

# Basic Diagnostic Procedure

## IMMOBILIZER (DIAGNOSTICS)

### 1. Basic Diagnostic Procedure

#### A: PROCEDURE

| Step                                                                                                                                                                                                                                                                                           | Check                                                                                      | Yes                                                                                    | No                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 CHECK SECURITY INDICATOR LIGHT.</b><br>1) Turn the ignition switch to "OFF" or "ACC".<br>2) Wait at least 60 seconds.                                                                                                                                                                     | Does the security indicator light blink?                                                   | Go to step 2.                                                                          | Check the security indicator light circuit. <Ref. to IM(diag)-11, CHECK SECURITY INDICATOR LIGHT CIRCUIT, INSPECTION, Diagnostics Chart for Security Indicator Light.>  |
| <b>2 CHECK KEY SWITCH.</b><br>Remove the key from ignition switch.                                                                                                                                                                                                                             | Does the security indicator light begin to blink within 1 second after the key is removed? | Go to step 3.                                                                          | Check the key switch circuit. <Ref. to IM(diag)-13, CHECK KEY SWITCH CIRCUIT, INSPECTION, Diagnostics Chart for Security Indicator Light.>                              |
| <b>3 CHECK SECURITY INDICATOR LIGHT.</b><br>Turn the ignition switch to ON.                                                                                                                                                                                                                    | Does the security indicator light go off?                                                  | Go to step 5.                                                                          | Go to step 4.                                                                                                                                                           |
| <b>4 CHECK ENGINE START.</b><br>Turn the ignition switch to START.                                                                                                                                                                                                                             | Does the starter operate?                                                                  | Check the LAN communication system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.> | Go to step 7.                                                                                                                                                           |
| <b>5 CHECK ENGINE START.</b><br>Turn the ignition switch to START.                                                                                                                                                                                                                             | Does the starter operate?                                                                  | Go to step 6.                                                                          | Check the LAN communication system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>                                                                                  |
| <b>6 CHECK ENGINE START.</b><br>Turn the ignition switch to START.                                                                                                                                                                                                                             | Does the engine start?                                                                     | Immobilizer system is normal.                                                          | Go to step 8.                                                                                                                                                           |
| <b>7 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the Subaru Select Monitor to data link connector. <Ref. to IM(diag)-8, Subaru Select Monitor.><br>3) Turn the ignition switch and Subaru Select Monitor switch to ON.<br>4) Read the DTC of the body integrated unit. | Is the DTC displayed on screen?                                                            | Go to step 10.                                                                         | Replace the body integrated unit. <Ref. to SL-48, Body Integrated Unit.> Register all ignition keys (transponders). Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER". |
| <b>8 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the Subaru Select Monitor to data link connector. <Ref. to IM(diag)-8, Subaru Select Monitor.><br>3) Turn the ignition switch and Subaru Select Monitor switch to ON.<br>4) Read the DTC of the ECM.                  | Is the DTC displayed on screen?                                                            | Go to step 9.                                                                          | Perform the diagnosis for engine system. <Ref. to EN(H4DOTC)(diag)-74, PROCEDURE, Diagnostics for Engine Starting Failure.>                                             |

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| Step                                                                                                                                                                                                                                                                                                  | Check                               | Yes                                                                                                                                                          | No                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>9</b><br><b>CHECK FREEZE FRAME DATA.</b><br>Using the Subaru Select Monitor, check the Freeze Frame Data.                                                                                                                                                                                          | Was the Freeze Frame Data recorded? | Record the data.<br>Go to step <b>10</b> .                                                                                                                   | Go to step <b>10</b> . |
| <b>10</b><br><b>PERFORM DIAGNOSIS.</b><br>1) Inspect using the "Diagnostic Procedure with Diagnostic Trouble Code (DTC)". <Ref. to IM(diag)-15, Diagnostic Procedure with Diagnostic Trouble Code (DTC).><br>2) Repair the trouble cause.<br>3) Perform the Clear Memory Mode.<br>4) Read DTCs again. | Is the DTC displayed on screen?     | Inspect using the "Diagnostic Procedure with Diagnostic Trouble Code (DTC)". <Ref. to IM(diag)-15, Diagnostic Procedure with Diagnostic Trouble Code (DTC).> | Finish the diagnosis.  |