SFI SYSTEM

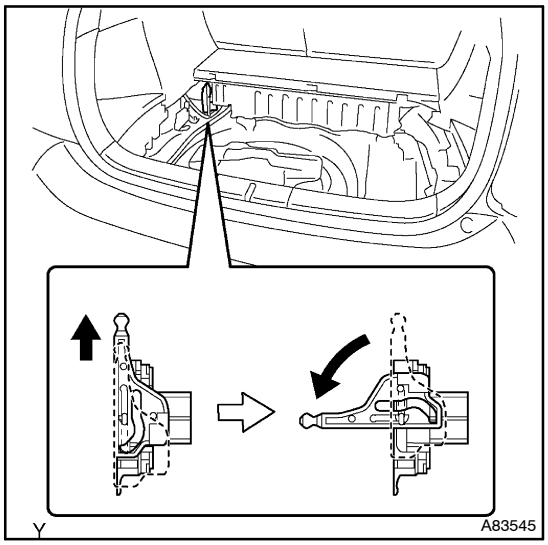
05IGX–01

PRECAUTION

1. PRECAUTIONS FOR HIGH–VOLTAGE CIRCUIT INSPECTION AND SERVICE

(a) Technicians to be engaged in inspection and service on high–voltage components and systems should receive special training.

(b) All the high–voltage wire harness connectors are colored orange: the HV battery and other high–voltage components are identified by the ”High Voltage” caution labels. Do not touch these connectors and components before removing the service plug. Remove the service plug prior to touching these connectors and components.

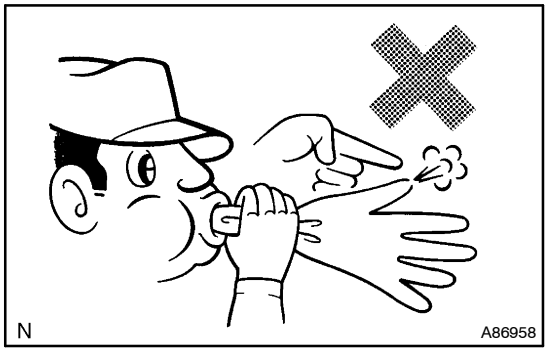


(c) Before inspecting or servicing the high–voltage components/systems, be sure to take safety precautions such as wearing insulated gloves and removing the service plug to prevent electric shock or electrocution. Store the removed service plug in your pocket to prevent other technicians from reinstalling it while you are servicing high–voltage components/systems.

(d) After removing the service plug, wait at least for 5 minutes before touching any of the high–voltage connectors and terminals.

HINT:

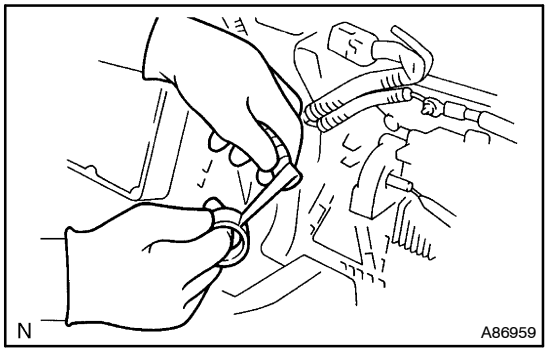
At least 5 minutes is required to discharge electricity from the high–voltage condenser inside the inverter.



(e) Before wearing insulated gloves, make sure that they are not ruptured, torn or damaged in any other way. Do not wear wet insulated gloves.

(f) When servicing, be careful not to drop metallic materials like a mechanical pencil or tools etc. Causing a short circuit may result.

(g) Wear the insulated gloves before touching a bare high–voltage terminal. Verify that electricity has discharged from the terminal (approximately 0 V) using an electrical tester.

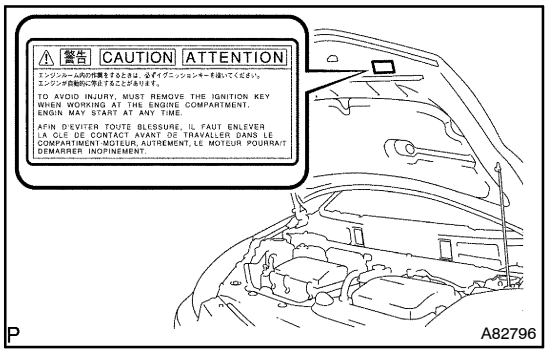


(h) After disconnecting or exposing a high–voltage connector or terminal, insulate it immediately using insulation tape.

(i) The screw of a high–voltage terminal should be tightened firmly to the specified torque. Either insufficient or excessive tightening torque can cause HV system failure.

(j) Call other technicians' attention to prevent accidents during working on the high–voltage components/systems by posting a sign to notify them (see page 01–5).

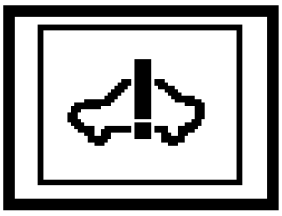
(k) Prior to reinstalling the service plug, again, verify whether or not any parts or tools have been left behind, and check if high–voltage terminal screws have been securely tightened as well as the connectors have been properly reconnected.



2. PRECAUTIONS TO BE OBSERVED WHEN INSPECTING OR SERVICING ENGINE COMPARTMENT

The PRIUS automatically turns the engine ON and OFF when the power switch is ON (READY lamp on the instrument panel is being illuminated). Turn the HV main system OFF before servicing inside the engine compartment.

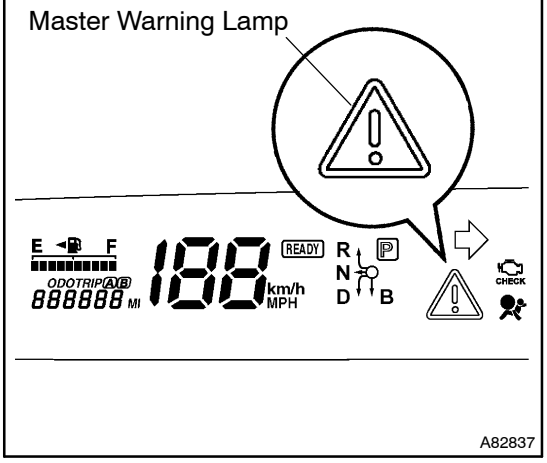
Multi Information Display:



HV System Warning

A82839

Combination Meter:



A82837

3. INSPECTION MODE

HINT:

- The PRIUS automatically stops the engine while the vehicle is stopped with the engine warmed up and battery well charged if the A/C compressor operation is not required. Therefore, even if the vehicle stops for any reason such as a check of ignition timing, inspection mode should be activated when continuous operation of the engine is required.

Activating inspection mode (Using the intelligent tester II)

(1) Connect the intelligent tester II to the DLC3.
(2) Turn the power switch ON (IG).
(3) Turn the intelligent tester II ON.
(4) On the intelligent tester II, select the item: Powertrain / Hybrid Control / Active Test / Inspection mode – 2WD inspection / ON.
(5) Activate inspection mode and check that the HV system warning on the multi–information display flashes and the master warning lamp on the combination meter is illuminated.
(6) Start the engine by pushing the power switch with depressing the brake pedal.

Deactivating inspection mode

(1) Turn the power switch OFF. Inspection mode and the HV main system are killed simultaneously.

NOTICE:

- **The idling speed in inspection mode is approximately 1,000 rpm. The number of revolutions will increase up to 1,500 rpm if the accelerator pedal is depressed to a degree of less than 60%, and up to 2,500 rpm in a case of 60% or more.**
- **If a diagnosis code is recorded when entering inspection mode, the master warning lamp and the error warning light on the multi–center display illuminates.**
- **When the master warning lamp illuminates during operation in inspection mode, deactivate inspection mode and inspect the diagnosed area.**
- **Traveling on a road without deactivating inspection mode may damage the transaxle.**

4. FOR USING INTELLIGENT TESTER II

CAUTION:

Observe the following items for safety reasons:

- **Read its instruction book before using the tester.**
- **Prevent the tester cable from being caught on the pedals, shift lever and steering wheel when driving with the tester connected to the vehicle.**
- **When driving the vehicle for testing purposes using the tester, two persons are required. One is for driving the vehicle, and the other operates the tester.**

5. INITIALIZATION

NOTICE:

When disconnecting the negative (–) battery cable, initialize the following systems after the terminal is reconnected.

System Name	See page
Power Window Control System	05–1727

HINT:

Initialization can not be completed by only removing the battery.

6. NOTICES FOR HYBRID SYSTEM ACTIVATION

- **When the warning lamp is illuminated or the battery has been disconnected and reconnected, pressing the power switch may not start the system on the first try. If so, press the power switch again.**
- **With the power switch's power mode changed to ON (IG), disconnect the battery. If the key is not in the key slot during reconnection, DTC B2799 may be output.**