

TECHNICAL

ZONES AND DEALERS

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Subject: DIRECT DRIVE CLUTCH FAILS TO DISENGAGE - ULTRAMATIC DRIVE

A service operation has been worked out to provide a more positive disengagement of the direct drive clutch to correct complaints of the clutch "hanging on" and stalling the engine when the vehicle is brought to a stop. This operation, however, should not be performed until other mechanisms, which also will cause this condition, are known to be operating properly.

Possible causes and their corrections are shown below and these should be checked in the sequence as listed:

POSSIBLE CAUSE

- (a) Faulty governor.
- (b) Sticking direct drive shift valve.
- (c) Sticking converter inlet valve.
- (d) Excessive reactor shaft end play.
- (e) Sticking direct drive clutch piston. (e) Check piston for sticking. Piston

CORRECTION

- (a) Perform governor pressure test. Recondition the governor. Install new parts if necessary.
- (b) Perform direct drive shift valve pressure test. Free up valve if necessary.
- (c) Perform converter inlet pressure test. Free up inlet valve if necessary.
- (d) Check end play and change washer if necessary to obtain .010" to .015" end play.
- should move freely in splines and rings should have .002" to .010" gap. Free up piston and file rings to obtain this gap if necessary.

If the inspections and pressure tests reveal that the mechanisms are operating properly, two additional annular grooves of the same width as the original grooves (1/16" wide) should be cut into the facings on each side of the driven plate. The inner grooves should be cut midway between the original grooves and the inner circumference of the facings. The outer grooves should be cut midway between the original grooves and the outer circumference of the facings. When completed, both facings will have three equally spaced ring-like grooves.

Reworking the driven plate in this manner will permit the oil pressure to release the clutch more quickly.

Very truly yours,

Parts and Service Department

AED: ljk