

# ACURA

|                       |                        |                |
|-----------------------|------------------------|----------------|
| Model:                | Engine identification: | Year:          |
| <b>NSX/NSX-T 3.0L</b> | <b>C30A1</b>           | <b>1991-02</b> |
| <b>NSX/NSX-T 3.2L</b> | <b>C32B1</b>           | <b>1997-02</b> |

System: **PGM-FI**

## Self-diagnosis

### General information

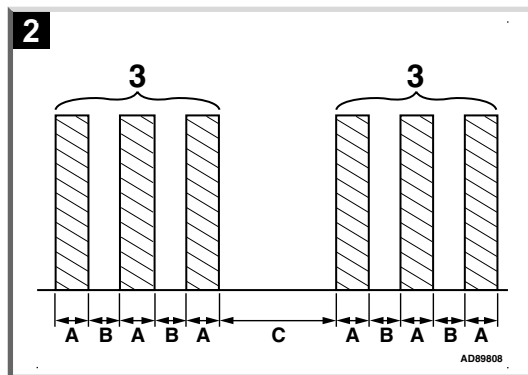
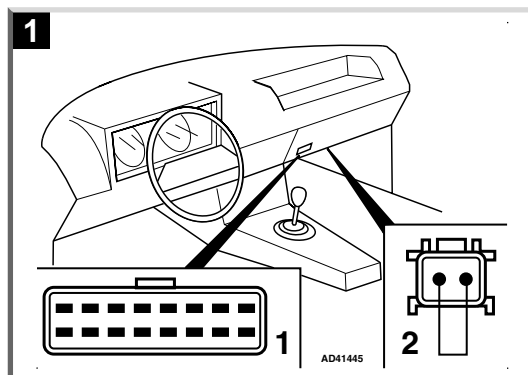
- Refer to the front of this manual for general test conditions, terminology, detailed descriptions of wiring faults and a general trouble shooter for electrical and mechanical faults.
- Engine control module (ECM) incorporates self-diagnosis function.
- Malfunction indicator lamp (MIL) will illuminate if certain faults are recorded.
- ECM operates in backup mode if sensors fail, to enable vehicle to be driven to workshop.
- Trouble codes can be displayed by using a Scan Tool connected to the data link connector (DLC) **1** [1] or by the malfunction indicator lamp (MIL) with the service check connector jumped **1** [2].

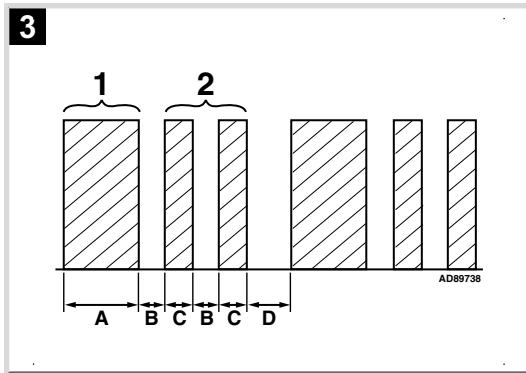
**NOTE:** *The use of a Scan Tool is essential to obtain full diagnostic information.*

### Accessing

- Ensure ignition switched OFF.
- Jump service check connector terminals **1** [2].
- Switch ignition ON.
- Check MIL is flashing.
- Trouble codes 1-9 are indicated as follows:
  - Individual short flashes display trouble code **2** [A].
  - A short pause separates each flash **2** [B].
  - A long pause separates each trouble code **2** [C].
  - For example: Trouble code 3 displayed **2**.
- Trouble codes greater than 9 are indicated as follows:
  - Long flashes indicate the 'tens' of the trouble code **3** [A].
  - Short flashes indicate the 'units' of the trouble code **3** [C].

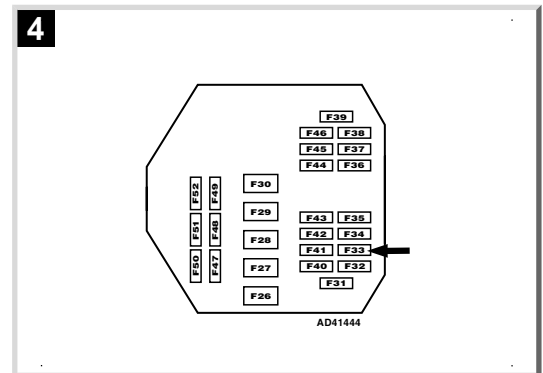
- A short pause separates each flash **3** [B].
- A long pause separates each trouble code **3** [D].
- For example: Trouble code 12 displayed **3**.
- Count MIL flashes and compare with trouble code table.
- Switch ignition OFF.
- Remove jump lead.





### Erasing

- After the faults have been rectified, erase the trouble codes as follows:
- Switch ignition OFF.
- Remove clock fuse No.33 (7.5A) from underhood fusebox for 10 seconds minimum **4**.
- Reinstall fuse.
- Repeat checking procedure to ensure no data remains in ECM fault memory.



### Trouble code identification

| Flash code | OBD-II code | Fault location  | Probable cause                        |
|------------|-------------|---|---------------------------------------|
| –          | P0000-P0999 | Refer to OBD-II trouble code table at the front of this manual                    | –                                     |
| 0          | –           | Engine control module –   | Wiring, ECM                           |
| 1          | –           | Heated oxygen sensor (HO2S) – front bank, front sensor – circuit/voltage low/high | Wiring, HO2S, fuel system, ECM        |
| 2          | –           | Heated oxygen sensor (HO2S) – rear bank, front sensor – circuit/voltage low/high  | Wiring, HO2S, ECM                     |
| 3          | –           | Manifold absolute pressure (MAP) sensor – circuit/voltage low/high                | Wiring, MAP sensor, ECM               |
| 4          | –           | Crankshaft position (CKP) sensor 1 – range/performance/circuit malfunction        | Wiring, CKP sensor, valve timing, ECM |
| 5          | –           | Manifold absolute pressure (MAP) sensor – range/performance                       | Hose leak/blockage, MAP sensor        |
| 5          | P1128       | Manifold absolute pressure (MAP) sensor – pressure lower than expected            | MAP sensor                            |
| 5          | P1129       | Manifold absolute pressure (MAP) sensor – pressure higher than expected           | MAP sensor                            |
| 6          | –           | Engine coolant temperature (ECT) sensor – circuit/voltage low/high                | Wiring, ECT sensor, ECM               |

| Flash code | OBD-II code | Fault location  | Probable cause   |
|------------|-------------|---|--|
| 7          | –           | Throttle position (TP) sensor – circuit/voltage low/high                            | Wiring, TP sensor, ECM   |
| 9          | P1382       | Camshaft position (CMP) sensor 1 – signal malfunction                               | Wiring, CMP sensor, ECM  |
| 10         | –           | Intake air temperature (IAT) sensor – circuit/voltage low/high                      | Wiring, IAT sensor, ECM  |
| 12         | P1491       | Exhaust gas recirculation (EGR) system – valve lift insufficient                    | Wiring, EGR valve/position sensor, EGR solenoid, hose leak/blockage, ECM |
| 12         | P1498       | Exhaust gas recirculation (EGR) valve position sensor – voltage high                | Wiring, EGR valve/position sensor, ECM                                   |
| 13         | P1106       | Barometric pressure (BARO) sensor – range/performance                               | ECM  |
| 13         | P1107       | Barometric pressure (BARO) sensor – circuit/voltage low                             | ECM  |
| 13         | P1108       | Barometric pressure (BARO) sensor – circuit/voltage high                            | ECM  |
| 14         | –           | Idle control system – malfunction   | Idle speed, throttle body  |
| 17         | –           | Vehicle speed sensor (VSS) – voltage low  | Wiring, VSS, ECM   |
| 22         | P1279       | VTEC control system malfunction – front bank  | Wiring, VTEC solenoid/pressure switch, ECM                               |
| 23         | –           | Knock sensor (KS) – front bank – circuit malfunction                                | Wiring, KS, ECM  |
| 31         | P1671       | AT to ECM signal – no signal  | Wiring, TCM, ECM   |
| 31         | P1672       | AT to ECM signal – signal failure   | Wiring, TCM, ECM   |
| 34         | –           | System voltage – malfunction  | Wiring, poor connection, battery   |
| 35         | P1676       | ECM to traction control system signal – no signal                                   | Wiring, traction control module, ECM                                     |
| 35         | P1677       | ECM to traction control system signal – signal failure                              | Wiring, traction control module, ECM                                     |
| 37         | P1246       | Accelerator pedal position (APP) sensor 1 – circuit malfunction                     | Wiring, APP sensor, ECM  |
| 37         | P1247       | Accelerator pedal position (APP) sensor 2 – circuit malfunction                     | Wiring, APP sensor, ECM  |
| 37         | P1248       | Accelerator pedal position (APP) sensor 1 & 2 – incorrect signals                   | APP sensor   |
| 40         | P1241       | Throttle actuator control (TAC) motor – circuit 1 – malfunction                     | Wiring, TAC motor, ECM   |
| 40         | P1242       | Throttle actuator control (TAC) motor – circuit 2 – malfunction                     | Wiring, TAC motor, ECM   |
| 40         | P1243       | Throttle position (TP) – insufficient   | Throttle valve, TP sensor, TAC motor                                     |
| 40         | P1244       | Closed throttle position (CTP) – insufficient                                       | Throttle valve, TP sensor  |
| 41         | –           | Heated oxygen sensor (HO2S) – front bank, front sensor – heater circuit malfunction | Wiring, ECM  |

| Flash code | OBD-II code | Fault location   | Probable cause  |
|------------|-------------|--|---|
| 42         | –           | Heated oxygen sensor (HO2S) – rear bank, front sensor – heater circuit malfunction             | Wiring, ECM   |
| 45         | –           | Mixture too lean/rich – front bank   | Fuel system, front HO2S, MAP sensor, mechanical fault   |
| 46         | –           | Mixture too lean/rich – rear bank  | Fuel system, front HO2S, MAP sensor, mechanical fault   |
| 52         | P1259       | VTEC control system malfunction – rear bank  | Wiring, VTEC solenoid/pressure switch, ECM  |
| 53         | –           | Knock sensor (KS) – rear bank – circuit malfunction  | Wiring, KS, ECM   |
| 54         | P1336       | Crankshaft position (CKP) sensor 2 – range/performance   | CKP sensor, valve timing  |
| 54         | P1337       | Crankshaft position (CKP) sensor 2 – circuit malfunction                                       | Wiring, CKP sensor, ECM   |
| 59         | P1386       | Camshaft position (CMP) sensor 2 – intermittent signal   | CMP sensor  |
| 59         | P1387       | Camshaft position (CMP) sensor 2 – no signal   | Wiring, CMPO sensor, ECM  |
| 60         | –           | Secondary air injection (AIR) system – malfunction   | Wiring, AIR pump relay, AIR pump, ECM   |
| 60         | P1410       | Secondary air injection (AIR) system – malfunction   | AIR pump  |
| 61         | –           | Heated oxygen sensor (HO2S) – front bank, front sensor – slow response                         | HO2S, exhaust system  |
| 62         | –           | Heated oxygen sensor (HO2S) – rear bank, front sensor – slow response                          | HO2S, exhaust system  |
| 63         | –           | Heated oxygen sensor (HO2S) – front bank, rear sensor – slow response/circuit/voltage low/high | Wiring, HO2S, ECM   |
| 64         | –           | Heated oxygen sensor (HO2S) – rear bank, rear sensor – slow response/circuit/voltage low/high  | Wiring, HO2S, ECM   |
| 65         | –           | Heated oxygen sensor (HO2S) – front bank, rear sensor – heater circuit malfunction             | Wiring, HO2S, ECM   |
| 66         | –           | Heated oxygen sensor (HO2S) – rear bank, rear sensor – heater circuit malfunction              | Wiring, HO2S, ECM   |
| 67         | –           | Catalytic converter – front bank – efficiency below limit                                      | Catalytic converter, rear HO2S  |
| 68         | –           | Catalytic converter – rear bank – efficiency below limit                                       | Catalytic converter, rear HO2S  |
| 70         | –           | AT – lock-up clutch not engaging/no gear shift   | Wiring, mainshaft speed sensor, countershaft speed sensor, lock-up control system, shift solenoid (SS) A/B, TCM |
| 70         | P1705       | AT – gear shift malfunction  | Wiring, range position switch, TCM  |

| Flash code | OBD-II code | Fault location   | Probable cause   |
|------------|-------------|--|--|
| 70         | P1706       | AT – gear shift malfunction  | Wiring, range position switch, TCM                     |
| 70         | P1706       | AT – lock-up clutch malfunction  | Wiring, range position switch, TCM                     |
| 70         | P1753       | AT – lock-up clutch not engaging/<br>disengaging   | Wiring, lock-up control solenoid A, TCM                |
| 70         | P1758       | AT – lock-up clutch not engaging   | Wiring, lock-up control solenoid B, TCM                |
| 70         | P1768       | AT – poor gear shift   | Wiring, linear solenoid, TCM                           |
| 70         | P1768       | AT – lock-up clutch not engaging   | Wiring, linear solenoid, TCM                           |
| 70         | P1788       | AT – poor gear shift   | Communication wire, ECM, TCM                           |
| 70         | P1790       | AT – lock-up clutch not engaging   | Wiring, TP sensor, TCM                                 |
| 70         | P1791       | AT – lock-up clutch not engaging   | Wiring, VSS, TCM                                       |
| 70         | P1792       | AT – lock-up clutch not engaging   | Wiring, ECT sensor, TCM                                |
| 70         | P1793       | Automatic transmission   | Wiring, MAP sensor, TCM                                |
| 70         | P1795       | Automatic transmission   | Wiring, APP sensor, TCM                                |
| 71         | P1201       | Cylinder No.1 – misfire  | Wiring, injector, ignition system,<br>mechanical fault |
| 71         | P1301       | Cylinder No.1 – misfire  | Ignition system  |
| 72         | P1202       | Cylinder No.2 – misfire  | Wiring, injector, ignition system,<br>mechanical fault |
| 72         | P1302       | Cylinder No.2 – misfire  | Ignition system  |
| 73         | P1203       | Cylinder No.3 – misfire  | Wiring, injector, ignition system,<br>mechanical fault |
| 73         | P1303       | Cylinder No.3 – misfire  | Ignition system  |
| 74         | P1204       | Cylinder No.4 – misfire  | Wiring, injector, ignition system,<br>mechanical fault |
| 74         | P1304       | Cylinder No.4 – misfire  | Ignition system  |
| 75         | P1205       | Cylinder No.5 – misfire  | Wiring, injector, ignition system,<br>mechanical fault |
| 75         | P1305       | Cylinder No.5 – misfire  | Ignition system  |
| 76         | P1206       | Cylinder No.6 – misfire  | Wiring, injector, ignition system,<br>mechanical fault |
| 76         | P1306       | Cylinder No.6 – misfire  | Ignition system  |
| –          | P1300       | Random misfire   | EGR/fuel/ignition system, MAP sensor                   |
| 79         | P1316       | Spark plug voltage detection – front bank –<br>circuit malfunction                       | Wiring, voltage detection module, ECM                  |
| 79         | P1317       | Spark plug voltage detection – rear bank –<br>circuit malfunction                        | Wiring, voltage detection module, ECM                  |
| 79         | P1318       | Spark plug voltage detection module<br>reset – front bank – reset circuit<br>malfunction | Wiring, voltage detection module, ECM                  |

| Flash code | OBD-II code | Fault location   | Probable cause   |
|------------|-------------|--|--|
| 79         | P1319       | Spark plug voltage detection module reset – rear bank – reset circuit malfunction    | Wiring, voltage detection module, ECM  |
| 80         | –           | Exhaust gas recirculation (EGR) solenoid – insufficient flow                         | EGR solenoid, hose/pipe leak or blockage   |
| 83         | P1415       | AIR pump electrical current sensor – open/short circuit                              | Wiring, AIR pump electrical current sensor, ECM  |
| 83         | P1416       | AIR pump electrical current sensor – open circuit                                    | Wiring, AIR pump electrical current sensor, ECM  |
| 86         | –           | Engine coolant temperature (ECT) sensor – range/performance problem                  | ECT sensor, cooling system   |
| 87         | P1486       | Thermostat – range/performance problem   | Engine coolant blower motor, cooling system  |
| 90         | P1456       | Evaporative emission (EVAP) canister purge system (fuel tank system) – leak detected | Hose leak/blockage, fuel tank/pressure sensor, fuel filler cap, EVAP valve/bypass solenoid, EVAP two way valve, EVAP canister/vent valve |
| 90         | P1457       | Evaporative emission (EVAP) canister purge system (canister system) – leak detected  | Hose leak/blockage, fuel tank/pressure sensor, EVAP valve/bypass solenoid, EVAP two way valve, EVAP canister/vent valve                  |
| 91         | –           | Fuel tank pressure sensor – circuit/voltage low/high                                 | Wiring, pressure sensor, ECM   |
| 92         | –           | Evaporative emission (EVAP) canister purge system – incorrect flow                   | EVAP solenoid/flow switch, wiring, throttle body, hose leak/blockage, ECM  |
| 92         | P1459       | Evaporative emission (EVAP) canister purge system – switch malfunction               | Wiring, flow switch, hose leak/blockage, ECM   |
| –          | P1607       | Engine control module (ECM) – internal circuit failure A                             | ECM  |
| –          | P1608       | Engine control module (ECM) – internal circuit failure B                             | ECM  |