2006 - 2009 Cadillac XLR-V: 6L80 Transmission Specifications

Below is a listing of specifications for the 6L80 Transmission used in the 2006 - 2009 Cadillac XLR-V:

Fastener 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	309	10	M5x0.8x45	8 Y	71 lb in

Valve Assembly and Control Valve Lower Body Assembly to Control Valve Upper Body Assembly					
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	3	9	M10x1.5x50	72 Y	53 lb ft

Assembly to
Case
Assembly
*Reference number refers to the component callout number in Disassembled Views

Transmission General Specifications

Name	6L80
RPO Codes	MYC
Production Location	Ypsilanti, Michigan (USA)
Transmission Drive	Rear Wheel Drive
1st Gear Ratio	4.027
2nd Gear Ratio	2.364
3rd Gear Ratio	1.532
4th Gear Ratio	1.152
5th Gear Ratio	0.852
6th Gear Ratio	0.667
Reverse	3.064
Torque Converter Size– Diameter of Torque Converter Turbine	258/300 mm
Pressure Taps	Line Pressure
Transmission Fluid Type	DEXRON VI®
Transmission Type: 6	Six Forward Gears
Transmission Type: L	Longitude Mount
Transmission Type: 80	Product Series
Position Quadrant	P, R, N, D, S (some models)
Case Material	Die Cast Aluminum
Transmission Net Weight– Approximate	100 kg (220 lb)
Maximum Trailer Towing Capacity	Refer to applicable owner’s manual

Fluid Capacity Specifications

Application	Specification	
	Metric	English

Pan Removal– Approximate Capacity	6.2 liters	6.5 quarts
Overhaul– Approximate Capacity (STSV/XLRV)	9.5 liters	10 quarts
Overhaul– Approximate Capacity (Corvette)	11.8 liters	12.5 quarts
Complete Trans System Fluid Capacity (STSV)	10.01 liters	10.58 quarts
Complete Trans System Fluid Capacity (XLRV)	10.32 liters	10.91 quarts
Complete Trans System Fluid Capacity (Corvette)	12.53 liters	13.24 quarts

Fluid Pump Selective Specifications

Size Classification	Thickness (mm)	Thickness (in)

Note:

- Rotor and slide must be chosen from the same size classification as the oil pump body.
- Allowable rotor and slide to fluid pump body end play is as follows:
  Specification
  - Slide to Fluid Pump Body End Play — 0.020–0.051 mm (0.0008–0.0020 in)
  - Rotor to Fluid Pump Body End Play — 0.020–0.051 mm (0.0008–0.0020 in)

The fluid pump assembly has selective rotor and slide components. These components are chosen based on pump body dimensions. Fluid pump rotor and slide components are available in three size classifications (1, 2, 3) with the following tolerances:
Rotor Selection

1	17.948–17.961	0.7066–0.7071
2	17.961–17.974	0.7071–0.7076
3	17.974–17.987	0.7076–0.7081

Slide Selection

1	17.948–17.961	0.7066–0.7071
2	17.961–17.974	0.7071–0.7076
3	17.974–17.987	0.7076–0.7081

3–5 Reverse Clutch

Clutch Pack Travel Specification – 1.21–1.79 mm (0.048–0.070 in)

Retaining Ring Thickness		O.D. Color
Metric	English	

Note: After measuring clutch pack travel, determine if the measurement is within the specification. If the measurement is not within the specification, measure the thickness of the existing retaining ring, and then choose a thicker or thinner retaining ring that will bring the measurement within specification.

1.61–1.71 mm	0.063–0.067 in	Gray
1.88–1.98 mm	0.074–0.078 in	Light Green
2.15–2.25 mm	0.085–0.089 in	Yellow
2.42–2.52 mm	0.095–0.099 in	None
2.69–2.79 mm	0.106–0.110 in	Purple

1–2–3–4 Clutch

Clutch Pack Travel Specification – 1.53–1.99 mm (0.060–0.078 in)

Retaining Ring Thickness		O.D. Color
Metric	English	

Note: After measuring clutch pack travel, determine if the measurement is within the specification. If the measurement is not within the specification,

measure the thickness of the existing retaining ring, and then choose a thicker or thinner retaining ring that will bring the measurement within specification.

2.42–2.52 mm	0.095–0.099 in	None
2.69–2.79 mm	0.106–0.110 in	Purple
2.96–3.06 mm	0.117–0.120 in	Light Blue
3.23–3.33 mm	0.127–0.131 in	Orange
3.50–3.60 mm	0.138–0.142 in	White

4–5–6 Clutch

Clutch Pack Travel Specification – 1.28–1.89 mm (0.050–0.074 in)

Retaining Ring Thickness		O.D. Color
Metric	English	

Note: After measuring clutch pack travel, determine if the measurement is within the specification. If the measurement is not within the specification, measure the thickness of the existing retaining ring, and then choose a thicker or thinner retaining ring that will bring the measurement within specification.

1.60–1.70 mm	0.063–0.067 in	Yellow
2.02–2.12 mm	0.080–0.083 in	None
2.44–2.54 mm	0.096–0.100 in	Purple

Low/Reverse Clutch

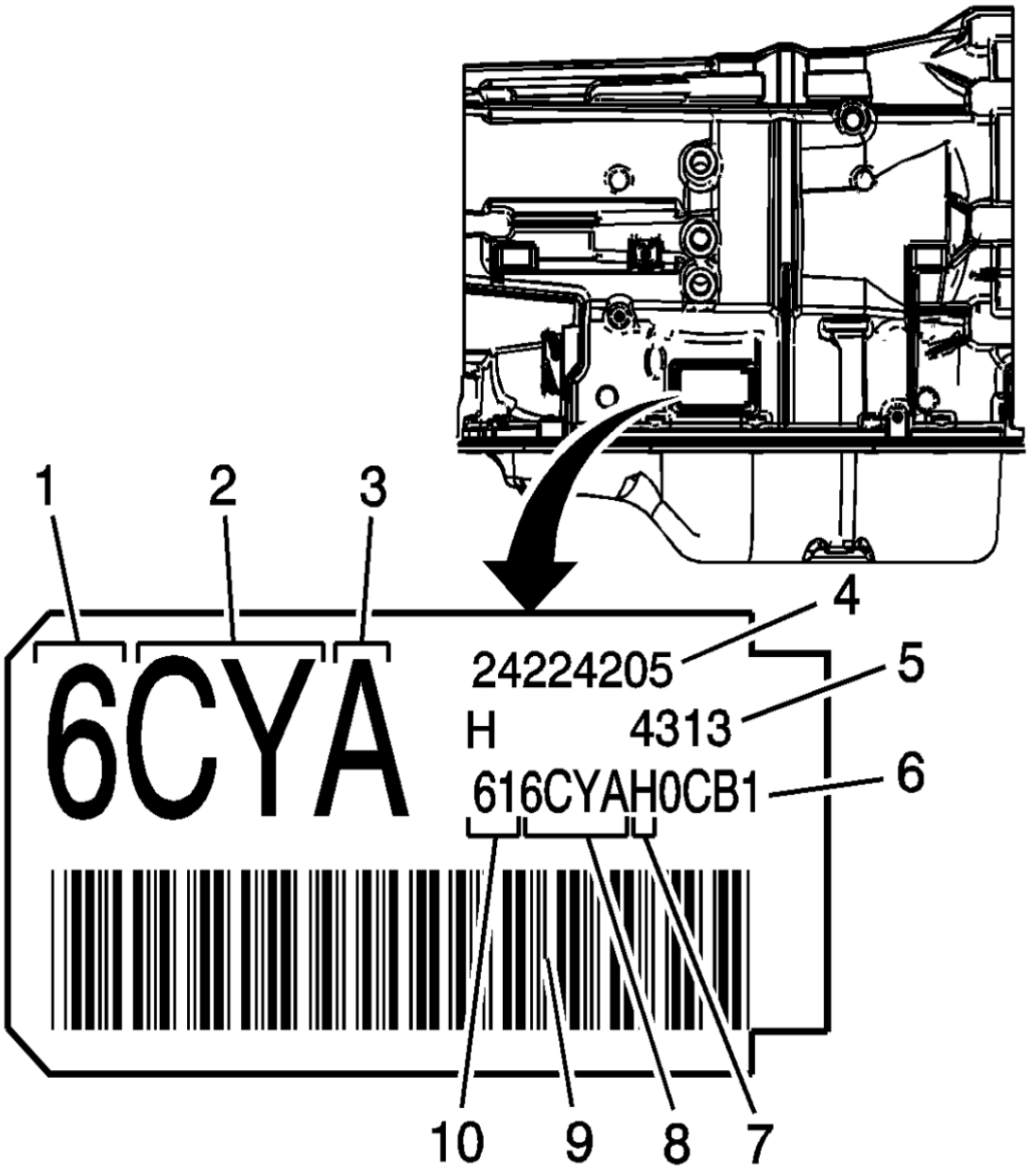
Clutch Pack Travel Specification – 1.30–2.07 mm (0.051–0.081 in)

Retaining Ring Thickness		O.D. Color
Metric	English	

Note: After measuring clutch pack travel, determine if the measurement is within the specification. If the measurement is not within the specification, measure the thickness of the existing retaining ring, and then choose a thicker or thinner retaining ring that will bring the measurement within specification.

1.85–1.95 mm	0.073–0.077 in	Yellow
2.26–2.36 mm	0.089–0.093 in	None
2.67–2.77 mm	0.105–0.109 in	Purple

Transmission ID and VIN Derivative Location (6L80)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(1)	Model Year
(2)	Model Code
(3)	Transmission Family
(4)	Transmission Assembly Number
(5)	Julian date
(6)	Sequential Serial Number
(7)	Source Code
(8)	Broadcast Code
(9)	Bar Code
(10)	Transmission I.D