

Group 5 SPECIFICATIONS

	JD301 Gasoline	JD301 Diesel	JD401 Gasoline	JD401 Diesel
ENGINE				
Net flywheel horse- power (observed) at 2500 rpm	43.0	43.0	59.0	59.0
Gross flywheel horsepower	46	46	63	63
Maximum torque in ft-lbs at 1300 rpm (observed) (nominal)	110.0	110.0	145.0	145.0
Number of cylin- ders	3	3	4	4
Bore and stroke, inches	3.86x3.86	3.86x4.33	3.86x3.86	3.86x4.33
Displacement in cubic inches	135.0	152.0	180.0	202.0
Compression ratio	7.5 to 1*	16.2 to 1	7.5 to 1*	16.2 to 1
Firing order	1-2-3	1-3-4-2	1-3-4-2	1-2-3
N.A.C.C. or A.M.A. horse- power rating for tax purposes	17.88	17.88	23.84	23.84
Intake valve clearance	0.014-in.	0.014-in.	0.014-in.	0.014-in.
Exhaust valve clearance	0.022-in.	0.018-in.	0.022-in.	0.018-in.
Full engine power	2500 rpm		2500 rpm	
CLUTCH	Single stage spring-loaded, dry disk foot-operated.			
ELECTRICAL SYSTEM				
Battery voltage				12 volts
Battery terminal grounded				Negative
TRANSMISSION				
Type				Collar shift
Gear selections	8 forward and 4 reverse			
Shifting	4 speeds each in high, low, and reverse ranges. Mechanical park lock included.			

REVERSER (OPTIONAL)

Type Planetary gear and wet clutch
Number reverse
speeds 4 (in low range speeds only)

DIFFERENTIAL AND FINAL DRIVES

Type Planetary reduction final
drives wet spiral bevel
gear drive differential

Differential Lock . . . JD301 . . . Foot operated mech-
anical lock, spring-
loaded out of engage-
ment

JD401 . . . Foot-operated
mechanical lock, spring-
loaded out
of engagement.

POWER TAKE-OFF

Type Continuous running
or transmission-
driven types avail-
able in 540 and/or
1000 rpm options

HYDRAULIC SYSTEM

Type Closed-center,
constant-pressure

BRAKES Hydraulically ac-
tivated wet-disk
types

* 8.6 to 1 High Altitude Pistons

Group 25 SEPARATION

REMOVING AND INSTALLING FRONT END ASSEMBLY

Removal

Disconnect battery ground straps. Remove front ballast if used. Remove grille screens and hood.

Drain radiator and disconnect inlet and outlet hoses. Disconnect reservoir and cooler lines. Disconnect air cleaner hose.

Remove radiator top support rod and disconnect fan shroud and slip it back over fan. Remove cap screws securing radiator to front end support and slide radiator out left side of tractor.

Close fuel shut-off valve at bottom of fuel tank and disconnect fuel lines. Disconnect fuel gauge sender wire.

Remove clamps securing hydraulic oil lines to engine on right side of tractor. Disconnect pressure line at connector at right front side of engine. Disconnect main pump inlet line and reservoir return line at front of clutch housing. *Do not lose check valve assembly in end of main pump inlet line when removing line.*

Disconnect steering drag link rod from front steering arm.

Support tractor under clutch housing. Insert wooden blocks between front axle and front end support to keep front end from tipping.

Loosen set screw in hydraulic pump drive coupling. Do not lose key from drive coupling when pump shaft is pulled from coupling.

Install JDG-2K splitting stand under front end as shown in Figure 1. Modify the standby slotting one hole in each side so that two screws can be installed on each side of support.

Remove attaching cap screws from front end support and roll front end away from engine (Fig. 1).

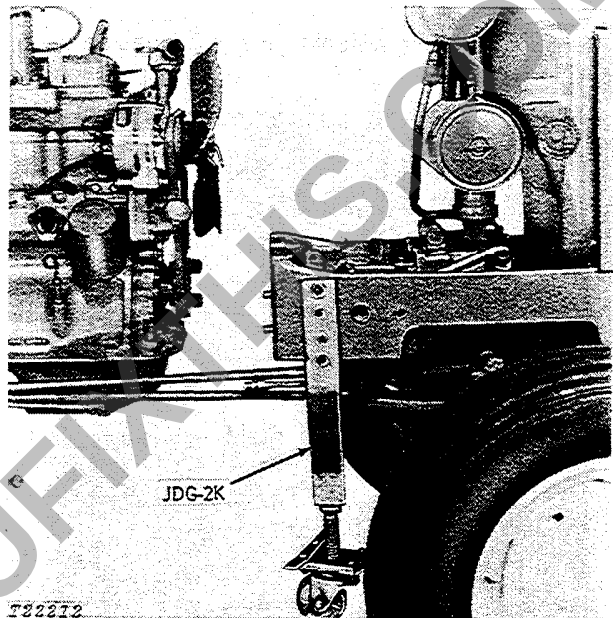


Fig. 1-Separating Front End Support From Engine

Use caution to prevent front assembly from tipping forward. Drain fuel tank if necessary.

Installation

Roll front end up to engine and connect and install all parts removed.

Position main pump inlet line and reservoir return line retainer between lines and against clutch housing before inserting lines into clutch housing. Insert check valve assembly in main pump inlet line before installing line.

Do not secure main pump drive shaft to coupling until front end support is secured to engine block.

Tighten all cap screws to specifications.

Group 5

DIAGNOSIS

DIAGNOSING ENGINE MALFUNCTIONS

The following is a quick guide for diagnosing engine malfunctions. Each malfunction is elaborated further in the section or group in this manual pertaining specifically to the component or system.

Engine Hard To Start, Will Not Start

- Check fuel system (Section 30).
- Check electrical system (Section 40).
- Check ignition system (Section 40).
- Check air system (Section 30).
- Low compression (Group 10).

Engine Starts, Won't Continue To Run

- Check fuel system (Section 30).
- Check ignition system (Section 40).
- Check air system (Section 30).

Engine Loses Power

- Check fuel system (Section 30).
- Check ignition system (Section 40).
- Check air system (Section 30).
- Low compression (Group 10).

Engine Emits Black or Gray Exhaust Smoke

- Check air intake system (Section 30).
- Check fuel system (Section 30).
- Low compression (Group 10).

Engine Has Low Oil Pressure

- Check lubrication system (Group 15).

Engine Speed is Erratic

- Check fuel injection pump (Section 30).
- Check governor (Group 20).
- Check speed control linkage (Group 20).

Engine Makes Abnormal Noise

- Check timing (Section 40; Section 30).
- Improper fuel (Section 30).
- Worn or improperly adjusted engine parts (Group 10).
- Plugged injection nozzles (Section 30).

Engine Operates At Abnormal Temperature

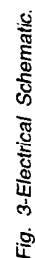
- Check cooling system (Group 25).
- Check ignition timing (Section 40).
- Check fuel injection timing (Section 30).

Engine Consumes Excessive Fuel

- Check fuel system (Section 30).
- Check ignition system (Section 40).
- Check air intake (Section 30).
- Low compression (Group 10).

Engine Misses

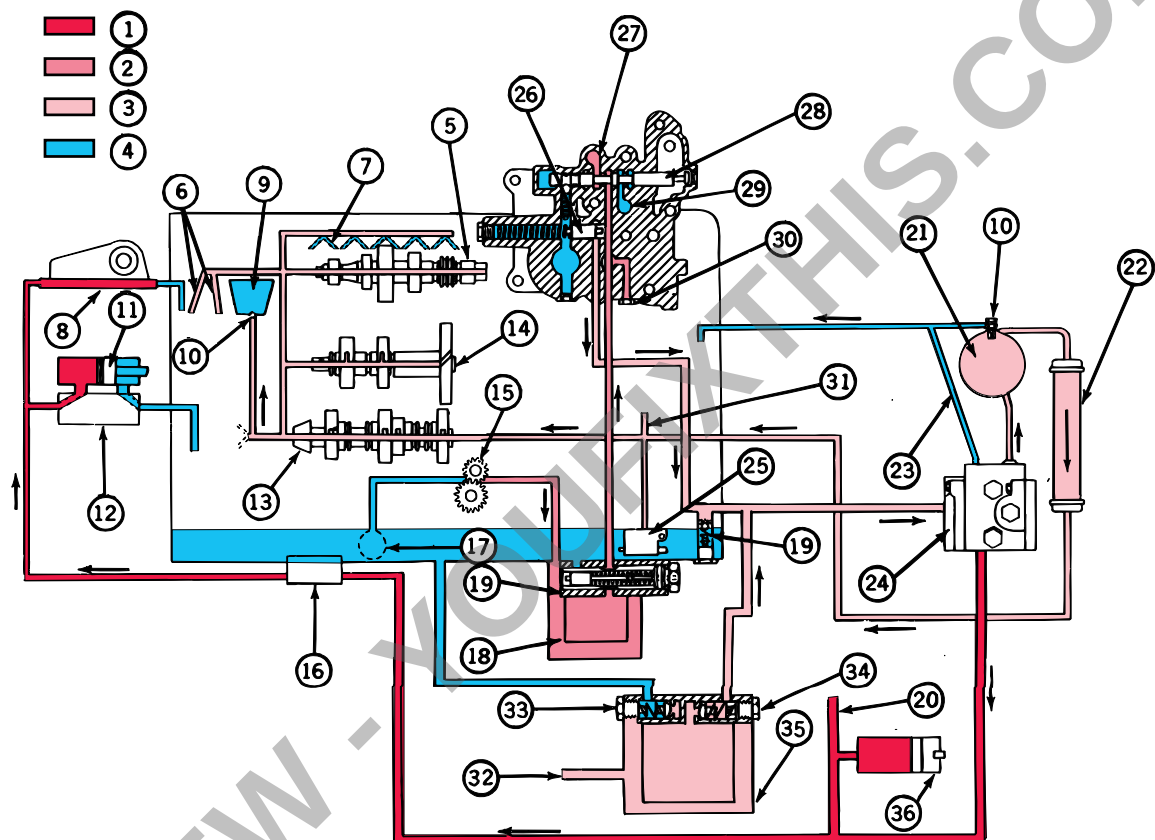
- Low compression (Group 10).
- Check fuel system (Section 30).
- Check ignition system (Section 40).



Group 5

GENERAL INFORMATION, TESTING AND DIAGNOSIS

GENERAL INFORMATION



T24843

- 1—High Pressure Oil
- 2—Intermediate Pressure Oil
- 3—Low Pressure Oil
- 4—Pressure Free Oil
- 5—Transmission Drive Shaft
- 6—Lube to Final Drives
- 7—Transmission Oil Spray
- 8—Rockshaft
- 9—Transmission Oil Cup
- 10—Check Valve
- 11—Remote Cylinder
- 12—Selective Control Valve
- 13—Differential Drive Shaft
- 14—Countershaft

- 15—Transmission Oil Pump
- 16—Pressure Control Valve
- 17—Intake Screen
- 18—Transmission Filter
- 19—Relief Valve
- 20—To Power Steering Valve
- 21—Hydraulic Reservoir
- 22—Oil Cooler
- 23—Bleed Line
- 24—Main Hydraulic Pump
- 25—Brake Valve
- 26—Pressure Regulating Valve
- 27—To Hi-Clutch

- 28—Hi-Lo Shift Control Valve
- 29—To Lo-Brake
- 30—Pressure Tap
- 31—Lube to Hi-Lo Shift Unit
- 32—Return from Mounted Equipment*
- 33—Relief Valve*
- 34—Check Valve*
- 35—Auxiliary Filter*
- 36—Accumulator*

* With 3.01 cu. in. hydraulic pump.

Fig. 1-Hydraulic System for Tractors Equipped with Hi-Lo Shift

SPECIFICATIONS

STANDARD TORQUE CHART

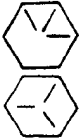
RECOMMENDED TORQUE IN FT-LBS COARSE AND FINE THREADS			
	B	D	F
			
Bolt Diameter	Plain Head	Three Dashes	Six Dashes
1/4	Not used	10	14
5/16	Not used	20	30
3/8	Not used	35	50
7/16	35	55	80
1/2	55	85	120
9/16	75	130	175
5/8	105	170	240
3/4	185	300	425
7/8	160	445	685
1	250	670	1030
1-1/8	330	910	1460
1-1/4	480	1250	2060

Fig. 15-Standard Torque Requirements

The types of bolts and cap screws are identified by head markings as follows:

Plain Head: (B-strength) regular machine bolts and cap screws.

3-Dash Head: (D-strength) tempered steel high-strength bolts and cap screws.

6-Dash Head: (F-strength) tempered steel extra high-strength bolts and cap screws.

Machine bolts and cap screws 7/8-inch and larger are sometimes formed hot rather than cold, which accounts for the lower torque.

The standard torque requirements chart (Fig. 15) is based on manufacturer's recommendations and should be observed in all cases where specific requirements are not mentioned.

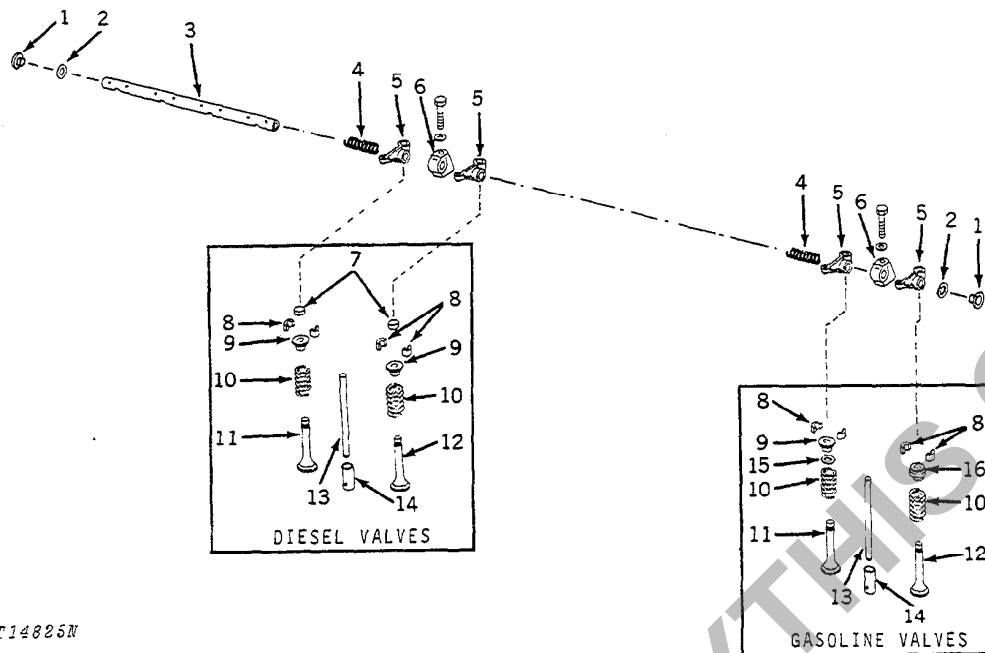
TORQUE VALUES

Item	Torque (Ft-lbs)
Wheels	
Rear Steel Disk to Axle	
JD301 and JD401	130
JD401-A	175
Rear Cast Disk to Axle	130
Rear Wheel Rim to Disk	170
Front Wheel Rim to Axle	100
Front End Support-to-Engine Block	
(5/8-inch)	170
(9/16-inch)	130
Engine-to-Clutch Housing	170
Clutch Housing-to-Transmission	85
Axle Assemblies-to-Transmission	85
Loader Front Mounting	
Bracket-to-Front End Support	300
Loader Mounting, JD401-A Loader	
Side frame to rear axle housing	375
Side frame to side rail mounting	180
Roll-Gard and Fenders-to-	
Rear Axle Housing	300

SPECIAL TOOLS

No.	Name	Use
Convenience Tools		
JD-244	Lifting Eyes	Remove Engine
JDG-1	Sling	Remove Engine
JDG-2K	Splitting Stand	Remove Front End Assembly
JDG-2A	Support Stand	Support Rear of Unit

Order from Service Tools Inc., 1901 Indiana Avenue Chicago, Illinois 60616



T14825N

- 1—Plug (2 used)
- 2—Washer (2 used)
- 3—Rocker Arm Shaft
- 4—Spring (2 used)
- 5—Rocker Arm with Adjusting Screw (6 used)
- 6—Bracket (3 used)
- 7—Valve Stem Caps (Diesel) (6 used)
- 8—Keepers (12 used)
- 9—Valve Spring Cap (6 used Diesel) (3 used Gasoline)

- 10—Spring (6 used)
- 11—Intake Valve (3 used)
- 12—Exhaust Valve (3 used)
- 13—Push Rod (6 used)
- 14—Cam Follower (6 used)
- 15—Intake Valve O-ring (Gasoline) (3 used)
- 16—Exhaust Valve Spring Cap Rotator (Gasoline) (3 used)

Fig. 1-Rocker Arm Assembly

Check to determine if cylinder head is flat and smooth. If it is necessary to resurface the bottom deck of the head, remove no more material than absolutely necessary (not to exceed 0.030 inch).

On diesel engines, check distance from the bottom deck of the cylinder head to the valves when seated. The distance for intake valves must be 0.023 to 0.047 inch, the distance for exhaust valves must be 0.038 to 0.072 inch.

Refacing Valves

If end of valve stem on gasoline engine is excessively pitted or worn by rocker arm, grind down end of valve until squared. On diesel engines, replace valve stem caps if worn or damaged.

Inspecting Valve Springs

Check compression strength of springs.

Inspecting Rocker Arm Assembly

Make sure that rocker arm oil holes are not plugged.

If ends of arms are worn, replace or resurface them.

Thoroughly clean holes in rocker arm mounting brackets. This is especially important for the rear bracket, because oil is fed to the rocker arm shaft through this hole.

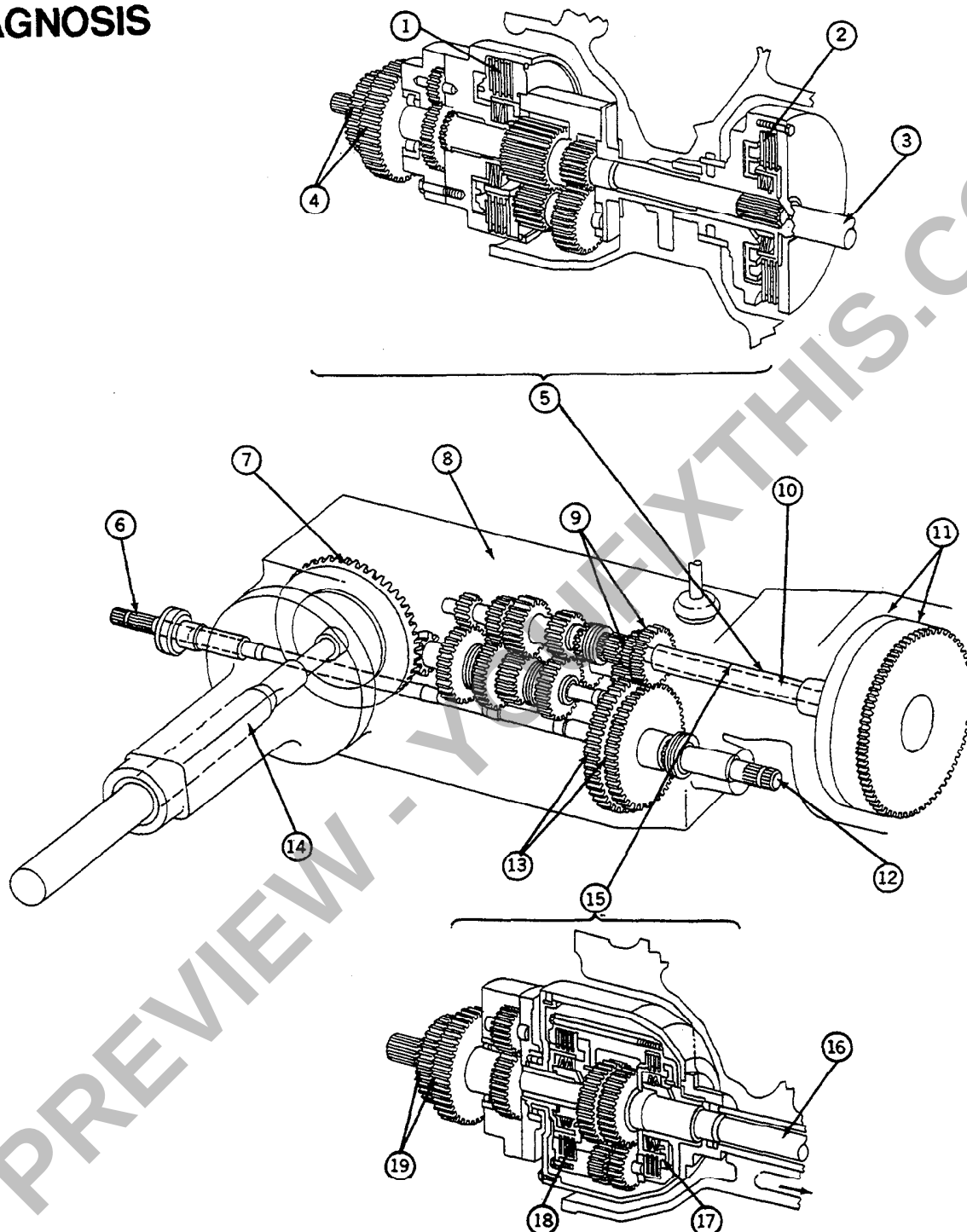
On gasoline engines, replace the intake valve stem O-ring.

If a failed valve has been replaced, also replace the rocker arm and push rod for that valve.

Valve Rotators (Gasoline)

On gasoline engines, inspect valve rotators. If rotator will not turn freely in one direction, replace with a new part.

Group 5 DIAGNOSIS



T22234

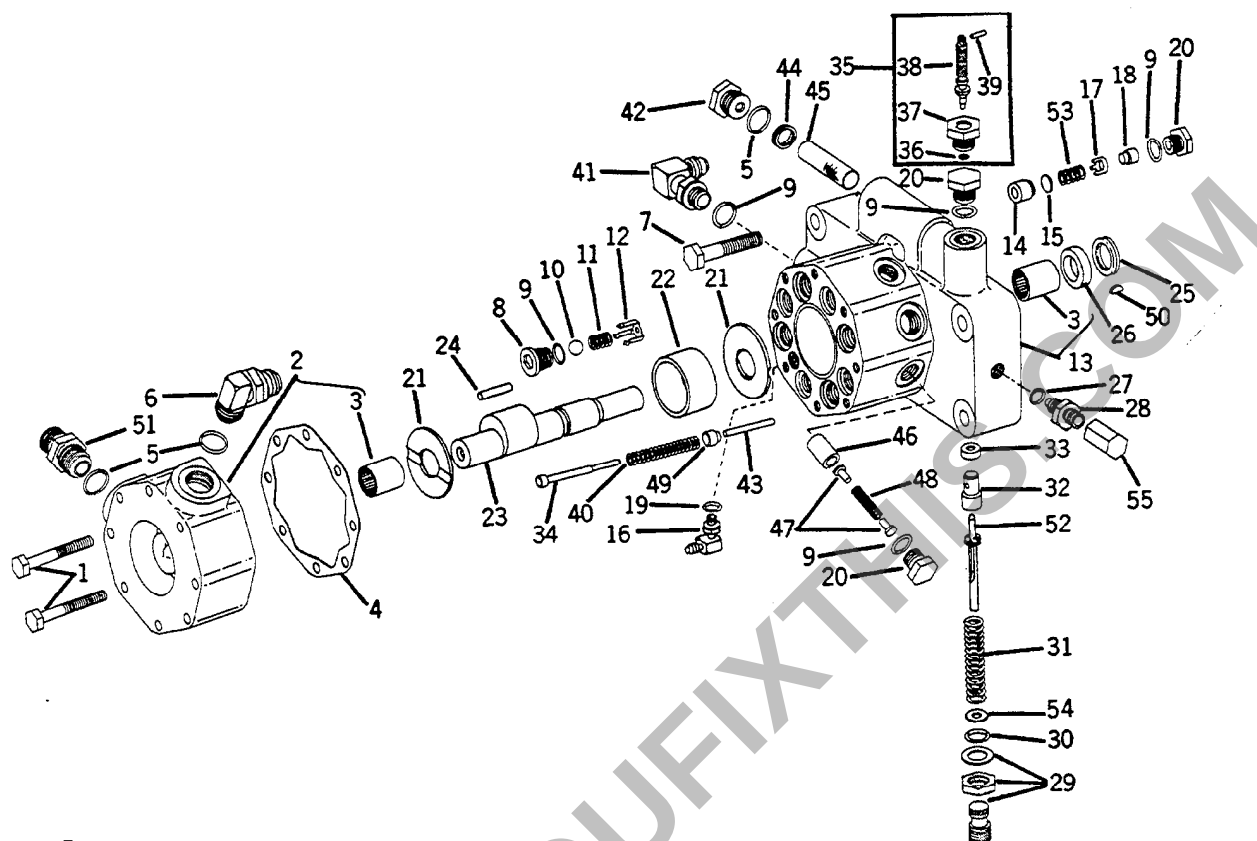
- 1—Reverse Brake Assembly
- 2—Forward Clutch Assembly
- 3—Clutch Shaft
- 4—PTO Drive Gears
- 5—Reverser Assembly

- 6—Rear PTO
- 7—Differential Assembly
- 8—Transmission Assembly
- 9—PTO Drive Gears
- 10—Clutch Shaft

- 11—Engine Flywheel and Clutch Assembly
- 12—Mid PTO
- 13—PTO Driven Gears
- 14—Axle Assemblies

- 15—Hi-Lo Assembly
- 16—Clutch Shaft
- 17—Hi-Clutch Assembly
- 18—Lo-Brake Assembly
- 19—PTO Drive Gears

Fig. 1—Power Train Components



T 16753

- | | | |
|--|---|--------------------------------------|
| 1—Cap Screw (8 used) | 19—O-Ring | 38—Shut-Off Screw |
| 2—Hydraulic Pump Cover | 20—Plug (17 used) | 39—Spring Pin |
| 3—Needle Bearing (Later Models) (2 used) | 21—Special Thrust Washer (2 used) | 40—Crankcase Outlet Valve Spring |
| Bushing (Early Models) (2 used) | 22—Race | 41—Elbow |
| 4—Gasket | 23—Hydraulic Pump Shaft | 42—Plug |
| 5—O-Ring Packing (3 used) | 24—Roller Bearing (33 used) | 43—Crankcase Outlet Valve Piston Pin |
| 6—Elbow | 25—Seal | 44—Packing (2 used) |
| 7—Cap Screw (4 used) | 26—Packing | 45—Stroke Control Valve Filter |
| 8—Inlet Valve Seat (4 used) | 27—O-Ring Packing | 46—Piston (8 used) |
| 9—O-Ring Packing (26 used) | 28—Connector | 47—Piston Spring Guide (16 used) |
| 10—Inlet Valve Ball (8 used) | 29—Stroke Control Valve Adjusting Screw | 48—Piston Spring (8 used) |
| 11—Inlet Valve Spring (8 used) | 30—O-Ring Packing | 49—Crankcase Outlet Valve |
| 12—Inlet Valve Guide (8 used) | 31—Stroke Control Valve Spring | 50—Woodruff Key |
| 13—Hydraulic Pump Housing | 32—Stroke Control Valve | 51—Connector |
| 14—Outlet Valve Seat (8 used) | 33—Stroke Control Valve Seat | 52—Stroke Control Valve Guide |
| 15—Outlet Valve (8 used) | 34—Crankcase Outlet Valve Spring Guide | 53—Outlet Valve Spring (8 used) |
| 16—Elbow | 35—Hydraulic Pump Shut-Off | 54—Washer |
| 17—Outlet Valve Guide (8 used) | 36—O-Ring Packing | 55—Cap |
| 18—Outlet Valve Stop (8 used) | 37—Bushing | |

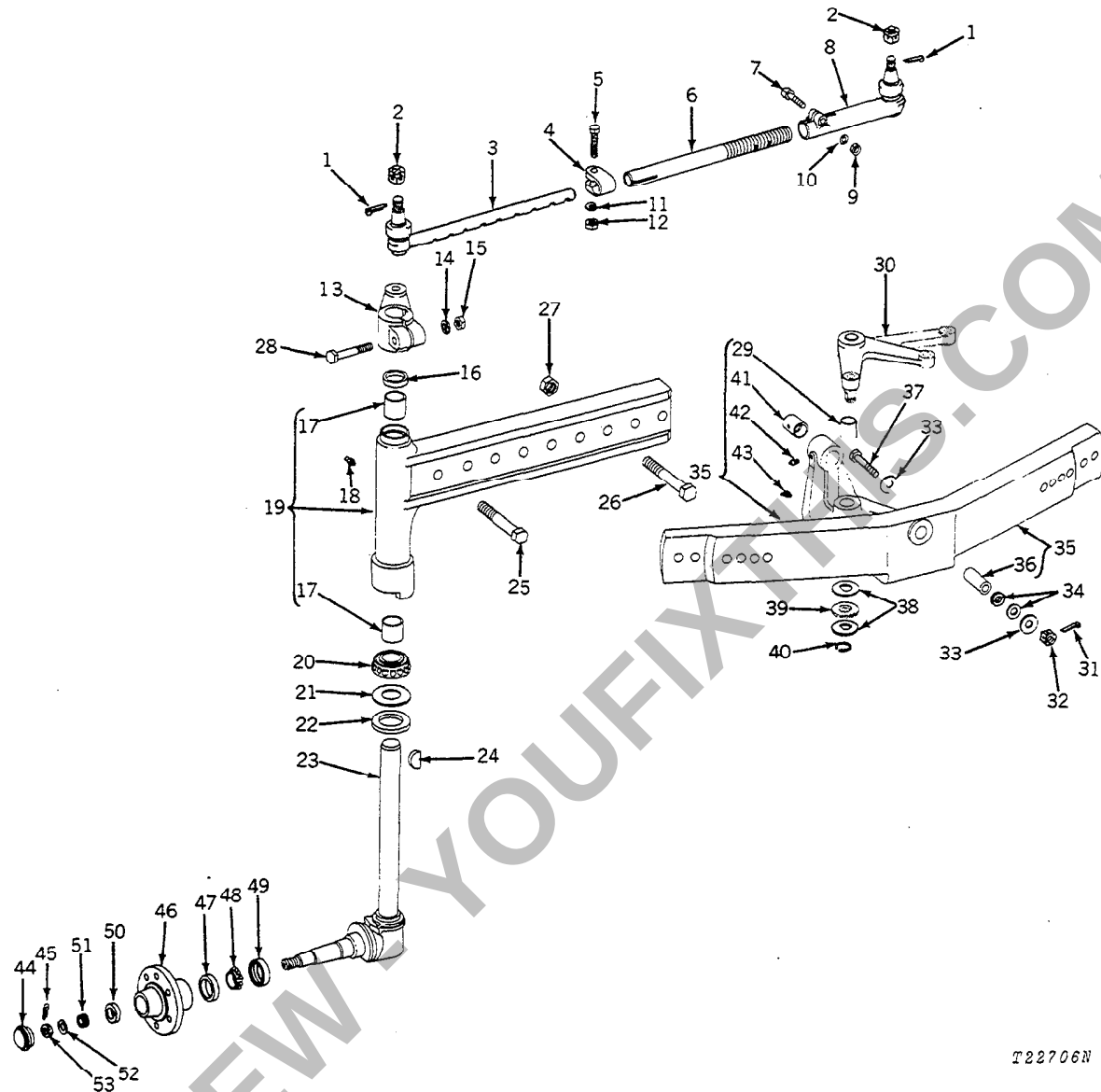
Fig. 2—Main Hydraulic Pump (1.38 Cubic-Inch Model Shown)

Check dimension of finished face of pump housing-to-bottom of cam and race bore. Wear at this point will give excessive pump shaft end play.

Check pump shaft bearing or bushing in housing for wear or scoring. Remove old bearing or bushing, using care not to mar machined surfaces in pump. On early models install new bushing to bottom of bushing bore. On later models install new bearing to specifications below finished surface of pump housing.

Examine pump shaft bore around quad ring seal groove. Wear at this point could cause crankcase oil leakage and cause the pump to be slow going out of stroke.

Check condition of outlet valve seats (14, Fig. 2) pressed into outlet valve bores. If seats are damaged, remove and drive in new seats with large chamfered end toward bottom of bore. Press seats in to specifications below spot face surface of bore. *Press on shoulder of seats only.*



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- | | | | |
|-------------------------|--|---------------------------|----------------------------|
| 1—Cotter Pin (2 used) | 15—Nut (2 used) | 28—Cap Screw (2 used) | 41—Bushing |
| 2—Slotted Nut (2 used) | 16—Upper Seal (2 used) | 29—Bushing (2 used) | 42—Grease Fitting |
| 3—Tie Rod End | 17—Bushing (4 used) | 30—Bellcrank | 43—Grease Fitting |
| 4—Clamp | 18—Grease Fitting (2 used) | 31—Cotter Pin | 44—Hub Cap |
| 5—Cap Screw | 19—Knee Assembly | 32—Slotted Nut | 45—Cotter Pin (2 used) |
| 6—Tube | 20—Thrust Bearing (2 used) | 33—Washer (2 used) | 46—Hub (2 used) |
| 7—Cap Screw | 21—Washer (2 used) | 34—Shim (0.015") (6 used) | 47—Bearing Cup (2 used) |
| 8—Tie Rod End | 22—Lower Seal (2 used) | 35—Axle Assembly | 48—Bearing Cone (2 used) |
| 9—Nut | 23—Spindle and Knuckle Assembly (2 used) | 36—Pivot Pin | 49—Oil Seal (2 used) |
| 10—Lock Washer | 24—Woodruff Key (2 used) | 37—Cap Screw | 50—Bearing Cup (2 used) |
| 11—Lock Washer | 25—Outer Cap Screw (2 used) | 38—Washer (2 used) | 51—Bearing Cone (2 used) |
| 12—Nut | 26—Inner Cap Screw (2 used) | 39—Shim (0.010") (2 used) | 52—Special Washer (2 used) |
| 13—Steering Arm | 27—Nut (4 used) | 40—Snap Ring | 53—Slotted Nut (2 used) |
| 14—Lock Washer (2 used) | | | |

Fig. 2-Front Axle Assembly (Adjustable)

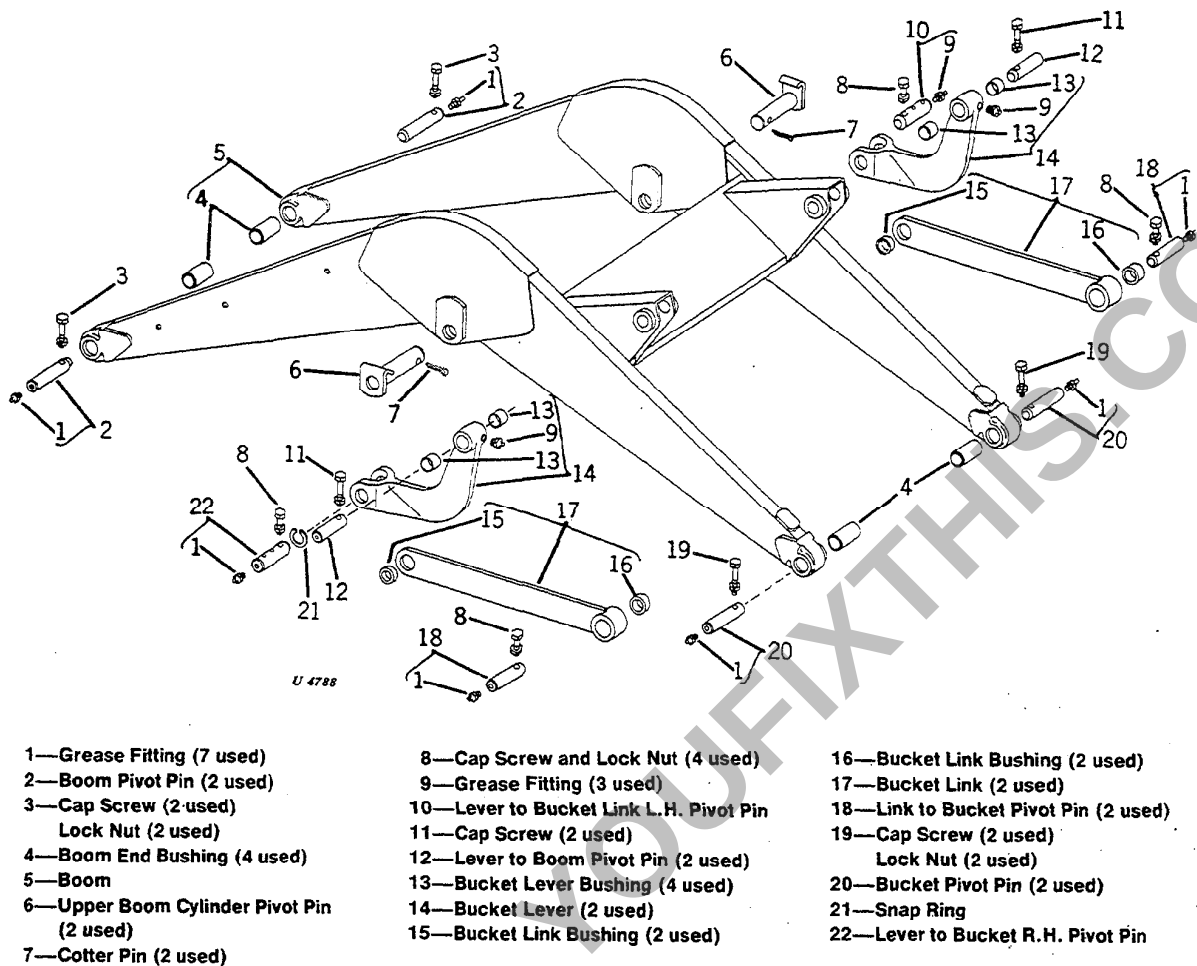


Fig. 5—Loader Boom and Bucket Linkage

REPAIR

CAUTION: To avoid possible injury always stop machine and lower or block up boom and bucket before servicing loader units.

Frame and Boom

See Section 20 for separation of frame from tractor.

Refer to Fig. 4 and 5 when disassembling and assembling boom, frame, and bucket linkage.

Inspect all parts for excessive wear or damage and repair or replace as necessary.

After assembling frame and boom, grease all fittings before resuming operation.

JD301-JD401 Tractors and Loaders

TECHNICAL MANUAL

TM-1034 (Feb-74)

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The specifications and design information contained in this manual were correct at the time it was printed. It is John Deere's policy to continually improve and update our machines. Therefore, the specifications and design information are subject to change without notice. Wherever applicable, specifications and design information are in accordance with SAE and IEMC standards.

Litho in U.S.A.

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Moline, Illinois
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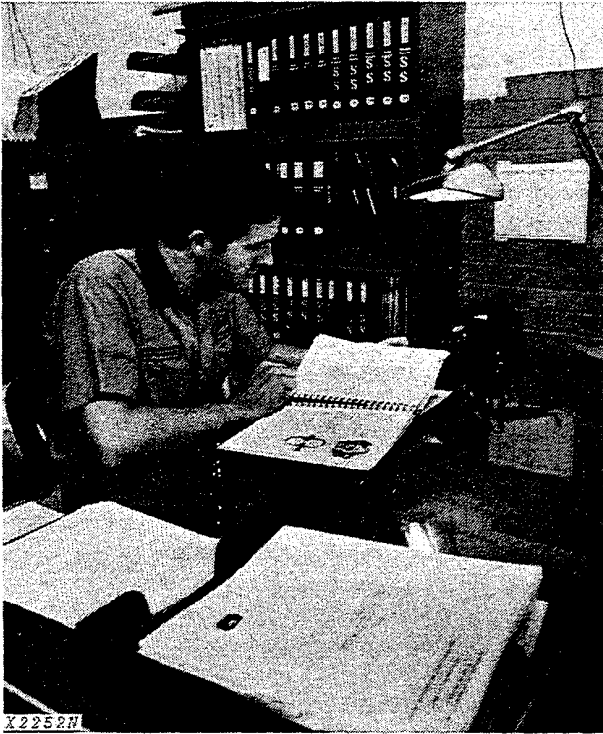
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INTRODUCTION



Use FOS Manuals for Reference



Use Technical Manuals for Actual Service

This technical manual is part of a twin concept of service:

- **FOS Manuals—for reference**
- **Technical Manuals—for actual service**

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

Fundamentals of Service (FOS) Manuals cover *basic* theory of operation, *fundamentals* of trouble shooting, *general* maintenance, and *basic* types of failures and their causes. FOS Manuals are for training new men and for reference by experienced men.

Technical Manuals are *concise* service guides for a *specific* machine. Technical Manuals are on-the-job guides containing only the vital information needed by a journeyman mechanic.



When a serviceman should refer to a FOS Manual for more information, a FOS symbol like the one at the left is used in the TM to identify the reference.

Some features of this technical manual:

- *Table of contents at front of manual*
- *Exploded views showing parts relationship*
- *Photos showing service techniques*
- *Specifications grouped for easy reference*

This technical manual was planned and written for you—a journeyman mechanic. Keep it in a permanent binder in the shop where it is handy. Refer to it whenever in doubt about correct service procedures or specifications.

Using the technical manual as a guide will reduce error and costly delay. It will also assure you the best in finished service work.



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

GOVERNOR AND SPEED CONTROL LINKAGE

SPECIFICATIONS

	Gasoline	Diesel
Fast idle		
Hand throttle full clockwise	2680 rpm	2650 rpm
Foot throttle pedal against footrest	2800 rpm	2800 rpm
Slow idle	600 rpm	800 rpm

Hand throttle spring test length	1.75 inches at 117 lbs.
Hand throttle facings thickness	0.060 inch

ADJUSTMENTS

GASOLINE

Carburetor-to-governor rod	1 turn short
Clearance of speed control rod end past governor lever attaching hole	1/8-inch

DIESEL

Override on pump lever (preload)	1/4-inch
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TORQUE VALUES

Item	Torque (in-lbs)
Injection pump slow idle adjusting lock nut	25
Throttle control cap	45 to 50
Throttle lever screw	20 to 25

SPECIAL TOOLS

No.	Name	Use
ESSENTIAL TOOLS		
JD240*	Driver	Installation of bushing in governor housing
JD241*	Driver	Removal and installation of open bearing in governor housing.
JD245*	Driver	Removal and installation of sealed bearing in governor housing.
----	Stroboscope or similar device	To test engine rpm.

* Available from Service Tools Inc., 1901 Indiana Avenue, Chicago, Illinois 60616.

SPECIFICATIONS

Item	New Part
SINGLE STAGE CLUTCH	
Pressure plate springs (light blue—without reverser) (red—with reverser)	
Free length	2-1/2 inch
Test strength (without reverser)	158-5/8 to 175-5/16 pounds at 1-11/16 inch
Test strength (with reverser)	234 pounds at 1-11/16 inch
DUAL STAGE CLUTCH	
Clutch plate friction surface	Flat within 0.006 inch
Clutch inner springs (black)	
Free length	3-1/2 inch
Test strength	50-1/2 to 61-1/2 pounds at 1-3/4 inch
Clutch outer springs (red)	
Free length	3-1/16 inch
Test strength	111 to 135 pounds at 1-7/8 inch
Clutch operating lever from finished circular face of clutch cover	1-1/4 inch
FLYWHEEL	
Flywheel friction driving surface	Flat within 0.006 inch
CLUTCH HOUSING	
Distance clutch pedal pivot shaft protrudes from clutch housing (units without reverser)	2-1/2 inch
Distance from end of carrier sleeve to engine mounting surface of clutch housing (Fig. 12)	2-13/16 inch
Distance center oil seal in from rear bore wall of clutch housing	1-5/16 inch
ADJUSTMENTS	
Clutch pedal free travel (units without reverser)	1 inch
Clutch wear adjustment (units with reverser)	5-1/4 inch

TORQUE VALUES

Item	Torque (ft-lbs)
Flywheel to crankshaft	85
Clutch assembly to flywheel	35 (dual stage clutch) 23 (single stage clutch)

SPECIAL TOOLS

No.	Name	Use
ESSENTIAL TOOLS		
JD227*	Clutch Finger Adjusting Gauge	To adjust single stage clutch (units without reverser)
JD-7*	Clutch Finger Adjusting Gauge	To adjust single stage clutch (units with reverser)
JDE-52*	Clutch Aligning Tool	To install clutch (single stage)
JDE-52-1*	Clutch Aligning Tool	To install clutch (dual stage)

* Order from Service Tools, Inc.
1901 Indiana Avenue
Chicago, Illinois 60616

Litho in U.S.A.

Remove and discard packings from pressure plate. Coat new packings with grease and install in grooves.

NOTE: If brake pressure plate (3 or 7, Fig. 3) cannot be easily removed, remove bleed screw on top of housing and attach a small hydraulic hand pump. Pump oil behind pressure plate to force it from the cylinder.

ASSEMBLY AND INSTALLATION

Early Units

Install floating facing with thickest facing against transmission case.

Coat pressure plate with grease and install into annular cylinders in axle assembly. Be sure packings are not cut or turned over when pressure plates are installed.

Align dowels in pressure plate with holes in axle before installation. Do not damage facing on brake pressure plate and ring assembly during installation.

Install axle assemblies (see Section 10, Group 25 of this manual).

Later Units

Install brake disk with facings so thickest facing is against transmission case.

Coat pressure plate with grease and install into annular cylinder in axle shaft housing. Be sure packings are not cut or turned over. Make sure dowels in final drive housing are in line with holes in pressure plate.

Install axle shaft housing (see Section 10, Group 25).

BRAKE SYSTEM ADJUSTMENT AND BLEEDING

The following adjustment and bleeding procedures are to be made in the sequence shown any time the brake valve is removed and disassembled.

1. Bleeding Air from the Brake System

Run the tractor engine for approximately two minutes to allow the transmission lubricating system to fill brake valve reservoir (clutch engaged and engine at fast idle).

NOTE: If it is not desirable to run tractor engine at this time, the brake valve reservoir may be filled by removing the filler plug on top of the valve.

With tractor engine running, attach a clear plastic bleeder tube to a brake bleed screw (located on top of axle shaft housing) and insert the tube in the transmission filler hole on rear of rockshaft housing.

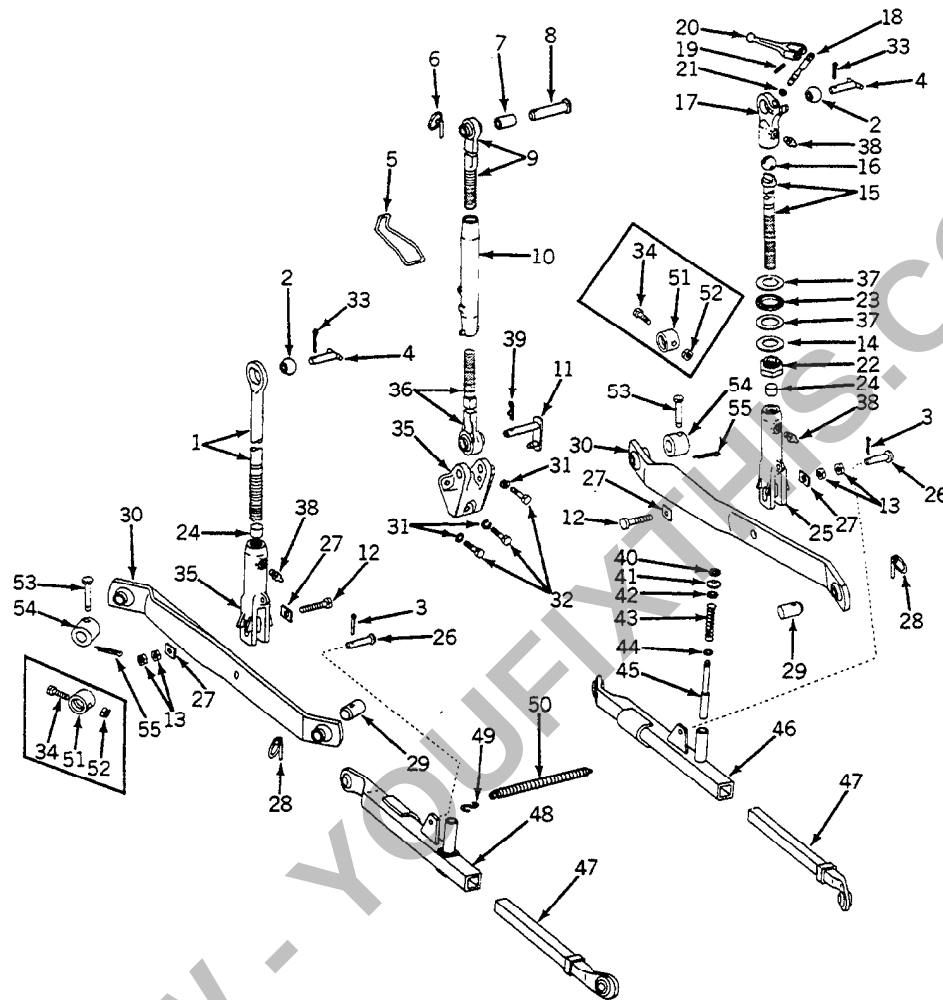
Unscrew bleed screw 3/4 turn, slowly depress brake pedal on brake being bled, and allow it to return slowly. Continue operating pedal until oil in tube is free of air bubbles.

Never allow brake pedal to return sharply, permitting brake valve piston to release quickly, as damage to valve parts may occur before brakes are completely adjusted.

NOTE: If it is not desirable to run tractor engine when bleeding the brakes, insert end of bleed tube in the top of the brake valve and bleed brakes as instructed above.

With brake pedal depressed, close bleed screw securely. Remove bleeder tube and repeat bleeding operation on other brake.

3-POINT HITCH



T28694

- | | | | |
|-----------------------|---------------------------|----------------------------|-------------------------------|
| 1—Link End | 17—Ball Housing | 31—Lock Washer (3 used) | 45—Lock Pin (2 used) |
| 2—Ball (2 used) | 18—Handle Shaft | 32—Cap Screw (3 used) | 46—R.H. Draft Tube |
| 3—Pin (2 used) | 19—Spring Pin | 33—Cotter Pin (2 used) | 47—Draft Link Bar (2 used) |
| 4—Pin (2 used) | 20—Leveling Handle | 34—Cap Screw (2 used) | 48—L.H. Draft Tube |
| 5—Handle | 21—O-Ring | (early units) | 49—"S" Hook |
| 6—Quik Lock Pin | 22—Bushing | 35—Center Link Bracket | 50—Spring |
| 7—Category 1 Bushing | 23—Needle Bearing | 36—Center Link End | 51—Retainer (2 used) |
| 8—Pin (Category 2) | 24—Plug (2 used) | 37—Thrust Race (2 used) | (early units) |
| 9—Link End | 25—Link Body (2 used) | 38—Grease Fitting (3 used) | 52—Stop Nut (2 used) |
| 10—Link Body | 26—Pin (2 used) | 39—Spring Pin | (early units) |
| 11—Pin | 27—Plate (4 used) | 40—Retaining Ring (2 used) | 53—Pin (2 used) (later units) |
| 12—Cap Screw (2 used) | 28—Quik Lock Pin (2 used) | 41—Washer (2 used) | 54—Retainer (2 used) |
| 13—Nut (4 used) | 29—Category 1 Bushing | 42—Washer (2 used) | (later units) |
| 14—R.H. Washer | (2 used) | 43—Spring (2 used) | 55—Cotter Pin (2 used) |
| 15—Leveling Shaft | 30—Draft Link (2 used) | 44—Washer (2 used) | (later units) |

Fig. 16-3-Point Hitch with Telescoping Draft Links

Refer to Fig. 16 as a parts guide to remove, disassemble, and assemble 3-point hitch.

For complete information on 3-point hitch adjustments, see the tractor or implement operator's manuals.

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