

Dedicated Harness Set:

**16X201**

<b>SOLENOID TEST: (Engine off)</b>				
Solenoid	TranX Setting	Output Channel	Current Cold-Hot	Resistance Cold-Hot
Shift Solenoid A	Gear 1	1	0.7 - 0.4	18 - 33 Ω
Shift Solenoid B	Gear 2	2	0.7 - 0.4	18 - 33 Ω
Lock-Up	Gear 5 select duty	5	0.2 - 0.1 (@ 20% duty)	10 - 16 Ω
4WD	Gear 6	6	1.3 - 0.8	9 - 16 Ω
EPC Solenoid	Gear 7 select duty	7	2.5 - 1.0 (@ 50% duty)	2.3 - 5.5 Ω
Overrun Clutch	Gear 8	8	0.7 - 0.4	18 - 33 Ω

**IMPORTANT**

4WD Solenoid must be turned on when testing all wheel drive vehicles. If not, the transfer case will bind on turns.

**CAUTION:**

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

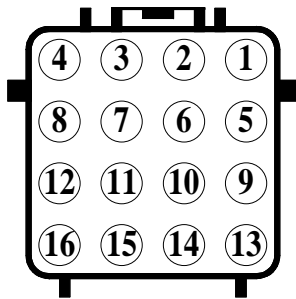
<b>SHIFT/MONITOR TEST</b>						
GEAR	Shift Solenoid A	Shift Solenoid B	Overrun Clutch (Function 1)	Lock-Up (pulsed)	4WD (Function 3)	EPC Solenoid (pulsed)
1st	ON	ON	ON/OFF	OFF	ON/OFF	Select Duty
2nd	OFF	ON	ON/OFF	ON/OFF	ON/OFF	Select Duty
3rd	OFF	OFF	ON/OFF	ON/OFF	ON/OFF	Select Duty
4th	ON	OFF	ON/OFF	ON/OFF	ON/OFF	Select Duty

**Notes:**

- ◆ **Overrun Clutch** provides engine braking in lower gears when off. It is always on in **4th gear**.
- ◆ **Lock Up** is normally activated in 3rd and 4th Gears.
- ◆ See other side for **connector diagram**.
- ◆ Polarity = Common **Negative**

Transmission: **Subaru 4 Speed (4EAT)**

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



TOT Sensor Test	
Connect Multimeter to Sensor Module Test Points 5 & 6	
Resistance	Temperature
2100 - 2900 Ω	68° F
275 - 375 Ω	176° F

**COMMENTS :**  
The Temperature Sensor is a thermistor, which changes resistance in relation to the temperature of the transmission fluid. As fluid temperature increases, thermistor resistance decreases.

Vehicle Speed Sensor Test	
Connect Multimeter to Sensor Module Test Points 7 & 8	
Resistance	Comments
450 - 650Ω	Ignition Off

**COMMENTS :**  
The Speed Sensor is Inductive - Dynamic tests can be made using a Multimeter measuring either Voltage AC or Frequency AC. An AC Voltage and frequency will be produced by the sensor, informing the transmission ECU the output speed.

## Wiring Chart

Case Connector Pin Number	TranX 2000 Harness Wire	Vehicle Function	TranX 2000 Output Location	TranX 2000 25 Way Pin
1	Black/Red Stripe	Ground		11
2	Blue	Shift Solenoid 3	Channel 1	7
3	Green	Shift Solenoid 2	Channel 2	8
4	Gray	Overrun Solenoid	Channel 4	2
5	Black	Ground		10
6	Yellow	EPC	Channel 7	1
7	Purple	Lockup Solenoid	Channel 6	3
8	Red/Blue Stripe	Temperature Sensor	Sensor 5 Test Point	19
9	White/Red Stripe	Temperature Sensor	Sensor 6 Test Point	20
10	Brown	4WD	Channel 5	4
12 & 15	White/Green Stripe	Vehicle Speed Sensor	Sensor 7 Test Point	21
13 & 14	White/Purple Stripe	Vehicle Speed Sensor	Sensor 8 Test Point	22