भारतीय कृत्रिम अंग निर्माण निगम

ALIMCO

(भारत सरकार का उपक्रम)
जी.टी. रोड, कानपुर–209217
सम्पर्क करें– www.alimco.in
फोन– 0512–2770176, फैक्स– 0512–2770617
टॉल फ्री नं.: 18001805129

IS/ISO : 9001 :2015

खुली निविदा सूचना

नीचे दिये गए विवरण के अनुसार आइटम की आपूर्ति के लिए ऑनलाइन निविदाएं (टेक्नीकल एवं प्राइस बिड) आमंत्रित की जाती हैं:

निविदा सं.	वस्तुओं की श्रेणी	मात्रा	अनुमानित मूल्य	निविदा खुलने की नियत तिथि
पीटी/ओटी/06 /ए जेड	ऑटोमैटिक कन्वेयराइज्ड एसेम्बली लाइन्स सेमी ऑटोमैटिक व्हील एसेम्बली सिस्टम की डिजाइन, निर्माण, आपूर्ति, इंस्टालेशन व कमीशिनंग (टर्नकी बेसिस पर)	01 सेट	रू. 20.47 करोड़	08.02.2022

इच्छुक निविदादाता एलिम्को की वेबसाईट **www.alimco.in** (केवल संदर्भ के लिए) व सीपीपीपी वेबसाइट **https://eprocure.gov.in/eprocure/app** से निविदा दस्तावेज डाउनलोड कर सकते हैं। निविदा शुल्क रू. 600/– वेबसाइट www.alimco.in पर उपलब्ध ऑनलाइन गेटवे के माध्यम से जमा किया जा सकता है। ई–रसीद की स्कैन कॉपी टीसी बिड के साथ जमा करें। सभी एसएसआई/एमएसई विक्रेताओं को वैध उद्योग आधार ज्ञापन प्रस्तुत/जमा करने पर निविदा शुल्क से छूट प्राप्त है।

निविदाकर्ताओं से अनुरोध है कि वे अपने प्रस्ताव/बिड केवल ई–निविदा प्रक्रिया के माध्यम से **https://eprocure.gov.in/eprocure/app** पर जमा करें। तकनीकी निविदा ऊपर दी गई तिथि को 15.30 बजे खोली जायेगी। एलिम्को को किसी भी या सभी आवेदनों/प्रस्ताव को बिना कारण बताये निरस्त करने का अधिकार है।

नोट : निविदा में किसी भी शुद्धिपत्र हेतु, निविदाकर्ता सीपीपीपी वेबसाइट व एलिम्को वेबसाइट पर जा सकते हैं।

वास्ते-एलिम्को, उपमहाप्रबंधक (एसपी एंड सी)

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA

(A Govt. of India Undertaking)
G.T. Road, Kanpur-209217
Visit us: www.alimco.in
Phone- 0512-2770176, Fax- 0512-2770617
TOLLFREE NO. 18001805129

IS/ISO : 9001 :2015

OPEN TENDER NOTICE

Online Bids (Technical & Price Bid) are invited for supply of item as per details indicated below:

Tender Number	Category of Items	Qty.	Approx Value	Due date of Opening
PT/OT/06/AZ	"Design, Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with Semi automatic wheel assembly system (On Turn Key Basis)"	01 Set	Rs. 20.47 Cr.	08.02.2022

Interested Tenderers may download the tender document from ALIMCO website www.alimco.in (for reference only) and CPPP **website: https://eprocure.gov.in/eprocure/app.**Tender Fee of Rs 600/- to be submitted only through online payment gateway available at www.alimco.in. Submit scan copy of the e- receipt of the same along with TC bid. All SSI / MSE's Vendor are exempted from Tender Cost after producing/submitting Valid Udyog Aadhaar Memorandum/ Udyam Registration Certificate (URC) only.

Tenderers are requested to submit their Offers/Bids through E- Tendering Process only on https://eprocure.gov.in/eprocure/app. The Technical Bid will be Opened at 1530 hrs. on the due date as indicated above. ALIMCO reserves the right to reject any or all requests/Offers without assigning any reason.

Note: For any corrigendum in the tender, Tenderers may please visit CPPP website and ALIMCO web-site.

For ALIMCO - DGM (SP & C)

ALIMCO

Artificial Limbs Manufacturing Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
G.T. ROAD, KANPUR-U.P. 209217

TENDER NO.PT/OT/06/AZ DATE – 06.01.2022

TENDER DOCUMENTS

FOR

"Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with Semi automatic wheel assembly system (On Turn Key Basis)"

Ref: TENDER NOTICE No-**PT/OT/06/AZ** **Dated**- 06.01.2022

1. Online tenders are invited "Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with semi automatic wheel assembly system (On Turn Key Basis)" to the following destination conforming strictly to ALIMCO Specifications enclosed at Annexure-A, against Purchase Orders to be placed on the successful Tenderer within specified period as per Purchase Order. The specific conditions of supply are enclosed at Annexure-D. **Manual bids shall not be accepted.**

Artificial Limbs Manufacturing Corporation of India **Qty – _01 Set.**
G.T. ROAD, **Kanpur-209217 (U.P.)**

2. **The scope of work:**
The tender regarding **"Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with semi automatic wheel assembly system (On Turn Key Basis)"** and a tentative quantity of producing various Products (Motorized Tri-cycle, Wheel Chair, Wheel assembly) likely to be covered by Purchase Order is indicated in the **ANNEXURE- 'A'.** The whole plant/ equipments/ lines would be required to be supplied as per the delivery schedule specified in our Purchase Order or as indicated in the tender.

Sr. No.	Description	Qty.	Estimated Cost Rs. in Crore
1.	**"Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with semi automatic wheel assembly system (On Turn Key Basis)"**	As per Annexure A	17.35 + GST

3. **Tender documents may be downloaded from ALIMCO website www.alimco.in (for reference only) and CPPP website https://eprocure.gov.in/eprocure/app as per the schedule as given in CRITICAL DATE SHEET as under.**

CRITICAL DATE SHEET

Published Date	07.01.2022 (10:00 AM)
Bid Document Download Start Date & Time	07.01.2022 (11.30 AM)
Pre-Bid Query Start Date & Time	08.01.2022 (10.00 AM)
Request for attending Pre-Bid Meeting latest by	17.01.2022 (05.00 PM)
Pre-Bid meeting date and time	18.01.2022 (11.30 AM)
Pre-bid Query end date & Time	22.01.2022 (05.00 PM)
Bid Submission Start Date & Time	27.01.2022 (10:00 AM)
Bid Submission End Date	07.02.2022 (02:00 PM)
Bid Opening Date	08.02.2022 (3:30 PM)

Bids shall be submitted online only at CPPP website: https://eprocure.gov.in/eprocure/app.

Tenderer/Contractors are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

Part I ('TC' BID):

The tenderers are requested to submit the scan copy of following details/documents in their 'TC'-Bid.

Mandatory / Pre-Qualification Criteria):-

i) All tenderers are required to submit Rs. 600/- (Including GST), towards cost of Tender documents, if down- loaded from the website of the Corporation/CPPP. (All SSI units/ MSE Vendors are exempted from Tender Cost on submission of valid Udyog Aadhaar memorandum (UAM)/ Udyam Registration against tender for the items/nature of business/ type of services specified there in the UAM). The cost of Tender documents for Rs. 600/- (Including GST) can be submitted **only through online payment gateway available at www.alimco.in and submit scan copy of the e-receipt of the same along with TC bid**.

ii) The person signing the bid should be duly authorized representative of the firm/company whose signature should be verified and certificate of authority should be submitted. The poser or authorization or any other document consisting of adequate proof of the ability of the signatory to bind the firm/company should be annexed to the bid.

iii) Tender documents with proper seal and signature of authorized person on each page of the bid must be submitted.

iv) The Complete specifications, Make/Model/Brand consisting of whole plant/ equipments/ lines & its accessories/mechanical & Electrical and MHE offered on parameters specified as per Annexure-A, must be mentioned. The details with values for individual specifications/parameters desired must be indicated at Annexure 'B2' to this tender document.

v) Copy of GST Registration Certificate, duly signed & stamped.

vi) The tenderer should have an average annual turnover of not less than 30% of estimated value during the latest three financial years. In order to authenticate, **a certificate regarding average turnover from a qualified Chartered Accountant mentioning UDIN is required to be furnished along with 'TC-Bid'.**

vii) Copy of income tax return for the latest three financial years duly signed & stamped.

viii) Only OEMs/OEM Authorized vendor (duly authorized for this specific tender) with relevant expertise are allowed to bid for the whole system (on turn-key basis) mentioned in the tender document. The declaration/ certificate is required from bidder.

ix) The tenderer must have completed supply of at least 01 (one) machine/item/equipment/system/plant having same or higher parameters as mentioned below:

1. Assembly shop/ Assembly line of Mechanical/Electromechanical Industrial parts, production capacity of 150 items per 8 hr shift. in Govt. Sector/ Private Sector in the last 7 years, reckoned from date of opening of this tender. (PO copies and Commission /Completion Certificates to be furnished by bidder).

Satisfactory Performance Certificate from atleast 1 users issued within last 1 years from date of opening of this tender stating that the machine/equipment/system/plant is working satisfactorily for at least one year to be enclosed. (On the letter head of issuing user mentioning PO no., date of installation and commissioning and name of supplier with full address)

x) Undertaking stating that "The delivery, installation, commissioning and training of the plant (on turn-key Basis) must be completed within the stipulated period as indicated in the tender or specified at Annexure- A, from the date of placement of PO/work contract" **in the format enclosed at Appendix-1**.

xi) The tenderer should submit an undertaking that his/her firm has not been debarred/blacklisted/terminated/banned to participate in the tender by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt. **in the format enclosed at Appendix-2**.

xii) The tenderer should submit an undertaking that his/her Offer is valid for acceptance for 120 days from the date of opening of TC Bids **in the format enclosed at Appendix-3.**

xiii) Undertaking to the effect that all the tender terms & conditions are acceptable to the bidder **in the format enclosed at Appendix-4**.

xiv) Undertaking to the effect that a Warranty Performance Bank Guarantee (PBG) of 3% of the order value, valid for warranty/defect liability period & claim submission date will be submitted after the commissioning of the plant (on turn-key basis). The security deposit shall be released on receipt of 3% PBG valid for warranty period **in the format enclosed at Appendix-5**.

xv) In case firm wishes to avail Advance of 10% of cost of machine, they have to submit an undertaking to the effect that an Advance Bank Guarantee (BG) of 110% of the advance value subject to maximum up to 100 Lakhs, valid for successful installation, commissioning & Prove out of whole plant & it's accessories & can be submitted within 1 months from the date of releasing the PO/Work Order of the plant (on turn-key basis) **in the format enclosed at Appendix-6**.The recovery of the advance will be done as adjustment @25% of advance value from the running bill. The Advance Bank Guarantee (BG) for advance shall only be released after successful installation, commissioning & Prove-out of whole plant/system & it's accessories and full recovery of the advance.

xvi) The tenderer should submit an undertaking that his/her firm shall provide Security Deposit within 14 days of releasing PO **in the format enclosed at Appendix-7.**

xvii) The tenderer should submit an undertaking that his/her firm shall provide the complete training regarding operation & maintenance of the Whole Plant (On turn-key Basis) & its accessories **in the format enclosed at Appendix-8**.

xviii) The tenderer should submit an undertaking for unconditional acceptance to replace the supplies if rejected at the destination **in the format enclosed at Appendix-9**.

xix) Undertaking to be submitted by the tenderer that "payment terms mentioned at Para No-16 of this tender document (i.e., Terms of Payment) is acceptable" **in the format enclosed at Appendix-10.**

xx) The tenderer should submit an undertaking that his firm shall attach the proof regarding prior Experience of supplying such systems, as specified in the Tender Document. Vendor to provide details of such customers along with contact number for verification) **in the format enclosed at Appendix-11.**

xxi) Tenderers are required to submit "**Tender Acceptance Letter**" in the format enclosed at **Appendix-12.**

xxii) Tenderers are required to submit "**Undertaking**" regarding availment of GST and matching of Input credit **in the format enclosed at Appendix-13.**

xxiii) Tenderers are required to submit "**Undertaking**" regarding the material delivers in multi-stages and the payment of the same will be done on the basis of completion of stage wise work as given **in the format enclosed in Appendix-14.**

xxiv) Undertaking to be submitted by the tendered that "They should undertake that they will execute comprehensive AMC including spares and labour for the period of 03 years after the expiry of 2 years warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 2%, 3% & 4% of basic value of the machine/plant during 3rd, 4th & 5th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment" **in the format enclosed at Appendix-15 and 15/1**.

xxv) Tenderers are required to submit duly filled **Annexure 'B1 & B2',** enclosed herewith.

xxvi) An affidavit to be sought from L1 party regarding, the party has not been debarred/blacklisted/terminated/banned by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt.

xxvii) The party has not supplied the same Machine /System/ Plant at a cost lower than the cost offered to ALIMCO to any government / semi-government /reputed private organization in India.

xxviii) Latest Government of India guidelines on "Purchase Preference to Make in India" placed at Appendix 16.

a. Self certification that the items offered meets the local content requirement for 'Class-I local supplier/ 'Class-II local supplier, as the case may be as per **Clause 1 of Appendix 16.** – Bidder to confirm
b. Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of supplies other than companies giving the percentage of local content as per **Clause 1 of Appendix 16** – Bidder to furnish.
c. Details of location at which local value addition is made – Bidder to confirm.

xxix) Latest Government of India guidelines on "PUBLIC PROCUREMENT POLICY FOR GOODS PRODUCED AND SERVICES RENDERED BY MICRO AND SMALL ENTERPRISES (MSES):" placed at **Appendix 17.**

xxx) Latest Government of India guidelines "Mandatory Conditions to be satisfied by any bidder from a country which shares a land border with India" placed at **Appendix 18**.

a. Self attested copy of **Appendix 18** mandatory conditions to be satisfied by any bidder from a country which shares a land border with India. – Bidder to confirm
b. Certificate of compliance of clauses of **Appendix 18**, **clause A VII**. – Bidder to confirm
c. Certification as per last paragraph of **Appendix 18** mandatory conditions to be satisfied by any bidder from a country which shares a land border with India. – Bidder to confirm.
d. The **Appendix 18** must be signed and stamp and submitted/uploaded by Bidder along with the bid. To be read in conjunction with Order (Public Procurement No. 2) F.No.6/18/2019-PDD dated 23rd July 2020 issued by Ministry of Finance, Department of Expenditure, Public Procurement Division. – Bidder to Confirm

xxxi) Bid security declaration Appendix -19.
xxxii) Documents in support of technical Parameters A1, A2 and A3 (clause 10 k)
xxxiii) QAP and PERT chart shall be submitted by successful bidder within 15 days of issue of LOA for Approval.
xxxiv) L-1 Bidder to submit the billing breakup (BBU) for approval of ALIMCO.
xxxv) Any other documents as mentioned in Tender.

(All these documents/ details/ conformation should necessarily be submitted specifically & in the same order.)

NOTE: Price bids of only those tenderers, who are assessed as technically qualified by the Corporation shall be opened & only Such parties shall be communicated regarding date & time of Price Bid opening requesting them to attend the Tender opening, if interested

Part II ('P'BID): shall consist of complete price details as under: -

P Bid offer shall be uploaded online. Rate should be quoted in Rupee per unit **as**

per format at Annexure-C (P-bid). Rate should be quoted for all inclusive Price at destination as indicated in Para 1 & should be without any price escalation clause. The following data shall be invariably furnished:-

a) GSTIN No., HSN Code, GST in % & Rs.
b) Packing & Forwarding charges, Installation charges, if any, in % &Rs.
c) Freight charges in % & Rs…… (Destination as indicated in para-1).
d) Charges for installation and commissioning (if any) may please be clearly indicated. Alternatively, rates quoted shall be considered to be inclusive of installation & commissioning charges.

THIS BREAKUP IS ESSENTIAL TO ENABLE PLACEMENT OF THE PURCHASE ORDERS AND PAYMENTS BY H.Q./AAPC's AS THE CASE MAY BE AND KEEPING IN VIEW APPLICABILITY OF GST BY THE GOVERNMENT w.e.f. 1st July 2017

The L1 offer will be decided based on all inclusive price and excluding GST only (destination as indicated in para-1).

NOTE: ALIMCO GST Registration details are given below.

	H.Q, Kanpur
GST Regd. No.	09AABCA8899F1Z6

Variation Clause: - Any change (Increase / Decrease) in Govt. Duties / Levies / Taxes GST as amended made applicable by Govt. (State / Central) from time to time at the rate as will be applicable over & above the basic price/rate quoted by parties in their offer during the currency of Purchase Order/Contract shall be considered by the Corporation for amendment on party's request along with necessary documents in support of their claim/amendment.

4. **SITE INSPECTION :** The tenderers shall be deemed to have inspected and examined the site and its Surrounding and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his tender, to the extent and nature of work and materials necessary for completion of works, availability of such materials, the means of access to the site and the accommodation that he may require and, in general, shall be deemed to have obtained all necessary information.

5. All the bids so received against the tender shall be scrutinized and assessed for the Plant suitability offered by you. Offers of only those tenderers whose bids are found conforming to laid-down specifications and qualifying our requirements shall be considered. Quotes with any variation in the specifications affecting functions of the Plant as specified are liable for outright rejection. Tenderers are therefore requested not to quote for nonconforming specifications Plants as an alternative one or two otherwise, for which tenders are liable for rejection. Each value in Part II (P-Bid) as specified is to be mentioned in tenders and words **"as specified"** or **"same"** shall not be considered valid at all.

6. No change in specifications by tenderers shall be permissible after submission of Technical Bids.

7. **EARNEST MONEY DEPOSIT& SECURITY DEPOSIT:**

No earnest money (EMD) needs to be paid. Bid Declaration in the format at **Appendix 19** to be given.

Subsequent to placement of Order / Contract, the successful tenderer will be required to deposit a sum equal to 3% of the Order/ Contract value subject to a maximum of Rs. 100.00 lakhs, within 14 days from the date of purchase order as **Security Deposit (SD)** in the form of 'Demand Draft' or 'Pay Order' or 'Bankers Cheque 'or 'Irrevocable Bank Guarantee' from any of Nationalized Bank in the prescribed format enclosed at **Annexure-E'** only in favour of **ALIMCO** payable at **Kanpur** for due discharge of the Purchase Order released on the basis of this tender**.** This will be retained till the expiry of warranty Period

for the plant supplied. No interest will be payable on the Security Deposit.

The Security deposit may be refunded/returned on submission of irrevocable, unconditional & acceptable Bank guarantee as performance guarantee of 3% of purchase Order/Contract value by the party to cover its obligations to offer free of cost replacement under the warranty period from any nationalized bank. The corporation may also consider, at its discretion, acceptance of Corporate Guarantee given by Foreign Principal In lieu of Bank Guarantee in case of imported goods.

Security deposit shall be furnished within the time limit provided for in the Contract. Non submission of Security deposit within the time specified for the purpose shall amount to the breach of essential conditions of the Contract and shall render the Contract liable to cancellation& the contractor shall be liable for all consequence thereof or caused there by.

After Satisfactory installation, commissioning & Training of the plant/machine and on receipt of Warranty Performance Bank Guarantee equal to 3% of the PO/work contract Value, valid for the warranty / defect liability period, the Security deposit amount shall be released by ALIMCO.

The Corporation reserves the right to forfeit the security money deposit in case the supplier fails to make good losses on supplies, unable to replace supplies found unacceptable as well as losses on account of exceptional delays in supplies.

8. Submission of Tender

The tender shall be submitted online in two part, viz., technical bid and

price bid Technical Bid (TC Bid)

The following documents are to be furnished by the tenderer along with **Technical Bid** as per the tender document

1) Scanned copy of e receipt against tender document cost / Exemption Certificate.
2) Scanned copy of all relevant documents as per Tender.

Please note that no indication of the rates/amounts be made in any of the documents submitted with the TC-BID

PRICE BID (P Bid)

(a) Schedule of price bid in the form of Annexure-C.

9. Virtual Pre-Bid Meeting

a) The tenderer may submit their queries on the tender document if any by email on the email id: dgm_spc@alimco.in or sm_pt@alimco.in Only the queries submitted by the tenderers, who have either purchased or deposited the cost of tender documents after downloading the tender document from ALIMCO website up to the due date of submission of queries, would be discussed in the pre bid meeting.

b) During the course of Virtual Pre-Bid Conference, the Bidder will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall endeavor to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Selection process.

c) Clarifications will be uploaded on ALIMCO website as per the schedule date fixed for submission. Any modification to tender document, which may become necessary as a result of pre bid meeting, shall be made through issuance of an Amendment/Corrigendum.

10. **OPENING & EVALUATION OF TENDER:**

a) The **tenders** shall be opened online at https://eprocure.gov.in/eprocure/appat 15.30 hours on due date in presence of representatives of tenderers who may like to be present. Bidder can view live bid opening at their remote end also. Bids will be opened as per date/time as mentioned in the Tender Critical Date Sheet.

b) Only the 'TC-Bid' (Part I) of the tender will be opened online on--.--.2021 **at 15.30 Hrs.**by the Tender Opening Committee of ALIMCO in the presence of representatives of tenderers who may like to be present. **Tenders received late will not be considered. If the due date happens to be a holiday the same stands extended to the date of next working day with time remaining the same. However, the Corporation has the right to alter the date & time of Tender closing & opening. The same shall be notified only on the website of the Corporation.** The procedure will be as follows:

c) Subsequent to opening of 'TC-BID' of all tenderers correspondence / discussion with regard to the conditions and other technical aspects may be held by the Committee nominated by ALIMCO, if needed

d) In case any tenderer submit only 'TC-BID' his tender shall not be considered and shall be treated as incomplete tender. Similarly, if any tenderer submit only 'P-BID', the same shall also be not considered.

e) The technical bids will be evaluated to shortlist the eligible bidders. The technical bids of only the eligible bidders shall be considered for further processing (financial evaluation). Preliminary scrutiny of the proposal will be made to determine whether they are complete, required processing tender fee have been furnished whether the documents have been properly signed, and whether the bids are generally in order. Proposals not conforming to such preliminary requirements will be prima facie rejected.

f) The ALIMCO has a right to seek clarification/ documents from the tenderer relating to TC-Bid of tenderers if such information is essential for evaluation of tender.

g) Bidder whose technical bids found to be acceptable and meeting the Mandatory/Pre-qualification criteria as specified in this tender will only be informed about the date and time of the opening of the commercial bid (P-Bid).

h) ALIMCO will open commercial bids of only the technically shortlisted bids, in the presence of the bidder or their-authorized representative who choose to attend the bid opening, at the time and date to be informed later.

i) Commercial bids of only those Tenderers will be opened who are found to be technically qualified & acceptable. Commercial bids shall be quoted all-inclusive price including basic price, packing & forwarding, freight, insurance, taxes, unloading, installation & commissioning charges, etc. GST will not be taken into account during tender evaluation only.

j) Tender Evaluation shall be done using QCBS (Quality and Cost Based Selection) method.

k) **Weightages to be assigned to different qualifying criteria.**

Evaluation Criteria of Bids:
Technical Bid (TC-Bid (Part I)) = 100 marks,
Price Bid (P-Bid) = 100 marks

A. Technical Bid: Maximum Marks = 100

A1. Work Experience: Maximum Marks = 40 marks.

Bidders shall have supplied and commissioned Assembly shop/ Assembly line of Mechanical/Electromechanical Industrial parts, production capacity atleast 150 items per 8 hr. shift, in the last 7 years. Completion certificate from the clients shall be enclosed.

For first completion certificate bidder will be awarded 20 marks. For each subsequent certificate bidder shall be awarded 5 marks each, subject to maximum of 40 marks (total 5 certificates). If more than 5 certificates are submitted maximum marks awarded shall still be 40.

A2. Technical Completeness of the Offer: Maximum marks = 30 marks

The Bid shall be complete with details of

1. Main assembly area with powered roller conveyor/ slant conveyor
2. Work benches
3. Storage racks
4. Material handling equipment
5. Throughput of each assembly line should be specified
6. In process Inventory Management System
7. Handling and Location Management System.
8. Layout drawings
9. List of Equipments with their quantities and broad technical specifications.
10. Ease of Movement of materials, Operation and Maintenance of the entire system

The offer shall be technically complete; failing which bidder is liable to be disqualified.

A3. Technical Presentation: Maximum marks = 30 marks

Bidders shall submit Technical Presentation with documents along with the bid containing the details as mentioned below. Bidder will be required to give this presentation at ALIMCO, Kanpur after opening of Technical bid. Time for presentation will be 30 minutes. Bidders will be informed at least 4 working days in advance for giving a technical presentation.

The technical presentation shall contain the following details.

1. Latest concepts used while designing the system especially the main assembly area.
2. Salient Design features of the system along with throughput of each assembly line and line balancing.
3. Layout and material movement.
4. Ergonomics and ease of working/ assembling at the work benches.
5. Traceability and Record Keeping methods.
6. Ease of Movement, Operation and Maintenance and required manpower to run the entire system smoothly and safely.
7. Limitations of the proposed system.
8. Use of production management tools and concepts.
9. Details of latest Safety standards/Norms followed, as per GOI, including fail safe features.
10. Support and services.

For bidder to be qualified in technical bid, bidder shall have scored at least 70 marks out of 100 marks, along with the terms and conditions mentioned above. Technical score will be combination of A1+A2+A3.

B. Financial Bid: Maximum marks = 100

The lowest Financial Bid value / amount (L1) will be assigned 100 marks. Higher Financial Bids shall be allotted proportionate marks as per formula given below:

Marks for Bidder in all the qualifying criteria = (Price of L1 bidder / Price of bidder) X 100 (to two places of decimal)

The work shall be awarded to the bidders scoring the highest marks as per procedure detailed below.

The overall score will be calculated as follows:

Overall score of bidder = (Technical score X 0.70) + (Financial score X 0.30).

11. REJECTION OF TENDER:

a) Tenders received without cost of tender document are liable to be rejected as also indicated at Para 3(i).

b) Conditional and unsigned tenders, tenders containing absurd or unworkable rates and amounts, tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions, drawings/specifications etc. are liable to be rejected.

c) Canvassing in any form in connection with the tender is strictly prohibited and the tenders submitted by the party who resort to canvassing are liable to be rejected.

d) The acceptance of tender will rest with ALIMCO which does not bind itself to accept the lowest tender or any tender and reserves full rights for the rejection of any or all tenders without assigning any reasons whatsoever.

12. VALIDITY OF TENDER:

a) The tenders shall remain open for acceptance for a minimum period validity of 120 days from, the date of opening of tenders or till such period up to which the extension of validity is agreed to mutually. This may please be stipulated clearly in the Quotation.

b) If notified within this period that the tender has been accepted, the tenderer shall be bound by the terms of the offer along with the terms that have been agreed mutually.

c) All the tenders without PROPER SPECIFICATION / MAKE / BRAND / BROCHURE /CATALOUGE/ LEAFLET & TEST CERTIFICATES wherever required, are liable to be rejected. It shall be in the interest of the tenderer that complete offer is made for our consideration. It will be in the interest of the tenderer to submit details/values against each individual parameters mentioned at Annexure 'B2' and sample wherever possible along with the offer.

13. QUANTITY DISCOUNT:

In order to submit the most competitive offer, the Tenderer may indicate the quantity discounts as applicable on the price. However, the buyer reserves the right to accept the quantity discounts for lower quantities as well. The quantities indicated in the Annexure 'A' are liable to revision either upwards or downwards.

14. DELIVERY:

a) The delivery, installation, commissioning & Training of the whole plant and its accessories must be completed within the stipulated period specified at Annexure-A, from the date of placement/acceptance of PO/ work contract.

b) The delivery of the plant shall be made strictly as per delivery schedule as stipulated in our Purchase Order/Work Contract or modified time to time by ALIMCO. In case of Failure to supply, install & commission/execution of work within the stipulated period will make the tenderers liable to an unconditional penalty. The penalty/Liquidated damages shall be levied at the rate of point five percent (i.e. 1/2 % or 0.5%) per week (or fraction of a week) subject to the maximum of 10% of the purchase order / work contract value.

15. INSPECTION:

a) Inspection will be carried out at the Destination (refer Para 1) and unacceptable/ rejected Item will be returned to the supplier through bank at the supplier's risk and

cost by road, only after receipt and acceptance of replacement supplies provided by the suppliers free of cost. Alternatively, all the tenderer will have to furnish their Banker's Name, Address including Code No. along with a declaration/undertaking to guarantee collection of the returned supplies documents negotiated through their bank within 07 days of its presentation.

b) In case of local supplier, rejected Item shall be lifted from our stores within 15 days of our rejection advice after refunding the payment, if already made to them before collecting the supply. In case of failure to lift the rejected Item, we may dispose-off the rejected Item as deemed fit and no claim whatsoever shall be entertained in this respect and the tenderer shall be liable to pay amount paid by ALIMCO, if any.

16. TERMS OF PAYMENT:

ALIMCO is a Schedule 'C' Mini Ratna Category II Central Public Sector Enterprises, registered under Section 8 (Not for Profit motive) of the Companies Act, 2013, (corresponding to Section 25 of the Companies Act, 1956). The terms of payment shall be as follows:

a) Part payment will be done in accordance to Billing Breakup (BBU) submitted by the L-1 Bidder and subsequent approval of ALIMCO.
b) 60% material cost of invoice (exclude GST) on receipt of material at ALIMCO site.
c) 30% material cost of invoice plus installation (exclude GST) total 90%, after completion of erection work of each item (exclude GST).
d) Balance 10% (exclude GST) of work will be released after successful prove out and receipt of bank guarantee from a nationalized bank equal to 3% of PO/WO value.
e) GST portion shall be paid on availment and matching of Input Credit.
f) Supplier's Bank Charges/Draft making charges will have to be borne by the party only.
g) The tenderer will be required to submit their RTGS details duly certified by the Bank along with a crossed/cancelled Cheque in support of the details, as all payments/refunds are preferably be made through RTGS.

17. RIGHT OF ACCEPTANCE:

ALIMCO reserves the right to reject any or all the tenders in part or full without assigning any reasons thereof. The Corporation also reserves the right to negotiate the rates and terms and conditions of supply with any or all the tenderers at its sole discretion as deemed fit without assigning any reasons thereof.

ARBITRATION

In case of any dispute, arising during the operation of the contract, efforts shall be made to resolve it by mutual discussions failing which the matter shall be referred to the Chairman & Managing Director of ALIMCO G.T. Road, Kanpur-209217 or his nominee whose decision shall be final and binding on both the parties. Arbitration proceedings shall be held at Kanpur as per provisions of the Arbitration & Conciliation Act 1996 & as amended from time to time and the Kanpur City Court shall have the jurisdiction in the matter.

Thanking you,

Yours faithfully,
For Artificial Limbs Mfg. Corporation of India

Dy. General Manager (SP&C)

Encl: As Above

ANNEXURE – A

SPECIFICATIONS

"Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with semi automatic wheel assembly system (On Turn Key Basis)"

Sr. No.	Description	Remarks
1.0	This shop is the Final Assembly area for assembly of following products: a) Motorized Tricycle b) Wheel Chair (4 type) c) Wheel Assembly	Confirm
2.0	The Assembly shop WC 7A shall have following production capacity a) Motorized Tricycle –150 (minimum) Per 8 hr shift b) Wheel Chair – 300 (minimum) Per 8 hr shift c) Wheel Assembly – 1300 (minimum) Per 8 hr shift	Confirm
3.0	The Assembly shop WC 7A shall have following separate Assembly lines: a) Automatic Conveyorized Assembly line/lines for Motorized Tricycle b) Automatic Conveyorized Assembly line/lines for Wheel Chair for all 4 types. c) Semi Automatic Assembly system for complete wheels assembly Capacity 1300 wheels per shift of 8 hrs (assembly of wheel, rim, spokes etc)	Confirm
4.0	System /lines should be installed in the available Covered shed of size 60 m x 30m with industrial grade flooring (load cap. 5T/sqm.). Workable height is 6 m.	Confirm
5.0	The components to be assembled shall be provided at the entrance of shed. The finished product shall be collected at exit of assembly shop. The component for assembly will be provided through movable trolleys. Trolleys to be provided as per the component and sub assembly is in Scope of bidder.	Confirm
6.0	Bidder shall study the existing process at ALIMCO, Kanpur and shall depute his team to study all aspects related to Industrial Engg. to avoid any issue later on and delay in implementation	Confirm
7.0	**Environmental conditions**	Confirm
7.1	Working temperature - 0 to 50 degree	Confirm
7.2	Relative Humidity - 20 to 100%	Confirm
7.3	Supply Voltage – three phase 415 +/- 10%	Confirm
7.4	Frequency - 50 Hz (+/- 10%)	Confirm
8.0	**The Overall Component Working Envelope are as per the dimensions mentioned**	Confirm
8.1	Wheel Chair - L1100XW720XH950 (mm)	Confirm
8.2	Motorized Tri Cycle - L1815XW750XH950(mm)	Confirm
8.3	Wheel diameter 20-28 inch	Confirm

9.0	**Assembly line/lines for Motorized tricycle and Wheel chair (4 types)**	Confirm
9.1	The parts/sub-assemblies/BOP will form a part of input to **Motorized tricycle assembly line** is attached at Appendix-1. Drawing of major parts/sub-assemblies/BOP is also attached with this tender document for reference.	Confirm
9.2	Tricycle frame will be placed on automatic conveyor in which above mentioned items will be assembled in sequence (to be suggested by bidder in its offer). The existing assembly activity is attached at Appendix-2.	Confirm
9.3	The following parts/sub-assemblies/Brought out parts(BOP) will form a part of input to **Wheel chair assembly line.** Component that will be used/provided as input for first type of wheelchair is attached at Appendix- 3. Component that will be used/provided as input for second type of wheel chair is attached at Appendix- 5.	Confirm

	Component that will be used/provided as input for third type of wheel chair is attached at Appendix- 7. Component that will be used/provided as input for fourth type of wheelchair is attached at Appendix-9. Drawing of major parts/sub-assemblies/BOP is also attached with this tender document for reference.	
9.4	Wheel chair RH and LH frame will be placed on automatic conveyor in which above mentioned items will be assembled in following sequence. The existing list of assembly activities for first type of wheel chair is attached at Appendix-4. The existing list of assembly activities for first type of wheel chair is attached at Appendix-6. The existing list of assembly activities for first type of wheel chair is attached at Appendix-8. The existing list of assembly activities for first type of wheel chair is attached at Appendix-10.	Confirm
9.5	The Assembly shop shall have separate 2 Nos. of Floor mounted powered Slat Conveyor for Assembling Wheel Chair and motorized Tri cycle. Following are the main parameters for assembly conveyors:	Confirm
9.5.1	No. of Assembly Stations per conveyor for each line – to be decided by bidder	Confirm
9.5.2	Top of the Conveyor / Working height – 600 to 800 mm	Confirm
9.5.3	Type of Conveyor – Slat type	Confirm
9.5.4	Station Pitch – to be decided by bidder based on requirement	Confirm
9.5.5	Length of conveyor– to be decided by bidder based on requirement	Confirm
9.5.6	Conveyor speed – to be decided by bidder based on requirement	Confirm
9.5.7	Drive type – Through Geared Motor (VFD Controlled)	Confirm
9.5.8	Take up type – Screw type	Confirm
9.5.9	Maximum Load of the Product – 70 Kg	Confirm
9.5.10	Unit Load carrying capacity - min 150 Kg.	Confirm
9.5.11	Slat width – be decided by bidder	Confirm
9.5.12	Slat Plates - M.S. Chequered Plate	Confirm
9.5.13	Conveyor Frame - Structural steel made out of Angle and Channels	Confirm
9.5.14	Surface treatment of the Frames - Powder Coated	Confirm
9.5.15	Conveyor Chain Track and Guides (Top Line / Return Line) - Abrasion/impact resistant wear material	Confirm
9.5.16	Surface Finish of Slats –value to be given	Confirm
9.5.17	Assembly Fixtures on the Slat Conveyor(all the 3D & 2D manufacturing drawing of fixture shall be provided by bidder)	Confirm
9.5.18	Type of Fixture - Rotation type (all the 3D & 2D manufacturing drawing of fixture shall be provided by bidder)	Confirm
9.6	In Assembly line conveyor, Assembly line Balancing, Ergonomics, Assembly complexity, Poke-yoke needs to be taken care off.	Confirm
9.7	There shall be work benches for each of the conveyors lines as per the requirement and number of stations. The work benches shall not be opposite to each other but located alternately. Storage bins/racks shall be available on both sides of the work bench to keep bought out items and Sub-Assemblies.	Confirm
9.8	The Assembly area shall have FIFO racks, Trolleys, Plastic Bins for collection of sub-assembly and BOP. Two bin System and Kanban system can be used. The work benches shall have few lockable racks also. Colour identification and poka-yoke for similar looking parts shall be used. Different color codes shall be applied for equipment used for Wheel Chair assembly and for Motorised Tricycle assembly. 5-S visual controls and poke-yoke shall be part of layout and proposed system.	Confirm
9.9	The work benches shall have Pneumatic Compressed Air connection (as required) and Electric power plugs. The worktable top shall have adjustable frame. Adjustable shelfs for bins shall be provided for storage of small items. For Sub assemblies parts feeding and storage shall be planned on the basis of BOM and Modular trolleys will be designed and supplied for each parts, sub assembly and BOP.	Confirm

9.10	Work procedure Orders in electronic form shall be made available at these benches.	Confirm
9.11	No part shall be stored on the floor.	Confirm
9.12	Floor shall be free from packaging waste which shall be kept in waste bins for regular removal to be considered in supplier scope	Confirm
9.13	Line side Storage Racks need to be considered depending on the requirement at Assembly conveyors. Supporting Structure for Utility tools lighting to be considered in Supplier scope.	Confirm
10.0	Electrical Controls :	Confirm
10.1	Type of System has to be PLC based. Operator interface will be Through HMI Screen. Conveyor Start / Stop at each station will be through Auto start/ stop as well as Through Push buttons at each station. Safety devices like Emergency stop push button or cable pull emergency stop switch, at each station are to be considered. Part counter to be provided.	Confirm
10.2	Andon production board to be provided along with the system. RYG lamp at each station to be provided. Necessary Electrical wiring to be considered for the entire system. Control Panel will be of RITTAL Make or Equivalent make. Blockage detection systems to be considered. Proximity sensors and Limit Switches to be considered where ever there is a requirement.	Confirm
10.4	Loading / Unloading : Frame Loading and Unloading will be done by Manually operated Manipulators.	Confirm
10.5	Pneumatic Nut Runners and Torque Wrenches are to be considered as per Line requirement and number of stations. Lighting to be considered throughout the Conveyor.	Confirm
11.0	**Assembly lines for complete wheels (assembly of wheel, rim, spokes etc)**	Confirm
11.1	The parts/sub-assemblies/BOP will form a part of input to wheel assembly line is attached at Appendix-11. A list of drawing is also attached with these tender documents.	Confirm
11.2	Details of Assembly lines	
11.2.1	The assembly lines shall have an cumulative output of minimum 1300 wheels per 8-hour shift.	Confirm
11.3	Description and Details of **Lacing and Tightening machine – 5 nos.**	Confirm
11.3.1	The function of this machine is to provide lacing and tightening and is used to join spokes with wheel rim. Both Lacing and tightening should be done in the machine in one operation. The machine should be equipped with the technology for detection of spoke holes for smooth and quick lacing.	
11.3.2	The Lacing & Tightening machine shall have change-over from at least 20"to 28". The machine shall be equipped with suitable camera/scanning technology for detecting the spoke holes.	Confirm
11.3.3	The machine shall have following features • Quick change-over • Automatic diameter correction of rim • Automatic pitch correction of rim holes • Automatic pitch correction of nipple holes • Database for min 20 wheel-types • Spoke length calculation • Self-diagnostic • Ergonomic design, easy operation	Confirm
11.4	Description and Details of **Stabilizing machine/rim taper – 3 nos.**	Confirm
11.4.1	Stabilizing machine is used to spread the tension equally over all spokes, and at the same time improves the strength of the spoke necks and the seating of the nipple in the rim. The Stabilizer/rim taper shall do both Stabilizing and rim tapering. The Stabilizer or Rim taper shall be ideally placed between the lacing machines and the trueing Robots	Confirm
	The Stabilizing machine/rim taper shall cater to different wheel sizes (from atleast 20"-28").	
11.4.2	The machine shall have following features • Stress relief by adding force on every spoke before trueing • Better seating of nipple in rim	Confirm

	• Better seating of spoke bend in hub flange • More equal spoke tensions within the wheel • Automatic spoke detection	
11.5	Description and Details of **Trueing system – 3 nos.**	Confirm
11.5.1	The function of this machine is to do the alignment of the wheel and it ensures minimum spoke tension on each and every spoke. It also helps to ensure uniform distribution of tension on each spoke in the wheel.	
11.5.2	The Trueing system shall cater to different wheel sizes (from at least 20"-28") and shall have a wheel database where all trueing values are stored.	Confirm
11.5.3	The machine shall have following features • constant quality output • easy to operate and easy to change-over • controlled wheel quality and spoke tensions	Confirm
11.6	Description and Details of **Disk Tyre Mounting Machine and Solid & pneumatic Tyre Mounting – 2 nos.**	Confirm
11.6.1	The Solid tyre mounting machine shall be able to mount solid & pneumatic tyres with a very tight fit and shall have no rim/tyre damage. No trueing after tyre fitting shall be necessary.	Confirm
11.6.2	The machine shall have following features • Can handle all rim/tyre combinations from atleast 20" to 28" • Working station: fitting of tyre / cassette hub / reflector / roller brake • Automatic tyre centering • Automatic inflation	Confirm
11.6.3	The Disk Tyre fitting machine shall be ideal for our output requirement.	Confirm
11.6.4	The machine shall have following features • Can handle all rim/tyre combinations from at least 20" to 28" • Working station: fitting of tyre / cassette hub / reflector / roller brake • Automatic tyre centering	
12.0	**Material Management System**	
12.1	The vendor shall supply the complete material management system including storage form input parts to finished product	Confirm
12.2	In plant Material flow need to be designed and location and quantity (WIP) for each part shall also be defined at WC7	Confirm
12.3	Place for Operator with PC, printer to generate barcodes and maintain data for Parts Addressal and Location system.	Confirm
12.4	Product and component Traceability shall be ensured. Cardex system shall be followed. Cardex not required can be through IT enabled system. Bidder will explore, suggest and designed parts traceability system, FG (finish goods) inventory monitoring, real time production monitoring of products used in this shop.	Confirm
12.5	Min 80 inch LED Digital display boards shall be provided to show daily and monthly out turn of products.	Confirm
13.0	Following the above guidelines, bidders shall design the layout of this shop with dimensions, showing product flow movement and storage(input material work in process(WIP), Finished Goods (FG)) also. Equipment list with quantities and major parameters of these equipments shall also be specified. Make and model number of the equipments shall be given. Bidders shall also bring out assumptions made for designing the system.	Confirm
14.0	The successful bidder shall submit the layout for approval of ALIMCO, within 15 days after placement of order.	Confirm
15.0	Details of safety features in the facility / equipment shall also be specified and shall be as per relevant standards.	Confirm
16.0	Complete Erection and Commissioning of the facility is in scope of bidder. This includes demonstration of software for traceability function and Inventory management module, Location & Handling management module and including all required civil work.	Confirm
17.0	Make and model of the equipments being supplied shall be listed. Three sets of operation, maintenance manuals shall be submitted.	Confirm
18.0	List & Rate of each mandatory Spare parts & Consumables for 1 year	Confirm

	requirement after warranty period is to be provided.	
19.0	List & Rate of each mandatory Spare parts & Consumables for 1 year requirement after warranty period is to be provided.	Confirm
20.0	Training on Operation & Maintenance of facility shall be imparted. One month training required for both Operation and Maintenance purpose.	Confirm
21.0	In-house trials will be taken before dispatch of the material to site. Loading and Unloading of the equipment will be in Supplier scope.	Confirm
22.0	Packing, Forwarding and Transportation will be in Supplier scope.	Confirm
23.0	**Acceptance Test:** The entire facility shall be operated successfully for 10 days of 8 hrs shift.	Confirm
24.0	**Warranty:** The entire machine/systems inclusive of all system/accessories must be covered under comprehensive warranty for a period of 24 months (min.) from the date of commissioning.	Confirm

DELIVERY PERIOD INCLUDING INSTALLATION, COMMISSIONING& TRAINING:

The delivery period including installation, commissioning& training of the items/ machines/ plant at the destination mentioned in Para 1 on page no. 02 of the tender documents will be 04 months from the date of placement of Purchase Order/work contract.

WARRANTY:

The entire Plant/machine/systems inclusive of all system/accessories must be covered under comprehensive warranty for a period of 24 months (min.) from the date of successful commissioning.

Note:

1. The loading/unloading of machine & other components of supply and their handling at destination site is in the scope of vendor.
2. Breakdown calls to be attended within 72 hrs. Physically or within 48 hrs. Through tele-diagnostic.
3. Machine foundation details and drawings with specifications to be provided by the tenderer. Vendor to arrange machine foundation work, if required, for the installation of items/ machine/ plant.
4. Total power consumption (in kW) to be provided by the tenderer.
5. The Bus-bar trunking (BBT) line for electricity will be provided at 8.5 meter height at one location. Sufficient suitable cable, cable tray, Circuit breaker, panel, fittings to connect the machine from power source is in Vendor's scope. If system/plant requires separate electrical panel that will be in vendor's scope. Suitable power back-up for failsafe operation of Machine in the event of power failure will be in vendor's scope.
6. Compressed air pipeline is available in the work center (air pressure will be available approx. 5.5 to 6 bar) All necessary fitting, air dryer, air booster as per machine requirement is in vendors scope. Tenderers to specify average consumption of compressed air.
7. Vendor to ensure operation and maintenance training for 10 days, at bidder premises. ALIMCO will bear the cost of travelling, lodging and fooding.
8. Bidders to furnish the latest Safety Standards Compliance of all relevant safety norms & regulation of Govt. of India of the system shall be in vendor scope.
9. Vendor to supply additional quantity of oil and lubricants for two more fills along with initial fill, if required.
10. Proper earthing of plant/machinery is in vendor scope. If separate earthing is required for machine/plant than earthing pit is in vendor scope.
11. 3D view of plant and as built drawing in CAD format of the plant/system to be submitted by vendor at the time of QAP.
12. 3D model and 2D manufacturing drawing of associated fixtures, special manufacture tools shall be provided by the vendor.
13. During Execution, the successful bidder shall get the layout & system design pre-approved before starting the manufacturing. The layout and system design shall be submitted within 15 days of issue of LOA.
14. Vendor should undertake that they will execute comprehensive AMC including spares and labour for the period of 03 years after the expiry of warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 2%,3% & 4% of basic value of the machine/plant during 3rd,

4th& 5th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment".

15. Vendor shall take full responsibility for the adequate stability and safety of all site operations and installation & commissioning as per the latest safety manuals published by Indian Standards Institution Statutory rules regulations and provisions of order conditions etc. and in case of default, Vendor shall solely be responsible and indemnify the corporation for any loss or damage caused to the ALIMCO for any violation of concerned laws.
16. Three (03) set of operation & Maintenance manuals in hard copy & soft copy along with the electrical drawing to be provided by the bidder with supply.

Motorized Tricycle (TD2A65) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	HANDLE ASSY	1	TD2A65C00
2	CENTRE TUBE ASSY	1	TD2A65D00
3	REAR WHEEL ASSY(RIGHT)	1	TD2A65J00
4	REAR WHEEL ASSY(LEFT)	1	TD2A65K00
5	FRONT WHEEL ASSY	1	TD2A65L00
6	BRAKET TUBE ASSY	4	TD2A65P00
7	SEAT ASSY	1	TD2A65S00
8	CHASIS ASSY	1	TD2A65U00
9	BRAKE ASSY RIGHT	1	TD2A65V00
10	LABEL	1	TD2A65001
11	SWITCH BOX. ##	1	TD2A65007
12	LAMP BRACKET	1	TD2C98A23
13	RETROFIT KIT HUB DRIVE SYSTEM, DC24V, 250W 36HOLES FOR SPOKES BRAND UMS OR EQUI. OR RETROFIT KIT HUB DRIVE SYSTEM, DC24V, 250W 36HOLES FOR SPOKES WITH DISC BRAKE, FORWARD & REVERSE DRIVE.	01 KIT	NY28 OR NY30
14	BICYCLE BOTTOM & TOP HEAD BALL RACE-1/8"(SET OF TWO)16G, BCP, IS:3973	02 SET	LA66
15	BICYCLE CROWN BALL RACER 1/8"	03 SET	LB52
16	BICYCLE TOP HEAD SCREWED RACER 1/8"	1	LB56
17	BICYCLE TOP HEAD LOCK NUT	1	LB57
18	HANDLE TIGHTNER ASSY	1	LB97
19	PU FORM ARM REST(FLAT)	2	LC42
20	BICYCLE MUDGUARD HERO RANGER TYPE FOR 26"X2.125", SIZE REAR WHEEL, COLOUR - BLACK GLOSSY FINISH WITH Ø4MM STAY WIRE	2	LF09
21	BICYCLE BRAKE WIRES(Ø1.4X1460X660-L) WITH INNER OUTER CABLE (LADIES SET)	01 PAIR	LF12
22	RACING FRONT BRAKE	2 #	LF23
23	BICYCLE HERO RANGER TYPE FRONT FORK FOR WHEEL SIZE 24"X2.125"	1	LF66
24	BICYCLE MUDGUARD HERO RANGER TYPE FOR 24"X2.125", SIZE FRONT WHEEL, COLOUR - BLACK GLOSSY FINISH WITH Ø4MM STAY WIRE	1	LF67
25	RANGER CYCLE FRAME LOCK- BRASS LIVER TUMBLER- EXTRA POWER WEIGHT-230gms	1	LF81
26	ICE BOX 25Ltr	1	LF83
27	RECHARGABLE SMF BATTERY E-BIKE, 12 V, 33 AH, MAKE- AMPTEK IPOWER OR EQUI.	2	LF90
28	CORRUGATED PVC FLEXIBLE PIPE Ø16 MM COLOUR - GREY GD. MEDIUM	0.5MTR	LK85
29	CORRUGATED PVC FLEXIBLE PIPE Ø25 MM COLOUR - GREY GD. MEDIUM	1MTR	LK86
30	TIE BAR NYLON LENGHT 200MM, NATURAL COLOUR	25	LK87
31	HEX NUT M10, IS:1363	8	BA03
32	HEX NUT M5, IS:1363	7	BA08
33	HEX BOLT M10X75MM, IS:1363	8	BB23
34	SLOTTED CSK HEAD SCREW AM5X16MM IS:1365-4.6	7	BF62
35	WOOD SCREW NO. 10X30MM, IS:6760, STEEL	4	BP88

36	PAN HEAD SCREW AM5X25MM IS:6101-4.8	4	BQ40
37	SLOTTED PAN HEAD TAPPING SCREW, IS:7173, ISP:1481-ST4.2X13-C	01+08 NOS. OPTIONAL	BQ72
38	SLOTTED PAN HEAD TAPPING SCREW, IS:7173, ISP:1481-ST4.2X38-C	1	BQ81
39	POP RIVIT Ø 4X6MM (AL)	4	BR71
40	PUNCHED WASHER A11, IS:2016, MS	16	BS46
41	PUNCHED WASHER A5.5, IS:2016, MS	7	BS47
42	SPRING WASHER 10MM, IS: 6735	8	BS55
43	FREE BALL Ø 1/8", IS:2898, STEEL	62	HK02
44	FLUORESCENT (RADIUM) TAPE-1" WIDE WITH PAPER BACKING, RED COLOUR	1.0MTR	EH43
45	CRUTCH CARRIER ASSY	1	TD2A65W00
46	CRUTCH CARRIER ASSY REAR	1	TD2A65X00
47	SMPS BATTER CHARGER FOR 24V, 33AH, SMF BATTERIES(12V, 33AH-02 NOS. CONNECTED IN SERIES)	1	LK47
48	PLUG END	1	TD2A07003
49	PAD FOOT REST	1	TD2A07K05
50	WIRING COVER LOWER	1	TD2A65008
51	WIRING COVER VERTICAL	1	TD2A65009
52	WIRING COVER HANDLE	1	TD2A65010
53	USER MANUAL OF MOTORIZED TRYCYCLE	1	EQ48
54	DISC HOLDING BRACKET	1*	TD2A65011
55	HEX HEAD BOLT IS:1363(PART1)/ISO-4016, M6X65-4.6 ZN, PLATED	1*	BB09
56	NYLOCK NUT M6 IS:7002/ISO-7040 ZN, PLATED	1*	BA82
57	PUNCHED WASHER A6.6MM, IS:2016 MS ZN, PLATED	2*	BS44
58	LABEL, IS:17154 BATTERY OPERATED MTC 56x46 MM	1	LE24
59	HELMET OPEN FACE AS PER IS:4151 (MEDIUM) HELMET OPEN FACE AS PER IS:4151 (LARGE)	1	LK59 or LK60
60	RETRO REFLECTIVE MARKING TAPE (COLOUR RED) OF 50mm WIDTH, IN COMPLIANCE WITH AIS 037 & AIS 090 SHOULD BE ARAI APPROVED	2	EH47
61	REAR VIEW MIRROR ASSY. ROUND TYPE Ø 100 mm	1	LD41
62	LABEL- SYMBOL OF ACCESSIBILITY	2	TD2A07005
63	BACK REST ASSY.	1	TD2A65M00

Quantity 01 in case of Retrofit kit NY30.
* S.no.54,55, 56,57 to be use only with NY30 kit.
Switch box not used when NY30 in use.

Motorized Tricycle (TD2A65) existing list of assembly activities.	
S. No.	**Operation**
1	Receive welded frame from painting section
2	Arm rest fixing at tube arm rest
3	Main wire fitment
4	Controller fixing at plate
5	Indicator both left and right fitment
6	Left side 2 bracket fixing.
7	Right side 2 bracket fixing.
8	2 mud guard fitment at lower side
9	Rear wheel (left) fitment
10	Rear wheel (right) fitment
11	Caliper fitment at rear right wheel
12	Brackets tightening with nut runner.
13	Right rear wheel motor wire wrapping
14	Rear wheel motor connection to controller
15	make ready fork with ball racing
16	Racing front Brake fitment & front mud guard
17	Front wheel fitment
18	Brake assy fix in holder tube
19	Back rest assy. Fitment
20	Label fixing
21	Make hole in rear left/right mudguard & tight to holder
22	Ball racer tightening and lane bracket fitment with locknut
23	Handle assy fitment with handle tightner assy.
24	Handle assy all function wire connection to main wire.
25	Covering handle assy wire & main wire with pvc pipe.
26	Cabling by hose pipes in wiring & dressing by tie
27	Horn & Head light fitment
28	Lock fitment over front mudguard
29	Connect and adjust front brake wire with brake shoe set in front wheel.
30	Connect and adjust rear brake wire with caliper at right rear wheel.
31	Connect light horn with main wire & switch
32	Brake wire set connection with brake lever
33	Battery fitment and connect 24 V wire with controller
34	Connect 12 v battery wire with controller & connect buzzer inside battery and cover with pvc pipe and tie with cable tie.
35	Connect handle assy to controller
36	Hold bunch of wires inside tube & tie with cable tie.
37	03 Nos Cable-tray fitment by BQ84
38	Offer to QC for Inspection
Note:- works also included as child part assembly such as, Wheel Assembly , Battery Assembly, Disc-Brake Plate Fitment, Mudguard Assembly (Rear & Front), Ball-Bearing Assembly, collar plate (LB52) fitment in fork (LF66), Brake Caliper Assembly, Parking Brake Assembly, Handle & centre tube Assembly etc. **Outside Assembly shop activity:** **Battery box packing and Ice box fitment with tagging strip & seat fitment.**	

Wheel chair (TD2A0600) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	FRAME ASSY (RIGHT)	1	TD2A06A00
2	FRAME ASSY (LEFT)	1	TD2A06B00
3	SEAT FRAME ASSY (RIGHT)	1	TD2A06C00
4	SEAT FRAME ASSY (LEFT)	1	TD2A06D00
5	ARM REST ASSY , OR PU FOAM ARM REST(WITH SCREWS)	2	TD2A06E00 OR LF58
6	CASTOR ASSY	2	TD2A06H00
7	REAR WHEEL ASSY	2	TD2A06J00
8	SEAT ASSY	1	TD2A06K00
9	BACK REST ASSY	1	TD2A06L00
10	PLATE GUARD	2	TD2A06002
11	WASHER	4	TD2A06003
12	DUST CAP	2	TD2A06004
13	WASHER	16	TD2A07D08
14	PLUG END	4	TD2A07002
15	PLUG END	4	TD2A07003
16	HAND GRIP OR HAND GRIP ID 21MM	2	LA24 OR LD50
17	TAPPING SCREW AB 8X13, IS:7178	8	BQ72
18	HEX BOLT M5X15MM IS:1365	4	BB02
19	PUNCHED WASHER A5.5 IS:2016, MS	4	BS47
20	DUST CAP	2	TD2A07N05
21	LABEL WHEEL CHAIR	1	TD2A06005
22	LABEL-SYMBOL OF ACCESSIBILITY	1	TD2A07005
23	POP RIVET Ø4X6MM (AL)	4	BR71
24	NYLOCK NUT M6	8	BA82
25	FOOT TRIP	2	TD2A07009
26	FOOT REST SUPPORT ASSY	2	TD2A06F00
27	FOOT REST ASSY	1	TD2A06G00
28	PLUG END ASSY	2	TD2A07004
29	KNOB	2	TD2A07RA0
30	PUNCHED WASHER A9MM IS:2016, MS	2	BS45
31	SPRING WASHER 8 MM IS:6735	2	BS54
32	BRAKEASSEMBLY RIGHT	1	TD2A02D00
33	BRAKEASSEMBLY LEFT	1	TD2A02E00
34	CHEST BELT ASSY	1	TD2A06U00
35	STICKER FOR INSTRUCTION FOR LUBRICATION	1	LF16
36	BELT ASSY	1	TD2A06V00
37	LABEL - IS:8086	1	LF17
38	ALIMCO ROUNDAL	2	TD2A07N06
39	SLOTTED CHEESS HEAD SCREW AM4X10MM IS:1366-6.6	2	BN11

Appendix-4

Wheel chair (TD2A0600) existing list of assembly activities.	
Sl.No	**OPERRATION**
1	REAMER OPERATION ON SIDE FRAME
2	ARMREST ASSEMBLY
3	DRILLING FOR SIDE GUARD FITTING
4	SIDE GUARD FITTING BY BQ-72
5	STRIP HOLDING ASSY
6	FITTING OF STRIP HOLDING
7	FITTING OF STOPPER FOR FOOT REST
8	FITTING OF BUSH FOR FRONT WHEEL
9	SEAT BACK ASSEMBLY FOR FITTING
10	PARKING BRAKE FITMENT
11	PASTING OF RUBBER ON FOOTREST
12	FOOTREST ASSEMBLY
13	FRONT WHEEL ASSY
14	HAND GRIP/FOOT TIP/DUST CAP FITMENT
15	TYRE MOUNTING (LD75/LD80)
16	FITMENT OF AXLE
17	FITMENT OF HAND RIM
18	FITMENT OF FRONT WHEEL /CASTER WHEEL
19	REAR WHEEL ASSY/FITMENT
20	HUB COVER FITMENT BOTH SIDE
21	DISABILITY STICKER PLACED AT LEFT SIDE PLATE
22	ISI MARK AND CABLE PLATE FITMENT AT RIGHT SIDE GUARD PLATE
23	PRESS BEARING FOR WHEEL SHAFT HOLDER AND BUSH PRESSING ON HUB AXLE BOTH SIDE
24	FITMENT END PLUG
25	FITMENT OF FOOT REST SUPPORT ARRAY
26	KNOB FITMENT IN FOOT REST SUPPORT ARRAY
	INSPECTION FOR QC
Note:- following works also included as child part assembly such as, wheel assembly, parking Brake assembly, etc	

Wheel chair (TD2C51000) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	FRAME ASSY (RIGHT)	1	TD2C51A00
2	FRAME ASSY (LEFT)	1	TD2C51B00
3	BELT ASSY	1	TD2C51K00
4	CHEST BELT ASSY	1	TD2C51L00
5	SEAT ASSY	1	TD2C51P00
6	BACK REST ASSY	1	TD2C51Q00
7	PLATE GUARD	2	TD2C51001
8	LABEL	1	TD2C51003
9	INSERT STOPPER	2	TD2C51006
10	BRAKE ASSY(RIGHT)	1	TD2A02D00
11	BRAKE ASSY(LEFT)	1	TD2A02E00
12	SEAT FRAME ASSY(RIGHT)	1	TD2A07D00
13	SEAT FRAME ASSY(LEFT)	1	TD2A07E00
14	CASTOR ASSY	2	TD2A07V00
15	WASHER	16	TD2A07D08
16	FOOT REST	2	TD2A07K04
17	PAD FOOT REST	2	TD2A07K05
18	SPRING FLAT FOOT REST	2	TD2A07K06
19	PLUG END	2	TD2A07003
20	PLUG END	4	TD2A07004
21	LABEL SYMBOL OF ACCESSIBILITY	1	TD2A07005
22	FOOT TIP	2	TD2A07009
23	INTEGRAL SKIN PU ARM REST	2	LC38
24	HAND GRIP ID 21MM	2	LD50
25	LABEL IS:7454	1	LD90
26	HEX NUT M6 IS:1363	4	BA01
27	NYLOCK NUT M6	8	BA82
28	HEX BOLT M6X35MM, IS:1363	2	BB06
29	SLOTTED CHEESE HEAD SCREW AM3X8, IS:1366	2	BN02
30	TAPPING SCREW AB 8X13, IS:7173	8	BQ72
31	POP RIVET Ø4X6MM AL	4	BR71
32	REAR WHEEL ASSY	2	TD2A07Z00

Wheel chair (TD2C51000) existing list of assembly activities (Tentative).	
Sl.No	**OPERRATION**
1	REAMER OPERATION ON SIDE FRAMES
2	ARMREST ASSEMBLY
3	DRILLING FOR SIDE GUARD FITTING
4	SIDE GUARD FITTING BY BQ-72
5	STRIP HOLDING ASSY
6	FITTING OF STRIP HOLDING
7	FITTING OF STOPPER FOR FOOT REST
8	FITTING OF BUSH FOR FRONT WHEEL
9	SEAT BACK ASSEMBLY FOR FITTING
10	PARKING BRAKE FITMENT
11	PASTING OF RUBBER ON FOOTREST
12	FOOTREST ASSEMBLY
13	FRONT WHEEL ASSY
14	HAND GRIP/FOOT TIP/DUST CAP FITMENT
15	TYRE MOUNTING (LD36/LD30)
16	FITMENT OF AXLE
17	FITMENT OF HAND RIM
18	FITMENT OF FRONT WHEEL /CASTER WHEEL
19	REAR WHEEL ASSY/FITMENT
20	HUB COVER FITMENT BOTH SIDE (LEFT & RIGHT)
21	DISABILITY STICKER PLACED AT LEFT SIDE PLATE
22	ISI MARK AND CABLE PLATE FITMENT AT RIGHT SIDE GUARD PLATE
23	PRESS BEARING FOR WHEEL SHAFT HOLDER AND BUSH PRESSING ON HUB AXLE BOTH SIDE
24	FITMENT END PLUG
	INSPECTION FOR QC
Note:- works also included as child part assembly such as, wheel assembly, parking Brake assembly, etc	

Wheel chair (TD2B3600) Assembly parts			
S.NO.	**OPERATION**	**QTY/PIECE**	**SUB ASSY DRAWING NO.**
1	WM3-01 FRAME PRE-ASSEMBLY	1	TD2B36A00
2	WM3-01 SEATING-BACKREST PRE-ASSEMBLY	1	TD2B36B00
3	FOOTREST SUPPORT WELDMENT	1	TD2B36F00
4	FRAME CLAMP - LEFT	1	TD2B36001
5	FRAME CLAMP - RIGHT	1	TD2B36002
6	WM3-01 FOOTREST ASSEMBLY	1	TD2B36G00
7	AXLE - REAR WHEEL	2	TD2B36004
8	CASTOR FORK	1	TD2B36H01
9	CASTOR BARREL CAP WASHER 12 X 31	1	TD2B36005
10	220 DIA CASTOR WHEEL - RURAL	1	TD2B36H03
11	SPACER STRAIGHT	1	TD2B37B07
12	M12 X 95 SPANNER BUTTON HEAD BOLT	1	TD2B36012
13	AXLE - CASTOR WHEEL	1	TD2B36H02
14	M8 ALLEN CAP NUT	9	TD2B36011
15	M8 NUT LOCKING PLATE	2	TD2B36003
16	TUBULAR ARMREST ASSY.	2	TD2B36E00
17	WHEEL ASSY. WITH PUSH RIM	2	TD2B36J00
18	CUSHION SEAT PU ASSY.	1	TD2B36MA0
19	FOOTPLATE COVER - MOULDED	2	TD2B36G02
20	12 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	8	BC63
21	6001 ZZ C3 RADIAL BALL BEARING	2	GC98
22	Hex Socket Button Head Screw M8x30 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	1	BC44
23	Hex Socket Button Head Screw M8x40 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	6	BC46
24	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	3	BC58
25	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	5	BA84
26	Nyloc Nut M12 IS:7002 Zinc Plated Blue 5-8µ IS:1573	2	BA85
27	8 mm SPRING LOCK WASHER IS:3063 (TYPE B) ZINC PLATED BLUE 5-8µ IS:1573	1	BC59
28	Hex Socket Button Head Screw M8x70 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	1	BC48
29	Hex Socket Button Head Screw M8x30 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2	BC44
30	ROUGH TERRAIN UPHOLSTERY KIT	1	TD2B360Z0
31	TOGGLE BRAKE - LEFT	1	TD2B36L00
32	TOGGLE BRAKE - RIGHT	1	TD2B36K00

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Wheelchair (TD2B3600) assembly activities (Tentative).			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	WM3-01 Frame Pre-Assembly	1 Set	TD2B36A00
	Foot rest Support weldment	1 Nos.	TD2B36F00
2	WM3-01 Foot rest Assembly	1 Set	TD2B36G00
3	Castor wheel assembly	1 Nos.	TD2B36H03
	Castor fork assembly	1 Nos.	TD2B36H01
4	Castor barrel Cap washer 12x31	1 Set	TD2B36005
5	WM3-01 Seating-Backrest Pre Assembly	1 Set	TD2B36B00
6	Rear Wheel Assy. With Push Rim	2 Set	TD2B36J00
7	Toggle Brake Assembly (right)	1 Nos.	TD2B36K00
	Toggle Brake Assembly (left)	1 Nos.	TD2B36L00
8	Hand Grip I.D. 21mm	2 Nos.	LD50
9	Tubular Armrest Assembly	2 Set	TD2B36E00
10	Cushion seat PU Assembly	1 Nos.	TD2B36MA0

Note : Wheel chair (TD2B3600) production yet to start, in development phase.

Wheel chair (TD2B3700) Assembly parts			
S. No.	**Operation**	**Qty/ Piece**	**sub assembly drawing no.**
1	SIDE FRAME WELD ASSY. - R	1	TD2B37CA0
2	SIDE FRAME WELD ASSY. - L	1	TD2B37BA0
3	M8 PIVOT SPACER	12	TD2B37B05
4	CROSS BRACE INNER ASSY.	1	TD2B37AA0
5	CROSS BRACE OUTER ASSY.	1	TD2B37AB0
6	X BRACE - ADJUSTMENT BAR	4	TD2B37B03
7	25MM TUBE SLEEVED CLIP	4	TD2B37A03
8	SPACER STRAIGHT	2	TD2B37B07
9	8 MM SADDLE WASHER BLACK PLASTIC OD 25 MM	8	TD2B36B01
10	X BRACE BUSH	4	TD2B37A01
11	LOCK OUT BAR	2	TD2B37B04
12	FOOTREST ASSY. - L	1	TD2B37F00
13	FOOTREST ASSY. - R	1	TD2B37G00
14	PUSH HANDLE EXTENSION WELD ASSY.	2	TD2B37E00
15	M8 ALLEN CAP NUT	2	TD2B36011
16	Hex Socket Button Head Screw M8x70 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2	BC48
17	Hexagon Socket Button Head Screw ISO 7380-M8x45	8	BC47
18	Hex Socket Button Head Screw M8x16 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	4	BC42
19	M12 X 95 SPANNER BUTTON HEAD BOLT	2	TD2B36012
20	12 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	8	BC63
21	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	10	BC58
22	CASTOR BARREL CAP WASHER 12 X 32	2	TD2B36005
23	CASTOR WHEEL WITH FORK ASSY.	2	TD2B37D00
24	M8 X 35 BLANK PAN HEAD - KEYED	2	TD2B37B06
25	WHEEL ASSY. WITH PUSH RIM	2	TD2B36J00
26	25 DIA END PLUG (23.4 ID)	4	TD2B37A02
27	Nylock Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	14	BA84
28	HAND GRIP I.D. 21mm	2	LD 50
29	8 mm SPRING LOCK WASHER IS:3063 (TYPE B) ZINC PLATED BLUE 5-8µ IS:1573	2	BC59
30	Nyloc Nut M12 IS:7002 Zinc Plated Blue 5-8µ IS:1573	4	BA85
31	TOGGLE BRAKE- RIGHT	1	TD2B36K00
32	TOGGLE BRAKE- LEFT	1	TD2B36L00
33	UPHOLSTERY KIT	1	TD2B370Z0

Wheelchair (TD2B3700) assembly activities (Tentative).			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Side frame weld assembly (right)	1 Nos.	TD2B37CA0
	Side frame weld assembly (left)	1 Nos.	TD2B37BA0
2	X-brace -Adjustment bar	4 Nos.	TD2B37B03
3	Lock Out Bar	2 Nos.	TD2B37B04
4	Cross Brace inner Assy	1 Nos.	TD2B37AA0
5	Cross Brace outer Assy	1 Nos.	TD2B37AB0
6	Castor wheel with fork assembly	2 Set	TD2B37D00
	Castor barrel Cap washer 12x31	2 Nos.	TD2B36005
7	Foot rest Assy(right)	1 Set	TD2B37G00
	Foot rest Assy(left)	1 Set	TD2B37F00
8	Wheel Assy. With Push Rim	2 Set	TD2B36J00
9	Toggle Brake Assembly (right)	1 Nos.	TD2B36K00
	Toggle Brake Assembly (left)	1 Nos.	TD2B36L00
10	Push handle extension weld assembly	2 Nos.	TD2B37EA0
11	Hand Grip I.D. 21mm	2 Nos.	LD50
12	Up holes tray kit fitment	1 kit	TD2B370Z0

Note: Wheel chair (TD2B3700) production yet to start, in development phase.

A. WHEEL TYPE -1

TD2A07Z00 wheel (wheel chair) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Hub Assy	1	TD2A07ZA0
2	Rim & Bracket Assy	1	TD2A07NC0
3	hand rim assy	1	TD2A07ND0
4	Hex Head bolt M12x125 10.9 as per IS:1363	1	BC53
5	Plain washer 00-16.8, 10-12.4x2mm thk.	2	TD2A07ZA1
6	Nylock nut M12 IS: 7002/ISO:7040	1	BA85
7	Nipple for bicycle spoke Ø2mm, brass , Ni, Cr, Plated, IS:630	32	LA37
8	Bicycle spoke washer galvanized Ø2mm, is 630 0.28mm thick	32	LA38
9	SPOKE BICYCLE FOR 24X1½" SIZE WHEEL Ø2mm, Ni, Cr Plated IS:630 Length 25.5mm	32	LA39
10	EVA TYRE WHEEL CHAIR(GRAY COLOUR)24"X1½" BICYCLE RIM	1	LD36
11	HEX BOLT M5X15MM IS:1363	4	BB02
12	SPRING WASHER 5MM, IS:6735	4	BS52

B. WHEEL TYPE -2

TD2A06J00 wheel (wheel chair) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Hub Assy	1	TD2A06JA0
2	Flange hub	2	TD2A06JA1
3	Tube hub	1	TD2A07N08
4	Hub Cap	2	TD2A07N10
5	Cup	2	TD2A07N11
6	Rim & Bracket Assy	1	TD2A06JB0
7	Rim bicycle 20"x1 3/8"" IS:624	1	TD2A06JB1
8	Bracket	4	TD2A06JB2
9	Washer I.D. 3	8	TD2A06JB3
10	Flat head rivet 3x6 st. IS: 2155	8	BR46
11	Axle & cone assy.	1	TD2A07NB0
12	Axle	1	TD2A07N12
13	Cone inner	1	TD2A07N16
14	Hand rim assy	1	TD2A06JC0
15	Hand rim	1	TD2A06JC1
16	Nut	4	TD2A06JC2
17	Lock Nut	1	TD2A07M13
18	Hex-bolt M5x15mm IS:1363	4	BB02
19	Spring washer 5 IS: 6735	4	BS52
20	Free ball Ø15 IS: 2298	13	HK05
21	Tyre bicycle 20"X1 1/3", IS:2414	1	LA29
22	Tube bicycle 20"X1 1/3", IS:2415	1	LA30
23	Spokes bicycle for 20"X1 1/3" size wheel, Ø2.00mm Ni, Cr. Plated IS:630	20	LA32
24	Bicycle spoke nipple for Ø2.00mm spokes IS:630	20	LA37
25	Bicycle spoke washer galvanized IS:630	20	LA38
26	Rim Tape & Buckle	1	LA40
27	Hub axle assy size-1	1	LA 27
28	Hex nut Hex nut ½"B.S.F.	1	TD2A07N13 or BA48

29	Spring washer ½"	1	BX51
30	Free ball Ø¼" IS: 2298	9	HK06
31	Cone lower	1	TD2A07M12
32	EVA solid tyre rear grey colour for 20x1 3/8" bicycle rim	1	LD80

C. WHEEL TYPE -3

TD2A65L00 front wheel (Motorized Try cycle) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Standard bicycle rim assy front wheel(24"x2.125") with 36 holes	1	LK13
2	standard bicycle tyre for wheel size-24"x2.125" colour -black ISI marked, as per IS:2414	1	LF64
3	standard bicycle tube for wheel size-24"x2.125" colour -black ISI marked, as per IS:2415	1	LF65
4	Bicycle rim rubber tape thick 0.8mm minimum, width-20mm, tensile strength-70kgf/cm² minimum, elongation at break-300% minimum, tension set(300 stretching)-20% maximum as per IS:960. OR Bicycle rubber rim tape thick 0.8mm minimum width-15±1mm, length 1520±20mm for size 24"x2.125"	1	HK22 OR HK53

D. WHEEL TYPE -4

TD2A65J00 Rear wheel right (Motorized Try cycle) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Standard bicycle rim assy. rear wheel(26"x2.125") with 36 holes(right)	1	LK11
2	standard bicycle tyre for wheel size-26"x2.125"(57-559) colour -black ISI marked, as per IS:2414	1	LF04
3	standard bicycle tube for wheel size-26"x2.125" colour -black ISI marked, as per IS:2415	1	LF05
4	Bicycle rim rubber tape thick 0.8mm minimum, width-20mm, tensile strength-70kgf/cm² minimum, elongation at break-300% minimum, tension set(300 stretching)-20% maximum as per IS:960 OR Bicycle rubber rim tape thick 0.8mm minimum width-15±1mm, length 1685±20mm for size 26"x2.125"	1	HK22 OR HK52

E. WHEEL TYPE -5

TD2A65K00 Rear wheel left (Motorized Try cycle) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Standard bicycle rim assy rear wheel(26"x2.125") with 36 holes(left)	1	LK12
2	standard bicycle tyre for wheel size-26"x2.125" (57-559) colour -black ISI marked, as per IS:2414	1	LF04
3	standard bicycle tube for wheel size-26"x2.125" colour -black ISI marked, as per IS:2415	1	LF05
4	Bicycle rim rubber tape thick 0.8mm minimum, width-20mm, tensile strength-70kgf/cm² minimum, elongation at break-300% minimum, tension set(300 strecting)-20% maximum as per IS:960 OR Bicycle rubber rim tape thick 0.8mm minimum width-15±1mm, length 1685±20mm for size 26"x2.125"	1	HK22 OR HK52

F. WHEEL TYPE -6

LJ57 front wheel (Manual Try cycle) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Rim bicycle BE-635-25-steel(28"x1 1/2")with 32- holes for spokes Ni, Cr. Plated, ISI marked, IS:624	1	LJ52
2	Nipple for bicycle spokes Ø2mm, brass Ni, Cr. Plated as per IS:630	32	LA37
3	Bicycle spoke washerØ2mm 0.28mm thick galvanized as per IS:630	32	LA38
4	Bicycle front hub assy (32 holes), for 28"x1 1/2" wheel, Thick Barrel hub type as per IS: 629, Ni.Cr Plated Service Condition No. -1 as per IS: 1068	1	LC51
5	Spokes bicycle for (28"X1 1/2") wheel, Ø2mm Zinc plated blue passivation, as per IS:630	32	LC55

G. WHEEL TYPE -7

LJ53 front wheel Tyre (Manual Try cycle) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Bicycle rim assy front wheel (28"x1 1/2")with 32-holes	1	LJ57
2	Cycle Rickshaw heavy duty tyre, type'A' size 40-635(28"x1 1/2") black, ISI marked IS:2414, Crown thicknes-5.5mm minimum tensile strength :- 81.5kgf/cm²(8MPA) minimum of rubber compound elongation at break-300% minimum	1	LC52
3	cycle rubber tube heavy duty size: 40-635(28"x1 1/2") black ISI marked, IS:2415 tensile strength :- 107kgf(10.5MPa)minimum elongation at break-475% minimum	1	LC53
4	Bicycle rim tape cotton webbing with buckle, as per IS:960 thickness- 1.07/0.97mm width-13.5mm, weight per 100mtr-550gm. Minimum OR Bicycle rubber rim tape thick 0.8mm minimum, width-15±1mm length 1930±20mm, for size 28"x1 1/2", as per IS:960	1	HK20 OR HK51

H. WHEEL TYPE -8

LJ58 REAR WHEEL TD2C38000 (MANUAL TRICYLE) ASSEMBLY PART			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Rim bicycle BE-635-25-steel(28"x1 1/2")with 40- holes for spokes, ISI marked as per IS:624 & Ni, Cr. Plated service condition no.-3 As per IS:1068	1	LJ54
2	Nipple for bicycle spokes Ø2mm, brass Ni, Cr. Plated as per IS:630	40	LA37
3	Bicycle spoke washerØ2mm 0.28mm thick galvanized as per IS:630	40	LA38
4	Spokes bicycle for (28"X1 1/2") wheel, Ø2mm Zinc plated blue passivation, as per IS:630	40	LC55
5	Bicycle rear Hub assy (40-holes) for 28"X1 1/2" wheel, thick barrel hub type, thread length 10.0mm min, Ni. Cr. plated, service condition no.- As per IS:629	1	LC56

I. WHEEL TYPE -9

LJ55 REAR WHEEL WITH TYRE TD2C38000 (MANUAL TRICYLE) ASSEMBLY PARTS			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Bicycle rim assy Rear wheel (28"x1 1/2")with 40-holes	1	LJ58
2	Cycle Rickshaw heavy duty tyre, type'A' size 40-635(28"x1 1/2") black, ISI marked IS:2414, Crown thicknes-5.5mm minimum tensile strength :- 81.5kgf/cm²(8MPA) minimum of rubber compound elongation at break-300% minimum	1	LC52
3	cycle rubber tube heavy duty size: 40-635(28"x1 1/2") black ISI marked, IS:2415 tensile strength :- 107kgf(10.5MPa)minimum elongation at break-475% minimum	1	LC53
4	Bicycle rim tape cotton webbing with buckle, as per IS:960 thickness- 1.07/0.97mm width-13.5mm, weight per 100mtr-550gm. Minimum OR Bicycle rubber rim tape thick 0.8mm minimum, width-15±1mm length 1930±20mm, for size 28"x1 1/2", as per IS:960	1	HK20 OR HK51

J. WHEEL TYPE -10

LD71 FRONT WHEEL TD2C95000 (MANUAL TRICYLE) ASSEMBLY PARTS			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Rim bicycle Type 'A' 20"x1 3/8")with 20 holes for spokes, As per IS:624	1	LA31
2	Spokes bicycle for 20"X1 1/3" size wheel, Ø2.00mm Ni, Cr. Plated IS:630	20	LA32
3	Nipple for bicycle spokes Ø2mm, brass Ni, Cr. Plated as per IS:630	20	LA37
4	Bicycle spoke washerØ2mm 0.28mm thick galvanized as per IS:630	20	LA38
5	hub axle assy Front wheel, 16"X1 3/8" with 20 holes	1	LC04

K. WHEEL TYPE -11

LA60 FRONT WHEEL WITH TYRE (MANUAL TRICYLE) ASSEMBLY PARTS			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Tyre bicycle 20"X1 1/3", IS:2414	1	LA29
2	Tube bicycle 20"X1 1/3", IS:2415	1	LA30
3	Rim bicycle Type 'A' 20"x1 3/8")with 20 holes for spokes, As per IS:624	1	LA31
4	Spokes bicycle for 20"X1 1/3" size wheel, Ø2.00mm Ni, Cr. Plated IS:630	20	LA32
5	Nipple for bicycle spokes Ø2mm, brass Ni, Cr. Plated as per IS:630	20	LA37
6	Bicycle spoke washerØ2mm 0.28mm thick galvanized as per IS:630	20	LA38
7	hub axle assy Front wheel, 16"X1 3/8" with 20 holes	1	LC04
8	Bicycle rim tape cotton webbing with buckle, as per IS:960 thickness- 1.07/0.97mm width-13.5mm, weight per 100mtr-550gm. Minimum	1	HK20

L. WHEEL TYPE -12

LD72 Rear wheel(40 spoke)(Manual Try cycle) Assembly parts			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Nipple for bicycle spokes Ø2mm brass, Ni, Cr. Plated as per IS:630	40	LA37
2	Bicycle spoke washer Ø2mm, Galvanized as per IS:630	40	LA38
3	Spoke bicycle for (24"x1 1/2") size wheel, Ø2mm zinc plated blue passivation lenght-260mm as per IS:630	40	LA39
4	Standard bicycle hub axle, assy rear wheel 28"x1 1/2" with 20 holes in each flange, Ni, Cr. Plated, IS:629	1	LC56
5	Bicycle rim rear (24"x1½") with 40 holes, Ni-Cr. Plated as per IS:624 OR RIM Bicycle BE-534-25 (24"x1½") with 40 holes, Ni-Cr. Plated, ISI Marked, IS:624	1	LC92 OR LJ60

M. WHEEL TYPE -13

LC98/TD2C95B00 Rear Tyre wheel(40 spoke)(Manual Try cycle) Assembly partsS			
S. No.	**Operation**	**Qty/Piece**	**sub assembly drawing no.**
1	Bicycle rear wheel assy 24"x1 1/2"(A-type rim) 40 holes	1	LC98
2	Nipple for bicycle spoke Ø2mm IS:630	40	LA37
3	Bicycle spoke washer, 0.28 thick, galvanized IS:630	40	LA38
4	Spoke bicycle for 24"x1 3/8" size wheel Ø2mm, zinc or Ni, Cr. Plated, IS:630, lenght-260mm	40	LA39
5	Standard bicycle rear hub(40-holes) for 28"x1 1/2" wheel phillip type, thread lenght-12.7mm(minimum), IS:12205	1	LC56
6	Bicycle rim rear 24"x1 1/2", with 40-holes Ni, Cr. Plated, IS:624	1	LC92
7	Tyre bicycle 24"x1 1/2", IS:2414, ISI marked	1	HK14
8	Tube bicycle 24"x1 1/2", IS:2415, ISI marked	1	HK15
9	Rim tape cotton with buckle	1	HK20
10	Bicycle free wheel 18 teeth, half ball hardness- 55 HRC minimum IS:1283	1	LC46

Preferred makes

Preferred makes for Buyout Items		
S.No	**Description**	**Make**
1.	PLC	Allen Bradley / Mitsubishi / Siemens/ Similar
2.	PLC IO	Allen Bradley / Mitsubishi / Siemens/ Similar
3.	EtherNet Adaptor	Allen Bradley / Mitsubishi / Siemens/ Similar
4.	HMI	Allen Bradley / Mitsubishi / Siemens/ Similar
5.	SMPS	Allen Bradley / Siemens/ Similar
6.	VFD	Allen Bradley / Siemens/ Similar
7.	Choke	Allen Bradley / Siemens/ Similar
8.	Transformer	Amruta / Equivalent/ Similar
9.	MCB/MPCB	Siemens/Schneider with No & NC contact/ Similar
10.	Contactor	Siemens/Schneider with No & NC contact/ Similar
11.	Panel	Rittal/Bartakke - IP 69
12.	Panel AC	Advanced/Rittal
13.	Indicator/PB/SS	Schneider/Tecknic/ Similar
14.	Single Phase preventer	Minilec / Equivalent/ Similar
15.	Safety replay (For Emergency) with two port	AB / Siemens/ Similar
16.	Limit switch	Schneider/Omron with indication/ Similar
17.	Proximity/Inductive sensor Any kind of sensor	IFM/Omron/ Similar
18.	Relay Board / Relay	Omron / Phonix Solid state relay/ Similar
19.	EtherNet Switch	Allen Bradley / Siemens/ Similar
20.	Motor	SEW / Nord/ Similar
21.	Panel terminals	Wago - Push type (without screw type) / Similar
22.	Panel Fan	Rexnord / Equivalent/ Similar
23.	DBR	Allen Bradley / Siemens/ Similar
24.	Panel Hooter / Tower Lamp	PATLITE / Equivalent/ Similar
25.	Bearings	FAG/SKF/New Ball Bearing/ Similar
26.	Plummer Block	SKF / NTN/ Similar
27.	Pneumatic Cylinder / Pipe/ Fittings / NRV / Air Controller / FRL / Booster / Valve	SMC/Festo/Norgrenl/ Similar
28.	Drag Chain	Igus / Equivalent/ Similar
29.	UPS	APC / Equivalent/ Similar
30.	Caster wheels	Pioneer / Rexello/ Similar
31.	Slat Chain	TI Diamond / Equivalent/ Similar
32.	Transmission Chain	TI Diamond / Equivalent/ Similar
33.	Gear box	SEW/Bonfiglioli/Premium/Similar
34.	LED Digital display	LG, SAMSUNG & Panasonic/ Similar

(On Letter Head of the Tenderer)

APPENDIX-1

UNDERTAKING

We hereby undertake that the delivery, installation, commissioning & training of the whole machine/equipment/system/plant & it's accessories (on turn Key Basis) will be completed within the stipulated period as indicated in the tender or specified at Annexure-A, from the date of placement of PO/work contract".

Dated:

Authorized Signatory:

Name: -

Designation: -

Seal: -

(On Letter Head of the Tenderer)

APPENDIX -2

UNDERTAKING

We hereby undertake that our Firm has not been debarred/blacklisted/terminated/banned to participate in the Tender by any Govt. Institution, PSU, State Govt. or Central Govt. Deptt.

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -3

UNDERTAKING

We hereby undertake that our Offer is valid for acceptance for 120 days from the date of opening of Techno-Commercial Bid (TC-Bid).

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -4

UNDERTAKING

We hereby undertake that all the tender terms & conditions are acceptable to us.

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -5

UNDERTAKING

We hereby undertake that a Performance Bank Guarantee (PBG) of 3% of the order value, valid for warranty period & claim submission date, will be submitted within 3 months from the date of expiry of S D Bank Guarantee period after the successful commissioning & Prove-out of the machine/equipment/system/plant (on turn-key basis).

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -6

UNDERTAKING

We hereby undertake to the effect that an Advance Bank Guarantee (BG) of 110% of the advance value subject to maximum upto 100 Lakhs, valid for successful installation, commissioning & prove out of whole plant & its accessories can be submitted within 1 months from the date of releasing the PO/Work Order of the machine/equipment/system/plant (on turn-key basis).

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -7

UNDERTAKING

We hereby undertake that our firm shall submit the security deposit as per tender terms within 14 days of releasing PO/Work Order of the machine/equipment/system/plant (on turn-key basis).

Dated:

Authorized Signatory :

Name :-

Designation :-
Seal :-

(On Letter Head of the Tenderer)

APPENDIX -8

UNDERTAKING

We hereby undertake that our firm shall provide the complete training regarding operation & maintenance of the Whole machine/equipment/system/plant (On turn-key Basis) & its accessories.

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -9

UNDERTAKING

We hereby undertake that we will unconditionally accept to replace the supplies if rejected at the destination.

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -10

UNDERTAKING

We hereby undertake that payment terms mentioned at Para No-16 of this tender document (i.e. Terms of Payment) is acceptable to us.

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -11

UNDERTAKING

We hereby undertake that our firm shall attach the proof regarding prior experience of supplying such systems as mentioned in **Mandatory / Pre-Qualification Criteria** of the Tender Document. Vendor to provide valid details of such customer along with contact number for verification.

Sl. No.	_____	_____	_____	_____

Dated:

Authorized Signatory :

Name :-

Designation :-

Seal :-

(On Letter Head of the Tenderer)

APPENDIX -12

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date:

To,

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No:

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No._to_____(including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organization to have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,
(Signature of the Bidder, with Official Seal)

(On Letter Head of the Tenderer)

APPENDIX -13

UNDERTAKING

We hereby confirm that the GST portion shall be claimed only after submission of GST Return and Input credit appearing in corporation's GST portal, filed online by the tenderer clearly (duly highlighted) showing invoice/ bill number and amount to ALIMCO so as to enable the Corporation to avail GST input credit after matching of the GST return and Invoice submitted in the Corporation. No claim against the Corporation shall be made for non- matching of GST and the amount shall be credited back by us.

Dated:

Authorized Signatory:

Name:-
Designation:
Seal:

(On Letter Head of the Tenderer)

APPENDIX -14

UNDERTAKING

We hereby undertake that as follows:

a) Part payment will be done in accordance to Billing Breakup (BBU) submitted by the L-1 Bidder and subsequent approval of ALIMCO.
b) 60% material cost of invoice (exclude GST) on receipt of material at ALIMCO site without damage.
c) 30% material cost of invoice plus installation (exclude GST) total 90%, after completion of erection work of each item (exclude GST).
d) Balance 10% (exclude GST) of work will be released after successful prove out and receipt of bank guarantee from a nationalized bank equal to 3% of PO/WO value.
e) GST portion shall be paid on availment and matching of Input Credit.
f) Supplier's Bank Charges/Draft making charges will have to be borne by the party only.
g) The tenderer will be required to submit their RTGS details duly certified by the Bank along with a crossed/cancelled Cheque in support of the details, as all payments/refunds are preferably be made through RTGS.
h) If desired Advance up Rs. 100 lacs against submission of Undertaking to the effect that an Advance Bank Guarantee (BG) of 110% of the advance value. The recovery of the advance will be done as adjustment @25% of advance value from the running bill. The Advance Bank Guarantee (BG) for advance shall only be released after successful installation, commissioning & Prove-out of whole plant & it's accessories and full recovery of the advance.

Dated:

Authorized Signatory :

Name :-

Designation :-
Seal :-

(On Letter Head of the Tenderer)

APPENDIX -15

UNDERTAKING

We hereby undertake that we will execute comprehensive AMC for the period of 03 years after the expiry of warranty/defect liability period as per the requirement of ALIMCO and the comprehensive AMC shall not exceed 2%, 3% & 4% of basic value of the machine/equipment/system/plant during 3rd, 4th & 5th year respectively from the date of successful installation & commissioning of the machine/equipment/system/plant.

Dated:

Authorized Signatory :

Name :-
Designation :-
Seal :-

APPENDIX -15/1

Comprehensive ANNUAL MAINTENANCE CONTRACT (AMC)

1. **Responsibilities of the Firm**

Comprehensive maintenance, including calibration, shall be conducted through mutual agreement with the nominated ALIMCO site official. The preventive maintenance regime offered must be aimed at achieving minimum 98% uptime of the System including the System down time for preventive maintenance schedules.

2. The tenderer shall ensure that in case a failure is reported, the system is restored to the complete working status within 48 hours. This period of upto 48 hours after the failure report shall be treated as grace period, which will not count towards System down time for up to one failure per quarter and a maximum of 4 failures per annum. In case the number of failures exceeds one during any quarter or four during any year of AMC, grace period of only 24 hours will be permissible for such additional failures.

3. The successful Tenderer should submit a list of authorized persons for carrying out the comprehensive AMC of the System. The Tenderer shall be solely responsible for the safety of all the men and equipment of the Tenderer. The authorized person shall observe all safety and security rules prevailing at the place of work. ALIMCO shall not be responsible for any mishap resulting out of non-observance of prevailing safety and security rules.

4. All costs involved in hiring, deployment etc. for the Tenderer's personnel should be borne by the Tenderer.

5. The Tenderer should ensure that there is no damage to the ALIMCO property/material.

6. Payments

Normally quarterly payment under comprehensive AMC will be made to the tenderer within 30 days from the end of the quarter subject to submission of following documents by the tenderer to the paying authority assigned by the consignee:

i. Detailed quarterly bill by the Tenderer and accepted by the consignee
ii. Consignee's Certificate for Quarterly Work Done Under comprehensive AMC
iii. Details of system malfunction calls logged.
iv. Certification from the nominated official of ALIMCO for the functioning of sites in his jurisdiction.
v. Attested photocopy of comprehensive AMC BG. comprehensive AMC BG for an amount of 03% of the total comprehensive AMC cost for 3rd, 4th and 5th year shall be submitted by Bidder before expiry of warranty period and before commencement of comprehensive AMC period, failing which PBG will be fortified.

7. Any spare part or material necessary to restore the plant to proper working order will be arranged by the tenderer as a part of comprehensive AMC.

8. **Penalty Clause**: Penalty shall be levied on the Tenderer for maintaining the System uptime below the limit of 98% (on quarterly basis), after discounting for grace period. Penalty shall be calculated as % age of quarterly payment and will be deducted from

the respective quarterly payments. Penalty calculation will be done over quarterly payment period.

S.No	Availability Slab	Applicable Penalty
1.	98% to 90%	0.5% for every 1 % (or part thereof) reduction in availability below 98%.
2.	Below 90%	1% for every 1% (or part thereof) reduction in availability below 90%.

9. In case the tender fails to provide comprehensive AMC services successfully, the comprehensive AMC BG will be forfeited. This will be in addition to penalty as per clause above. System up time of less than 60% for two consecutive quarters will constitute complete failure of Tenderer to provide comprehensive AMC services successfully.

10. Necessary records for comprehensive AMC will be maintained online by the Tenderer or reference of both the parties.

11. In the event of failure of Tenderer to provide comprehensive AMC services as per the comprehensive AMC agreement, the comprehensive AMC contract shall be terminated in following way:

Notice in writing by Client, ALIMCO giving 3 months' clear notice period. Dues, if any, will be settled in accordance with the conditions of the agreement.

APPENDIX -16

PURCHASE PREFERENCE TO MAKE IN INDIA

1. Purchase Preference to Make in India

In order to give effect to the policy of Government of India to encourage 'Make in India', price preference shall be accorded to Local Supplier/Bidder in accordance with Order No.P- 45021/2/2017-PP (BE-II) dated 04.06.2020 & 16.09.2020 on Public Procurement (Preference to Make in India) Order 2017 as per latest amendment of the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. ALIMCO Ltd being a CPSU adopted the guidelines given in the above-mentioned Order dated 04.06.2020 & 16.09.2020 and the following shall be applicable in this tender:

1.1. Definitions:

'Local Content' means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, in percent.

'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under this clause.

'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this clause.

'Non - local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than or equal to 20%, as defined under this clause.

'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjusted in the evaluation process as per the tender or other procurement solicitation.

'Margin of purchase preference' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

'Procuring entity' means ALIMCO

'Works' means all works covered in the scope of work in this tender.

1.2. Eligible bidder in this tender: Class-I local supplier

1.3. Purchase Preference

(a) In the procurements of goods or works which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.

ii. If L1 bid is not a 'Class-I local supplier'. 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the class-I

local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

(b) In the procurement of goods or works which are not divisible in nature, and in procurement of services where bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure: - Not applicable as only Class-I local supplier allowed.

i) Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I Local supplier', the contract will be awarded to L1.- Not applicable as only Class-I local supplier allowed.

ii) If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. - Not applicable as only Class-I local supplier allowed.

iii) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder. - Not applicable as only Class-I local supplier allowed.

(c) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entity. - Not applicable as only Class-I local supplier allowed.

1.4. **Applicability of Purchase preference** in this tender as per Para 3(b)

1.5. Type of this Tender/Work: Goods

1.6. Margin of Purchase Preference: The margin of purchase preference shall be 20%.

1.7. The minimum local content for this tender shall be 50% (Minimum Local content will apply on all items of price schedule excluding AMC cost).

1.8. Verification of local content:

a. The 'Class-I local supplier'/'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.

b. In case of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

APPENDIX -17

PUBLIC PROCUREMENT POLICY FOR GOODS PRODUCED AND SERVICES RENDERED BY MICRO AND SMALL ENTERPRISES (MSES):

a) As per the extant Public Procurement Policy of the Government of India, Micro and Small Enterprises (MSEs) having current and valid registration for the tendered item with any of the below specified agencies are entitled for benefits and preferential treatments specified in Para d below. MSEs who are interested in availing themselves of these benefits must upload with their offer, the proof of their being MSE registered with any of the agencies mentioned in the notification of the Ministry of MSME (Udyog Aadhar Memorandum)/Udyam Registration as indicated below:

   i) District Industries Centers
   ii) Khadi and Village Industries Commission
   iii) Khadi and Village Industries Board
   iv) Coir Board
   v) National Small Industries Corporation
   vi) Directorate of Handicraft and Handloom
   vii) Any other body registered with MSME

Note: Trading enterprises are not covered under the definition of Micro and Small Enterprises.

b) The MSEs must also indicate the terminal date of validity of their registration.

c) Non compliance of requirements of para (a) and (b) above, such offers will not be liable for consideration of benefits detailed in para (d) given below.

d) MSEs registered with any of the agencies mentioned in para (a) are entitled for the following benefits provided they submit a valid Udyog Aadhar Memorandum/Udyam Registration:

   i. MSEs registered with any of the agencies for the item tendered will be exempted from payment of Earnest Money.

   ii. In tenders, participating MSEs quoting a price within price band of L1 + 15% shall be allowed to supply a portion of the requirement by bringing down their price to L1 price, in a situation where L1 price is from someone other than a MSE and such MSEs can be together ordered up to 25% value out of the net procurement quantity.

   iii. A minimum of 4% of total procurement, within the 25% earmarked for MSEs will be from MSEs owned by Scheduled Caste/ Scheduled tribe (SC/ST) Entrepreneurs. In the event of failure of such MSEs to participate in the tender process or meet tender requirements and L-1 price, 4% earmarked from MSEs owned by Scheduled Caste/ Scheduled Tribe (SC/ST) Entrepreneurs be met from other MSEs.

   iv. A minimum of 3% of total procurement, within the 25% earmarked for MSEs will be procured from women owned MSEs.

v. In case tendered item is non-splitable or non-dividable, etc. Purchaser may award the full/complete supply of total tendered value to MSE quoting price within price band L1+15%, considering spirit of policy for enhancing the Govt. procurement from MSE.

Traders and agents are not eligible to avail the benefits extended under the Public Procurement Policy for MSEs.

e) An MSE shall be considered as that owned by SC/ST in following cases:

i) In case of proprietary MSE, proprietor(s) shall be SC/ST.
ii) In case of partnership MSE, the SC/ST partners shall be holding at least 51% shares in the unit.
iii) In case of Private Limited Companies, at least 51% share shall be held by SC/ST promoters.

f) In case, the tenderer is a Micro or Small Enterprises (MSE), the tenderer shall also furnish the following details in their offer:

i) The category of the tenderer:

a) Whether vendor is Micro Enterprise or
b) Whether vendor is Small Enterprise.

ii) Each of the above categories must further mention the sub-classification whether the tenderer is an enterprise -

a) Owned by Scheduled Castes (SC)
b) Owned by Scheduled Tribes (ST)
c) Owned by women entrepreneurs
d) Owned by other than the above three categories.

iii) Confirm the following:

a) Whether documentary proof of being registered with any of the specified agencies indicated in Para (a) above has been submitted with their offer.

b) Whether the terminal date of validity of the registration with the specified agencies has been indicated in their offer.

g) In case, the tendered item is restricted for placement of bulk orders on approved sources, then the criteria for placement of orders on MSEs under the Public Procurement Policy for MSEs will additionally require that the MSE firms are one of the valid approved sources for the tendered item.

h) The tenderers who are large Scale vendors of Railway Units or who come under consortia of MSEs (as vendors to Railway Units) formed by NSIC, are also required to upload with their offers, the procurement and percentage of sub-contract to be made from MSEs for goods to be supplied against this tender, and also furnish the details as in para 6 above for the portion sub- contracted to MSEs.

Declaration of Udyog Adhar Memorandam (UAM)/ Udyam Registration number by vendor **is mandatory.** Accordingly, the bidders who fail to submit UAM number shall not be avail the benefits available to MSE as contained in Public Procurement Policy for MSEs Order, 2012 or latest issued by MSME, for tenders invited electronically through CPPP.

APPENDIX -18

ANNEXURE VII - MANDATORY CONDITIONS TO BE SATISFIED BY ANY BIDDER FROM A COUNTRY WHICH SHARES A LAND BORDER WITH INDIA

(This annexure is to be signed and stamp and submitted/uploaded by Bidder along with the bid)

A. The tender shall be governed by the following terms and conditions:

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as specified in Order (Public Procurement No.1) F.No.6/18/2019-PPD Dated 23.07.2020 issued by Ministry of Finance, Department of Expenditure, Public Procurement Division and as amended from time to time. Such registration should be valid at the time of submission and acceptance of bids.

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose beneficial owner is situated in such a country; or
e. An Indian (or other) agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation-

a) "Controlling ownership interest" means ownership of or entitlement to more than twenty- five percent of shares or capital or profits of the company;

b) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or owner ship.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

VII. Certificate regarding compliance: **A certificate shall be provided by bidders in the tender documents regarding their compliance with these clauses**. If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law.

VIII. Validity of registration: In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

B. Not with standing above, the terms and conditions mentioned above will not apply to bidders from those countries (even if sharing a land border with India) to which the

Government of India has extended lines of credit or in which the Government of India is engaged in developing projects.

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Sign of Bidder

(On Letter Head of the Tenderer)

APPENDIX -19

UNDERTAKING

We hereby declare and accept that if we withdraw or modify our bid during the period of validity, or if we are awarded the contract and we fail to sign the contract, or fail or submit the performance security before the deadline defined in the Tender, we agree for suspension for period of TWO year from participating in GeMs and in any tender of the corporation which shall be binding on us and we shall not appeal against the same.

Dated:

Authorized Signatory :

Name :-
Designation :-
Seal :-

APPENDIX -20

Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

Registration:

1. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrolment" on the CPP Portal which is free of charge
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudra etc.), with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID/Password and the password of the DSC/e-Token.

Searching For Tender Documents:

1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS/e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

Preparation of Bids:

a. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
b. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
c. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
d. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or ''Other Important Documents'' area available to them to upload such documents and keep it as a repository.

   Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

Submission of Bids:

1. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder has to select the payment option as "offline" to pay the tender fee/EMD as applicable and enter details of the instrument.
4. Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/ couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and

complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
9. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
10. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

Assistance to Bidders:

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk Nos. 0120-4200462, 0120-4001002

Sr. No.	Mandatory/Pre-Qualification Criteria	Complied / Not Complied	Provide details
i	All tenderers are required to submit Rs. 600/- (Including GST), towards cost of Tender documents, if down- loaded from the website of the Corporation/CPPP. (All SSI units/ MSE Vendors are exempted from Tender Cost on submission of valid Udyog Aadhaar memorandum (UAM)/ Udyam Registration against tender for the items/nature of business/ type of services specified there in the UAM). The cost of Tender documents for Rs. 600/- (Including GST) can be submitted **only through online payment gateway available at www.alimco.in and submit scan copy of the e-receipt of the same along with TC bid.**		
ii	The person signing the bid should be duly authorized representative of the firm/company whose signature should be verified and certificate of authority should be submitted. The poser or authorization or any other document consisting of adequate proof of the ability of the signatory to bind the firm/company should be annexed to the bid.		
iii	Tender documents with proper seal and signature of authorized person on each page of the bid must be submitted.		
iv	The Complete specifications, Make/Model/Brand consisting of whole plant & its accessories/mechanical & Electrical and MHE offered on parameters specified as per Annexure-A, must be mentioned. The details with values for individual specifications/parameters desired must be indicated at Annexure 'B2' to this tender document.		
v	Copy of GST Registration Certificate, duly signed & stamped.		
vi	The tenderer should have an average annual turnover of not less than 30% of estimated value during the latest three financial years. In order to authenticate, **a certificate regarding average turnover from a qualified Chartered Accountant mentioning UDIN is required to be furnished along with 'TC-Bid'.**		
vii	Copy of income tax return for the latest three financial years duly signed & stamped.		
viii	Only OEMs/OEM Authorized vendor (duly authorized for this specific tender) with relevant expertise are allowed to bid for the whole system (on turn-key basis) mentioned in the tender document. The declaration/ certificate is required from bidder.		
ix	The tenderer must have completed supply of at least 01 (one) machine/item/equipment/system/plant having same or higher parameters as mentioned below: 1. Assembly shop/ Assembly line of Mechanical/Electromechanical Industrial parts, production capacity of 150 items per 8 hr shift. in Govt. Sector/ Private Sector in the last 7 years, reckoned from date of opening of this tender. (PO copies and Commission /Completion Certificates to be furnished by bidder). Satisfactory Performance Certificate from atleast 1 users issued within last 1 years from date of opening of this tender stating that the machine/equipment/system/plant is working satisfactorily for at least one year to be enclosed. (On the letter head of issuing user mentioning PO no., date of installation and commissioning and name of supplier with full address)		
x	Undertaking stating that "The delivery, installation, commissioning and training of the plant (on turn-key Basis) must be completed within the stipulated period as indicated in the tender or specified at Annexure- A, from the date of placement of PO/work contract" **in the format enclosed at Appendix-1**		
xi	The tenderer should submit an undertaking that his/her firm has not been debarred/blacklisted/terminated/banned to participate in the tender by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt. **in the format enclosed at Appendix-2**.		

xii	The tenderer should submit an undertaking that his/her Offer is valid for acceptance for 120 days from the date of opening of TC Bids **in the format enclosed at Appendix-3.**		
xiii	Undertaking to the effect that all the tender terms & conditions are acceptable to the bidder **in the format enclosed at Appendix-4**.		
xiv	Undertaking to the effect that a Warranty Performance Bank Guarantee (PBG) of 3% of the order value, valid for warranty/defect liability period& claim submission date will be submitted after the commissioning of the plant (on turn-key basis). The security deposit shall be released on receipt of 3% PBG valid for warranty period **in the format enclosed at Appendix-5**.		
xv	In case firm wishes to avail Advance of 10% of cost of machine, they have to submit an undertaking to the effect that an Advance Bank Guarantee (BG) of 110% of the advance value subject to maximum up to 100 Lakhs, valid for successful installation, commissioning & Prove out of whole plant & it's accessories & can be submitted within 1 months from the date of releasing the PO/Work Order of the plant (on turn-key basis)**in the format enclosed at Appendix-6**.The recovery of the advance will be done as adjustment@25% of advance value from the running bill. The Advance Bank Guarantee (BG) for advance shall only be released after successful installation, commissioning & Prove-out of whole plant/system & it's accessories and full recovery of the advance.		
xvi	The tenderer should submit an undertaking that his/her firm shall provide Security Deposit within 14 days of releasing PO **in the format enclosed at Appendix-7.**		
xvii	The tenderer should submit an undertaking that his/her firm shall provide the complete training regarding operation & maintenance of the Whole Plant (On turn-key Basis) & its accessories **in the format enclosed at Appendix-8**.		
xviii	The tenderer should submit an undertaking for unconditional acceptance to replace the supplies if rejected at the destination **in the format enclosed at Appendix-9**		
xix	Undertaking to be submitted by the tenderer that "payment terms mentioned at Para No-16 of this tender document (i.e. Terms of Payment) is acceptable" **in the format enclosed at Appendix-10.**		
xx	The tenderer should submit an undertaking that his firm shall attach the proof regarding prior Experience of supplying such systems, as specified in the Tender Document. Vendor to provide details of such customers along with contact number for verification) **in the format enclosed at Appendix-11**		
xxi	Tenderers are required to submit "**Tender Acceptance Letter**" in the format enclosed at **Appendix-12.**		
xxii	Tenderers are required to submit "**Undertaking**" regarding availment of GST and matching of Input credit **in the format enclosed at Appendix-13.**		
xxiii	Tenderers are required to submit "**Undertaking**" regarding the material delivers in multi-stages and the payment of the same will be done on the basis of completion of stage wise work as given **in the format enclosed in Appendix-14.**		
xxiv	Undertaking to be submitted by the tendered that "They should undertake that they will execute comprehensive AMC including spares and labour for the period of 03 years after the expiry of 2 years warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 2%, 3% & 4% of basic value of the machine/plant during 3rd, 4th& 5th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment" **in the format enclosed at Appendix-15 and 15/1**.		
xxv	Tenderers are required to submit duly filled **Annexure 'B1 & B2',** enclosed herewith.		

xxvi	An affidavit to be sought from L1 party regarding, The party has not been debarred/blacklisted/terminated/banned by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt.		
xxvii	The party has not supplied the same Machine /System/ Plant at a cost lower than the cost offered to ALIMCO to any government / semi-government /reputed private organization in India.		
xxviii	Latest Government of India guidelines on "Purchase Preference to Make in India" placed at Appendix 16.		
a.	Self certification that the items offered meets the local content requirement for 'Class-I local supplier/ 'Class-II local supplier, as the case may be as per **Clause 1 of Appendix 16.** – Bidder to confirm.		
b.	Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of supplies other than companies giving the percentage of local content as per **Clause 1 of Appendix 16** – Bidder to furnish.		
c.	Details of location at which local value addition is made – Bidder to confirm		
xxix	Latest Government of India guidelines on "PUBLIC PROCUREMENT POLICY FOR GOODS PRODUCED AND SERVICES RENDERED BY MICRO AND SMALL ENTERPRISES (MSES):" placed at **Appendix 17.**		
xxx	Latest Government of India guidelines "Mandatory Conditions to be satisfied by any bidder from a country which shares a land border with India" placed at **Appendix 18**.		
a.	Self attested copy of **Appendix 18** mandatory conditions to be satisfied by any bidder from a country which shares a land border with India. – Bidder to confirm		
b.	Certificate of compliance of clauses of **Appendix 18**, **clause A VII**. – Bidder to confirm		
c.	Certification as per last paragraph of **Appendix 18** mandatory conditions to be satisfied by any bidder from a country which shares a land border with India. – Bidder to confirm.		
d.	The **Appendix 18** must be signed and stamp and submitted/uploaded by Bidder along with the bid. To be read in conjunction with Order (Public Procurement No. 2) F.No.6/18/2019-PDD dated 23rd July 2020 issued by Ministry of Finance, Department of Expenditure, Public Procurement Division. – Bidder to Confirm		
xxxi	Bid security declaration Appendix -19.		
xxxii	Documents in support of technical Parameters A1, A2 and A3 (clause 10 k)		
xxxiii	QAP and PERT chart shall be submitted by successful bidder within one month of issue of LOA for Approval.		
xxxiv	L-1 Bidder to submit the billing breakup (BBU) for approval of ALIMCO.		
xxxv	Any other documents as mentioned in the tender.		

Annexure-B2

Sr. No.	Description	Remarks		
1.0	This shop is the Final Assembly area for assembly of following products: a) Motorized Tricycle b) Wheel Chair (4 type) c) Wheel Assembly	Confirm		
2.0	The Assembly shop WC 7A shall have following production capacity a) Motorized Tricycle –150 (minimum) Per 8 hr shift b) Wheel Chair – 300 (minimum) Per 8 hr shift c) Wheel Assembly – 1300 (minimum) Per 8 hr shift	Confirm		
3.0	The Assembly shop WC 7A shall have following separate Assembly lines: a) Automatic Conveyorized Assembly line/lines for Motorized Tricycle b) Automatic Conveyorized Assembly line/lines for Wheel Chair for all 4 types. c) Semi Automatic Assembly line/lines for complete wheels assembly Capacity 1300 wheels per shift of 8 hrs (assembly of wheel, rim, spokes etc)	Confirm		
4.0	System /lines should be installed in the available Covered shed of size 60 m x 30m with industrial grade flooring (load cap. 5T/sqm.). Workable height is 6 m.	Confirm		
5.0	The components to be assembled shall be provided at the entrance of shed. The finished product shall be provided at exist of assembly shop. The component for assembly will be provided through movable trolleys. Trolleys to be provided as per the component and sub assembly is in Scope of bidder.	Confirm		
6.0	Bidder shall study the existing process at ALIMCO, Kanpur and shall depute his team to study all aspects related to Industrial Engg. to avoid any issue later on and delay in implementation	Confirm		
7.0	**Environmental conditions**	Confirm		
7.1	Working temperature - 0 to 50 degree	Confirm		
7.2	Relative Humidity - 20 to 100%	Confirm		
7.3	Supply Voltage – three phase 415 +/- 10%	Confirm		
7.4	Frequency - 50 Hz (+/- 10%)	Confirm		
8.0	**The Overall Component Working Envelope are as per the dimensions mentioned**	Confirm		
8.1	Wheel Chair - L1100XW720XH950 (mm)	Confirm		
8.2	Motorized Tri Cycle - L1815XW750XH950(mm)	Confirm		
8.3	Wheel diameter 20-28 inch	Confirm		
9.0	**Assembly line/lines for Motorized tricycle and Wheel chair (4 types)**	Confirm		
9.1	The parts/sub-assemblies/BOP will form a part of input to **Motorized tricycle assembly line** is attached at Appendix-1. Drawing of major parts/sub-assemblies/BOP is also attached with this tender document for reference.	Confirm		

9.2	Tricycle frame will be placed on automatic conveyor in which above mentioned items will be assembled in sequence (to be suggested by bidder in its offer). The existing assembly activity is attached at Appendix-2.	Confirm		
9.3	The following parts/sub-assemblies/Brought out parts(BOP) will form a part of input to **Wheel chair assembly line.** Component that will be used/provided as input for first type of wheelchair is attached at Appendix- 3. Component that will be used/provided as input for second type of wheel chair is attached at Appendix- 5. Component that will be used/provided as input for third type of wheel chair is attached at Appendix- 7. Component that will be used/provided as input for fourth type of wheelchair is attached at Appendix-9. Drawing of major parts/sub-assemblies/BOP is also attached with this tender document for reference.	Confirm		
9.4	Wheel chair RH and LH frame will be placed on automatic conveyor in which above mentioned items will be assembled in following sequence. The existing list of assembly activities for first type of wheel chair is attached at Appendix-4. The existing list of assembly activities for Second type of wheel chair is attached at Appendix-6. The existing list of assembly activities for third type of wheel chair is attached at Appendix-8. The existing list of assembly activities for fourth type of wheel chair is attached at Appendix-10.	Confirm		
9.5	The Assembly shop shall have separate 2 Nos. of Floor mounted powered Slat Conveyor for Assembling Wheel Chair and motorized Tri cycle. Following are the main parameters for assembly conveyors:	Confirm		
9.5.1	No. of Assembly Stations per conveyor for each line – to be decided by bidder	Confirm		
9.5.2	Top of the Conveyor / Working height – 600 to 800 mm	Confirm		
9.5.3	Type of Conveyor – Slat type	Confirm		
9.5.4	Station Pitch – to be decided by bidder based on requirement	Confirm		
9.5.5	Length of conveyor– to be decided by bidder based on requirement	Confirm		
9.5.6	Conveyor speed – to be decided by bidder based on requirement	Confirm		
9.5.7	Drive type – Through Geared Motor (VFD Controlled)	Confirm		

9.5.8	Take up type – Screw type	Confirm		
9.5.9	Maximum Load of the Product – 70 Kg	Confirm		
9.5.10	Unit Load carrying capacity – min 150 Kg./m	Confirm		
9.5.11	Slat width – be decided by bidder	Confirm		
9.5.12	Slat Plates - M.S. Chequered Plate	Confirm		
9.5.13	Conveyor Frame - Structural steel made out of Angle and Channels	Confirm		
9.5.14	Surface treatment of the Frames - Powder Coated	Confirm		
9.5.15	Conveyor Chain Track and Guides (Top Line / Return Line) - Abrasion/impact resistant wear material	Confirm		
9.5.16	Surface Finish of Slats –value to be given	Confirm		
9.5.17	Assembly Fixtures on the Slat Conveyor(all the 3D & 2D manufacturing drawing of fixture shall be provided by bidder)	Confirm		
9.5.18	Type of Fixture - Rotation type (all the 3D & 2D manufacturing drawing of fixture shall be provided by bidder)	Confirm		
9.6	In Assembly line conveyor, Assembly line Balancing, Ergonomics, Assembly complexity, Poke-yoke needs to be taken care off.	Confirm		
9.7	There shall be work benches for each of the conveyors lines as per the requirement and number of stations. The work benches shall not be opposite to each other but located alternately. Storage bins/racks shall be available on both sides of the work bench to keep bought out items and Sub-Assemblies.	Confirm		
9.8	The Assembly area shall have FIFO racks, Trolleys, Plastic Bins for collection of sub-assembly and BOP. Two bin System and Kanban system can be used. The work benches shall have few lockable racks also. Colour identification and poka-yoke for similar looking parts shall be used. Different color codes shall be applied for equipment used for Wheel Chair assembly and for Motorised Tricycle assembly. 5-S visual controls and poke-yoke shall be part of layout and proposed system.	Confirm		
9.9	The work benches shall have Pneumatic Compressed Air connection (as required) and Electric power plugs. The worktable top shall have adjustable frame. Adjustable shelfs for bins shall be provided for storage of small items. For Sub assemblies parts feeding and storage shall be planned on the basis of BOM and Moduler trolleys will be designed and supplied for each parts, sub assembly and BOP.	Confirm		
9.10	Work procedure Orders in electronic form shall be made available at these benches.	Confirm		
9.11	No part shall be stored on the floor.	Confirm		
9.12	Floor shall be free from packaging waste which shall be kept in waste bins for regular removal to be considered in supplier scope	Confirm		
9.13	Line side Storage Racks need to be considered depending on the requirement at	Confirm		

	Assembly conveyors. Supporting Structure for Utility tools lighting to be considered in Supplier scope.			
10.0	Electrical Controls :	Confirm		
10.1	Type of System has to be PLC based. Operator interface will be Through HMI Screen. Conveyor Start / Stop at each station will be through Auto start/ stop as well as Through Push buttons at each station. Safety devices like Emergency stop push button or cable pull emergency stop switch, at each station are to be considered. Part counter to be provided.	Confirm		
10.2	Andon production board to be provided along with the system. RYG lamp at each station to be provided. Necessary Electrical wiring to be considered for the entire system. Control Panel will be of RITTAL Make or Equivalent. Blockage detection systems to be considered. Proximity sensors and Limit Switches to be considered where ever there is a requirement.	Confirm		
10.4	Loading / Unloading : Frame Loading and Unloading will be done by Manually operated Manipulators.	Confirm		
10.5	Pneumatic Nut Runners and Torque Wrenches are to be considered as per Line requirement and number of stations. Lighting to be considered throughout the Conveyor.	Confirm		
11.0	**Assembly lines for complete wheels (assembly of wheel, rim, spokes etc)**	Confirm		
11.1	The parts/sub-assemblies/BOP will form a part of input to wheel assembly line is attached at Appendix-11. A list of drawing is also attached with these tender documents.	Confirm		
11.2	Details of Assembly lines	Confirm		
11.2.1	The assembly lines shall have an cumulative output of minimum 1300 wheels per 8-hour shift.	Confirm		
11.3	Description and Details of **Lacing and Tightening machine – 5 nos.**	Confirm		
11.3.1	The function of this machine is to provide lacing and tightening and is used to join spokes with wheel rim. Both Lacing and tightening should be done in the machine in one operation. The machine should be equipped with the technology for detection of spoke holes for smooth and quick lacing.			
11.3.2	The Lacing & Tightening machine shall have change-over from at least 20”to 28”. The machine shall be equipped with suitable camera/scanning technology for detecting the spoke holes.	Confirm		
11.3.3	The machine shall have following features • Quick change-over • Automatic diameter correction of rim • Automatic pitch correction of rim holes • Automatic pitch correction of nipple holes	Confirm		

	• Database for min 20 wheel-types • Spoke length calculation • Self-diagnostic • Ergonomic design, easy operation			
11.4	Description and Details of **Stabilizing machine/rim taper – 3 nos.**	Confirm		
11.4.1	Stabilizing machine is used to spread the tension equally over all spokes, and at the same time improves the strength of the spoke necks and the seating of the nipple in the rim. The Stabilizer/rim taper shall do both Stabilizing and rim tapering. The Stabilizer or Rim taper shall be ideally placed between the lacing machines and the trueing Robots	Confirm		
	The Stabilizing machine/rim taper shall cater to different wheel sizes (from atleast 20”-28”).			
11.4.2	The machine shall have following features • Stress relief by adding force on every spoke before trueing • Better seating of nipple in rim • Better seating of spoke bend in hub flange • More equal spoke tensions within the wheel • Automatic spoke detection	Confirm		
11.5	Description and Details of **Trueing system – 3 nos.**	Confirm		
11.5.1	The function of this machine is to do the alignment of the wheel and it ensures minimum spoke tension on each and every spoke. It also helps to ensure uniform distribution of tension on each spoke in the wheel.			
11.5.2	The Trueing system shall cater to different wheel sizes (from at least 20”-28”) and shall have a wheel database where all trueing values are stored.	Confirm		
11.5.3	The machine shall have following features • constant quality output • easy to operate and easy to change-over • controlled wheel quality and spoke tensions	Confirm		
11.6	Description and Details of **Disk Tyre Mounting Machine and Solid & pneumatic Tyre Mounting – 2 nos.**	Confirm		
11.6.1	The Solid tyre mounting machine shall be able to mount solid & pneumatic tyres with a very tight fit and shall have no rim/tyre damage. No trueing after tyre fitting shall be necessary.	Confirm		
11.6.2	The machine shall have following features • Can handle all rim/tyre combinations from at least 20” to 28” • Working station: fitting of tyre / cassette hub / reflector / roller brake • Automatic tyre centering • Automatic inflation	Confirm		
11.6.3	The Disk Tyre fitting machine shall be ideal for our output requirement.	Confirm		

11.6.4	The machine shall have following features • Can handle all rim/tyre combinations from 20" to 28" • Working station: fitting of tyre / cassette hub / reflector / roller brake • Automatic tyre centering			
12.0	**Material Management System**			
12.1	The vendor shall supply the complete material management system including storage form input parts to finished product	Confirm		
12.2	In plant Material flow need to design and location and quantity (WIP) for each part shall be defined at WC7	Confirm		
12.3	Place for Operator with PC, printer to generate barcodes and maintain data for Parts Addressal and Location system.	Confirm		
12.4	Product and component Traceability shall be ensured. Cardex system shall be followed. Cardex not required can be through IT enabled system. Bidder will explore, suggest and designed parts traceability system, FG (finish goods) inventory monitoring, real time production monitoring of products used in this shop.	Confirm		
12.5	Min 80inch LED Digital display boards shall be provided to show daily and monthly out turn of products.	Confirm		
13.0	Following the above guidelines, bidders shall design the layout of this shop with dimensions, showing product flow movement also. Equipment list with quantities and major parameters of these equipments shall also be specified. Make and model number of the equipments shall be given. Bidders shall also bring out assumptions made for designing the system.	Confirm		
14.0	The successful bidder shall submit the layout for approval of ALIMCO, within 15 days after placement of order.	Confirm		
15.0	Details of safety features in the facility / equipment shall also be specified and shall be as per relevant standards.	Confirm		
16.0	Erection and Commissioning of the facility is in scope of bidder. This includes demonstration of the function and Inventory management module, Location & Handling management module.	Confirm		
17.0	Three sets of operation, maintenance manuals shall be submitted.	Confirm		
18.0	Consumables for 1 year consumption shall form part of supply.	Confirm		
19.0	List of mandatory spare parts shall be provided by bidder.	Confirm		
20.0	Training on Operation & Maintenance shall be imparted during commissioning of the facility. One month training required for both Operation and Maintenance purpose.	Confirm		
21.0	In-house trials will be taken before dispatch of the material to site. Loading and Unloading of the equipment will be in Supplier scope.	Confirm		

22.0	Packing, Forwarding and Transportation will be in Supplier scope.	Confirm		
23.0	**Acceptance Test:** The entire facility shall be operated successfully for 10 days of 8 hrs shift.	Confirm		
24.0	**Warranty:** The entire Plant/machine/systems inclusive of all system/accessories must be covered under comprehensive warranty for a period of 24 months (min.) from the date of successful commissioning.	Confirm		
25.0	**DELIVERY PERIOD INCLUDING INSTALLATION, COMMISSIONING& TRAINING:**			
	The delivery period including installation, commissioning& training of the items/ machines/ plant at the destination mentioned in Para 1 on page no. 02 of the tender documents will be 04 months from the date of placement of Purchase Order/work contract.			
	Note:			
1.	The loading/unloading of machine & other components of supply and their handling at destination site is in the scope of vendor.			
2.	Breakdown calls to be attended within 72 hrs. Physically or within 48 hrs. Through tele-diagnostic.			
3.	Machine foundation details and drawings with specifications to be provided by the tenderer. Vendor to arrange machine foundation work, if required, for the installation of items/ machine/ plant.			
4.	Total power consumption (in kW) to be provided by the tenderer.			
5.	The Bus-bar trunking (BBT) line for electricity will be provided at 8.5 meter height at one location. Sufficient suitable cable, cable tray, Circuit breaker, panel, fittings to connect the machine from power source is in Vendor's scope. If system/plant requires separate electrical panel that will be in vendor's scope. Suitable power back-up for failsafe operation of Machine in the event of power failure will be in vendor's scope.			
6.	Compressed air pipeline is available in the work center (air pressure will be available approx. 5.5 to 6 bar) All necessary fitting, air dryer, air booster as per machine requirement is in vendors scope. Tenderers to specify average consumption of compressed air.			
7.	Vendor to ensure operation and maintenance training for 10 days, at bidders premises. ALIMCO will bear the cost of travelling, lodging and fooding.			
8.	Bidders to furnish the latest Safety Standards Compliance of all relevant safety			

	norms & regulation of Govt. of India of the system shall be in vendor scope.			
9.	Vendor to supply additional quantity of oil and lubricants for two more fills along with initial fill, if required.			
10.	Proper earthing of plant/machinery is in vendor scope. If separate earthing is required for machine/plant than earthing pit is in vendor scope.			
11.	3D view of plant and as built drawing in CAD format of the plant/system to be submitted by vendor at the time of QAP.			
12.	3D model and 2D manufacturing drawing of associated fixtures, special manufacture tools shall be provided by the vendor.			
13.	During Execution, the successful bidder shall get the layout & system design pre-approved before starting the manufacturing. The layout and system design shall be submitted within 15 days of issue of LOA.			
14.	Vendor should undertake that they will execute comprehensive AMC including spares and labour for the period of 03 years after the expiry of warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 2%,3% & 4% of basic value of the machine/plant during 3rd, 4th& 5th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment".			
15.	Vendor shall take full responsibility for the adequate stability and safety of all site operations and installation & commissioning as per the latest safety manuals published by Indian Standards Institution Statutory rules regulations and provisions of order conditions etc. and in case of default, Vendor shall solely be responsible and indemnify the corporation for any loss or damage caused to the ALIMCO for any violation of concerned laws.			
16.	Three (03) set of operation & Maintenance manuals in hard copy & soft copy along with the electrical drawing to be provided by the bidder with supply.			

ANNEXURE-C

Tender Inviting Authority: ALIMCO, Kanpur

Tender No: Tender no PT/OT/06/AZ dated 06.01.2022 regarding "Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with Semi automatic wheel assembly system (On Turn Key Basis)"

Name of the Firm:

PRICE Bid (P-Bid)

Sl. No.	Item Description	HSN Code	GSTIN No.	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P A	Freight Charges B		Packing & Forwarding Charges C		Sub Total Amount in Rs. D=A+B+C	GST E		Billing Price to Alimco (in Rs.) G=E+F
							(In %)	(In Rs.)	(In %)	(In Rs.)		(In %)	(In Rs.)	
1	Design , Fabrication, Supply, Installation and commissioning of Automatic Conveyorized Assembly lines along with semi automatic wheel assembly system (On Turn Key Basis)" " As per the details enclosed at Annexure-A"			1	Set									
2	Installation & Commissioning Charges including Civil, Electrical work on turnkey basis for satisfactory commissioning of the machine/equipment (if any)			1	Job									
Total (in Rs.) F.O.R ALIMCO, Kanpur														
Total in Words														

Note:

1. The rates should be seprately quoted for supplies to ALIMCO HQ or to its others units, as the case may be ,
2. Giving HSN Code is mandatory and the the bills after placement of order should mention the same HSN Code.
3. Providing correct HSN Code is the responsibility of the vendor and ALIMCO is no way responsible for any subsequent interpretation/order by the Tax authorities.

ANNEXURE– D

TENDER NO.PT/OT/06/AZ
DATE – 06.01.2022

SPECIFIC CONDITIONS OF SUPPLY:

The tenderer should clearly indicate the following in their offer:

1) Installation/Commissioning – details,
2) Whether GeM or any other State/Central Rate Contract exists for the item offered. Please enclose copy.
3) Tenders are required to provide address, e-mail, and contact person of local service centre /Nearest Service centre from where service support shall be provided.
4) Any other relevant technical details of the offered Plant/equipment/system/machine & its accessories.
5) Complete details of infrastructural requirement for the Offered Plant/equipment/system/machine & its accessories i.e., Ambient working atmosphere requirement Power connections.
6) Tenderer is required to provide a list of parties with their complete postal address with telephone / e-mail. To whom they have supplied similar Plant over the last 7 years. The list should clearly indicate the quantity and the model of the Plant to such customers.
7) Tenderer is required to give complete details of the training facilities, if available, with their organization for training our technicians and engineers on the use and maintenance of the Whole Plant & its accessories. Details of complimentary training should also be indicated in the offer.
8) Tenderer is required to clearly indicate the details of infrastructure of after sales service facility with its location together with the anticipated time of attending complaints after their receipt of complaint in their service center.
9) Plant/equipment/system/machine & it's accessories would be required to be supplied and installed in the company premises as specified in Para 1 of the tender document. As such the tenderers should clearly confirm their acceptance to deliver / install and provide after sales service during the warranty period and afterwards at Corporation premises or as the location as specified in the tender document. They are also required to indicate the nearest service point location with address for providing services in respect of the offered Plant & it's accessories.
10) The tenderer should necessarily enclose the complete exhaustive literature / Printed catalogue of their offered Plant/equipment/system/machine & its Accessories indicating full technical details/specifications and special features of their Plants & it's accessories together with their make & model, etc.
11) In case of existence of a DGS&D/GeM rate contract or a State/Central Govt. Rate Contract in respect of the supply of the offered Plants & it's accessories, an authenticated copy of the same should also be enclosed along with the offer. The enclosing of a copy of the relevant rate contract would still permit the tenderer to submit a lower competitive offer in which case the corporation would consider only the lower offer for comparison and analysis.
12) In case of any problem / trouble / defect after commissioning the local service provider is required to respond / attend the problem within 48 Hrs.
13) The repeat orders may be placed up to 100% of quantity of original order where the original order was placed on the supplier selected on the basis of OT only for ordering additional quantity. The repeat order will be placed on same rates and terms as mentioned in initial order.

****

Annexure-E
TENDER NO.PT/OT/06/AZ
DATE – 06.01.2022

FORMAT FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT/PERFORMANCE GUARANTEE/ADVANCE

(To be executed by any Nationalized Bank in India, on a Rs. 200 non-judicial stamp paper under bank's covering letter mentioning address of the bank)

In consideration of M/s Artificial Limbs Manufacturing Corporation of India, hereinafter referred to as 'ALIMCO', which expression unless repugnant to the context and meaning thereof shall include its successors and assigns having agreed to exempt M/s____(Name of the vender/supplier/contractor) hereinafter referred to as supplier/contractor which expression unless repugnant to the context and meaning thereof shall include its successors and assigns] from depositing with ALIMCO a sum of Rs._____towards security / performance guarantee in lieu of the said
Supplier/contractor having agreed to furnish a bank guarantee for the said sum of Rs._____
As required under the terms and conditions of contract / work order / purchase order no.
_____Dated_____[hereinafter referred as the order'] placed by ALIMCO on the said supplier / contractor.

We,_____the bank [hereinafter referred to as 'the bank' which expression shall include Its successors and assigns] do hereby undertake to pay ALIMCO an amount not exceeding Rs.
_____on the demand made by ALIMCO on us due to a breach committed by the said supplier
/ Contractor of the terms and conditions of the order.

We_____the bank hereby undertakes to pay the amount under the guarantee without any demur merely on a demand from ALIMCO stating that there is a breach by the supplier / contractor of any of the terms and conditions contained in the order or by the reasons of the supplier's / contractor's failure to comply with the terms and conditions as stipulated in the order or amendment(s) thereto.

The demand made on the bank shall be conclusive as to the breach of the terms and conditions of the order and as regard to the amount due and payable by the bank under this guarantee, notwithstanding any dispute or disputes raised by the said supplier / contractor regarding the validity of such breach and we agree to pay the amount so demanded by ALIMCO without any demur. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs._____.

We,_____the bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order and that it shall continue to be enforceable till the dues of ALIMCO under or by virtue of the said order have been fully paid and its claim satisfied or discharged or till ALIMCO certifies that the terms and conditions of the order have been fully and properly carried out by the supplier / contractor and accordingly discharge the guarantee.

We_____the bank, undertake to pay to ALIMCO any money so demanded notwithstanding any dispute or disputes raised by the said supplier / contractor in any suit or proceedings pending before any court or tribunal relating thereto as our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the said supplier / contractor shall have no claim against us for making such payment.

We_____the bank further agree that ALIMCO shall have full liberty, without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the order or to extend time of performance by the said supplier / contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the ALIMCO against the said supplier / contractor and to forbear or enforce any of the terms and conditions relating to the order and shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier / contractor or for any forbearance, act or omission on the part of ALIMCO or any indulgence by ALIMCO to the supplier / contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions have effect of so relieving us. Our liability under this guarantee is restricted to Rs._____and shall remain in force up to ……. unless demand or claim under this guarantee is made on us in writing within 3 months from the date of expiry viz._____. We shall be discharged from all liabilities under this guarantee thereafter.

This guarantee will not discharged due to change in the constitution in the bank or the said supplier / contractor.

The bank hereby agrees to address all the future correspondence in regard to this bank guarantee to Chairman & Managing Director, Artificial Limbs Manufacturing Corporation of India.

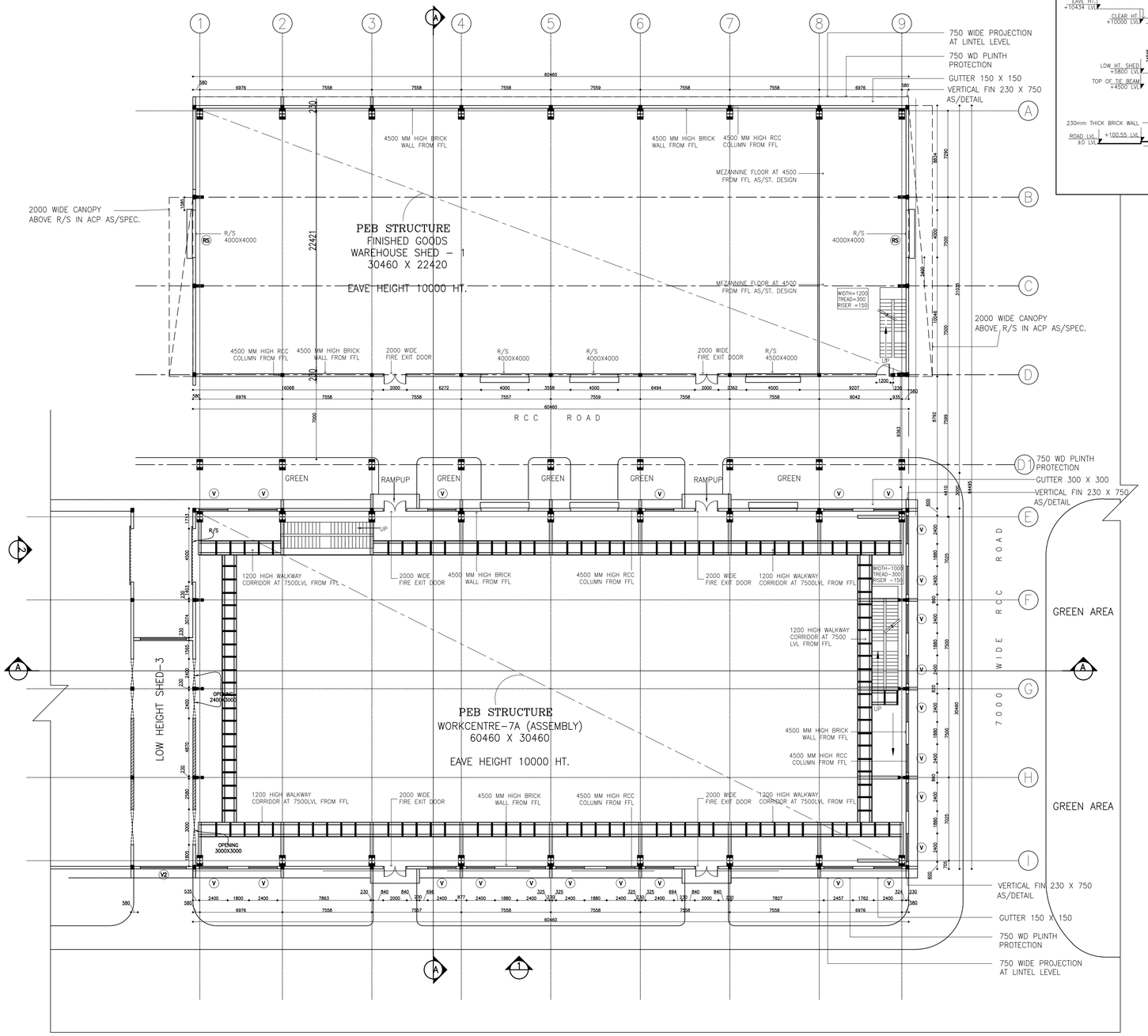
We,_____the bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of ALIMCO in writing.

Signed on the_____day of

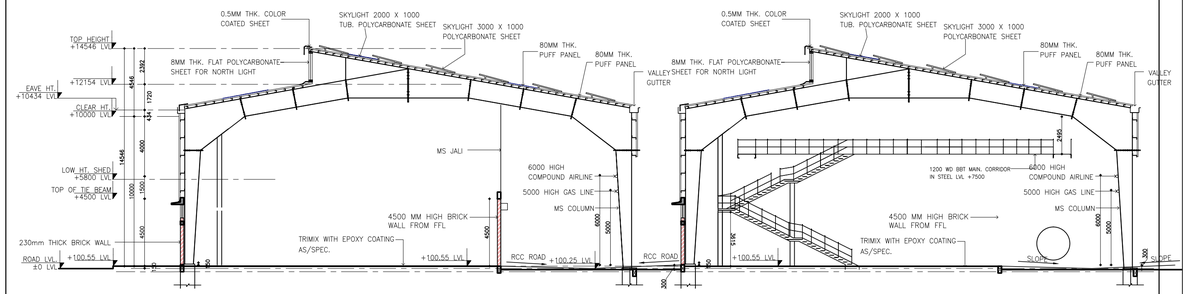
Witness

Signature for the Bank

Layout of the Work Center

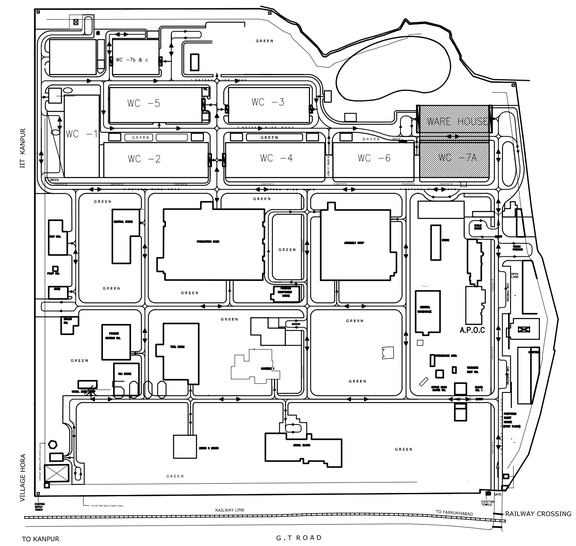


PLAN



SECTION AA

KEY PLAN



GOOD FOR CONSTRUCTION

CATEGORY OF DRG.	○ APPROVAL	○ INFORMATION	○ REFERENCE	● GFC

CLIENT
ARTIFICIAL LIMBS MANUFACTURING CORP. OF INDIA

PROJECT
ALIMCO AUXILLARY PRODUCTION CENTRE,KANPUR

PROJECT MANAGEMENT CONSULTANT
इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि.
(भारत सरकार का उद्यम)
ENGINEERING PROJECTS (INDIA) LTD
(A Government of India Enterprise)

CONSULTANT/ ARCHITECT
JAGDISH MARWAHA ASSOCIATES
Architects, Engineers, Planners & Interior Designers
603-604 ,Kirti Shikhar,District Centre, Janakpuri, New Delhi. Ph:- 41588788,
E-mail= jma_110@yahoo.co.in

BUILDING TITLE.	WORK CENTER-7A
DRAWING TITLE.	FLOOR PLAN & SECTION A
DRAWING NO.	AR/WC-7A/WH/250
SCALE.	
DATE.	07.08.2017

THIS DRAWING IS THE PROPERTY OF THE CONSULTANT. IT SHALL NOT BE REPRODUCED, COPIED,USED IN ANY MANNER OR HANDED OVER TO ANY OTHER PERSON OR PARTY WITHOUT WRITTEN CONSENT OF ENGINEERING PROJECT (I) LTD. EXCEPT FOR THE PURPOSE OF CONSTRUCTION,OPERATION AND MAINTENANCE OF THE SYSTEM FOR WHICH THE DRAWING IS MEANT.

NOTES.
1. ALL DIMENSIONS ARE IN MILIMETERS UNLESS OTHERWISE MENTIONED
2. ALL DIMENSIONS ARE TO BE READ NOT MEASURED,
3. ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE CONSULTANT BEFORE EXECUTION OF WORK AT SITE.
4. VERIFY ALL DIMENSIONS AND LEVELS AT SITE BEFORE EXECUTION.
5. ALL ROOF IN 80MM PUFF PANEL
6. SIDE CLADDING PUFF PANELS ARE 40MM THK.
7. FLASHING/GUTTER ARE IN 5MM COLOR COATED SHEETS.

SUFFIX.	DATE.	DETAILS.	RECORD
		REVISION NOTES.	

TD 2A 65 0 00
BATTERY OPERATED MOTORIZED TRICYCLE

USER MANUAL :- BATTERY OPERATED MOTORIZED TRICYCLE

BILINGUAL i.e.(HINDI & ENGLISH)

- TD 2 A 64 (WITHOUT ICE BOX)
- TD 2 A 65 (WITH ICE BOX)

No. OF PAGES	16 PAGES
SIZE OF PAGE	130mm X 220mm
TYPE OF PAPER	170 GSM ART PAPER GLOSS
PRINTING	MULTICOLOUR AS PER GIVEN SAMPLE

NOTE:- SUPPLIERS MUST ENSURE SAMPLE APPROVED FROM ALIMCO BEFORE BULK SUPPLY

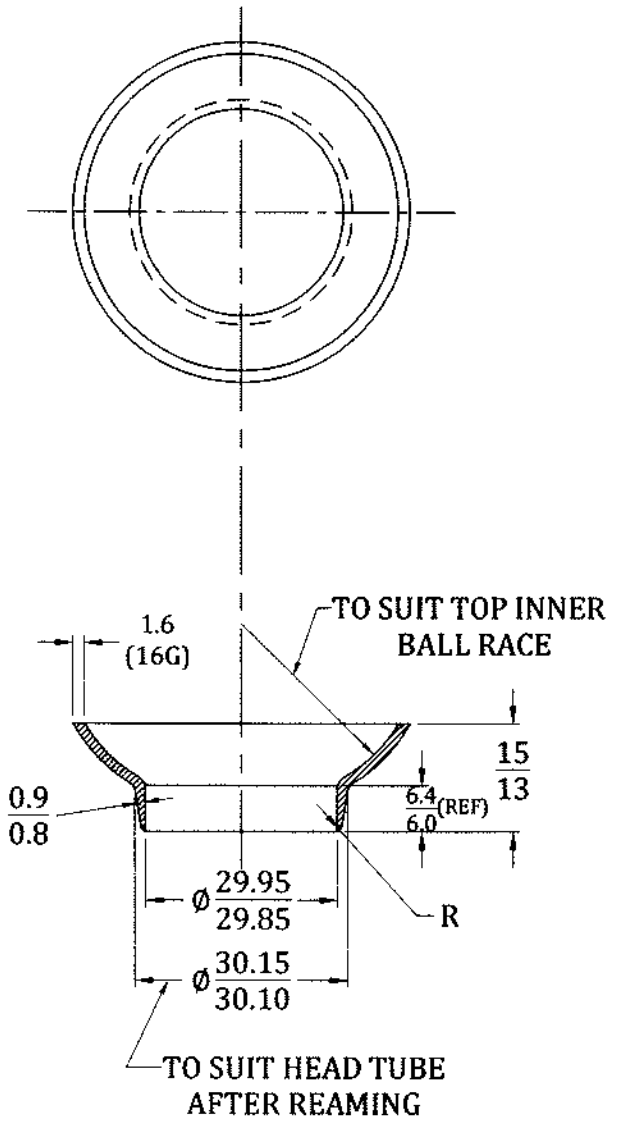
SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

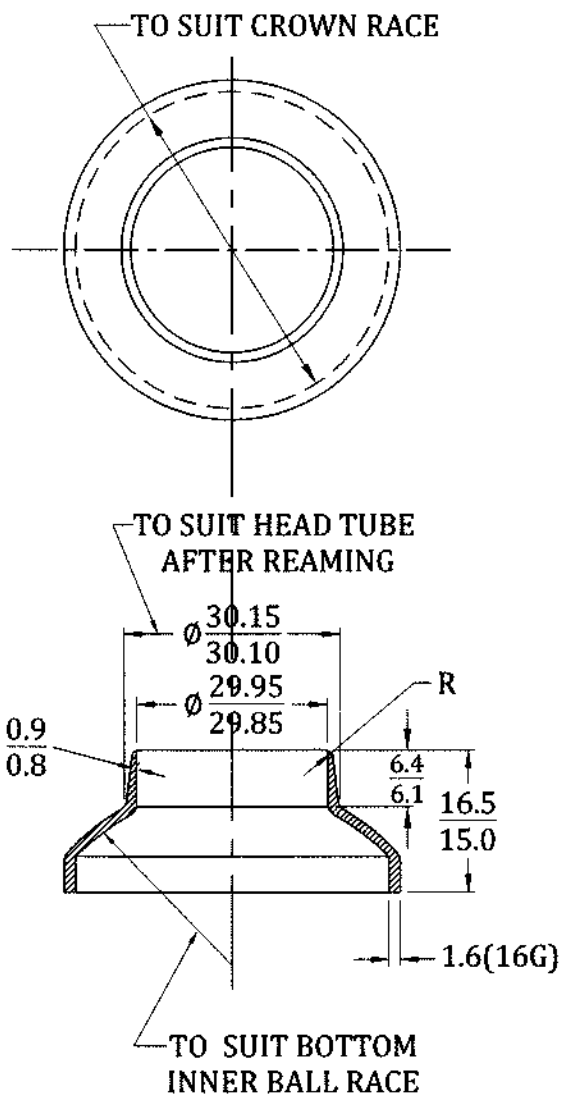
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	USER MANUAL OF MOTORIZED TRICYCLE
DRN		MTL	INDICATED
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS	DRG No:-	EQ 48
APP		REV	0
DATE	09.03.2019	SHEET	1OF1

L B 54



L B 51



NOTE:-
1. READYMADE AVAILABLE IS ACCEPTABLE.
2. No SHARP EDGES & CORNERS.
3. WEIGHT - 32 gms. (APPROX) .
4. L A 66 CONSISTING OF L B 51 & L B 54 (SET OF TWO)

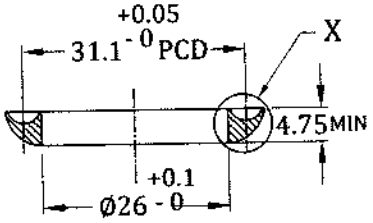
SNo.	REGION	REVISION	DATE	SIGN
4	---	DRAWING REDRAWN	17 12/12	

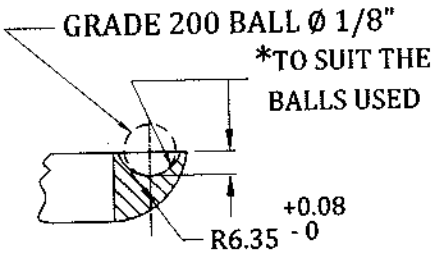
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BICYCLE BOTTOM & TOP HEAD BALL RACE 1/8" (SET OF TWO) 16 G,B.C.P. AS PER IS:2973
DRN		MTL	STEEL CONFORMING TO TYPE-DD AS PER IS: 513
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	BRIGHT CHROME PLATED(B.C.P.)
APP		DRG No:-	L A 66
DATE	24-9-85		SHEET 1OF1

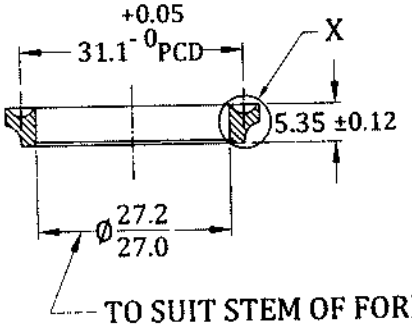
0 6 | K | 6 | 0 85

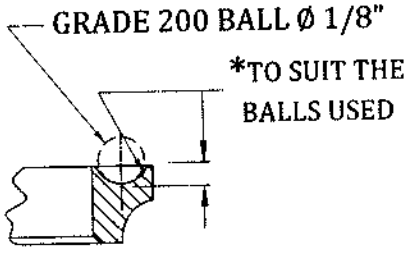




DETAIL AT - X

TOP AND BOTTOM INNER BALL RACE





DETAIL AT - X

*SEATING SHAPE FOR BALLS MAY BE HEMISPHERICAL OR V - GROOVED.

CROWN RACE

NOTE:-
1. READYMADE AVAILABLE IS ACCEPTABLE.
2. NO SHARP EDGES & CORNERS.
3. WEIGHT - 40 gms. (APPROX).

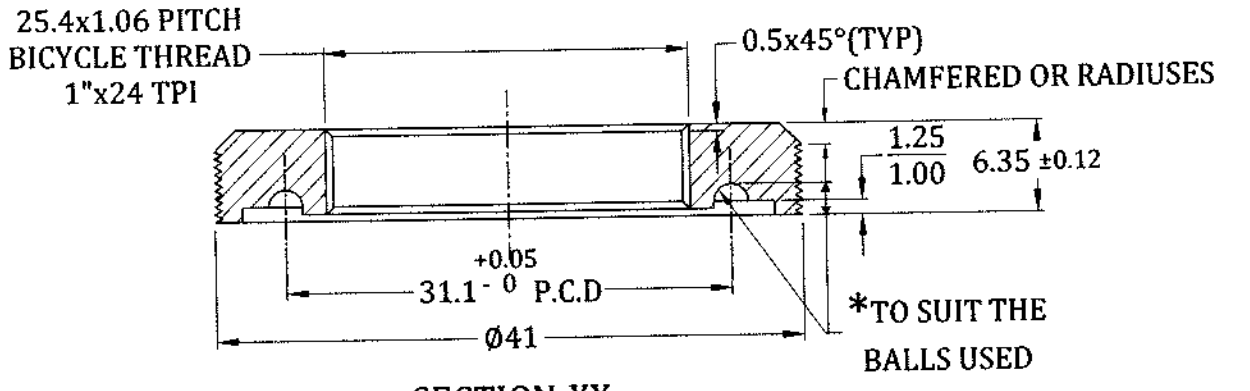
SNo.	REGION	REVISION	DATE	SIGN
3	---	DRAWING REDRAWN	24/12/12	

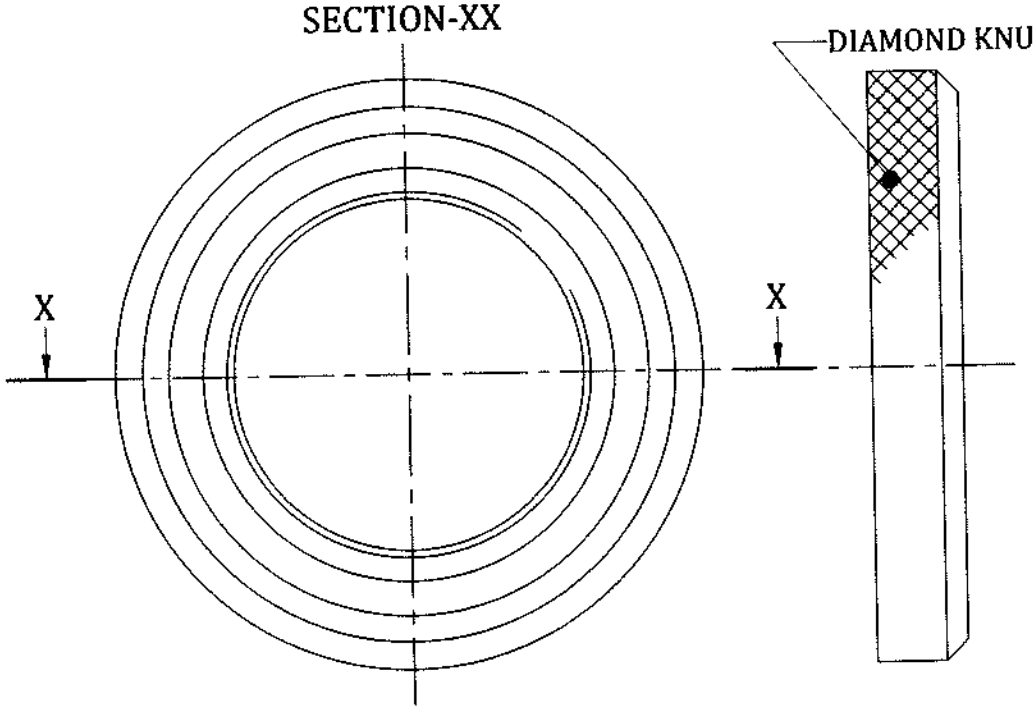
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BICYCLE CROWN BALL RACER 1/8", (SET OF THREE) HARDNESS 50-60 HRC, AS PER IS:2973
DRN		MTL	STEEL CONFORMING TO AS PER IS:226
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	BRIGHT CHROME PLATED(B.C.P.)
APP		DRG No:-	L B 52
DATE	24-09-99		SHEET 1OF1

06 K 6 086





*SEATING SHAPE FOR BALLS MAY BE HEMISPHERICAL OR V - GROOVED

NOTE:-
1. READYMADE AVAILABLE IS ACCEPTABLE.
2. NO SHARP EDGES & CORNERS.
3. WEIGHT - 28 gms. (APPROX)

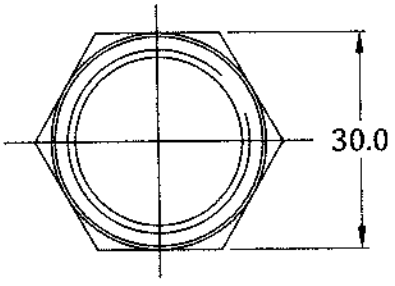
SNo.	REGION	REVISION	DATE	SIGN
3	---	DRAWING REDRAWN	24 12 12	

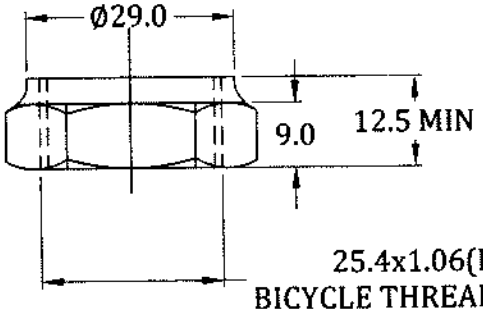
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BICYCLE TOP HEAD SCREWED RACER 1/8", HARDNESS 50-60 HRC, THICK 6.3 MIN BCP. AS PER IS:2973
DRN		MTL	STEEL CONFORMING AS PER IS:226
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	BRIGHT CHROME PLATED(B.C.P.)
APP		DRG No:-	L B 56
DATE	24-09-99		SHEET 1OF1

06 K 6 087





25.4x1.06(PITCH)
BICYCLE THREADS 1"x24 TPI

NOTE:-
1. READYMADE AVAILABLE IS ACCEPTABLE.
2. NO SHARP EDGES & CORNERS.
3. WEIGHT - 23 TO 25 gms.

SNo.	REGION	REVISION	DATE	SIGN
2	---	DRAWING REDRAWN	17 12 12	

REVISIONS

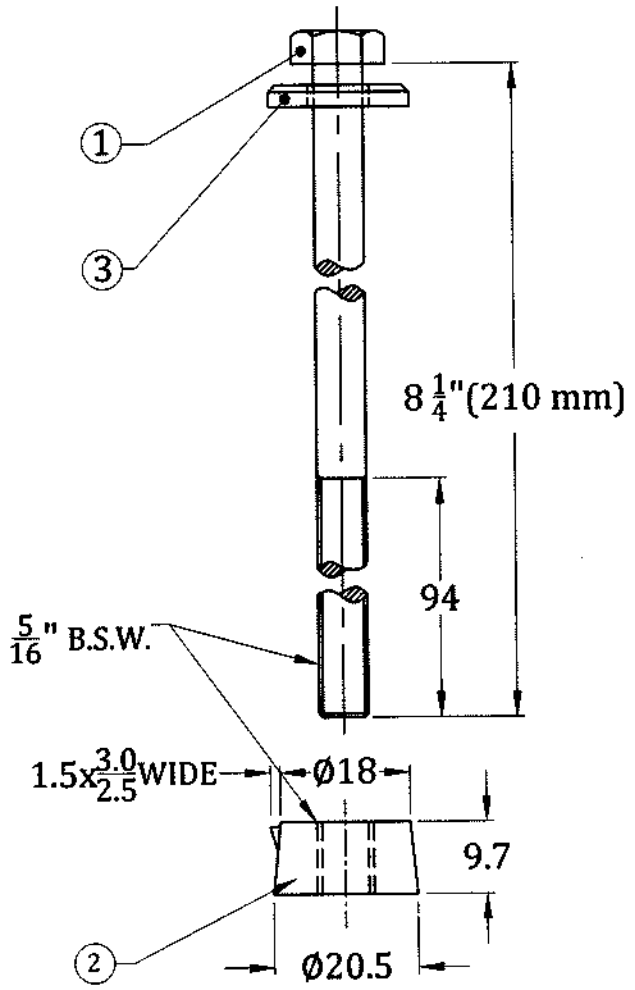
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BICYCLE TOP HEAD LOCK NUT (CHECK NUT) FULL THREADED HEAVY DUTY, K.W. TYPE, THK.-12.5mm MIN, B.C.P.
DRN		MTL	STEEL CONFORMING TO IS:226
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	BRIGHT CHROME PLATED(B.C.P.)
APP		DRG No:-	L B 57
DATE	24-09-99		SHEET 1OF1

0 6	K	6	0 88

5 4

ITEM No.	DRG No.	NOMENCLATURE	No.OFF	MTL.	FIN.
1	L B 58	BICYCLE HANDLE TIGHTNER BOLT $8\frac{1}{4}$" (210mm)x5/16" B.S.W. 18 TPI	1	M.S.	Ni-Cr PLATED
2	L B 59	BICYCLE HANDLE TIGHTNER NUT 5/16" B.S.W. 18 TPI	1	M.S.	Ni-Cr PLATED
3	L B 60	WASHER FOR TIGHTNER BOLT OD. 19.5 , ID. 8.5 , THICK 3 mm	1	M.S.	Ni-Cr PLATED



NOTE:-

1. DIMENSIONS ARE FOR REFERENCE ONLY.
2. READYMADE AVAILABLE IN BICYCLE INDUSTRY.
3. WEIGHT - 100 gms. (APPROX).

SNo.	REGION	REVISION	DATE	SIGN
3	D-4	NOTCH DIM $\frac{3.0}{2.5}$ mm WIDE ADDED	19.06.15	
2	-------	DRAWING REDRAWN	24.12.12	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

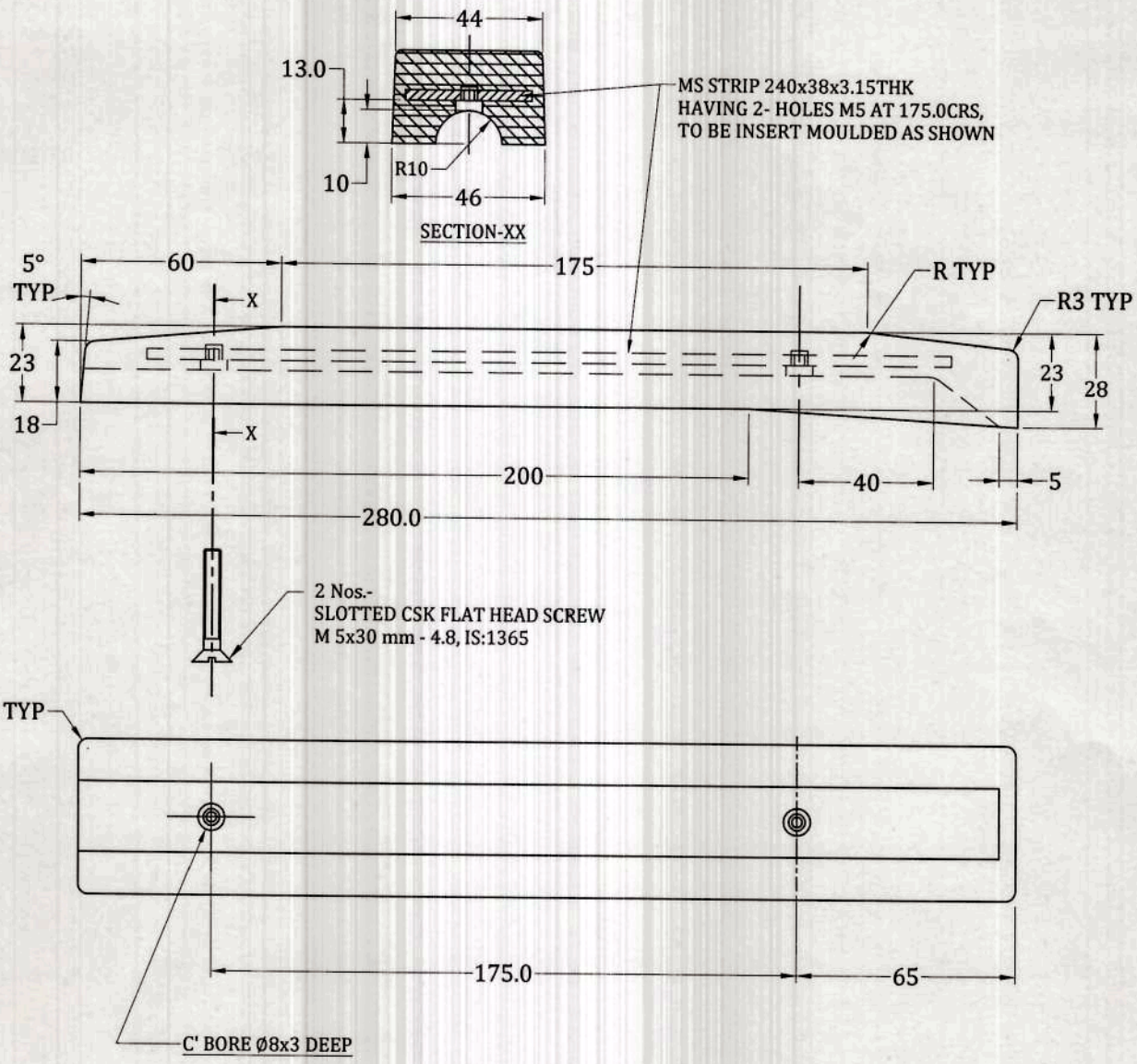
DGN	Ashish
DRN	Ashish
CHD	Rlam
DIM	IN mm
SCALE	NTS
APP	SL/DD1
DATE	16 - 07 - 01

NOM	BICYCLE HANDLE TIGHTNER ASSY
MTL	INDICATED
TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
FIN	INDICATED

DRG No:- L B 97

SHEET 1OF1

06	K	6	1 00



NOTE:

1. DIMENSIONS ARE FOR REFERENCE ONLY.
2. M.S STRIP TO BE INSERT MOLDED.
3. READYMADE IF AVAILABLE IS ACCEPTABLE.
4. COMPONENT TO BE INSPECTED FOR GENERAL APPEARANCE FINISH & OUTER DIMENSIONS.
5. REMOVE SHARP EDGES & CORNERS OF M.S STRIP BEFORE MOULDING.
6. ALL REDII TO BE BLENDED SMOOTH.
7. FLUSHES TO BE REMOVED SMOOTHLY.

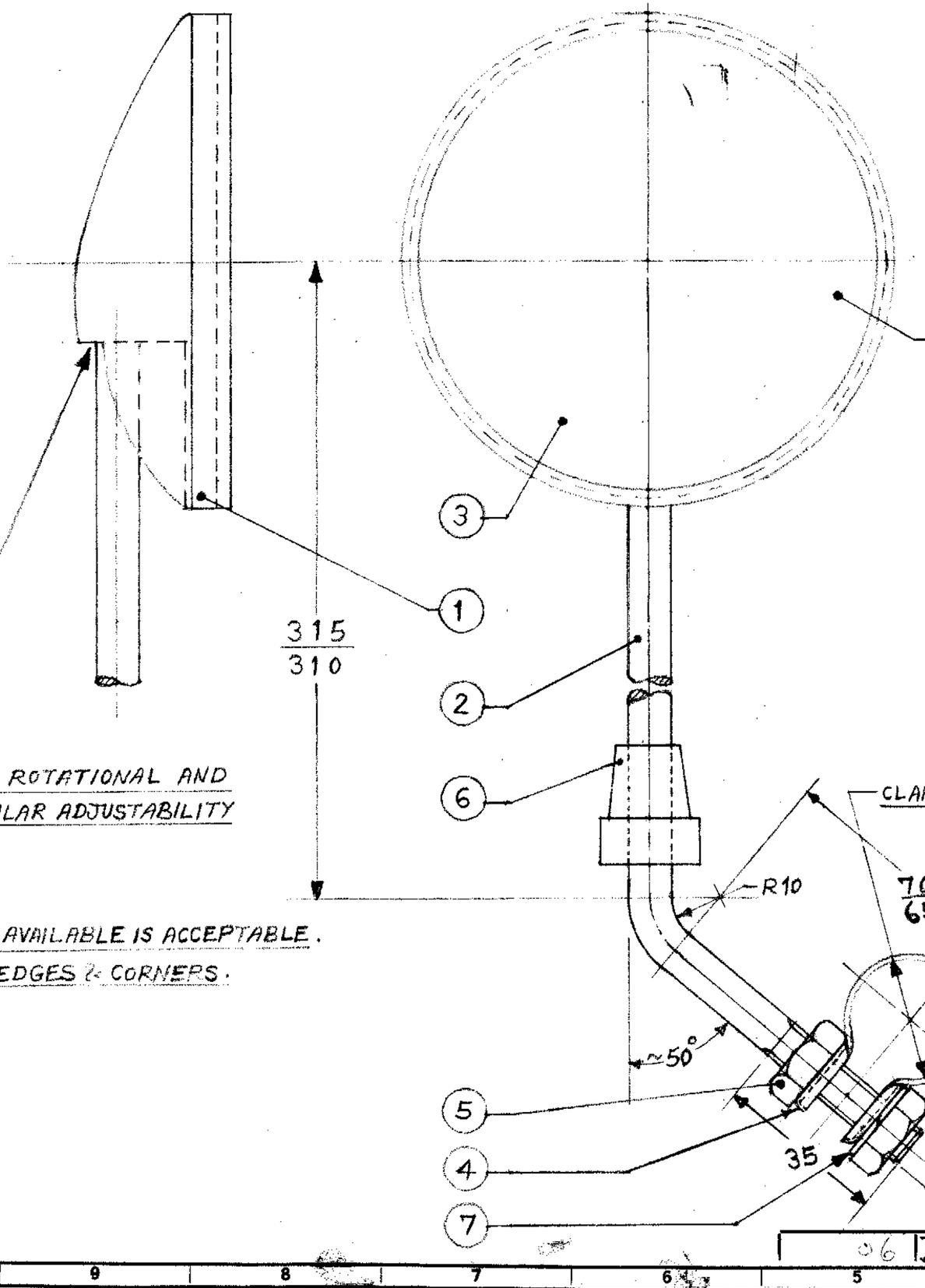
SNo.	REGION	REVISION	DATE	SIGN
6	E-4	CSK FLAT HEAD SCREW M5x30 WAS M5x25	30.04.18	
5	A - 2	Mtl Hardness 45±3 Shore'A' & Density - 200-300 Kg/M³ were 40 to 45 'A' & 0.35 gm/cc	18.10.17	SD/DDI
4	E - 5	2 Nos. SCREW ADDED	14.10.16	SD/DDI
3	-----	DRAWING REDRAWN	31.01.13	SD/DDI

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	P U. FOAM ARMREST (FLAT)
DRN	Ashish	MTL	INTEGRAL SKIN PU FOAM COLOUR BLACK, DENSITY 200-300 Kg/m³ HARDNESS 45±3 Shore 'A'
CHD	Ram	HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	MOLDED WITH TOP SURFACE HAVING MATT/ WRINKLE FINISH AS APPROVED
SCALE	NTS	DRG No:-	LC 42
APP	SD/DDI	REV	6
DATE	10.05.1990	SHEET	1OF1

ITEM No	DESCRIPTION	MATERIAL	FINISH	No. OFF
1	HOUSING ASSY.	Co. P.P. MOULDING	BLACK	1
2	STAY	M.S. ROD ϕ9.5 mm (3/8")	POWDER COATING BLACK	1
3	CONVEX MIRROR PLATE - AS PER SPECIFICATIONS.			1
4	CLAMP	M.S. SHEET 1 mm THICK	Ni-Cr. PLATED / BLACK PAINTED	1
5	HEX. NUT 3/8" BSW OR EQUIVALENT	M.S.	Ni. Cr. OR Zn PLATED	2
6	CAP	P.V.C.	BLACK	1
7	SPRING WASHER	SPRING STEEL Gd. I	Zn PLATED	1



SPECIFICATION OF MIRROR PLATE:—

I – RADIUS OF CURVETURE – 1200^{+100}_{-0} mm

II – LIGHT REFLECTION – 80% MIN.

III – DISTORTION RATE – 7% MAX.

IV – MIRROR DIA. – ~96 mm

V – THICKNESS – 1.9 ± 0.2 mm

VI – REFLECTION COATING – AL.

VII – TEST STANDARD – JIS D 5105

NOTE:—

1. READYMADE AVAILABLE IS ACCEPTABLE.
2. NO SHARP EDGES & CORNERS.

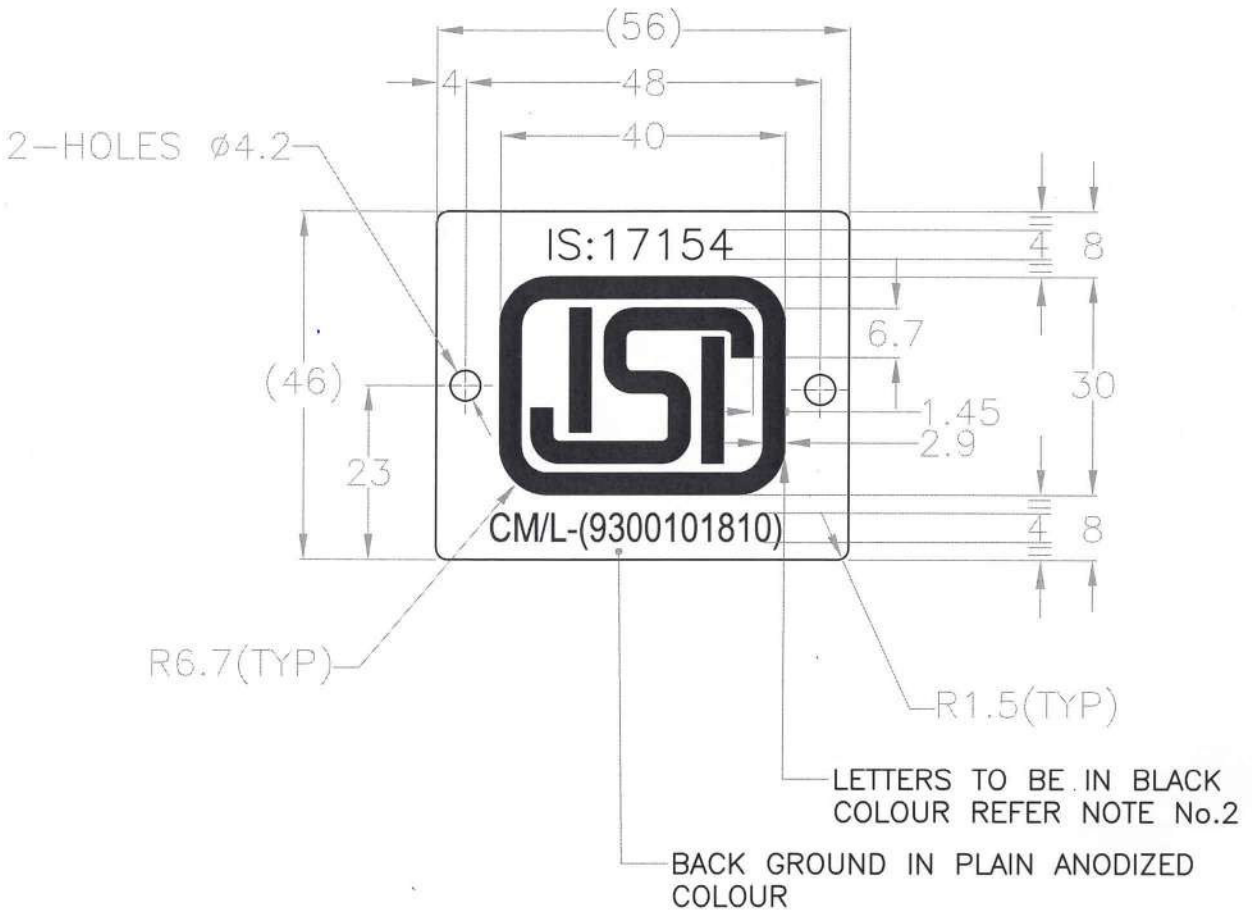
S No.	REGION	REVISION	DATE	SIG.
2	6-1	FIN. BLACK PAINTED ADDED AT ITEM No. 4	27.08.2001	RKS
1	–	SPECIFICATIONS ADDED	8.3.2000	RKS

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

DGN	RKS	NOM	REAR VIEW MIRROR ASSY. ROUND TYPE ϕ100 mm
DRN		MTL	—
CHD		TOL	INTEGER ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.250 mm; TWO PLACE DECIMAL ± 0.125 mm — UNLESS SPECIFIED
DIM.	IN mm		
SCALE	1:1	FIN.	INDICATED
APP	RKS	DRG No.	LD 41
DATE	21.02.2K		SHEET 1 OF 1

06 J 02 044



NOTE:

1. REMOVE SHARP EDGES & CORNERS.
2. ALL THE LETTERS (ISI, IS:17154) TO BE SYMMETRICALLY LOCATED

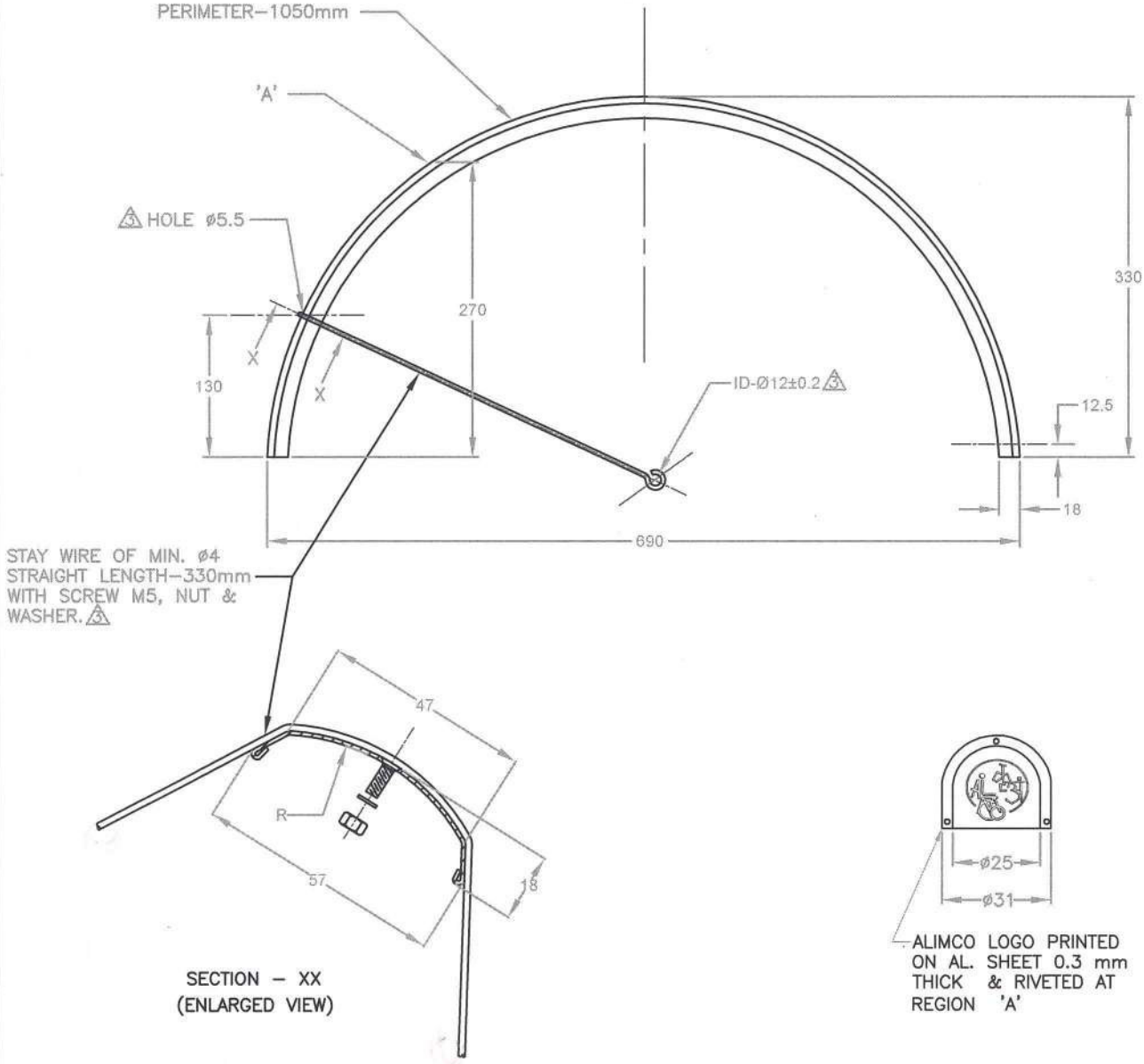
SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

TOLERANCE CHART		
DIM.	MEDIUM	FINE
0.5–3	±0.1	±0.05
3–6	±0.1	±0.05
6–30	±0.2	±0.1
30–120	±0.3	±0.15

DRN	Sreeshant	NOM	LABEL, IS:17154 (BATTER OPERATED MOTORIZED TRICYCLE) 56x46 mm
CHD		MTL	SHEET AL ALLOY Gd-64430-T6 (HS 30 WP) IS:737, THICK 0.32 mm (AP 23)
DIM	IN mm	TOL	———
SCALE	NTS	FIN	ANODIZED
PROJ.			
APP		DRG No:-	L E 24
DATE	14.12.21	REV	SHEET 1OF1



NOTE:–

2. DIMENSIONS ARE FOR REF. ONLY.
3. MUDGUARD WEIGHT – 375 to 380gms.
4. STAY WIRE WEIGHT – 55 TO 60gms.

DIM.	TOLERANCE		
1-16	±0.2	±0.3	±0.4
16-63	±0.2	±0.5	±0.7
63-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

SNo.	REGION	REVISION	DATE	SIGN
3	----	DIMENSIONS MODIFIED, NOTE 1 DELETED & TOLERANCE TABLE ADDED	14.12.21	
2	A – 2	STAY WIRE ø4mm WAS ø3.2mm	22.09.18	

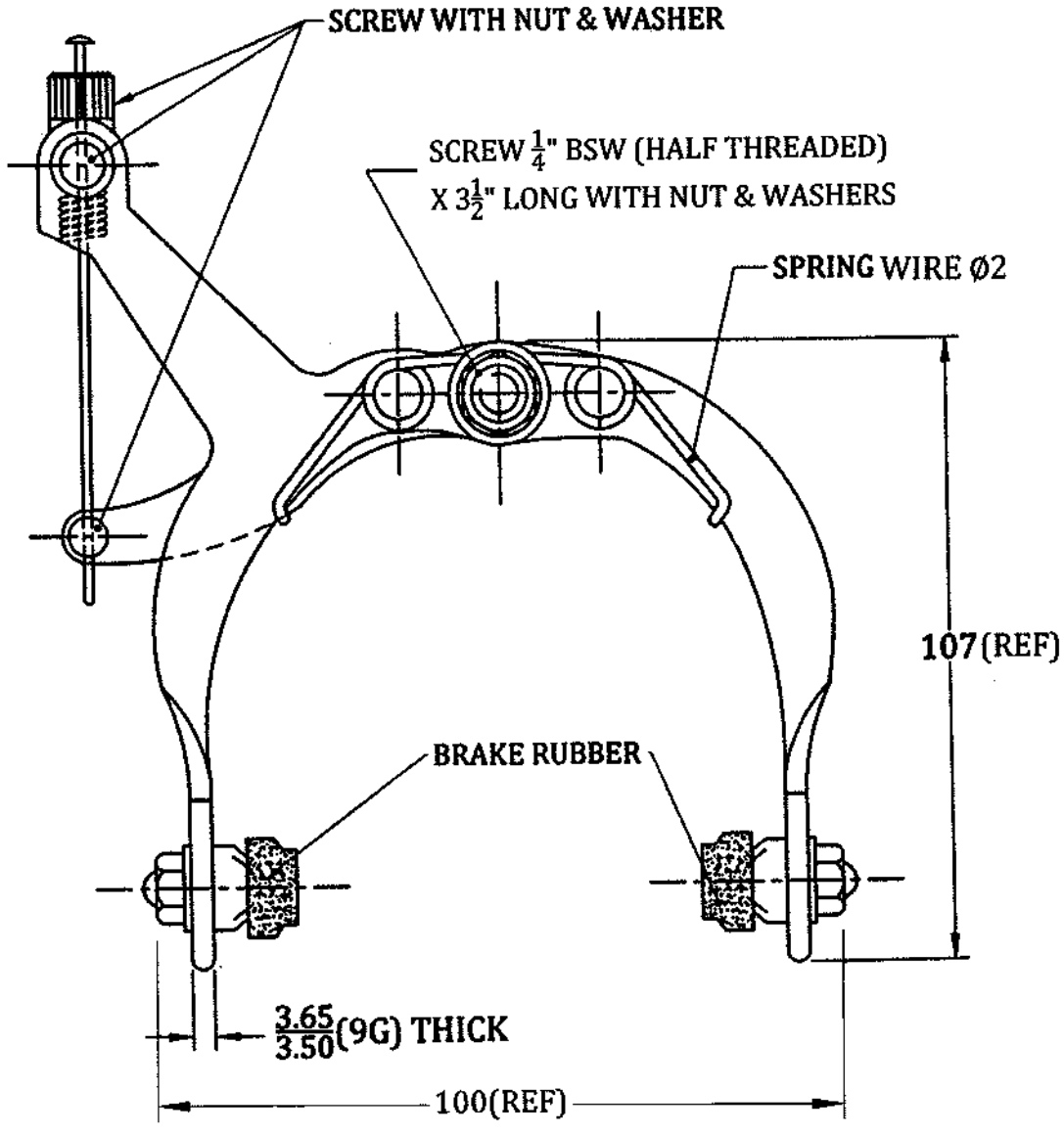
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DRN	
CHD	Sharma
DIM	IN mm
SCALE	NTS
PROJ.	
APP	Sd.DD1
DATE	24.07.2016

NOM	BICYCLE MUDGUARD (REAR) RANGER TYPE WHEEL SIZE 26"X2.125", RED OXIDE PRIMER & PAINT COLOUR BLACK, GLOSSY FINISH, WITH STAY WIRE Min. ø4mm & ALIMCO MONOGRAM
MTL	MS STRIP THICK 24G (0.56mm)
TOL	———
FIN	———

DRG No:– LF 09 | REV 3 | SHEET 1OF1



NOTE:—

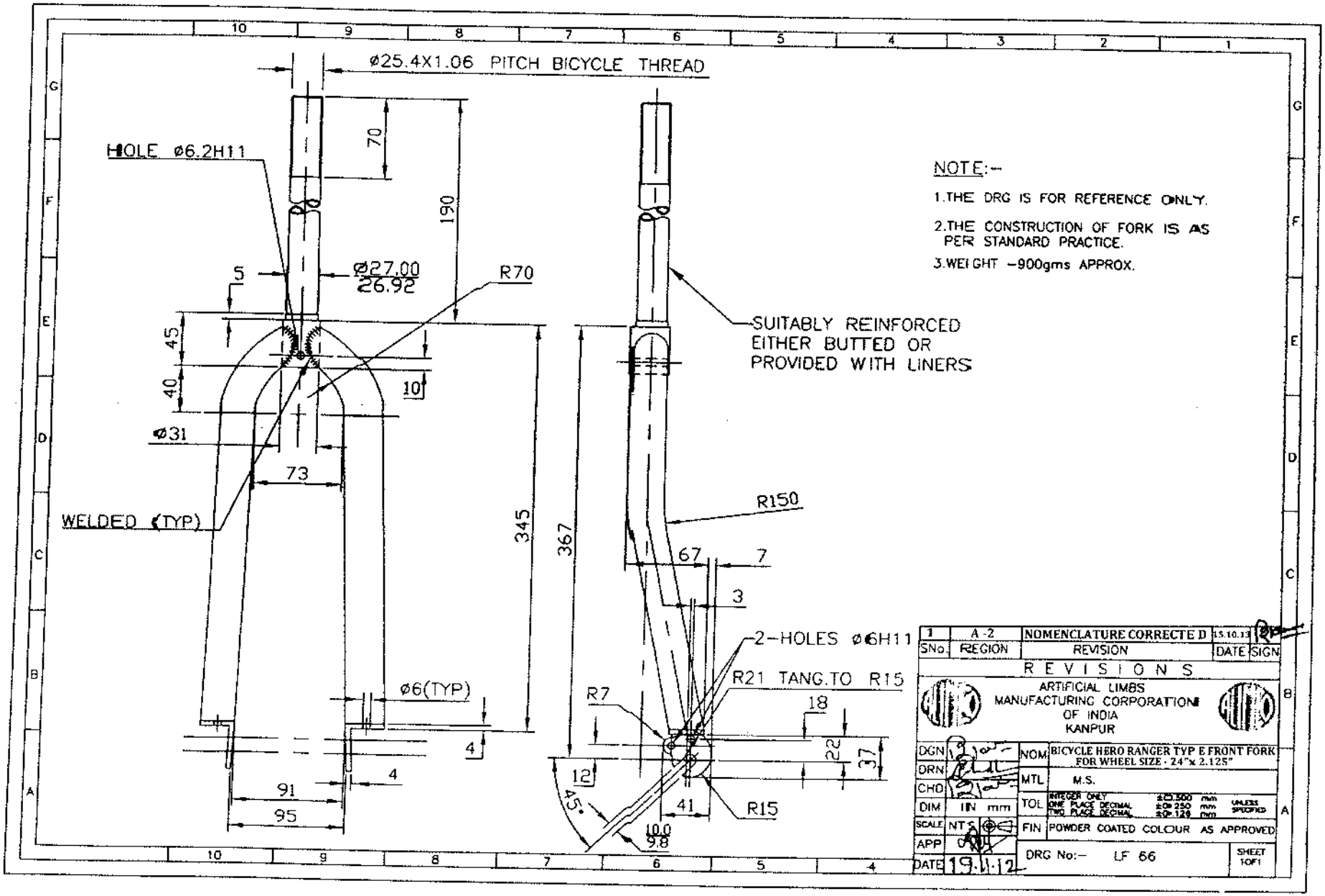
1. THE BRAKE IS READILY AVAILABLE AS STANDARD BICYCLE SPARE.
2. THIS DRG. IS FOR REFERENCE ONLY TO IDENTIFY THE COMPLETE BRAKE ASSY.
3. WEIGHT 240 TO 245gms.

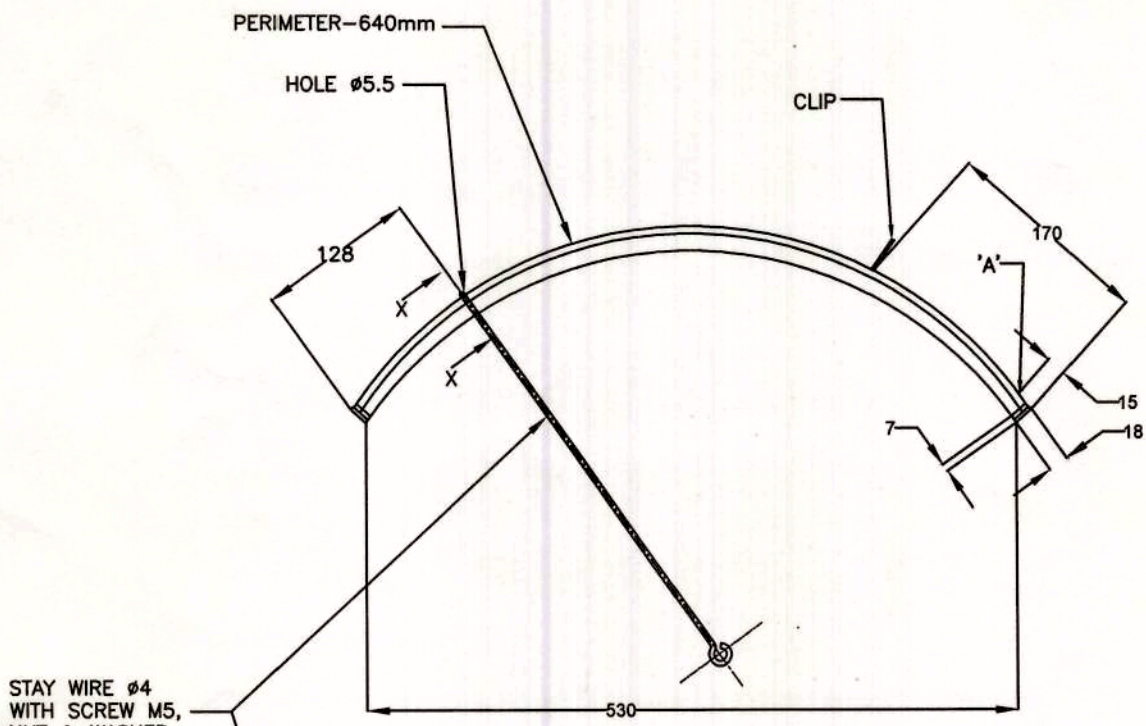
SNo.	REGION	REVISION	DATE	SIGN
3	——	NOTE No. 3 ADDED	12.09.16	
2	C-4	THICK DIM 3.65/3.50 (9G) ADDED	19.06.15	
1	-----	DRAWING REDRAWN	04.03.13	—

REVISIONS

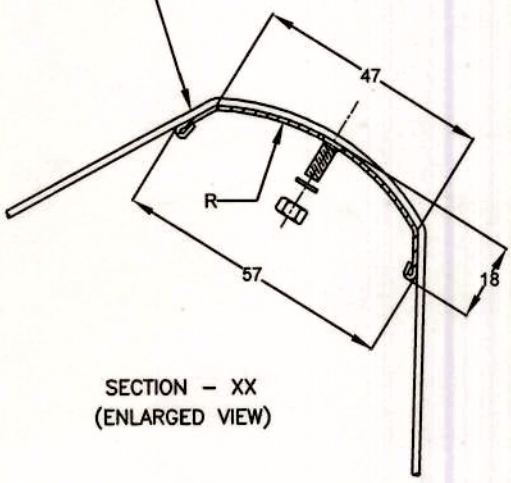
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	PBhish	NOM	RACING FRONT BRAKE
DRN	PBhish	MTL	MILD STEEL
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	——
APP		DRG No:-	L F 23
DATE	30-06-2007		SHEET 1OF1

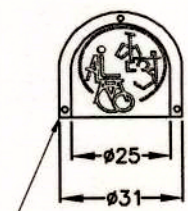

ø25.4X1.06 PITCH BICYCLE THREAD
HOLE ø6.2H11
70
190
5
ø27.00
26.92
R70
45
40
10
ø31
73
WELDED (TYP)
345
367
SUITABLY REINFORCED
EITHER BUTTED OR
PROVIDED WITH LINERS
R150
67
7
3
2-HOLES ø6H11
R21 TANG.TO R15
R7
18
22
37
ø6(TYP)
4
4
91
95
12
45°
41
R15
10.0
9.8
NOTE:-
1.THE DRG IS FOR REFERENCE ONLY.
2.THE CONSTRUCTION OF FORK IS AS PER STANDARD PRACTICE.
3.WEIGHT -900gms APPROX.
1 A-2 NOMENCLATURE CORRECTED 15.10.13
SNo. REGION REVISION DATE SIGN
REVISIONS
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR
DGN
DRN
CHD
DIM IN mm
SCALE NTS
APP
DATE 19.11.12
NOM BICYCLE HERO RANGER TYP E FRONT FORK FOR WHEEL SIZE - 24"x 2.125"
MTL M.S.
TOL INTEGER ONLY ±0.500 mm
ONE PLACE DECIMAL ±0.250 mm
TWO PLACE DECIMAL ±0.125 mm
UNLESS SPECIFIED
FIN POWDER COATED COLOUR AS APPROVED
DRG No:- LF 66
SHEET 1OF1



STAY WIRE ø4
WITH SCREW M5,
NUT & WASHER



SECTION – XX
(ENLARGED VIEW)



ALIMCO LOGO PRINTED
ON AL. SHEET 0.3 mm
THICK & RIVETED AT
REGION 'A'

NOTE:–

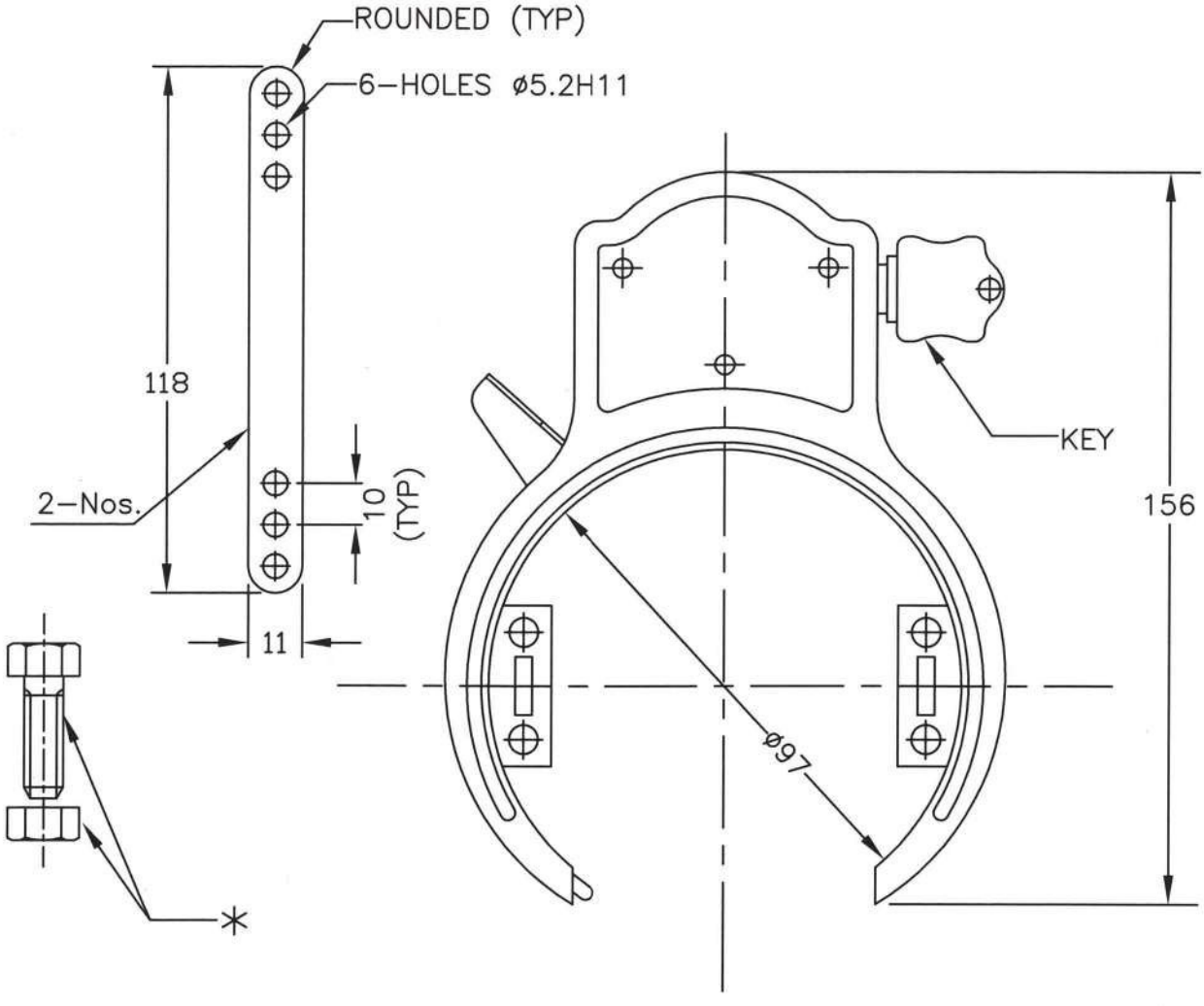
1. THE MUDGUARD IS READILY AVAILABLE AS STANDARD BICYCLE SPARE WITH STAY WIRE FITTINGS.
2. DIMENSIONS ARE FOR REF. ONLY.
3. MUDGUARD WEIGHT – 220 to 225gms.
4. STAY WIRE WEIGHT – 55 TO 60gms.

SNo.	REGION	REVISION	DATE	SIGN
2	A – 2	STAY WIRE ø4mm WAS ø3.2mm	22.09.18	
1	A – 2	NOMENCLATURE SPECIFICATION MODIFIED	12.09.16	Sd/DDI

REVISIONS

ARTIFICIAL LIMBS
MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN	Ashish	NOM	BICYCLE MUDGUARD (FRONT) RANGER TYPE WHEEL SIZE 24"X2.125", RED OXIDE PRIMER & PAINT COLOUR BLACK, GLOSSY FINISH, WITH STAY WIRE ø4mm & ALIMCO MONOGRAM	
DRN	Ashish			
CHD	Rajan	MTL	MS STRIP THICK 24G (0.56mm)	
DIM	IN mm	TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm	UNLESS SPECIFIED
SCALE	NTS	FIN	———	
APP	Sd/DDI	DRG No:–	LF 67	REV 2 / SHEET 1OF1
DATE	03.08.2016			



*

1.) HEX HEAD BOLT–IS:1363(PART1)/ISO–4016
M5x15–4.6, Zn PLATED (BB 02) – 2 Nos.

2.) HEX NUT–IS:1363(PART 3)/ISO–4034
M5–4.6, Zn PLATED (BA 08) – 2 Nos.

NOTE:–

1. CYCLE FRAME LOCK COMPLETE SET READYMADE AVAILABLE IN THE MARKET.
2. DIMENSIONS ARE FOR REFERANCE ONLY.
3. WEIGHT–230gms (APPROX)

SNo.	REGION	REVISION	DATE	SIGN
1.	----	* FASTENER DETAILS ADDED	22.06.20	

REVISIONS

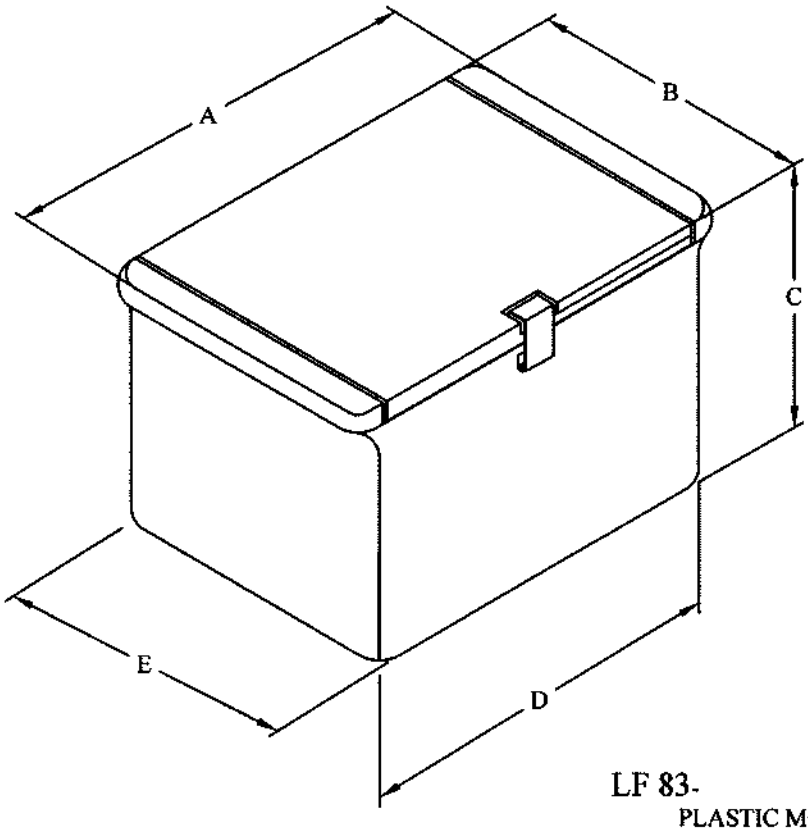
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	RANGER CYCLE FRAME LOCK–BRASS LEVER TUMBLER–EXTRA POWER WT. 230gm(APROX)
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS		
APP	Sd./DD1		
DATE	11.06.2015	DRG No:–	LF 81

SHEET 1 OF 1

OUTER DIMENSIONS IN mm :-

A	495±5
B	335±5
C	300±5
D	425±5
E	310±5



LF 83-

PLASTIC MOULDED INSULATED ICE BOX
WITHOUT TAP,CAPACITY-25 Ltr,RED COLOUR

NOTE:-

1. ICE BOX APPROVED FOOD GRADE POLYETHYLENE PU FILLED & UV STABILIZED.
2. EXCELLENT INSULATION TO MAINTAIN UNIFORM TEMPERATURE FOR STORAGE & TRANSPORTATION.
3. WEIGHT :- 3.4±0.3Kg

SNo.	REGION	REVISION	DATE	SIGN
1	———	DRAWING REDESIGN & REDRAWN	05.06.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN		MTL	FOOD GRADE APPROVED POLYETHYELENE
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	MOULDED
SCALE	NTS	DRG No:-	LF 83
APP			SHEET 1OF1
DATE	24.07.2015		

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 15	L F 90	**Rechargeable SMF Lead Acid E-Bike Battery 12V, 33Ah (5Hrs) Make Amptek, i-Power OR Equivalent and ICAT Approved* & One Year Guarantee.** Size Details : i. Length = 195±5mm ii. Width = 130±5mm iii. Height = 170±5mm (Including terminals)	02 Nos

* I-CAT certificate shall not be more than 6 months old.

SNo.	REGION	REVISION	DATE	SIGN
02	E 8	SPECIFICATION MODIFIED	04.06.19	
01	E 8	ONE YEAR GUARANTEE ADDED	30.9.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.16		

PRODUCT No.	B.O. No.	NOMENCLATURE
TD 2 A 65 Z 17	LK 47	SMPS BATTERY CHARGER FOR 24V, 33Ah, SMF BATTERIES(12V,33Ah - 2 Nos. CONNECTED IN SERIES)

A	INPUT SPECIFICATION:-	
1	NOMINAL VOLTAGE	230V AC, 1PHASE 50Hz
2	OPERATING VOLTAGE RANGE	**140 To 275V AC, 1 PHASE 50HZ & CHARGER SHOULD BE ABLE TO SUSTAIN CONTINUOUS VARIATION IN INPUT VOLTAGE FROM 140 V TO 275 V AC**
3	FREQUENCY	50±3Hz
4	EFFICIENCY	> 80%
5	ISOLATION	I/P To O/P : 1.5 KV DC FOR ONE MINUTE I/P To EARTH : 1.5 KV DC FOR ONE MINUTE
* 6	INPUT PROTECTION	**i)- FUSE PROTECTION** **ii)- VARIATION IN INPUT VOLTAGE:- BELOW 140V & ABOVE 275 (UP TO 280 V AC)**
7	TRANSIENT SURGE PROTECTION	YES (VARIESTOR) OR ANY OTHER COMPONENT
B	OUTPUT SPECIFICATION:-	
1	PURPOSE	SUITABLE FOR CHARGING OF 24V 33Ah SMF BATTERIES (12V 33Ah SMF BATTERIES - 2 Nos. CONNECTED IN SERIES)
* 2	CHARGING VOLTAGE	**28 ± 0.5 V DC**
3	OUTPUT CURRENT	5.0 Amp DC (MAX)
* 4	RIPPLE	**< 3%** PK - PK MAXIMUM OUTPUT VOLTAGE
* 5	LINE REGULATION	**< +/- 1.2 %**
* 6	LOAD REGULATION	**< +/- 5 %**
* 7	PROTECTION	I - O/P OVER VOLTAGE II - OVER LOAD **(120% of Rated 5 Amp)** III - SHORT CIRCUIT IV - BATTERY BLOCKING V - BATTERY REVERSE
8	INDICATION	I- BATTERY CHARGING II- BATTERY FULL CHARGE
C	ENVIRONMENTAL SPECIFICATIONS:	
* 1	OPERATING AMBIENT TEMPERATURE RANGE	-10 to 55 °C Duration min 6 Hrs **as per following standards:** **i. IS: 9000 (Part II)-1977 (reaffirmed on 2016)** **ii. IS: 9000 (Part III)-1977 (reaffirmed on 2016)**
* 2	OPERATING RELATIVE HUMIDITY REQUIREMENT	At least 90% RH (Non condensing) At 25°C, **Duration 12 Hrs** **As per following standard:** **IS: 9000 (Part IV)-1979 (reaffirmed on 2016)**
3	COOLING	NATURAL / FORCED AIR COOLING

D	MECHANICAL TEST REQUIREMENT	
* 1	MECHANICAL SHOCK AND VIBRATION TEST	Up to 2G **as per following standard** **i. IS : 9000(Part VIII)-1981** **ii. IS : 9000 (Part 7/Sec1):2006**
E	CABLE AND CONNECTOR SPECIFICATION	
1	INPUT SIDE	3 - PIN PLUG TOP OF AT LEAST 6 AMP RATING WITH 3 CORE COPPER CABLE LENGTH AT LEAST 2 METER.
2	OUTPUT SIDE	3- PIN IEC C14 MALE CONNECTOR OF AT LEAST 6 AMP CURRENT RATING WITH 1 METER LENGTH CABLE (EXCLUDING CONNECTOR) OF CROSS SECTIONAL AREA 1.5 SQ. mm, ISI MARKED, IS:694.
F	GENERAL REQUIREMENT	
	I- CURRENT & VOLTAGE RATING SAFETY FACTOR SHALL BE AT LEAST 1.5 TIMES FOR POWER SEMICONDUCTOR DEVICES. II- MANUFACTURER SHOULD INCLUDE CYCLE BY CYCLE PRIMARY CURRENT PROTECTION TO PREVENT POTENTIAL DAMAGE. III- COMPLETE COVER SHALL BE GOOD QUALITY NON CONDUCTING / NON CONDUCTING COATED AND NON-BREAKABLE MATERIAL AND ALL THE LIVE PART SHALL BE COVERED TO PROVIDE PROTECTION AGAINST ELECTRIC SHOCK. IV- BILINGUAL (HINDI & ENGLISH) OPERATION MANUAL WITH EACH BATTERY CHARGER V- PACKING SHALL BE INDIVIDUAL AND ABLE TO WITHSTAND/ SUSTAIN DURING TRANSPORTATION WITHOUT ANY DAMAGE TO CHARGER (PREFERABLE IN CORRUGATED BOX WITH THERMOCOL SIDE SUPPORT OR ANY BETTER MATERIAL SIDE SUPPORT TO AVOID DAMAGES) VI- MANUFACTURER SHALL PROVIDE THEIR OWN DETAIL ON THE TOP OR BOTTOM OF PRODUCT FOR IDENTIFICATION PURPOSE INCLUDING SERIAL No., DATE, MONTH AND YEAR OF MANUFACTURING.	
G	**WARRANTY:-** WARRANTY OF 12 MONTHS FROM DATE OF RECEIPT OF MATERIAL SHALL BE PROVIDED BY MANUFACTURER.	

SNo.	REGION	REVISION	DATE	SIGN
2	———	* SPECIFICATIONS MODIFIED	14.06.19	
1	———	SPECIFICATIONS OF INPUT SECTION - 'A' MODIFIED	08.09.18	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	INDICATED
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- INDICATED	REV 2 / SHEET 1 OF 1
DATE	24.11.2017		

SPECIFICATIONS : -

i) ISI Marked (IS:4151) Helmet without Lower Face Cover/Open Face, with Visor

ii) Size - 570mm (Medium)

iii) Colour - As approved

iv) Quick release Visor Mechanism.

v) Adjustable Chin Strap.

SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN	Ashish	NOM	OPEN FACE HELMET (ISI MARKED) IS:4151, SIZE - 570mm (MEDIUM)
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:-	LK 59
DATE	20.06.2019		SHEET 1 OF 1

SPECIFICATIONS : -

i) ISI Marked (IS:4151) Helmet without Lower Face Cover/Open Face, with Visor

ii) Size - 600mm (Large)

iii) Colour - As approved

iv) Quick release Visor Mechanism.

v) Adjustable Chin Strap.

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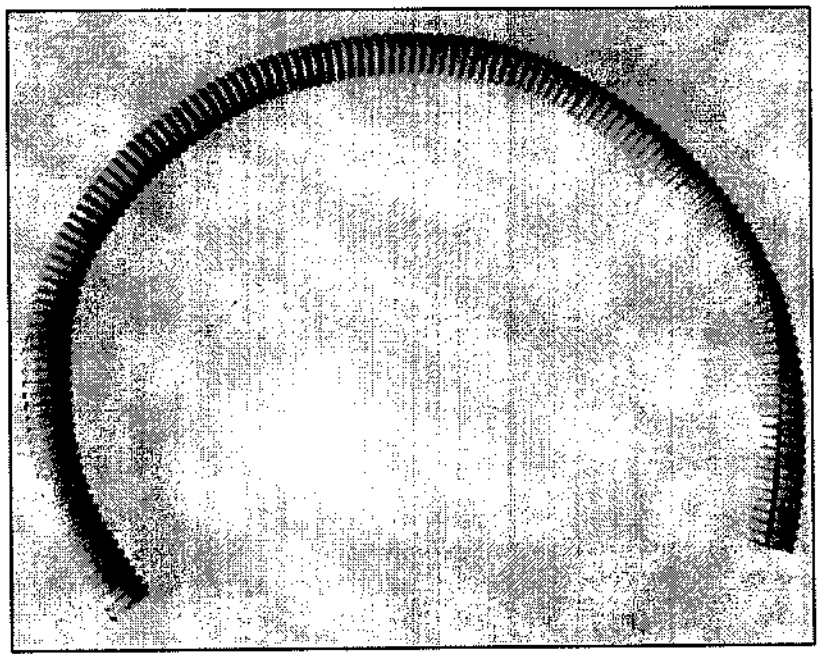
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN	Ashish	NOM	OPEN FACE HELMET (ISI MARKED) IS:4151, SIZE - 600mm (LARGE)
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:-	LK 60
DATE	20.06.2019	SHEET	1 OF 1



NOMENCLATURE:- - LK 85 -

CORRUGATED PVC FLEXIBLE PIPE ø16mm
COLOUR–GRAY Gd. MEDIUM

NOTE:-

1. PVC FLEXIBLE PIPE 30Mtr. LENGTH IN A BUNDLE.
2. MTL. REQUIRE 0.5 Mtr. LENGTH FOR EACH MOTORIZED TRICYCLE (TD 2 A 65).

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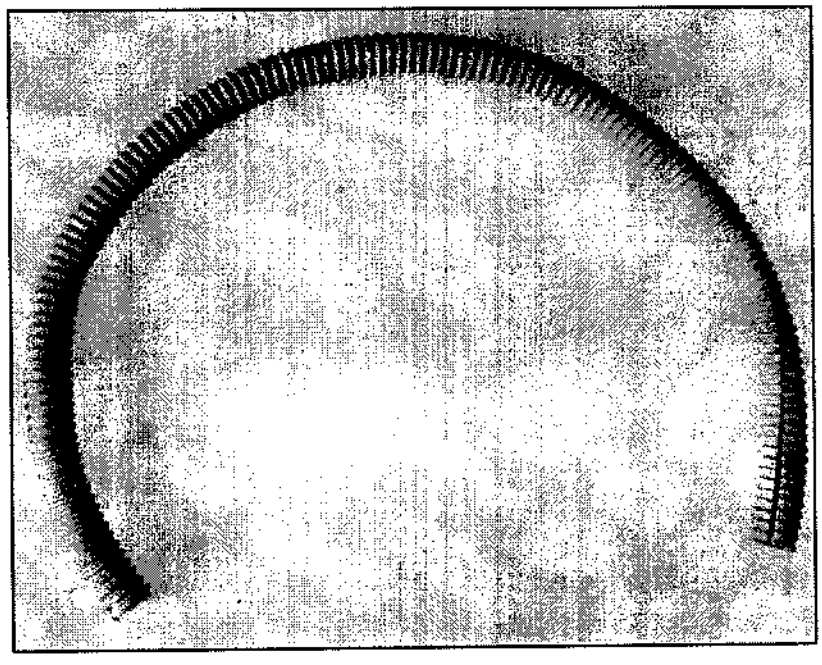
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	INDICATED
DRN	Ashish	MTL	PVC
CHD	Rau	TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP	Rau	DRG No:-	LK 85
DATE	27.06.16	SHEET	1 OF 1



NOMENCLATURE:– – LK 86 –

CORRUGATED PVC FLEXIBLE PIPE ø25mm
COLOUR–GRAY Gd. MEDIUM

NOTE:–

1. PVC FLEXIBLE PIPE 30Mtr. LENGTH IN A BUNDLE.
2. MTL. REQUIRE 01 Mtr. LENGTH FOR EACH MOTORIZED TRICYCLE (TD 2 A 65).

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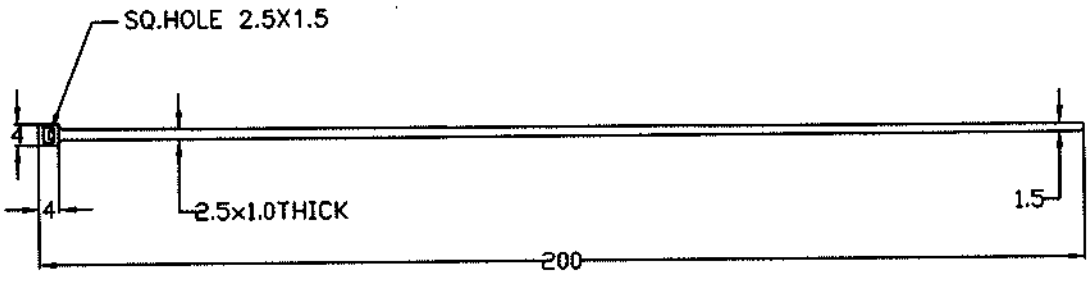
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	PVC
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS	DRG No:–	LK 86
APP		SHEET	1 OF 1
DATE	27.06.16		



NOMENCLATURE:- - LK 87 -

TIE BAR NYLON LENGTH 200mm
NATURAL COLOUR

NOTE:-

1. TIE BAR 100 Nos. IN A PACKET.
2. MTL. REQUIRE 25 Nos. FOR EACH MOTORIZED TRICYCLE(TD 2 A 65).

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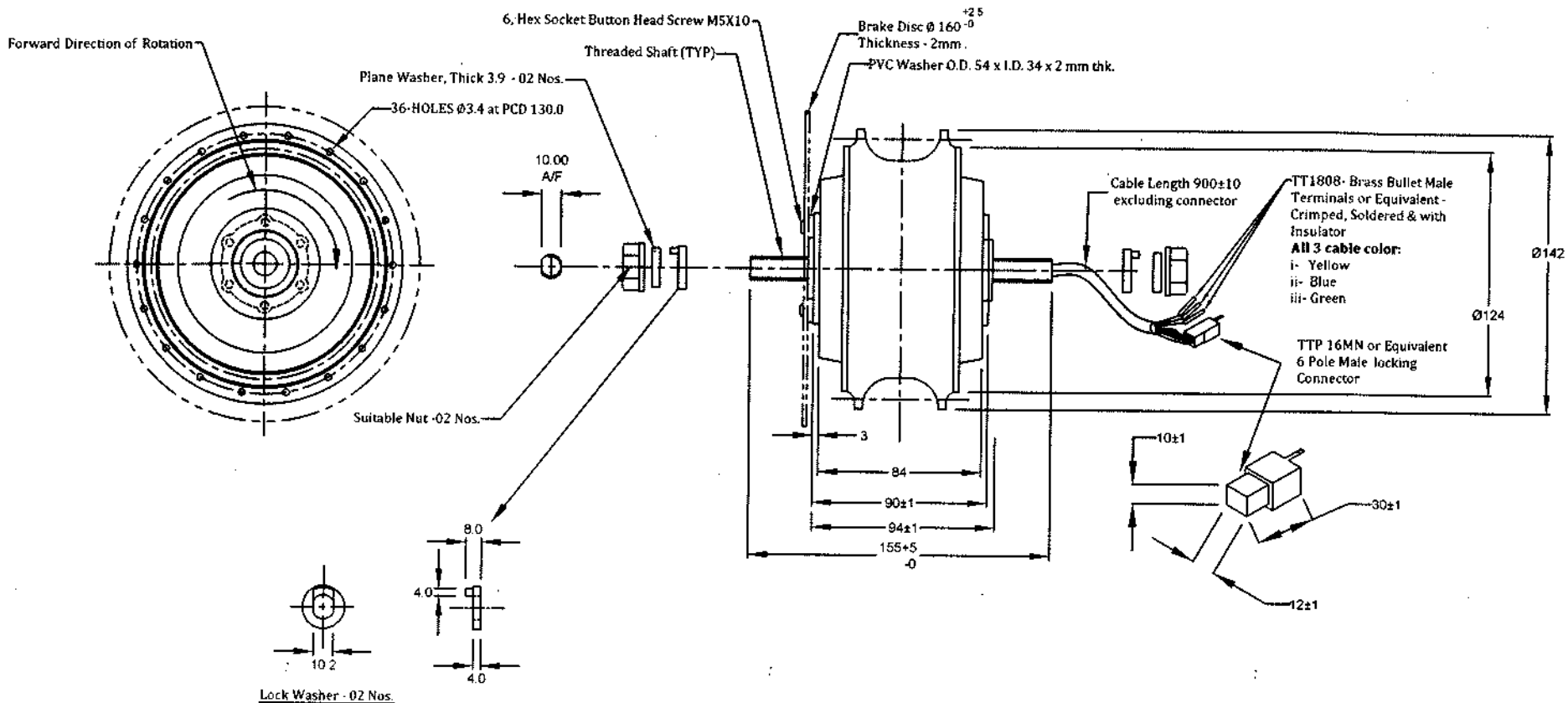
ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

DGN	Ashish	NOM	INDICATED
DRN	Ashish	MTL	NYLON
CHD	Rajan	TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP	Rajan	DRG No:-	LK 87
DATE	27.06.16	SHEET	1 OF 1



NOTE:-

1. Hub Drive Motor will be supplied with required connectors & it should be fixable with connectors of Controller (LM21).
2. Working of all three together Hub Drive Motor(LM20), Controller (LM21) and Accelerator with Brake Levers & Forward-Reverse Drive switch (LM22) shall be checked to ensure functioning of all three properly.
3. Complete Motor body should be waterproof.

B.O. No.	NOMENCLATURE WITH SPECIFICATION	Qty.
L M 20	**Hub Drive Motor DC 24V, 250Watt, 36 Holes for Spokes with forward & reverse motion feature.** i. Motor will be supplied along with Brake disc & caliper, required fasteners & with two rubber cap for nuts. ii. Outgoing Motor cable length = 900±10mm (Excluding connector) iii. Copper wires shall be used for windings iv Hub Drive Motor RPM (Test with be conducted of using given controller & throttle) Forward RPM (No Load) = 200±10 Reverse RPM (No Load) = 100±10 v. Supplier may have to interchange position of wire inside connector if required.	01Set

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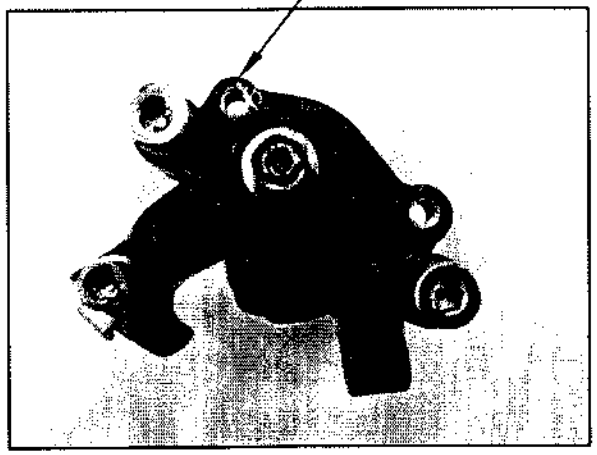
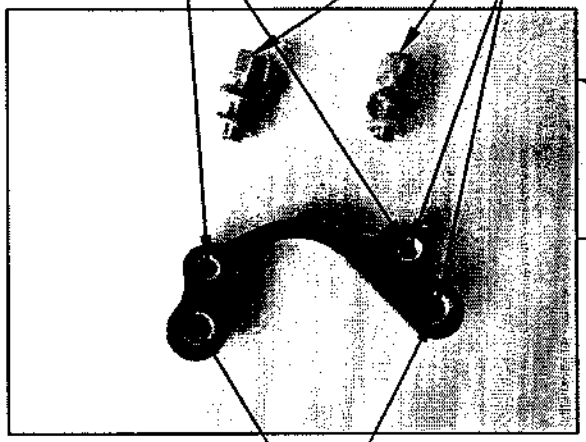
DGN		NOM	INDICATED
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE			
APP		DRG No:-	INDICATED
DATE	20.05.2019		SHEET 1 OF 2



Caliper Assembly for Disc Brake



Mounting Adadpter

Code No.	Nomenclature
--------	Caliper Assy for Disc Brake: Specification:- i. Material - Aluminium alloy ii. Colour - Black iii. Suitable for 160mm brake disc iv. Length: approx. 7.4cm/2.9inch v. Will be supplied along with all kind of fastenres including mounting fasteners. vi. Weight - 240±10gms

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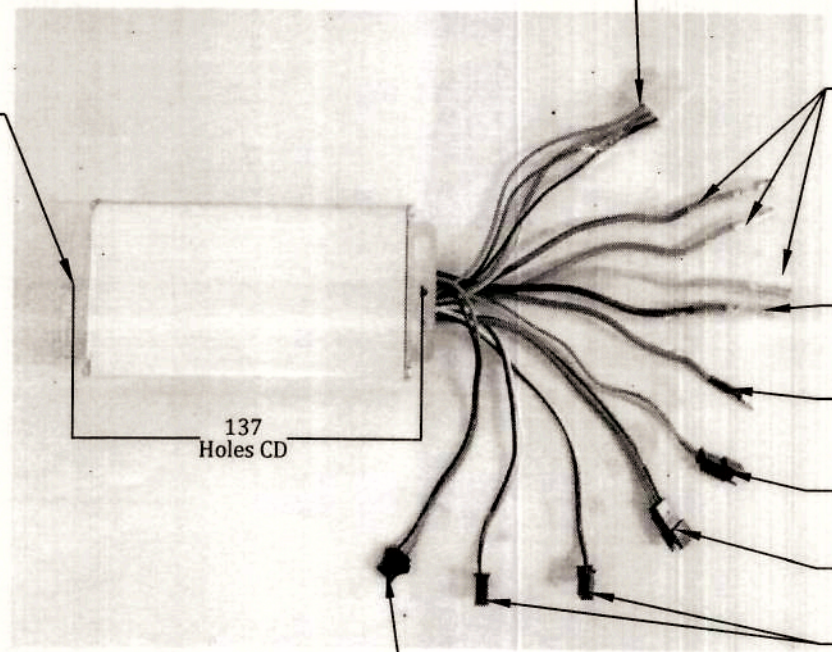
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	Indicated
DRN		MTL	Indicated
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE		DRG No:-	SHEET 2 OF 2
APP			
DATE	20.05.19		

Sensor wires Colour- Red, Black, Yellow, Blue & Green
Connector Type :- TTP 16FN or Equivalent 6 Pole Female Locking Connector
} Motor sensor wire connections

Outgoing wires length including connectors: 150mm



All 3 wire color :
i- Yellow
ii - Blue
iii- Green
Connector Type:TT1825-Brass Bullet female connector or Equivalent with insulator

Motor connections
Wire Details:-
Cross-sectional Area in Sq. mm = 2.0 to 2.5
as per relevant IEC standard
Outgoing wires length including connectors: 150mm

TT1825- Brass Bullet female Terminals or Equivalent with insulator
Wire Color : Black

TT1808- Brass Bullet male Terminals or Equivalent with insulator
Wire Color : Red

DC 24V Input
Wire Details:-
Cross-sectional Area in Sq. mm = 2.0 to 2.5
as per relevant IEC standard
Outgoing length including connectors:
Red Colour wire : 80mm
Black colour wire : 180mm

JST SM 2-Pin male Connector plug or Equivalent

JST SM 3-Pin male Connector plug or Equivalent

Throttle Connections.
Outgoing wires length including connectors: 150mm

JST SM 2-Pin female Connector plug or Equivalent

Brake levers connection
Outgoing wires length including connectors: 150mm

JST SM 3-Pin Female Connector plug or Equivalent (Only outer 2 Wire connected)

Connector for forward and **reverse drive**:-
Outgoing wires length including connectors: 150mm

B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
L M 21	**BRUSHLESS DC MOTOR CONTROLLER WITH REVERSE DRIVE :-** i. Rated Voltage DC24V. ii. Current Rating 19±1 Amps. iii. Working Voltage DC 20V to DC 30V iv. Controller with proper fixing & holding arrangement so that it can be fixed on the chassis at proper place & position. v. **Output of controller shall be such that the Hub Drive Motor reverse RPM shall be half($\frac{1}{2}$) of forward RPM approx.** (Refer Drg No. LM 20 for RPM details.)	01Set

NOTE:-

1. Controller shall be supplied with required connectors & fixable with connectors of Hub Drive Motor (LM20) & Accelerator with Brake Levers (LM22).
2. Working of all three together Accelerator with Brake Levers & Forward-reverse drive switch (LM22), Controller (LM21) & Hub Drive Motor (LM20) will be checked for forword and reverse drive to ensure its functioning properly.
3. Controller's body shall be waterproof.
4. Suppliers may have to interchange position of wires inside connectors if required.

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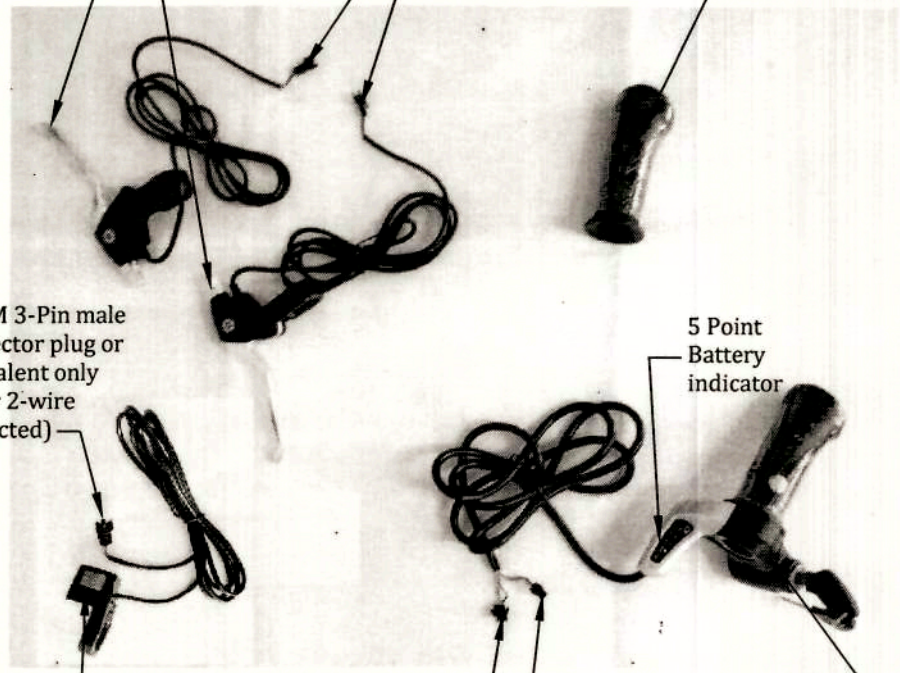
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	—
SCALE	NTS		
APP		DRG No:–	INDICATED
DATE	20.05.2019		SHEET 1 OF 1



B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
L M 22	**ACCELERATOR WITH BRAKE LEVERS & FORWARD-REVERSE DRIVE SWITCH:-** **1. Accelerator:-** i. Rated Voltage DC 24V ii. 5 Points inbuilt battery charge status indicator (First three green, second one yellow & last one red) iii. ON / OFF switch with Key. iv. Outgoing cable length 1530±10mm excluding connector v. It is to be fixed over M.S. tube Ø22mm **2. Brake Levers:-** i. Two brake levers with required fixing arrangement to be fixed over M.S. tube Ø22mm ii. outgoing cable length 1530±10mm excluding connector. iii. During application of Brake lever, power supplied to motor shall be disconnected **3 Forward and reverse drive switch assembly:-** i. Outgoing Cable length 1530±10mm excluding connectors ii. It is to be fixed over M.S. tube Ø22mm. **4 Hand Grip:-** i. One extra hand grip for left hand and to be fixed over M.S. tube Ø22mm.	01Set

NOTE:-

1. Accelerator with Brake Levers shall be supplied with required connectors & fixable with connectors of Controller (LM21).
2. Working of all three together Accelerator with Brake Levers Forward-Reverse Drive switch(LM22), Controller (LM21) & Hub Drive Motor (LM20) will be checked for forward and reverse motion to ensure its functioning properly.
3. Accelerator's body and forward & reverse drive switch shall be waterproof.
4. Suppliers may have to interchange the position of wire inside connectors if required.

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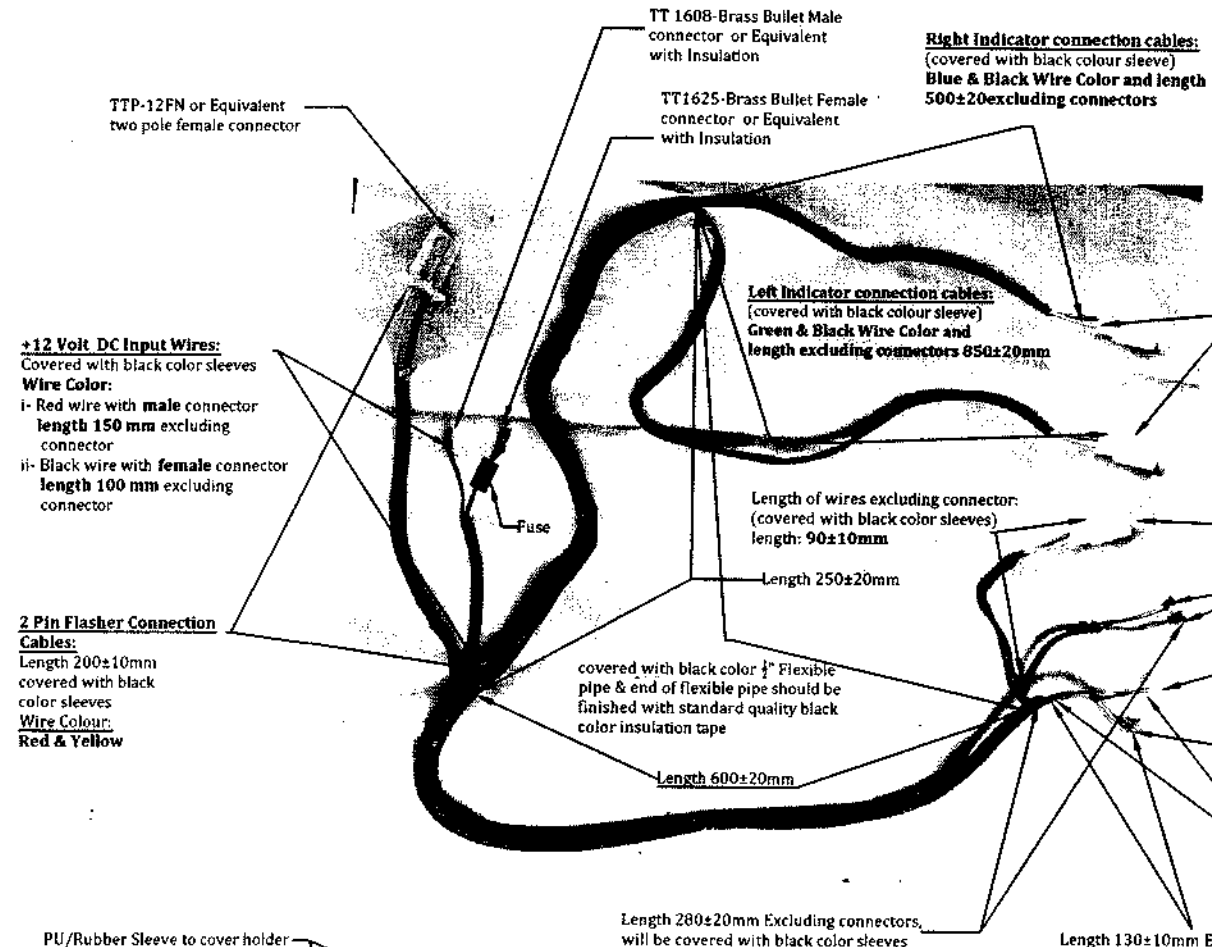
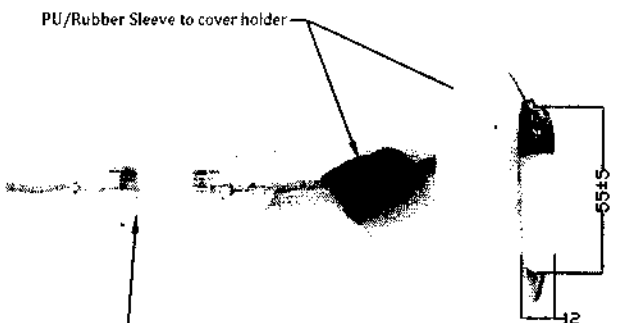
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS		
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	20.05.19		





FUSE DETAILS:-
Glass Tube Fuse Holder Flip Cover Type:
Fuse of rating 5 Amp + 1 extra fuse
Fuse size:- 6 x 30 mm

B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
L M 23	**Main Wiring with Fuse Holder:-** 1.Completely finished wiring along with required PVC Sleeve & good quality of connector, Thimble & Lugs 2. **Cable Details**: - Each wire cross-sectional area in **Sq. mm = 0.5, ISI Marked, IS:694** All the joints should be soldered properly 3. Working of wiring shall be checked with Switch (LM 25) and other required items. 4. Supplier may have to interchange position of wire inside connector if required.	01Set

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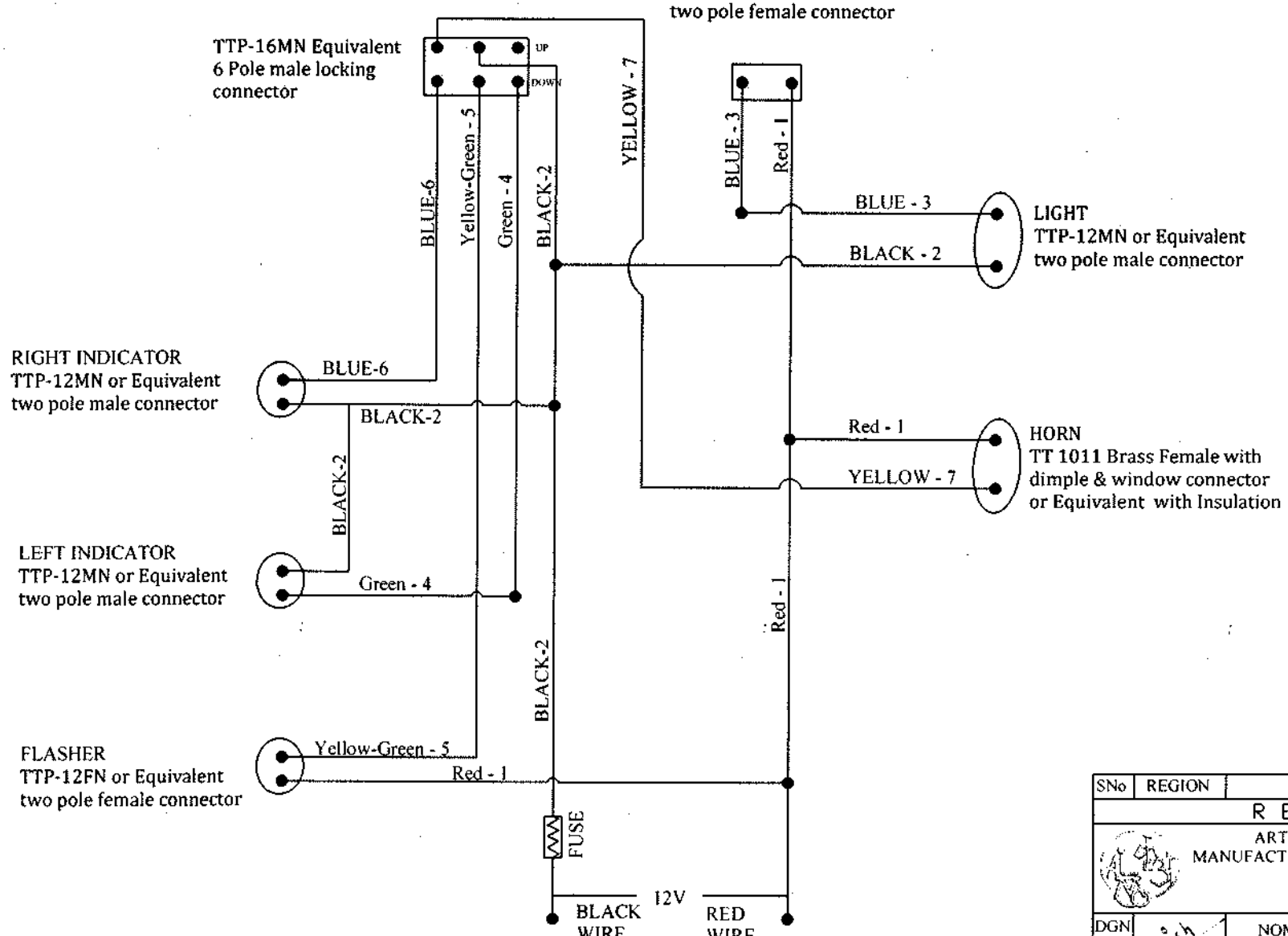
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	20.05.2019	SHEET	1 OF 2



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ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
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DGN		NOM	MAIN WIRING DIAGRAM
DRN		MTL	
CHD		HEAT TREATMENT	
DIM	IN mm	SURFACE TREATMENT	
SCALE	NTS		
APP		DRG No:-	SHEET 2 OF 2
DATE	20.05.2019		

Terminals to connect two Batteries:
TT 1533 Brass Ring Terminal or Equivalent
ID= 6.5mm
OD= 12mm
Thick= 1 to 1.25mm
End terminal should be crimped, soldered and covered with sleeves

All 4 Cable length:
200±10mm excluding connectors
Cross-sectional Area in Sq. mm
= 4.0 ISI Marked, IS:694

Cable Length 300±10mm
covered with black color 1/2 " Flexible pipe & end of flexible pipe should be finished with standard quality black color insulation tape

TT 1608-Brass Bullet **Male** connector or Equivalent with Insulation
Wire Colour :- **Black**
Outgoing wire length :- **250mm**

TT1625-Brass Bullet **Female** connector or Equivalent with Insulation,
Wire Colour :- **Red**
Outgoing wire length :- **200mm**

Cable color:Red
Cable color: Black

Both Cable details:
Cross-sectional Area in **Sq. mm = 4.0 ISI Marked, IS:694**
Cables Color :
i- Cable with **female connector** shall be **RED color length 220±10mm** excluding connectors
ii- Cable with **male connector** shall be **Black color length 140±10mm** excluding connectors

Cables to connect charging plug:
Length 380±10mm covered with black color sleeves
Cross-sectional Area in Sq. mm
= 1.5 ISI Marked, IS:694

Both Cable color: Yel

Cable Color:
i- Red, ii- Black

TT1825-Brass Bullet female connector or Equivalent.
Fully covered with Red color sleeve

TT1808-Brass Bullet male connector or Equivalent.
Half covered with Black color sleeve

24V DC output

12 V DC OUTPUT
(To be connected with 12V input wire of Main Wiring LM 23)

Copper Leg Self-locking female terminal with following specification:
Length= 18.0±0.2mm
Height= 2.2±0.2mm
Width= 5.8±0.2mm
Sheet Thickness= 0.35±0.05mm
Connector will be properly soldered and covered with insulation

24Volt DC output cable:
Cable covered with black color sleeves
Cross-sectional Area in Sq. mm = 0.75 ISI Marked, IS:694
Wire colour: **Red & Black**
Length: **100mm**

Converter 24VDC to 12VDC, 5A 60W

TTP 12FN OR Equivalent
Two Pole Female Connector
Wire Colour :-Red & Black
Lenght : **100mm**

24V DC INPUT

Max Size of the Box
85 x 50 x 30mm

Both Cable details:
Length 130±10mm excluding connectors
Cross-sectional Area in Sq. mm
= 4.0 ISI Marked, IS:694

TTP-12MN or Equivalent two pole male connector

In-Line ATM Stackable Mini-Fuse Holder: Fuse rating:20Amp
Extra fuse : 01 No.

TT2872 -PB/Brass Ring Terminal or Equivalent
ID= 5.4mm
OD= 9.5mm
Thick= 0.5 to 1 mm
End terminal should be crimped, soldered and covered with sleeves
Note :-
This switch should be used to control the out put of both **24VDC.**

Connection for ON/OFF Switch used in Battery Box

B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
LM 24	**Battery Wiring with Converter:-** **1- Battery Wiring:-** i) Completely finished wiring along with good quality connector & Lugs covered with proper sleeves. (Every Joint should be soldered and Every Lug, Connector shall be crimped & soldered with wires) ii) It should be fixable with terminals of used two nos. of 12V 33Ah SMF, E-bike Battery Wiring will be protected with fuse of current rating 20Amps 2- **Converter** 24V DC to 12VDC, 5A 60W :- i) converter with stable output., with high efficiency & water proof ii) Input Voltage range : 20VDC to 30VDC iii) Output Voltage : 12VDC iv) Output Over Voltage Protection (Maximum 120% of rated output) v) **Printing on TOP Cover:** Converter 24VDC to 12VDC, 5A 60W vi) **Max Size of the Box 85 x 50 x 30mm** 3- Supplier may have to interchange position of wire inside connector if required.	01Set

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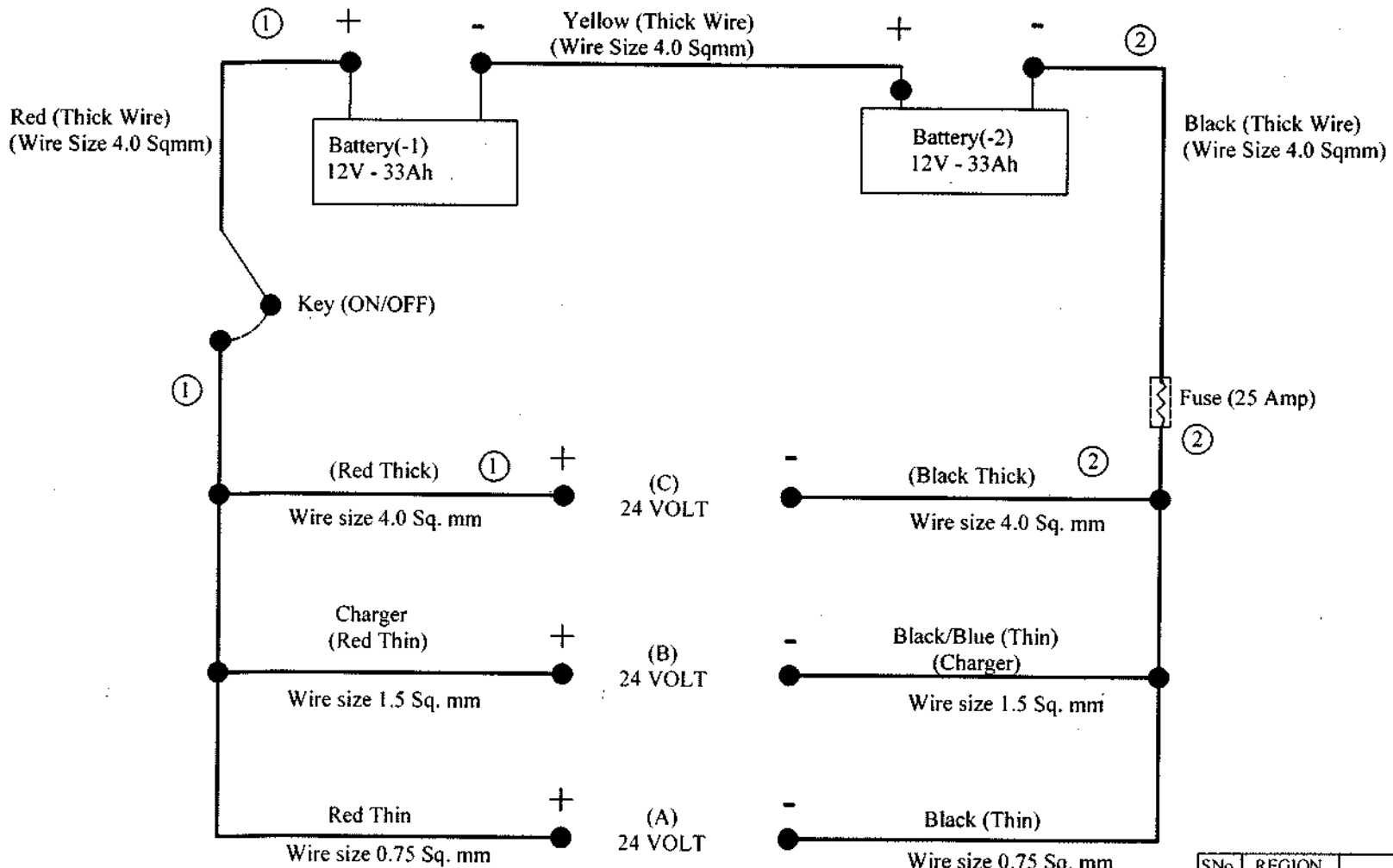
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	20.05.2019	SHEET	1 OF 2



A - Supply for Converter (Converter 24VDC to 12VDC, 5A 60Watt)

B - Connected to Charger Socket

C - Supply to controller

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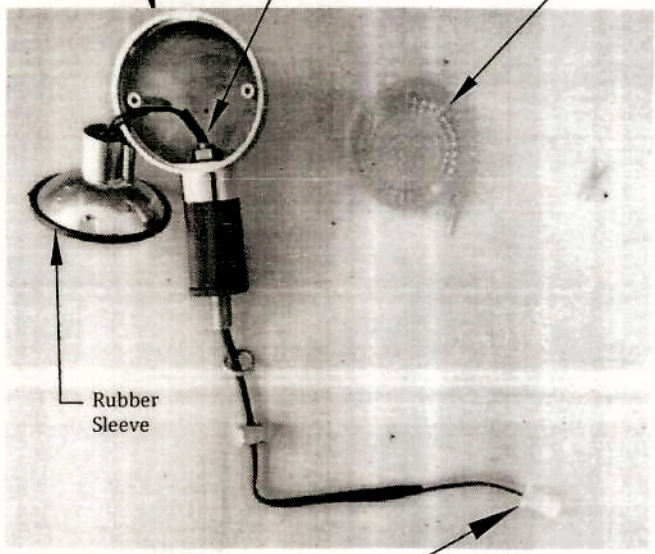
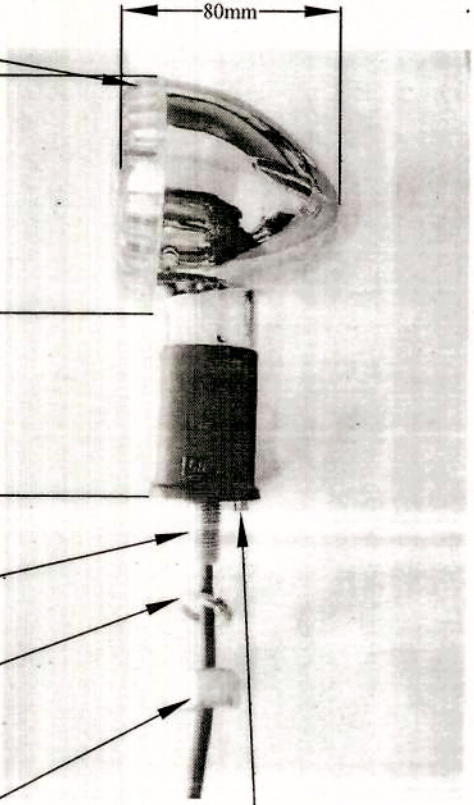
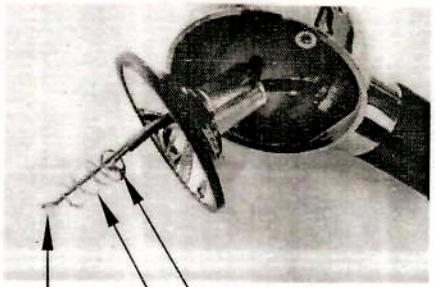
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	Battery Wiring Diagram
DRN		MTL	
CHD		HEAT TREATMENT	
DIM	IN mm	SURFACE TREATMENT	
SCALE	NTS		
APP		DRG No:-	SHEET 2 OF 2
DATE	20.05.2019		





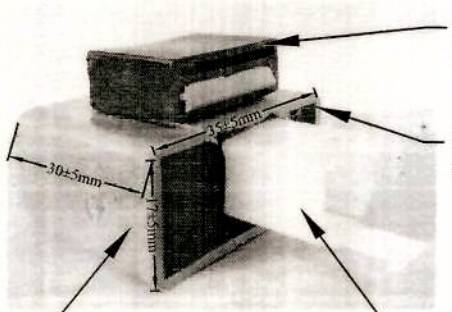


TTP 12FN OR Equivalent
Two Pole Female Connector or
Equivalent with insulation.

Wire Colour

1. Green & Black (First Indicator)
2. Blue & Black (Second Indicator)

Wire length 90±10mm excluding connectors



B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
L M 25	**REAR LIGHT INDICATOR ASSY RIGHT & LEFT WITH FLASHER:-** 1. Light Indicator Right & Left with a) LED bulbs rating shall be between3 to 5 Watt b) Outgoing cable will be covered with Black colour sleeve. 2. Three pin flasher to operate LED indicator and all three pin & inside component should be fixed properly. 3. Operating voltage for indicators & flasher is 12V DC 4. Supplier may have to interchange position of wire inside connector if required.	01Set (02 Nos.)

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1	—	DIMENSION 135±5 WAS 155±5	13.09.19	

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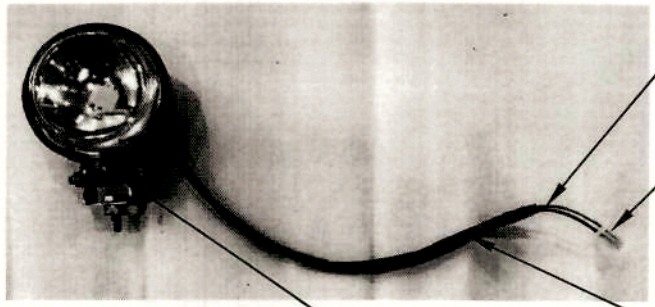
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	—
CHD		HEAT TREATMENT	—
DIM	IN mm	SURFACE TREATMENT	—
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	12.03.2019	SHEET	1 OF 1

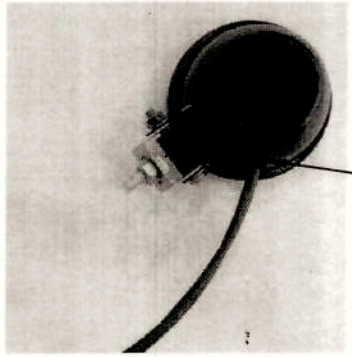


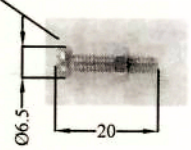
Wire Color -
Blue, Yellow

TTP 12FN OR Equivalent
Two Pole Female Connector
with insulation

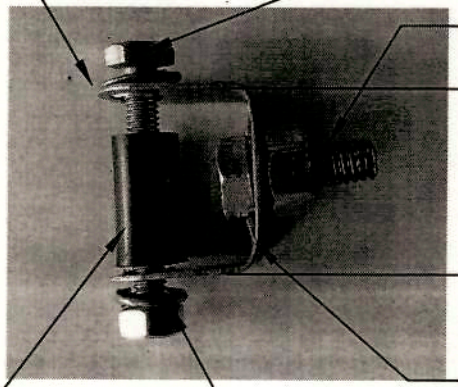
Black Colour
Sleeve

Fig. 1





Rubber Packing



Plane Washer

HEX BOLT M6x45mm
WITH NUT

HEX BOLT M8X20MM
WITH NUT

Holder (MS Sheet)
Thick 1.0mm

Bush:
ID= 8 mm
OD=12mm
Length = 25mm
Material = MS

Fig. 2

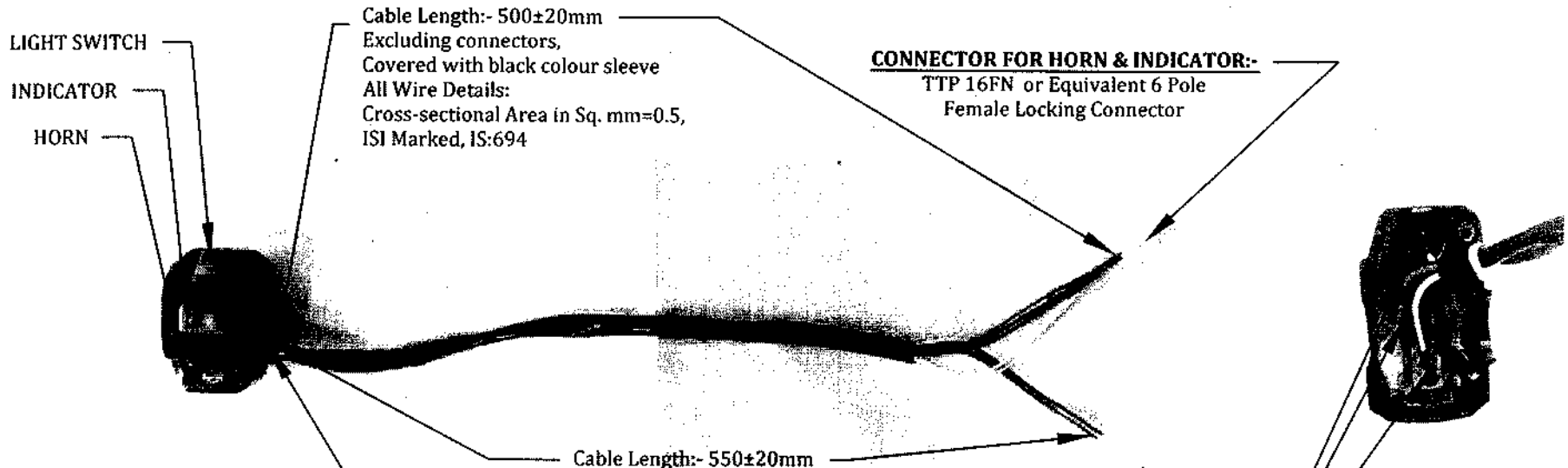
Spring Washer

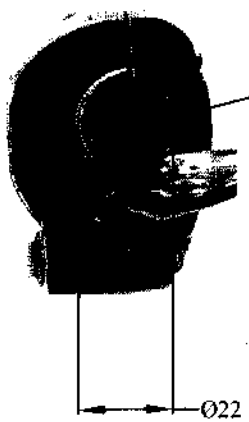
B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
L M 26	**FRONT LIGHT ASSY:-** i. With LED bulb 3 to 5 Watt ii. Operating Voltage 12V DC iii. To be supplied with Hex Bolts, Nuts , Washers and other fixing arrangement as shown in **fig. 2** iv. Fixing items shall be Zn plated v. Outgoing wire length :-230±10mm excluding connector v. **Wire Details:** - Cross-sectional area in **Sq. mm = 0.5 ISI Marked, IS:694** Wires joints should be soldered properly. Wires shall be covered with Black colour sleeve vi. Supplier may have to interchange position of wire inside connector if required.	01Set

SNo.	REGION	REVISION	DATE	SIGN
REVISIONS				

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN	Ashish	MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	—
SCALE	NTS		
APP		DRG No:–	INDICATED
DATE	20.05.2019		SHEET 1 OF 1





It is to be fixed over
M.S. tube Ø22mm

CONNECTOR FOR FRONT LIGHT:-
TTP-12MN or Equivalent 2 Pole
male locking connector

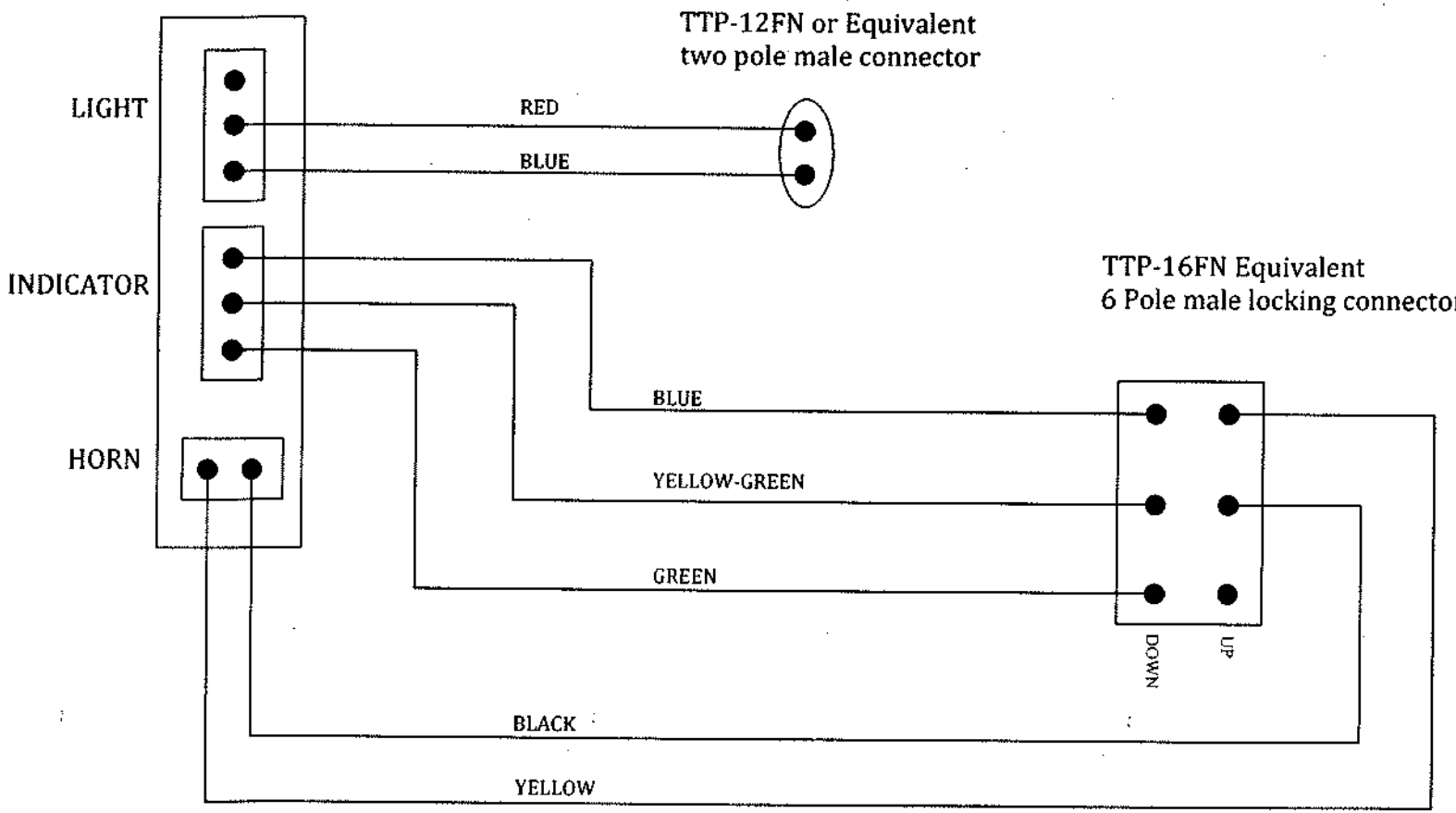
All inside soldering joints
shall be covered with sleeve

B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
LM 27	**Handlebar Switch Assembly for Horn, Light & Indicator :-** 1.Handlebar Switch Assembly along with suitable wiring & connectors with following features only (other extra features will be point for rejection) : a. Horn b. Light c. Left & Right Indicator . 2. Supplier may have to change wiring connections to suit with our Main Wiring (LM 23) at the time of supply. 3. Supplier may have to interchange position of wires inside connectors as per requirments	01Set

SNo.	REGION	REVISION	DATE	SIGN
		REVISIONS		

ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN		MTL	
CHD		HEAT TREATMENT	
DIM	IN mm	SURFACE TREATMENT	
SCALE			
APP		DRG No:-	INDICATED
DATE	20.05.2019	SHEET	1 OF 2



SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	WIRE DIAGRAM OF SWITCH ASSY
DRN	Ashish	MTL	
CHD		HEAT TREATMENT	
DIM	IN mm	SURFACE TREATMENT	
SCALE		DRG No:-	INDICATED
APP		SHEET	
DATE	20.05.2019		

CODE No. NY28 – RETRO FIT KIT HUB DRIVE SYSTEM, DC 24V, 250W, 36 HOLES FOR SPOKES, BRAND UMS OR EQUIVALENT CONTAINING :–

SL.NO.	DRAWING NO.	NOMENCLATURE	Qty.
1.	LK23	SPOKE ASSY FOR HUB DRIVE MOTOR, ø2.6mm (12G) FOR 26"X2.125" WHEEL WITH 36 HOLES	36 Nos.
2.	LK24	HUB DRIVE MOTOR DC 24V/250W, 36 HOLES FOR SPOKES	01 SET
3.	LK25	BRUSHLESS DC MOTOR CONTROLLER 24V,19±1Amps	01
4.	LK26	ACCELERATOR WITH BRAKE LEVER	01 SET
5.	LK27	MAIN WIRING	01 SET
6.	LK28	BATTERY WIRING	01 SET
7.	LK29	ON/OFF SWITCH USED IN BATTERY BOX	01 SET
~~8.~~	~~LK30~~	~~BATTERY CHARGER SMPS WITH OUTPUT DC 24V, 4.0AMP~~	~~01 SET~~
9.	LK31	ON/OFF SWITCH ASSEMBLY FOR HORN, LIGHT & INDICATOR	01 SET
10.	LK32	LIGHT INDICATOR RIGHT & LEFT WITH FLASHER	01 SET
11.	LK33	FRONT LIGHT	01 SET
12.	LK34	HORN 12VDC	01 SET
13.	LK88	BATTERY BOX ASSEMBLY	01 SET

Note:–

i– Each & every items mentioned above will be fixed on the chassis of our Tricycle & tested before supply.In any case if any items found not fixable & fails in testing the complete Retro Fit Kit will be rejected.

ii – Each and every items shall be tested by Supplier and marked as ' Tested ' with good quality printed sticker.

iii– One Year guarantee for all the above mentioned items.

SNo.	REGION	REVISION	DATE	SIGN
03	——	ITEM SL. No 8 (LK 30) DELETED	11.01.18	
02	——	SPECIFICATION OF NY 28 MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm	FIN	——
SCALE	NTS	ORG No.	NY28
APP	Sd/DDi	SHEET	1OF1
DATE	14.07.15		

CODE No. NY30 – RETRO FIT KIT HUB DRIVE SYSTEM, DC 24V, 250W, 36 HOLES FOR SPOKES WITH DISC BRAKE, FORWARD & REVERSE DRIVE CONTAINING :–

SL.NO.	DRAWING NO.	NOMENCLATURE	Qty.
1.	LM20	HUB DRIVE MOTOR DC 24V, 250WATT, 36 HOLE FOR SPOKE WITH FORWORD AND REVERSE DRIVE FEATURE	01 SET
2.	LM21	BRUSHLESS DC MOTOR CONTROLLER WITH REVERSE DRIVE	01 SET
3.	LM22	ACCELERATOR WITH BRAKE LEVER & FORWARD–REVERSE DRIVE SWITCH	01 SET
4.	LM23	MAIN WIRING WITH FUSE HOLDER	01 SET
5.	LM24	BATTERY WIRING WITH CONVERTER	01 SET
6.	LM25	REAR LIGHT INDICATOR ASSY RIGHT & LEFT WITH FLASHER	01 SET (02 Nos.)
7.	LM26	FRONT LIGHT ASSY	01 SET
8.	LM27	HANDLE BAR SWITCH ASSEMBLY FOR HORN, LIGHT & INDICATOR	01 SET
9.	LK29	ON/OFF SWITCH USED IN BATTERY BOX	01 SET
10.	LK34	HORN 12VDC	01 SET
11.	LK88	BATTERY BOX ASSEMBLY	01 SET
12.	LK23	SPOKE ASSY FOR HUB DRIVE MOTOR ø2.6mm(12g) FOR 26"x2.125" WHEEL WITH 36 HOLES	36 NOS.

Note:–

i– Each & every items mentioned above will be fixed on the chassis of our Tricycle & tested before supply.In any case if any items found not fixable & fails in testing the complete Retro Fit Kit will be rejected.

ii – Each and every items shall be tested by Supplier and marked as ' Tested ' with good quality printed sticker.

iii– One Year guarantee for all the above mentioned items.

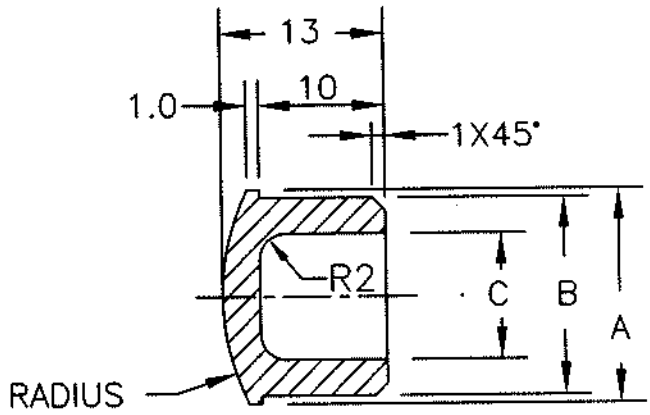
SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

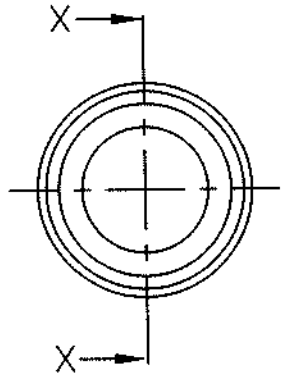
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN	Ashish	NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm	FIN	
SCALE	NTS	ORG No.	NY 30
APP		SHEET	1OF1
DATE	20.05.19		

SL.No.	DRAWING No.	NOMENCLATURE	ØA	ØB	ØC
1.	TD 2 A 07 0 02	PLUG END 22mm	22.0	19.5/19.4	16
2.	TD 2 A 07 0 03	PLUG END 19mm	19.0	17.5/17.4	13
3.	TD 2 A 07 0 04	PLUG END 17mm	17.0	15.7/15.6	10



SECTION–XX



NOTE:–

1. SHRINKING & FLOW LINES TO BE AVOIDED
2. COMPONENTS TO BE FREE FLASH & AIR HOLES.
3. REMOVE SHARP EDGES & CORNERS.
4. HARDNESS 60 TO 70 SHORE 'A'.

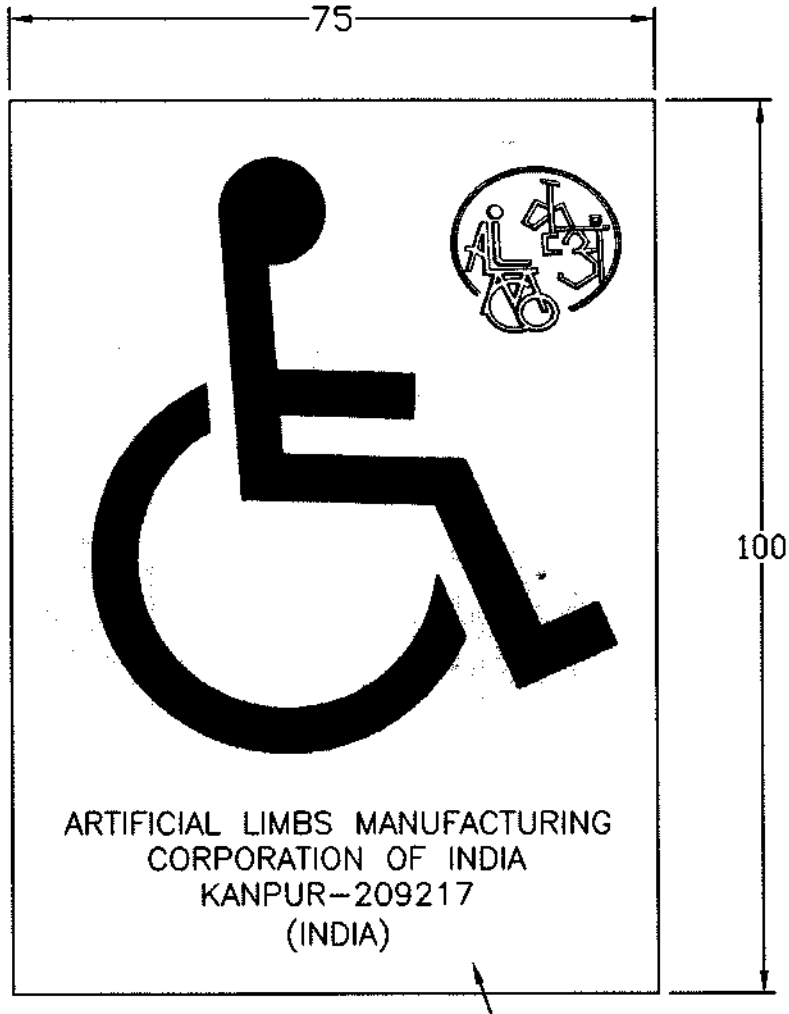
SNo.	REGION	REVISION	DATE	SIGN
3.	——	DRAWING REDRAWN	09.05.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	PLUG END 22/19/17mm
DRN	Ashish	MTL	PVC BLACK COLOUR IS:7078 (AW 92)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	SMOOTH
APP	Sd/ DD1	DRG No:–	TD 2 A 07 0 02; TD 2 A 07 0 03; TD 2 A 07 0 04
DATE	09.05.1978		SHEET 1OF1

01	K	5	116



NOTE:–

1. SYMBOL'S PROPORTIONS AS SHOWN.
2. LABEL TO BE PROVIDED GLUED ON REVERSE WITH PAPER BACKING.

TOLERENCE:--

DEVIATION FOR NON TOLERANCED DIMENSIONS (ISI:2102 MEDIUM)

DIAMETER & LENGTHS BETWEEN		LENGTH IN MM OF SHORTER SIDE OF ANGLE UPTO & INCL.	
0.5 up to 6	±0.1	Up to 10	±1°00`
Over 6 up to 30	±0.2	Over 10 upto 50	±0°30`
Over 30 up to 120	±0.3	Over 50 upto 120	±0°20`
Over 120 up to 315	±0.5	Over 120 upto 400	±0°10`
Over 315 up to1000	±0.8		
Over 1000 up to 2000	±1.2		
Over 2000 up to 4000	±2.0		

MACHINING FINISH IN MICRONS
▽ 8 - 25 ▽▽ 1.6 - 8 ▽▽▽ 0.025 - 1.6 ▽▽▽▽ <0.025

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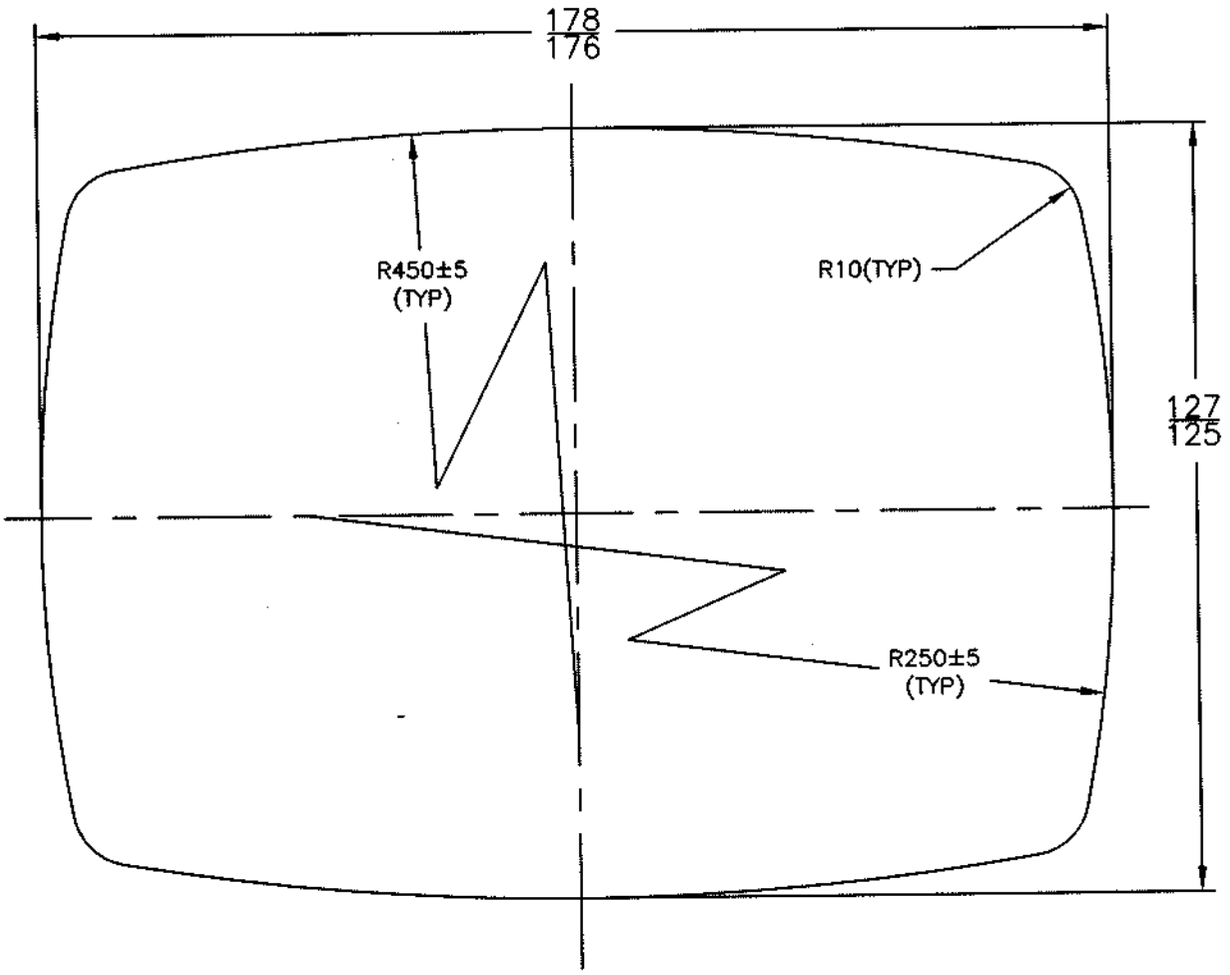
SNo.	REGION	REVISION	DATE	SIGN
4	———	ALIMCO LOGO MODIFIED	28.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL–SYMBOL OF ACCESSIBILITY
DRN		MTL	ALUMINIUM FOIL THK 60 TO 70 MICRONS
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP	Sol/DD1		
DATE	12.12.1978		

DRG No:- TD 2 A 07 0 05 SHEET 1OF1



SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRAWING REDRAWN	05.03.15	

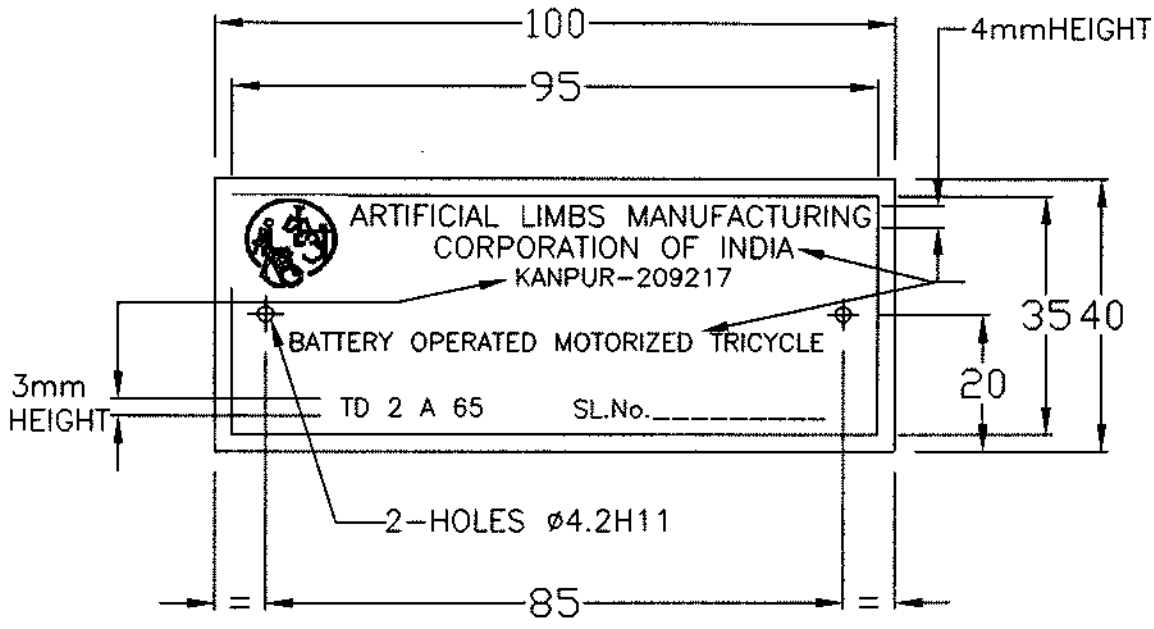
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	PAD FOOT REST
DRN		MTL	SHEET RUBBER–SHOE VELTING SIZE 400X300mm COLOUR–BLACK,THICK2.5mm APPROX (AV31)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	——
APP	Sd/DD1	DRG No:– TD 2 A 07 K 05	SHEET 1OF1
DATE	30.07.1982		

01	K	5	150

5 4



THE GAP BETWEEN THE TWO LINES=3mm APPROX

NOTE:-

1. BACKGROUND ANODIZED PRINTING COLOUR AS APPROVED.
2. LETTERING DETAILS & PROPORTIONS AS SHOWN (APPROX).
3. REMOVE SHARP EDGES & CORNERS.

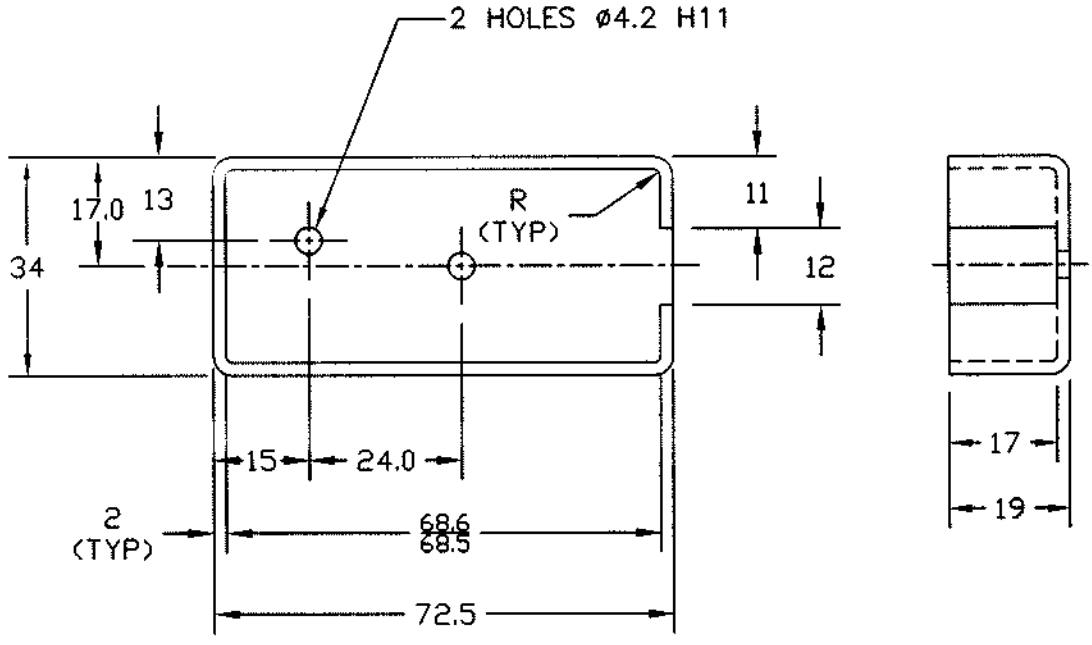
SNo.	REGION	REVISION	DATE	SIGN
2	—	2 HOLES ø4.2H11 WAS ø2.2H11	29.06.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL
DRN	Ashish	MTL	SHEET AL.ALLOY HS 30 WP IS:737 THICK 1mm(19SWG) (AP20)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	—
APP	SA/DD1	DRG No:- TD 2 A 65 0 01	SHEET 1 OF 1
DATE	16.08.05		

01 J 3 104



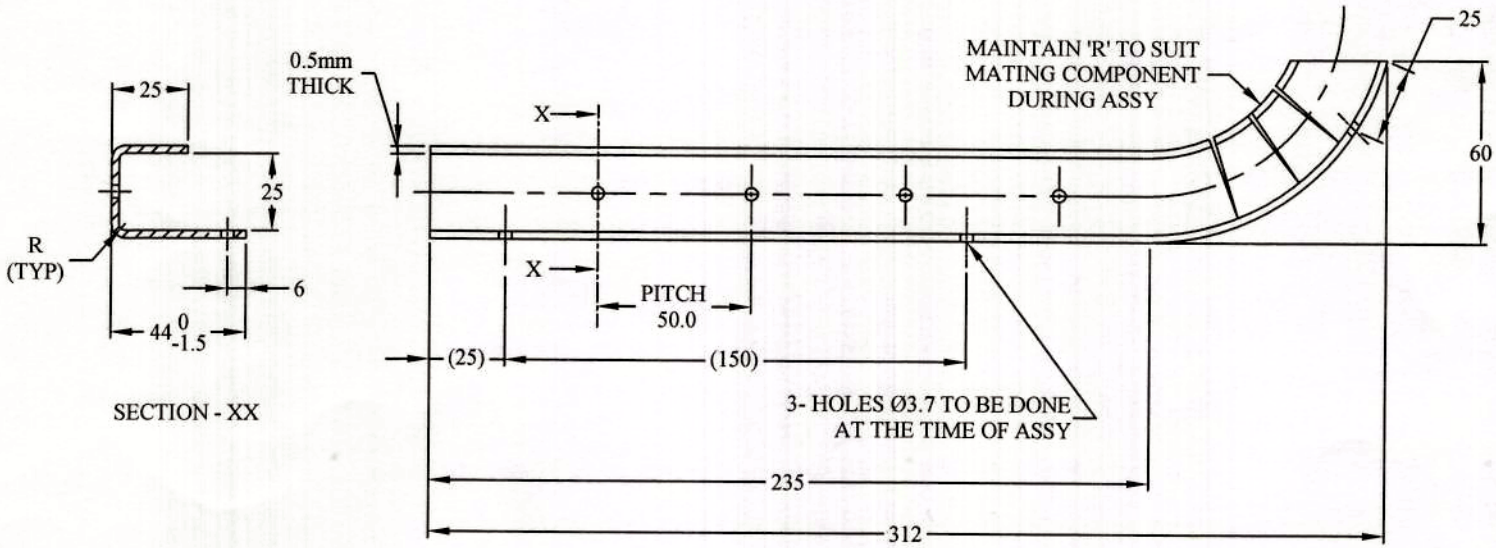
NOTE:–

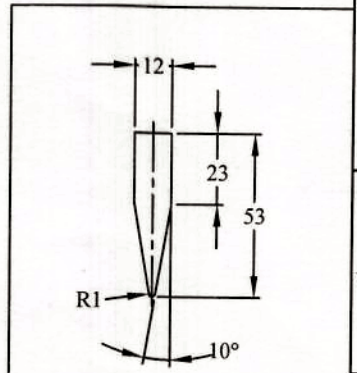
1. MOULDING TO BE FREE FROM UNDESIRABLE SHRINKAGE & ANY DEFECTS.
2. Wt. – 12gms (APPROX)

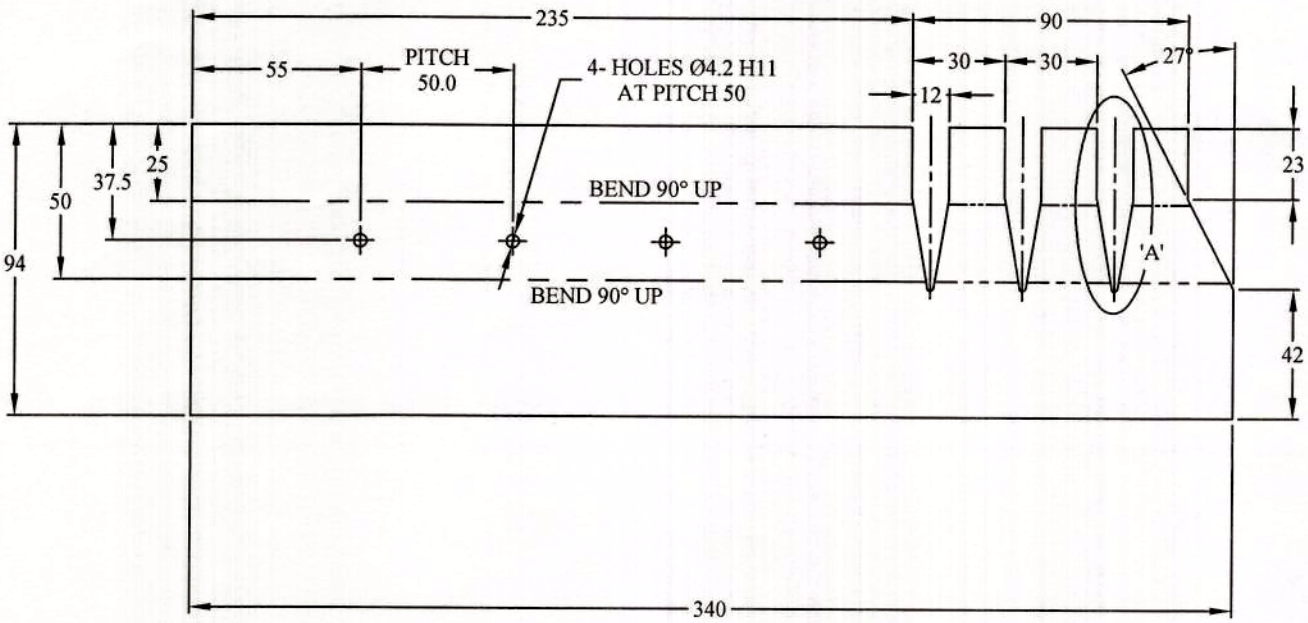
SNo.	REGION	REVISION	DATE	SIGN
		R E V I S I O N S		

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN	Ashish	NOM	SWITCH BOX
DRN		MTL	GRANULES ABS Gd 'I',BLACK COLOUR(AW74)
CHD		TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	MOULDED
APP		DRG No:– TD 2 A 65 0 07	SHEET 1 OF 1
DATE	25.06.2016		







DEVELOPMENT VIEW

NOTE:-

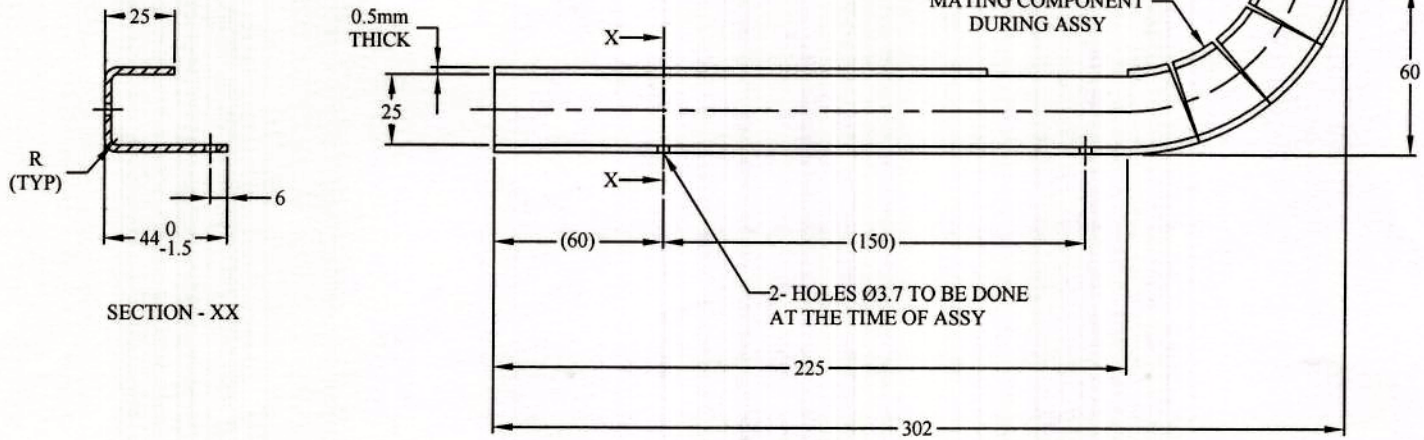
1 . REMOVE SHARP EDGES AND CORNERS.

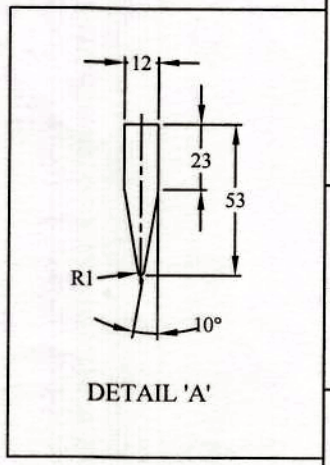
SNo.	REGION	REVISION	DATE	SIGN

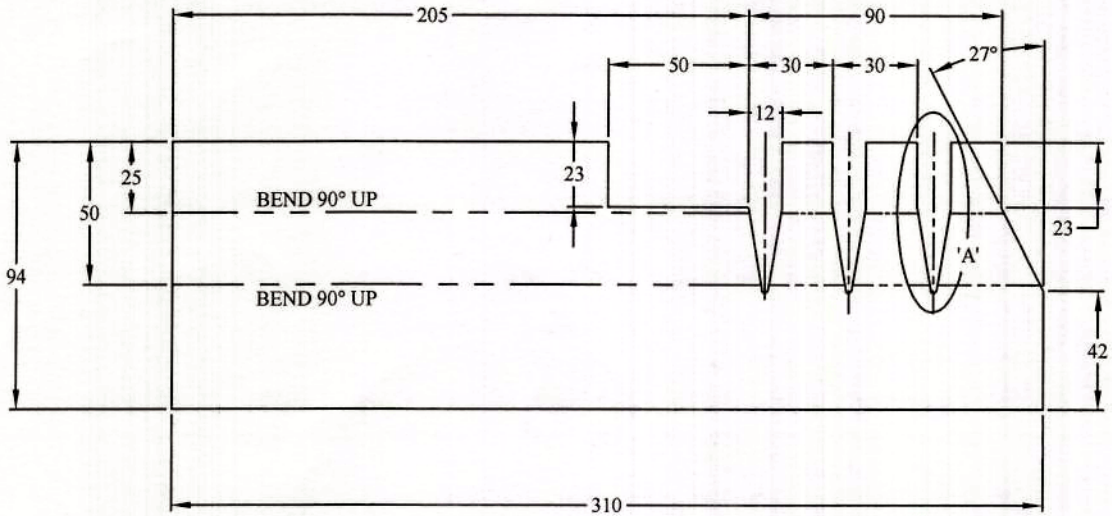
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	WIRING COVER LOWER
DRN	Ashish	MTL	SHEET MS CR1, Gd '0', IS:513, THICK 0.5mm (A A 21)
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 A 65 0 08	REV 0 / SHEET 1 OF 1
DATE	10.01.2019		







DEVELOPMENT VIEW

NOTE:-

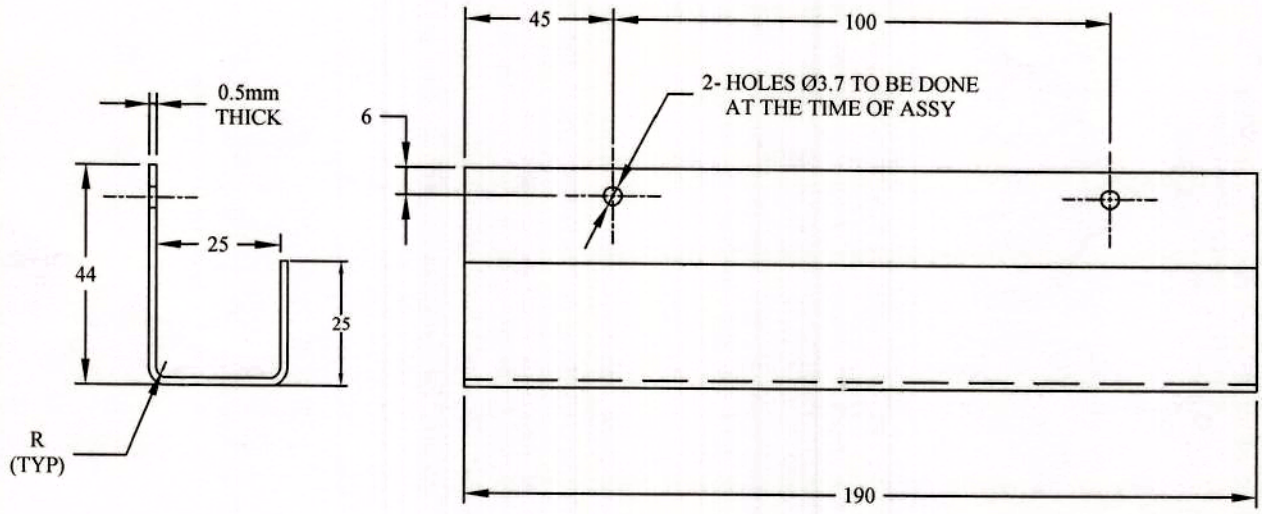
1 . REMOVE SHARP EDGES AND CORNERS.

SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	WIRING COVER VERTICAL
DRN		MTL	SHEET MS CR1, Gd '0', IS:513, THICK 0.5mm (A A 21)
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 A 65 0 09	REV 0 / SHEET 1 OF 1
DATE	10.01.2019		



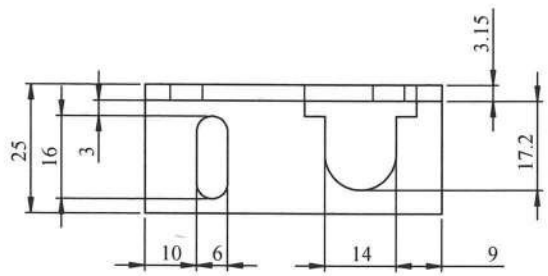
NOTE:-

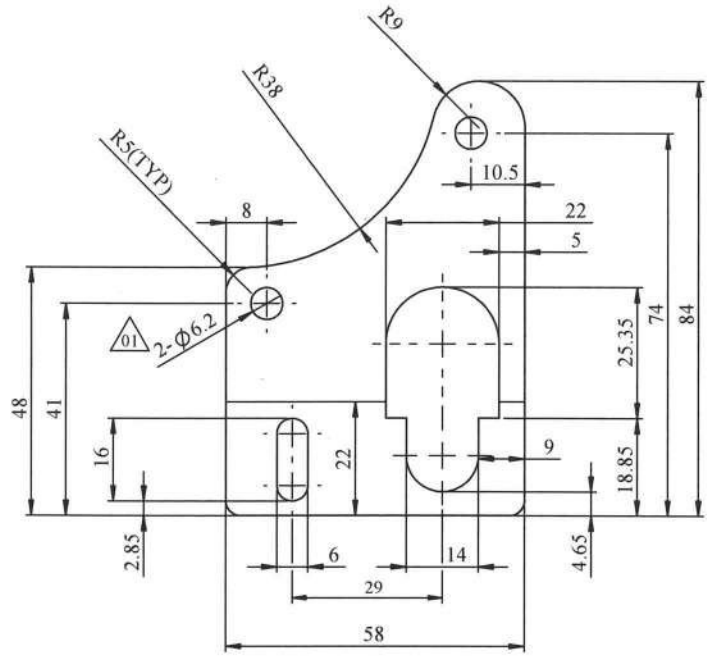
1 . REMOVE SHARP EDGES AND CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
R E V I S I O N S				

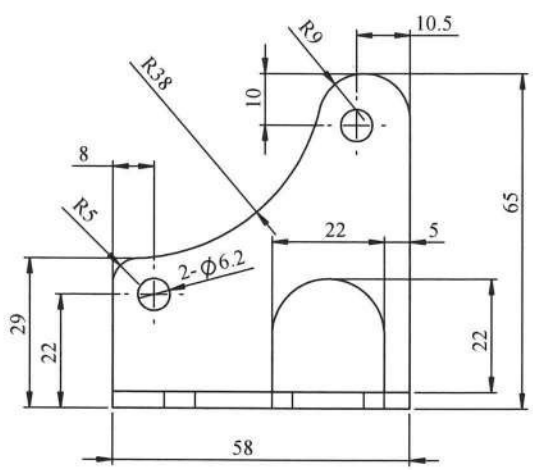
ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

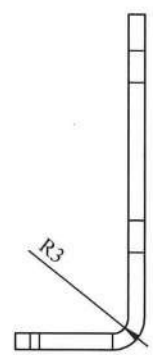
DGN	Ashish	NOM	WIRING COVER HANDLE
DRN		MTL	SHEET MS CR1, Gd '0', IS:513, THICK 0.5mm (A A 21)
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 A 65 0 10	REV 0 / SHEET 1OF1
DATE	10.01.2019		





DEVELOPMENT VIEW





REV.	DESCRIPTION	DATE	APPROVED
01	HOLE SIZE Ø6.2 WAS Ø6.0	04/06/2020	

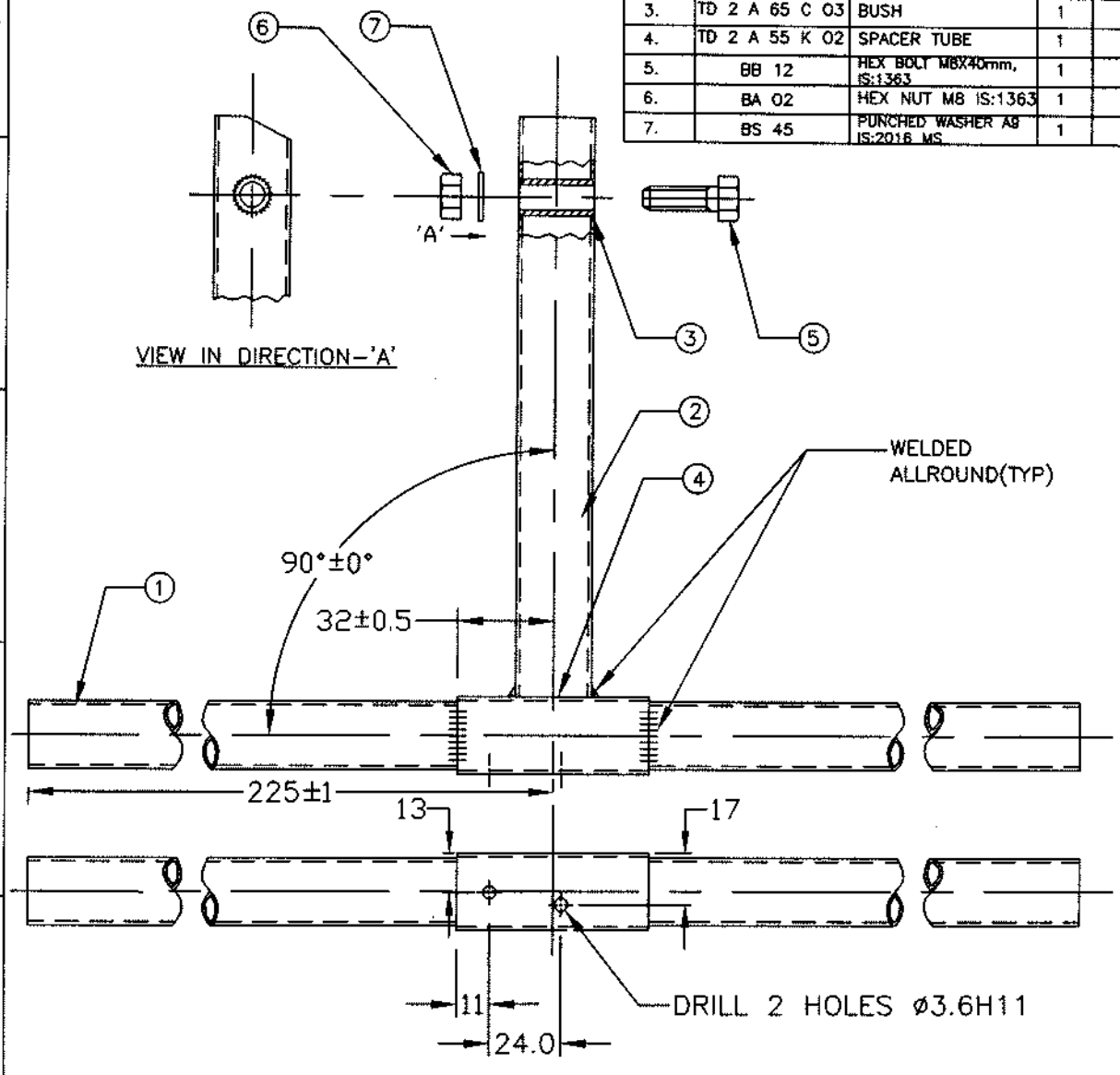
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT	06.01.2020	MATERIAL	SHEET M.S. GD 'H.R.1' THICK: 3.15 mm ANNEALED, AS PER IS:1079 (AA 08)
CHKD BY		DT	06.01.2020	HEAT TRT.	----------
APPD BY		DT	06.01.2020	FINISH	POWDER COATED COLOUR AS APPROVED
				IS:2012 ISO:2768-mK	DEBURR ALL SHARP EDGES 0.5x45°
					ALL DIMENSIONS ARE IN mm
WEIGHT				NOM.	DISC HOLDING BRACKET
SCALE	NTS				
SHEET	1 OF 1			DRG NO.	TD 2 A 65 0 11
REV. NO.	01				

Dim	Tolerance Range		
1-16	±0.1	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 C 01	HANDLE TUBE	1	
2.	TD 2 A 65 C 02	HANDLE LINK	1	
3.	TD 2 A 65 C 03	BUSH	1	
4.	TD 2 A 55 K 02	SPACER TUBE	1	
5.	BB 12	HEX BOLT M8X40mm, IS:1363	1	
6.	BA 02	HEX NUT M8 IS:1363	1	
7.	BS 45	PUNCHED WASHER A8 IS:2016 MS	1	



NOTE:–

1.DRESS ALL WELDED JOINTS & FINISH SMOOTH

SNo.	REGION	REVISION	DATE	SIGN
5	——	2 HOLES ø3.6 H11 ADDED	29.06.16	

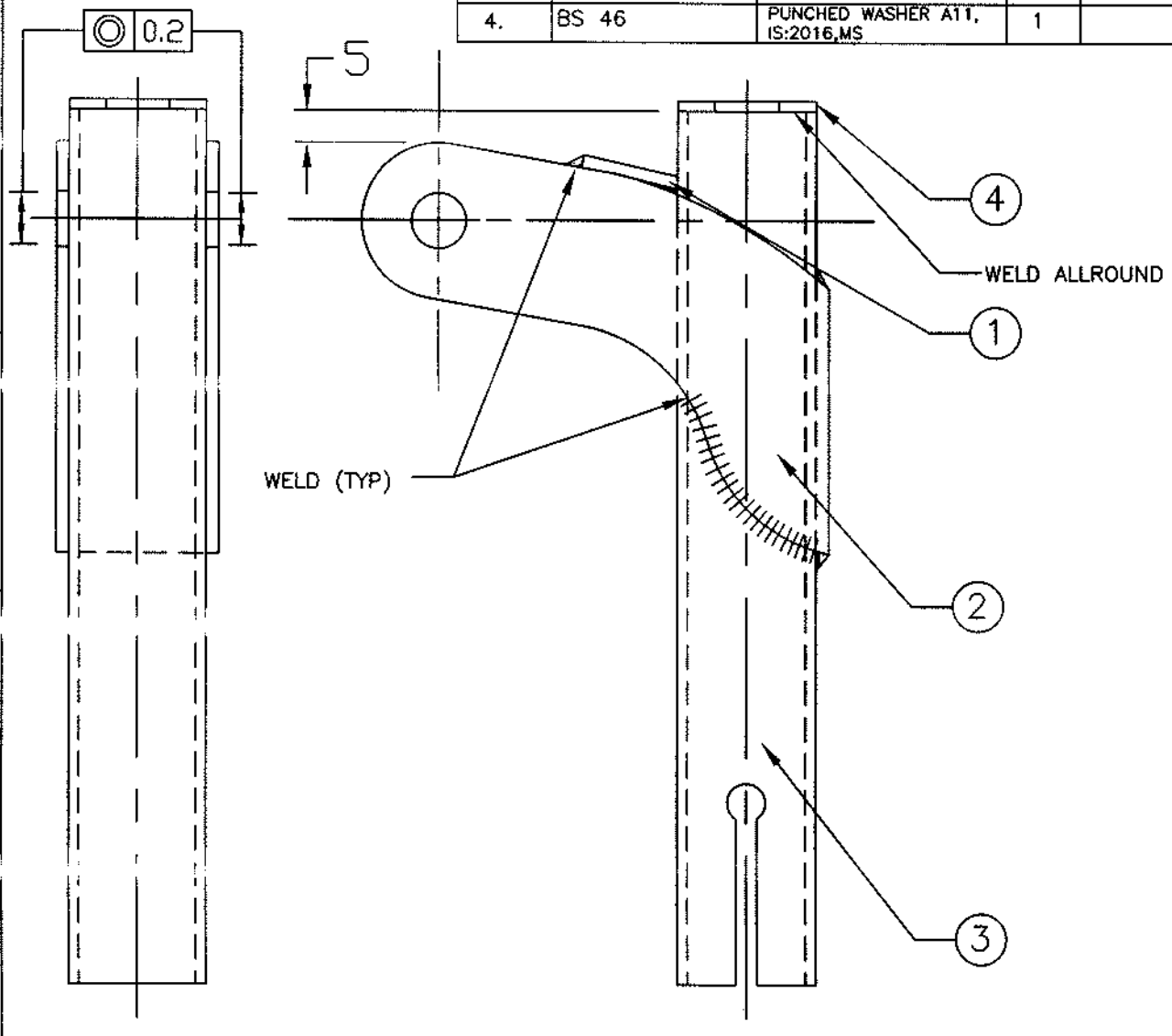
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	HANDLE ASSY
DRN	Ashish	MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	Ni.Cr PLATED Gd.2, IS:1068
SCALE	NTS		
APP	SA/DD1	DRG No:– TD 2 A 65 C 00	SHEET 1 OF 1
DATE	08.08.05		

01 J 3 202

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 D 01	PLATE	1	
2.	TD 2 N 85 B 02	CLAMP	1	
3.	TD 2 C 98 A B1	CENTRE TUBE	1	
4.	BS 46	PUNCHED WASHER A11, IS:2016,MS	1	



NOTE :—

1. DRESS ALL WELDED JOINTS & FINISH SMOOTH

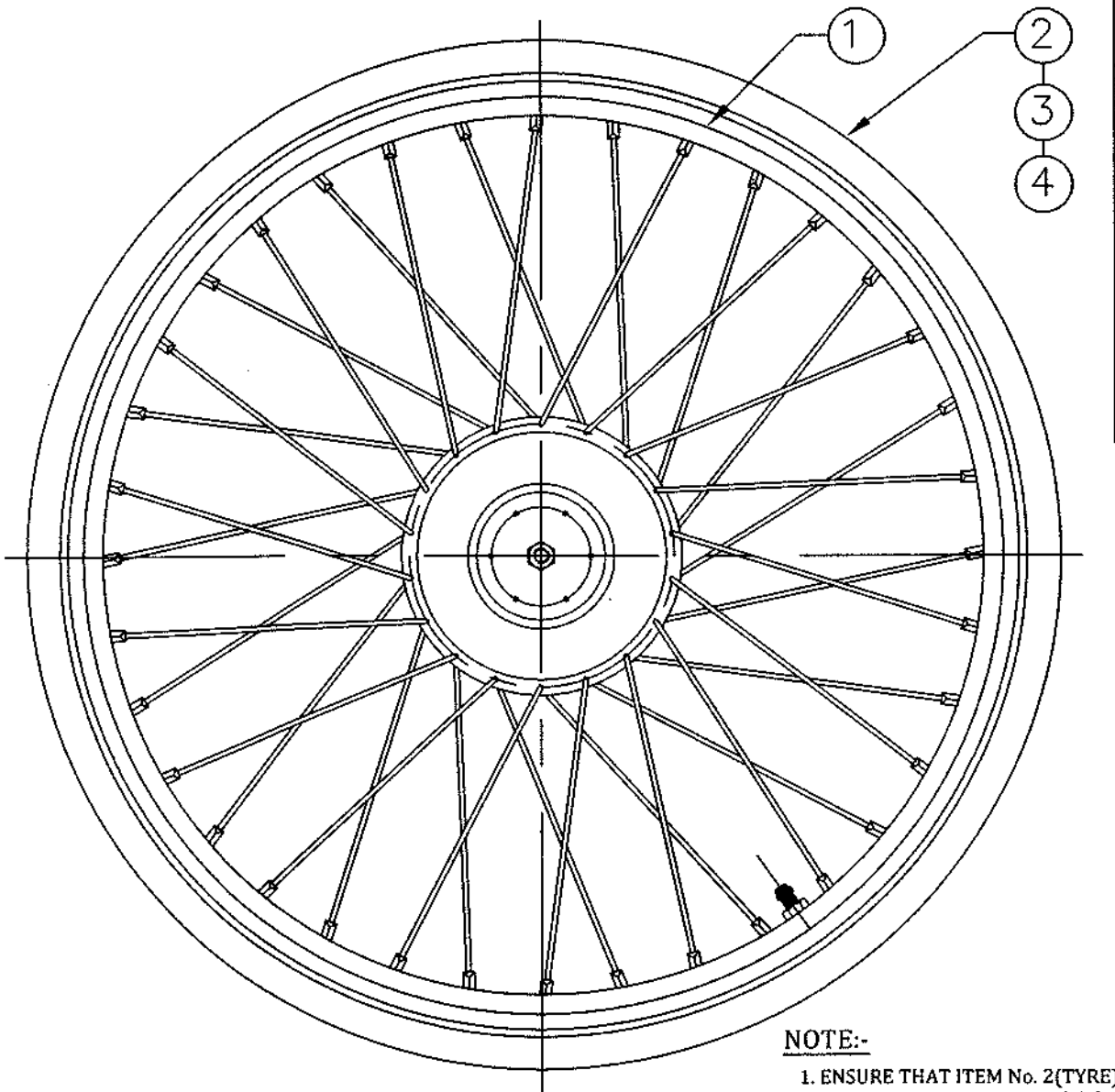
SNo.	REGION	REVISION	DATE	SIGN
3	—	TD 2 N 85 B 02 WAS TD 2 A 35 F 02 AT ITEM No.2	29.06.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	CENTRE TUBE ASSY
DRN	Ashish	MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	Ni.Cr PLATED Gd.2, IS:1068
APP	Sd/ DDI	DRG No:— TD 2 A 65 D 00	SHEET 1 OF 1
DATE	08.08.05		

01 3 094



ITEM No.	DRG No.	NOMENCLATURE	QTY.	REMARKS
1	LK 11	STANDARD BICYCLE RIM ASSY REAR WHEEL (26"X2.125") WITH 36 HOLES (RIGHT)	01	
2	LF 04	STANDARD BICYCLE TYRE FOR WHEEL SIZE-26"x2.125" (57-559), COLOUR-BLACK, ISI MARKED, AS PER IS:2414	01	
3	LF 05	STANDARD BICYCLE TUBE FOR WHEEL SIZE 26"x2.125", COLOUR-BLACK, ISI MARKED, AS PER IS:2415	01	
4	HK 22	BICYCLE RIM RUBBER TAPE THICK 0.8mm MIN, WIDTH-20mm, TENSILE STRENGTH - 70Kgf/cm² MIN, ELONGATION AT BREAK - 300% MIN, TENSION SET(300 STRETCHING) - 20% MAX AS PER IS:960	01	
	OR	OR		
	HK 52	BICYCLE RUBBER RIM TAPE THICK 0.8mm MIN, WIDTH-15±1mm, LENGTH 1685±20mm FOR SIZE 26"X2.125"	01	

NOTE:-

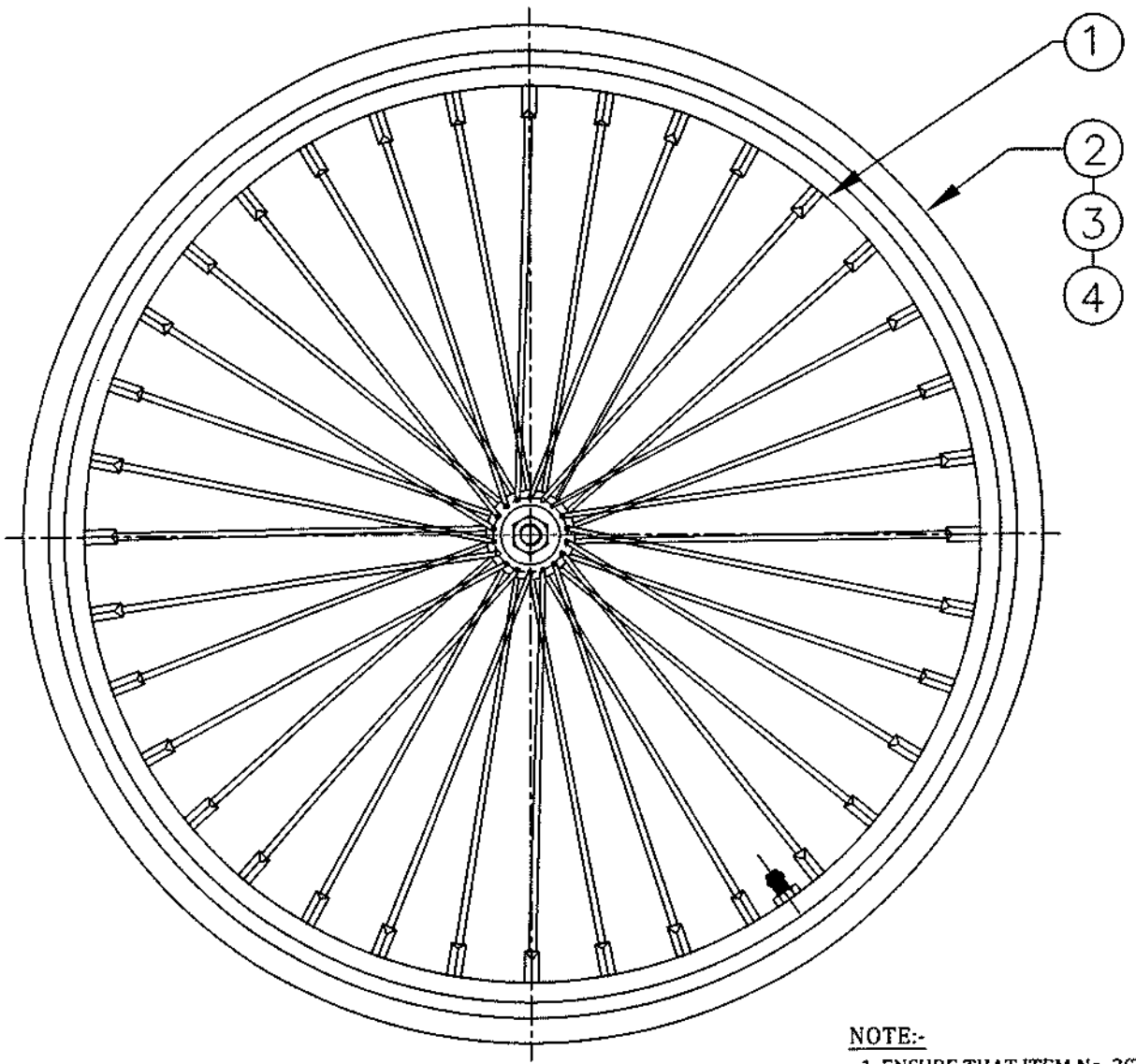
1. ENSURE THAT ITEM No. 2(TYRE) IS POWDERED FROM INSIDE WITH FRENCH CHALK BEFORE ASSEMBLING WITH ITEM No. 3 (TUBE).

SNo.	REGION	REVISION	DATE	SIGN
5	———	ISI MARKED ADDED AND BRAND NAME DELETED AT ITEM NO.2 & 3	23.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	REAR WHEEL ASSY (RIGHT)
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS		
APP		DRG No:-TD 2 A 65 J 00	SHEET 1 OF 1
DATE	19.11.2012		



ITEM No.	DRG No.	NOMENCLATURE	QTY	REMARKS
1	LK 12	STANDARD BICYCLE RIM ASSY REAR WHEEL (26"X2.125") WITH 36 HOLES (LEFT)	01	
2	LF 04	STANDARD BICYCLE TYRE FOR WHEEL SIZE-26"x2.125" (57-559), COLOUR-BLACK, ISI MARKED, AS PER IS:2414	01	
3	LF 05	STANDARD BICYCLE TUBE FOR WHEEL SIZE 26"x2.125", COLOUR-BLACK, ISI MARKED, AS PER IS:2415	01	
4	HK 22	BICYCLE RIM RUBBER TAPE THICK 0.8mm MIN, WIDTH-20mm, TENSILE STRENGTH - 70Kgf/cm²MIN, ELONGATION AT BREAK - 300% MIN, TENSION SET(300 STRETCHING) - 20% MAX AS PER IS:960	01	
	OR	OR		
	HK 52	BICYCLE RUBBER RIM TAPE THICK 0.8mm MIN, WIDTH-15±1mm, LENGTH 1685±20mm FOR SIZE 26"X2.125"	01	

NOTE:-

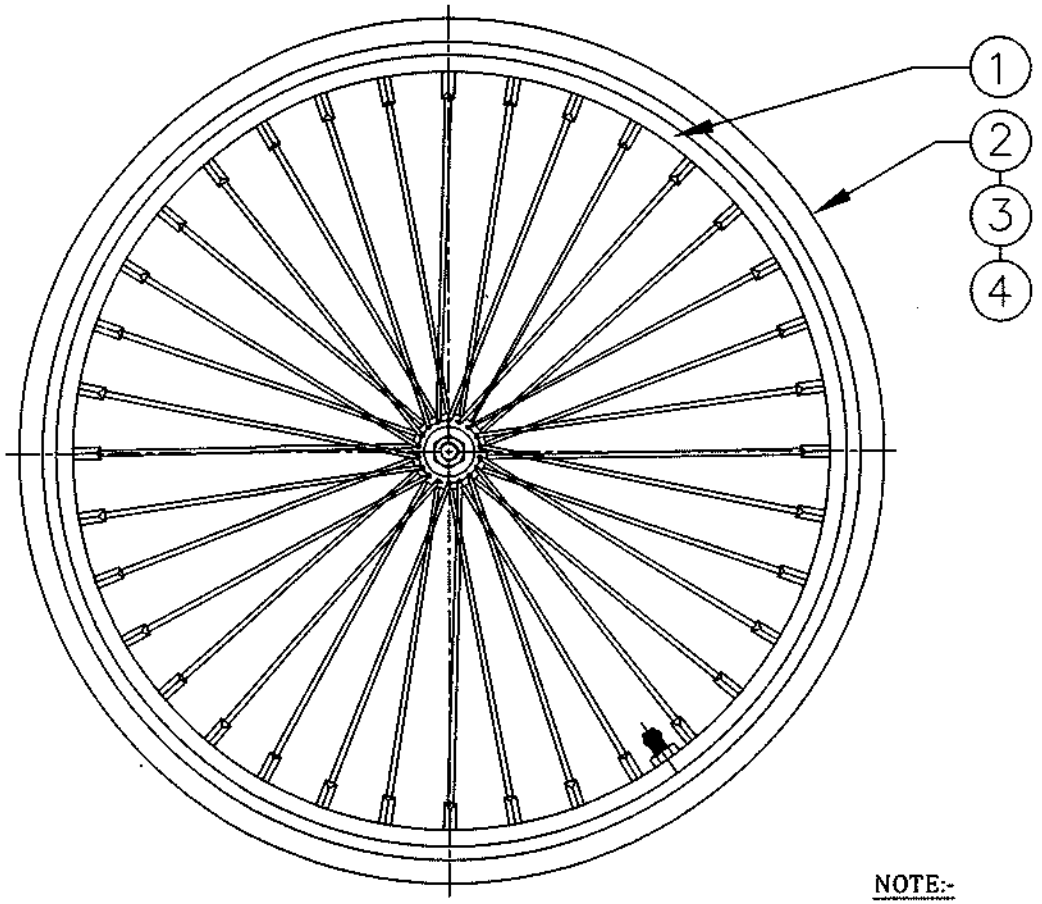
1. ENSURE THAT ITEM No. 2(TYRE) IS POWDERED FROM INSIDE WITH FRENCH CHALK BEFORE ASSEMBLING WITH ITEM No. 3 (TUBE).

SNo.	REGION	REVISION	DATE	SIGN
5	——	ISI MARKED ADDED AND BRAND NAME DELETED AT ITEM NO.2 & 3	23.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	REAR WHEEL ASSY (LEFT)
DRN	Ashish	MTL	——
CHD	Gaur	TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	——
SCALE	NTS	DRG No:	TD 2 A 65 K 00
APP	SA/DDI	SHEET	1 OF 1
DATE	19.11.2012		



ITEM No.	DRG No.	NOMENCLATURE	QTY.	REMARKS
1	LK 13	STANDARD BICYCLE RIM ASSY FRONT WHEEL (24"X2.125") WITH 36 HOLES	01	
2	LF 64	STANDARD BICYCLE TYRE FOR WHEEL SIZE-24"x2.125" COLOUR-BLACK, ISI MARKED, AS PER IS:2414	01	
3	LF 65	STANDARD BICYCLE TUBE FOR WHEEL SIZE 24"x2.125", COLOUR-BLACK, ISI MARKED, AS PER IS:2415	01	
4	HK 22	BICYCLE RIM RUBBER TAPE THICK 0.8mm MIN, WIDTH-20mm, TENSILE STRENGTH - 70Kgf/cm²MIN, ELONGATION AT BREAK - 300% MIN, TENSION SET(300 STRETCHING) - 20% MAX AS PER IS:960	01	
		OR		
	HK 53	BICYCLE RUBBER RIM TAPE THICK 0.8mm MIN, WIDTH-15±1mm, LENGTH 1520±20mm, FOR SIZE 24"X2.125"	01	

NOTE:-

1. ENSURE THAT ITEM No. 2(TYRE) IS POWDERED FROM INSIDE WITH FRENCH CHALK BEFORE ASSEMBLING WITH ITEM No. 3 (TUBE).

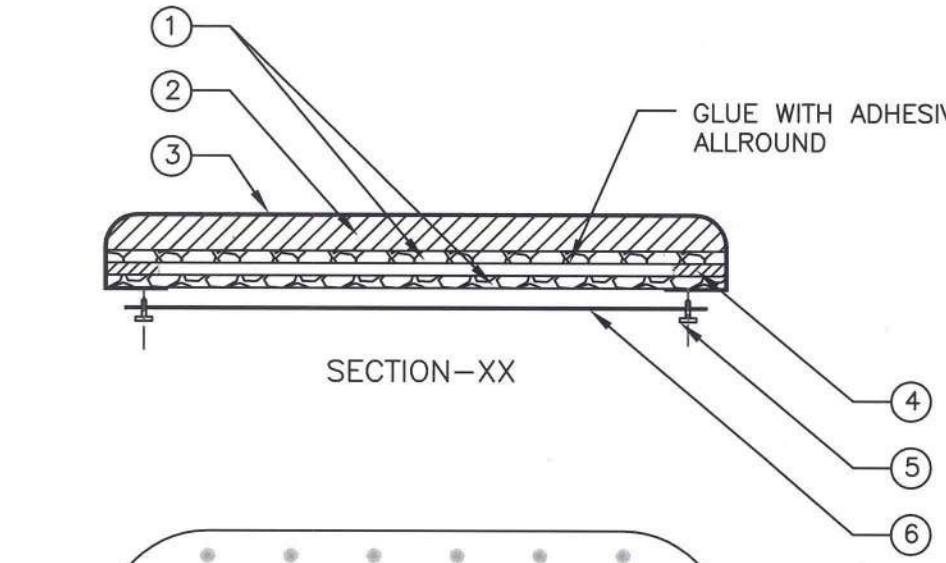
SNo.	REGION	REVISION	DATE	SIGN
7	——	ISI MARKED ADDED AND BRAND NAME DELETED AT ITEM NO.2 & 3	23.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	FRONT WHEEL ASSY
DRN	Ashish	MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	——
SCALE	NTS	DRG No:-	TD 2 A 65 L 00
APP		SHEET	1 OF 1
DATE	19.11.2012		

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 M 01	BACKREST BASE	2	
2.	TD 2 A 65 M 02	FOAM PIECE	1	
3.	TD 2 A 65 M 03	FRONT COVER	1	
4.	TD 2 A 65 M 04	WOODEN FRAME BASE	1	
5.	BR 11	SHOE NAIL $\frac{3}{4}$"	30	
6.	TD 2 A 65 M 05	BACK COVER	1	



NOTE:–

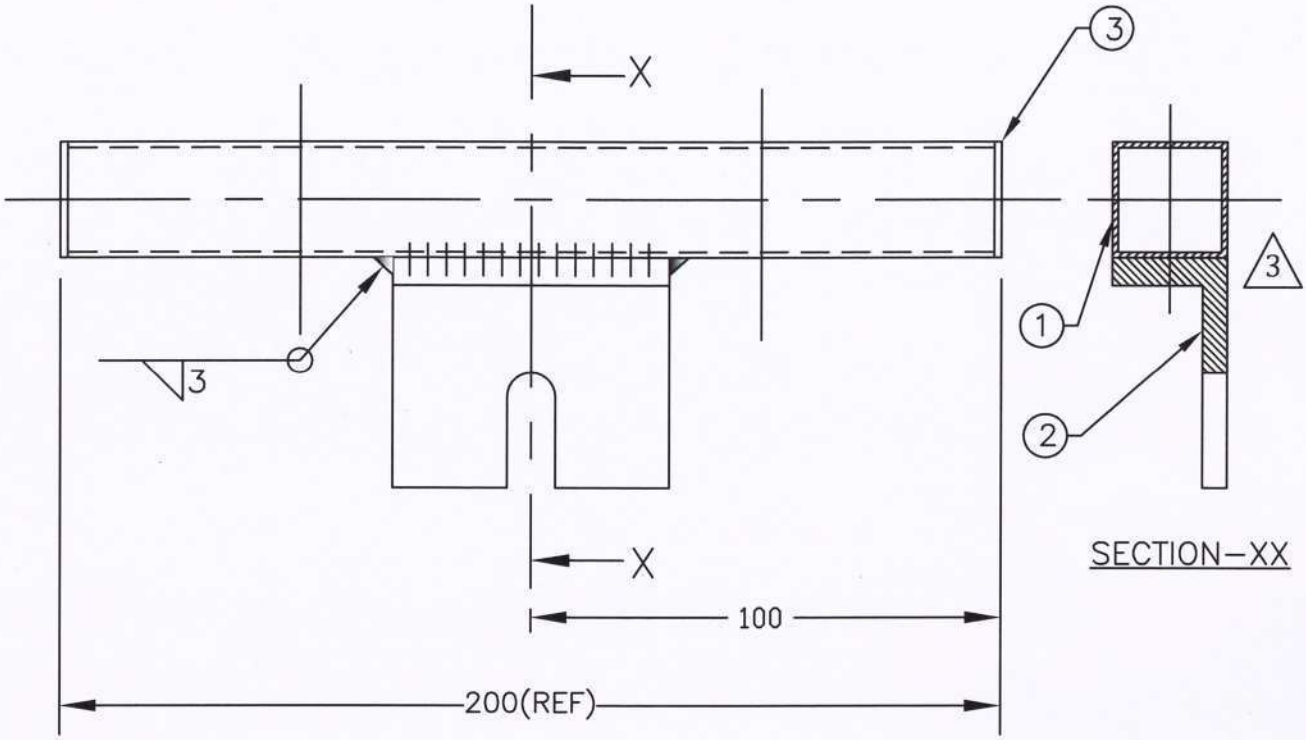
ITEM No. 1,2&4 DIMENSIONS 179^{+0}_{-3} SHOULD BE MATCHED

SNo.	REGION	REVISION	DATE	SIGN
		REVISIONS		

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN		NOM	BACK REST ASSY
CHD		MTL	———
DIM	IN mm	TOL	
SCALE	NTS	FIN	———
PROJ.			
APP		DRG No:– TD 2 A 65 M 00	REV
DATE	15.12.21		SHEET 1 OF 1

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 P 01	BRACKET TUBE	1	
2.	TD 2 A 65 P 02	BRACKET	1	
3.	TD 2 A 65 U B3	COVER PLATE	2	



NOTE:–

1. DRESS WELDED JOINT.

WELDING TOLERENCE:--

DEVIATION FOR NON TOLERANCED DIMENSIONS IN WELDING (ISO:13920)

TOLERANCE FOR LINEAR DIMENSION ('B' CLASS)		TOLERANCE FOR ANGULAR DIMENSION:-	
2 to 30	±1	(i) RANGE FOR NOMINAL SIZE:-	
Over 30 up to 400	±2		
Over 400 up to 1000	±3	Up to 400	±0°45'
Over 1000 up to 2000	±4	Over 400 upto 1000	±0°30'
Over 2000 up to 4000	±6	Over 1000	±0°20'
Over 4000 up to 8000	±8		
Over 8000 up to 12000	±10	(ii) ROUNDED TOLERANCE:-	
Over 12000 up to 16000	±12	Up to 400	±0°13'
Over 16000 up to 20000	±14	Over 400 upto 1000	±0°9'
Over 20000	±16	Over 1000	±0°6'

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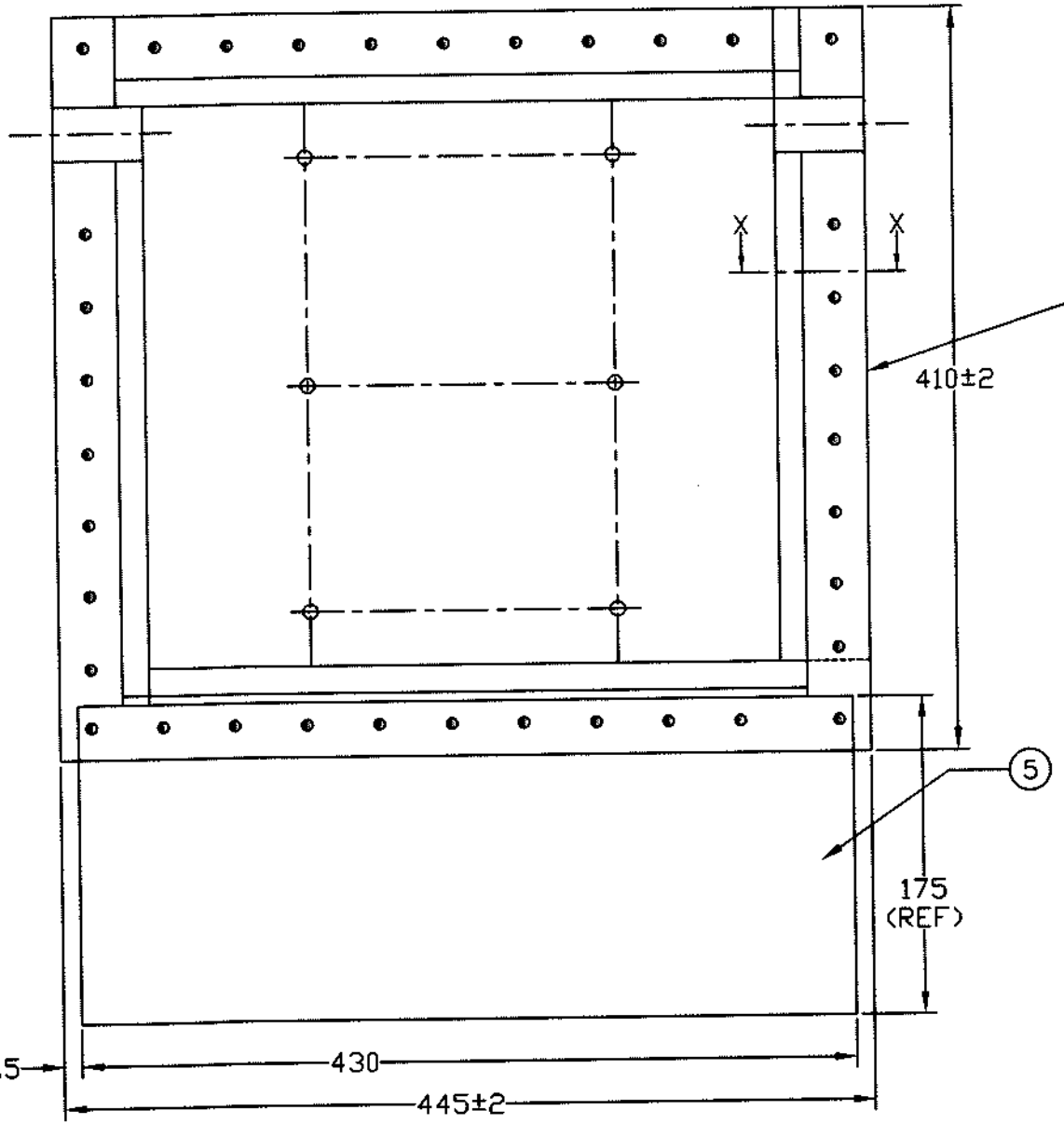
SNo.	REGION	REVISION	DATE	SIGN
3	----	DIMENSION 3 mm REMOVED	24.02.20	
2	F - 2&5	ITEM No 3 ADDED	24.05.18	
1	E - 1	ITEM No 2 SHIFT TO 3mm	30.10.14	S.DD1

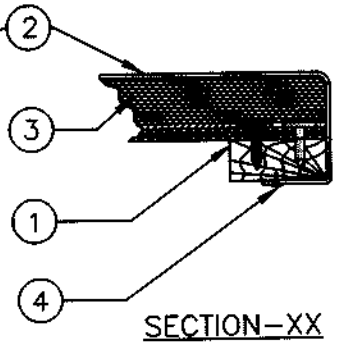
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BRACKET TUBE ASSY
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	POWDER COATED COLOUR AS APPROVED
SCALE	NTS		
APP	S.DD1	DRG No:- TD 2 A 65 P 00	REV 3 / SHEET 1OF1
DATE	19.11.2012		

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 S A0	SEAT BASE ASSY	1	
2.	TD 2 A 65 S 01	SEAT COVER	1	
3.	TD 2 A 65 S 02	SEAT FOAM PIECE	1	
4.	BR 13	SHOE NAIL ½"	50 APPROX	
5.	TD 2 A 65 0 02	BATTERY COVER	1	





SECTION–XX

NOTE :–

1. CUT SHEET COVER ACCORDING TO WIDTH OF SLOT & NAIL IT ON THE SLOT AS SHOWN.

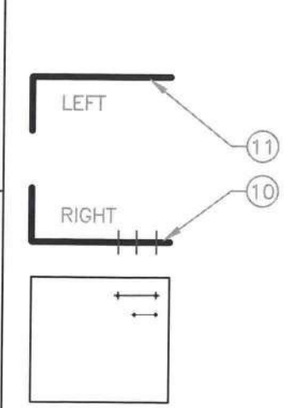
SNo.	REGION	REVISION	DATE	SIGN
3	—	DIMS 445±2 & 7.5 WERE 450±2 & 10	24.08.16	
2	—	ITEM No. 5 ADDED	29.06.16	

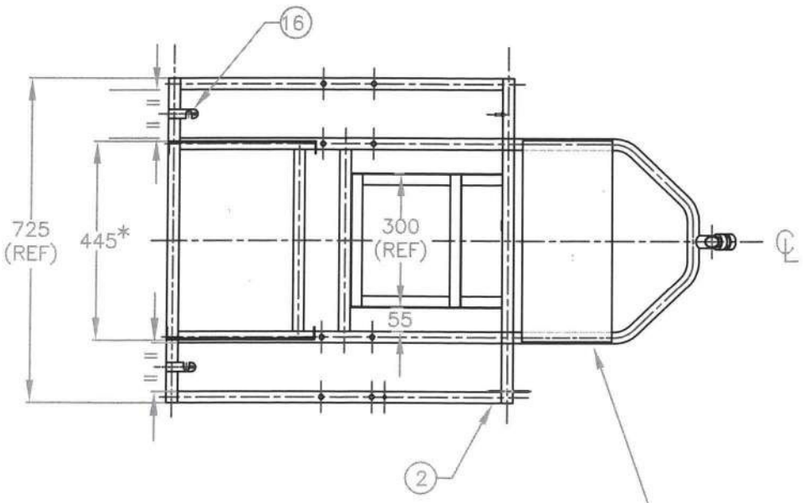
REVISIONS

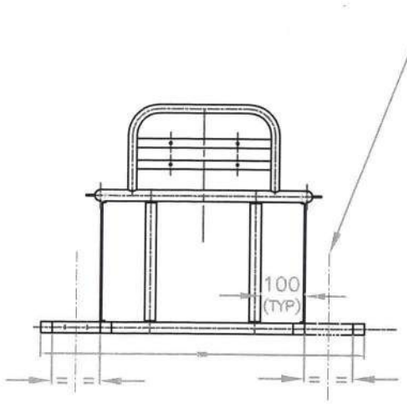
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

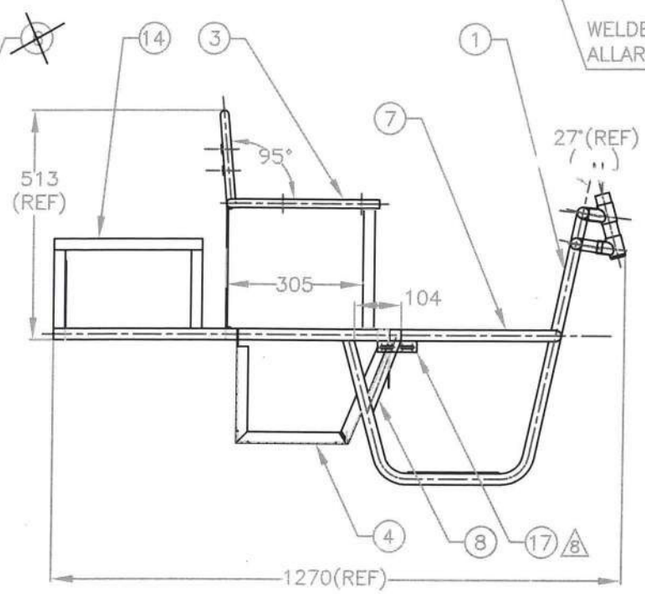
DGN	Ashish	NOM	SEAT ASSY
DRN		MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	—
APP	SA/DD1	DRG No:–TD 2 A 65 S 00	SHEET 1 OF 1
DATE	9.11.12		

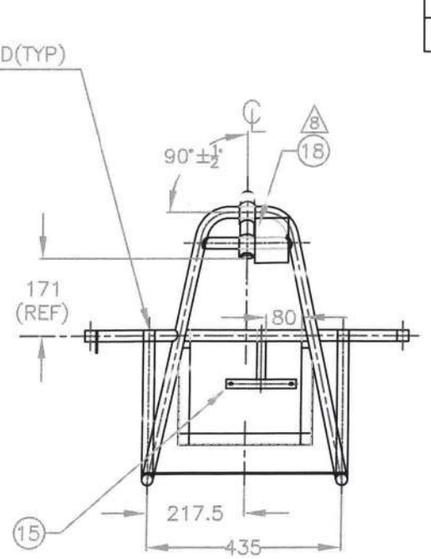
ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 U A0	FRONT CHASIS ASSY	1	
2.	TD 2 A 65 U B0	REAR CHASIS ASSY	1	
3.	TD 2 A 65 U C0	BACK FRAME ASSY	1	
4.	TD 2 A 65 U D0	BATTERY TRAY ASSY	1	
~~5.~~	~~TD 2 A 65 U 01~~	~~PLATE FOR CONTROLLER~~	~~2~~	DELETED
~~6.~~	~~TD 2 A 65 U 02~~	~~BACK LIGHT CLAMP~~	~~2~~	DELETED
7.	TD 2 A 65 A 03	SIDE SUPPORT TUBE	1	
8.	TD 2 A 60 A A2	REINFORCING TUBE	2	
~~9.~~	~~TD 2 A 65 U E0~~	~~CARRIER ASSY~~	~~1~~	DELETED
10.	TD 2 A 65 0 05	PLATE GUARD RIGHT	1	
11.	TD 2 A 65 0 06	PLATE GUARD LEFT	1	
~~12.~~	~~TD 2 A 65 U F0~~	~~CRUTCH HOLDER ASSY~~	~~1~~	DELETED
~~13.~~	~~TD 2 A 65 V 01~~	~~BRAKE HOLDER TUBE~~	~~1~~	DELETED
14.	TD 2 A 65 U J0	SIDE HOLDER ASSY FOR ICE BOX	2	
15.	TD 2 A 65 U K0	PLATE ASSY FOR CONTROLLER	1	
16.	TD 2 A 65 0 12	INDICATOR HOLDER	2	
17.	TD 2 A 65 V 02	HAND BRAKE BRACKET	1	
18.	TD 2 C 38 A 04	PLATE FOR ACCESSIBILITY	1	











NOTE:–

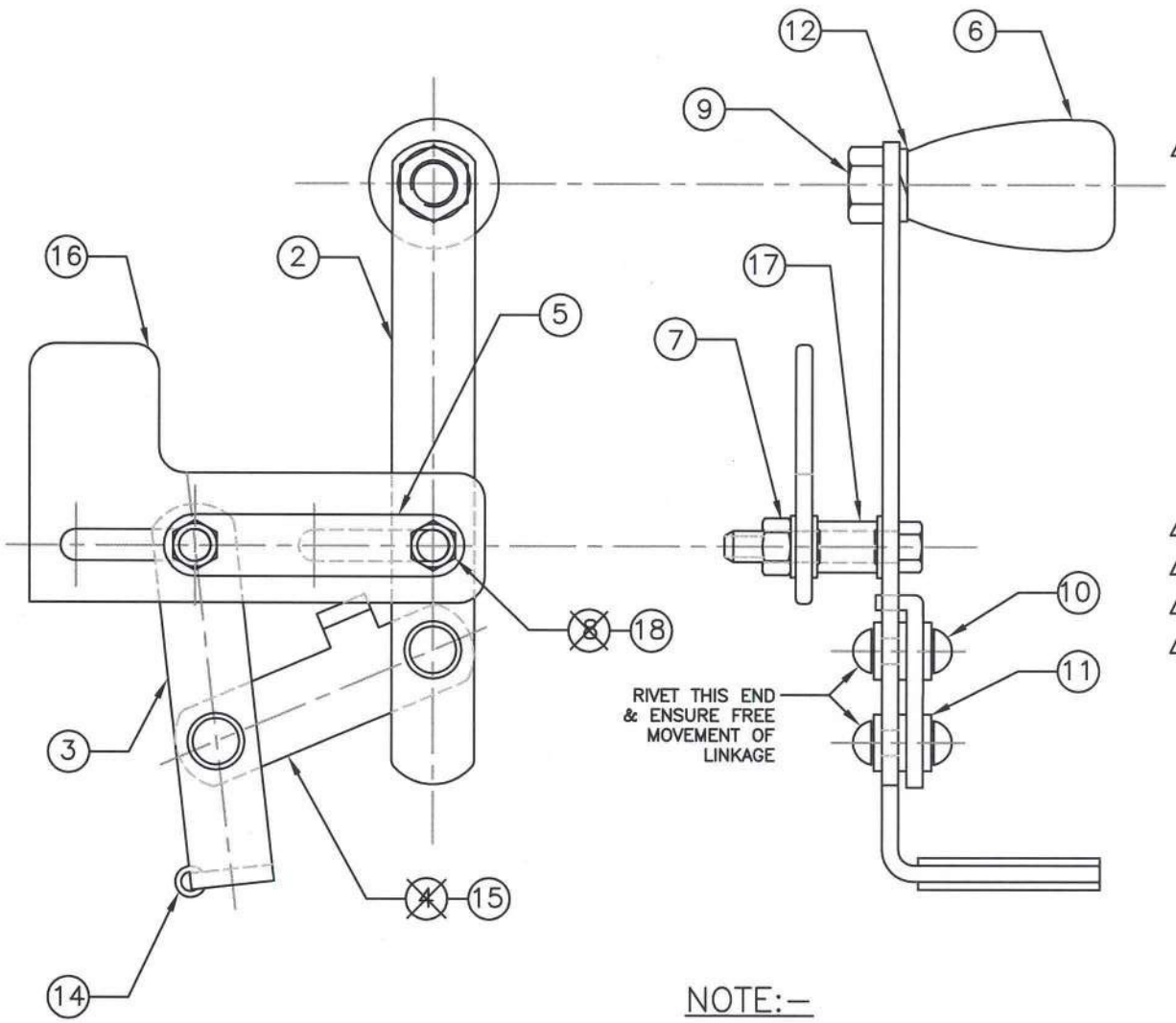
1 DRESS ALL WELDED JOINTS & FINISH SMOOTH.
*2 DIMENSION SUITABLY ADJUST AS PER AVAILABLE ICE BOX.

SNo.	REGION	REVISION	DATE	SIGN
8.	——	ITEM No.13 DELETED, ITEM No.17 & 18 ADDED	15.12.21	
7.	——	DIMENSION 305 mm WAS 255 mm	04.11.20	
6.	——	ITEM No 16 ADDED & ITEM No 6 DELETED	28.12.19	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN		NOM	CHASIS ASSY
CHD		MTL	——
DIM	IN mm	TOL	
SCALE	NTS	FIN	POWDER COATED COLOUR AS APPROVED
PROJ.			
APP	S.DD1	DRG No:– TD 2 A 65 U 00	REV 8 / SHEET 1 OF 1
DATE	22.06.15		



ITEM No.	DRAWING No.	NOMENCLATURE	QTY.	REMARKS
~~1~~	~~TD 2 A 65 V 01~~	~~BRAKE HOLDER TUBE~~	~~1~~	DELETED
2	TD 2 A 02 D 01	BRAKE LEVER	1	
3	TD 2 A 02 D 02	BRAKE SHOE	1	
~~4~~	~~TD 2 A 02 D 03~~	~~INTERMEDIATE LINK~~	~~1~~	DELETED
△2 5	TD 2 A 02 D 04	STATIONARY LINK	3	
6	TD 2 A 07 R A0	KNOB	1	
7	BA 82	NYLOCK NUT M6	2	
~~8~~	~~BB 06~~	~~HEX.BOLT M6X35,IS:1363~~	~~2~~	DELETED
9	BM 23	HEX. HEAD SCREW IS:1364(PART 2)/ ISO 4017–M8x25–4.6, Zn PLATED	1	
10	BU 80	SNAP HEAD RIVET 5X12,IS:2155, STEEL ZINC PLATED	2	
11	BS 47	PUNCHED WASHER B 5.5,IS:2016 MS,ZINC PLATED	6	
12	BS 54	SPRING WASHER 8,IS:6735	1	
~~13~~	~~BS 44~~	~~PUNCHED WASHER A 6.6,IS:2016 MS,ZINC PLATED~~	~~6~~	DELETED
14	BY 01	SPRING DOWEL SLEEVE LIGHT 6X35,IS:5988	1	
△2 15	TD 2 A 02 E 01	INTERMEDIATE LINK	1	
△2 16*	TD 2 A 65 V 02	HAND BRAKE BRACKET	1	
△2 17	TD 2 N 86 A 03	BUSH	2	
△2 18	BB 57	HEX. HEAD BOLT IS:1363(PART 1)/ ISO–4016 M6x45–4.6 Zn. PLATED	2	

NOTE:–

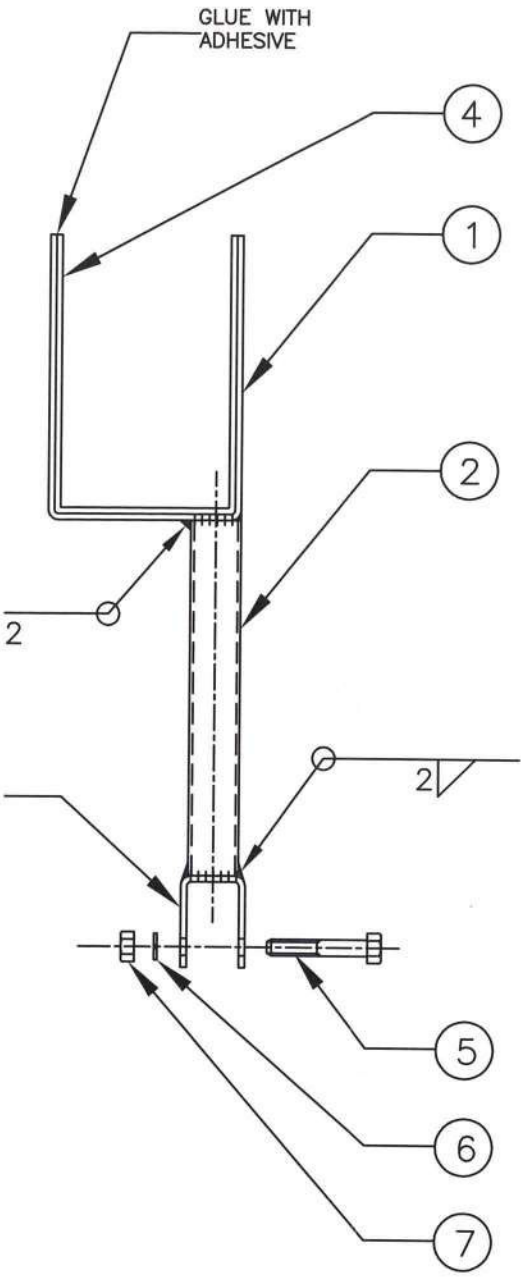
1. ASSEMBLE ITEM No.3 WITH 14 AFTER PLATING & BEFORE ASSEMBLY WITH OTHER COMPONENTS.
△2 2*. ITEM No.16 TO BE WELD IN CHASIS ASSY (TD 2 A 65 U 00).

SNo.	REGION	REVISION	DATE	SIGN
2	——	ITEM No.1,4,8&13 DELETED & ITEM No. 15,16,17&18 ADDED NOTE 2 MODIFIED	15.12.21	
1	——	NOTE No.2 ADDED	29.11.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN	Chauhan	NOM	BRAKE ASSY (RIGHT)
CHD		MTL	——
DIM	IN mm	TOL	
SCALE	NTS	FIN	——
PROJ.			
APP	SDD 1	DRG No:– TD 2 A 65 V 00	REV 2 / SHEET 1 OF 1
DATE	13.11.15		



ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 W 01	CRUTCH CARRIER	1	
2.	TD 2 A 65 W 02	CARRIER STRUT	1	
3.	TD 2 A 65 W 03	CARRIER CLAMP	1	
4.	TD 2 A 65 W 04	CARRIER PAD	1	
5.	BB 13	HEX HEAD BOLT IS:1363(PART 1) ISO–4016, M8x50–4.6, Zn PLATED	1	
6.	BS 54	SPRING LOCK WASHER 8– IS:6735, PHOSPHATE COATED	1	
7.	BA 02	HEX NUT IS:1363 (PART 3)/ISO 4034–M8–4.6, Zn PLATED	1	

WELDING TOLERENCE:--

DEVIATION FOR NON TOLERANCED DIMENSIONS IN WELDING (ISO:13920)

TOLERANCE FOR LINEAR DIMENSION ('B' CLASS)	
2 to 30	±1
Over 30 up to 400	±2
Over 400 up to 1000	±3
Over 1000 up to 2000	±4
Over 2000 up to 4000	±6
Over 4000 up to 8000	±8
Over 8000 up to 12000	±10
Over 12000 up to 16000	±12
Over 16000 up to 20000	±14
Over 20000	±16

TOLERANCE FOR ANGULAR DIMENSION:-	
(i) RANGE FOR NOMINAL SIZE:-	
Up to 400	±0°45'
Over 400 upto 1000	±0°30'
Over 1000	±0°20'
(ii) ROUNDED TOLERANCE:-	
Up to 400	±13mm
Over 400 upto 1000	±9mm
Over 1000	±6mm

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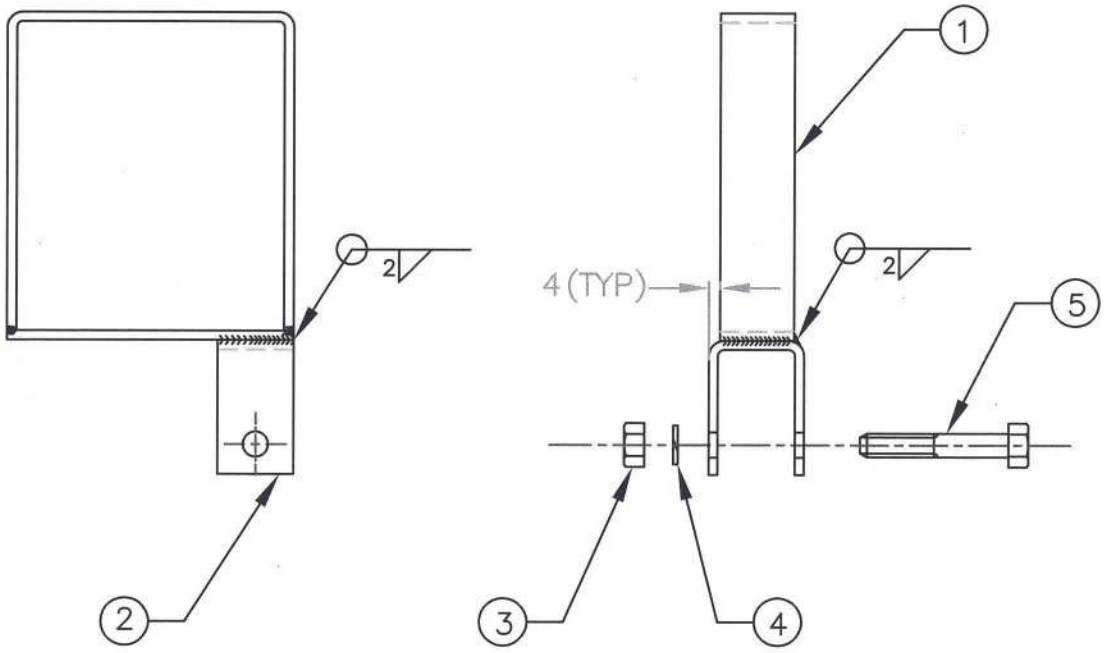
SNo.	REGION	REVISION	DATE	SIGN
01.	---	ANGLE REMOVED	19.02.2020	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	CRUTCH CARRIER ASSY
DRN		MTL	———
CHD		HEAT TREATMENT	
DIM	IN mm	SURFACE TREATMENT	POWDER COATED COLOUR AS APPROVED
SCALE	NTS	DRG No:- TD 2 A 65 W 00	REV 01 / SHEET 1 OF 1
APP	S.DD1		
DATE	19.06.2016		

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 65 U F0	CRUTCH HOLDER ASSY	1	
2.	TD 2 A 65 W 03	CARRIER CLAMP	1	
3.	BA 02	HEX NUT IS:1363 (PART 3)/ISO 4034–M8–4.6, Zn PLATED	1	
4.	BS 54	SPRING LOCK WASHER 8–IS:6735, PHOSPHATE COATED	1	
5.	BB 13	HEX HEAD BOLT IS:1363(PART 1) ISO–4016, M8x50–4.6, Zn PLATED	1	



NOTE:–

1. DRESS WELDED JOINT.

SNo.	REGION	REVISION	DATE	SIGN
02.	---	DESIGN MODIFIED	14.12.2021	
01.	---	ANGLE REMOVED	19.02.2020	

REVISIONS

WELDING TOLERENCE:--

DEVIATION FOR NON TOLERANCED DIMENSIONS IN WELDING (ISO:13920)

TOLERANCE FOR LINEAR DIMENSION ('B' CLASS)	
2 to 30	±1
Over 30 up to 400	±2
Over 400 up to 1000	±3
Over 1000 up to 2000	±4
Over 2000 up to 4000	±6
Over 4000 up to 8000	±8
Over 8000 up to 12000	±10
Over 12000 up to 16000	±12
Over 16000 up to 20000	±14

TOLERANCE FOR ANGULAR DIMENSION:-	
(i) RANGE FOR NOMINAL SIZE:-	
Up to 400	±0°45`
Over 400 upto 1000	±0°30`
Over 1000	±0°20`
(ii) ROUNDED TOLERANCE:-	
Up to 400	±0°13`
Over 400 upto 1000	±0°9`
Over 1000	±0°6`

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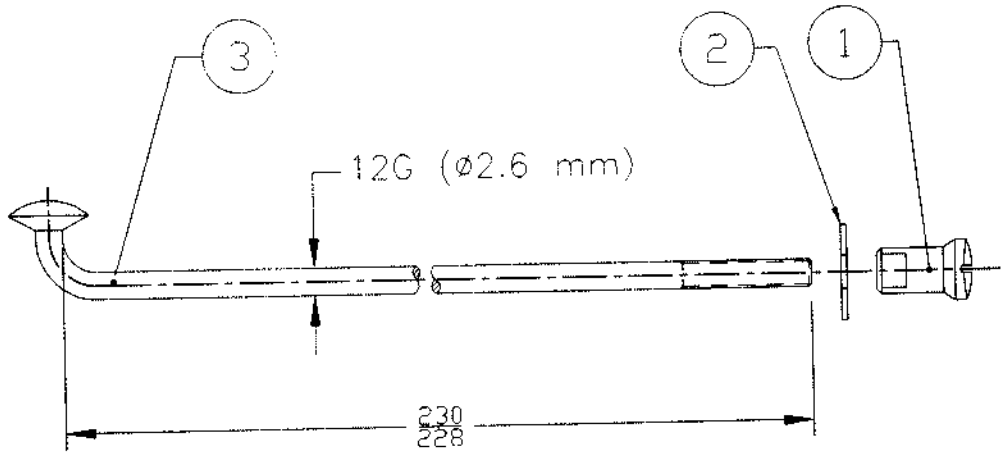
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN	Prashant	NOM	CRUTCH CARRIER ASSY REAR
CHD		MTL	———
DIM	IN mm	HEAT TREATMENT	
SCALE	NTS	SURFACE TREATMENT	POWDER COATED COLOUR AS APPROVED
PROJ.		DRG No:- TD 2 A 65 X 00	REV 02 / SHEET 1OF1
APP	S.DD1		
DATE	29.11.2016		

ITEM No.	DRG No.	NOMENCLATURE	QTY.	REMARKS
1	LK 15	NIPPLE TO SUIT BICYCLE SPOKES Ø 2.6mm (12G), BRASS, Ni. Cr. PLATED IS:630	36	
2	LK 16	WASHER TO SUIT NIPPLE BICYCLE SPOKES Ø 2.6mm(12G) IS:630	36	
3	LK 10	BICYCLE SPOKES FOR 26"x2.125"WHEEL, LENGTH 230/228mm, Ø 2.6mm (12G), Ni. Cr./Zn. PLATED,IS:630	36	



PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 03	L K 23	SPOKE ASSY FOR HUB DRIVE MOTOR, Ø2.6mm (12G) FOR 26"X2.125" WHEEL WITH 36 HOLES	36 Nos.

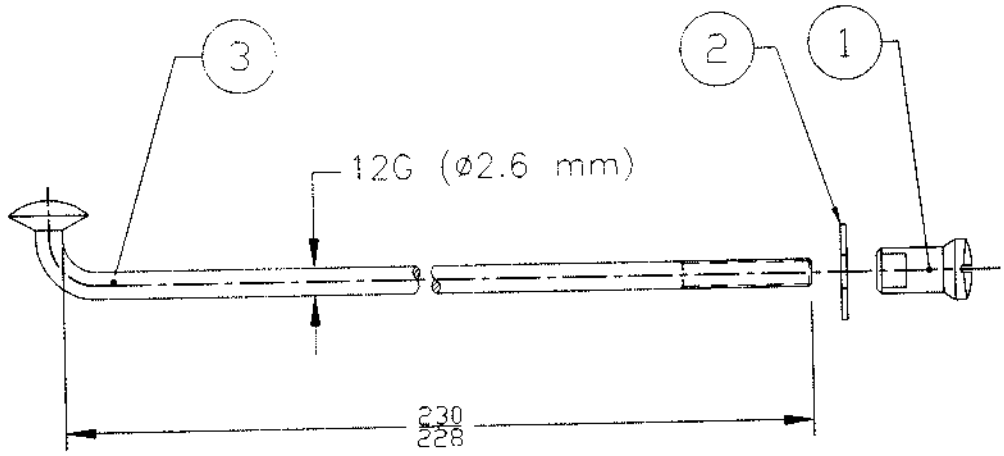
SNo.	REGION	REVISION	DATE	SIGN
02	———	SPECIFICATION MODIFIED AT ITEM No.03	03.02.17	
01	———	SPECIFICATION OF LK 15 MODIFIED AT ITEM No.01	13.07.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.2016		

ITEM No.	DRG No.	NOMENCLATURE	QTY.	REMARKS
1	LK 15	NIPPLE TO SUIT BICYCLE SPOKES Ø 2.6mm (12G), BRASS, Ni. Cr. PLATED IS:630	36	
2	LK 16	WASHER TO SUIT NIPPLE BICYCLE SPOKES Ø 2.6mm(12G) IS:630	36	
3	LK 10	BICYCLE SPOKES FOR 26"x2.125"WHEEL, LENGTH 230/228mm, Ø 2.6mm (12G), Ni. Cr./Zn. PLATED,IS:630	36	



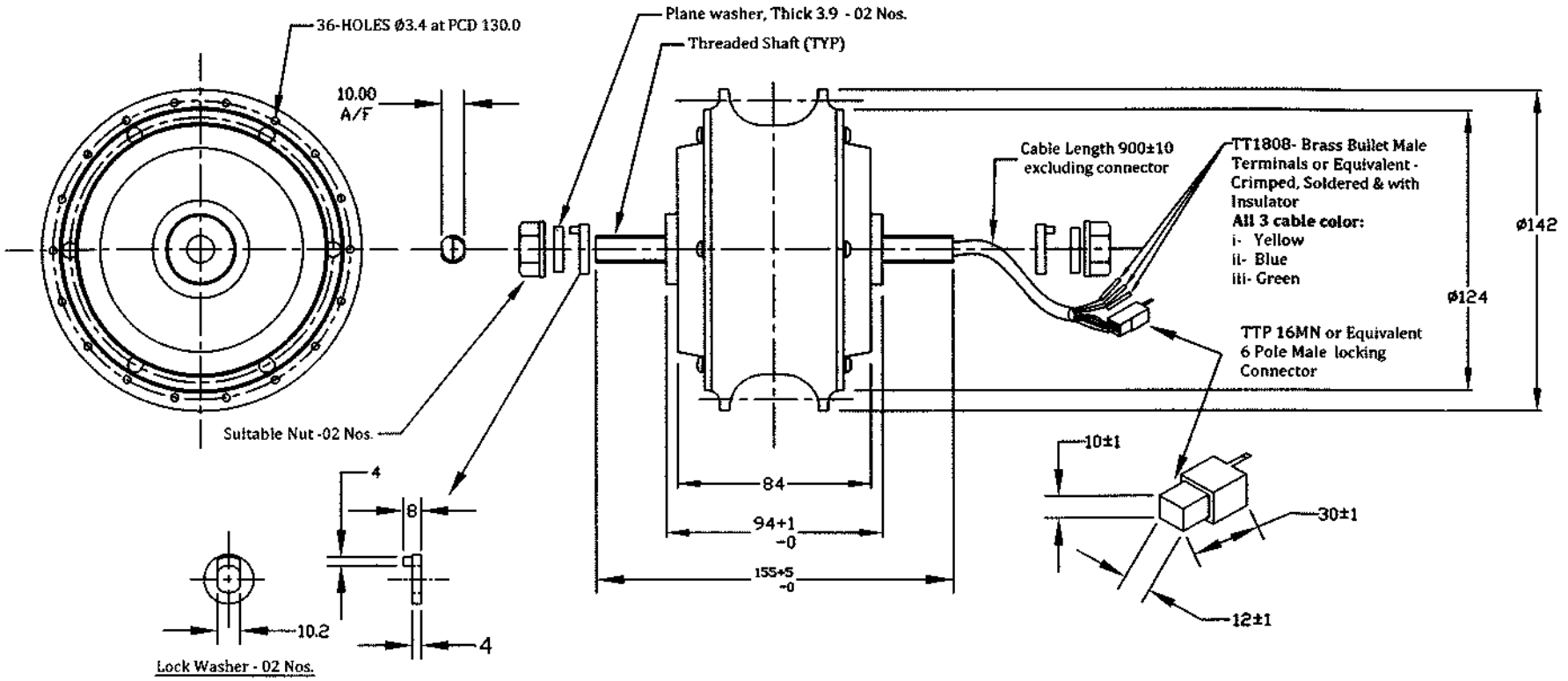
PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 03	L K 23	SPOKE ASSY FOR HUB DRIVE MOTOR, Ø2.6mm (12G) FOR 26"X2.125" WHEEL WITH 36 HOLES	36 Nos.

SNo.	REGION	REVISION	DATE	SIGN
02	———	SPECIFICATION MODIFIED AT ITEM No.03	03.02.17	
01	———	SPECIFICATION OF LK 15 MODIFIED AT ITEM No.01	13.07.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.2016		



NOTE:-

1. Hub Drive Motor will be supplied with required connectors & it should be fixable with connectors of Controller (LK25).
2. Working of all three together Hub Drive Motor(LK24), Controller (LK25) and Accelerator with Brake Levers (LK26) will be checked to ensure its functioning properly

PRODUCT No.	B.O. No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z04	L K 24	**Hub Drive Motor DC 24V, 250Watt, 36 Holes for Spokes** i. Motor will be supplied along with required fasteners & with two rubber cap for nuts. ii. Outgoing Motor cable length = 900±10mm (Excluding connector) iii. Copper wires shall be used for windings	01Set

TOLERENCE:-

DEVIATION FOR NON TOLERANCED DIMENSIONS (IS:2102 (Pt.1) MEDIUM)			
DIAMETER & LENGTHS BETWEEN		LENGTH IN MM OF SHORTER SIDE OF ANGLE UPTO & INCL.	
0.5 up to 6	±0.1	Up to 10	±1°00'
Over 6 up to 30	±0.2	Over 10 upto 50	±0°30'
Over 30 up to 120	±0.3	Over 50 upto 120	±0°20'
Over 120 up to 315	±0.5	Over 120 upto 400	±0°10'
Over 315 up to 1000	±0.8		
Over 1000 up to 2000	±1.2		
Over 2000 up to 4000	±2.0		

MACHINING FINISH IN MICRONS ▽8 - 25 ▽▽1.6 - 8 ▽▽▽ 0.025 - 1.6 ▽▽▽▽ <0.025

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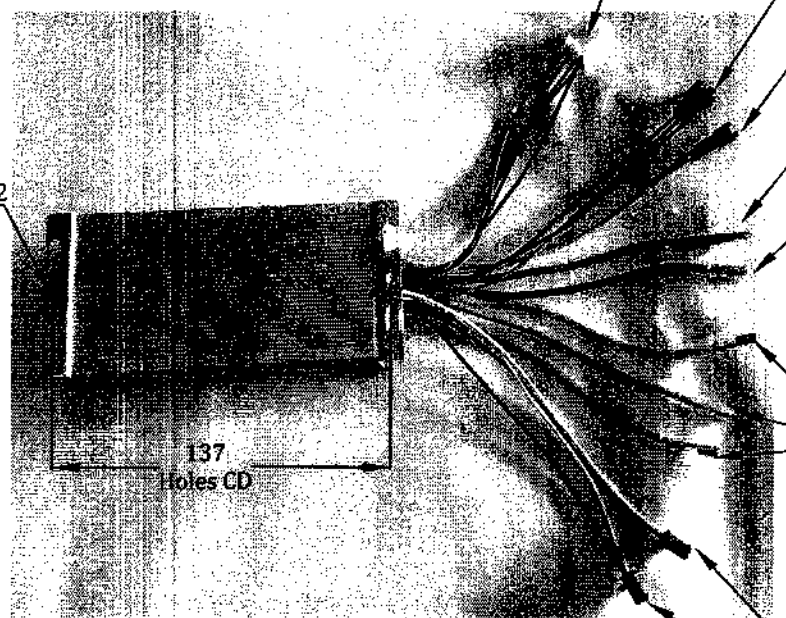
SNo.	REGION	REVISION	DATE	SIGN
02	———	SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	08.03.2016		SHEET 1 OF 1



NOTE:-

1. Controller shall be supplied with required connectors & fixable with connectors of Hub Drive Motor (LK24) & Accelerator with Brake Levers (LK26).
2. Working of all three together Accelerator with Brake Levers(LK26), Controller (LK25) & Hub Drive Motor (LK24) will be checked to ensure its functioning properly

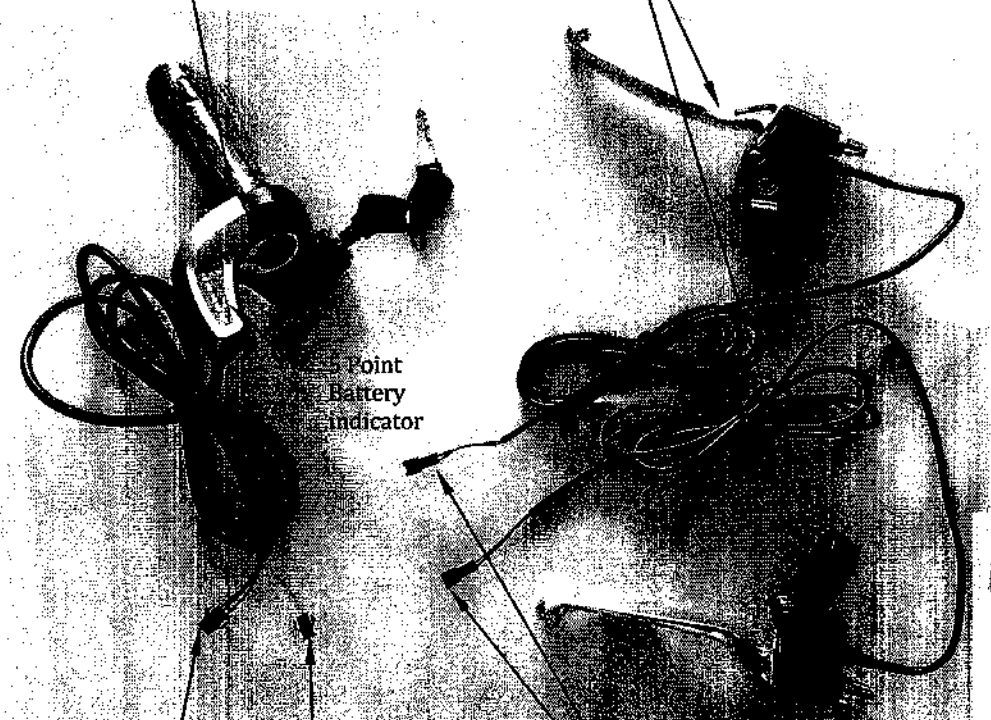
PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 05	L K 25	**BRUSHLESS DC MOTOR CONTROLLER :-** i. Rated Voltage DC24V. ii. Current Rating 19±1 Amps. iii. Min. working Voltage DC20V. iv. Outgoing cables length 150mm including connectors & lugs. Controller with proper fixing & holding arrangement so that it can be fixed on the chassis at proper place & position.	01Set

SNo.	REGION	REVISION	DATE	SIGN
02	———	SPECIFICATION MODIFIED	03.02.17	
01	E 4	NOTES ADDED	28.7.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.16		



PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 06	L K 26	**ACCELERATOR WITH BRAKE LEVERS:-** 1. Accelerator with i. 5 Points inbuilt battery charge status indicator (First three green, second one yellow & last one red) ii. ON / OFF switch with Key. iii. Outgoing cable length 1530±10mm excluding connector iv. It is to be fixed over M.S. tube Ø22mm 2. One extra hand grip for left hand and to be fixed over M.S. tube Ø22mm. 3. Two brake levers with required fixing arrangement to be fixed over M.S. tube Ø22mm and outgoing cable length 1530±10mm excluding connector. During application of Brake lever, power supplied to motor shall be disconnected	01Set

NOTE:-

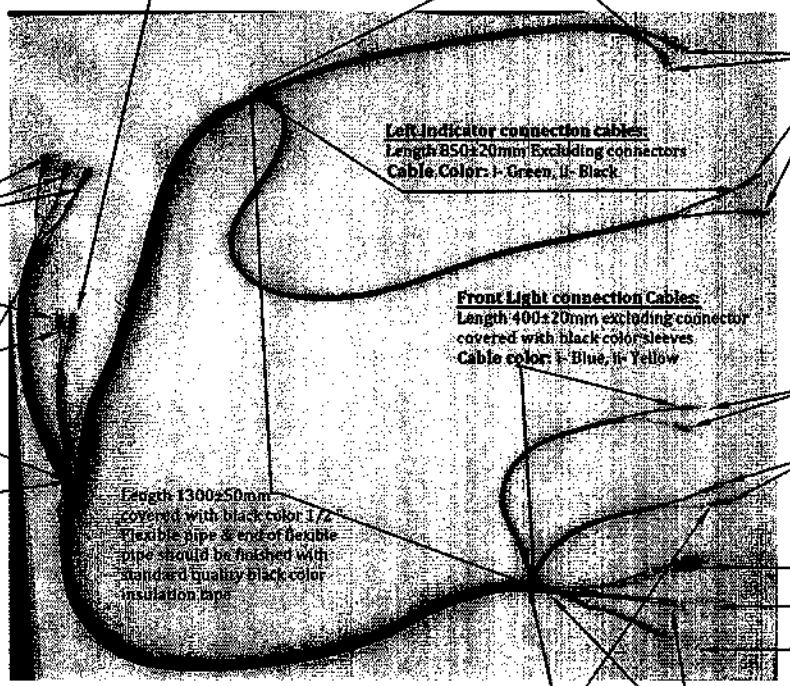
1. Accelerator with Brake Levers shall be supplied with required connectors & fixable with connectors of Controller (LK25).
2. Working of all three together Accelerator with Brake Levers(LK26), Controller (LK25) & Hub Drive Motor (LK24) will be checked to ensure its functioning properly.

SNo.	REGION	REVISION	DATE	SIGN
02	——	SPECIFICATION MODIFIED	03.02.17	
01	E 4	NOTES ADDED	28.7.16	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.128 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	——
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.16		



Right Indicator connection cables:
Length 500±20mm Excluding connectors
Cable Color: i- Blue, ii- Black

TT1625-Brass Bullet Female connector or Equivalent with Insulation

TT 1608-Brass Bullet Male connector or Equivalent with Insulation

Left Indicator connection cables:
Length 850±20mm Excluding connectors
Cable Color: i- Green, ii- Black

TT 1011 Brass Female with dimple & window connector or Equivalent with Insulation

TT 1608-Brass Bullet Male connector or Equivalent with Insulation

+12 Volt DC Input Cables:
Length 250±20mm covered with black color sleeves
Cable Color:
i- Red, ii- Black

3 Pin Flasher Connection Cables:
Length 420±20mm covered with black color sleeves

Front Light connection Cables:
Length 400±20mm excluding connector covered with black color sleeves
Cable color: i- Blue, ii- Yellow

TT 1608-Brass Bullet Male connector or Equivalent with Insulation

TT 1011 Brass Female with dimple & window connector or Equivalent with Insulation

Length 1300±50mm covered with black color 1/2" flexible pipe & end of flexible pipe should be finished with standard quality black color insulation tape

MTW 3 pin 2.8mm - .110 Male locking connector or Equivalent
MTW 2 pin 2.8mm - .110 Male locking connector or Equivalent
MTW 3 pin 2.8mm - .110 Male locking connector or Equivalent

Cable connections for:
ON/OFF switch for Horn, Light & Indicator
Note:-
All 3 Connector Color shall match with connector of ON/OFF switch for Horn, light & Indicator to ensure proper functioning

Horn 12V DC connection cables:
Length 280±20mm Excluding connectors
Cable color: i- Red, ii- Yellow

Length 180±20mm Excluding connectors

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 07	L K 27	**Main Wiring:-** Completely finished wiring along with required PVC Sleeve & good quality of connector, Thimble & Lugs Cable Details: - Cross-sectional area in Sq. mm = 1.0 As per IS:694 All the joints should be soldered properly	01Set

SNo.	REGION	REVISION	DATE	SIGN
01		Specifications modified	03-02-17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN		MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	—
SCALE	NTS		
APP		DRG No:–	INDICATED
DATE	08.03.16		SHEET 1 OF 1

Right Indicator connection cables:
Length 500±20mm Excluding connectors
Cable Color: i- Blue, ii- Black

TT1625-Brass Bullet Female connector or Equivalent with Insulation

TT 1608-Brass Bullet Male connector or Equivalent with Insulation

TT 1011 Brass Female with dimple & window connector or Equivalent with Insulation

TT 1608-Brass Bullet Male connector or Equivalent with Insulation

+12 Volt DC Input Cables:
Length 250±20mm covered with black color sleeves
Cable Color:
i- Red cable with male connector
ii- Black cable with female connector

3 Pin Flasher Connection Cables:
Length 420±20mm covered with black color sleeves

TT 1608-Brass Bullet Male connector or Equivalent with Insulation

TT 1011 Brass Female with dimple & window connector or Equivalent with Insulation

MTW 3 pin 2.8mm - .110 Male locking connector or Equivalent
MTW 2 pin 2.8mm - .110 Male locking connector or Equivalent
MTW 3 pin 2.8mm - .110 Male locking connector or Equivalent

Cable connections for:
ON/OFF switch for Horn, Light & Indicator
Note:-
All 3 Connector Color shall match with connector of ON/OFF switch for Horn, light & Indicator to ensure proper functioning

Horn 12V DC connection cables:
Length 280±20mm Excluding connectors
Cable color: i- Red, ii- Yellow cable will be covered with black color sleeves

Length 180±20mm Excluding connectors

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD2A6SZ07	LK27	**Main Wiring:-** Completely finished wiring along with required PVC Sleeve & good quality of connector, Thimble & Lugs Cable Details: - Cross-sectional area in Sq. mm = 1.0 ISI Marked, IS:694 All the joints should be soldered properly	01Set

SNo.	REGION	REVISION	DATE	SIGN
02		Specifications modified	09-09-17	
01		Specifications modified	03-02-17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	08.03.16	SHEET	1 OF 1

Terminals to connect two Batteries:
TT 1533 Brass Ring Terminal or Equivalent
ID= 6.5mm
OD= 12mm
Thick= 1 to 1.25mm
End terminal should be crimped, soldered and covered with sleeves

All 4 Cable length:
200±10mm excluding connectors
Cross-sectional Area in Sq. mm
= 4.0 ISI Marked, IS:694

Cable Length 300±10mm
covered with black color 1/2 " Flexible pipe & end of flexible pipe should be finished with standard quality black color insulation tape

Both Cable details:
Length 150±10mm excluding connectors
Cross-sectional Area in Sq. mm = 4.0 ISI Marked, IS:694
Cables Color :
i- Cable with female connector shall be RED color
ii- Cable with female connector shall be Black color

Cables to connect charging plug:
Length 380±10mm covered with black color sleeves
Cross-sectional Area in Sq. mm
= 1.5 ISI Marked, IS:694
Cable Color:
i- Red, ii- Black

TT1825-Brass Bullet female connector or Equivalent. Fully covered with Red color sleeve

TT1808-Brass Bullet male connector or Equivalent. Half covered with Black color sleeve

} 24V DC output

Copper Leg Self-locking female terminal with following specification:
Length= 18.0±0.2mm
Height= 2.2±0.2mm
Width= 5.8±0.2mm
Sheet Thickness= 0.35±0.05mm
Connector will be prperly soldered and covered with insulation

12 Volt DC output cable:
Length 220±10mm covered with black color sleeves
Cross-sectional Area in Sq. mm = 1.5 ISI Marked, IS:694
Cables Color :
i- Cable with female connector shall be RED color
ii- Cable with male connector shall be Black color

Both Cable details:
Length 130±10mm excluding connectors
Cross-sectional Area in Sq. mm
= 4.0 ISI Marked, IS:694

TT1608 - Brass Bullet Male connector or Equivalent

TT1625-Brass Bullet Female connector or Equivalent with insulation

} 12V DC output

TT2872 -PB/Brass Ring Terminal or Equivalent
ID= 5.4mm
OD= 9.5mm
Thick= 0.5 to 1 mm
End terminal should be crimped, soldered and covered with sleeves
Note :-
This switch should be used to control the out put of both **12VDC and 24VDC**

} **Connection for ON/OFF Switch used in Battery Box**

In-Line ATM Stackable Mini-Fuse Holder: Fuse rating:20Amp
Extra fuse : 01 No.

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 08	LK 28	**Battery Wiring:-** a) Completely finished wiring along with good quality connector & Lugs covered with proper sleeves. (Every Joint should be soldered and Every Lug, Connector shall be crimped & soldered with wires) b) It should be fixable with terminals of used two nos. of 12V 33Ah SMF, E-bike Battery. Wiring will be protected with fuse of current rating 20Amps	01Set

SNo.	REGION	REVISION	DATE	SIGN
02		SPECIFICATION MODIFIED	09-09-17	
01		SPECIFICATION MODIFIED	03-02-17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

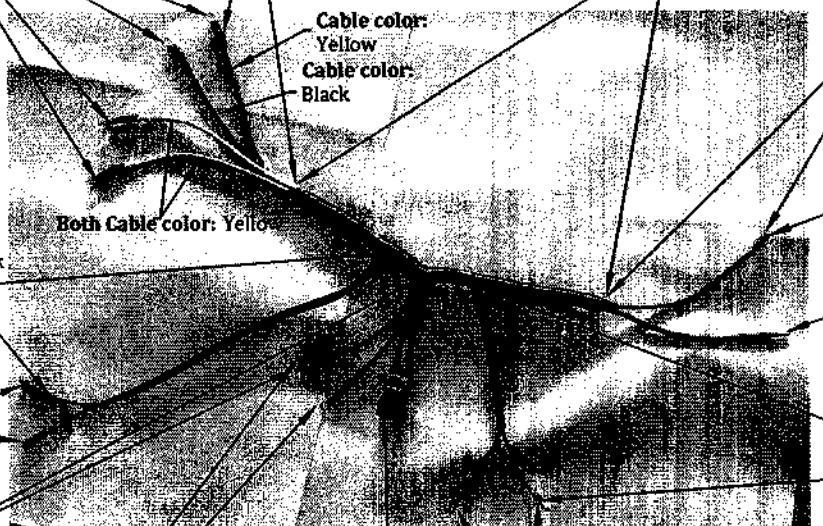
DGN		NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	
SCALE	NTS		
APP		DRG No:–	INDICATED
DATE	08.03.16		SHEET 1 OF 1

Terminal to connect two Batteries:
TT 1533 Brass Ring Terminal or Equivalent
ID= 6.5mm
OD= 12mm
Thick= 1 to 1.25mm
End terminal should be crimped, soldered and covered with sleeves

All 4 Cable length:
200±10mm excluding connectors
Cross-sectional Area in Sq. mm = 4.0 As per IS:694

Cable Length 300±10mm
covered with black color 1/2 " Flexible pipe & end of flexible pipe should be finished with standard quality black color insulation tape

Both Cable details:
Length 150±10mm excluding connectors
Cross-sectional Area in Sq. mm = 4.0 As per IS:694
Cables Color :
i- Cable with female connector shall be RED color
ii- Cable with female connector shall be Black color



TT1825-Brass Bullet female connector or Equivalent.
Fully covered with Red color sleeve

TT1808-Brass Bullet male connector or Equivalent.
Half covered with Black color sleeve

} 24V DC output

Cables to connect charging plug:
Length 380±10mm covered with black color sleeves
Cross-sectional Area in Sq. mm = 1.5 As per IS:694
Cable Color:
i- Red, ii- Black
TT-1968 - Brass Female with dimple & window or Equivalent with insulation

Cables to connect charging plug:
Length 380±10mm covered with black color sleeves
Cross-sectional Area in Sq. mm = 1.5 As per IS:694
Cables Color :
i- Cable with female connector shall be RED color
ii- Cable with female connector shall be Black color

Both Cable details:
Length 130±10mm excluding connectors
Cross-sectional Area in Sq. mm = 4.0 As per IS:694

TT1608 - Brass Bullet Male connector or Equivalent

TT1625-Brass Bullet Female connector or Equivalent with insulation

} 12V DC output

TT2872 -PB/Brass Ring Terminal or Equivalent
ID= 5.4mm
OD= 9.5mm
Thick= 0.5 to 1 mm
End terminal should be crimped, soldered and covered with sleeves
Note :-
This switch should be used to control the out put of both **12VDC and 24VDC**

} **Connection for ON/OFF Switch used in Battery Box**

In-Line ATM Stackable Mini-Fuse Holder: Fuse rating:20Amp
Extra fuse : 01 No.

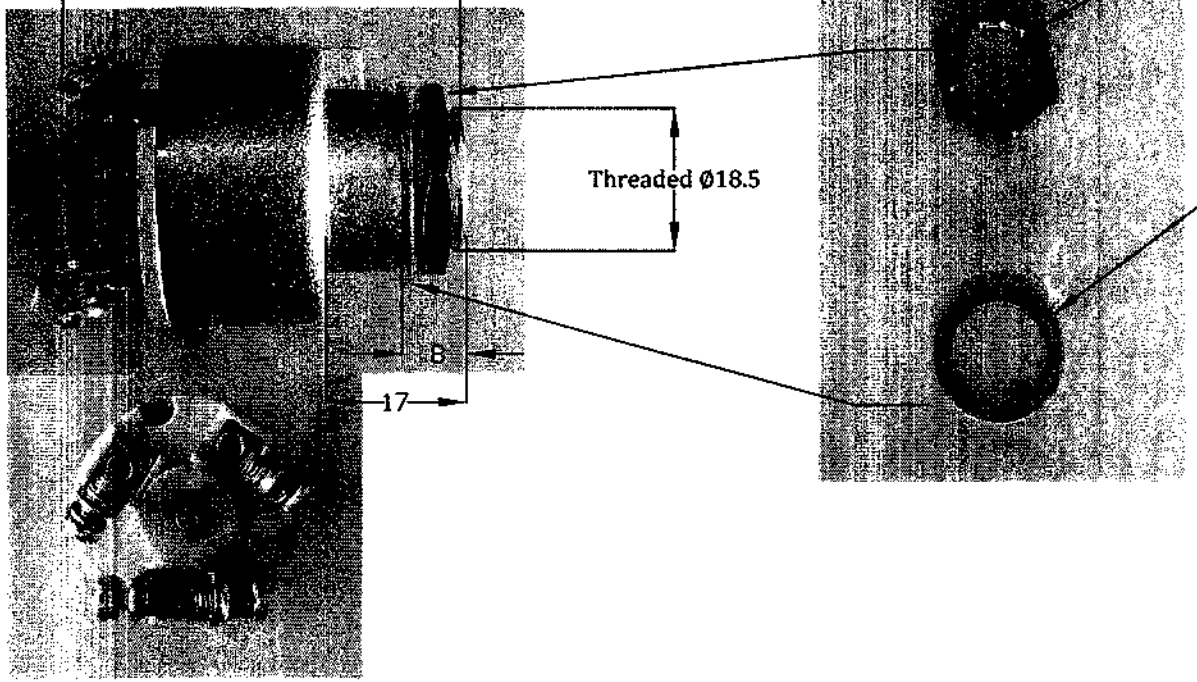
PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 08	L K 28	**Battery Wiring:-** a) Completely finished wiring along with good quality connector & Lugs covered with proper sleeves. (Every Joint should be soldered and Every Lug, Connector shall be crimped & soldered with wires) b) It should be fixable with terminals of used two nos. of 12V 33Ah SMF, E-bike Battery. Wiring will be protected with fuse of current rating 20Amps	01Set

SNo.	REGION	REVISION	DATE	SIGN
01	———	SPECIFICATION MODIFIED	03-02-17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP			
DATE	08.03.16	DRG No:– INDICATED	SHEET 1 OF 1



PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 09	L K 29	**ON/OFF Switch used in Battery Box:-** Good quality ON/OFF Switch along with Key, Nut and washer, able to carry at least 20 Amp current.	01Set

SNo.	REGION	REVISION	DATE	SIGN
01	———	SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm ONE PLACE DECIMAL ±0.250 mm TWO PLACE DECIMAL ±0.126 mm UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS		
APP		DRG No:–	INDICATED
DATE	08.03.16		SHEET 1 OF 1

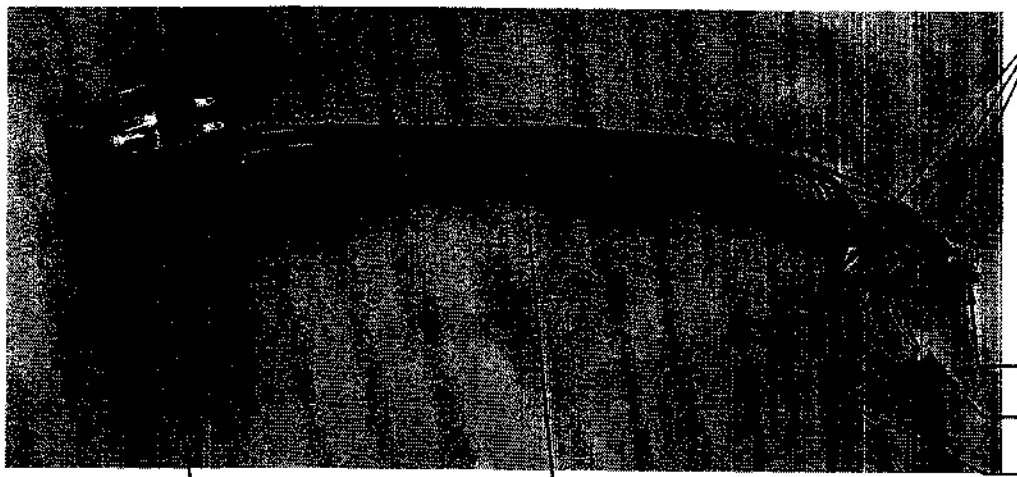
PRODUCT No.	B.O.No.	SL.No.	NOMENCLATURE WITH SPECIFICATION
TD 2 A 65 Z 10	L K 30		**Battery Charger SMPS type with output DC 24V, 4.0 Amp.** **Good quality SMPS based charger suitable for charging, rechargeable SMF Batteries (Two Batteries of 12Volt 33Ah in series) with following features: -**
		01	**Charger Operating voltage range : -** Charger should work satisfactorily within a Voltage Range of 140 to 260 V AC 50Hz. Charger should be able to sustain continuous variation in voltage from 140 V to 260 V and shall work without any variations in output.
		02	**Constant current constant voltage charging: -** a) Charger should give 4.0 Amp constant current till the battery voltage reaches / exceeds 27 Volt. b) Further charging to battery shall be done in constant voltage mode with applied voltage 28±0.5 volt.
		03	**Over Charging protection:** Charger should have Over charging protection feature and it should not charge the battery more than 28V at any stage.
		04	**Protection against High and Low Input Voltage:** In any case if input voltage goes below 140V and above 260 Volt, charger should not be damaged and should resume charging once input voltage is available between 140 V to 260V.
		05	**Deep Discharge Protection:** If Battery goes in deep discharge condition (Per Battery voltage at least 8 Volt), Charger should work properly without any change in output (Charging current should not be more than 4.0 Amp).
		06	**Protection for Battery Reversal:** In any case of interchange of battery wires at charger connection point, Charger should not be damaged and give some type of indication to user.
		07	**Protection against Electric Shock:** a) Complete Cover shall be of good quality non-conducting / non conducting coated and non-breakable material to provide protection against electric shock . b) Voltage and current rating shall be printed c) Month and year of manufacturing shall be printed
		08	**Indication for Charging and Charged status of Battery:** a) Charging- Charger should show any indication during charging b) Charged - Once batteries are charged to their capacities, Charger should stop charging and provide a clear Indication to user.
		09	**Cables and connector:** a) 3-Pin 6 Amp plugged cable of length 1.5 meter excluding connector shall be provided for AC Input. b) 3-Pin IEC C14 Male connector suitable for at least 6Amp load with an IS694 cable of 1.5 sq. mm should be provided for battery connection. The length of cable should be 1200mm (minimum) excluding connector.
		10	**Guarantee: - 1 Year**

SNo.	REGION	REVISION	DATE	SIGN
02	——	SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	——
SCALE	NTS	DRG No:–	INDICATED
APP		SHEET	1 OF 1
DATE	08.03.16		



All Cable Details: -
Cross-sectional Area in Sq. mm=1.0 ISI Marked, IS:694
Length = 400±10mm Excluding connector

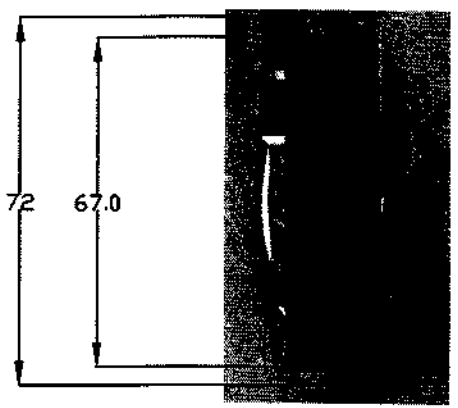
MTW 2 pin 2.8mm - .110 female locking connector or Equivalent
MTW 3 pin 2.8mm - .110 female locking connector or Equivalent
MTW 3 pin 2.8mm - .110 female locking connector or Equivalent

Cable connections for:
ON/OFF switch for Horn, Light & Indicator

PVC Sleeve
Length - 350±10

Switch Unit for Horn, Light & Indicator

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 11	L K 31	**ON/OFF switch Assembly for Horn, Light & Indicator :-** ON/OFF switch for Horn, Light & Indicator along with suitable wiring & connectors.	01Set

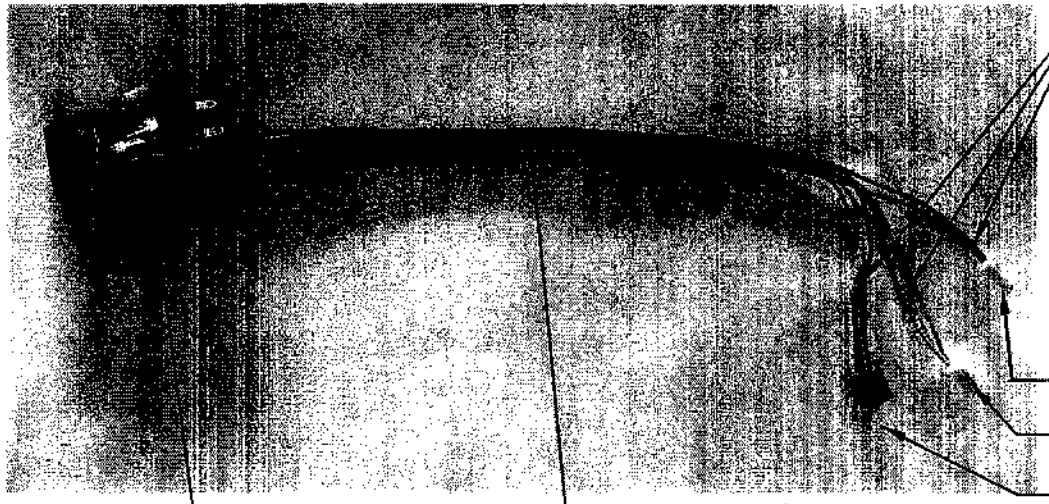


SNo.	REGION	REVISION	DATE	SIGN
02		SPECIFICATION MODIFIED	09.09.17	
01		SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	08.03.16	SHEET	1 OF 1



All Cable Details: -
Cross-sectional Area in Sq. mm=1.0 As per IS:694
Length = 400±10mm Excluding connector

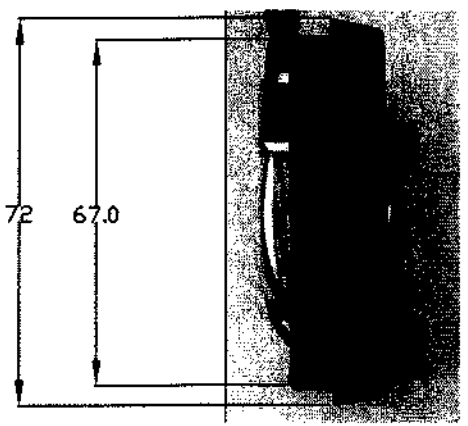
MTW 2 pin 2.8mm - .110 female locking connector or Equivalent
MTW 3 pin 2.8mm - .110 female locking connector or Equivalent
MTW 3 pin 2.8mm - .110 female locking connector or Equivalent

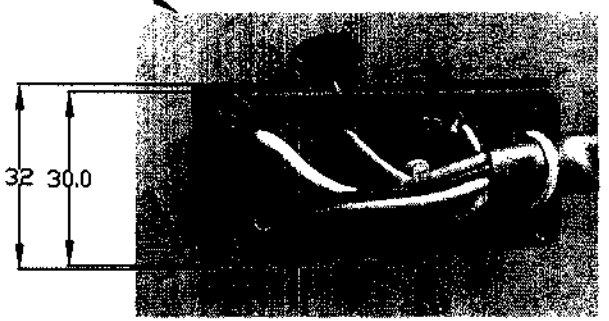
Cable connections for:
ON/OFF switch for Horn, Light & Indicator

PVC Sleeve
Length - 350±10

Switch Unit for Horn, Light & Indicator

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 11	L K 31	**ON/OFF switch Assembly for Horn, Light & Indicator :-** ON/OFF switch for Horn, Light & Indicator along with suitable wiring & connectors.	01Set



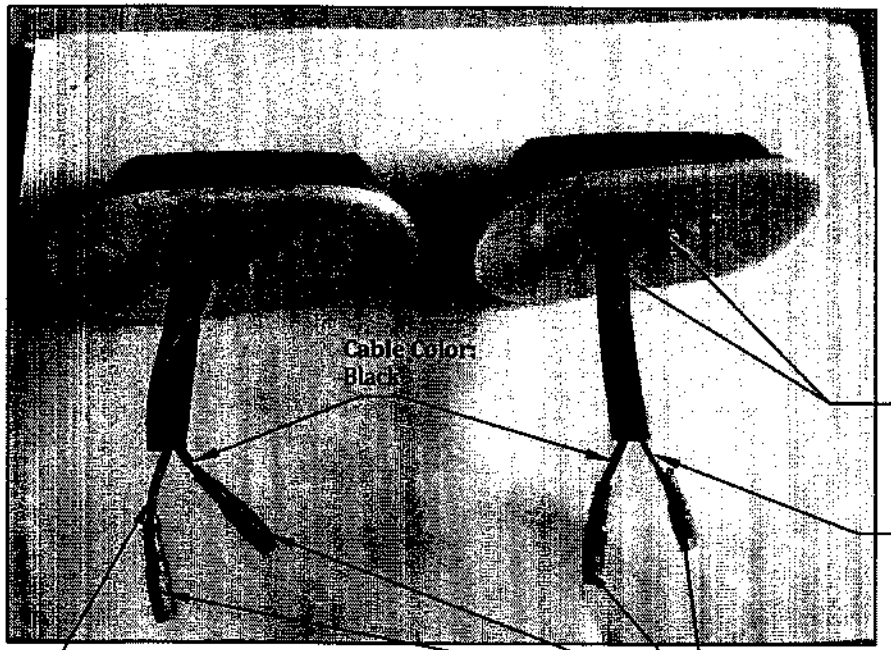


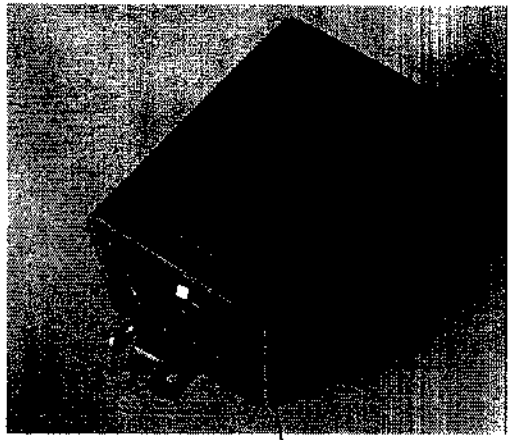
SNo.	REGION	REVISION	DATE	SIGN
01		SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	
SCALE	NTS		
APP			
DATE	08.03.16	DRG No:– INDICATED	SHEET 1 OF 1





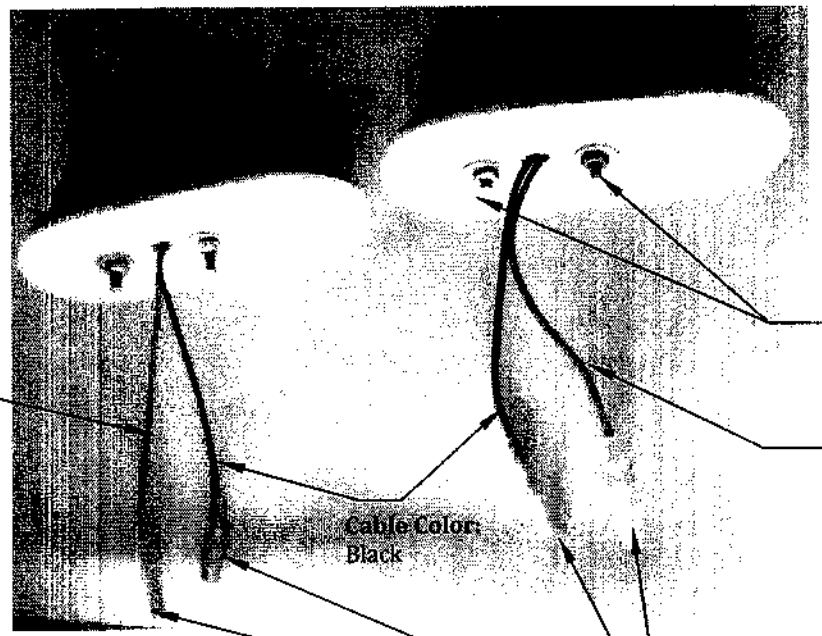
PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 12	L K 32	**LIGHT INDICATOR RIGHT & LEFT WITH FLASHER:-** 1. Light Indicator Right & Left with a) LED bulbs rating shall be between3 to 5 Watt b) outgoing cable length 90±10mm excluding connectors 2. Three pin flasher to operate LED indicator and all three pin & inside component should be fixed properly. 3. Operating voltage for indicators & flasher is 12V DC 4. **Cable Details:** - Cross-sectional area in Sq. mm = 1.0 ISI Marked, IS:694. Cable will be covered with Black colour sleeve	01Set

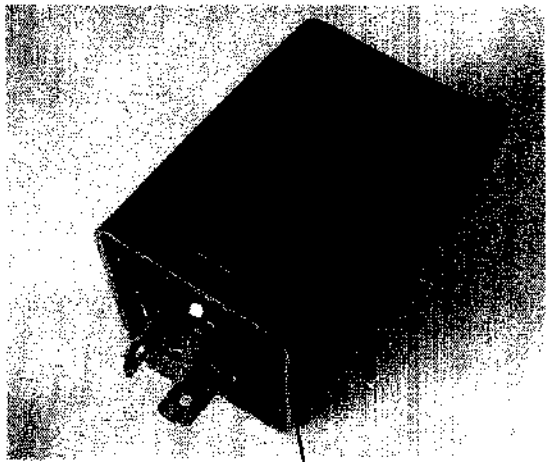
SNo.	REGION	REVISION	DATE	SIGN
02	———	SPECIFICATION MODIFIED	09-09-17	
01	———	SPECIFICATION MODIFIED	03-02-17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.16		





PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 12	L K 32	**LIGHT INDICATOR RIGHT & LEFT WITH FLASHER:-** 1. Light Indicator Right & Left with a) LED bulbs rating shall be between3 to 5 Watt b) outgoing cable length 90±10mm excluding connectors 2. Three pin flasher to operate LED indicator and all three pin & inside component should be fixed properly. 3. Operating voltage for indicators & flasher is 12V DC 4. **Cable Details:** - Cross-sectional area in Sq. mm = 1.0 as per IS:694	01Set

SNo.	REGION	REVISION	DATE	SIGN
01	———	SPECIFICATION MODIFIED	03-02-17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP		DRG No:– INDICATED	SHEET 1 OF 1
DATE	08.03.16		

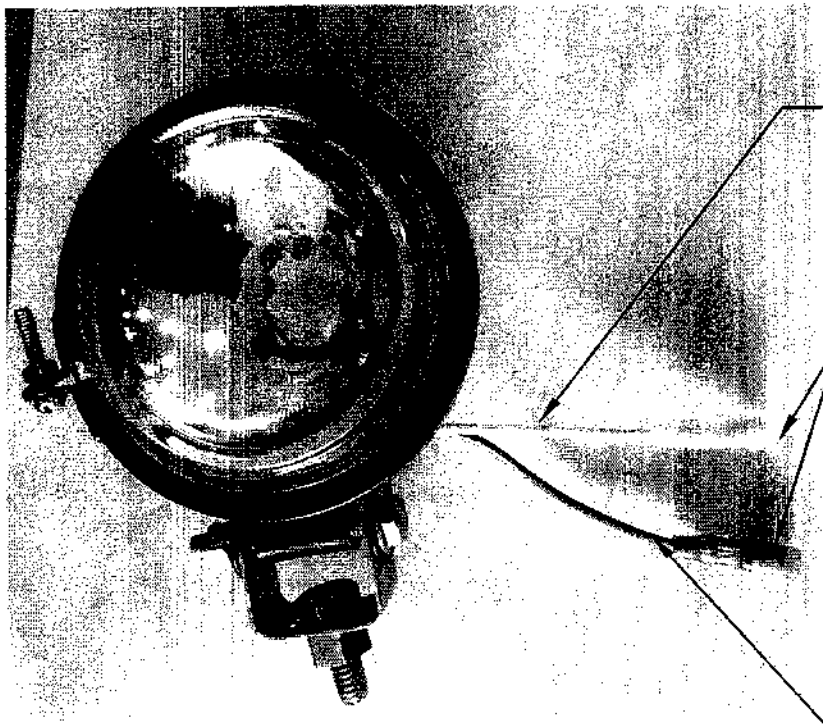


Fig. 1

Fig. 2

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 13	L K 33	**FRONT LIGHT:-** i. With LED bulb 5 Watt ii. Operating Voltage 12V DC iii. To be supplied with Hex Bolts, Nuts , Washers and other fixing arrangement as shown in **fig. 2** iv. Fixing items shall be Zn plated v. Outgoing cable length 90±10mm excluding connector v. **Cable Details:** - Cross-sectional area in Sq. mm = 1.0 As per IS:694 Cable joints should be soldered properly	01Set

SNo.	REGION	REVISION	DATE	SIGN
01	——	SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	——
APP		DRG No:—	INDICATED
DATE	08.03.16		SHEET 1 OF 1

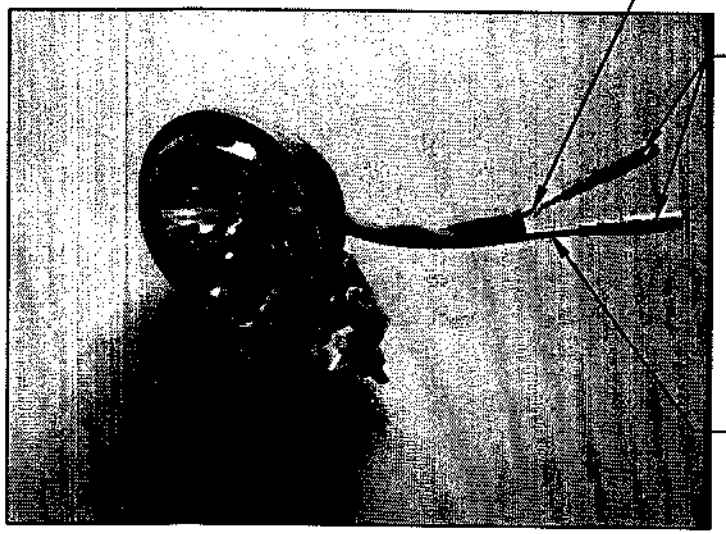


Fig. 1

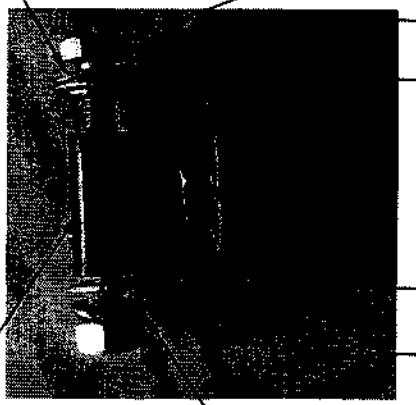


Fig. 2

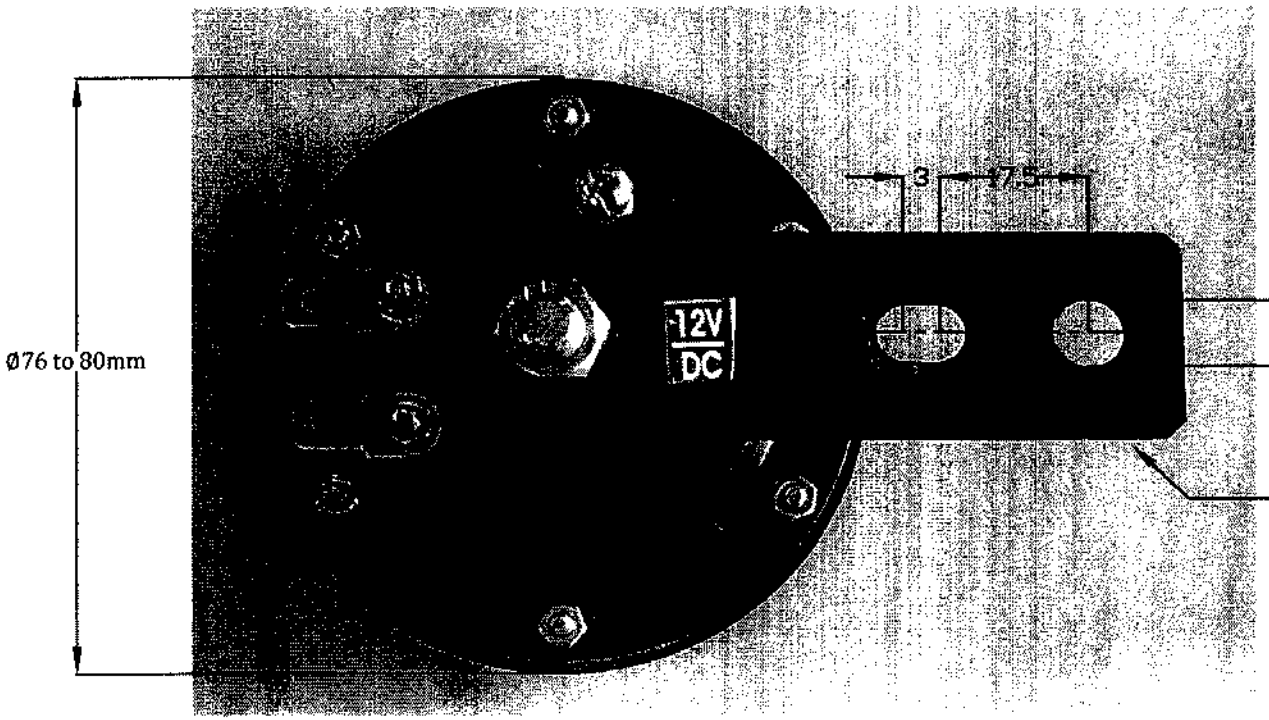
PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 13	L K 33	**FRONT LIGHT:-** i. With LED bulb 5 Watt ii. Operating Voltage 12V DC iii. To be supplied with Hex Bolts, Nuts , Washers and other fixing arrangement as shown in **fig. 2** iv. Fixing items shall be Zn plated v. Outgoing cable length 90±10mm excluding connector v. **Cable Details:** - Cross-sectional area in Sq. mm = 1.0 ISI Marked, IS:694 Cable joints should be soldered properly. Cable will be covered with Black colour sleeve	01Set

SNo.	REGION	REVISION	DATE	SIGN
02	———	SPECIFICATION MODIFIED	09.09.17	
01	———	SPECIFICATION MODIFIED	03.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.120 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	08.03.16		SHEET 1 OF 1



PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 14	L K 34	HORN 12V DC	01Set

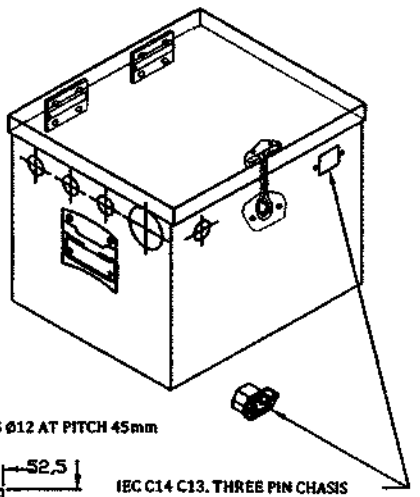
SNo.	REGION	REVISION	DATE	SIGN
01	———	SPECIFICATION MODIFIED	03.02.17	

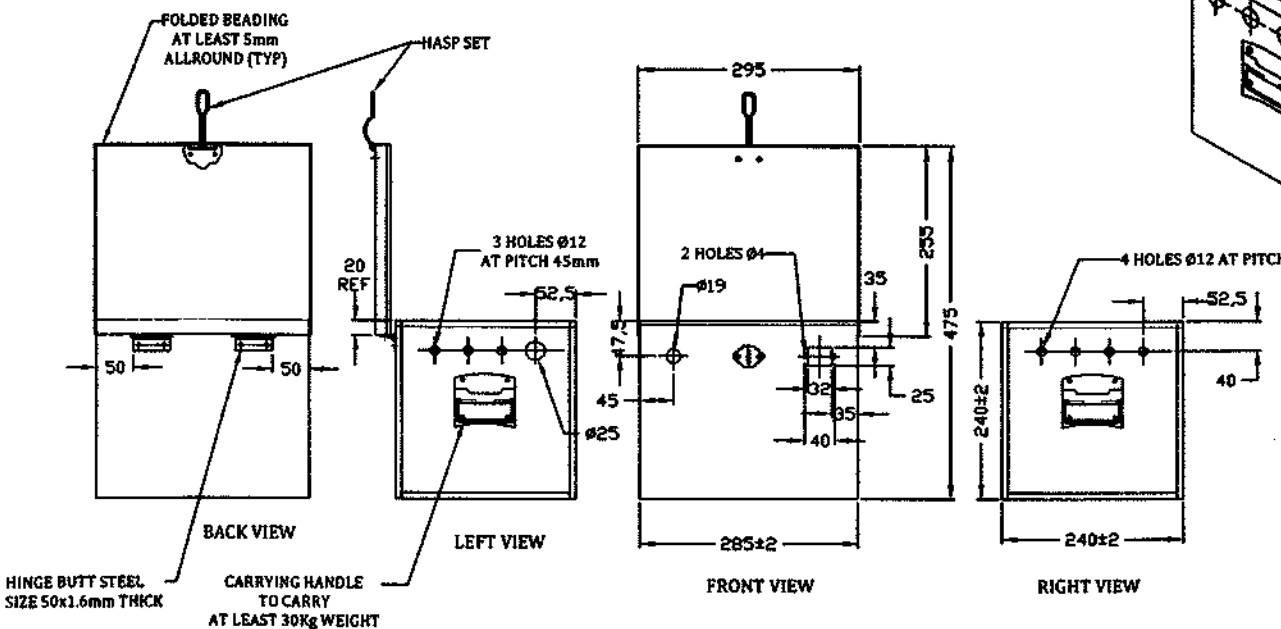
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

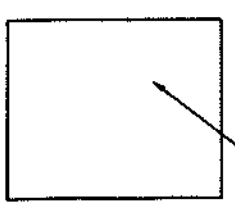
DGN		NOM	INDICATED
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS	DRG No:–	INDICATED
APP		SHEET	1 OF 1
DATE	08.03.16		

PRODUCT No.	B.O.No.	NOMENCLATURE WITH SPECIFICATION	Qty.
TD 2 A 65 Z 16	L K 88	BATTERY BOX ASSY	01 SET





IEC C14 C13. THREE PIN CHASIS PANEL MOUNT PLUG CONNECTOR 250V 10Amp (FEMALE) ASSEMBLED BY SCREWS & NUTS WITH BOX SHALL BE SUPPLIED

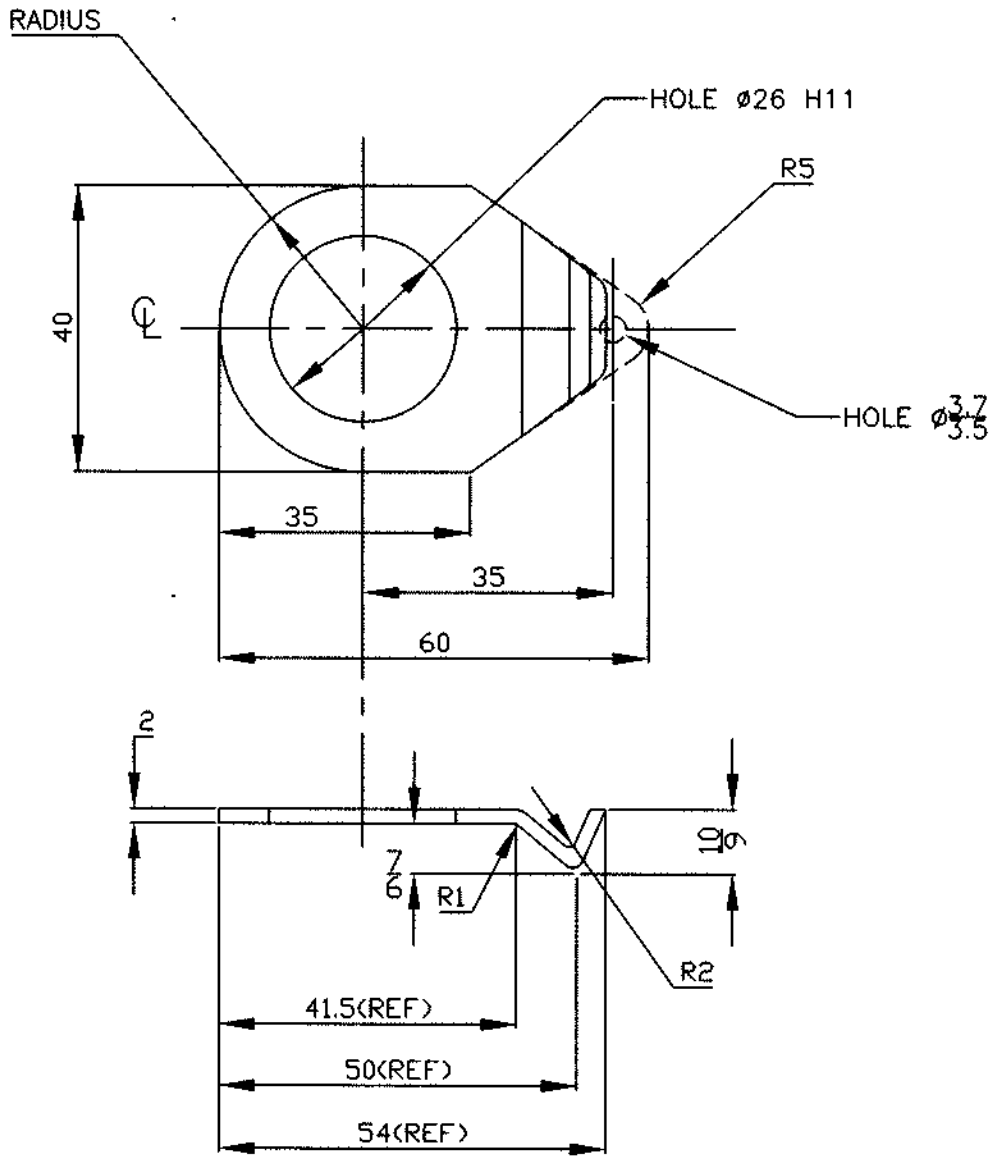


Non conducting material sheet thickness 3 mm (min.) to be pasted inside the BOX completely

SNo.	REGION	REVISION	DATE	SIGN
REVISIONS				

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INDICATED
DRN		MTL	SHEET G.I. 22 G (0.71mm) THICK
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	INDICATED
DATE	04.02.2017		SHEET 1 OF 1



NOTE:-

1. REMOVE SHARP EDGES & CORNERS

SNo.	REGION	REVISION	DATE	SIGN
3	—	DRAWING REDRAWN	18.3.93	

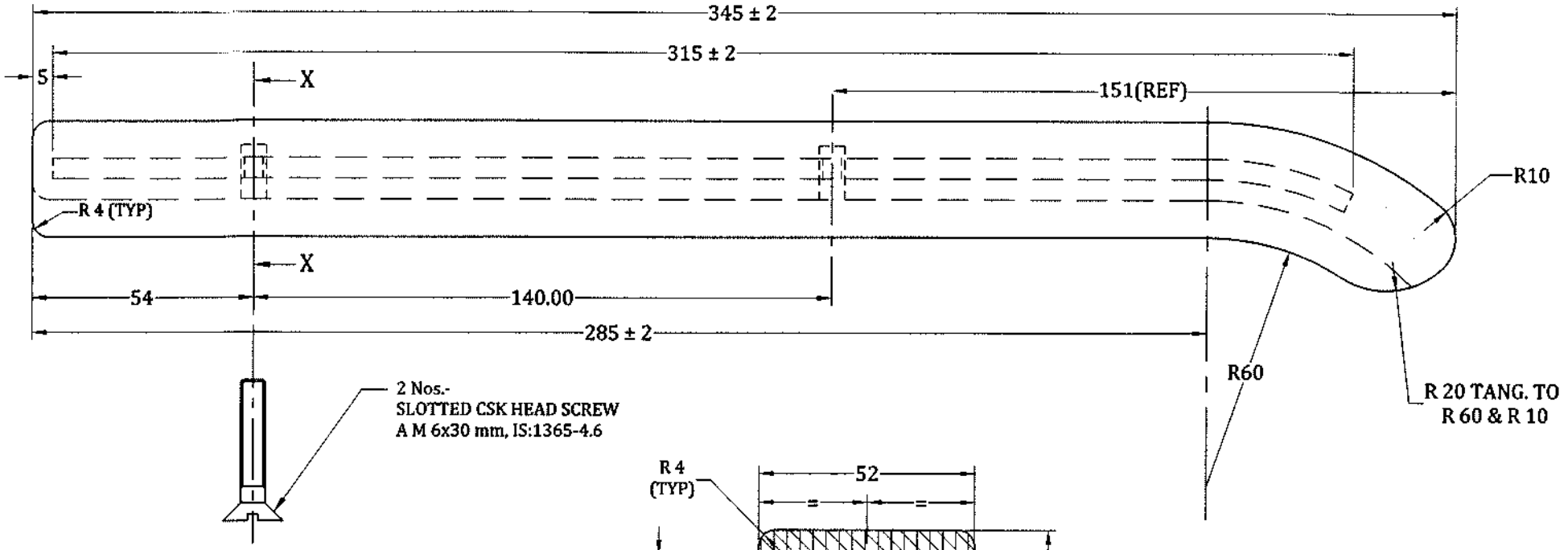
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LAMP BRACKET
DRN		MTL	SHEET MS CRA Gd '0', IS:513 THICK 2mm (AA 27)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	ZINC PLATED THK 6 TO 8 MICRONS
APP		DRG No:- TD 2 C 98 A 23	SHEET 1OF1
DATE	21.04.1993		

01 K 8 324

WHEEL CHAIR
TD2C51000
(ADULT TYPE)



MTL :--

INTEGRAL SKIN POLYURETHANE FOAM
HARDNESS - 45 ± 3 SHORE 'A'
DENSITY - 200 - 300 Kg/M^3
COLOUR - BLACK

NOTE:--

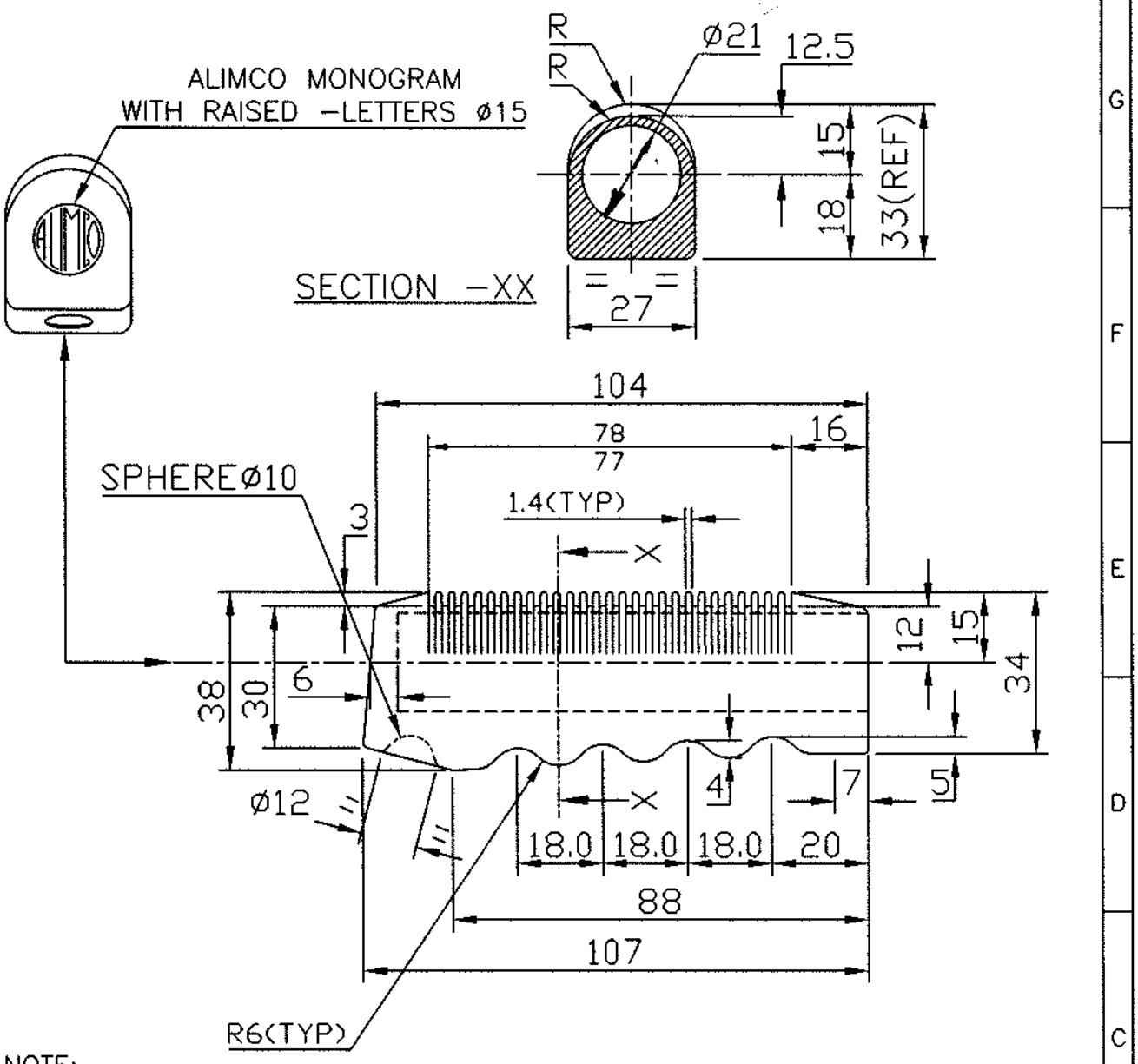
1. DIMENSIONS ARE FOR REFERENCE ONLY .
2. M.S. STRIP OR M.S.CHANNEL TO BE INSERT MOULDED AS AN ALTERNATE.
3. READYMADE IF AVAILABLE, IS ACCEPTABLE .
4. ---------
5. COMPONENTS TO BE INSPECTED FOR GENERAL APPEARANCE / FINISH & OUTER DIMENSIONS .

SNo.	REGION	REVISION	DATE	SIGN
8	B-9, C-7	Mtl. Hardness 45±3 Shore'A', Density 200-300Kg/M^3 & MS Strip 4mm were 45-55 shore'A' density 300-350Kg/M^3 & MS Strip 5/4 mm(Resp), weight at Note No.4 Deleted.	18.10.17	
7	C-10	M.S.CHANNEL ADDED AS AN ALTERNATE	09.11.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INTEGRAL SKIN P.U. ARMREST (WITH SCREWS)
DRN		MTL	INDICATED
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	MOULDED WITH TOP SURFACE HEAVING MATT FINISH AS APPROVED
SCALE	NTS		
APP	Sd/DD	DRG No:-	L C 38
DATE	30.06.1989	REV	8
		SHEET	1 OF 1



NOTE:-

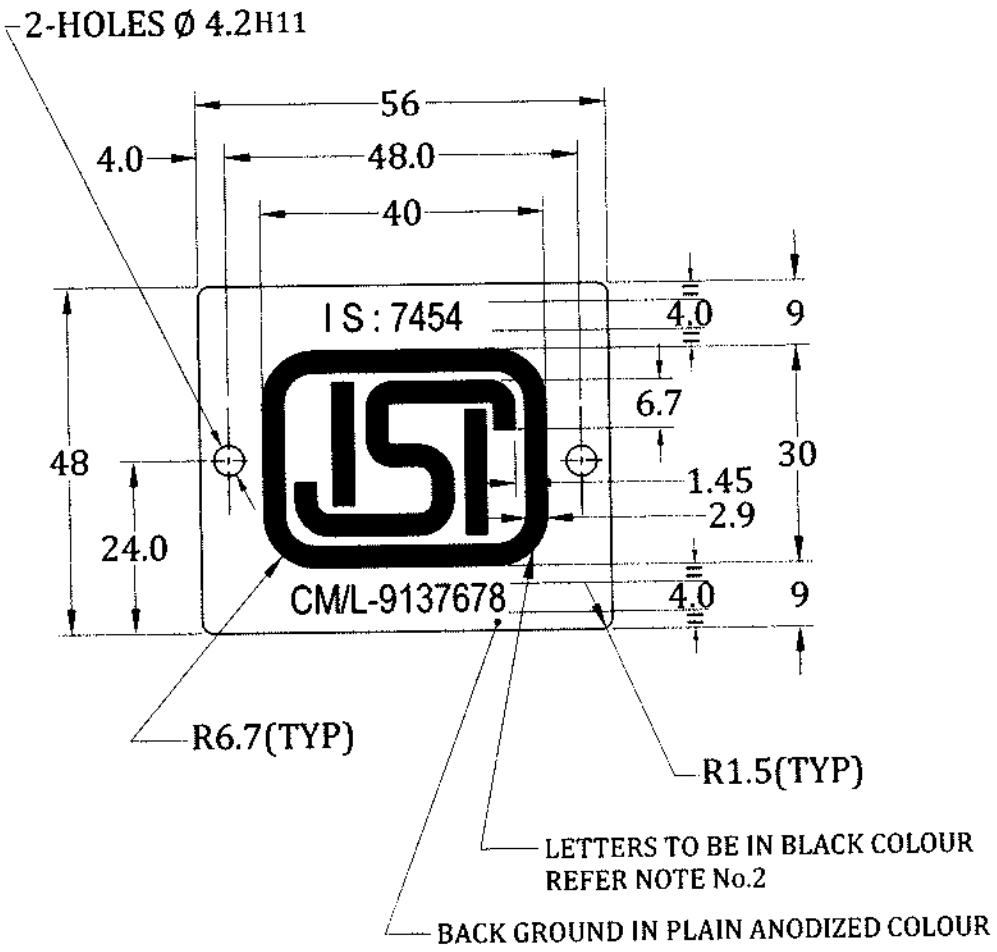
1. ROUND OFF SHARP EDGES & CORNERS
2. DIMENSIONS ARE FOR REF.ONLY
3. READYMADE IF AVAILABLE IS ACCEPTABLE
4. SHORE HARDNESS-85 TO 90 IRHD
5. WEIGHT-60 gms APPROX.
6. PERMITTED MOULDING DRAFT ANGLE 1°MAX

SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRG REDESIGN & REDRAWN	27.7.12	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	HAND GRIP I.D. 21mm
DRN		MTL	P.V.C. MOULDED,COLOUR BLACK
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	MOULDED
SCALE	NTS		
APP		DRG No:-	LD 50
DATE	21.10.99		SHEET 1OF1



NOTE:—

1. REMOVE SHARP EDGES & CORNERS.
2. ALL THE LETTERS (ISI, IS:7454) TO BE SYMMETRICALLY LOCATED

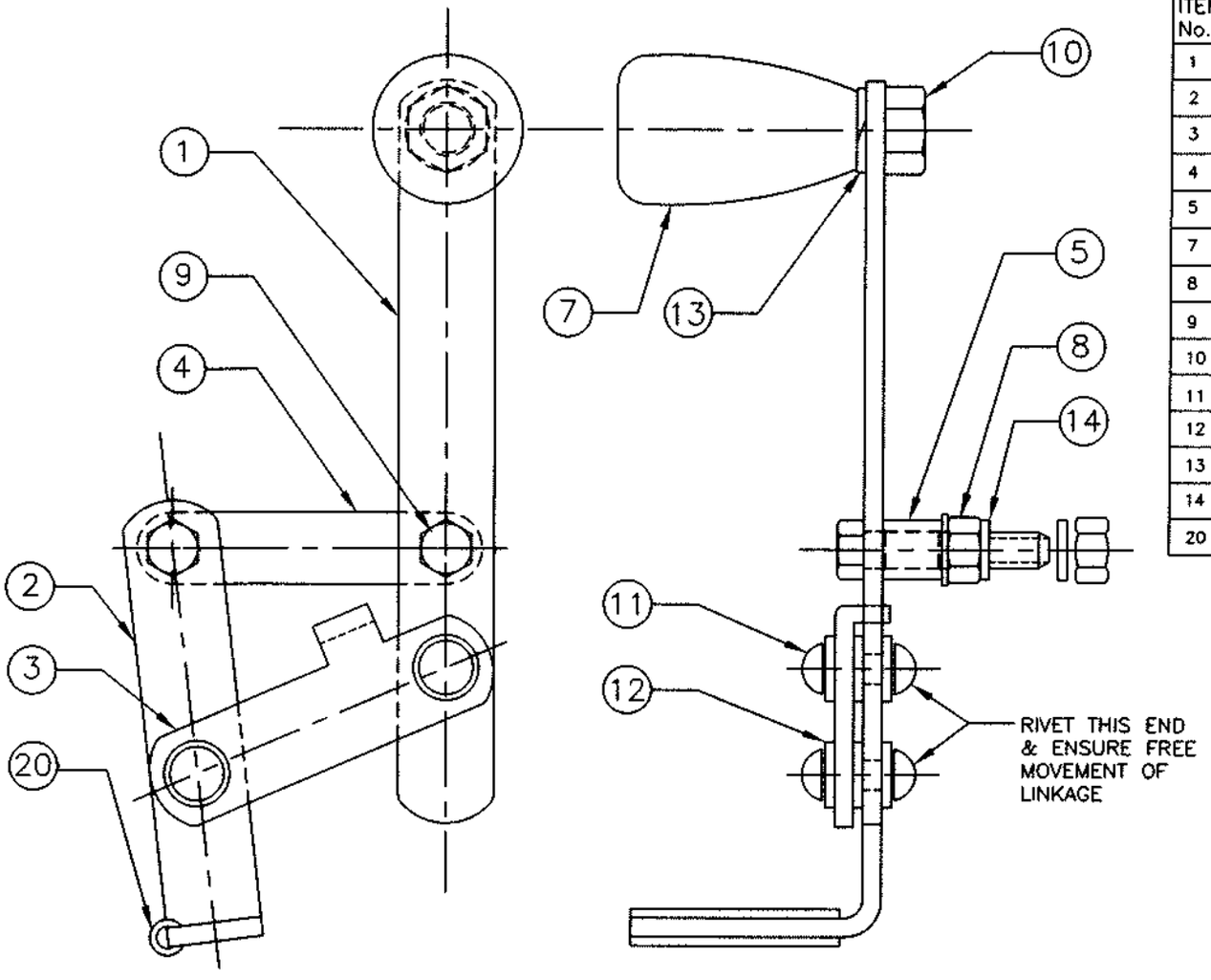
SNo.	REGION	REVISION	DATE	SIGN
6	-----	DRAWING REDRAWN	27 13 2	

REVISIONS

ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

DGN		NOM	LABEL, IS: 7454 (WHEEL CHAIR FOLDING-II)
DRN		MTL	SHEET AL ALLOY HS 30 W P IS:737, THICK 0.8 mm(AP 19)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0 126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	ANODIZED
APP		DRG No:-	L D 90
DATE	11 - 03 - 97		SHEET 1OF1

06 K 6 080



ITEM No.	DRAWING No.	NOMENCLATURE	QTY.	REMARKS
1	TD 2 A 02 D 01	BRAKE LEVER	1	
2	TD 2 A 02 D 02	BRAKE SHOE	1	
3	TD 2 A 02 D 03	INTERMEDIATE LINK	1	
4	TD 2 A 02 D 04	STATIONARY LINK	1	
5	TD 2 A 02 D 05	SPACER	2	
7	TD 2 A 07 R A0	KNOB	1	
8	BA 10	HEX.NUT DC,M6 IS:1363	4	
9	BB 06	HEX.BOLT M6X35,IS:1363	2	
10	BM 23	HEX.SCREW M8X25,IS:1364,P-4.6	1	
11	BU 80	SNAP HEAD RIVET 5X12,IS:2155, STEEL ZINC PLATED	2	
12	BS 47	PUNCHED WASHER B 5.5,IS:2016 MS,ZINC PLATED	6	
13	BS 54	SPRING WASHER 8,IS:6735	1	
14	BS 44	PUNCHED WASHER A 6.6,IS:2016 MS,ZINC PLATED	4	
20	BY 01	SPRING DOWEL SLEEVE LIGHT 6X35,IS:5988	1	

NOTE:-

1. ASSEMBLE ITEM No.2 WITH 20 AFTER PLATING & BEFORE ASSEMBLY WITH OTHER COMPONENTS.

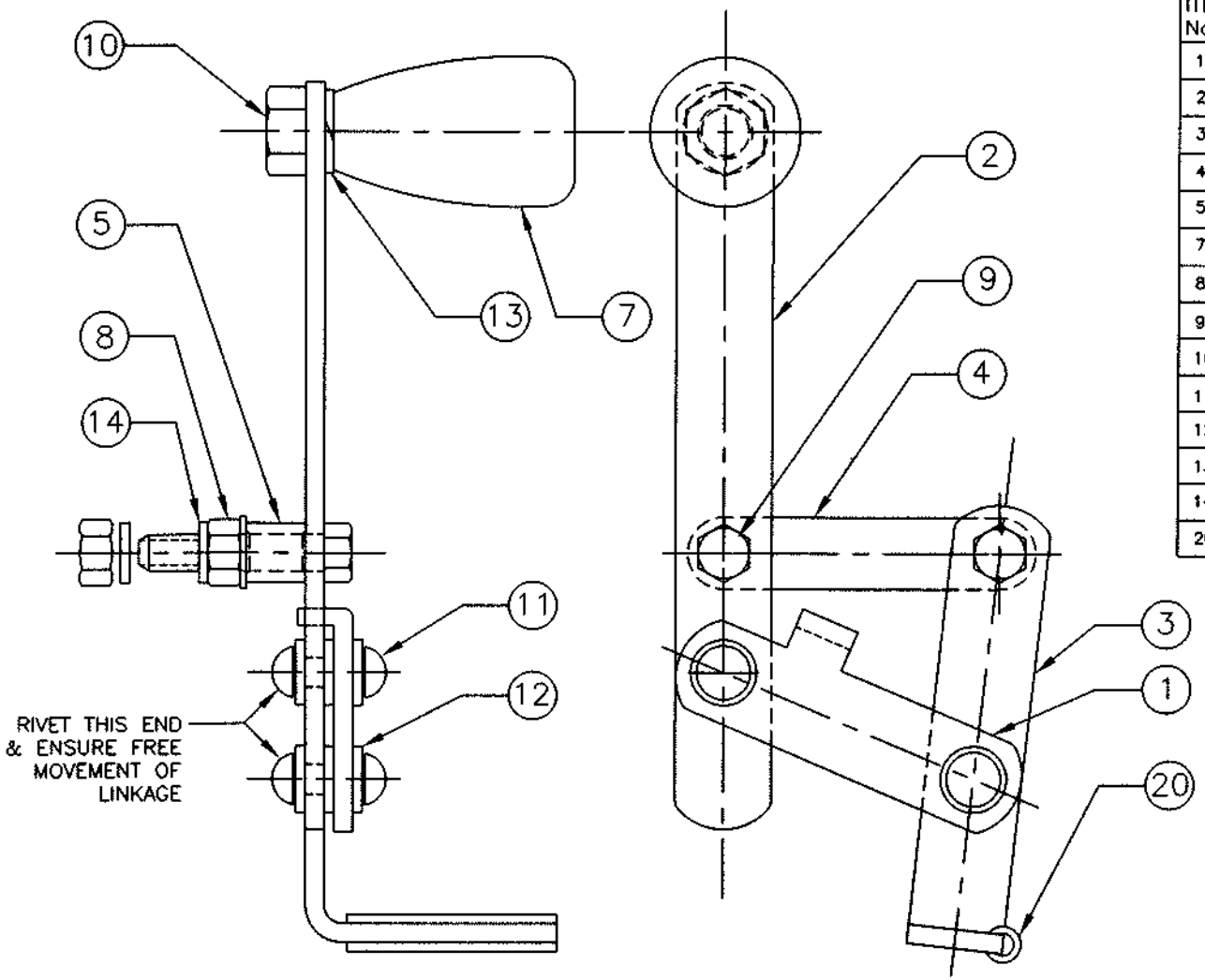
01 G 2 131

SNo.	REGION	REVISION	DATE	SIGN
8	—	DRG REDRAWN	26/12	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BRAKE ASSY (RIGHT)
DRN		MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	—
APP	SC/DD1	DRG No:- TD 2 A 02 D 00	SHEET 1OF1
DATE	10-583		



ITEM No.	DRAWING No.	NOMENCLATURE	QTY.	REMARKS
1	TD 2 A 02 E 01	INTERMEDIATE LINK	1	
2	TD 2 A 02 D 01	BRAKE LEVER	1	
3	TD 2 A 02 D 02	BRAKE SHOE	1	
4	TD 2 A 02 D 04	STATIONARY LINK	1	
5	TD 2 A 02 D 05	SPACER	2	
7	TD 2 A 07 R A0	KNOB	1	
8	BA 10	HEX.NUT DC,M6 IS:1363	4	
9	BB 06	HEX.BOLT M6X35,IS:1363	2	
10	BM 23	HEX.SCREW M8X25,IS:1364,P-4.6	1	
11	BU 80	SNAP HEAD RIVET 5X12,IS:2155, STEEL ZINC PLATED	2	
12	BS 47	PUNCHED WASHER B 5.5,IS:2016 MS,ZINC PLATED	6	
13	BS 54	SPRING WASHER 8,IS:6735	1	
14	BS 44	PUNCHED WASHER A 6.6,IS:2016 MS,ZINC PLATED	4	
20	BY 01	SPRING DOWEL SLEEVE LIGHT 6X35,IS:5988	1	

NOTE:-

1. ASSEMBLE ITEM No.2 WITH 20 AFTER PLATING & BEFORE ASSEMBLY WITH OTHER COMPONENTS.

01 G 2 132

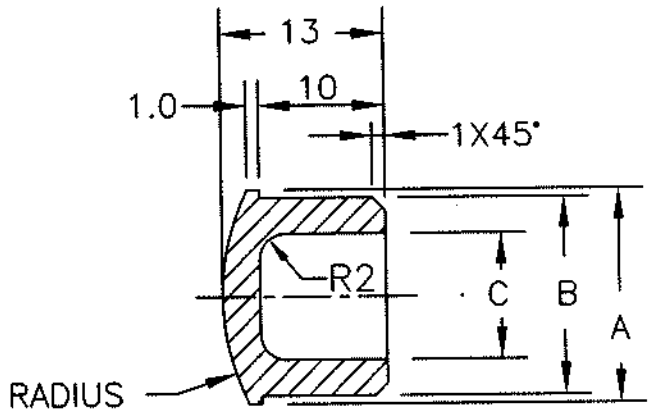
SNo.	REGION	REVISION	DATE	SIGN
8	—	DRG REDRAWN	26/3	

REVISIONS

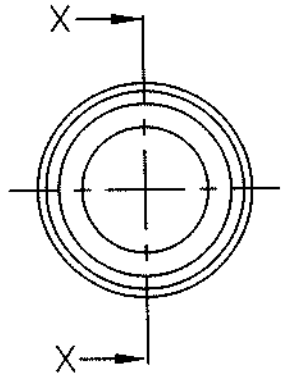
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BRAKE ASSY (LEFT)
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS	DRG No:- TD 2 A 02 E 00	SHEET 1OF1
APP	SD/DD1		
DATE	10.5.83		

SL.No.	DRAWING No.	NOMENCLATURE	ØA	ØB	ØC
1.	TD 2 A 07 0 02	PLUG END 22mm	22.0	19.5/19.4	16
2.	TD 2 A 07 0 03	PLUG END 19mm	19.0	17.5/17.4	13
3.	TD 2 A 07 0 04	PLUG END 17mm	17.0	15.7/15.6	10



SECTION–XX



NOTE:–

1. SHRINKING & FLOW LINES TO BE AVOIDED
2. COMPONENTS TO BE FREE FLASH & AIR HOLES.
3. REMOVE SHARP EDGES & CORNERS.
4. HARDNESS 60 TO 70 SHORE 'A'.

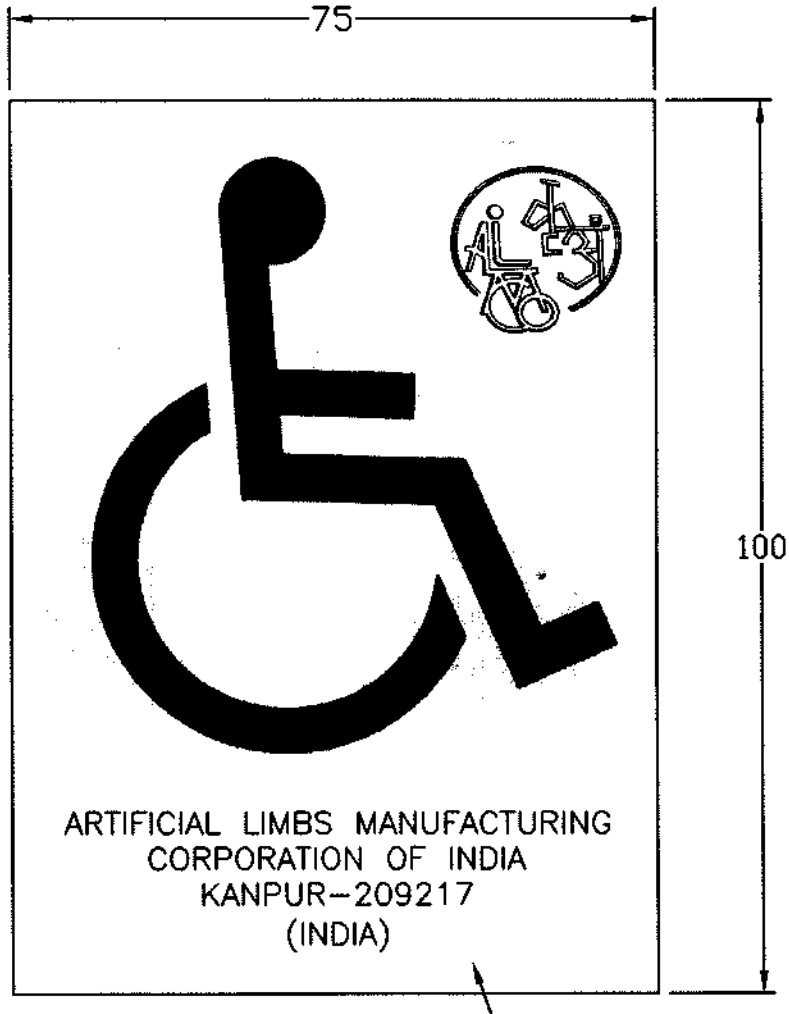
SNo.	REGION	REVISION	DATE	SIGN
3.	——	DRAWING REDRAWN	09.05.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	PLUG END 22/19/17mm
DRN	Ashish	MTL	PVC BLACK COLOUR IS:7078 (AW 92)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	SMOOTH
APP	Sd/ DD1	DRG No:–	TD 2 A 07 0 02; TD 2 A 07 0 03; TD 2 A 07 0 04
DATE	09.05.1978		SHEET 1OF1

01	K	5	116



NOTE:–

1. SYMBOL'S PROPORTIONS AS SHOWN.
2. LABEL TO BE PROVIDED GLUED ON REVERSE WITH PAPER BACKING.

TOLERENCE:--

DEVIATION FOR NON TOLERANCED DIMENSIONS (ISI:2102 MEDIUM)

DIAMETER & LENGTHS BETWEEN		LENGTH IN MM OF SHORTER SIDE OF ANGLE UPTO & INCL.	
0.5 up to 6	±0.1	Up to 10	±1°00`
Over 6 up to 30	±0.2	Over 10 upto 50	±0°30`
Over 30 up to 120	±0.3	Over 50 upto 120	±0°20`
Over 120 up to 315	±0.5	Over 120 upto 400	±0°10`
Over 315 up to1000	±0.8		
Over 1000 up to 2000	±1.2		
Over 2000 up to 4000	±2.0		

MACHINING FINISH IN MICRONS
▽ 8 - 25 ▽▽ 1.6 - 8 ▽▽▽ 0.025 - 1.6 ▽▽▽▽ <0.025

THIS DRAWINGS AND SPECIFICATION ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

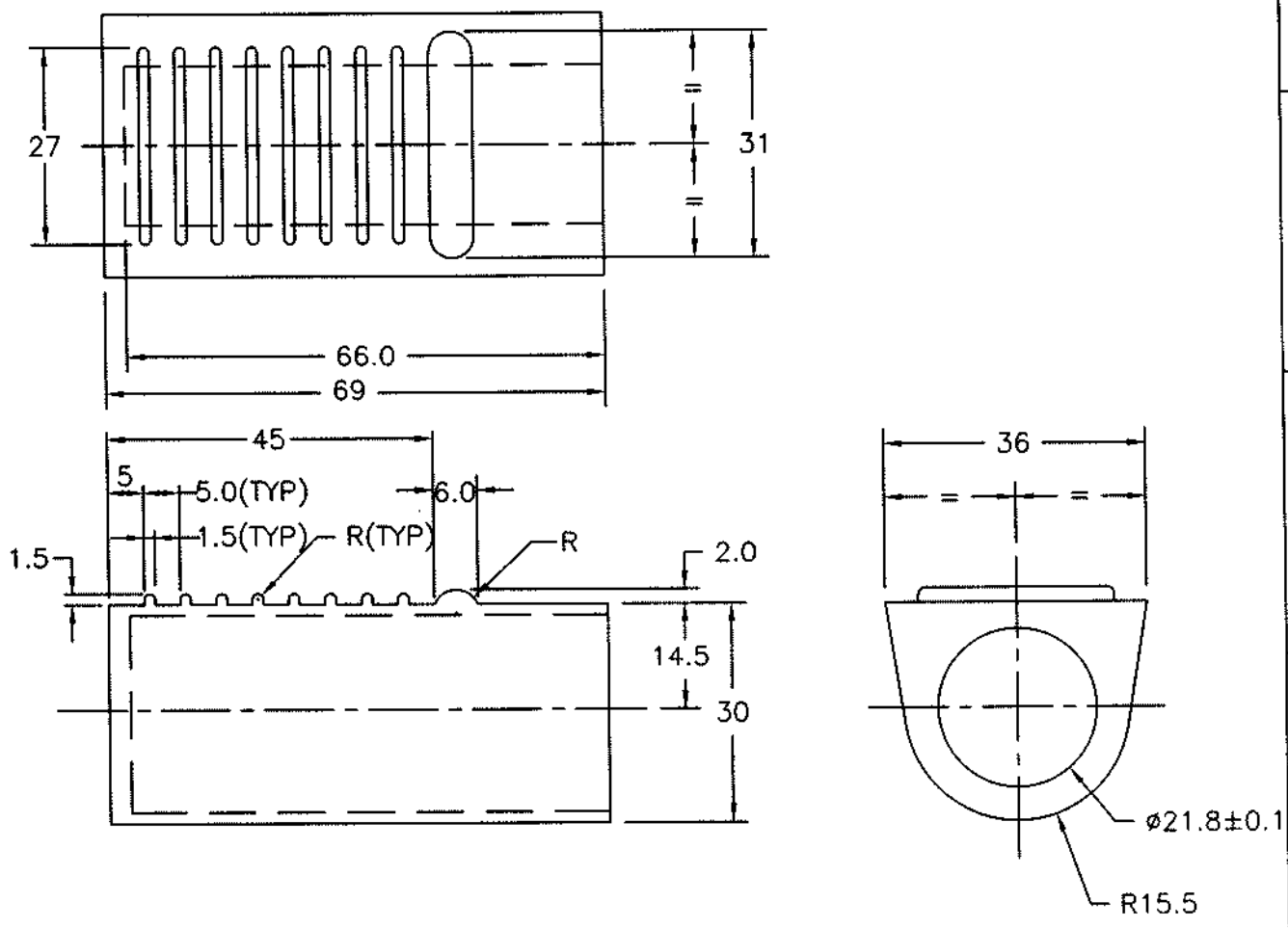
SNo.	REGION	REVISION	DATE	SIGN
4	———	ALIMCO LOGO MODIFIED	28.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL–SYMBOL OF ACCESSIBILITY
DRN		MTL	ALUMINIUM FOIL THK 60 TO 70 MICRONS
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP	Sol/DD1		
DATE	12.12.1978		

DRG No:- TD 2 A 07 0 05 SHEET 1OF1



NOTE:—
1. SURFACE SHOULD BE FREE FROM CUTS,PIN HOLES,EMBEDDED FOREIGN MATTERS SURFACE IRREGULARITIES & BLISTERS ETC.
2. READYMADE IF AVAILABLE IS ACCEPTABLE.

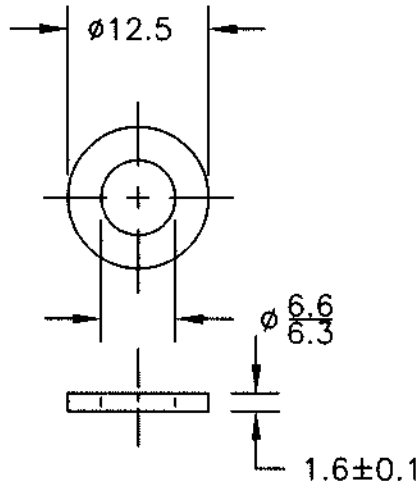
SNo.	REGION	REVISION	DATE	SIGN
3.	——	DRAWING REDRAWN	09.05.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	FOOT TIP
DRN	Ashish	MTL	LDP 400 Gd.'1'PLASTIC GRANULES BLACK COLOUR(AW 72)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	MOULDED SMOOTH
SCALE	NTS		
APP	SD/DD1		
DATE	17.01.2001	DRG No:— TD 2 A 07 0 09	SHEET 1OF1

01	K	8	340
5			4



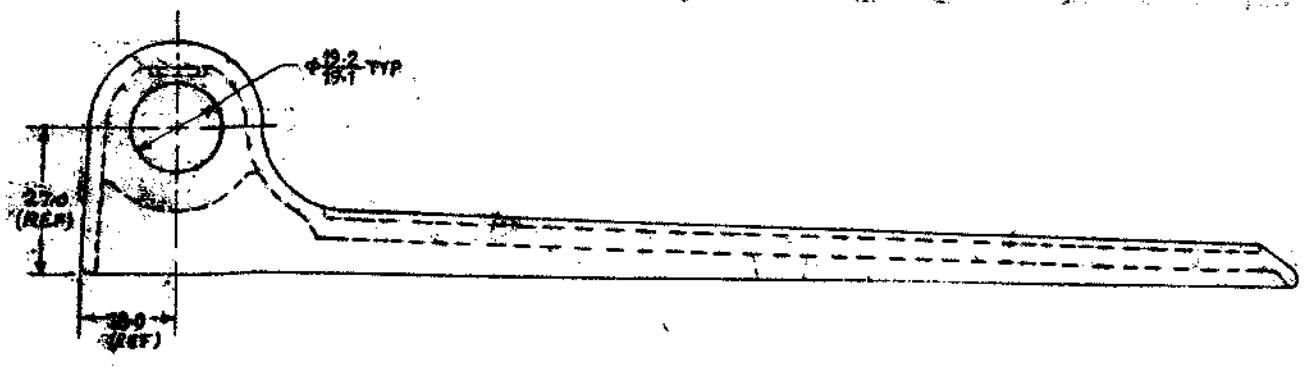
SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRAWING REDRAWN	12.02.15	

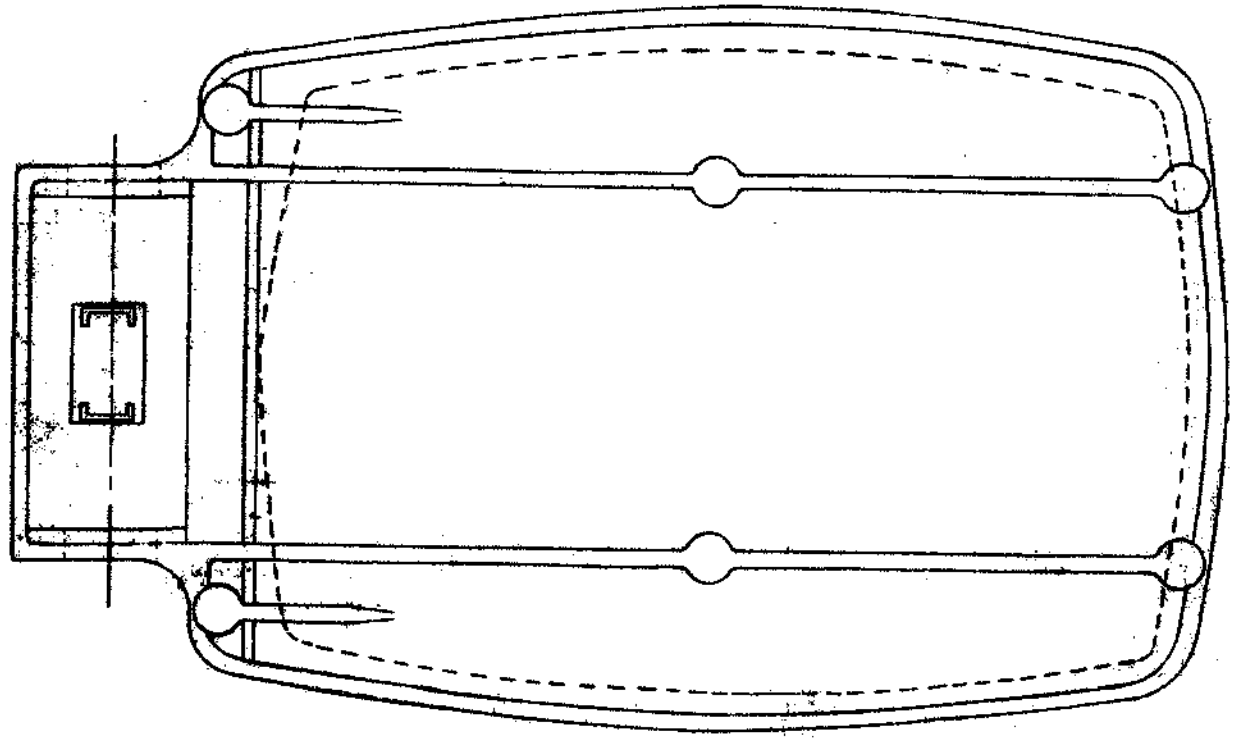
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	WASHER
DRN	Ashish	MTL	POLYAMIDE(NYLON) GRANNULES, TYPE-6 OR 6.6 IS:7078 (AW54)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	SMOOTH
APP		DRG No:- TD 2 A 07 D 08	SHEET 1OF1
DATE	13.07.1979		

01	K	5	159





NOTE:–

1. FOR CASTING DRAWING REFER DRG. No TD 2 A 07 K 99

S.No.	REGION	REVISION	DATE
7		NEW DESIGNATION OF AL ALLOY TYPE 4600 WAS TYPE–A–6 IN MTL SPECIFICATION AS PER IS:617	28.09.17
6	A-6	NOTE No.2 (WITHOUT FINISH DRAWING -TD 2 A 07 K 98) DELETED.	
5	A-6	NOTE NO. 2 ADDED	
4	A-2	REVISION NO.3 WITHDRAWN FINISH – BUFF DELETED.	
3	A-2	FIN – BUFF ADDED.	
2	A-2	FIN – BUFF DELETED.	
1	F-9	φ19.2/19.1 WAS φ17.3/17.1	

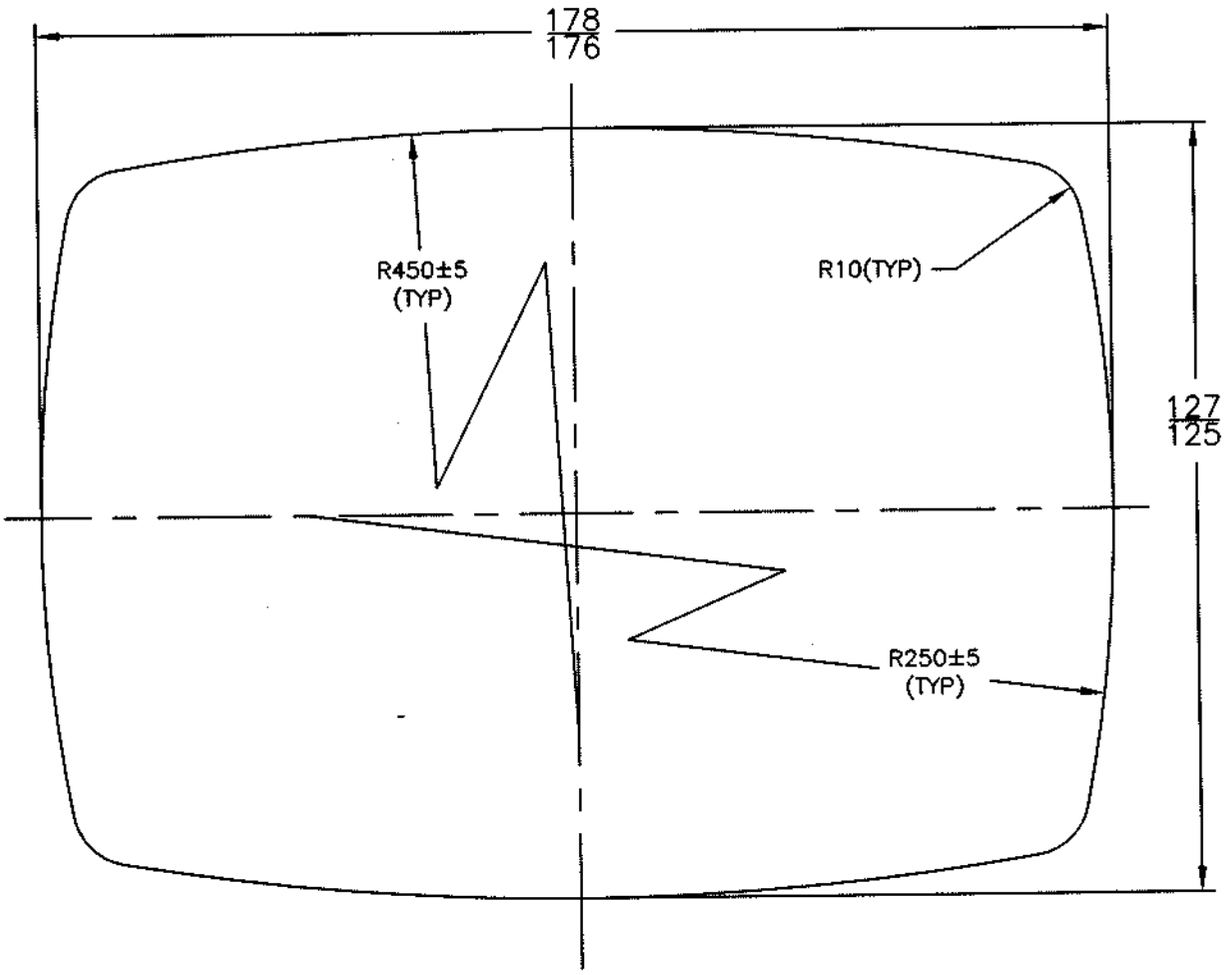
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

DRN. | DES. | CHD. | APP. | BRAKE | APP.

APP.	FOOT REST
MTL.	AL ALLOY CASTING TYPE–4600, IS:617, GRAVITY/PRESSURE DIE CAST
TOL.	
FIN.	

DRG No. – TD 2 A 07 K 04 | SHEET 1 OF 1



SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRAWING REDRAWN	05.03.15	

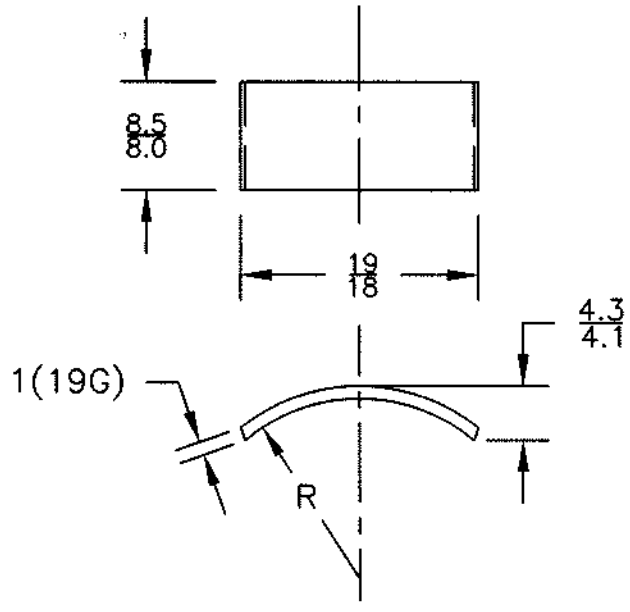
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	PAD FOOT REST
DRN		MTL	SHEET RUBBER–SHOE VELTING SIZE 400X300mm COLOUR–BLACK,THICK2.5mm APPROX (AV31)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	——
APP	Sd/DD1	DRG No:– TD 2 A 07 K 05	SHEET 1OF1
DATE	30.07.1982		

01	K	5	150

5 4



NOTE:-

1. REMOVE SHARP EDGES & CORNERS.
2. HARDENED & TEMPERED 35 TO 40 HRC

SNo.	REGION	REVISION	DATE	SIGN
1.	—	DRAWING REDRAWN	05.03.15	

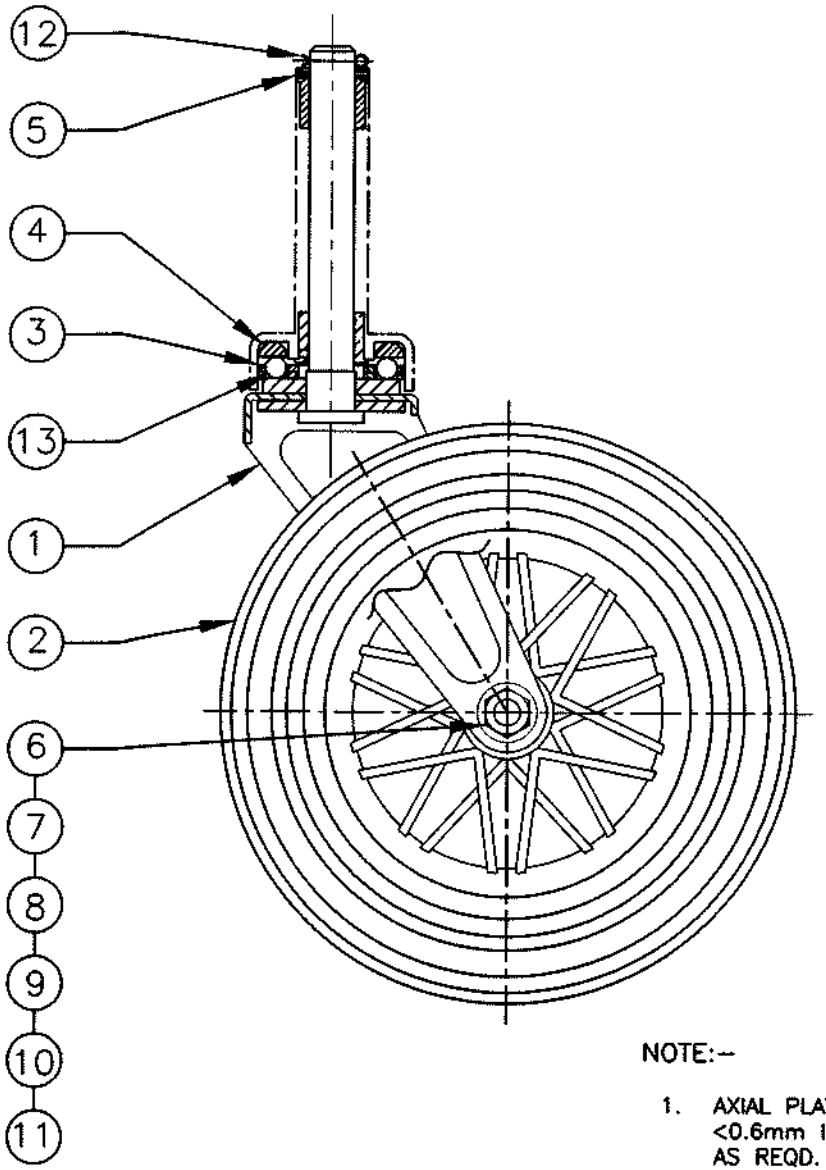
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	SPRING FLAT FOOT REST
DRN		MTL	SPRING STEEL STRIP Gd'4' IS:2507 THICK-1.0mm (AL25)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	ZINC PLATED THICKNESS 6 TO 8 MICRONS
SCALE	NTS		
APP	SA/DD1	DRG No:-	TD 2 A 07 K 06
DATE	09.05.1978		SHEET 1OF1

01	K	5	058

5 4



ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 07 V B0	FORK STEM ASSY	1	
2.	TD 2 A 07 V D0	PPCP RIM ASSY WITH EVA TYRE ø175mm	1	
3.	TD 2 A 07 V 01	CAGE	1	
4.	TD 2 A 07 V 02	PLATE BEARING UPPER	1	
5.	TD 2 A 07 V 05	WASHER NYLON	3	
6.	TD 2 A 07 V 07	WASHER ID 8	2	
7.	TD 2 A 07 V 08	BEARING SLEEVE	2	
8.	TD 2 A 07 V 10	HEX BOLT	1	
9.	BA 02	HEX NUT M8, IS:1363	1	Ni. Cr. PLATED
10.	BS 45	PUNCHED WASHER A9 IS:2016 MS	2	
11.	BS 54	SPRING WASHER 8 IS:6735	1	
12.	BX 07	SPLIT PIN 2.5x20 STEEL IS:549	2	
13.	HK 06	FREE BALL ø¼" IS:2898 STEEL	10	

NOTE:-

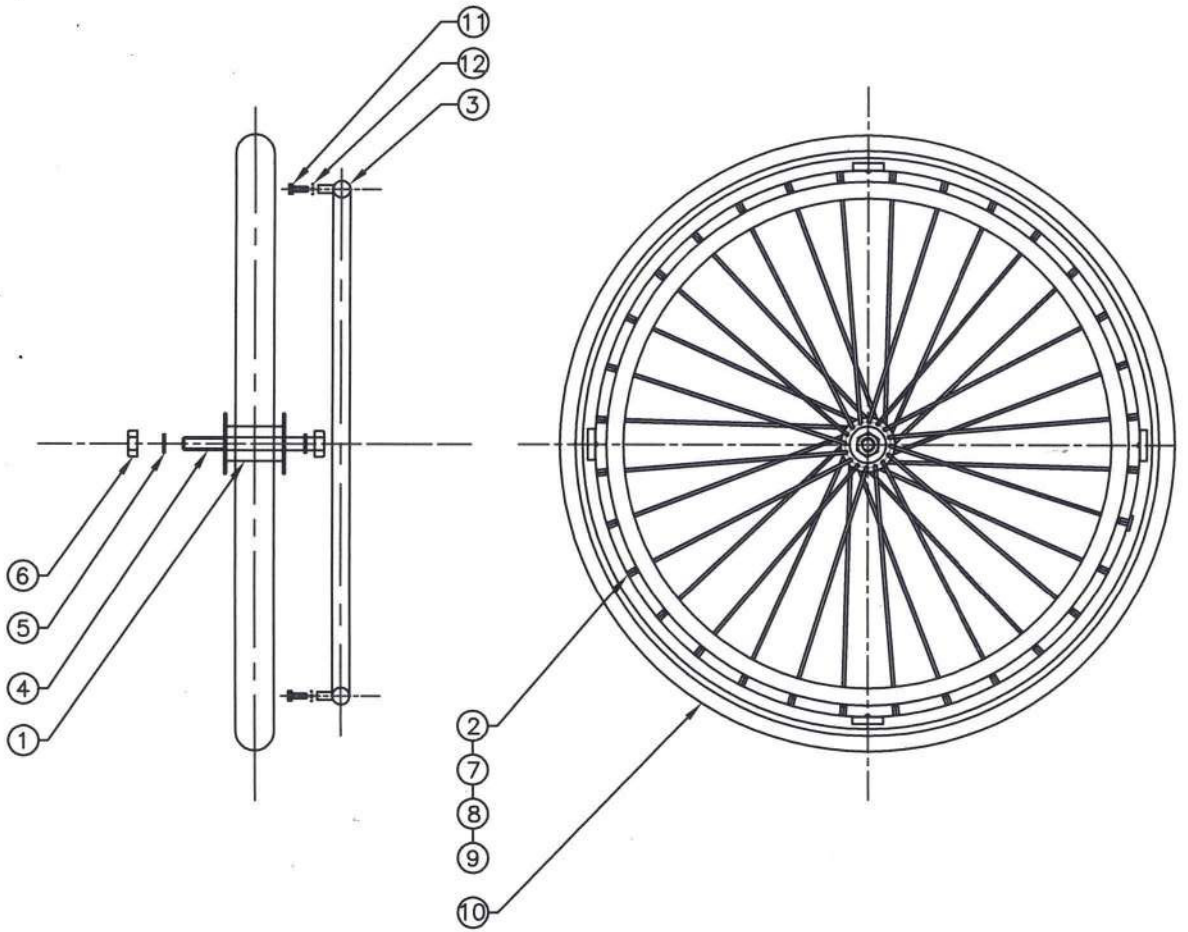
1. AXIAL PLAY OF THE STEM SHOULD BE <0.6mm INSERT WASHER ITEM No.5 AS REQD. FOR ADJUSTMENT OF PLAY.
2. USE THIN LAYER OF LIGHT DUTY GREASE BETWEEN PLATE BEARING UPPER & PLATE BEARING LOWER.
3. ITEM No. 3,4,5,12 & 13 WILL BE SUPPLIED IN LOOSE CONDITION.

SNo.	REGION	REVISION	DATE	SIGN
16.	———	DRAWING REDESIGN & REDRAWN	24.01.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	CASTOR ASSY ø175mm
DRN	Ashish	MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm	FIN	———
SCALE	NTS		
APP		DRG No:-TD 2 A 07 V 00	SHEET 1OF1
DATE	11.04.1981		



ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 07 Z A0	HUB ASSY	1	
2.	TD 2 A 07 N C0	RIM & BRACKET ASSY	1	
3.	TD 2 A 07 N D0	HAND RIM ASSY	1	
4.	BC 53	HEX HEAD BOLT M12x125 10.9 as per IS:1363	1	Zn PLATED BLUE 5–8μ IS:1573
5.	TD 2 A 07 Z A1	PLAIN WASHER OD–16.8, ID–12.4x2 mm thk.	2	
6.	BA 85	NYLOCK NUT M12 IS:7002/ISO:7040	1	
7.	LA 37	NIPPLE FOR BICYCLE SPOKE ø2mm,BRASS, Ni,Cr,PLATED, IS:630	32	
8.	LA 38	BICYCLE SPOKE WASHER GALVANISED ø2mm, IS:630, 0.28mm THICK	32	
9.	LA 39	SPOKE BICYCLE FOR 24x1½" SIZE WHEEL ø2mm, Ni,Cr PLATED, IS:630 LENGTH 255mm	32	
10.	LD 36	EVA TYRE WHEEL CHAIR (GRAY COLOUR) 24"x1½" BICYCLE RIM	1	
11.	BB 02	HEX BOLT M5x15mm IS:1363	4	Ni. Cr. PLATED
12.	BS 52	SPRING WASHER 5 mm, IS:6735	4	

SNo.	REGION	REVISION	DATE	SIGN

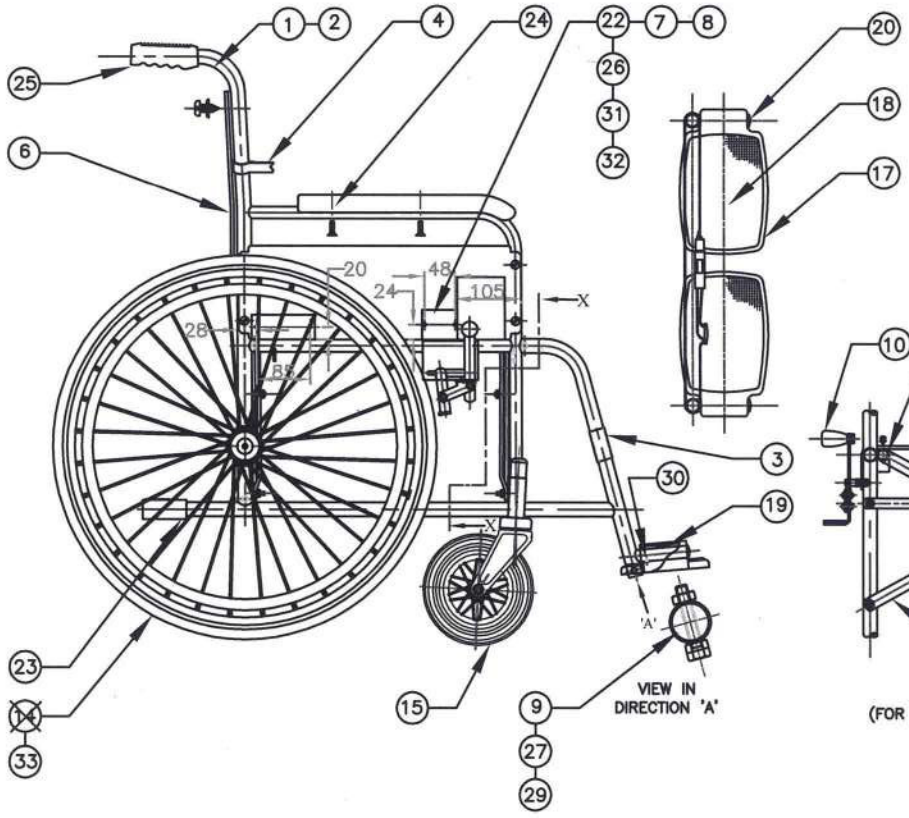
REVISIONS

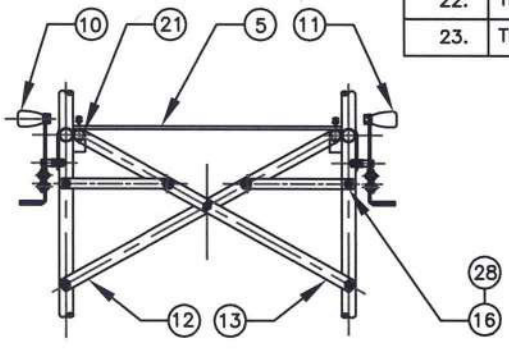
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN	Prashant	NOM	REAR WHEEL ASSY
CHD		MTL	
DIM	INmm	TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
SCALE	NTS	FIN	
PROJ		DRG No:– TD 2 A 07 Z 00	SHEET 10F1
APP			
DATE	12.02.2021		

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 A 00	FRAME ASSY (RIGHT)	1	
2.	TD 2 C 51 B 00	FRAME ASSY (LEFT)	1	
3.	TD 2 C 51 K 00	BELT ASSY	1	
4.	TD 2 C 51 L 00	CHEST BELT ASSY	1	
5.	TD 2 C 51 P 00	SEAT ASSY	1	
6.	TD 2 C 51 Q 00	BACK REST ASSY	1	
7.	TD 2 C 51 0 01	PLATE GUARD	2	
8.	TD 2 C 51 0 03	LABEL	1	
9.	TD 2 C 51 0 06	INSERT STOPPER	2	
10.	TD 2 A 02 D 00	BRAKE ASSY (RIGHT)	1	
11.	TD 2 A 02 E 00	BRAKE ASSY (LEFT)	1	
12.	TD 2 A 07 D 00	SEAT FRAME ASSY (RIGHT)	1	
13.	TD 2 A 07 E 00	SEAT FRAME ASSY (LEFT)	1	
~~14.~~	~~TD 2 A 07 N 00~~	~~REAR WHEEL ASSY~~	~~2~~	DELETED
15.	TD 2 A 07 V 00	CASTOR ASSY ø175mm	2	
16.	TD 2 A 07 D 08	WASHER	16	
17.	TD 2 A 07 K 04	FOOT REST	2	
18.	TD 2 A 07 K 05	PAD FOOT REST	2	
19.	TD 2 A 07 K 06	SPRING FLAT FOOT REST	2	
20.	TD 2 A 07 0 03	PLUG END 19mm	2	
21.	TD 2 A 07 0 04	PLUG END 17mm	4	
22.	TD 2 A 07 0 05	LABEL SYMBOL OF ACCESSIBILITY	1	
23.	TD 2 A 07 0 09	FOOT TIP	2	

24.	LC 38	INTEGRAL SKIN PU ARM REST	2	
25.	LD 50	HAND GRIP ID 21mm	2	
26.	LD 90	LABEL, IS:7454	1	
27.	BA 01	HEX NUT M6 IS:1363	4	Ni.Cr.PLATED
28.	BA 82	NYLOCK NUT M6	8	
29.	BB 06	HEX BOLT M6x35mm,IS:1363	2	Ni.Cr.PLATED
30.	BN 02	SLOTTED CHEESE HEAD SCREW AM 3x8, IS 1366	2	
31.	BQ 72	TAPPING SCREW AB 8x13,IS:7173	8	
32.	BR 71	POP RIVET ø4x6mm AL	4	
33.	TD 2 A 07 Z 00	REAR WHEEL ASSY.	2	





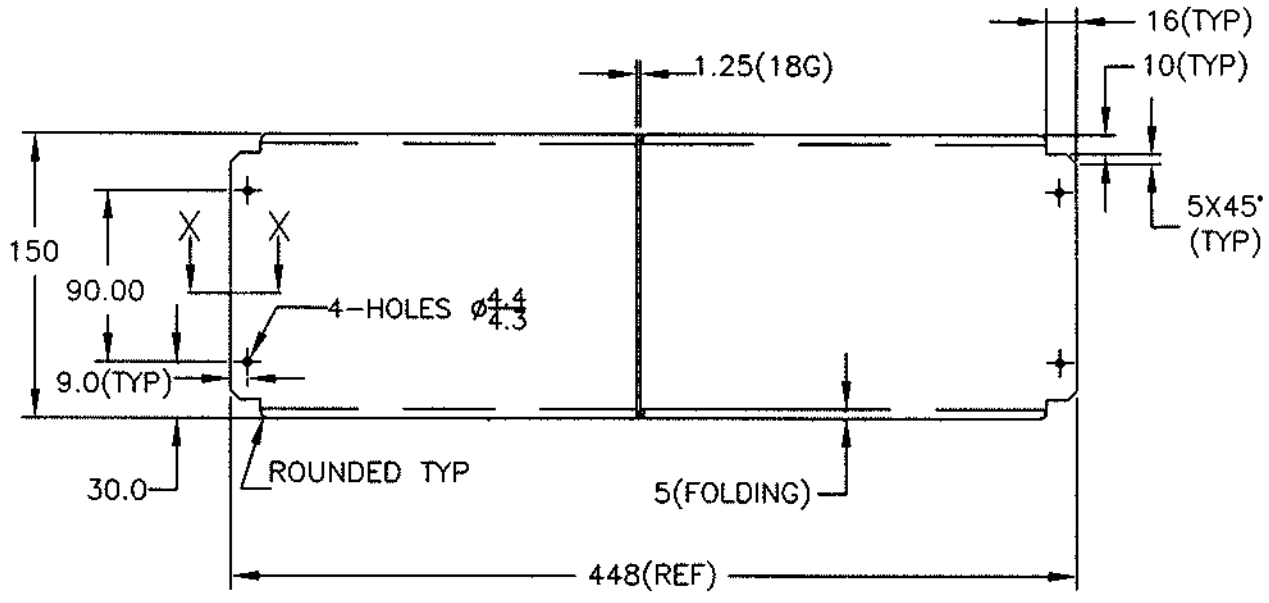
SCTION – XX
(FOR DETAILS OF SEAT FRAME ASSY)

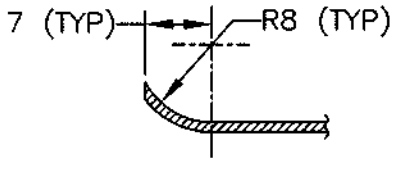
SNo.	REGION	REVISION	DATE	SIGN
44.	———	ITEM No. 14 DELETED & ITEM No. 33 ADDED	12.02.21	
43.	———	DRAWING REDESIGN & REDRAWN	25.01.17	Sd. DD1

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN		NOM	WHEELCHAIR FOLDING SIZE II (STANDARD)
CHD		MTL	———
DIM	IN mm	HEAT TREATMENT	———
SCALE	NTS	SURFACE TREATMENT	———
PROJ			
APP	Sd. DD1	DRG No:- TD 2 C 51 0 00	REV 44 / SHEET 1 OF 1
DATE	14.10.1982		





SECTION–XX
SCALE–5:1

NOTE:–

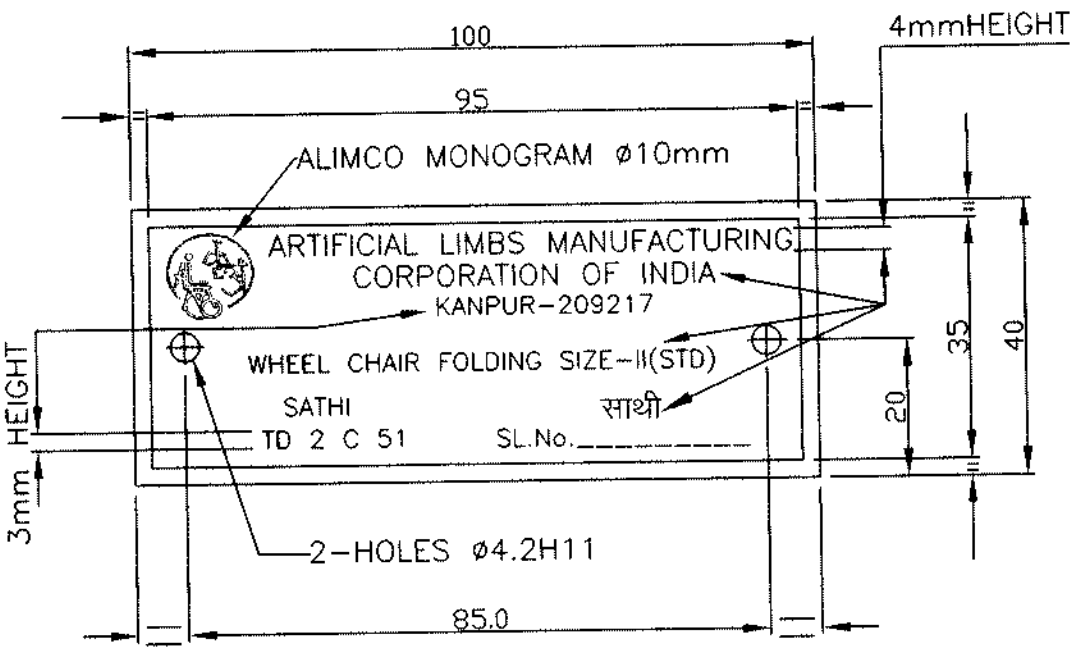
1.REMOVE SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
5.	A – 2	MTL AA 23 WAS AA 22	28.10.17	
4.	———	DRAWING REDRAWN	03.12.14	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	PLATE GUARD
DRN	Ashish	MTL	SHEET MS CR1 Gd '0' IS:513, THICK 1.25mm (AA 23)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	POWDER COATED COLOUR AS APPROVED
SCALE	NTS		
APP	SA/001	DRG No:–TD 2 C 51 0 01	REV 5 / SHEET 1OF1
DATE	30.09.1982		



THE GAP BETWEEN THE TWO LINES=2mm APPROX

NOTE:-

1. BACKGROUND ANODIZED PRINTING COLOUR AS APPROVED.
2. LETTERING DETAILS & PROPORTIONS AS SHOWN
3. REMOVE SHARP EDGES & CORNERS.

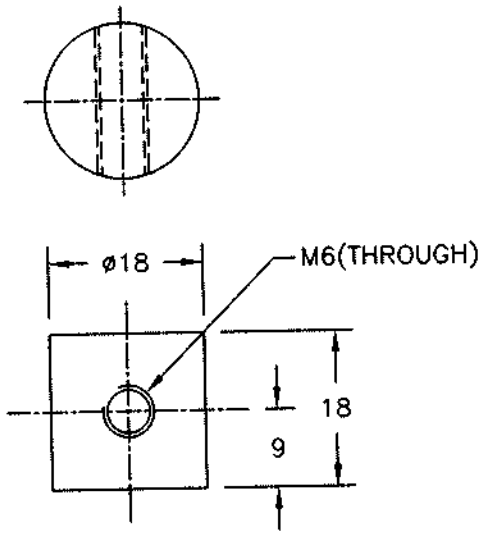
SNo.	REGION	REVISION	DATE	SIGN
4	—	REDESIGN & REDRAWN	12.05.14	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL
DRN		MTL	SHEET AL.ALLOY HS 30 WP IS:737 THICK 1mm(19SWG) (AP20)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	—
SCALE	NTS		
APP	Sd/ DD1		
DATE	23.01.1991	DRG No:- TD 2 C 51 0 03	SHEET 1OF1

01 K 5 406



NOTE:--

1.ROUND OFF SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
1.	———	DRAWING REDRAWN	03.12.14	

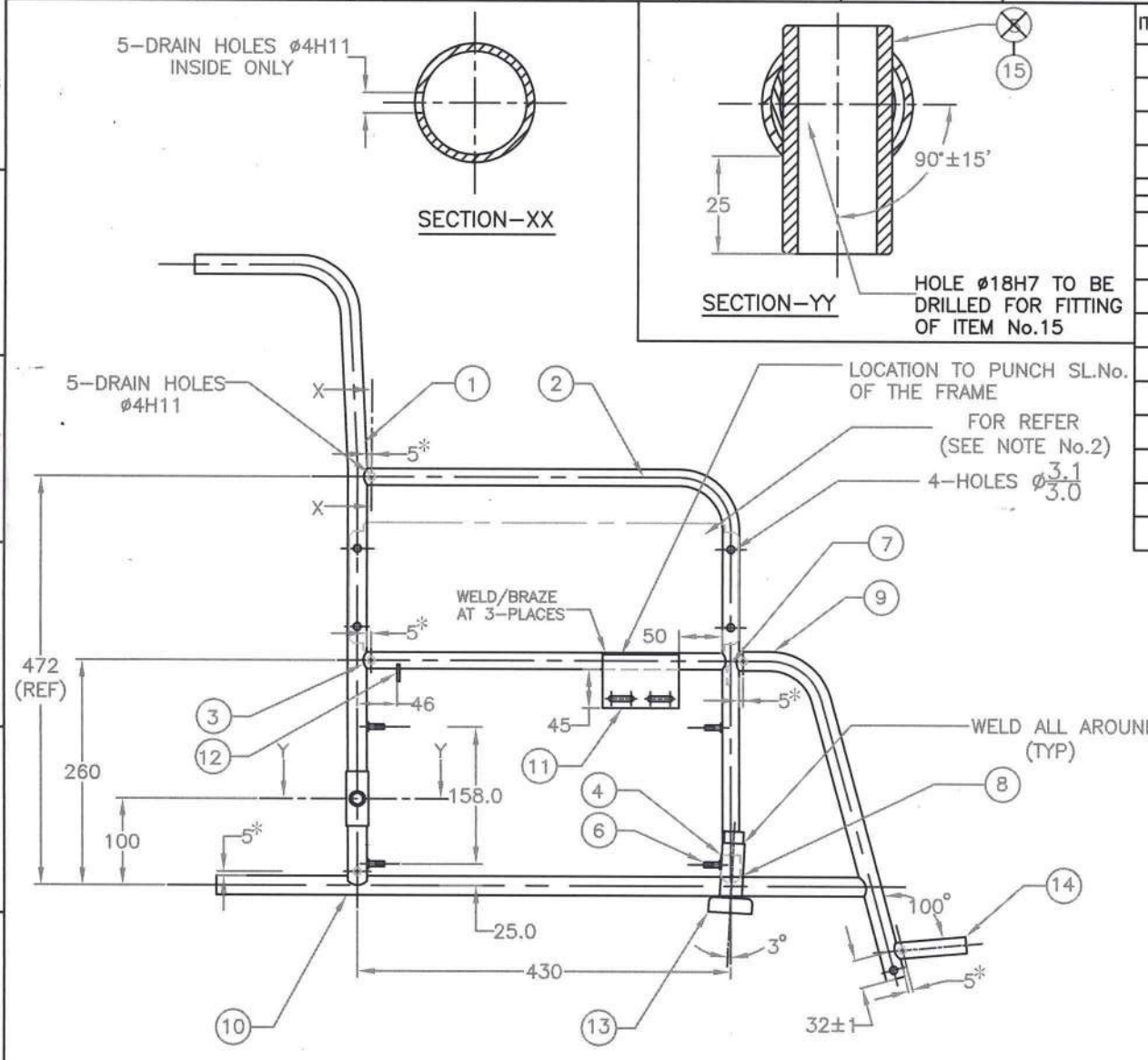
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	INSERT STOPPER
DRN	Ashish	MTL	GRANNULES POLYAMIDE (NYLON) TYPE-6,IS:7078 (AW 90)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	———
APP	Sd/DD	DRG No:-TD 2 C 51 0 06	SHEET 1OF1
DATE	26.06.2010		

01	K	5	446

5 4



ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 A 01	TUBE REAR	1	
2.	TD 2 C 51 A 02	TUBE ARM REST	1	
3.	TD 2 C 51 A 03	TUBE UPPER	1	
4.	TD 2 A 07 A 01	EXTENSION FRONT	1	
~~5.~~	~~TD 2 A 07 A 11~~	~~BUSH AXLE~~	~~1~~	DELETED
6.	TD 2 A 07 A 19	STUD	4	
7.	TD 2 A 07 A 20	REST RAIL SEAT(FRONT)	1	
8.	TD 2 A 07 A 22	TUBE ADAPTOR FRONT WHEEL	2	
9.	TD 2 A 02 A 05	TUBE MAIN FOOT REST SUPPORT	1	
10.	TD 2 A 02 A 14	TUBE LOWER	1	
11.	TD 2 A 07 A 25	BRACKET	1	
12.	TD 2 A 07 A 28	REST RAIL SEAT(REAR)	1	
13.	TD 2 A 07 V A0	TUBE ADAPTOR ASSY.	1	
14.	TD 2 A 07 K 02	TUBE FOOT REST	1	
15.	TD 2 A 07 A 29	BUSH AXLE	1	

NOTE:-

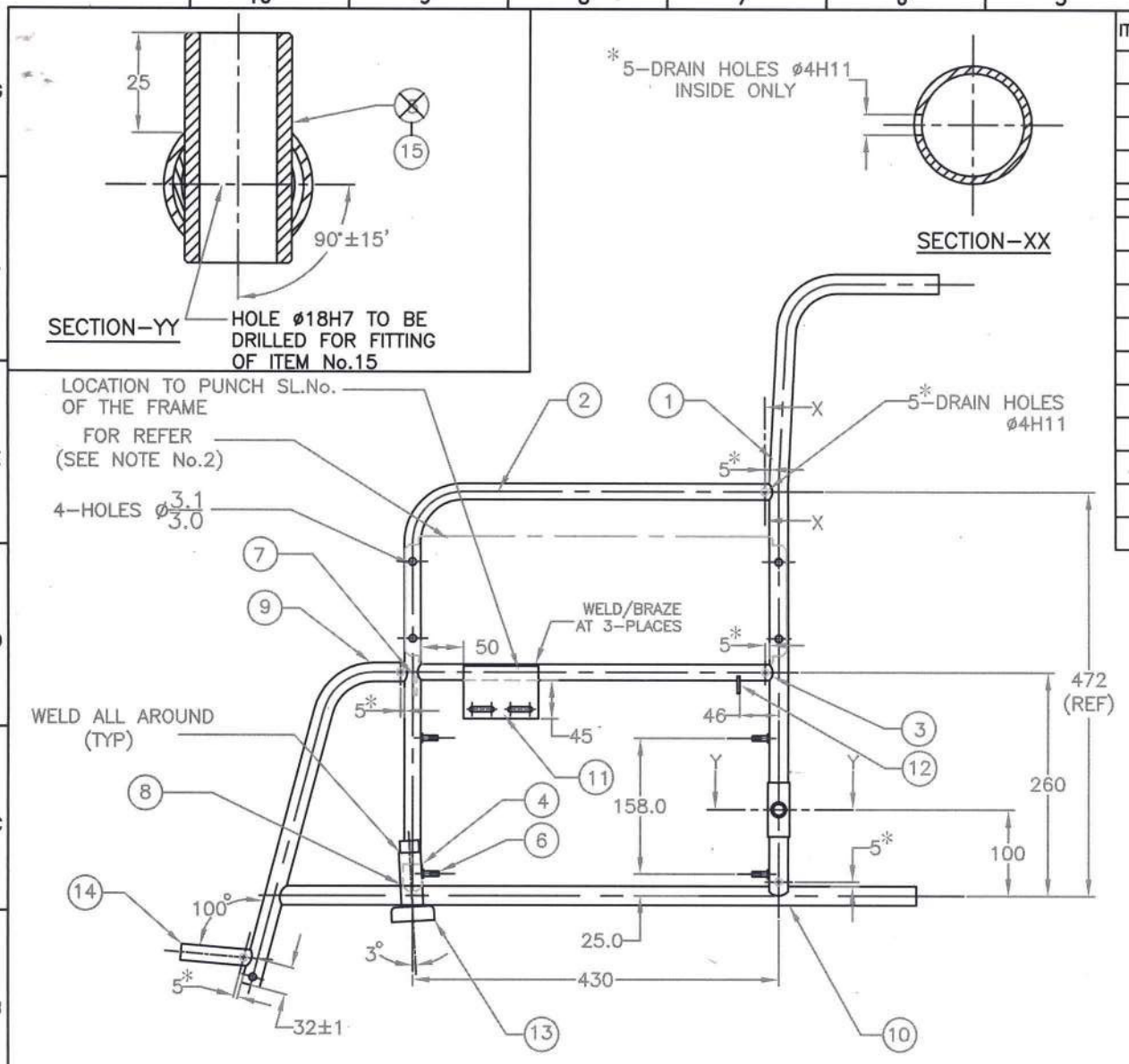
1. FOR ALL OTHER DETAILS REFER DRG No. TD 2 A 07 A 00 (SHEET 1).
2. DRILL 4–HOLES ø3.1/3.0 ON ITEM No.1 & 2 ON ONE SIDE ONLY BEFORE PAINTING. USING PLATE GUARD (TD 2 C 51 0 01) AS TEMPLATE.

SNo.	REGION	REVISION	DATE	SIGN
25.	———	ITEM No. 5 DELETED, ITEM No.15 ADDED	12.02.21	
24.	D–5	DIM 472(REF) WAS 460(REF)	07.03.18	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN	Sushant	NOM	FRAME ASSY (RIGHT)
CHD		MTL	———
DIM	IN mm	HEAT TREATMENT	———
SCALE	NTS	SURFACE TREATMENT	POWDER COATED (COLOUR AS APPROVED)
PROJ		DRG No:-	TD 2 C 51 A 00
APP	Sd. DD1	REV	25
DATE	25.09.1982	SHEET	1 OF 1



ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 A 01	TUBE REAR	1	
2.	TD 2 C 51 A 02	TUBE ARM REST	1	
3.	TD 2 C 51 A 03	TUBE UPPER	1	
4.	TD 2 A 07 A 01	EXTENSION FRONT	1	
~~5.~~	~~TD 2 A 07 A 11~~	~~BUSH AXLE~~	~~1~~	DELETED
6.	TD 2 A 07 A 19	STUD	4	
7.	TD 2 A 07 A 20	REST RAIL SEAT(FRONT)	1	
8.	TD 2 A 07 A 22	TUBE ADAPTOR FRONT WHEEL	2	
9.	TD 2 A 02 A 05	TUBE MAIN FOOT REST SUPPORT	1	
10.	TD 2 A 02 A 14	TUBE LOWER	1	
11.	TD 2 A 07 A 25	BRACKET	1	
12.	TD 2 A 07 A 28	REST RAIL SEAT(REAR)	1	
13.	TD 2 A 07 V A0	TUBE ADAPTOR ASSY.	1	
14.	TD 2 A 07 K 02	TUBE FOOT REST	1	
15.	TD 2 A 07 A 29	BUSH AXLE	1	

NOTE:-

1. FOR ALL OTHER DETAILS REFER DRG No. TD 2 A 07 A 00 (SHEET 1).
2. DRILL 4–HOLES ø3.1/3.0 ON ITEM No.1 & 2 ON ONE SIDE ONLY BEFORE PAINTING USING PLATE GUARD (TD 2 C 51 0 01) AS TEMPLATE.

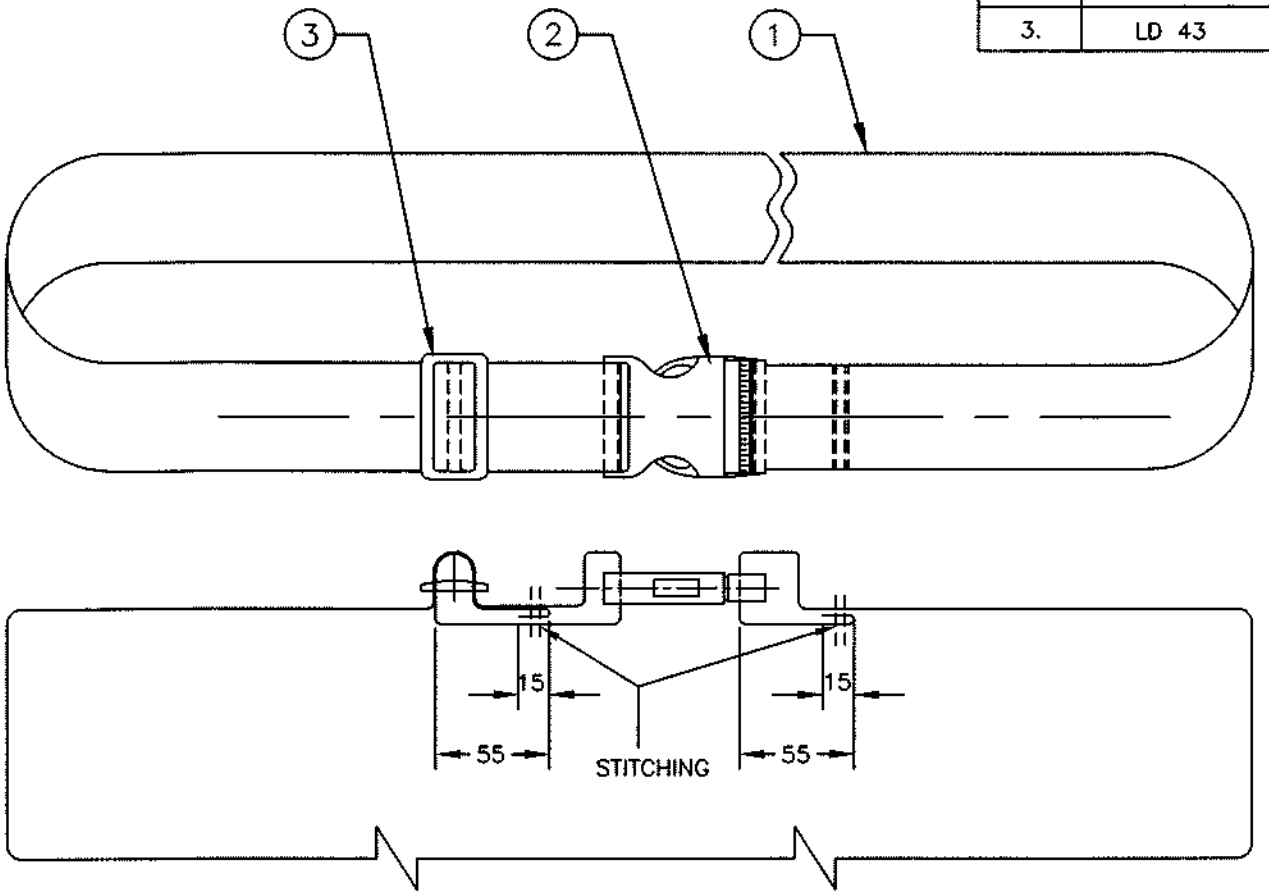
SNo.	REGION	REVISION	DATE	SIGN
25.	———	ITEM No. 5 DELETED, ITEM No.15 ADDED	12.02.21	
24.	D–5	DIM 472(REF) WAS 460(REF)	07.03.18	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DRN	Prashant	NOM	FRAME ASSY.(LEFT)
CHD		MTL	———
DIM	IN mm	HEAT TREATMENT	———
SCALE	NTS	SURFACE TREATMENT	POWDER COATED (COLOUR AS APPROVED)
PROJ			
APP	Sd. DD1	DRG No:- TD 2 C 51 B 00	REV 25 / SHEET 1 OF 1
DATE	25.09.1982		

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 K 01	BELT	1	
2.	LD 42	PUSH CLIP 2"(BLACK)	1	F.F. MAKE
3.	LD 43	BUCKLE 2"(BLACK)	1	



SNo.	REGION	REVISION	DATE	SIGN
1.	——	DRAWING REDRAWN	03.12.14	

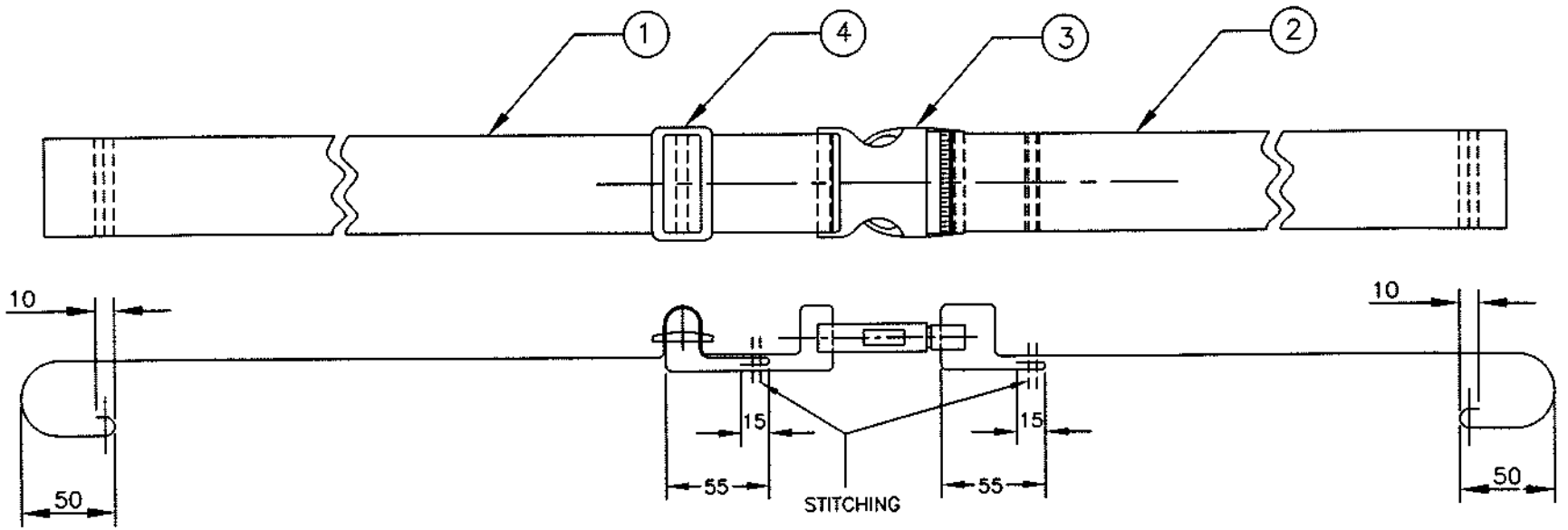
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BELT ASSY
DRN	Ashish	MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm		
SCALE	NTS	FIN	——
APP	SVDDI	DRG No:-TD 2 C 51 K 00	SHEET 1OF1
DATE	30.08.1999		

D G 4 070

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 L 01	CHEST BELT PART 'A'	1	
2.	TD 2 C 51 L 02	CHEST BELT PART 'B'	1	
3.	LD 42	PUSH CLIP 2"(BLACK)	1	F.F. MAKE
4.	LD 43	BUCKLE 2"(BLACK)	1	



SNo.	REGION	REVISION	DATE	SIGN
1.	——	DRAWING REDRAWN	03.12.14	

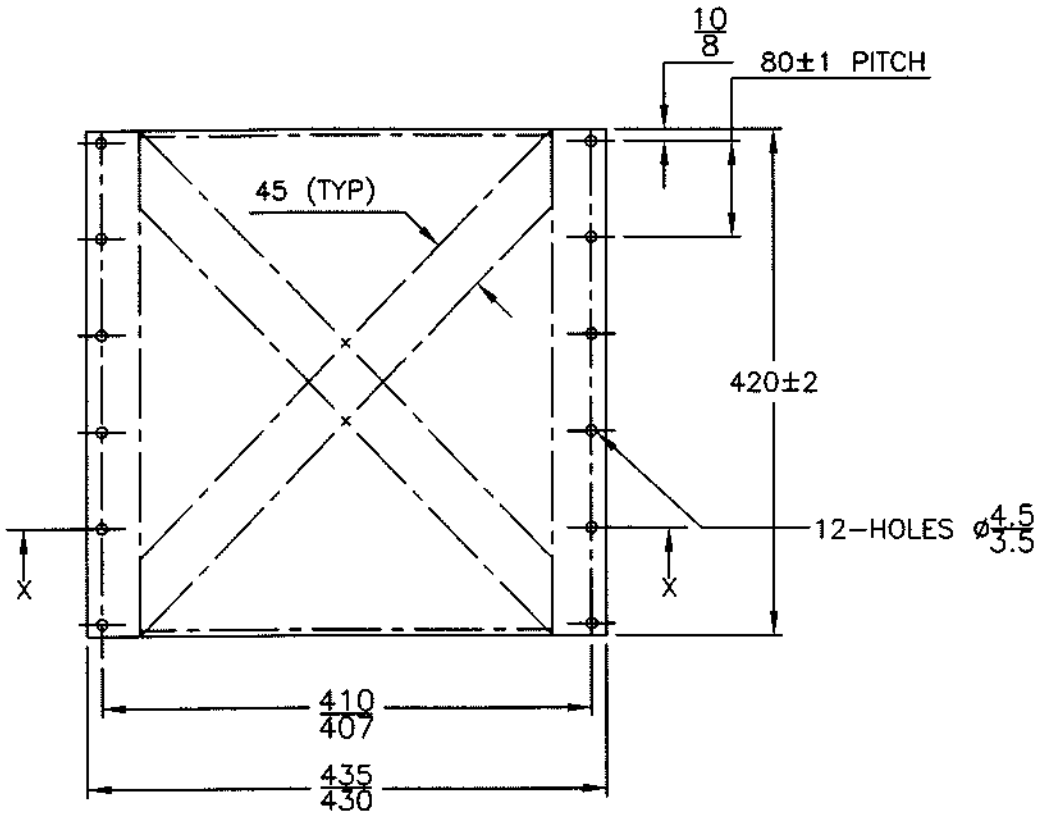
REVISIONS

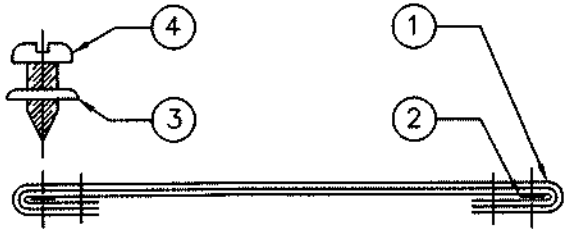
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	CHEST BELT ASSY
DRN		MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm	FIN	——
SCALE	NTS		
APP		DRG No:-TD 2 C 51 L 00	SHEET 1OF1
DATE	30.08.1999		

D	G	4	071

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 P A0	SEAT COVER ASSY	1	
2.	TD 2 A 07 P 01	STRIP REINFORCING	2	
3.	TD 2 A 07 P 02	WASHER	12	
4.	BQ 74	TAPPING SCREW AB10X19,IS:7173	12	





SECTION–XX

NOTE:-

1. PUNCH HOLE ø4.5/3.5 IN ITEM No.1 AS SHOWN.
2. ITEM No.2,3,&4 TO BE SUPPLIED LOOSE.

SNo.	REGION	REVISION	DATE	SIGN
1	——	DRAWING REDRAWN	03.12.14	

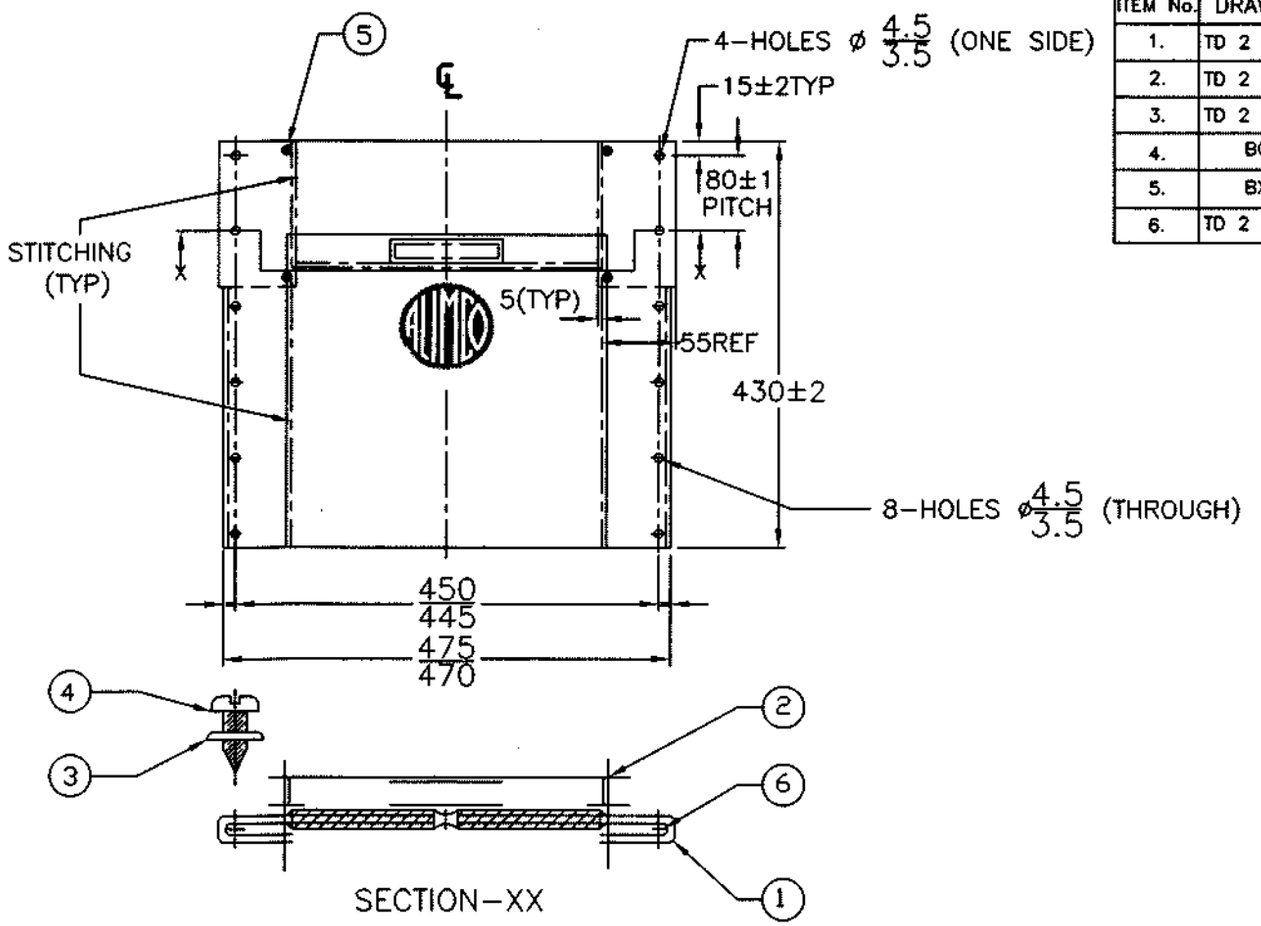
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	SEAT ASSY
DRN		MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm		
SCALE	NTS	FIN	——
APP		DRG No:– TD 2 C 51 P 00	SHEET 1OF1
DATE	12.11.2002		

01	G	1	090

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 C 51 Q A0	BACK REST COVER ASSY	1	
2.	TD 2 C 51 Q B0	POCKET ASSY	1	
3.	TD 2 C 07 P 02	WASHER	12	
4.	BQ 74	TAPPING SCREW AB10X19 IS:7173	12	
5.	BX 76	TWO PART PRESS BUTTON HEAD ø10mm STEEL BLACK	4	
6.	TD 2 A 07 P 01	STRIP REINFORCING	2	



NOTE:-

1. USE BLACK NYLON THREAD 210/6 (COATS No.24) FOR STITCHING.
2. STITCHING PITCH 3 TO 5mm.
3. PUNCH HOLE ø4.5/3.5 IN ITEM No.1 IN SHOWN.
4. ITEM No.3,4&6 TO BE SUPPLIED LOOSE.
5. SCREEN PRINTING IS TO BE DONE IF REQUIRED AS PER DRG.No. TD 2 C 51 Q B2.

SNo.	REGION	REVISION	DATE	SIGN
4.	——	DRAWING REDRAWN	03.12.14	

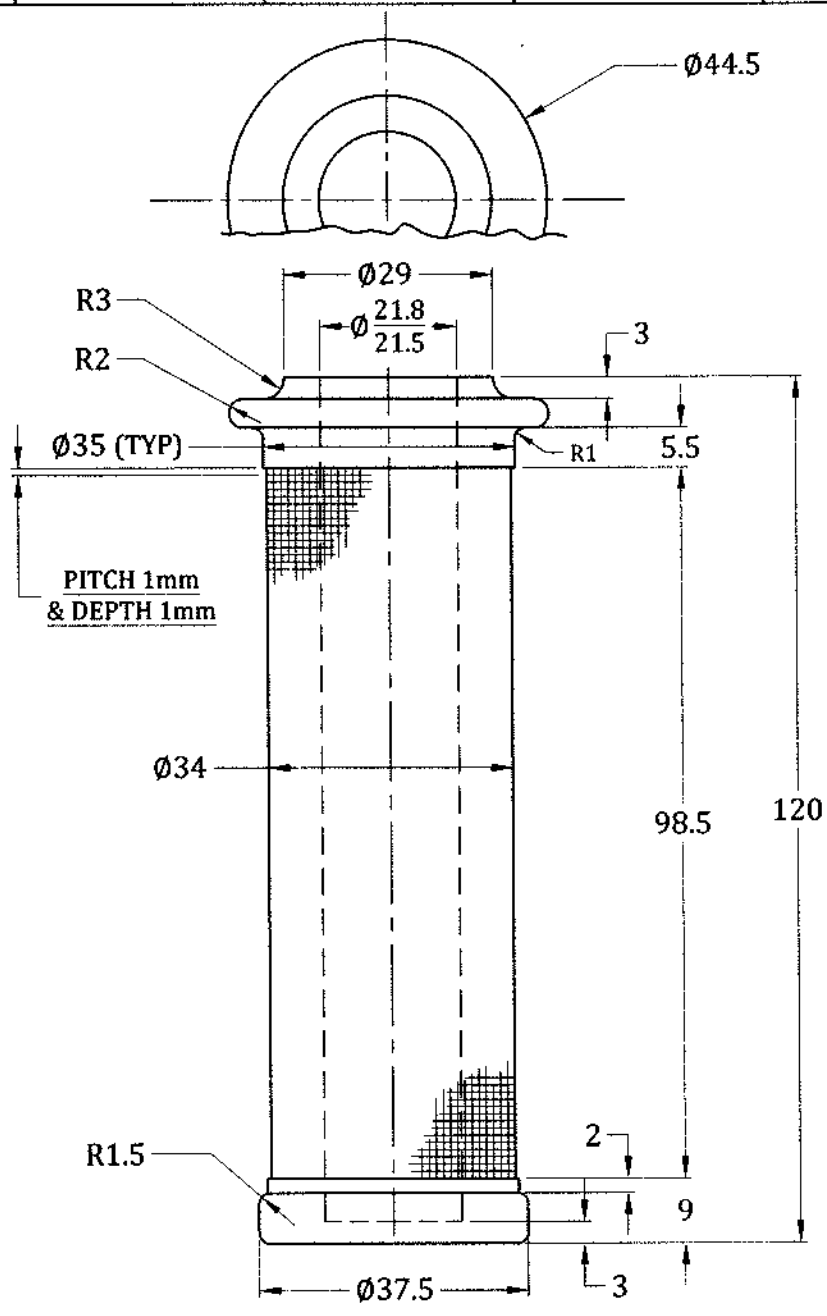
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BACK REST ASSY
DRN		MTL	——
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	INmm	FIN	——
SCALE	NTS		
APP		DRGNo:-TD 2 C 51 Q 00	SHEET 1OF1
DATE	12.11.2002		

01 G 1 092

TD2B36000
ROUGH TERRAIN
WHEEL CHAIR



NOTE:-

1. SHORE HARONESS 75 To 85 IRHD.
2. UNSPECIFIED RADII 1mm.
3. ---------

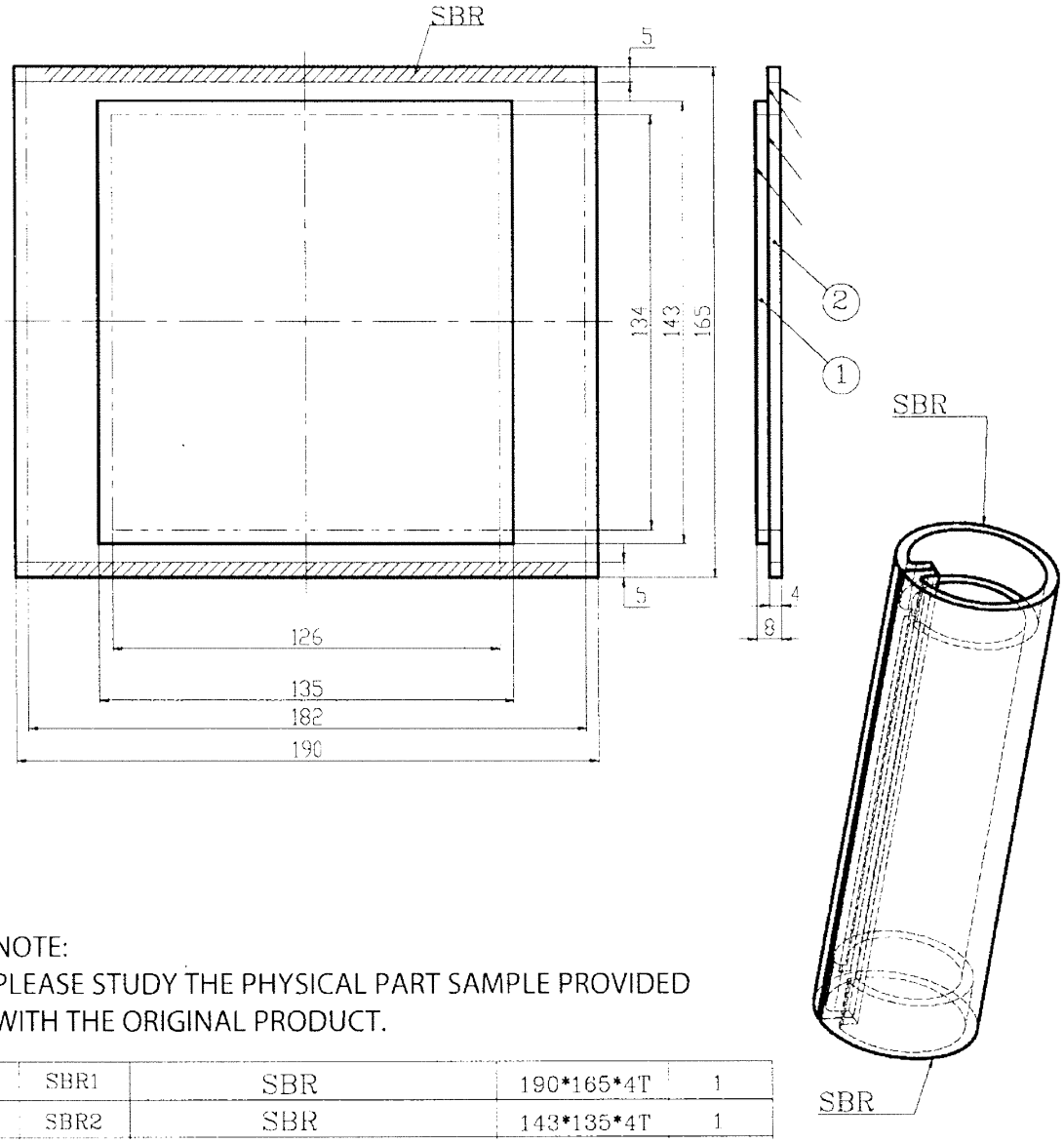
SNo.	REGION	REVISION	DATE	SIGN
3	----	DRAWING REDRAWN	17/12/12	

REVISIONS

ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

DGN		NOM	HAND GRIP — I.D. ≈ Ø 22 mm, O.D. ≈ Ø 34 mm
DRN		MTL	P.V.C. MOULDED, COLOUR GREY
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	MOULDED SMOOTH
APP		DRG No:-	L A 24 — SHEET 1OF1
DATE	30 - 09 - 80		

0 6 K 6 0 17



NOTE:
PLEASE STUDY THE PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT.

2	SBR1	SBR	190*165*4T	1
1	SBR2	SBR	143*135*4T	1

SNo.	REGION	REVISION	DATE	SIGN
R E V I S I O N S				

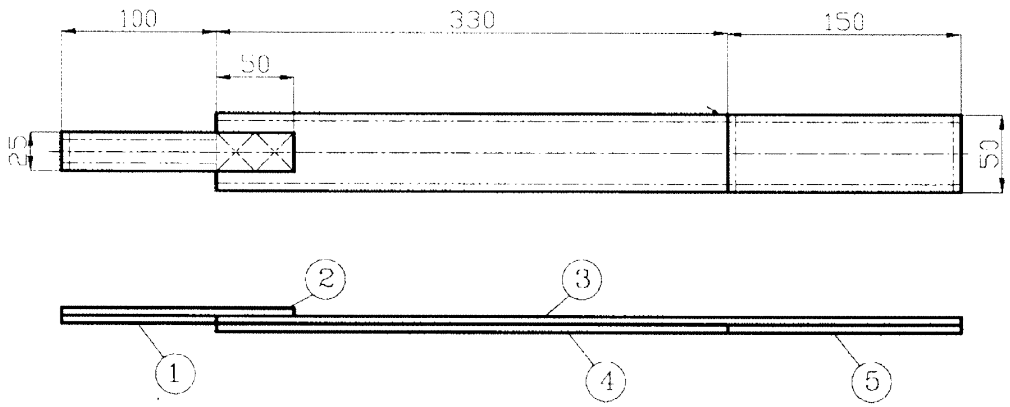
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

Tolerence wherever not specified

Dim	Tolerence Range		
1 - 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

THIS DRAWINGS AND SPECIFICATION ARE THE PROPERTY OF ALIMCO AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT PRIOR PERMISSION.

DGN		NOM	FOOTREST SUPPORT COVER
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	TD 2 B 36 0 06
DATE	09.02.2018	REV	
		SHEET	1OF1



NOTE:
PLEASE STUDY THE PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT.

SNo.	REGION	REVISION	DATE	SIGN
R E V I S I O N S				

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

Tolerence wherever not specified

Dim	Tolerence Range		
1 - 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

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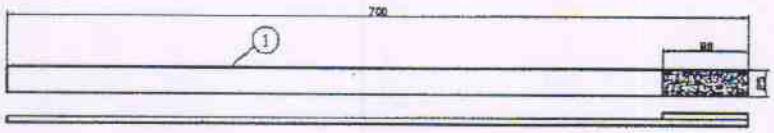
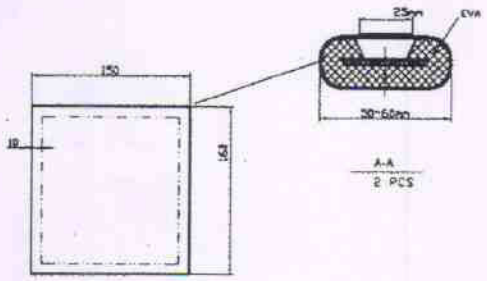
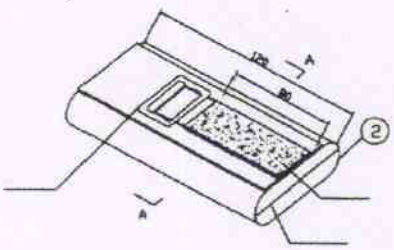
DGN		NOM	FOOTREST VERTICAL STRAP
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	TD 2 B 36 0 07
DATE	09.02.2018	REV	SHEET 1OF1







SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

Tolerence wherever not specified

Dim	Tolerence Range		
1 - 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

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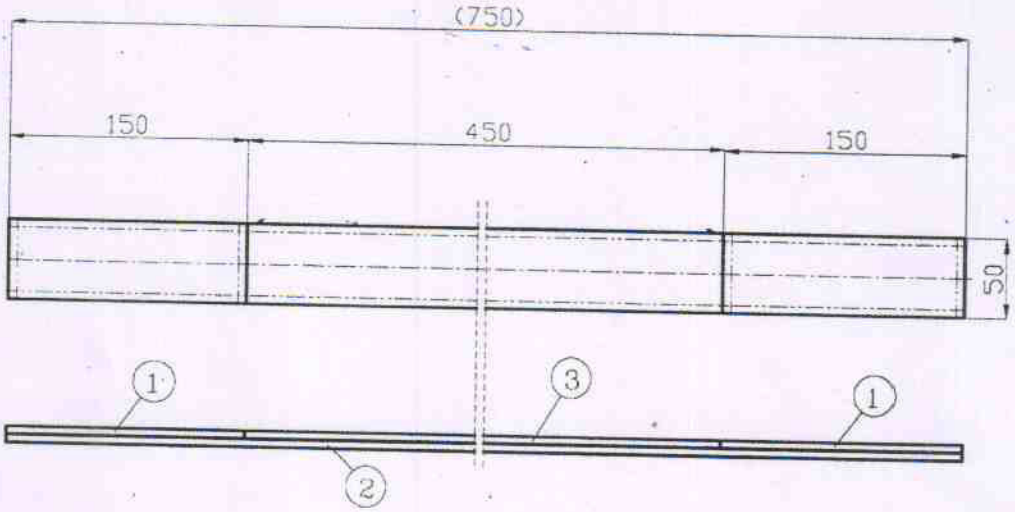
DGN	
DRN	
CHD	
DIM	IN mm
SCALE	NTS
APP	
DATE	09.02.2018

NOM	FOOTREST HORIZONTAL STRAP
MTL	
HEAT TREATMENT	
SURFACE TREATMENT	
DRG No:-	TD 2 B 36 0 08
REV	
SHEET	1OF1



NOTE:
PLEASE STUDY THE PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT.

SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

Tolerence wherever not specified

Dim	Tolerence Range		
1 - 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

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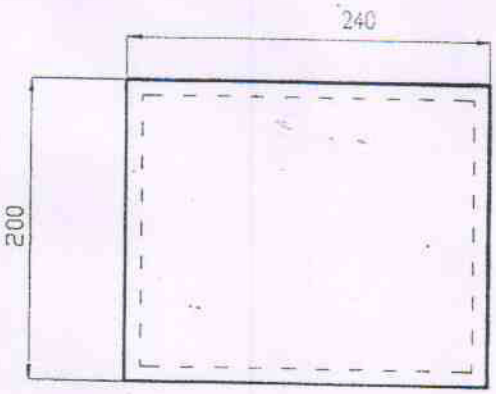
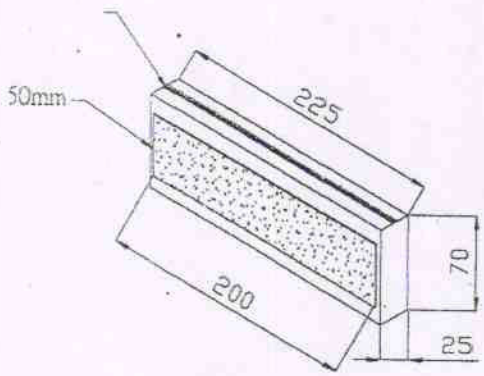
DGN		NOM	CALF STRAP
DRN		MTL	
CHD		HEAT TREATMENT	
DIM	IN mm	SURFACE TREATMENT	
SCALE	NTS		
APP			
DATE	09.02.2018	DRG No:- TD 2 B 36 0 09	REV / SHEET 1OF1





SNo.	REGION	REVISION	DATE	SIGN
R E V I S I O N S				

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LUMBO-SACRAL PAD
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 36 0 13	SHEET 1OF1
DATE			

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TD 2 B 36 0 Z0 - UPHOLSTERY KIT FOR TD 2 B 36 0 00

Rough Terrain			
S.No.	**ALIMCO Code**	**Nomenclature**	**Qty.**
1	TD2B37K02	CUSHION COVER	1
2	TD2B36D04	BACKREST COVER	1
3	TD2B36009	CALF STRAP	1
4	TD2B36008	FOOTREST HORIZONTAL STRAP	2
5	TD2B36007	FOOTREST VERTICAL STRAP	2
6	TD2B36006	FOOTREST SUPPORT COVER	1
7	TD2B36013	LUMBO-SACRAL PAD	1

SNo.	REGION	REVISION	DATE	SIGN
		R E V I S I O N S		

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	ROUGH TERRAIN UPHOLSTERY KIT
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 36 0 Z0	REV 0 / SHEET 1OF1
DATE	15.01.2018		

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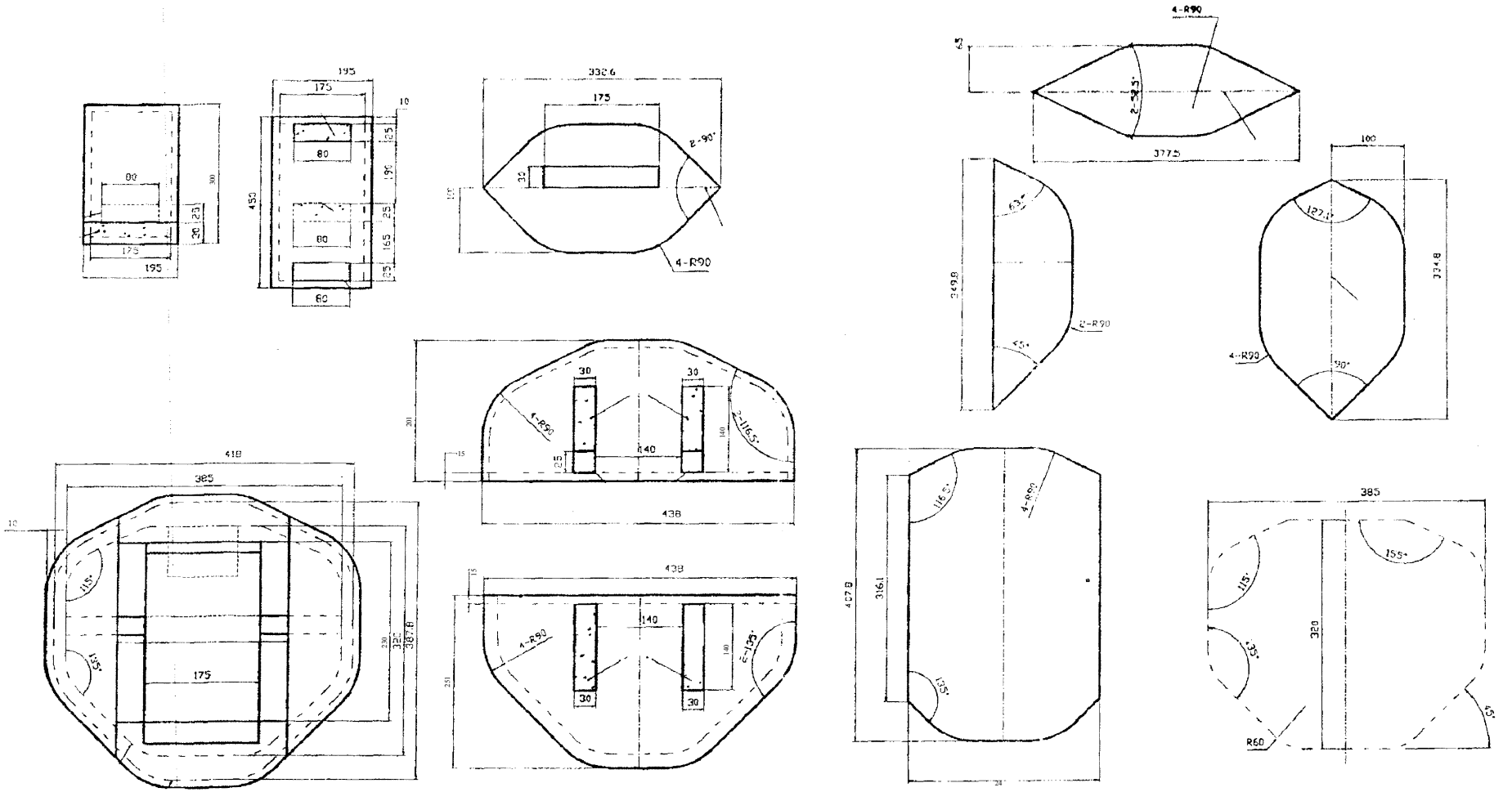


Tolerence wherever not specified

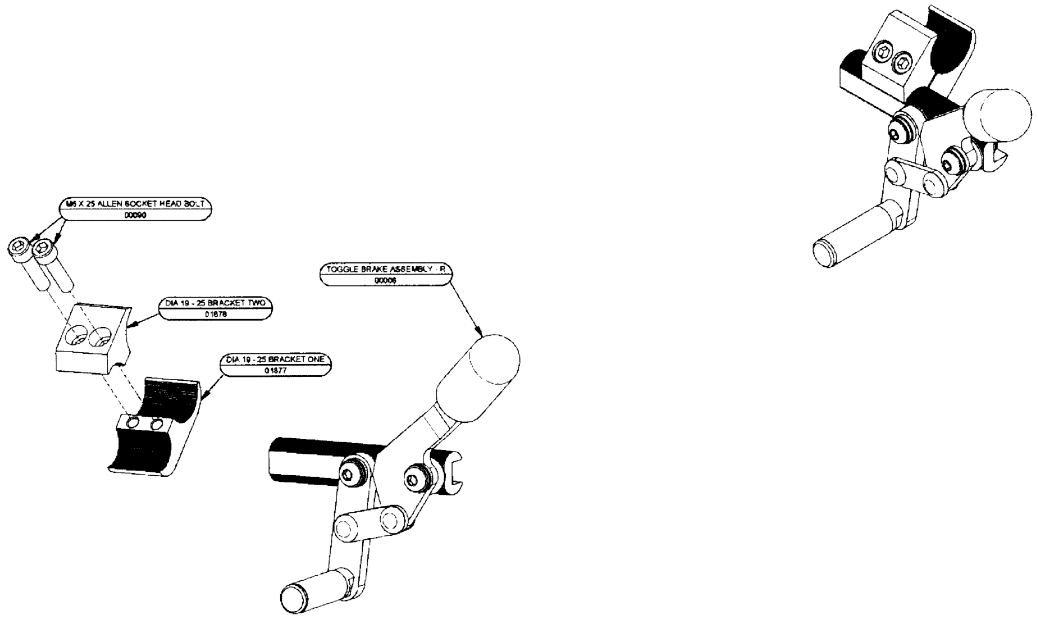
Dim	Tolerence Range		
1 - 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

SNo.	REGION	REVISION	DATE	SIGN
		REVISIONS		

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BACK REST COVER
DRN		MTL	NYLON 200D, FIRE RETARDENT
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS	DRG No:-	TD 2 B 36 D 04
APP		REV	0
DATE	15.01.2018	SHEET	1 OF 1

SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 36 K A0	TOGGLE BRAKE ASSY - R	1	
2	TD 2 B 36 K 01	Ø19-25 BRACKET ONE	1	
3	TD 2 B 36 K 02	Ø19-25 BRACKET ONE	1	
4		M6x25 ALLEN SOCKET HEAD BOLT	2	



123

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PART BREAKDOWN
EDITION FEB 2013

TOGGLE BRAKE RIGHT (25MM CLAMP) - GENERAL ASSEMBLY

TOGGLE BRAKE GA (DIA 25) - R
PART NR 01876 REVISION 01

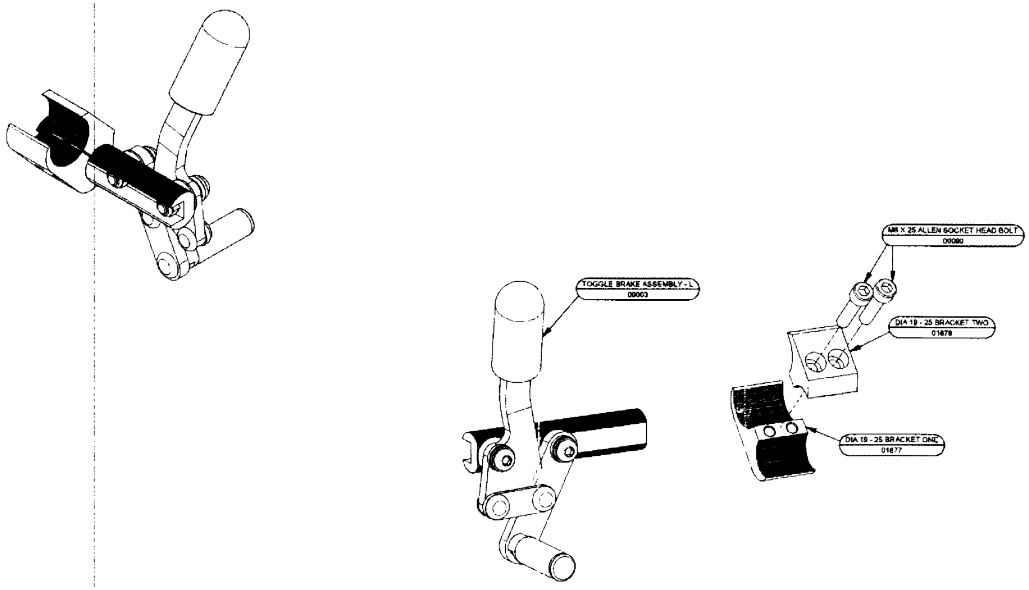
motivation
FREEDOM THROUGH MOBILITY

SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	TOGGLE BRAKE - RIGHT
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 36 K 00	REV 0 / SHEET 1 OF 1
DATE	15.01.2018		



SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 36 L A0	TOGGLE BRAKE ASSY - R	1	
2	TD 2 B 36 K 01	Ø19-25 BRACKET ONE	1	
3	TD 2 B 36 K 02	Ø19-25 BRACKET ONE	1	
4		M6x25 ALLEN SOCKET HEAD BOLT	2	

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PART BREAKDOWN
EDITION FEB 2013

TOGGLE BRAKE LEFT (25MM CLAMP) - GENERAL ASSEMBLY

TOGGLE BRAKE GA (DIA 25) - L
PART NR 01873 REVISION 01

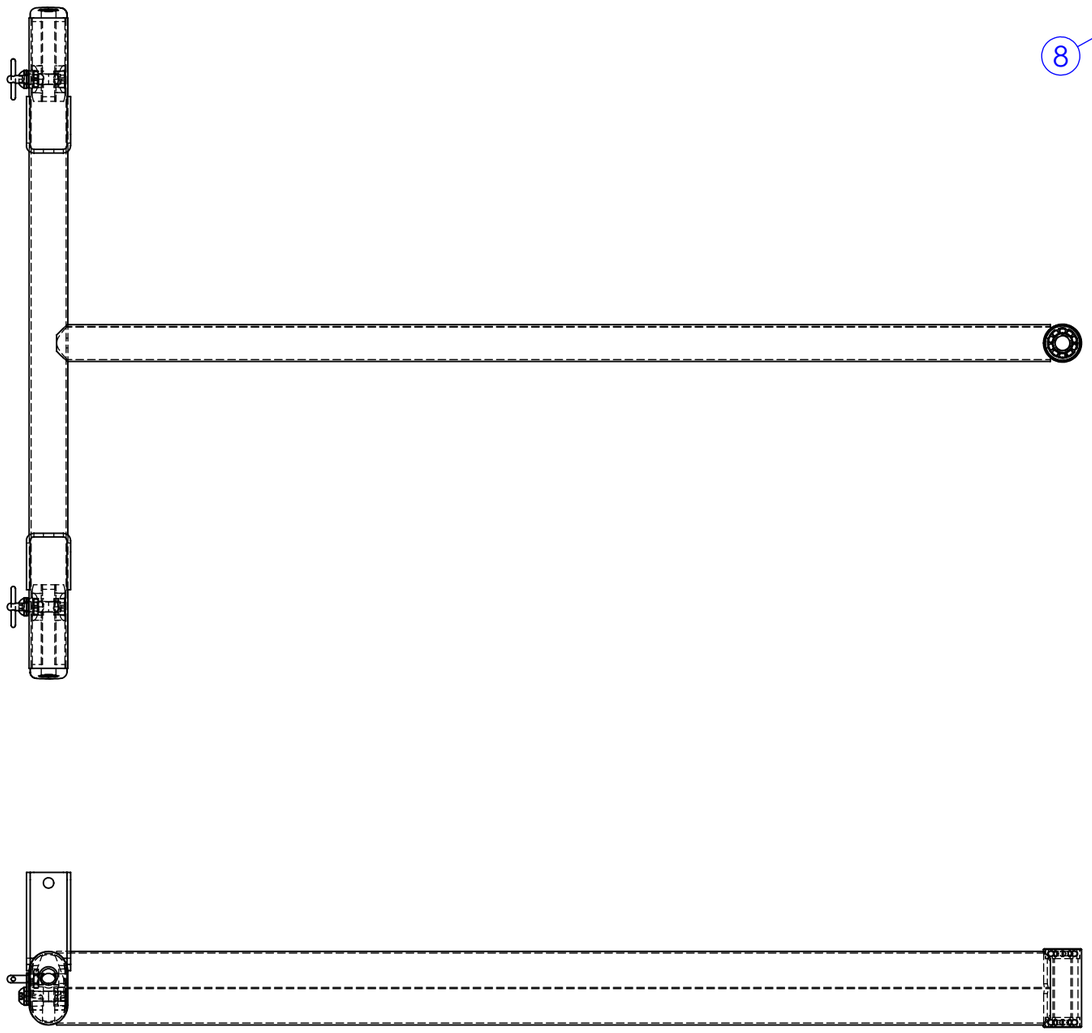
motivation
FREEDOM THROUGH MOBILITY

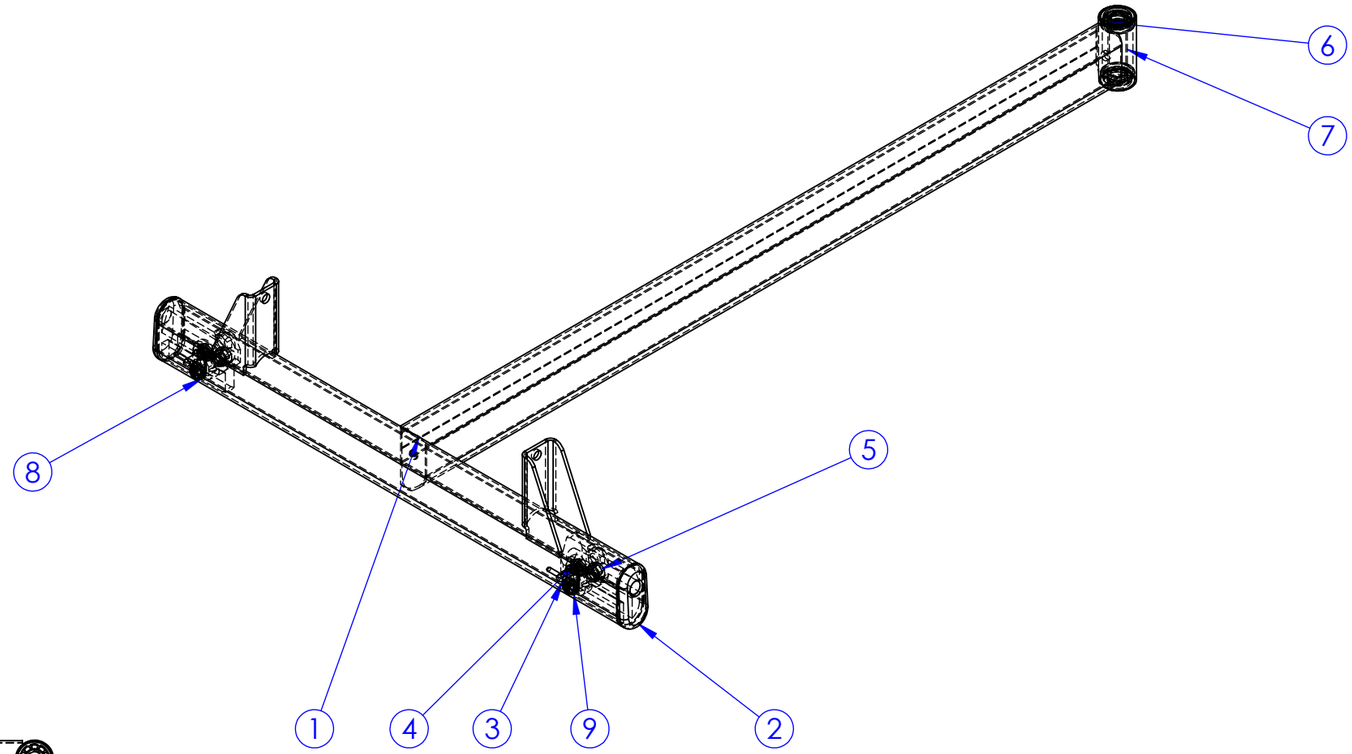
SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	TOGGLE BRAKE - LEFT
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 36 L 00	REV 0
DATE	15.01.2018		SHEET 1 OF 1





ITEM NO.	PART NUMBER	DESCRIPTION	
1	TD2B36AA0	WM3-01 FRAME WELD ASSEMBLY	1
2	TD2B36A01	REAR AXLE BLOCK - DIE CAST REAR AXLE BLOCK - DIE CAST	2
3	TD2B36AB0	LOCK BOLT - REAR AXLE - ASSEMBLY	2
4	BC57	Hex Thin Nut M8 IS:1364 (Part 4) Zinc Plated Blue 5-8µ IS:1573	2
5	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	2
6	GC98	6001 ZZ C3 RADIAL BALL BEARING	2
7	TD2B36A02	SPACER 48mm	1
8	BC59	8 mm Spring Lock Washer IS:3063 (Type B) Zinc Plated Blue 5-8µ IS:1573	2
9	BC44	Hex Socket Button Head Screw M8x30 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 **ISO: 2768-mK**		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		**NOM.**		**WM3-01 FRAME PRE-ASSEMBLY**	
SCALE					
SHEET		**DRG NO.**		**TD2B36A00**	
REV. NO.					

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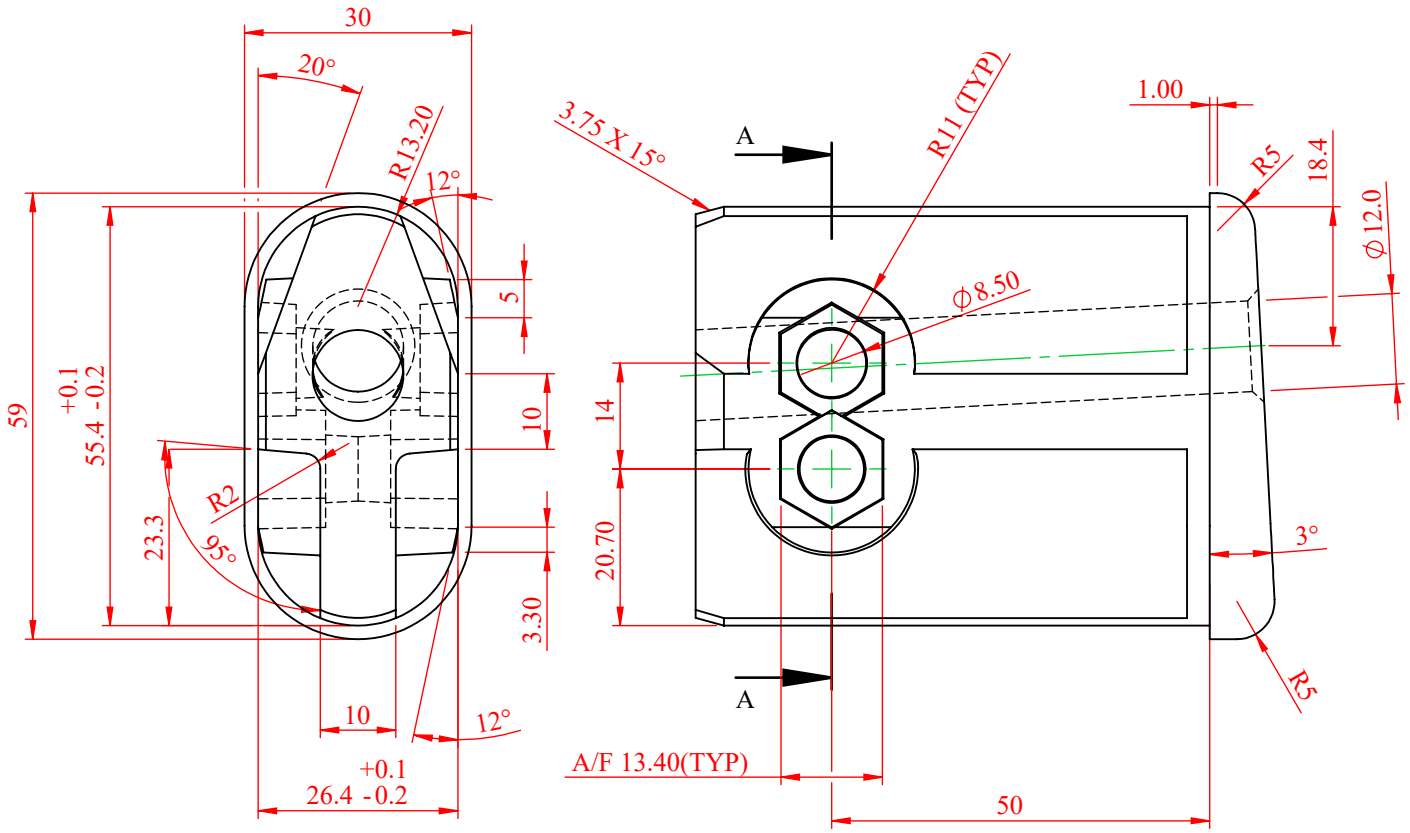
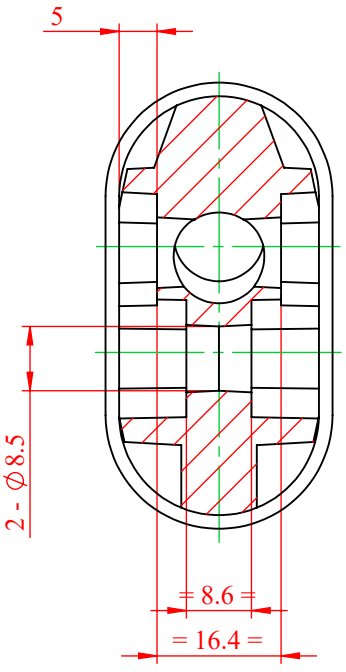
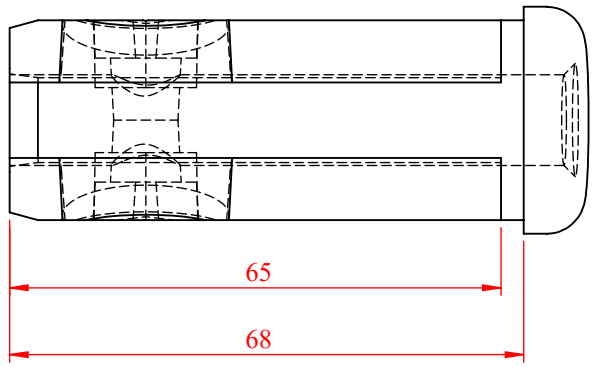
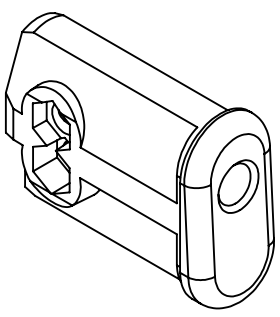




SECTION A-A



DEVELOPMENT DRAWING



DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	P. THAKUR	DT		MATERIAL	LM-6
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	10.10.19	SUR. TRT.	ANODIZED COLOUR BLACK(RAL9005)DFT30µ
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		REAR AXLE BLOCK DIE CAST	
SCALE	1:1				
SHEET		DRG NO.		TD2B36A01	
REV. NO.					

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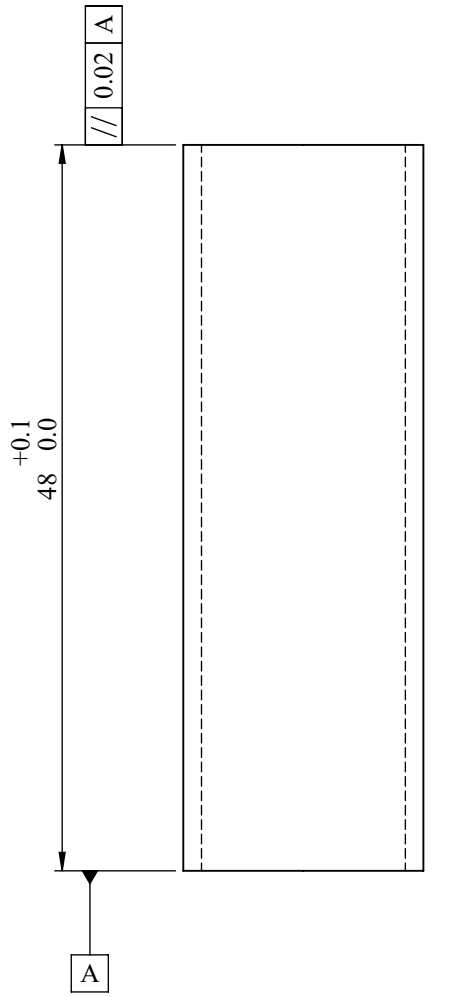
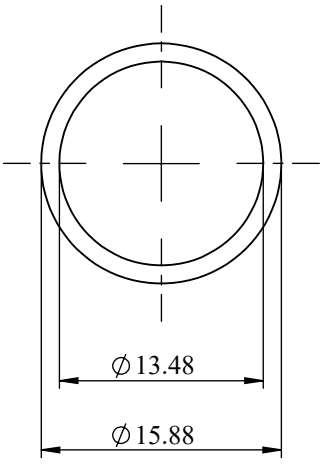
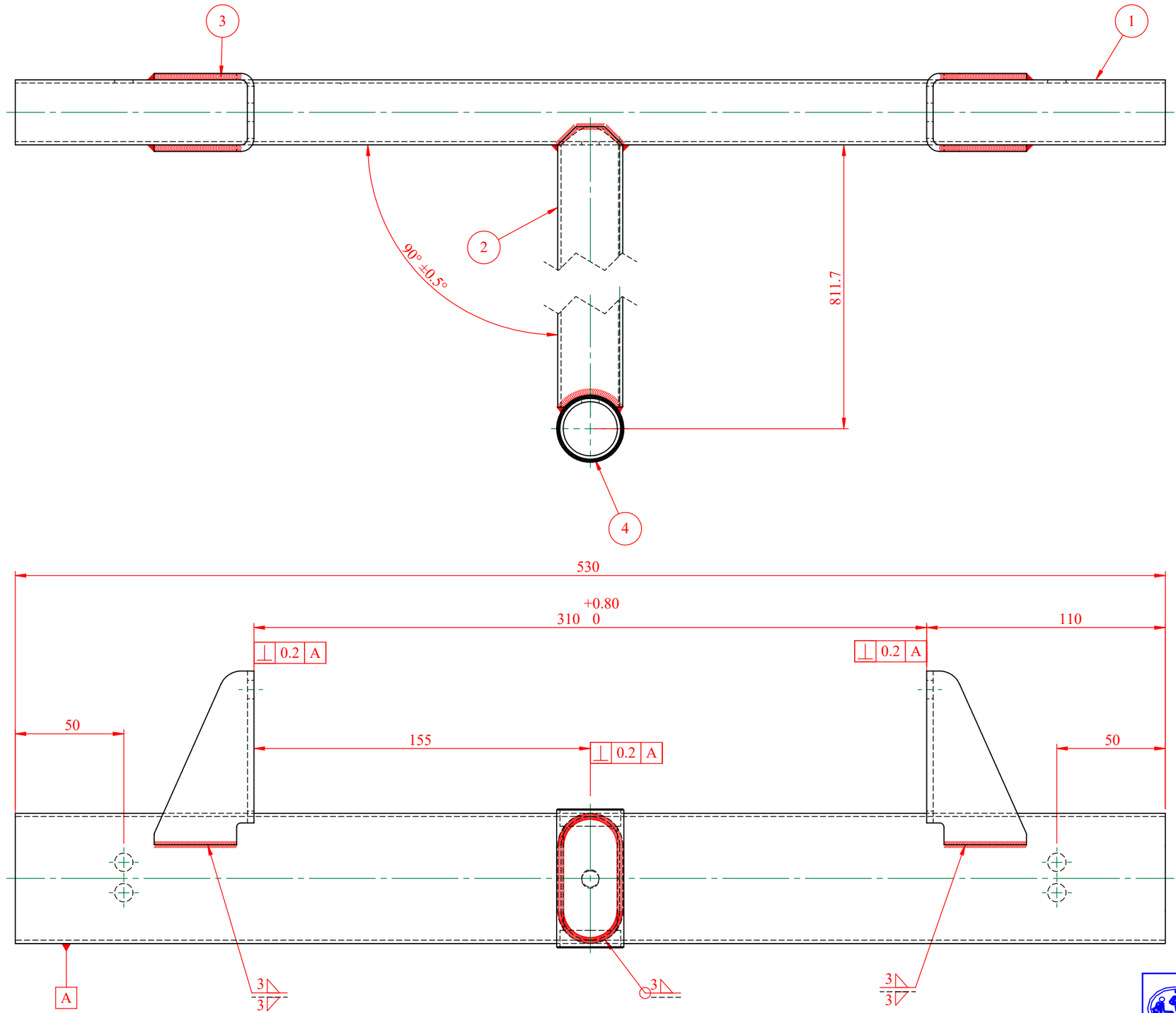
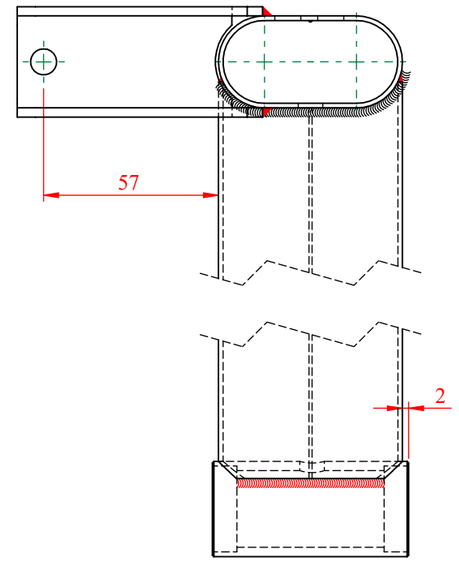




ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ASTM 10NB STD (Ø17.1 x 2.31mm THK), AF80
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		SPACER 48mm	
SCALE					
SHEET		DRG NO.		TD2B36A02	
REV. NO.					





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36AA3	CROSS TUBE - FRAME	1
2	TD2B36AA2	MAIN TUBE - FRAME	1
3	TD2B36AA4	REAR BRACKET - FRAME	2
4	TD2B36AA1	CASTOR BARREL	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	
		IS: 2102 **ISO: 2768-mK**		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		**NOM.**		**FRAME WELD ASSEMBLY**	
SCALE	1:10				
SHEET	1 OF 1	**DRG NO.**		**TD2B36AA0**	
REV. NO.					

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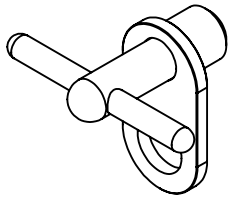

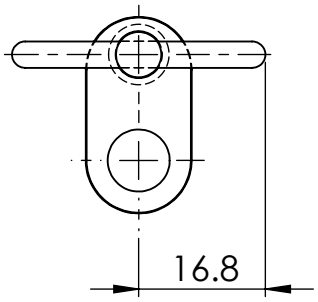

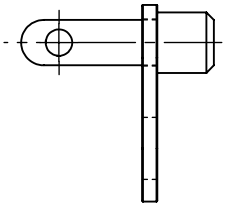

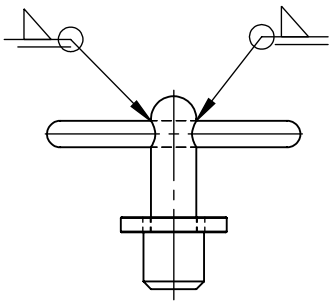

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36AB1	LOCK BOLT - REAR AXLE - CAPTIVE WASHER	1
2	TD2B36AB3	LOCK BOLT - REAR AXLE - SHAFT	1
3	TD2B36AB2	LOCK BOLT - REAR AXLE - HANDLE	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 **ISO: 2768-mK**		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		**NOM.**		**LOCK BOLT - REAR AXLE ASSEMBLY**	
SCALE					
SHEET		**DRG NO.**		**TD2B36AB0**	
REV. NO.					

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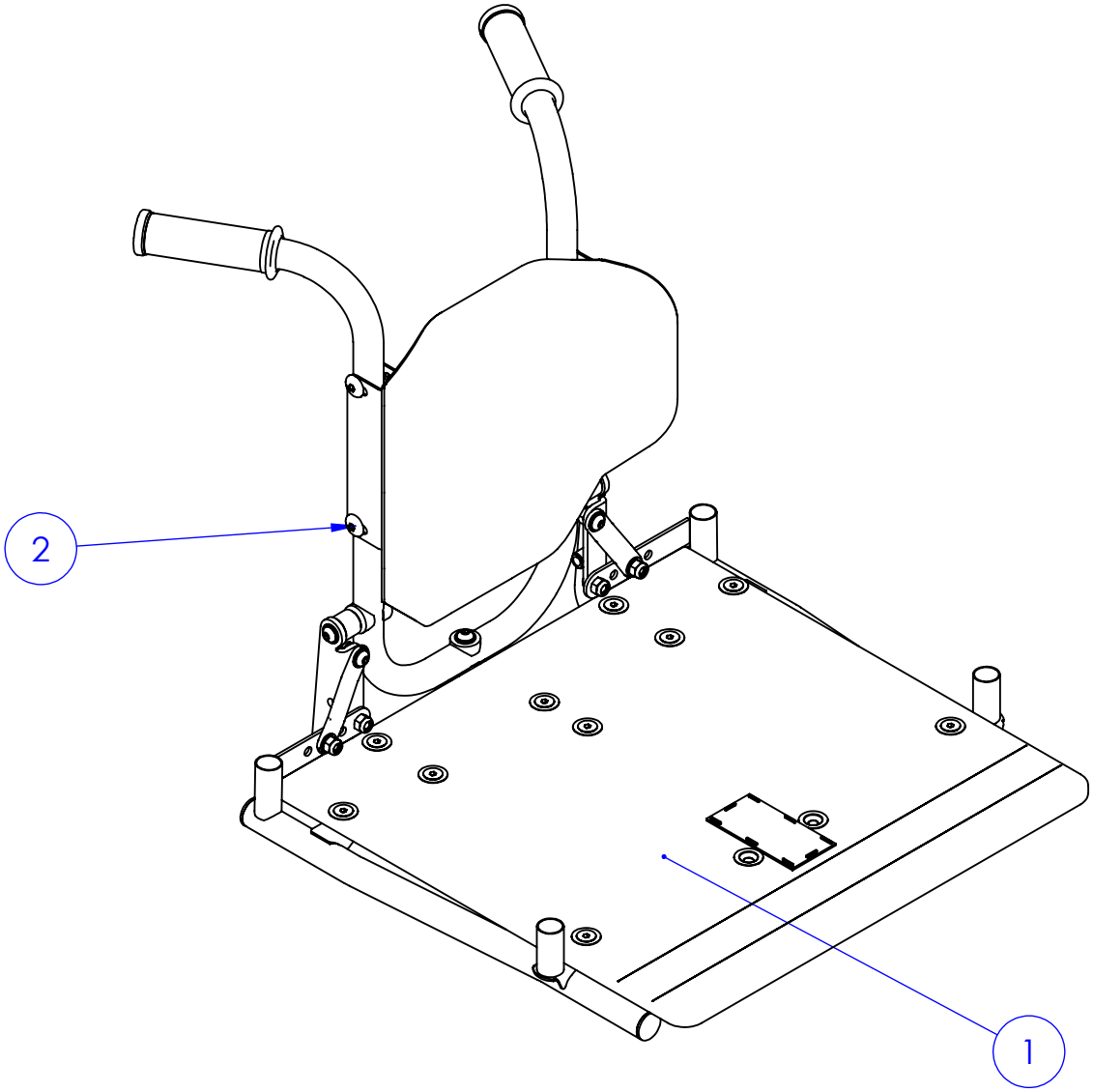
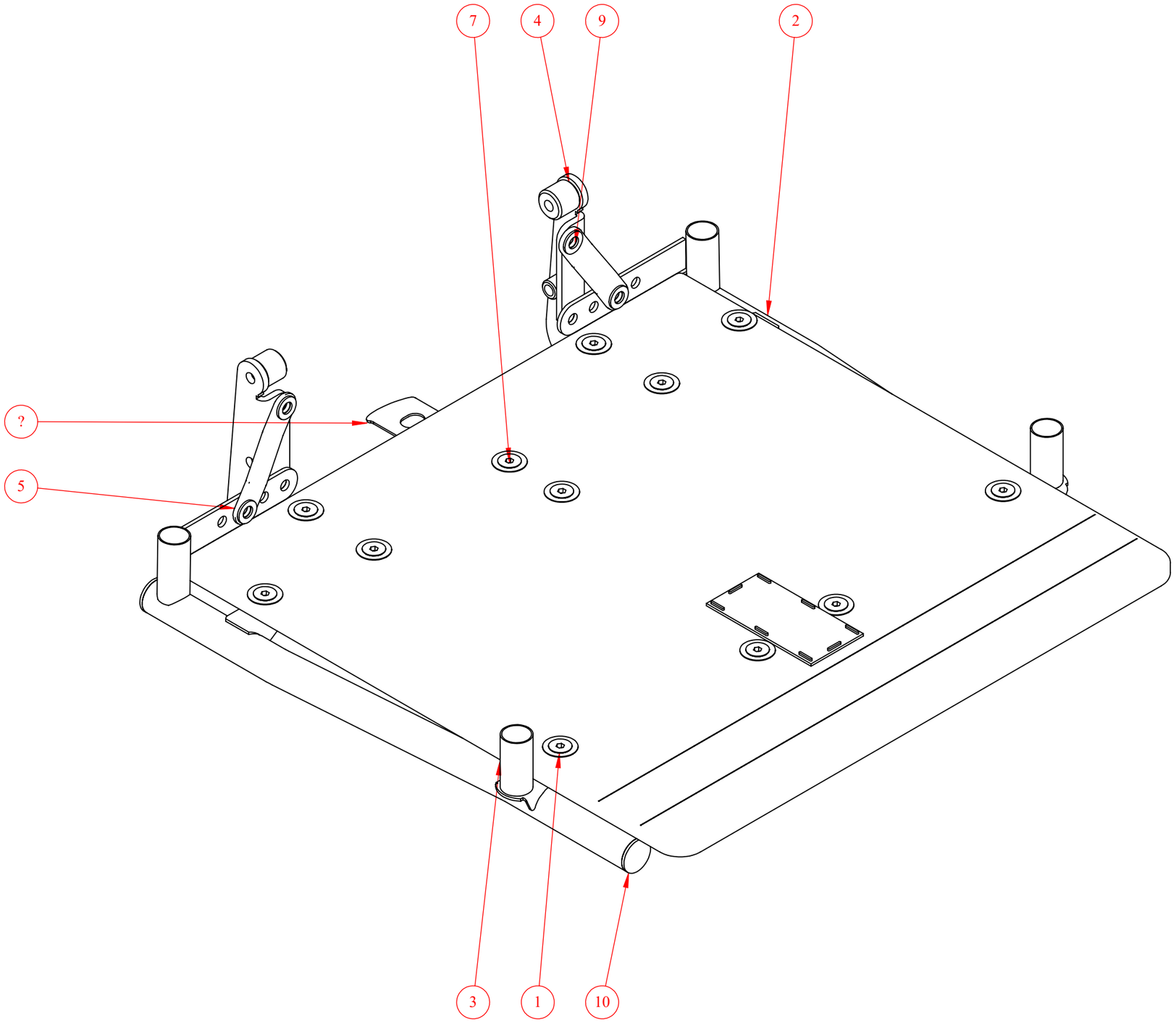


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36C00	SEAT BOARD FRAME MOUNTED ASSY.	1
2	TD2B36D00	SOLID BACKREST FINAL ASSEMBLY	1
3	BC58	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	5
4	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	4
5	BC48	Hex Socket Button Head Screw M8x70 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

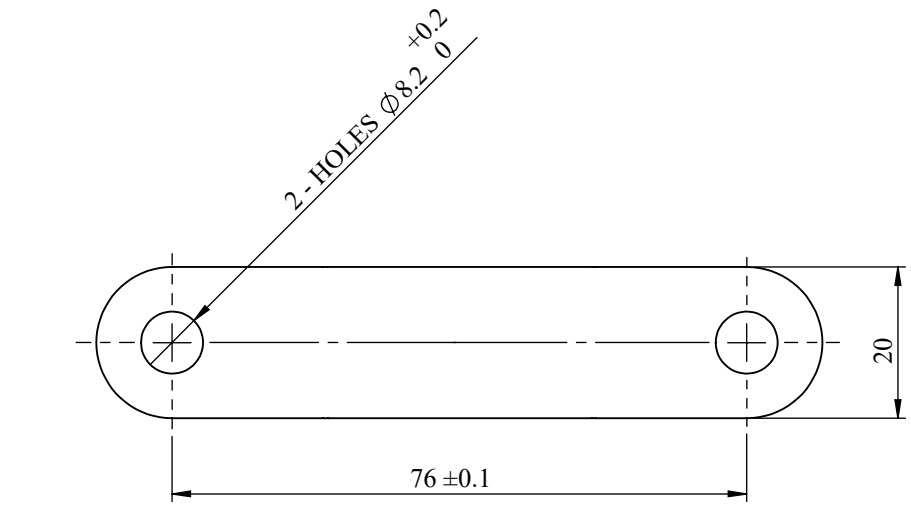
DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		WM3-01 SEATING BACKREST PRE-ASSEMBLY	
SCALE					
SHEET		DRG NO.		TD2B36B00	
REV. NO.					

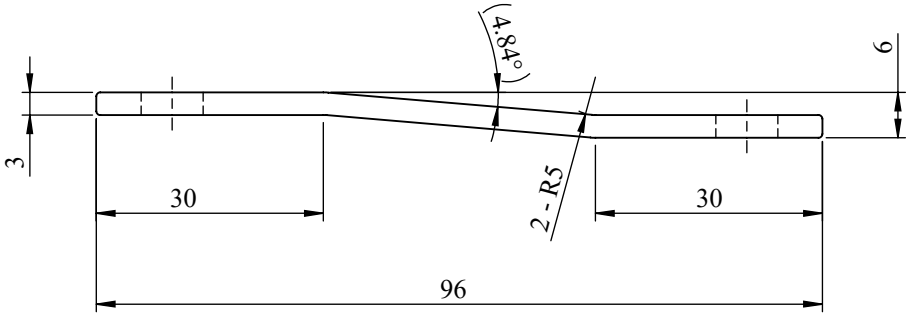


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36CD0	SEAT BOARD ASSY.	1
2	TD2B36CA0	TUBULAR ARMREST MOUNTING WELD ASSY - L	1
3	TD2B36CB0	TUBULAR ARMREST MOUNTING WELD ASSY - R	1
4	TD2B36CC0	REAR SEAT SUPPORT WELDMENT	2
5	TD2B36C01	ANGLED FLAT STRIP	2
6	TD2B36C02	LOCKING STRIP	1
7	IS 6761 - M8 x 25-N		12
8	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	12
9	BC58	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	12
10	TD2B37A02	25 DIA END PLUG (23.4 ID)	4

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		SEAT BOARD FRAME MOUNTED ASSY.	
SCALE					
SHEET		DRG NO.		TD2B36C00	
REV. NO.					





DEVELOPMENT DRAWING

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET MS CR1 GD'O' IS:513 THICK 3mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	15.01.18	SUR. TRT.	POWDER COATED COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		ANGLED FLAT STRIP	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36C01	
REV. NO.					

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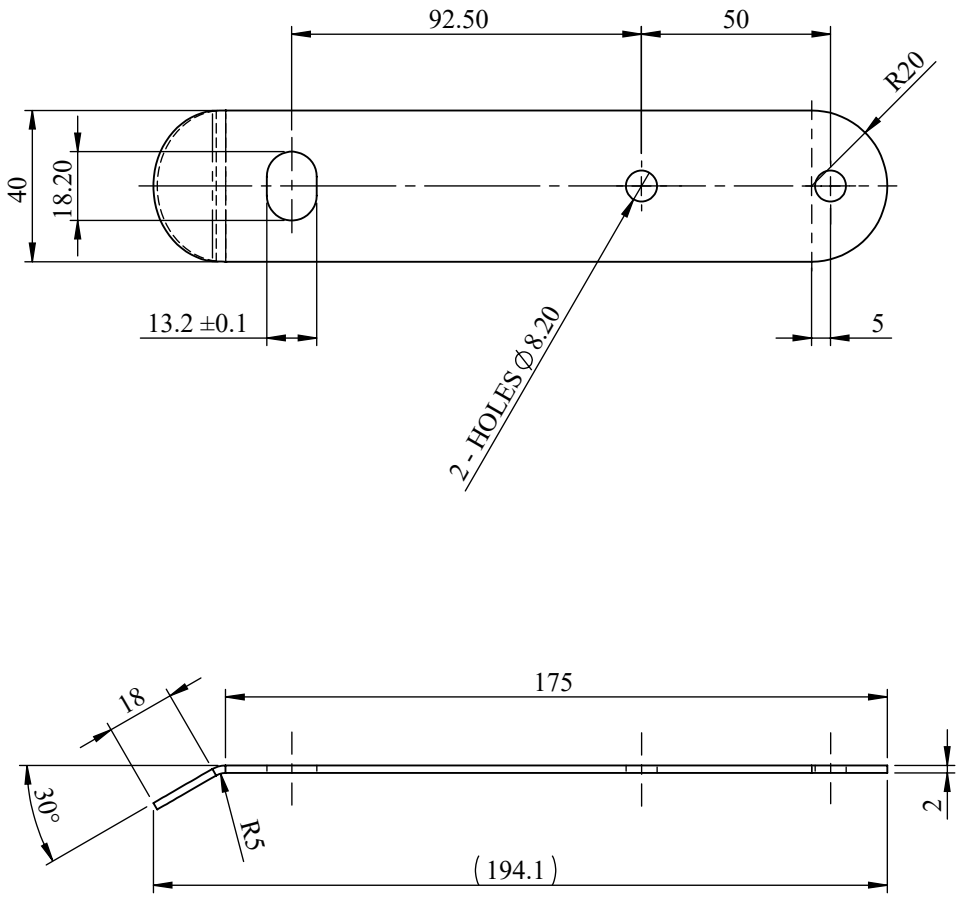


DEVELOPMENT DRAWING

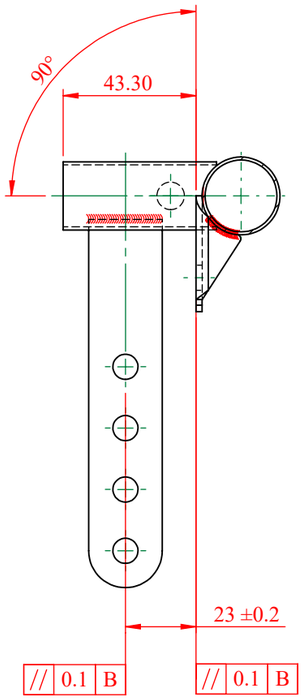
NOTE:

- HARDENING 45-48 HRc

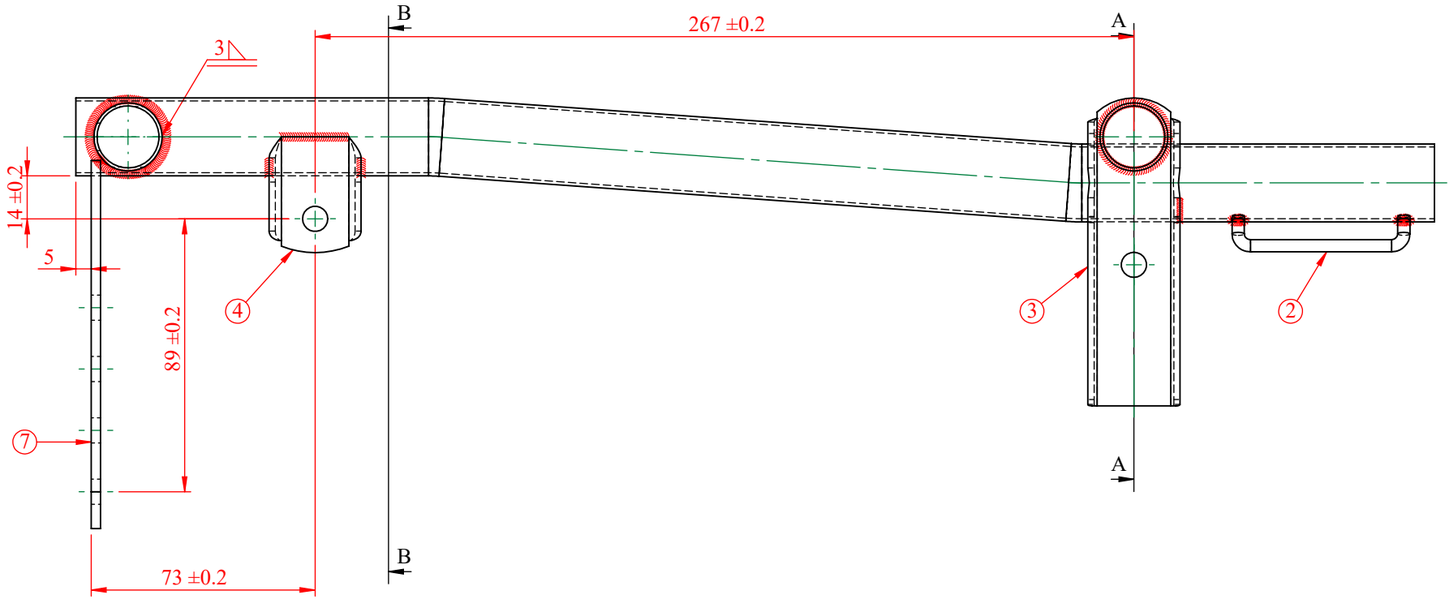
DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

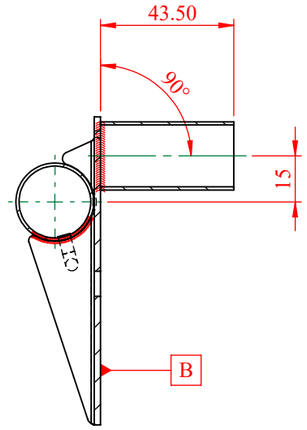
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	STRIP SPRING STEEL GD-4 ANNEALED IS:2507 THICK 2mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	15.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		LOCKING STRIP	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B36C02	
REV. NO.					

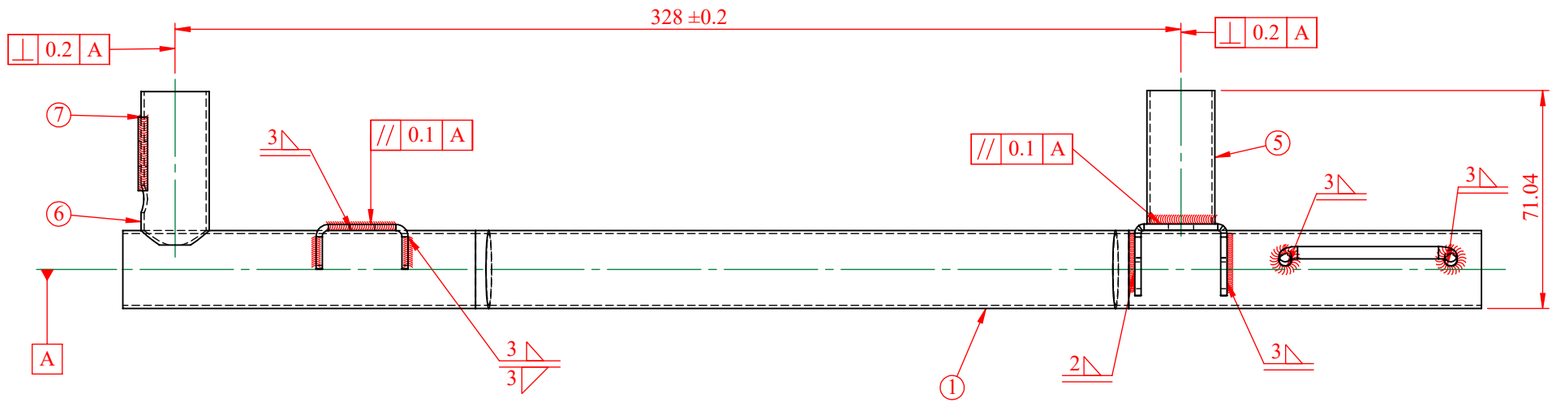


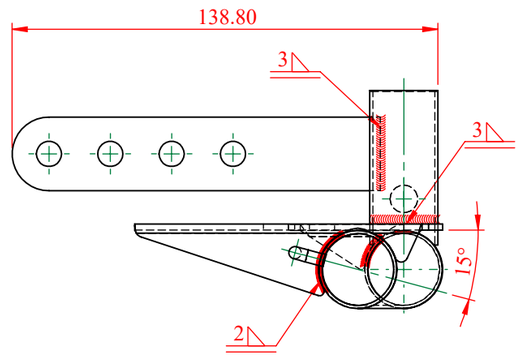
SECTION B-B
SCALE 1 : 2





SECTION A-A
SCALE 1 : 2





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36CA1	ARMREST MOUNTING ANGLED TUBE - L	1
2	TD2B37B02	STRAP MOUNTING - SINGLE	1
3	TD2B36CA2	LONG MOUNTING BRACKET	1
4	TD2B36CA3	SHORT MOUNTING BRACKET	1
5	TD2B36CA5	TUBULAR MOUTING SOCKET - SHORT	1
6	TD2B36CA6	TUBULAR MOUTING SOCKET - LONG	1
7	TD2B36CA4	ADJUSTMENT FLAT STRIP	1

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	POWDER COATING, COLOUR AS APPROVED

IS: 2102
ISO: 2768-mK

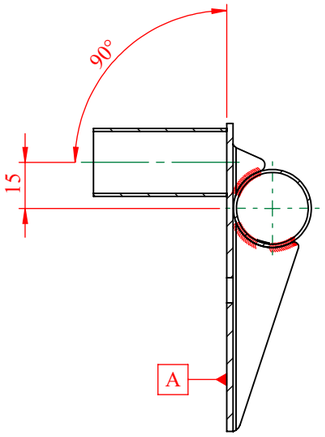
DEBURR ALL SHARP EDGES 0.5x45°

ALL DIMENSIONS ARE IN mm

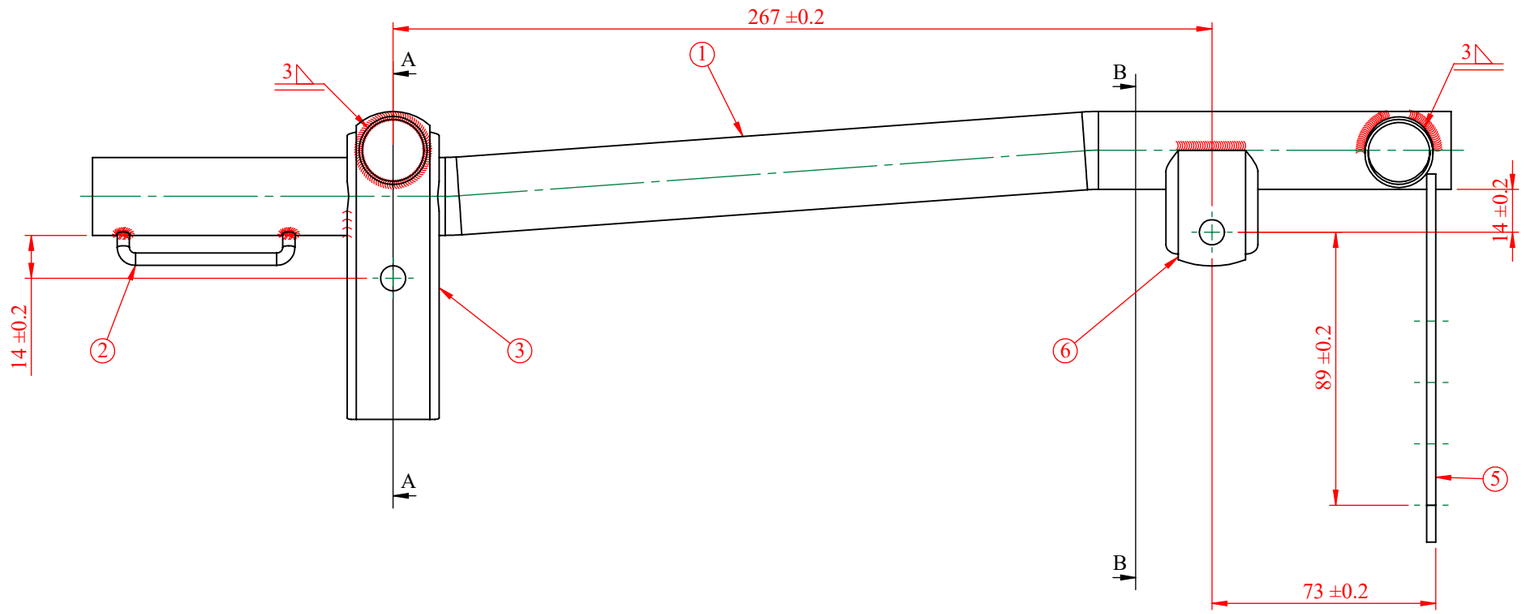
WEIGHT	
SCALE	1:2
SHEET	1 OF 1
REV. NO.	

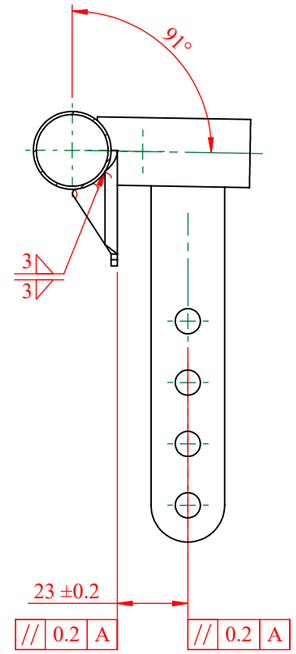
NOM. TUBULAR ARMREST MOUNT WELD ASSY-R

DRG NO. TD2B36CA0

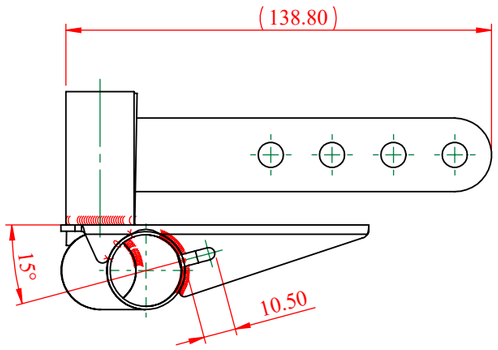


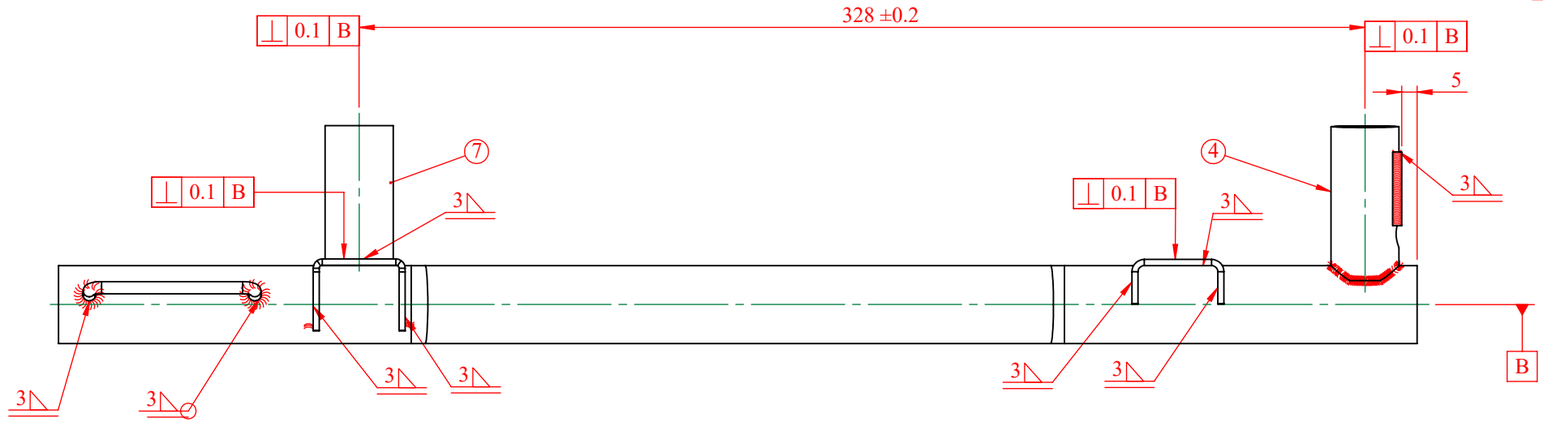
SECTION A-A
SCALE 1 : 2

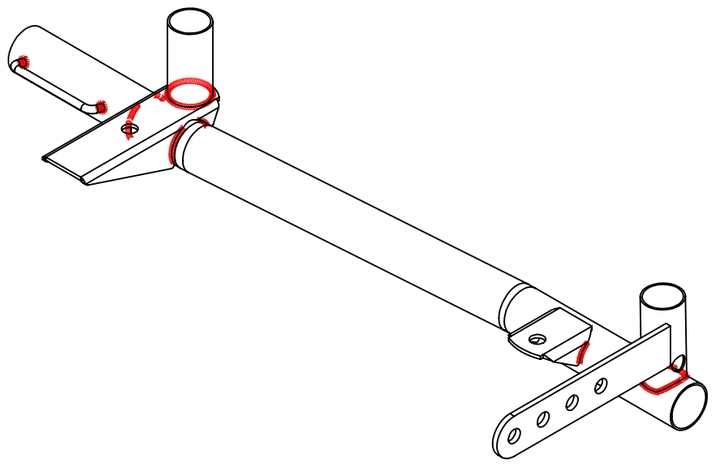




SECTION B-B
SCALE 1 : 2





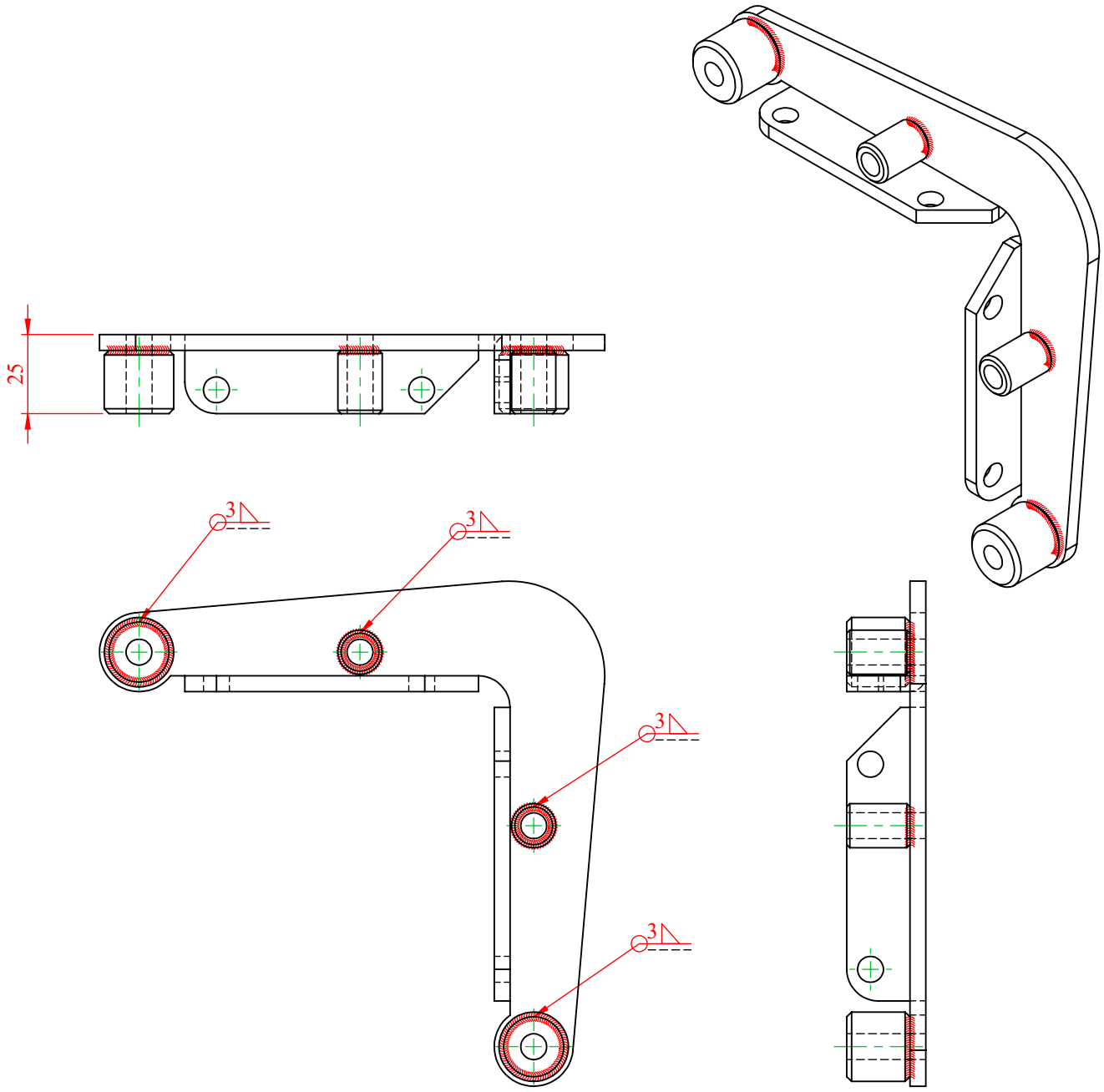


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36CB1	ARMREST MOUNTING ANGLED TUBE - R	1
2	TD2B37B02	STRAP MOUNTING - SINGLE	1
3	TD2B36CA2	LONG MOUNTING BRACKET	1
4	TD2B36CA6	TUBULAR MOUTING SOCKET - LONG	1
5	TD2B36CA4	ADJUSTMENT FLAT STRIP	1
6	TD2B36CA3	SHORT MOUNTING BRACKET	1
7	TD2B36CA5	TUBULAR MOUTING SOCKET - SHORT	1

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	POWDER COATING, COLOUR AS APPROVED
				IS: 2102 ISO: 2768-mK	DEBURR ALL SHARP EDGES 0.5x45°
					ALL DIMENSIONS ARE IN mm
WEIGHT		NOM.		TUBULAR ARMREST MOUNT WELD ASSY-R	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B36CB0	
REV. NO.					



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36CC1		1
2	TD2B36CC2		2
3	TD2B36CC3		2

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	POWDER COATED, COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		REAR SEAT SUPPORT WELDMENT	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B36CC0	
REV. NO.					

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

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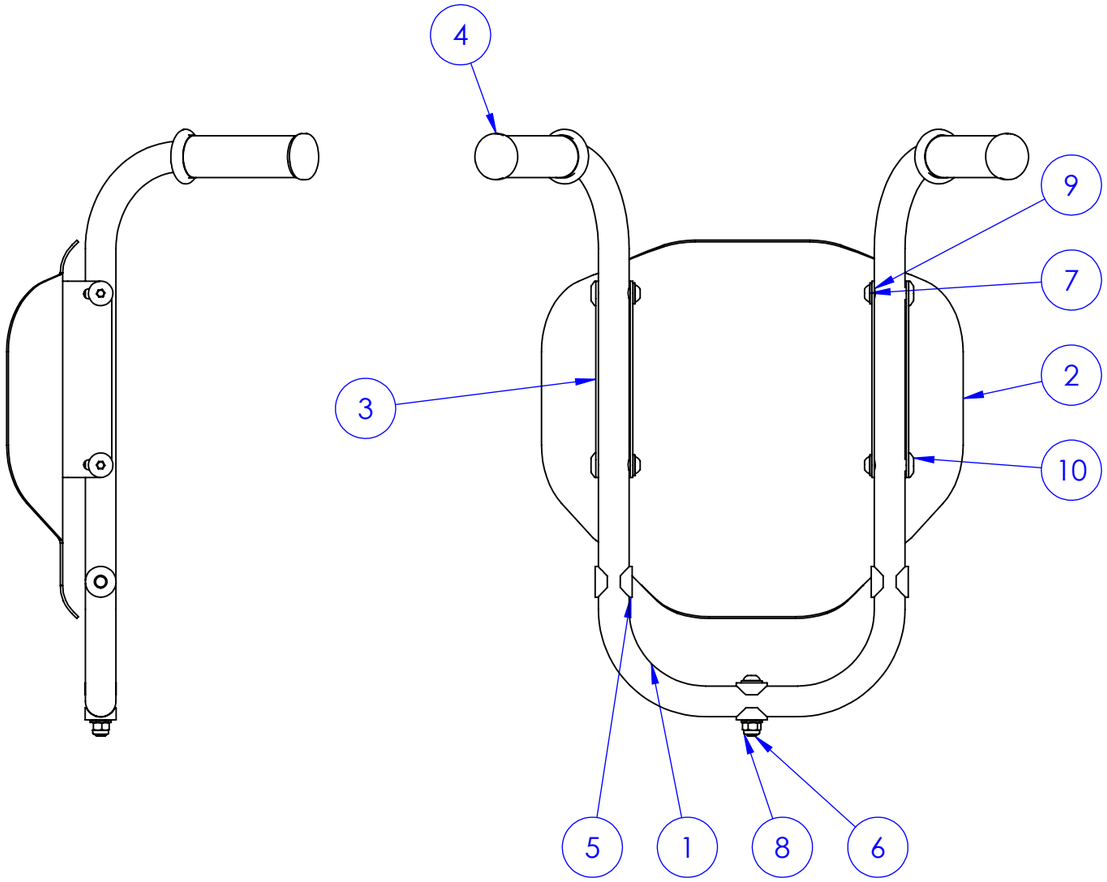

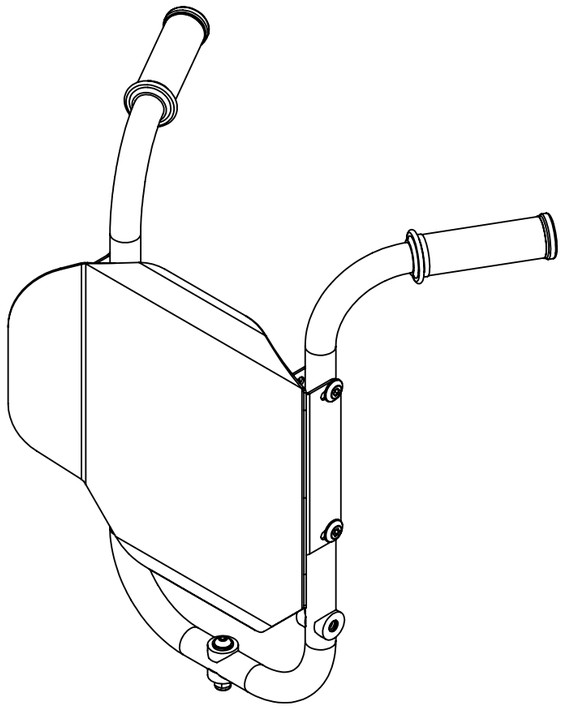

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36D01	PUSH HANDLE TUBE,	1
2	TD2B36DA1	BACKREST SHELL PANEL	1
3	TD2B36DA2	BACKREST SHELL BRACKET	2
4	LA24		2
5	TD2B36B01	8 MM SADDLE WASHER BLACK PLASTIC OD 25 MM	6
6	BC47	Hexagon Socket Button Head Screw ISO 7380-M8x45	1
7	BC58	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	6
8	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	1
9	BC44	Hex Socket Button Head Screw M8x30 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	4
10	TD2B36011	M8 ALLEN CAP NUT	4

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		**NOM.**		**SOLID BACKREST FINAL ASSEMBLY**	
SCALE					
SHEET		**DRG NO.**		**TD2B36D00**	
REV. NO.					

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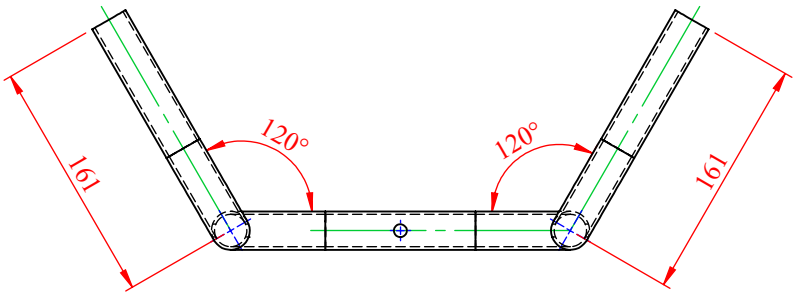

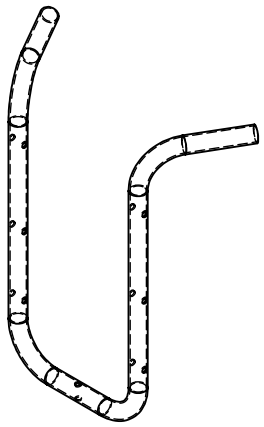

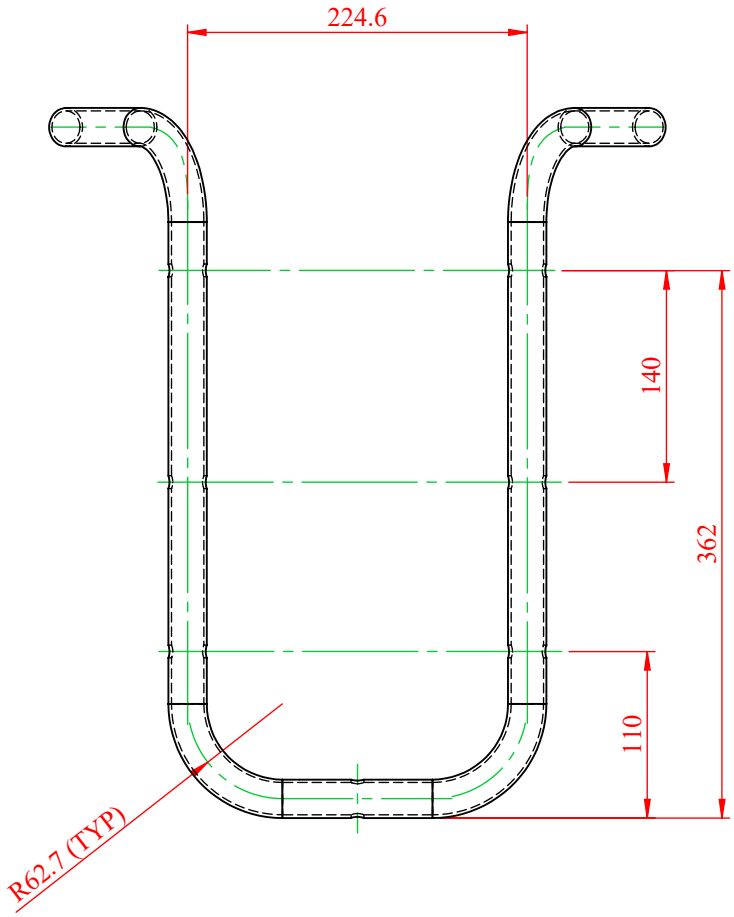

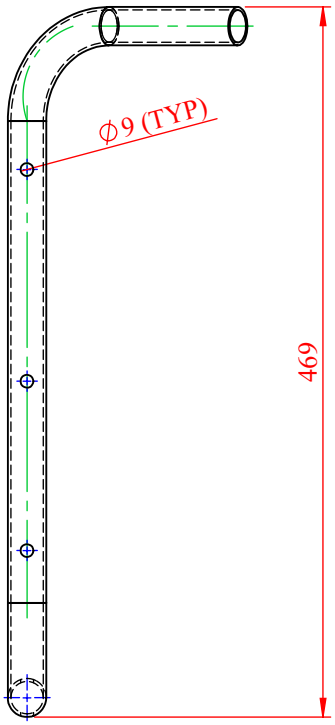

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ALUMINIUM TUBE Ø25.4x2 THK, 6063-T6 (BENDING QUALITY)
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		PUSH HANDLE TUBE	
SCALE					
SHEET		DRG NO.		TD2B36D01	
REV. NO.					

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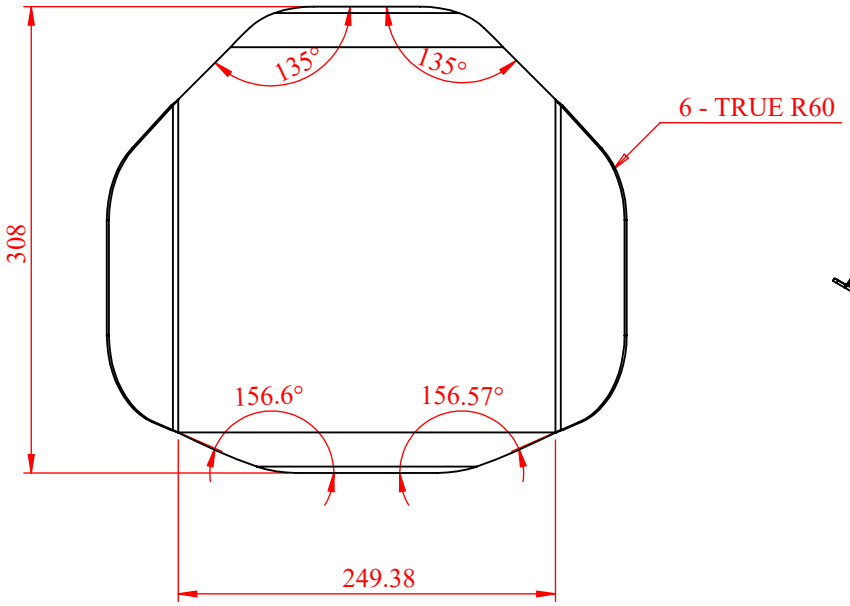

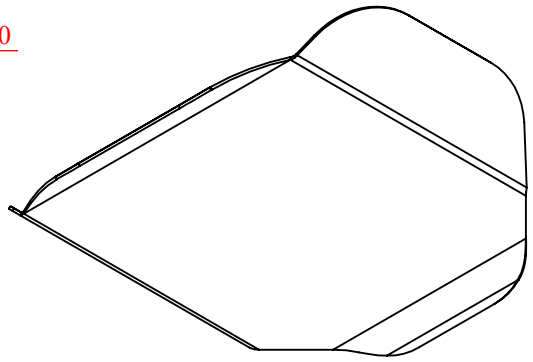

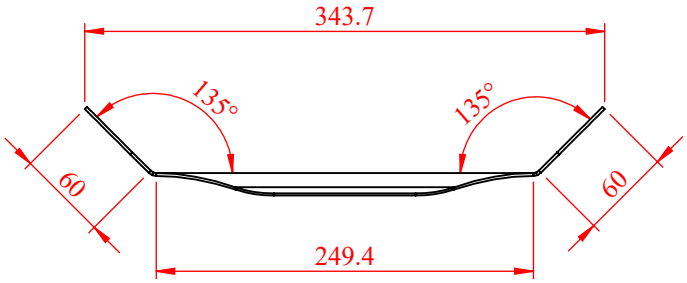

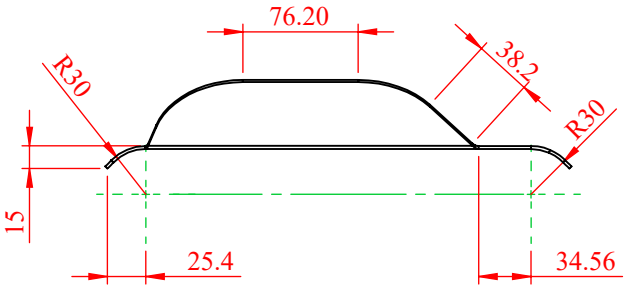

DEVELOPMENT DRAWING

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET AL. ALLOY HS30 WP, IS:737 THICK 2mm, AP46
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	15.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		BACK REST SHELL PANEL	
SCALE	1:5				
SHEET	1OF1	DRG NO.		TD2B36DA1	
REV. NO.					

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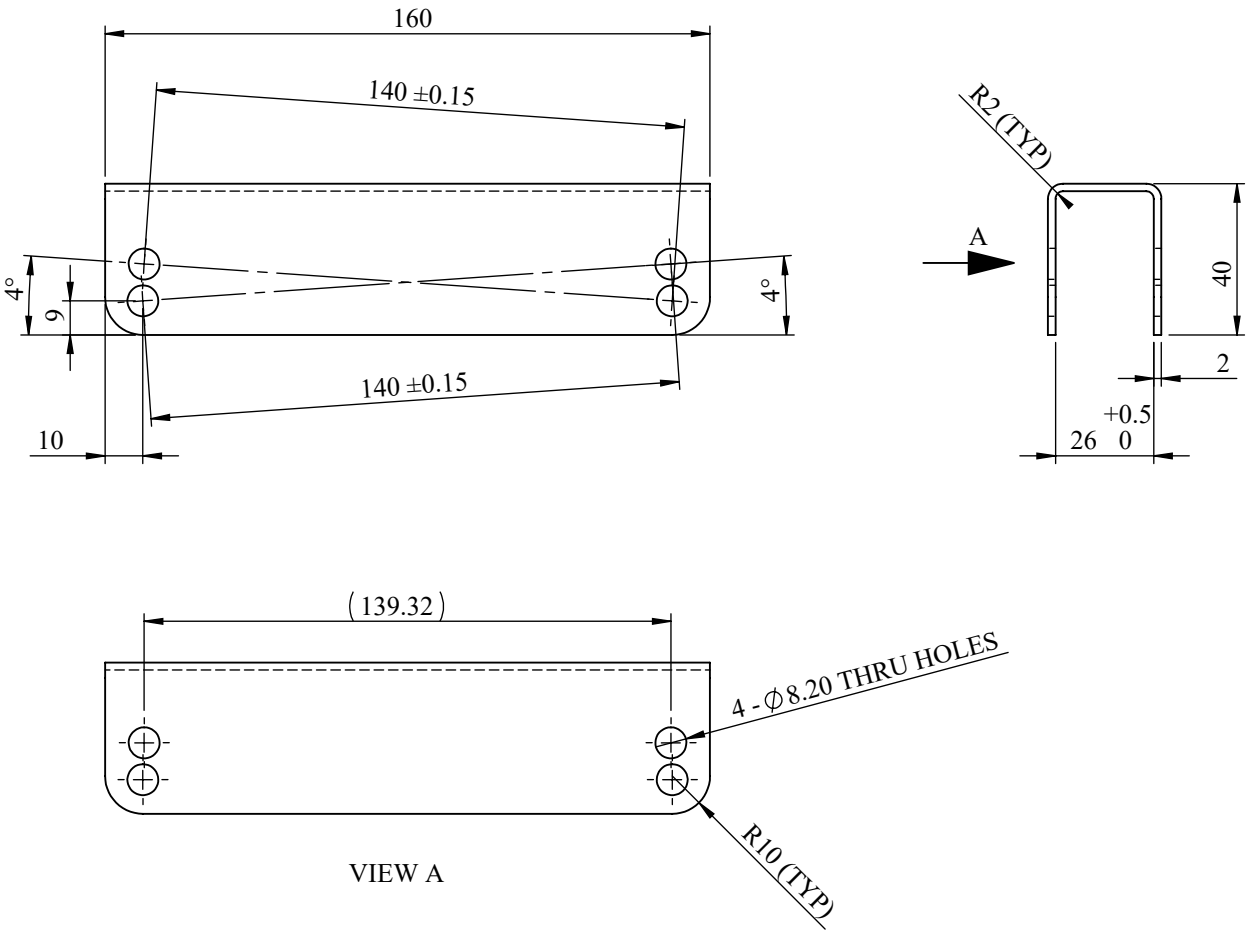

VIEW A

DEVELOPMENT DRAWING

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET AL ALLOY HS 30 WP IS:737 THICK 2mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	15.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		BACK REST SHELL BRACKET	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B36DA2	
REV. NO.					

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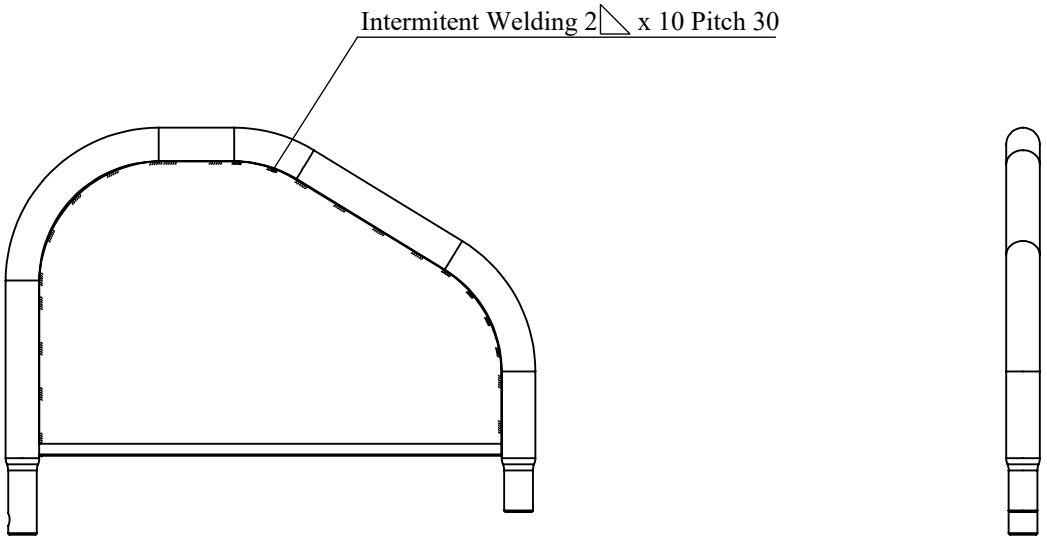
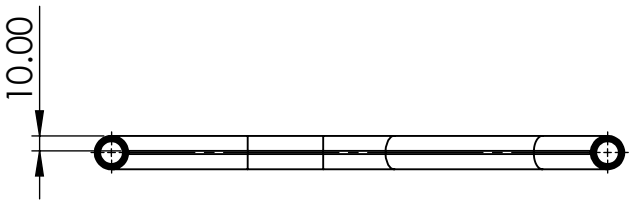
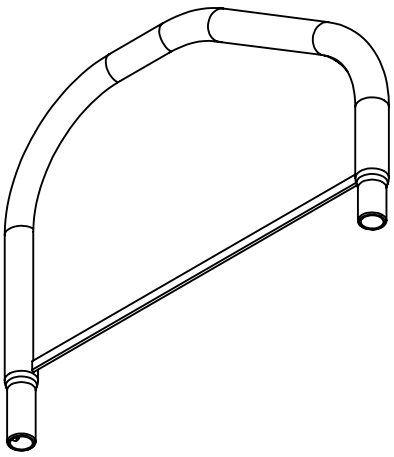


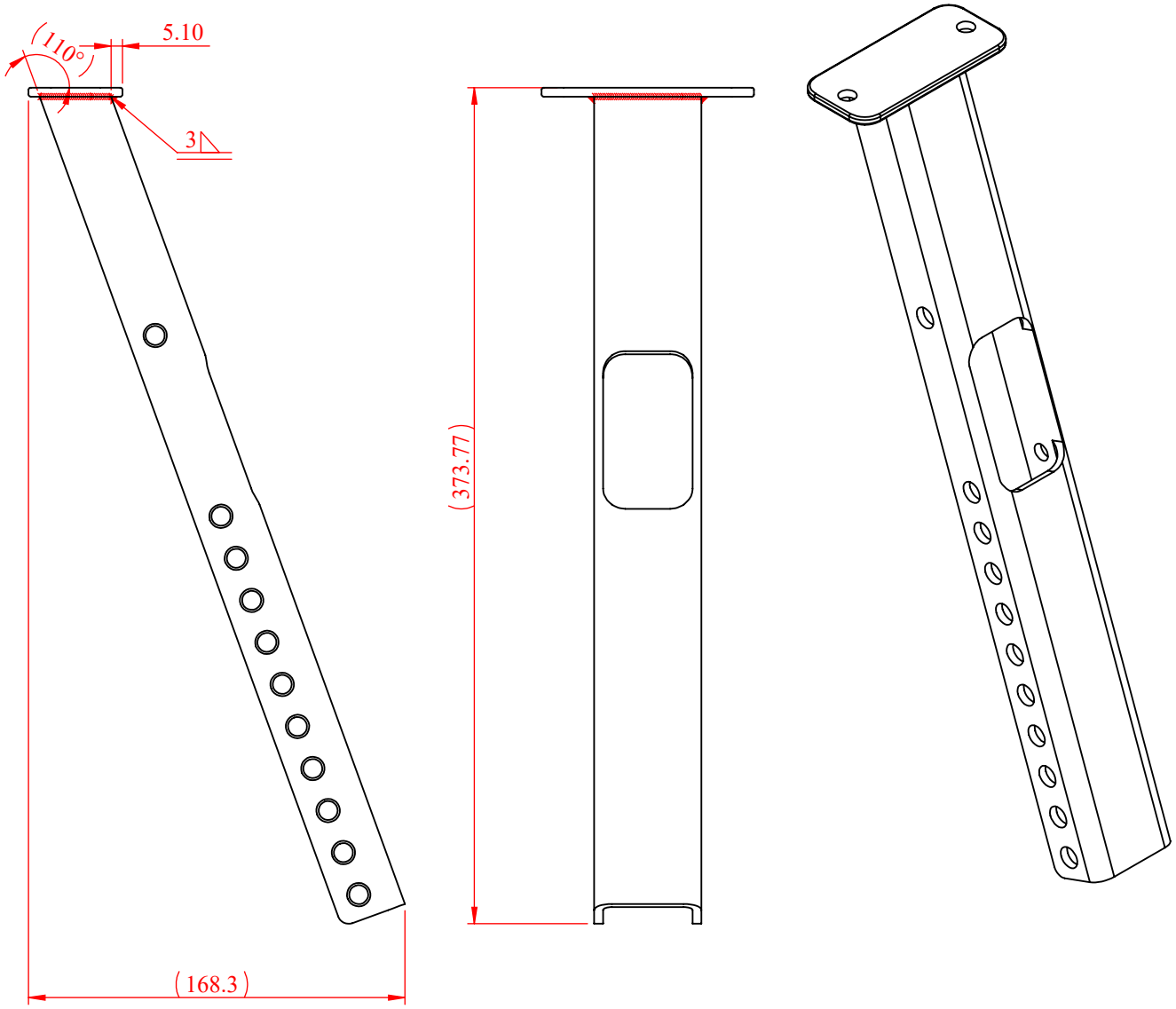


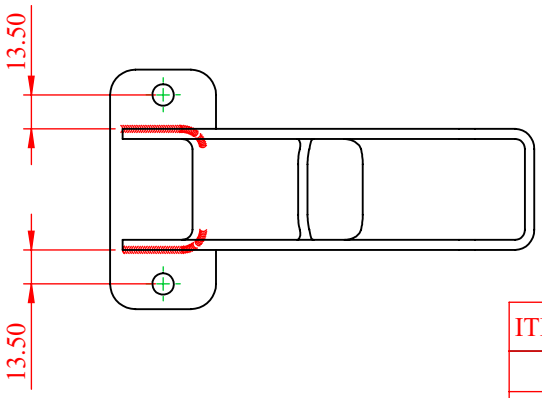


DEVELOPMENT DRAWING

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	POWDER COATING, COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		TUBULAR ARMREST ASSY.	
SCALE					
SHEET		DRG NO.		TD2B36E00	
REV. NO.					





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36F01	FOOTREST SUPPORT - BRACKET	1
2	TD2B36F02	FOOTREST SUPPORT - PLATE	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ALUMINIUM WELDMENT
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	POWDER COATING, COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOTREST SUPPORT WELDMENT	
SCALE	1:3				
SHEET	1 OF 1	DRG NO.		TD2B36F00	
REV. NO.					

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

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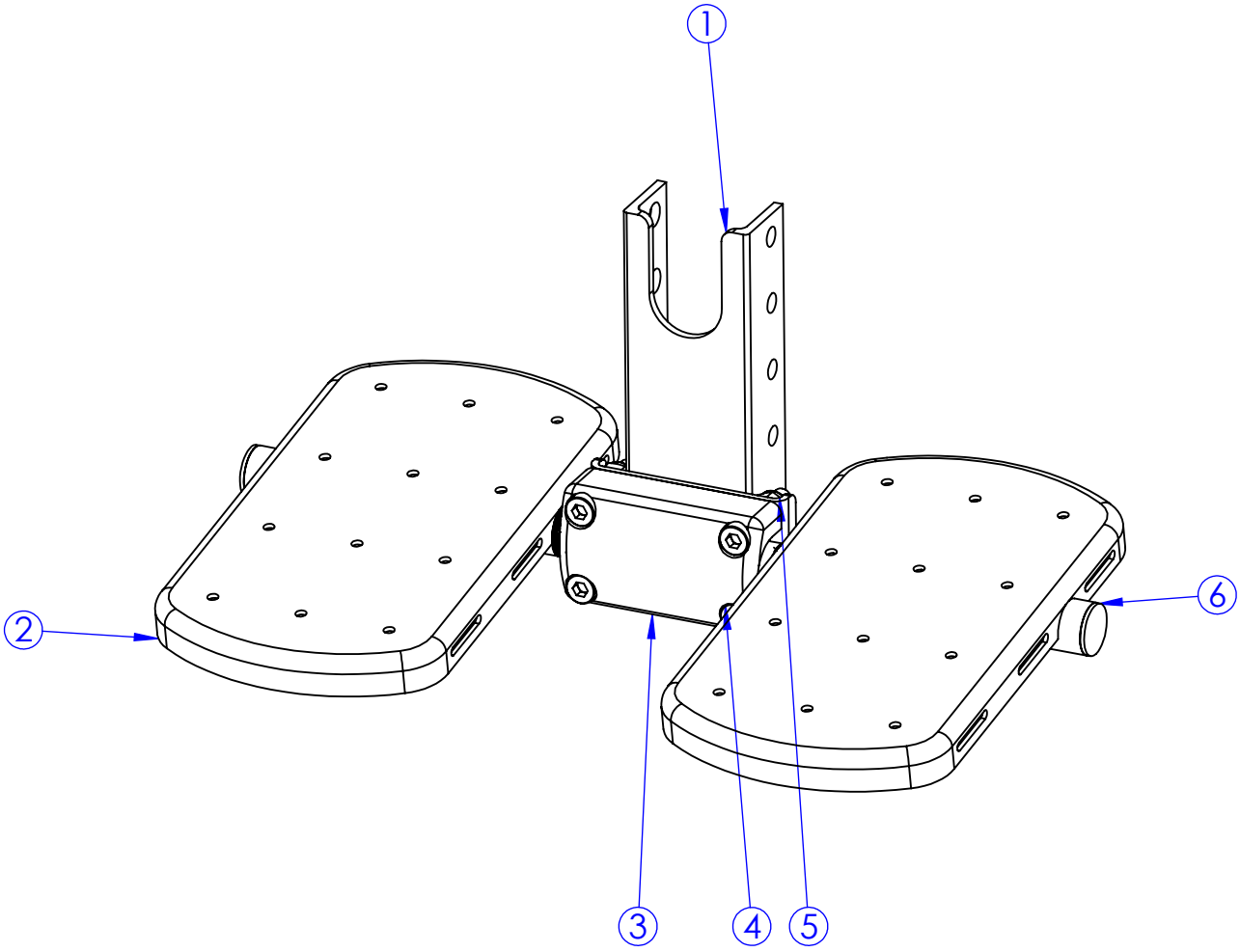
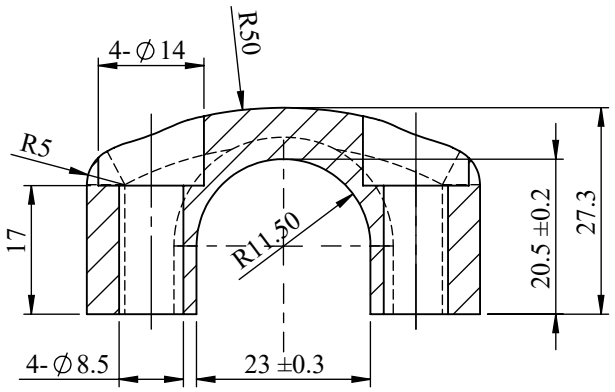


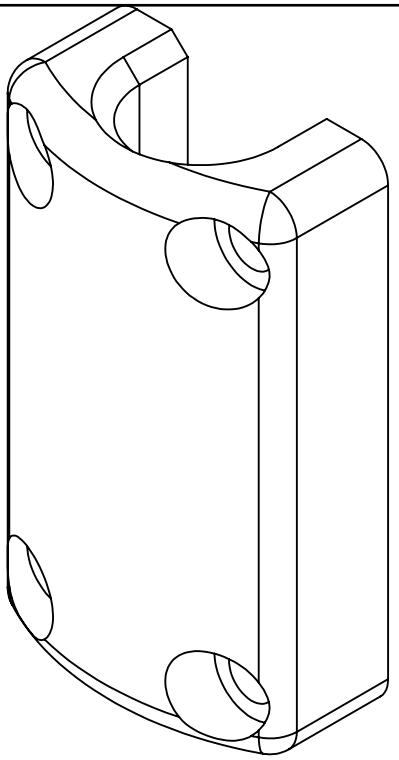
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36GA0	FOOTREST SLIDING BRACKET ASSY.	1
2	TD2B36GB0	WM3-01 FOOT PLATE WELD ASSEMBLY	1
3	TD2B36G01	FOOT PLATE TUBE CLAMP	1
4	BC50	Hex Socket Head Screw M8x40 10.9 IS:2270 Zinc Plated Blue	4
5	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	4
6	TD2B36G03	END PLUG DIA 22 (18 INSIDE)	2

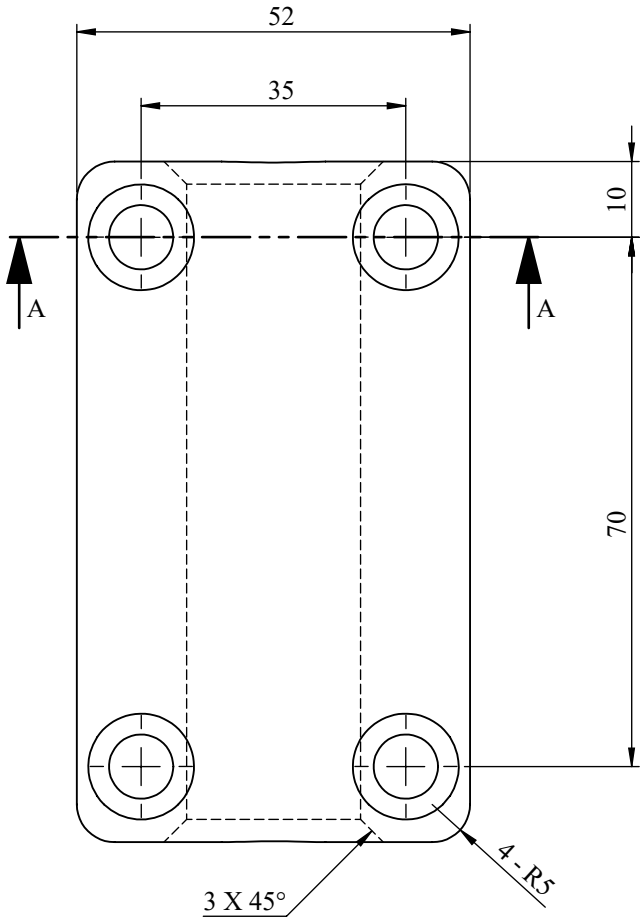
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

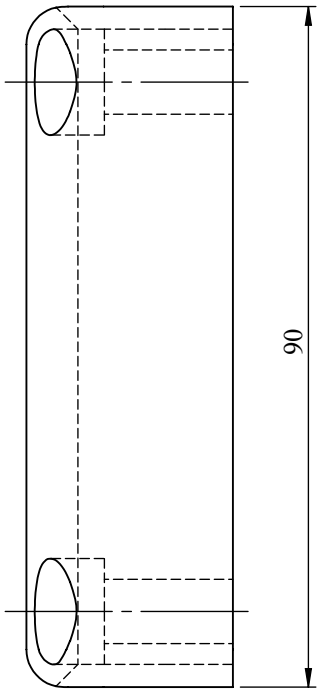
DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		WM3-01 FOOTREST ASSEMBLY	
SCALE					
SHEET		DRG NO.		TD2B36G00	
REV. NO.					



SECTION A-A
SCALE 1 : 1







FOR DEVELOPMENT

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DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	LM-6
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOT PLATE TUBE CLAMP	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B36G01	
REV. NO.					

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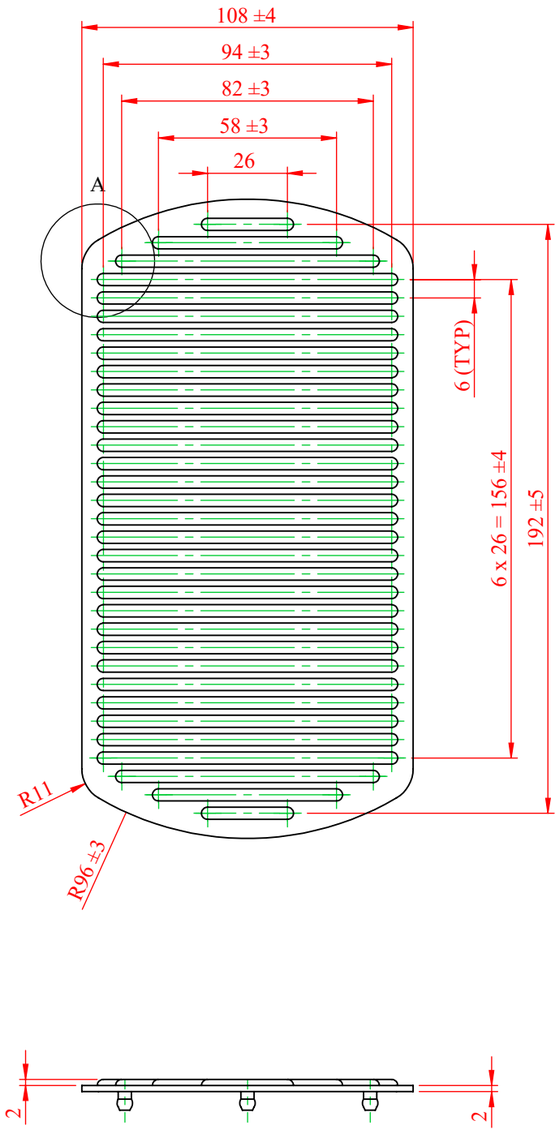
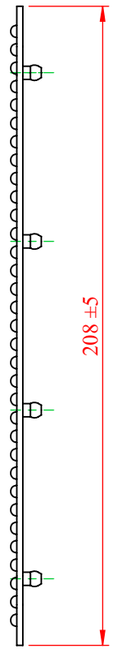
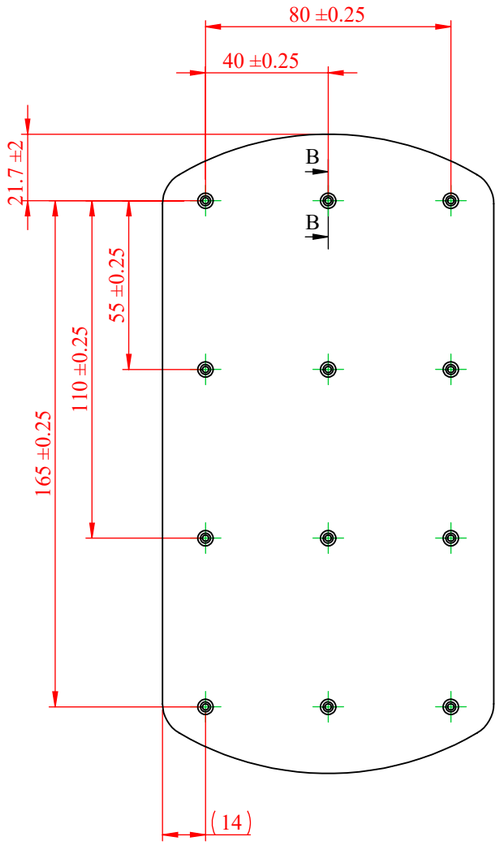
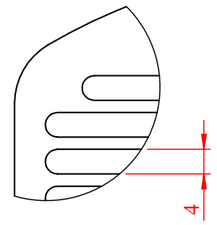
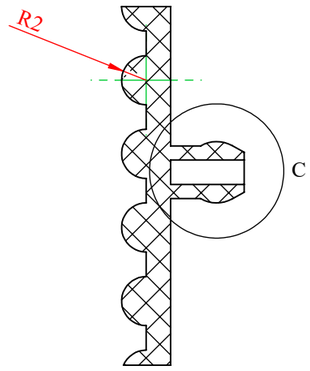




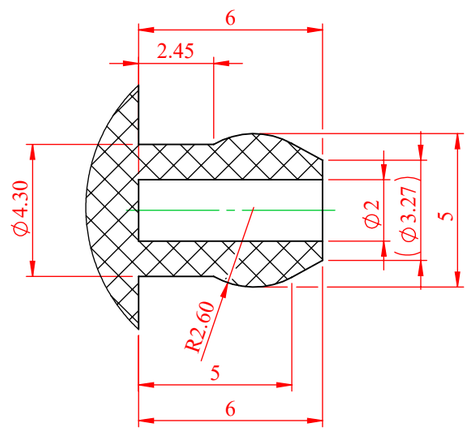




DETAIL A
SCALE 1 : 1



SECTION B-B
SCALE 2 : 1



DETAIL C
SCALE 5 : 1

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

NOTE:
COMPONENT SHOULD BE FREE FROM MOULDING DEFECTS SUCH AS
- SHRINKAGE
- FLASHES
- WARPAGE
- COLOUR STREAKS, etc.

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	LDPE, COLOUR - BLACK
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45° ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOTPLATE COVER - MOULDED	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B36G02	
REV. NO.					

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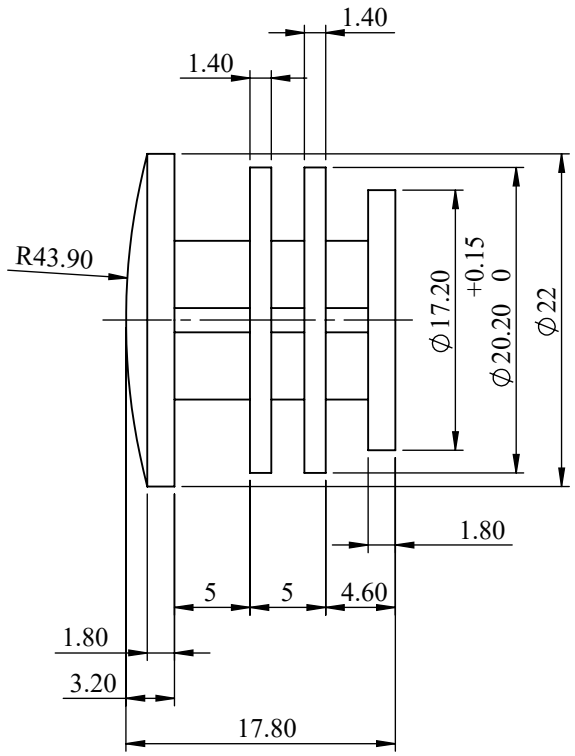
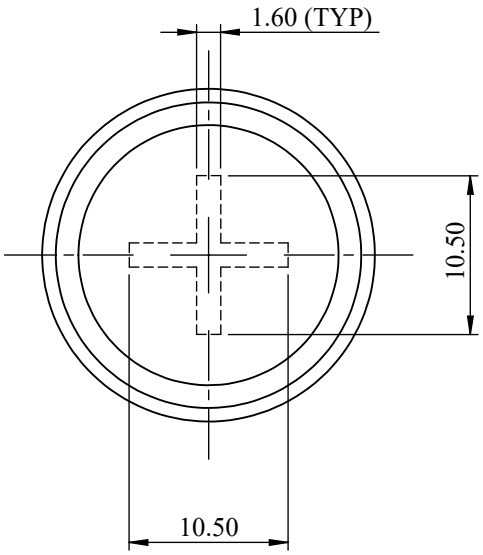




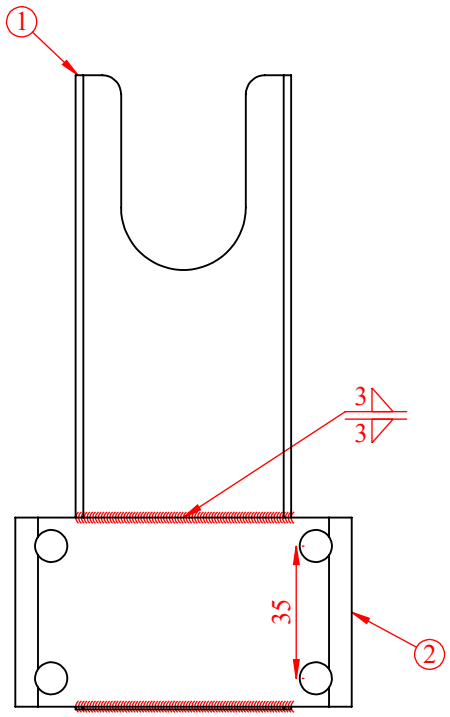
NOTE:
COMPONENT SHOULD BE FREE FROM MOULDING DEFECTS SUCH AS

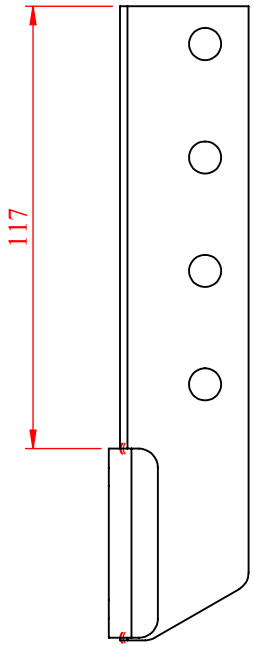
- SHRINKAGE
- FLASHES
- WARPAGE
- COLOUR STREAKS, etc.

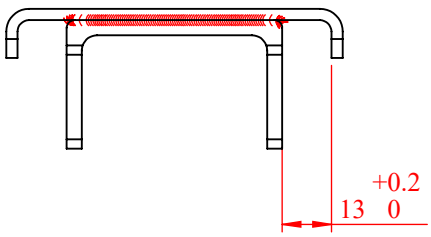
DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

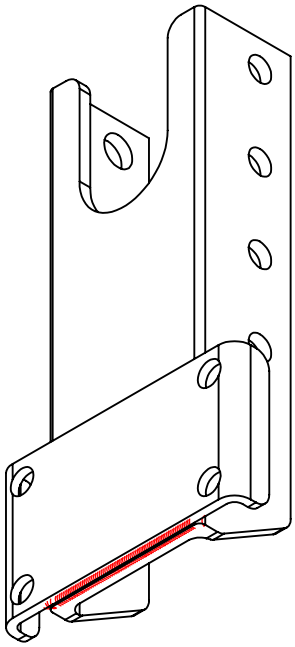
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	POLYPROPYLENE, COLOUR - BLACK
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		END PLUG Ø22mm (18mm INSIDE)	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36G03	
REV. NO.					









ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36GA1	FOOTREST SLIDING BRACKET	1
2	TD2B36GA2	FOOT PLATE TUBE BRACKET	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ALUMINIUM WELDMENT
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	POWDER COATING, COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOTREST SLIDING BRACKET ASSY	
SCALE	1:5				
SHEET	1 OF 1	DRG NO.		TD2B36GA0	
REV. NO.					

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

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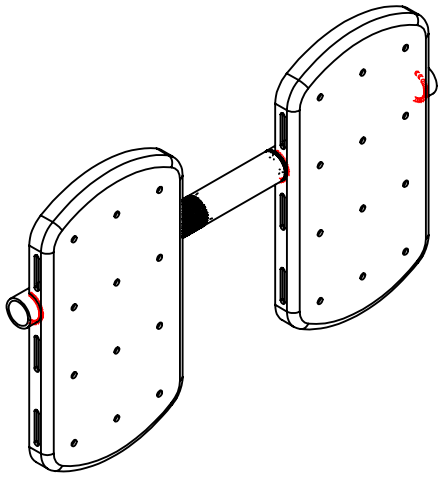

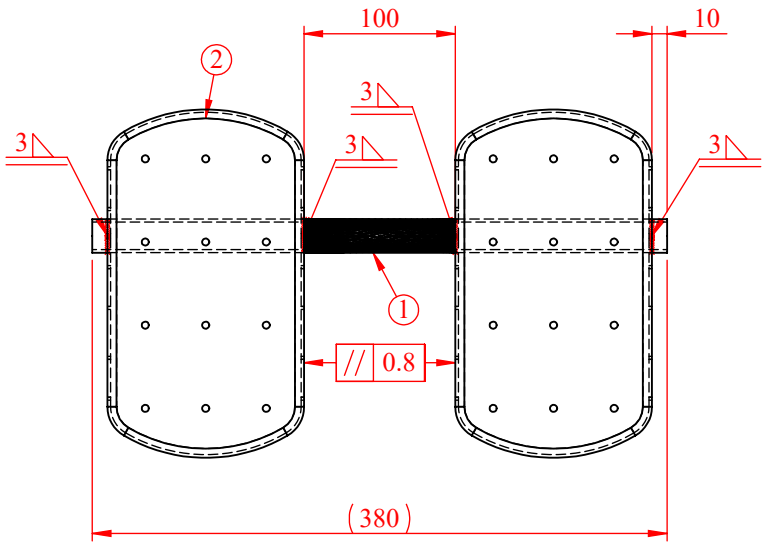

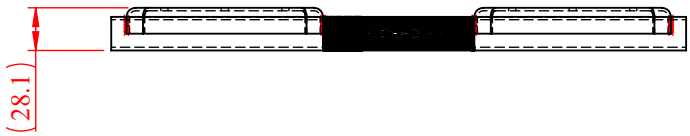

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36GB1	FOOT PLATE TUBE	1
2	TD2B36GB2	FOOT PLATE	2

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ALUMINIUM WELDMENT
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	POWDER COATING, COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOT PLATE WELD ASSY.	
SCALE	1:5				
SHEET	1 OF 1	DRG NO.		TD2B36GB0	
REV. NO.					

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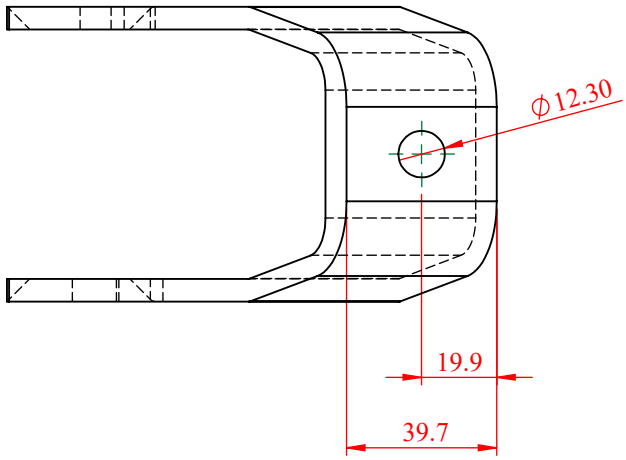

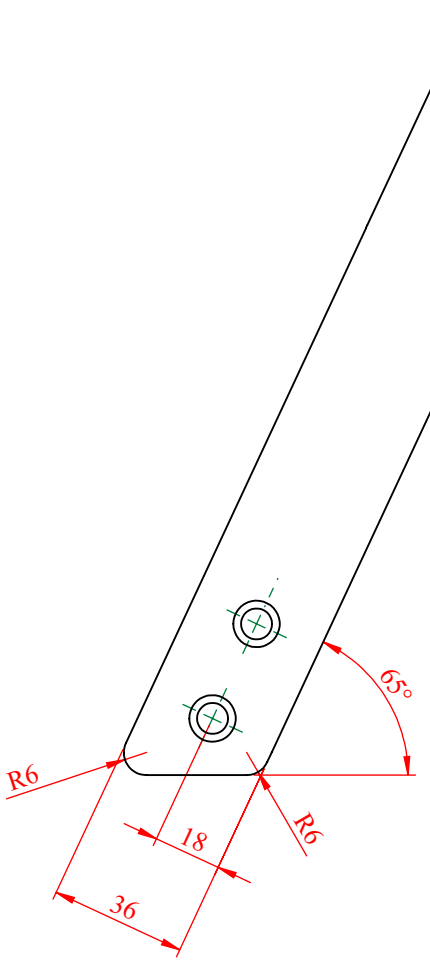

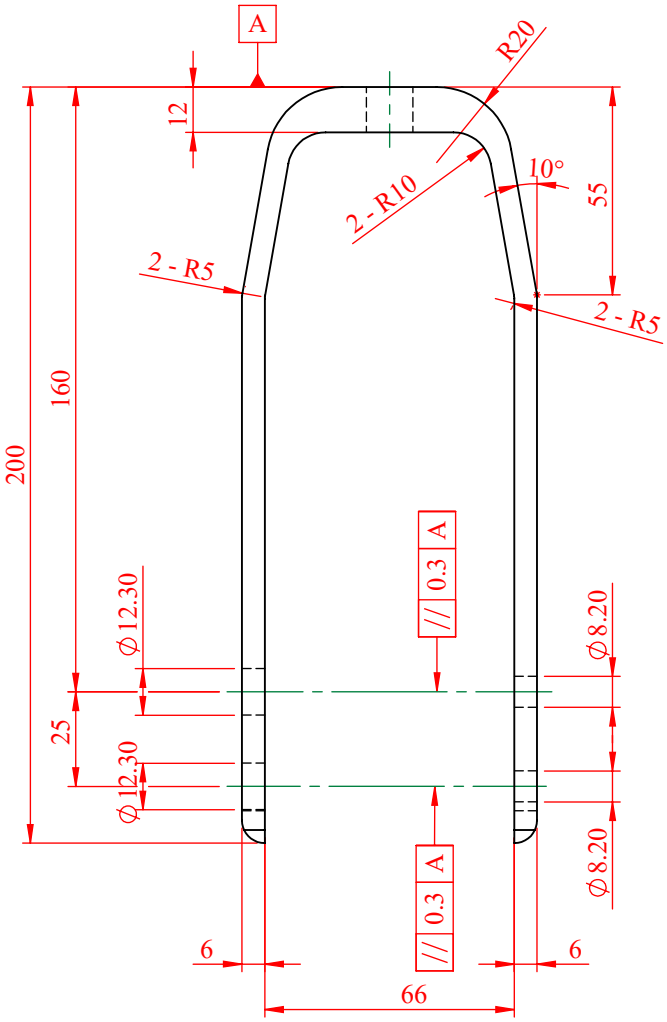

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	AQ 36
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	15.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		CASTOR FORK	
SCALE	1:5				
SHEET	1 OF 1	DRG NO.		TD2B36H01	
REV. NO.					

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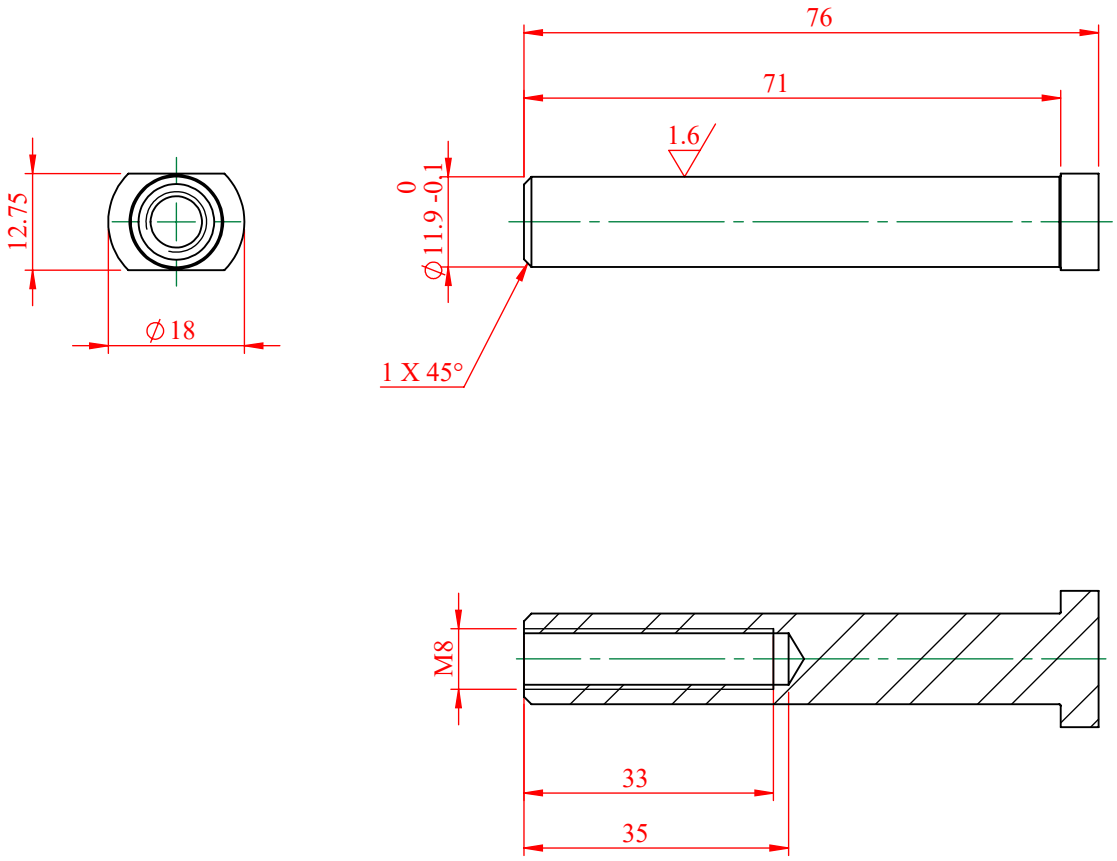

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD CARBON TOOL STEEL COLD DRAWN ANNEALED En8M Ø18mm IS:4431, AH68
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	Ni-Cr PLATED, 8-12µ
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		AXLE CASTOR WHEEL	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36H02	
REV. NO.					

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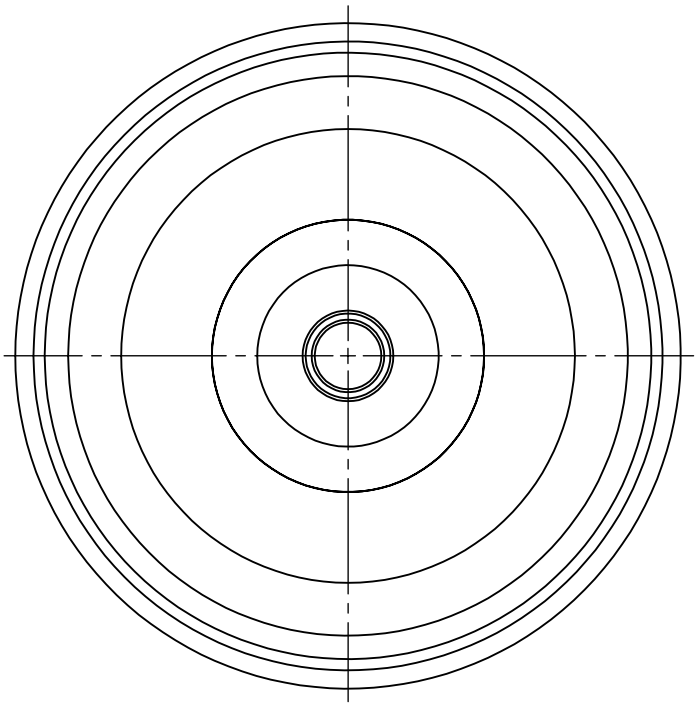

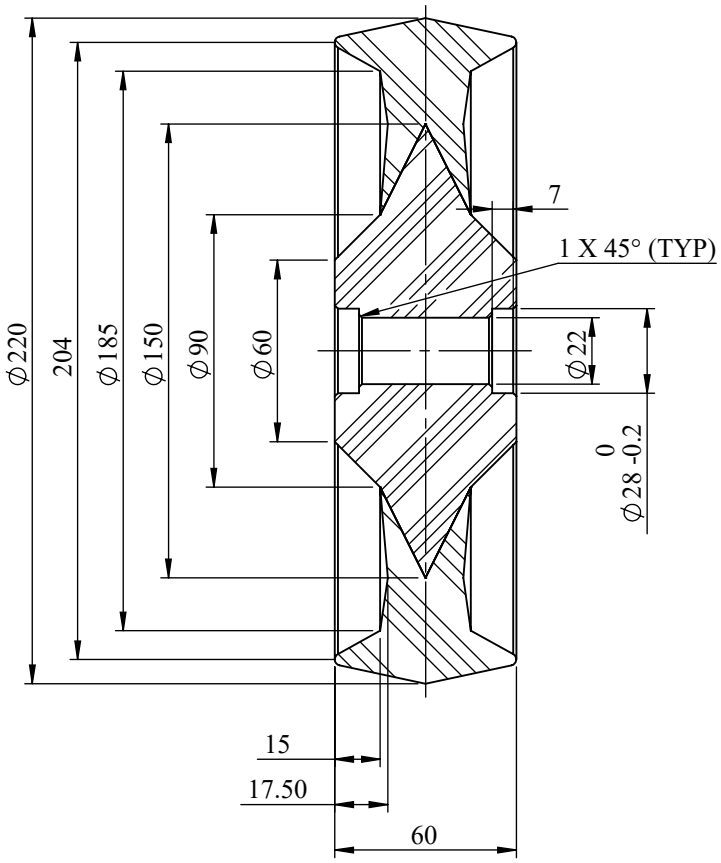

NOTE:
- INNER CORE HARDNESS - 90HS
- OUTER SHELL HARDNESS - 65HS

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	RUBBER, MOULDED IN TWO DENSITIES
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		Ø220 CASTOR WHEEL RURAL	
SCALE	2:5				
SHEET	1 OF 1	DRG NO.		TD2B36H03	
REV. NO.					

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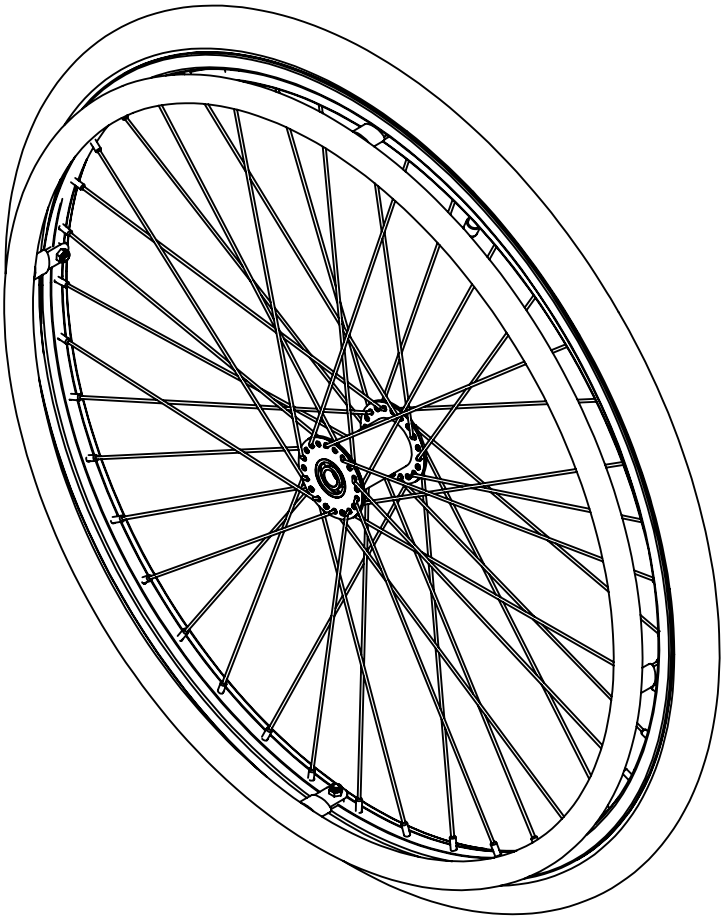
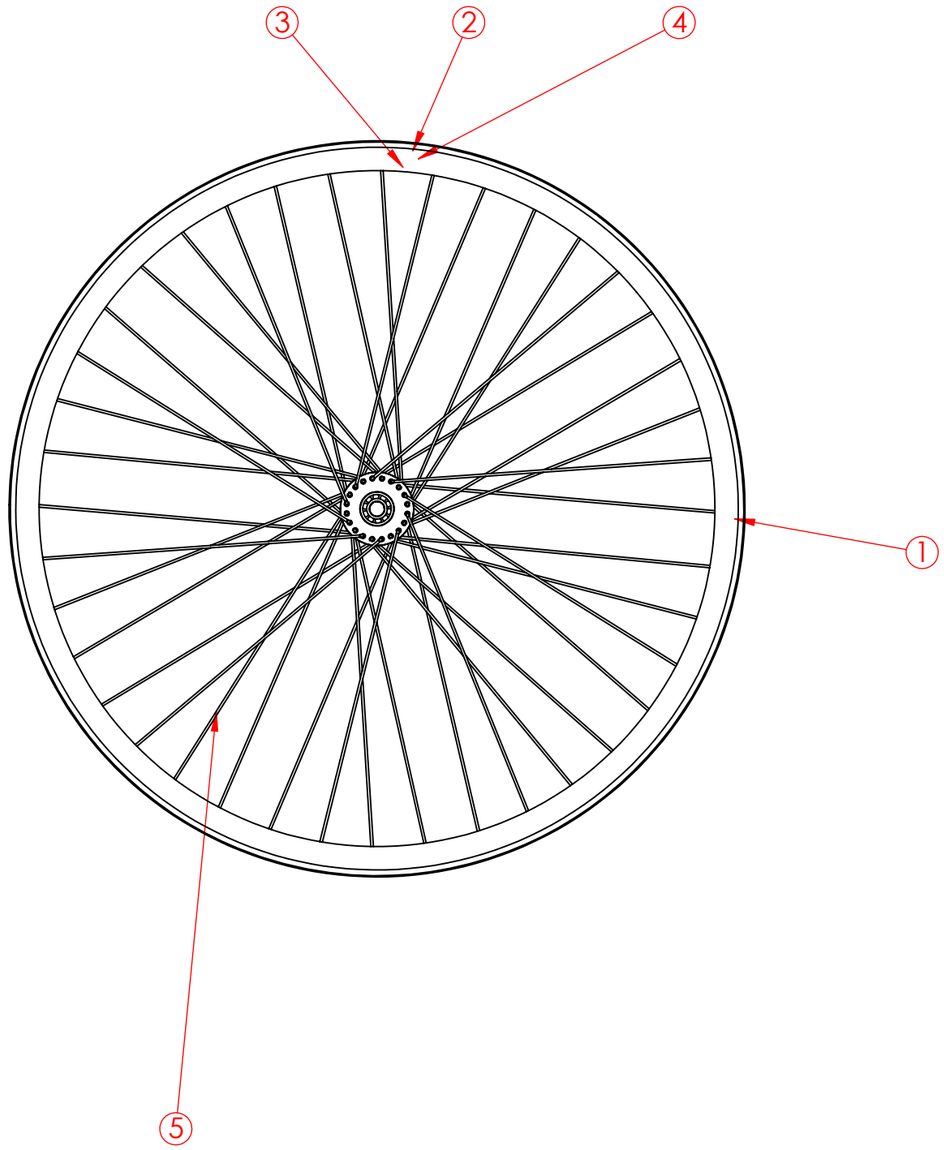
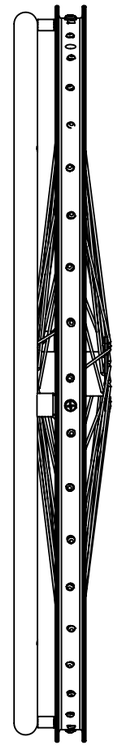


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36JD0	PUSH RIM & RIM WITH SPOKE ASSY	1
2	LM05	RIM TAPE 26" 0.5 mm thick, 14±1 mm Length-1762±20. IS:960	1
3	LM03	Cycle Standard duty tyre type 'B' size 37-590 (26"x1 3/8" BLACK as per IS:2414, Crown thickness-4.5 mm, Min. tensile Strength-81.5kgf/cm2 (Mpa) Min. of rubber compound elongation at break -300%.	1
4	LM04	Cycle Rubber tube Standard duty, size-37-590 (26" x 1 3/8") BLACK ISI marked as per IS:2415-2015 Class D.	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		WHEEL ASSY. WITH PUSH RIM	
SCALE					
SHEET		DRG NO.		TD2B36J00	
REV. NO.					

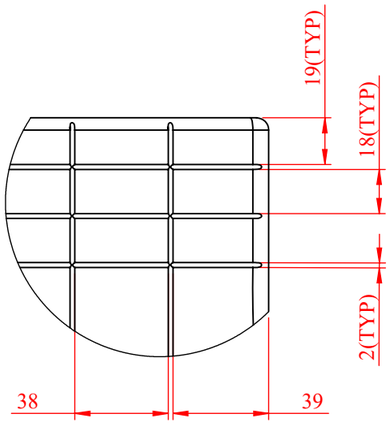




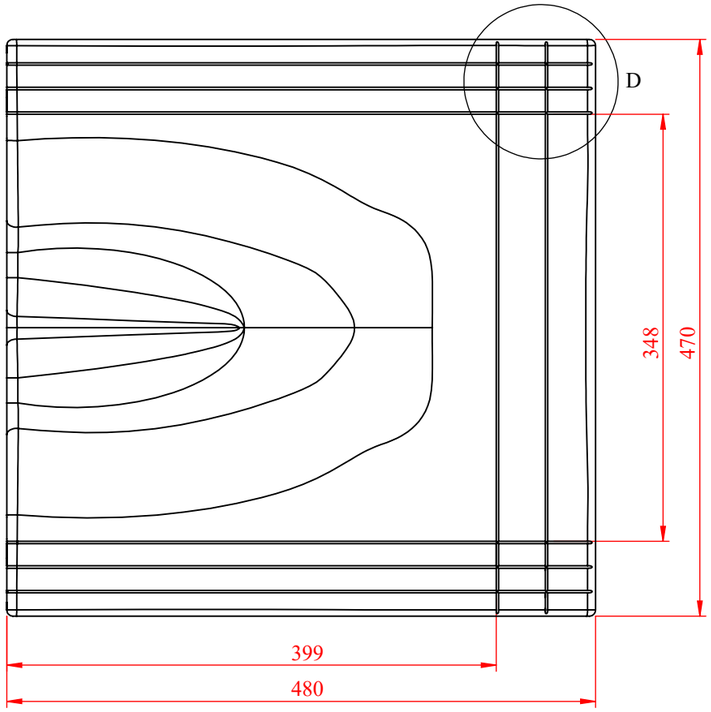
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36JC0	PUSH RING WELDED ASSY.	1
2	BC56	Phillips Pan Head Bolt M5x12 8.8 IS0:7045 Zinc Plated Blue 5-8µ IS:1573	4
3	BA81	Nyloc Nut M5 IS:7002 Zinc Plated Blue 5-8µ IS:1573	4
4	TD2B36JC3	PUSH RING TAB COVER	4
5	TD2B36JE0	RIM WITH SPOKE ASSY.	1

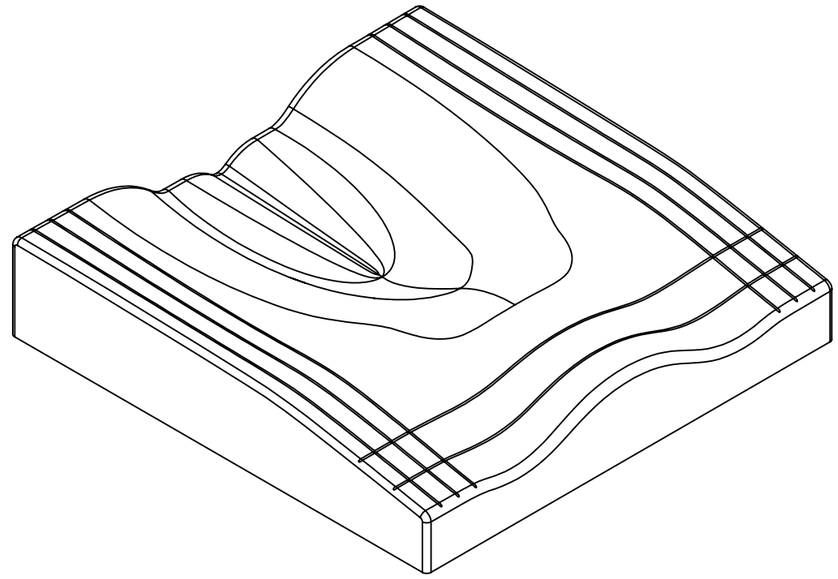
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

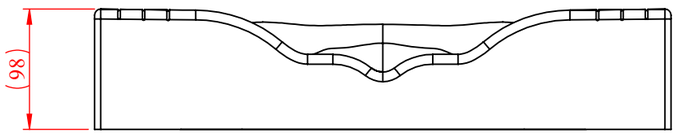
DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		PUSH RIM & RIM WITH SPOKE ASSY	
SCALE					
SHEET		DRG NO.		TD2B36JD0	
REV. NO.					

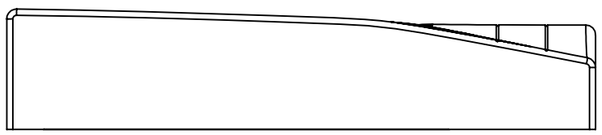


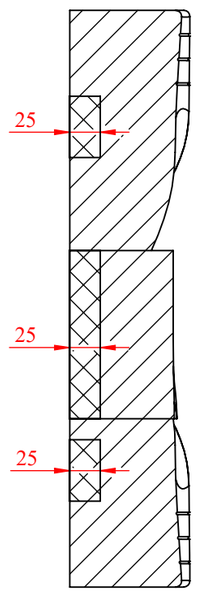
DETAIL D
SCALE 2 : 5



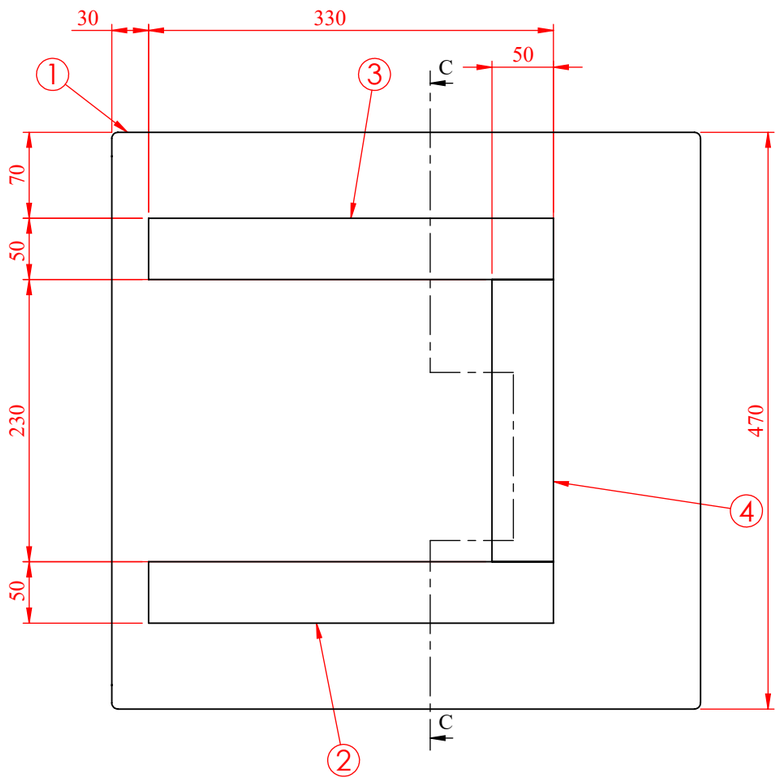








SECTION C-C



NOTE:

1. MATERIAL: PU FOAM
2. INDENTATION HARDNESS NUMBER AT 50% DEFLECTION (100mm SQ. INDENTER): 20 as per IS 7888-1976
3. DENSITY: 70 ± 5 kg/m^3 as per IS 7888-1976
4. ELONGATION AT BREAK(%) : 160 ± 5 as per IS 7888-1976
5. TENSILE STRENGTH (N/cm): 12 as per IS 7888-1976
6. %COMPRESSION SET AT 70° ±2° FOR 22hrs (AT 50% DEFLECTION): 15 as per IS 7888-1976
7. REFER 3D-MODEL FOR MOULD PREPARATION

ITEM NO.	PART NUMBER	MATERIAL	QTY.
1	TD2B36MA4	CUSHION SEAT PU ASSY.	1
2	TD2B36MA1	EPE	1
3	TD2B36MA2	EPE	1
4	TD2B36MA3	EPE	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	

IS: 2102
ISO: 2768-mK

DEBURR ALL SHARP EDGES 0.5x45°
ALL DIMENSIONS ARE IN mm

WEIGHT	
SCALE	1:5
SHEET	1 OF 1
REV. NO.	

NOM. CUSHION SEAT PU ASSY.

DRG NO. TD2B36MA0

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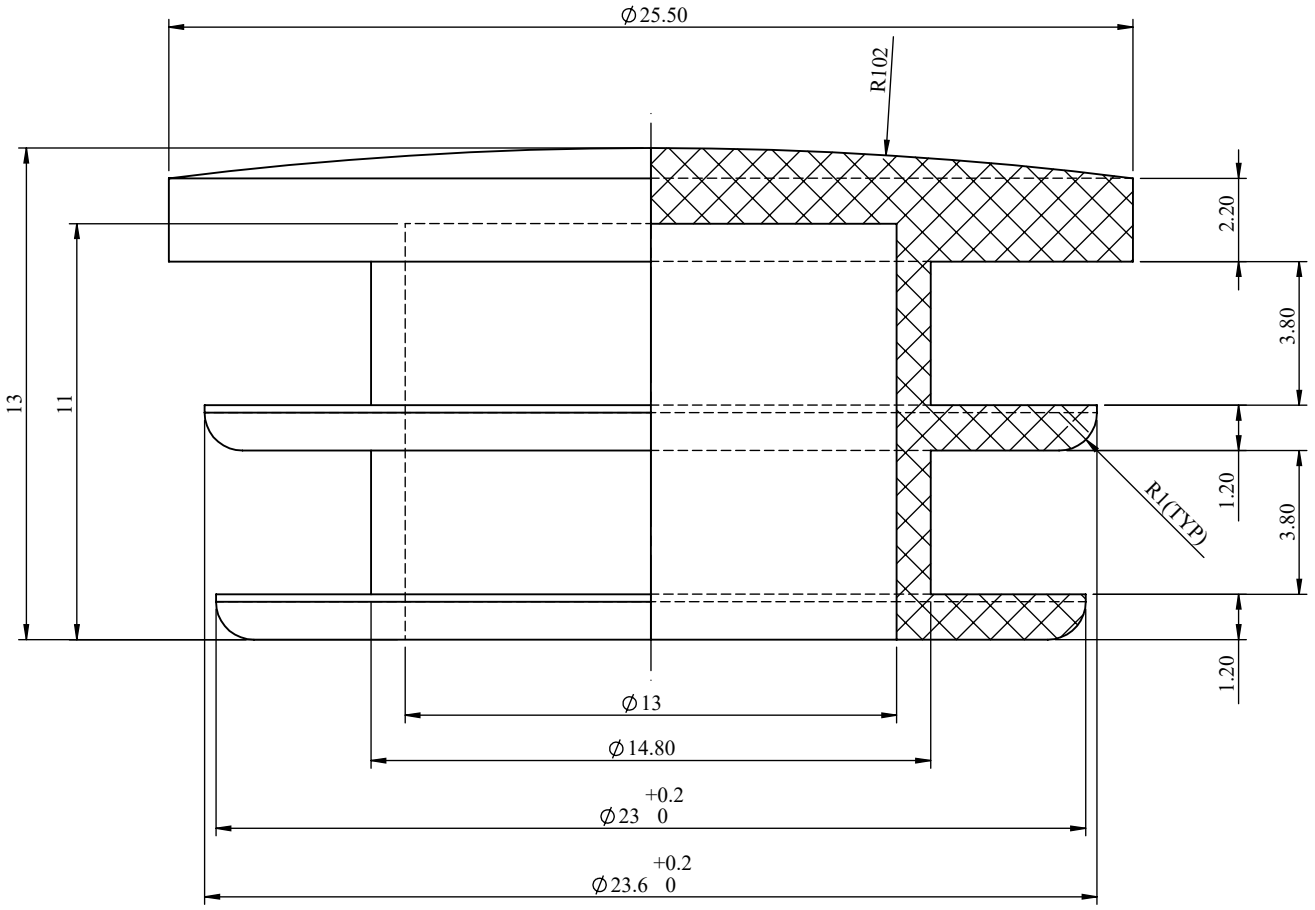
1.6



NOTE:
COMPONENT SHOULD BE FREE FROM MOULDING DEFECTS SUCH AS

- SHRINKAGE
- FLASHES
- WARPAGE
- COLOUR STREAKS, etc.

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	GRANNULES POLYPROPYLENE (BLACK COLOUR) GD KM 6100 IS:7078
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		25 mm DIA END PLUG (23.4 ID)	
SCALE	1:1				
SHEET	1 OF 1				
REV. NO.		DRG NO.		TD2B37A02	

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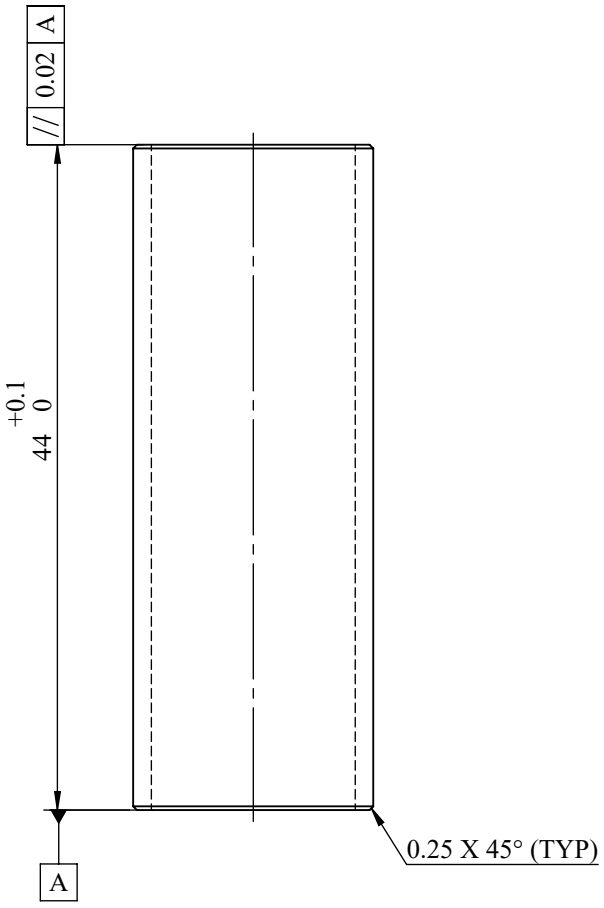
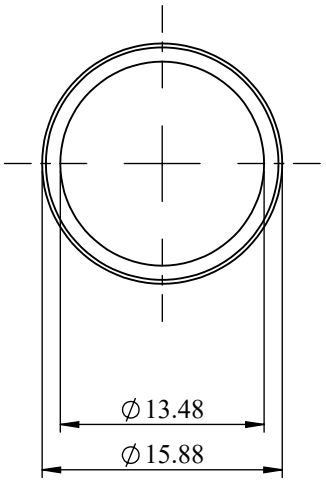
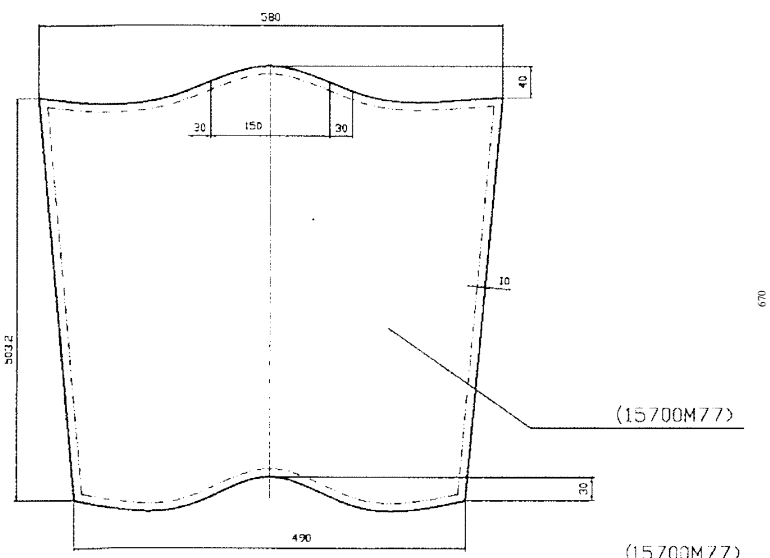
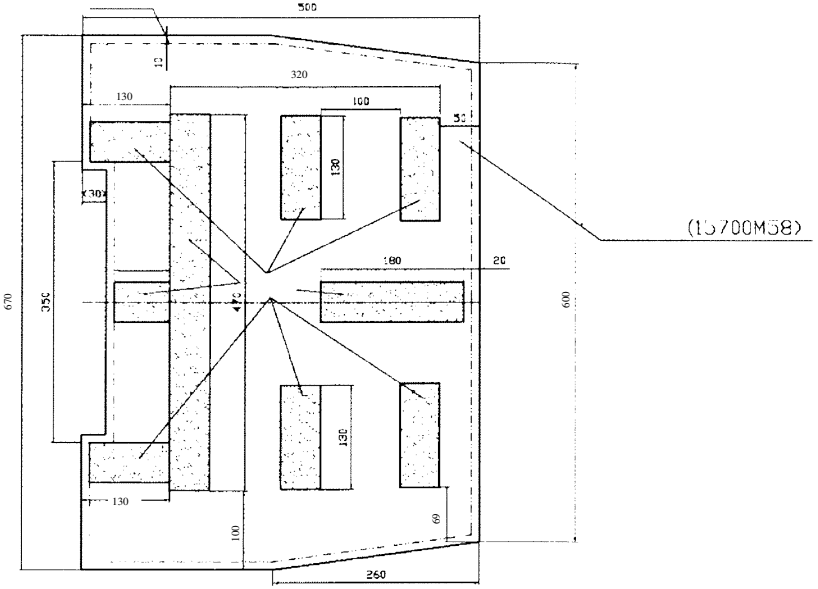


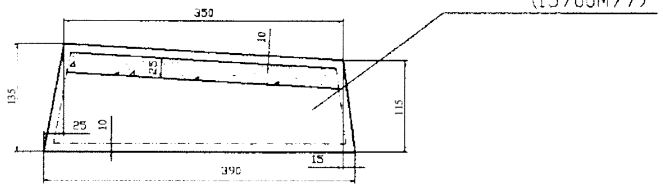


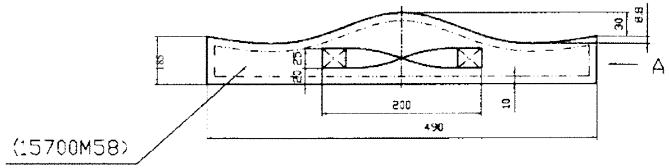
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

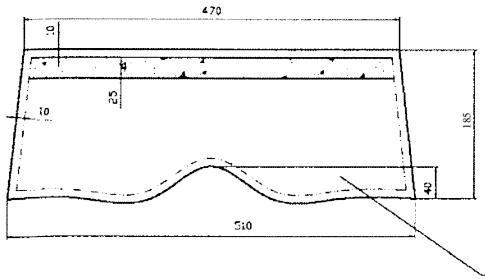
DRN BY		DT		MATERIAL	ASTM 10NB STD (Ø17.1 x 2.31mm THK)
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		SPACER STRAIGHT	
SCALE					
SHEET		DRG NO.		TD2B37B07	
REV. NO.					











NOTE:
PLEASE STUDY THE PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT.

SNo.	REGION	REVISION	DATE	SIGN
REVISIONS				

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	CUSHION COVER
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	TD 2 B 37 K 02
DATE	09.02.2018	REV	SHEET 1 OF 1

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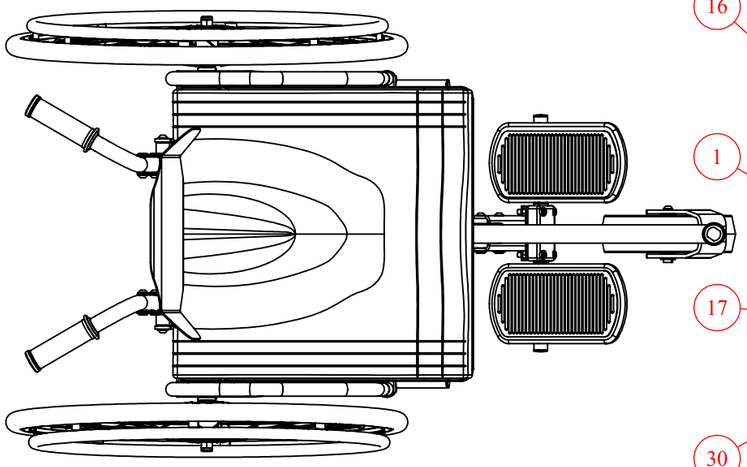

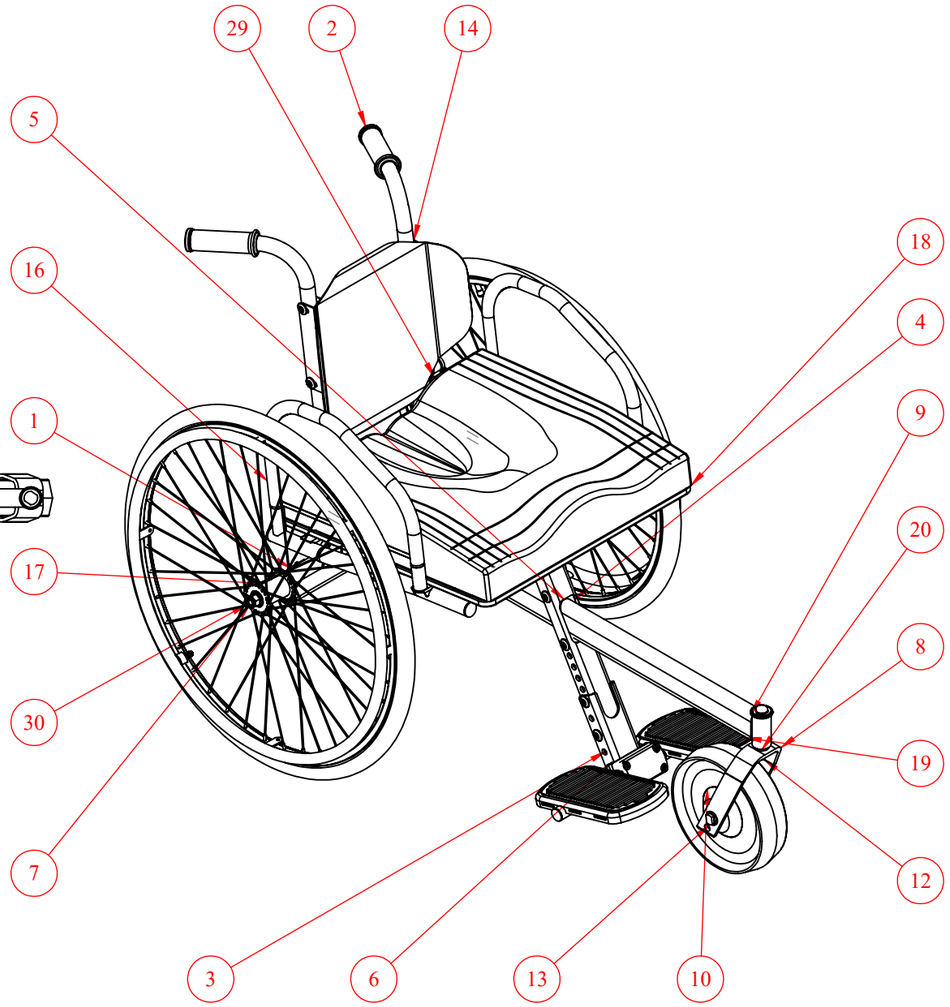

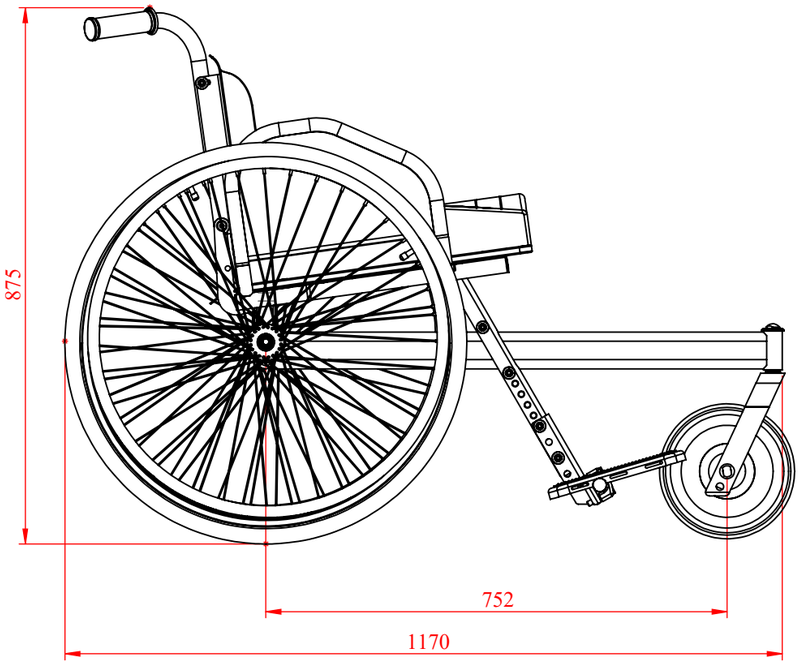

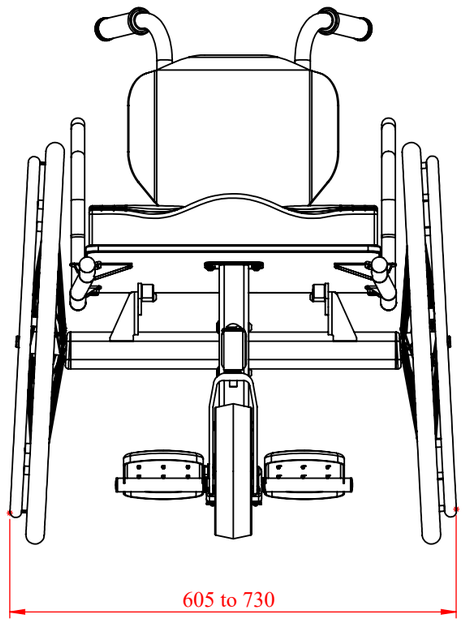

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36A00	WM3-01 FRAME PRE-ASSEMBLY	1
2	TD2B36B00	WM3-01 SEATING-BACKREST PRE-ASSEMBLY	1
3	TD2B36F00	FOOTREST SUPPORT WELDMENT	1
4	TD2B36001	FRAME CLAMP - LEFT	1
5	TD2B36002	FRAME CLAMP - RIGHT	1
6	TD2B36G00	WM3-01 FOOTREST ASSEMBLY	1
7	TD2B36004	AXLE - REAR WHEEL	2
8	TD2B36H01	CASTOR FORK	1
9	TD2B36005	CASTOR BARREL CAP WASHER 12 X 31	1
10	TD2B36H03	220 DIA CASTOR WHEEL - RURAL	1
11	TD2B37B07	SPACER STRAIGHT	1
12	TD2B36012	M12 X 95 SPANNER BUTTON HEAD BOLT	1
13	TD2B36H02	AXLE - CASTOR WHEEL	1
14	TD2B36011	M8 ALLEN CAP NUT	8
15	TD2B36003	M8 NUT LOCKING PLATE	2
16	TD2B36E00	TUBULAR ARMREST ASSY.	2
17	TD2B36J00	WHEEL ASSY. WITH PUSH RIM	2
18	TD2B36MA4	CUSHION SEAT PU ASSY.	1
19	TD2B36G02	FOOTPLATE COVER - MOULDED	2
20	BC63	12 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	8
21	BC58	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	10
22	GC98	6001 ZZ C3 RADIAL BALL BEAREING	2
23	BC44	Hex Socket Button Head Screw M8x30 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	5
24	BC46	Hex Socket Button Head Screw M8x40 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	6
25	BC42	Hex Socket Button Head Screw M8x16 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	4
26	BC48	Hex Socket Button Head Screw M8x70 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2
27	BC47	Hexagon Socket Button Head Screw ISO 7380-M8x45	1
28	BC43	Hex Socket Button Head Screw M8x20 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2
29	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	11
30	BA85	Nyloc Nut M12 IS:7002 Zinc Plated Blue 5-8µ IS:1573	2
31	BC59	8 mm SPRING LOCK WASHER IS:3063 (TYPE B) ZINC PLATED BLUE 5-8µ IS:1573	1

DEVELOPMENT DRAWING

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.TOMER	DT		MATERIAL	
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	14.10.2020	SUR. TRT.	
				DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT					
SCALE					
SHEET					
REV. NO.					

IS: 2102
ISO: 2768-mK

NOM. **ROUGH TERRAIN WHEELCHAIR**

DRG NO. **TD2B36000**

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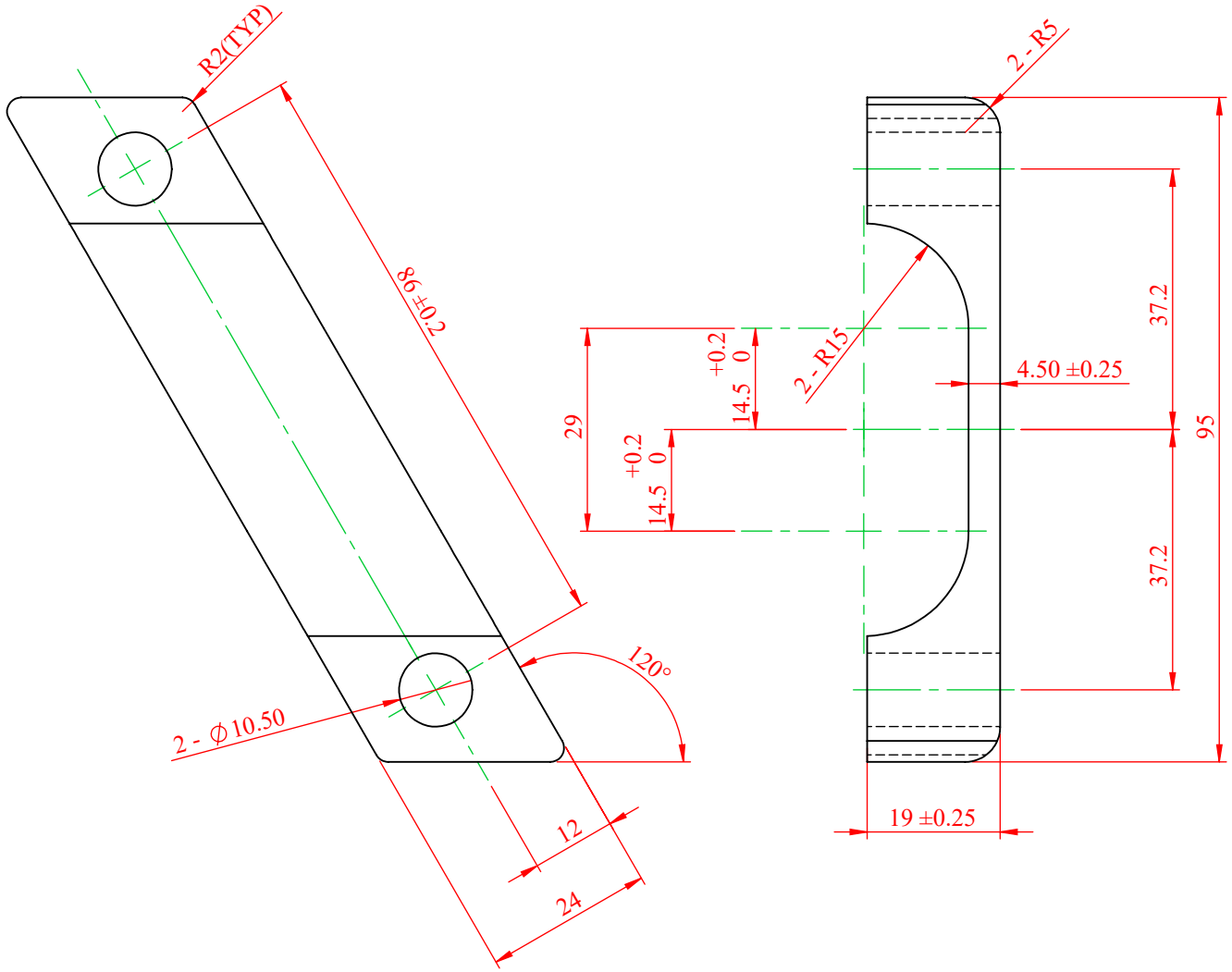

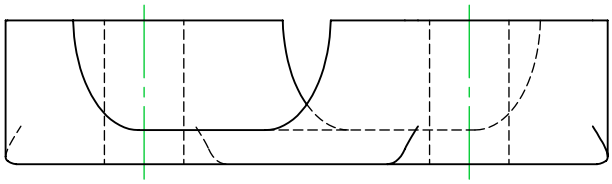

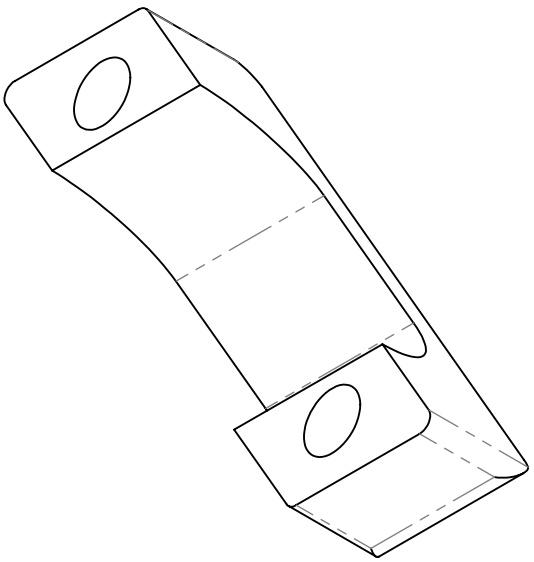

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	AQ37
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	BLACK OXIDIZING, RAL-9005
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FRAME CLAMP - LEFT	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36001	
REV. NO.					

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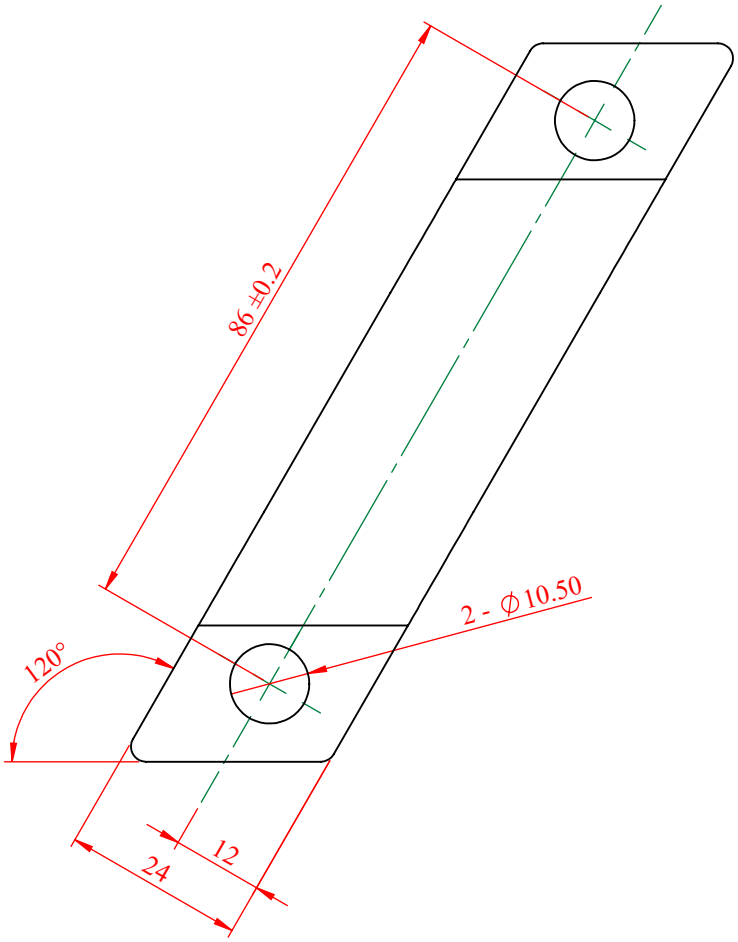
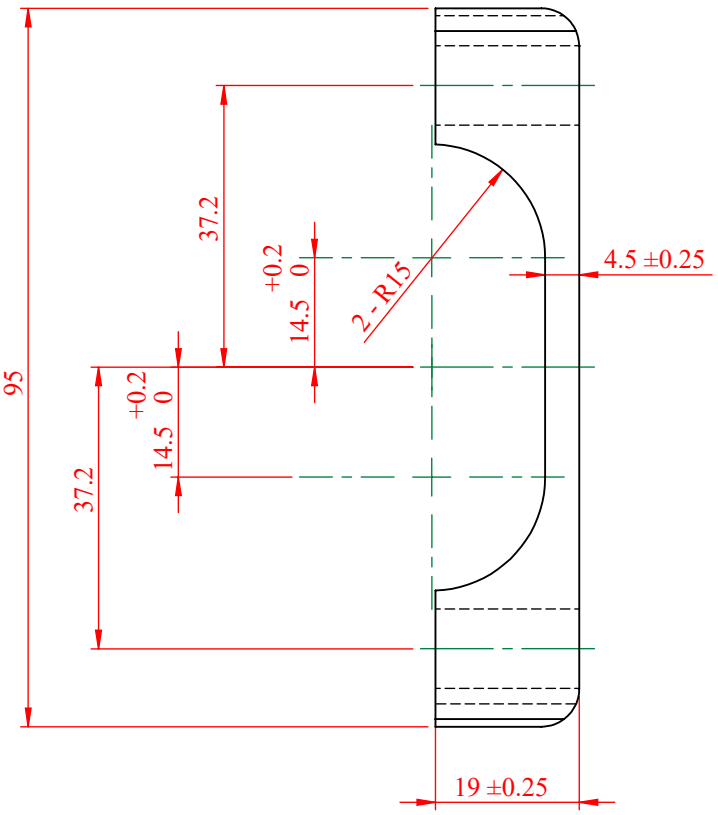
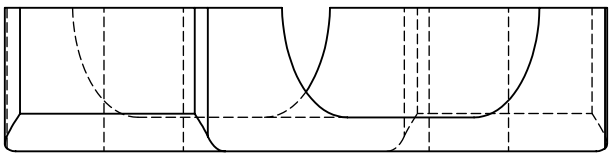
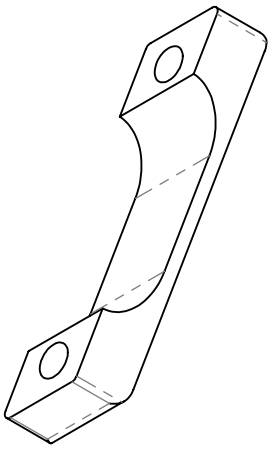




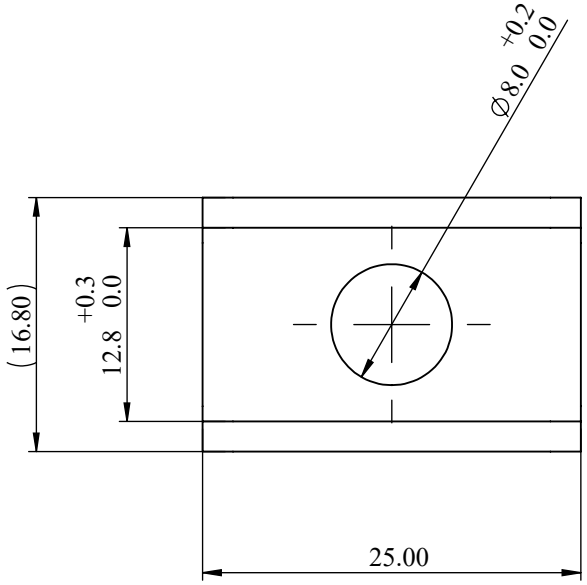


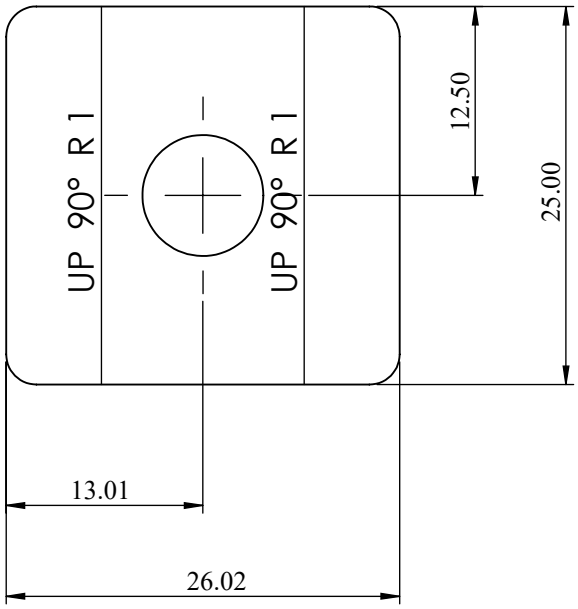


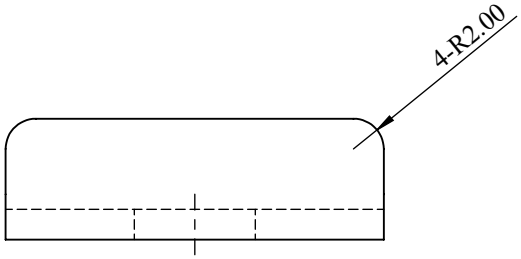
DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

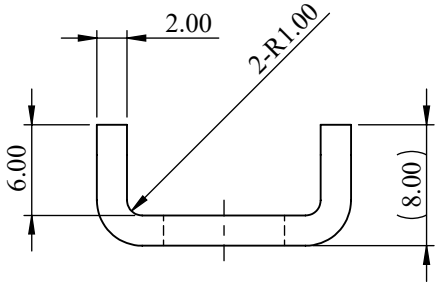
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	AQ37
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	BLACK OXIDIZING, RAL-9005
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FRAME CLAMP - RIGHT	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36002	
REV. NO.					









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DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	SHEET M.S. C.R.1. GD 'O' IS:513 THICK 2 mm, AA27
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	15.01.2019	SUR. TRT.	Ni-Cr PLATED, 8-12µ
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		M8 NUT LOCKING PLATE	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36003	
REV. NO.					

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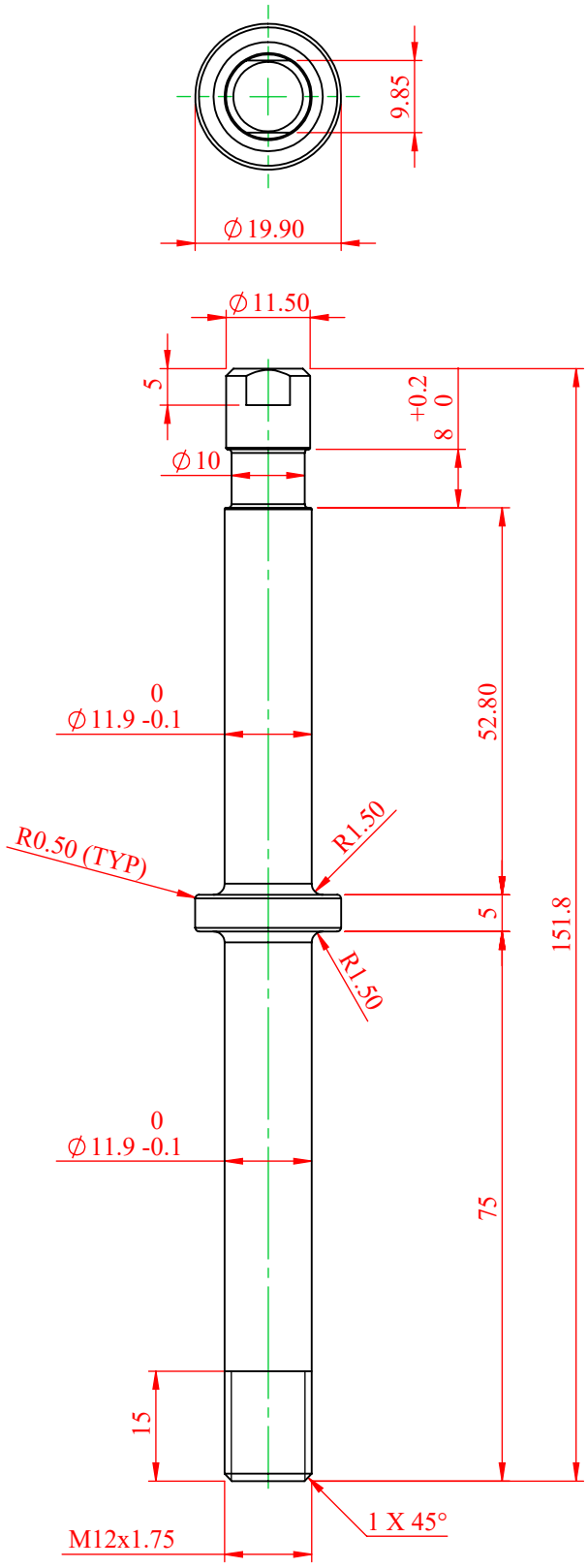

NOTE:

- HRC 26-35

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD TOOL STEEL HRA 40Ni2Cr1Mo28 (En8M) Ø20, AB22
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	Ni-Cr PLATED, 8-12µ
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		AXLE - REAR WHEEL	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36004	
REV. NO.					

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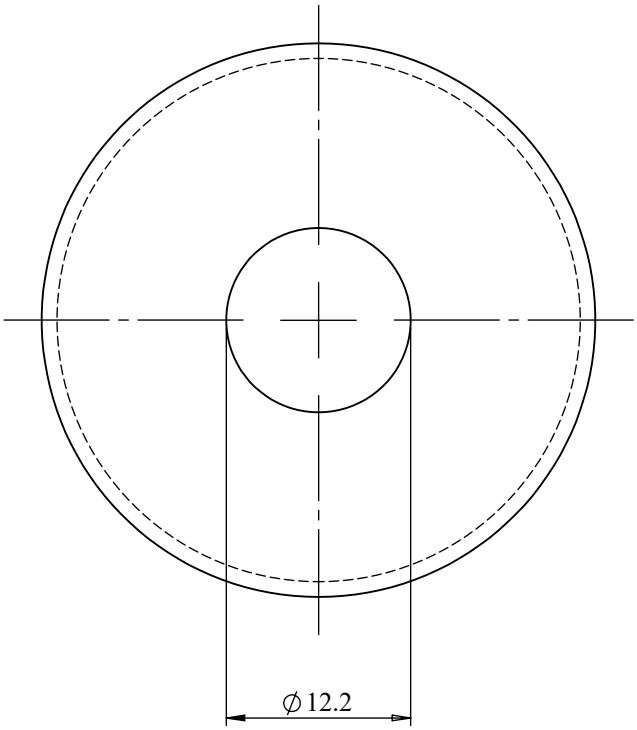

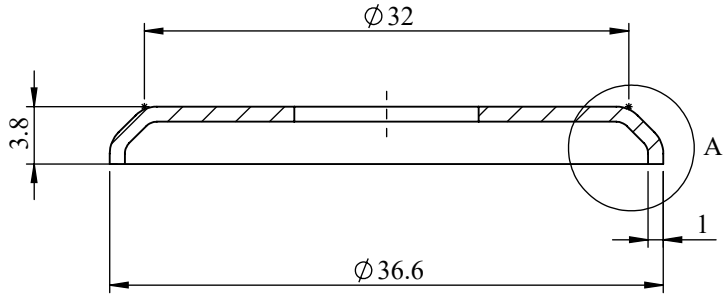

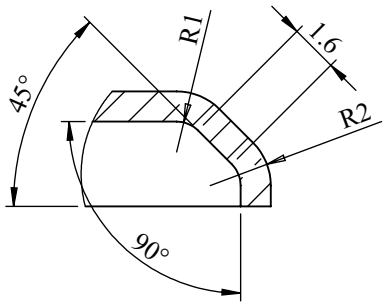

DETAIL A
SCALE 4 : 1

DEVELOPMENT DRAWING

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET MS CR1 GD 'O' IS:513 THICK 1mm
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		CASTOR BARREL CAP WASHER 12 X 32	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36005	
REV. NO.					

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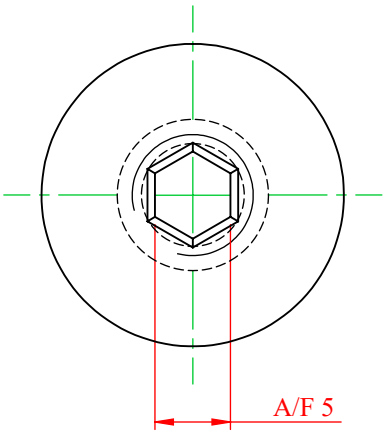

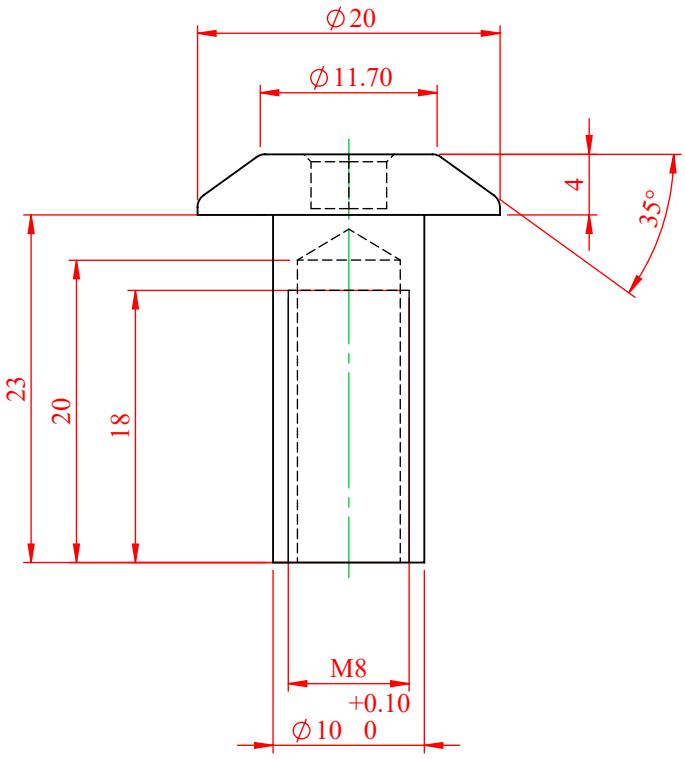

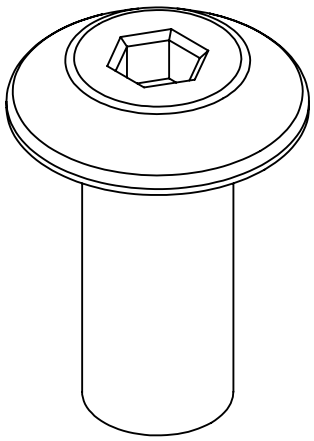

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	CR STAINLESS STEEL ROD Ø20mm, X04Cr19Ni9 (SS304) IS:6603-2002, AA88
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		M8 ALLEN CAP NUT	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36011	
REV. NO.					

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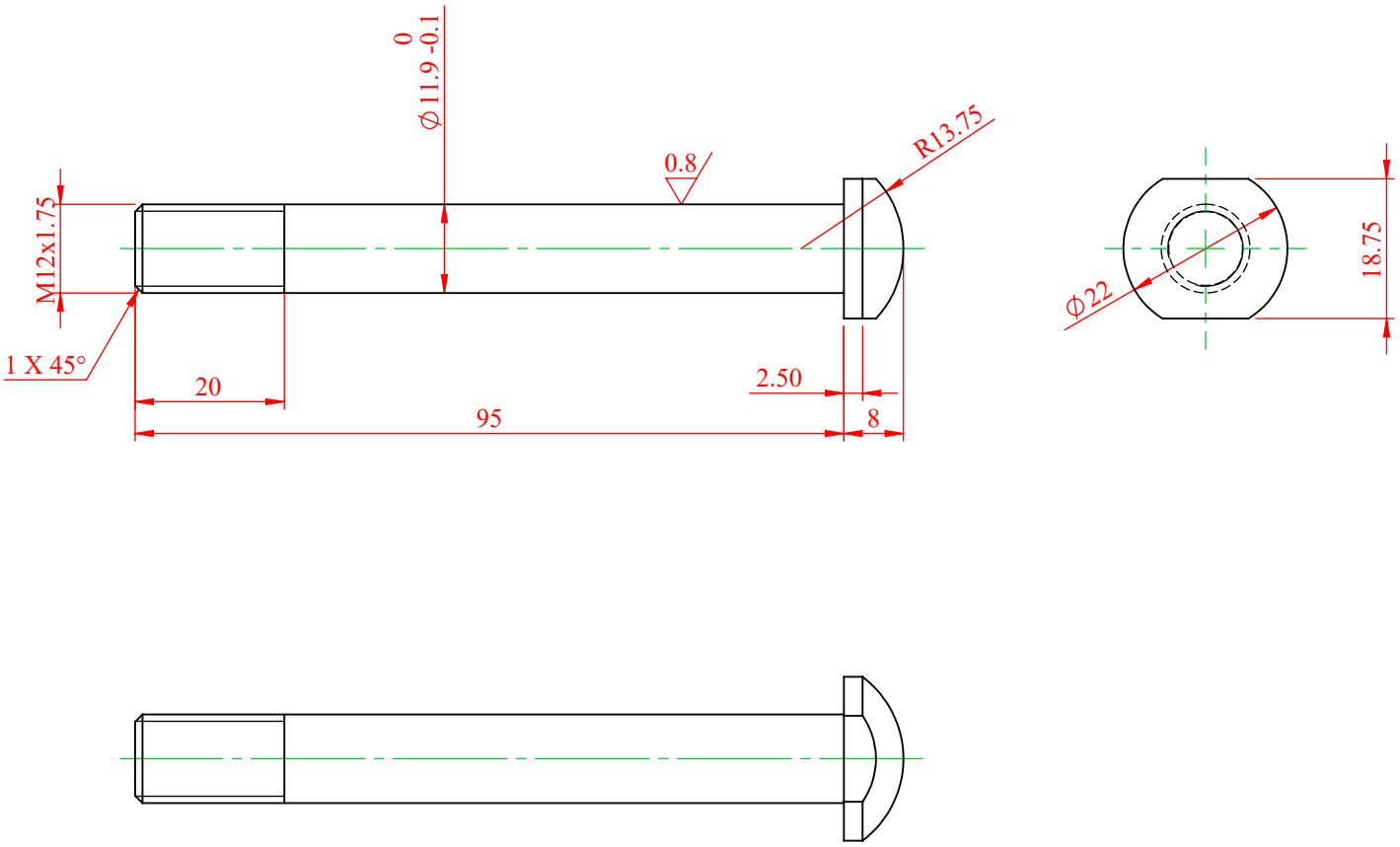
3.2 0.8

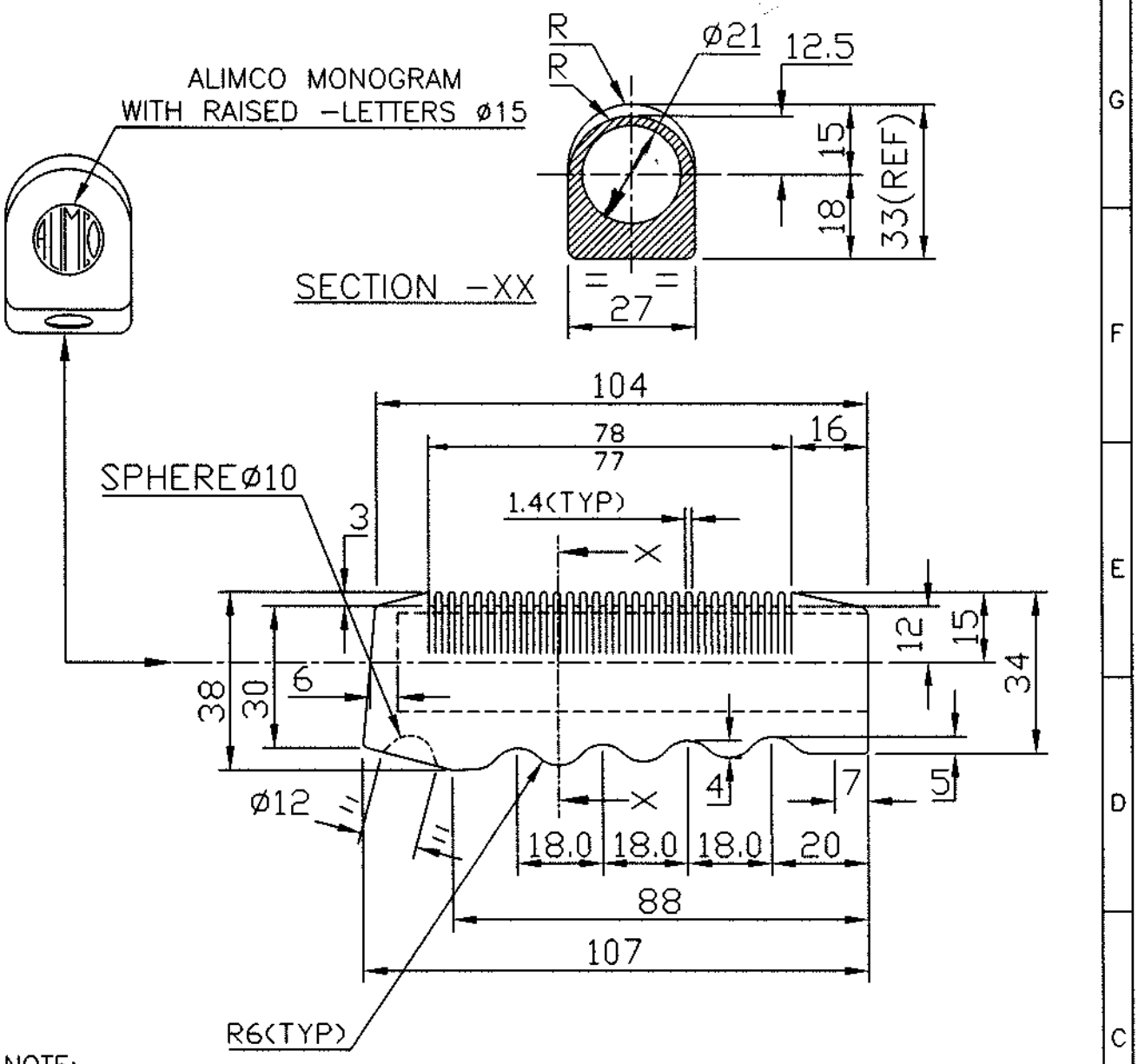


DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD TOOL STEEL ANNEALED (En9) IS:1570 Ø22mm, AH16
CHKD BY		DT		HEAT TRT.	32-34 HRc
APPD BY		DT	16.01.18	SUR. TRT.	Ni-Cr PLATED, 8-12µ
		IS: 2102 ISO: 2768-mK			DEBURR ALL SHARP EDGES 0.5x45°
					ALL DIMENSIONS ARE IN mm
WEIGHT		NOM.		M12 X 95 SPANNER BUTTON HEAD BOLT	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36012	
REV. NO.					

TD2B37000
ACTIVE FOLDING WHEEL CHAIR



NOTE:-

1. ROUND OFF SHARP EDGES & CORNERS
2. DIMENSIONS ARE FOR REF.ONLY
3. READYMADE IF AVAILABLE IS ACCEPTABLE
4. SHORE HARDNESS-85 TO 90 IRHD
5. WEIGHT-60 gms APPROX.
6. PERMITTED MOULDING DRAFT ANGLE 1°MAX

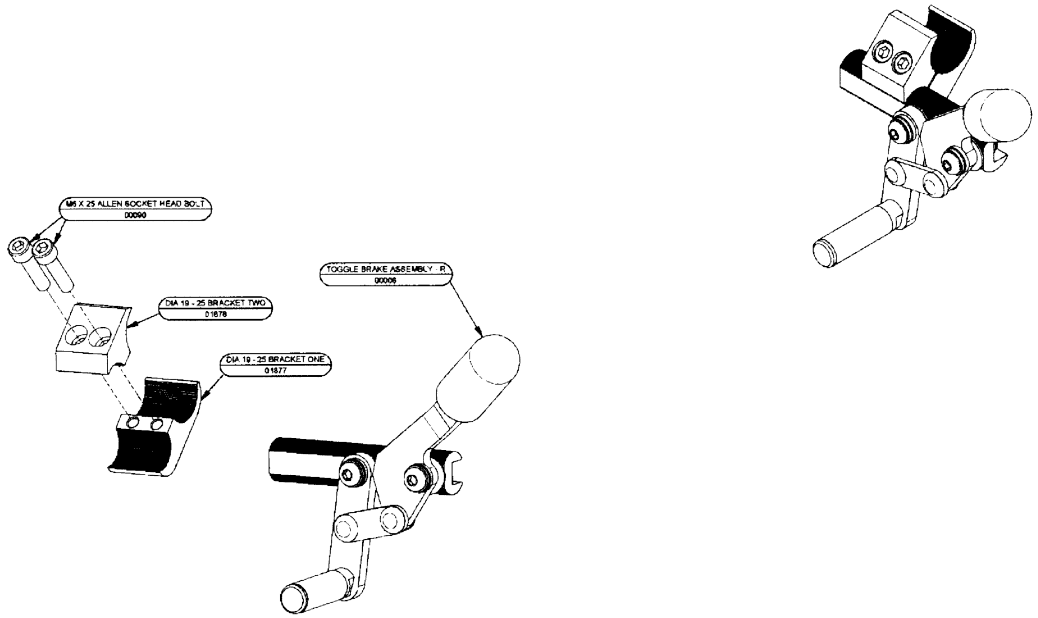
SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRG REDESIGN & REDRAWN	27.7.12	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	HAND GRIP I.D. 21mm
DRN		MTL	P.V.C. MOULDED,COLOUR BLACK
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	MOULDED
SCALE	NTS		
APP		DRG No:-	LD 50
DATE	21.10.99		SHEET 1OF1

SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 36 K A0	TOGGLE BRAKE ASSY - R	1	
2	TD 2 B 36 K 01	Ø19-25 BRACKET ONE	1	
3	TD 2 B 36 K 02	Ø19-25 BRACKET ONE	1	
4		M6x25 ALLEN SOCKET HEAD BOLT	2	



123

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PART BREAKDOWN
EDITION FEB 2013

TOGGLE BRAKE RIGHT (25MM CLAMP) - GENERAL ASSEMBLY

TOGGLE BRAKE GA (DIA 25) - R
PART NR 01876 REVISION 01

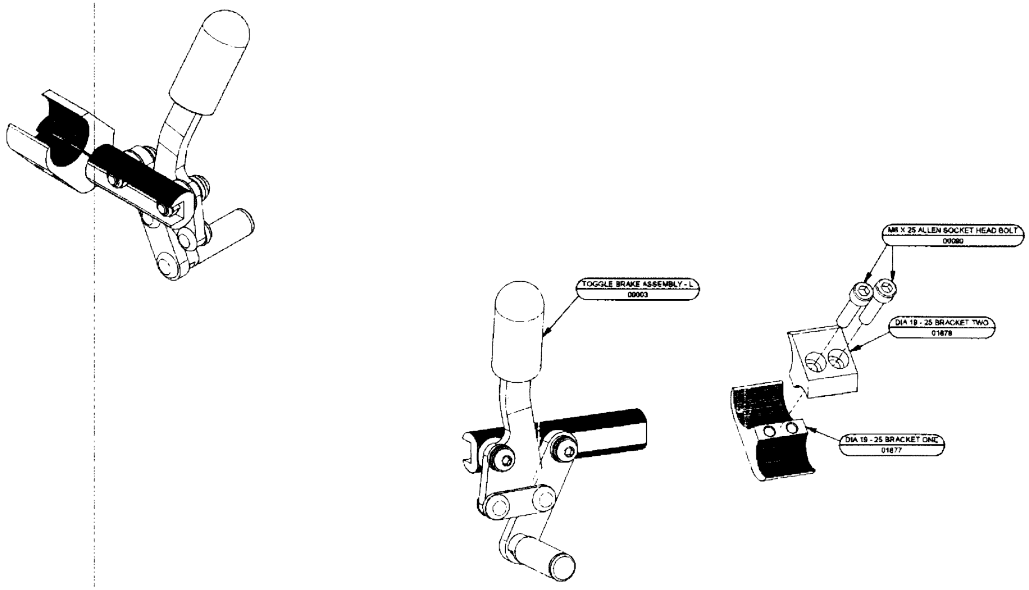
motivation
FREEDOM THROUGH MOBILITY

SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	TOGGLE BRAKE - RIGHT
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 36 K 00	REV 0 / SHEET 1 OF 1
DATE	15.01.2018		



SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 36 L A0	TOGGLE BRAKE ASSY - R	1	
2	TD 2 B 36 K 01	Ø19-25 BRACKET ONE	1	
3	TD 2 B 36 K 02	Ø19-25 BRACKET ONE	1	
4		M6x25 ALLEN SOCKET HEAD BOLT	2	

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PART BREAKDOWN
EDITION FEB 2013

TOGGLE BRAKE LEFT (25MM CLAMP) - GENERAL ASSEMBLY

TOGGLE BRAKE GA (DIA 25) - L
PART NR 01873 REVISION 01

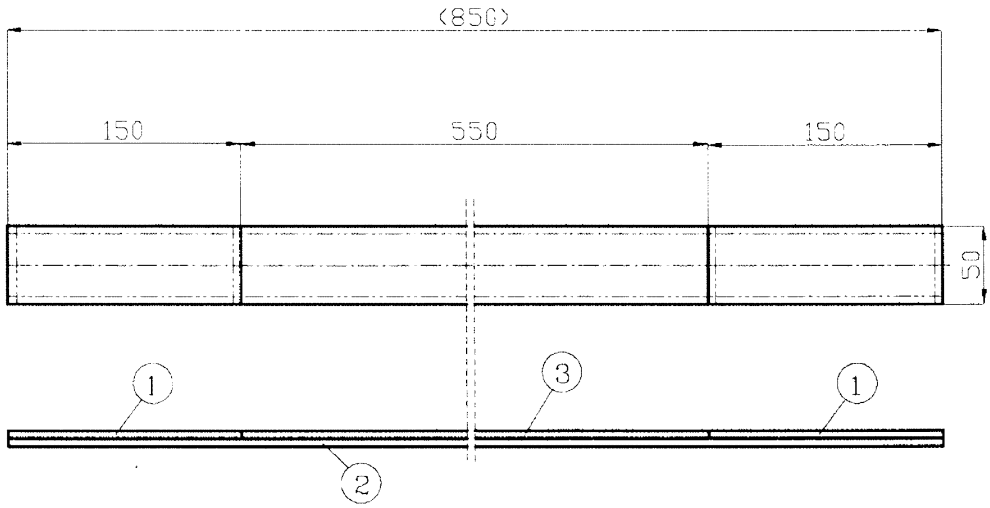
motivation
FREEDOM THROUGH MOBILITY

SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	TOGGLE BRAKE - LEFT
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 36 L 00	REV 0
DATE	15.01.2018		SHEET 1 OF 1



NOTE:
PLEASE STUDY THE PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT.

Tolerence wherever not specified

Dim	Tolerence Range		
1 - 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

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SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	CALF STRAP 850mm
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	TD 2 B 37 0 01
DATE	09.02.2018	REV	SHEET 1OF1

TD 2 B 37 0 Z0 - UPHOLSTERY KIT FOR TD 2 B 37 0 00

Active Folding			
S.No.	**ALIMCO Code**	**Nomenclature**	**Qty.**
1	TD2B37H00	BACKREST UPHOLSTERY	1
a	TD2B37H01	BACKREST COVER 600D	1
b	TD2B37H02	ADJUSTABLE STRAP CENTRE WEBBING	5
c	TD2B37HA0	ADJUSTABLE STRAP SIDE ASSY	10
2	TD2B37J00	SEAT UPHOLSTERY	1
a	TD2B37J01	SEAT COVER 600D	1
b	TD2B37H02	ADJUSTABLE STRAP CENTRE WEBBING	7
c	TD2B37HA0	ADJUSTABLE STRAP SIDE ASSY	14
3	TD2B37001	CALF STRAP 850MM	1
4	TD2B37K02	CUSHION COVER	1

SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	ACTIVE FOLDING WHEELCHAIR UPHOLSTERY KIT
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 37 0 Z0	REV 0 / SHEET 1OF1
DATE	09.02.2018		

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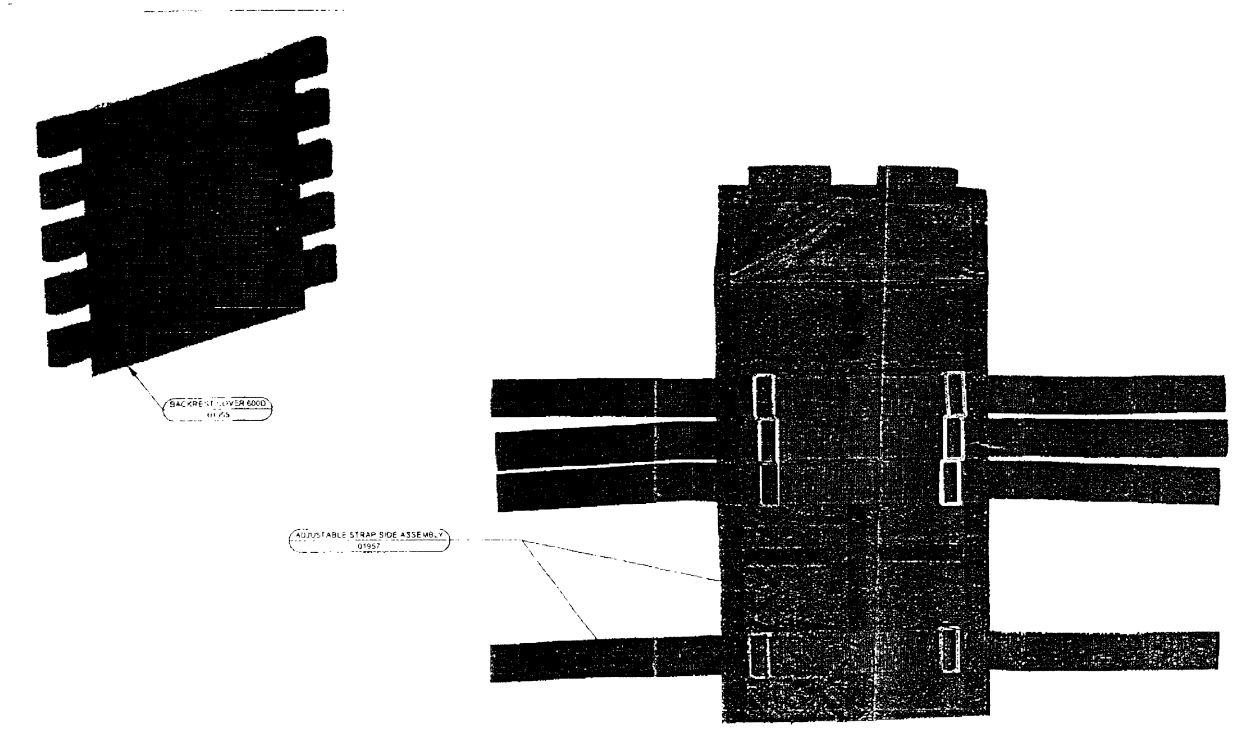
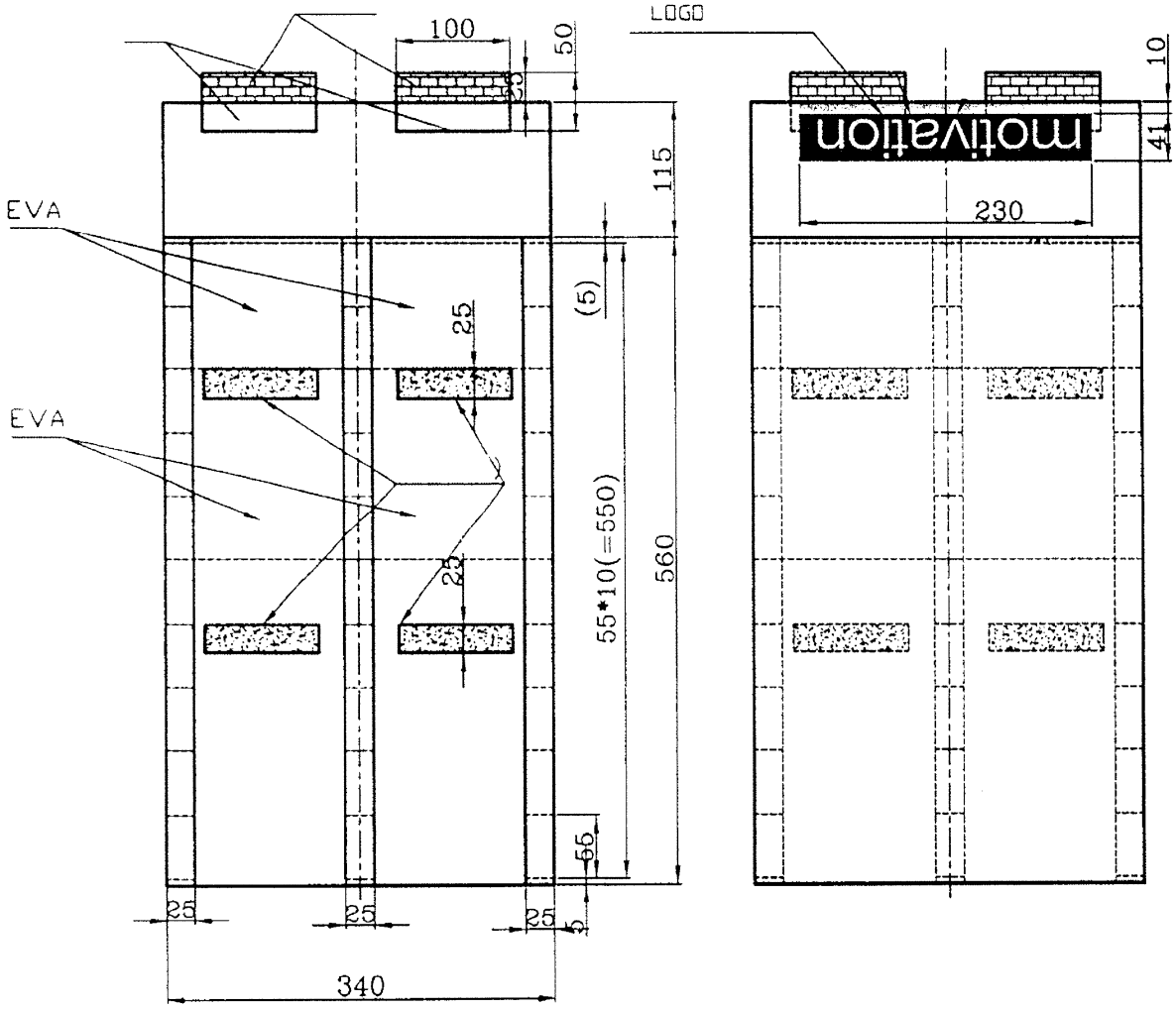


SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 37 H A0	ADJUSTABLE STRAP SIDE ASSY	12	
2	TD 2 B 37 H 01	BACKREST COVER 600D	1	
3	TD 2 B 37 H 02	ADJUSTABLE STRAP CENTRE WEBBING	6	

SNo.	REGION	REVISION	DATE	SIGN
		REVISIONS		

ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

DGN		NOM	BACKREST UPHOLSTERY
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 37 H 00	REV 0
DATE	09.02.2018		SHEET 1 OF 1



Tolerence wherever not specified

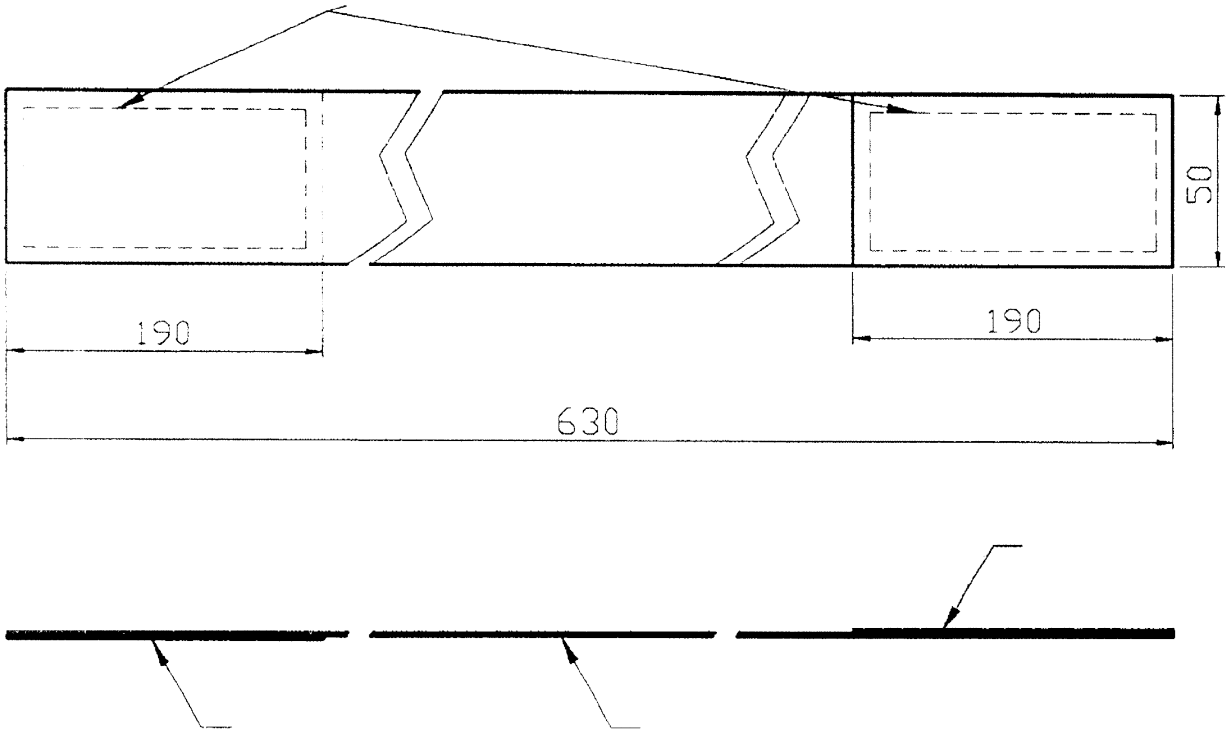
Dim	Tolerence Range		
1\ 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BACK REST COVER 600D
DRN		MTL	NYLON 200D, FIRE RETARDANT, WATERPROOF
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS	DRG No:-	TD 2 B 37 H 01
APP		REV	0
DATE	09.02.2018	SHEET	1OF1



Tolerence wherever not specified

Dim	Tolerence Range		
1\ 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

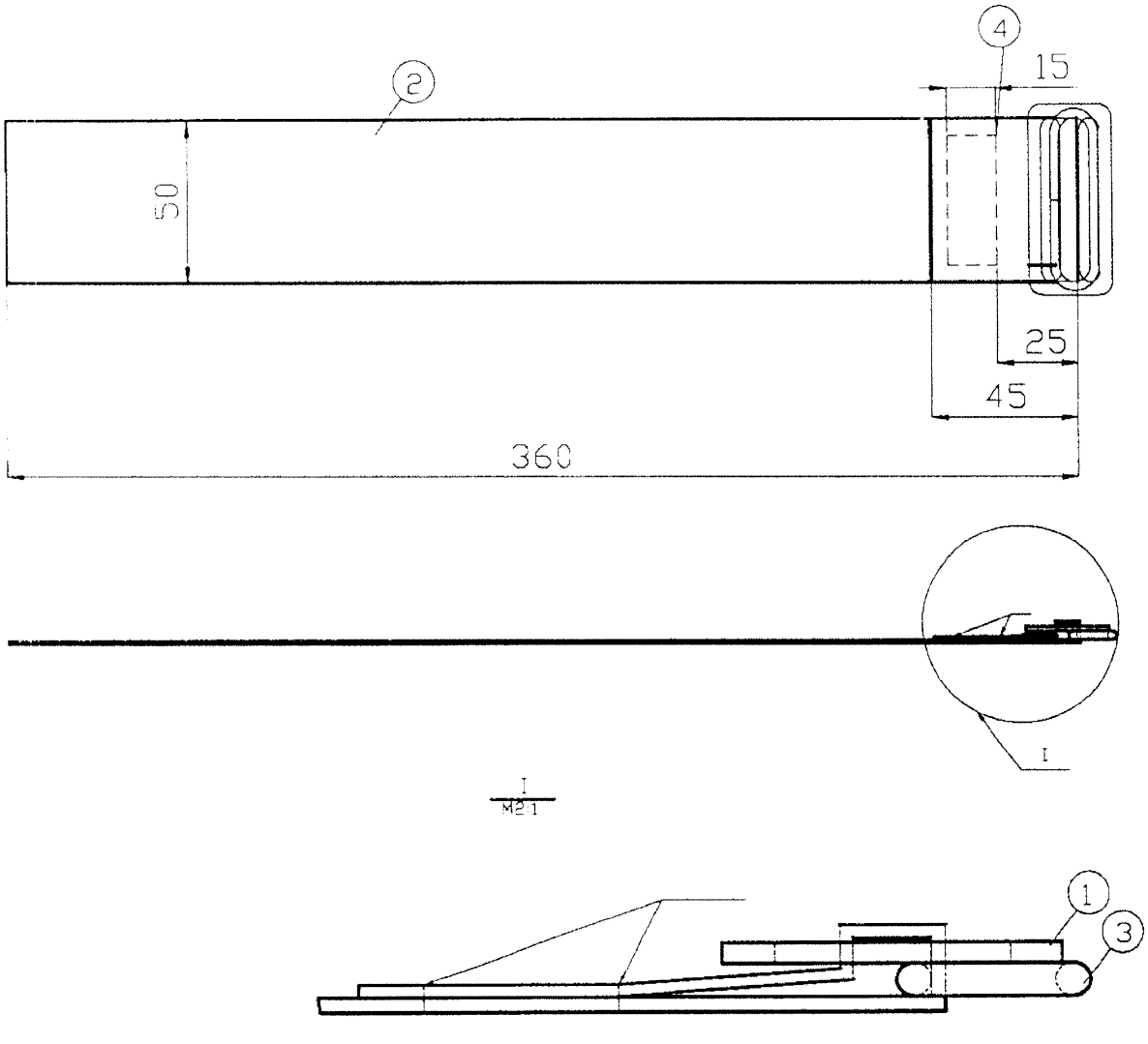
SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	ADJUSTABLE STRAP CENTRE WEBBING
DRN		MTL	NYLON 200D, FIRE RETARDENT, WATERPROOF
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	TD 2 B 37 H 02
DATE	09.02.2018	REV	0
		SHEET	1OF1

SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 37 H A1	50mm 3 BAR BUCKLE	1	
2	TD 2 B 37 H A2	50mm STRAP RING	1	
3		STRAP WEBBING SIDE 50mm	1	



Tolerence wherever not specified

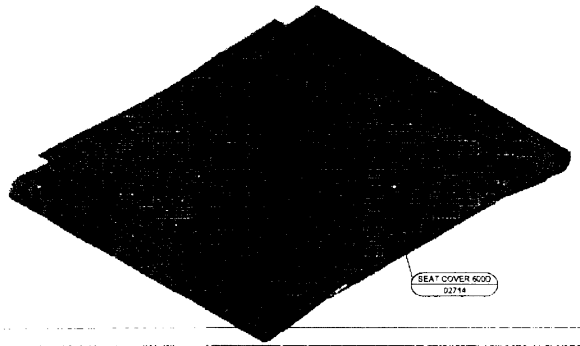
Dim	Tolerence Range		
1\ 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

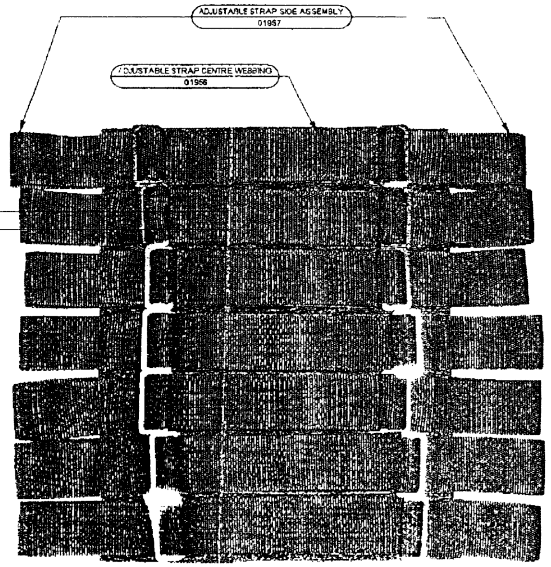
SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	ADJUSTABLE STRAP SIDE ASSY
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 37 H A0	REV 0 / SHEET 1OF1
DATE	09.02.2018		





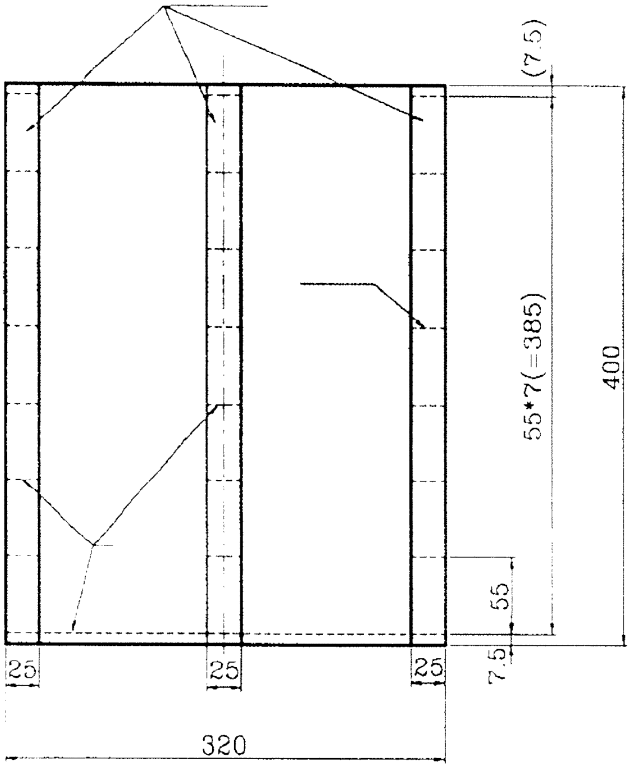
SL.No	DRAWING No.	NOMENCLATURE	QTY	REMARK
1	TD 2 B 37 J 01	SEAT COVER 600D	1	
2	TD 2 B 37 J 02	ADJUSTABLE STRAP CENTRE WEBBING	7	
3	TD 2 B 37 H A0	ADJUSTABLE STRAP SIDE ASSY	2	

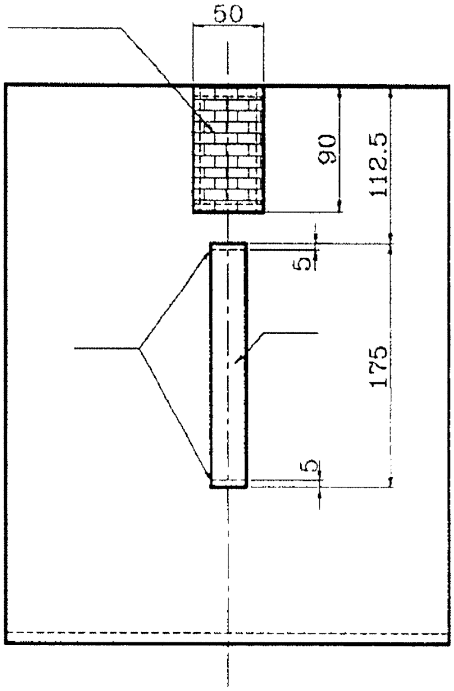
SNo.	REGION	REVISION	DATE	SIGN

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	SEAT UPHOSTERY
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:- TD 2 B 37 J 00	REV 0
DATE	09.02.2018		SHEET 1 OF 1





Tolerence wherever not specified

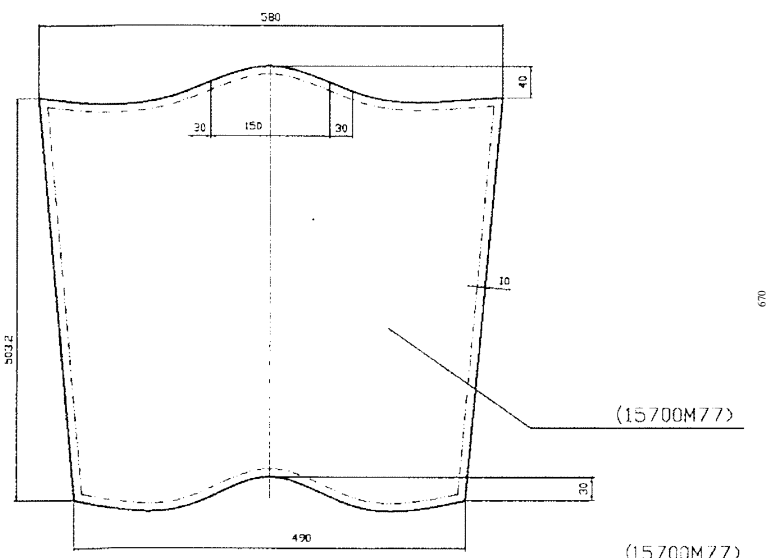
Dim	Tolerence Range		
1\ 16	± 0.2	± 0.3	± 0.4
17 - 63	± 0.2	± 0.5	± 0.7
64 - 250	± 0.3	± 0.7	± 1.0
250 - 960	± 0.5	± 0.12	± 1.5

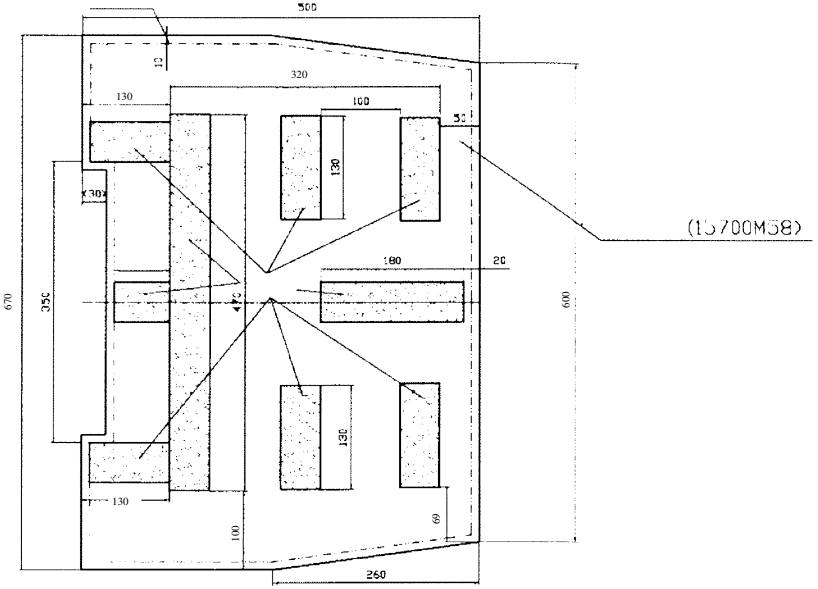
SNo.	REGION	REVISION	DATE	SIGN

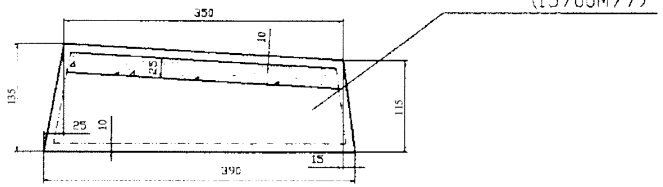
R E V I S I O N S

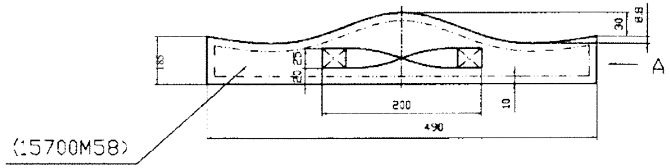
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

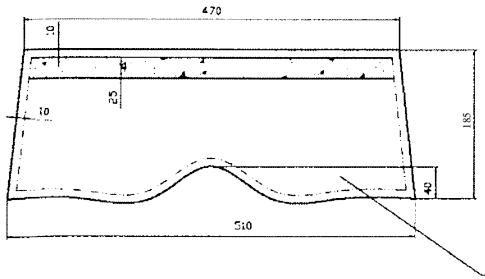
DGN		NOM	SEAT COVER 600D
DRN		MTL	NYLON 200D, FIRE RETAARDENT, WATERPROOF
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS	DRG No:-	TD 2 B 37 J 01
APP		REV	0
DATE	09.02.2018	SHEET	1OF1











NOTE:
PLEASE STUDY THE PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT.

SNo.	REGION	REVISION	DATE	SIGN
REVISIONS				

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN		NOM	CUSHION COVER
DRN		MTL	———
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP		DRG No:-	TD 2 B 37 K 02
DATE	09.02.2018	REV	SHEET 1 OF 1

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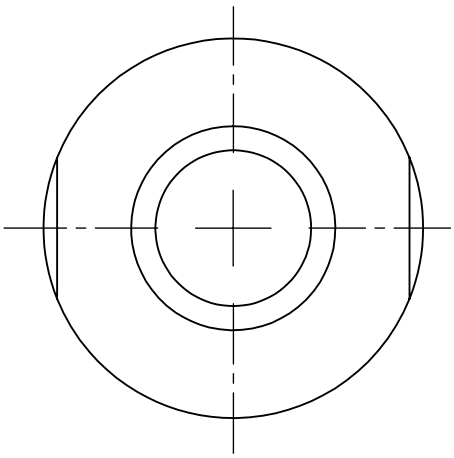

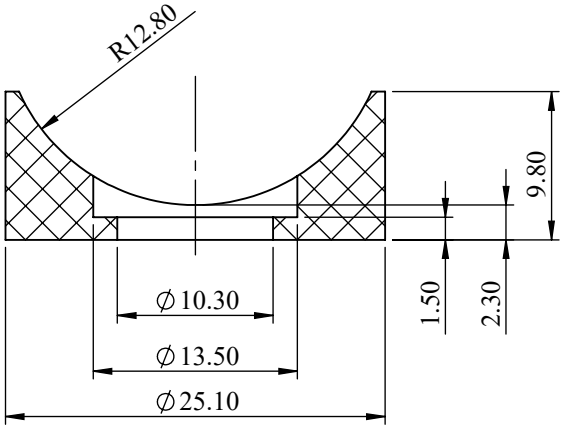

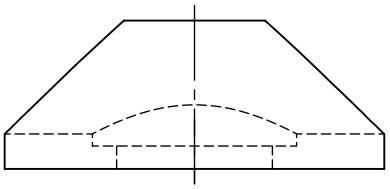

NOTE:
COMPONENT SHOULD BE FREE FROM MOULDING DEFECTS SUCH AS

- SHRINKAGE
- FLASHES
- WARPAGE
- COLOUR STREAKS, etc.

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	NYLON 6, COLOUR - BLACK
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		8 mm SADDLE WASHER OD 25mm	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36B01	
REV. NO.					

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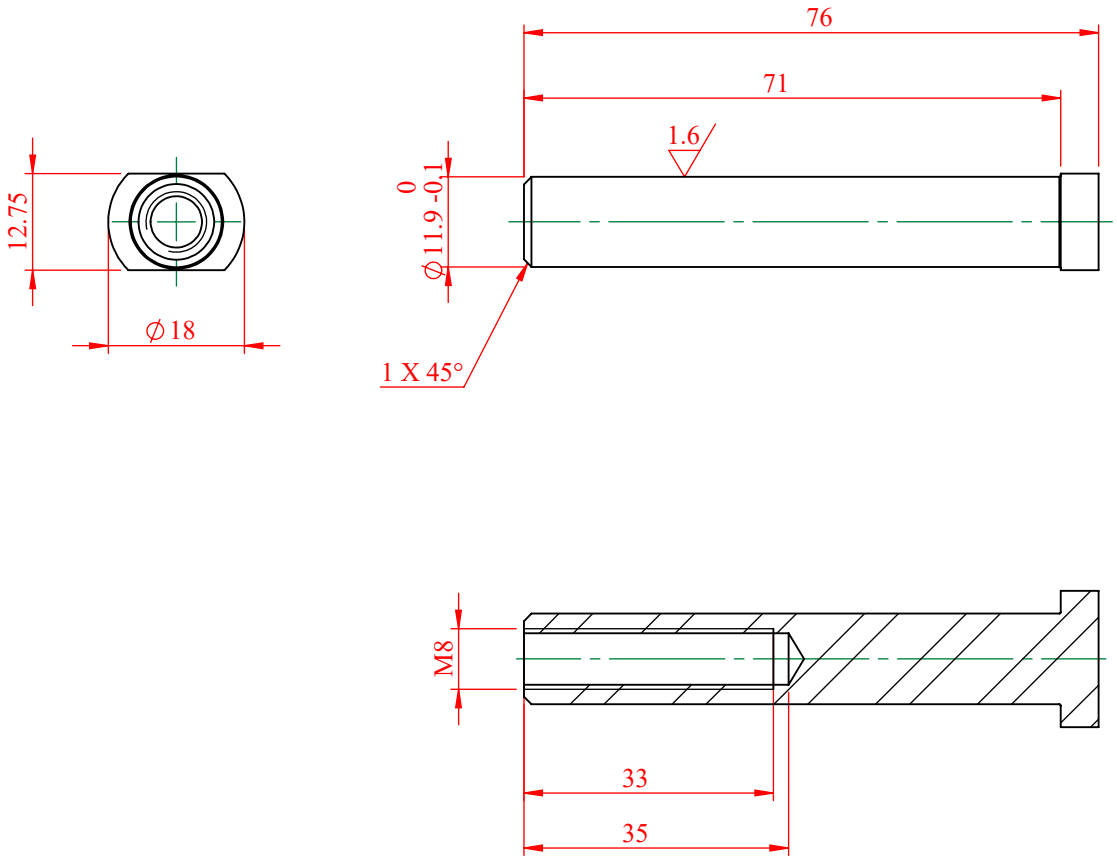

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD CARBON TOOL STEEL COLD DRAWN ANNEALED En8M Ø18mm IS:4431, AH68
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	Ni-Cr PLATED, 8-12µ
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		AXLE CASTOR WHEEL	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36H02	
REV. NO.					

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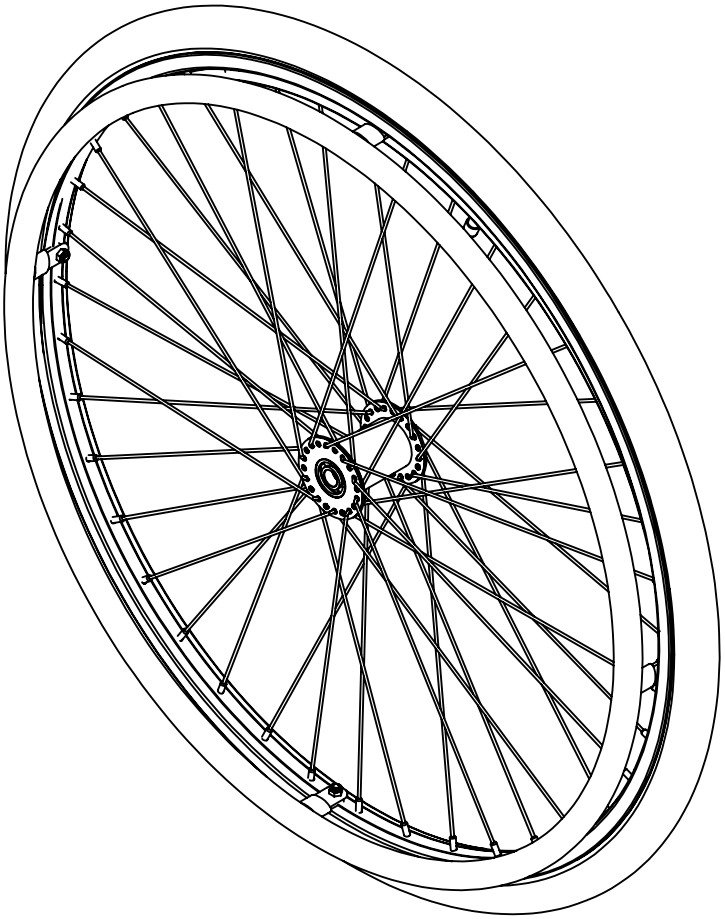
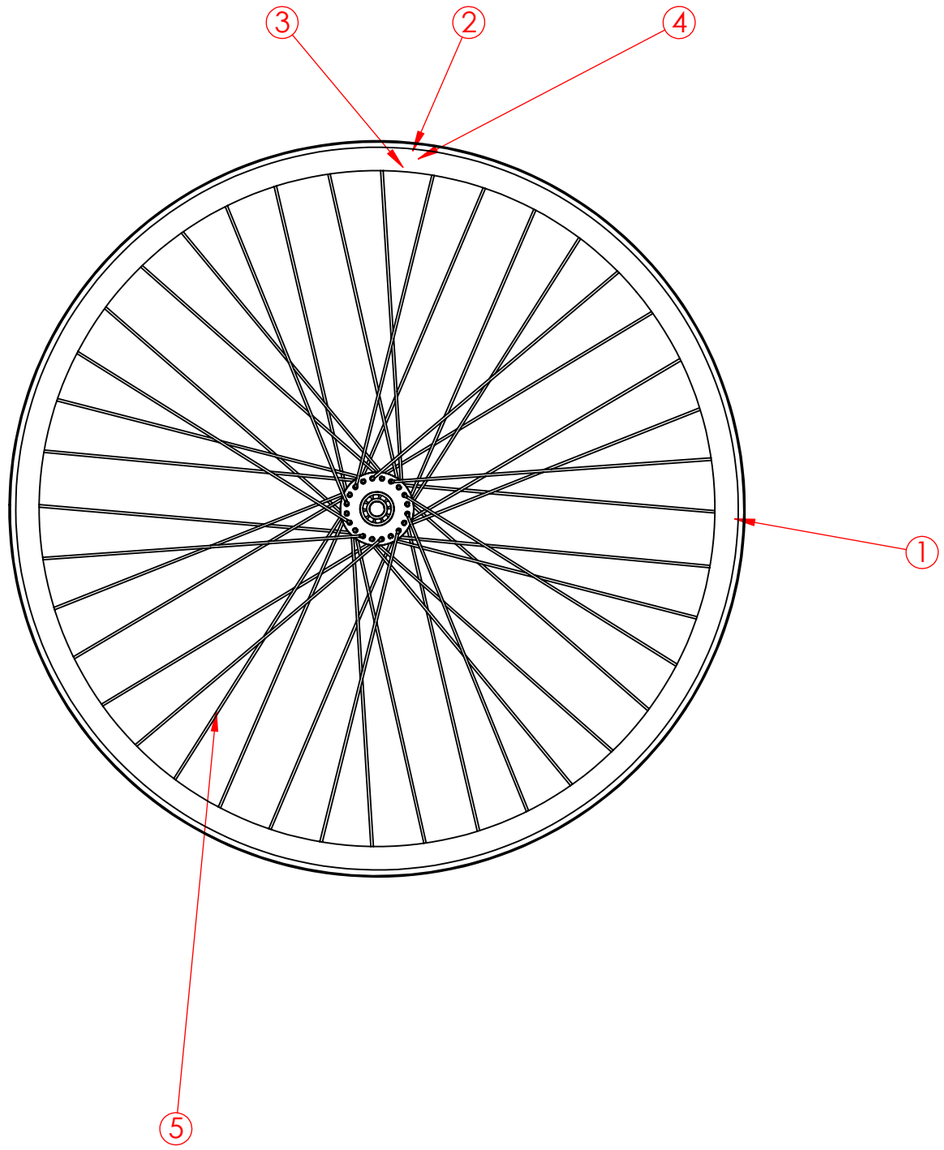
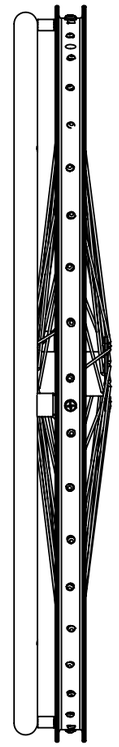


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36JD0	PUSH RIM & RIM WITH SPOKE ASSY	1
2	LM05	RIM TAPE 26" 0.5 mm thick, 14±1 mm Length-1762±20. IS:960	1
3	LM03	Cycle Standard duty tyre type 'B' size 37-590 (26"x1 3/8" BLACK as per IS:2414, Crown thickness-4.5 mm, Min. tensile Strength-81.5kgf/cm2 (Mpa) Min. of rubber compound elongation at break -300%.	1
4	LM04	Cycle Rubber tube Standard duty, size-37-590 (26" x 1 3/8") BLACK ISI marked as per IS:2415-2015 Class D.	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		WHEEL ASSY. WITH PUSH RIM	
SCALE					
SHEET		DRG NO.		TD2B36J00	
REV. NO.					





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B36JC0	PUSH RING WELDED ASSY.	1
2	BC56	Phillips Pan Head Bolt M5x12 8.8 IS0:7045 Zinc Plated Blue 5-8µ IS:1573	4
3	BA81	Nyloc Nut M5 IS:7002 Zinc Plated Blue 5-8µ IS:1573	4
4	TD2B36JC3	PUSH RING TAB COVER	4
5	TD2B36JE0	RIM WITH SPOKE ASSY.	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		PUSH RIM & RIM WITH SPOKE ASSY	
SCALE					
SHEET		DRG NO.		TD2B36JD0	
REV. NO.					

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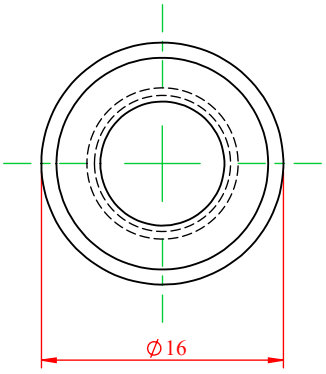
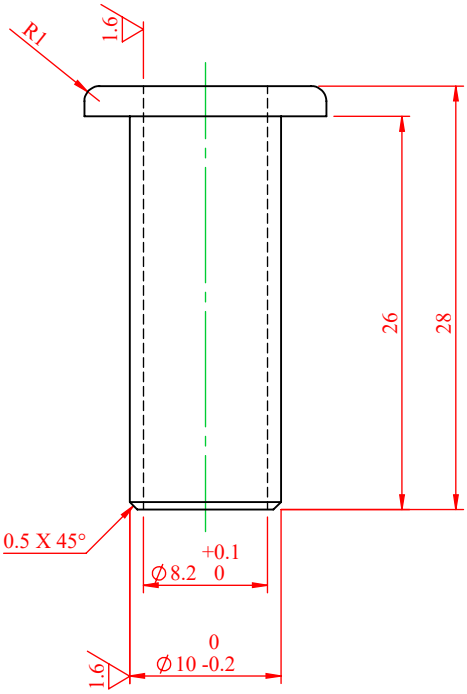
3.2 [1.6]





ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD Ø16 PHOSPHOR BRONZE, IS: 7811, AA85
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		X BRACE TUBE	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B37A01	
REV. NO.					

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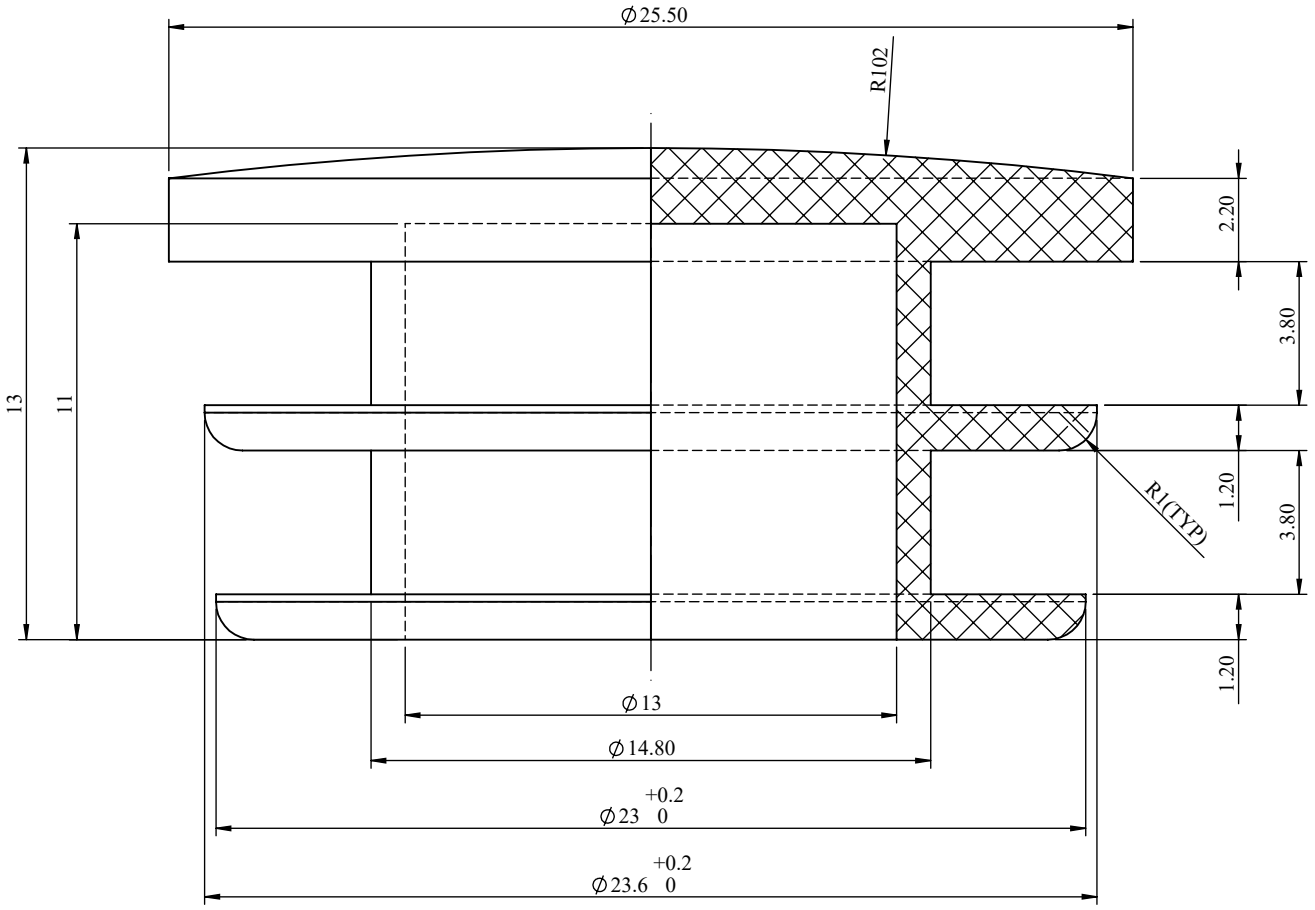
1.6



NOTE:
COMPONENT SHOULD BE FREE FROM MOULDING DEFECTS SUCH AS

- SHRINKAGE
- FLASHES
- WARPAGE
- COLOUR STREAKS, etc.

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	GRANNULES POLYPROPYLENE (BLACK COLOUR) GD KM 6100 IS:7078
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		25 mm DIA END PLUG (23.4 ID)	
SCALE	1:1				
SHEET	1 OF 1				
REV. NO.		DRG NO.		TD2B37A02	

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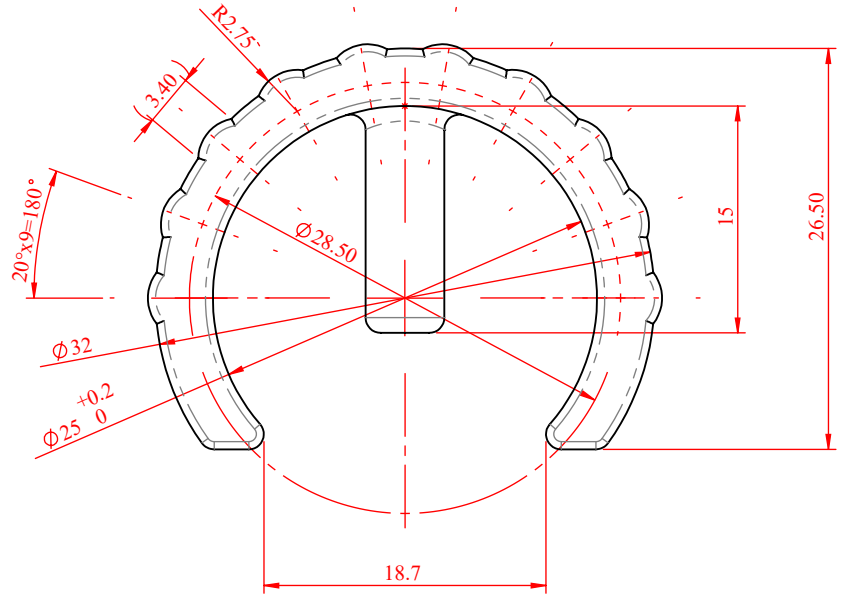
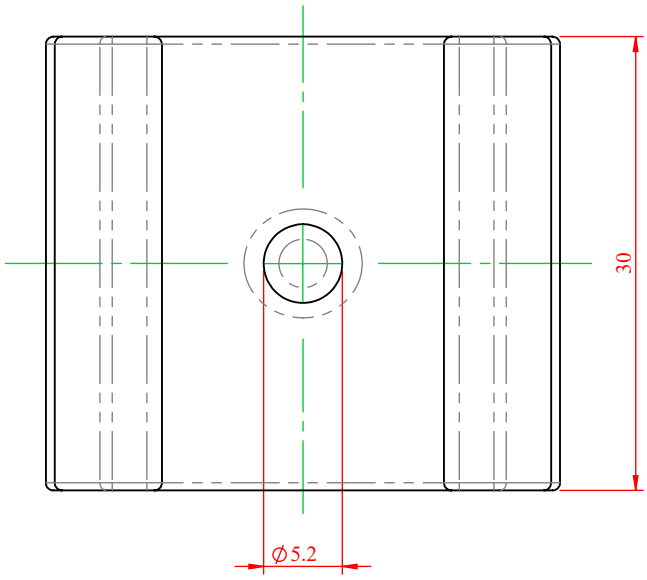




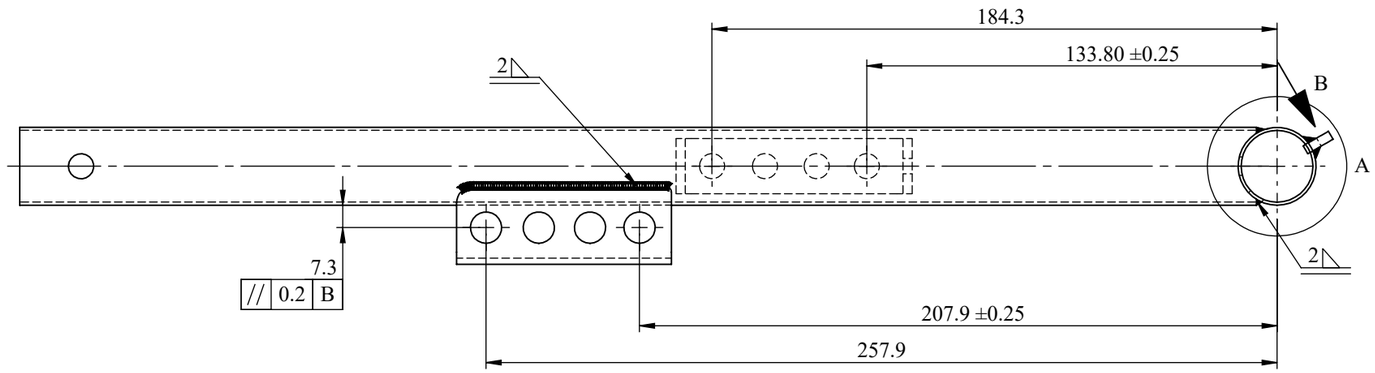
NOTE:

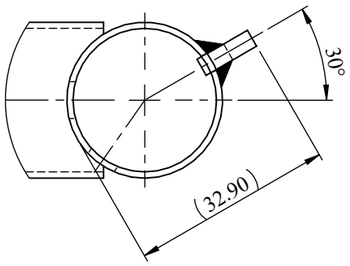
- COMPONENT SHOULD BE FREE FROM MOULDING DEFECTS SUCH AS
  - SHRINKAGE
  - FLASHES
  - WARPAGE
  - COLOUR STREAKS, etc.
- MOULD FILLET R=0.5mm

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

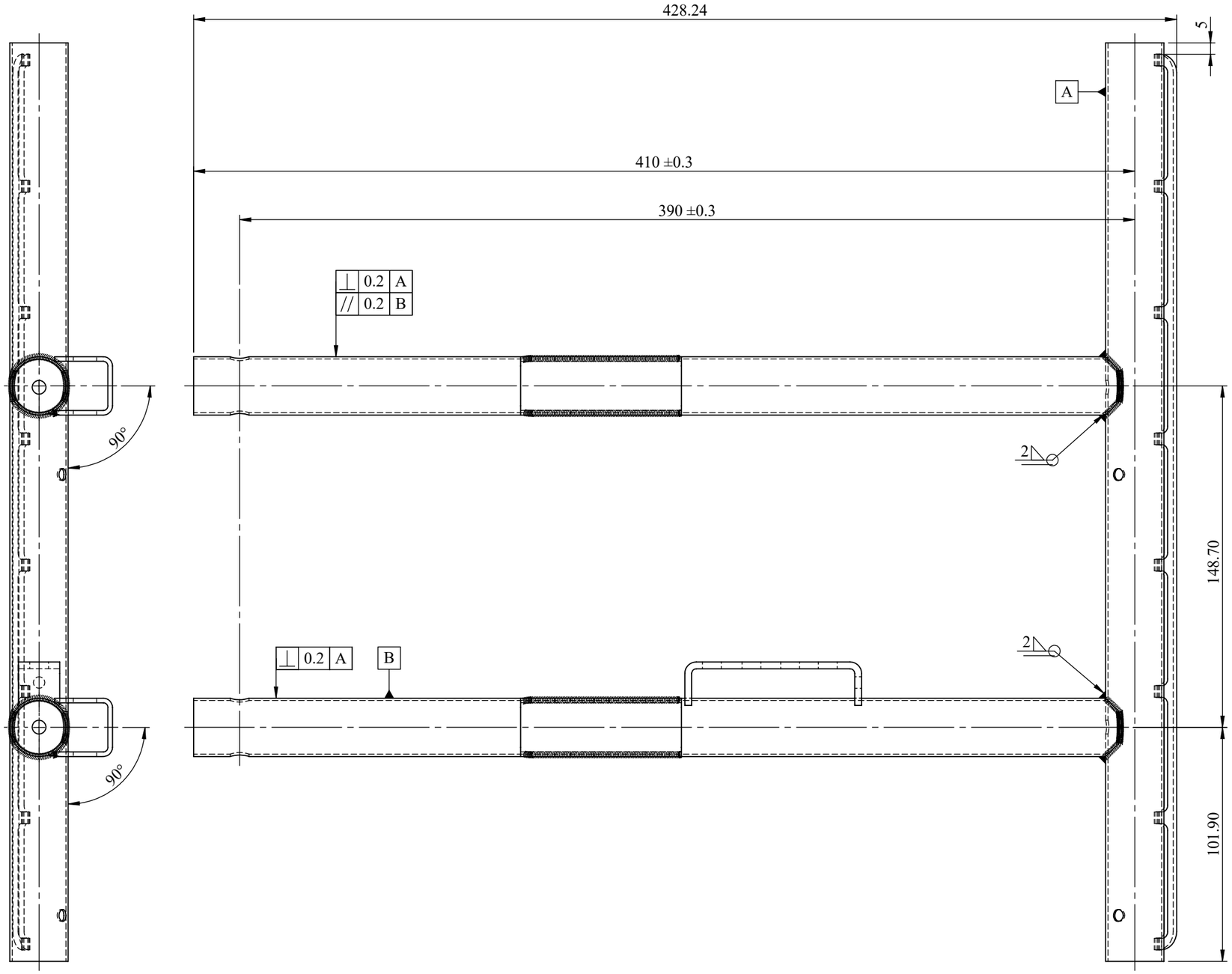
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

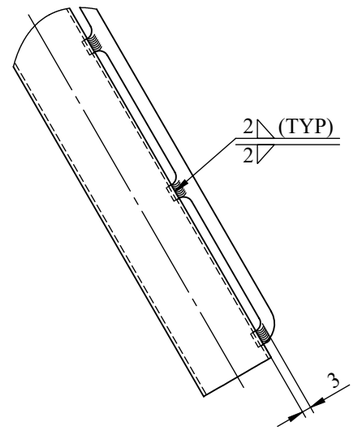
DRN BY	A.SHUKLA	DT		MATERIAL	GRANNULES POLYAMIDE (NYLON) IS:7078, TYPE 6, COLOUR BLACK
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		25 mm TUBE SLEEVED CLIP	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B37A03	
REV. NO.					





DETAIL A
SCALE 1 : 1





VIEW B

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37AA2	X BRACE - SEAT TUBE - INNER	1
2	TD2B37AA3	X BRACE - CROSS BRACE TUBE	2
3	TD2B37AA1	STRAP MOUNTING - MULTIPLE	1
4	TD2B37AA4	X BRACE MAIN PIVOT BRACKET	2
5	TD2B37AA5	X BRACE / LOCK OUT PIVOT BRACKET	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.18	SUR. TRT.	POWDER COATING - COLOUR AS APPROVED

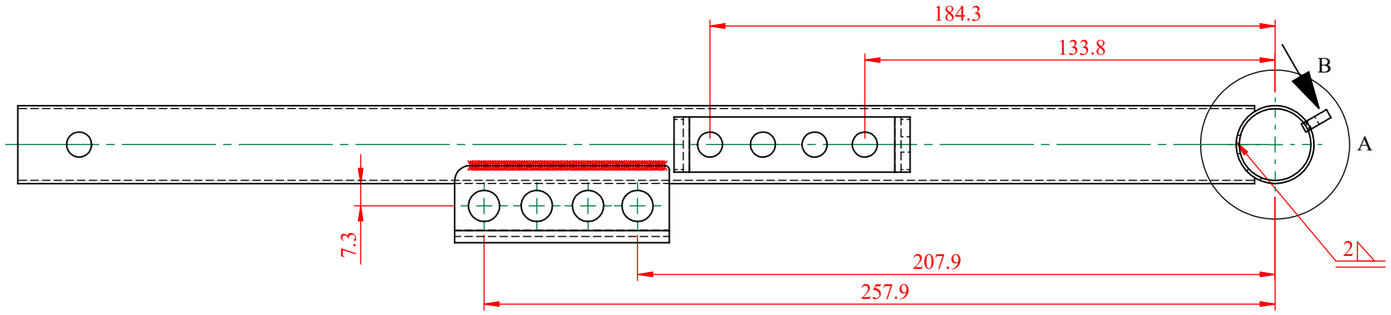
IS: 2102
ISO: 2768-mK

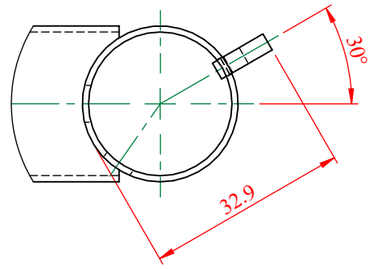
DEBURR ALL SHARP EDGES 0.5x45°
ALL DIMENSIONS ARE IN mm

WEIGHT	
SCALE	1:2
SHEET	1 OF 1
REV. NO.	

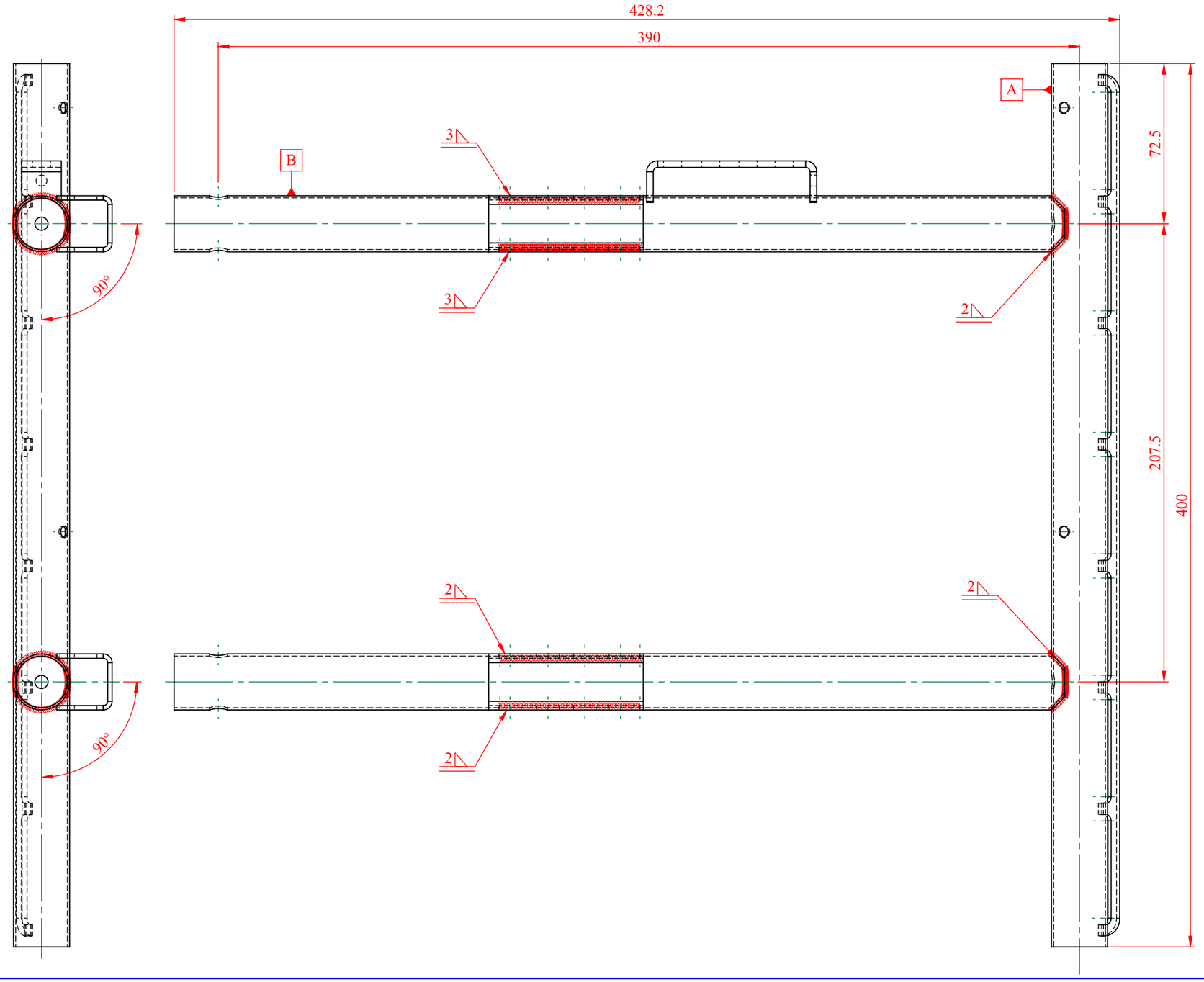
NOM. CROSS BRACE INNER ASSY.

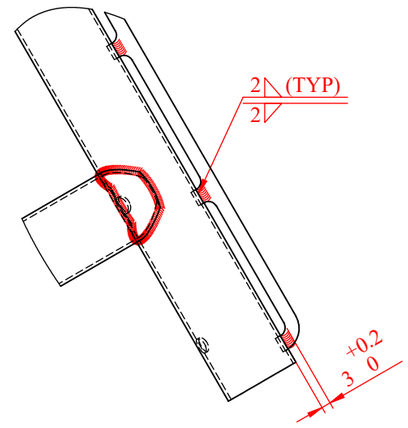
DRG NO. TD2B37AA0





DETAIL A
SCALE 1 : 1





VIEW B
SCALE 1 : 2

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37AB1	X BRACE - SEAT TUBE - OUTER	1
2	TD2B37AA3	X BRACE - CROSS BRACE TUBE	2
3	TD2B37AA4	X BRACE MAIN PIVOT BRACKET	2
4	TD2B37AA5	X BRACE / LOCK OUT PIVOT BRACKET	1
5	TD2B37AA1	STRAP MOUNTING - MULTIPLE	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.18	SUR. TRT.	POWDER COATING - COLOUR AS APPROVED

ISO: 13920-B	DEBURR ALL SHARP EDGES 0.5x45°
	ALL DIMENSIONS ARE IN mm

WEIGHT		NOM.	CROSS BRACE OUTER TUBE
SCALE	1:2		
SHEET	1 OF 1	DRG NO.	TD2B37AB0
REV. NO.			

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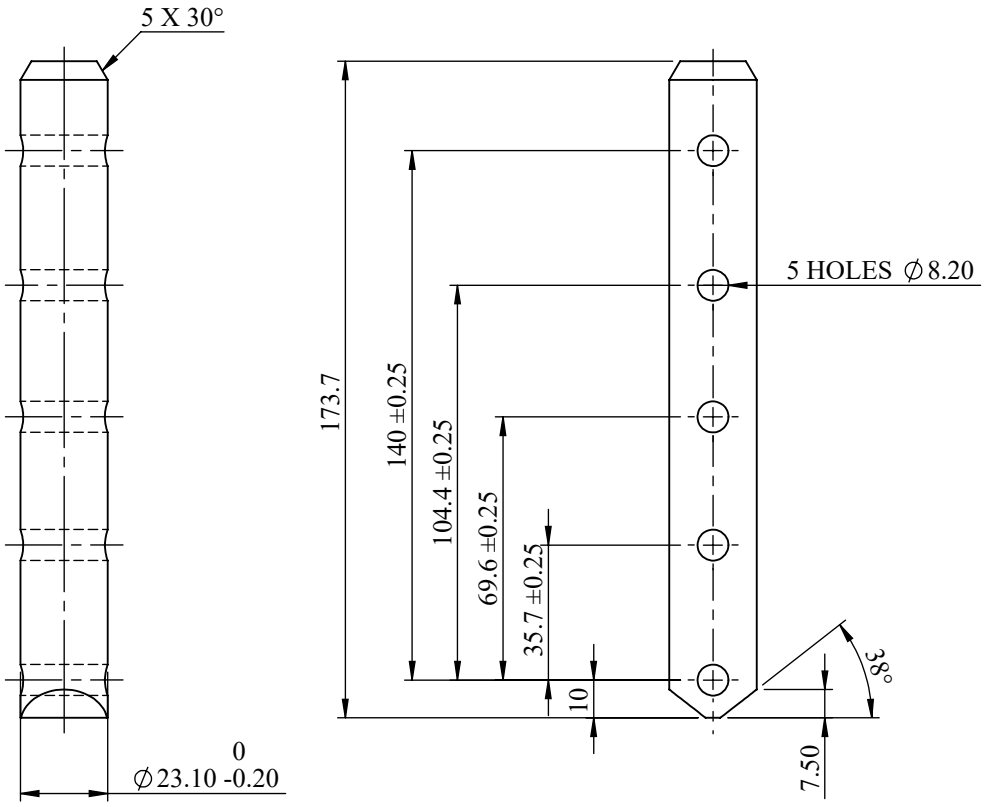

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD ALUMINIUM ALLOY Ø24, 65032 WP IS:733(6061 T6), AP44
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	ANODISED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		X BRACE ADJUSTABLE BAR	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B37B03	
REV. NO.					

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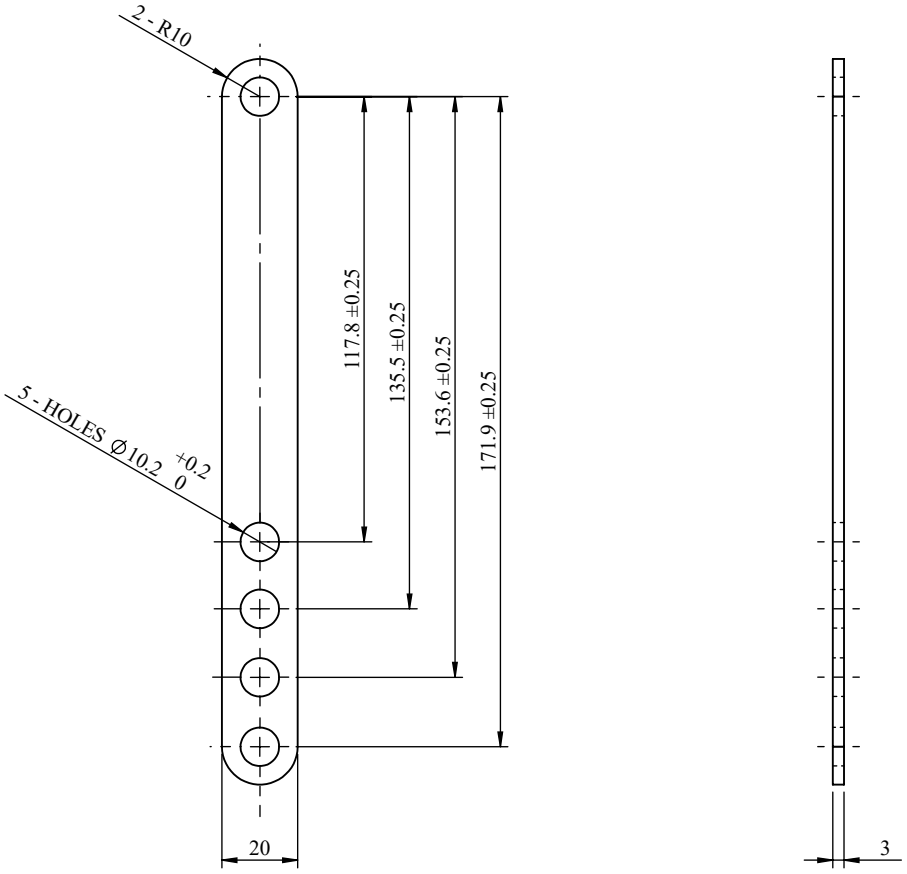


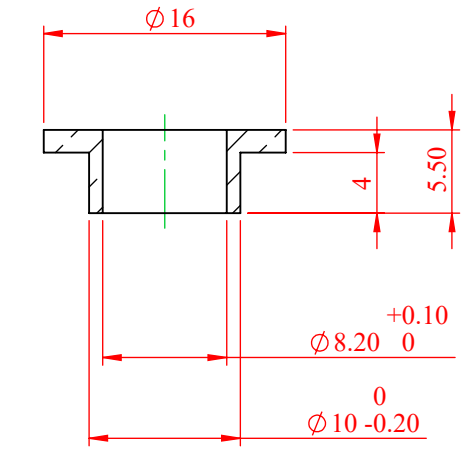
DEVELOPMENT DRAWING

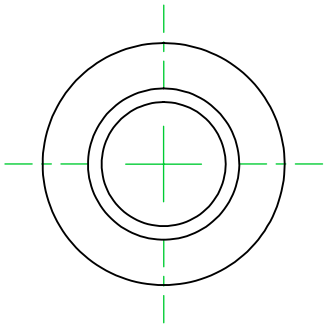
DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET SS HRA 04Cr19Ni9 THICK 3mm IS:6911
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		LOCK OUT BAR	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B37B04	
REV. NO.					

3.2





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DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD Ø16 PHOSPHOR BRONZE, IS: 7811 AA85
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		M8 PIVOT SPACER	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B37B05	
REV. NO.					

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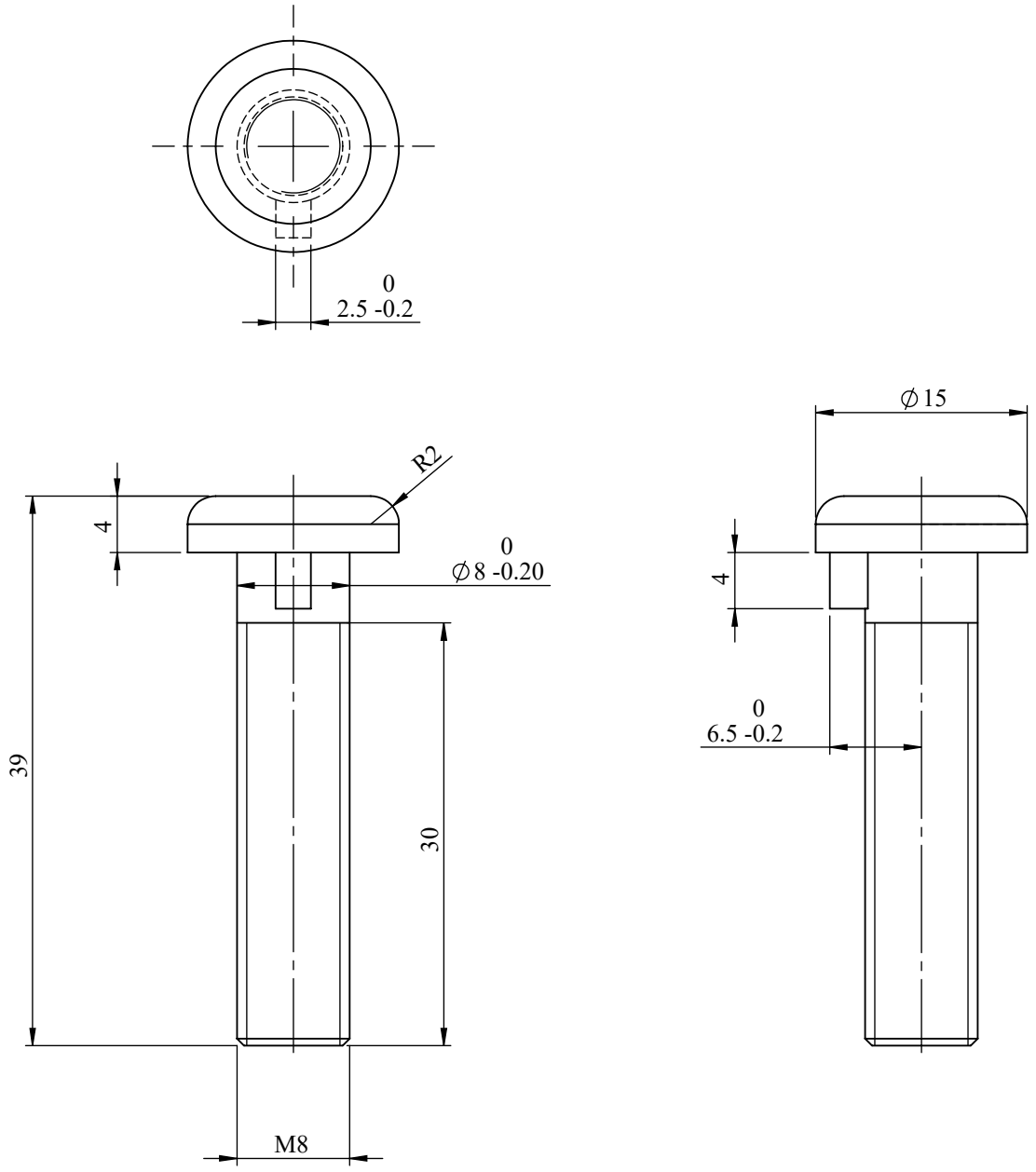

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	BAR MS CRBA DIA 16mm13S25 IS:9550
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		M8x35 BLANK PAN HEAD	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B37B06	
REV. NO.					

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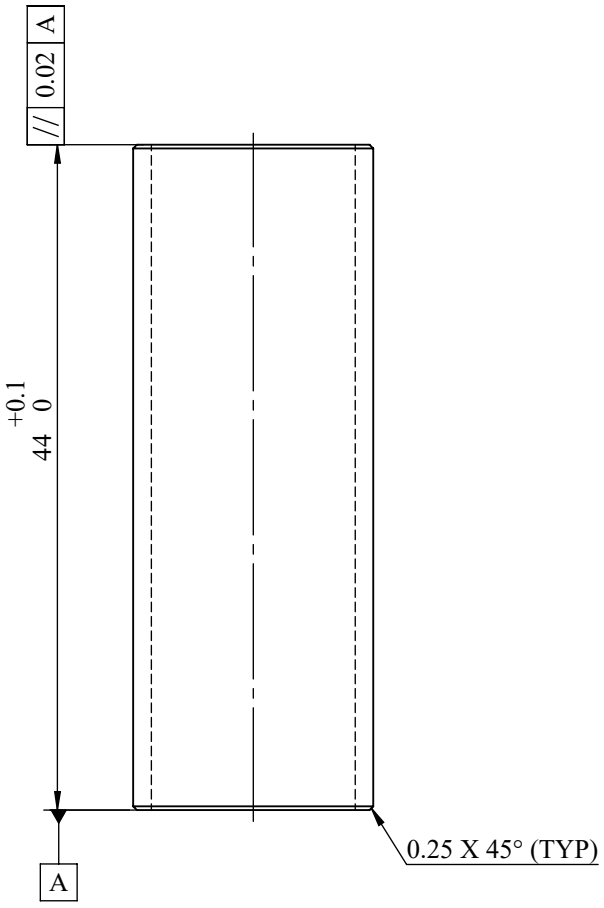
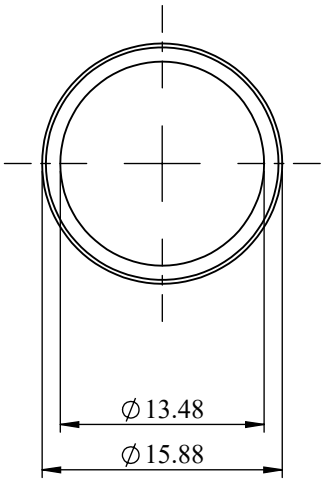
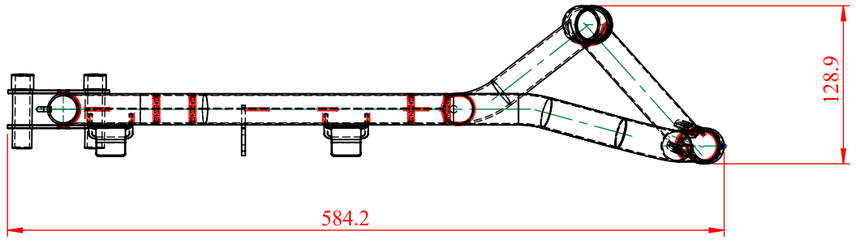
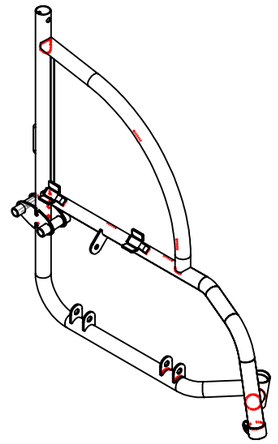


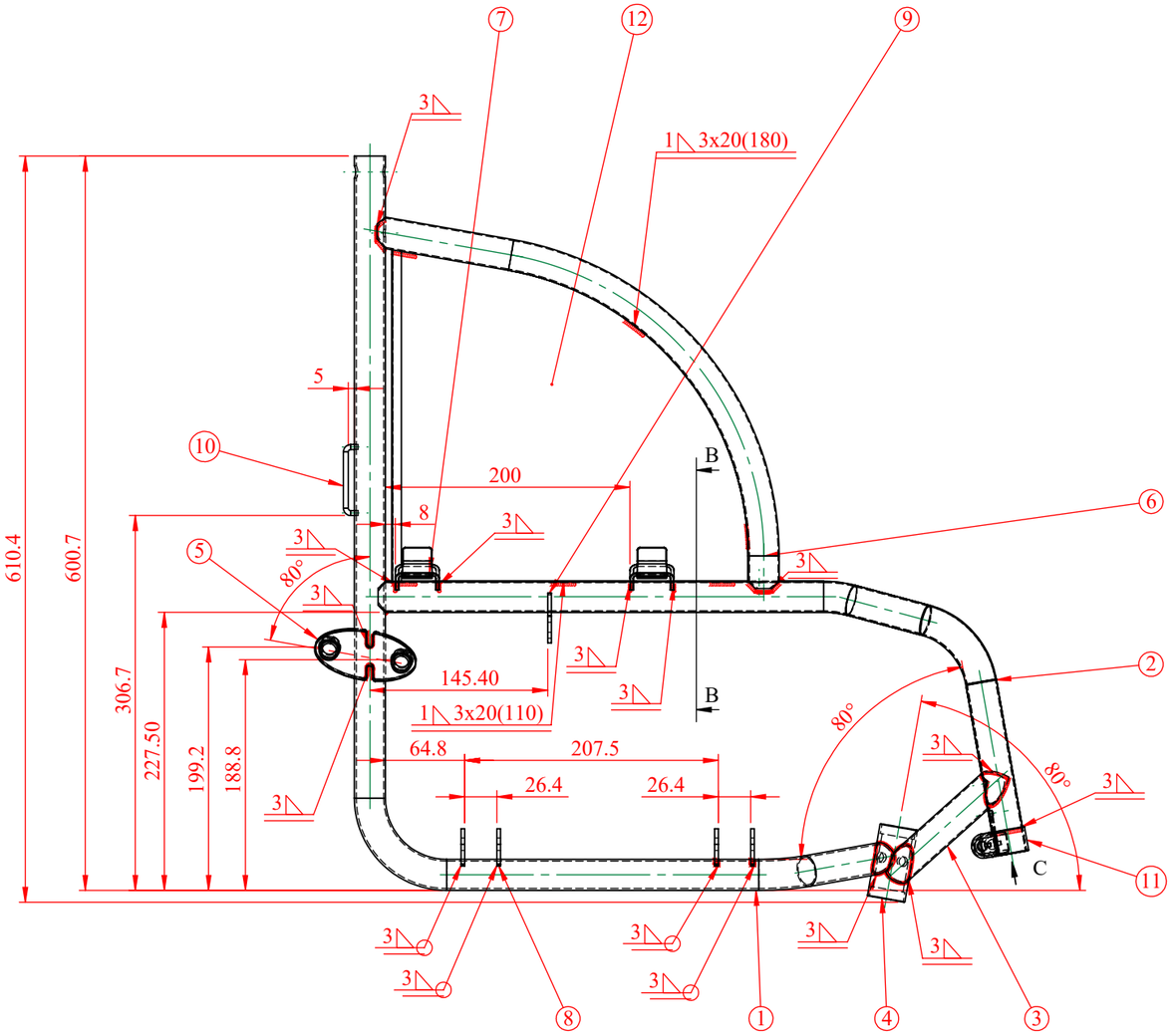


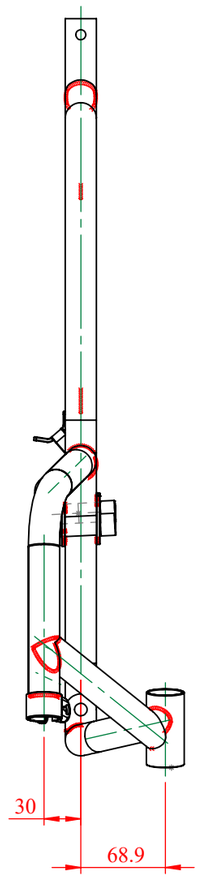
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

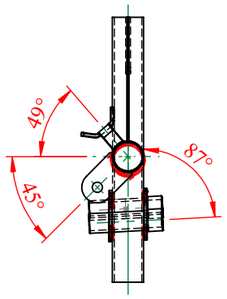
DRN BY		DT		MATERIAL	ASTM 10NB STD (Ø17.1 x 2.31mm THK)
CHKD BY		DT		HEAT TRT.	
APPD BY		DT		SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		SPACER STRAIGHT	
SCALE					
SHEET		DRG NO.		TD2B37B07	
REV. NO.					



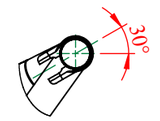








SECTION B-B



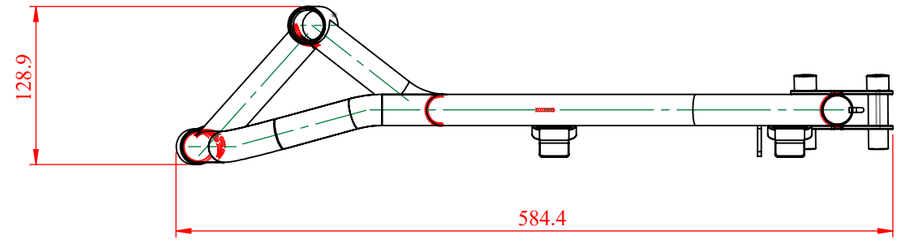
VIEW C

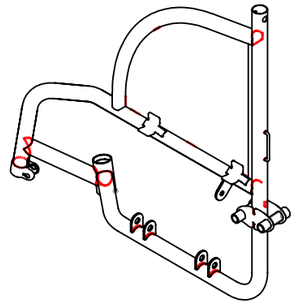
D

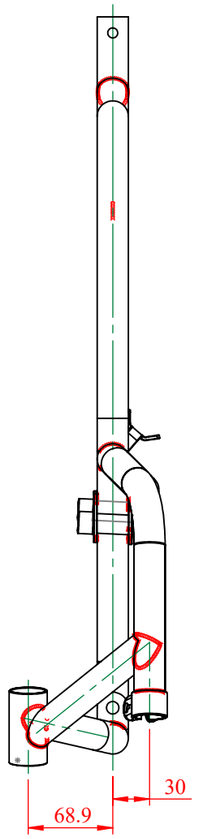
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37BA1	BACKREST TUBE - L	1
2	TD2B37BA6	TOP TUBE - SIDE FRAME - L	1
3	TD2B37BA8	CASTOR MOUNT TUBE - L	1
4	TD2B37BA9	CASTOR BARREL - TWO HOLES	1
5	TD2B37BB0		1
6	TD2B37BA2	ARMREST TUBE	1
7	TD2B37BA5	SUPPORT CUP - GENERIC	2
8	TD2B37B01	X BRACE / FRAME PIVOT	4
9	TD2B37BA4	LOCKOUT BAR / FRAME PIVOT	1
10	TD2B37B02	STRAP MOUNTING - SINGLE	1
11	TD2B37BA7	FOOTREST HEIGHT CLAMP	1
12	TD2B37BA3	SIDE GUARD -L	1

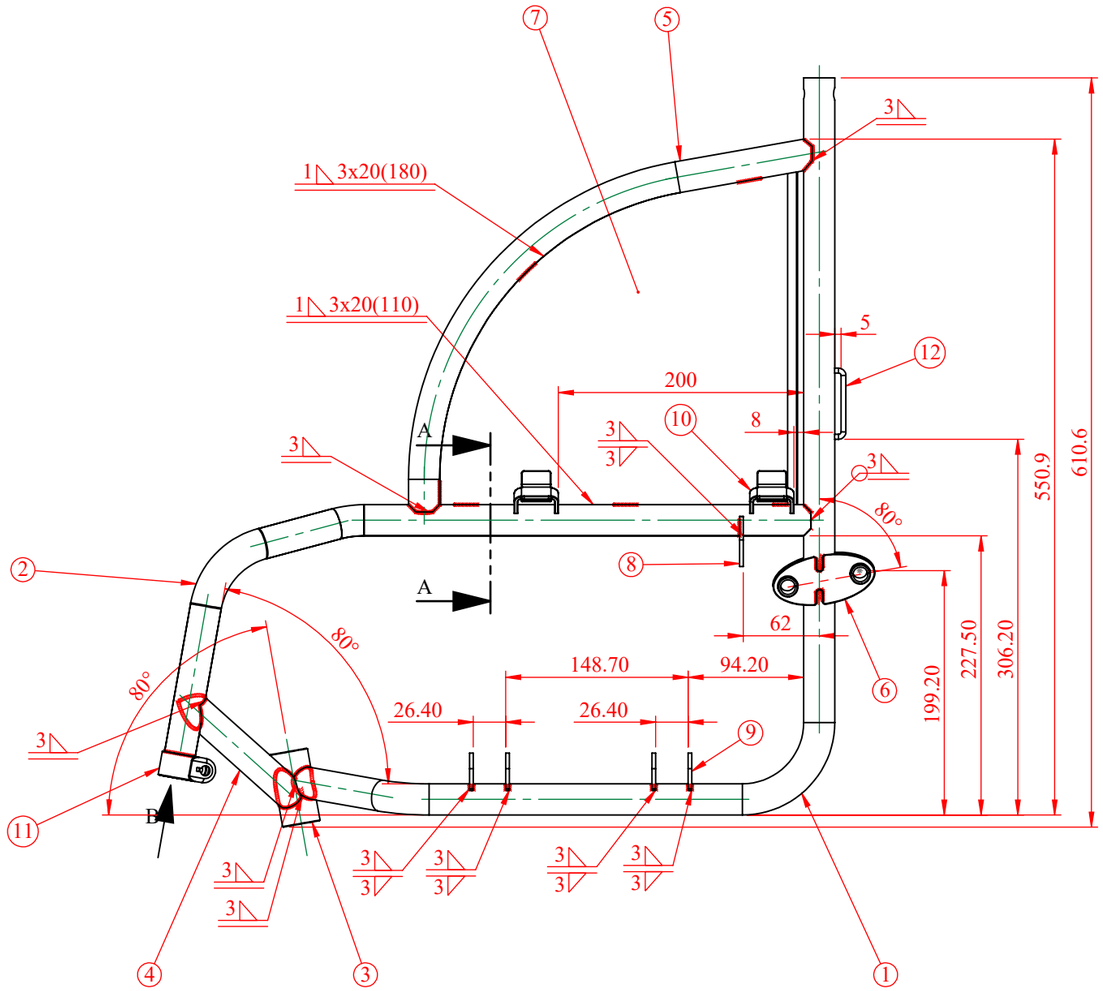
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

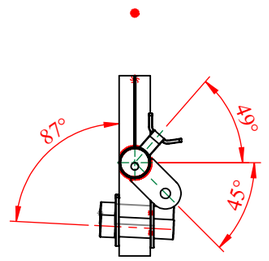
DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.18	SUR. TRT.	
		ISO: 13920-B		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		SIDE FRAME WELD ASSY. - L	
SCALE	1:5				
SHEET	1 OF 1	DRG NO.		TD2B37BA0	
REV. NO.					



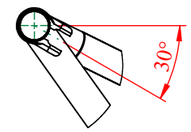








SECTION A-A

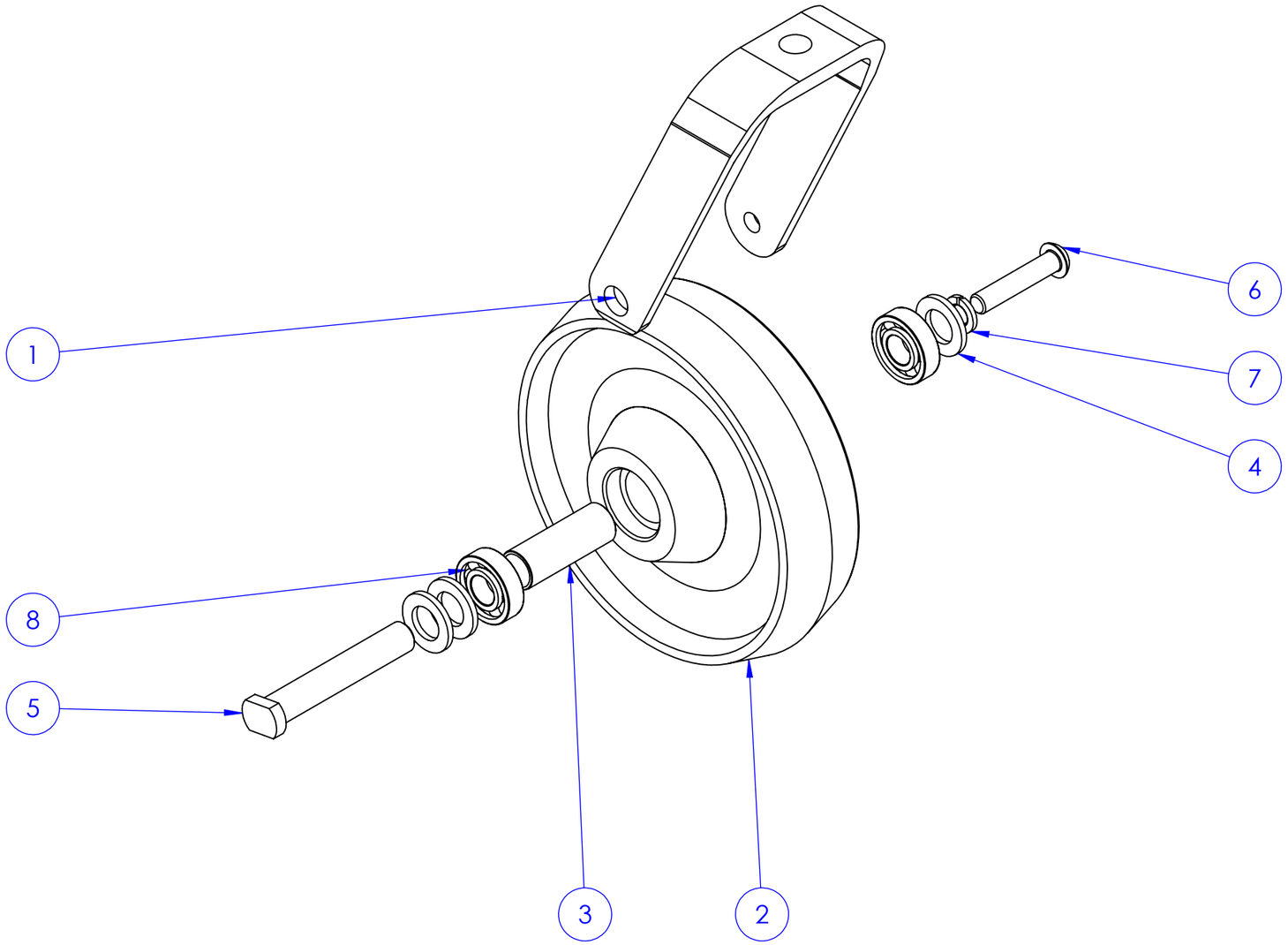


VIEW B

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37CA1	BACKREST TUBE - R	1
2	TD2B37CA2	TOP TUBE - SIDE FRAME - R	1
3	TD2B37BA9	CASTOR BARREL - TWO HOLES	1
4	TD2B37CA3	CASTOR MOUNT TUBE - R	1
5	TD2B37BA2	ARMREST TUBE	1
6	TD2B37CB0	AXLE MOUNTING WELDMENT-R	1
7	TD2B37CA4	SIDE GUARD - R	1
8	TD2B37BA4	LOCKOUT BAR / FRAME PIVOT	1
9	TD2B37B01	X BRACE / FRAME PIVOT	4
10	TD2B37BA5	SUPPORT CUP - GENERIC	2
11	TD2B37BA7	FOOTREST HEIGHT CLAMP	1
12	TD2B37B02	STRAP MOUNTING - SINGLE	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.18	SUR. TRT.	POWDER COATING - COLOUR AS APPROVED
		ISO: 13920-B		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		SIDE FRAME WELD ASSY. - R	
SCALE	1:5				
SHEET	1 OF 1	DRG NO.		TD2B37CA0	
REV. NO.					



DEVELOPMENT DRAWING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37D03	CASTOR FORK FOR 150 DIA WHEEL	1
2	TD2B37D02	CASTOR WHEEL 150 DIA - RURAL	1
3	TD2B37B07	SPACER STRAIGHT	1
4	BC63	12 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	3
5	TD2B36H02	AXLE - CASTOR WHEEL	1
6	BC46	Hex Socket Button Head Screw M8x40 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	1
7	BC59	8 mm SPRING LOCK WASHER IS:3063 (TYPE B) ZINC PLATED BLUE 5-8µ IS:1573	1
8	GC98	6001 ZZ C3 RADIAL BALL BEARING	2

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.2020	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		**NOM.**		**CASTOR WHEEL WITH FORK ASSY.**	
SCALE					
SHEET		**DRG NO.**		**TD2B37D00**	
REV. NO.					

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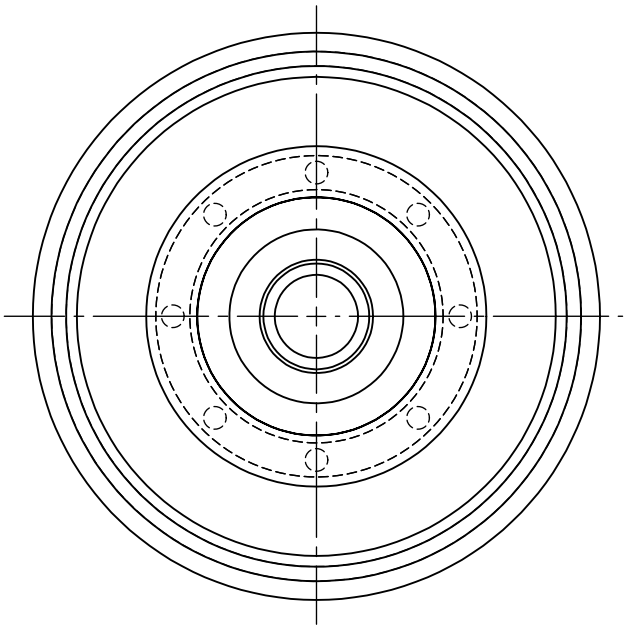
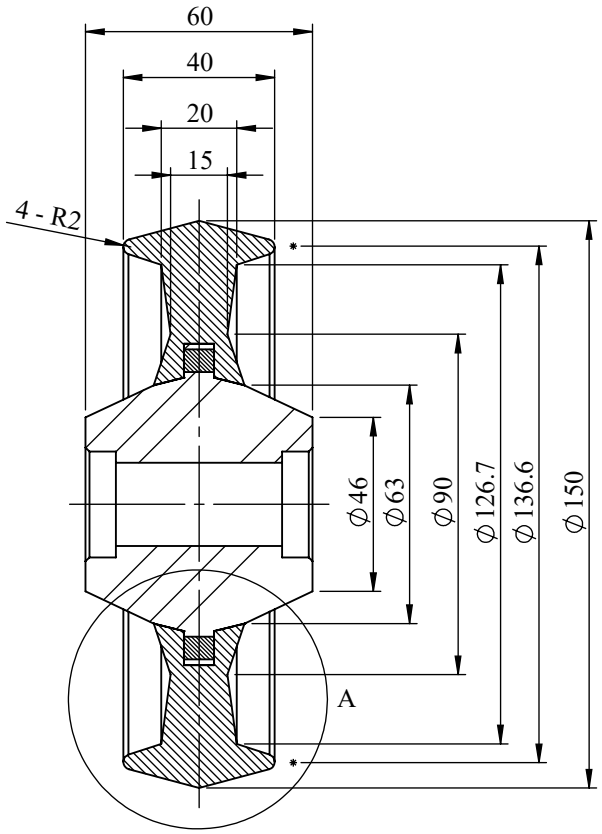
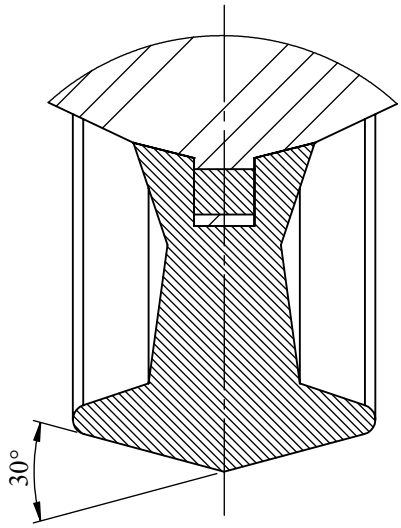
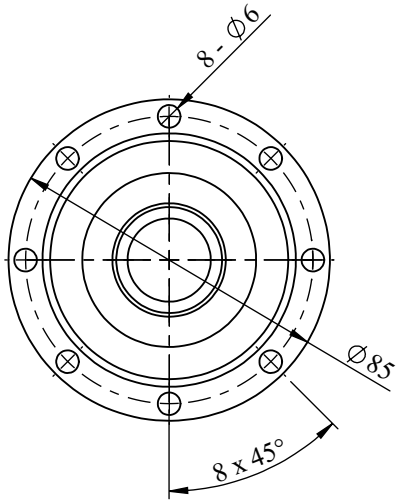
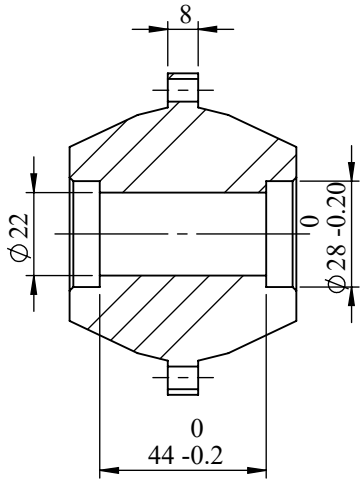






DETAIL A
SCALE 1 : 1





NOTE:-
- CORE HARDNESS: 90 SHORE A
- OUTER HARDNESS: 75 SHORE A

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	RUBBER, MOULDED IN TWO DENSITY
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		CASTOR WHEEL Ø150 RURAL	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B37D02	
REV. NO.					

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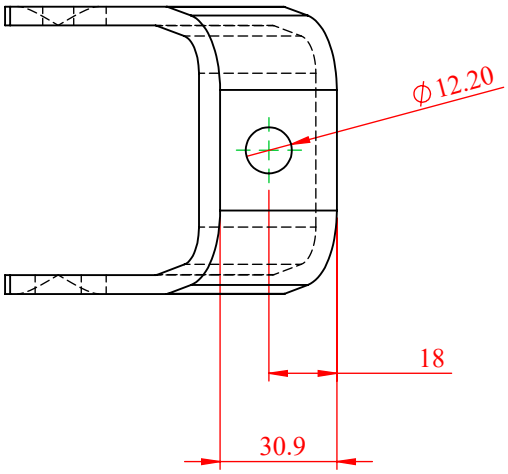

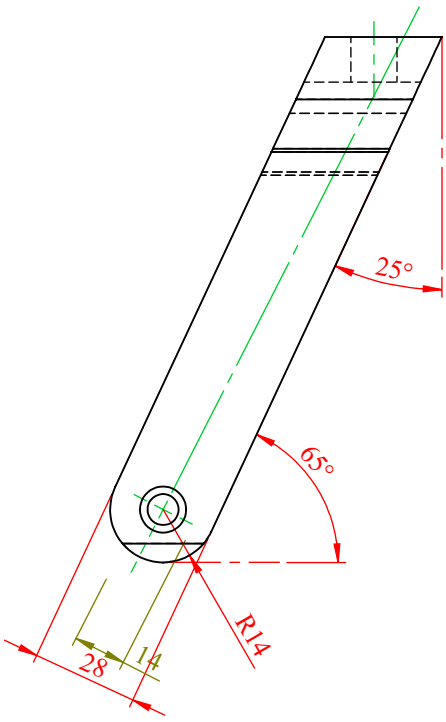

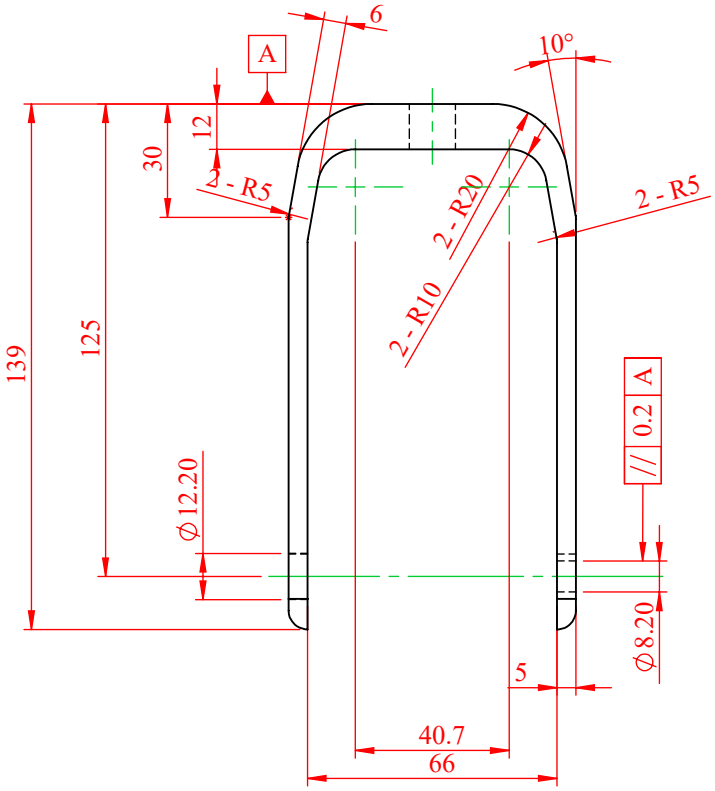

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)					
DRN BY		DT		MATERIAL	EXTRUDED SECTION FOR TD2B37D03, AQ34
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	09.02.18	SUR. TRT.	BLACK ANODIZED (RAL 9005), 30µ
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		**NOM.**		**CASTOR FORK FOR Ø150 WHEEL**	
SCALE	1:2				
SHEET	1 OF 1				
REV. NO.		**DRG NO.**		**TD2B37D03**	

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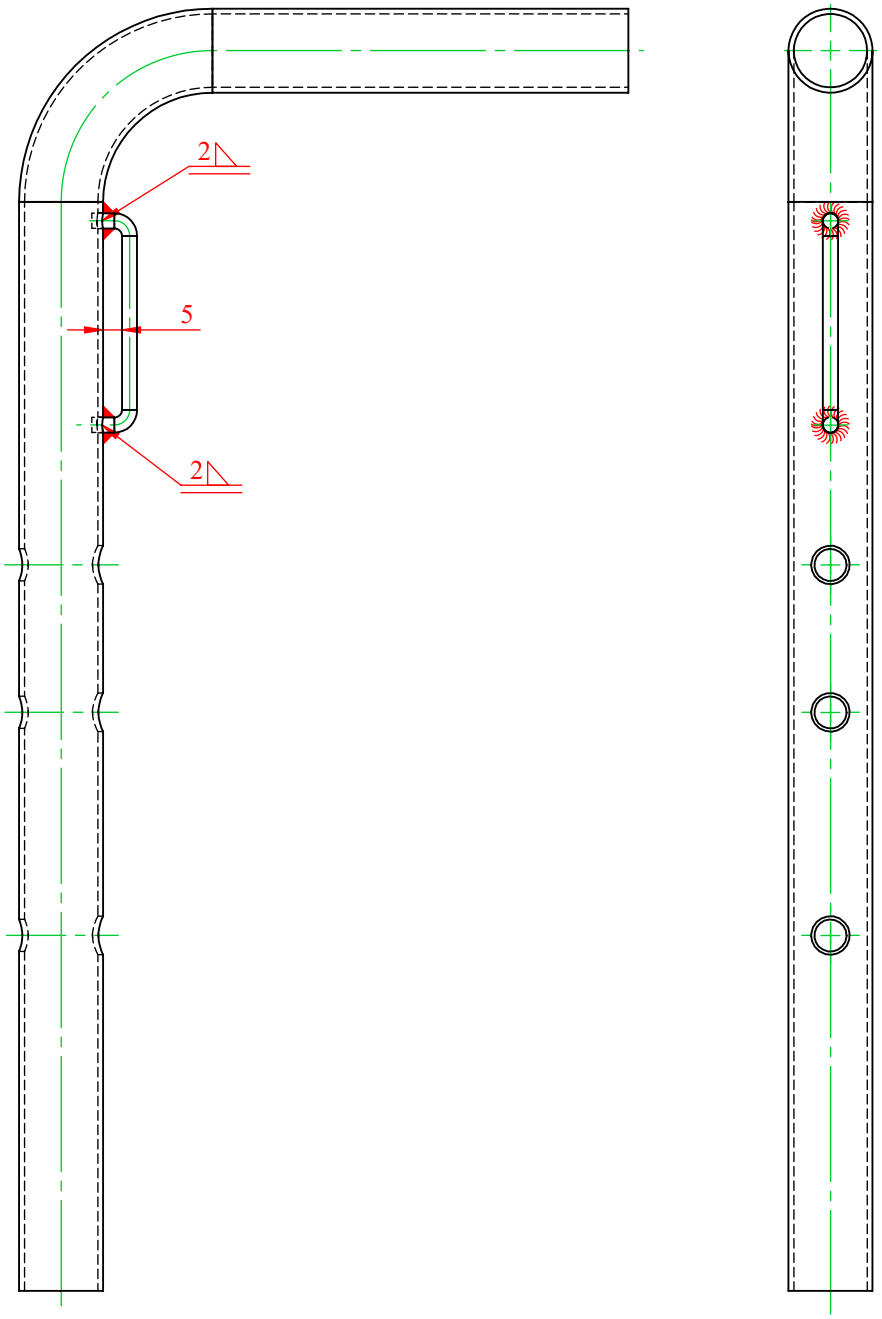
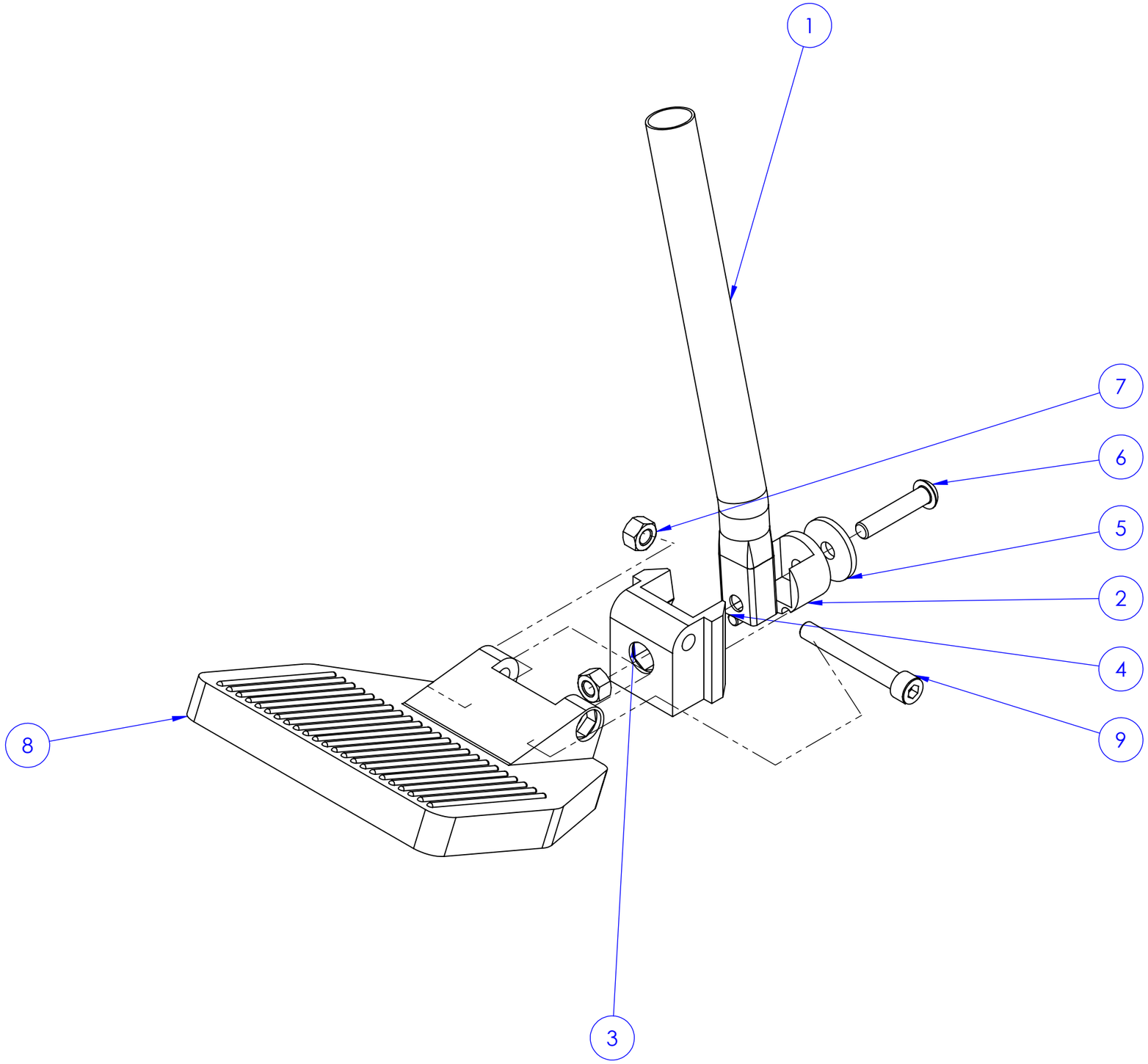


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37EA1	PUSH HANDLE EXTENSION TUBE	1
2	TD2B37B02	STRAP MOUNTING - SINGLE	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.18	SUR. TRT.	POWDER COATING - COLOUR AS APPROVED
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		PUSH HANDLE EXTENSION WELD ASSY.	
SCALE	1:2				
SHEET	1 OF 1	DRG NO.		TD2B37EA0	
REV. NO.					

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

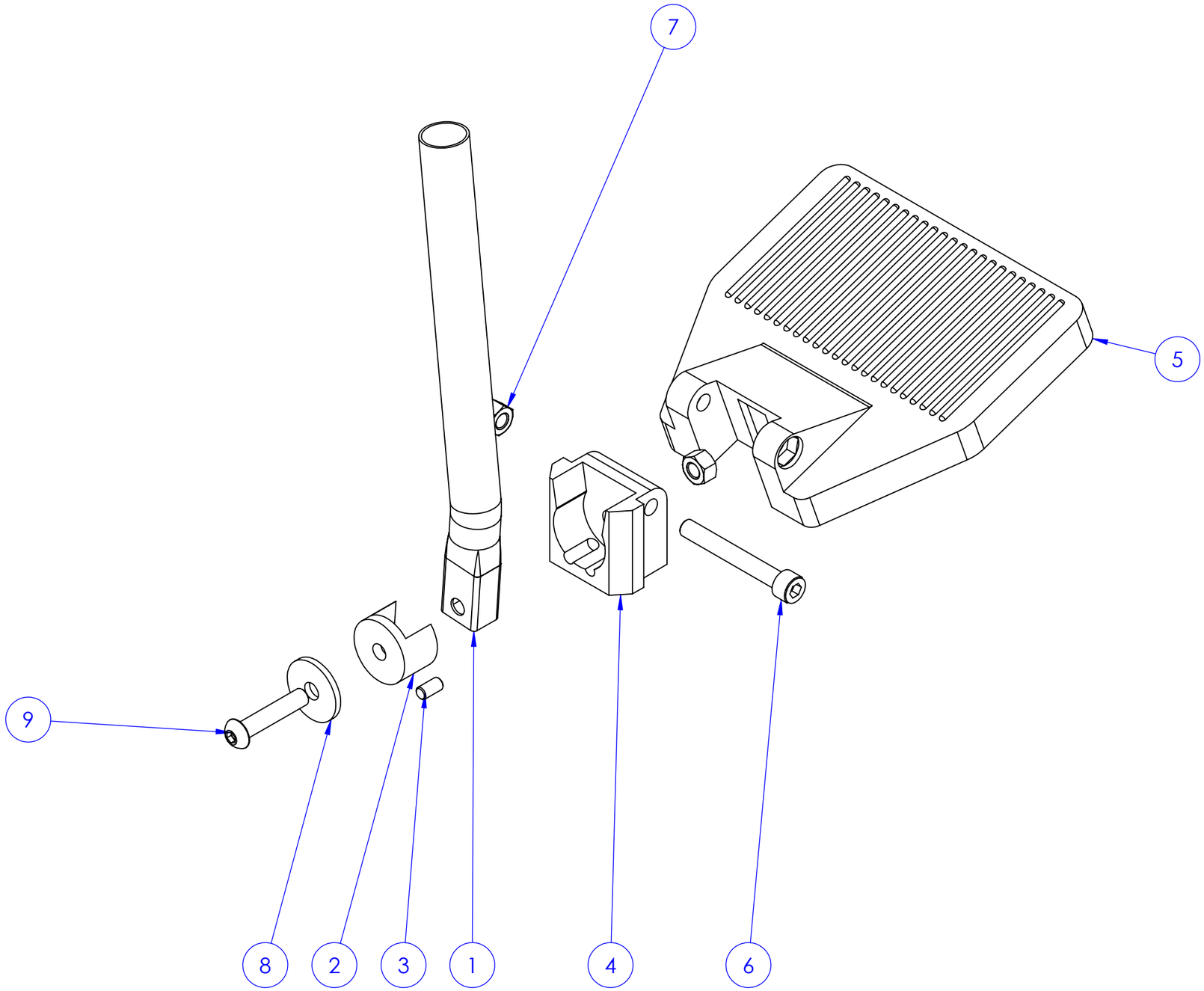


DEVELOPMENT DRAWING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37F02	FOOTREST HEIGHT TUBE - ANGLED	1
2	TD2B37F04	FOOTREST HINGE INSERT (MERITS MODIFIED)	1
3	TD2B37F03	FOOTREST HINGLE BLOCK (MERITS MODIFIED)	1
4	TD2B37F05	STEEL PIN DIA 6	1
5	TD2B37F06	8 MM THICK WASHER OD 30 MM	1
6	BC46	Hex Socket Button Head Screw M8x40 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	1
7	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	2
8	TD2B37F01	153MM MERITS FLIP-UP FOOTPLATE	1
9	BB86	Hex Socket Head Screw M8x60 10.9 IS:2269 Zinc Plated Blue 5-8µ IS:1573	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.2020	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOTREST ASSY. - L	
SCALE					
SHEET		DRG NO.		TD2B37F00	
REV. NO.					

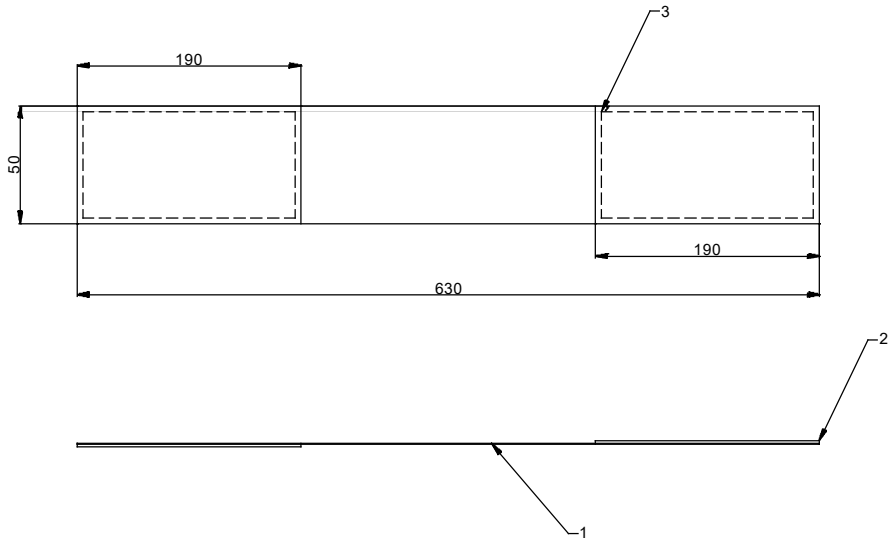


DEVELOPMENT DRAWING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TD2B37F02	FOOTREST HEIGHT TUBE - ANGLED	1
2	TD2B37F04	FOOTREST HINGE INSERT (MERITS MODIFIED)	1
3	TD2B37F05	STEEL PIN DIA 6	1
4	TD2B37F03	FOOTREST HINGLE BLOCK (MERITS MODIFIED)	1
5	TD2B37F01	153MM MERITS FLIP-UP FOOTPLATE	1
6	BB86	Hex Socket Head Screw M8x60 10.9 IS:2269 Zinc Plated Blue 5-8µ IS:1573	1
7	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	2
8	TD2B37F06	8 MM THICK WASHER OD 30 MM	1
9	BC46	Hex Socket Button Head Screw M8x40 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	1

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	10.02.2020	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		FOOTREST ASSY. - R	
SCALE					
SHEET		DRG NO.		TD2B37G00	
REV. NO.					



NOTE:–

PLEASE STUDY PHYSICAL PART SAMPLE PROVIDED WITH THE ORIGINAL PRODUCT

S.NO.	DESCRIPTION	MATERIAL	REQUIRED PROPERTIES
1	RIBBON	POLYPROPYLENE	END/PICKS-493/24 PER inch, WEAVE TYPE-HERRING BONE, THICKNESS OF YARN-1.2, GSM-22, COUNT OF YARN WARP/WEFT-600D
2	VELCRO STRIP	POLYESTER 100% BLENDED	LOOP & HOOK, END/PICKS-196/10 PERcm SHEAR STRENGTH 1250G/cm^2
3	POLYESTER THREAD	THREAD	POLYESTER, BLACK 3 PLY

SNo.	REGION	REVISION	DATE	SIGN

R E V I S I O N S

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	ADJUSTABLE STRAP CENTRE WEBBING
DRN		MTL	
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS	DRG No:-	TD 2 B 37 H 02
APP			SHEET 1OF1
DATE	08.08.2017		

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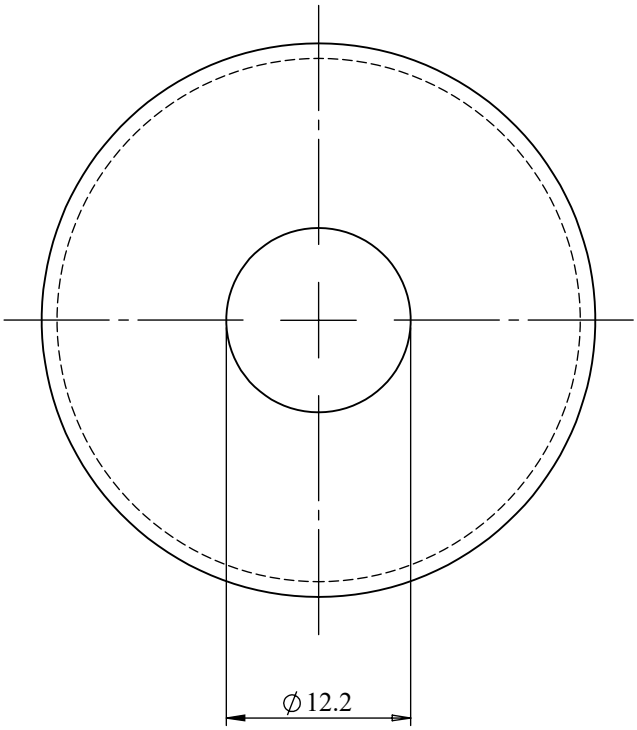

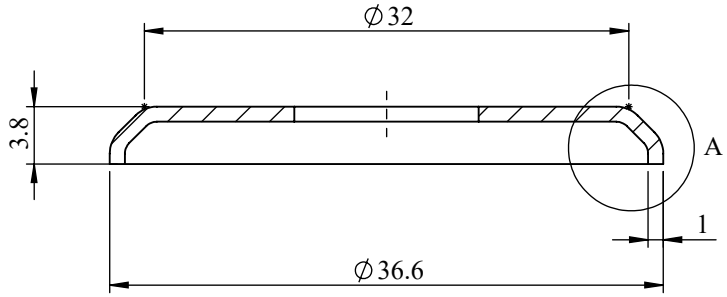

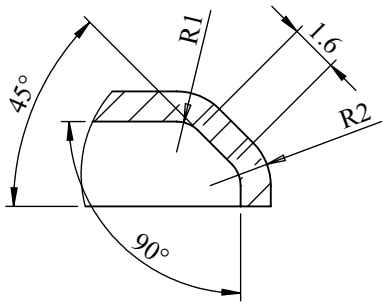

DETAIL A
SCALE 4 : 1

DEVELOPMENT DRAWING

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±1.2	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY	A.SHUKLA	DT		MATERIAL	SHEET MS CR1 GD 'O' IS:513 THICK 1mm, AA22
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	16.01.18	SUR. TRT.	POWDER COATED - RAL 9005
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		CASTOR BARREL CAP WASHER 12 X 32	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36005	
REV. NO.					

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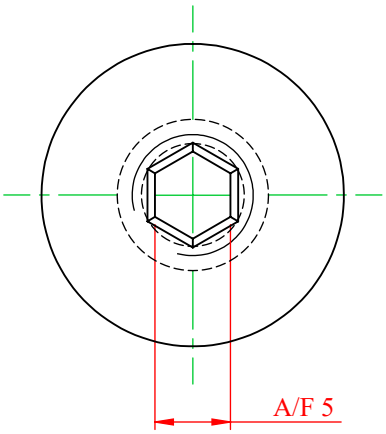

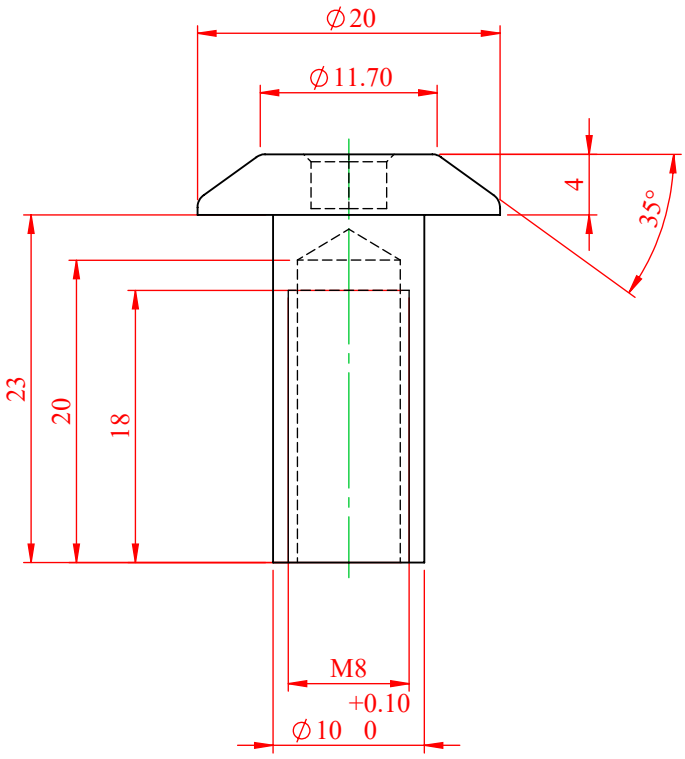

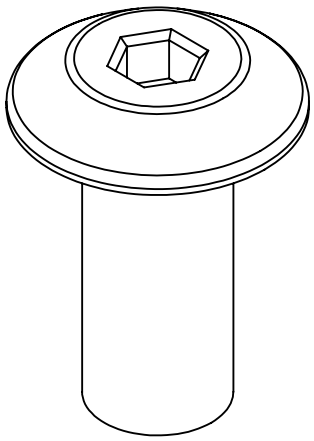

DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	CR STAINLESS STEEL ROD Ø20mm, X04Cr19Ni9 (SS304) IS:6603-2002, AA88
CHKD BY		DT		HEAT TRT.	
APPD BY		DT	16.01.18	SUR. TRT.	
		IS: 2102 ISO: 2768-mK		DEBURR ALL SHARP EDGES 0.5x45°	
				ALL DIMENSIONS ARE IN mm	
WEIGHT		NOM.		M8 ALLEN CAP NUT	
SCALE	2:1				
SHEET	1 OF 1	DRG NO.		TD2B36011	
REV. NO.					

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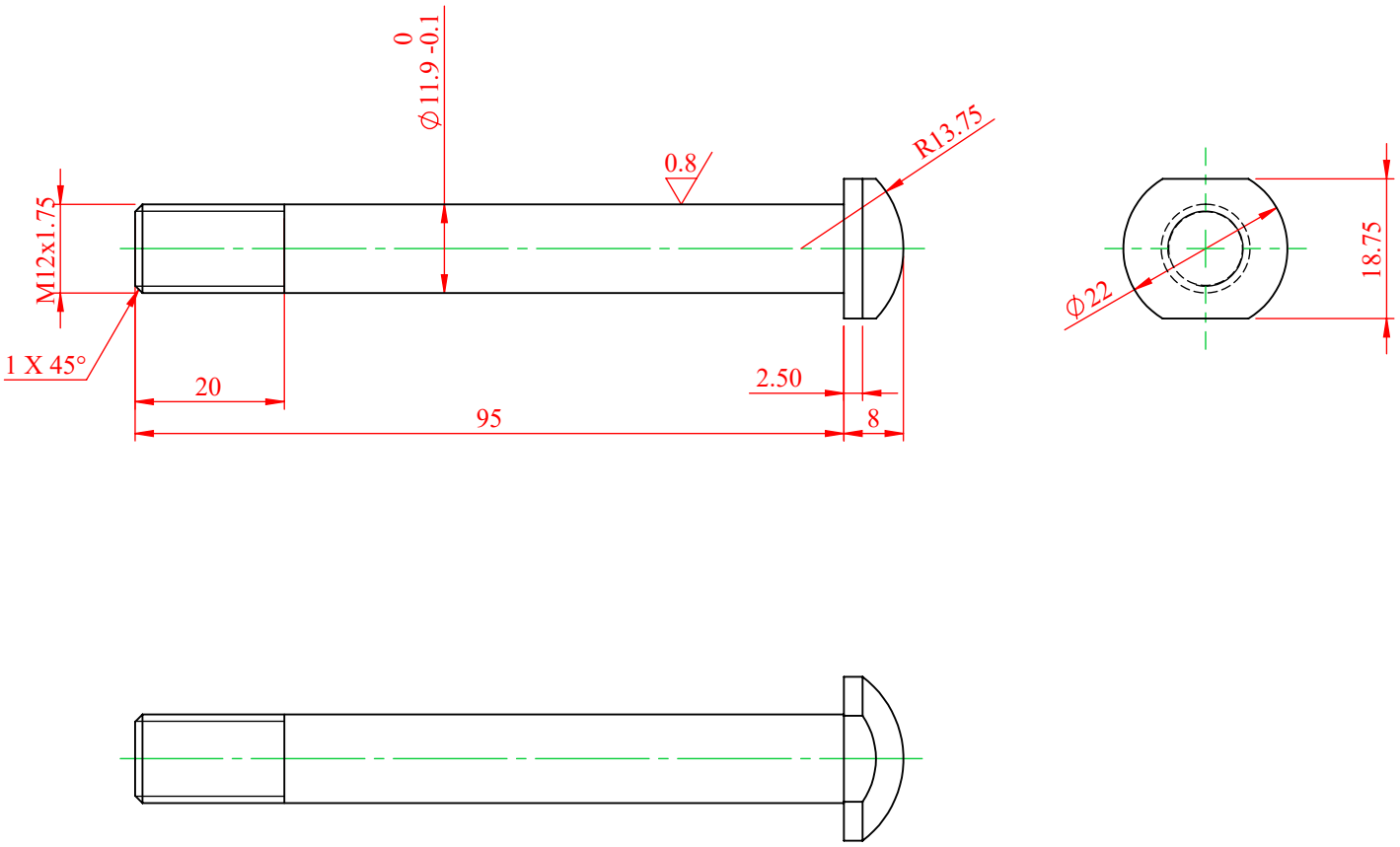
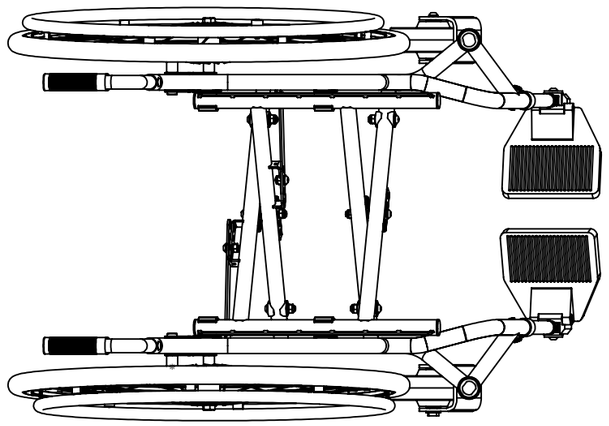
3.2 0.8

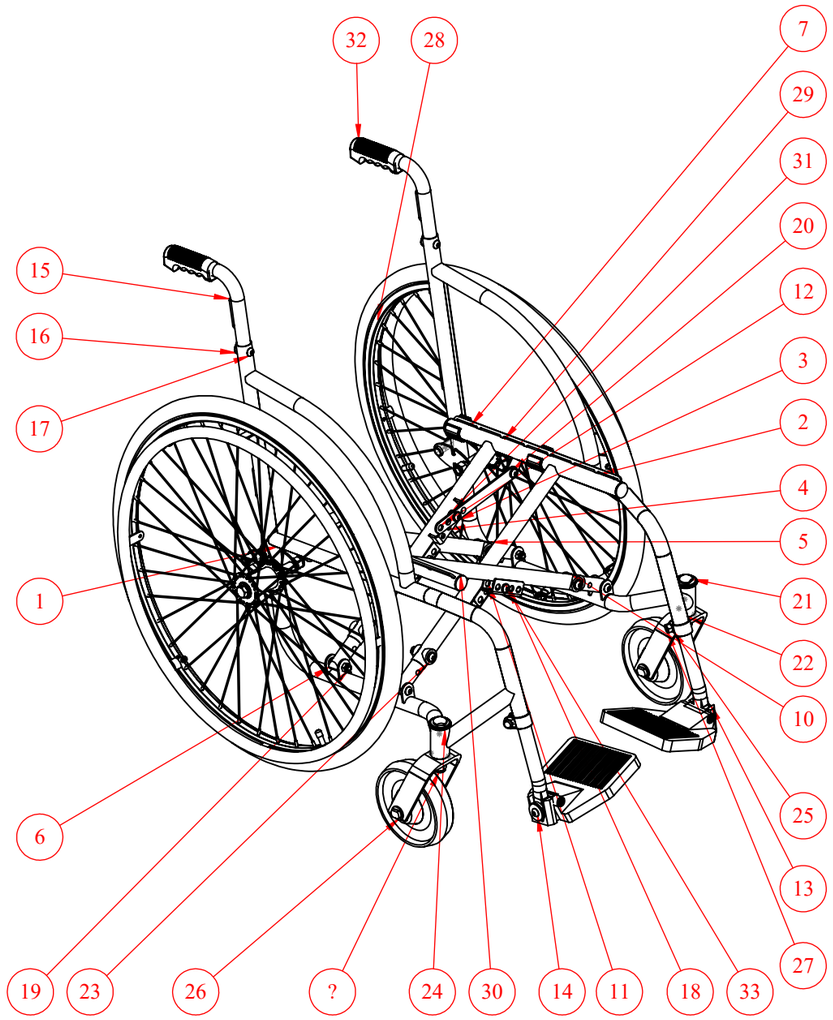


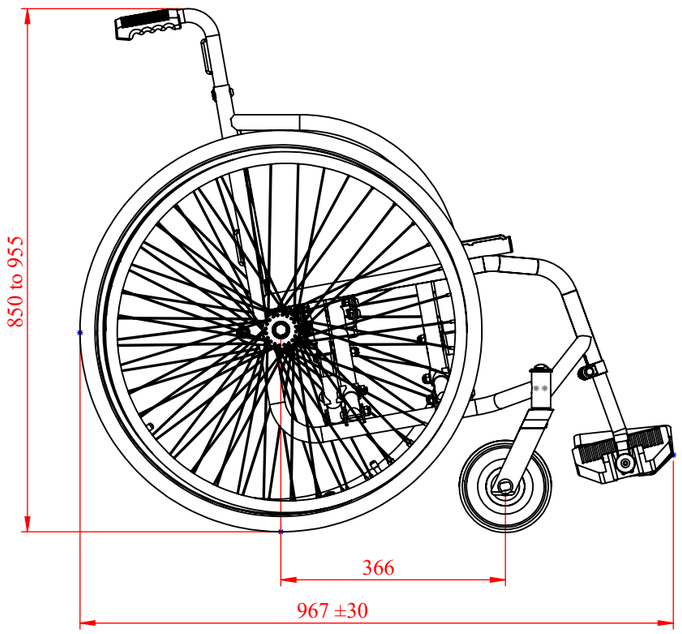
DIM	TOLERANCE		
1-16	±0.2	±0.3	±0.4
17-63	±0.2	±0.5	±0.7
64-250	±0.3	±0.7	±1.0
250-960	±0.5	±0.12	±1.5

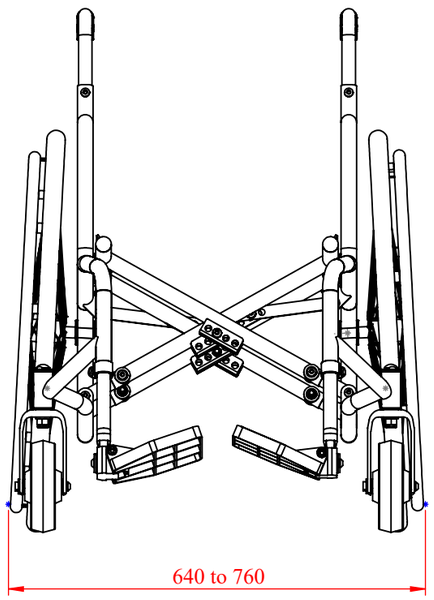
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

DRN BY		DT		MATERIAL	ROD TOOL STEEL ANNEALED (En9) IS:1570 Ø22mm, AH16
CHKD BY		DT		HEAT TRT.	32-34 HRc
APPD BY		DT	16.01.18	SUR. TRT.	Ni-Cr PLATED, 8-12µ
		IS: 2102 ISO: 2768-mK			DEBURR ALL SHARP EDGES 0.5x45°
					ALL DIMENSIONS ARE IN mm
WEIGHT		NOM.		M12 X 95 SPANNER BUTTON HEAD BOLT	
SCALE	1:1				
SHEET	1 OF 1	DRG NO.		TD2B36012	
REV. NO.					









ITEM NO.	PART NUMBER	DESCRIPTION	
1	TD2B37CA0	SIDE FRAME WELD ASSY. - R	1
2	TD2B37BA0	SIDE FRAME WELD ASSY. - L	1
3	TD2B37B05	M8 PIVOT SPACER	12
4	TD2B37AA0	CROSS BRACE INNER ASSY.	1
5	TD2B37AB0	CROSS BRACE OUTER ASSY.	1
6	TD2B37B03	X BRACE - ADJUSTMENT BAR	4
7	TD2B37A03	25MM TUBE SLEEVED CLIP	4
8	TD2B37B07	SPACER STRAIGHT	2
9	SKF - 6001 - 10,SI,NC,10_68		4
10	TD2B36B01	8 MM SADDLE WASHER BLACK PLASTIC OD 25 MM	8
11	TD2B37A01	X BRACE BUSH	4
12	TD2B37B04	LOCK OUT BAR	2
13	TD2B37F00	FOOTREST ASSY. - L	1
14	TD2B37G00	FOOTREST ASSY. - R	1
15	TD2B37EA0	PUSH HANDLE EXTENSION WELD ASSY.	2
16	TD2B36011	M8 ALLEN CAP NUT	2
17	ISO 7380 - M8 x 16 --- 16N		2
18	BC48	Hex Socket Button Head Screw M8x70 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	2
19	BC47	Hexagon Socket Button Head Screw ISO 7380-M8x45	8
20	BC42	Hex Socket Button Head Screw M8x16 ISO:7380 10.9 Zinc Plated Blue 5-8µ IS:1573	4
21	TD2B36012	M12 X 95 SPANNER BUTTON HEAD BOLT	2
22	BC63	12 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	8
23	BC58	8 mm Plain Washer IS:2016 (Type A) Zinc Plated Blue 5-8µ IS:1573	10
24	TD2B36005	CASTOR BARREL CAP WASHER 12 X 31	2
25	IS 1363-2 - M8-N		2
26	TD2B37D00	CASTOR WHEEL WITH FORK ASSY.	2
27	TD2B37B06	M8 X 35 BLANK PAN HEAD - KEYED	2
28	TD2B36J00	WHEEL ASSY. WITH PUSH RIM	2
29	IS 1363(Part2) - M12 x 130-WN		2
30	TD2B37A02	25 DIA END PLUG (23.4 ID)	4
31	BA84	Nyloc Nut M8 IS:7002 Zinc Plated Blue 5-8µ IS:1573	14
32	LD 50	HAND GRIP I.D. 21mm	2
33	BC59	8 mm SPRING LOCK WASHER IS:3063 (TYPE B) ZINC PLATED BLUE 5-8µ IS:1573	2
34	BA85	Nyloc Nut M12 IS:7002 Zinc Plated Blue 5-8µ IS:1573	4

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA (ALIMCO)

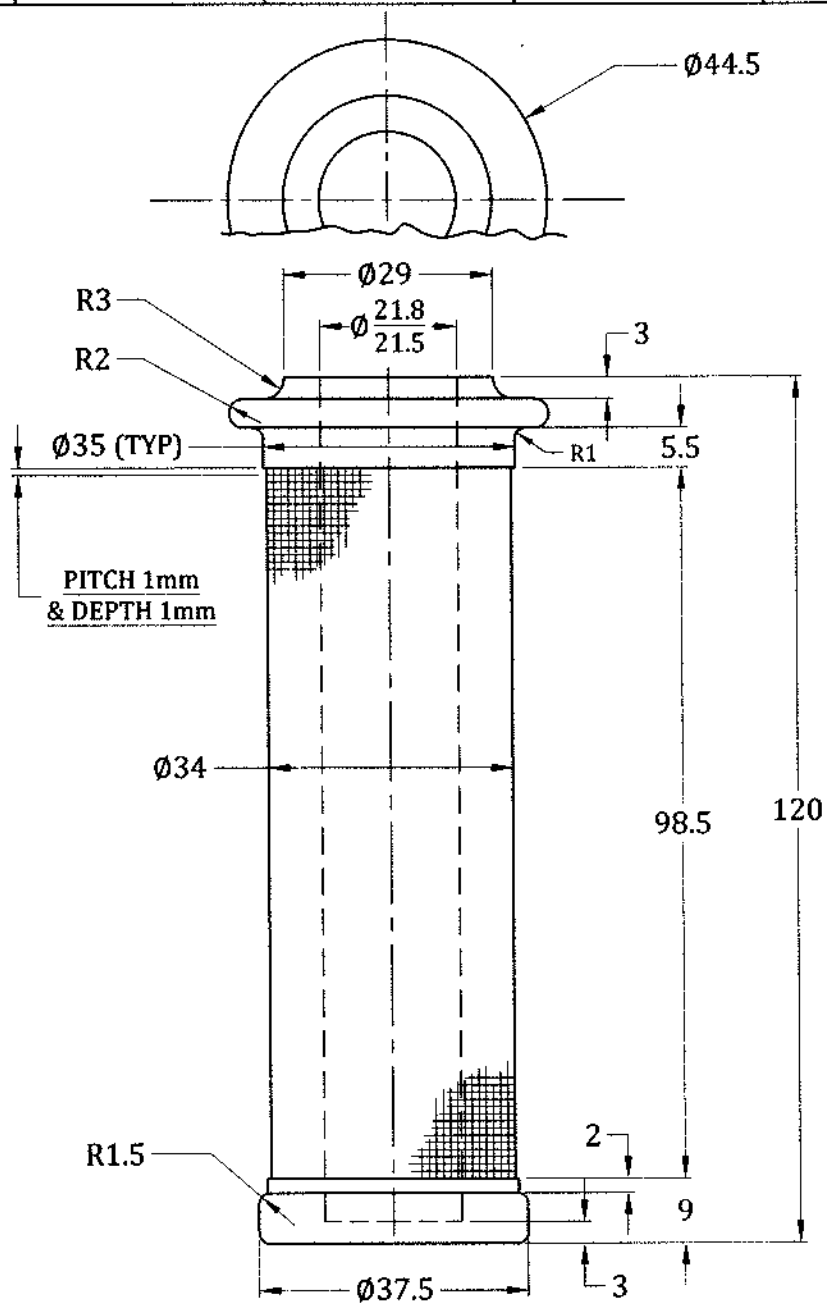
DRN BY	A.TOMER	DT		MATERIAL	
CHKD BY	A.TOMER	DT		HEAT TRT.	
APPD BY	V.SHUKLA	DT	14.10.2020	SUR. TRT.	

IS: 2102
ISO: 2768-mK

DEBURR ALL SHARP EDGES 0.5x45°
ALL DIMENSIONS ARE IN mm

WEIGHT		NOM.	ACTIVE FOLDING WHEELCHAIR
SCALE			
SHEET		DRG NO.	TD2B37000
REV. NO.			

WHEEL CHAIR
TD2A0600



NOTE:-

1. SHORE HARONESS 75 To 85 IRHD.
2. UNSPECIFIED RADII 1mm.
3. ---------

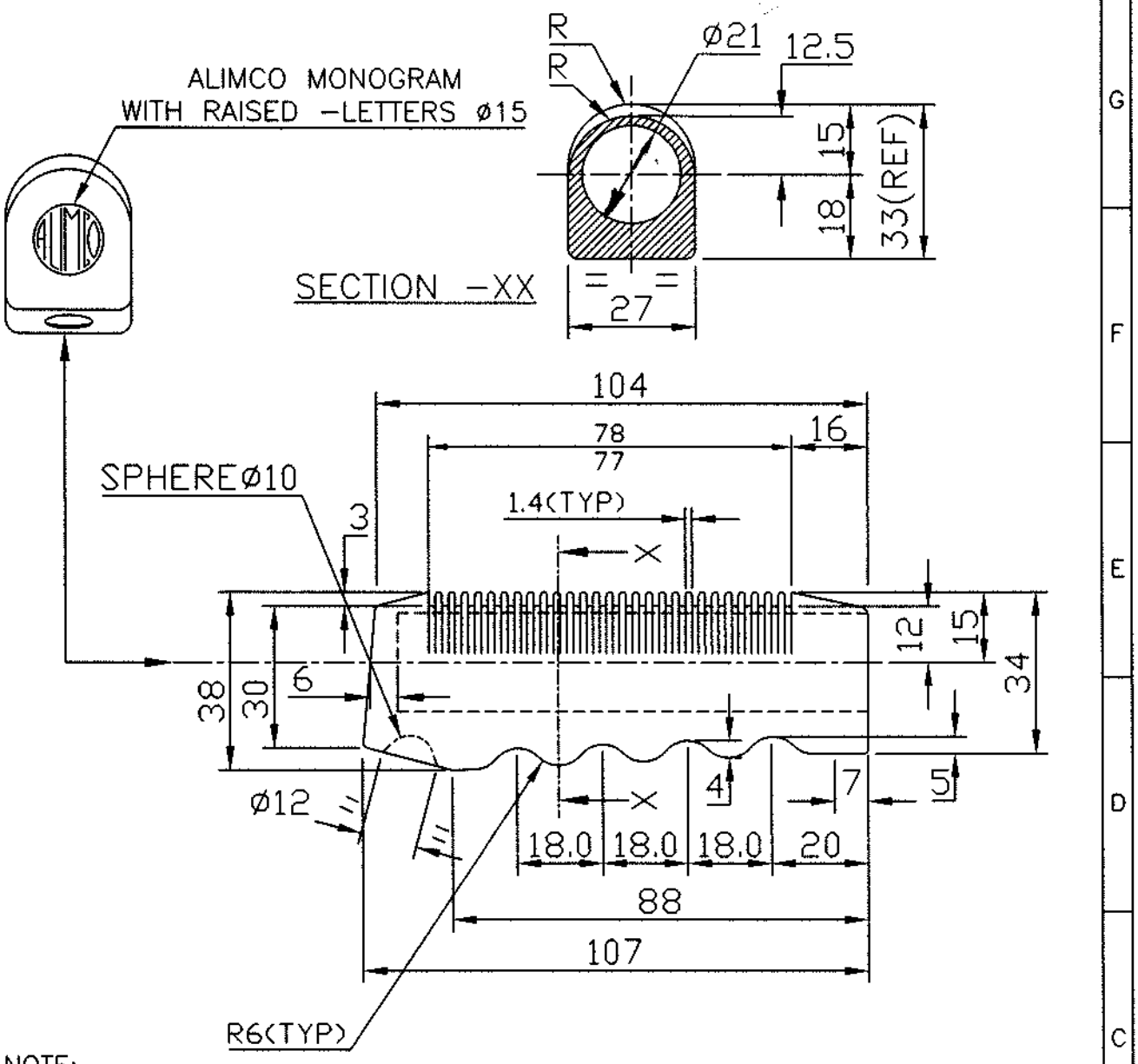
SNo.	REGION	REVISION	DATE	SIGN
3	----	DRAWING REDRAWN	17/12/12	

REVISIONS

ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

DGN		NOM	HAND GRIP — I.D. ≈ Ø 22 mm, O.D. ≈ Ø 34 mm
DRN		MTL	P.V.C. MOULDED, COLOUR GREY
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	MOULDED SMOOTH
APP		DRG No:-	L A 24 — SHEET 1OF1
DATE	30 - 09 - 80		

0 6 K 6 0 17



NOTE:-

1. ROUND OFF SHARP EDGES & CORNERS
2. DIMENSIONS ARE FOR REF.ONLY
3. READYMADE IF AVAILABLE IS ACCEPTABLE
4. SHORE HARDNESS-85 TO 90 IRHD
5. WEIGHT-60 gms APPROX.
6. PERMITTED MOULDING DRAFT ANGLE 1°MAX

SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRG REDESIGN & REDRAWN	27.7.12	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	HAND GRIP I.D. 21mm
DRN		MTL	P.V.C. MOULDED,COLOUR BLACK
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	MOULDED
SCALE	NTS		
APP		DRG No:-	LD 50
DATE	21.10.99		SHEET 1OF1

BLACK COLOUR

दिशा निर्देश - लुब्रिकेशन

दोनो पिछले पहिये के हब और धूरी के मिलान स्थान से
धूल , मिट्टी एवं गन्दगी को साफ कीजिये एवं
आवश्यकतानुसार मशीन तेल दीजिये ।

36

114

NOTE :-

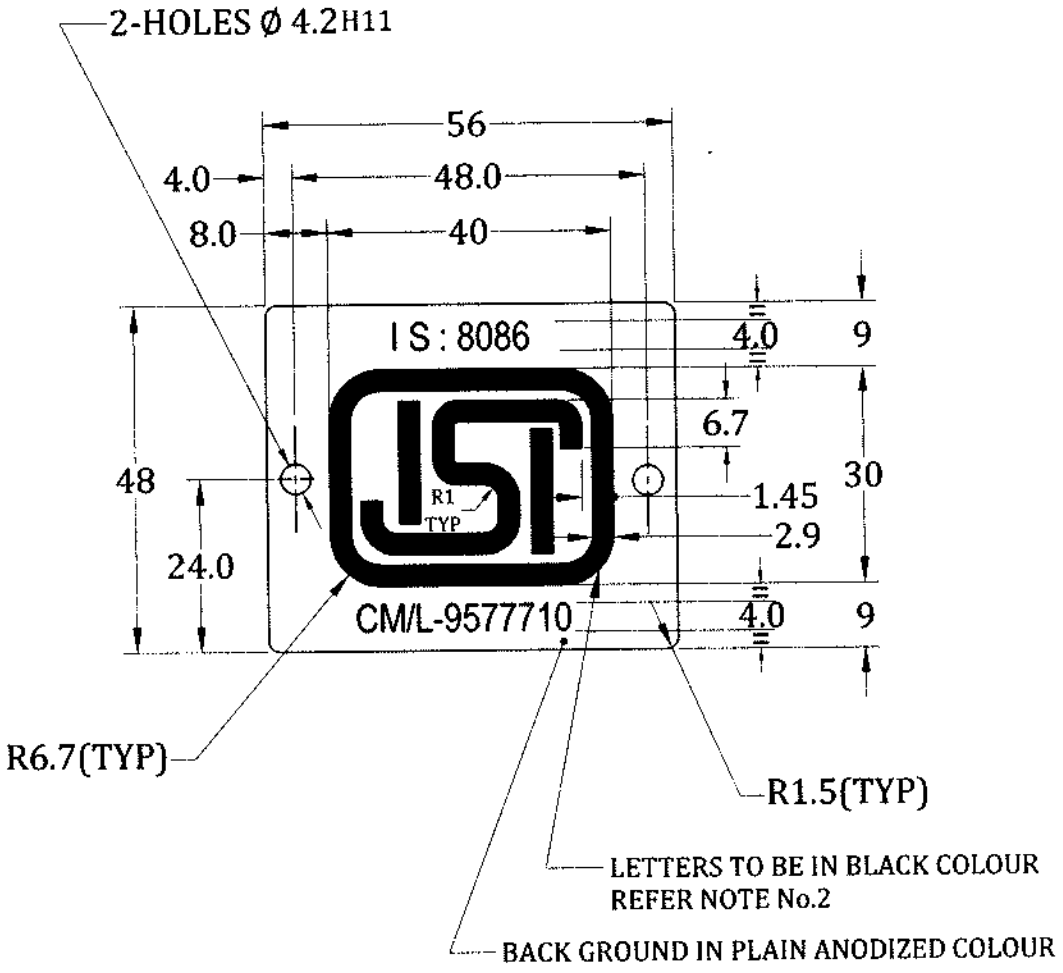
1. PAPER BACKING TO BE STICKED WITH FEVICOL BONDED ADHESIVE ON THE BACK SIDE OF THE STICKER
2. PAPER BACKING SHOULD BE IN TWO PART FOR EASY REMOVAL
3. SAMPLE SHOULD BE GOT APPROVED BEFORE BULK SUPPLY.

S No.	REGION	REVISION	DATE	SIG.

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

DGN		NOM	STICKER FOR दिशा निर्देश-लुब्रिकेशन
DRN	Parimesh.	MTL	SHEET POLYETHELENE (PLASTIC) THICK 0·07 mm
CHD		TOL	INTEGER ONLY ± 0.500 mm ONE PLACE DECIMAL ± 0.250 mm UNLESS SPECIFIED TWO PLACE DECIMAL ± 0.126 mm
DIM.	IN mm	FIN.	—
SCALE	1:1	DRG No.	LF 16
APP		SHEET	1 OF 1
DATE	20·9·06		



NOTE:—

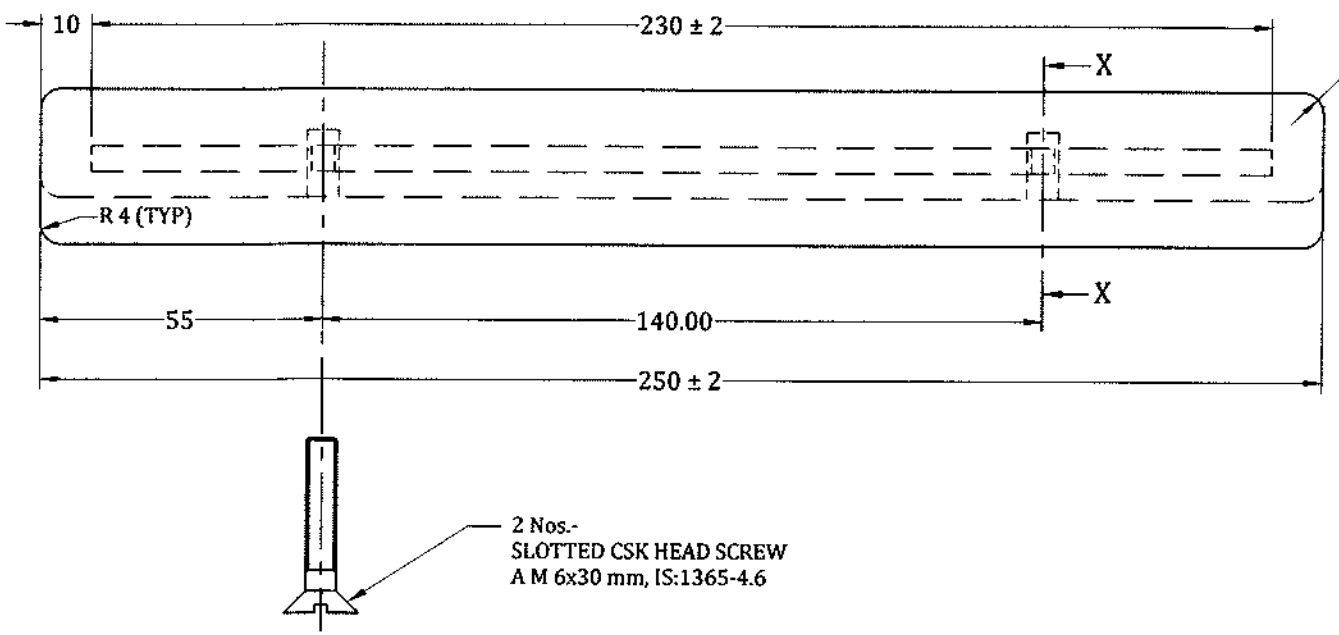
1. REMOVE SHARP EDGES & CORNERS.
2. ALL THE LETTERS (ISI, IS:8086 & CM/L 9577710) TO BE SYMMETRICALLY LOCATED

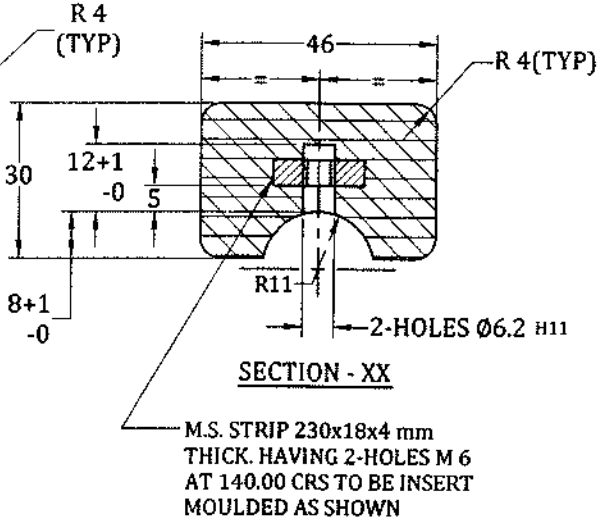
SNo.	REGION	REVISION	DATE	SIGN
1	-----	DRAWING REDRAWN	22.2.13	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL , IS:8086 (WHEEL CHAIR FOLDING SIZE - I)
DRN		MTL	SHEET AL ALLOY HS 30 W P IS:737, THICK 0.8 mm(AP19)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	ANODIZED
APP		DRG No:-	L F 17
DATE	22 - 02 - 07		SHEET 1OF1





MTL :—
INTEGRAL SKIN POLYURETHANE FOAM
HARDNESS - 45 ± 3 SHORE 'A'
DENSITY - 200 -- 300 Kg/m^3
COLOUR - BLACK

NOTE:—

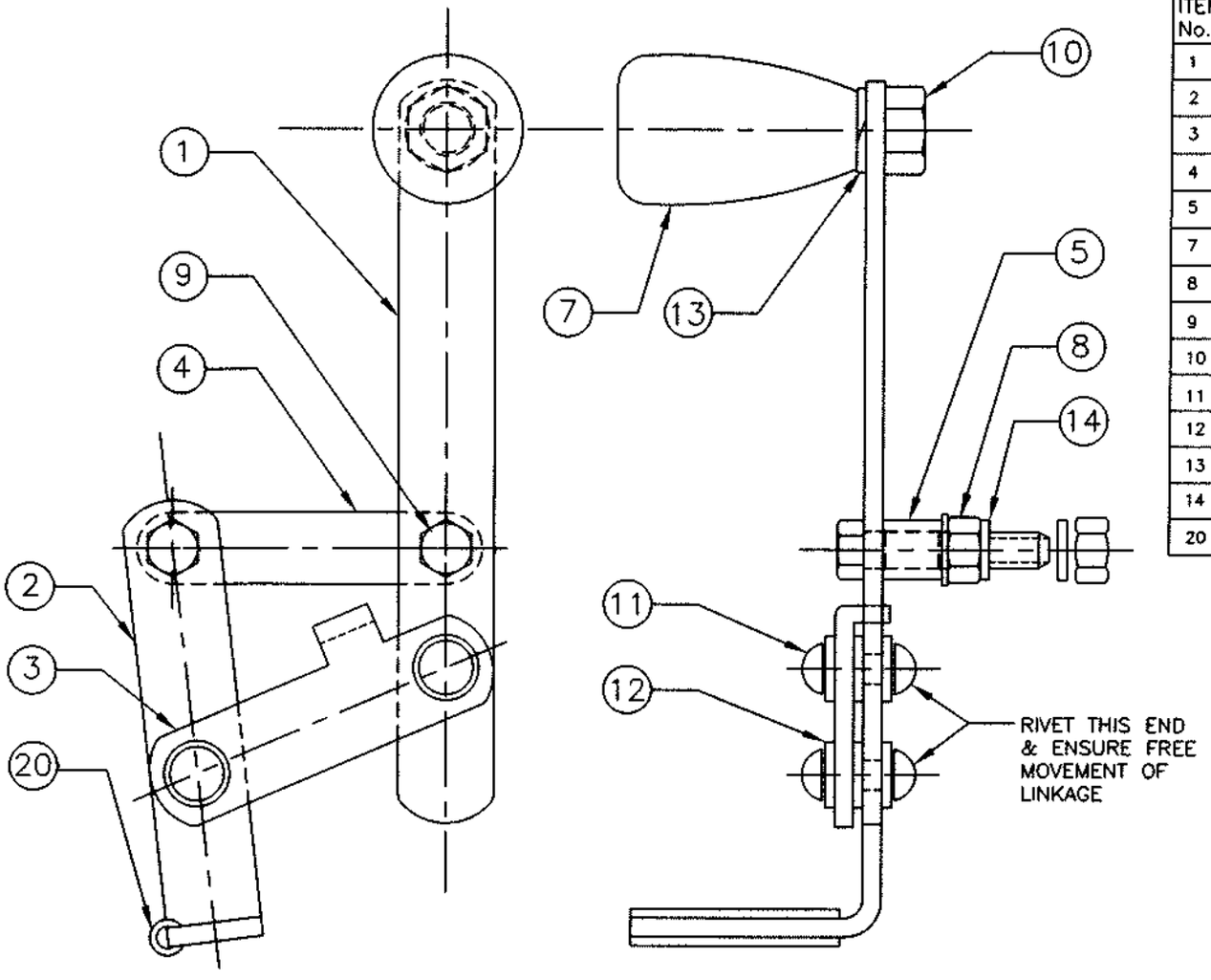
1. DIMENSIONS ARE FOR REFERENCE ONLY .
2. M.S. STRIP TO BE INSERT MOULDED .
3. READYMADE IF AVAILABLE, IS ACCEPTABLE .
4. ---------
5. COMPONENTS TO BE INSPECTED FOR GENERAL APPEARANCE / FINISH & OUTER DIMENSIONS .

SNo.	REGION	REVISION	DATE	SIGN
3	B-6&9	Mtl. Hardness 45±3 Shore'A', Density 200-300Kg/M^3 & MS Strip 4mm were 45-55 shore'A' density 300-350 Kg/M^3 & MS Strip 5/4 mm(Resp), weight at Note No.4 Deleted.	18.10.17	
2	------	DRAWING REDRAWN	10.05.13	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	P.U. FOAM ARMREST (WITH SCREWS)
DRN		MTL	INDICATED
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	MOULDED WITH TOP SURFACE HEAVING MATT FINISH AS APPROVED
SCALE	NTS	DRG No:-	LF 58
APP	Sd/DD1	REV	3
DATE	12.11.2009	SHEET	1 OF 1



ITEM No.	DRAWING No.	NOMENCLATURE	QTY.	REMARKS
1	TD 2 A 02 D 01	BRAKE LEVER	1	
2	TD 2 A 02 D 02	BRAKE SHOE	1	
3	TD 2 A 02 D 03	INTERMEDIATE LINK	1	
4	TD 2 A 02 D 04	STATIONARY LINK	1	
5	TD 2 A 02 D 05	SPACER	2	
7	TD 2 A 07 R A0	KNOB	1	
8	BA 10	HEX.NUT DC,M6 IS:1363	4	
9	BB 06	HEX.BOLT M6X35,IS:1363	2	
10	BM 23	HEX.SCREW M8X25,IS:1364,P-4.6	1	
11	BU 80	SNAP HEAD RIVET 5X12,IS:2155, STEEL ZINC PLATED	2	
12	BS 47	PUNCHED WASHER B 5.5,IS:2016 MS,ZINC PLATED	6	
13	BS 54	SPRING WASHER 8,IS:6735	1	
14	BS 44	PUNCHED WASHER A 6.6,IS:2016 MS,ZINC PLATED	4	
20	BY 01	SPRING DOWEL SLEEVE LIGHT 6X35,IS:5988	1	

NOTE:-

1. ASSEMBLE ITEM No.2 WITH 20 AFTER PLATING & BEFORE ASSEMBLY WITH OTHER COMPONENTS.

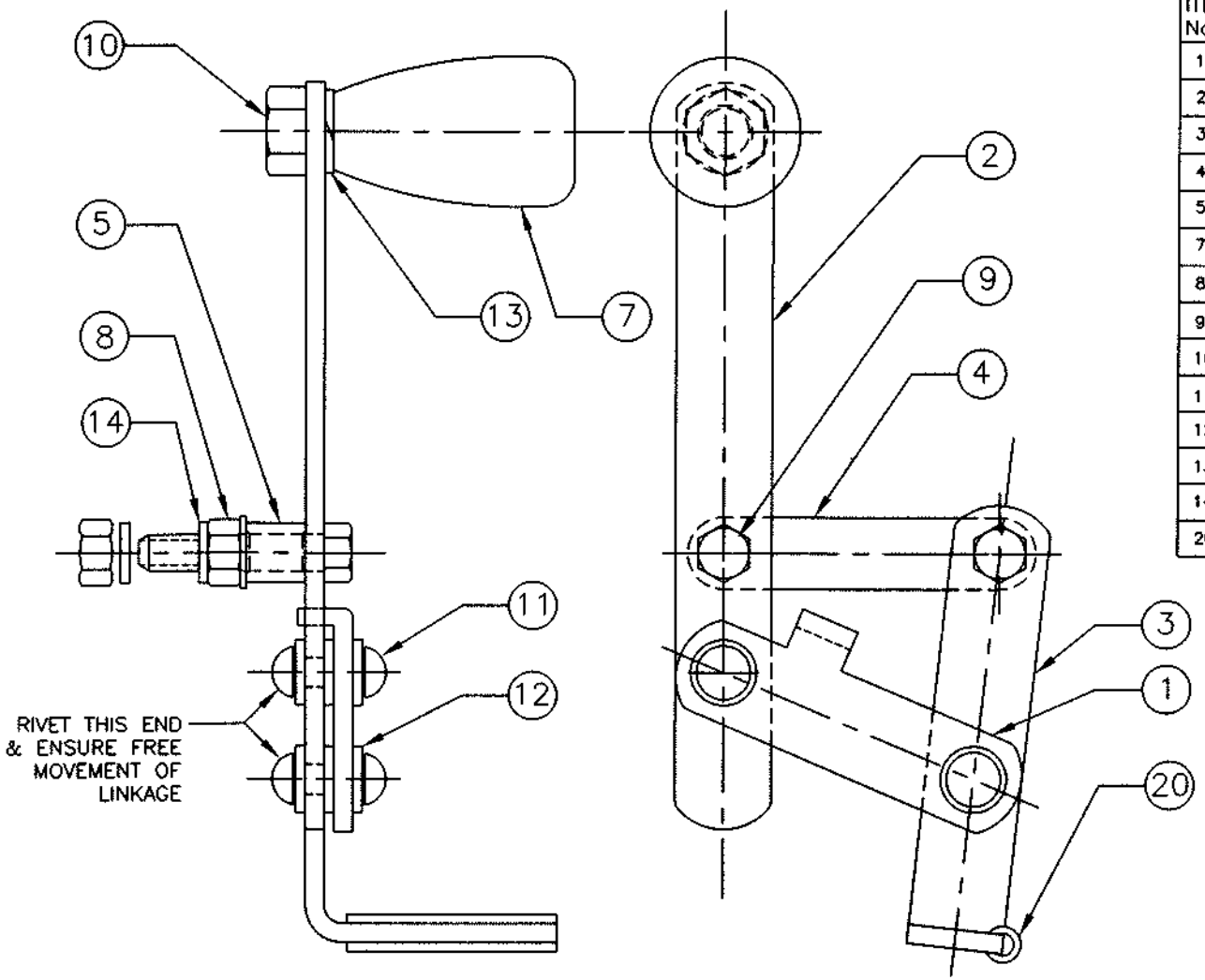
01 G 2 131

SNo.	REGION	REVISION	DATE	SIGN
8	—	DRG REDRAWN	26/12	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BRAKE ASSY (RIGHT)
DRN		MTL	—
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	—
APP	SC/DD1	DRG No:- TD 2 A 02 D 00	SHEET 1OF1
DATE	10-583		



ITEM No.	DRAWING No.	NOMENCLATURE	QTY.	REMARKS
1	TD 2 A 02 E 01	INTERMEDIATE LINK	1	
2	TD 2 A 02 D 01	BRAKE LEVER	1	
3	TD 2 A 02 D 02	BRAKE SHOE	1	
4	TD 2 A 02 D 04	STATIONARY LINK	1	
5	TD 2 A 02 D 05	SPACER	2	
7	TD 2 A 07 R A0	KNOB	1	
8	BA 10	HEX.NUT DC,M6 IS:1363	4	
9	BB 06	HEX.BOLT M6X35,IS:1363	2	
10	BM 23	HEX.SCREW M8X25,IS:1364,P-4.6	1	
11	BU 80	SNAP HEAD RIVET 5X12,IS:2155, STEEL ZINC PLATED	2	
12	BS 47	PUNCHED WASHER B 5.5,IS:2016 MS,ZINC PLATED	6	
13	BS 54	SPRING WASHER 8,IS:6735	1	
14	BS 44	PUNCHED WASHER A 6.6,IS:2016 MS,ZINC PLATED	4	
20	BY 01	SPRING DOWEL SLEEVE LIGHT 6X35,IS:5988	1	

NOTE:-

1. ASSEMBLE ITEM No.2 WITH 20 AFTER PLATING & BEFORE ASSEMBLY WITH OTHER COMPONENTS.

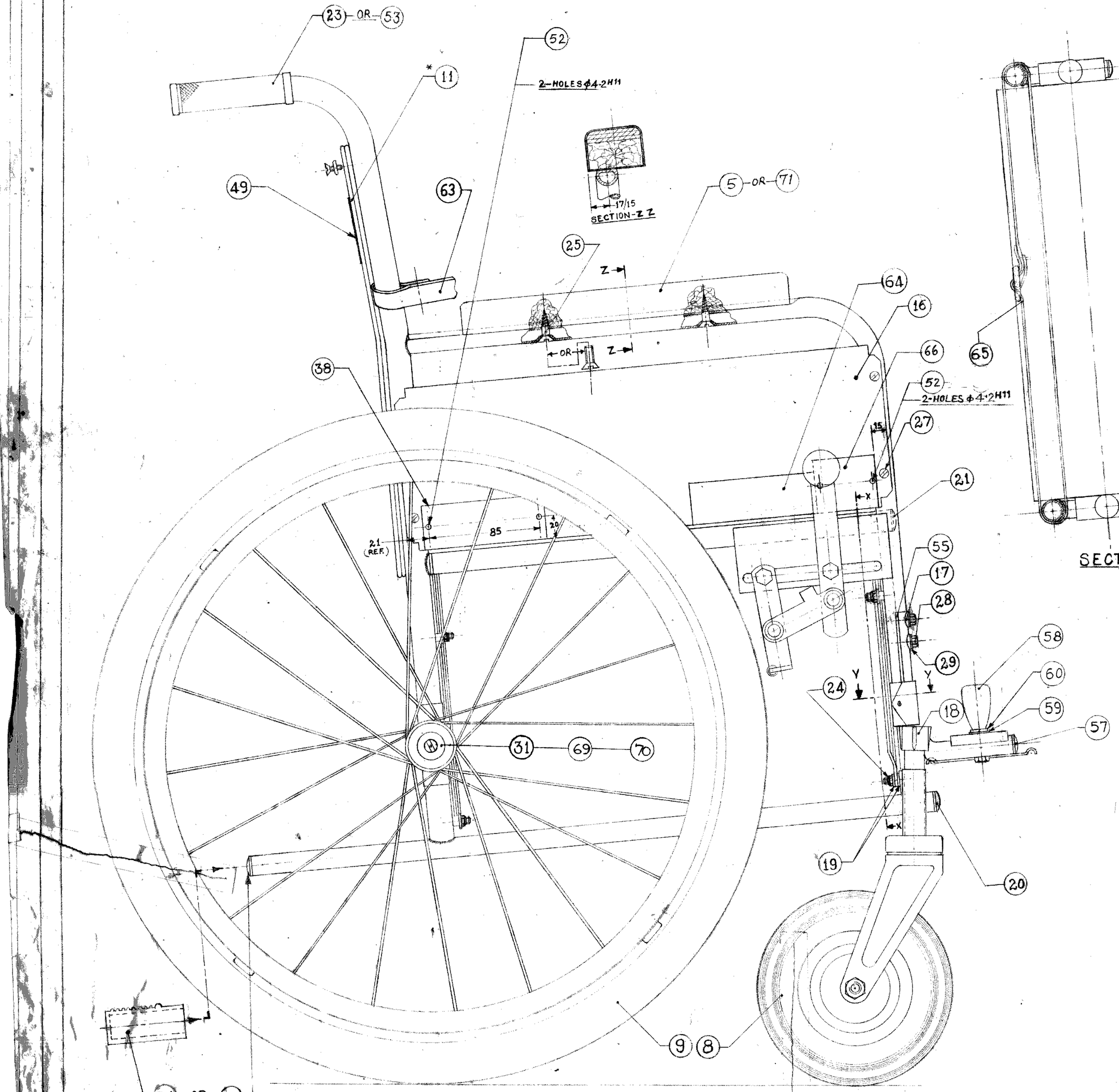
01 G 2 132

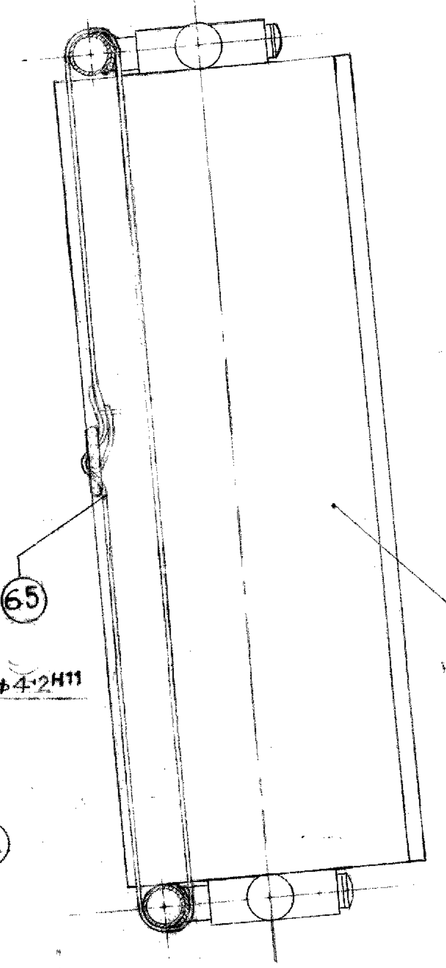
SNo.	REGION	REVISION	DATE	SIGN
8	—	DRG REDRAWN	26/3	

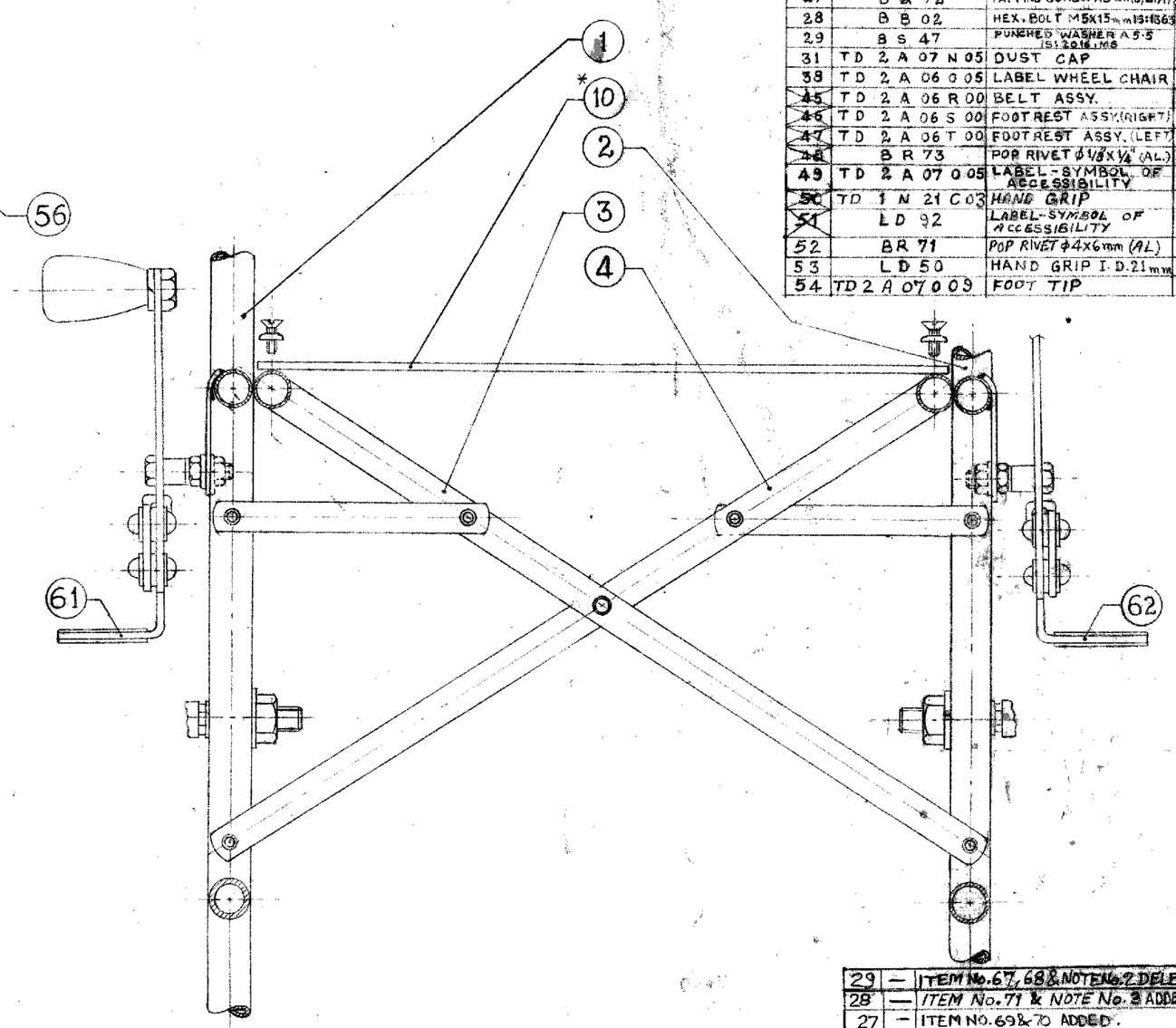
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	BRAKE ASSY (LEFT)
DRN		MTL	———
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm; UNLESS SPECIFIED
DIM	IN mm	FIN	———
SCALE	NTS	DRG No:- TD 2 A 02 E 00	SHEET 1OF1
APP	SD/DD1		
DATE	10.5.83		







SECTION-XX
(FOR DETAILS OF SEAT FRAME ASSY. ONLY)

ITEM NO.	DRG. NO.	NOMENCLATURE	NO. OFF	REMARK
55	TD 2 A 06 F 00	FOOT REST SUPPORT ASSY	2	
56	TD 2 A 06 G 00	FOOT REST ASSY.	1	
57	TD 2 A 07 0 04	PLUG END 17 m.m.	2	
58	TD 2 A 07 R A0	KNOB	2	
59	B S 45	PUNCHED WASHER A9 m.m IS:2016	2	
60	B S 54	SPRING WASHER 8 m.m IS:6735	2	
61	TD 2 A 02 D 00	BRAKE ASSY. (RIGHT)	1	
62	TD 2 A 02 E 00	BRAKE ASSY. (LEFT)	1	
63	TD 2 A 06 U 00	CHEST BELT ASSY	1	
64	L F 16	STICKER FOR "CAUTION SIGN"	1	
65	TD 2 A 06 V 00	BELT ASSY.	1	
66	L F 17	LABEL - IS: 8086	1	
~~67~~	~~TD 2A 06 006~~	~~PLATE GUARD~~	DELETED	
~~68~~	~~BR69~~	~~POP RIVET ϕ 1/8"X3/8" AL~~		
69	TD2A07N06	ALIMCO ROUNDAL	2	
70	BN 11	SLOTTED CHEESE HEAD SCREW AM4X10 m.m. IS:1366-66	2	
71	LF 58	P.U. FOAM ARM REST (WITH SCREWS).	2	

ITEM NO.	DRG. NO.	NOMENCLATURE	NO. OFF	REMARK
1	TD 2 A 06 A 00	FRAME ASSY. (RIGHT)	1	
2	TD 2 A 06 B 00	FRAME ASSY. (LEFT)	1	
3	TD 2 A 06 C 00	SEAT FRAME ASSY. (RT)	1	
4	TD 2 A 06 D 00	SEAT FRAME ASSY. (LT)	1	
5	TD 2 A 06 E 00	ARMREST ASSY.	2	
8	TD 2 A 06 H 00	CASTOR ASSY.	2	
9	TD 2 A 06 J 00	REAR-WHEEL ASSY.	2	
10	TD 2 A 06 K 00	SEAT ASSY.	1	
11	TD 2 A 06 L 00	BACK-REST ASSY.	1	
~~12~~	TD 2 A 07 R 00	BRAKE ASSY. (RIGHT)	DELETED	
~~13~~	TD 2 A 07 S 00	BRAKE ASSY. (LEFT)	DELETED	
~~14~~	TD 2 A 06 0 01	RETAINER BRAKE	DELETED	
16	TD 2 A 06 0 02	PLATE GUARD	2	
17	TD 2 A 06 0 03	WASHER	4	
18	TD 2 A 06 0 04	DUST CAP	2	
19	TD 2 A 07 D 08	WASHER	16	
20	TD 2 A 07 0 02	PLUG END 22 m.m.	4	
21	TD 2 A 07 0 03	PLUG END 19 m.m.	4	
23	L A 24	HAND GRIP	2	
24	B A 82	NYLOCK NUT M6	8	
25	B P 83	WOOD SCREW NO:10X35 IS:1580	4	STEEL
~~26~~	B N 08	SLOTTED CHEESE HEAD SCREW AM5X8 IS:1366-66	DELETED	
27	B A 72	TAPPING SCREW AB 4X13 IS:7107	8	STEEL
28	B B 02	HEX. BOLT M5X15 m.m IS:1363	4	
29	B S 47	PUNCHED WASHER A 5.5 IS:2016	4	W.C. PLATED
31	TD 2 A 07 N 05	DUST CAP	2	
33	TD 2 A 06 0 05	LABEL WHEEL CHAIR	1	
~~45~~	TD 2 A 06 R 00	BELT ASSY.	DELETED	
~~46~~	TD 2 A 06 S 00	FOOT REST ASSY. (RIGHT)	DELETED	
~~47~~	TD 2 A 06 T 00	FOOT REST ASSY. (LEFT)	DELETED	
~~48~~	B R 73	POP RIVET ϕ 1/8X1/4" (AL)	2	DELETED
49	TD 2 A 07 0 05	LABEL - SYMBOL OF ACCESSIBILITY	1	
~~50~~	TD 1 N 21 C 03	HAND GRIP	2	DELETED
~~51~~	L D 92	LABEL - SYMBOL OF ACCESSIBILITY	DELETED	
52	BR 71	POP RIVET ϕ 4X6 m.m (AL)	4	
53	L D 50	HAND GRIP I.D. 21 m.m.	2	
54	TD 2 A 07 0 09	FOOT TIP	2	

NOTE:-
1. ENSURE THAT THE HEIGHT OF TUBE REAR (TD 2 A 06 A A1) IN TD 2 A 06 A A0 IS WITHIN ±1 (NOMINAL 720 m.m).
X2
3. USE ITEM No. 71 AS AN ALTERNATE OF ITEM No. 5

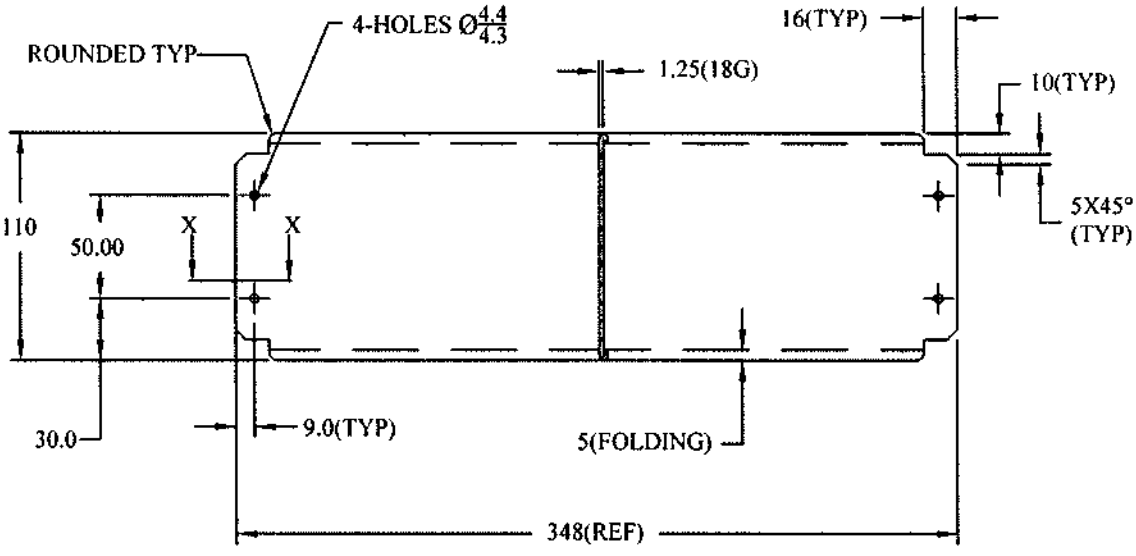
S.No.	REGION	REVISION	DATE	SIG.
29	—	ITEM No. 67, 68 & NOTE No. 2 DELETED	13.10.11	
28	—	ITEM No. 71 & NOTE No. 3 ADDED.	04.9.11	
27	—	ITEM NO. 69 & 70 ADDED.	26-6-10	
26		ITEM NO. 67, 68 & NOTE No. 2 ADDED.	09-1-09	
25	—	ITEM No 66 ADDED. No. OFF 4 WAS 2 AT ITEM No. 52	03.2.09	
24	—	LOCATION OF ITEM NO. 49 CHANGED. ITEM NO. 64, 65 ADDED & ITEM NO. 45 DELETED	20.2.04	
23	—	ITEM Nos. 63 ADDED.	30.12.03	
22		ITEM No. 51 DELETED. ITEM No. 49 REINTRODUCED. No. OFF 2 WAS 8 AT ITEM No. 52	21.12.03	
21		ITEM NO. 61, 62 ADDED & IT. NO. 12, 13, 15, 28 DELETED.	20.12.03	
20		ITEM NO. 55 TO 60 ADDED & ITEM NO. 45, 47 DELETED	14.12.03	
19		ITEM No. 54 ADDED AS ALTERNATE TO ITEM No. 20	17.07.01	
18	—	REV. NO. 16 WITHDRAWN. ITEM NO. 53 ADDED AS ALTERNATE TO ITEM NO. 5	27.11.99	
17	—	ITEM No. 51, 52 ADDED. ITEM No. 45, 48 DELETED.	22.9.99	
16	—	ITEM No. 50 ADDED. ITEM No. 23 DELETED	9.9.98	
15	—	DRG. REDRAWN.	24.2.98	
14	—	ITEM NO. 48, 49 & LABEL REF. DIMS ADDED. NOTE NO. 3 DELETED	23.4.97	

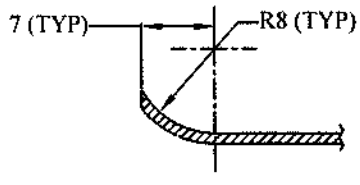
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

DSN		NOM	WHEEL CHAIR FOLDING SIZE '1' (MAMTA)
DRN		MTL	
CHD		TOL	UNLESS SPECIFIED
DIM	IN m.m		
SCALE		FIN	
APP		DRG No.	TD 2 A 06 0 00
DATE	28-8-81	SHEET	1 OF 2

01 | A | D. | 016





SECTION-XX
SCALE-5:1

NOTE:-

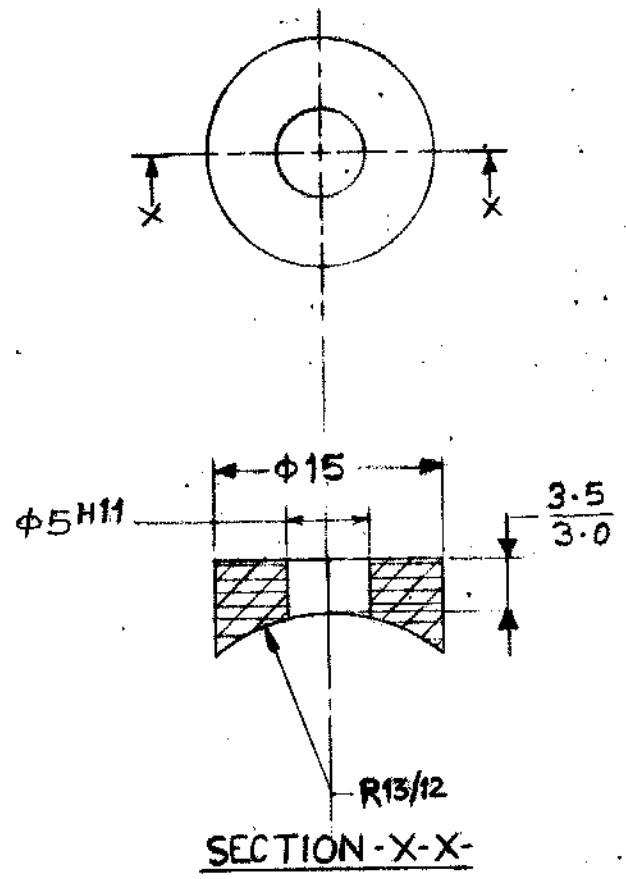
1.REMOVE SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
4.	A - 2	MTL AA 23 WAS AA 22 & DRAWING REDRAWN	28.10.17	
3.	-----	FINISH WAS STOVE ENAMEL PAINT	03.06.14	
2.	A - 1	MTL CODE No. WAS AA 29	21.02.06	
1.	A - 2	Gd OF MTL 'DD' WAS 'O'	18.04.89	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA
KANPUR

DGN	Ashish	NOM	PLATE GUARD
DRN		MTL	SHEET MS CR1 Gd '0' IS:513, THICK 1.25mm (AA 23)
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	POWDER COATED COLOUR AS APPROVED
SCALE	NTS	DRG No:-	TD 2 A 06 0 02
APP		REV	4
DATE	28.08.1981	SHEET	1OF1



SECTION - X - X -

NOTE :-

1. REMOVE SHARP EDGES & CORNERS

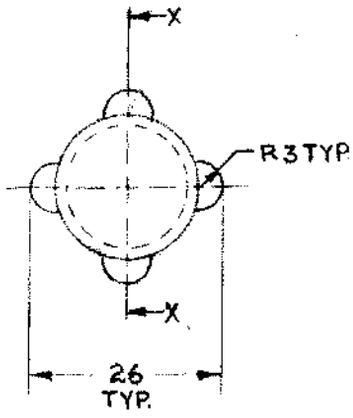
S No.	REGION	REVISION	DATE	SIG.
3	A-2	MTL. NYLON WAS BAR MS Φ15 (AB32)	15.07.82	
2	A-2	FIN. ADDED	12.11.82	
1	F-3	Φ15 WAS Φ12	10.6.82	

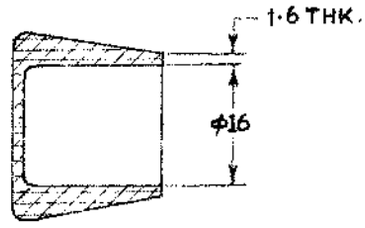
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

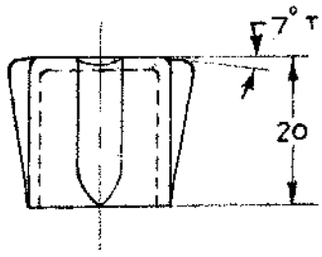
DGN		NOM	WASHER
DRN		MTL	GRANNULES POLYAMIDE (NYLON) IS: 7078 TYPE 6 (AW 90)
CHD		TOL	INTEGER ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.250 mm; TWO PLACE DECIMAL ± 0.125 mm UNLESS SPECIFIED
DIM.	IN mm		
SCALE	2:1	FIN.	MOULDED
APP		DRG No.	TD 2 A 06 0 03
DATE	29.8.81	SHEET	1 OF 1

01 | K 8 | 071





SECTION X-X



NOTE:-

1. UNSPECIFIED RADII 1 mm.
2. HARDNESS 50-60 IRHD.

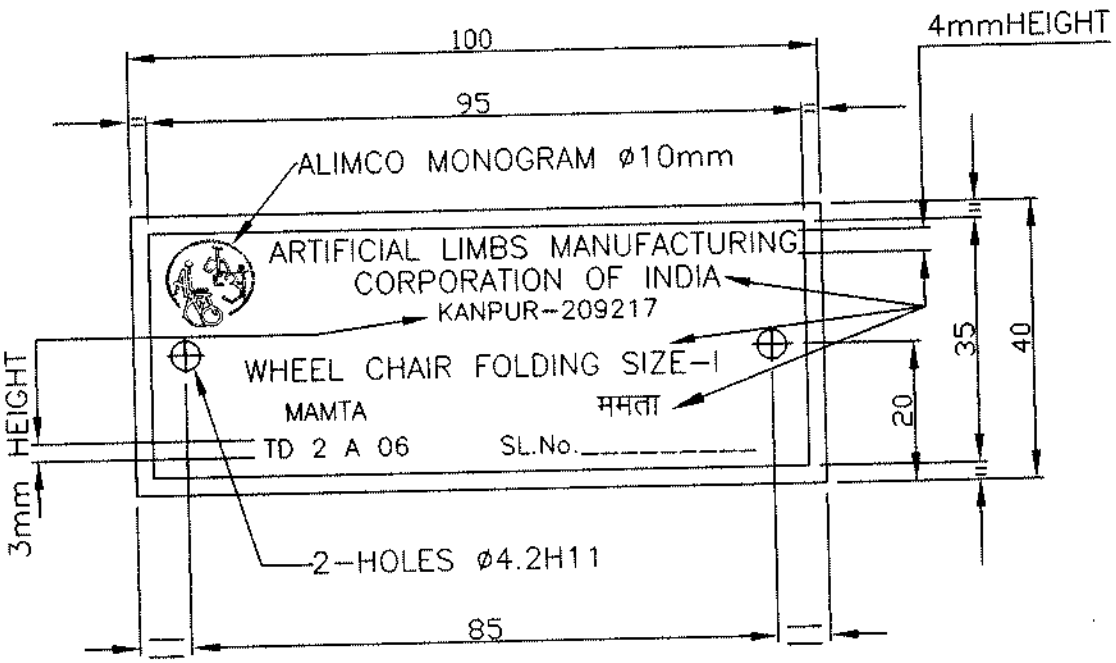
S.No.	REGION	REVISION	DATE	SIG.

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

DGN.		NOM.	DUST CAP
DRN.		MTL.	GRANULES POLYVINYLE CHLORIDE IS:7078 (BLACK COLOUR) (AW 92)
CHD.		TOL.	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm UNLESS SPECIFIED
DIM.	IN mm		
SCALE	1:1	FIN.	MOULDED
APP.		DRG.NO.	TD 2A 06 0 04
DATE	19.2.82	SHEET	1 OF 1

01 K 8 892



THE GAP BETWEEN THE TWO LINES=2mm APPROX

NOTE:-

1. BACKGROUND ANODIZED PRINTING COLOUR AS APPROVED.
2. LETTERING DETAILS & PROPORTIONS AS SHOWN
3. REMOVE SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
4	—	REDESIGN & REDRAWN	12.05.14	

REVISIONS

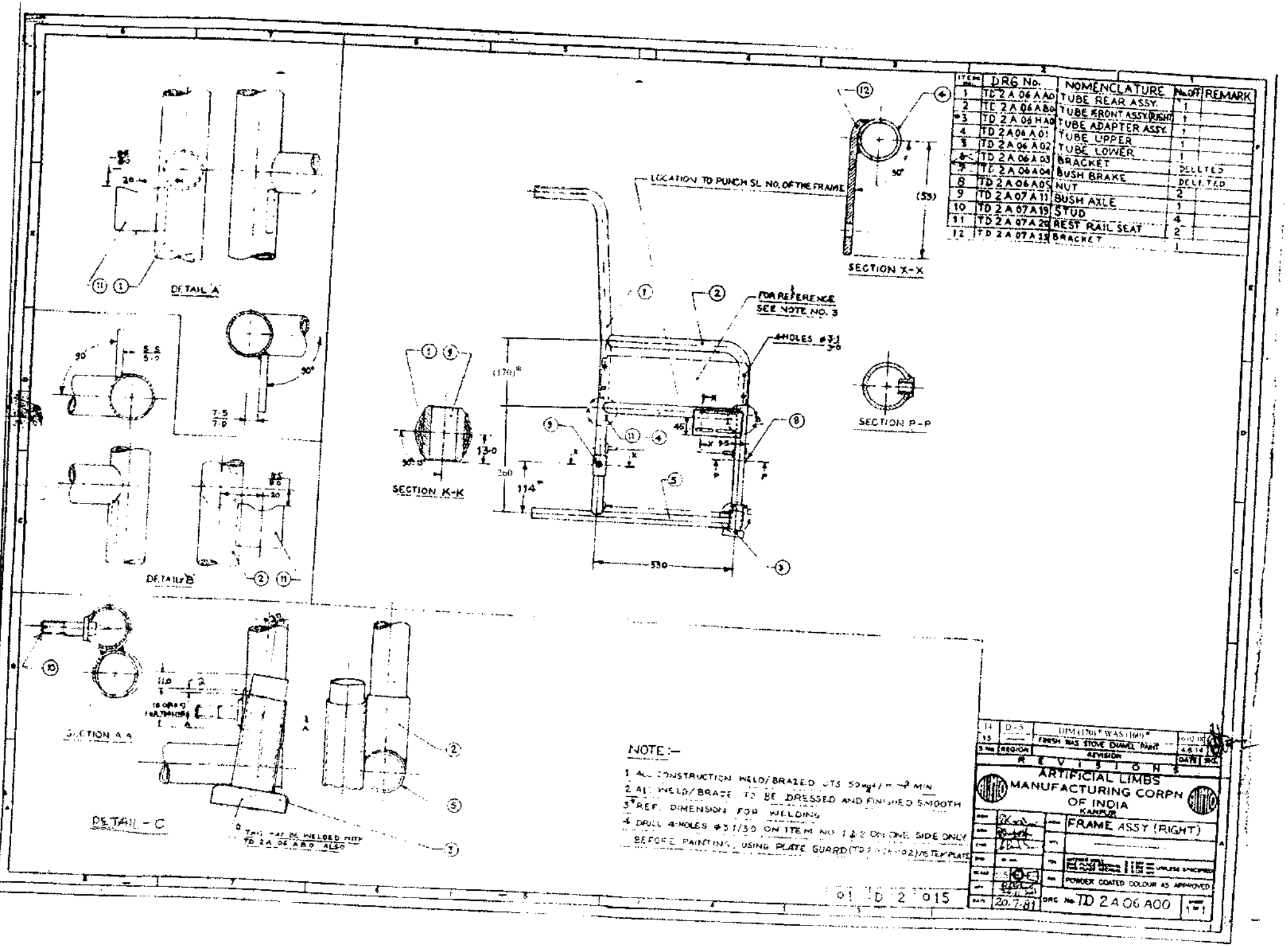
ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL
DRN		MTL	SHEET AL.ALLOY HS 30 WP IS:737 THICK 1mm(19SWG) (AP20)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	—
APP	SD/DD		
DATE	23.01.1991		

01 K 8 186

DRG No:- TD 2 A 06 0 05

SHEET 1OF1



ITEM No.	DRG No.	NOMENCLATURE	No. OFF	REMARK
1	TD 2 A 06 A AD	TUBE REAR ASSY.	1	
2	TE 2 A 06 A B0	TUBE FRONT ASSY (RIGHT)	1	
*3	TD 2 A 06 H A0	TUBE ADAPTER ASSY.	1	
4	TD 2 A 06 A 01	TUBE UPPER	1	
5	TD 2 A 06 A 02	TUBE LOWER	1	
6	TD 2 A 06 A 03	BRACKET	1	
7	TE 2 A 06 A 04	BUSH BRAKE		DELETED
8	TD 2 A 06 A 05	NUT		DELETED
9	TD 2 A 07 A 11	BUSH AXLE	2	
10	TD 2 A 07 A 19	STUD	1	
11	TD 2 A 07 A 20	REST RAIL SEAT	4	
12	TD 2 A 07 A 15	BRACKET	2	

NOTE :-

1. ALL CONSTRUCTION WELD/BRAZED UTS 50 kgf/mm² MIN
2. ALL WELD/BRAZE TO BE DRESSED AND FINISHED SMOOTH
3. *REF. DIMENSION FOR WELDING
4. DRILL 4-HOLES ø3.1/3.0 ON ITEM NO. 1 & 2 ON ONE SIDE ONLY BEFORE PAINTING, USING PLATE GUARD (TD 2 A 06 A02) AS TEMPLATE

14	D-5	DIM (170)* WAS (160)*	
13		FINISH WAS STOVE ENAMEL PAINT	4.8.14
S.No.	REGION	REVISION	DATE / SIG.

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA KANPUR

FRAME ASSY (RIGHT)

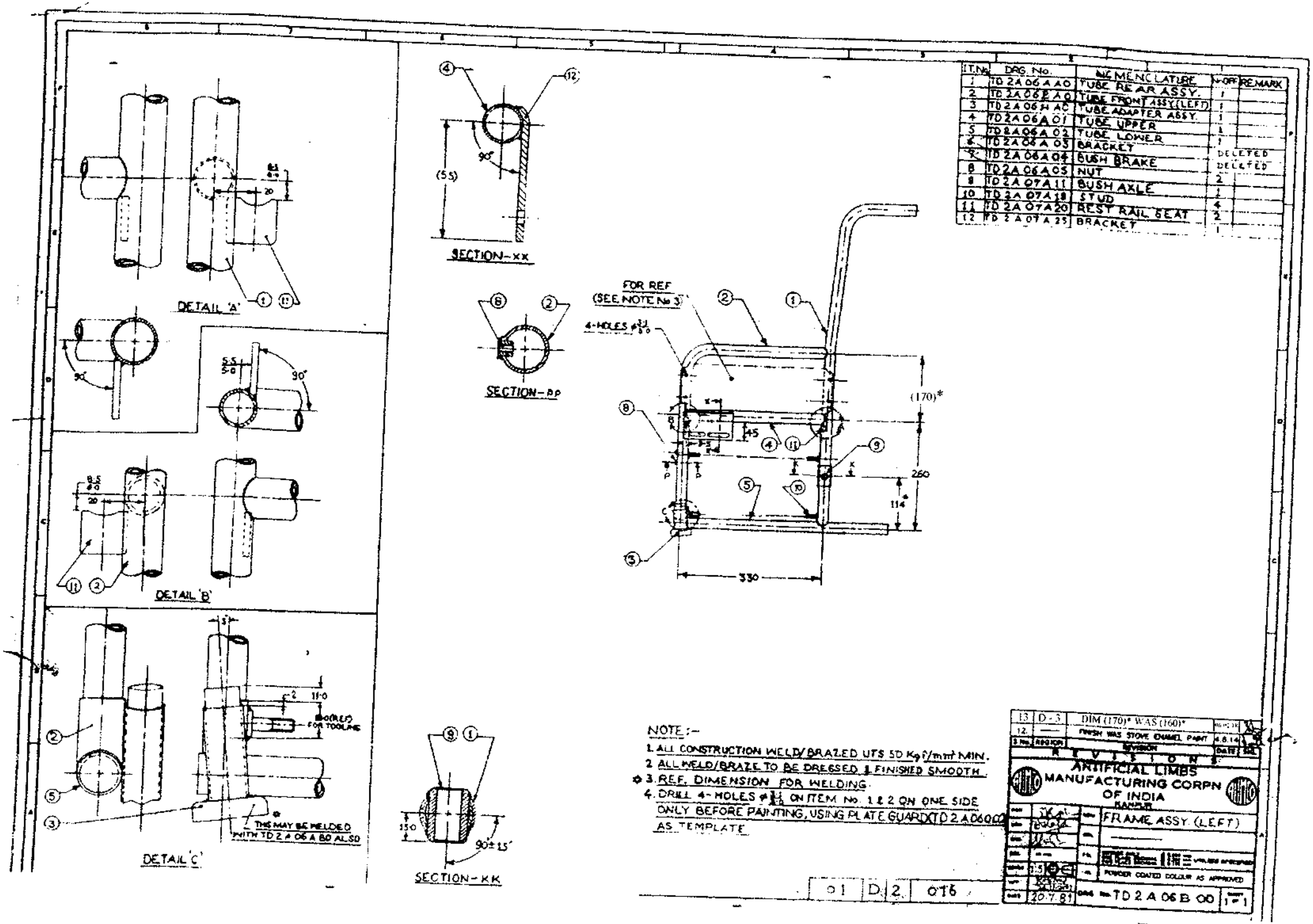
POWDER COATED COLOUR AS APPROVED

DRG No. TD 2 A 06 A00

DATE 20.7.81

SCALE 1:1

01 TD 2 015



I.T.No.	DRG. No.	NOMENCLATURE	No. OFF	REMARK
1	TD 2A 06 A A0	TUBE REAR ASSY.	1	
2	TD 2A 06 B A0	TUBE FRONT ASSY (LEFT)	1	
3	TD 2A 06 H A0	TUBE ADAPTER ASSY.	1	
4	TD 2A 06 A 01	TUBE UPPER	1	
5	TD 2A 06 A 02	TUBE LOWER	1	
6	TD 2A 06 A 03	BRACKET	1	
7	TD 2A 06 A 04	BUSH BRAKE		DELETED
8	TD 2A 06 A 05	NUT		DELETED
9	TD 2A 07 A 11	BUSH AXLE	2	
10	TD 2A 07 A 19	STUD	1	
11	TD 2A 07 A 20	REST RAIL SEAT	4	
12	TD 2 A 07 A 25	BRACKET	2	

NOTE :-

1. ALL CONSTRUCTION WELD/BRAZED UTS 50 Kg f/mm² MIN.
2. ALL WELD/BRAZE TO BE DRESSED & FINISHED SMOOTH.
3. REF. DIMENSION FOR WELDING.
4. DRILL 4-HOLES ⌀11/10 ON ITEM No. 1 & 2 ON ONE SIDE ONLY BEFORE PAINTING, USING PLATE GUARD TD 2 A 06 00 AS TEMPLATE.

13	D-3	DIM (170)* WAS (160)*	
12	—	FINISH WAS STOVE ENAMEL PAINT	4.8.14
S.No.	REVISION	REVISION	Date

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA KANPUR

FRAME ASSY. (LEFT)

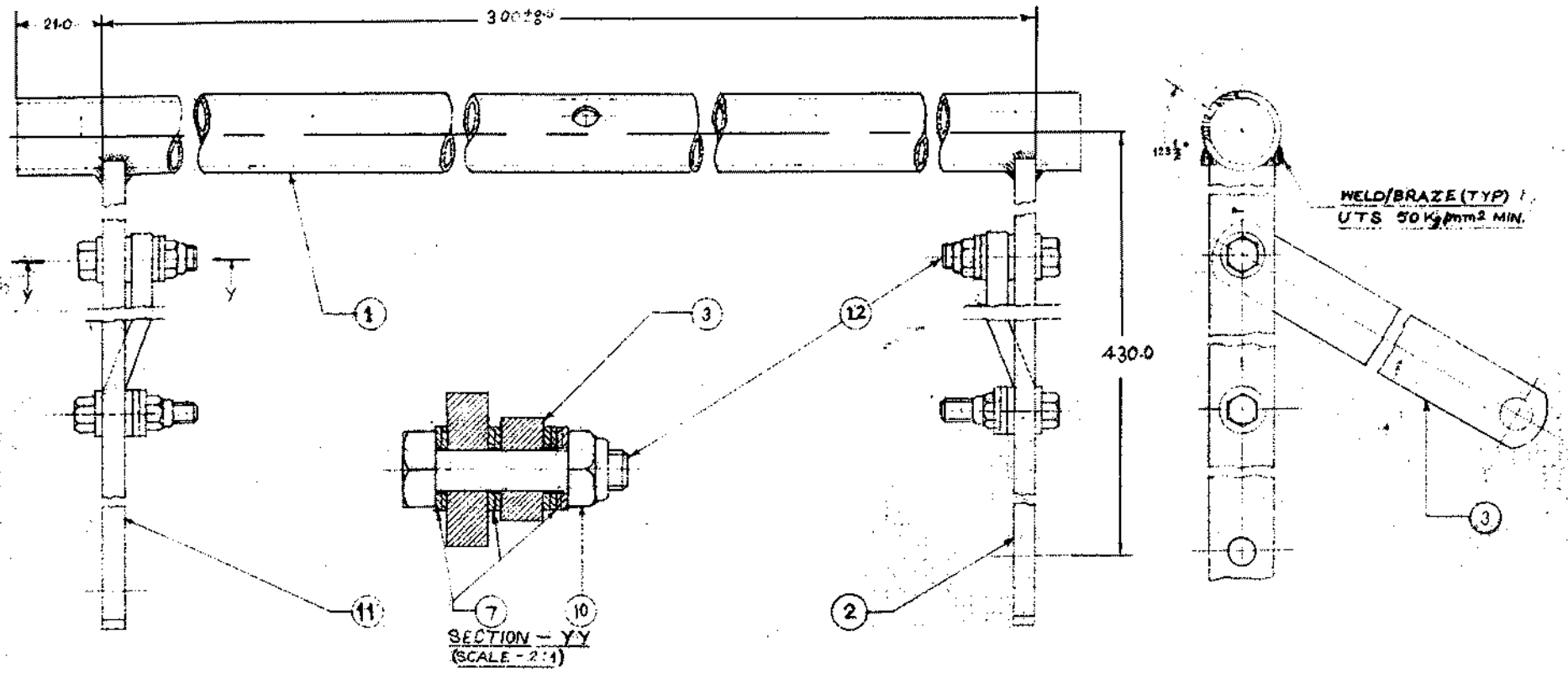
POWDER COATED COLOUR AS APPROVED

20.7.81

DRG No TD 2 A 06 B 00

SHEET 1 OF 1

01 D 2 016



ITEM NO.	DRG. NO.	NOMENCLATURE	NO. OFF	REMARK
12	BB04	HEX BOLT M6 X 25mm.	4	IS: 1363
11	TD2A 06 C 04	STRIP FOLDING RIGHT (FRONT)	1	
10	B A 82	NYLOCK NUT M6	4	
9	TD2A 07 D 09	HEX BOLT	4	DELETED
8	B A 81	NYLOCK NUT M5	DELETED	
7	TD2A 07 D 08	WASHER	16	
6	TD 2A 07 D 07	WASHER	DELETED	
5	TD 2A 07 D 06	STUD		
4	TD 2A 07 D 02	BUSH ADAPTOR SEAT		
3	TD 2A 06 C 03	LINK RIGHT	2	
2	TD 2A 06 C 02	STRIP FOLDING RIGHT	1	
1	TD 2A 06 C 01	RAIL SEAT	1	

NOTE:—

1. REMOVE SHARP EDGES & CORNERS
2. ITEM NO. 3, 7, 12 & 10 TO BE ASSEMBLED AFTER PAINTING OF ITEM NO. 1, 2 & 11
3. ALL WELDS TO BE DRESSED & FINISH SMOOTH
4. ITEM NO. 7 (NO. OF 4) & 12 (NO. OF 4) & 10 (NOTE 2) DO NOT FORM A PART OF ASSEMBLY. TO BE INCORPORATED AT THE TIME OF MAIN ASSY. OF WHEEL CHAIR.

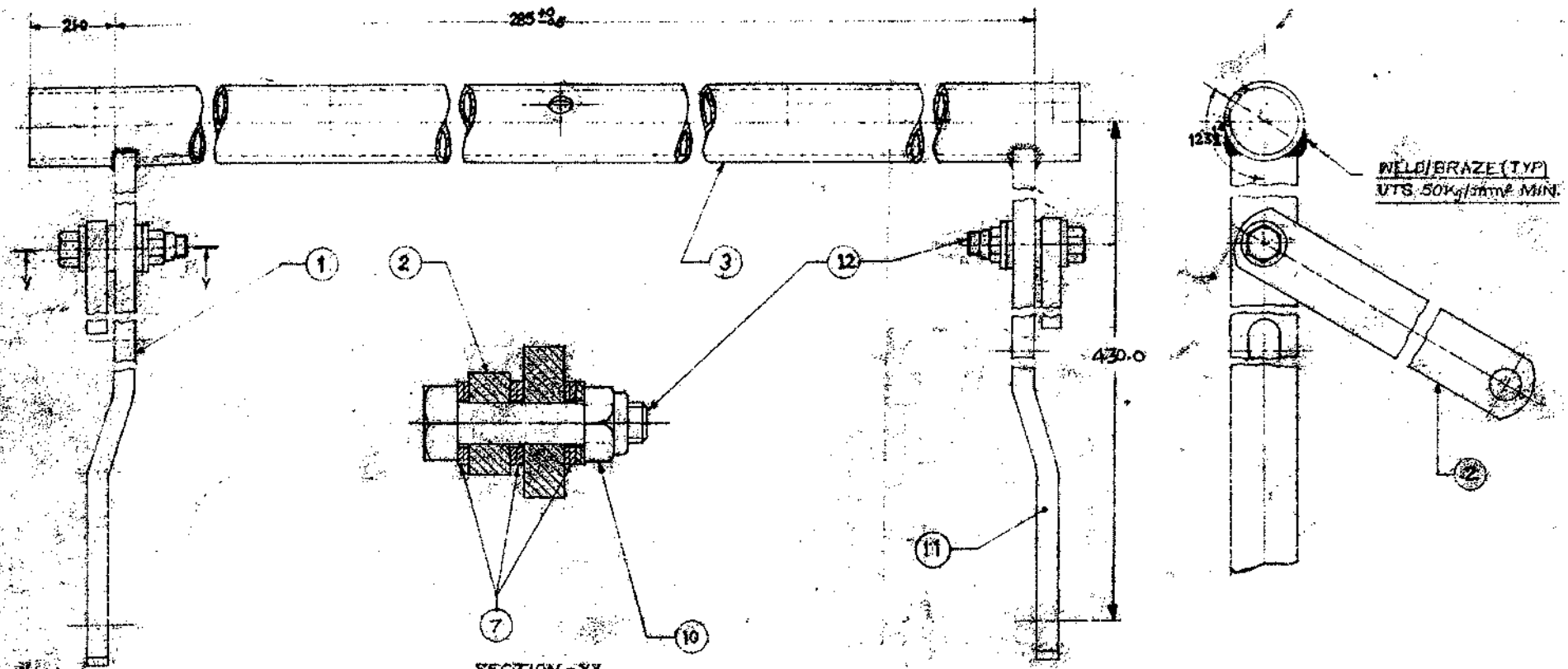
01 G2 076

S.No.	REGION	REVISION	DATE	SIG.
7.	—	FINISH WAS STOVE ENAMEL PAINT	3.6.14	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

DGN.		NOM.	SEAT FRAME ASSY RIGHT
DRN.	SP	MTL.	—
CHD.		TOL.	INTEGER ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.200 mm; TWO PLACE DECIMAL ± 0.100 mm; UNLESS OTHERWISE SPECIFIED
DBL.	—	FIN.	POWDER COATED COLOUR AS APPROVED
SCALE	1:5		
APP.			DRG NO. TD 2 A 06 C 00
DATE	23.7.01		



12	BBOA	HEX BOLT M6 X 25 mm	2	IS:1363
11	TD 2 A 06 D 03	STRIP FOLDING LEFT (FRONT)	1	
10	BA 82	NYLOCK NUT M6	2	
9	TD 2 A 07 D 09	HEX BOLT	2	DELETED
8	BA 81	NYLOCK NUT M5	DELETED	
7	TD 2A 07 D 08	WASHER	8	
6	TD 2A 07 D 07	WASHER	DELETED	
5	TD 2A 07 D 06	STUD		
4	TD 2A 07 D 02	BUSH ADAPTOR SEAT		
3	TD 2A 04 C 01	RAIL SEAT	1	
2	TD 2A 06 D 02	LINK LEFT	2	
1	TD 2A 06 D 01	STRIP FOLDING LEFT	1	
ITEM	PURG NO.	NOMENCLATURE	NO.	REMARK

NOTE:—
1. REMOVE SHARP EDGES AND CORNERS.
2. ITEM NO. 2, 7, 12 & 10 TO BE ASSEMBLED AFTER PAINTING OF ITEM NO. 1, 5 & 11
3. ALL WELDS TO BE DRESSED & FINISH SMOOTH

7.	—	FINISH WAS STOVE ENAMEL PAINT	3.6.14
S.No.	REGION	REVISION	DATE SIG.

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

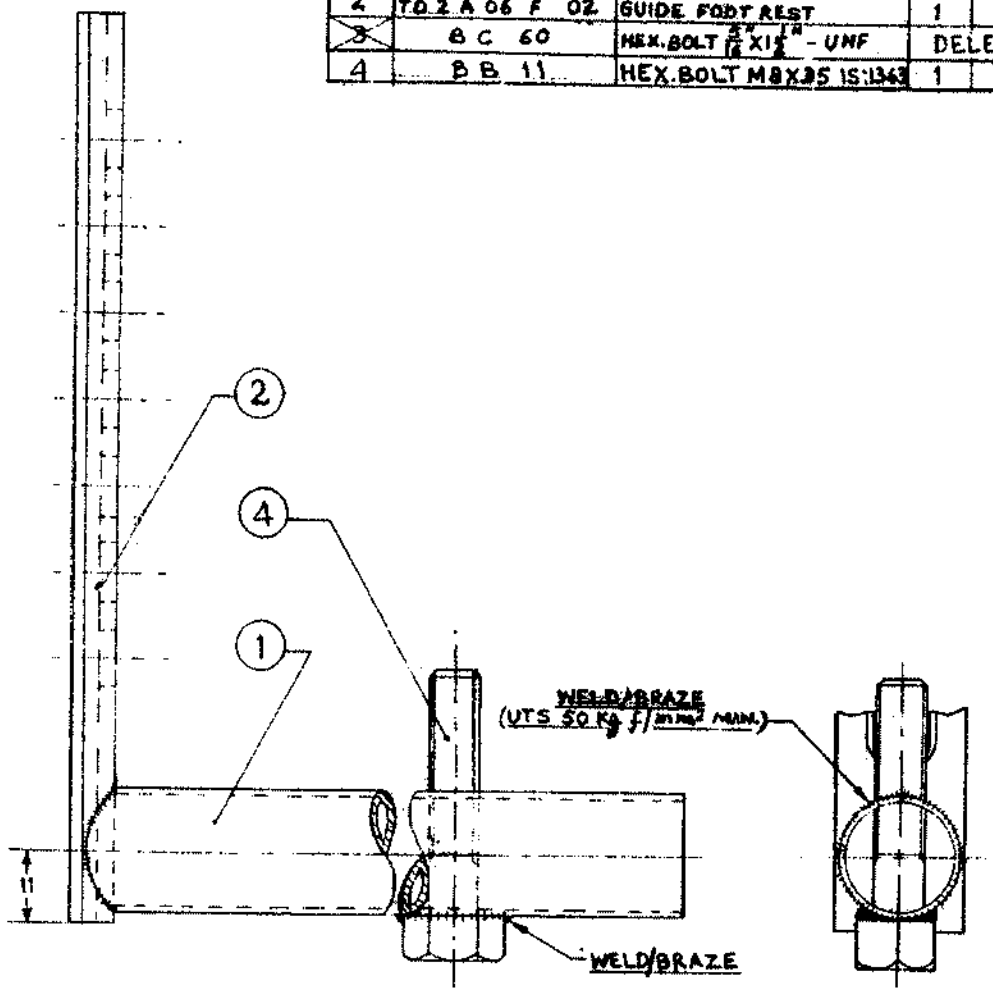
SEAT FRAME ASSY LEFT

POWDER COATED COLOUR AS APPROVED

DRG NO. TD 2 A 06 D 00

01 62 077

IT. NO.	DRG. NO.	NOMENCLATURE	NO. OFF	REMARKS
1	TD 2 A 06 F 01	TUBE FOOTREST	1	
2	TD 2 A 06 F 02	GUIDE FOOT REST	1	
~~3~~	B C 60	HEX. BOLT $\frac{5}{16}$" X $1\frac{1}{2}$" - UNF	DELETED	
4	B B 11	HEX. BOLT M8X35 IS:1363	1	



NOTE :-

1. WELDS TO BE FINISHED FLUSH & SMOOTH BEFORE PLATING.

S No.	REGION	REVISION	DATE	SIG.
4.	——	FINISH WAS STOVE ENAMEL PAINT	3.6.14	
3	A-1 TO 3	FIN. WAS STOVE ENAMEL PAINT COLOUR AS APPROVED.		
2	G-3	ITEM NO. 3 DELETED & 4 ADDED	23.9.86	
1	D-3	ITEM NO. 3 ADDED, FIN. WAS Nicr. PLATED	11.8.82	

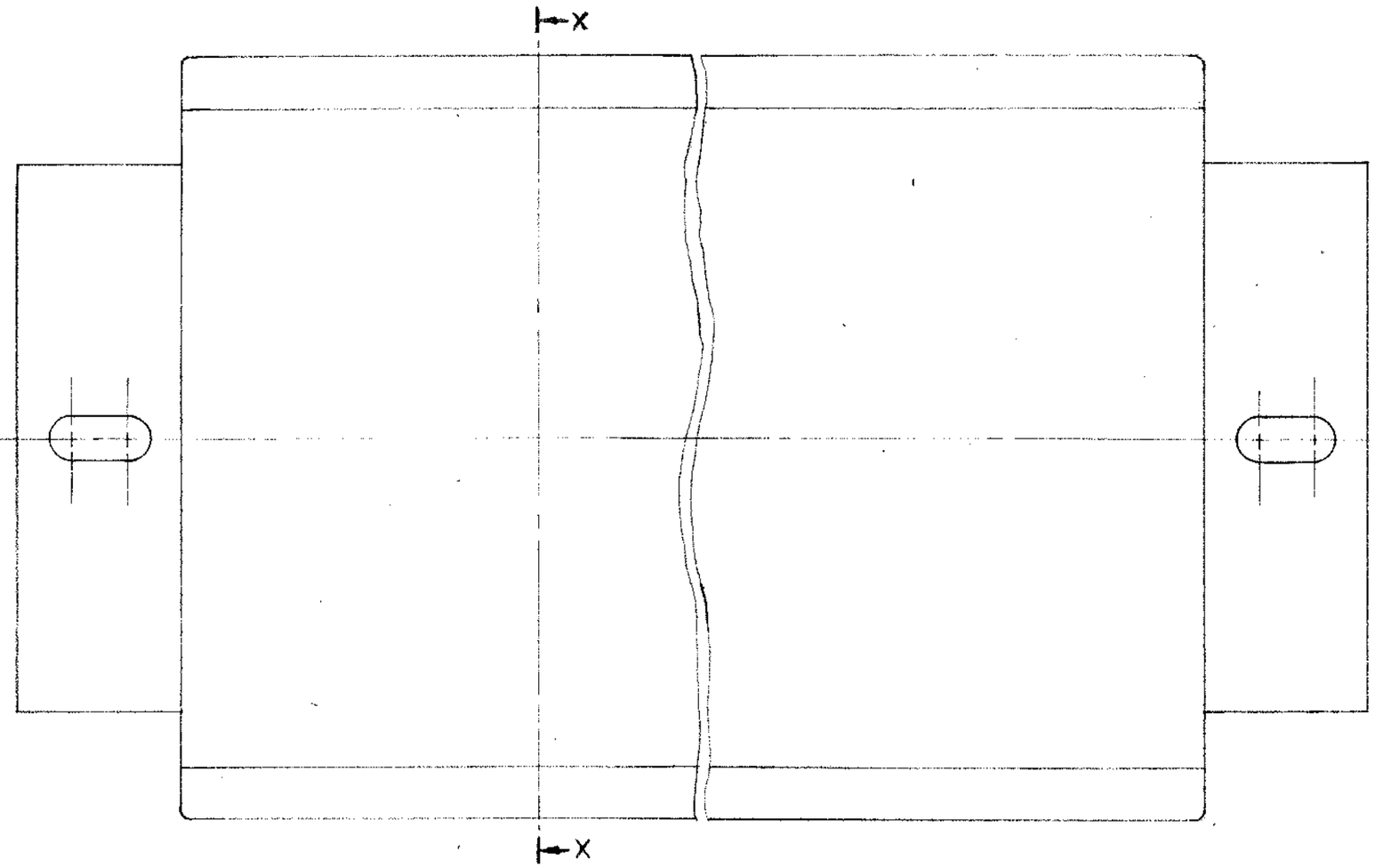
REVISIONS

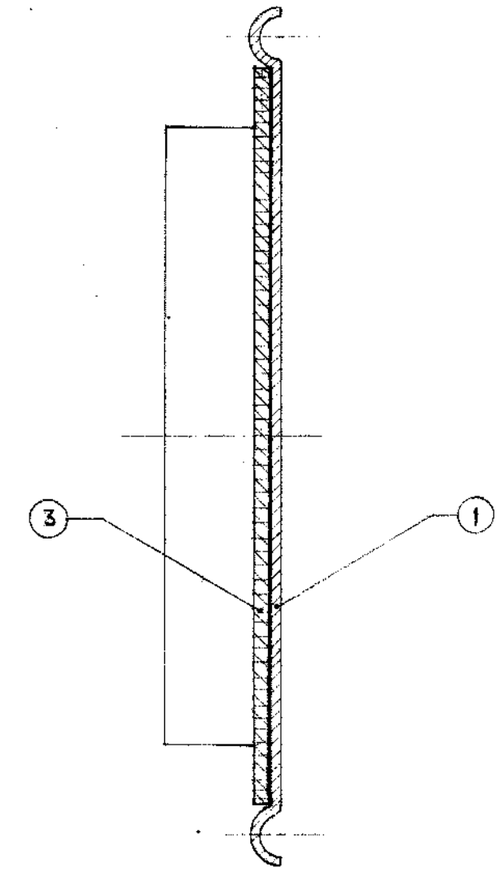
ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

DGN		NOM	FOOT REST SUPPORT ASSY.
DRN		MTL	——
CHD		TOL	INTEGER ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.250 mm; TWO PLACE DECIMAL ± 0.125 mm UNLESS SPECIFIED
DIM.	IN mm		
SCALE	1:1	FIN.	POWDER COATED COLOUR AS APPROVED
APP		DRG No.	TD 2 A 06 F 00
DATE	28.7.81	SHEET	1 OF 1

01 K 8 046

IT.NO.	DRG. NO.	NOMENCLATURE	NO.OFF	REMARK
1.	TD 2 A 06 G 01	FOOT PLATE	1	
~~2.~~	TD 2 A 06 G 02	TUBE HINGE	DELETED	
3.	TD 2 A 06 G 03	PAD FOOTREST	1	





SECTION X-X

NOTE :-

1. USE DUNLOP S-758 OR EQUIVALENT ADHESIVE TO STICK ITEM NO. 2 WITH ITEM NO. 1.

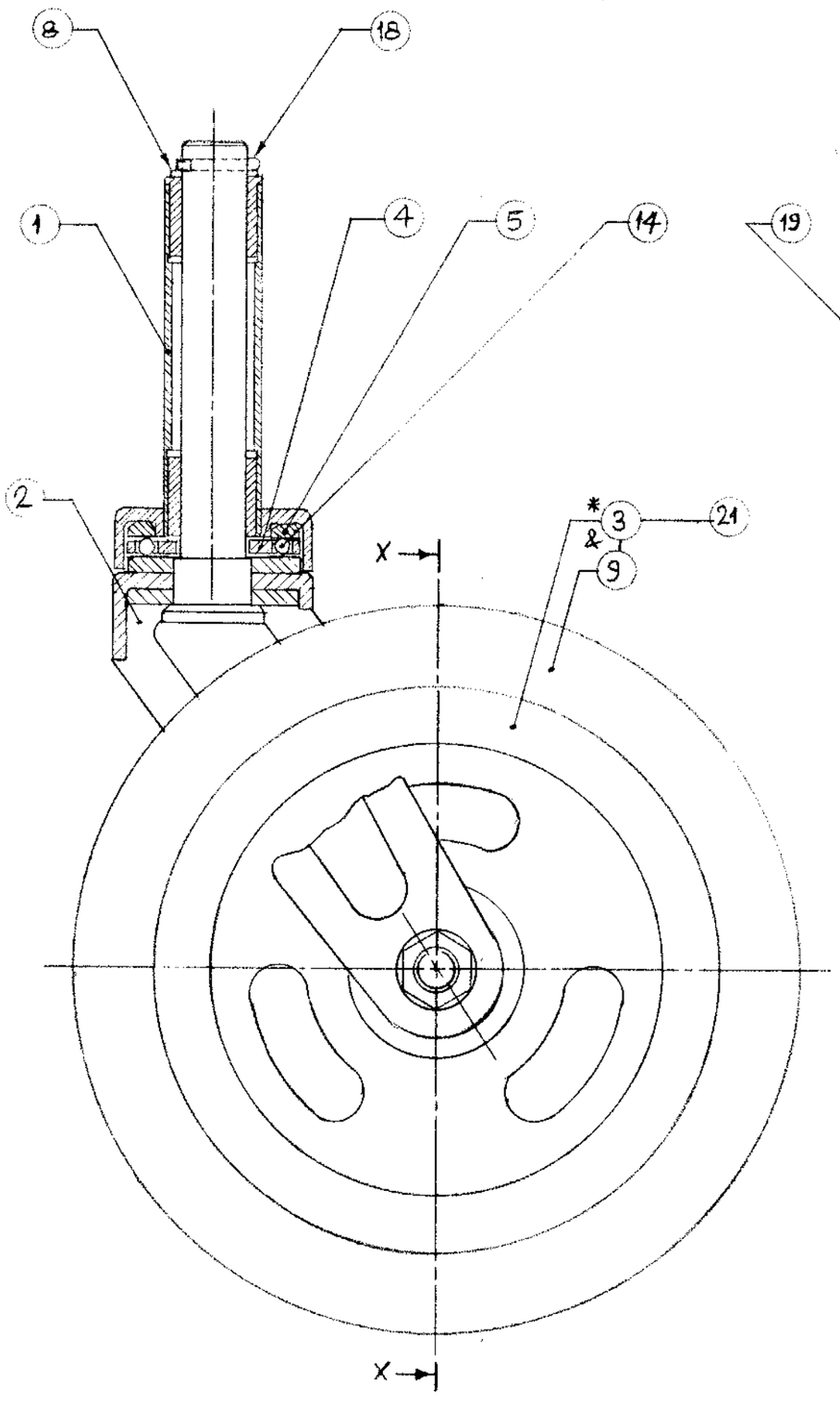
S.No.	REGION	REVISION	DATE	SIG.
1	–	RE DESIGNED & RE DRAWN	17.8.82	

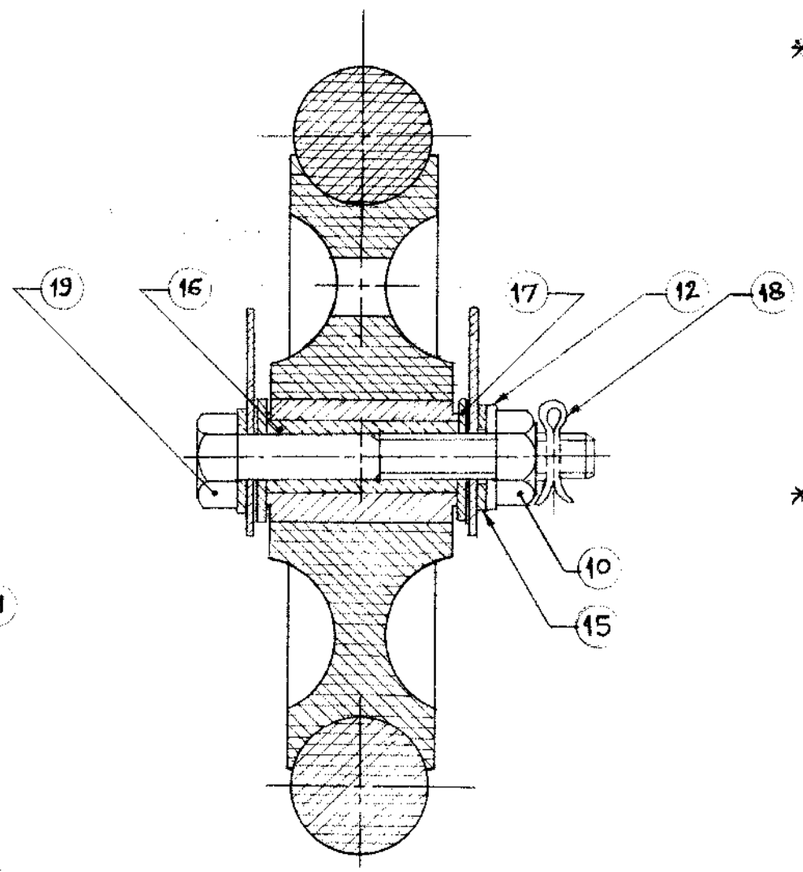
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

DGN.	Devadhar	NOM.	FOOT REST ASSY.
DRN.	Krishna	MTL.	———
CHD.	Ramesh	TOL.	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm UNLESS SPECIFIED
DIM.	IN mm	FIN.	———
SCALE	1:1	DRG.NO.	TD 2 A 06 G 00
APP.	Ramesh	SHEET	1 OF 1
DATE	23.7.81		

01 G2 107





SECTION-XX

IT.NO	DRG. NO	NOMENCLATURE	No.OFF	REMARK
1.	TD 2A 06 HA0	TUBE ADAPTER ASSY	1	
2.	TD 2A 06 HB0	FORKSTEM ASSY	1	
* 3.	TD 2A 06 HC0	RIM ASSY	1	
4.	TD 2A 06 H01	CAGE	1	
5.	TD 2A 06 H02	PLATE BEARING UPPER	1	
8	TD 2A 06 H05	WASHER NYLON	AS REQD	
9	TD 4A B1 000	TYRE ϕ125mm TYPE-B	1	
10	BA 02	HEX. NUT M8 IS:1363	1	
12	BS 54	SPRING WASHER 8 IS:6735	1	
14	HK 03	FREE BALL ϕ5/32. IS:2898 STEEL	10	
15	BS 45	PUNCHED WASHER A9 IS:2016 MS	2	
16	TD 2A 06 H06	BEARING SLEEVE	1	
17	TD 2A 06 H07	WASHER I.D. 8	2	
18	BX 07	SPLIT PIN 2.5X20-STEEL IS:549	2	
19	TD 2A 06 H08	HEX. BOLT	1	
* 21	TD 2A 06 HE0	RIM ASSY WITH EVA TYRE ϕ125mm	1	

NOTE:—

1. AXIAL PLAY OF THE STEM SHOULD BE < 0.6 mm. INSERT WASHER ITEM No. 8 AS REQD FOR ADJUSTMENT OF PLAY.
2. USE LIGHT DUTY GREASE BETWEEN PLATE-BEARING UPPER & PLATE BEARING LOWER.
3. * ITEM No. 21 IS AN ALTERNATE OF ITEM No. 3 & 9

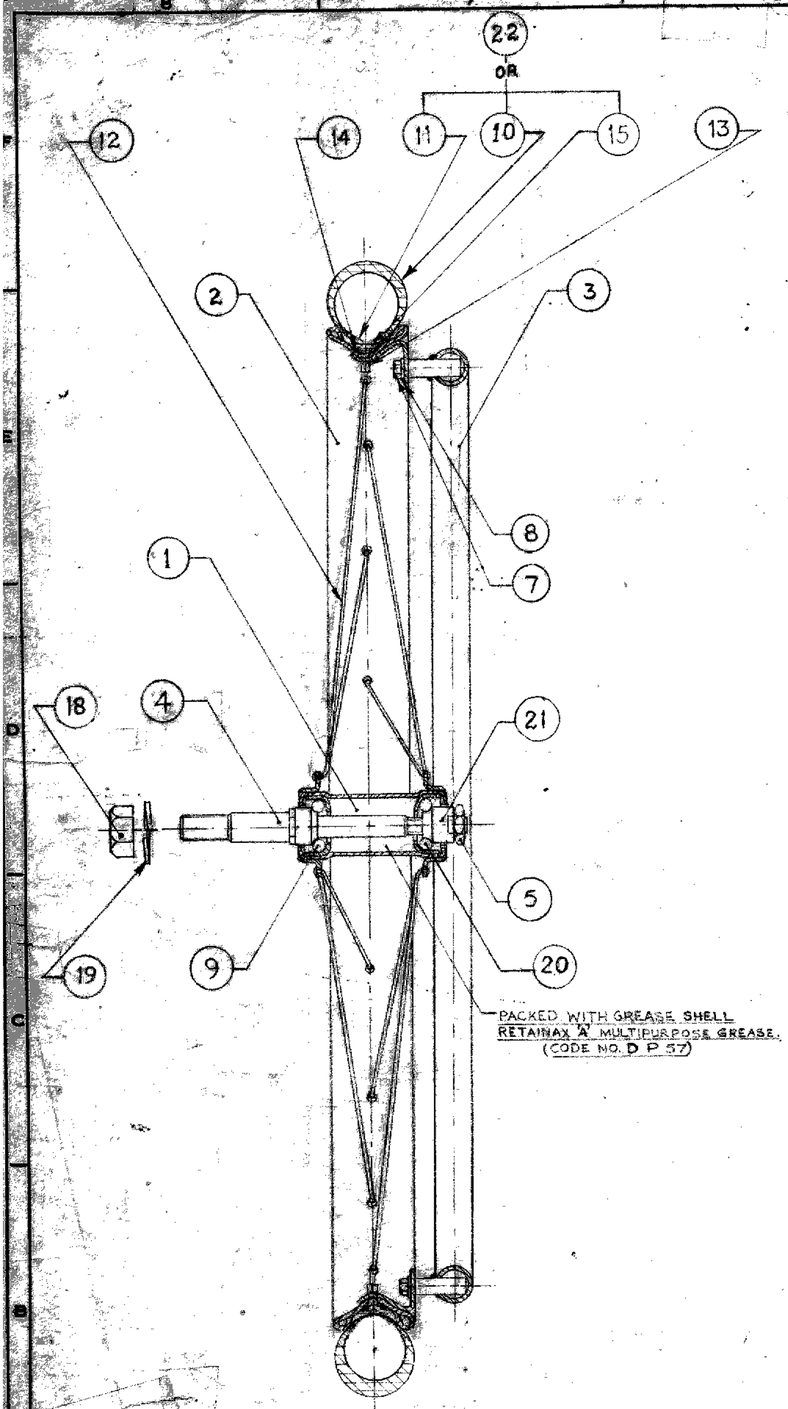
S No.	REGION	REVISION	DATE	SIGN
11.	—	DRAWING RADRAWN	25-11-11	

REVISIONS

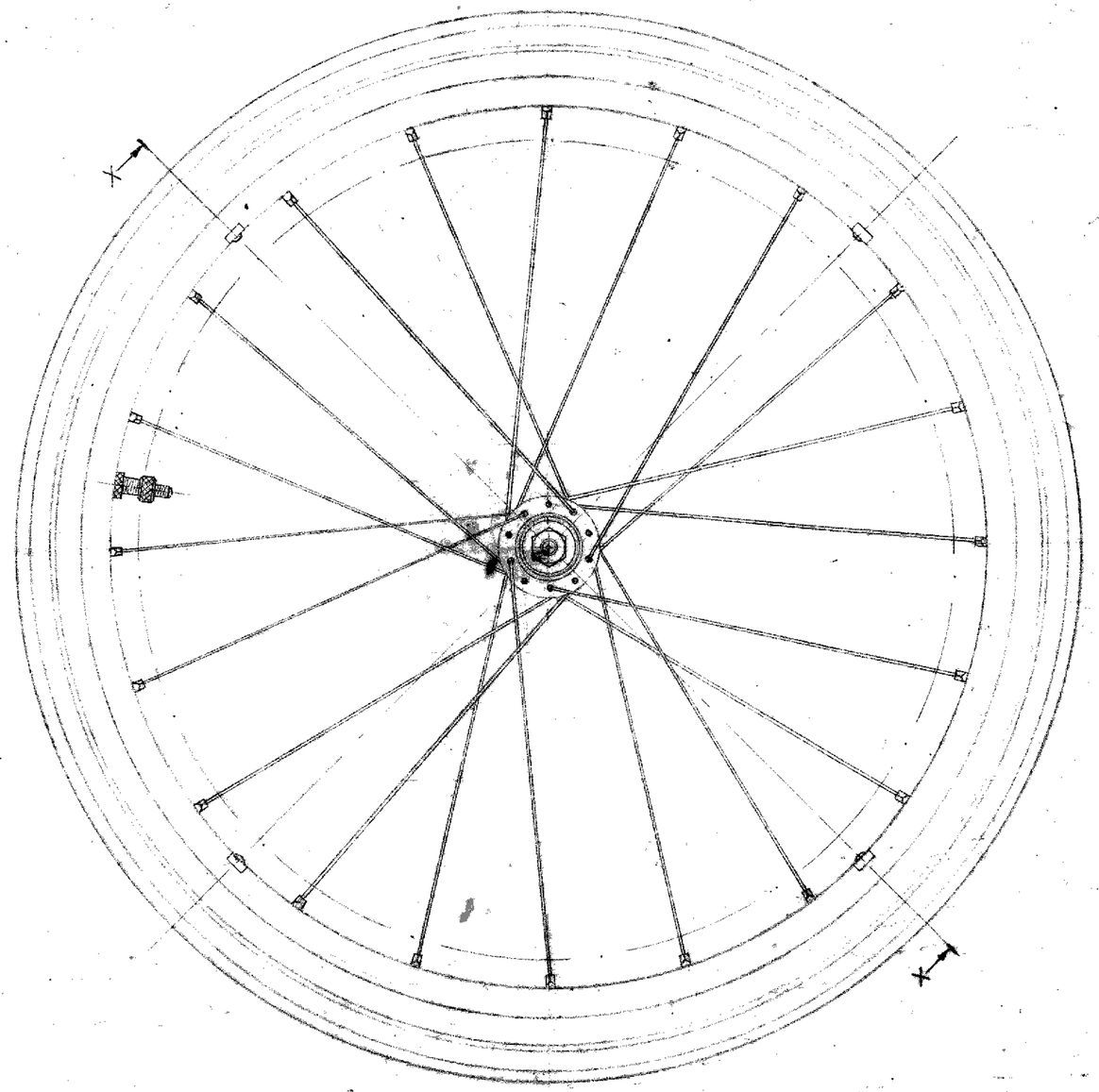
ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA KANPUR

DGN		NOM	CASTOR ASSY. ϕ125mm
DRN		MTL	—
CHD		TOL	INTEGER ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.100 mm; TWO PLACE DECIMAL ± 0.125 mm UNLESS SPECIFIED
DIM.	IN mm		
SCALE	1:1	PIN.	—
APP		DRG No.	TD 2A 06 H00
DATE	11-4-81	SHEET	1 OF 1

01 | G | 2 | 066



SECTION X-X



T. NO.	DRG. NO.	NOMENCLATURE		
*1	TD 2 A 06 J A0	HUB ASSY.	1	
	TD 2 A 06 J A1	FLANGE HUB	2	
	TD 2 A 07 N 08	TUBE HUB	1	
	TD 2 A 07 N 16	HUB CAP	2	
	TD 2 A 07 N 11	CUP	2	
2.	TD 2 A 06 J B0	RIM & BRACKET ASSY.	1	
	TD 2 A 06 J B1	RIM BICYCLE 20" X 1 3/8" IS:428	1	ISI MARKED
	TD 2 A 06 J B2	BRACKET	4	
	TD 2 A 06 J B3	WASHER I.D. 3	8	
	B R 46	FLAT HEAD RIVET 3X6 ST. IS:2155	8	
3.	TD 2 A 06 J C0	HANDRIM ASSY.	1	
	TD 2 A 06 J C1	HANDRIM	1	
	TD 2 A 06 J C2	NUT	4	
*4	TD 2 A 07 N B0	AXLE & CONE ASSY.	1	
	TD 2 A 07 N 12	AXLE	1	
	TD 2 A 07 N 16	CONE INNER	1	
*5	TD 2 A 07 M 13	LOCK NUT	1	
~~*6~~	TD 2 A 07 N 17	CONE OUTER	DELETED	
7.	B B 02	HEX. BOLT M5X15mm IS:1363	4	BRIGHT NI PLATED
8.	B S 52	SPRING WASHER 5 IS:6735	4	
*9	H K 05	FREE BALL 5/16" IS:2298	13	STEEL
** 10	L A 29	TYRE BICYCLE 20" X 1 3/8" IS:2414	1	ISI MARKED
** 11	L A 30	TUBE BICYCLE 20" X 1 3/8" IS:2415	1	ISI MARKED
12	L A 32	SPOKES BICYCLE FOR 20" X 1 3/8" SIZE WHEEL, Ø2.00mm, NI. CP. PLATED IS:630	20	
13	L A 37	BICYCLE SPOKE NIPPLE FOR 2mm SPOKES IS:630	20	
14	L A 38	BICYCLE SPOKE WASHER GALVANISED IS:630	20	
** 15	L A 40	RIM TAPE & BUCKLE	1	
X	TD 4 A 83 0 00 OR TD 4 A 84 0 00	TYRE SOLID WHEEL CHAIR TYPE A / TYRE SOLID WHEEL CHAIR TYPE B	DELETED	
*17	L A 27	HUB, AXLE ASSY SIZE-I	1	
18	TD 2 A 07 N 13 OR B A 48	HEX. NUT 1/2" BS.F / HEX NUT 1/2 BS.F	1	
19	B X 51	SPRING WASHER 1/2"	1	
20	H K 06	FREE BALL 1/4" IS:2298	9	STEEL
21	TD 2 A 07 M 12	CONE LOWER	1	
** 22	L D 80	EVA SOLID TYRE REAR GREY COLOUR FOR 20X1 3/8" BICYCLE RIM	1	

S.No.	REGION	REVISION	DATE	SIG.
10	A-2 to 4, C-1, 3	ITEM NO. 22 & NOTE NO. 5 ADDED.	21.12.82	
9	D-2	ISI MARKED ADDED AT ITEM 1, 2, 10, 11	19.2.84	
8	E-1, D-1 & C-2	IS:2414 ADD. AT ITEM NO. 10, QTY. 13 WAS 26 AT ITEM NO. 9, ITEM NO. 6 DELETED & 20, 21 ADDED.		
7	D-8	ITEM NO. 18 & 19 ADDED	1.12.84	
6	D, E, F-2, A-4	ITEM NO. 1, 4, 5, 6, 9 RE-INTRODUCED & NOTE NO. 4 ADDED.	24.8.83	
5	E-2, F-2, D-2	ITEM NO. 1, 4, 5, 6, 9 & NOTE NO. 2 DEL. ITEM NO. 17 ADDED, NOTE NO. 1 MODIFIED	10.9.82	
4	D-2	REVISION NO. 3 WITHDRAWN	3.9.82	
3	D-2	ITEM NO. 16 & * MARKED NOTE ADDED	19.8.82	
2	E-1	FIN. ADDED AT ITEM NO. 7	22.4.82	
1	A-4, PER 2 NOTES & BILL OF COMPONENTS MODIFIED		20.1.82	

REVISIONS

NOTE:—

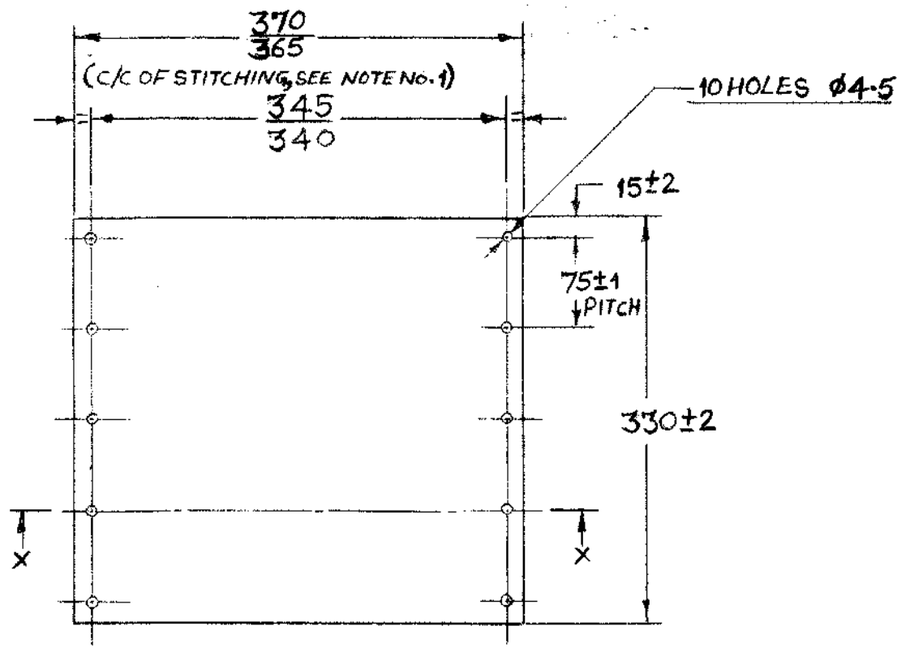
1. ASSEMBLE ITEM NO. 8 AND 17 WITH ITEM NO. 10 TO 15 AS SHOWN AS PER STANDARD PROCEDURE ADOPTED AND TRUE THE WHOLE WHEEL FOR ECENTRICITY AND WOBBLE. ENSURE THAT TYRE (IT. NO. 10) IS POWDERDED FROM IN SIDE WITH FRENCH CHALK BEFORE ASSEMBLING WITH TUBE (ITEM NO. 11).
2. ASSEMBLE ITEM NO. 3 WITH 2 BY ITEM NO. 7 & 8
*4. ITEM NO. 17 IS EQUIVALENT TO ITEM NO. 1, 4, 5, 9
**5. USE ITEM NO. 10, 11 & 15 OR ITEM NO. 22 AS AN ALTERNATE.

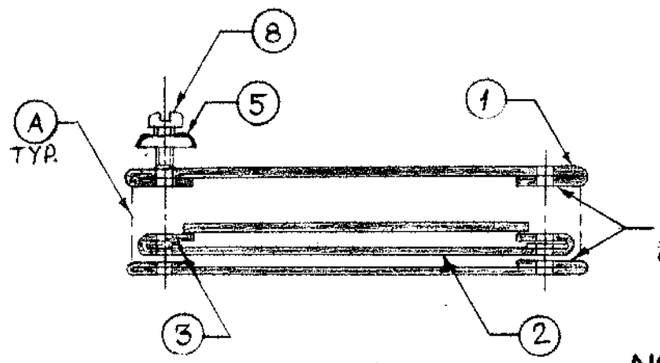
01 D 2 017

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

DSN.		NOM.	REAR WHEEL ASSY.
DRN.		MTL.	
CHD.		SOL.	INTIGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.125 mm UNLESS SPECIFIED
DIM.	IN mm	FIN.	
SCALE	1:2	ORG. NO.	TD 2 A 06 J 00
APP.			
DATE	12.8.81		

SLNO	DRG No.	NOMENCLATURE	NO.OFF	REMARKS
1	TD 2A 06 K A0	COVER SEAT ASSY	1	
2	TD 2A 06 K B0	CANVAS STRE. ASSY.	1	
3	TD 2A 06 K 01	STRIP REINFORCING	2	
5	TD 2A 07 P 02	WASHER	10	
8	BQ 74	TAPPING SCREW AB 10X19 IS: 7173	10	





SECTION – X X (ENLARGED)

STICK AFTER STITCHING IN REVERSE CONDITION (SEE NOTE No. 1) WITH ADHESIVE DUNLOP S-75B THROUGHOUT THE LENGTH TYP

NOTE:—

1. STITCH AT 'A' & REVERSE.
2. USE NYLON THREAD 210/6 OF GARWARE OR COTTON SEWING THREAD (COATS NO. 24) OR EQUIVALENT COLOUR - BLACK.
3. STITCHING PITCH 5 mm.
4. PUNCH HOLES ϕ4.5 AS SHOWN.
5. INSERT ITEM No. 2 & 3 IN ITEM No. 1
6. ITEM No. 5 & 7 TO BE SUPPLIED LOOSE

S No.	REGION	REVISION	DATE	SIG.
6.	—	DRAWING REDRAWN	25-11-11	

REVISIONS

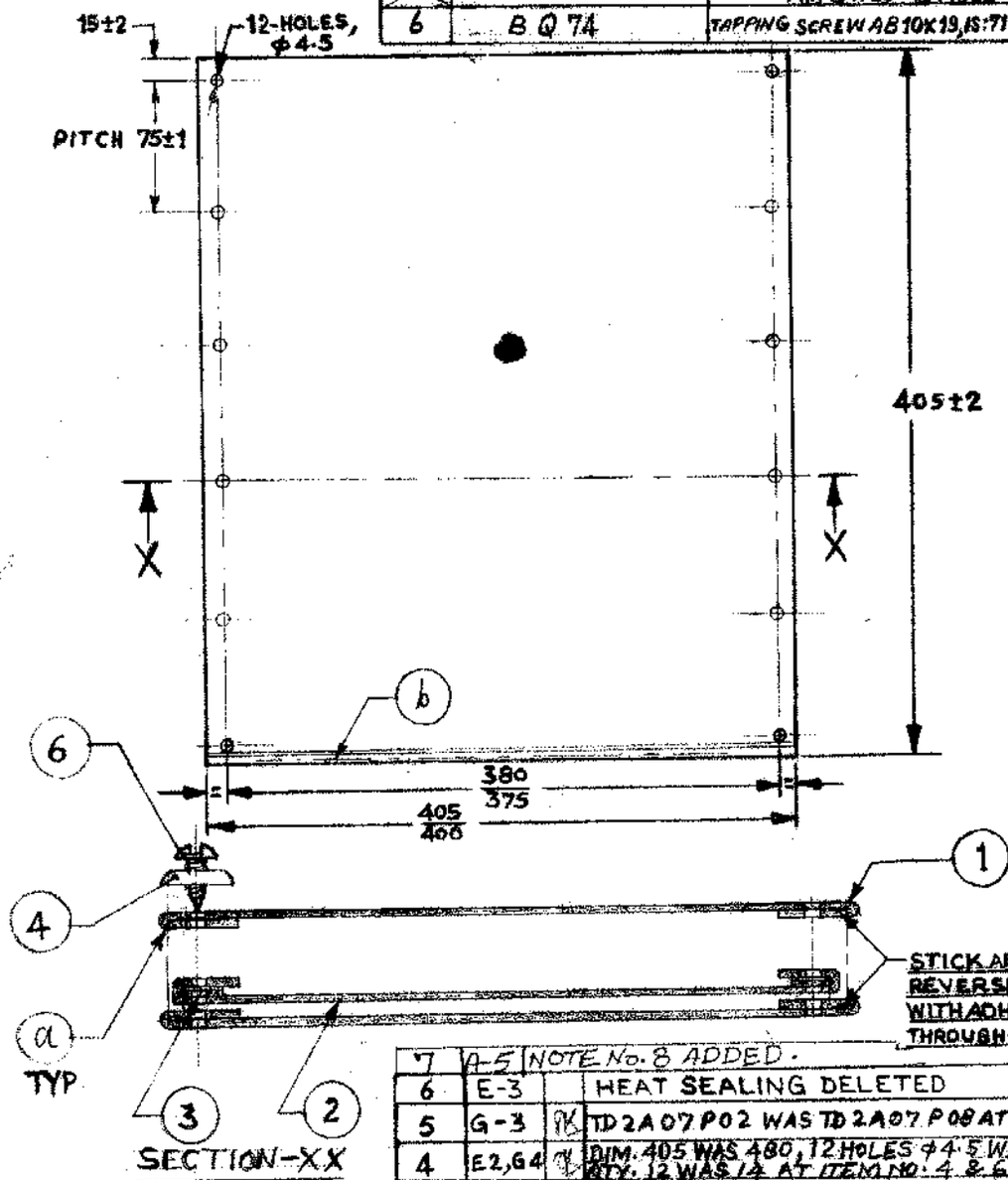
ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

DSN		NOM	SEAT ASSY.
DRN		MTL	—
CHD		TOL	INTGR ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.200 mm; TWO PLACE DECIMAL ± 0.130 mm UNLESS SPECIFIED
DIM.	IN mm		
SCALE	1:5	PIN.	—
APP		DRG No.	TD 2A 06 K 00
DATE	10-8-81	SHEET	1 OF 1

01 G 2 0 83

Gateway TM
Gateway TM

IT. NO.	DRG. NO.	NOMENCLATURE	NO. OFF	REMARK.
1	TD 2 A 06 L A0	COVER BACK REST ASSY.	1	
2	TD 2 A 06 L 01	CANVAS BACKING	1	
3	TD 2 A 06 L 02	STRIP REINFORCING	2	
4	TD 2 A 07 P 02	WASHER	12	
~~5~~	B F 63	SCREW SLOTTED CSK HEAD AM 5 X 20 IS : 1365		DELETED
6	B Q 74	TAPPING SCREW AB 10K 19, IS: 7173	12	



SECTION-XX

NOTE:-

1. STITCH AT @ AND REVERSE.
2. USE NYLON THREAD 210/6 OF GARWARE OR COTTON SEWING THREAD (COATS NO. 24) OR EQUIVALENT COLOUR BLACK.
3. STITCHING PITCH 5 mm.
4. PUNCH HOLES φ4·5 AS SHOWN.
5. ITEM NO. 4 & 6 WILL BE SUPPLIED LOOSE
6. IT. NO 2 SHALL BE STITCHED SAPERATELY BEFORE INSERTING IN IT. NO. 1
7. φ150 mm STANDARD ALIMCO MONOGRAM TO BE STENCELED IN WHITE COLOUR CENTRALLY ON BACKSIDE AS SHOWN IN DRG. NO. TD 2 A 07 R 00 (USE AIR DRYING PAINT)
8. OR SCREEN PRINTING IS TO BE DONE, IF REQUIRED AS PER DRG No. TD 2 C 51 R B 2.

S.No.	REGION	REVISION	DATE	SIG.
7	A-5	NOTE No. 8 ADDED.	14.8.92	
6	E-3	HEAT SEALING DELETED	28.8.91	
5	G-3	TD 2 A 07 P 02 WAS TD 2 A 07 P 08 AT IT. NO. 4	19.3.93	
4	E 2, G 4	DIM. 405 WAS 480, 12 HOLES φ4·5 WERE 14 QTY. 12 WAS 14 AT ITEM NO. 4 & 6	16.9.92	
3	A-5	NOTE NO. 7 ADDED	1.3.88	
2	C-2	BQ 74 WAS BQ 71 AT ITEM NO. 6	7.1.83	
1	C-2	IT. No. 5 DELETED & IT. No. 6 ADDED	20.1.82	

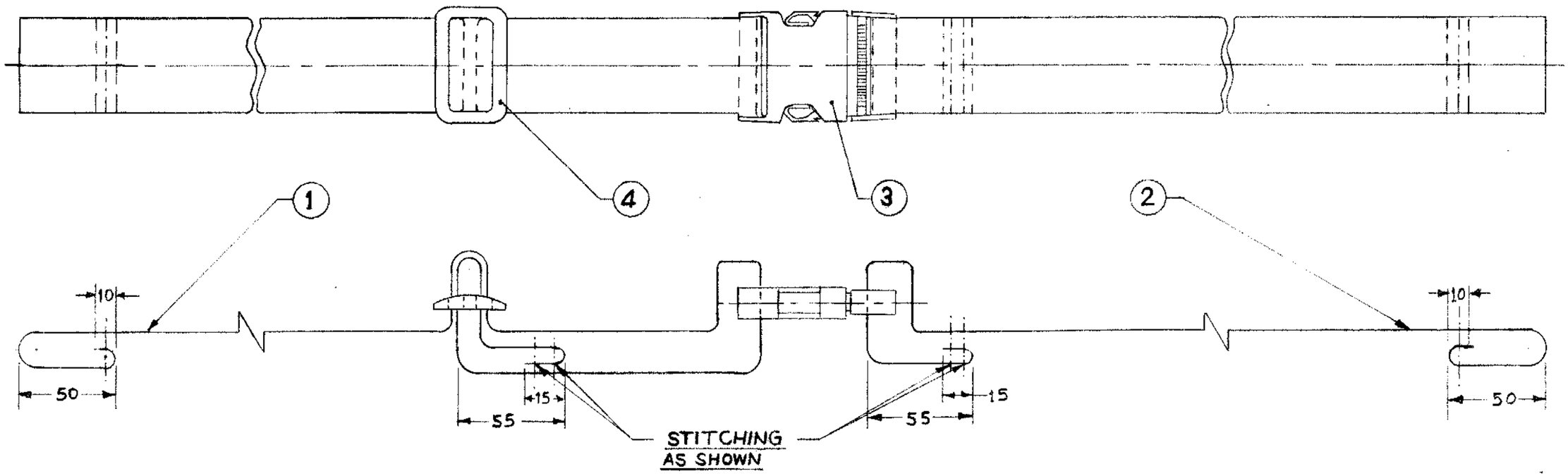
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN. OF INDIA
KANPUR

DGN.		NOM.	BACK REST ASSY.
DRN.		MTL.	
CHD.		TOL.	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm UNLESS SPECIFIED; TWO PLACE DECIMAL
DIM.	IN mm		
SCALE	1:5	FIN.	
APP.		DRG. NO.	TD 2 A 06 L 00
DATE	10. 8. 81		

01 KB 065

ITEM NO.	DRG No.	NOMENCLATURE	NO. OFF	REMARK
1	TD 2A 06 U 01	CHEST BELT PART 'A'	1	
2	TD 2A 06 U 02	CHEST BELT PART 'B'	1	
3	LD 42	PUSH CLIP 2" (BLACK)	1	F-F
4	LD 43	BUCKLE 2" (BLACK)	1	MAKE



S No.	REGION	REVISION	DATE	SIG.

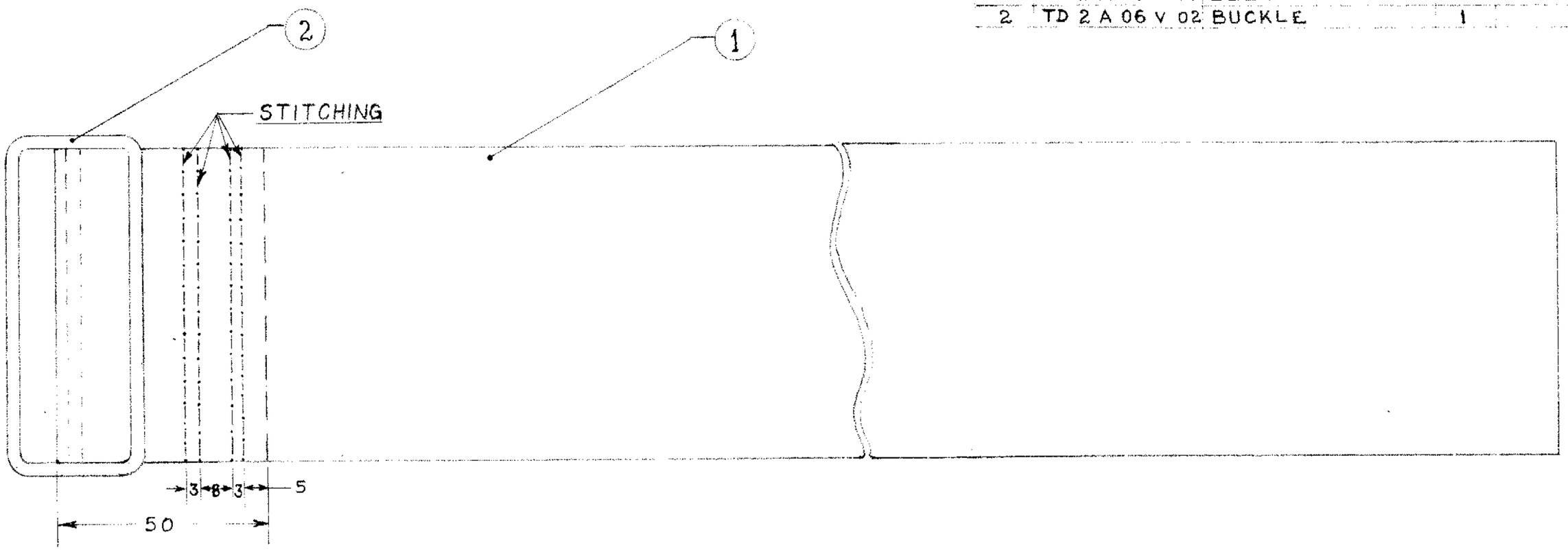
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

DGN	K.S. Dwivedi	NOM	CHEST BELT ASSY.
DRN	Ganesh Kumar	MTL	—
CHD		TOL	INTEGER ONLY ± 0.500 mm ONE PLACE DECIMAL ± 0.250 mm UNLESS SPECIFIED TWO PLACE DECIMAL ± 0.125 mm
DIM.	IN mm	FIN.	—
SCALE		DRG No.	TD 2A 06 U 00
APP	R.P. Shukla	SHEET	1 OF 1
DATE	26.12.2005		

01 G 2 259

ITEM NO.	DRG. NO.	NOMENCLATURE	NO. OFF	REMARK
1	TD 2 A 06 V 01	BELT	1	
2	TD 2 A 06 V 02	BUCKLE	1	



NOTE:-

1. USE BLACK NYLON THREAD 210/6 (COATS NO. 24) FOR STITCHING.
2. STITCHING PITCH 3 TO 5 mm

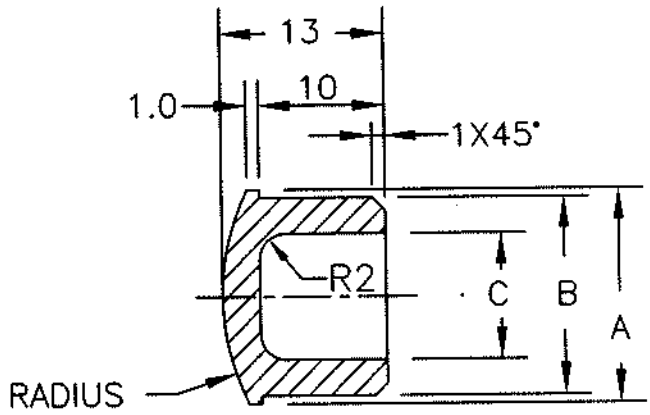
S No.	REGION	REVISION	DATE	SIG.
REVISIONS				

ARTIFICIAL LIMBS MANUFACTURING CORPN OF INDIA
KANPUR

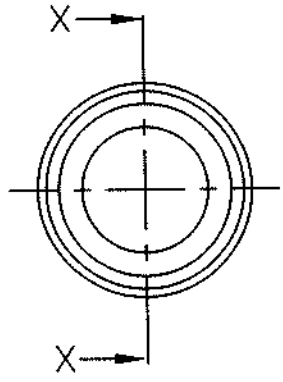
DSN	K.S. Srivastava	NOM	BELT ASSY.
DRN	K.S. Srivastava	MTL	
CHD		TOL	INTEGER ONLY ± 0.500 mm; ONE PLACE DECIMAL ± 0.250 mm; TWO PLACE DECIMAL ± 0.125 mm UNLESS SPECIFIED
DIM.	IN mm	PIN.	
SCALE	1:1		
APP		DRG No.	TD 2 A 06 V 00
DATE	20-9-06	SHEET	1 OF 1

01 G 2 274

SL.No.	DRAWING No.	NOMENCLATURE	ØA	ØB	ØC
1.	TD 2 A 07 0 02	PLUG END 22mm	22.0	19.5/19.4	16
2.	TD 2 A 07 0 03	PLUG END 19mm	19.0	17.5/17.4	13
3.	TD 2 A 07 0 04	PLUG END 17mm	17.0	15.7/15.6	10



SECTION–XX



NOTE:–

1. SHRINKING & FLOW LINES TO BE AVOIDED
2. COMPONENTS TO BE FREE FLASH & AIR HOLES.
3. REMOVE SHARP EDGES & CORNERS.
4. HARDNESS 60 TO 70 SHORE 'A'.

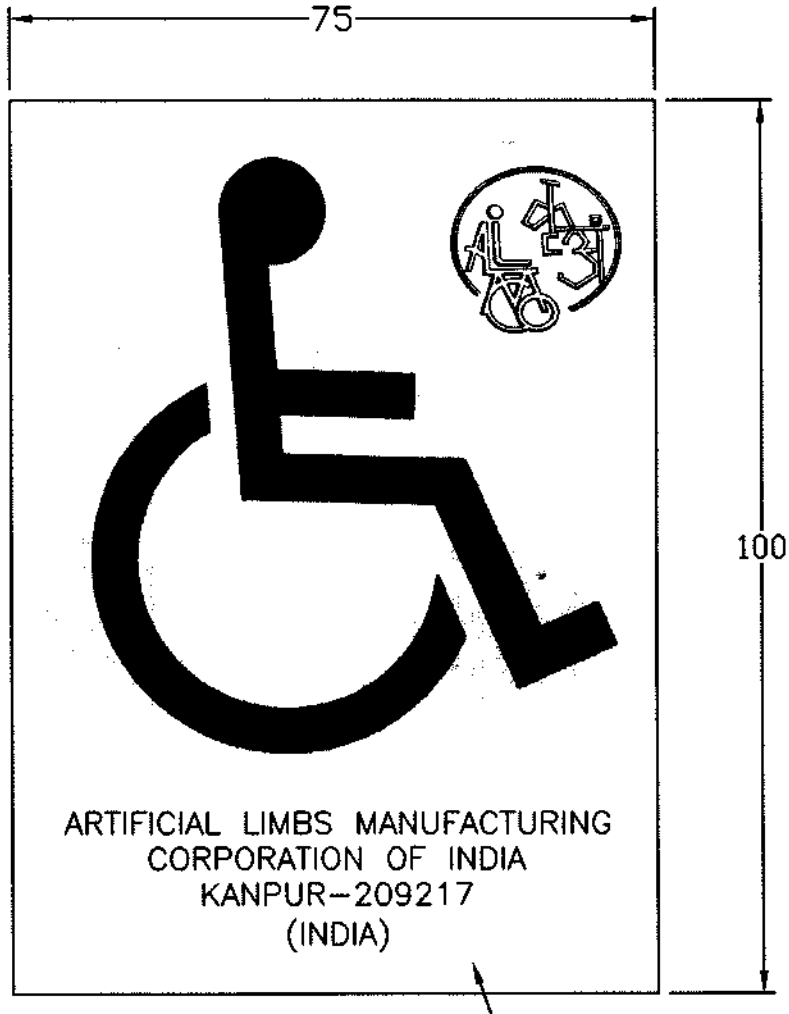
SNo.	REGION	REVISION	DATE	SIGN
3.	——	DRAWING REDRAWN	09.05.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	PLUG END 22/19/17mm
DRN	Ashish	MTL	PVC BLACK COLOUR IS:7078 (AW 92)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	SMOOTH
APP	Sd/ DD1	DRG No:–	TD 2 A 07 0 02; TD 2 A 07 0 03; TD 2 A 07 0 04
DATE	09.05.1978		SHEET 1OF1

01	K	5	116



NOTE:–

1. SYMBOL'S PROPORTIONS AS SHOWN.
2. LABEL TO BE PROVIDED GLUED ON REVERSE WITH PAPER BACKING.

TOLERENCE:--

DEVIATION FOR NON TOLERANCED DIMENSIONS (ISI:2102 MEDIUM)

DIAMETER & LENGTHS BETWEEN		LENGTH IN MM OF SHORTER SIDE OF ANGLE UPTO & INCL.	
0.5 up to 6	±0.1	Up to 10	±1°00`
Over 6 up to 30	±0.2	Over 10 upto 50	±0°30`
Over 30 up to 120	±0.3	Over 50 upto 120	±0°20`
Over 120 up to 315	±0.5	Over 120 upto 400	±0°10`
Over 315 up to1000	±0.8		
Over 1000 up to 2000	±1.2		
Over 2000 up to 4000	±2.0		

MACHINING FINISH IN MICRONS
▽ 8 - 25 ▽▽ 1.6 - 8 ▽▽▽ 0.025 - 1.6 ▽▽▽▽ <0.025

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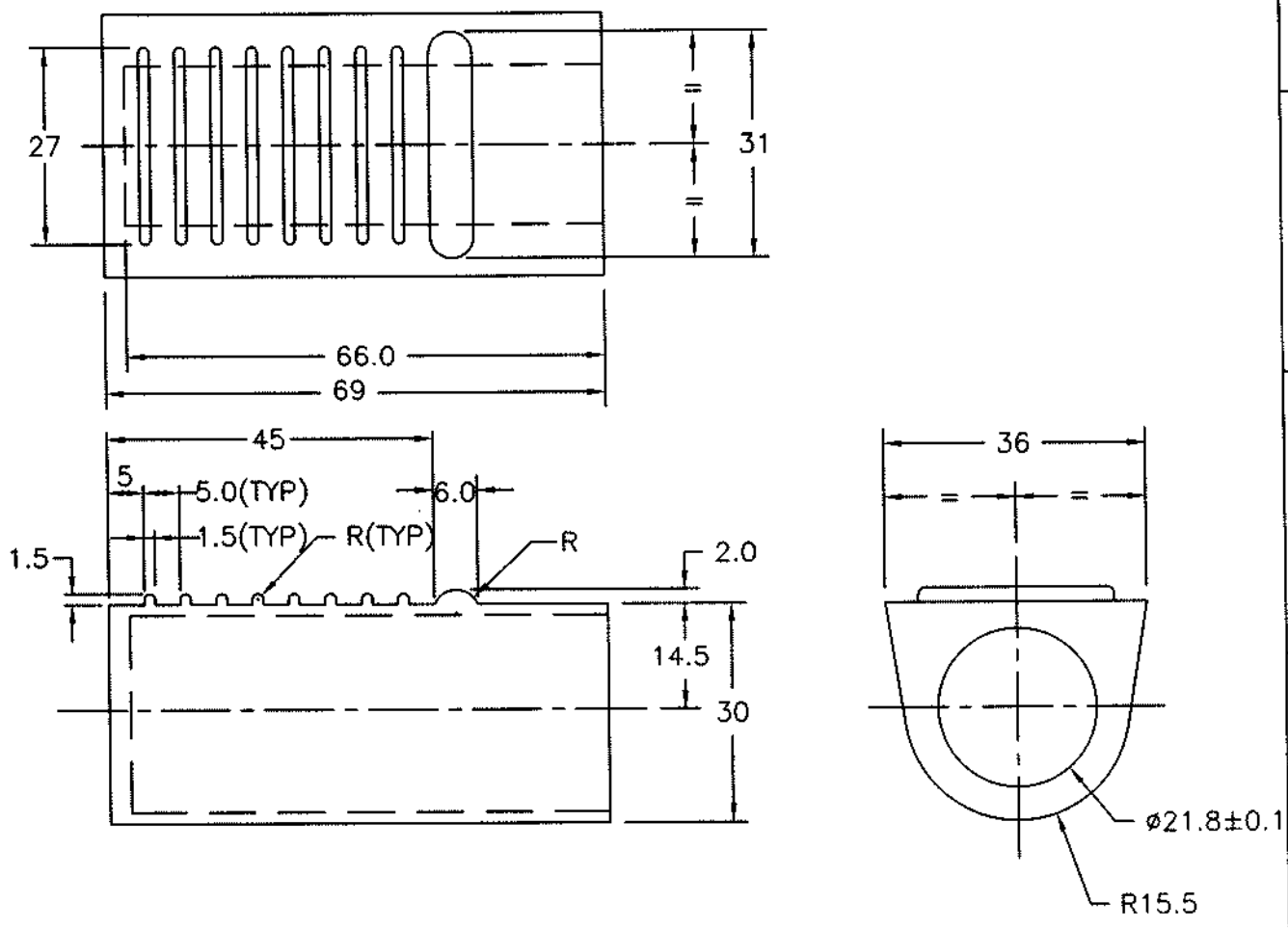
SNo.	REGION	REVISION	DATE	SIGN
4	———	ALIMCO LOGO MODIFIED	28.02.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	LABEL–SYMBOL OF ACCESSIBILITY
DRN		MTL	ALUMINIUM FOIL THK 60 TO 70 MICRONS
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	———
SCALE	NTS		
APP	Sol/DD1		
DATE	12.12.1978		

DRG No:- TD 2 A 07 0 05 SHEET 1OF1



NOTE:—
1. SURFACE SHOULD BE FREE FROM CUTS,PIN HOLES,EMBEDDED FOREIGN MATTERS SURFACE IRREGULARITIES & BLISTERS ETC.
2. READYMADE IF AVAILABLE IS ACCEPTABLE.

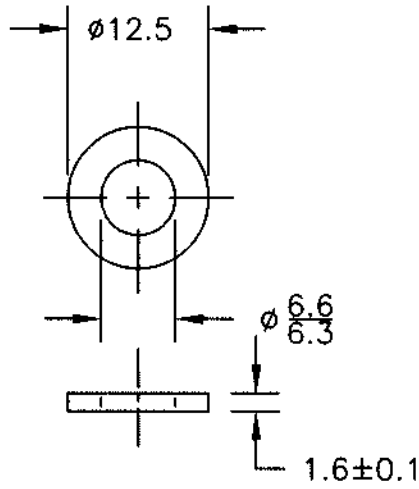
SNo.	REGION	REVISION	DATE	SIGN
3.	——	DRAWING REDRAWN	09.05.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	FOOT TIP
DRN	Ashish	MTL	LDP 400 Gd.'1'PLASTIC GRANULES BLACK COLOUR(AW 72)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	MOULDED SMOOTH
SCALE	NTS		
APP	SD/DD1		
DATE	17.01.2001	DRG No:— TD 2 A 07 0 09	SHEET 1OF1

01	K	8	340
5			4



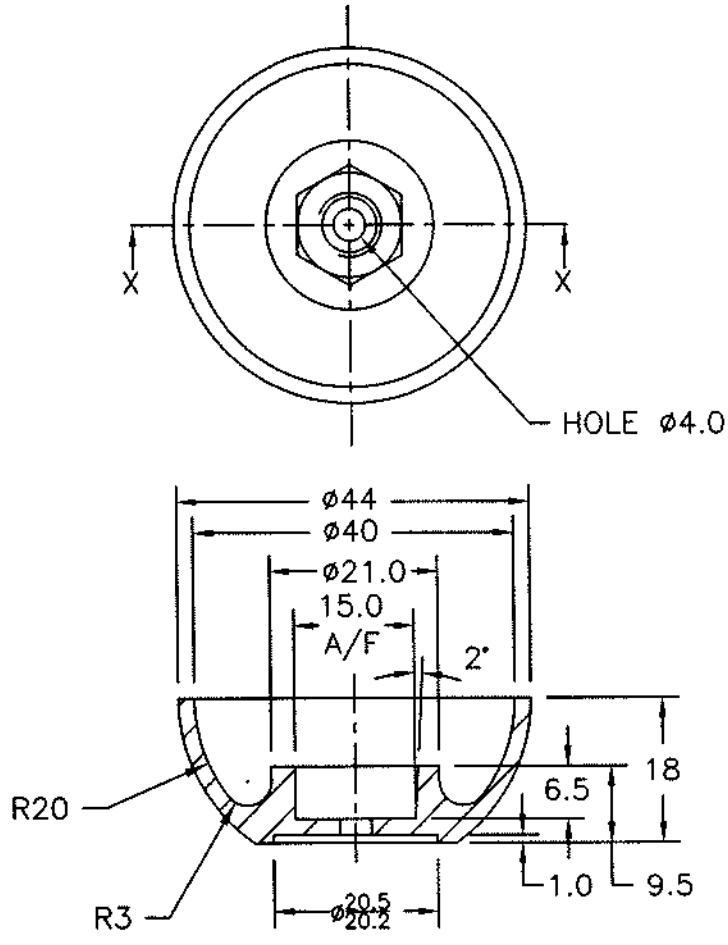
SNo.	REGION	REVISION	DATE	SIGN
2.	——	DRAWING REDRAWN	12.02.15	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	WASHER
DRN	Ashish	MTL	POLYAMIDE(NYLON) GRANNULES, TYPE-6 OR 6.6 IS:7078 (AW54)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	SMOOTH
APP		DRG No:- TD 2 A 07 D 08	SHEET 1OF1
DATE	13.07.1979		

01	K	5	159



SECTION–XX

NOTE:–

1. SHRINKAGE AND FLOW LINES TO BE AVOIDED.
2. COMPONENT TO BE FREE OF FLASH & AIR HOLES.
3. REMOVE SHARP EDGES & CORNERS.
4. HARDNESS 80 TO 90 SHORE 'A'.

SNo.	REGION	REVISION	DATE	SIGN
6.	—	DRAWING REDRAWN	09.05.15	

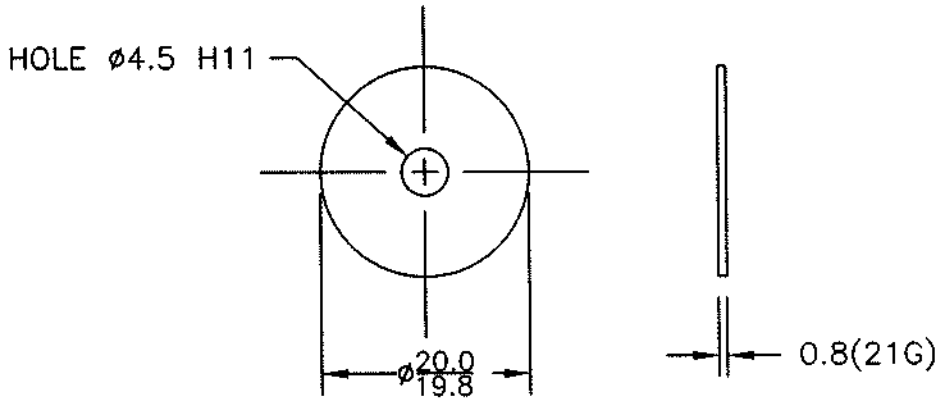
REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN		NOM	DUST CAP
DRN	Ashish	MTL	LDP 400 Gd 1, PLASTIC GRANULES, BLACK COLOUR (AW72)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm	FIN	NORMAL
SCALE	NTS		
APP	SA/DDI	DRG No:– TD 2 A 07 N 05	SHEET 1OF1
DATE	01.05.1978		

01	K	5	078

5 4



NOTE:–

1.REMOVE SHARP EDGES & CORNERS.

SNo.	REGION	REVISION	DATE	SIGN
4.	——	DRAWING REDRAWN	09.05.15	

REVISIONS

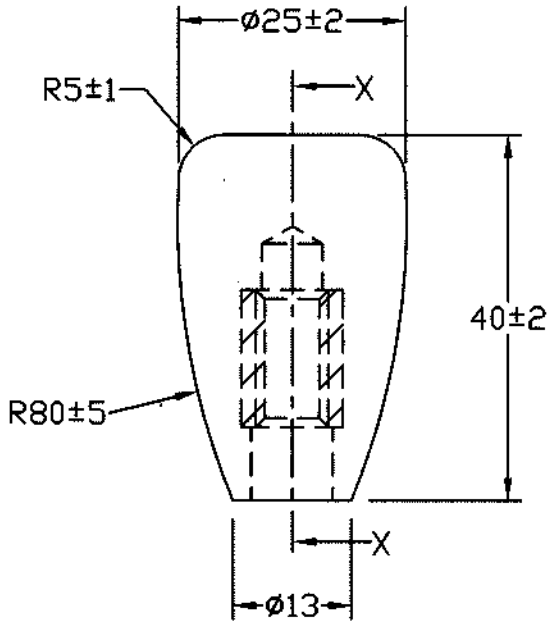
ARTIFICIAL LIMBS
MANUFACTURING CORPORATION
OF INDIA
KANPUR

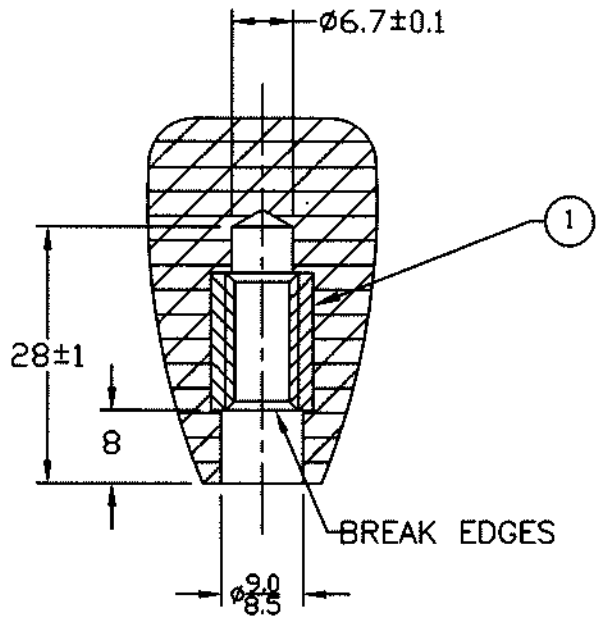
DGN		NOM	ALIMCO ROUNDAL
DRN	Ashish	MTL	AL.ALLOY SHEET HS 30 WP IS:737 THICKNESS–0.8mm(AP19)
CHD		TOL	INTEGER ONLY ±0.500 mm; ONE PLACE DECIMAL ±0.250 mm; TWO PLACE DECIMAL ±0.126 mm — UNLESS SPECIFIED
DIM	IN mm		
SCALE	NTS	FIN	ANODIZE
APP	SA/DD1	DRG No:– TD 2 A 07 N 06	SHEET 1OF1
DATE	01.05.1978		

01	K	5	079

5 4

ITEM No.	DRAWING No.	NOMENCLATURE	QTY	REMARKS
1.	TD 2 A 07 R A1	BUSH INSERT	1	





SECTION–XX

NOTE:–

1. DIMENSIONS ARE FOR REFERENCE ONLY.
2. READYMADE AS AVAILABLE IS ACCEPTABLE.
3. REMOVE SHARP EDGES & CORNERS.
4. MS BUSH TD 2 A 07 R A1 TO BE INSERT MOULDED.

SNo.	REGION	REVISION	DATE	SIGN
4	———	DRAWING REDRAWN	06.07.17	

REVISIONS

ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR

DGN	Ashish	NOM	KNOB
DRN	Ashish	MTL	PHENOLIC MOULDING MATERIAL (ANY GRADE), IS:1300
CHD		HEAT TREATMENT	———
DIM	IN mm	SURFACE TREATMENT	MOULDED
SCALE	NTS	DRG No:- TD 2 A 07 R A0	SHEET 1OF1
APP	SKV / DD 1		
DATE	28.04.2000		