

# How To Proceed With Troubleshooting

Malfunction symptoms of the airbag system are difficult to confirm, so the diagnostic codes become the most important source of information when troubleshooting. Perform troubleshooting of the airbag system in accordance with the following procedure:

HINT: Do not disconnect the battery negative (–) terminal cable until step [ 3 ], Diagnostic Code Check and Recording, has been completed.

## 1. CUSTOMER PROBLEM ANALYSIS

Using the CUSTOMER PROBLEM ANALYSIS CHECK SHEET (See page AB-29) for reference, ask the customer in as much detail as possible about the problem.

## 2. WARNING LIGHT CHECK

Check the airbag warning light. If the light remains on, a malfunction is stored in the center airbag sensor, assembly, so proceed to step [ 3 ]. If the airbag warning light is not on, a malfunction has occurred in the airbag warning light circuit, so perform troubleshooting for code 22.

HINT: Code 22 is recorded when a malfunction occurs in the airbag warning light system.

If an open malfunction occurs in the airbag warning light system, the airbag warning light does not light up, so that until the malfunction is repaired, the diagnostic codes (including code 22) cannot be confirmed.

## 3. DIAGNOSTIC CODE CHECK AND RECORDING

Check the diagnostic codes and make a note of any malfunction codes which are output. If a normal code is output, an abnormality in the power source circuit may have occurred, so perform troubleshooting for source voltage in step [ 8 ].

If code 22 is output, skip steps [ 4 ] and [ 5 ] and proceed to step [ 7 ].

## 4. CLEARING OF MALFUNCTION CODE (EXCEPT CODE 41)

Clear the malfunction code.

HINT: The malfunction code output in step [ 3 ] indicates that a malfunction has occurred in the circuit designated by the malfunction code, but does not indicate whether the malfunction is still occurring or whether it was in the past.

Accordingly, it is necessary to find out the present condition of the malfunction occurrence by clearing the malfunction code and performing the diagnostic code check again. If this operation is neglected and troubleshooting is performed using only the malfunction code confirmed in step [ 3 ], isolating the problem component becomes difficult and invites mistaken diagnosis.

## 5. DIAGNOSTIC CODE CHECK AND RECORDING [ 6 ] SYMPTOM SIMULATION

After repeating ignition switch ON–OFF operation (ON: wait 20 secs., OFF: wait 20 secs.) 5 times, check the diagnostic codes. If any code other than code 41 is output, the malfunction is still occurring, so proceed to step [ 7 ].

If code 41 only is output, the following three cases are possible:

- Intermittent trouble occurred previously, but it is now normal.
- The problem has been corrected, but clearing of code 41 has been forgotten.
- There is a malfunction in the circuit for code 41.

Focusing on the circuit of the malfunction code stored in step 3, use the simulation method in step [ 6 ] in order to simulate the malfunction. If the malfunction occurs, proceed to step [ 7 ]; if not, proceed to step [ 12 ].

**NOTICE:** When connecting the battery after clearing the malfunction code, always do it with the ignition switch in LOCK position. When the battery has been reconnected, turn the ignition switch to ACC or ON position after at least 2 seconds have elapsed.

If the battery is reconnected with the ignition switch in ACC or ON position, or the ignition switch is turned to ACC or ON within 2 seconds of connecting the battery, it is possible that the diagnosis system will not operate normally.

**HINT:** Determine the malfunction in the airbag system in step [ 6 ] by whether or not a malfunction code other than code 41 is output.

## 7. DIAGNOSTIC CODE CHART

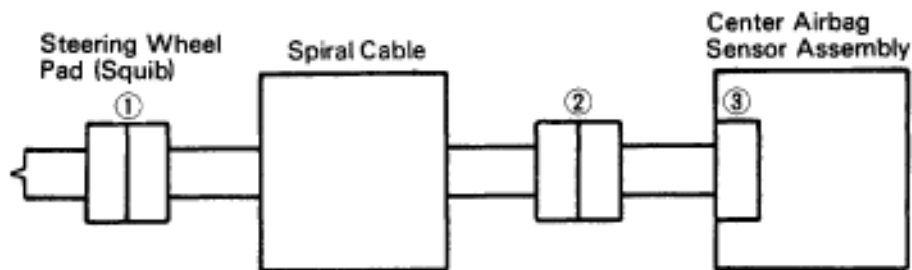
Proceed to the appropriate flow chart in step [ 8 ] in accordance with the malfunction code found in step [ 5 ] or [ 6 ].

## 8. CIRCUIT INSPECTION [ 9 ] REPAIR

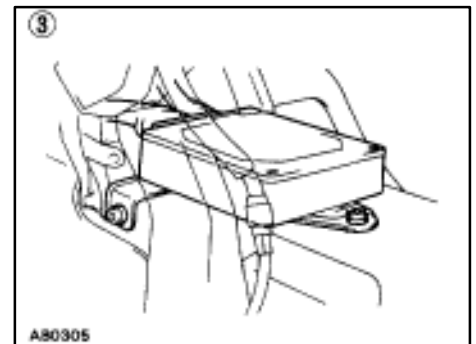
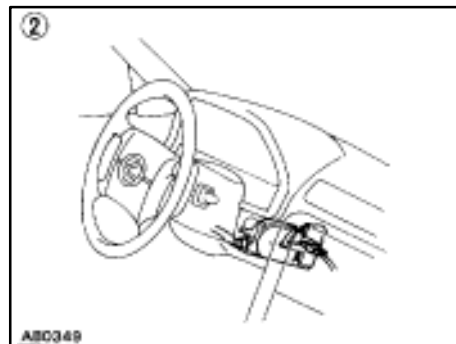
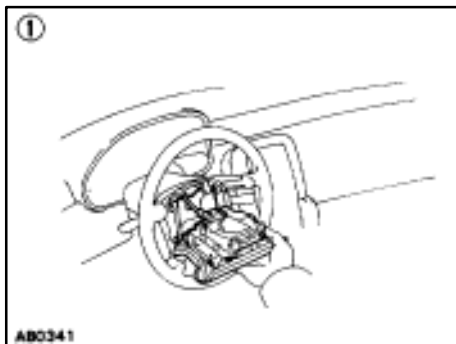
Find out if the problem lies in a sensor, actuator or wire harness and connector, and repair the problem. After the problem part is repaired, reinstall the disassembled parts. Do not start work until at least 20 seconds after the ignition switch is turned to the LOCK position and the negative (–) terminal cable is disconnected.

**CAUTION:** If incorrect procedure is used, a malfunction may occur in the system or there is the danger that airbag may be accidentally activated during the repair operation. Carefully read the GENERAL DESCRIPTION (See page AB-2) and the cautions for each operation, and perform repairs in the correct order using the correct methods.

**HINT:** The following illustration for the CIRCUIT INSPECTION shows each connector for the circuit from the center airbag sensor assembly to the steering wheel pad (squib).



A80091



## 10. CLEARING OF MALFUNCTION CODE (EXCEPT CODE 41)

When all the malfunction codes found in steps [ 5 ] and [ 6 ] have been repaired, clear the malfunction codes.

**11. DIAGNOSTIC CODE CHECK**

After repeating ignition switch ON–OFF operation (ON: wait 20 secs., OFF: wait 20 secs.) 5 times, check the diagnostic codes. If only code 41 is displayed, proceed to step [ 12 ]. If a code other than code 41 is displayed, return to step [ 7 ] and troubleshoot the displayed malfunction code.

NOTICE: When connecting the battery after clearing the malfunction code, always do it with the ignition switch in LOCK position. When the battery has been reconnected, turn the ignition switch to ACC or ON position after at least 2 seconds have elapsed.

If the battery is reconnected with the ignition switch in ACC or ON position, or the ignition switch is turned ACC or ON within 2 seconds of connecting the battery, it is possible that the diagnosis system will not operate normally.

**12. CLEARING OF MALFUNCTION CODE 41 STORED IN MEMORY**

Clear malfunction code 41 stored in memory. This operation is not necessary only in case that the power source voltage returns to normal.

**13. CONFIRMATION TEST**

Check the warning light again and confirm that all the malfunctions have been repaired. If the warning light indicates an abnormality, repeat the operation again from step [ 2 ]. If code 41 is output at step [ 3 ], skip steps [ 4 ] and [ 5 ] and proceed to step [ 7 ].

