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MANUAL PREVIEW

Versatile

Service Manual

756, 836, 846, 876,
856, 936, 956, 976

Chassis Only 4 Wheel Drive

Volume 1 of 2

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SECTION 5

DRIVE TRAIN

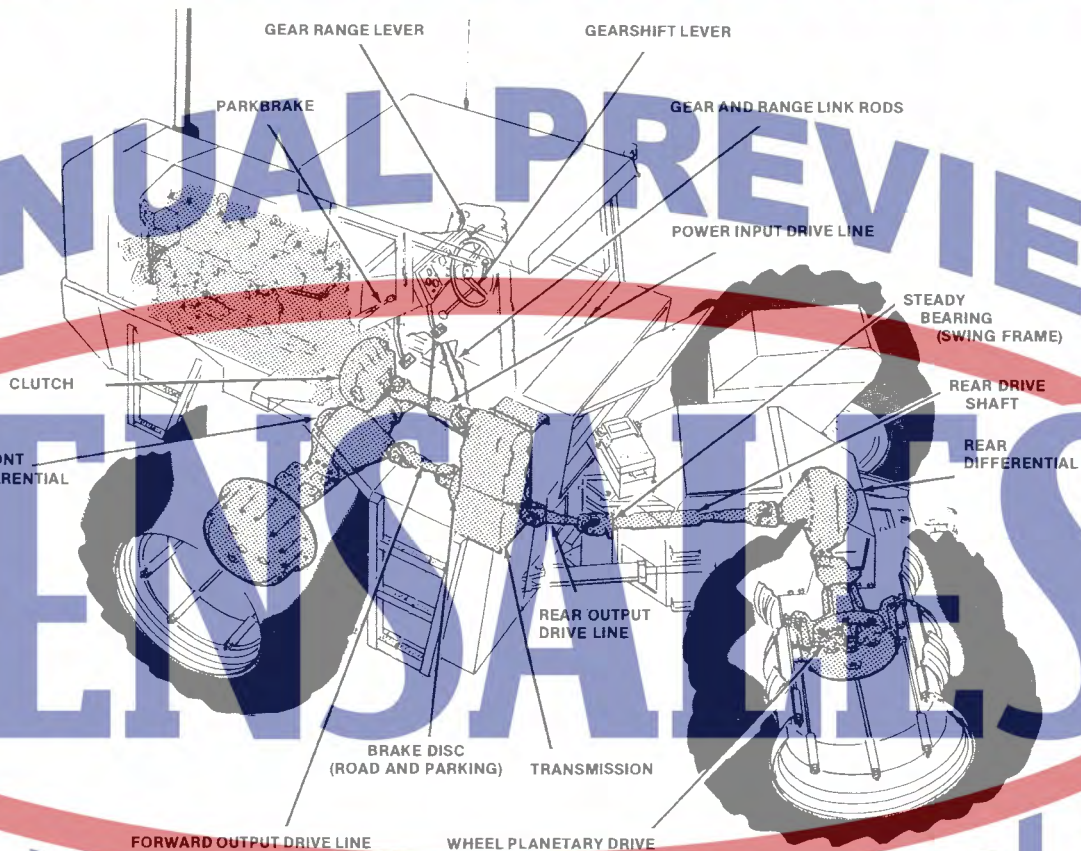


FIGURE 5-1: Drive Train

1 INTRODUCTION

The drive train includes all components between the engine and drive wheels that directly transmit power.

2 DESCRIPTION AND OPERATION

2.1 General

The drive train (Ref. Figure 5-1) consists of a dry-type, double-disc, mechanical clutch; a 16 selection manual transmission; and outboard planetary-type front and rear axle units interconnected by means of three drive lines.

The front and rear axle units are identical except for differences in the helical input gearing to account for the different relative direction of rotation of the axles with respect to the drive lines. Each axle unit contains a standard differential (or an optional locking differential) and a planetary drive at each wheel. The planetary drives create gear reduction at the wheels.

SEPARATING HOUSING HALVES.

1. Remove capscrews (Figure 12-11, 22 and 42) and capscrews (Figure 12-10, 15). See Figures 6-21 and 6-22.

2. Use two pusher screws in the threaded holes provided and loosen the rear housing from the front housing. See Figure 6-22.

3. Carefully hoist off the rear housing. See Figure 6-23.

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Figure 6-21. Removing or Installing Capscrews that Secure Housing Halves Together.

Figure 6-23. Removing or Installing Rear Housing.

NOTE

Figure 6-24 shows the upper clutches (number 1 through 6) installed in the front housing.

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CLUTCHES 3 & 4

CLUTCHES 1 & 2

CLUTCHES 5 & 6

Figure 6-22. Capscrews Securing Housing Halves Together.

Figure 6-24. Upper Clutch Pack Assemblies in Front Housing.

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PUMP COUPLING

Figure 6-3. Pump Adapter Removed.

NOTE

Snap rings (9 and 10) in the bores of the pump coupling and pump adapter need not be removed unless they are damaged.

7. Remove the retaining capscrew (See Figure 6-4), retainer washers, shims, and O-ring from the input and output yokes. See Figures 6-5 and 6-6.

Figure 6-5. Retainer Washer and Shims Removed from Input Shaft.

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Figure 6-4. Removing or Installing Capscrew on Input Yoke.

Figure 6-6. Retainer Washer and Shims Removed from Rear Output Yoke.

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Pump Exploded View. Figure 12-24.

Item	Description	Qty
1	COVER, Rear	1
* 2	SEAL, Pre-load (Black)	2
* 3	SEAL, Load (Blue or Gold)	2
* 4	PLATE, Wear	2
5	PIN, Dowel	2
6	PLATE, Gear	1
7	GEAR, Idler	1
* 8	RING, Seal	2
* 9	SEAL, Oil	1
10	COVER, Front	1
11	GEAR, Drive	1

* Parts furnished in Kit Number K-544.

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anytime the receiver/dryer's ports are cool to touch or sweat during system operation; when cloudiness appears in the sight glass during operation. The receiver/dryer is the horizontal tank on the condenser right side (Figure 9-21).



FIGURE 9-21: Receiver/Dryer Replacement

1. Discharge system (Para 4).
2. Disconnect and plug hoses connected to receiver/dryer.
3. Remove flange screw connecting receiver/dryer mounting strap to condenser and remove receiver/dryer.
4. Install new receiver/dryer to condenser with mounting strap and flange screw. Tighten securely.

5. Remove cap from one receiver/dryer port and quickly connect hose to open port. Repeat at remaining port. Tighten fittings securely.

6. Evacuate (Para 10), charge (Para 11), and leak test (Para 3.2) system.

9 Air Conditioning Hoses and Lines

9.1 INSPECTION

1. Air conditioning hoses must be free of cracks or breaks.
2. Air conditioning hoses should be firm.
3. Connections should be rust free, uncracked and without leaks.
4. Air conditioning lines must be free of kinks and twists.
5. Air conditioning lines must be free of rust, uncracked and without leaks.

9.2 REPLACEMENT

1. Discharge system (Para 4).
2. Remove fittings securing hose or line and remove hose or line.
3. Remove protective caps from hose or line and coat o-rings with clean refrigerant oil.
4. Install hose or line. Torque fittings according to Table 9-3.
5. Evacuate (Para 10), charge (Para 11) and leak test (Para 3.2) system.

TABLE 9-3: Air Conditioning Hose and Line Fitting Torque

Fitting Size	N.m	Lbf ft
5/8" 45° Flare	11 - 14	8 - 10
3/4" 45° Flare	24 - 28	18 - 20
7/8" 45° Flare	24 - 30	18 - 22
Discharge Hose to Compressor	24 - 30	18 - 22
Suction Hose to Compressor	30 - 34	22 - 25

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