

Transmission: **GM 4L60E/4L65E/4L70E**

Transmission Code: **073** early  
**078** late

Dedicated Harness Set: **07X207** (obsolete)  
**07X221**

| <b>SOLENOID TEST: (Engine off)</b> |               |                |                                   |                     |
|------------------------------------|---------------|----------------|-----------------------------------|---------------------|
| Solenoid                           | TranX Setting | Output Channel | AMPS Cold-Hot                     | Resistance Cold-Hot |
| Solenoid A (1-2/3-4)               | Gear 1        | 1              | 0.6 - 0.3                         | 20 - 40 Ω           |
| Solenoid B (2-3)                   | Gear 2        | 2              | 0.6 - 0.3                         | 20 - 40 Ω           |
| 3-2 Solenoid (pulsed)              | Gear 3        | 3              | 1.3 - 0.9                         | 9 - 14 Ω            |
| Lock-Up Apply                      | Gear 5        | 5              | 0.6 - 0.3                         | 20 - 40 Ω           |
| LU Feel (pulsed) *                 | Gear 6        | 6              | 0.0 - 1.8<br>Duty MIN - MAX       | 9 - 14 Ω            |
| EPC (pulsed)                       | Gear 8        | 8              | 0 - (0.9 - 1.8)<br>Duty MIN - MAX | 3.5 - 4.6 Ω         |

**NOTE:**  
4L70E has an added speed sensor. 07X207 will not work on it. 07X221 will work for all models of the 4L60E and 4L70E.

◆ **Lock Up Feel**  
◆  
Solenoid was added during 1995 4L60E Model Year. If you get a reading on **Channel 6** use code **078** for shift/monitor test. Use code **078** for 4L70E.

**CAUTION:**  
Always come to a COMPLETE STOP & TURN ENGINE OFF before changing test modes

| <b>SHIFT/MONTIOR TEST</b> |            |            |                                  |         |                             |              |
|---------------------------|------------|------------|----------------------------------|---------|-----------------------------|--------------|
| GEAR                      | Solenoid A | Solenoid B | 3-2 Solenoid Function 2 (pulsed) | Lock-Up | LU Feel Function 3 (pulsed) | EPC (pulsed) |
| 1st                       | ON         | ON         | OFF                              | OFF     | Select Duty                 | Select Duty  |
| 2nd                       | OFF        | ON         | ON                               | ON/OFF  | Select Duty                 | Select Duty  |
| 3rd                       | OFF        | OFF        | ON                               | ON/OFF  | Select Duty                 | Select Duty  |
| 4th                       | ON         | OFF        | ON                               | ON/OFF  | Select Duty                 | Select Duty  |

**Notes:**

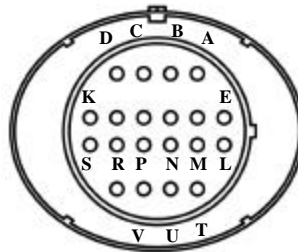
- ◆ **EPC Solenoid** current read on **output channel 8** for solenoid test, shift test and for monitor mode.
- ◆ **EPC Solenoid** duty cycle displayed in monitor mode is actual duty cycle from ECM.
- ◆ **Lock Up** is normally activated in 2nd, 3rd and 4th Gears. Lockup is activated in late models by energizing both Lockup and LU Feel solenoids.
- ◆ See other side for **connector diagram**.
- ◆ Polarity = Common **Positive**

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| <b>Pressure Switch Settings</b> |                               |                               |                               |
|---------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Gear</b>                     | <b>Range A<br/>(Sensor 1)</b> | <b>Range B<br/>(Sensor 2)</b> | <b>Range C<br/>(Sensor 3)</b> |
| <b>Park</b>                     | Red                           | <b>GREEN</b>                  | Red                           |
| <b>Reverse</b>                  | <b>GREEN</b>                  | <b>GREEN</b>                  | Red                           |
| <b>Neutral</b>                  | Red                           | <b>GREEN</b>                  | Red                           |
| <b>Drive (1 to 4)</b>           | Red                           | <b>GREEN</b>                  | <b>GREEN</b>                  |
| <b>Manual 3</b>                 | Red                           | Red                           | <b>GREEN</b>                  |
| <b>Manual 2</b>                 | Red                           | Red                           | Red                           |
| <b>Manual 1</b>                 | <b>GREEN</b>                  | Red                           | Red                           |
| <b>Illegal</b>                  | <b>GREEN</b>                  | Red                           | Red                           |

| <b>TOT Sensor Testing</b>                                |                    |
|--|--------------------|
| Connect Multimeter to Sensor Module<br>Test Points 5 & 6 |                    |
| <b>Resistance</b>  | <b>Temperature</b> |
| 2981 - 4018 Ω  | 68° F              |
| 1915 - 2550 Ω  | 86° F              |
| 1260 - 1660 Ω  | 104° F             |
| 848.8 - 1105 Ω   | 122° F             |
| 584.1 - 753.4 Ω  | 140° F             |
| 410.3 - 524.2 Ω  | 158° F             |
| 293.7 - 371.7 Ω  | 176° F             |
| 213.9 - 268.2 Ω  | 194° F             |
| 158.1 - 196.8 Ω  | 212° F             |

**CONNECTOR:**  
(Looking into harness connector)



| <b>Wiring Chart</b>              |                                |                         |                                   |                              |
|----------------------------------|--------------------------------|-------------------------|-----------------------------------|------------------------------|
| <b>Case Connector Pin Number</b> | <b>TranX 2000 Harness Wire</b> | <b>Vehicle Function</b> | <b>TranX 2000 Output Location</b> | <b>TranX 2000 25 Way Pin</b> |
| <b>A</b>                         | <b>Blue</b>                    | Solenoid A              | <b>Channel 1</b>                  | 7                            |
| <b>B</b>                         | <b>Green</b>                   | Solenoid B              | <b>Channel 2</b>                  | 8                            |
| <b>C</b>                         | <b>Yellow</b>                  | EPC Power               | <b>Channel 7</b>                  | 1                            |
| <b>D</b>                         | <b>Gray</b>                    | EPC Ground              | <b>Channel 8</b>                  | 2                            |
| <b>E</b>                         | <b>Red, or Red/Brown</b>       | Power to Solenoids      |                                   | 12                           |
| <b>K</b>                         | <b>White/Purple</b>            | Input Speed Sensor      | <b>Sensor 7 Test Point</b>        | 21 (07x221 only)             |
| <b>L</b>                         | <b>Red/Blue Stripe</b>         | TOT Sensor              | <b>Sensor 5 Test Point</b>        | 19                           |
| <b>M</b>                         | <b>White/Red Stripe</b>        | TOT Sensor              | <b>Sensor 6 Test Point</b>        | 20                           |
| <b>N</b>                         | <b>Orange</b>                  | Pressure Switch (A)     | <b>Sensor LED 1</b>               | 15                           |
| <b>P</b>                         | <b>Light Green</b>             | Pressure Switch (C)     | <b>Sensor LED 3</b>               | 17                           |
| <b>R</b>                         | <b>White</b>                   | Pressure Switch (B)     | <b>Sensor LED 2</b>               | 16                           |
| <b>S</b>                         | <b>Pink</b>                    | 3-2 Control Solenoid    | <b>Channel 3</b>                  | 5                            |
| <b>T</b>                         | <b>Purple</b>                  | Lockup Solenoid         | <b>Channel 5</b>                  | 3                            |
| <b>U</b>                         | <b>Brown</b>                   | LU Feel Solenoid        | <b>Channel 6</b>                  | 4                            |
| <b>V</b>                         | <b>White/Green</b>             | Input Speed Sensor      | <b>Sensor 8 Test Point</b>        | 22 (07x221 only)             |