

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 Control Valve Upper Body Assembly to Control Valve Lower Body Assembly Control (with Body and Valve) Valve Assembly to Case Assembly Fluid Pan Assembly to Case Assembly | 312 | 2 | M5x0.8x53 | 8 Y | 71 lb in |
| | 301 | 12 | M5x0.8x36 | 8 Y | 71 lb in |
| | 22 | 6 | M5x0.8x73 | 8 Y | 71 lb in |
| | 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 Line | 302 | 2 | M6x1.0x20 | 12 Y | 106 lb in |
| 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 | M10x1.5x5 0 | 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

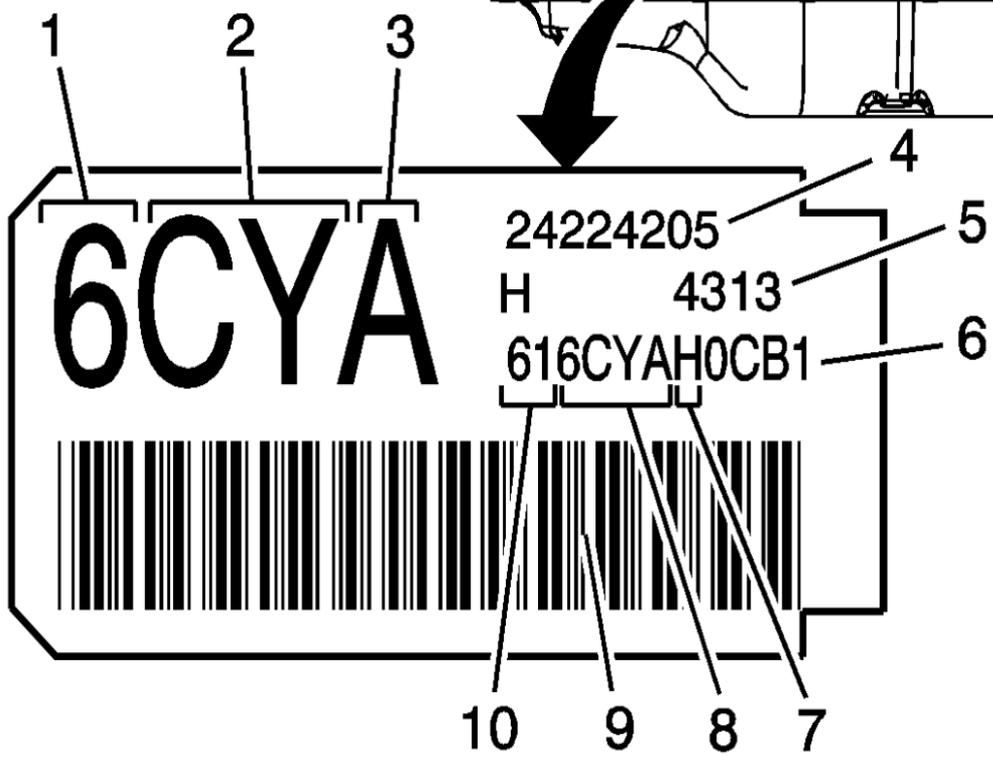
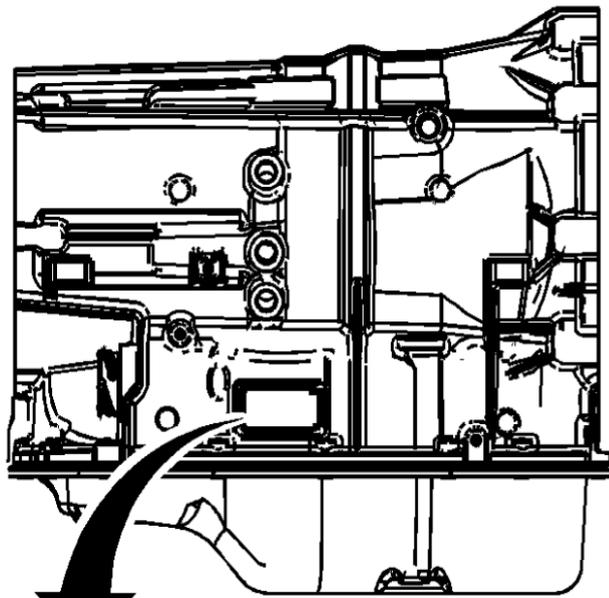
None

2.67–2.77 mm

0.105–0.109 in

Purple

Transmission ID and VIN Derivative Location (6L80)



| | |
|------|------------------------------|
| (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 |

Online URL:

<https://www.xlr-net.com/knowledgebase/article/2006-2009-cadillac-xlr-v-6l80-transmission-specifications-18.html>