

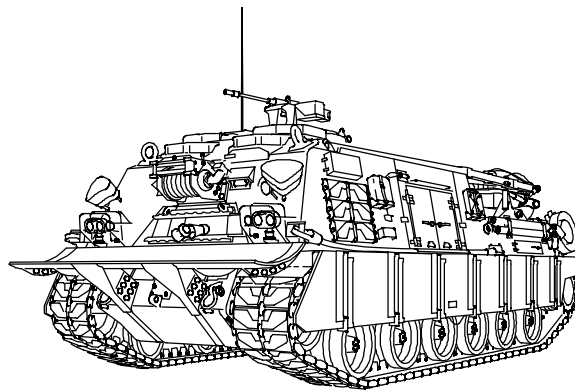
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TECHNICAL MANUAL
VOLUME 2 OF 2

UNIT MAINTENANCE MANUAL

FOR

RECOVERY VEHICLE, HEAVY,
FULL-TRACKED: M88A2
(NSN 2350-01-390-4683)
(EIC: ACQ)



This manual supercedes TM 9-2350-292-20-2 dated 1 October 2000.
Distribution Statement A: Approved for public release; distribution is unlimited.

01 JANUARY 2002
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WASHINGTON, D.C. 01 JANUARY 2002

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UNIT MAINTENANCE MANUAL
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HOW TO USE THIS MANUAL

This manual was designed to provide you with the information you will need to maintain the M88A2 recovery vehicle.

The information contained in this manual is presented in chapters and work packages. Each chapter is divided into work packages to cover the subject for vehicle system(s) or components. Where references are made to tables, figures, and work packages, refer to those portions of the text.

To find information relating to a specific component or system:

- Determine the specific name or function of the component/system.
- Find the name or function in the Index Listing, located in the back of this manual.
- Refer to appropriate work package(s) called out in the Index Listing.

To find information pertaining to a broader range of information (such as vehicle troubleshooting, preventive maintenance component repair, and component descriptions):

- Identify the desired topic.
- Find the general topic in the Table of Contents, located in the front of this manual.
- Refer to appropriate work package(s) called out in the Table of Contents.

MAINTENANCE

Throughout this manual you will frequently see "notify direct support maintenance". When you are instructed to notify direct support maintenance, do exactly that; they have the tools and training to efficiently and correctly perform the next level of maintenance.

Maintenance procedures are to be performed in the sequence shown in the text and illustrations. Step 1 must be performed before step 2 and so on.

Equipment illustrations use numbers to identify parts of the system/components.

Throughout this manual the words WARNING, CAUTION, and NOTE will appear. There is a reason for every one of them.



A warning is used to alert the user to hazardous operating and maintenance procedures, practices, conditions, statements, etc. that may result in injury to or DEATH or personnel if not strictly observed.



A caution is used to alert the user of hazardous operating and maintenance procedures, practices, conditions, statement, etc. that may result in damage to or destruction of equipment or of mission effectiveness if not observed.

NOTE

A note is used to inform the user of essential information which is of special interest or importance or will aid the user in performing a job.

CHAPTER 9

TRANSMISSION MAINTENANCE

TRANSMISSION OIL COOLER LINES REPLACEMENT**0345 00****THIS WORK PACKAGE COVERS:**

Removal, Installation

INITIAL SETUP:**Tools**

General mechanic's tool kit (item 1, WP 0717 00)
 Adjustable wrench (item 22, WP 0717 00)
 Crowfoot attachment (item 91, WP 0717 00)
 Suitable container (2.5 gal. (9.5 L) min cap)

Equipment Conditions

Transmission oil temperature transmitter removed
 (WP 0348 00)
 Transmission oil temperature switch removed
 (WP 0349 00)

Materials/Parts

Self-locking nuts (2) (item 234, WP 0718 00)
 Lockwashers (2) (item 12, WP 0718 00)
 Sealing compound (item 16, WP 0716 00)

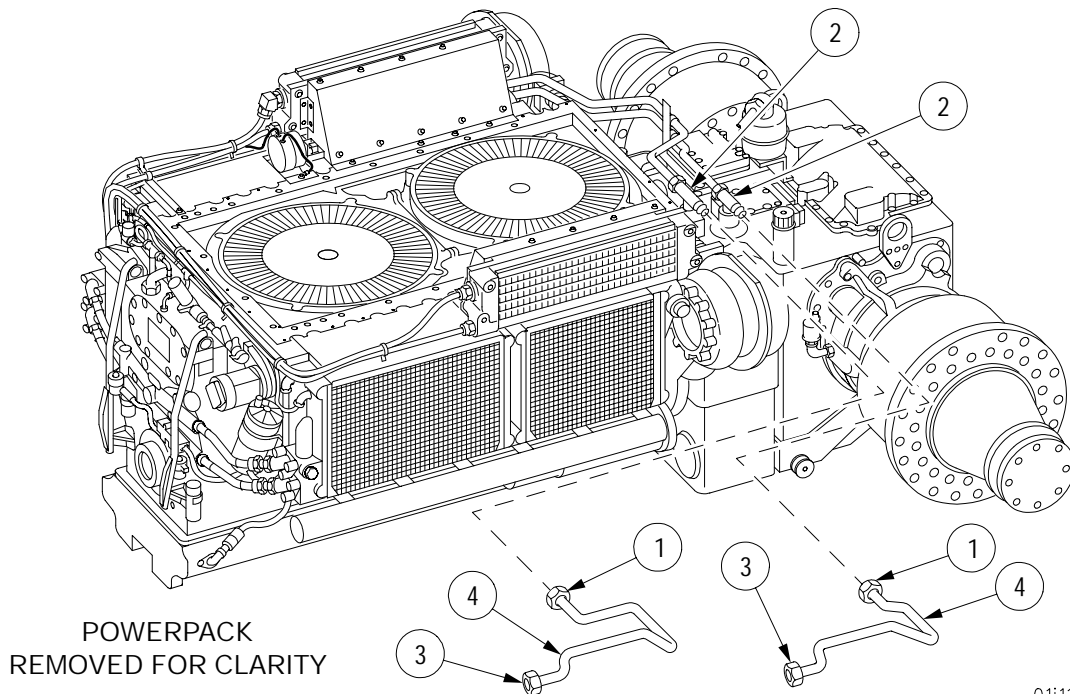
NOTE

Perform Removal steps 1 and 8 and Installation step 9 for maintenance of left side oil cooler lines.

Perform Removal steps 2 through 4 and 8 and Installation steps 6 through 8 for maintenance of right side oil cooler lines and bracket.

Removal

1. Disconnect coupling nut (1) at each of two tees (2) and coupling nut (3) on two left side oil cooler lines (4). Remove left side oil cooler lines (4).



TRANSMISSION OIL COOLER LINES REPLACEMENT - CONTINUED**0345 00****Removal-Continued**

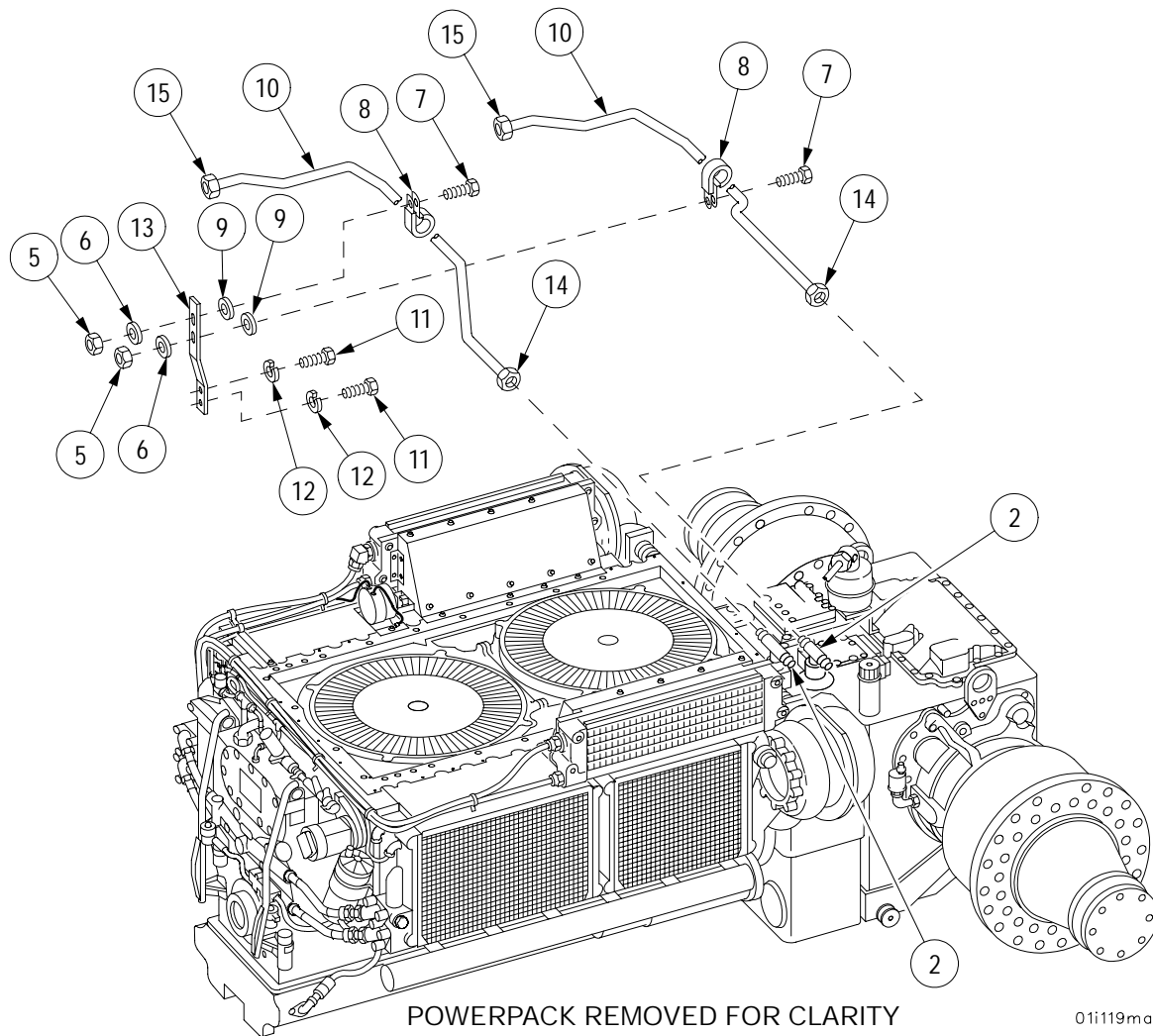
- Remove two self-locking nuts (5), two flat washers (6), two screws (7), two clamps (8), and shim(s) (9) from two right side oil cooler lines (10). Discard two self-locking nuts.

NOTE

For removal of right side oil cooler lines bracket use existing transmission hardware.

Note the quantity and position of shim(s) being removed to ensure shim(s) are installed in the same position.

- Remove two screws (11), two lockwashers (12) and bracket (13). Discard lockwashers.
- Disconnect coupling nut (14) at each of two tees (2) and coupling nut (15) on opposite end of two right side oil cooler lines (10). Remove right side oil cooler lines (10).

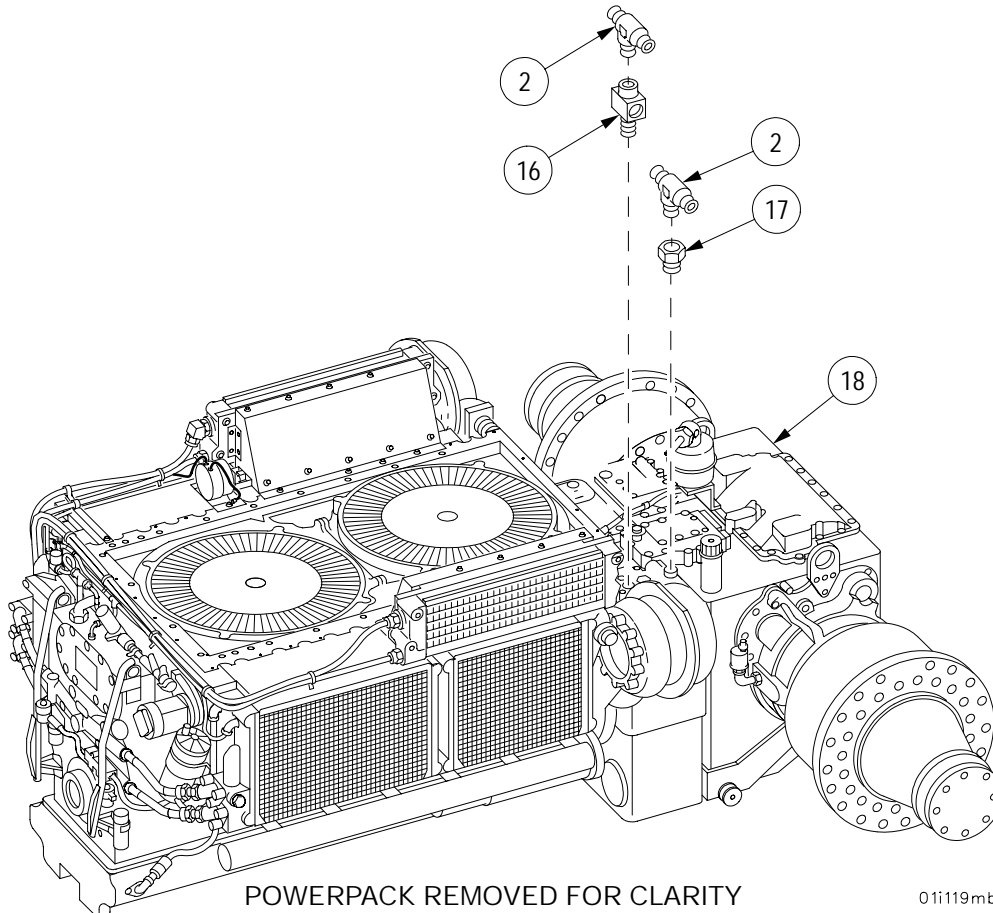


TRANSMISSION OIL COOLER LINES REPLACEMENT - CONTINUED**0345 00****Removal-Continued**

5. Remove two tees (2) from cross (16) and bushing (17).
6. Remove bushing (17) from transmission (18).
7. Remove cross (16) from transmission (18).
8. Inspect parts for damage and replace as required.

Installation

1. Apply sealing compound to male pipe threads of cross (16) and bushing (17).
2. Install cross (16) in transmission (18).
3. Install bushing (17) in transmission (18).
4. Apply sealing compound to male pipe threads of two tees (2) which are to be installed in cross (16) and bushing (17).
5. Install two tees (2) in bushing (17) and cross (16).



TRANSMISSION OIL COOLER LINES REPLACEMENT - CONTINUED**0345 00****Installation-Continued**

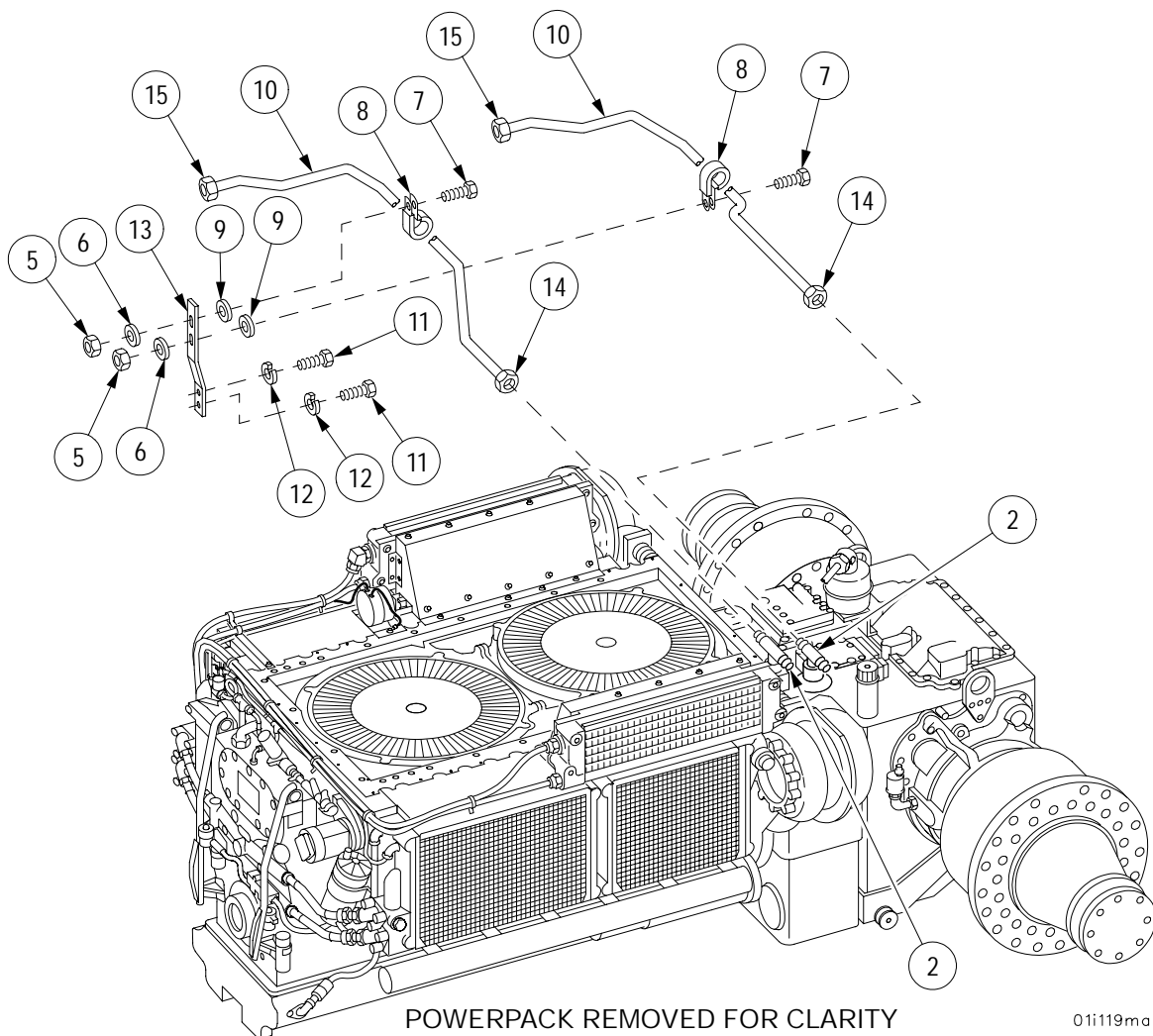
6. Install two right side oil cooler lines (10) with coupling nuts (14) at tees (2) and coupling nuts (15) on opposite ends of lines (10) at oil cooler.

NOTE

Using existing side transmission hardware for mounting right oil cooler lines bracket.

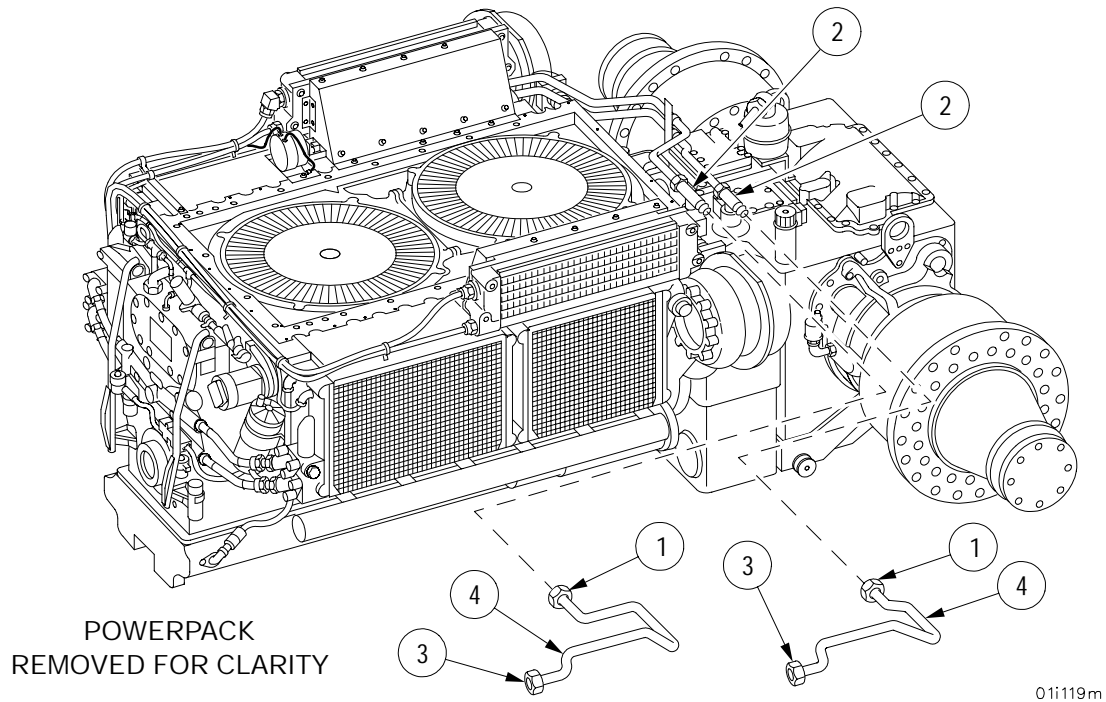
Shim so that tube clamps fits flush with transmission bracket.

7. Install bracket (13) with two screws (11) and two new lockwashers (12).
8. Install two clamps (8) around two right side oil cooler lines (10) with two screws (7), shim(s) (9), two flat washers (6) and two new self-locking nuts (5).



TRANSMISSION OIL COOLER LINES REPLACEMENT - CONTINUED**0345 00****Installation-Continued**

9. Install two left side oil cooler lines (4) with coupling nuts (1) at tees (2) and coupling nuts (3) on opposite ends of lines (4) at oil cooler.

**NOTE****FOLLOW-ON MAINTENANCE:**

Install transmission oil temperature transmitter
(WP 0348 00)

Install transmission oil temperature switch (WP 0349 00)

END OF TASK

TRANSMISSION OIL SAMPLING VALVE REPLACEMENT**0346 00****THIS WORK PACKAGE COVERS:**

Removal, Installation

INITIAL SETUP:**Tools and Special Tools**

General mechanic's tool kit (item 1, WP 0717 00)

Materials/Parts

Sealing compound (item 16, WP 0716 00)

Equipment Conditions

Engine deck doors opened (TM 9-2350-292-10)

References

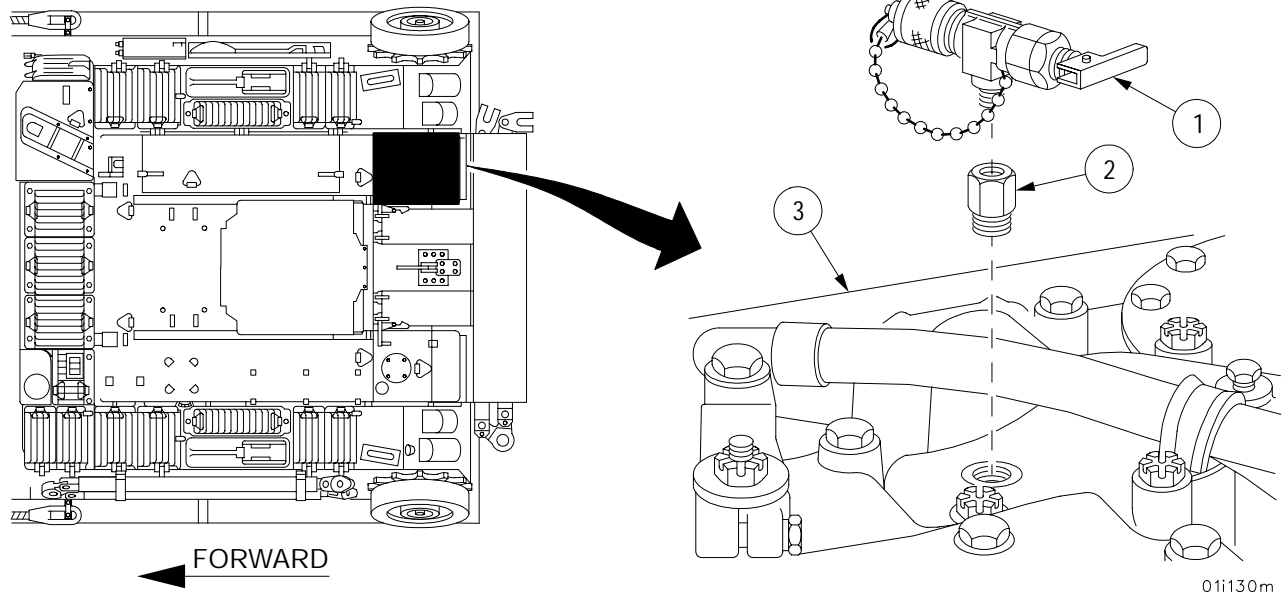
TM 9-2350-292-10

Removal

1. Remove oil sampling valve (1) from bushing (2).
2. Remove bushing (2) from transmission (3).
3. Inspect parts for damage and replace as required.

Installation

1. Apply sealing compound to male pipe threads of bushing (2).
2. Install bushing (2) in transmission (3).
3. Apply sealing compound to male pipe threads of oil sampling valve (1).
4. Install oil sampling valve (1) in bushing (2).

**NOTE****FOLLOW-ON MAINTENANCE:**

Close engine deck doors
(TM 9-2350-292-10)

END OF TASK

TRANSMISSION BRACKET ASSEMBLY REPAIR

0347 00

THIS WORK PACKAGE COVERS:

Removal, Disassembly, Assembly, Installation

INITIAL SETUP:

Tools and Special Tools

General mechanic's tool kit (item 1, WP 0717 00)

Equipment Conditions

Powerpack removed (WP 0188 00)

Materials/Parts

Lockwashers (5) (item 12, WP 0718 00)

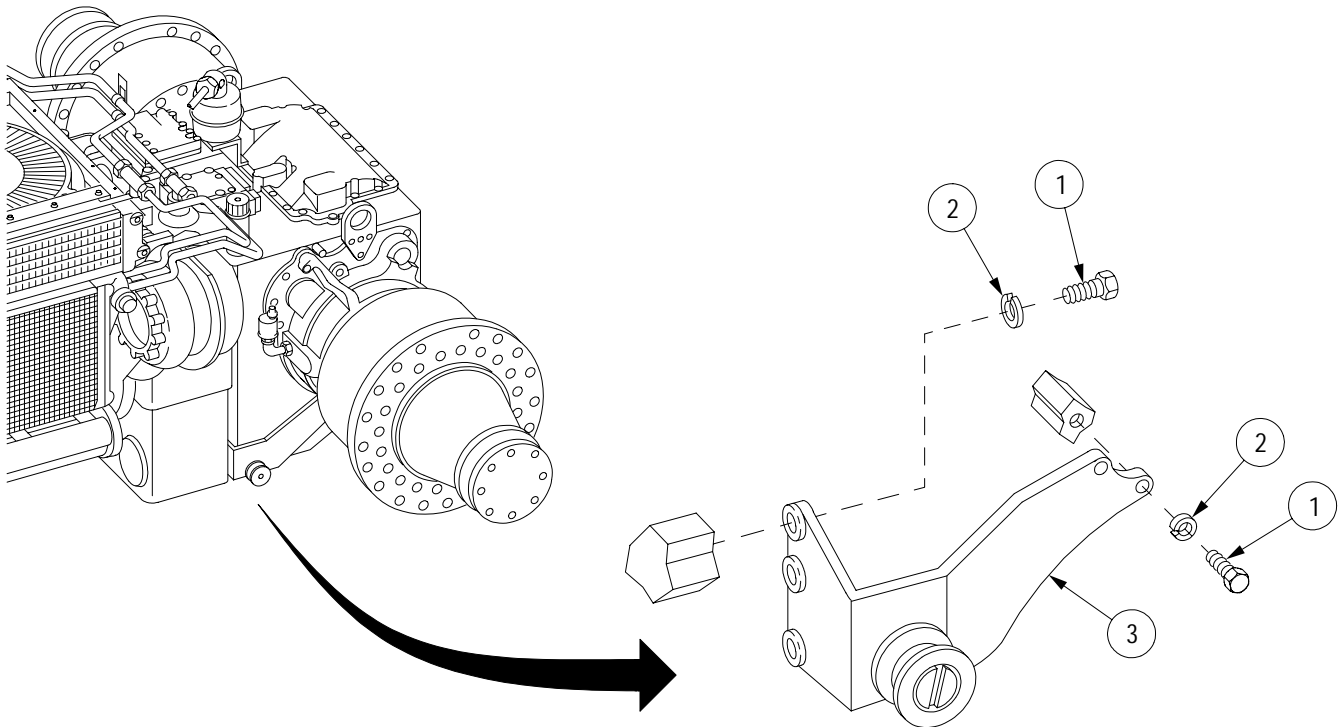
Lockwasher (item 297, WP 0718 00)

NOTE

Left and right transmission bracket assemblies are repaired in the same manner.

Removal

Remove five screws (1), five lockwashers (2) and bracket assembly (3). Discard lockwashers.



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TRANSMISSION BRACKET ASSEMBLY REPAIR - CONTINUED

0347 00

Disassembly

1. Remove nut (4), lockwasher (5), screw (6) and roller (7) from transmission bracket (8). Discard lockwasher.
2. Inspect parts for damage and replace as required.

Assembly

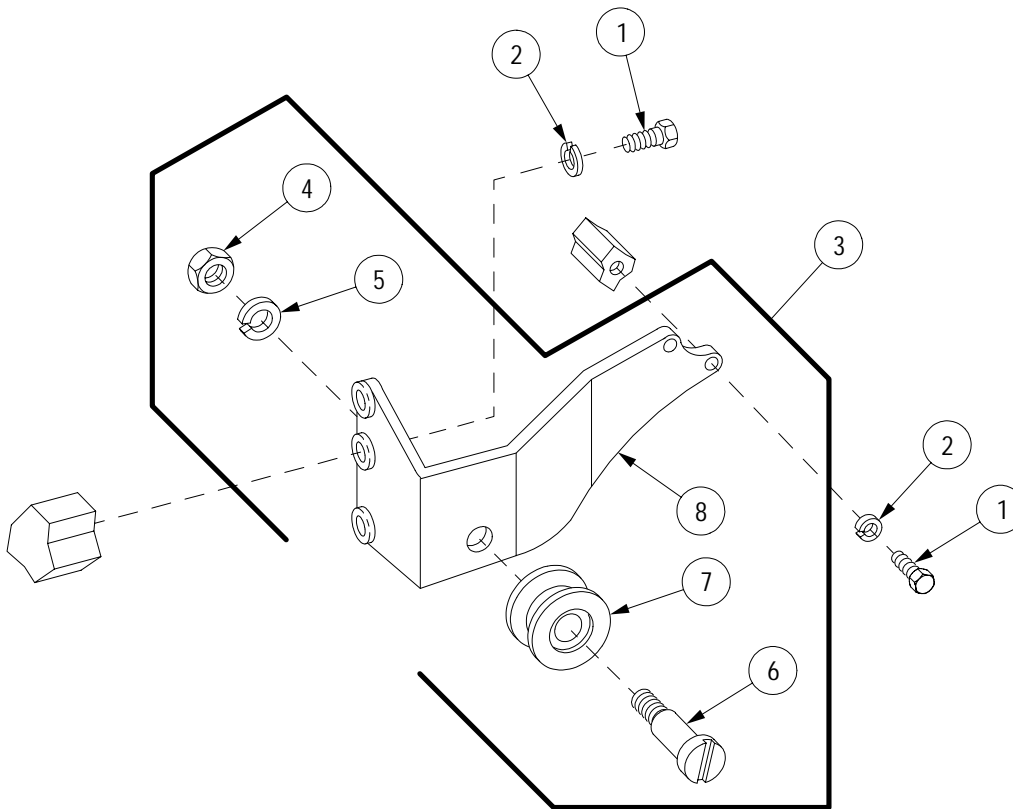
Install roller (7) with screw (6), new lockwasher (5) and nut (4) on transmission bracket (8).

Installation

NOTE

For mounting of transmission bracket assemblies use existing transmission hardware.

Install transmission bracket assembly (3) with five new lockwashers (2) and five screws (1).



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NOTE

FOLLOW-ON MAINTENANCE:
Install powerpack (WP 0188 00)

END OF TASK