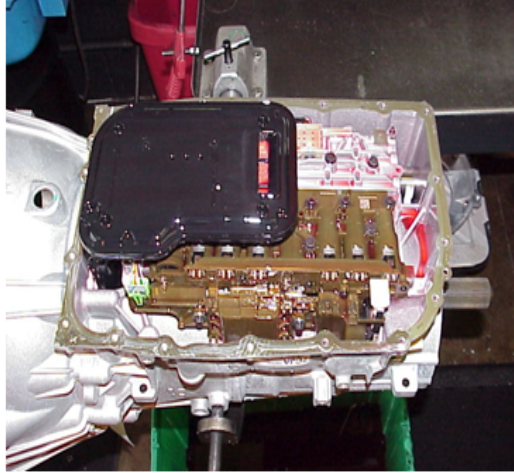
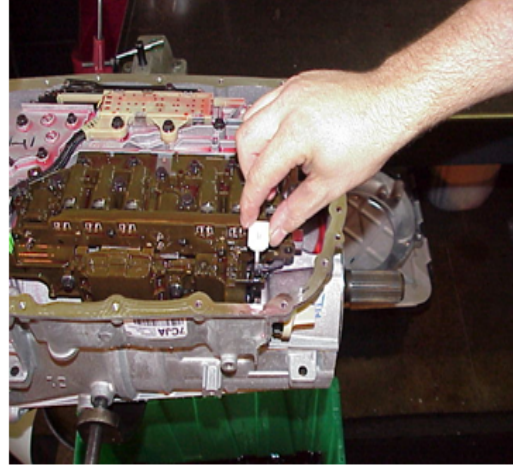


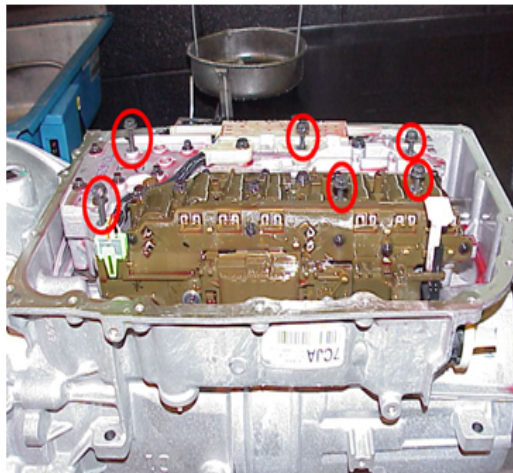
## 6L80/6L90 Module Removal



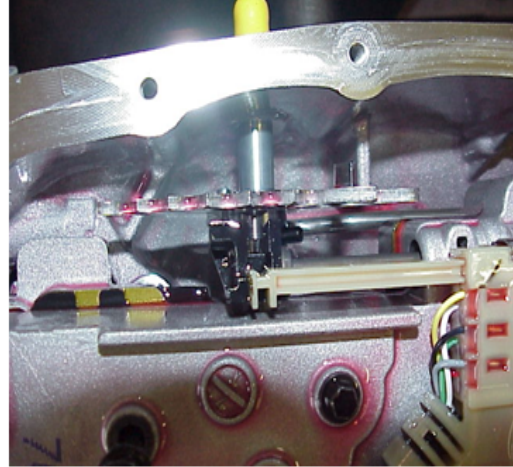
View of 6L80/6L90 with pan removed



Pull this tab to unlock module from electrical pass-thru

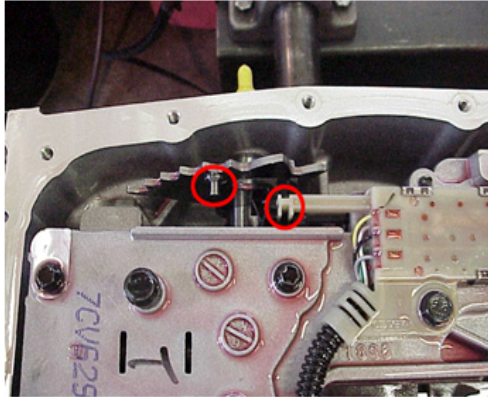


Unscrew these 6 bolts for module removal

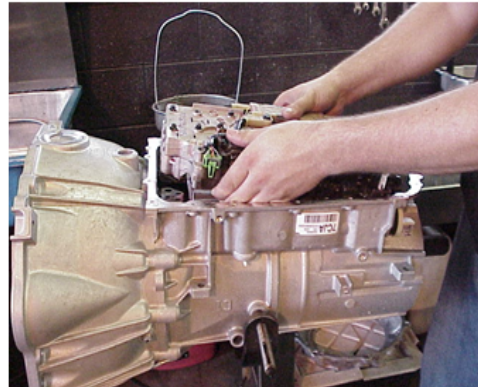


Disconnect selector shaft nub from trans module

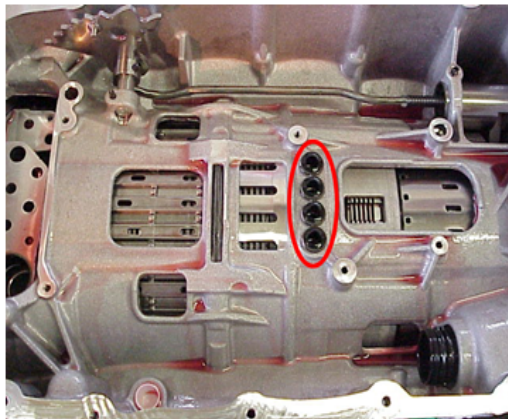
## 6L80/6L90 Module Removal



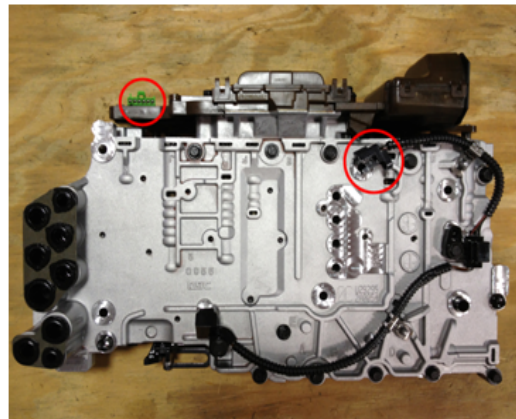
View showing nub disconnected from trans module



Lift the front – then slide the entire assembly forward for removal

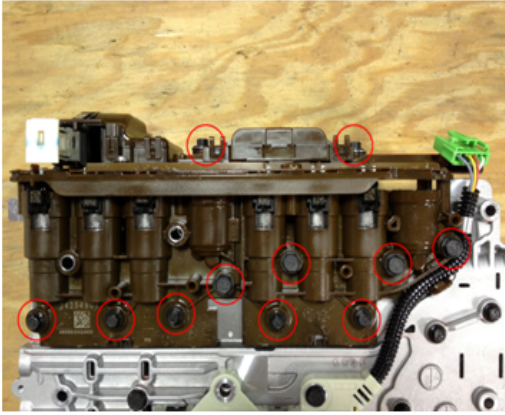


View after removal - make sure the 4-seal assembly stays in place

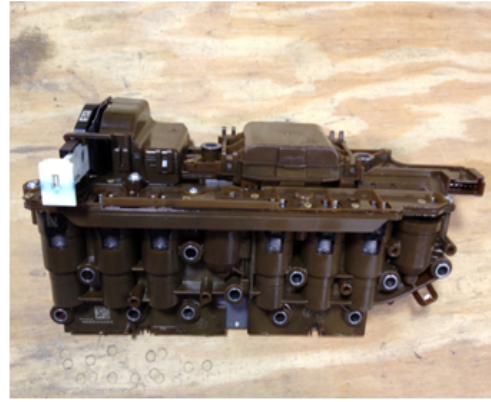


Unplug the two electrical connectors

## 6L80/6L90 Module Removal



Remove 11 bolts to separate module from valve body



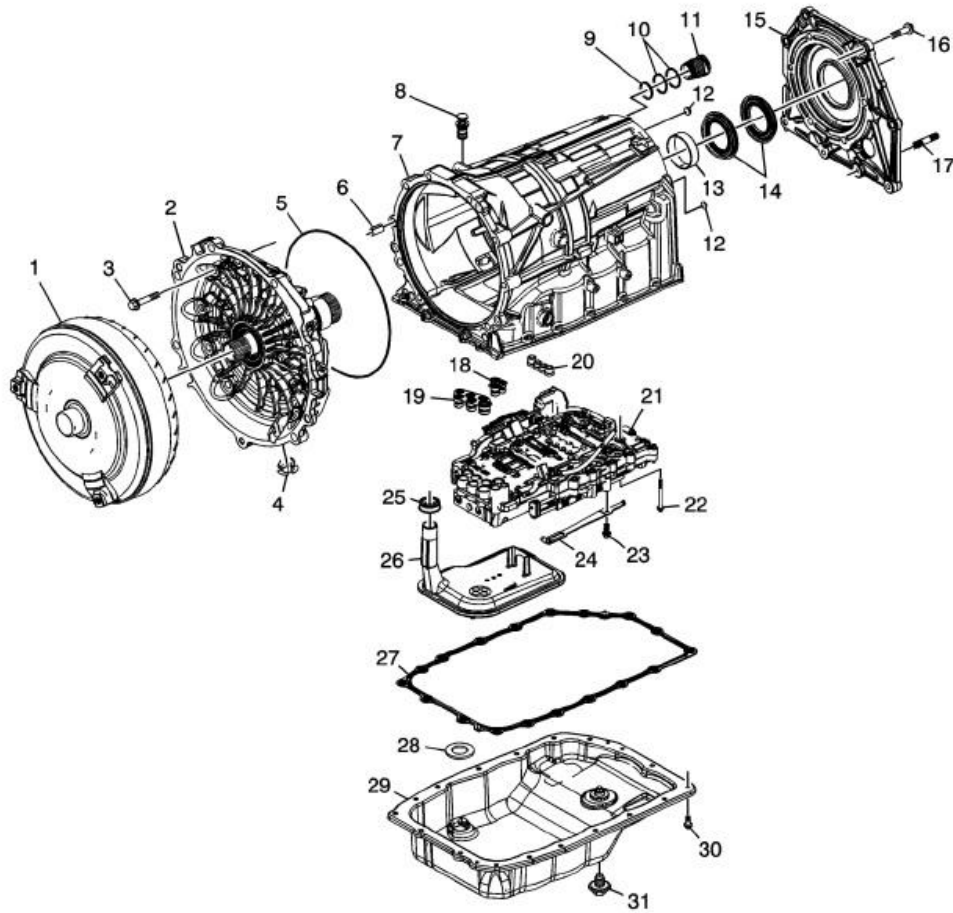
This is the module to send in for programming

**Special TCM Torx Socket:  
Kent-Moore DT-48285**

Fastener Tightening Specifications					
Application	Ref No.	Quantity	Size	Specification	
				Metric	English
Case Extension Stud to Case Extension	17	2	M10x1.5	15 Y	11 lb ft
Case Extension to Case Assembly	16	6	M10x1.5x40	55 Y	41 lb ft
Control Solenoid Valve Assembly and Control Valve Lower Body Assembly to Control Valve Upper Body Assembly	310	6	M5x0.8x55	8 Y	71 lb in
Control Solenoid Valve Assembly and Control Valve Lower Body Assembly to Control Valve Upper Body Assembly	309	10	M5x0.8x45	8 Y	71 lb in
Control Solenoid Valve Heat Sink to Valve Body	312	2	M5x0.8x53	8 Y	71 lb in
Control Valve Upper Body Assembly to Control Valve Lower Body Assembly	301	12	M5x0.8x36	8 Y	71 lb in
Control (with Body and Valve) Valve Assembly to Case Assembly	22	6	M5x0.8x73	8 Y	71 lb in
Fluid Pan Assembly to Case Assembly	30	18	M6x1.0x20	9 Y	80 lb in
Trans Oil Level Check Plug to Fluid Pan Assembly	31	1	M12x1.75	25 Y	18 lb ft
Fluid Pump Cover Assembly to Torque Converter Housing	231	13	M6 1.0x40	11 Y	97 lb in
Input and Output Speed Sensor Assembly to Control Valve Upper Body Assembly	302	2	M6x1.0x20	12 Y	106 lb in
Line Pressure Test Hole Plug to Torque Converter Housing	202	1	1/8– 27 NPTF	11 Y	97 lb in
Manual Shaft Detent Assembly to Valve Body	23	1	M6x1.0x14.5	12 Y	106 lb in
Torque Converter Housing Assembly to Case Assembly	3	9	M10x1.5x50	72 Y	53 lb ft

\*Reference number refers to the component callout number in Disassembled Views

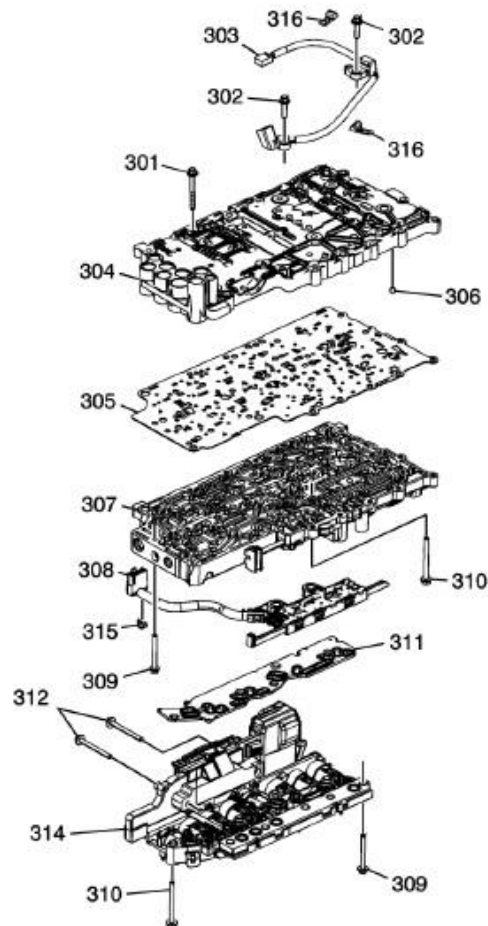
## Case and Associated Parts



- (1) Torque Converter Assembly
- (2) Torque Converter (with Fluid Pump) Housing Assembly
- (3) Bolt/Screw, M10 x 50 mm
- (4) Torque Converter Housing Access Hole Cover
- (5) A/Trans Fluid Pump Seal
- (6) Torque Converter Housing Locator Pin
- (7) A/Trans Case Assembly
- (8) Transmission Fluid Fill Tube Plug Assembly
- (9) A/Trans Connector Seal
- (10) A/Trans Connector (O-ring) Seal

- (12) A/Trans Case Plug
- (13) Output Shaft Bushing
- (14) Output Shaft Seal Assembly
- (15) A/Trans Case Extension
- (16) Bolt/Screw, M10 x 40 mm
- (17) A/Trans Case Extension Stud
- (18) A/Trans Fluid Pump Seal Assembly
- (19) A/Trans Fluid Pump Seal Assembly
- (20) Center Support Fluid Passage Seal Assembly
- (21) Control (with Body and Valve) Valve Assembly
- (22) Bolt/Screw, M5 x 73 mm
- (23) Bolt/Screw, M6 x 14.5 mm
- (24) Manual Shaft Detent Assembly
- (25) A/Trans Fluid Filter Seal Assembly
- (26) A/Trans Fluid Filter Assembly
- (27) A/Trans Fluid Pan Gasket
- (28) A/Trans Fluid Pan Magnet
- (29) A/Trans Fluid Pan Assembly
- (30) Bolt/Screw, M6 x 20 mm
- (31) Trans Oil Level Check Plug

### Control (with Body and Valve) Valve Assembly



- (301) Bolt, M5 x 36 mm
- (302) Bolt, M6 x 20 mm
- (303) A/Trans Input and Output Speed Sensor Assembly – Model Dependent
- (304) Control Valve Upper Body Assembly
- (305) Control Valve Body Spacer (w/ Gasket) Plate Assembly
- (306) Control Valve Body Ball Check Valve
- (307) Control Valve Lower Body Assembly
- (308) A/Trans Manual Shift Shaft Position Switch Assembly
- (309) Bolt, M5 x 45 mm
- (310) Bolt, M5 x 55 mm
- (311) Filter Plate Assembly
- (312) Bolt, M5 x 53 mm
- (314) Control Solenoid (w/ Body and TCM) Valve Assembly
- (315) A/Trans Manual Shift Shaft Position Switch Wiring Harness Clip
- (316) A/Trans Input and Output Speed Sensor Wiring Harness Clip – Model Dependent

Sources: GM.com

Document ID: 1537818

Document ID: 1650771

Document ID: 1645128