

COMET TORQUE CONVERTER SYSTEM GENERAL MAINTENANCE INFORMATION

Inspect the Comet Drive Clutch and Driven unit on a regular basis . . . every few hours of operation. Check for dirt, frayed belts, plus any other problem that is obvious by a visual inspection. **KEEP DRIVE FREE FROM DIRT AT ALL TIMES.** If the vehicle is being used frequently, both Driver Clutch and Driven unit should be checked thoroughly every month. **ALWAYS CLEAN AND SERVICE BEFORE EACH SEASON.**

Drive and Driven members should be parallel and within alignment tolerance. (See alignment instructions.) Friction faces must be smooth, free of dirt, corrosion, rust, oil or grease.

Belt must be dry, straight and free of cracks, breaks or uneven wear. The belt should be free of cracks, breaks or uneven wear. The belt should be free in bottom of Drive clutch and approximately flush with outside diameter of driven unit sheaves. There must not be an excessive looseness in the belt. If belt wear is uneven, check for the following: Improper alignment, incorrect idle speed or malfunction of clutch engagement mechanism.

When checking a Torque Converter System as described here, **DO NOT STAND OR ALLOW ANYONE TO STAND IN LINE WITH DRIVE BELT WITH THE SCATTER SHIELD REMOVED.** Any broken parts or an object dropped on the belt with its high rotating speed can be thrown with tremendous force.

Start engine and set throttle to idle speed. Belt should not have any movement. There should not be any load on engine when the converter system is stopped. Check the engagement of the clutch and the disengagement as well. If the Drive clutch fails to disengage, the idle setting may be too high. Misalignment can also cause the system not to disengage.

Slowly open the throttle. The belt should move smoothly toward the outside diameter of the Drive clutch and inward on the diameter of the Driven unit. You may also test the centrifugal action of the clutch by varying the engine speed to obtain full movement of the sheave faces.

If the engagement speed is too low, the compression spring may be too weak and will have to be replaced.

If the engagement speed is too high, the compression spring may be too strong or . . . the engaging mechanism may be sticking or binding . . . check centrifugal weights and spider rollers.

If the engagement action is erratic, the engagement mechanism is probably binding. This can be caused by dirt or matter that has collected on the Driver post. In this case remove the drive belt. Apply solvent to the post and in the grooves of the post thoroughly. **CLEAN and DRY** the post and sheaves carefully before replacing the drive belt.

CHECKING THE DRIVEN UNIT

To check the torque sensing element of the Driven unit; slowly open throttle until belt moves to outside diameter of drive clutch. Maintain this setting by holding throttle steady. Now check the torque sensing unit by applying the brake. Drive ratio should change smoothly with varying torque load. If it does not, check ramp buttons and spring for obstructions.

NOTE! Vibrations at higher speeds may indicate a bent shaft, improper alignment or . . . imbalance of some component within the Torque Converter System (Driver and/or Driven member.)

Inspect all parts for wear and/or damage. If wear is abnormal find the reason and correct before

See No. 1 & 3



See No. 6



See No. 7



See No. 8



See No. 9



See No. 10



See No. 11



PROBLEM	CAUSE	SOLUTION
1 Belt is worn thin in just one portion	Excessive Slipping of Drive Clutch Pulley caused by A. Locked Track B. Clutch not operating properly. C. Idle speed is too high.	A. Rotate track by hand to free up. B. Repair or Release clutch. C. Reduce engine R.P.M.
2 Drive Clutch turns while engine idles.	A. Idle set too high B. Wrong belt length C. Wrong Drive Center Dimension	A. Reduce engine R.P.M. B. Check application specs. C. See instruction Manual
3 Belt is worn "Cup" shaped (concave) on sides	A. Too much run out on Drive clutch pulley	A. Repair or replace Drive Clutch B. Increase center distance (see manual)
4 Belt Disintegration	Excessive Belt speed	Reduce RPM at high speed.
5 Belt "Roll-over" at high speed	A. Pulley system out of line B. Belt speed too high C. Too much run out on drive clutch pulley	A. Align System (see manual) B. Reduce RPM C. Repair or replace Drive Clutch D. Check operator's manual.
6 Cord breakage on belt edge	A. Misalignment of Drive system B. Belt not properly installed	A. Align system (see manual) B. Check operator's manual
7 Cracking between cogs on belt	Belt is wearing out	Replace belt
8 Broken or torn cogs Compression section broken-torn.	A. Belt not installed right B. Belt is rubbing something	A. See Manual B. Check drive components for interference
9 Belt worn uneven on one side	A. System out of line B. Engine mount is loose	A. Align system (see manual) B. Tighten or replace engine mount.
10 Belt has glazed on baked appearance	Excessive slippage caused by: A. Lack of enough pressure on belt sides. B. Horse power too high for clutch & belt. C. Oil on pulley residual from belt mfgs. mold release.	A. Check springs & weights of drive clutch B. Consult Dealer C. Clean belt - Clean pulley faces - Make sure they are dry
11 Top Width of belt worn too much	A. Excessive slipping B. Pulleys are scratched or rough	A. Check Drive Clutch for proper engagement B. Replace or repair