"300" SERIES TRACTORS AND ENGINS

SERVICE MANUAL

RI307

Reprinted

CASE

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GROUP IV, TRANSMISSION

SPECIFICATIONS

Tractor Speeds — Standard Transmission

	10-28 Tires	11-24 Tires	10-24 Tires
1st Gear	2.5	2.4	2.3
2nd Gear	3.7	3.5	3.3
3rd Gear	4.8	4.6	4.4
4th Gear	11.9	11.3	10.8
Reverse	3.0	2.8	2.7

Tractor Speeds — Tripl-Range Unit

1st Gear	1.5	1.4	1.4
2nd Gear	2.2	2.1	2.0
3rd Gear	2.5	2.4	2.3
4th Gear	2.9	2.7	2.6
5th Gear	3.7	3.5	3.3
6th Gear	4.1	3.9	3.8
7th Gear	4.8	4.6	4.4
8th Gear	6.1	5.8	4.5
9th Gear	7.1	6.8	6.5
10th Gear	8.0	7.6	7.3
11th Gear	11.9	11.3	10.8
12th Gear	19.8	18.8	18.0
1st Reverse	1.8	1.7	1.6
2nd Reverse	3.0	2.8	2.7
3rd Reverse	4.9	4.7	4.5

SERVICE LUBRICATION

1. Fill transmission to mark on dip stick with SAE No. 90 lubricant. Dip stick should be turned into case before reading is taken. Do not fill above the mark on stick.
2. Due to a difference in design of the transmission case, the rear axle shaft bearings on tractors with flanged shaft are not lubricated by means of the transmission grease. An oil seal is installed on the inner end to prevent transmission grease from entering the axle housing and pressure gun fittings are provided to grease the bearings. Use a good grade of pressure gun grease — three to four strokes every 250 hours of operation.
3. The Tripl-range gear assembly is lubricated by oil in the hydraulic reservoir of the torque tube. See section on torque tube for oil specifications.

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IMPORTANT

USE THIS MANUAL IN CONJUNCTION WITH, (FORM R. I. 258 DEALERS SERVICE "VA" TRACTORS.) IN CASES WHERE MAJOR ASSEMBLIES OF THE MODEL "300" TRACTOR ARE SIMILAR TO THE "VA" SERIES, REFERENCE HAS BEEN MADE ON SPECIFIC PAGES IN THIS MANUAL. DIESEL ENGINES ARE COVERED IN SEPARATE MANUAL.

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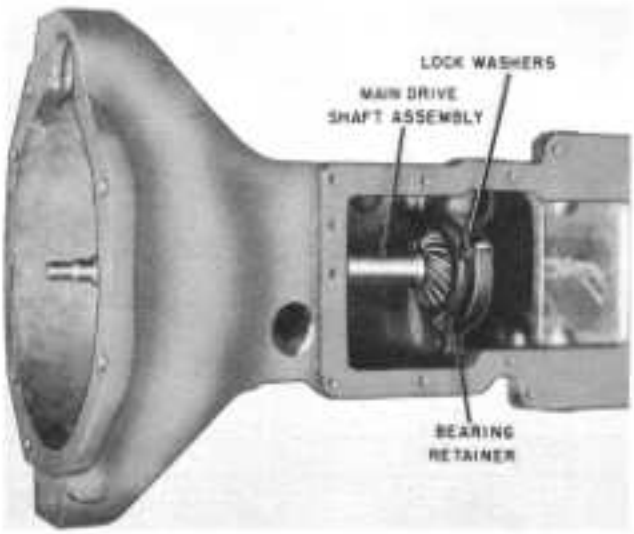


Figure III-4. Installing Drive Shaft

INSTALLING HYDRAULIC PUMP AND TACHOMETER DRIVE ASSEMBLY

The hydraulic pump and tachometer drive must be assembled as a unit before being installed in the torque tube. Figs. III-5 and III-6.

1. Install oil seal in gear and shaft assembly using the G-15016 driver.
2. Install ball bearing on gear assembly and secure in place with snap ring.
3. Press tachometer drive gear on shaft far enough to contact shoulder on shaft.
4. Install oil seal in housing using G-13501 driver and G-15015 plug.
5. Attach gear assembly to housing with bearing retainer cap. Lock bolts with washers. Fig. III-6.
6. Install snap ring on shaft.
7. Coat the ball and socket of the clutch throw-out yoke with "Lubriplate" or similar lubricant.
8. Attach yoke by turning stud into housing as far as possible.

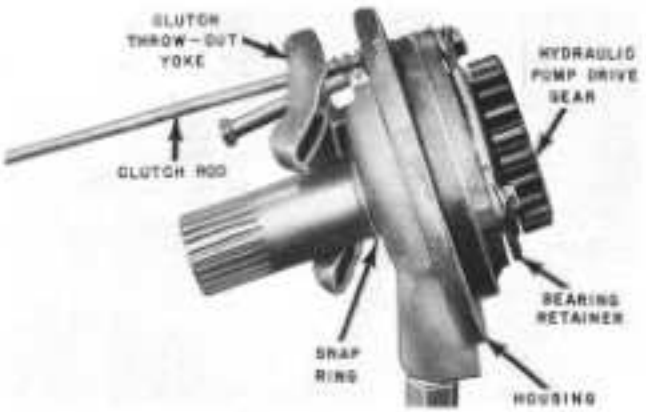


Figure III-5. Pump and Tachometer Drive

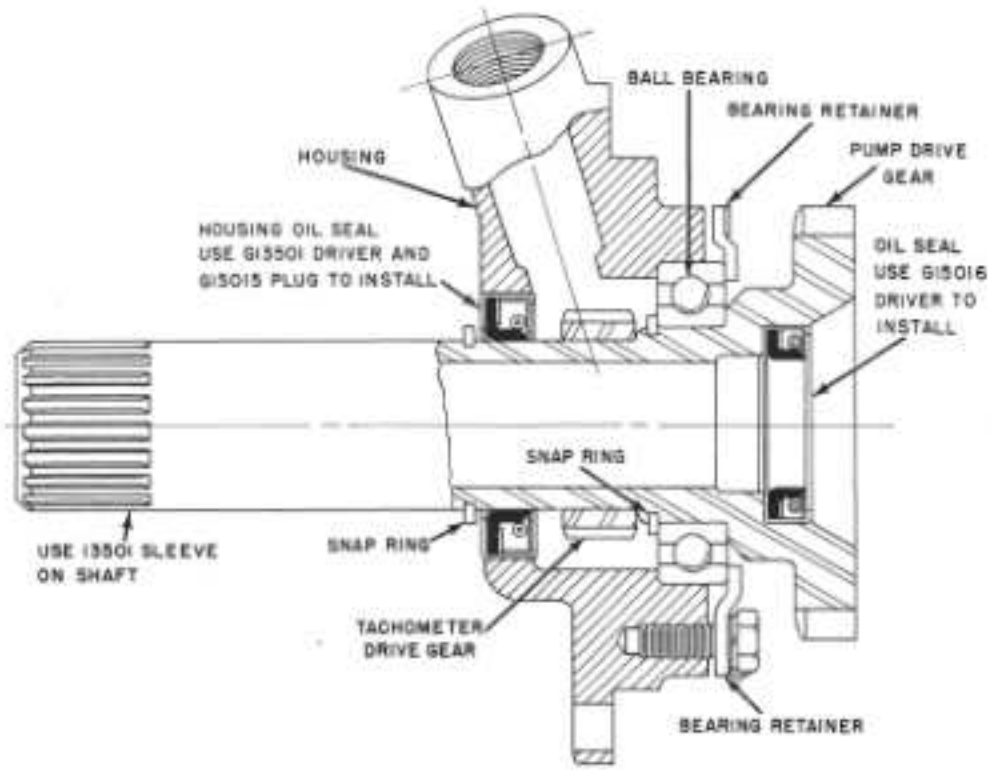


Figure III-6. Pump and Tachometer Drive

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