

TECHNICAL MANUAL

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

FOR

**85' AERIAL LADDER
FIRE FIGHTING TRUCK**

NSN 4210-00-965-1254

**HEADQUARTERS, DEPARTMENT OF THE ARMY
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Service Manual

Allison Transmissions

AUTOMATIC MODELS

HT 740D, HT 747D

HT 750CRD, HT 754CRD

HT 750DRD

HT 750DRD DB

HT 754CRD

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Detroit Diesel Allison

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NOTE

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- A,23. Rear output disconnect clutch
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Section 1. GENERAL INFORMATION

1-1. SCOPE OF MANUAL

a. Coverage. This Service Manual describes the operation, maintenance, and overhaul procedures for the HT 700 Series automatic transmissions figures 1-1 through 1-8. The major components of the transmission are explained. Detailed instructions are provided for disassembly and rebuild. Spring data is shown in Section 8. Troubleshooting and part inspection are shown in Sections 3 and 4.

b. Illustrations

(1) The text is illustrated with photographs, line drawings, and cross-section views. The overhaul procedures are illustrated mainly by photographs. Line drawings are used to supplement detailed assembly procedures; cross-sections show the torque paths and relationship of assembled parts. Cross-sections, color-coded schematics of the hydraulic system, and all exploded views are on foldout pages at the back of the manual.

(2) Certain illustrations will not always show the model being serviced. However, the illustration will show the correct procedure.

c. Maintenance Information. Each task outlined in this Service Manual has been successfully accomplished by service organizations and individuals. It is not expected that every service organization or individual will possess the required special tooling, training, or experience to perform all the tasks outlined. However, any task outlined herein may be performed if the following conditions are met:

(1) The organization or individual has the required knowledge of the task through:

- Formal instruction in a DDA or Distributor training facility.
- "On-the-job" instruction by a DDA or Distributor representative.
- Experience in performing the task.

(2) The work environment is suitable to prevent contamination or damage to transmission parts or assemblies.

(3) Required tools and fixtures are available as outlined in the Service Manual.

(4) Reasonable and prudent maintenance practices are utilized.

NOTE

Service organizations and individuals are encouraged to contact their local DDA Distributor for information and guidance on any of the tasks outlined herein.

1-2. SUPPLEMENTARY INFORMATION

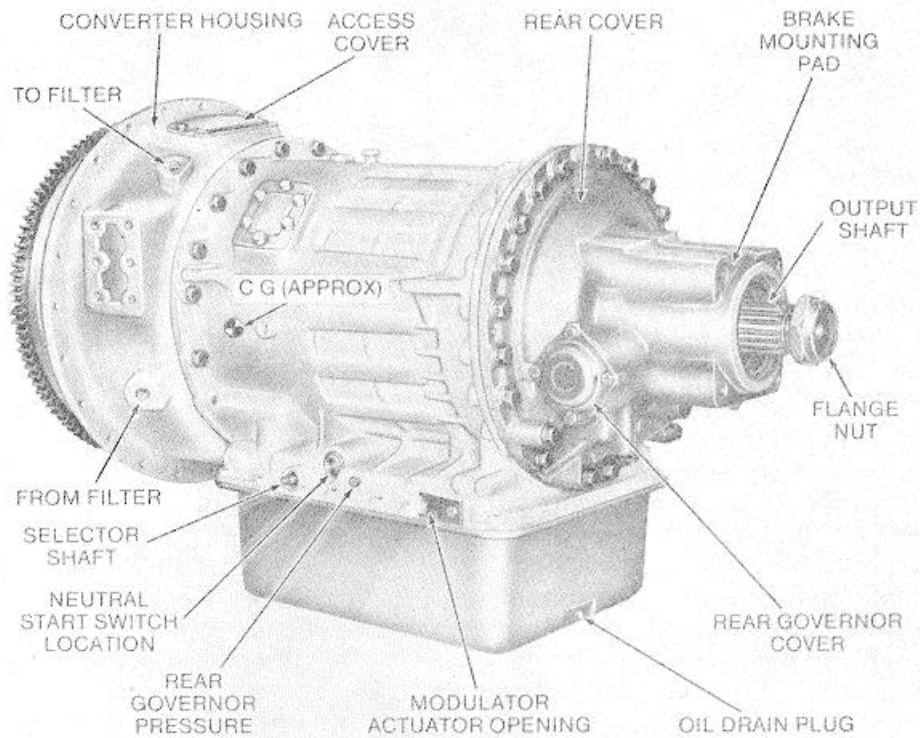
Supplementary information will be issued, as required, to cover any improvements which may occur after publication of this manual. Check with your dealer to ensure you have the latest information.

1-3. ORDERING PARTS

a. Transmission Nameplate. The nameplate (fig. 1-9) is located on the right-rear side of the transmission housing. The nameplate displays the transmission serial number, part number (assembly number), and model number. All three of these must be supplied when ordering replacement parts or requesting service information.

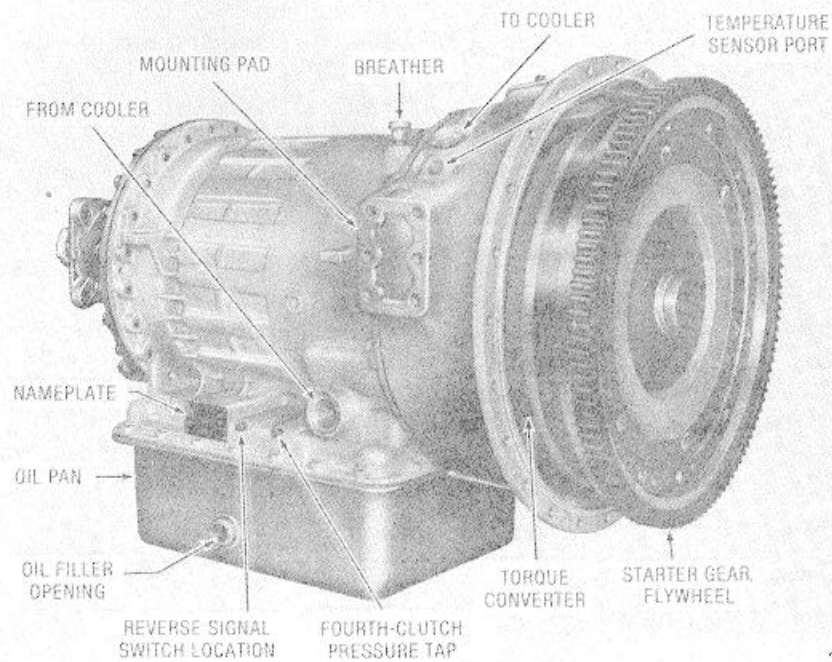
b. Parts Catalog. All replacement parts should be ordered from your dealer. These parts are listed in the Parts Catalog SA 1268. Do not order by illustration item numbers used on exploded views in this manual.

HT 740D, HT 750D AUTOMATIC TRANSMISSIONS



S1916

Fig. 1-1. Model HT 740D transmission-left-rear view



S1917

Fig. 1-2. Model HT 740D transmission-right-front view

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GENERAL INFORMATION

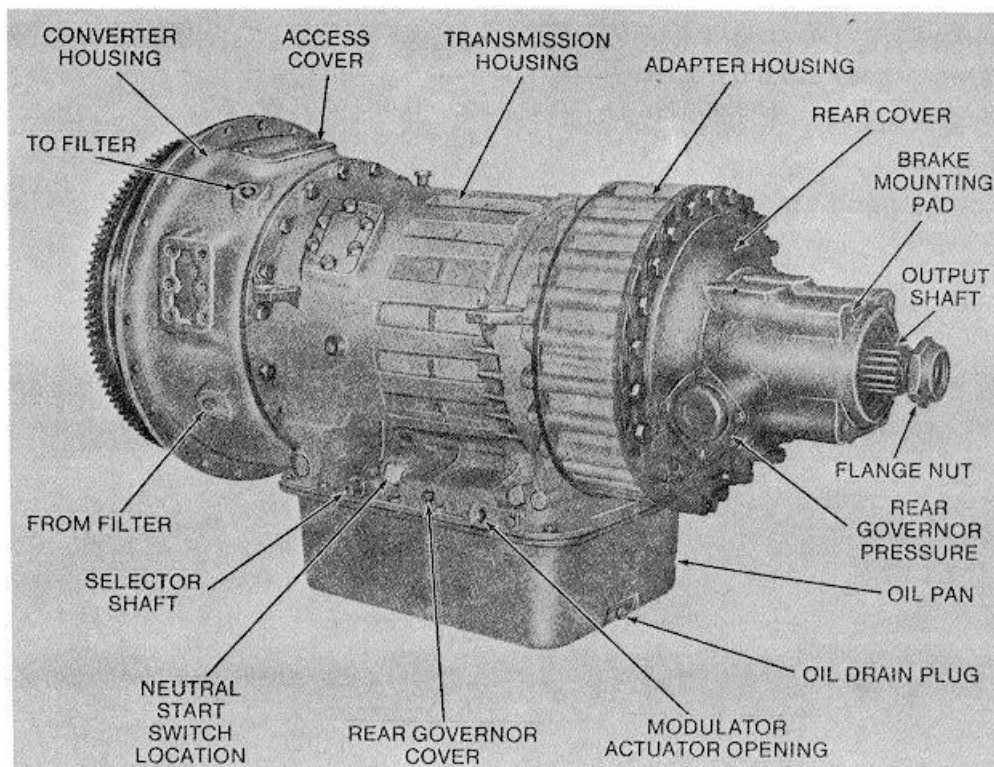


Fig. 1-3. Model HT 750 transmission-left-rear view

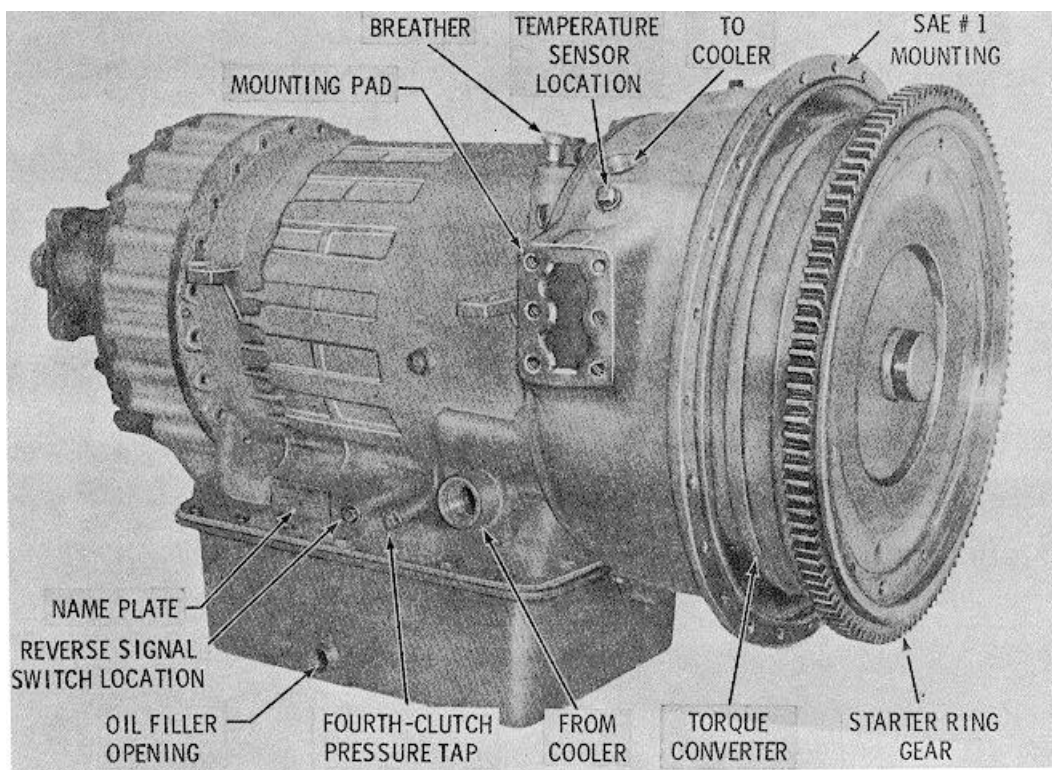


Fig. 1-4. Model HT 750 transmission--right-front view