

TROUBLESHOOTING

General Notes

1. Troubles occurring with the automatic transmission can be caused by either the engine, electrical control or the transmission itself. These three areas should be distinctly isolated before proceeding with troubleshooting.
2. Troubleshooting should begin with the simplest operation, working up in order of difficulty, but first determine whether the trouble lies within the engine, electrical control or transmission.
3. Proceed with the inspection as follows:

PRELIMINARY CHECK (See page AT-10)

- (a) Check the tire inflation.
- (b) Check the idle speed.
- (c) Check the fluid level and fluid condition.
- (d) Check the throttle cable.
- (e) Check the shift linkage.
- (f) Check the neutral start switch.

STALL TEST (See page AT-19)

Check the engine and torque converter.

TIME LAG TEST (See page AT-20)

Check the automatic transmission (each clutch, brake and gear) for wear.

HYDRAULIC TEST (See page AT-21)

Measure the line pressure and make basic check of fluid circuit.

ROAD TEST (See page AT-24)

Confirm if trouble lies within automatic transmission. If noisy or vibrating, the possible cause could be with the engine, drive shaft, tires, etc.

(No up-shift to overdrive/No down-shift from overdrive)

ELECTRIC CONTROL SYSTEM CHECK (See page AT-12)

General Troubleshooting

Problem	Possible cause	Remedy	Page
Fluid discolored or smells burnt	Fluid contaminated Torque converter faulty Transmission faulty	Replace fluid Replace torque converter Disassemble and inspect transmission	AT-10 AT-37
Vehicle does not move in any forward range or reverse	Manual linkage out of adjustment Valve body or primary regulator faulty Parking lock pawl faulty Torque converter faulty Converter drive plate broken Transmission faulty	Adjust linkage Inspect valve body Inspect parking lock pawl Replace torque converter Replace drive plate Disassembly and inspect transmission	AT-11 AT-28 AT-30 AT-37
Shift lever position incorrect	Manual linkage out of adjustment Manual valve and lever faulty Transmission faulty	Adjust linkage Inspect valve body Disassembly and inspect transmission	AT-11 AT-28
Harsh engagement into any drive range	Throttle cable out of adjustment Valve body or primary regulator faulty Transmission faulty	Adjust throttle cable Inspect valve body Disassembly and inspect transmission	AT-11 AT-28
Delayed 1-2, 2-3, or 3-O/D up-shift, or down-shifts from O/D-3 or 3-2 then shifts back to O/D or 3	Throttle cable out of adjustment Valve body faulty Governor body faulty	Adjust throttle cable Inspect valve body Inspect governor body	AT-11 AT-28 AT-35
Slips on 1-2, 2-3, or 3-O/D up-shift, or shllips or shudders on acceleration	Manual linkage out of adjustment Throttle cable out of adjustment Valve body faulty Transmission faulty	Adjust linkage Adjust throttle cable Inspect valve body Disassemble and inspect transmission	AT-11 AT-11 AT-37

General Troubleshooting (Cont'd)

Problem	Possible cause	Remedy	Page
Drag, binding or tie-up on 1-2, 2-3 or 3-O/D up-shift	Manual linkage out of adjustment	Adjust linkage	AT-11
	Valve body faulty	Inspect valve body	AT-37
	Transmission faulty	Disassemble and inspect transmission	
Harsh down-shift	Throttle cable out of adjustment	Adjust throttle cable	AT-11
	Throttle cable and cam faulty	Inspect throttle cable and cam	AT-30
	Valve body faulty	Inspect valve body	AT-37
	Transmission faulty	Disassemble and inspect transmission	
No down-shift when coasting	Valve body faulty	Inspect valve body	AT-37
	Governor body faulty	Inspect governor body	AT-35
Down-shift occurs too quickly or too late while coasting	Throttle cable faulty	Inspect throttle cable	AT-37
	Valve body faulty	Inspect valve body	AT-37
	Governor body faulty	Inspect governor body	AT-35
	Transmission faulty	Disassemble and inspect transmission	
No O/D-3, 3-2 or 2-1 kick-down	Throttle cable out of adjustment	Adjust throttle cable	AT-11
	Governor body faulty	Inspect governor body	AT-35
	Valve body faulty	Inspect valve body	AT-37
No engine braking in 2 or L range	Valve body faulty Transmission faulty	Inspect valve body Disassemble and inspect transmission	AT-37
Vehicle does not hold in P	Manual linkage out of adjustment	Adjust linkage	AT-11
	Parking lock pawl cam and spring faulty	Inspect cam and spring	AT-30