

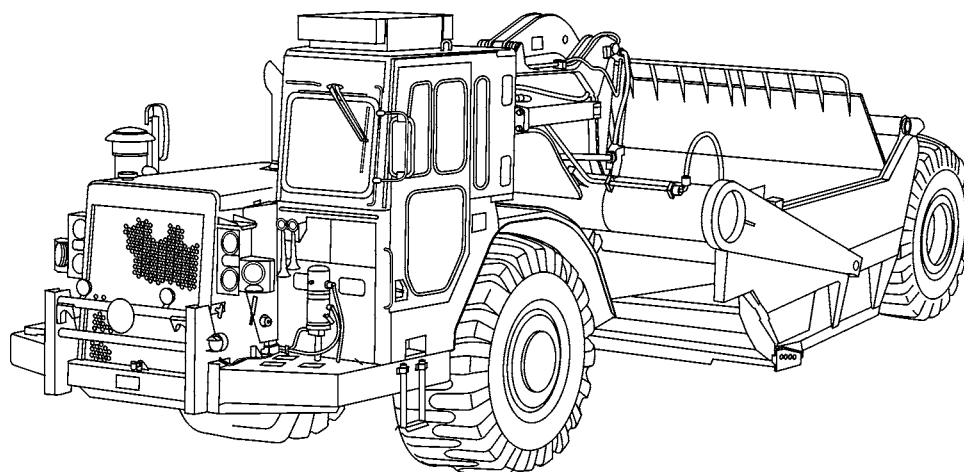
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## TECHNICAL MANUAL

### UNIT AND DIRECT SUPPORT MAINTENANCE (REPAIR PARTS AND SPECIAL TOOLS LISTS (RPSTL)) ALSO INCLUDES GENERAL SUPPORT AND DEPOT MAINTENANCE

FOR

### SCRAPER, EARTH MOVING, MOTORIZED, DIESEL ENGINE DRIVEN MODEL 621B (NSN 3805-01-153-1854) (EIC:EH3)



**SUPERSEDURE NOTICE** - This manual supersedes TM 5-3805-248-14&P-4, dated 19 August 1985

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Current as of April 22, 2005

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**FIELD MAINTENANCE (UNIT AND DIRECT SUPPORT MAINTENANCE) REPAIR PARTS AND SPECIAL TOOLS LISTS (RPSTL) INCLUDING (SUSTAINMENT MAINTENANCE REPAIR PARTS) INTRODUCTION**

0001 00

**SCOPE**

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Field and Sustainment level maintenance of the Scraper, Earth Moving, Motorized, Diesel Engine Driven. The 621B model is covered in this manual. Unless otherwise noted, the illustrations and corresponding parts listing applies to both models. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

**GENERAL**

In addition to the Introduction work package, this RPSTL is divided into the following work packages:

- a. **Repair Parts Lists Work Package.** Work package containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. This work package also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work package. Repair parts kits are listed separately in their own functional group. Items listed are shown on the associated illustrations.
- b. **Special Tools List Work Package.** Work package containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL [as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column]. Tools that are components of common tool sets and/or Class VII are listed.
- c. **Cross-Reference Indexes Work Package.** There are two cross-reference indexes in this RPSTL: National Stock Number Index and Part Number Index.

**EXPLANATION OF COLUMNS IN THE REPAIR PARTS LISTS AND SPECIAL TOOLS LIST WORK PACKAGES**

- a. **Item No. (Column 1).** Indicates the number used to identify items called out in the illustration.
- b. **SMR Code (Column 2).** The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

| SOURCE CODE          | MAINTENANCE CODE                          |  | RECOVERABILITY CODE   |
|----------------------|---|--|---|
| XXxxx                | xxXXx                                     |  | xxxxX   |
| 1st two positions    | 3rd position                              | 4th position                             | 5th position  |
| How you get an item. | Who can install, replace or use the item. | Who can do complete repair* on the item. | Who determines disposition action on an unserviceable item. |

\* *Complete Repair:* Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

**FIELD MAINTENANCE (UNIT AND DIRECT SUPPORT MAINTENANCE) REPAIR PARTS AND SPECIAL TOOLS LISTS (RPSTL) INCLUDING (SUSTAINMENT MAINTENANCE REPAIR PARTS) INTRODUCTION - CONTINUED**

0001 00

**EXPLANATION OF COLUMNS IN THE REPAIR PARTS LISTS AND SPECIAL TOOLS LIST WORK PACKAGES - CONTINUED**

- (1) **Source Code.** The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

| <u>Code</u>   | <u>Application/Explanation</u>  |
|---|---|
| PA<br>PB<br>PC<br>PD<br>PE<br>PF<br>PG  | <p>Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the maintenance category indicated by the code entered in the third position of the SMR code.</p> <p style="text-align: center;"><i>Items coded PC are subject to deterioration.</i></p> <p>.....</p>   |
| KD<br>KF<br>KB  | <p>Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.</p> <p>.....</p>   |
| MO - Made at Unit/<br>AVUM level<br>MF - Made at DS/AVIM Level<br>MH - Made at GS Level<br>ML - Made at SRA<br>MD - Made at Depot                       | <p>Items with these codes are not to be requested/requisitioned individually. They must be made from bulk materiel which is identified by the part number in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk materiel group work package of the RPSTL. If the item is authorized to you by the third position of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.</p> <p>.....</p> |
| AO-Assembled by Unit/<br>AVUM level<br>AF-Assembled by DS/<br>AVIM level<br>AH-Assembled by<br>GS level<br>AL-Assembled by SRA<br>AD-Assembled by Depot | <p>Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the third position of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.</p>   |
| XA  | Do not requisition an "XA" coded item. Order the next higher assembly. (Refer to NOTE below).   |
| XB  | If an item is not available from salvage, order it using the CAGEC and P/N.   |
| XC  | Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.  |
| XD  | Item is not stocked. Order an XD-coded item through normal supply channels using the CAGEC and P/N given, if no NSN is available.   |

**NOTE**

Cannibalization of controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.



**FIELD MAINTENANCE (UNIT AND DIRECT SUPPORT MAINTENANCE) REPAIR PARTS AND SPECIAL TOOLS LISTS (RPSTL) INCLUDING (SUSTAINMENT MAINTENANCE REPAIR PARTS) INTRODUCTION - CONTINUED**

0001 00

**EXPLANATION OF COLUMNS IN THE REPAIR PARTS LISTS AND SPECIAL TOOLS LIST WORK PACKAGES - CONTINUED**

- (2) **Maintenance Code.** Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:
  - (a) Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance:

| <u>Code</u> | <u>Application/Explanation</u>   |
|-------------|--|
| C. . . . .  | Crew or Operator maintenance done within Field/AVUM maintenance.         |
| O . . . . . | Unit Level/AVUM maintenance can remove, replace, and use the item.       |
| F. . . . .  | Direct Support/AVIM maintenance can remove, replace, and use the item.   |
| H . . . . . | General Support maintenance can remove, replace, and use the item.       |
| L . . . . . | Specialized Repair Activity (SRA) can remove, replace, and use the item. |
| D . . . . . | Depot Maintenance can remove, replace, and use the item.                 |

- (b) Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

**NOTE**

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

| <u>Code</u> | <u>Application/Explanation</u>  |
|-------------|---|
| O . . . . . | Unit/AVUM is the lowest level that can do complete repair of the item.  |
| F. . . . .  | Direct Support/AVIM is the lowest level that can do complete repair of the item.  |
| H . . . . . | General Support is the lowest level that can do complete repair of the item.  |
| L. . . . .  | Specialized Repair Activity (SRA) is the lowest level that can do complete repair of the item.  |
| D . . . . . | Depot is the lowest level that can do complete repair of the item.  |
| Z. . . . .  | Nonreparable. No repair is authorized.  |
| B. . . . .  | No repair is authorized. No parts or special tools are authorized for the maintenance of a "B"-coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level. |

**FIELD MAINTENANCE (UNIT AND DIRECT SUPPORT MAINTENANCE) REPAIR PARTS AND SPECIAL TOOLS LISTS (RPSTL) INCLUDING (SUSTAINMENT MAINTENANCE REPAIR PARTS) INTRODUCTION - CONTINUED**

0001 00

**EXPLANATION OF COLUMNS IN THE REPAIR PARTS LISTS AND SPECIAL TOOLS LIST WORK PACKAGES - CONTINUED**

- (3) **Recoverability Code.** Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR code as follows:

| <u>Code</u> | <u>Application/Explanation</u>  |
|-------------|---|
| Z. . . . .  | Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.   |
| O . . . . . | Reparable item. When uneconomically repairable, condemn and dispose of the item at the Unit level maintenance.  |
| F. . . . .  | Reparable item. When uneconomically repairable, condemn and dispose of the item at Direct Support level.  |
| H . . . . . | Reparable item. When uneconomically repairable, condemn and dispose of the item at General Support level.   |
| D . . . . . | Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.   |
| L. . . . .  | Reparable item. Condemnation and disposal of item not authorized below Specialized Repair Activity (SRA).   |
| A . . . . . | Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions. |

- c. **NSN - (Column 3).** The NSN for the item is listed in this column.
- d. **CAGEC (Column 4).** The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.
- e. **PART NUMBER (Column 5).** Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

**NOTE**

When you use an NSN to requisition an item, the item you receive may have a different part number from the part ordered.

- f. **DESCRIPTION AND USABLE ON CODE (UOC) (Column 6).** This column includes the following information:
  - (1) The Federal item name and, when required, a minimum description to identify the item.
  - (2) P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
  - (3) Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.
  - (4) The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

---

**FIELD MAINTENANCE (UNIT AND DIRECT SUPPORT MAINTENANCE) REPAIR PARTS  
AND SPECIAL TOOLS LISTS (RPSTL) INCLUDING (SUSTAINMENT MAINTENANCE  
REPAIR PARTS) INTRODUCTION - CONTINUED**


---

0001 00

**EXPLANATION OF COLUMNS IN THE REPAIR PARTS LISTS AND SPECIAL  
TOOLS LIST WORK PACKAGES - CONTINUED**

- g. **QTY (Column 7).** The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, group or an assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and the quantity may vary from application to application.

**EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGE FORMAT AND COLUMNS**

- a. **National Stock Number (NSN) Index Work Package.**
- (1) **STOCK NUMBER Column.** This column lists the NSN by National Item Identification Number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN (i.e., NSN 5305-01-674-1467). When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.
  - (2) **FIG. Column.** This column lists the number of the figure where the item is identified/located. The figures are in numerical order in WP 0002 00 and WP 0003 00.
  - (3) **ITEM Column.** The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.
- b. **Part Number (P/N) Index Work Package.** Part numbers in this index are listed in ascending alphanumeric sequence (i.e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).
- (1) **PART NUMBER Column.** Indicates the P/N assigned to the item.
  - (2) **FIG. Column.** This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.
  - (3) **ITEM Column.** The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

**SPECIAL INFORMATION**

- a. **Remanufactured Parts, Core Values and Dealer Exchange Items.**
- (1) Remanufactured parts and/or direct dealer parts exchange are available for select Caterpillar supported items. The user has the option to:
    - (a) Procure a new part through the normal ordering channels.
    - (b) Exchange a part through a local Caterpillar dealer and receive a *core value credit towards a new part.*
    - (c) Exchange a part through a local Caterpillar dealer and receive a *core value credit towards a remanufactured part.*
  - (2) Extended nomenclature in the DESCRIPTION column identifies those items that are dealer exchange/reman parts (i.e., *DEALER EXCHANGE ITEM, PN OR-9608* or *DEALER EXCHANGE*). If a part is not listed as a dealer exchange item, order it through traditional supply channels.
  - (3) The core value/exchange is a unit-to-Caterpillar dealer direct transaction. To receive the core value, you must return the part to the local Caterpillar dealer. You will receive a core value (credit) for the returned item. When you buy a new or remanufactured part, the core value credit is automatically calculated for your transaction and deducted from the total price. You can complete this transaction using your IMPAC card.

**FIELD MAINTENANCE (UNIT AND DIRECT SUPPORT MAINTENANCE) REPAIR PARTS AND SPECIAL TOOLS LISTS (RPSTL) INCLUDING (SUSTAINMENT MAINTENANCE REPAIR PARTS) INTRODUCTION - CONTINUED**

0001 00

**SPECIAL INFORMATION - CONTINUED**

- b. **Cancelled and Replaced By Part Numbers.** Caterpillar implements a *Modernization through Spares* program for its equipment through the use of *cancelled and replaced by* part numbers. If the part number you ordered has been cancelled and replaced by a new part, the new part will be automatically shipped to you. Install this new part; DO NOT return it.
- a. **Usable On Code (UOC).** The UOC appears in the lower left corner of the DESCRIPTION column heading. Usable on codes are shown as "UOC:" in the Description Column (justified left) on the first line under the applicable item/nomenclature. Uncoded items are applicable to all models. Identification of the UOC's used in the RPSTL are:

| <u>Code</u>   | <u>Used On</u>  |
|---------------|---|
| WTS . . . . . | Scraper, Earth Moving, Self-Propelled, Caterpillar Model 621B |

- b. **Fabrication Instructions.** Bulk materials required to manufacture items are listed in the Bulk Materiel functional group of this RPSTL. Part numbers for bulk materiel are also referenced in the Description Column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in TM 5-3805-248-23.
- c. **Index Numbers.** Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the NSN/P/N Index work package and the bulk materiel list in the repair parts list work package.
- d. **Associated Publications.** The publication(s) listed below pertain to the Scraper, Earth Moving, Motorized, Diesel Engine Driven and its components:

| <u>Publication</u>         | <u>Short Title</u>   |
|----------------------------|--|
| TM 5-3805-248-10 . . . . . | Operator's Manual for Scraper, Earth Moving, Self-Propelled        |
| TM 5-3805-248-23 . . . . . | Field Maintenance Manual for Scraper, Earth Moving, Self-Propelled |

**HOW TO LOCATE REPAIR PARTS**

- a. **When National Stock Number is Known:**
  - (1) **First.** If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.
  - (2) **Second.** Turn to the figure and locate the item number. Verify that the item is the one you are looking for.
- b. **When Part Number is Known.**
  - (1) **First.** If you have the P/N and not the NSN, look in the PART NUMBER column of the P/N index work package. Identify the figure and item number.
  - (2) **Second.** Look up the item on the figure in the applicable repair parts list work package.