

**TECHNICAL MANUAL**

**ORGANIZATIONAL,  
DIRECT SUPPORT, AND  
GENERAL SUPPORT MAINTENANCE  
REPAIR PARTS AND SPECIAL TOOLS LIST  
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS)**

**FOR**

**BRIDGE, ARMORED-VEHICLE LAUNCHED:  
SCISSORING TYPE  
CLASS 60 (5420-00-522-9599)  
AND CLASS 70 (5420-01-390-3933)  
ALUMINUM, 60 FOOT SPAN;  
FOR USE WITH M48 AND M60 LAUNCHER  
(ALL MAKES AND MODELS)**

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DEPARTMENT OF THE ARMY  
Washington D.C., 8 November 1988

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FOR  
BRIDGE, ARMORED-VEHICLE LAUNCHED:  
SCISSORING TYPE  
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AND CLASS 70 (5420-01-390-3393)  
ALUMINUM 60 FOOT SPAN;  
FOR USE WITH M48 AND M60 LAUNCHER  
(ALL MAKES AND MODELS)

Current as of 15 July 1996

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ORGANIZATIONAL  
DIRECT SUPPORT, AND  
GENERAL SUPPORT MAINTENANCE  
REPAIR PARTS AND SPECIAL TOOLS LIST  
SECTION I INTRODUCTION

1. Scope.

This RPSTL lists and authorizes spares, repair parts required for performance of organizational, direct support, and general support maintenance of the Bridge. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the Source, Maintenance, and Recoverability (SMR) codes.

2. General.

In addition to Section I, Introduction this Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of fictional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Items listed are shown on the associated illustration(s)/ figure(s).

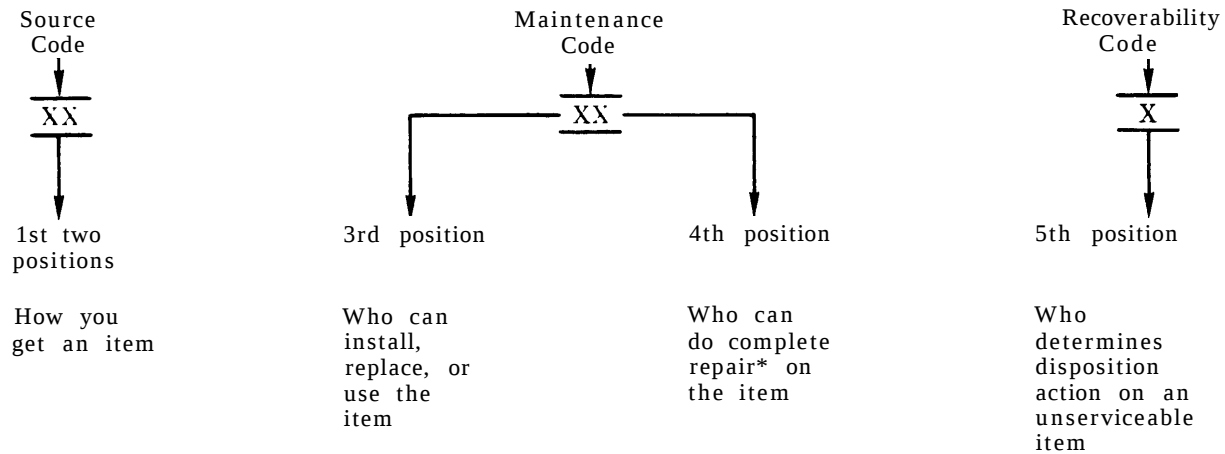
b. Section III. Special Tools List. Not applicable.

c. Section IV. Cross-reference Index. A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance. The figure and item number index lists figure and item numbers in alphanumeric sequence and cross-reference NSN, FSCM and part numbers.

3. Explanation of Columns (Section II.

a. ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration

b. SMR CODE (Column (2)) The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/ requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout



\*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.

(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:

| Code                                                                                                     | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PA<br>PB<br>PC**<br>PD<br>PE<br>PF<br>PG                                                                 | Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the level indicated by the code entered in the 3rd position of the SMR code.<br><br>** NOTE Items coded PC are subject to deterioration                                                                                                                                                                                                                          |
| KD<br>KF<br>KB                                                                                           | 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 3rd position of the SMR code. The complete kit must be requisitioned and applied.                                                                                                                                                                                                                                   |
| MO - (Made at Org Level)<br>MF - (Made at DS Level)<br>MH - (Made at GS Level)<br>MD - (Made at Depot):) | Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL. If the item is authorized to you by the 3rd position code 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. |

| Code                          | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AO - (Assembled by Org Level) | 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 3rd position code 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. |
| AF - (Assembled by DS Level)  |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| AH - (Assembled by GS Level)  |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| AD - (Assembled by Depot)     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |

XA - Do not requisition an "XA" -coded item. Order its next higher assembly. (Also, refer to the NOTE below).

XB - If an "XB" item is not available from salvage, order it using the FSCM and part number given.

XD - Item is not stocked. Order an "XD" -coded item through normal supply channels using the FSCM and part number given, if no NSN is available.

NOTE Cannibalization or cent rolled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA".

(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) 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.

| Code                                                                     | Application/Explanation |
|--------------------------------------------------------------------------|-------------------------|
| C - Crew or operator maintenance done within organizational maintenance. |                         |
| O - Organizational level can remove, replace, and use the item.          |                         |
| F - Direct support level can remove, replace, and use the item.          |                         |
| H - General support level can remove, replace, and use the item.         |                         |
| D - Depot level can remove, replace, and use the item.                   |                         |

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., 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.) This position will contain one of the following maintenance codes.

| Code | Application/ Explanation |
|------|--------------------------|
|------|--------------------------|

O - Organizational is the lowest level that can do complete repair of the item.

F - Direct support 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.

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.

(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:

| Recoverability<br>Codes | Application/Explanation |
|-------------------------|-------------------------|
|-------------------------|-------------------------|

Z - Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3rd position of SMR Code.

O - Repairable item. When uneconomically repairable, condemn and dispose of the item at organizational level.

F - Repairable item. When uneconomically repairable, condemn and dispose of the item at the direct support level.

H - Repairable item. When uneconomically repairable, condemn and dispose of the item at the genera 1 support level.

D - Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.

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. FSCM (Column(3)). The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. PART NUMBER (Column (4)). 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.

e. DESCRIPTION AND USABLE ON CODE (UOC) (Column (5)). This column includes the following information

- (1) The Federal item name and, when required, a minimum description to identify the item.
- (2) The physical security classification is not applicable.
- (3) Kits and sets are not applicable.
- (4) Spare/ repair parts that make up an assembled item are listed immediately following the assembled line item entry.
- (5) Part numbers for bulk materials are not applicable.
- (6) Serial number effectivity is not applicable.
- (7) The usable on code is not applicable.
- (8) Basis of issue (BOI) is not applicable.
- (9) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in Section II.

f. QTY (Column (6)). 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 fictional group, subfunctional 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.

#### 4. Explanation of Columns (Sect. IV).

##### a. NATIONAL STOCK NUMBER (NSN) INDEX.

(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      NIIN 5305-01-674-1467

When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by the 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 Section II.

(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 INDEX. Part numbers in this index are listed by part number 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) FSCM column. The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(2) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, 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.

(3) STOCK NUMBER column. This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and FSCM columns to the left.

(4) FIG. column. This column lists the number of the figure where the item is identified/located in Section II.

(5) ITEM column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

c. FIGURE AND ITEM NUMBER INDEX.

(1) FIG. column. This column lists the number of the figure where the item is identified/located in Section II.

(2) ITEM column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

(3) STOCK NUMBER column. This column lists the NSN for the item.

(4) FSCM column. The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(5) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, 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.

5. Special Information

a. USABLE ON CODE. Not applicable.

b. FABRICATION INSTRUCTIONS. Not applicable.

c. ASSEMBLY INSTRUCTIONS. Detailed assembly instructions for items source coded to be assembled from component spare/ repair parts are found in TM5-5420-203-14. Items that make up the assembly are listed immediately following the assembly item entry or reference is made to an applicable figure.

d. KITS. Not applicable.

e. INDEX NUMBERS. Not applicable.

f. ASSOCIATED PUBLICATIONS.

The following publications pertain to the Bridge and its components.

| <u>Publication</u> | <u>Short Title</u>               |
|--------------------|----------------------------------|
| TM 5-5420-203-14   | Bridge, Armored-Vehicle Launched |

g. ILLUSTRATIONS - LISTING. Not applicable.

h. ITEMS IN PARENTHESES. Item numbers appearing in parentheses, i.e., (8), signify components that are supplied only as part of the item having the same number or indicate continuation of an item.

i. FIGURE ASSEMBLY PART NUMBER. The next higher assembly part number for component parts listed is shown in parentheses.

EXAMPLE: (ASSY P/N 13211E7880)

j. CHANGE PAGE INFORMATION. An asterisk in the left hand margin (before the item number) indicates a change has occurred in at least one of the columns for that item.

6. How to Locate Repair Parts.a. When National Stock Number or Part Number is Not Known.

(1) First. Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) Second. Find the figure covering the assembly group or subassembly group to which the item belongs.

(3) Third. Identify the item on the figure and use the Figure and Item Number Index to find the NSN.

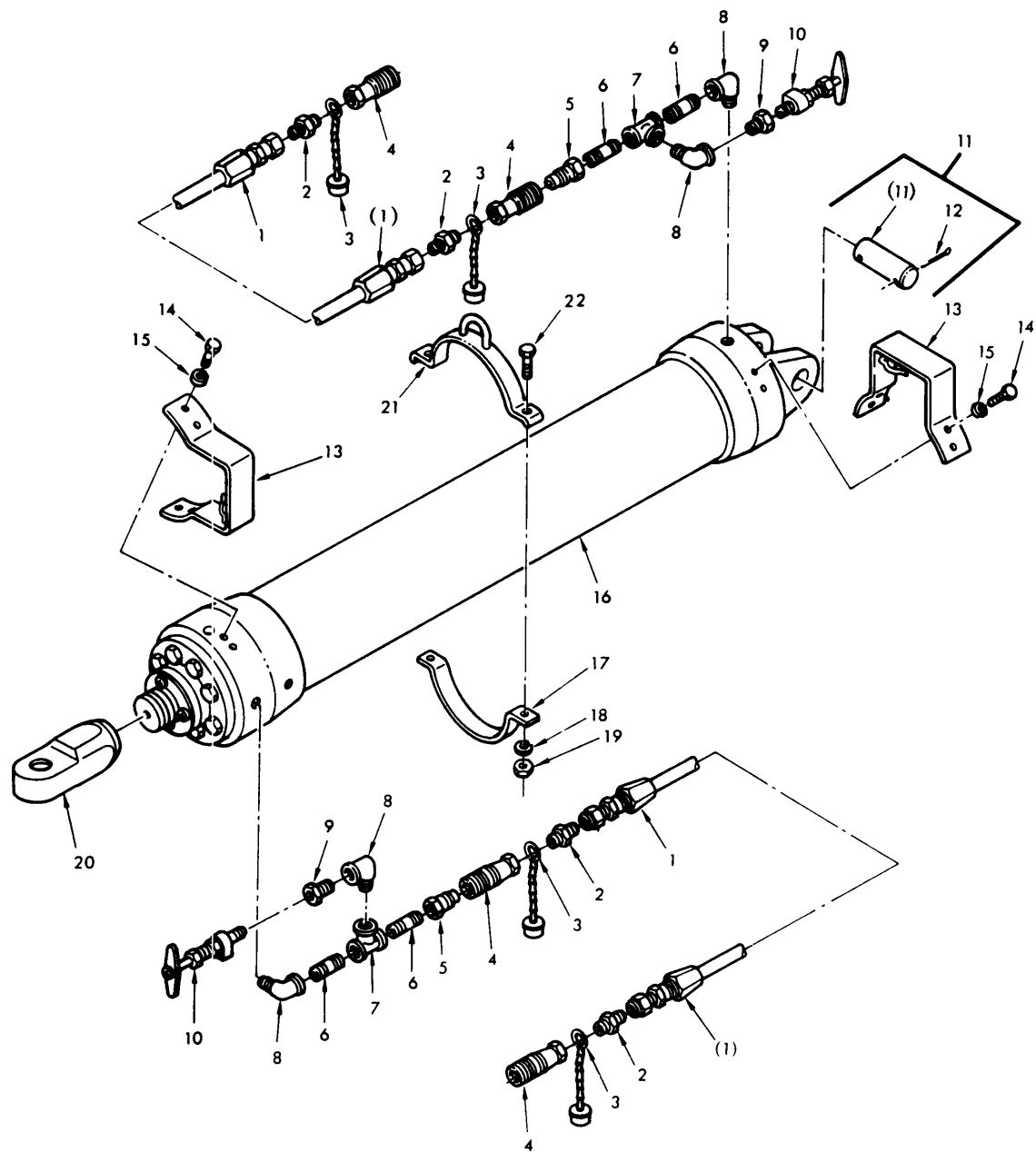
b. When National Stock Number or Part Number is Known

(1) First. Using the National Stock Number or the Part Number index find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see 4a. (1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see 4.b.). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(2) Second. Turn to the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.

7. Abbreviations.

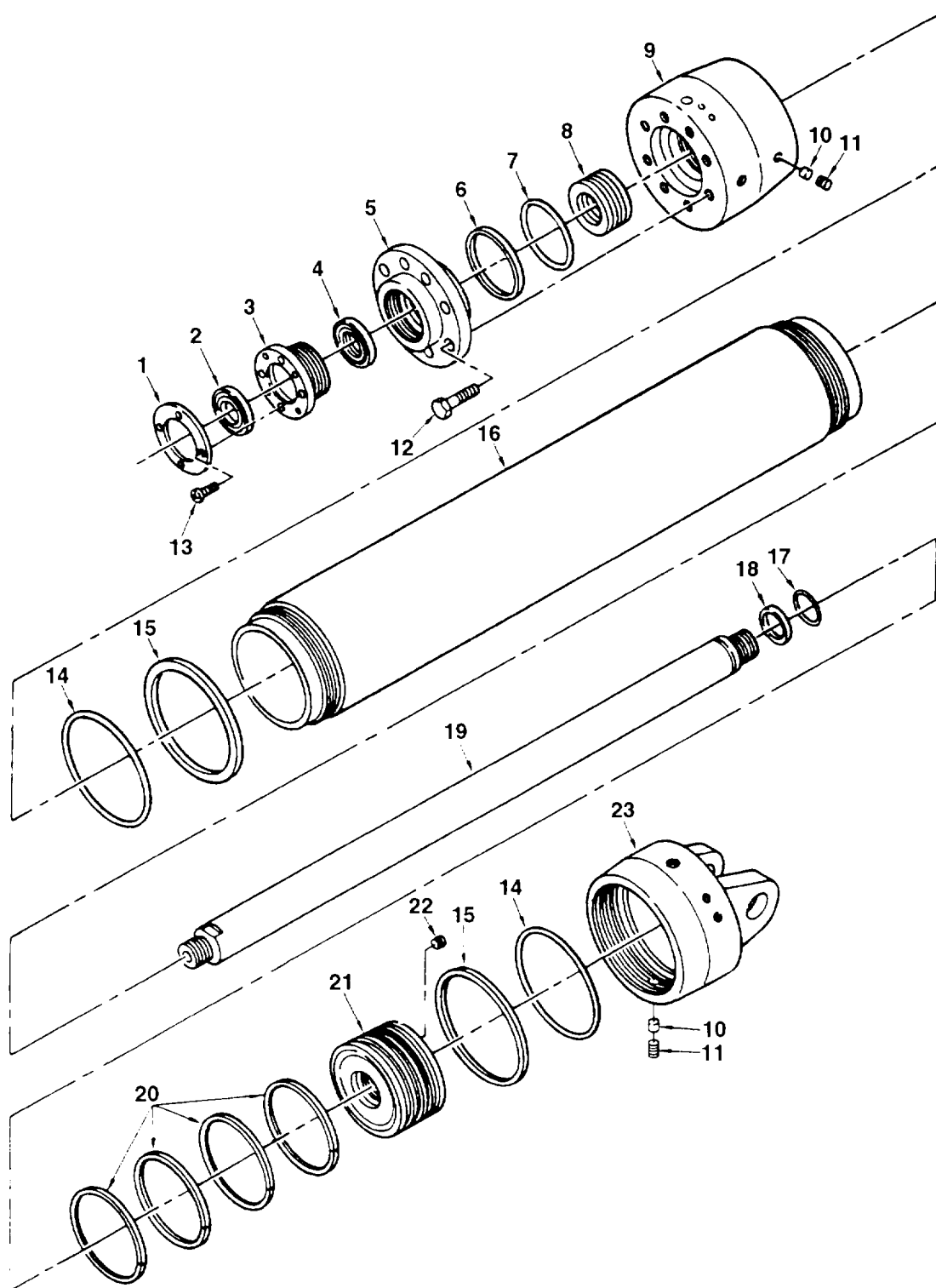
| <u>Abbreviations</u> | <u>Explanations</u>                 |
|----------------------|-------------------------------------|
| P/N                  | Part Number                         |
| RPSTL                | Repair Parts and Special Tools List |



SB001

FIGURE 1. HYDRAULIC LINES, CYLINDER, AND FITTINGS

| SECTION II                                        |       |                  |       | TM 5-5420-203-24P C01 |                                          |     |
|---------------------------------------------------|-------|------------------|-------|-----------------------|------------------------------------------|-----|
| (1)                                               | (2)   | (3)              | (4)   | (5)                   | (6)                                      | (7) |
| ITEM                                              | SMR   |                  |       | PART                  |                                          |     |
| NO                                                | CODE  | NSN              | CAGEC | NUMBER                | DESCRIPTION AND USABLE ON CODES (UDC)    | QTY |
| GROUP 01: HYDRAULIC SYSTEM                        |       |                  |       |                       |                                          |     |
| FIG. 1 HYDRAULIC LINES.<br>CYLINDER. AND FITTINGS |       |                  |       |                       |                                          |     |
| 1                                                 | PAOZZ | 4720-00-732-3418 | 97403 | 1321 1E7904-3         | HOSE ASSEMBLY, RUBBE .....               | 2   |
| 2                                                 | PAOZZ | 4730-00-202-8469 | 96906 | MS51500A12            | ADAPTER STRAIGHT, PI .....               | 4   |
| 3                                                 | PAOZZ | 5420-00-816-5649 | 97403 | 13211E7831            | CAP ASSEMBLY HYDRAU. ....                | 4   |
| 4                                                 | PAOZZ | 4730-00-257-0236 | 97403 | 13211E3213            | COUPLING HALF, QUICK.....                | 4   |
| 5                                                 | PAOZZ | 4730-00-182-9086 | 97403 | 13211 E3212           | COUPLING HALF, QUICK.....                | 2   |
| 6                                                 | PAOZZ | 4730-00-277-9457 | 81348 | WWN351TYPEB           | PIPE .....                               | 4   |
| 7                                                 | PAOZZ | 4730-01-009-0981 | 81343 | 12-12-140438S         | TEE. PIPE .....                          | 2   |
| 8                                                 | PAOZZ | 4730-00-203-0030 | 81343 | 12-12-140239C         | ELBOW, PIPE .....                        | 4   |
| 9                                                 | PAOZZ | 4730-00-278-3917 | 81343 | 12-4-140140C          | PIPE FITTING .....                       | 2   |
| 10                                                | PAOZZ | 4820-00-249-4203 | 97403 | 1321 1E7842           | VALVE, ANGLE .....                       | 2   |
| 11                                                | PBOOO | 5420-00-542-3157 | 97403 | 13211E7873            | PIN, CYLINDER, SCISSO (GROUP 0102) ..... | 1   |
| 12                                                | PAOZZ | 5315-00-597-7399 | 96906 | MS24665-631           | PIN, COTTER.....                         | 2   |
| 13                                                | PBOZZ | 5420-00-182-8639 | 97403 | 13211E7892            | SHIELD ASSEMBLY.....                     | 2   |
| 14                                                | PZOZZ | 5305-00-226-7767 | 96906 | MS90726-109           | SCREW, CAP, HEXAGON H.....               | 8   |
| 15                                                | PAOZZ | 5310-00-584-5272 | 96906 | MS35338-48            | WASHER. LOCK .....                       | 8   |
| 16                                                | PAOFD | 5420-01-104-9108 | 97403 | 13211E7880            | CYLINDER. HYDRAULIC (FOR 1.....          | 1   |
|                                                   |       |                  |       |                       | COMPONENT PARTS SEE GROUP 0101)          |     |
| 17                                                | PAOZZ | 5340-01-145-1968 | 97403 | 13211E7939            | STRAP. RETAINING, LOWER .....            | 1   |
| 18                                                | PAOZZ | 5310-00-584-7888 | 96906 | MS35338-51            | WASHER. LOCK .....                       | 2   |
| 19                                                | PAOZZ | 5310-00-763-8921 | 96906 | MS51967-23            | NUT, PILAIN. HEXAGON .....               | 2   |
| 20                                                | PBOZZ | 5420-00-542-3156 | 97403 | 1321 1E7874           | CLEVIS, CYLINDER. SCI.....               | 1   |
| 21                                                | PBOZZ | 5420-00-542-3192 | 97403 | 13211E7935            | BRACKET ASSEMBLY, UPPER .....            | 1   |
| 22                                                | PAOZZ | 5305-00-947-4353 | 96906 | MS90728-190           | SCREW, CAP, HEXAGON H.....               | 2   |
| END OF FIGURE                                     |       |                  |       |                       |                                          |     |



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FIGURE 2. HYDRAULIC CYLINDER COMPONENTS  
(ASSY P/N 13211E7880)