

SOP FOR WARRANTY SCHEME IN ORDNANCE FACTORIES

Version 2.0

1.0. BACK GROUND:

Ordnance Factories as departmental production Organisation under DDP/ MoD, supply armament and battle field equipment to Indian Armed Forces. MOD vide order No. 1(5)/95/WM-DP (PLG IV) dated 01-05-2007 has directed OFB to supply products under warranty scheme to the Armed Forces. Accordingly, OFB formulated the SOP Version-1.31 and implemented the warranty scheme. A need was felt to review the existing SOP to make it more exhaustive. Hence, a revised SOP Version -2.0 is formulated. Being a departmental production Organisation under DDP/ MoD, the finance involved to fulfill the warranty obligation shall be met through budget allocation.

2.0 APPLICABILITY:

- 2.1.** This SOP is applicable to the products issued by Ordnance Factories only against indent received. In cases, Orders are received through RFP, in that case warranty shall be applicable as per the terms & conditions laid down in the RFP documents.
- 2.2.** The supply to all the Armed Forces i.e. Army, Navy and Air Force shall be covered under warranty scheme.
- 2.2.** Warranty will also be applicable in respect of supplies to Non-Defence customers viz MHA, State Police Department etc.
- 2.3.** The Issue Voucher date shall be taken as date of supply for warranty scheme for all supplies.
- 2.4.** All supplies made by Ordnance Factories on or after 1st May 2007 shall be covered under this warranty scheme.
- 2.5.** All warranty claims and the procedure given in this document shall be applicable when the product is used in India.

3.0 SCOPE:

- 3.1** OFB warrants that the goods supplied to customers under the contract, conform to technical specifications prescribed and shall perform according to the said technical specifications. Warranty period details are given at Para 6.0.
- 3.2** OFB warrants the above goods supplied for a specified period of duration of warranty (mentioned in the Clause 6.0), from the date of issue of stores (Date of issue voucher) that the goods supplied under this contract and each component used in the manufacture thereof shall be free from all types of manufacturing defects/failures.
- 3.3** If within the period of warranty, the goods are reported by the Customer to have failed to perform as per the specifications on account of manufacturing defect, OFB shall either replace or rectify the same free of charge within reasonable period upon

notification and acceptance of such DEFECT REPORT and making the defective product available to OFB, provided that the goods are used and maintained by the Indentor / Customer as per instructions contained in the User Manual/ Internationally acceptable norms of Storage & Handling. Spares required for warranty repairs shall be provided free of cost.

3.4 In case product is mishandled or not stored as per requirement, the warranty shall become null & void. However, OFB may still undertake to diagnose, test, adjust, calibrate and repair/replace the goods/equipment arising due to accidents / neglect / misuse by the operator or damaged due to transportation of the goods during the warranty period, at the cost mutually agreed upon between the Indentor / Customer and OFB.

4.0 DEFINITIONS:

4.1 WARRANTY: It is a certification on the part of supplying Factory/ OFB that product supplied to Armed Forces, under the contract, conform to technical specifications prescribed and shall perform according to the said technical specifications and each component used in the manufacture thereof shall be free from all types of manufacturing defects/failures.

4.2 ISSUE VOUCHER: It is a document prepared at the time of issue/ dispatch of the product containing details of issuing Factory name, product nomenclature, product code, Lot no./ product Sl. No., quantity issued, date of issue. Also each Issue Voucher should contain information of Indentor/Customer and details of inspecting authority/person, for proper audit trail.

4.3 FACTORY NODAL OFFICER: Nodal officer (usually divisional officer looking after planning office) is the officer nominated by designation through Factory Order / Office Order who is to be contacted by User/ Customer for any matter related with Warranty. Nodal officer shall coordinate all issues pertaining to warranty including receipt of warranty complaints, forwarding the same to Production/ QC / Planning Section, updating the customer regarding progress of attending complaint vide Internet/ Telephone /Fax, etc.

4.4 SURVEYOR: Officers/Team of Officers nominated by Factory who shall scrutinize/ carry out Initial Assessment of customer complaint at User's end.

5.0 POST WARRANTY SUPPORT:

Post warranty product repair support may be provided by Ordnance Factories at mutually agreed Terms & Conditions including cost between Ordnance Factory/ OFB and customer.

6.0 DURATION OF WARRANTY:

Duration of Warranty for different category of OFB products would be as follows:

| Sl. No. | Category of Product | Warranty Period | Remarks |
|---------|--|--|---|
| 01 | Ammunitions (including propellants, explosives & pyrotechnic stores) | Complete original shelf-life from the date of issue voucher. | In case it is found that any component of the ammunition has been used in its extended shelf-life, the ammunition will be considered being used in extended shelf-life. During extended shelf-life, warranty will not be applicable. |
| 02 | Explosive Propellant | As per Annexure-G | |
| 03 | Engine for Tank | a) 18 Months from the date of Issue Voucher, in case of issue of complete Tank. B) 18 Months from the date of fitment of engine in the tank, issued as spare. | Free repair of engines will be carried out in case of manufacturing defect. The engines are to be deposited at EFA and collected back by units / workshops / Ordnance depots, (as per MGO Lr. No. B/81388/Engs/MGO/EM (A&C Vehs), dt. 04-05-2018. |
| 04 | Product issued by Opto Electronic Factory, Dehradun | As per Annexure-D | - |
| 05 | Product issued by Ordnance Factory Dehradun | 18 months from date of Issue Voucher. | |
| 06 | Product issued by Ordnance Factory Medak | 18 months from date of Issue Voucher. | As per the List attached as Annexure-E |

| | | | |
|----|---|--|--|
| | | | |
| 07 | All weapons (including artillery guns, small arms) & Equipment. | 18 months from date of Issue Voucher. | |
| 08 | Type- B vehicles | 24 months date of classification of Vehicle or 20,000 kilometers, whichever is earlier. | |
| 09 | Type-A vehicles (T-72, T-90, RLT, MBT Arjun) | 18 months from date of Issue Voucher | 06-months transit period & 12- months in the unit locations. |
| 10 | All kinds of General stores & Equipments including parachutes issued from OEF Group of Factories. | 18 months from date of Issue Voucher or specified period/number of usages, whichever is less or earlier. | |
| 11 | Multiple Element Net Assembly (MENA) and accessories | As per service life within storage life indicated by ADRDE (Service life is the period which starts once the product is being used by customer). | As per list attached as Annexure-F |

Note:

- i. Warranty coverage is subject to proper storage and use of the products by the user in accordance with the prescribed conditions of the products / periodic maintenance/handling/ transportation as per user manual.
- ii. In cases, the products are not covered in the above mentioned categories, Warranty of such products may be considered as 18 months from the date of Issue Voucher.

7.0 USER'S MANUAL:

Product for which AHSP is with DGQA/ DGAQA/ DGNAI, the Product Manual & Handling Instructions are issued & maintained by them to all Users. New products for which AHSP is with OFB, respective Factories should do following:

(i) Each Factory shall prepare User Manual indicating general information about the product with pictorial views indicating the operations/ use of products. It should also stipulate periodical maintenance activities, do's and don'ts and troubleshooting mechanism. User Manual should also cater for storage instructions.

(ii) Factory shall forward User Manual/ Instruction Manual to concerned Inspection Controller for comments at preparation stage.

7.1 Factory should enclose user manual with each product or each lot as the case may be.

8.0 THE SYSTEM OF LODGING WARRANTY CLAIM BY CUSTOMER:

The process flow of Warranty Claim is enclosed as per **Annexure-H**.

8.1 Lodging of warranty claim shall normally be done by product procurement agency of customer after Internal Investigation at their end.

8.2 Before lodging warranty claim, customer should verify the validity of warranty period with respect to the Issue Voucher.

8.3 The complaint can be forwarded to supplier Ordnance Factory with a copy to OFB through FAX/E-mail/Registered post as per **Annexure-A**.

8.4 OFB in consultation with the Customer shall try to introduce an internet based Online Customer Complaint Monitoring System (CCMS) through which facility of lodging of complaint, redressal of complaint etc. will be available.

8.5 All Ordnance Factories shall have Customer Complaint Officer (CCO) who shall function as single window communication for all types of complaints. For warranty repair/ replacement and after-sales service, a Nodal Officer shall be designated in each factory as well as in each Operating Division at OFB who will do the overall co-ordination. OFB and Ordnance Factory may also display details of CCO in their website.

8.6 Armed forces, MHA, police departments etc. shall also nominate Nodal Officer for each Base Depot / WEDs and also at each command and name of Nodal Officer be mentioned in the complaint.

8.7 CCO will inform status of complaint redressal to the customer and update the same in Customer Complaint Monitoring System (CCMS).

9.0 CUSTOMER COMPLAINT MONITORING SYSTEM (CCMS):

All complaints whether lodged manually or through Internet (whenever made available) shall be kept in Customer Complaint Monitoring System (CCMS), a

database centrally available at OFB under COMNET server for future access & record. Each Factory will update its records. Efforts to be made to implement CCMS on Internet with provision to share relevant information with customer procurement agency.

10.0 BACK TO BACK WARRANTY:

10.1 Both End-product Factories & IFD Factories shall make arrangements with reputed suppliers during procurement of input assemblies so that the warranty cover is directly passed on to End Users. If required, Factories shall ask for extended warranty period from such vendors so that coverage for the warranty period could be provided to the Customer.

10.2 Vendors of OFs having service centers of their products across the country may be allowed to provide warranty services of their assembly directly to Customer. However, customer shall first report its complaint to Ordnance Factory (for record purpose) and on advice of Factory, Vendor shall arrange repair/ replacement under intimation to the Factory. Accountability towards customers shall be of the Factory.

11.0 PROCESSING OF WARRANTY CLAIM BY ORDNANCE FACTORY:

Each claim shall be scrutinized by respective Factory through an Initial Assessment by surveyor as per **Annexure- "B"**. Detailed Defect Investigation, if required, may also be carried out by manufacturer through Factory QAG. The Defect Investigation Report shall be analyzed by concerned Ordnance Factory/ Operating Division to ascertain and decide, applicability of warranty claim & remedial action as deemed fit. After attending the customer complaint by the Ordnance Factory, a feedback to be obtained from the customer as per **Annexure- "C"**. Warranty Claim as per **Annexure-H** is to be processed by the Factory.

Cases, where Factory/OFB determine that the warranty claim is not acceptable, the same shall be intimated to the complainant. In case of any dispute the same may be redressed by Joint Arbitration Mechanism (JAM).

12.0 SYSTEM OF POST- WARRANTY PRODUCT SUPPORT:

As mentioned in Para 5.0, Ordnance Factories may provide Post- Warranty product support on payment basis. Wherever customer complaint is received, Ordnance Factory will verify the Issue Voucher date, to determine lapse of warranty period. On request from customer, the Factory will make the estimate

of repair charges taking in to account all expenses accountable like Direct Material, Direct Labour, Direct Expenses (expenditure specifically incurred for carrying out the job like TA/DA, Consultancy, Testing Charges etc.) and general over heads as applicable and intimate the repair charges to the customers for consent. On getting the confirmation of receipt of payment, the Factory shall undertake the repair work. The Factory shall ensure that the requisite amount of repair charges has been paid by the customer and transferred to the relevant account head. Only the replaced parts in such cases will have warranty for specified period (or one year) or the residual life of the product/equipment, whichever is least.

13.0 PERIODIC MAINTENANCE CONTRACT:

Ordnance Factories can undertake “Periodic Maintenance Contract” (PMC) post-warranty on mutually agreed terms and conditions with the customers.

14.0 SPARES MANAGEMENT FOR ITEMS UNDER WARRANTY/PMC:

Factory shall make estimate of spares/ components requirement for a year for all end products initially. Part claims of warranty should also be factored in making estimate.

- i) Based on this estimate, factory shall make request to OFB for allotment of budget.
- ii) Factory shall procure estimated items and keep them in stock for prompt response during warranty period After spares are consumed the production section shall intimate the consumption done after each repair to planning section for re-couplement.
- iii) Planning section of factory shall compile the consumption pattern and based on this shall take Make/ Buy decision and arrange fund availability as required.

15.0 ACCOUNTING PROCEDURE:

15.1 In order to service the warranty scheme, contingent expenditure budget codes 810/14 and 811/55 under UCC 075 have been opened for booking expenditure and receipts within the warranty period and post warranty period.

15.2 BUDGET:

Salient features of the envisaged accounting procedure.

- 15.2.1** Necessary budget provision for warranty expenditure will have to be part of overall budget projection e.g. Manufacture, Stores etc.
- 15.2.2** As per MOD decision amount of expenditure compiled under warranty services as per accounting procedure to be issued by PCA (Fys.) shall also have to be shown in the budget projection separately. Accordingly, a contingent expenditure budget code head 810/14 under minor Head 800 other expenditure has been opened for showing the expenditure booked in the relevant work order together with separate unit control code under class code 811/55 for taking the contra credit through transfer voucher.
- 15.2.3** At the beginning of the financial year, factories shall project likely expenditure to be incurred for servicing warranty.
- 15.2.4** Based on these projections, budget requirement under head 810/14 and 811/55 shall be projected.

15.3 EXPENDITURE:

- 15.3.1** To book warranty expenditure:
- 15.3.2** A warrant shall be opened under respective Work Order series of the customer viz. 90 for Army etc.
- 15.3.3** The warrant shall bear a specific identification number as '3' in the last digit of 10-digit warrant Number.
- 15.3.4** The cost as and when incurred shall be booked to the respective cost cards.
- 15.3.5** At the end of the month cost booked will be transferred to indirect work Order No.02/20018/00. Detailed guide lines have been issued to LAOs by PCA(Fys.) vide PR/V/936/Warranty/Vol-I dated 10-03-2008.

15.4 IMPORTANT ACCOUNTING FEATURES:

- 15.4.1** Every month total amount appearing against Indirect Work Order No. 02/20018 shall be reflected and identified in the financial compilation under proposed code 810/14 through Class 2 Transfer Entry.
- 15.4.2** Product wise and factory wise compilation of data on warranty expenditure shall be maintained by LAO.
- 15.4.3** The details of the expenditure for OFB as a whole shall be compiled quarterly by PC of A (Fys.) and submitted to OFB through Member/Finance.
- 15.4.4** Items to be rectified will be taken on Nominal Voucher as Loan receipt.

15.4.5 Item to be replaced will be taken in the stock charge through regular receipt voucher at scrap value.

15.4.6 Relief to be given to the cost of production for the scrap value as per extant practice.

15.5 ACCOUNTING OF POST WARRANTY PRODUCT SUPPORT:

15.5.1 Cost of replacement / rectification shall be booked against direct outturn warrants.

15.5.2 Issue price of such post warranty product support jobs shall be fixed by the concerned pricing committee.

15.5.3 Indent or-wise value of issues for post warranty product support to be reflected in the finished stock account.

15.5.4 A register for capturing the data in respect of post warranty product support, in line similar to that of warranty coverage shall be maintained by LAO.

15.5.5 PCA (Fys.) has issued detailed guide lines vide letter number PR/V/936/Warranty/Vol-I dated 10-03-2008 to LAO's.

16.0 JOINT ARBITRATION MECHANISM (JAM):

For operation of the Warranty Scheme, a Joint Arbitration Mechanism (JAM), consisting of two tier JAM committee shall be constituted. In the first tier, JAM committee will be chaired by Sr.GM/GM of concerned Ordnance Factory with customer's representative. In the second tier, JAM committee will be chaired by concerned Operating Member with representatives from Customer's Headquarters, representatives from the concerned AHSP Directorates and Controller of Finance. All Warranty related issues, including the claims referred to by the first tier committee shall be discussed in this forum and decision taken thereon.

17.0 REVIEW OF THE SOP:

The SOP shall be reviewed and reaffirmed as and when required.

..... **END OF SOP**

Complaint Form

1. **Product Category : (Like Ammunition/Weapon/ Store Material/ Parachute etc.)**
2. **Product Nomenclature/Description:**
3. **Product Code :**
4. **Lot / Product Number : Date:**
5. **Date of Accident/Defect :**
6. **Date of Complaint :**
7. **Name of Factory :**
8. **Nature of Complaint/Defect :**
9. **Any Other :**

Complainant Details:

1. **Name of Officer :**
2. **Designation/ Appointment :**
3. **Unit where Posted :**
4. **Mobile No. : Phone No.**
5. **FAX No. : Email ID:**

Initial Assessment of Customer Complaints

Factory Name:

Customer Name:

Customer Address.

Customer Telephone No.

Customer Fax. No.

Product Nomenclature.

Product code.

Lot No. / Product No.

Issue vr. No. & date.

Complaint No.

Complaint Date

Within warranty / (YES/ NO)

Warranty Expiry date:

Nature of complaint (Descriptive)

Surveyor comments: (Like Improper Use/ Mishandling / Storage not done as per Manual/ Physical Verification Report (e.g. Photograph / Video Recording) / etc.

SIGNATURE & DATE
CUSTOMER'S REP
(Full name and rank with date)

SIGNATURE & DATE
FACTORY'S REPs (OFB reps.)
(Full name and rank with date)

CUSTOMER COMPLAINT SETTLEMENT CERTIFICATE

FACTORY NAME

USER Base Depot / WEDs/ CUSTOMER NAME

Customer Address.

Customer Telephone No.

Customer Fax. No.

Product Nomenclature.

Product code.

Lot No. / Product No.

Issue vr. No. & date.

Complaint No.

Complaint Date

With in warranty / (YES/NO)Warranty

Expiry date:

Nature of complaint (Descriptive)

Complaint attended / Rectified on...

Details of spares consumed.....

Details of repairs done.....

The above complaint has been resolved satisfactorily. The equipment /article has been rendered serviceable as on date.

SIGNATURE

CUSTOMER'S REP

(Full name and rank with date)

SIGNATURE

FACTORY'S REP

(Full name and rank with date)

Product wise Duration of Warranty Issued by OLF

| SL. NO. | DEVICE | WARRANTY PERIOD |
|----------------|---------------------------------|---|
| 01 | DRIVER SIGHT TVNE-4B 1PA | 18 Months |
| 02 | DRIVER SIGHT TVNE-4B (M1) | 18 Months |
| 03 | DRIVER SIGHT TVNE-4B (M2) | 18 Months |
| 04 | COMMANDER SIGHT SYSTEM PNK-4S | 18 Months |
| 05 | ANTI AIR CRAFT SIGHT PZU-7 | 18 Months |
| 06 | 9SH-119-M1 | 1000 ON/OFF OPERATING CYCLE AND 400 ON/OFF OPERATING CYCLE FOR ADJUSTMENT AND ACCEPTANCE. |
| 07 | BPK-2-42(DAY CHNL) | 18 Months |
| 08 | 1P3-3 | 18 Months |
| 09 | FIRE CTRL SYS. 1A43 WITH SPTA | 2 YEAR |
| 10 | K10-T | 18 Months |
| 11 | TKN-3 | 18 Months |
| 12 | TKN-3B (DAY CHNL) | 18 Months |
| 13 | TXP-195 | 18 Months |
| 14 | TXP-1-30-515 | 18 Months |
| 15 | RED DOT SIGHT | 18 Months |
| 16 | COMMANDER THERMAL SIGHT (CTI) | 18 Months |
| 17 | PZU-7 | 18 Months |
| 18 | TPDK-1 | 2 YEAR |
| 19 | TNP-350B | 18 Months |
| 20 | TNPO-170A | 18 Months |
| 21 | TNPT-1 | 18 Months |
| 22 | SE-2P | 18 Months |
| 23 | SE-1 (OE) | 18 Months |
| 24 | RTS-27-4M | 2 YEAR |
| 25 | COSINE POTENTIOMETER | 18 Months |
| 26 | AUTOMATIC CONTROL UNIT 9S517-1S | 2 YEAR |
| 27 | TRAVERSE CTRL UNIT BG-29-4S | 2 YEAR |
| 28 | VOLTAGE CONVERTOR 9S831 | 2 YEAR |
| 29 | COMMANDER HATCH SIGHT BPV-29 | 2 YEAR |
| 30 | ELEVATION CTRL UNIT BV-29 | 2 YEAR |
| 31 | CABLE SET FOR 1A43 | 2 YEAR |
| 32 | TEMP REGULATOR RTS-27-4MS | 2 YEAR |
| 33 | COSINE POTENTIOMETER T-90 | 2 YEAR |
| 34 | RTS-27-1M | 2 YEAR |
| 35 | UNIT BV-1 | 2 YEAR |
| 36 | UNIT BV-2 | 2 YEAR |
| 37 | TI-ESSA | 2 YEAR |

Product wise Duration of Warranty Issued by OFMK

| SL. NO. | PART NO. | NOMENCLATURE | WARRANTY |
|----------------|-----------------|---------------------|--|
| 01 | 765-CD117 | GEAR BOX | 18 Months – SUBJECT TO PROPER HANDLING AND OPERATON AS PER SPECIFICATIONS. |
| 02 | 675-41-CD5 | STABILIZER | |
| 03 | 675-54-CD4 | ELEVATING GEAR BOX | |
| 04 | 675-55-CD4 | TRAVERSING GEAR BOX | |
| 05 | BY-25-2C | CONTROL PANEL | |
| 06 | 765-06-CD268 | OIL TANK | |
| 07 | 765-03-CD178 | WATER RADIATOR | |
| 08 | 765-03-CD161 | COOLER | |
| 09 | 765-03-CD162 | COOLER | |
| 10 | 765-78-CD281 | COMPRESSOR | |

Product wise Duration of Warranty Issued by OEF Group

| SL NO. | NOMENCLATURE | DRAWING NO./SPECIFICATION NO. | SERVICE LIFE | STORAGE LIFE (UNDER STORAGE CONDITION) |
|---------------|---|--------------------------------------|---------------------|---|
| 01 | MENA-30 (Friction Type) | ADRDE/548(i) | 2 Years | 10 Years |
| 02 | MENA-30 (Water Twister Type) | ADRDE/1237(c) | 2 Years | 10 Years |
| 03 | Middle Suspension strap MENA-30 | ADRDE/1239(a) | 2 Years | 10 Years |
| 04 | Inner suspension strap MENA-30 | ADRDE/1242(a) | 2 Years | 10 Years |
| 05 | Ground Anchor Strap | ADRDE/1238(b) sheet no. 11 | 2 Years | 10 Years |
| 06 | Net to stanchion connecting Strap (MENA-30) | ADRDE/1241(a) | 2 Years | 10 Years |
| 07 | Main suspension strap MENA-30 | ADRDE/1188(a) | 18 Months | 10 Years |
| 08 | Terminal Suspension Strap MENA-30 | ADRDE/1243(a) | 18 Months | 10 Years |
| 09 | Shock absorber Cord for MENA 30 WT & FT | ADRDE/1238(b) sheet no.6 | 2 Years | 10 Years |
| 10 | Mena-40 | AASU-11-000(a) | 2 Years | 10 Years |
| 11 | Inner Strap with 'D' Ring MENA-40 | AASU-11-800(a) | 2 Years | 10 Years |
| 12 | Middle Suspension Strap MENA-40 | AASU-11-800(a)AASU-11-700(A) | 2 Years | 10 Years |
| 13 | Shock absorber Cord for MENA-40 | ADRDE DRAW NO. AASU-11-160 | 2 Years | 10 Years |
| 14 | Net to stanchion connecting Strap MENA-40 | AASU-11-500 | 2 Years | 10 Years |
| 15 | Inner suspension strap MENA-40 | AASU-11-600 | 2 Years | 10 Years |
| 16 | MENA 40 (Without Suspension System) | AASU-11-000 | 2 Years | 10 Years |
| 17 | STENA | ARRED/1244 | 2 Years | 10 Years |

Product wise Duration of Warranty For Explosive Propellant

| SL NO. | EXPLOSIVE PROPELLANT | EXPECTED SHELF LIFE IN YEAR/WARRANTY PERIOD |
|---------------|-----------------------------|--|
| 01 | TNT | 20 |
| 02 | CE | 20 |
| 03 | RDX | 20 |
| 04 | PETN | 15 |
| 05 | RDX/TNT | 15-20 |
| 06 | PEK1 | 15-20 |
| 07 | TNT/CE | 20 |
| 08 | RDX/WAX | 20 |
| 09 | TNT/AI | 15 |
| 10 | HMX | 20 |
| 11 | OCTOL | 20 |
| 12 | RDX/TNT/AI | 15 |
| 13 | RDX/WAX/AI | 15 |
| 14 | SINGLE BASE PROPELLANT | 15 |
| 15 | DOUBLE BASE PROPELLANT | 10 |
| 16 | PICRITE PROPELLANT | 15 |
| 17 | BMCS-M 91 & M-92 | 10 |

FLOW CHART FOR WARRANTY CLAIM

