

11-14 TROUBLESHOOTING

4. Transmission leaks fluid

- Check the fluid level for an overfilled condition. Adjust the fluid level to specification.
- Check for a restricted transmission vent or breather tube. Clear the blockage as necessary and check the fluid level. If necessary, top off with the recommended lubricant.
- Check for a porous casting, leaking seal or gasket. Replace defective parts and top off the fluid level with the recommended lubricant.

2-C. Clutch

1. Clutch slips on hills or during sudden acceleration

- Check for insufficient clutch pedal free-play. Adjust clutch linkage or cable to allow about 1 inch (25mm) of pedal free-play.
- Clutch disc worn or severely damaged. Remove engine or transmission and replace clutch disc.
- Clutch pressure plate is weak. Remove engine or transmission and replace the clutch pressure plate and clutch disc.
- Clutch pressure plate and/or flywheel incorrectly machined. If the clutch system has been recently replaced and rebuilt, or refurbished parts have been used, it is possible that the machined surfaces decreased the clutch clamping force. Replace defective parts with new replacement parts.

2. Clutch will not disengage, difficult to shift

- Check the clutch release mechanism. Check for stretched cables, worn linkages or failed clutch hydraulics and replace defective parts. On hydraulically operated clutch release mechanisms, check for air in the hydraulic system and bleed as necessary.
- Check for a broken, cracked or fatigued clutch release arm or release arm pivot. Replace defective parts and properly lubricate upon assembly.
- Check for a damaged clutch hub damper or damper spring. The broken parts tend to become lodged between the clutch disc and the pressure plate. Disassemble clutch system and replace failed parts.
- Check for a seized clutch pilot bearing. Disassemble the clutch assembly and replace the defective parts.
- Check for a defective clutch disc. Check for warpage or lining thicknesses larger than original equipment.

3. Clutch is noisy when the clutch pedal is pressed

- Check the clutch pedal stop and pedal free-play adjustment for excessive movement and adjust as necessary.
- Check for a worn or damaged release bearing. If the noise ceases when the pedal is released, the release bearing should be replaced.
- Check the engine crankshaft axial play. If the crankshaft thrust bearings are worn or damaged, the crankshaft will move when pressing the clutch pedal. The engine must be disassembled to replace the crankshaft thrust bearings.

4. Clutch pedal extremely difficult to press

- Check the clutch pedal pivots and linkages for binding. Clean and lubricate linkages.

- On cable actuated clutch systems, check the cable routing and condition. Replace kinked, frayed, damaged or corroded cables and check cable routing to avoid sharp bends. Check the engine ground strap for poor conductivity. If the ground strap is marginal, the engine could try to ground itself via the clutch cable, causing premature failure.
- On mechanical linkage clutches, check the linkage for binding or misalignment. Lubricate pivots or linkages and repair as necessary.
- Check the release bearing guide tube and release fork for a lack of lubrication. Install a smooth coating of high temperature grease to allow smooth movement of the release bearing over the guide tube.

5. Clutch pedal remains down when pressed

- On mechanical linkage or cable actuated clutches, check for a loose or disconnected link.
- On hydraulically actuated clutches, check the fluid level and check for a hydraulic leak at the clutch slave or master cylinder, or hydraulic line. Replace failed parts and bleed clutch hydraulic system. If no leakage is noted, the clutch master cylinder may have failed internally. Replace the clutch master cylinder and bleed the clutch hydraulic system.

6. Clutch chatters when engaging

- Check the engine flywheel for warpage or surface variations and replace or repair as necessary.
- Check for a warped clutch disc or damaged clutch damper hub. Remove the clutch disc and replace.
- Check for a loose or damaged clutch pressure plate and replace defective components.

NOTE: The clutch is actuated either by a mechanical linkage, cable or a clutch hydraulic system. The mechanical linkage and cable systems may require the clutch pedal free-play to be adjusted as the clutch disc wears. A hydraulic clutch system automatically adjusts as the clutch wears and, with the exception of the clutch pedal height, no adjustment is possible.

2-D. Differential and Final Drive

1. Differential makes a low pitched rumbling noise

- Check fluid level type and amount. Replace the fluid with the recommended type and amount of lubricant.
- Check the differential bearings for wear or damage. Remove the bearings, inspect the drive and driven gears for wear or damage, and replace components as necessary.

2. Differential makes a howling noise

- Check fluid level type and amount. Replace the fluid with the recommended type and amount of lubricant.
- Check the differential drive and driven gears for wear or damage, and replace components as necessary.