



R 14970

- 1 - Pivot Bracket
- 2 - Cap Screw
- 3 - Expansion Plug
- 4 - Cap Screw
- 5 - Cap Screw
- 6 - Washer
- 7 - Grease Fitting
- 8 - Dowel

- 9 - Pivot Pin
- 10 - Front Axle
- 11 - Bushing
- 12 - Packing
- 13 - Knuckle Pin
- 14 - Bushing
- 15 - Taper Bolt
- 16 - Dust Excluder

- 17 - Knuckle
- 18 - Cap
- 19 - Thrust Washer
- 20 - Nut
- 21 - Lock Washer
- 22 - Grease Fitting
- 23 - Pivot Pin

Fig. 2-Front Axle (Standard Tractor, Fixed Tread)

GENERAL INFORMATION

The front axle assembly consists of the axle housing, pivot bracket and pins, steering bell-crank, knee, front wheel knuckles, steering arms and tie rods.

Remove the front axle assembly if new bushings are to be installed in axle housing.

REMOVAL

Install a JDG-7 front lift bracket and raise front end of tractor slightly to remove weight from front axle.

Relieve any hydraulic pressure within the steering system by turning the wheel back and forth until resistance is felt.

Disconnect steering hoses at the manifold end, and remove steering cylinder rear pins.

Support the axle housing with a floor jack and remove cap screws from pivot bracket (Fig. 2).

Raise the front end of tractor enough to allow axle assembly to be rolled forward, away from tractor.

REPAIR

Service of the front axle housing or the knee will usually be limited to the replacement of bushings or pins. Examine all parts for wear, referring to specifications section for dimensions of new parts.

If new bushings are to be used, be sure that the inside diameter is within specifications when assembled into the bore. Ream a newly installed bushing if it is swelled beyond specified limits.

When new knee bushings or knuckle bushings are installed, be sure that the hole in bushing lines up with the grease fitting hole in knee. Adjust knuckle end-play to specifications by using the correct thickness of thrust washers.

Use Fig. 1 and 2 as a guide for assembling parts. Tighten bolts and cap screws to specified torque.

INSTALLATION

Move axle assembly back under tractor front end.

Connect steering cylinder hoses to manifold, and remove JDG-7 hoist bracket from front of tractor.

Check toe-in adjustment, and adjust if necessary. **ADJUST TIE RODS SO LENGTH OF EACH IS THE SAME.**

Start engine and bleed steering system.

SPECIFICATIONS

Item	Dimension
Toe-in adjustment	1/8 - 3/8 in.
Axle housing pivot pin bushings	
ID (assembled)	2.011 ± 0.007 in.
OD (press into 2.251 ± 0.001 in. bore)	2.2545 ± .0025 in.
Length	2.00 in.
Steering bellcrank pivot bushings	
ID (assembled)	2.0015 - 2.0045 in.
OD (press into 2.1845 - 2.1855 in. bore).	2.1890 - 2.1905 in.
Length	1 in.
Knee bushings (adjustable tread)	
ID (assembled)	2.001 - 2.004 in.
OD (press into 2.185 in. bore)	2.189 - 2.190 in.
Length	2.00 in.
Knuckle bushings (fixed tread)	
ID (assembled)	1.237 - 1.241 in.
OD	1.4995 in.
Length	1.37 in.
Knuckle wheel bearing surfaces	
Inner	2.2490 ± 0.0005 in.
Outer	1.4360 ± 0.0005 in.
Knuckle end-play	0.005 - 0.045 in.
Knuckle spindle shaft diameter	1.9990 ± 0.0005 in.