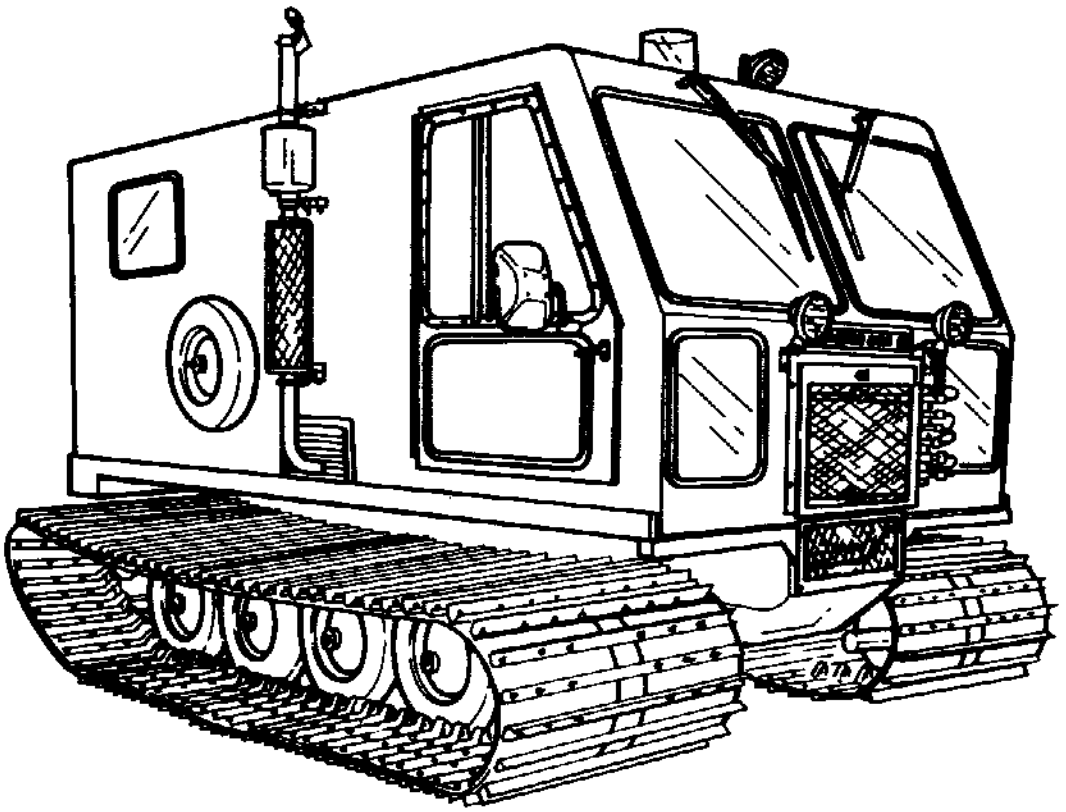
BOMBARDIER

Operator's/Maintenance manual

SKIDOZER 252 G
TURKEY



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INDEX

FOREWORD

The operator's manual has been prepared to acquaint the owner and/or operator(s) of an industrial tracked vehicle with the various controls and instruments, inspections, maintenance and safe driving instructions. Each is indispensable for the proper use of the product, and should be kept with the vehicle at all times.

This manual uses the following symbols:

◆ **WARNING:** Identifies an instruction which, if not followed, could cause personal injuries including possibility of death.

▼ **CAUTION:** Denotes an instruction which, if not followed, could severely damage vehicle components.

○ **NOTE:** Indicates supplementary information needed to fully complete an instruction.

Although the mere reading of such information does not eliminate the hazard, your understanding of the information will promote its correct use.

INTRODUCTION

This Manual has been prepared to give you a step by step procedure of operation and routine maintenance. Please take the time to read it and follow the instructions carefully.

This Manual does not concern itself with major repairs, which may be required over the life of the vehicle. For information on the removal and replacement of components, please contact your authorized Bombardier Industrial Distributor who is vitally interested in your complete satisfaction with the vehicle which you purchased. He has factory-trained service personnel available and maintains a stock of genuine replacement parts. Should you require advice or assistance, or encounter any problems concerning your vehicle, he will be pleased to help you.

The description contained in this Manual were in effect at the time that this book was approved for printing. Bombardier Inc. reserves the right to discontinue models at any time, or to change specifications without incurring obligations.

A WORD OF CAUTION

OFF-HIGHWAY OPERATION:

The very nature of off-highway operation of a vehicle is dangerous. Any terrain, which has not been specially prepared to carry vehicles, presents an inherent danger where angularity, substance and exact steepness are unpredictable. The terrain itself presents a continual element of danger, which must be accepted with pre-meditation by anyone venturing over it.

An operator who takes a vehicle off-highway should always exercise the utmost care in selecting the safest path and keeping close watch on terrain ahead of him. On no account should the vehicle be operated by anyone who is not fully conversant with the "Driving Instructions" applicable to the vehicle, nor should it be operated in steep terrain by anyone who has not become thoroughly familiar with the vehicle's performance on flat terrain.

DESIGN LIMITATIONS:

The Skidozer is designed primarily as an over-the-snow vehicle. The fundamental design concept is a compromise between ruggedness which call for strength and weight, and light-footedness to move over snow.

Whereas the Skidozer is exceptionally rugged for its class, it is still a light vehicle by definition and its operation must be restricted to its proper purpose, the grooming and packing of snow, or over-snow operation.

Its design objective is to push and pull snow-grooming equipment over most snow conditions; loads, personnel included, should not exceed 2,000 lbs.

Whereas Bombardier vehicles carry many types of equipment and loads, it must be understood that the addition of weight to any part of the vehicle changes its gravitational stability and modifies its performance. Do not make radical changes to the centre of gravity of the vehicle without written approval by a Bombardier engineer.

OPERATION

1- PARKING BRAKE WARNING LIGHT:

Will light up when parking brake is applied.

2-3- WIPER SWITCHES:

To operate the two speed windshield wipers, turn the switche knobs clockwise. The first position is "slow" speed. Turn completely to the right for "high" speed. The wiper on the driver's side can also be operated by pressing on the button on top of the left hand steering lever.

4- DIFFERENTIAL OIL TEMPERATURE GAUGE:

Indicates the temperature of the oil in the differential; maximum working temperature is 210°F.

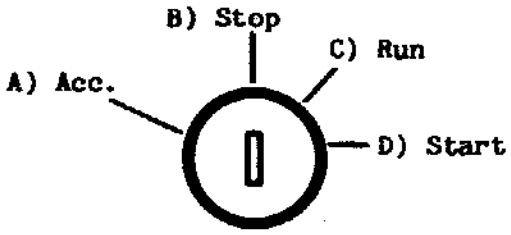
5- FUEL GAUGE:

Indicates the level of fuel in the tank.

6- HOUR METER:

Registers the number of hours the engine has been in operation. Service and Maintenance operations should be performed according to the number of hours registered on the hour meter and as detailed in the Service Schedule.

7- IGNITION SWITCH:



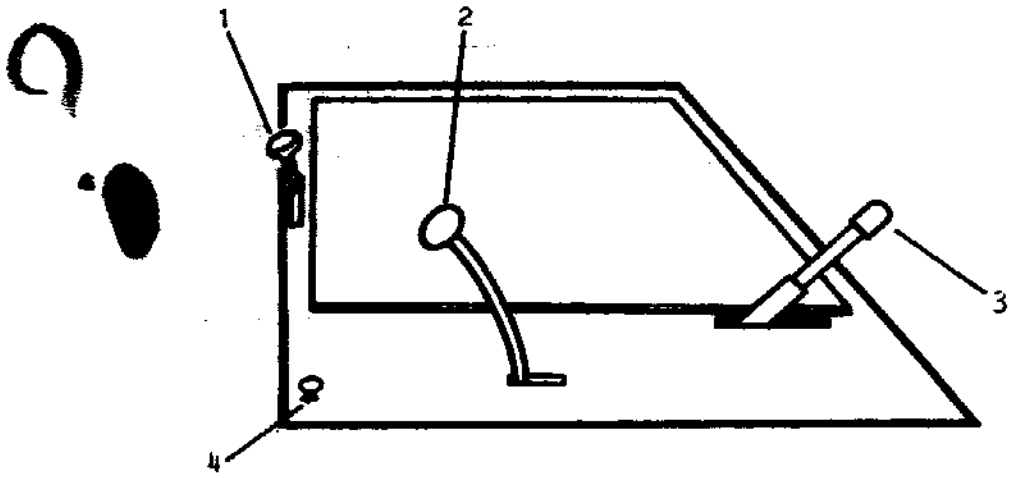
Four-way Switch

A) Accessories position
Supplies the main lighting system.

B) "Stop" position
Stops the engine and cuts off supply power to the vehicle.

OPERATION

1- Transmission gear shift lever
2- Two-speed gearbox shifter
3- Parking brake lever
4- Manual choke control



TWO-SPEED GEARBOX SHIFTING LEVER:

Located on top of the engine cowling on the left hand side, towards the rear. Pull this lever to the LEFT for the "HIGH" range and push to the RIGHT for the "LOW" range. When the lever is in the middle, the gearbox is completely disengaged. When the two-speed gearbox is in "neutral" there is no power transmitted to the differential. Never attempt to shift from one range to the other when the vehicle is in motion and with the engine running.

▼ **CAUTION: It is very important that the vehicle and the engine be stopped and the transmission set to the "neutral" position before selecting "HIGH" or "LOW" range to avoid damage to the two-speed gearbox and/or the transmission.**

STARTING THE ENGINE:

The automatic transmission selector lever must be placed at the "P" position before attempting to start the engine.

STARTING THE ENGINE (cont'd)

Press the accelerator pedal approximately 1/4 of the way down. Pull up on choke knob. Turn the ignition key to "start" position and release immediately when the engine starts, remove choke by pressing the knob down. Never use the starter for more than 30 seconds at any one attempt to start the engine.

SAFETY TIPS:

- Keep a first-aid kit and a fire-extinguisher in a conveniently located place in the cab.
- Never fill fuel tank when engine is running, near sparks or open flame, cigarette, etc.
- Fasten and adjust seat belt and shoulder harness.
- Adjust operator's seat for maximum comfort and in a position where all operating controls are within easy reach.
- Do not attempt to perform repairs on a vehicle in motion.
- Never leave engine running in an enclosed garage or shed.
- Do not remove radiator cap when engine is hot.
- Never leave Skidozer unattended for extended periods without being sure it is off the trail, and well marked by warning lights and/or signs.
- Always engage park brake before leaving operators seat.

DAILY CHECK LIST:

Preventive maintenance is most important and contributes to economical operating costs. A quick inspection of the Skidozer before driving away will help to discover any abnormal wear of faulty operation, and corrective measures can be taken before failure occurs.

GEAR SHIFTING:

The Ford C-6 automatic transmission used in the 252G has 6 positions on the shift selector:

"P" Park position, use this position for STARTING the engine.

"R" Reverse.

"N" Neutral: engine will also start in this position.

"D" Normal drive position where the vehicle starts in low gear and automatically upshift to second and high gears as the speed increases. In this position, the transmission will also down-shif when the load increases sufficiently.

"2" Second gear MANUAL: there is no upshift or down-shift in this position.

"1" Low gear MANUAL: there is no upshift: this range is designed primarily for engine braking when coming down steep hills.

Normal operation of the SV 252, is in the "D" driving range; however, should there be conditions where the transmission will downshift and upshift frequently from drive to 2nd, then the "2" position should be used. Should frequent up and down shifting between 2nd and 1st occur while operating in "D", manually select "1" position to prevent transmission damage.

SELECTING THE APPROPRIATE WORKING SPEED:

The automatic transmission of Skidozer has 3 forward speeds and 1 reverse; the 2 speed gear box has a ratio of 1.96 to 1, offering two alternate gear ranges at equivalent engine revolutions. This provides the operator a choice of 6 forward speeds and 2 reverse speeds. With the 2 speed gear box in the high range, the transmission gear ratios are the following:
1.00, 1.47 and 2.46.
With the gear-box in low-range, these become:
1.96, 2.88 and 4.85.
The ratios in reverse are:
2.17 in high range, and 4.25 in low range.

STOPPING:

Stopping is effected by pulling on both steering levers simultaneously. Avoid sudden stops. Slow down the vehicle, using compression of the engine, whenever possible, and pull on both levers gradually and evenly.

◆ WARNING: The foot brake is an emergency brake only: Not a service brake. The foot brake should be used only in extreme cases where a sudden stop is an absolute necessity.

UPHILL DRIVING:

Select the gear box range and transmission speed that will give you the necessary power to climb the slope. Gear changing at a critical point in a slope may cause track-slippage and digging in; therefore, select the gear ratio that will provide the power to climb the slope without stalling. Should the tracks start to spin and dig in, back off and choose an alternate route.

DOWNHILL DRIVING:

On steep slopes, use the low gears of the transmission to have the compression of the engine act as a speed reducer. Using the low range of the gear box will increase the braking effect of the compression of the engine. The further reduce the speed, pull on both steering levers simultaneously.

PREVENTIVE MAINTENANCE

The inspection and checks listed below should be done WEEKLY and any correction found necessary should be made immediately to prevent failures.

NOTE: The vehicle must be on LEVEL ground when checking oil and fluid levels.

1- DIFFERENTIAL OIL LEVEL:

The dipstick is on the differential cover and may be reached through the opening on the rear floor plate. If the oil is below the level mark, fill to proper level and check for oil leaks around the differential and its cooling system.

2- AUTOMATIC TRANSMISSION OIL LEVEL:

Check the oil level while the engine is running and the oil is at normal operating temperature; with the shift lever at the "P" or "N" position. Follow the instructions stamped on the dipstick. The fluid level should be at the "F" mark or slightly below, but never above the "F" mark.

3- BATTERY ELECTROLYTE LEVEL:

If fluid is added during freezing weather, it should be added at the beginning of a working day to allow the water to mix with the electrolyte and prevent damage due to freezing.

4- TRACKS:

Check for loose bolts and tighten where necessary. Replace any broken track links or track guards. Check the belt overlapping joints.

5- SPROCKETS:

Check the bolts and tighten if necessary. Inspect the sprockets for wear. If the aluminium casting of the sprocket is visible at the bottom of the teeth; the sprockets must be removed and exchanged left to right and right to left.

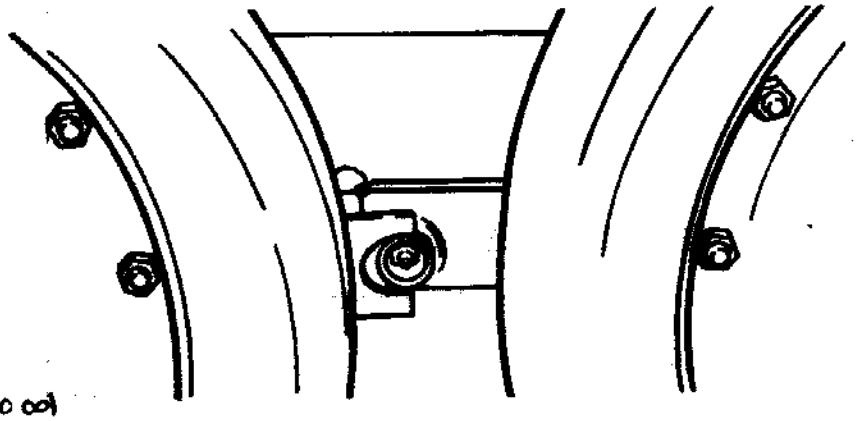
6- SUSPENSION AND WHEELS:

Check the condition of the crank arms and wheel bearings. Replace or repair as required.

7- DRIVING CONTROLS:

Check the oil level in the master cylinders of the steering levers and foot brake. Replenish as required with the appropriate fluid.

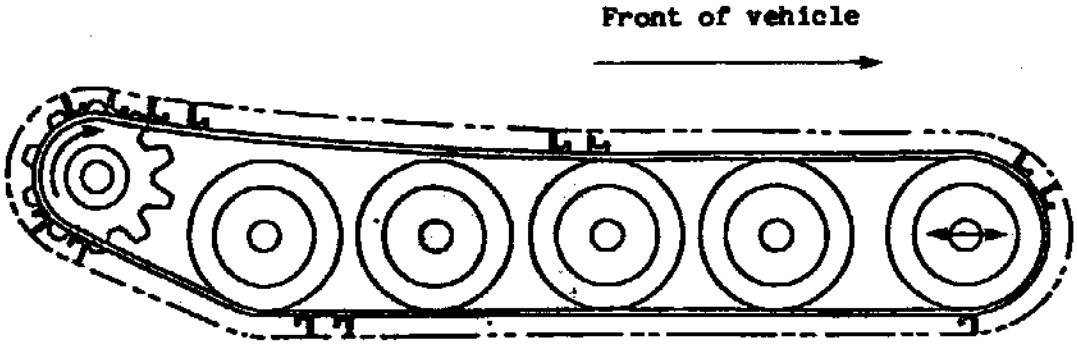
2) Further adjustment is done by inserting grease in the track adjuster located between the front and second wheel.



Boo7 120 00

NOTE: Track adjuster piston must not extend more than 3" (7.6 cm) beyond end of cylinder. When the mechanical and hydraulic adjustments reach their maximum, belts and sprockets must be replaced.

3) On level ground, the crosslinks should not touch the rear wheel and barely touch the second last wheel.



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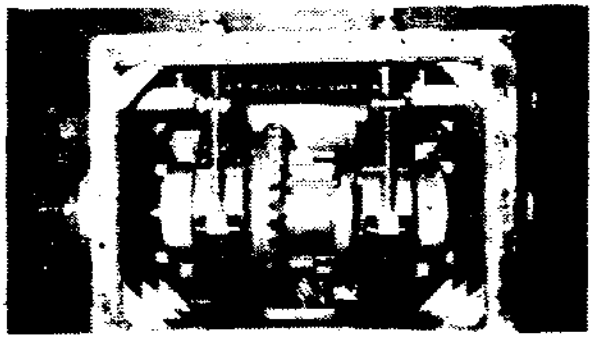
NOTE: Some brakes have shoe stop screws at "F" and others at "FF". Adjustments is made with nut "A" and the only pressure shoe stop screws "F" or "FF" should exert against the shoe is to overcome the tension of shoe spring "E" in making the shoes parallel with the disc.

6) Be sure HAND LEVER is in full released position, then adjust pull rod to proper length and make final connections.

STEERING BRAKE BANDS:

On Skidozer 252 the adjusting mechanism of each band is located on the rear side of the differential housing. Remove the plugs, and with a 3/4" socket, tighten the adjusting nut to 20 ft-lbs. where most resistance is felt. (The adjusting nut is concave and rides on a convex surface which accounts for the high resistance every half turn).

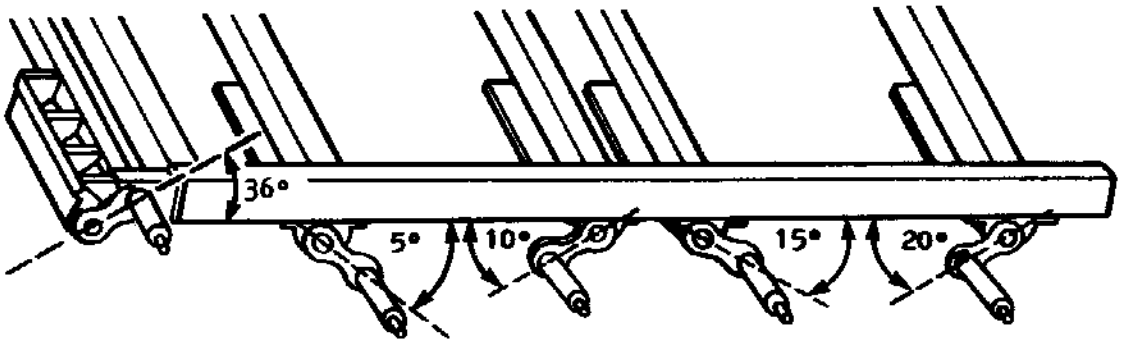


CHANGING A CRANK ARM:

Remove the wheel as per instructions for changing a tire. Completely remove the bolt that tightens the crank arm to the Flexitor shaft. Pry the crank arm off the flexitor shaft. When re-installing the crank arm, make sure that it is installed at the correct angle, see following chart:

Crank Arm Position	Angle ABOVE Horizontal	Angle BELOW Horizontal
Front Wheel	36°	
Second Wheel		5°
Third Wheel		10°
Fourth Wheel		15°
Rear Wheel		20°

Front

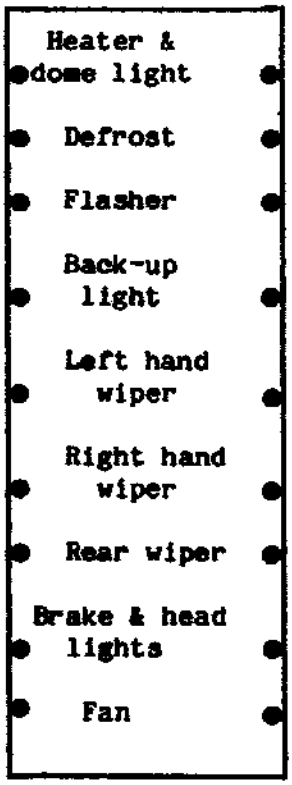


Left arm Left arm Right arm Left arm Right arm

Boot 100 002

Changing a fuse:

The fuse holder is inside the instrument panel; they are installed as follows:



WHEEL BEARINGS:

Wheel bearings are lubricated through the grease fitting on the hub cap. Lubrication every week is recommended. The wheel seal is installed inside-out, compared to normal installation, so that dirt and water will be kept out of the wheel hubs; this also allows the grease to expel any water that may have entered the hub, and prevents the seals from being blown out through excess pressure.

SPROCKET HUB BEARINGS:

A grease fitting is located on the inside of the hub near flange. To facilitate lubrication, stop the vehicle when the grease fitting faces the front. A grease-gun with a flexible hose is required to lubricate this fitting. Lubricate weekly.

PROPELLOR SHAFT:

The universal joints, as well as the slip joints, of the two propeller shafts should be lubricated every 100 hours. The centre floor has to be removed in order to gain access to the propeller shaft from the top.

STEERING LEVERS, PINTLE HOOK, DISC BRAKE CALIPER:

Lubricate through grease fittings every 100 hours.

DOOR HINGES:

Oil every 100 hours.

LUBRICATION CHART AND SCHEDULE

Lubrication Points	Change or service interval	Capacity	Recommended lubricant specifications
Master Cylinders (steering & Brake)	As required	1 imp.pt. 1.2 U.S.pt. .57 litres	EXTRA HEAVY DUTY BRAKE FLUID SAE 70R3
Wheel Bearings	Every 50 hours	10 fittings	GOOD QUALITY MULTI-PURPOSE GREASE WITH SUPERIOR SHEAR STABILITY which will remain fluid at very low temperatures
Sprocket Bearings	Every 50 hours	2 fittings	
U-Joints	Every 100 hours	6 fittings	
Steerings levers	Every 100 hours	2 fittings	
Pintle hook	Every 100 hours	3 fittings	
Brake caliper	Every 100 hours	4 fittings	

COLD WEATHER OPERATION

A vehicle like the Skidozer is called upon to work in exceedingly cold temperatures. Certain basic precautions should be taken in order to protect the vehicle, and to prolong its useful life.

The Skidozer leaves the factory with anti-freeze solution in the cooling system for protection up to minus 40° F. Make certain that if colder temperatures are anticipated, additional anti-freeze is added for adequate protection.

The battery should be kept fully charged at all times and should never be allowed to run down.

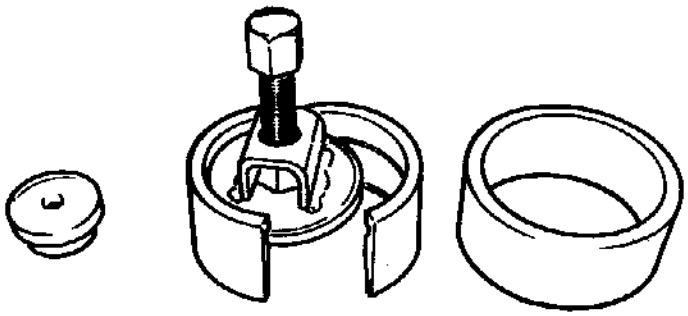
The oil in the crank case should be of the recommended viscosity. Refer to the Operator's Manual supplied by the engine manufacturer.

A thermostat installed as original equipment is suitable for cold temperatures.

If the Skidozer is left outdoors, in extremely cold temperatures, special precautions should be taken when it is started after having been idle for quite sometime. The engine should be warmed at slightly faster than idle before putting it to work. This will give a chance to the oil in the crank case to warm for proper lubrication. Driving a cold engine at full throttle will cause excessive wear on all the moving parts, and will result in premature failure.

DIFFERENTIAL

Disassembly



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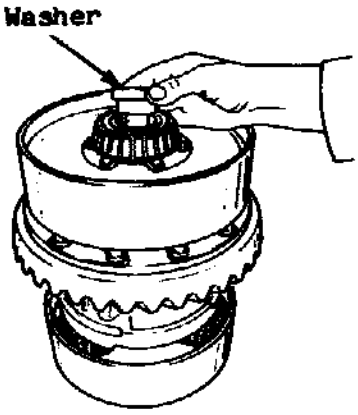
NOTE: A special puller (P/N 629 0009 00) is used to remove cone bearings from the differential.



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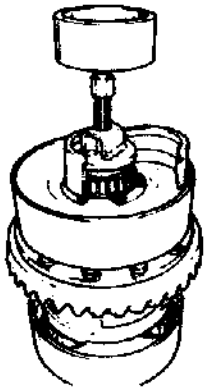
- Put the washer from the puller on the cone bearing.



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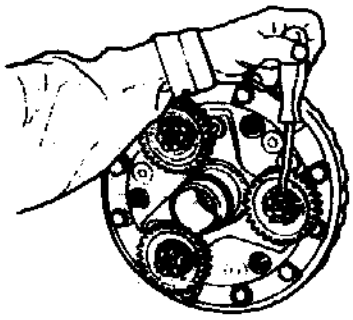
- Put the sides of the puller with the screw at the same time. The puller must be secured on the cone bearing.

- After having removed the cone bearing, pull out the brake drum.



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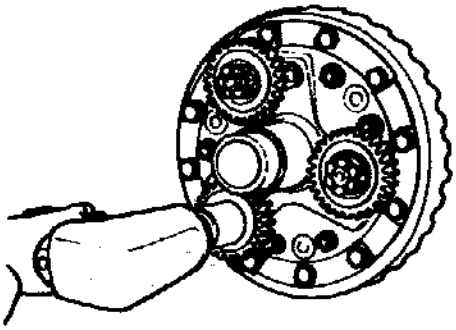

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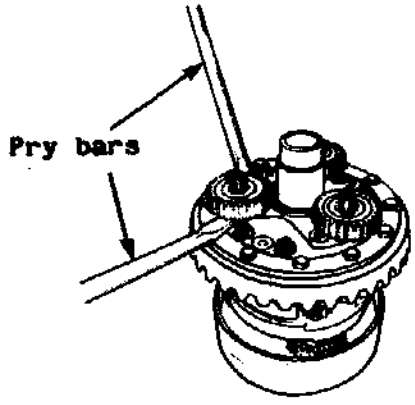
- Remove cotter pins in order to unscrew the nuts and to remove the washers from planet gears.



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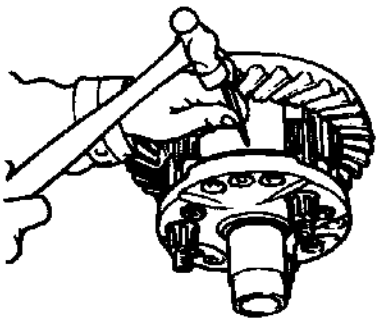
- Using two (2) pry bars, remove planet gears from the differential.

NOTE: Repeat the same procedure to remove the planet gears from the other end of the differential.



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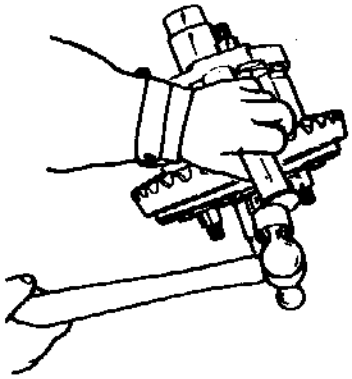
- Using a punch, mark the differential cases according to their position.



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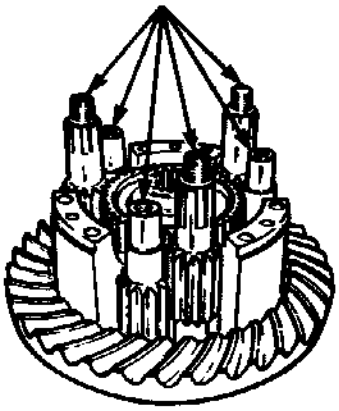
- Using a hammer and a soft punch, remove the side case (opposite side of the crown gear) from the differential.

Pinion gears



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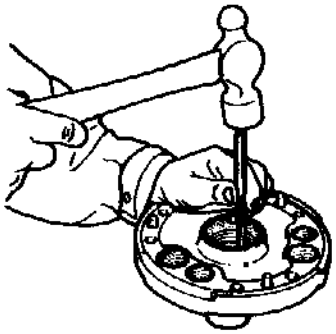
- Remove the six (6) pinion gears.

▼ CAUTION: All pinion gears set must be kept together and not mixed.



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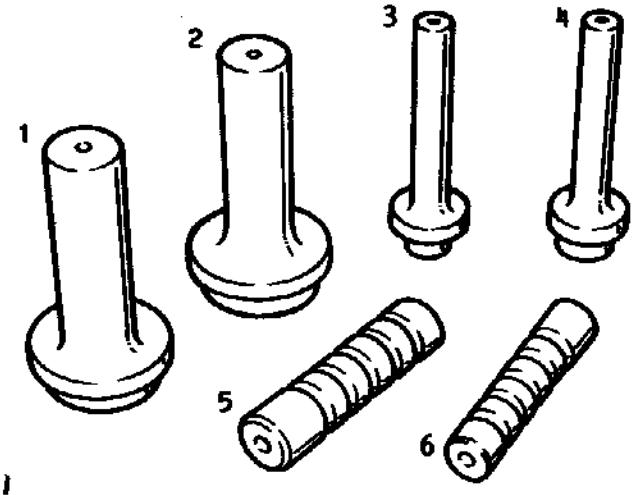
- To remove sleeves and/or bushings, cut them using a hammer and a cold-chisel.

NOTE: Here are the required tools to install the bushings.



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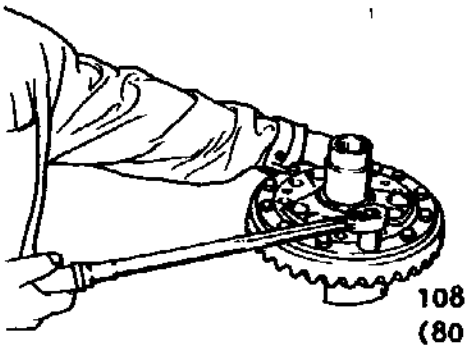
1- Brake drum gear bushing installer	(P/N 629 0018 00)
2- Center and side case bushing installer	(P/N 629 0017 00)
3- Pinion gear small bushing installer	(P/N 629 0019 00)
4- Pinion gear large bushing installer	(P/N 629 0020 00)
5- Pinion gear large bushing 1¼" burnishing bar	(P/N 629 0016 00)
6- Pinion gear small bushing 1" burnishing bar	(P/N 629 0015 00)

Bushing installation:

- Put the side case on a work bench.

- Start the bushing straight into the housing by hand.

▼ **CAUTION: Always use new tab-locks.**



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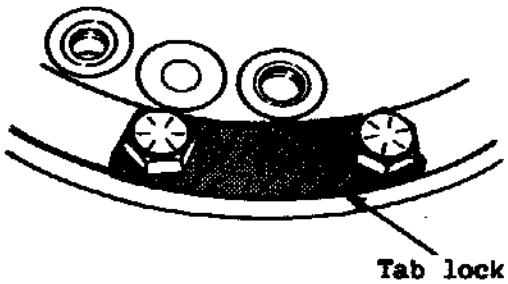

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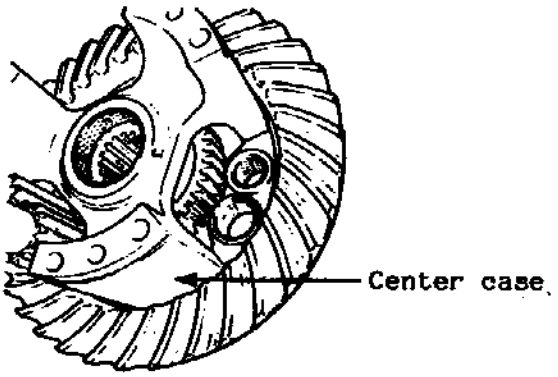
- **Tighten screws to 108 N.m (80 lbf.ft) and secure them properly using new tab-locks.**

- **Oil all bushings on center and side cases and then place the axle gear in position.**



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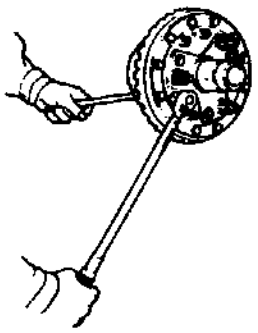
- **Place the differential center case carefully on the three (3) dowel pins and press it into position.**

- Place thrust washers on the end of the pinion gears.

▼ CAUTION: The thrust washer chamfer must face the pinion gear.

- Drive dowel pins in the side case.

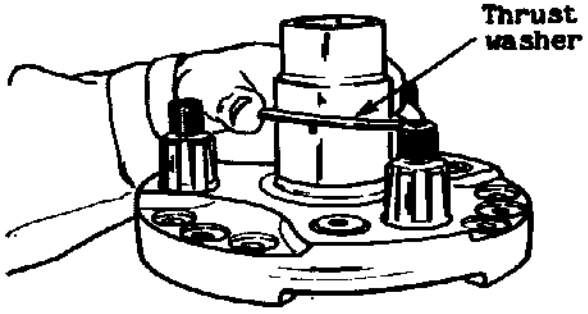


102 N.m
(75 lbf.ft)

B002 080 069

- Place the differential side case on top of the assembly and fix it using the six (6) bolts and nuts. Tighten to 102 N.m (75 lbf.ft) and lock in position using new cotter pins.

▼ CAUTION: Always use new cotter pins.



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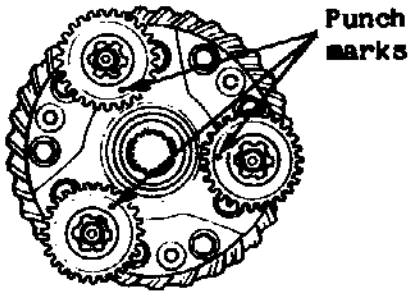
- Install thrust washers on side cases.



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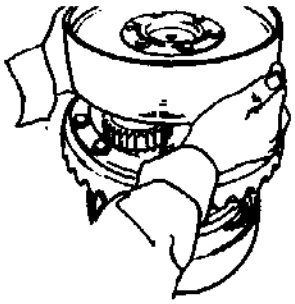
- Place a synchronized planet gear on the end of each pinion gear.



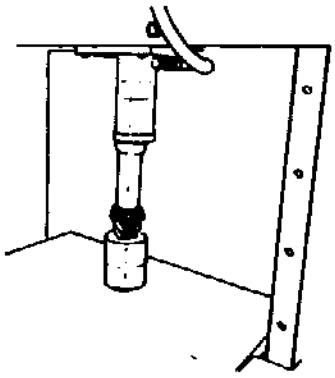
B002 080 075

- Place a steering brake drum in position and verify if all turns well.

- Install the other steering brake drum in the same way on the other side of the assembly.

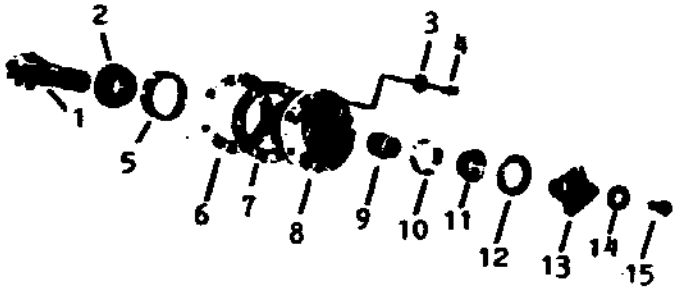
- Using a press, install the cone bearing on both sides of the assembly.

Installation of the pinion gear to the differential



B002 080 079

- Using a press, install the cone bearing on the pinion gear.



1- Pinion gear
2- Cone bearing
3- Lock washer
4- Screw
5- Bearing cup (rear)
6- shim
7- Gasket
8- Housing
9- Sleeve
10- Bearing cup (front)
11- Cone bearing
12- Oil seal
13- Companion flange
14- Washer
15- Screw

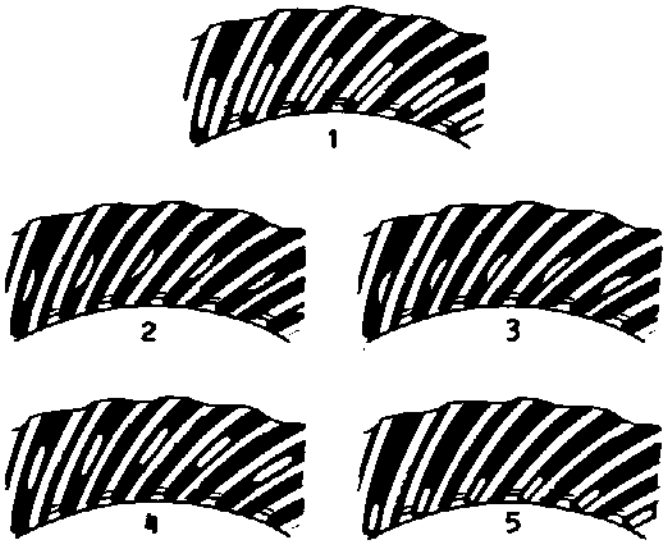
B) Use a dial indicator to check the backlash to a tolerance of .18 mm (.007"). Should it not be correct, the bearing adjusters should be moved accordingly: 1/4 of a turn on the bearing adjusters will give approximately a variation of .03 mm (.001").

C) Tighten the bearing adjusters to 27-34 N.m (20-25 lbf.ft) and lock the adjuster bearings in position on the outside with 41 gauge wire.

D) Tighten the bearing collar bolts to 122-129 N.m (90-95 lbf.ft) and lock in position using tab-locks.

▼ CAUTION: Always use new tab-locks.

○ NOTE: Two adjustments affect crown gear and pinion tooth contact. They are pinion depth and backlash. Adding or removing shims would move the pinion toward the crown gear or away from it. Increasing or decreasing backlash could move the crown gear toward the pinion or away from it. So, when replacing a crown gear and a pinion, it should be noted that the original factory installed shim is of the correct thickness. If the original shim pack was lost or if the new carrier housing is being installed, substitute a nominal shim for the original and run a tooth pattern. The tooth pattern will indicate if the shim pack needs to be increased or decreased.



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1. Correct tooth pattern
2. Low contact
3. High contact
4. Contact on the heel
5. Contact on the toe

Steering brake band adjustment

On this vehicle, the adjusting mechanism of each band is located on the rear side of the differential housing. Remove the plug, and with a 3/4" socket tight the toggle adjusting nut to 27 N.m (20 lbf.ft) maximum and back off one notch.

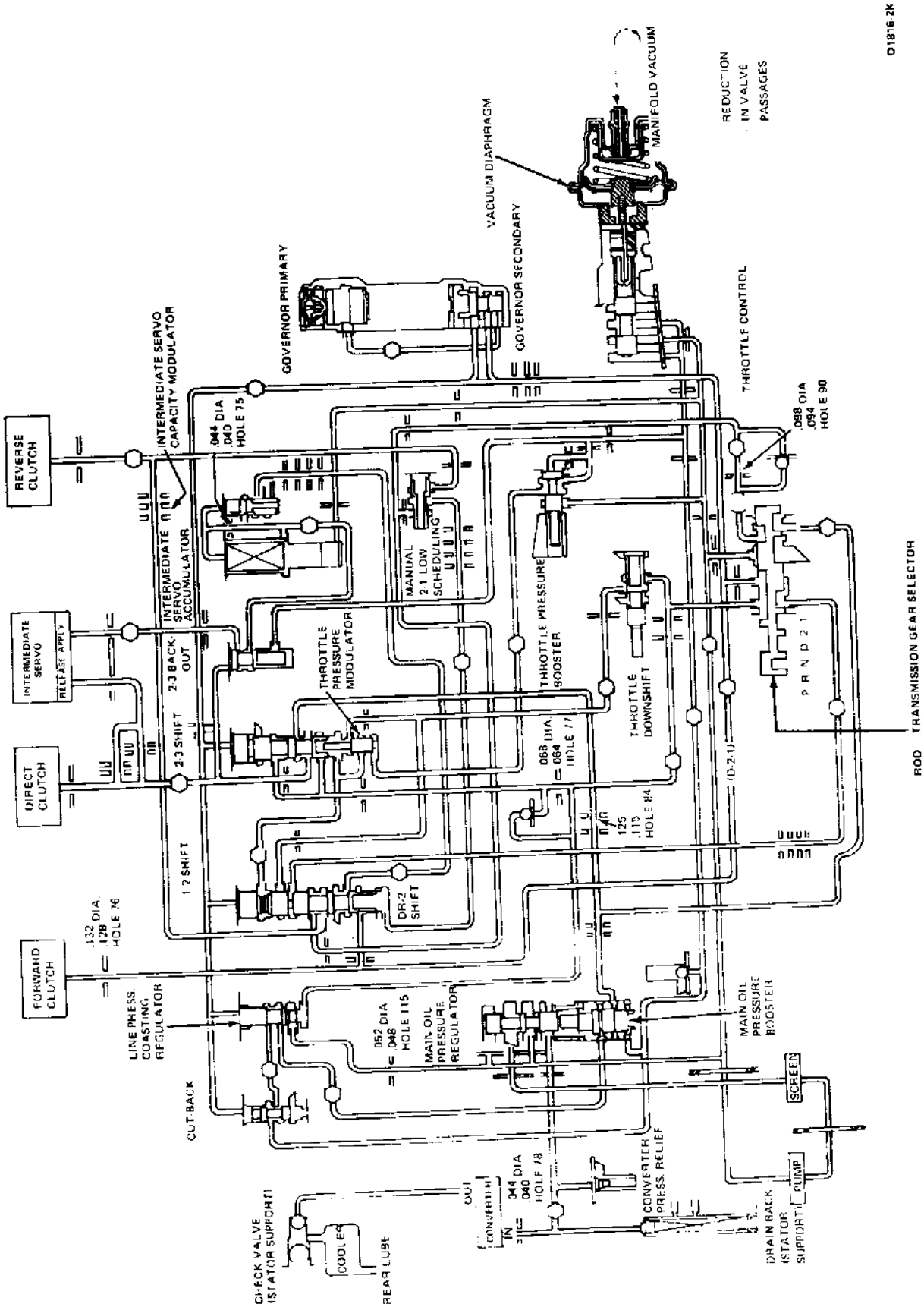

FIG. 3 Hydraulic Control System—C-6 Transmission

21. Remove the remaining converter housing-to-engine attaching bolts.
22. Move the transmission away from the engine. Lower the jack and remove the converter and transmission assembly from under the vehicle.

Installation

1. Tighten the converter drain plug to 11-37 N·m (18-28 ft-lbs).
2. Position the converter on the transmission making sure the converter drive flats are fully engaged in the pump gear.
3. With the converter properly installed, place the transmission on the jack. Secure the transmission to the jack with the chain.
4. Rotate the converter until the studs and drain plug are in alignment with their holes in the flywheel.
5. Move the converter and transmission assembly forward into position, using care not to damage the flywheel and the converter pilot. **The converter must rest squarely against the flywheel. This indicates that the converter pilot is not binding in the engine crankshaft.**
6. Install and tighten the converter housing-to-engine attaching bolts to 55-67 N·m (40-50 ft-lbs).
7. Remove the transmission jack safety chain from around the transmission.
8. Position the No. 2 crossmember to the frame side rails. Install and tighten the attaching bolts to specifications as listed at the end of this Section.
9. Install transfer case on F-150—F-250 (4x4) and Bronco. Refer to Section 16-82, New Process Gear 208 Transfer Case or Section 16-86, Borg Warner 1345 Transfer Case.
10. Position the engine rear support and insulator assembly above the crossmember. Install the rear support and insulator assembly-to-extension housing mounting bolts and tighten the bolts to specifications as listed at the end of this Section.
11. Lower the transmission and remove the jack.
12. Secure the engine rear support and insulator assembly to the crossmember with the attaching bolts and tighten them to specifications as listed at the end of this Section.
13. Connect the vacuum line to the vacuum diaphragm making sure that the line is in the retaining clip.
14. Connect the oil cooler lines to the transmission.
15. Connect the downshift and manual linkage rods to their respective levers on the transmission. Refer to Section 17-02 Shift Control Linkage, Removal and Installation
16. Connect the speedometer cable to the extension housing.
17. Secure the starter motor in place with the attaching bolts. Connect the cable to the terminal on the starter.
18. Install a new O-ring on the lower end of the transmission filler tube and insert the tube in the case.
19. Secure the converter-to-flywheel attaching nuts and tighten them to 28-40 N·m (20-30 ft-lbs).
20. Install the converter housing access cover and secure it with the attaching bolts.
21. Connect the drive shaft.
22. Adjust the shift linkage as required. Refer to Section 17-02, Shift Control Linkage.
23. Lower the vehicle. Then install the two upper converter housing- to-engine bolts and tighten them to 55-67 N·m (40-50 ft-lbs).
24. Position the transmission fluid filler tube to the cylinder head and secure with the attaching bolt.
25. Make sure the drain pan is securely attached, and fill the transmission to the correct level with the specified fluid.

E-100—E-350

Removal

1. Working from inside the vehicle, remove the engine compartment cover.
2. Disconnect the neutral start switch wires at the plug connector.
3. If the vehicle is equipped with a V-8 engine, remove the flexhose from the air cleaner heat tube.
4. Remove the upper converter housing-to-engine attaching bolts (three bolts on 6-cylinder engine; four bolts on 8-cylinder engines).
5. Raise the vehicle on a hoist.
6. Place the drain pan under the transmission fluid pan. Starting at the rear of the pan and working toward the front, loosen the attaching bolts and allow the fluid to drain. Finally remove all of the pan attaching bolts except two at the front, to allow the fluid to further drain. With fluid drained, install two bolts on the rear side of the pan to temporarily hold it in place.
7. Remove the converter drain plug access cover from the lower end of the converter housing.
8. Remove the converter-to-flywheel attaching nuts. Place a wrench on the crankshaft pulley attaching bolt to turn the converter to gain access to the nuts.
9. With the wrench on the crankshaft pulley attaching bolt, turn the converter to gain access to the converter drain plug. Place a drain pan under the converter to catch the fluid. Then, remove the plug. With fluid drained, re-install the plug.
10. Disconnect the drive shaft.
11. Remove fluid filler tube.
12. Disconnect the starter cable at the starter. Remove the starter- to-converter housing attaching bolts and remove the starter.
13. Position the engine support bar (Tool T65E-6000-JO) to the frame and engine oil pan flanges.
14. Disconnect the cooler lines from the transmission. Disconnect the vacuum line from the vacuum diaphragm unit. Remove the vacuum line from the retaining clip at the transmission.
15. Remove the speedometer driven gear from the extension housing.
16. Disconnect the manual and downshift linkage rods from the transmission control levers.

4. Lower the vehicle and fill the transmission to the correct level with the specified fluid.

INTERMEDIATE SERVO

(Refer to Fig. 5.)

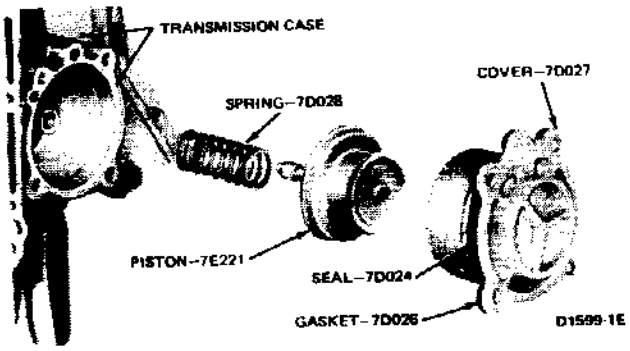

FIG. 5 Intermediate Servo Disassembled—Typical

Removal

1. Raise the vehicle on a hoist or stands.
2. Remove the bolts that secure the engine rear support is on the transmission extension rear support and insulator assembly to the crossmember.
3. Remove the two crossmember-to-frame attaching bolts, and the bolts attaching the gussets to the crossmember if so equipped.
4. Raise the transmission high enough to remove the weight from the crossmember and remove the crossmember.
5. Disconnect the muffler inlet pipe from the exhaust manifolds and allow the pipe to hang.
6. Place a drain pan under the servo. Remove the bolts that attach the servo cover to the transmission case.
7. Remove the cover, piston, spring and gasket from the case, screwing the band adjusting screw inward as the piston is removed. This places enough tension on the band to keep the struts properly engaged in the band end notches while the piston is removed.
8. Apply air pressure to the port in the servo cover to remove the piston and rod.
9. Replace the complete piston and rod assembly if the piston or piston sealing lips are damaged, (Fig. 5).
10. Remove the seal from the cover.

Installation

1. Dip the new seal in transmission fluid.
2. Install a new seal on the cover.
3. Coat new gasket with petroleum jelly, and position on the servo cover.
4. Dip the piston in transmission fluid and install it in the cover.
5. Position the servo spring on the piston rod.
6. Insert the servo piston and cover in the case and secure the cover to the case with the attaching bolts, taking care to back off the band adjusting screw as the cover bolts are tightened. **Make sure that the service identification tag is in place.**
7. Connect the muffler inlet pipe to the exhaust manifolds.
8. Raise the transmission high enough to install the crossmember. Secure the crossmember to the rear support with the attaching bolts. Lower the transmission as required to install the crossmember to frame and gussets attaching bolts. Tighten the attaching bolts to specifications as listed at the end of this Section.
9. Remove the jack from the transmission. Adjust the band as detailed in the Adjustment portion of this Section.
10. Lower the vehicle and replenish the fluid as required. Refer to Section 17-01 General Automatic Transmission Service.

EXTENSION HOUSING BEARING OR BUSHING AND REAR SEAL

E-100—E-350, F-100—F-350 and Bronco

Removal

1. Raise the vehicle and disconnect the drive shaft at the transmission.
2. When only the rear seal needs replacing, carefully remove it with a tapered chisel or the tools shown in Fig. 6. Remove the bushing as shown in Fig. 7. **Use the bushing remover carefully so that the spline seal is not damaged.**

Installation

1. When installing a new bushing use the special tool shown in Fig. 8.

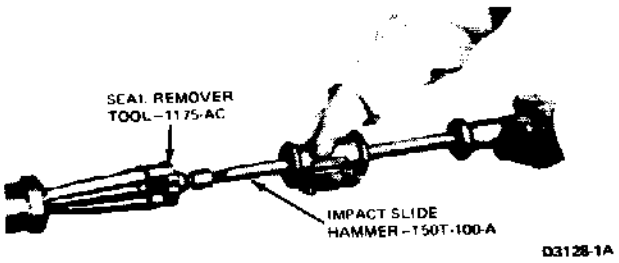

FIG. 6 Removing Extension Housing Seal

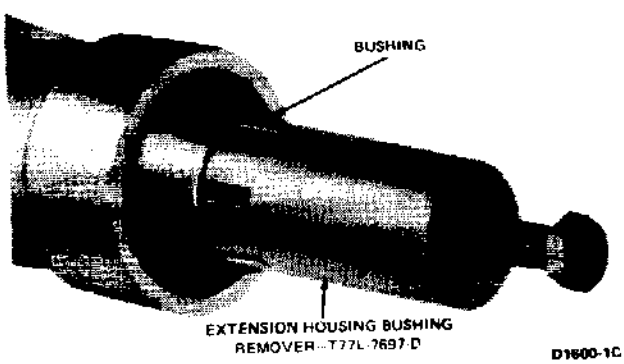

FIG. 7 Removing Extension Housing Bushing

Installation

1. Secure the governor (Fig. 10) to the oil collector flange with the attaching bolts. Tighten the bolts to 10.5-13.5 N·m (90-120 in.-lbs).
2. Re-install the extension housing as outlined in this Section.

DISASSEMBLY AND ASSEMBLY

TRANSMISSION

Refer to Fig. 35.

Before removing any of the subassemblies, thoroughly clean the outside of the transmission to prevent dirt from entering the mechanical parts.

During the repair of the subassemblies, certain general instructions which apply to all units of the transmission must be followed. Following these instructions will avoid unnecessary repetition.

Handle all transmission parts carefully to avoid nicking or burring the bearing or mating surfaces. Lubricate all internal parts of the transmission with clean automatic transmission fluid before assembly.

Do not use any other lubricants except on gaskets and thrust washers. These may be coated with petroleum jelly to facilitate assembly. Always use new gaskets and seals when assembling a transmission. Refer to Section 17-01, General Automatic Transmission Service for Cleaning and Inspection Procedures.

Tighten all bolts and screws to the recommended torque as outlined in specifications at end of this Section.

Disassembly

1. Remove the converter, and mount the transmission in holding fixture T64L-6001-A, (Fig. 11).

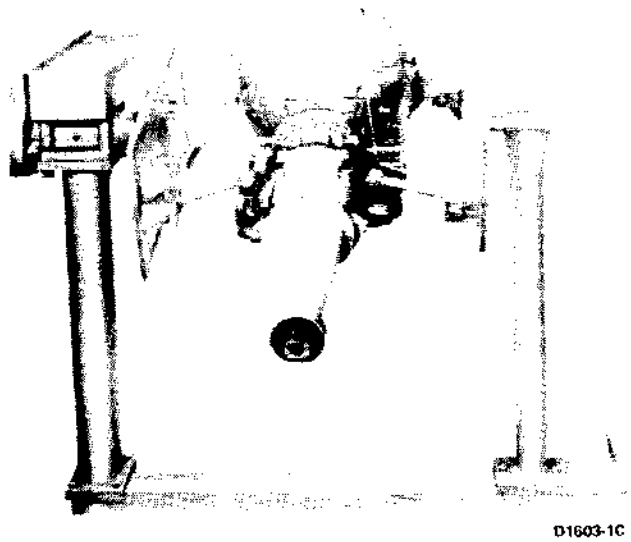

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FIG. 11 Transmission Mounted in Holding Fixture

2. Remove the 17 fluid pan attaching bolts. Remove the pan and gasket.
3. Remove the eight valve body attaching bolts. Lift the valve body (Fig. 12) from the transmission case.

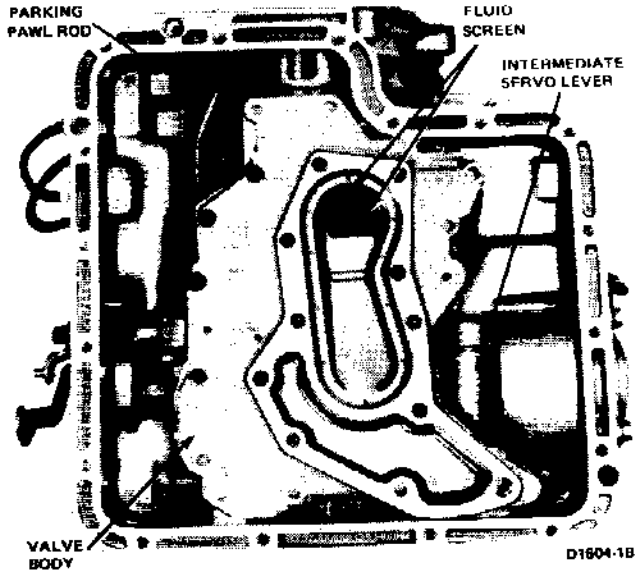


FIG. 12 Transmission With Pan Removed

4. Attach a dial indicator to the front pump as shown in Fig. 13. Install Tool T61L-7657-B in the extension housing to center the output shaft.
5. Pry the gear train to the rear of the case and at the same time, press the input shaft inward until it bottoms, (Fig. 13). Set the dial indicator to read zero.
6. Pry the gear train forward, (Fig. 13), and note the amount of gear train end play on the dial indicator. Record the end play to facilitate assembling the transmission. Remove the dial indicator from the pump and the tool from the extension housing.
7. Remove the vacuum diaphragm, rod and the primary throttle valve from the bore in the rear of the case. Slip the input shaft out of the front pump.
8. Remove the front pump attaching bolts. Pry the gear train forward as shown in Fig. 14 to remove the pump.
9. Loosen the band adjustment screw and remove the two struts.
10. Rotate the band 90 degrees counterclockwise to align the ends with the slot in the case (Fig. 15). Slide the band off the reverse-high clutch drum.
11. Remove the forward part of the gear train as an assembly as shown in Fig. 16.

17. Remove the reverse clutch snap ring from the case, then remove the clutch discs, plates and pressure plate from the case.
18. Remove the extension housing attaching bolts and vent tube from the case. Remove the extension housing and gasket.
19. Slide the output shaft (with governor and oil collector) assembly from the transmission case.
20. Remove the distributor sleeve attaching bolts and remove the sleeve, parking pawl gear and the thrust washer.

    If the thrust washer is staked in place, use a sharp chisel and cut off the metal from behind the thrust washer. Be sure to clean the rear of the case with air pressure or a suitable solvent to remove any metal particles.
21. Compress the reverse clutch piston release spring with Tool T65L-77515-A (Fig. 18). Remove the snap ring. Remove the tool and the springs and retainer assembly.

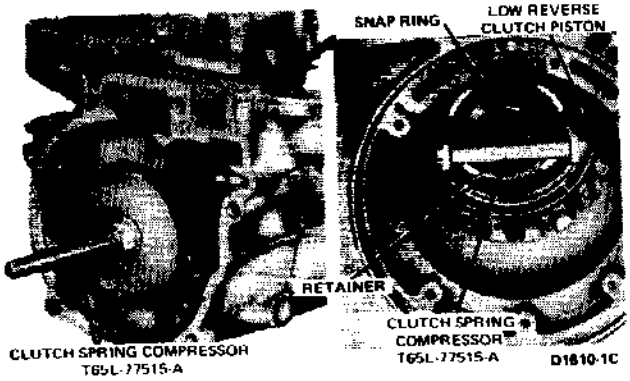


FIG. 18 Compressing Reverse Clutch Springs

22. Remove the one-way clutch inner race attaching bolts from the rear of the case. Remove the inner race from inside of the case.
23. Remove the low-reverse clutch piston from the case as shown in Fig. 19.

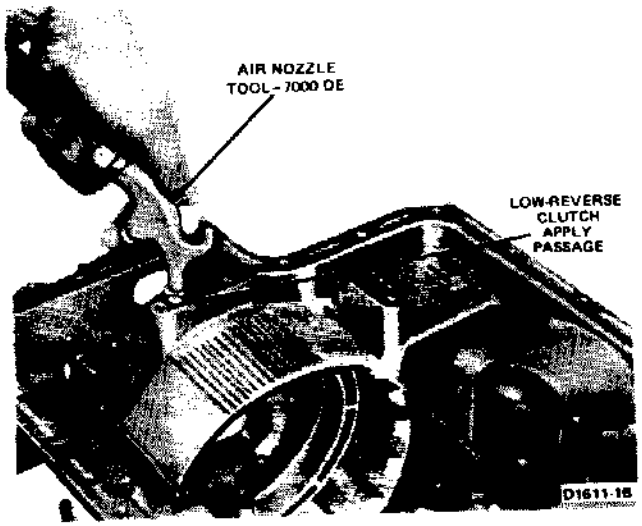


FIG. 19 Removing Low-Reverse Clutch Piston

Assembly

1. Place the transmission case in a holding fixture.
2. Tap the low-reverse piston into place in the case with a clean rubber hammer.
3. Hold the one-way clutch inner race in position and install the attaching bolts. Tighten bolts to 25-33 N·m (18-25 ft-lbs).
4. Install the low-reverse clutch return spring and retainer assembly in the clutch piston.
5. Position the retainer snap ring in place on the one-way clutch inner race.
6. Install the compressing tool shown in Fig. 18 and compress the springs just enough to install the low-reverse clutch piston snap ring.
7. Install the snap ring, then remove the compressing tool.
8. Place the transmission case on the bench with the front end facing downward.
9. Position the parking gear thrust washer and the gear on the case (Fig. 28). **Do not re-stake the thrust washer.**
10. Position the collector and tubes in place on the rear of the case. Install the attaching bolts and tighten to 17-21 N·m (12-16 ft-lbs).
11. Install the output shaft, and governor as an assembly.
12. Place a new gasket on the rear of the transmission case. Position the extension housing on the case and install the attaching bolts. Tighten the attaching bolts to 34-47 N·m (25-35 ft-lbs). Install the vent tube.
13. Place the transmission case in the holding fixture.
14. Coat two new gaskets with petroleum jelly and position them on the servo cover.
15. Position the servo spring on the piston rod.
16. Insert the servo piston rod in the case. Install the serve cover with the attaching bolts, making sure that the identification tag is in place. Tighten the attaching bolts to 19-27 N·m (14-20 ft-lbs).
17. Align the low-reverse clutch hub and one-way clutch with the inner race at the rear of the case. Rotate the low-reverse clutch hub clockwise while applying pressure to seat it on the inner race.
18. Install the low-reverse clutch plates, starting with the wave plate next to the piston and following with steel and friction plates alternately. Retain them with petroleum jelly. Five (5) steel and five (5) friction plates are required for all models. If new composition plates are being used, soak them in clean transmission fluid, (ESP-M2C138 CJ, Dexron II, Series D, or equivalent), for fifteen minutes before installation. Install the pressure plate and the snap ring. Test the operation of the low-reverse clutch by applying air pressure at the clutch pressure apply hole in the case.
19. Install the reverse planet ring gear thrust washer and the ring gear and hub assembly. Insert the snap ring in the groove in the output shaft.
20. Assemble the front and rear thrust washers onto the reverse planet assembly; retain with petroleum jelly. Insert the assembly into the ring gear and install the snap ring.

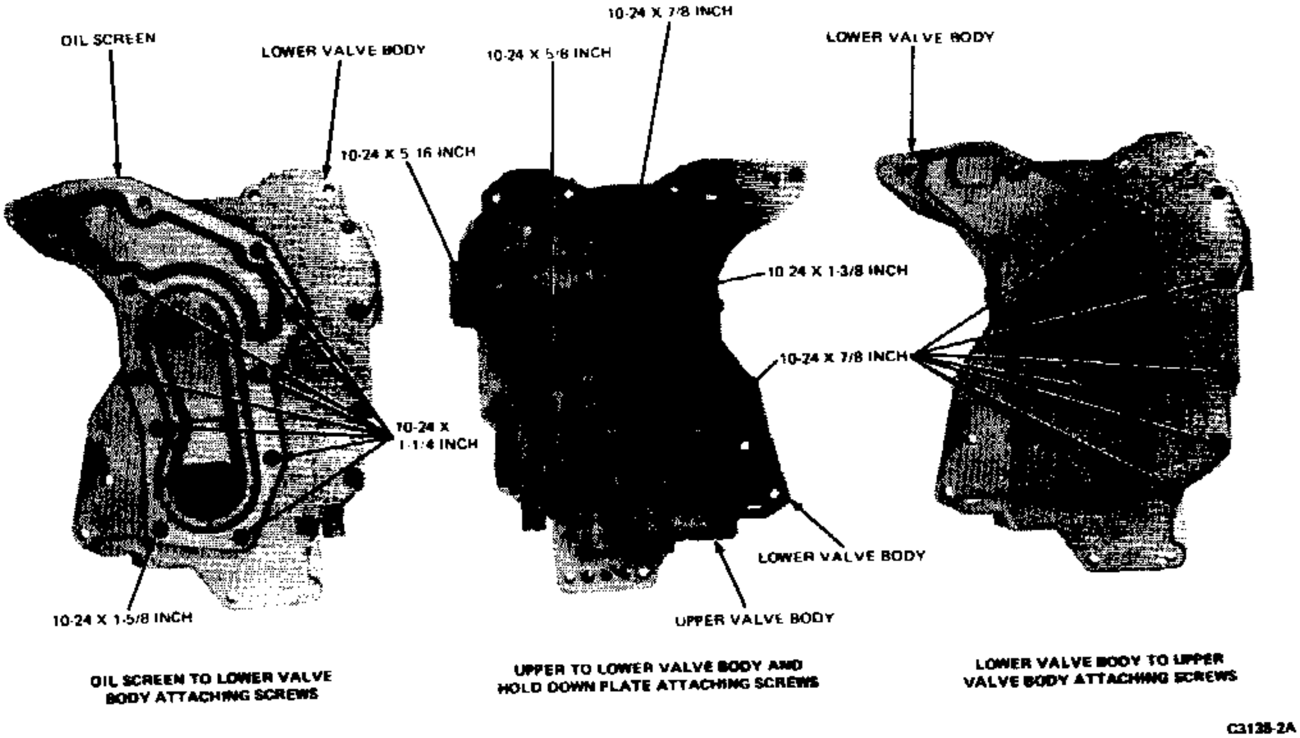


FIG. 20 Control Valve Body and Screen Attaching Screws

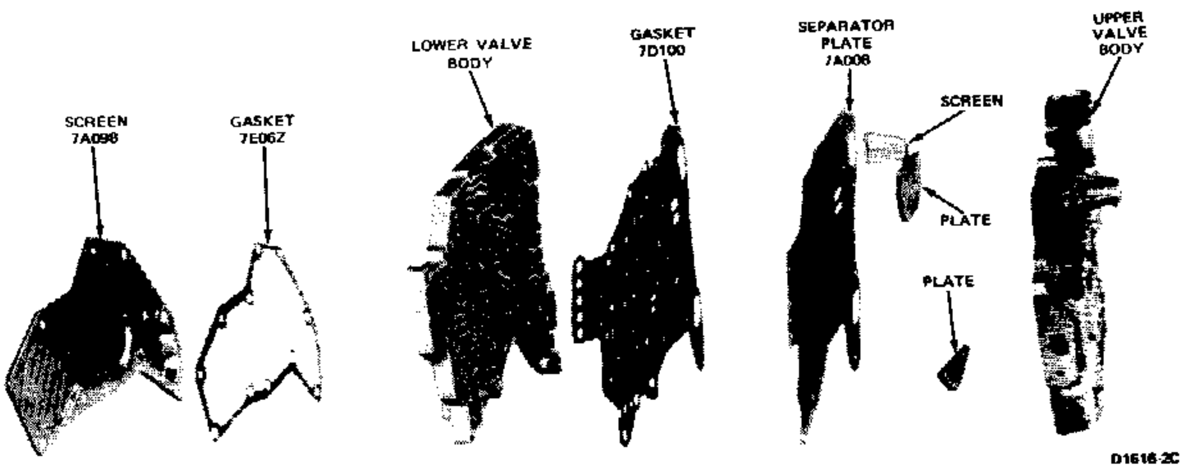


FIG. 21 Upper and Lower Valve Bodies Disassembled

Assembly

1. Place the downshift valve and spring in the valve body. Compress the spring and install the retainer from the underside of the body (Fig. 23).
2. Place the valve body on a clean surface with the passage side facing up. Place the converter relief valve spring in its bore (Fig. 23). Coat the converter pressure relief valve with petroleum jelly and place it on top of the spring. Place the 2-3 shift valve check ball in its cavity. Place the throttle pressure relief valve spring in its bore (Fig. 23). Coat the throttle pressure relief valve check ball with petroleum jelly and place it on top of the spring.
3. Install the separator screen in the separator plate if it was previously removed. **Be sure the screen tabs are flush with the separator plate surface.** Carefully position the separator plate and new gasket on the lower valve body. Place the two hold-down plates on the separator plate and install the attaching screws finger tight.
4. Place the lower body and plate assembly on the upper valve body (Fig. 20) and install the attaching screws finger tight.
5. Install the oil screen screws loosely, without the screen, to properly align the upper and lower valve bodies, gasket and separator plate.

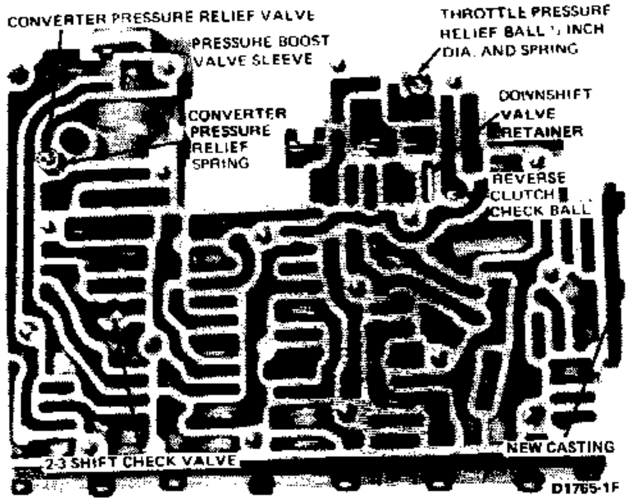


FIG. 23 Converter Pressure Relief Valve, Throttle Pressure Relief Valve, and 2-3 Shift Check Valve Locations

9. Place the cutback control valve (Fig. 22) and the line pressure coasting regulator valve in the valve body.
10. Place the one spring, DR-2 shift valve and the 1-2 shift valve in the body.
11. Place the throttle modulator valve and spring and the 2-3 shift valve in the valve body.
12. Place the spring and the 2-3 backout valve in the valve body.
13. Place the two springs and the intermediate servo accumulator valve in the valve body.
14. Place the intermediate servo modulator valve and spring in the body.
15. Carefully place the valve retaining plate on the body and secure it with the eight attaching screws. Tighten the screws to 2.5-5.0 N·m (20-45 in.-lbs).
16. Place the throttle pressure boost valve and spring in the valve body. Place. the manual low 2-1 scheduling valve and spring in the valve body and install the retaining plate. Tighten the attaching screws to 2.5-5.0 N·m (20-45 in.-lbs).
17. Place the spring retainer on the stem of the main regulator valve so that the retainer flange is next to the valve shoulder. Place the main regulator valve, spring retainer, two springs, pressure boost valve and sleeve in the bore. Apply hand pressure on the end of the pressure boost valve sleeve and install the spring clip retainer in the groove on the under side of the body so that the clip is inserted into the end groove in the sleeve. Be sure that the pressure boost valve sleeve is free in its bore.
18. Place the manual valve in the valve body and install the plunger and the retaining pin in the body.

INTERMEDIATE SERVO

(Refer to Fig. 5.)

Disassembly

1. Apply air pressure to the port in the servo cover to remove the piston and rod.
2. Replace the complete piston and rod assembly if the piston or piston sealing lips are unserviceable or damaged.
3. Remove the seals from the cover.

Assembly

1. Dip the new seals in transmission fluid.
2. Install new seals on the cover.
3. Dip the piston in transmission fluid and install it in the cover.

GOVERNOR

Disassembly

1. Remove the governor attaching bolts and remove the governor.
2. Remove the snap ring that secures the governor oil collector body on the output shaft (Fig. 24) and slide it off the front of the shaft.
3. Remove the seal rings from the oil collector body,

Assembly

1. Carefully install new seal rings on the oil collector body.
2. Working from the front end of the output shaft, slide the governor oil collector body into place on the shaft. Install the snap ring to secure it. Make sure that the snap ring is seated in the groove.
3. Position the governor on the oil collector body (Fig. 24) and secure with the attaching screws. Tighten screws to 10.5-13.5 N·m (90-120 in.-lbs).

DOWNSHIFT AND MANUAL LINKAGE

Disassembly

1. Remove the nut and lockwasher that secures the outer downshift lever to the transmission and remove the lever.
2. Slide the inner downshift lever assembly out from the inside of the case (Fig. 25). Remove the seal from the recess in the manual lever shaft.
3. On E-100—E-350, remove the two bolts retaining the backup lamp switch, and remove the switch, (Fig. 26).
4. Remove the C-ring securing the parking pawl actuating rod to the manual lever. Remove the rod from the case.
5. Remove the nut securing the inner manual lever to the shaft. Remove the inner lever from the shaft. Slide the outer lever and shaft from the case.
6. Remove the seal from the case with Tools T59L-100-B, Slide Hammer and T58L-101-A, Puller Attachment.

Assembly

1. Dip the new seal in transmission fluid and install it in the case as shown in Fig. 27.
2. Slide the outer manual lever and shaft in the transmission case.
3. Position the inner lever on the shaft, making sure the leaf spring roller is positioned in the inner manual lever detent. Install the attaching nut. Tighten the nut to 41-54 N·m (30-40 ft-lbs). Install

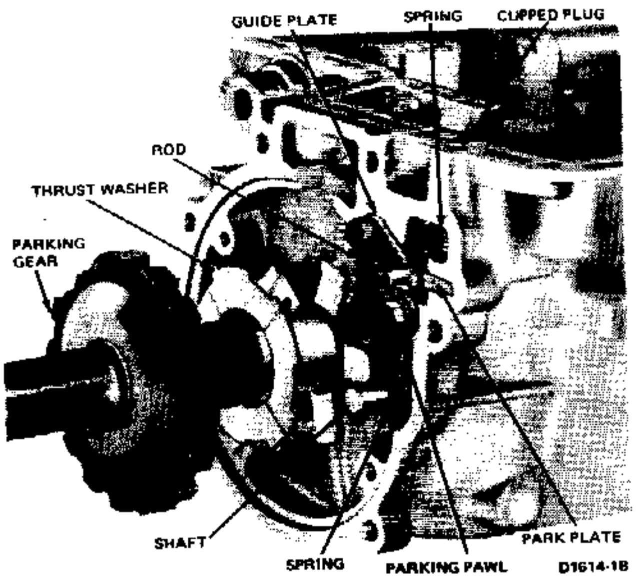


FIG. 28 Parking Pawl Mechanism

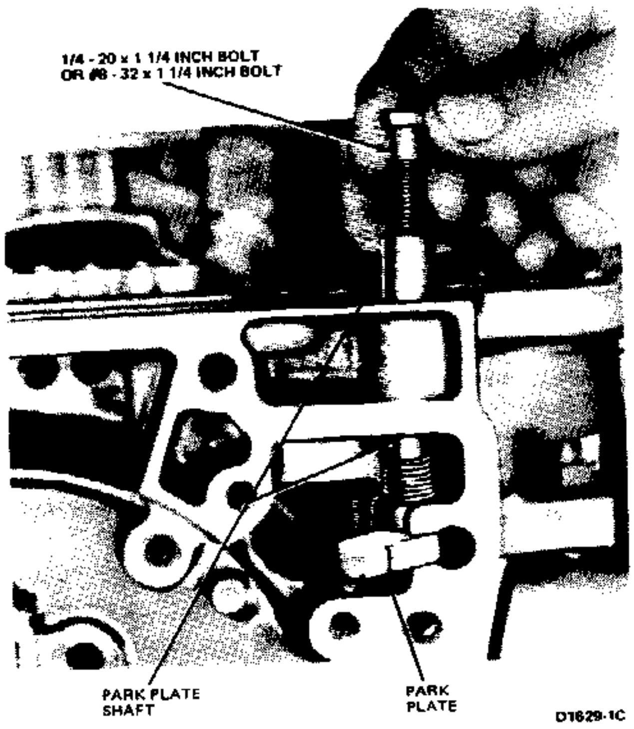


FIG. 29 Removing Park Plate

4. Position the guide plate on the case, making sure that the actuating rod is seated in the slot of the plate. Secure the plate with two bolts and lockwashers. Tighten bolts to 17-21 N·m (12-16 ft-lbs).

SERVO APPLY LEVER

Disassembly

1. Working from inside of the transmission case, carefully drive on the servo apply lever shaft to remove the cup plug. The shaft (Fig. 30) can be withdrawn from the case by hand.

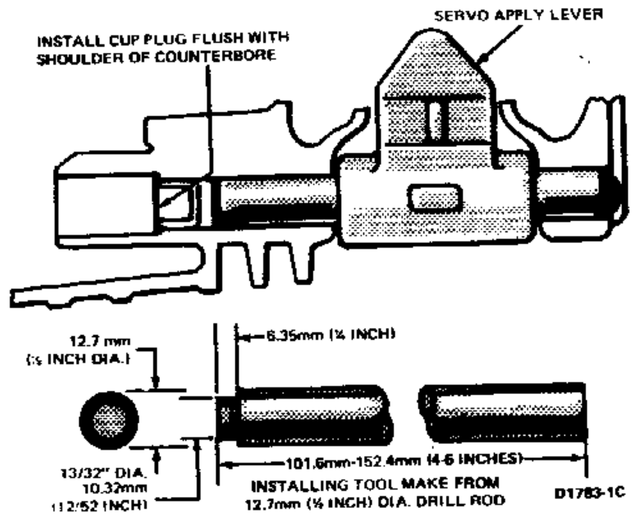


FIG. 30 Servo Apply Lever Installation

Assembly

1. Hold the servo apply lever in position and install the new shaft.
2. Using the fabricated tool shown in Fig. 30, drive the cup plug into position in the case. Be sure the plug is flush with the shoulder of the counterbore. The cup plug may be coated with Loctite, Part No. E0AZ-19554-A or equivalent, before installation.

FRONT PUMP

The front seal can be replaced after the pump has been installed on the transmission (Figs. 31 and 32).

Disassembly

1. Remove the two seal rings and the selective thrust washer (Fig. 33).
2. Remove the large square-cut seal from the outside diameter of the pump housing.

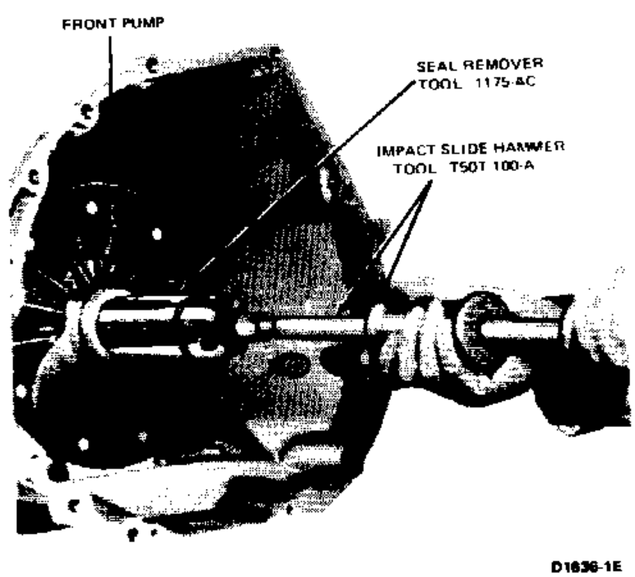


FIG. 31 Removing Front Pump Seal

3. Carefully install two new seal rings on the stator support. Make sure that the ends of the rings are engaged to lock them in place. Install a new square-cut seal on the outside diameter of the pump housing.
4. Install the selective thrust washer. **Make sure that the correct thickness selective washer is being used to obtain the specified end play.** Refer to Specifications at end of this Section.
5. Place the pump on the converter, making sure that the drive gear engages the converter hub. Rotate the pump to make sure that the gears rotate freely.

REVERSE-HIGH CLUTCH

Disassembly

1. Separate the drive train as shown in Fig. 35. Remove the pressure plate snap ring as shown in Fig. 36.
2. Remove the pressure plate and the drive and driven (internal and external spline) clutch plates (Fig. 37).
3. Install Clutch Spring Compressor, Tool T65L-77515-A (Fig. 38) on the reverse-high clutch drum. Make sure that the legs clear the snap ring enough to remove it. Remove both snap rings and remove the tool.
4. Remove the spring retainer and the piston return springs.
5. Apply air pressure to the piston apply hole in the clutch hub (Fig. 39) and remove the piston.
6. Remove the piston outer seal from the piston and the inner seal from the clutch drum (Fig. 37).
7. Remove the front and rear bushings from the clutch drum if they are worn or damaged. To remove the front bushing, use a cape chisel and cut along the bushing seam until the chisel breaks through the bushing wall. Pry the loose ends of the bushing up with an awl and remove the bushing. To remove the rear bushing, use the tool shown in Fig. 40, and press the bushing from the drum.

Assembly

1. If the clutch drum bushings were removed, position the drum in a press and press new bushings into the drum with the tools shown in Figs. 40 and 41.
2. Dip the new seals in transmission fluid and install one on the drum and one on the piston.
3. Install the piston in the clutch drum.
4. Position the piston return springs in the piston sockets (Fig. 42). Place the spring retainer on the springs.
5. Install Clutch Spring Compressor, Tool T65L-77515-A (Fig. 38) and compress the springs. Make certain that the spring retainer is centered while compressing the springs. Install the snap ring. **Before releasing the pressure on the tool, make certain that the snap ring is positioned inside of the four snap ring guides on the spring retainer.**
6. Clutch plate usage varies with each model, refer to the specifications at end of this Section for the number of plates required. Dip the clutch plates in clean transmission fluid. Install the clutch plates alternately starting with a steel drive (internal) plate (Fig. 37). When new composition clutch plates are used, soak the plates in automatic transmission fluid, (Spec. ESP-M2C138 CJ), for 15 minutes before they are assembled.
7. After all clutch plates have been installed, position the pressure plate in the clutch drum. Install the pressure plate (selective) snap ring.
8. With a feeler gauge, check the clearance between the pressure plate and snap ring (Fig. 43).
9. The pressure plate should be held downward as the clearance is checked. The clearance should be 0.558-0.914mm (0.022-0.036 inch). If the clearance is not within specifications, selective thickness snap rings are available in the following thicknesses: 1.42-1.52mm (0.056-0.060 inch), 1.65-1.75mm (0.065-0.069 inch), 1.87-1.98mm (0.074-0.078 inch), 2.10-2.20mm (0.083-0.087 inch), 2.33-2.43mm (0.092-0.096 inch), 2.79-2.89mm (0.110-0.114 inch) and 3.25-3.35mm (0.128-0.132 inch). Install the correct size snap ring and re-check the clearance.

FORWARD CLUTCH

Disassembly

1. Remove the clutch pressure plate snap ring (Fig. 44).
2. Remove the rear pressure plate, the drive and driven plates, wave plate, and the forward pressure plate from the clutch hub (Fig. 45).
3. Remove the snap ring (Fig. 46) that secures the disc spring in the clutch cylinder. Remove the disc spring.
4. Apply air pressure to the clutch cylinder (Fig. 47) to remove the piston.
5. Remove the seal from the piston and the seal from the clutch hub (Fig. 45).

Assembly

1. Dip two new seals in transmission fluid. Install the smaller seal on the clutch hub and the lip seal on the clutch piston.
2. Install the clutch piston and lip seal with Lip Seal Protector, T77L-77548-A, (Fig. 48).
3. Position the installation tool into the forward clutch cylinder, so that the bore of the tool is aligned with the piston bore in the cylinder. Press the piston into the cylinder until it bottoms in the bore. Remove the installation tool.
4. Make sure that the steel pressure ring is in the groove on the piston. **Position the disc spring in the cylinder with the dished face downward.** Install the spring as shown in Fig. 46 so that the pressure ring and spring are in contact. Secure the disc with the retaining snap ring.
5. Install the forward pressure plate with the flat side up and the beveled side downward. Dip the clutch plates in clean transmission fluid (Specification ESP-M2C 138-CJ or equivalent). Next, install the wave plate, then a steel plate and a composition driven plate. Install the remaining plates in this sequence (Fig. 45).

Refer to the Specification at end of this Section for the number of plates required. The last plate

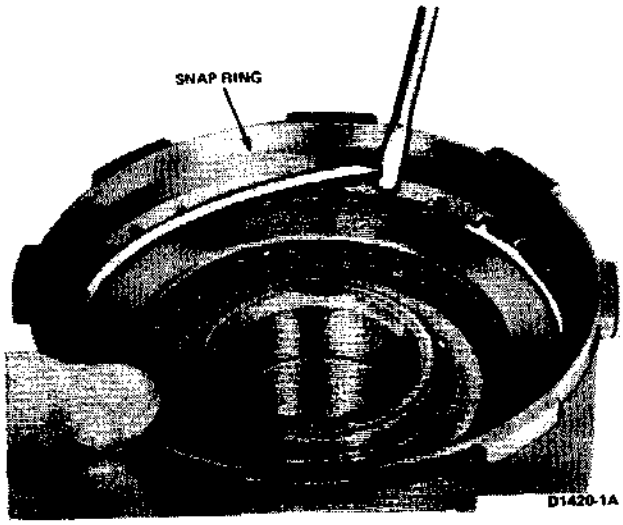


FIG. 36 Removing or Installing Reverse-High Clutch Pressure Plate Snap Ring

installed will be the rear pressure plate. Install the snap ring and make certain that it seats fully in the groove. When new composition clutch plates are used, soak the plates in automatic transmission fluid for 15 minutes before they are assembled.

6. With a feeler gauge, check the clearance between the snap ring and the pressure plate (Fig. 49). Downward pressure on the plate should be maintained when making this check. Clearance should be 0.533-1.168mm (0.021-0.046 inch).
7. If the clearance is not within specifications, selective snap rings are available in the following thicknesses: 1.42-1.52mm (0.056-0.060 inch), 1.65-1.75mm (0.065-0.069 inch), 1.87-1.98mm (0.074-0.078 inch), 2.10-2.20mm (0.083-0.087 inch), 2.33-2.43mm (0.092-0.096 inch), 2.79-2.89mm (0.110-0.114 inch) and 3.25-3.35mm (0.128-0.132 inch). Insert the correct size snap ring and recheck the clearance.

INPUT SHELL AND SUN GEAR

Disassembly

1. Remove the external snap ring from the sun gear as shown in Fig. 50.

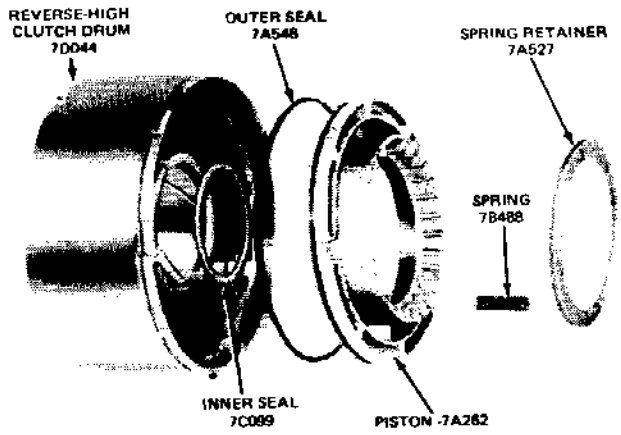


FIG. 37 Reverse-High Clutch Disassembled

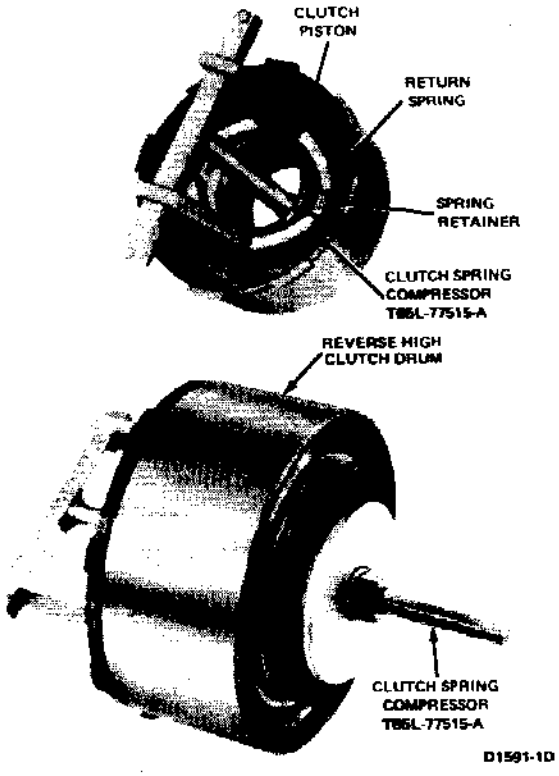
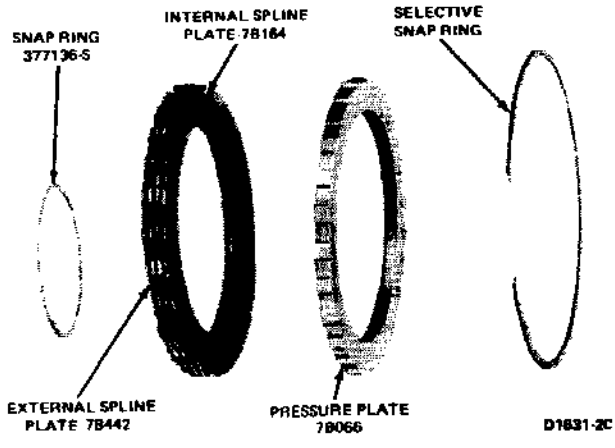


FIG. 38 Removing or Installing Reverse—High Clutch Piston Snap Ring

2. Remove the thrust washer from the input shell and sun gear (Fig. 51).
3. Working from inside the input shell remove the sun gear. Remove the snap ring from the gear.

Assembly

1. Install the forward snap ring on the forward end (short end) of the sun gear (Fig. 51). Working from inside the input shell, slide the sun gear and snap ring into place making sure that the longer end is at the rear (Fig. 51).
2. Place the No. 6 thrust washer on the sun gear and install the rear snap ring.



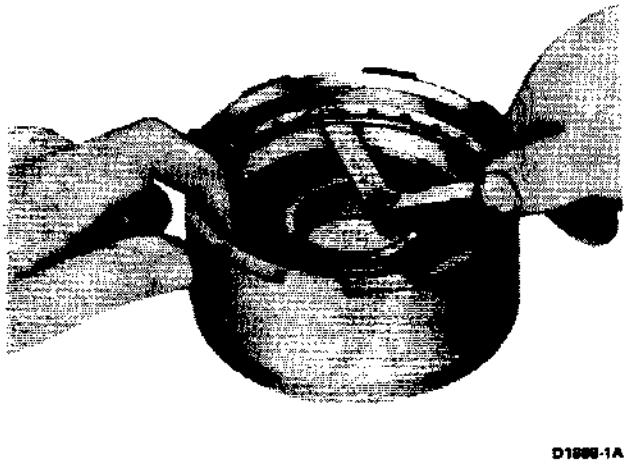


FIG. 43 Checking Reverse-High Clutch Snap Ring Clearance

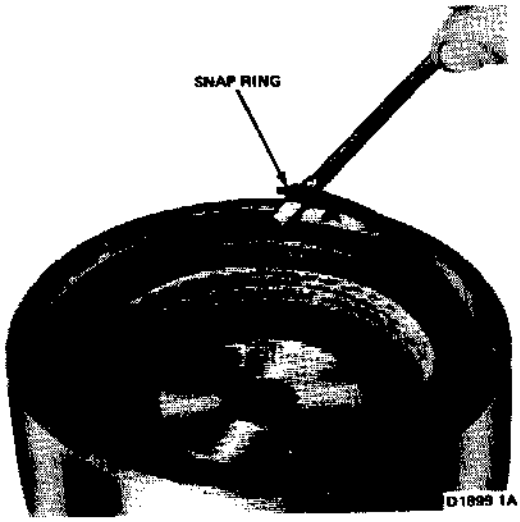


FIG. 44 Removing Forward Clutch Pressure Plate Snap Ring

Assembly

1. Dip the two new seals in clean transmission fluid.
2. Install the seals on the piston.

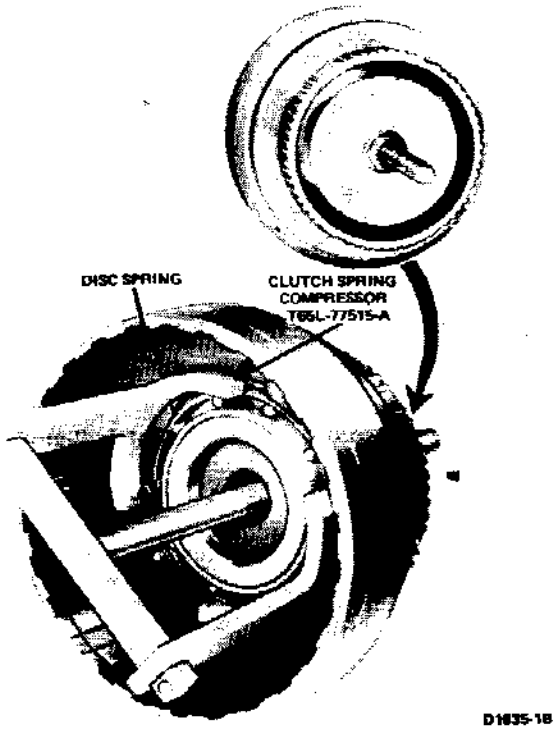


FIG. 46 Removing or Installing Disc Spring

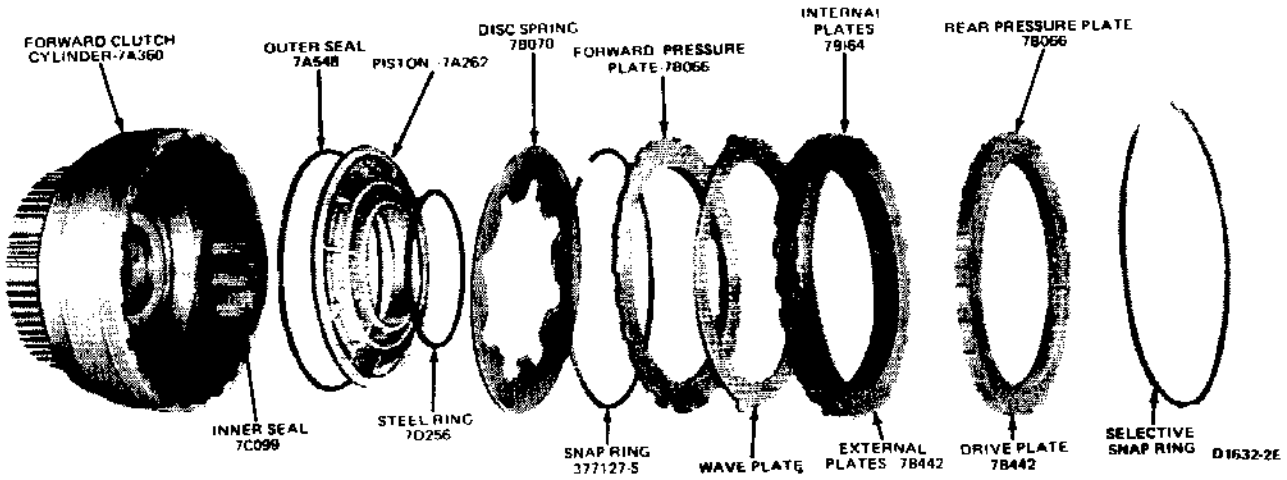


FIG. 45 Forward Clutch Disassembled

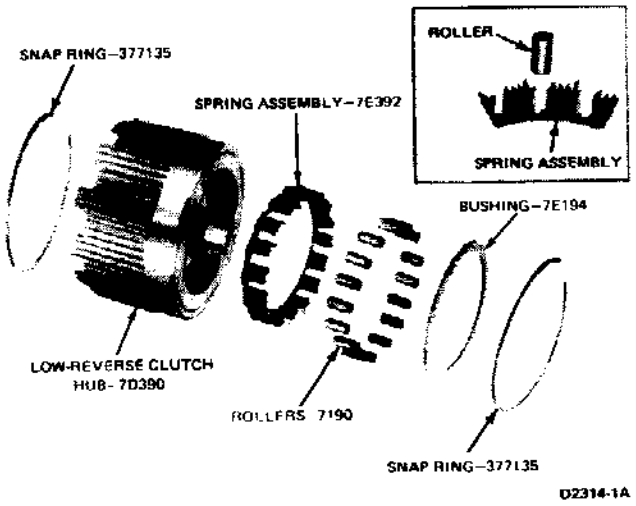


FIG. 53 One-Way Clutch Disassembled

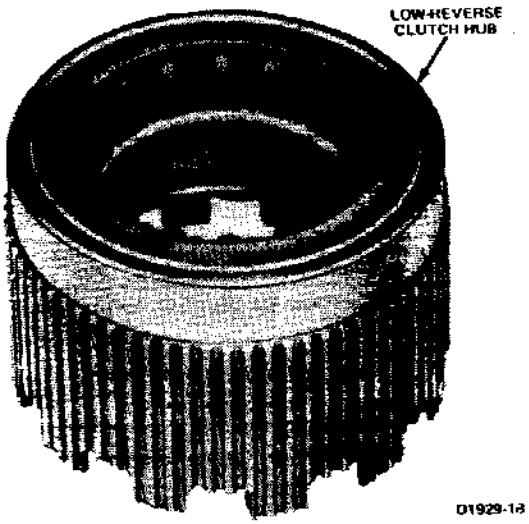


FIG. 54 One-Way Clutch Installed

STALL SPEED SPECIFICATION — C6 TRANSMISSION

Vehicle	Engine	Trans. Type	Converter		Stall Speed	
			Size	ID	Min.	Max.
F-100/150/250, E-100/150/250	4.9L (300 CID)	C6	12"	99	1630	1850
F-350/E-350	4.9L (300 CID)	C6	12"	99	1550	1750
F-100/150 (49S/Canada)	5.0L (302 CID)	C6	12"	99	1525	1735
F-150 (50S)/F-250 (49S)	5.0L (302 CID)	C6	12"	99	1590	1800
E-100/150/250						
F-150/250	5.8L (351 CID)	C6	12"	100	1550	1800
F-250 (Calif)/F-250/350,	5.8L (351 CID)	C6	12"	100	1570	1820
F-100/Bronco/E-100/150						
E-250/350	5.8L (351 CID)	C6	12"	100	1510	1750
F-250/350/E-250/350	6.8L (400 CID)	C6	12"	100	1610	1890
E-250/350	7.5L (460 CID)	C6	12"	91	1580	1930

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TORQUE LIMITS

Item	(ft-lbs)	N-m	Item	(ft-lbs)	N-m
Converter to Flywheel	20-30	28-40	Pressure Gauge Tap	9-15	12.5-20
Front Pump to Trans. Case	16-30	22-40	Band Adj. Screw Locknut to Case	35-45	48-61
Overrunning Clutch Race to Case	18-25	25-33	Cooler Tube Connector Lock	20-35	28-47
Oil Pan to Case	12-16	17-21	Converter Drain Plug	8-26	11-37
Stator Support to Pump	12-16	17-21	Manual Valve Inner Lever to Shaft	30-40	41-54
Converter Cover to Converter Housing	12-16	17-21	Downshift Lever to Shaft	12-16	17-21
Guide Plate to Case	12-16	17-21	Filler Tube to Engine	20-25	28-33
Intermediate Servo Cover to Case	14-20	19-27	Transmission to Engine	40-50	55-67
Diaphragm Assy. to Case	12-16	17-21	Rear Engine Support to Transmission	55-65	75-88
Distributor Sleeve to Case	12-16	17-21	Extension Housing to Bearing Retainer Stud	35-50	48-67
Extension Assy. to Trans. Case	25-35	34-47	Bearing Retainer to Extension Assy.	35-45	48-61
Rear Cover Plate to Converter Housing	20-30	28-40	Plug Case — Throttle Pressure	6-12	8.5-16
Plug — Case TRS Switch Port	6-12	8.5-16	5/16" Fitting — Cooler Line Connector to Case — Front and Rear (Case Fitting)	18-23	25-32
Plug — Case Front Pump or Line Pressure	6-12	8.5-16	5/16" Tube Nut — Cooler Line to Trans. Case Fitting	12-18	17-24
Yoke to Output Shaft (4 x 4)	100-150	136-203			
	(in-lb)	N-m		(in-lb)	N-m
End Plates to Body	20-45	2.5-5	Converter Hsg. Cover to Converter Hsg.	30-60	3.5-6.5
Inner Downshift Lever Stop	20-45	2.5-5	Control Assy. to Case	95-125	11-14
Reinforcement Plate to Body	20-45	2.5-5	Gov. Body to Collector Body	90-120	10.5-13.5
Screen and Lower to Upper Valve Body	40-55	5-6.2	Oil Tube Connector	60-120	7-13.5
Shift Valve Plate to Upper Body	20-45	2.5-5	Detent Spring to Case	80-120	9.5-13.5
Upper to Lower Body	40-55	5-6.2	Rear Engine Support to Frame	40-60	5-6.5
Reinforcing Right Side Plate to Lower Body	20-45	2.5-5	Neutral Switch to Case	55-75	6.5-8

CD2184-2N

PRECAUTIONS FOR STORAGE

If the Skidozer is to remain idle for a prolonged period of time, certain precautions have to be taken so that it will not deteriorate during this idle period. The following storage procedure is recommended:

- Clean the machine thoroughly.
- Thoroughly inspect and do all the necessary repairs.
- Lubricate all points mentioned in the lubrications schedule.
- Prepare the engine according to the instructions found in the Maintenance and Operator's Manual prepared by the engine Manufacturer.
- Check the oil in the differential; if it is contaminated, drain and refill with new oil.
- Check the oil in the transmission, hydraulic system and the 2 speed gear box. If it is contaminated, or if it is close to change period, drain and refill with new oil.
- Lift and block the vehicle off the ground to take the weight off the suspension.
- Remove the battery.
- Battery should be put on a trickle charge, or checked and charged monthly.

DIFFERENTIAL		SV-252
Type		Planetary-controlled
Ratio		5.83 to 1
DRIVE SPROCKETS:		Polyurethane covered aluminium core
BRAKES:	Service	Disc brake on drive line
	Parking	Locking device on drive line
ELECTRICAL:		12 Volts
Battery capacity cold cranking capacity at -17.8°C (0°F)		560 AMP reserve of 140 min.
Alternator capacity		60 amps
WHEELS:		
Type		1 piece disc wheel & hub.
TIRE:		10 Front solid rubber.
TRACKS:		
Width		29" 73.7 cm
Type		Fabric reinforced rubber belts with steel crosslinks

CAPACITIES:	IMP.	U.S.	LITRES
Cooling system.....:	17.8 qts	21.4 qts	20.3 L
Fuel tank.....:	31.9 gals	38.2 gals	145.0 L
Crankcase.....:	6.66 qts	8. qts	7.57 L
Transmission Automatic:	11.5 qts	13.7 qts	13. L
2 Speed Gear Box.....:	1.5 qts	1.7 qts	1.7 L
Differential.....:	16.65 qts	20. qts	19. L