

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000029A5I
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: HYBRID / BATTERY CONTROL: HYBRID BATTERY SYSTEM (for M20A-FXS): UTILITY; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

UTILITY



NOTICE:

- If the HV battery has been replaced, make sure to perform the following utilities in the following order: "Battery Status Info Update", "Prediagnostic Battery Charge" then "Battery Diagnosis".
 - "Have Traction Battery Inspected" is displayed, perform both "Prediagnostic Battery Charge" and "Battery Diagnosis" to diagnose the extent of deterioration of each HV battery cell.
 - "Have Traction Battery Inspected" is cleared after both "Prediagnostic Battery Charge" and "Battery Diagnosis" are performed and "There is no need to replace HV battery." is displayed.
 - After the "Have Traction Battery Inspected" is displayed, if the traction battery is used continually without performing "Prediagnostic Battery Charge" and "Battery Diagnosis" for a few weeks*, use of the HV battery (input/output voltage) will be limited. If it is used more, the ignition switch ON (READY) operation will be disabled.
- *: Timing may vary depending on vehicle usage.
- If the ignition switch cannot be turned to ON (READY), perform "Temporary Vehicle Start Up", "Prediagnostic Battery Charge" and "Battery Diagnosis".

HINT:

If "Have Traction Battery Inspected" is displayed,  .

PURPOSE

UTILITY ITEMS (GTS DISPLAY)	MAIN PURPOSE	CONTROL DESCRIPTION
All Readiness	Check whether or not DTC judgment has been completed.	-
Diagnosis Related Information	Confirm the diagnosis related information	-
Prediagnostic Battery Charge	Before performing "Battery Diagnosis", charge the HV battery, as a high SOC of the HV battery is required to start "Battery Diagnosis".	-
Battery Diagnosis	Discharge the HV battery and diagnose the extent of deterioration of each HV supply stack sub-assembly based on the SOC.	-
Battery Status Info Update	Initialize the HV battery age information.	-
Temporary Vehicle Start Up	Temporarily enable the ignition switch on (Ready) operation which has been disabled due to continual usage of the vehicle without performing battery diagnosis.	-
High Voltage Fuse Accumulated Load History Reset	Initialize the load history of the high voltage fuse.	
Vehicle Control History (RoB)	View vehicle control history.	

ALL READINESS

HINT:

- With "All Readiness", you can check whether or not the DTC judgment has been completed by using the GTS.

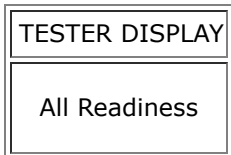
- You should check "All Readiness" after simulating malfunction symptoms or for validation after finishing repairs.

(a) Clear the DTCs even if no DTCs are stored.

Powertrain > HV Battery > Clear DTCs

- (b) Turn the ignition switch off and wait for at least 2 minutes.
- (c) Turn the ignition switch to ON.
- (d) Perform the DTC judgment driving pattern to run the DTC judgment.
- (e) Enter the following menus.

Powertrain > HV Battery > Utility



- (f) Input the DTCs to be confirmed.
- (g) Check the DTC judgment result.

GTS DISPLAY	DESCRIPTION
NORMAL	<ul style="list-style-type: none"> • DTC judgment completed • System normal
ABNORMAL	<ul style="list-style-type: none"> • DTC judgment completed • System abnormal
INCOMPLETE	<ul style="list-style-type: none"> • DTC judgment not completed • Perform the driving pattern

If the judgment result shows Incomplete, perform the DTC confirmation driving pattern again.

DIAGNOSIS RELATED INFORMATION

- (a) Check for diagnosis related information.
 - (1) Enter the following menus.

Powertrain > HV Battery > Utility



- (2) Check the Diagnosis Related Information, and then write them down.
- (b) Clear diagnosis related information.

NOTICE:

Clearing the DTCs will also clear the diagnosis related information.

- (1) Enter the following menus.

Powertrain > HV Battery > Clear DTCs

(2) Clear the DTCs.

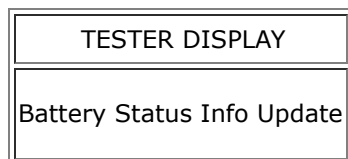
BATTERY STATUS INFO UPDATE

HINT:

If the HV battery has been replaced, make sure to perform "Battery Status Info Update" to initialize the HV battery age information stored in the battery ECU assembly.

(a) Enter the following menus.

Powertrain > HV Battery > Utility



PREDIAGNOSTIC BATTERY CHARGE

NOTICE:

- If the fuel level warning is illuminated, add enough fuel that the light turns off, and then perform "Prediagnostic Battery Charge".
- Perform HV battery charging with appropriate HV battery temperature, between 0°C (32°F) and 47°C (116.6°F).
- Do not perform prediagnostic battery charge while the master warning is illuminated.
- Perform prediagnostic battery charge with the HV battery installed correctly.
- Do not perform "Prediagnostic Battery Charge" while changing from inspection mode to another mode.

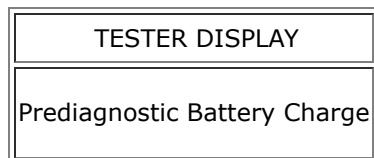
HINT:

- If the HV battery temperature is low (below 0°C (32°F)), drive the vehicle until the temperature reaches 0°C (32°F) or more and perform "Prediagnostic Battery Charge" again.
- If the HV battery temperature is high (above 47°C (116.6°F)), leave the vehicle with the ignition switch ON (READY) and the shift lever in P. Wait until the HV battery temperature drops to 42°C (107.6°F) or lower, and then perform "Prediagnostic Battery Charge" again.
- If the HV battery temperature is low (below 0°C (32°F)) and the ignition switch cannot be turned to ON (READY), place the vehicle in a warm environment (20°C (68°F) or higher). Wait until the HV battery temperature reaches 0°C (32°F) or higher, and then perform "Prediagnostic Battery Charge" again.

(a) When using the GTS:

(1) Enter the following menus.



Powertrain > HV Battery > Utility



(2) Check items on the display and press "Next".

(3) When the prediagnostic battery charge is suspended because the charging conditions are not met anymore, the reasons for suspension are displayed on the GTS. Perform "Prediagnostic Battery Charge" after checking the causes and troubleshoot the suspected area in accordance with instructions in the "Procedure when prediagnostic battery charge is suspended" table.

Procedure when prediagnostic battery charge is suspended

GTS DISPLAY	REASON FOR CHARGING SUSPENSION (RELATED CONDITION)	PROCEDURE
105	Unable to complete the current sensor offset learning	Turn the ignition switch off and then perform "Prediagnostic Battery Charge" again. (If trouble code 105 is output again, inspect the current sensor.) 
107	HV battery connection malfunction	Confirm the connection condition of the HV battery.
108	Shift state park (P) is not selected.	Move the shift lever to P.
109	The ignition switch was turned off or a GTS communication error occurred.	After checking that the connector of the GTS is not disconnected from the DLC3, perform "Prediagnostic Battery Charge" again.
110	Current out of the specified range (-60 to 25 A)	If accessories are connected to the vehicle, turn them on/off or disconnect them from the vehicle.
111	Battery temperature out of the specified range (0°C (32°F) to 47°C (116.6°F))	Read the temperatures listed in "Hybrid/EV Battery Temperature 1 to 6". <ul style="list-style-type: none"> When the HV battery temperature is below 0°C (32°F): Drive the vehicle until the temperature reaches 0°C (32°F) or more. When the HV battery temperature is above 47°C (116.6°F): Leave the vehicle with the ignition switch ON (READY) and the shift lever in P and wait until the HV battery temperature drops to 42°C (107.6°F) or lower.
112	Excessive charge	Check "Hybrid/EV Battery SOC" listed in the Data List. <ul style="list-style-type: none"> When the SOC is below 74%: Turn the ignition switch off and perform "Prediagnostic Battery Charge" again. When the SOC is 74% or more: Cancel "Prediagnostic Battery Charge" and perform "Battery Diagnosis" again.
113	Excessive voltage	Cancel "Prediagnostic Battery Charge" and perform "Battery Diagnosis" again.
115	Time-out	If the ignition switch is turned off by the time-out function, perform "Prediagnostic Battery Charge" again.
116	HV battery malfunction	<ul style="list-style-type: none"> Check for Hybrid Battery System related DTCs and perform troubleshooting. After checking that the master warning has turned off, perform "Prediagnostic Battery Charge" again.
117	System malfunction	
118	Low auxiliary battery voltage	Inspect the auxiliary battery and hybrid vehicle converter function. 

(4) The screen transitions to the next screen and "Turn the ignition switch to ON (READY)" is displayed.

(5) While depressing the brake pedal, turn the ignition switch to ON (READY).

HINT:

The engine starts without the READY indicator illuminated.

(6) The screen transitions to the next screen and "Charging the battery." is displayed.

NOTICE:

If a DTC is stored during "Prediagnostic Battery Charge", the master warning will turn on and stop the charging.

HINT:

- Time required for "Prediagnostic Battery Charge" varies by the SOC of the HV battery when the charging is started.
 - To suspend prediagnostic battery charge, press "Exit" and turn the ignition switch off.
- (7) When the prediagnostic battery charge is suspended because the charging conditions are not met anymore, the reasons of suspension are displayed on the GTS. Perform "Battery Diagnosis" after checking the causes and troubleshoot the suspected area in accordance with instructions in the "Procedure when prediagnostic battery charge is suspended" table.
- (8) The engine stops when "Prediagnostic Battery Charge" is complete.
- (9) The screen transitions to the next screen and "Prediagnostic Battery Charge is complete." is displayed.
- (10) Press "Exit" and turn the ignition switch off.

(b) When not using the GTS:

- (1) Perform the following procedure within 60 seconds of the ignition switch being turned to ON.
 1. Check that the shift lever is in P. (Do not depress the accelerator pedal.)
 2. While depressing the brake pedal with your left foot, move the shift lever to N and fully depress the accelerator pedal three times with your right foot.
 3. Move the shift lever to P, and then fully depress the accelerator pedal twice.
 4. While depressing the brake pedal with your left foot, move the shift lever to N and fully depress the accelerator pedal three times with your right foot.
 5. Move the shift lever to P, and then fully depress the accelerator pedal twice.

HINT:

Fully depressing the accelerator pedal from the closed position is counted as one operation.

- (2) Wait for 5 seconds.
- (3) While depressing the brake pedal, turn the ignition switch to ON (READY).

HINT:

- The engine starts without the READY indicator illuminated.
 - If the SOC indicator of the HV battery shows 6 segments or more, charging of the vehicle is not necessary. Therefore, the engine will not start. In this case, perform "Battery Diagnosis".
- (4) Wait until the engine stops.

NOTICE:

If a DTC is stored during "Prediagnostic Battery Charge", the master warning will turn on and stop the charging.

HINT:

- Time required for "Prediagnostic Battery Charge" varies by the SOC of the HV battery when the charging is started.
 - To suspend prediagnostic battery charge, turn the ignition switch off.
- (5) The engine stops when "Prediagnostic Battery Charge" is complete.

HINT:

If "Prediagnostic Battery Charge" completes correctly, the SOC indicator of the HV battery will show 6 segments or more.

(6) Turn the ignition switch off.

BATTERY DIAGNOSIS

NOTICE:

- Perform this diagnosis with the engine coolant at -10°C (14°F) or more.
- Perform battery diagnosis with appropriate HV battery temperature (between 0°C (32°F) and 47°C (116.6°F)).
- Do not perform battery diagnosis while the master warning is illuminated.
- Perform battery diagnosis with the HV battery installed correctly.
- Do not perform battery diagnosis while changing from inspection mode to another mode.
- Make sure to turn the ignition switch off after battery diagnosis to prevent the auxiliary battery from being discharged.

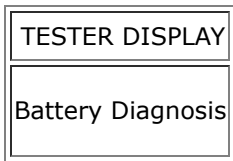
HINT:

- If the HV battery temperature is low (below 0°C (32°F)), drive the vehicle until the temperature reaches 0°C (32°F) or more and perform "Battery Diagnosis" again.
- If the HV battery temperature is high (above 47°C (116.6°F)), leave the vehicle with the ignition switch ON (READY) and the shift lever in P. Wait until the HV battery temperature drops to 42°C (107.6°F) or lower, and then perform "Battery Diagnosis" again.
- If the HV battery temperature is low (below 0°C (32°F)) and the ignition switch cannot be turned to ON (READY), place the vehicle in a warm environment (20°C (68°F) or higher). Wait until the HV battery temperature reaches 0°C (32°F) or higher, and then perform "Battery Diagnosis" again.

(a) When using the GTS:

(1) Enter the following menus.

Powertrain > HV Battery > Utility




(2) Check items on the display and press "Next".

(3) When the battery diagnosis is suspended because the diagnosis conditions are not met anymore, the reasons for suspension are displayed on the GTS. Perform "Battery Diagnosis" after checking the causes and troubleshoot the suspected area in accordance with instructions in the "Procedure when battery diagnosis is suspended" table.

Procedure when battery diagnostic is suspended

GTS DISPLAY	REASON FOR DIAGNOSIS SUSPENSION (RELATED CONDITION)	PROCEDURE
004	Voltage too low	Turn the ignition switch off and then perform "Prediagnostic Battery Charge" again.
005	Unable to complete the current sensor offset learning	Turn the ignition switch off and then perform "Battery Diagnosis" again. (If trouble code 005 is output again, inspect the current sensor.)
006	The ignition switch was turned off.	After checking that the connector of the GTS is not disconnected from the DLC3, perform "Prediagnostic Battery Charge" again.
007	Shift state park (P) is not selected.	Move the shift lever to P.

GTS DISPLAY	REASON FOR DIAGNOSIS SUSPENSION (RELATED CONDITION)	PROCEDURE
008	HV battery connection malfunction	Confirm the connection condition of the HV battery.
009	GTS communication error occurred.	After checking that the connector of the GTS is not disconnected from the DLC3, perform "Prediagnostic Battery Charge" again.
010	Current out of the specified range (2.00 to 10.00 A)	<ul style="list-style-type: none"> Confirm that the vehicle satisfies the "Vehicle Condition" specified in the following table. If accessories are connected to the vehicle, turn them on/off or disconnect them from the vehicle.
011	Battery temperature out of the specified range (0°C (32°F) to 47°C (116.6°F))	<p>Read the temperatures listed in "Hybrid/EV Battery Temperature 1 to 6".</p> <ul style="list-style-type: none"> When the HV battery temperature is below 0°C (32°F): Drive the vehicle until the temperature reaches 0°C (32°F) or more. When the HV battery temperature is above 47°C (116.6°F): Leave the vehicle with the ignition switch ON (READY) and the shift lever in P and wait until the HV battery temperature drops to 42°C (107.6°F) or lower.
012	Time-out	If the ignition switch is turned off by the time-out function, perform "Prediagnostic Battery Charge" again.
013	Low auxiliary battery voltage	Inspect the auxiliary battery and hybrid vehicle converter function. 
014	HV battery malfunction	<ul style="list-style-type: none"> Check for Hybrid Battery System related DTCs and perform troubleshooting. After checking that the master warning has turned off, perform "Prediagnostic Battery Charge" again.
015	System malfunction	

(4) The screen transitions to the next screen and "Operate the vehicle as instructed in the repair manual and turn the ignition switch to ON (READY)." is displayed.

(5) Adjust the vehicle condition as specified in the following table.

Vehicle Condition

ITEM		CONDITION
(1)	Blower speed	HI
(2)	Air conditioning system set temperature	MAX COLD
(3)	Position of the mode controller damper	FACE
(4)	Position of the air mix controller damper	Recirculate
(5)	A/C switch	OFF
(6)	Position of the headlight dimmer switch	High beam
(7)	Hazard warning signal switch assembly	ON

HINT:

Turn off all switches other than the headlight dimmer switch, air conditioning system and hazard warning signal switch assembly related switches.

(6) While depressing the brake pedal, turn the ignition switch to ON (READY).

HINT:

The READY indicator does not illuminate.

(7) The screen transitions to the next screen and "Now diagnosing" is displayed.

HINT:

- "Progress" is displayed as a reference to the estimated time to complete the diagnosis.
- To suspend battery diagnosis, press "Exit" and turn the ignition switch off.

(8) The screen changes to the "Battery Diagnosis" screen and "Have Traction Battery Inspected" is cleared simultaneously.

NOTICE:

- It takes about 40 to 60 minutes for battery diagnosis to complete. As the diagnosis may be stopped due to an error, make sure to check the diagnosis status every 10 minutes.
- If a DTC is stored during "Battery Diagnosis", the master warning will turn on and battery diagnosis.

HINT:

If battery diagnosis is suspended because the diagnosis conditions are not met anymore, the reasons for suspension are displayed on the GTS. Perform "Battery Diagnosis" after checking the causes and troubleshoot the suspected area in accordance with instructions in the "Procedure when battery diagnosis is suspended" table.

(9) When battery diagnosis completes successfully, "Turn the engine/power switch OFF." is displayed.

HINT:

If "Maintenance Required For Traction Battery AT Your Dealer" is displayed, follow the procedure displayed on the GTS.

(10) Press "Exit", turn the power switch off and wait for 60 seconds or more.

NOTICE:

To prevent the auxiliary battery from being depleted, make sure to turn the air conditioning system related switches, headlight dimmer switch, hazard warning signal switch assembly and ignition switch off as soon as "Battery Diagnosis" is complete.

(11) Check the diagnosis result.

HINT:

- If the diagnosis result is "Replace the HV battery", replace the HV battery.
- After performing "Battery Diagnosis", the trip will be determined to have ended when 60 seconds have elapsed since the ignition switch was turned off. If the ignition switch is attempted to be turned on (READY) before 60 seconds have elapsed since the ignition switch was turned off, it may not be able to be turned on (READY).

If the diagnosis result states to replace an HV supply stack sub-assembly, replace the listed HV battery.

(12) As the SOC of the HV battery will be low after performing "Battery Diagnosis", charge the HV battery by turning the ignition switch to ON (READY) and allowing the engine to idle until it stops.

HINT:

As "Battery Diagnosis" discharges the HV battery to a low SOC, if the power switch is turned on immediately after the "Battery Diagnosis" is completed, DTC P300000 or P300016 may be stored. For this reason, leave the vehicle as is for 5 hours to allow the HV battery SOC to recover or charge the HV battery using the THS Charger. Then, clear the DTCs and check that no DTCs are output. If DTC P300000 or P300016 is output again, perform troubleshooting for the DTC.

(b) When manually starting "Battery Diagnosis":

(1) Perform the following procedure within 60 seconds of the ignition switch being turned to ON.

1. Check that the shift lever is in P. (Do not depress the accelerator pedal.)
2. While depressing the brake pedal with your left foot, move the shift lever to N and fully depress the accelerator pedal three times with your right foot.
3. Move the shift lever to P, and then fully depress the accelerator pedal once.
4. While depressing the brake pedal with your left foot, move the shift lever to N and fully depress the accelerator pedal three times with your right foot.
5. Move the shift lever to P, and then fully depress the accelerator pedal once.

HINT:

Fully depressing the accelerator pedal from the closed position is counted as one operation.

(2) Wait for 5 seconds.

(3) Adjust the vehicle condition as specified in the following table.

Vehicle Condition

ITEM		CONDITION
(1)	Blower speed	HI
(2)	Air conditioning system set temperature	MAX COLD
(3)	Position of the mode controller damper	FACE
(4)	Position of the air mix controller damper	Recirculate
(5)	A/C switch	OFF
(6)	Position of the headlight dimmer switch	High beam
(7)	Hazard warning signal switch assembly	ON

HINT:

Turn off all switches other than the headlight dimmer switch, air conditioning system and hazard warning signal switch assembly related switches.

(4) While depressing the brake pedal, turn the ignition switch to ON (READY).

HINT:

The READY indicator does not illuminate.

(5) The screen changes to the "Battery Diagnosis" screen and "Have Traction Battery Inspected" is cleared simultaneously.

NOTICE:

- It takes about 40 to 60 minutes for battery diagnosis to complete. As the diagnosis may be stopped due to an error, make sure to check the diagnosis status every 10 minutes.
- If a DTC is stored during "Battery Diagnosis", the master warning will turn on and stop the charging.

HINT:

- To suspend battery diagnosis, turn the ignition switch off.
- If the diagnosis conditions are not met, the ignition switch will turn off immediately after it is turned on (READY). In this case, "Voltage too low", "HV battery connection malfunction" or "Battery temperature out of the specified range" will be the reason for diagnosis suspension. Troubleshoot the suspected area in accordance with instructions in the "Procedure when battery diagnosis is suspended" table.

Procedure when battery diagnostic is suspended

REASON OF DIAGNOSIS SUSPENSION (RELATED CONDITION)	PROCEDURE
Voltage too low	Turn the ignition switch off and then perform "Prediagnostic Battery Charge" again.
Unable to complete the current sensor offset learning	Turn the ignition switch off and then perform "Battery Diagnosis" again. (If diagnosis suspension occurs again, inspect the current sensor.) INFO
The ignition switch was turned off.	Turn the ignition switch off and then perform "Prediagnostic Battery Charge" again.
Shift state park (P) is not selected.	Move the shift lever to P.
HV battery connection malfunction	Confirm the connection condition of the HV battery.
Current out of the specified range (2.00 to 10.00 A)	<ul style="list-style-type: none"> Confirm that the vehicle satisfies the "Vehicle Condition" specified in the previous table. If accessories are connected to the vehicle, turn them on/off or disconnect them from the vehicle.
Battery temperature out of the specified range (0°C (32°F) to 47°C (116.6°F))	<p>Read the temperatures listed in "Hybrid/EV Battery Temperature 1 to 6".</p> <ul style="list-style-type: none"> When the HV battery temperature is below 0°C (32°F): Drive the vehicle until the temperature reaches 0°C (32°F) or more. When the HV battery temperature is above 47°C (116.6°F): Leave the vehicle with the ignition switch ON (READY) and the shift lever in P and wait until the HV battery temperature drops to 42°C (107.6°F) or lower.
Time-out	If the ignition switch is turned off by the time-out function, perform "Prediagnostic Battery Charge" again.
Low auxiliary battery voltage	Inspect the auxiliary battery and hybrid vehicle converter function. INFO
HV battery malfunction	<ul style="list-style-type: none"> Check for Hybrid Battery System related DTCs and perform troubleshooting. After checking that the master warning has turned off, perform "Prediagnostic Battery Charge" again.
System malfunction	

(6) Approximately 2 hours after "Battery Diagnosis" is started, the ignition switch is automatically turned off. Turn the ignition switch back to ON and check the diagnosis result.

HINT:

The IG off timer function automatically turns the ignition switch off 10 minutes after "Battery Diagnosis" (which takes approximately 40 to 60 minutes) is complete.

- After the ignition switch has been automatically turned off, turn the ignition switch to ON.
- Check the multi-information display.

MULTI-INFORMATION DISPLAY	DIAGNOSIS RESULT
"Have Traction Battery Inspected" is displayed.	Replace the HV battery or "Battery Diagnosis" suspended due to an error
"Have Traction Battery Inspected" is not displayed.	There is no need to replace HV battery.

HINT:

- As "Battery Diagnosis" discharges the HV battery to a low SOC, if the ignition switch is turned to ON immediately after the "Battery Diagnosis" is completed, DTC P300000 or P300016 may be stored. For this reason, leave the vehicle as is for 5 hours to allow the HV battery SOC to recover or charge the HV battery using the THS Charger. Then, clear the DTCs and check that no DTCs are output. If DTC P300000 or P300016 is output again, perform troubleshooting for the DTC.
- If "Have Traction Battery Inspected" is displayed, "Battery Diagnosis" may have been suspended due to a malfunction. Perform "Prediagnostic Battery Charge" and "Battery Diagnosis" using the GTS.

(7) Turn the ignition switch off and wait for 60 seconds or more.

HINT:

- If the diagnosis result is "Replace the HV battery", replace the HV battery.
- After performing "Battery Diagnosis", the trip will be determined to have ended when 60 seconds have elapsed since the ignition switch was turned off. If the ignition switch is attempted to be turned to ON (READY) before 60 seconds have elapsed since the ignition switch was turned off, it may not be able to be turned to ON (READY).

(8) As the SOC of the HV battery will be low after performing "Battery Diagnosis", charge the HV battery by turning the ignition switch to ON (READY) and allowing the engine to idle until it stops.

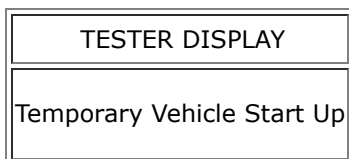
TEMPORARY VEHICLE START UP

NOTICE:

- Do not perform temporary vehicle start up while the master warning is illuminated.
- Perform only when "Vehicle Start Disabled Until Traction Battery Inspected" is displayed on the multi-information display and the vehicle cannot be started.
- "Vehicle Start Disabled Until Traction Battery Inspected" is not cleared even after "Temporary Vehicle Start Up" is performed.

(a) Enter the following menus.

Powertrain > HV Battery > Utility



NOTICE:

If the ignition switch is turned to ON (READY) while depressing the brake pedal, "Temporary Vehicle Start Up" is not possible. Retry after turning the ignition switch off.

(b) Check items on the display and press "Next".

(c) The screen transitions to the next screen and "Please wait" is displayed.

(d) The screen transitions to the next screen and "Now the vehicle is ready to start." is displayed.

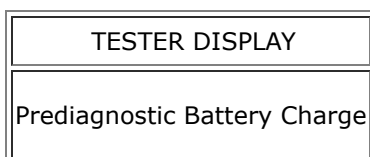
HINT:

- If the ignition switch is turned off after "Temporary Vehicle Start Up", the vehicle will not be able to start again.
- The GTS can be disconnected after turning the ignition switch to ON (READY).

(e) Perform "Prediagnostic Battery Charge".

(1) Enter the following menus.

Powertrain > HV Battery > Utility



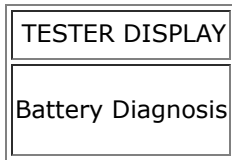
HINT:

Refer to Prediagnostic Battery Charge.

(f) Perform "Battery Diagnosis".

(1) Enter the following menus.

Powertrain > HV Battery > Utility



HINT:

Refer to Battery Diagnosis.

(g) Turn the ignition switch to ON (READY).

(h) When the condition to perform "Temporary Vehicle Start Up" is not met, the reasons for suspension are displayed on the GTS. Perform "Temporary Vehicle Start Up" again after checking the causes and troubleshooting the suspected area in accordance with instructions in the "Procedure when temporary vehicle start up is suspended" table.

Procedure when "Temporary Vehicle Start Up" is suspended

GTS DISPLAY	REASON FOR TEMPORARY VEHICLE START UP SUSPENSION (RELATED CONDITION)	PROCEDURE
Temporary Vehicle Start Up has failed. Confirm the following condition.	GTS communication error	After checking that the connector of the GTS is not disconnected and the ignition switch is ON, perform "Temporary Vehicle Start Up" again.

