4. Clock System

A: WIRING DIAGRAM

Refer to "Clock System" in the wiring diagram. <Ref. to WI-94, WIRING DIAGRAM, Clock System.>

B: ELECTRICAL SPECIFICATION

1. MULTI DISPLAY TERMINAL ARRANGEMENT



Connector

Terminal No.	Item	Measuring condition	Standard
$3 \leftarrow \rightarrow$ Chassis ground	Voltage	Passenger's airbag ON indicator OFF \rightarrow ON	$0 \text{ V} \rightarrow 10 - 14 \text{ V}$
$4 \leftrightarrow$ Chassis ground	Voltage	Passenger's airbag OFF indicator OFF \rightarrow ON	$0 \text{ V} \rightarrow 10 - 14 \text{ V}$
5 (U-ART com.)	—	Cannot be measured	—
6 (GND) $\leftarrow \rightarrow$ chassis ground	Resistance	Always	Less than 1 Ω
8 (IG) $\leftarrow \rightarrow$ Chassis ground	Voltage	IG OFF \rightarrow ON	$0 \text{ V} \rightarrow 10 - 14 \text{ V}$
10 (+B) $\leftarrow \rightarrow$ Chassis ground	Voltage	Always	10 — 14 V

C: INSPECTION

1. SYMPTOM CHART

Symptoms	Repair order	Note
No display is shown.	 Power supply Ground circuit Communication circuit harness Multi display 	<ref. and="" check="" circuit,="" clock="" ground="" idi-22,="" inspection,="" power="" supply="" system.="" to=""></ref.>
Ambient air temperature/fuel economy displays do not appear.	 Power supply Ground circuit Communication circuit harness Multi display 	<ref. check="" clock="" commu-<br="" idi-22,="" system="" to="">NICATION CIRCUIT, INSPECTION, Clock System.></ref.>
Only ambient air temperature dis- play is not displayed.	 Power supply Harness Ambient sensor Communication circuit Multi display 	<ref. ambient="" check="" idi-23,="" temperature<br="" to="">SYSTEM COMMUNICATION CIRCUIT, INSPEC- TION, Clock System.></ref.>
Only fuel economy display is not displayed.	 Setting Communication circuit Multi display 	<ref. check="" economy="" fuel="" idi-24,="" system<br="" to="">COMMUNICATION CIRCUIT, INSPECTION, Clock System.></ref.>

2. CHECK POWER SUPPLY AND GROUND CIRCUIT

	Step	Check	Yes	No
1	 CHECK POWER SUPPLY. 1) Disconnect the multi display connector. 2) Measure the voltage between multi display connector and chassis ground. Connector & terminal (i59) No. 10 (+) — Chassis ground (-): 	Is the voltage 10 V or more?	Go to step 2.	Check the harness for open or short between the fuse and multi display.
2	CHECK GROUND CIRCUIT. Measure the resistance between multi display connector and chassis ground. Connector & terminal (i59) No. 6 — Chassis ground:	Is the resistance less than 10 Ω ?	Go to step 3.	Repair or replace the harness.
3	 CHECK HARNESS BETWEEN MULTI DIS- PLAY AND COMBINATION METER. 1) Disconnect the combination meter connector. 2) Measure the resistance between multi display connector and combination meter connector. Connector & terminal (i59) No. 5 — (i10) No. 3: 	Is the resistance less than 10 Ω?	Go to step 4.	Repair or replace the harness.
4	 CHECK MULTI DISPLAY. 1) Remove the multi display. 2) Attach the clock to another vehicle on which the clock display operates normally, and check its operation. 	Is the multi display normal?	Replace the meter case assembly.	Replace the multi display.

3. CHECK CLOCK SYSTEM COMMUNICATION CIRCUIT

	Step	Check	Yes	No
1	 CHECK POWER SUPPLY. 1) Disconnect the multi display connector. 2) Measure the voltage between multi display connector and chassis ground. Connector & terminal (i59) No. 8 (+) — Chassis ground (-): 	Is the voltage 10 V or more?	Go to step 2.	Repair or replace the harness.
2	CHECK GROUND CIRCUIT. Measure the resistance between multi display connector and chassis ground. Connector & terminal (i59) No. 6 — Chassis ground:	Is the resistance less than 10 Ω ?	Go to step 3.	Repair or replace the harness.
3	 CHECK HARNESS BETWEEN MULTI DIS- PLAY AND COMBINATION METER. 1) Disconnect the combination meter connector. 2) Measure the resistance between multi display connector and combination meter connector. Connector & terminal (i59) No. 5 — (i10) No. 3: 	Is the resistance less than 10 Ω?	Go to step 4.	Repair or replace the harness.
4	 CHECK MULTI DISPLAY. 1) Remove the multi display. 2) Attach the clock to another vehicle on which the clock display operates normally, and check its operation. 	Is the multi display normal?	Replace the meter case assembly.	Replace the multi display.

4. CHECK AMBIENT TEMPERATURE SYSTEM COMMUNICATION CIRCUIT

	Step	Check	Yes	No
1	 CHECK AMBIENT SENSOR POWER SUP- PLY. 1) Disconnect the ambient sensor connector. 2) Turn the ignition switch to ON. 3) Measure the voltage between the ambient sensor connector and chassis ground. Connector & terminal (B480) No. 2 (+) — Chassis ground (-): 	Is the voltage 4 V or more?	Go to step 2.	Check the harness for open or short between the fuse and multi display.
2	 CHECK HARNESS BETWEEN AMBIENT SENSOR AND COMBINATION METER. 1) Disconnect the combination meter connector. 2) Measure the resistance between the ambient sensor connector and the combination meter connector. Connector & terminal (B480) No. 1 – (i10) No. 37: (B480) No. 2 – (i10) No. 36: 	Is the resistance less than 10 Ω?	Go to step 3.	Repair or replace the harness.
3	 CHECK AMBIENT SENSOR. 1) Remove the ambient sensor. <ref. ac-<br="" to="">78, REMOVAL, Ambient Sensor.></ref.> 2) Check the ambient sensor. <ref. ac-79,<br="" to="">INSPECTION, Ambient Sensor.></ref.> 	Is the ambient sensor operating properly?	Go to step 4.	Replace the ambi- ent sensor.
4	 CHECK AMBIENT TEMPERATURE DIS- PLAY. 1) Connect the combination meter connector. 2) Install the 3 kΩ resistance to ambient sensor connector terminal. 3) Turn the ignition switch to ON. Connector & terminal (B480) No. 1 — No. 2: 	Does the ambient temperature display 25°C (77°F)?	Repair the poor contact between the ambient sensor and harness con- nector.	Go to step 5.
5	 CHECK AMBIENT TEMPERATURE OUTPUT DATA. 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF) and run the "PC application for Subaru Select Monitor". 3) On «System Selection Menu» display, select {Integ. unit mode}. 4) Select {Ambient Temperature}. 	Does the ambient temperature display 25°C (77°F)?	Go to step 6 .	Replace the meter case assembly. <ref. idi-25,<br="" to="">Combination Meter.></ref.>
6	 CHECK MULTI DISPLAY. 1) Remove the multi display. 2) Attach the ambient temperature display to another vehicle on which the ambient temperature display operates normally to check its operation. 	Does the ambient temperature display 25°C (77°F)?	Replace the multi display.	Replace the meter case assembly. <ref. idi-25,<br="" to="">Combination Meter.></ref.>

5. CHECK FUEL ECONOMY SYSTEM COMMUNICATION CIRCUIT

	Step	Check	Yes	No
1	CHECK FUEL ECONOMY DISPLAY OFF MODE. Check that the mode display changes when the multi display changeover knob is operated. (Display changes in the following order: Cruis- ing Distance \rightarrow Average Fuel Economy \rightarrow Instantaneous Fuel Economy \rightarrow blank display)	Is fuel economy displayed?	Multi display is nor- mal.	Go to step 2.
2	 CHECK DIAGNOSTIC TROUBLE CODE (DTC). 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF) and run the "PC application for Subaru Select Monitor". 3) On «System Selection Menu» display, select {Integ. unit mode}. 4) Select the {Diagnostic Code(s) Display}. 	Is DTC detected?	Go to step 3.	Replace the meter case assembly. <ref. idi-25,<br="" to="">Combination Meter.></ref.>
3	 CHECK MULTI DISPLAY. 1) Remove the multi display. 2) Attach the fuel economy display to another vehicle on which the fuel economy display operates normally to check its operation. 	Is the fuel economy display cor- rect?	Replace the multi display.	Replace the meter case assembly. <ref. idi-25,<br="" to="">Combination Meter.></ref.>

D: NOTE

For operation procedures of each component of the clock system, refer to the following section: • Multi display: <Ref. to IDI-37, Multi Display.>