

11. Crankshaft/Transmission

Service Information	11-1	Transmission Removal/Installation	11-6
Troubleshooting	11-1	Mainshaft Disassembly/Assembly	11-8
Crankshaft Removal/Installation	11-2	Countershaft Disassembly/Assembly	11-10
Crankshaft Bearing Replacement	11-4		

Service Information

- The crankcase must be separated to repair transmission or crankshaft.
- At crankshaft removal and installation, do not damage the crankshaft main journal bearings.
- All bearing inserts are select fitted and are identified by color code. Select replacement bearings from the code tables.
- After installing new bearings, recheck them with plastigauge to verify clearance.
- Apply molybdenum disulfide oil to the main journals and crankpins during assembly.

Troubleshooting

Crankshaft Noisy

- Worn crankshaft main journal bearings
- Worn connecting rod bearings
- Bent connecting rod

Hard To Shift

- Improper clutch adjustment
- Incorrect engine oil viscosity
- Improper clutch operation
- Bent shift forks
- Bent shift fork shaft
- Bent shift fork claw
- Damaged shift drum cam grooves
- Bent shift spindle

Transmission Jump Out Of Slots

- Worn gear engagement dogs or slots
- Bent shift fork shaft
- Damaged shift drum stopper arm
- Damaged or bent shift fork
- Broken shift linkage return spring
- Damaged shift drum cam grooves