

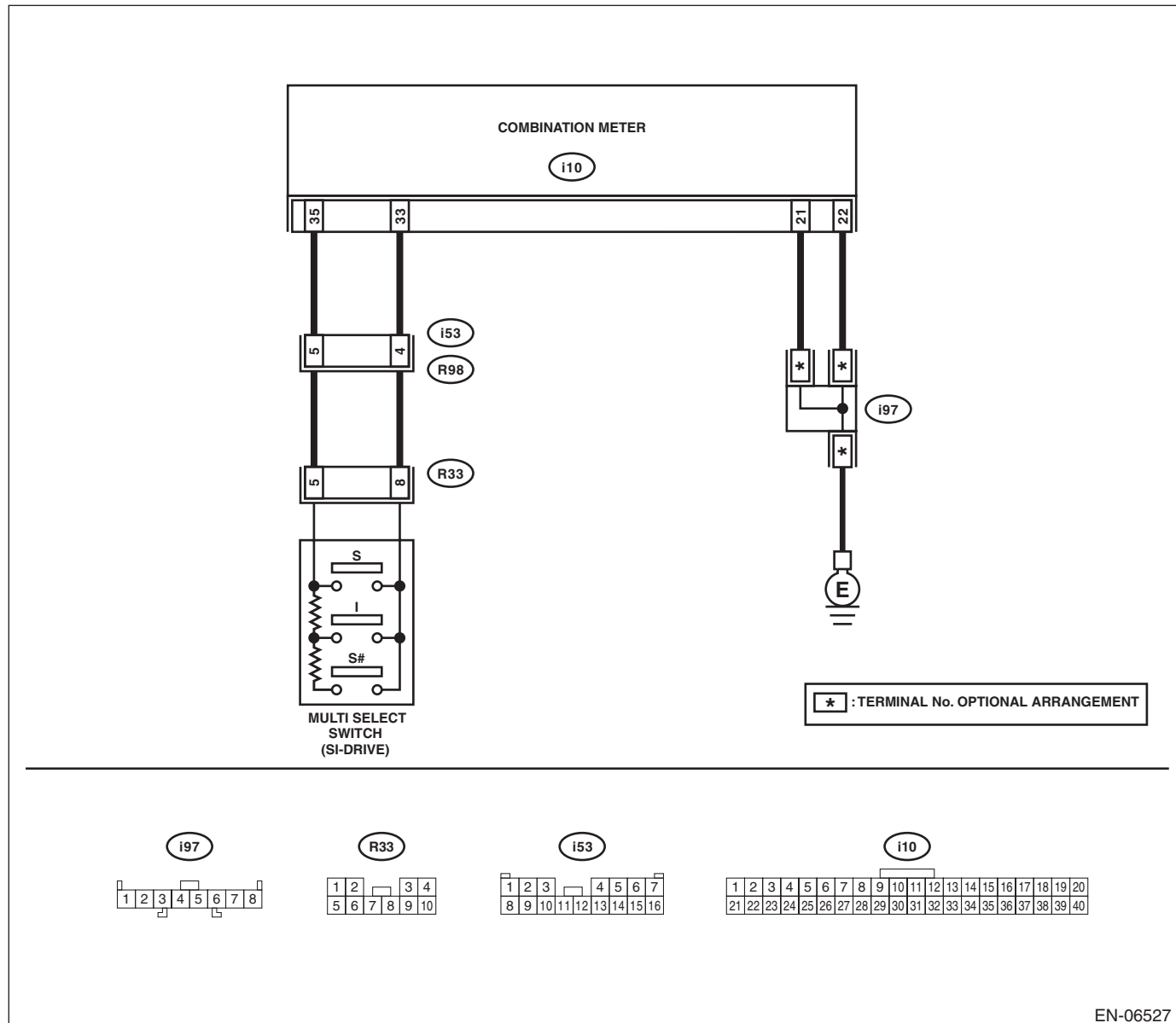
# Diagnostic Procedure without Diagnostic Trouble Code (DTC)

ENGINE (DIAGNOSTICS)

## 1. SI-DRIVE MODE INDICATION DOES NOT CHANGE AND MODES DO NOT SWITCH AFTER SWITCHING SI-DRIVE MODES

### WIRING DIAGRAM:

- Engine electrical system, without SI-DRIVE <Ref. to WI-32, WITHOUT SI-DRIVE, WIRING DIAGRAM, Engine Electrical System.>
- Engine electrical system, with SI-DRIVE <Ref. to WI-48, WITH SI-DRIVE, WIRING DIAGRAM, Engine Electrical System.>



EN-06527

Step	Check	Yes	No
<b>1 CHECK SI-DRIVE SELECTOR.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the combination meter. 3) Measure the resistance between connectors when the SI-DRIVE selector is operated. <b>Connector &amp; terminal</b> <b>(i10) No. 33 — (i10) No. 35:</b>	Does the resistance change as below? S#: 3.48 — 3.85 kΩ I: 0.95 — 1.05 kΩ S: less than 1 Ω	Go to step 4.	Go to step 2.

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## ENGINE (DIAGNOSTICS)

Step	Check	Yes	No
<b>2</b> <b>CHECK HARNESS BETWEEN COMBINATION METER AND MULTI-SELECT SWITCH CONNECTOR.</b> 1) Disconnect the connector from multi-select switch. 2) Measure the resistance of harness between combination meter and multi-select switch connector. <i>Connector &amp; terminal</i> <i>(i10) No. 33 — (R33) No. 8:</i> <i>(i10) No. 35 — (R33) No. 5:</i>	Is the resistance less than 1 $\Omega$ ?	Go to step 3.	Repair the harness and connector. <b>NOTE:</b> In this case, repair the following item: • Open circuit in harness between combination meter and multi-select switch connector • Poor contact of coupling connector
<b>3</b> <b>CHECK HARNESS BETWEEN COMBINATION METER AND MULTI-SELECT SWITCH CONNECTOR.</b> Measure the resistance between multi-select switch connector and chassis ground. <i>Connector &amp; terminal</i> <i>(R33) No. 8 — Chassis ground:</i> <i>(R33) No. 5 — Chassis ground:</i>	Is the resistance 1 M $\Omega$ or more?	Repair the poor contact of multi-select switch connector. Replace the multi-select switch if defective. <Ref. to FU(STI)-58, SI-DRIVE (SUBARU Intelligent Drive) Selector.>	Repair the ground short circuit in harness between combination meter and multi-select switch connector.
<b>4</b> <b>CHECK HARNESS BETWEEN COMBINATION METER AND CHASSIS GROUND.</b> Measure the resistance of harness between combination meter and chassis ground. <i>Connector &amp; terminal</i> <i>(i10) No. 21 — Chassis ground:</i> <i>(i10) No. 22 — Chassis ground:</i>	Is the resistance less than 5 $\Omega$ ?	Go to step 5.	Repair the harness and connector. <b>NOTE:</b> In this case, repair the following item: • Open circuit in harness between combination meter and chassis ground • Poor contact of coupling connector
<b>5</b> <b>RECHECK FAULT.</b> 1) Connect all connectors. 2) Switch SI-DRIVE modes.	Is there any fault?	Repair the poor contact of combination meter connector. Replace the combination meter if defective. <Ref. to IDI-16, Combination Meter.>	The circuit has returned to a normal condition at this time. Reproduce the failure, and then perform the diagnosis again. <b>NOTE:</b> In this case, temporary poor contact of connector, temporary open or short circuit of harness may be the cause.

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## 2. "S" BLINKS ON SI-DRIVE MODE DISPLAY IN THE COMBINATION METER APPROX. 5 SECONDS AFTER SWITCHING SI-DRIVE MODES

Step	Check	Yes	No
1 <b>CHECK DTC.</b>	Is DTC displayed?	Check the appropriate DTC using the "List of Diagnostic Trouble Code (DTC)" concerning the respective units.	Go to step 2.
2 <b>CHECK COMBINATION METER AND CLOCK DISPLAY.</b> Check for abnormal indication other than "S" blinking. Examples: <ul style="list-style-type: none"> <li>• Malfunction indicator light illuminates.</li> <li>• "Err" is displayed on fuel efficiency display part.</li> <li>• Engine coolant temperature gauge does not move.</li> </ul>	Is there any abnormal indication other than "S" blinking?	For the diagnostic procedure, refer to LAN section. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Go to step 3.
3 <b>CHECK COMBINATION METER, ECM AND BODY INTEGRATED UNIT.</b>	Are the part numbers of combination meter, ECM and body integrated unit correct?	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>	Replace the combination meter, ECM or body integrated unit with parts of proper part number. <Ref. to IDI-16, Combination Meter.> <Ref. to FU(STI)-59, Engine Control Module (ECM).> or <Ref. to SL-48, Body Integrated Unit.>

## Diagnostic Procedure without Diagnostic Trouble Code (DTC)

### ENGINE (DIAGNOSTICS)

#### 3. “S#”, “I” OR “S” BLINKS ON SI-DRIVE MODE DISPLAY IN THE COMBINATION METER AFTER SWITCHING SI-DRIVE MODES

**NOTE:**

In this case, there is a fault other than in SI-DRIVE system.

Step	Check	Yes	No
<b>1</b> <b>CHECK MALFUNCTION INDICATOR LIGHT.</b> 1) Start the engine. 2) Check if malfunction indicator light illuminates.	Does the malfunction indicator light illuminate?	Read the DTC using Subaru Select Monitor and check the indicated DTC. <Ref. to EN(H4DOTC)(diag)-87, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
<b>2</b> <b>CHECK ENGINE COOLANT TEMPERATURE GAUGE.</b> 1) Turn the ignition switch to ON. 2) Check the engine coolant temperature gauge.	Does it indicate overheating?	Inspect for the cause of overheating and repair.	Go to step 3.
<b>3</b> <b>CHECK COMBINATION METER INDICATION.</b> 1) Turn the ignition switch to ON. 2) Switch SI-DRIVE modes. 3) Check the SI-DRIVE mode display in the combination meter.	Does “S#”, “I” or “S” of the SI-DRIVE mode blink in combination meter?	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>	Perform test driving to check the malfunction indicator light and engine coolant temperature gauge. Complete the diagnosis if they are normal.