



# Technical Service Information

## HONDA BAXA/B7XA FAMILY MIL ILLUMINATED SETTING DTC P1705

**COMPLAINT:** Before or after overhaul, a Honda vehicle equipped with a BAXA/B7XA Family transmission exhibits a complaint of the Malfunction Indicator Lamp (MIL) illuminated. When checking for codes, DTC P1705 is detected.

**CAUSE:** One cause may be a problem with the Powertrain Control Module (PGM-FI) main relay stuck closed.

To check for the PGM-FI main relay being stuck closed, have a suitable scan tool connected to the OBDII connector located under the driver side of the dash. Turn the ignition switch to the OFF position. If the scan tool does not lose communication, the PGM-FI main relay is stuck closed, proceed to **CORRECTION 1**. If scan tool does lose communication, the problem may be intermittent. Cycle ignition several times with scan tool still connected and see if code can be reproduced. If scan tool loses communication and code returns, proceed to **CORRECTION 2**.

**CORRECTION 1:** Replace the PGM-FI main relay.

**CORRECTION 2:** To diagnose and check the A/T Gear Position Switch, go to A/T Gear Position Switch Test.

### SERVICE INFORMATION:

PGM-FI Main Relay (Two Door Models).....Honda Part # 39400-582-A01  
PGM-FI Main Relay (Four Door Models).....Honda Part # 39400-584-003  
A/T Gear Position Switch.....Honda Part # 28900-P6H-013

### A/T GEAR POSITION SWITCH TEST:

Turn the ignition switch to the ON position. Move the gear selector from the Park position down each detent to the D1 position. Check to see if the gear position indicator light illuminates for each position. If any indicators stay illuminated in a position that is not indicated by the gear selector, proceed with Gear Position Switch Test. If indicators illuminate correctly, problem may be intermittent, wiggle harness and repeat test.

Pull the carpet back from both passenger and driver side of vehicle and locate the PCM behind the center console. There will be four connectors at the PCM. Connector A (32 pin), Connector B (25 pin), Connector C (31 pin) and Connector D (16 pin). Refer to Figure 1 for PCM Connector Pin ID and A/T Gear Position Switch Pin ID. Refer to Figure 2 for partial wiring diagram of A/T Gear Position Switch.

**NOTE:** *Pin locations and wire colors are specifically for 98-99 Honda Accord 4 CYL vehicles. Other models may vary.*

*Special thanks to Bill  
at AAA-1 Transmissions  
in New York.*



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## A/T GEAR POSITION SWITCH TEST: CONT'D

**PRELIMINARY:** *Preliminary checks for integrity of ground wire B20 at PCM Harness connector.*

Using a DVOM set to read DC volts, back-probe terminal B20 (*brn/blk wire*) with the red lead of the meter. Place the black lead of the meter to the battery negative terminal. The meter should indicate a reading of .1 volts or less with the ignition on. If ok, proceed. If not ok, repair ground circuit B20.

**STEP ONE:** *Step One checks the integrity of the P/N input.*

Using a DVOM, set to read DC volts. Back-probe terminal B20 (*brn/blk wire*) with the black lead of the meter, probe terminal D13 (*blu/wht wire*) with the red lead. Turn the ignition switch to ON, and check for voltage. Move the gear selector slowly through each range. The meter should indicate a voltage reading of .1 volts or less in P/N. All other gear ranges should indicate approximately 5 volts. If ok, proceed to Step Two. If voltage is seen in P/N, disconnect the connector at the Gear Select Switch on the transmission and check for continuity between Terminal D13 at the PCM and Terminal 1 at the Gear Position Switch. If no continuity exists, repair open in circuit. If continuity is good, replace the Gear Position Switch. If less than .1 volts is observed in all positions, disconnect both connectors and check for continuity between terminal D13 at the PCM and ground. If continuity exists, repair short to ground in circuit. If no continuity exists, PCM is at fault.

**STEP TWO:** *Step Two checks integrity of Reverse input.*

Using a DVOM, set to read DC volts. Back-probe terminal B20 (*brn/blk wire*) with the black lead of the meter, probe terminal D6 (*white wire*) with the red lead. Turn the ignition switch to ON, and check for voltage. Move the gear selector slowly through each range. The meter should indicate a voltage reading of .1 volts or less in Reverse. All other gear ranges should indicate approximately 12 volts. If ok, proceed to Step Three. If voltage is seen in Reverse, disconnect the connector at the Gear Select Switch on the transmission and check for continuity between Terminal D6 at the PCM and Terminal 9 at the Gear Position Switch. If no continuity exists, repair open in circuit. If continuity is good, replace the Gear Position Switch. If less than .1 volts is observed in all positions, disconnect both connectors and check for continuity between terminal D6 at the PCM and ground. If continuity exists, repair short to ground in circuit. If no continuity exists, PCM is at fault.



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## A/T GEAR POSITION SWITCH TEST: CONT'D

### **STEP THREE:**     *Step Three checks the integrity of the D4 input.*

Using a DVOM, set to read DC volts. Back-probe terminal B20 (*brn/blk wire*) with the black lead of the meter, probe terminal D9 (*yellow wire*) with the red lead. Turn the ignition switch to ON, and check for voltage. Move the gear selector slowly through each range. The meter should indicate a voltage reading of .1 volts or less in D4. All other gear ranges should indicate approximately 5 volts. If ok, proceed to Step Four. If voltage is seen in D4, disconnect the connector at the Gear Select Switch on the transmission and check for continuity between Terminal D9 at the PCM and Terminal 7 at the Gear Position Switch. If no continuity exists, repair open in circuit. If continuity is good, replace the Gear Position Switch. If less than .1 volts is observed in all positions, disconnect both connectors and check for continuity between terminal D9 at the PCM and ground. If continuity exists, repair short to ground in circuit. If no continuity exists, PCM is at fault.

### **STEP FOUR:**     *Step Four checks the integrity of the D3 input.*

Using a DVOM, set to read DC volts. Back-probe terminal B20 (*brn/blk wire*) with the black lead of the meter, probe terminal D8 (*pink wire*) with the red lead. Turn the ignition switch to ON, and check for voltage. Move the gear selector slowly through each range. The meter should indicate a voltage reading of .1 volts or less in D3. All other gear ranges should indicate approximately 12 volts. If ok, proceed to Step Five. If voltage is seen in D3, disconnect the connector at the Gear Select Switch on the transmission and check for continuity between Terminal D8 at the PCM and Terminal 6 at the Gear Position Switch. If no continuity exists, repair open in circuit. If continuity is good, replace the Gear Position Switch. If less than .1 volts is observed in all positions, disconnect both connectors and check for continuity between terminal D8 at the PCM and ground. If continuity exists, repair short to ground in circuit. If no continuity exists, PCM is at fault.

### **STEP FIVE:**     *Step Five checks the integrity of the D2 input.*

Using a DVOM, set to read DC volts. Back-probe terminal B20 (*brn/blk wire*) with the black lead of the meter, probe terminal D14 (*blue wire*) with the red lead. Turn the ignition switch to ON, and check for voltage. Move the gear selector slowly through each range. The meter should indicate a voltage reading of .1 volts or less in D2. All other gear ranges should indicate approximately 12 volts. If ok, proceed to Step Six. If voltage is seen in D2, disconnect the connector at the Gear Select Switch on the transmission and check for continuity between Terminal D14 at the PCM and Terminal 5 at the Gear Position Switch. If no continuity exists, repair open in circuit. If continuity is good, replace the Gear Position Switch. If less than .1 volts is observed in all positions, disconnect both connectors and check for continuity between terminal D14 at the PCM and ground. If continuity exists, repair short to ground in circuit. If no continuity exists, PCM is at fault.



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## A/T GEAR POSITION SWITCH TEST: CONT'D

### STEP SIX: *Step Six checks the integrity of the D1 input.*

Using a DVOM, set to read DC volts. Back-probe terminal B20 (*brn/blk wire*) with the black lead of the meter, probe terminal D15 (*brown wire*) with the red lead. Turn the ignition switch to ON, and check for voltage. Move the gear selector slowly through each range. The meter should indicate a voltage reading of .1 volts or less in D1. All other gear ranges should indicate approximately 12 volts. If ok, refer back to PGM-FI relay test with scan tool. If voltage is seen in D1, disconnect the connector at the Gear Select Switch on the transmission and check for continuity between Terminal D15 at the PCM and Terminal 4 at the Gear Position Switch. If no continuity exists, repair open in circuit. If continuity is good, replace the Gear Position Switch. If less than .1 volts is observed in all positions, disconnect both connectors and check for continuity between terminal D15 at the PCM and ground. If continuity exists, repair short to ground in circuit. If no continuity exists, PCM is at fault.

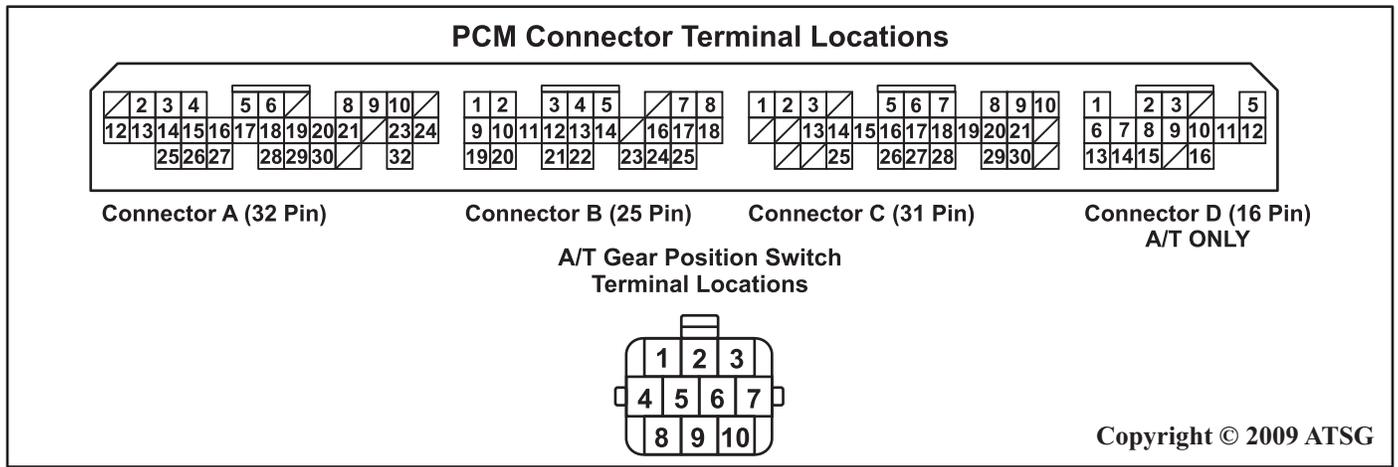


Figure 1

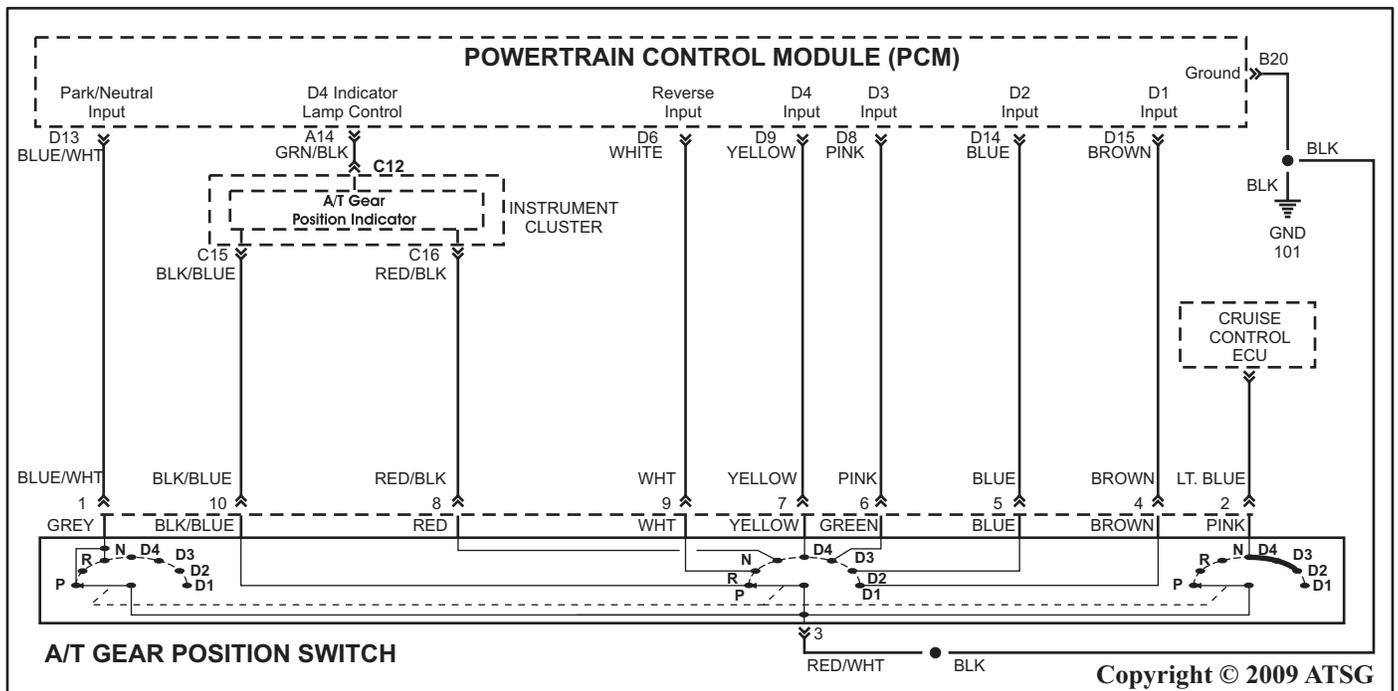


Figure 2