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*All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.*

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## ENGINE

Engine Types
- 2700 . . . . . Z1201T
- 2800 . . . . . Z1001T
- 2900 . . . . . Z1301A

SAE Engine Power (Flywheel)
- 2700 . . . . . 89 hp @ 2200 rpm
- 2800 . . . . . 100 hp @ 2200 rpm
- 2900 . . . . . 106 hp @ 2200 rpm

SAE PTO Power*
- 2700 . . . . . 75 hp @ 2200 rpm
- 2800 . . . . . 86 hp @ 2200 rpm
- 2900 . . . . . 91 hp @ 2200 rpm

*NOTE: Net engine power is at rated engine speed (2200 rpm) in accordance with SAE J1995.*

** Net PTO power at rated speed of 2200 rpm, measured in accordance with SAE J708.*

Rated engine speed (All) . . . . . 2200 rpm
Slow idle (All) . . . . . 700 rpm
Fast idle (All) . . . . . 2640 rpm
Number of cylinders (All) . . . . . 4
Firing Order . . . . . 1-3-4-2
Bore (All) . . . . . 105 mm (4.133 in.)
Stroke (All) . . . . . 120 mm (4.724 in.)
Displacement (All) . . . . . 4.2 L
Air Intake (All) . . . . . Turbocharged
Injection Pump Type
- 2700 . . . . . PP4M10K1F 3163
- 2800 . . . . . PP4M10K1F 3150
- 2900 . . . . . Not Available at Printing

Valve Clearance (All)
- Intake . . . . . 0.25 ± 0.05 mm (0.012 ± 0.002 in.)
- Exhaust . . . . . 0.25 ± 0.05 mm (0.012 ± 0.002 in.)

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## ELECTRICAL

Battery (All) . . . . . 12V, 180 Ah
Alternator (All) . . . . . 14V, 55 Amp
Starter (All) . . . . . 12V, 3.5 Kw
Battery Terminal Type . . . . . Negative Ground

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## CAPACITIES

| | |
|---|---|
| Fuel Tank (All) | 105L (27.7 gal) |
| Cooling System (All) | |
| With Cab and Heater | 17.5L (4.6 gal) |
| Without Heater | 19.0L (5.0 gal) |
| Engine Crankcase (All) | 10L (10.5 qts) |
| Transmission and Rear Axle (All) | 38.9L (42 qts) |
| Front Drive Axle (All) | 3.1L (3.3 qts) |
| Front Final Drive (All) (One Wheel) | 95L (1.0 qt) |
| Hydrostatic Steering (All) | 4.5L (4.8 qt) |
| Brake Fluid | 0.5L (0.53 qt) |

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## SOUND LEVEL

Maximum sound level at operator's ear with muffler and cab closed is 84 dba.

Maximum sound level at operator's ear without muffler and cab closed is 86 dba.

Maximum external sound level with muffler at 7 meters (23 ft.) is 85 dba.

Maximum external sound level without muffler at 7 meters (23 ft.) is 89 dba.

*NOTE: Measurement method in accordance with Directive OECD Test.*

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## 2WD TRACTOR DIMENSIONS

| | |
|---|---|
| **Wheel Base** | |
| 2700, 2800 and 2900 | 2376 mm (93.5 in.) |
| **Overall Length (Without Weights)** | |
| 2700, 2800 and 2900 | 4209 mm (165.7 in.) |
| **Overall Width* (Narrow Track with 16.9 - 38 Rear Tires)** | |
| 2700, 2800 and 2900 | 1763 mm (69.4 in.) |
| **Overall Width* (Wide Track with 16.9 - 38 Rear Tires)** | |
| 2700, 2800 and 2900 | 1929 mm (75.9 in.) |

** There are six different track positions between narrow and wide track settings.*

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**Overall Height (Top of Exhaust with 16.9 - 38 Rear Tires)**
2700, 2800 and 2900 . . . . . 2787 mm (109.7 in.)

**Overall Height (Top edge of Cab with 16.9 - 38 Rear Tires)**
2700, 2800 and 2900 . . . . . 2622 mm (105.2 in.)

**Turning Radius (With Brake)**
2700, 2800 and 2900 . . . . . 7450 + 500 mm (293.3 + 20 in.)

**Average Shipping Weight (With Cab)**
2700 . . . . . 3323 Kg (7327.2 lbs.)
2800 . . . . . 3456 Kg (7620.5 lbs.)
2900 . . . . . 3456 Kg (7620.5 lbs.)

**Average Shipping Weight (Without Cab)**
2700 . . . . . 3068 Kg (6764.9 lbs.)
2800 . . . . . 3201 Kg (7058.2 lbs.)
2900 . . . . . 3201 Kg (7058.2 lbs.)

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## 4WD TRACTOR DIMENSIONS

**Wheel Base**
2700, 2800 and 2900 . . . . . 2376 mm (93.5 in.)

**Overall Length (Without Weights)**
2700, 2800 and 2900 . . . . . 4209 mm (165.7 in.)

**Overall Width* (Narrow Track with 16.9 - 38 Rear Tires)**
2700, 2800 and 2900 . . . . . 1763 mm (69.4 in.)

**Overall Width* (Wide Track with 16.9 - 38 Rear Tires)**
2700, 2800 and 2900 . . . . . 1929 mm (75.9 in.)

** There are six different track positions between narrow and wide track settings.*

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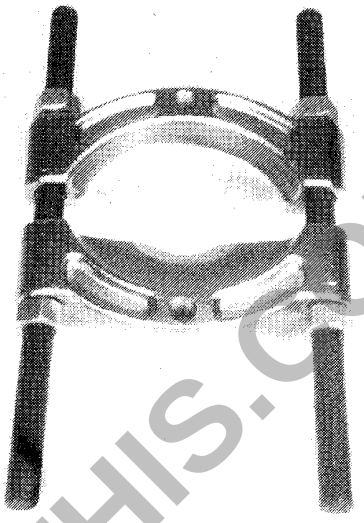
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Bearing Puller Attachment . . . . . D01274AA

Used to remove drive gear from air compressor crankshaft.



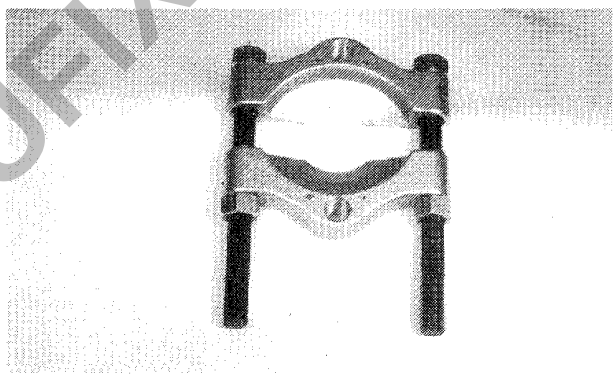
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Bearing Puller Attachment . . . . . D01218AA

Used to remove rear bearing of air compressor crankshaft.



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Dial Indicator Magnetic Base . . . . . D17525CI
English Dial Indicator Gauge . . . . . D17526CI
Metric Dial Indicator Gauge . . . . . D17527CI

Used to check valve lift, valve recess, and cylinder liner step dimensions.

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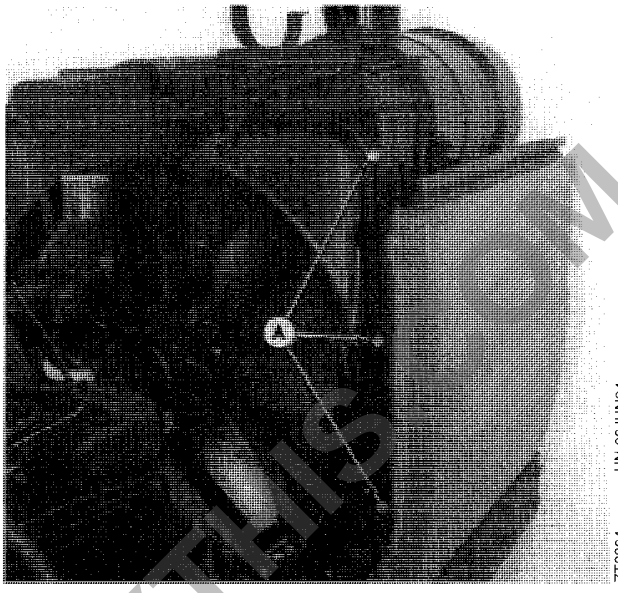


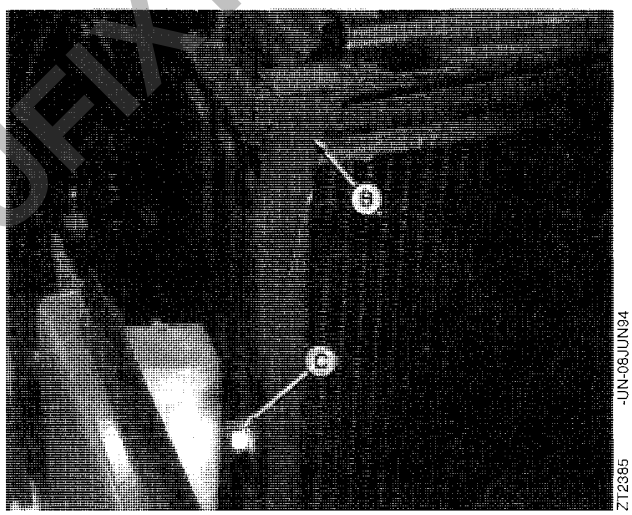
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**• Remove Fan Shroud**

1. Remove three cap screws, lock washers and flat washers (A) from each side of the shroud.

2. Remove reservoir holder (B) by removing cap screw, lock washer and flat washer (C) from each side of the radiator. Remove fan shroud from radiator and position over water pump.



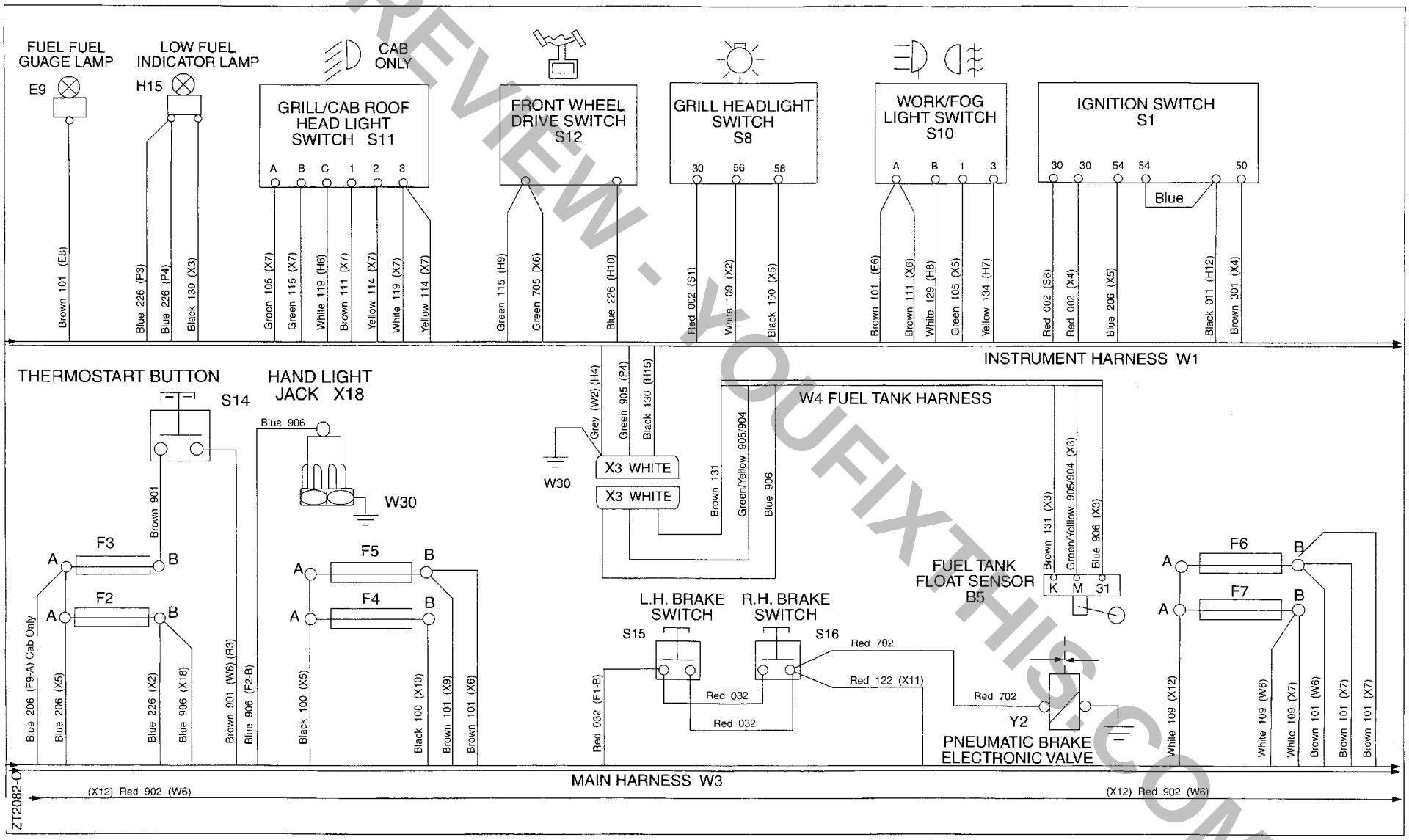




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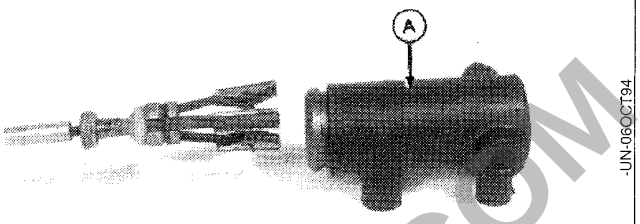



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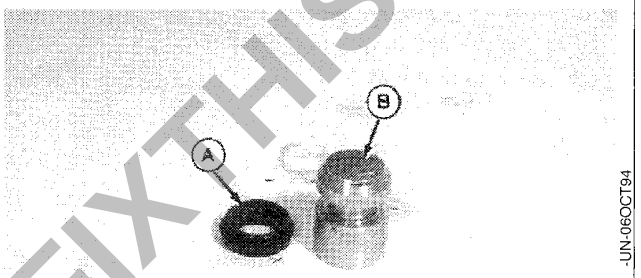
## ASSEMBLE PTO CLUTCH SLAVE CYLINDER

1. Clamp cylinder (A) in shop vise and hone cylinder. Use standard wheel cylinder hone.




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2. Install new seal (A) on piston (B).

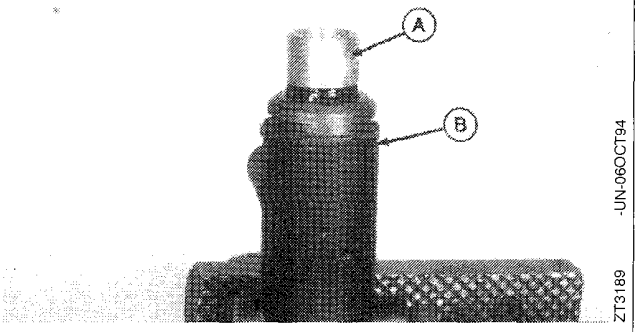



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3. Install piston (A) with seal in cylinder (B).

**IMPORTANT: Dip seal and piston in hydraulic brake fluid prior to installation.**




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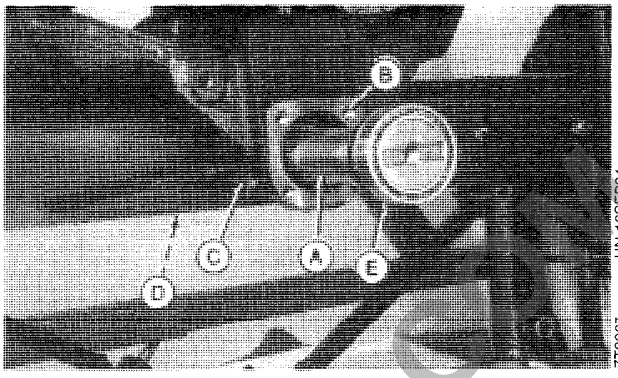
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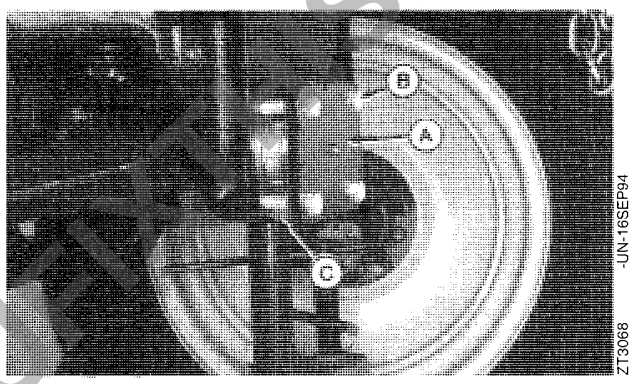
8. Insert shaft assembly (A) into axle front support housing (B) through front axle (C). Drive into axle rear support (D) until front bearing (E) is ready to enter front support housing. Use soft hammer.

**A—Shaft Assembly**
**B—Support Housing**
**C—Front Axle**
**D—Rear Axle Support**
**E—Bearing**



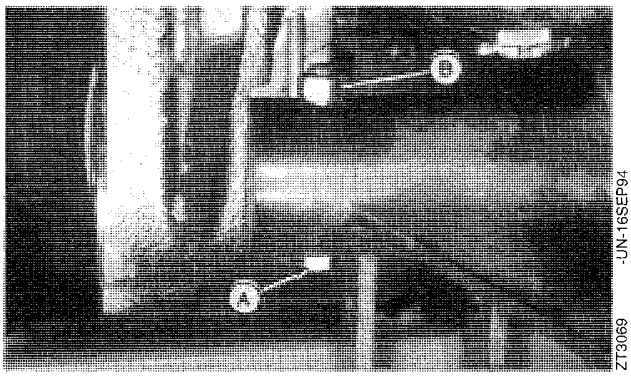

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9. Invert front cover (A) and install against face of shaft using four 12 mm bolts (B). Draw bolts down, pressing bearing into housing until cover meets flush with face of housing (C).




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10. Insert 12 mm bolt (A) through cross hole of shaft assembly and axle housing. Install washer and nut (B) on bolt and tighten.




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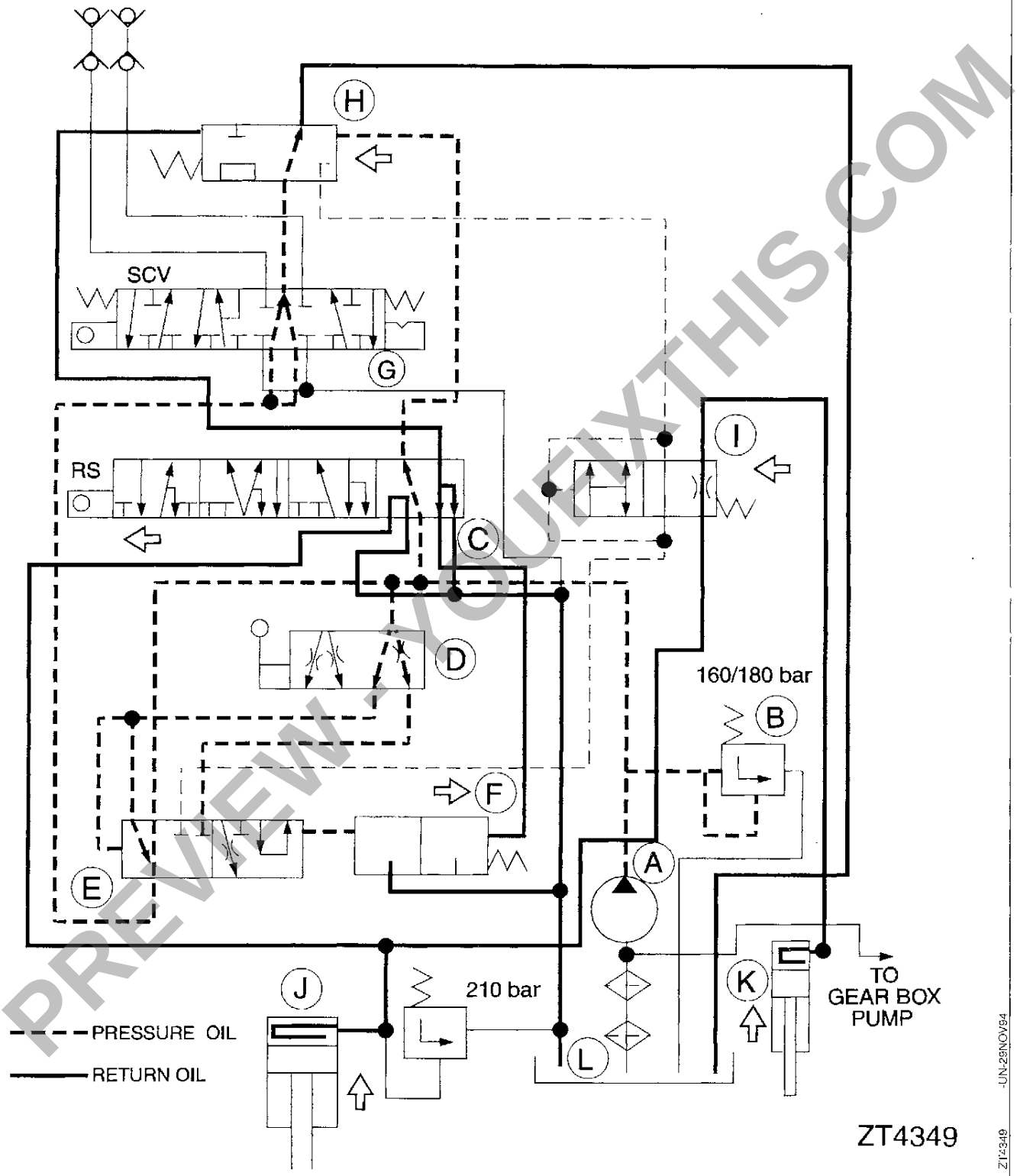
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## ROCKSHAFT LOWERING FUNCTION




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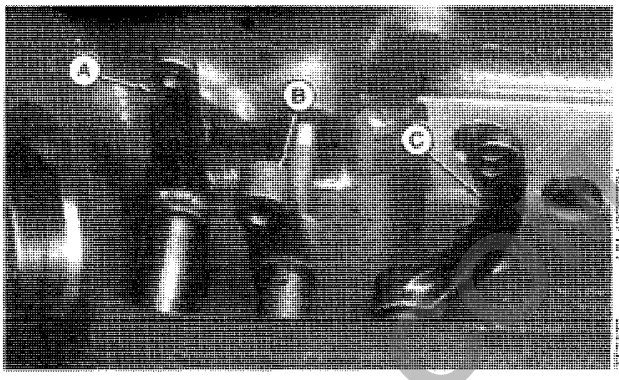


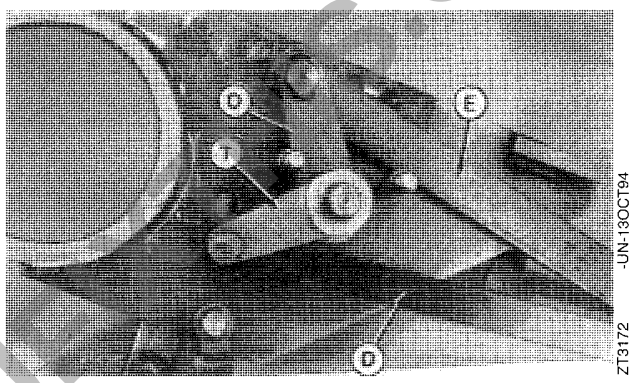
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1. Connect tie rod (D) to inside circuit lever (T) and tie rod (E) to selection lever (O). Lock in place with snap rings.

2. Press levers (O) and (T) onto keyed shaft and lock with snap ring.

3. Connect tie rod (E) to selector lever (C) and tie rod (D) to inside circuit lever (B).

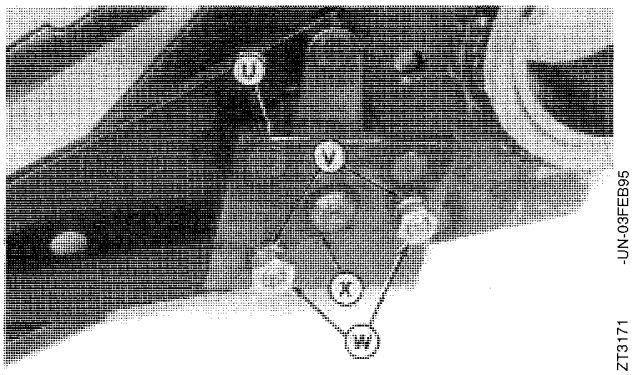



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4. Position plate (U) onto selection lever and install snap ring (X).

5. Attach plate (U) to main plate with two 8 mm nuts (W) and washers (V) on threaded studs.




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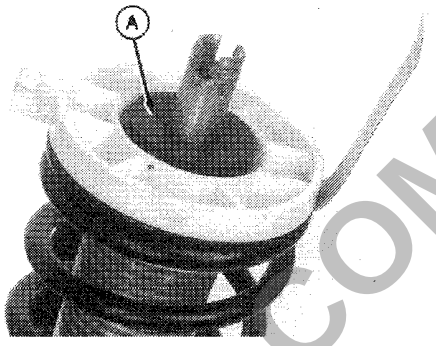
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**• Removing Spring Assembly from Stand**

1. Remove rubber spacer, flat washer and wear bushing (A) from shaft. Inspect bushing for wear and replace if necessary.

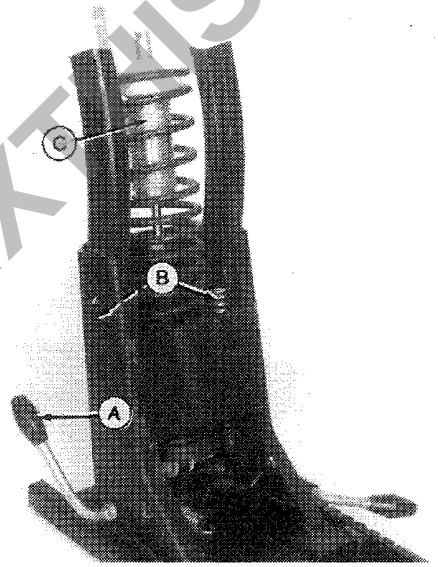



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**CAUTION: Stand to side when side spring tension is relieved. Spring assembly (C) will raise up.**

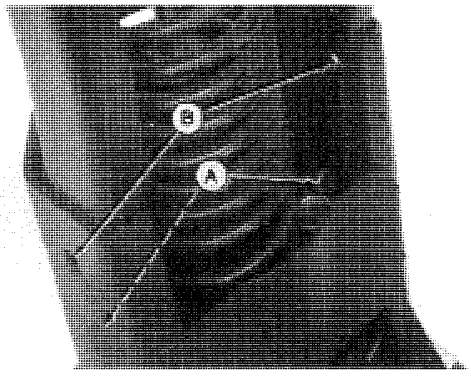
2. Lift height adjusting lever (A) to relieve tension on side springs (B).




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3. With needle nose vise grips, remove side springs (A) from holes (B) in stand.




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