# Pressure Testing

**⚠ WARNING**
- **While testing, be careful of the rotating rear wheels.**
- **Make sure lifts are placed properly (see section 1).**

**CAUTION:**
- **Before testing, be sure the transmission fluid is filled to the proper level.**
- **Warm up the engine before testing.**

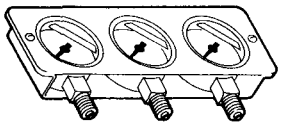
1. Raise the vehicle (see section 1).

2. Warm up the engine, then stop the engine and connect a tachometer.

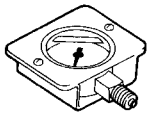
3. Connect a pressure gauge to each inspection hole. 18N-m(1.8kgf-m,13lbf-ft)

   **CAUTION: Connect the pressure gauge securely; be sure not to allow dust and other foreign particles to enter the inspection hole.**

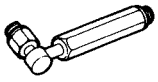
**A/T OIL PRESSURE GAUGE SET W/PANEL**
**07406-0020400**



**A/T OIL PRESSURE HOSE, 2210 mm**
**07MAJ - PY4011A**
**(4 Required)**



**A/T LOW PRESSURE GAUGE W/PANEL**
**07406 - 0070300**



**A/T OIL PRESSURE HOSE ADAPTER**
**07MAJ - PY40120**
**(4 Required)**

4. Start the engine, and measure the respective pressure as follows.
   - Line Pressure/Clutch Pressure
   - Clutch Low/High Pressure
   - Throttle B Pressure

5. Install a new washer and the sealing bolt in the inspection hole, and tighten to the specified torque.
   **Torque: 18 N-m (1.8 kgf-m, 13 lbf-ft)**

   NOTE: Do not reuse old aluminum washers.

- Line Pressure/Clutch Pressure Measurement

1. Allow the rear wheels to rotate freely.

2. Run the engine at 2,000 rpm.

3. Shift the shift lever as shown on the chart on the next page.

4. Measure each clutch pressure.

**⚠ WARNING** **While testing, be careful of the rotating rear wheels.**

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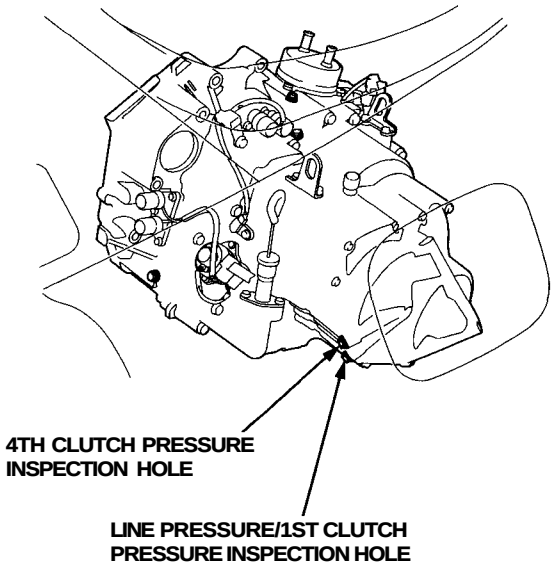


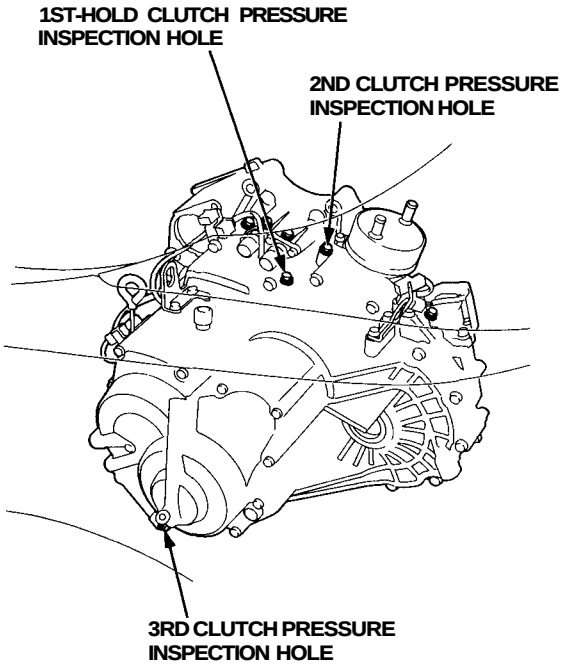


| PRESSURE | SHIFT LEVER POSITION | SYMPTOM | PROBABLE CAUSE | FLUID PRESSURE | |
|---|---|---|---|---|---|
| | | | | Standard | Service Limit |
| Line/1st Clutch | D or 1 | No or low line/1st pressure | Torque converter, ATF pump pressure regulator, torque converter check valve, ATF pump, 1st Clutch | 830 – 880 kPa (8.5 – 9.0 kgf/cm², 121 – 128 psi) | 785 kPa (8.0 kgf/cm², 114 psi) |
| 1st-hold Clutch | 1 | No or low 1st-hold pressure | 1st-hold Clutch | | |
| 2nd Clutch | 2 | No or low 2nd pressure | 2nd Clutch | | |
| 2nd Clutch | D | No or low 2nd pressure | 2nd Clutch | 490 kPa (5.0 kgf/cm², 71 psi) (throttle fully closed) 880 kPa (9.0 kgf/cm², 128 psi) (throttle more than 3/16 opened) | 440 kPa (4.5 kgf/cm², 64 psi) (throttle fully closed) 785 kPa (8.0 kgf/cm², 114 psi) (throttle more than 3/16 opened) |
| 3rd Clutch | | No or low 3rd pressure | 3rd Clutch | | |
| 4th Clutch | | No or low 4th pressure | 4th Clutch | | |
| | R | | Servo valve or 4th Clutch | 830 – 880 kPa (8.5 – 9.0 kgf/cm², 121 – 128 psi) | 785 kPa (8.0 kgf/cm², 114 psi) |

(cont'd)

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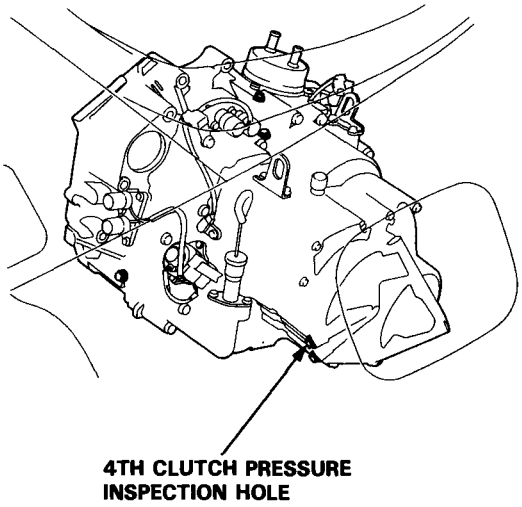
# Pressure Testing

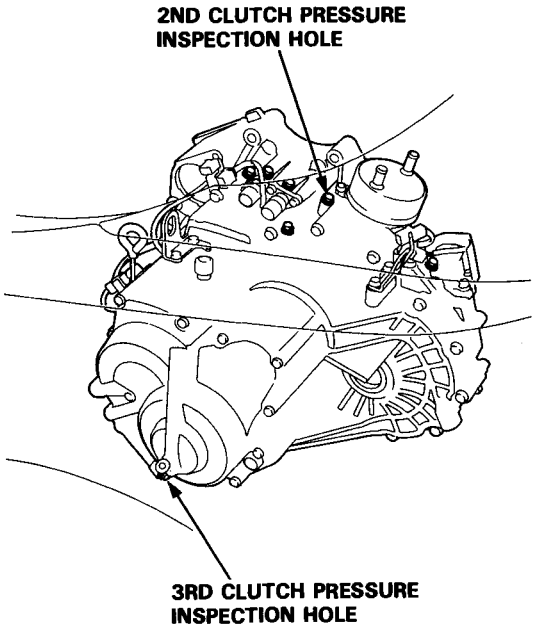
## (cont'd)

- Clutch Low/High Pressure Measurement

**⚠ WARNING While testing, be careful of the rotating rear wheels.**

1. Allow the rear wheels to rotate freely.
2. Start the engine and let it idle.
3. Shift to [D] position.
4. Slowly press down the accelerator pedal to increase engine rpm until pressure is indicated on the oil pressure gauge. Then release the accelerator pedal, allowing the engine return to an idle, and measure the pressure reading.
5. With the engine idling, press down the accelerator pedal approximately 1/2 of its possible travel and increase the engine rpm until pressure is indicated on the gauge. Note the highest pressure reading obtained.
6. Repeat steps 4 and 5 for each clutch pressure being inspected.




| PRESSURE | SHIFT LEVER POSITION | SYMPTOM | PROBABLE CAUSE | FLUID PRESSURE | |
|---|---|---|---|---|---|
| | | | | Standard | Service Limit |
| 2nd Clutch | [D] | No or low 2nd pressure | 2nd Clutch | 490 – 880 kPa (5.0 – 9.0 kgf/cm², 71 – 128 psi) varies with throttle opening | 440 kPa (4.5 kgf/cm², 64 psi) with accelerator pedal released 785 kPa (8.0 kgf/cm², 114 psi) with accelerator pedal more than 3/16 opened |
| 3rd Clutch | | No or low 3rd pressure | 3rd Clutch | | |
| 4th Clutch | | No or low 4th pressure | 4th Clutch | | |

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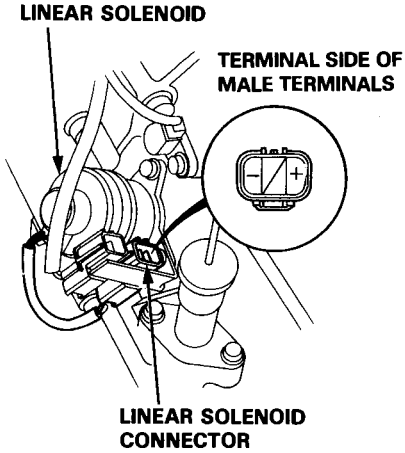
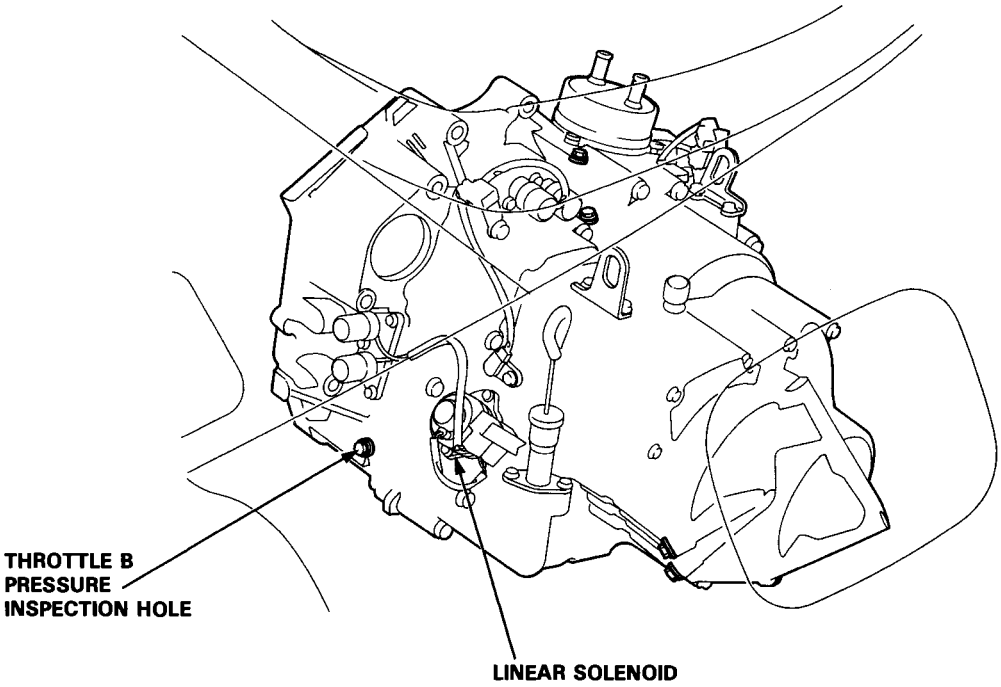
- Throttle B Pressure Measurement

**⚠WARNING While testing, be careful of the rotating rear wheels.**

1. Allow the rear wheels to rotate freely.
2. Disconnect the linear solenoid connector.
3. Shift to [D] position.
4. Run the engine at 2,000 rpm.
5. Measure fully opened throttle B pressure.
6. Connect battery voltage to the linear solenoid terminal of the connector.
7. Measure fully closed throttle B pressure.




| PRESSURE | SHIFT LEVER POSITION | SYMPTOM | PROBABLE CAUSE | FLUID PRESSURE | |
|---|---|---|---|---|---|
| | | | | Standard | Service Limit |
| Throttle B | [D] | Pressure too high | Linear Solenoid | 0 – 15 kPa (0 – 0.15 kgf/cm², 0 – 2 psi) | 0 – 15 kPa (0 – 0.15 kgf/cm², 0 – 2 psi) |
| | | No or low pressure | Faulty throttle B valve | 600 – 660 kPa (6.1 – 6.7 kgf/cm², 87 – 95 psi) | 600 – 660 kPa (6.1 – 6.7 kgf/cm², 87 – 95 psi) |

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