



# TEREX

## SERVICE PROCEDURES MANUAL

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Terex Construction

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# **Terex CONSTRUCTION**

## **SERVICE PROCEDURES MANUAL**

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# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 1 - POLICIES AND PROCEDURES PART A – INTRODUCTION**

For the purposes of this document only, the various Terex Construction facilities listed below will hereinafter be referred to as Terex.

<b>Terex Equipment Limited:</b>	<b>Off highway rigid and articulated dump trucks, motor scrapers, graders</b>
<b>Terex United Kingdom:</b>	<b>Tractor loader backhoes, site dumpers, compaction equipment, rollers, ancillary equipment</b>
<b>Terex GmbH:</b>	<b>Crawler excavators, mobile excavators, railroad excavators, material handlers, cutting units, wheeled loaders, truck mounted cranes</b>
<b>Terex Deutschland GmbH:</b>	<b>Material handlers</b>
<b>Terex Vectra:</b>	<b>Tractor loader backhoes, skidsteer loaders, rollers</b>

The Service Procedures Manual is furnished to authorised Terex Distributors and to Sub Distributors appointed by them, pursuant to the Terex Distributorship Sales Agreement (hereinafter called the "Agreement"). The Agreement provides for performance of service responsibilities of authorised Terex Distributors by such Distributors and their Sub Distributors, and reimbursement therefore in accordance with this Manual.

As provided in the Agreement, the policies and procedures set forth herein may be changed from time to time by Terex.

Adherence to the policies and procedures contained in this Manual will promote owner goodwill toward Terex products, authorised Terex Distributors and Sub Distributors. It will also facilitate the processing and payment of warranty claims submitted by authorised Terex Distributors for performing warranty, policy and campaign bulletin adjustments.

The co-operation of all authorised Terex Distributors and their Terex approved Sub Distributors is required in handling all adjustments promptly and effectively to derive the full benefits intended by Terex in issuing this manual.

These policies and procedures apply to new Terex machines, Attachments and Parts.

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## **SECTION 1 - POLICIES AND PROCEDURES PART B - DEFINITIONS**

As used in this manual, the following definitions apply:

**- Distributor**

An authorised Terex Distributor operating under a valid Distributor Sales and Service Agreement with Terex and for purposes of this manual shall include their Sub Distributors who have been appointed as such pursuant to that Agreement.

**- Owner/User**

A person or entity that has purchased, rented or leased a Machine and taken delivery thereof for their own use.

**- Machines**

The model types and series of earthmoving and construction equipment marketed by Terex.

**- Attachments and Options**

Those items that are marketed by Terex which are listed as “attachments and options” in current Terex Price Lists.

**- Parts**

Parts marketed by Terex which are designed for installation on or for use in servicing Terex Machines and Attachments and which are listed in the Terex Parts Price Lists and supplements thereto published by Terex.

**- Warranty Adjustment**

The repair or replacement by a Distributor of a defective Part or Parts which qualify for such repair or replacement under the provisions of a valid New Machine Warranty or Parts and Attachments Warranty.

**- Campaign Adjustment**

The inspection, repair or replacement of a Part or Parts performed by a Distributor on specific Machines or Attachments as authorised by Terex in a Campaign Bulletin Letter to Distributors, whether or not the need for such inspection, repair or replacement has become evident.

**- Policy Adjustment**

The repair or replacement by a Distributor of a defective Part or Parts on a machine or attachment other than a Warranty Adjustment or Campaign Bulletin.

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- **Area of Sales and Service Responsibility**

Shall mean the area established by Terex in which the authorised Terex Distributor has responsibility to sell and service Terex Machines, Attachments and Parts directly or through approved Sub Distributors.

- **Terex Warranty System / "TWS"**

Internet based system which allows Distributors to submit warranty claims, after warranty work is complete.

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 1 - POLICIES AND PROCEDURES**

### **PART C - PRODUCT WARRANTIES**

#### **1C1. NEW EQUIPMENT STANDARD WARRANTY**

With the exception of the two machines identified below, equipment purchased from 1st January 2008 will carry a warranty term of 12 months and unlimited hours from either (a) placement into service by the first user (including as a demonstrator), (b) delivery to the first retail purchaser, or (c) will activate 6 months from delivery of the machine to the dealer regardless of use, whichever occurs first.

The exceptions to this equipment policy are:

1. Articulated Trucks, which will have 12 months unlimited hours base machine warranty and 36 months or 5000 hours (whichever occurs first) powertrain warranty
2. Rigid Trucks, which will have 12 months or 5000 hours (whichever occurs first) base warranty.

#### **1C2. EXTENDED WARRANTY**

Terex offer extended warranty, which starts after the expiration of the Standard Warranty. Requests should be made during the machine Sales enquiry.

Contact Terex Sales Department for available warranties and pricing.

#### **1C3. REPLACEMENT NEW PARTS AND ATTACHMENT WARRANTY**

New genuine Terex replacement parts and attachments installed on equipment by an authorised Terex Distributor, and new Terex parts and attachments sold by the Distributor “over the counter” are warranted for twelve (12) months from the date of retail sale.

This does not cover parts being changed under the warranty of the original equipment as the warranty of the original equipment shall apply.

Parts sold “over the counter” will only be covered by Terex warranty if they are used on Terex products and in approved applications.

#### **1C4. DISTRIBUTOR OBLIGATIONS**

It is most important that each Distributor fulfils the obligations and responsibilities even though the OWNER who is seeking assistance may not have purchased the Terex Machine at the Distributorship where he seeks service. OWNER goodwill and satisfaction, the acceptance of the Terex machine, and the Distributor's local reputation are all built upon the acceptance of this responsibility by the Distributor organisation and Terex as a means of enhancing our respective positions of leadership in construction equipment sales and service business.

The Terex Operation-Safety-Maintenance handbook and the Terex technical literature provides a recommended maintenance and servicing scheduled to Terex OWNERS.



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## **SECTION 1 - POLICIES AND PROCEDURES**

### **PART D - Terex MACHINE REGISTRATION**

#### **1D1. PURPOSE OF WARRANTY REGISTRATION**

The Warranty Registration card records that each retail purchaser has received a copy of the Terex New Machine Warranty and Policy on Owner Service. The OWNER acknowledgement signature signifies that the documentation has been received and has been explained by the selling Distributor.

#### **1D2 SELLING DISTRIBUTORS RESPONSIBILITY**

It is the responsibility of the selling Distributor to properly identify the OWNER and the servicing Distributor on the Warranty Registration Card, to obtain the purchaser's signature as OWNER acknowledgement on the Warranty Registration and Hand-Over Acceptance Certificate, and to confirm these details to Terex by registering the machine in TWS or via whatever process is advised by the relevant Terex facility.

The Warranty Registration cards and Hand-Over Acceptance Certificate are to be completed at the time of delivery, and machines are to be registered in TWS within 14 days of delivery.

Failure to complete the registration of any new machine will mean that TEREX is unable to process warranty claims on that machine.

When a new Machine is used by the Distributor as a rental (no purchase option) or demonstrator, the owner's signature is not required for registration. However, the machine must be registered reflecting the Distributor as the purchaser.

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## **SECTION 1 - POLICIES AND PROCEDURES**

### **PART E - ADJUSTMENTS**

#### **1E1. WARRANTY ADJUSTMENTS**

##### **1E1.1 Distributor's Obligations**

Distributor will perform all Warranty Adjustments pursuant to the policies and procedures set forth in this Manual. Warranty claims must be submitted to Terex promptly, after such work is performed by the Distributor, using the Terex Internet system "TWS".

This method of application is fully explained in Section 3.

##### **1E1.2 Submission Time Limitation**

Credit will not be allowed on any warranty claim which is submitted more than thirty (30) days after the repair date, which is the date the actual work has been completed.

#### **1E2. ITEMS COVERED BY WARRANTY**

Terex machines are warranted to be free from defects in material and workmanship under normal use and service, which means in the type of service for which the machine was designed, and provided the machine is not operated outside the design specification.

In some circumstances warranties on tyres, engines, and transmissions are administered by the component Original Equipment Manufacturer. This is specific to certain products and will be detailed by Terex model.

The following is a guide to what is covered by warranty.

##### **1E2.1 New Machine Warranty**

The cost of parts and appropriate labour for the repair or replacement due to defects in material or workmanship of component parts of a new Machine including Attachments delivered with such Machines, excepting items listed under "Items not covered by warranty".

##### **1E2.2 Replacement New Parts and Attachments**

Terex part price will be reimbursed. Labour will only be considered for parts originally fitted by a Terex Authorised Dealer. Consequential damage will not be considered.

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## **1E2.3 Special Items**

The repair or replacement of parts such as (but not limited to) the following is confined to cases where the part is clearly defective and not items which require replacement resulting from normal use, neglect, misuse, accident, wear, environmental exposure and overload.

- 1) Cab Glass
- 2) Brake Lining, Brake Pads and Friction Plates
- 3) Brake Drums and Discs
- 4) Clutch Plates
- 5) Cutting Edges, Side Cutters and Cutting Teeth
- 6) Tyres
- 7) Rubber tracks

## **1E2.4 Paint**

Authorised Terex Aftermarket representative approval is required for repainting under warranty.

## **1E3. ITEMS NOT COVERED BY WARRANTY**

The following is a guide to items not covered by warranty.

**1E3.1 Services that do not involve defective Parts are in most cases a maintenance service. Normal maintenance services such as the following are not covered by warranty:**

- a) Fuel System Cleaning.
- b) Wheel Adjustment – Alignment.
- c) Engine Tune-up.
- d) Brake Inspection and Adjustment.
- e) Other adjustments made necessary by use.
- f) Adding or replacing of Service Fluids and filters
- g) Hydraulic system cleaning

## **1E3.2 Replacement of Service Items:**

Replacement of air, hydraulic, transmission, engine and fuel filters. Replacement of oil, breathers, belts and wiper blades, lubricants, brake linings, batteries, bushings, tyres, inspection / maintenance parts.

## **1E3.3 Assembly Replacements:**

It is the policy of Terex not to accept a claim for the replacement of a complete assembly. It is standard practice to replace or repair the defective part, unless specifically instructed otherwise by the factory. In no case should the cost of repair exceed 2/3 the Distributor price of a new complete component. When practical, repairs should be made to such items as structural assemblies, tanks and radiators, without replacement.

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### **1E3.4 Temporary Repairs:**

Any temporary repair made by the OWNER/USER or Distributor.

### **1E3.5 Service Supplies:**

Such as oils, grease, radiator coolant, anti freeze, transmission and hydraulic fluids, nitrogen and refrigerant gases. Policy consideration will be given when contamination or loss due to a warrantable failure is evident.

### **1E3.6 Diagnosis Time:**

The standard repair times have a factor included for diagnosis time.

### **1E3.7 Equipment Not Designed or Recommended for Terex Machines:**

Repair, replacement, adjustment made necessary due to installation of equipment not designed or recommended for the Machine.

### **1E3.8 Inspections:**

Claims for Distributor inspection items will not be accepted.

### **1E3.9 Carrier Damage:**

Carrier damage cases are to be handled as transportation claims with the carrier.

### **1E3.10 Storage Damage:**

It is the Distributor's responsibility to implement storage procedures. The Distributor is responsible for physical damage or deterioration of new Machines while in the Distributor's inventory.

### **1E3.11 Down Time:**

The provisions of the aforementioned warranties do not provide for any liability on the part of Terex for the period of time a Machine is out of service during fulfillment of any such warranty obligations.

### **1E3.12 Towing, hauling, craneage or lifting equipment:**

Charges for the aforementioned items are not normally covered by warranty.

### **1E3.13 Unloading and/or Assembly:**

Unloading and/or assembly are not covered by warranty.

### **1E3.14 Overloading:**

Any Machine or Attachment, which has been subject to loading beyond the Terex design specification, or subjected to abnormal loading (e.g. from bad haul roads), will not be covered by Warranty.

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### **1E3.15 General Exclusions:**

Repairs due to neglect, accident, fair wear and tear, inadequate maintenance, dirty fuel or lubricants; or repairs carried out other than by an authorised Terex Distributor.

### **1E3.16 Shop Comeback:**

The Distributor is responsible for the satisfactory completion of any warranty, campaign or special policy repair, which is submitted on a warranty claim. Should a later repair of the same item become necessary because of improper inspection, diagnosis, workmanship or deficiencies in service parts or supplies not supplied by Terex, the subsequent repairs would be classed as “shop comeback” repairs and are not eligible for further consideration as a warranty, campaign or special policy decision.

## **1E4. SPECIAL PROVISIONS FOR DISTRIBUTOR-OWNED DEMONSTRATORS AND FACTORY-OWNED MACHINES**

Defects in material or workmanship which are discovered while the Machine is in the Distributor’s inventory or in Distributor service are covered to the same extent as provided in the Terex Standard Limited New Product Warranty.

A Distributor-owned or Terex-owned demonstration Machine subsequently sold by an authorised Distributor to a retail purchaser is covered from the date of such sale to the original retail purchaser for the unexpired portion of the warranty from the date such Machine was originally placed into service by the Distributor or Terex. Also refer to the New Equipment warranty book, where applicable for time limitations.

## **1E5. CAMPAIGN BULLETIN ADJUSTMENTS**

It may be necessary on occasions to advise Distributors that a specific Part, Parts or component of a Terex Machine produced during a designated period of time or between designated Machine identification numbers requires inspection, repair or replacement. This request may be made regardless of whether or not the need for taking such action has become evident in such Machine or component thereof.

### **1E5.1 Distributor Obligations:**

All campaign bulletins should be completed as quickly as possible as specified in the Campaign Bulletin letter. The Distributor should contact the Customer to arrange for the repair and should notify each Customer of Terex's limited liability with regard to the Customer’s failure to comply with requests to perform campaign bulletin work.

Distributor will perform all Campaign Bulletin Adjustments pursuant to the policies and procedures set forth in this Manual and any written instruction furnished by

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Terex in connection with the specific Campaign Bulletin. Warranty claims for Campaign Bulletin Adjustments must be submitted to Terex, after the Distributor performs such work, using established warranty claim procedure on "TWS".

### **1E6. POLICY ADJUSTMENTS**

Proof of prior approval by Terex Service, for example a Policy Decision (PD) number, must be supplied with any policy claim submitted. Failure to include such evidence could result in claims being denied.

Once the claim is approved Terex will credit the Distributor who, in turn, will credit the Customer as follows.

#### **1E6.1 Full Credit:**

When a credit is issued by Terex for the full Distributor stock net price of a part, or for a specific amount of labour at the Distributor's warranty rate, it will be considered that Terex has furnished that part or labour operation free of charge to the Customer. The Customer is to receive these parts or labour free of charge, or if he has been charged, issued full credit for the amount charged. The Customer may be charged for any parts, labour and expense not credited or the Distributor may contribute towards these costs.

#### **1E6.2 Prorated Credit:**

When a credit is issued by Terex based on a percentage of the total amount claimed, the Customer will be credited for that percentage of the Distributor's usual and customary charge to the Customer plus the Distributor's contributions.

### **1E7. THIRD PARTY EQUIPMENT WARRANTY**

The equipment manufacturer will warrant third party equipment designed for Terex Machines and approved by Terex. Most third party equipment manufacturers will enter into a selling agreement with the Terex Distributor to sell and service their products. In those instances where Terex designed and Terex numbered Parts are used in the manufacture of third party equipment or products, Terex will warrant those Parts manufactured or supplied by Terex.

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**PART F - ALLOWANCE FOR ADJUSTMENT PERFORMED**  
**BY DISTRIBUTOR**

Distributors will perform Warranty and Campaign Bulletin adjustments without charge to the customers. Terex will reimburse the Distributor for this work as follows:

**1F1. LABOUR**

Actual labour hours to perform repairs but not to exceed hours shown in the Terex Labour Time Guides, qualified time schedule, and Campaign Bulletin Letters, multiplied by the approved Distributor labour warranty rate. Published repair times include an allowance for diagnostics.

When actual repair hours exceed the hours listed in the Labour Time Guide, qualified time schedule or Campaign Bulletin letter the Distributor may request credit consideration for the difference by providing a detailed explanation with their warranty claim. Such requests will be reviewed on a case by case basis, based on the evidence provided.

When Labour Time Guides have not been established, actual repair hours will be considered by comparison with similar failures to establish a fair time for repair. Reimbursement for policy adjustments will be at the terms of the agreement made between the Distributor and Terex.

**1F2. PARTS AND ATTACHMENTS**

For Warranty repairs or Campaign Bulletins, parts and attachments will be reimbursed at the rates agreed by the relevant Terex facility. Emergency order rates are not covered under the warranty terms and conditions.

**1F3. MILEAGE AND TRAVEL LABOUR**

Where applicable, mileage and / or travel labour will be reimbursed at the rates agreed by the relevant Terex facility.

**1F4. SUBLET REPAIRS**

Distributors should only outsource the repair of Terex equipment in exceptional circumstances. Where they do so, authorised sublet repairs must be clearly shown on a warranty claim and be supported by attaching a copy of the paid sublet invoice. Sublet repairs must not exceed Distributor labour and/or Parts or Attachments allowances for repair operations normally expected to be performed by Terex Distributors such as welding and painting.

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## **1F5. DEFECTIVE PARTS RETURN**

Terex will identify material required for return to the factory and advise the Distributor accordingly. Distributors will be reimbursed for the associated transport charges prepaid by Distributor on acceptance of Distributor's warranty claim.

## **1F6. ESTABLISHMENT OF DISTRIBUTOR WARRANTY LABOUR RATE**

The Distributors warranty rate will be set by Terex based on information provided by the Distributor.

The Distributor may request new or revised rates related to past or planned increases in his retail rates, but not more than one (1) time in any twelve (12) month period.

Terex will require copies of five (5) customer invoices to substantiate the Distributors selling rate.



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## **SECTION 1 - POLICIES AND PROCEDURES**

### **PART G - DISTRIBUTOR RECORDS IN SUPPORT OF A WARRANTY CLAIM**

#### **1G1. PREPARATION AND MAINTENANCE OF RECORDS**

Details of repair must be noted on Distributor's office and shop copies of the original engineer's worksheet. Each such order should be signed and agreed to by the OWNER/USER when practical and the details thereon should coincide with details on the warranty claim in connection with each repair for which credit has been requested. Distributor will maintain a separate file for each machine serial number, commonly identified as a "Machine file". Records should be retained for six months after completion of the machine warranty.

Terex reserves the right to request Terex Parts invoice number for any warranty or policy claim submitted by Distributor.

#### **1G2. RETENTION OF DISTRIBUTOR RECORDS RELATING TO ADJUSTMENTS**

Distributor will retain in "Machine File" the following records in support of each warranty claim and such records shall be subject to examination and audit by Terex, as provided in the Agreement.

a) Office and Shop copies of:

- i) Original repair orders.
- ii) Mechanics' time records including clock cards where used.
- iii) Parts disbursement records.

b) Distributor's copies of WARRANTY CLAIM.

#### **1G3. EXAMINATION AND AUDIT OF DISTRIBUTOR RECORDS**

Records supporting warranty claim's and related customer settlements shall be subject to examination and audit by any authorised representative of Terex at Distributor's place of business during regular working hours.

Such examination and audit shall be limited to Distributor's records in support of warranty claim's and related customer settlements received by Terex during the year immediately preceding the first day of the month in which such examination and audit is undertaken.

If warranty claims and related customer settlements cannot be substantiated from Distributor's records, the amount not substantiated will be charged back by Terex to Distributor's account.

Terex also reserves the right to levy pro-rated penalties for the period since the last audit. These penalties will be related to the inspection sample, an example being 15% errors in claims then 15% recharge of costs.

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## **SECTION 1 - POLICIES AND PROCEDURES**

### **PART H - PRODUCT INSPECTION SERVICE – Where applicable as advised by relevant Terex facility.**

#### **1H1. AUTHORISED SERVICING DISTRIBUTOR**

The Distributor whose Area of Sales and Service Responsibility on a Terex Machine delivered and placed in operation is considered the authorised Servicing Distributor, and as such is responsible for servicing the Machine and stocking Parts. In the case of new Machine shipment, the Warranty Documents are sent to the authorised Servicing Distributor.

#### **1H2. WHEN TO PERFORM INSPECTION SERVICE (WHERE APPLICABLE)**

##### **1H2.1 Pre-Delivery Inspection**

The authorised Servicing Distributor is to perform the functions outlined on the Delivery Inspection form when the Machine is first placed into operation.

##### **1H2.2 Standard Inspections**

The authorised Servicing Distributor is to perform standard inspection functions as outlined in the Operator Manual.

**Inspections must be completed in sequence.**

#### **1H3 DEMONSTRATION MACHINES**

If a Distributor assigns a new machine to a demonstration programme this must last no longer than 6 months or 500 hours, whichever occurs first.

During the period of the programme the delivery and any subsequent inspection due must be completed and recorded as for any other machine.

#### **1H4 RENTALS**

Distributor rental or rental-purchase Machines are to be considered the same as sales and all inspection procedures are to be followed.

#### **1H5 INTERRUPTED SERVICE**

If the Machine has been placed into operation and is then shut down or stored for an extended period of time before all inspections have been completed, the Distributor is to forward a letter to the Terex Warranty department advising of this situation. When Equipment is put back into operation, Terex must be re-notified. Performance of Equipment inspections must be adjusted accordingly.

The above procedure affects only Machine inspections and does not apply to the NEW Equipment Warranty which is in effect for consecutive months commencing on the date the Machine was initially placed into service.

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Proper storage procedures must be adhered to whenever the Equipment is idled for extended periods of time.

### **1H6 TRANSIT MACHINES - MOVEMENTS**

Should a Machine be removed from a Sales and Service Distributor's area of responsibility that Distributor will notify the Distributor having Service responsibility in the area in which the Machine will be operated. A copy of the letter of transmittal is to be forwarded to Terex.

If a Distributor has information that a new Machine is moved into his area of responsibility, contact should be made with the previous Sales and Service Distributor to obtain the status of inspections. In the event the previous Sales and Service Distributor is unknown, contact the Terex for information of status.

### **1H7 ADMINISTRATION OF INSPECTION SERVICE REPORTS**

If the Sales Distributor works out servicing arrangements with a Distributor in whose service area the Machine will be operated, such agreement is to be confirmed by both Distributors by letter to the Terex Warranty Manager. The Inspection Service Reports are to be prepared and submitted to Terex by the Distributor performing the work.

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## **SECTION 2 - SHIPMENT AND INSPECTION PROCEDURES**

### **PART A - PREPARATION OF INSPECTION SERVICE**

#### **REPORTS –** Where applicable as advised by relevant Terex facility.

##### **2A1. GENERAL INSTRUCTIONS**

###### **2A1.1 Purpose of Inspection Service Report**

The report serves as a record of service inspections and instructions on new Terex Machines.

###### **2A1.2 How to Use Inspection Service Report**

Prepare one form for each machine for each inspection.

##### **2A2. Terex INSPECTION SERVICE REPORT COPY DISTRIBUTION**

The Terex inspection service report can be found in the support forms function within the “TWS “website

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## **SECTION 2 - SHIPMENT AND INSPECTION PROCEDURES PART B - EQUIPMENT SHIPMENT**

### **2B1. UNLOADING AND ASSEMBLY OF EQUIPMENT**

When transportation restrictions necessitate that Terex products be partially disassembled for shipment, it will be the Distributor responsibility to arrange for assembly of the Equipment to the Customer's satisfaction. When the equipment is sold into another Distributor's area of service responsibility and the Selling Distributor requests the Servicing Distributor to assemble Equipment, arrangements for assembly are to be negotiated between Distributors.

If the Equipment has to be started prior to the performance of the Delivery Inspection, the Selling Distributor should, in order to ensure safe operation, inform the Customer of proper operating procedures as outlined in the Operation-Safety-Maintenance Handbook. The Customer should then be advised that the Equipment should not be operated until a Delivery Inspection is performed by the authorised Servicing Distributor.

### **2B2. DAMAGES IN SHIPMENT**

The Consignee (Distributor or Customer) shall submit damage claims directly to the carrier.

### **2B3. SHORTAGES IN SHIPMENT**

The Distributor is to inspect Terex Equipment upon receipt. The Distributor must report shortages or errors in shipments to the Terex Sales Department in accordance with the terms and conditions governing the sale of the machine.

# **Terex CONSTRUCTION**

## **SERVICE PROCEDURES MANUAL**

### **SECTION 3 – WARRANTY CLAIM PREPARATION INSTRUCTIONS**

#### **PART A - INTRODUCTION**

Terex warranty claims are submitted using the Internet based system “TWS”. This system is used to request reimbursement for warranty, policy and campaign bulletin repairs performed on products manufactured or supplied by Terex. In addition to being used to credit Distributors for adjustments, the information listed on the system is used as a basis to analyse field problems and instigate where necessary corrective actions. Therefore, accurate information is important.

##### **3A1. USE OF WARRANTY CLAIM**

The “TWS” warranty claim system Distributor’s User Guide is available within the system. This guide clearly identifies how to submit accurate claims and attach supporting documents.

- a) Each warranty claim submitted must represent only one failure. Unrelated failures repaired at the same time must be submitted on separate warranty claims. For example if a cylinder is being repaired for a leaking rod seal and a cracked pin is discovered, this represents two unrelated failures, and a separate warranty claim must be filed for each.
- b) The warranty claim analysis procedure often requires that copies of the warranty claim, Distributor engineer’s worksheet and supporting documents be provided to various Terex suppliers.
- c) Warranty claims are to be submitted within 30 days after the completion of the repair. To ensure prompt processing of the warranty claims, it is important that the procedures outlined in this manual are followed by all authorised service outlets.
- d) Terex reserves the right to return to the Distributor any warranty claim that is lacking sufficient information and / or supporting documentation to process the claim. If no response is received from the Distributor within sixty (60) days from the first communication, the warranty claim will be considered a “No Award” claim and will be denied if resubmitted.

##### **3A2. WARRANTY CLAIM SHALL NOT BE USED FOR**

- a) Reporting damage in shipment. This should be claimed to the responsible carrier.
- b) Reporting new parts returns or new inactive parts returns.
- c) Reporting incorrect new parts that have not been installed in Equipment.
- d) Return of attachments shipped on/or with a new Terex Machine: Requests for permission to return this type of material should be forwarded to the Terex Commercial Sales Department.

Claims for (b) and (c) should be submitted to your Parts correspondent.

# **Terex CONSTRUCTION**

## **SERVICE PROCEDURES MANUAL**

### **SECTION 3 – WARRANTY CLAIM PREPARATION INSTRUCTIONS**

#### **PART B - DEFECTIVE MATERIAL DISPOSITION**

##### **3B1. MATERIAL AT THE DISTRIBUTORSHIP**

All defective material removed from the customer's equipment for which a warranty claim is being submitted will be held by the Distributor in a designated area available for inspection by a Terex representative. The Distributor must ensure that such material is stored appropriately to prevent contamination and secondary damage. The material must be properly identified with a warranty claim parts tag showing the repair order number and repair date.

It is the Distributor's responsibility to provide a Distributor employee to assist the Terex representative during the inspection process. Any parts listed on the warranty claim that are not in the designated inspection area will be considered not available and will be deleted from the warranty claim.

##### **3B2. RETURN OF MATERIAL**

Material may be authorised for return by the factory. In such cases the Distributor will be advised what is required for return and where they are to be shipped. This advice will be in the form of an RGA (Return Goods Advice Note) form or whatever process is in force with the relevant Terex facility.

The Distributor will return the parts per the instructions issued.

**UNDER NO CIRCUMSTANCES IS MATERIAL TO BE RETURNED WITHOUT THE PRIOR APPROVAL OF Terex.**

A time limit of 30 days will be allowed for return of material from receipt of instructions after which time the claim will be denied if the material is not received.

When returning material, identify the failed area with paint or ink. Be sure a copy of the Terex material return request (e.g. the RGA) is attached and the "Part Causing Failure" is identified. If the material is received without a copy of the relevant paperwork the warranty claim may be denied.

Should the material not be available when requested, reasonable explanation will be required. Failure to provide material or explanation could result in the warranty claim being denied.

##### **3B3. PACKING**

The material should be packed in a way which will avoid contamination or damage in shipment. Whenever possible, use the container from the replacement part. Large items should be on a pallet or skid for ease of handling.

**Material from separate warranty claims must be packed separately** but may be sent in a single shipment. A copy of the relevant paperwork must be attached to each returned part. Each container must have the RGA number(s) (where applicable) visibly marked on the outside of the container.

# **Terex CONSTRUCTION**

## **SERVICE PROCEDURES MANUAL**

### **3B4. FREIGHT**

All shipments will be made freight prepaid using the most economical means of transportation unless the Distributor is given special shipping instructions by Terex. To receive credit for freight expense, a copy of the freight bill with the amount listed must be attached. The freight expense must also be listed on the warranty claim under sublet items. Freight expenses paid by the Distributor will be credited for authorised returns when the warranty claim is approved. No freight credit will be allowed if the claim is not approved or when material is returned without Terex authorisation.

### **3B5. DISPOSITION**

Material can be scrapped by the Distributor sixty (60) days after the claim has been approved, unless specific instructions have been given by Terex Warranty to hold the material for inspection.



# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 3 – WARRANTY CLAIM PREPARATION INSTRUCTIONS**

### **PART C - COMMON REASONS FOR CLAIMS BEING DELAYED / DENIED**

1. Terex standard limited new product warranty or replacement parts warranty had expired.
2. The warranty claim was for a condition not covered by the Terex warranty.
3. Prior approval by Terex for a non-warranty repair (such as PD number) was not on file.
4. The warranty claim was incomplete or contained incorrect information.
5. Insufficient back-up information was provided to document the warranty claim.
6. Multiple, unrelated failures were submitted on one warranty claim.
7. The failure was caused by a part not supplied by Terex.
8. A previous repair of the same component was not documented.
9. The failure was classified as “shop come-back”.
10. The warranty claim exceeded the thirty (30) day submission time limitation.
11. Repair was performed by other than an authorised Terex Distributor, if not previously agreed by Terex.
12. Warranty claim was for temporary repair.

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 3 – WARRANTY CLAIM PREPARATION INSTRUCTIONS**

### **PART D - CLAIM TYPE DEFINITIONS**

#### **3D1. '0' HOUR**

For failures covered by the Terex Standard Limited New Product Warranty and identified at the Pre-Delivery Inspection or before the OWNER/USER has taken receipt of the machine.

#### **3D2. MACHINE STANDARD WARRANTY**

For failures covered by the Terex Standard Limited New Product Warranty.

#### **3D3. MACHINE EXTENDED WARRANTY**

For failures which occurred after the expiration of the Terex Standard Limited New Product Warranty and while an Extended Warranty was in force and on record with Terex covering the component which failed. The failure must be of a nature, which would have been covered under the Terex Standard Limited New Product Warranty.

#### **3D4. PARTS AND ATTACHMENT WARRANTY**

For parts and attachment warranty failures covered by the Terex Standard Limited New Product Warranty.

#### **3D5. TECHNICAL POLICY ADJUSTMENTS**

Request for policy adjustment for a failure occurring after the expiration of the Terex Standard Limited New Product Warranty or a failure of a nature not covered by warranty. Terex authorised personnel may extend a commitment to pay all or part of repairs made by the Distributor which would not normally be covered by warranty.

***Note: Documented Pre-approval is required for this type of warranty claim, e.g. in the form of a PD No (Policy Decision number).***

#### **3D6. PARTS POLICY ADJUSTMENTS**

Request for policy adjustment for a failure occurring after the expiration of the Terex Standard Limited New Product Warranty or a failure of a nature not covered by warranty. Terex authorised personnel may extend a commitment to pay all or part of the repairs made by the Distributor, which would not normally be covered by warranty.

***Note: Documented Pre-approval is required for this type of warranty claim, e.g. in the form of a PD No (Policy Decision number).***

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **3D7. CAMPAIGN BULLETINS**

A warranty claim for parts, labour and expenses to perform a Terex Campaign Bulletin as authorised in a Terex Campaign Bulletin Letter.

Terex will pay Distributors for expenses to perform Campaign Bulletins in accordance with instructions given in each Campaign Bulletin letter. Upon completion, the Distributor must prepare a warranty claim to cover authorised expenses. Labour allowances will be calculated at the established warranty labour rate. Mileage will be paid at the established rate. The warranty claim must also show the following information:

- a) Campaign Bulletin number must be entered into the Campaign/Project field.
- b) Warranty claim must state "Campaign Bulletin (#####)" (by number) in the "Reason for Repair" section of the warranty claim.
- c) Only approved items are to be listed.
- d) List labour hours actually expended, but not to exceed those hours authorised by the Campaign letter. If time is in excess of the authorised allowance, a complete and acceptable explanation must accompany the warranty claim before credit will be approved.
- e) List travel separately, showing actual number of travel hours
- f) List actual number of travel miles/kilometres as per bulletin
- g) List all freight charges and substantiate by attaching copies of paid invoices or freight bills.

## **3D8. RESUBMISSIONS**

For re-submission of a previous warranty claim which was denied. If a Distributor feels he has more complete or additional information, he may elect to reopen a denied (NO AWARD) warranty claim.

The Distributor can resubmit a denied (NO AWARD) warranty claim by updating the original warranty claim with more complete or additional information and resubmitting through "TWS".

A warranty claim must be resubmitted within sixty (60) days of its denial, any warranty claim resubmitted after this period will be classified as CLOSED to Terex and no further consideration will be given.

## **3D9. COMMERCIAL POLICY ADJUSTMENTS**

Claim for non-warranty expenses pre-approved by an authorised Terex Sales Department representative.

***Note: Written Pre-approval by a Terex Sales Department representative is required for this type of claim.***

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 4 - SERVICE PUBLICATIONS**

### **PART A – PARTS, MAINTENANCE AND OPERATING PUBLICATIONS**

#### **4A1. PARTS BOOKS & MAINTENANCE MANUALS**

Parts Books and Maintenance Manuals covering all basic lines of Terex Machines are prepared, published and distributed as an aid to proper maintenance, repair and overhaul of Terex Machines. Included in the manuals is information on the operation, removal, disassembly, inspection, repair, assembly, installation, period servicing, lubrication and component or system diagnosis. Adequate reference libraries should be established and maintained in each Distributorship for ready access by field and shop personnel.

Where applicable, a copy of this documentation is available on the Terex Construction assistance website <http://constructionsupport.terex.com>.

#### **4A2. OPERATION-SAFETY-MAINTENANCE HANDBOOKS**

Operation-Safety-Maintenance Handbooks are available covering basic lines of Terex Machines. Operation-Safety-Maintenance Handbooks include basic descriptions of instruments, switches and controls. Proper operation of engines and transmissions, principles of Machine operation and safety hints. Also includes routine servicing schedule.

Where applicable, a copy of this documentation is available on the Terex Construction assistance website <http://constructionsupport.terex.com>

# **Terex CONSTRUCTION**

## **SERVICE PROCEDURES MANUAL**

### **SECTION 4 - SERVICE PUBLICATIONS**

#### **PART B - FIELD AND DISTRIBUTOR PUBLICATIONS**

##### **4B1. PRODUCT ADVISORY BULLETINS**

Product Advisory Bulletins are prepared for conveying information relating to non-mandatory updates to improve equipment performance, advice on product use and the maintenance and inspection of specific areas of the equipment.

Product Advisory Bulletins are numbered consecutively and are sent to each registered Distributor outlet. Where applicable, a copy of this documentation is available on the Terex Construction assistance website.

**Note: A Product Advisory Bulletin is not an authorisation to upgrade a machine under warranty.**

##### **4B2. SERVICE BULLETINS**

Service Bulletins are prepared to focus on a possible situation, which may require attention and information relative to servicing, and the operation of the equipment. The Service Bulletin will normally request information to be sent to the Service Department so that action may be taken where necessary.

Service Bulletins are numbered consecutively and are sent to each registered Distributor outlet. Where applicable, a copy of this documentation is available on the Terex Construction assistance website.

**Note: A Service Bulletin is not an authorisation to upgrade a machine under warranty**

##### **4B3. CONFIDENTIALITY**

Service Bulletins and Product Advisory Bulletins may at times deal with confidential information and therefore have to be treated with discretion. Information contained is helpful to the field and each Distributor must acquaint his service personnel with the contents.

The Distributor should make appropriate OWNERS/USERS aware of the contents of the Product Advisory Bulletins or Service Bulletins WITHOUT OBLIGATING THE DISTRIBUTOR OR FACTORY.

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 5 - SERVICE TRAINING**

### **PART A - TRAINING PROGRAMMES**

#### **5A1. OBJECTIVES**

Comprehensive service training programmes are available to Terex Distributors OWNERS and USERS. Instructions, training aids and facilities are provided at the Terex Service Department. OWNER/USER satisfaction is assured through properly trained service personnel.

The objectives of Terex Service Training programmes are:

- a) To train Distributor service personnel on the best methods and latest procedures for proper diagnosis, repair and adjustment of the various components and systems of Terex Machines.
- b) To train OWNER/USER service personnel in the proper maintenance and repair of Terex Machines.

#### **5A2. Terex SERVICE TRAINING DEPARTMENT**

Details of courses in diagnosing, servicing, maintenance and repairing of Terex Machines are available on request from the Service Training Department.

#### **5A3. FIELD MAINTENANCE TRAINING**

To reach personnel who cannot attend the Terex Service Department training programmes, special programmes can be arranged with OWNER/USER for training on the "field maintenance" requirements of their Terex Machines. Such field programmes must be arranged with the Terex Service Department.

#### **5A4. SPECIALISED PROGRAMMES**

On request, it may be possible to conduct specialised programmes. However, a course fee for such would be applicable.

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 5 - SERVICE TRAINING**

### **PART B - DISTRIBUTOR SERVICE MEETINGS**

#### **5B1. MEETING - Terex SERVICE REPRESENTATIVE**

Terex Service representatives, in co-operation with the Distributor management are to conduct service meetings at the Distributor's locations for Distributor service personnel.

These meetings afford an excellent opportunity to keep up-to-date with machine service information and product improvements.

#### **5B2. MEETING DISTRIBUTOR**

Terex encourages Distributor and OWNER/USER to hold self-conducted meetings. We offer a variety of information which can be provided on application. Requests for such information should be directed to the Product Training Manager for the relevant product.

# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 6 - LABOUR TIME GUIDES**

### **PART A - PURPOSE**

The purpose in establishing repair standards is to serve as a guide to Terex Distributors in the performance of service operations on Terex Machines. It will assist the Service Manager to:

1. Measure Shop Efficiency.
2. Schedule Manpower.
3. Appraise Used Equipment.
4. Estimate Repair Cost for Customer.

### **PART B - HOW STANDARDS ARE ESTABLISHED**

Standards are established based on the use of adequate facilities, necessary tools and equipment and trained personnel.

To simulate actual Distributor conditions, a used Machine is employed in making time studies. Procedures as outlined in Terex maintenance manuals and good shop practices are followed.

Standards established are based on actual time worked. No allowance has been made for breaks, waiting for crane, tools or other special equipment. Sufficient time is allowed for mechanical labour, cleaning and inspecting, and an allowance is included for diagnostics.

In the absence of detailed labour time analysis, previously established field times will be utilised. Distributors should contact their relevant Terex Service Representative for advice about such repairs prior to submitting a warranty claim.



# **Terex CONSTRUCTION SERVICE PROCEDURES MANUAL**

## **SECTION 7 - DISTRIBUTOR FACILITIES**

### **PART A - SPECIAL TOOLS AND EQUIPMENT**

Terex Machines are designed to minimise the need for special tools. However, there are certain service operations in which the use of special tools is advisable for efficient and quality servicing. Reference to the use of these tools is made in the maintenance manuals.

The need for these tools is determined and their design approved by Terex Service Department. All special tools are itemised by part number or Manufacturing drawing. The Distributor can order the appropriate part number tooling through Terex Parts Department or manufacture the tooling from the drawings. All expenses for Special Tools are the responsibility of the Distributor.

### **PART B - NEW FACILITIES OR EXPANSION OF EXISTING FACILITIES**

If a Distributor plans an expansion of its facility or is contemplating a new facility, such plans should be brought to the attention of the Terex Service Manager, who will provide assistance in developing suggested layouts and making tooling and equipment recommendations.