MERCEDES 722.3 /.4

ERRATIC DOWNSHIFTS

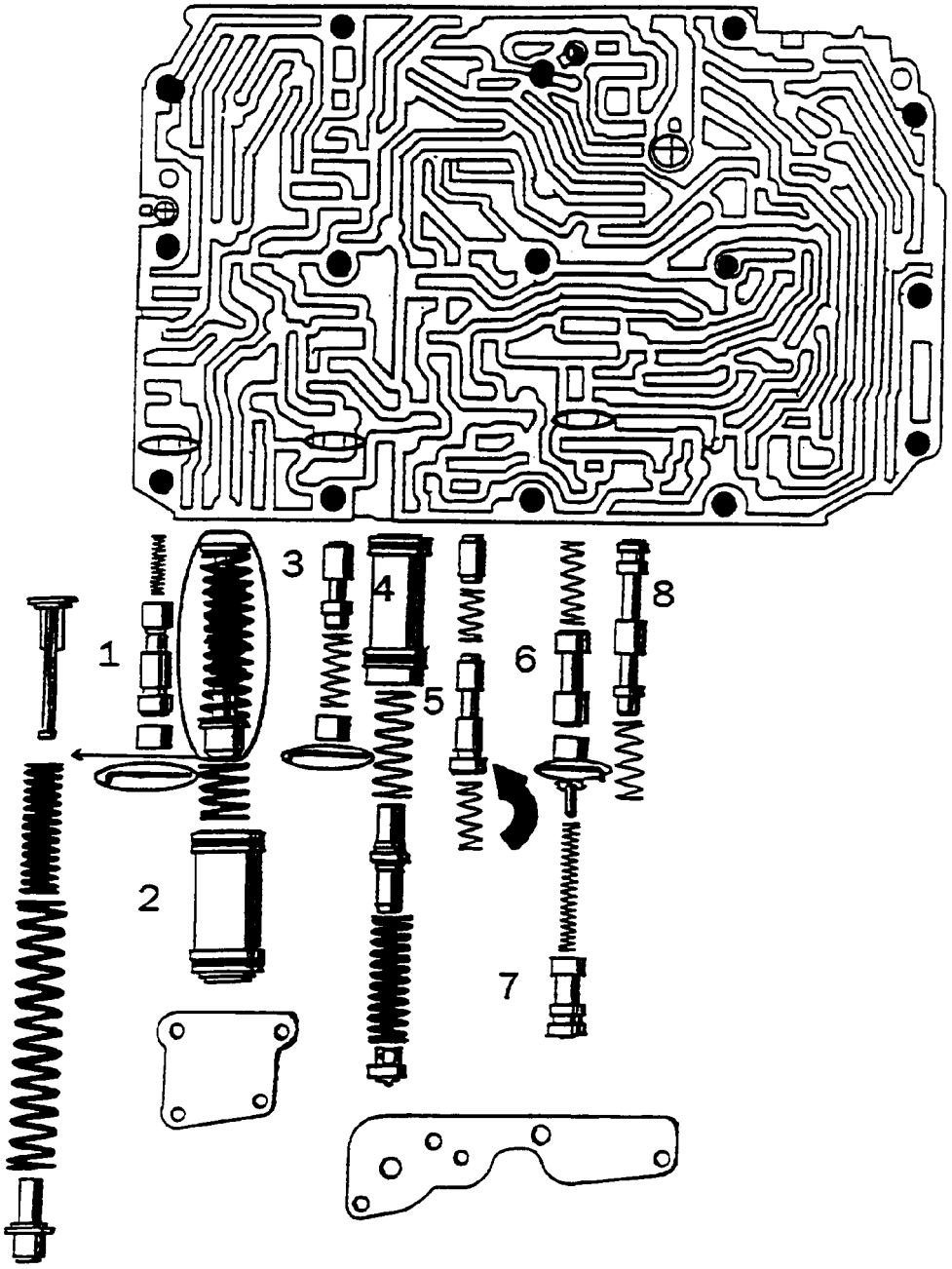
COMPLAINT: Erratic 4-3 3-2 downshift, other times it does not. Sometimes it does occur and at all.

CAUSE: Throttle linkage and/or control pressure detent/Bowden cable is not adjusted properly, or the reaction valve in the valve body is binding. Or the shut off valve is binding. Figure 1 and Figure 2 show the location of these valves.

CORRECTION: Drive the vehicle with the detent cable disconnected (control pressure Bowden cable). If manual downshift will take place then the problem is not the transmission nor the valve body, but that the detent/Bowden cable is out of adjustment. Make necessary adjustment to the cable. If the downshift still will not occur, then the problem is either the RV5 shut off valve shown in Figure 1 is binding or the brake shut off valve in Figure 2 is binding.

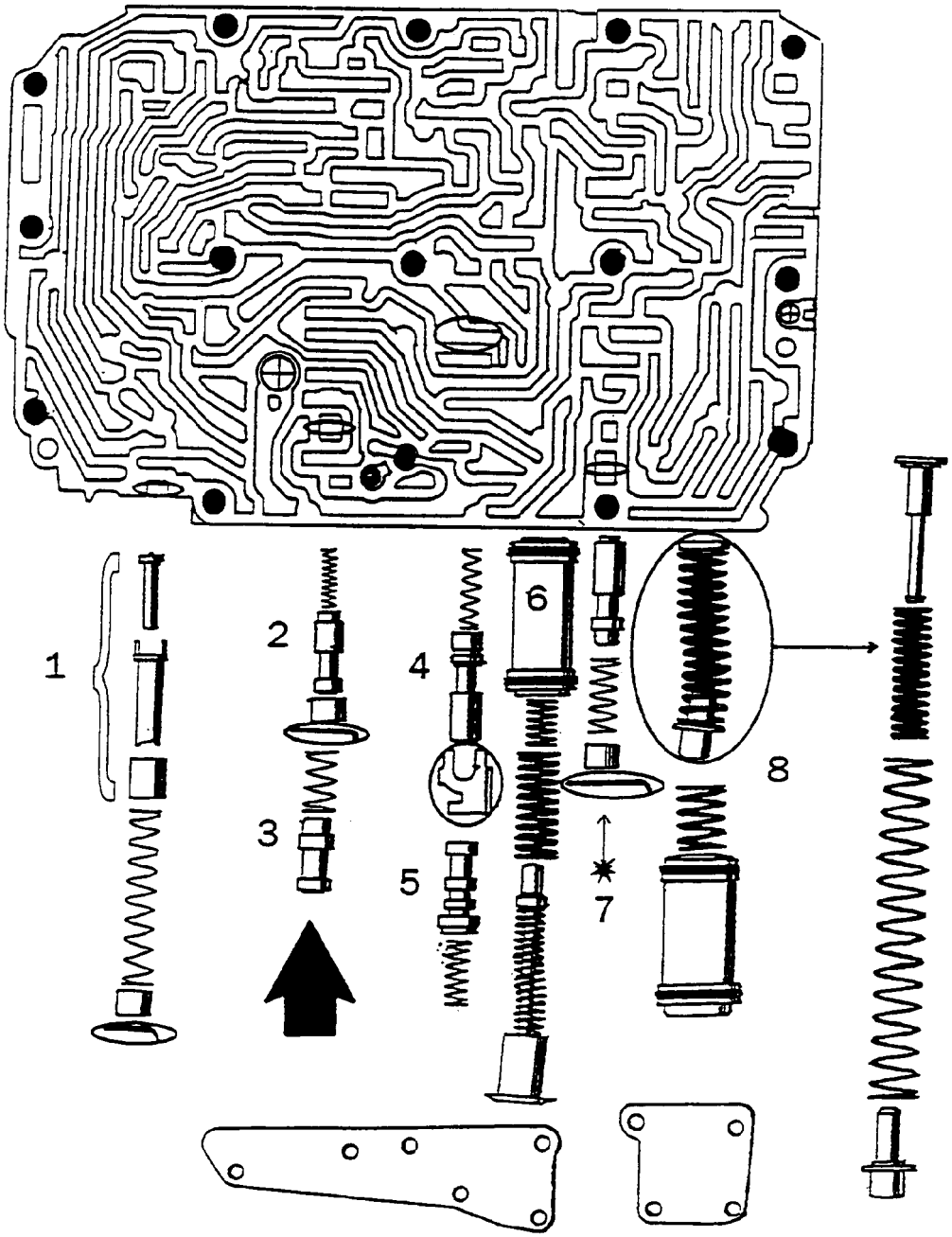
CAUTION: It is important that the valve body bolts be properly torqued. On this model unit the bolts holding the valve body together should be torqued to 65 in. lbs. and the bolts that secure the valve body to the case should also be torqued to the 65 in. lbs. setting.

Copyright © 2000 ATSG



1. SHIFT CONTROL PRESSURE VALVE
2. K2 ACCUMULATOR
3. K2 ACCUMULATOR CONTROL VALVE.
4. ACCUMULATOR SWITCHING ON
5. RV2 SHUT OFF VALVE
6. ACCUMULATOR SWITCHING ON CONTROL VALVE
7. K2 SHIFT VALVE
8. B2 DETENT VALVE

Figure 1



1. ACCUMULATOR KICK DOWN
2. RV1 SHUT OFF VALVE
3. BRAKE CIRCUIT SHUT OFF VALVE
4. B1 ACCUMULATOR CONTROL VALVE
5. DECELERATION CONTROL VALVE
6. B1 ACCUMULATOR
7. K1 ACCUMULATOR CONTROL VALVE
8. K1 ACCUMULATOR

Figure 2