

# ULTRAMATIC DRIVE

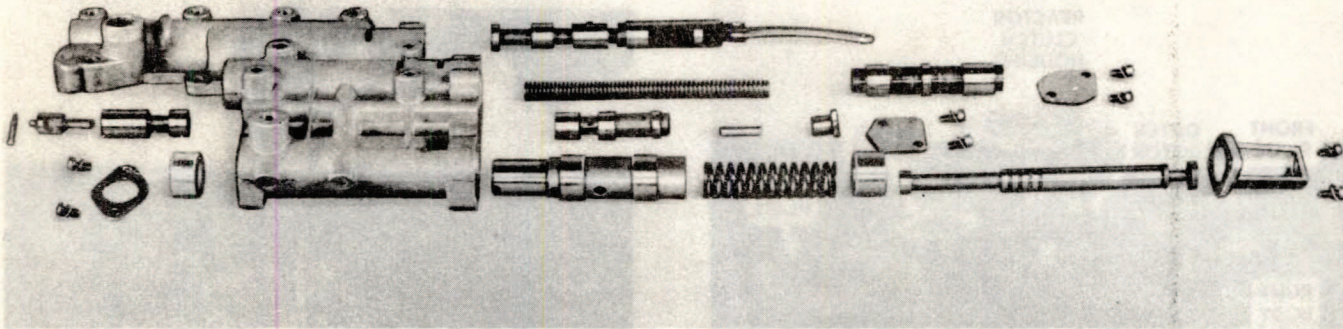


Figure 35—A Disassembled Lower Valve Body

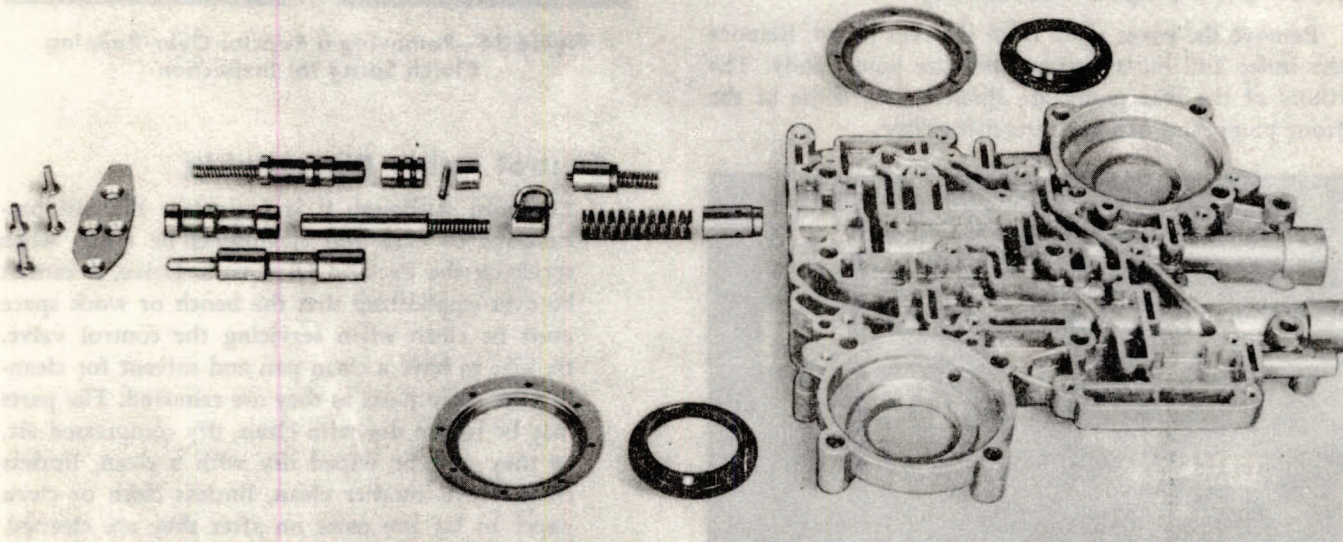


Figure 36—A Disassembled Upper Valve Body

## Procedure

Remove the cap screws and separate the lower valve body, separator plate, and upper valve body. Remove the throttle valve piston spring seat screws. Remove the throttle valve, piston, spacer, spring, and seat. Remove the control valve and link, using a slight twisting motion.

Remove the plate at the rear end of the timing bore. Remove the timing valve and spring. Remove the plate at the rear end of the direct drive shift valve bore. Remove the shift valve piston. Remove the pins at the forward end, and at the center of the modulating valve bore. Remove the modulating valve, guide, and the direct drive shift valve.

Remove the low range and reverse cylinder bodies and pistons from the upper valve body.

Remove the plate at the forward end of the upper valve body. Remove the pump check valve, pump selector valve, converter inlet valve, converter relief valve, and the valve springs.

## Hydraulic Governor Disassembly

Remove the two cap screws attaching the governor housing to the governor drive shaft flange. Separate the housing from the driving flange. Check the governor drive shaft to adapter end play and side clearance. The end play should be .010" to .018", while the drive shaft side clearance should be .0005" to .002".

If the end play or side clearances exceed these limits, disassemble the driveshaft as follows: Drive out the driving gear pin. Press off the driving gear, and remove the driving shaft from the adapter.