Part #: PT398-53141

Conflicts: Do not install into Vehicles with Navigation System.

Will not program with Techstream Lite.

Kit Contents

RES ECU	RES ECU Bracket	V4 Harness	M6 Nut	Washer	Wire Tie	Foam Tape
x1	x1	x1	x1	x1	x10	x3
PT398-53141-AA			90179-06097-A		205mm	

Protection Sheet	Key Tag	Window Label	Engine Room Label	Owner's Guide
x1	x2	x2	x1	x1
	PT398-60086	PT398-60088	PT398-00070-EL	
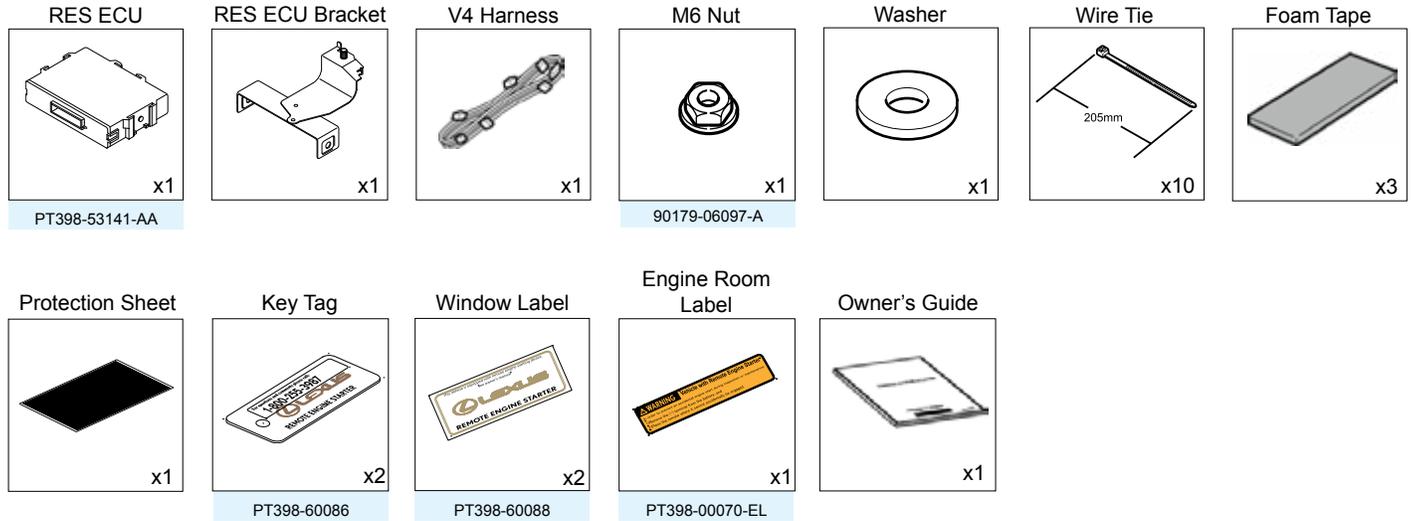
Service Part #'s

Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description
1	Remote Engine Starter (RES)
2	Glass Breakage Sensor (GBS)

Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
Special Tools	
Techstream	Use latest version on TIS (Do not use Techstream Lite)
Installation Tools	
Screwdriver	#2 Phillips
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Utility Knife	
Side Cutters	
Pliers	45° Angled Needle Nose
Torque Wrench	Battery: 48 in•lbf (5.4 N•m), Passenger's Knee Airbag: 88.5 in•lbf (10 N•m)
Tape	Clear, Electrical
Socket	10mm, Extension
Special Chemicals	
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

Issue B: 05/22/13

Table of Contents

Legend

STOP Do not proceed until process has been completed.

⚠️ Follow steps carefully to avoid damaging the Vehicle or Accessory

➕ Use caution to avoid injury.

🔧 Used in Figures to call attention to specific tools recommended for the process.

‖ Highlights a change in installation with respect to previous issue.

S/ Indicates that torque is related to safety.

▶ Video available; click to play.

(xx)⤺ Wire Tie location and number.

Accessory Installation Practice (read before installation)

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking torque procedure, etc.)
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

Please see your LEXUS dealer for a copy of this document.

Lexus IS 250/350 RES with G/W ECU
Wire Harness Outline*

TVIP	Vehicle	Description
A		8P White
B	—	8P White
E	—	24P White
W	—	White Tape Marker
Z	—	RES ECU

***Color of Harness on Overview corresponds with Colored Tape near Connectors on Harness.**

Lexus IS 250/350 RES without G/W ECU
Wire Harness Outline*

TVIP	Vehicle	Description
A	—	8P White
B	—	8P White
E	—	24P White
P	—	8P White
Q	—	8P White
R	—	16P White
W	—	White Tape Marker
Z	—	RES ECU

***Color of Harness on Overview corresponds with Colored Tape near Connectors on Harness.**

Disassembly Overview

1	PS Step Cover
2	PS Cowl Cover
3	PS Dash Cover
4	PS Under Cover
5	Center Console PS Panel #1
6	Center Console PS Panel #2
7	PS Knee Airbag
8	Glove Box

Disconnect all Corresponding Connectors, except for the PS Knee Airbag Connector.

1. Vehicle Disassembly.

a. Place the Vehicle in Park with the Parking Brake set.

b. Disconnect the Negative Battery Terminal.

  • Note the Battery Cable Position as it will be re-installed in the same position.

CAUTION: Do not touch the Positive Terminal.

c. Remove the Passenger Side
    Step Cover.

d. Remove the Passenger Side
    Cowl Cover.

e. Remove the Passenger Side
    Dash Cover.

f. Dislodge the Passenger Side Under Cover.

g. Disconnect the Foot Lamp Connector.

h. Remove the Under Cover.

i. Remove the Center Console Passenger Side Panel #1.

j. Remove the Center Console Passenger Side Panel #2.

k. Dislodge the Passenger Side Knee Airbag carefully.

   • Remove 3 Bolts.

⚠ **CAUTION:** Do not disconnect the Vehicle's Airbag Connector.

l. Wrap the Airbag in a Blanket or the like and place it on top of the TVIP box.

⚠ **CAUTION:** Prevent stress on the Airbag Harness.

m. Remove 2 Screws from the bottom of the Glove Box.

n. Open the Glove Box and remove 3 Screws.

o. Dislodge the Glove Box.

p. Disconnect the Vehicle Connectors.

q. Pinch the Vehicle Harness Clamp to remove from the Glove Box.

r. Remove the Glove Box.

Fig. 2-1
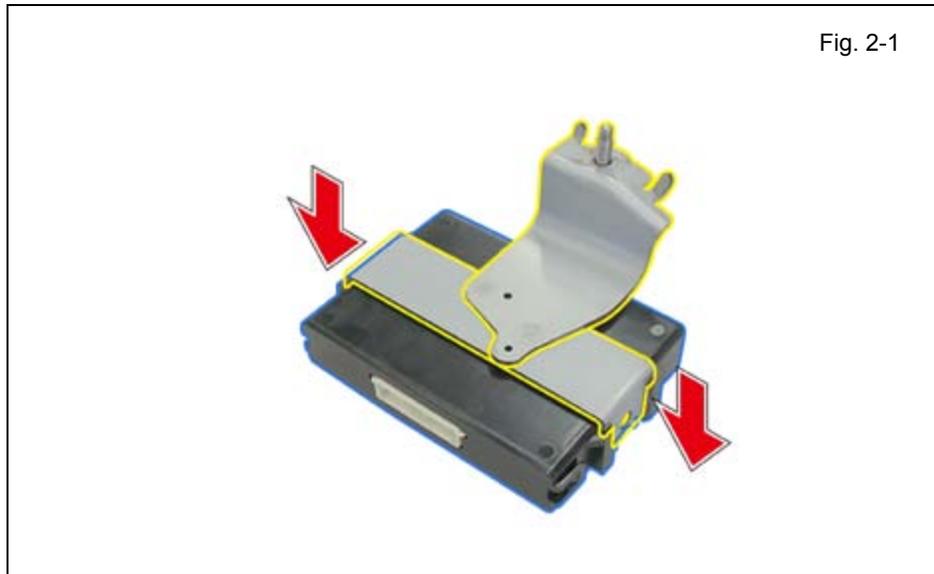
2. RES ECU Preparation and Installation.

a. Attach the RES ECU Bracket to the RES ECU.

Fig. 2-2
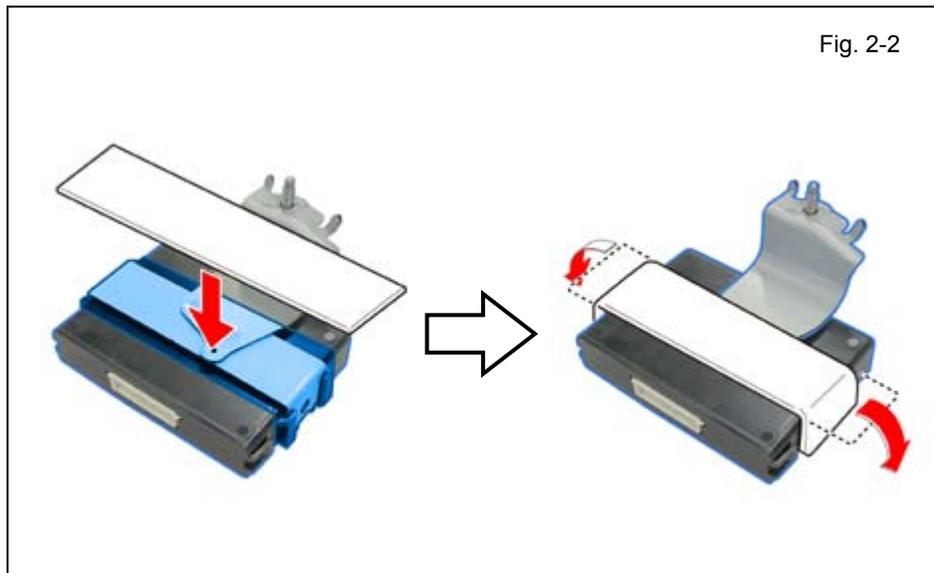
b. Apply the Protection Sheet to cover the edges of the RES ECU Bracket.

Utility Knife   Fig. 2-3
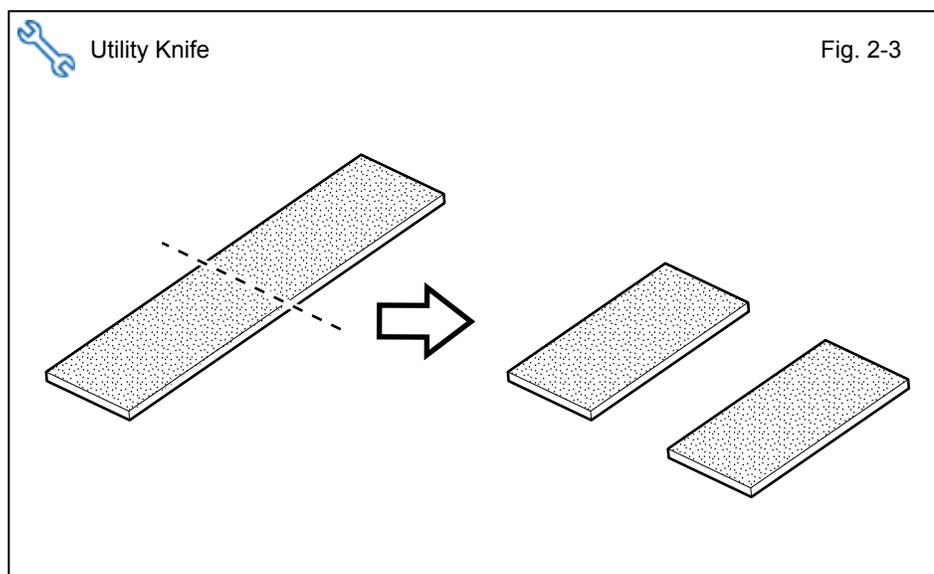
c. Cut the Foam Tape in half.
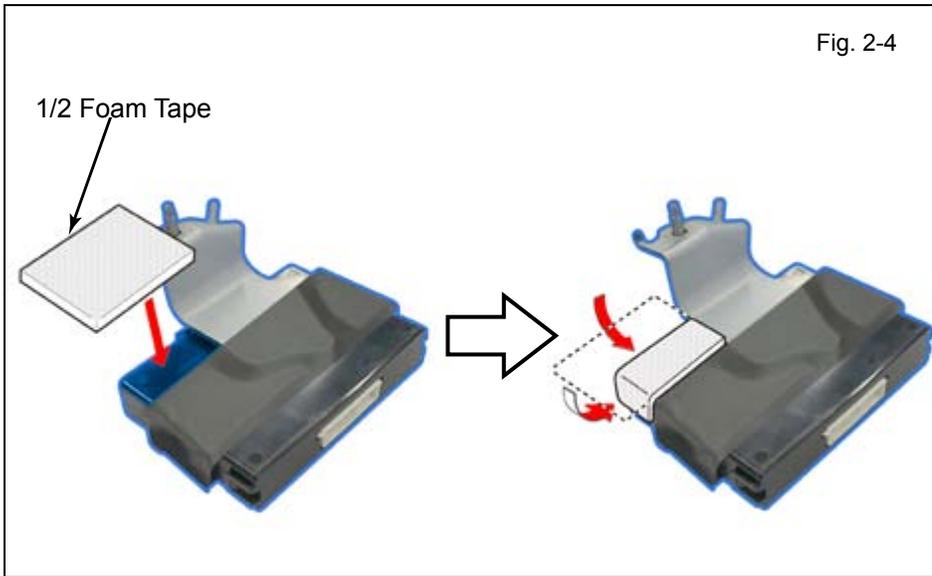
d. Attach 1/2 Foam Tape to the RES ECU.

Fig. 2-4
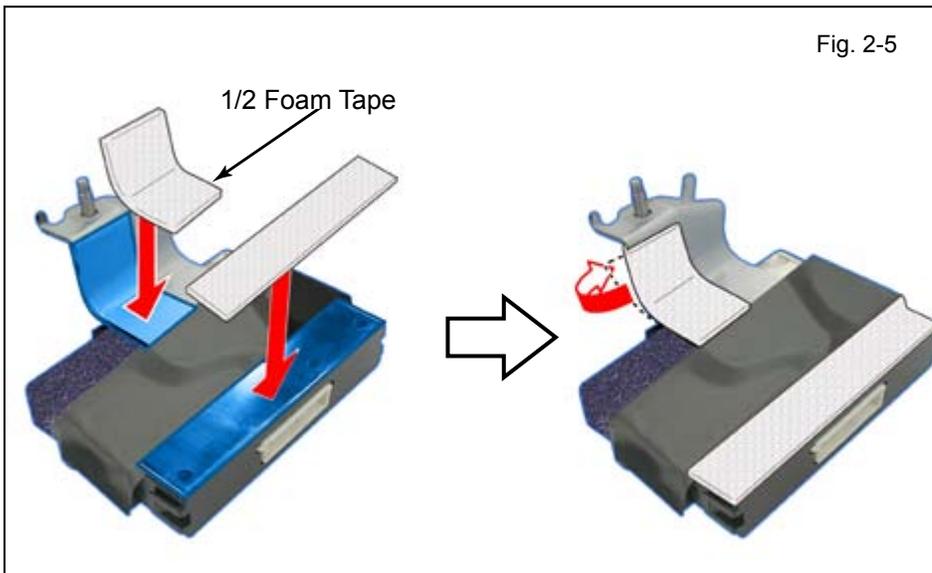
1/2 Foam Tape

e. Attach 1 Foam Tape to the RES ECU.

f. Attach 1/2 Foam Tape to cover the edge of the RES ECU Bracket.

Fig. 2-5
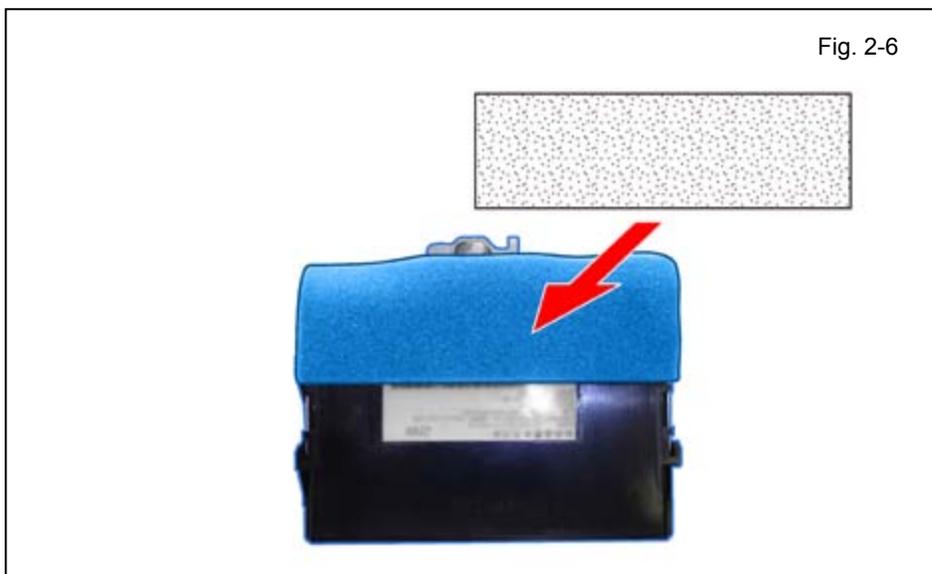
1/2 Foam Tape

g. Attach 1 Foam Tape to the RES ECU.

NOTE: Make sure not to cover the Part Number on the label.

Fig. 2-6

h. Position the RES ECU
    as shown.

i. Install the RES ECU using
    the supplied Washer and Nut.

NOTE: Make sure the Guide Pins
are seated correctly and verify
that the Nut is tightened securely.

Check if Gateway (G/W) ECU is present on the Vehicle.
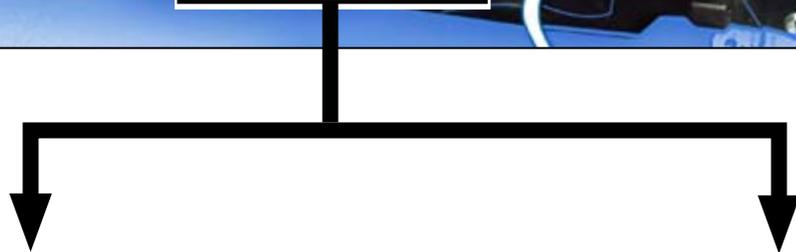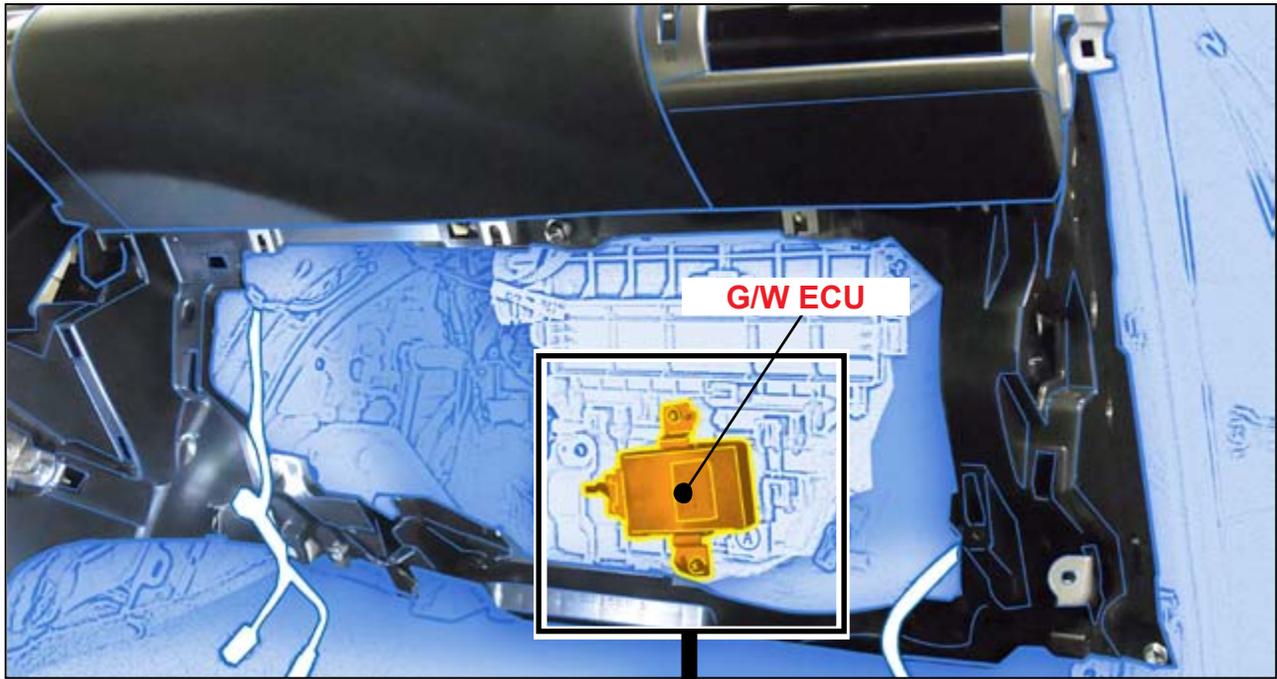
G/W ECU

WITH G/W ECU
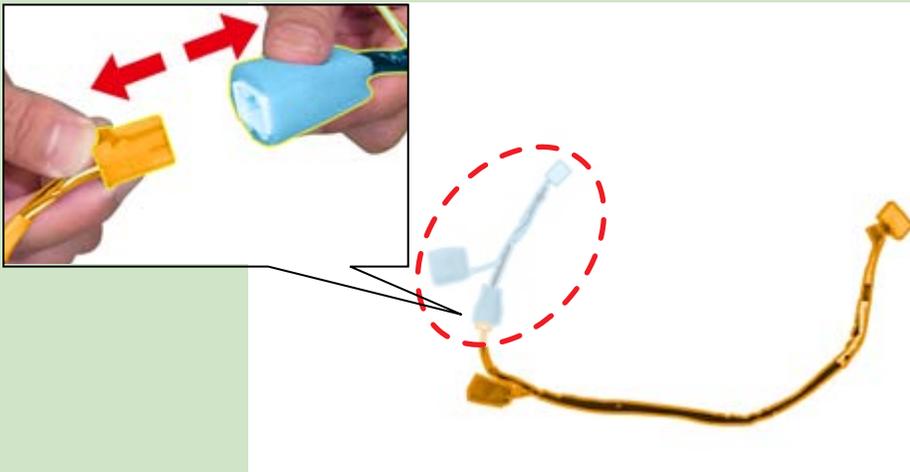
- Disconnect the White 8P Connectors on the V4 Harness.
- Discard the White 8P Male Connector's Harness.
- Proceed to next page.

WITHOUT G/W ECU

- Proceed to next page.

3. V4 Harness Installation.

a. Connect the V4 White 24P Connector to the RES ECU.

b. Secure the V4 Harness White Tape Marker to the Vehicle Harness using 1 Wire Tie.

c. Route the V4 Harness in between the HVAC bracket and I/P Reinforcement.
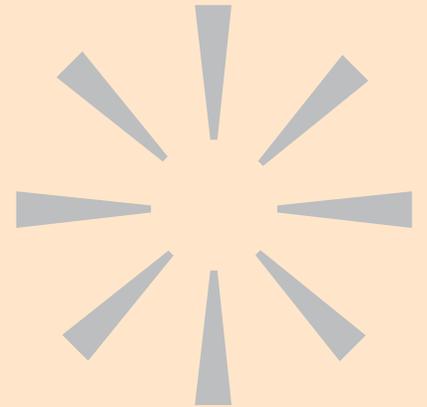
d. Secure the V4 Harness to the Vehicle Brace using 1 Wire Tie.

e. Secure the V4 Harness to the I/P Reinforcement with 2 Wire Ties.

STOP **NOTE:** For vehicles without G/W ECU, skip to step r (page 18).

V4 Only with G/W ECU

STOP **NOTE:** If V2 (GBS) is installed in the vehicle, skip to page 17 for V4/V2 Add-on (steps l-q).

f. Remove the Tape securing the Vehicle 8P Pre-connector.

V4 Only with G/W ECU

g.   Route the V4 Harness behind the Vehicle Harness.

h.   Connect the V4 White 8P Connector to the Vehicle 8P Pre-Connector.

🛑 **NOTE:** Place the 8P Connectors in reference to the illustration.

i.   Secure the V4 Harness with the Vehicle 8P Pre-Connector to the Vehicle Harness using 1 Wire Tie.

   • Rotate the ratchet end of the Wire Tie toward center of the vehicle.

j.   Secure the V4 8P Connector to the Vehicle Harness using 1 Wire Tie.

   • Rotate the ratchet end of the Wire Ties toward center of the vehicle.

k.   Secure the V4 Harness to the Vehicle's I/P Reinforcement with 1 Wire Tie.

🛑 **NOTE:** Skip to Section 4 for Vehicle Reassembly (page 23).

V4/V2 Add-on with G/W ECU

l.   Disconnect the V2 White 8P Connector from the Vehicle's 8P Pre-Connector.

m. Route the V4 Harness behind the Vehicle Harness.

n.   Connect the V4 White 8P Connector to the Vehicle 8P Pre-Connector.

o.   Connect the V4 White 8P Connector to the V2 White 8P Connector.

V4/V2 Add-on with G/W ECU

STOP **NOTE:** Place the 8P Connectors in reference to the illustration.

p. Secure the V4 8P Connector to the Vehicle Harness using 1 Wire Tie.

- Rotate the ratchet end of the Wire Tie toward center of the vehicle.

q. Secure the V4 Harness to the Vehicle's I/P Reinforcement using 1 Wire Tie.

STOP **NOTE:** Skip to Section 4 for Vehicle Reassembly (pg. 23).

V4 Only without G/W ECU

STOP **NOTE:** If V2 (GBS) is installed in the vehicle, skip to page 20 for V4/V2 Add-on (steps x-ag).

r. Locate and remove the Tape securing the Vehicle's 8P and 16P Pre-Connectors.

V4 Only without G/W ECU

s. Route the V4 Harness behind the Vehicle Harness.

t. Connect the V4 White 8P Connector to the Vehicle 8P Pre-Connector.

NOTE: Place the 8P Connectors in reference to the illustration.

u. Secure the V4 Harness with the Vehicle 8P Pre-Connector to the Vehicle Harness using 1 Wire Tie.

   • Rotate the ratchet end of the Wire Tie toward center of the vehicle.

v. Secure the V4 8P Connector to the Vehicle Harness using 1 Wire Tie.

   • Rotate the ratchet end of the Wire Tie toward center of the vehicle.

V4 Only without G/W ECU

w. Secure the V4 Harness to the I/P Reinforcement with 1 Wire Tie.

Skip to step ad (page 22).

**V4/V2 Add-on
without G/W ECU**

x. Disconnect the V2 White 8P Connector from the Vehicle 8P Pre-Connector.

y. Route the V4 Harness behind the Vehicle Harness.

**V4/V2 Add-on
without G/W ECU**

z. Connect the V4 White 8P
    Connector to the Vehicle
    8P Pre-Connector.

aa. Connect the V4 White 8P
    Connector to the V2 White
    8P Connector.

🛑 **NOTE:** Place the 8P Connector in
reference to the illustration.

ab. Secure the V4 Harness 8P
    Connectors to the Vehicle
    Harness using 1 Wire Tie.

    • Rotate the ratchet end of the Wire
      Tie toward center of the vehicle.

V2/V4 Add-on without G/W ECU

ac. Secure the V4 Harness to the I/P Reinforcement with 1 Wire Tie.

Without G/W ECU

ad. Secure the V4 8P Connectors to the Vehicle Harness using 1 Wire Tie.

(For V4/V2 add-on will be Wire Tie #7 instead #8)

- Rotate the ratchet end of the Wire Tie toward center of the vehicle.

ae. Connect the V4 White 16P Connector to the Vehicle's 16P Pre-Connector.

af. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

(For V4/V2 add-on will be Wire Tie #8 instead #9)

- Rotate the ratchet end of the Wire Tie toward center of vehicle.

ag. Secure the 16P Connectors to the Vehicle Harness using 1 Wire Tie.

(For V4/V2 add-on will be Wire Tie #9 instead #10)

10mm Socket, Extension, Torque Wrench, Phillips Screwdriver   Fig. 4-1

4. Vehicle Reassembly.

a. Reassemble the Vehicle.

NOTE: When reinstalling Knee Airbag, make sure to tighten the Bolts to 88.5 in·lbf (10 N·m).

VERIFY: That panels fit together properly, with no uneven gaps.

VERIFY: That all Connectors are plugged in.

🔧 10mm Socket   Fig. 5-1
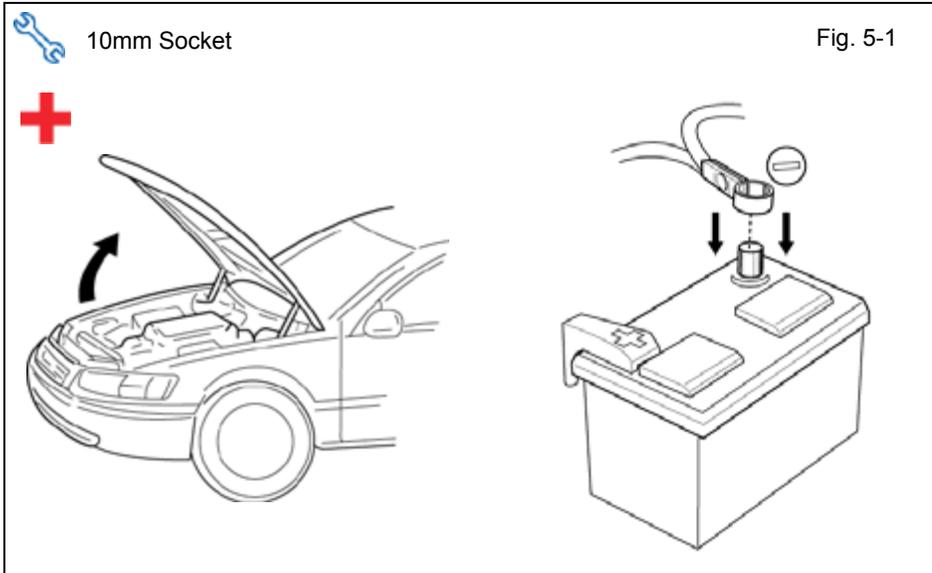
5. Registration.

a. Open the Hood.

b. Temporarily reconnect the Negative Battery Cable.

➕ **CAUTION:** Do not touch the Positive Terminal.

c. Verify that the 30 Amp D/C Cut fuse is installed.

   • If not, install now.

Fig. 5-3

ENGINE
START
STOP

ON
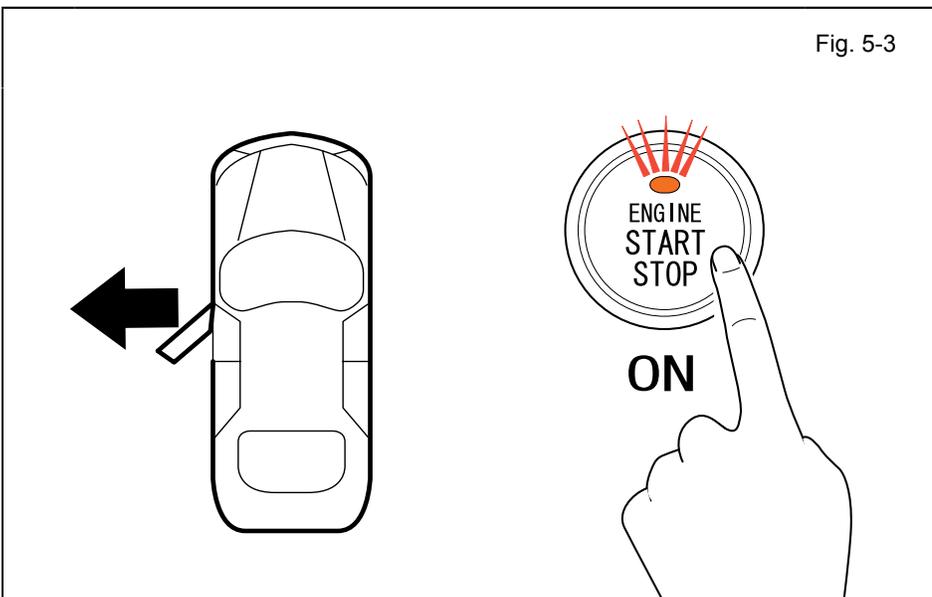
d. Open the Driver's Side Door.

⚠️ **CAUTION:** Leave the Door open until the registration is completed.

e. With the Smart Key in your possession, press the "Engine Start Stop" Button twice to select the Ignition "ON" position.

Techstream Fig. 5-4
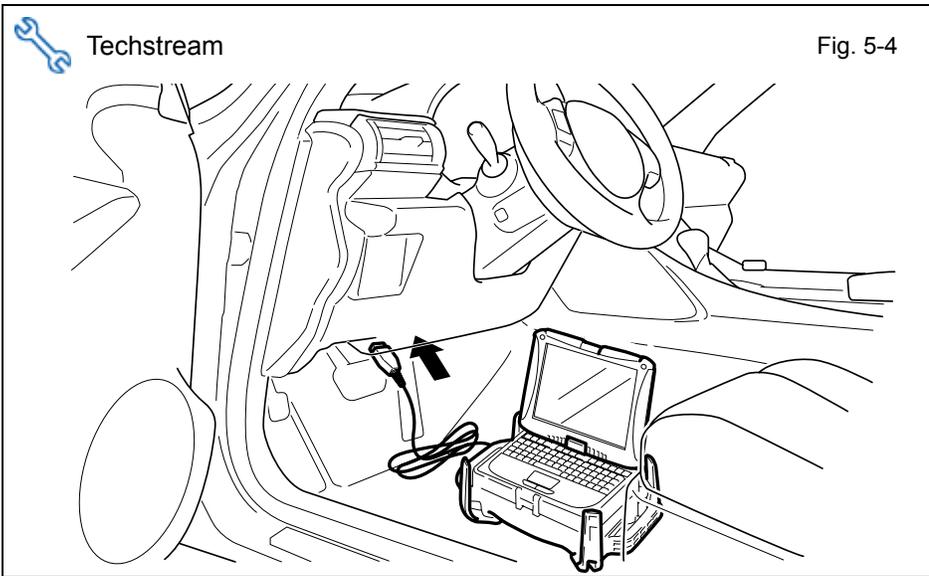
STOP **CAUTION:** Techstream Lite will not work for this section, use the Techstream Notebook ONLY.

f. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.

Fig. 5-5
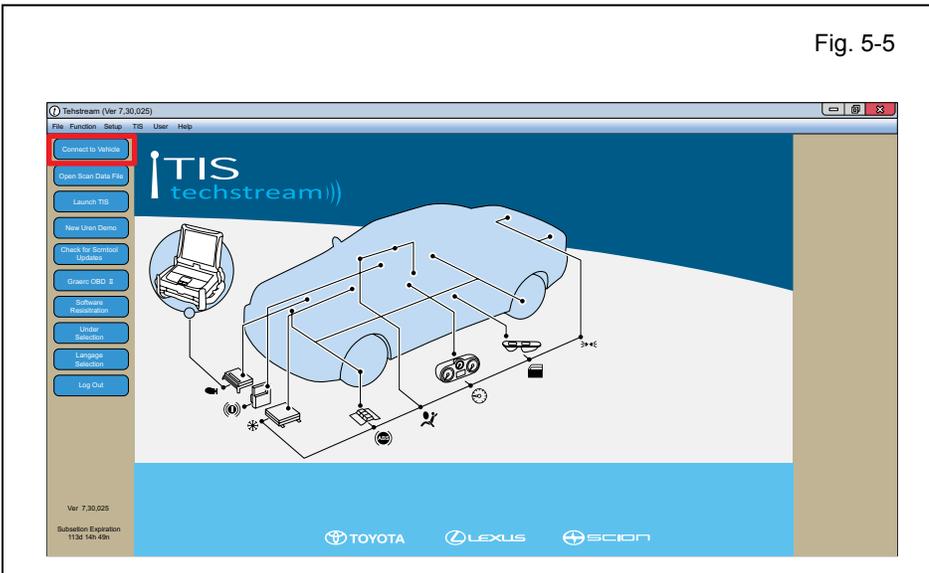
g. Start the TIS Techstream Application by clicking on the shortcut located on the Desktop.

h. Click "Connect to Vehicle."

Fig. 5-6
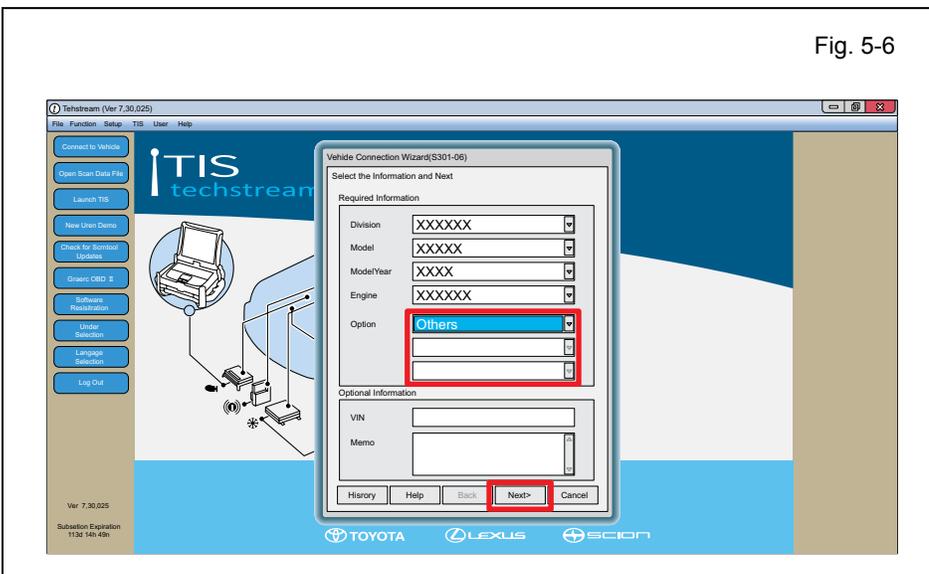
i. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not verify that the Techstream is properly connected.

j. Select options that applies to the Vehicle.

k. Click "Next>"

Fig. 5-7
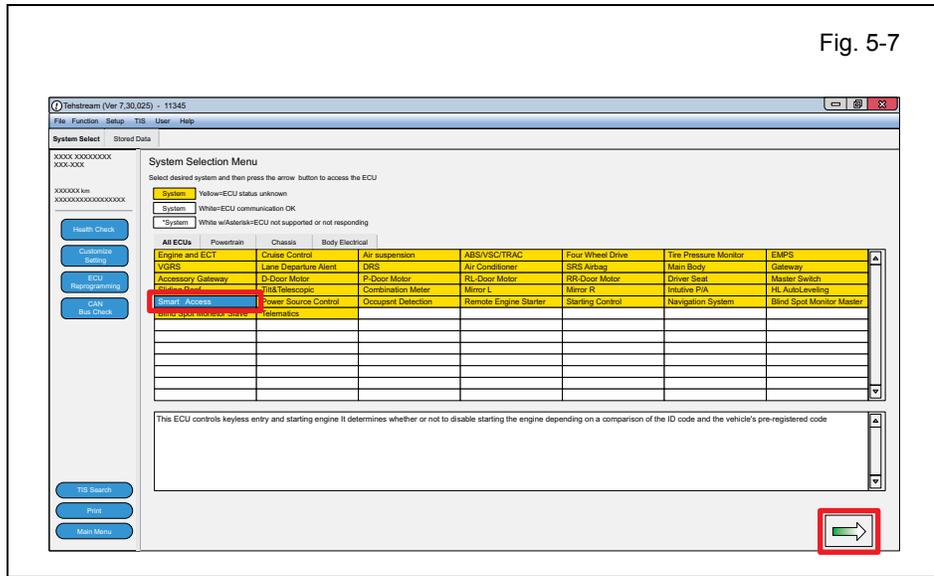
l.   Select "Smart Access."

m. Click [→] .

Fig. 5-8

n. Click on "Utility."

Fig. 5-9
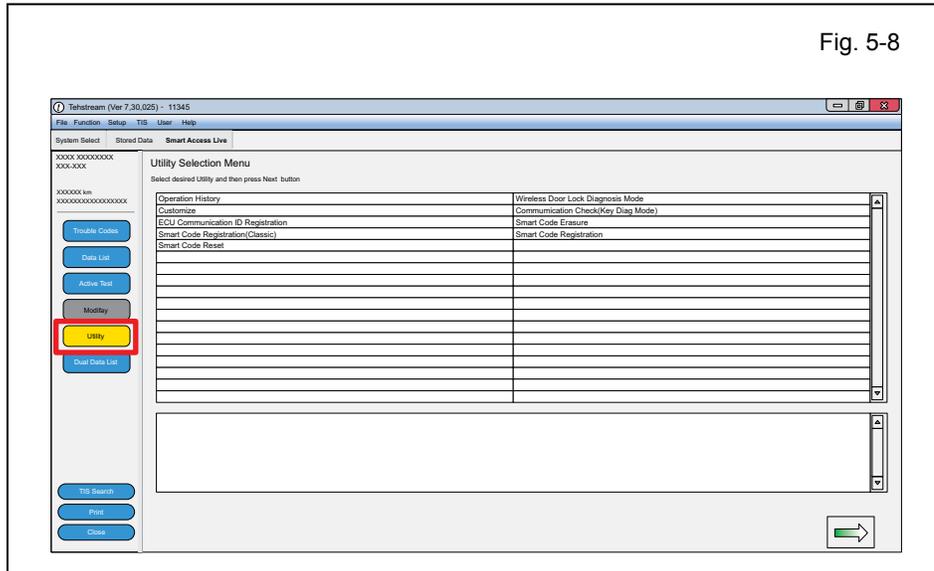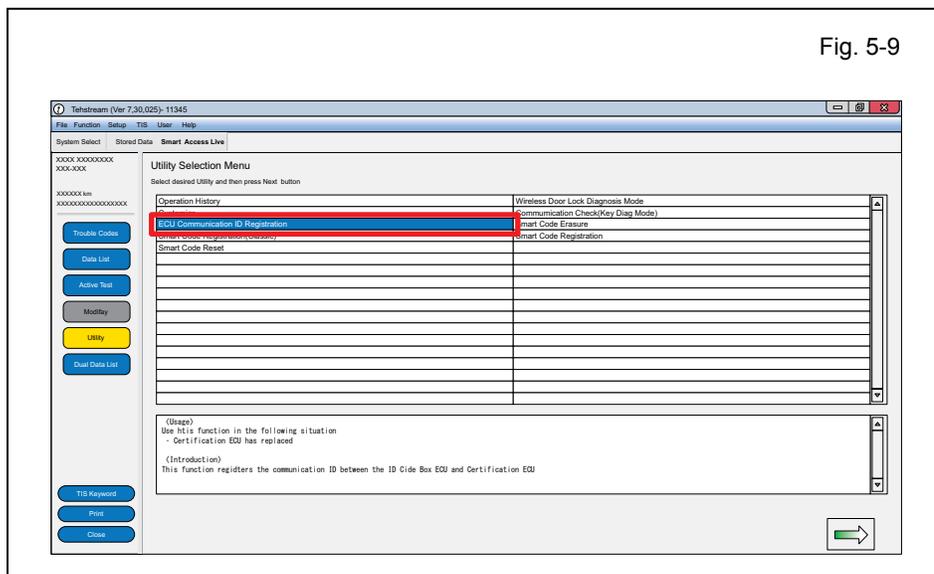
o. Select "ECU Communication ID Registration."

p. Click [→] .

Fig. 5-10

q.   Click "Next>"

Fig. 5-11
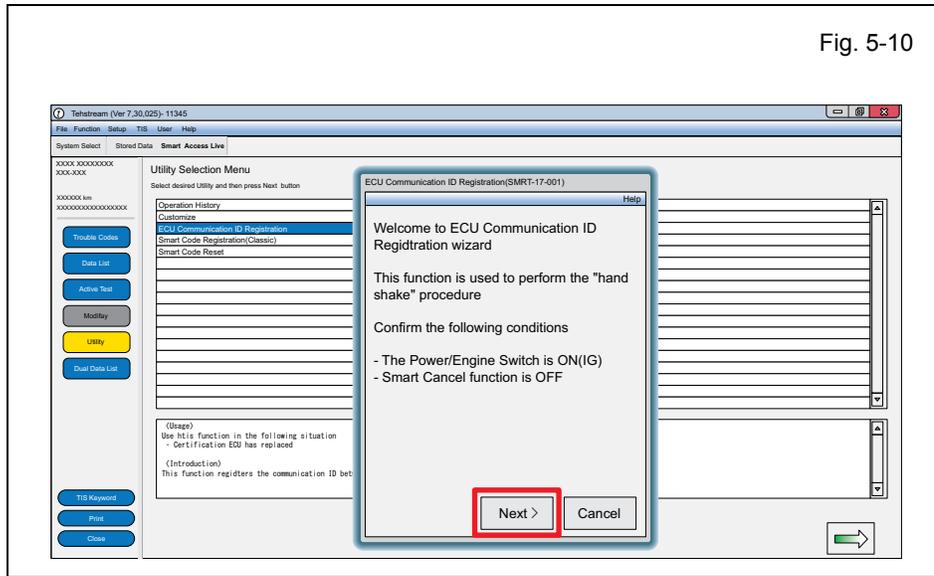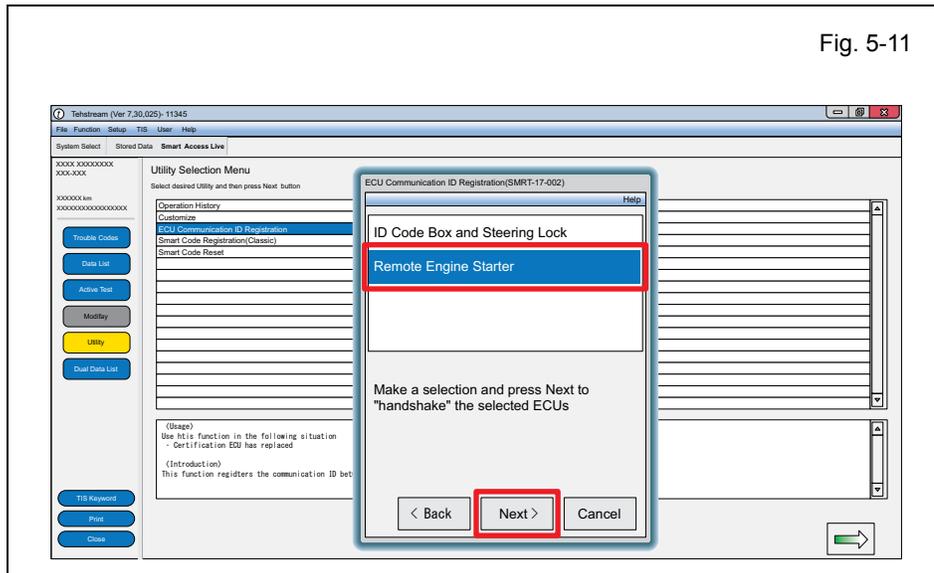
r.   Select "Remote Engine Starter."

s.   Click "Next>"

Fig. 5-12
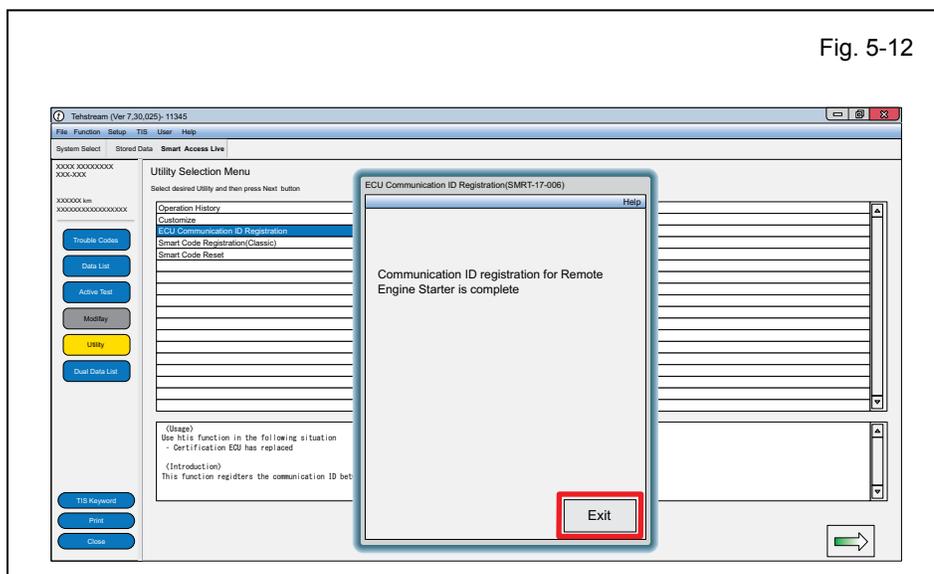
CONFIRM: That the ECU Communication ID was completed successfully.

t.   Click "Exit."

Fig. 5-13
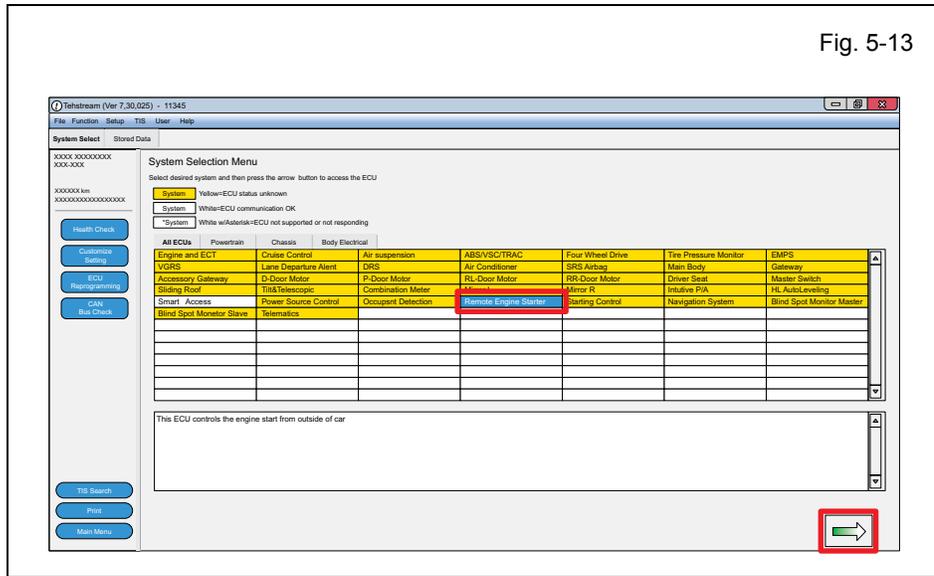
u. Select "Remote Engine Starter."

v. Click [arrow button] .

Fig. 5-14

w. Click on "Utility."

Fig. 5-15
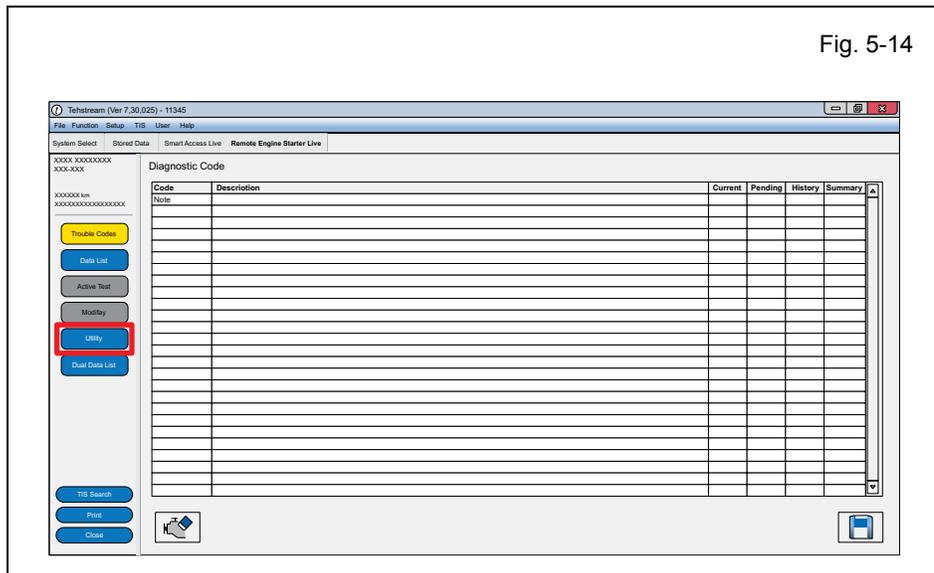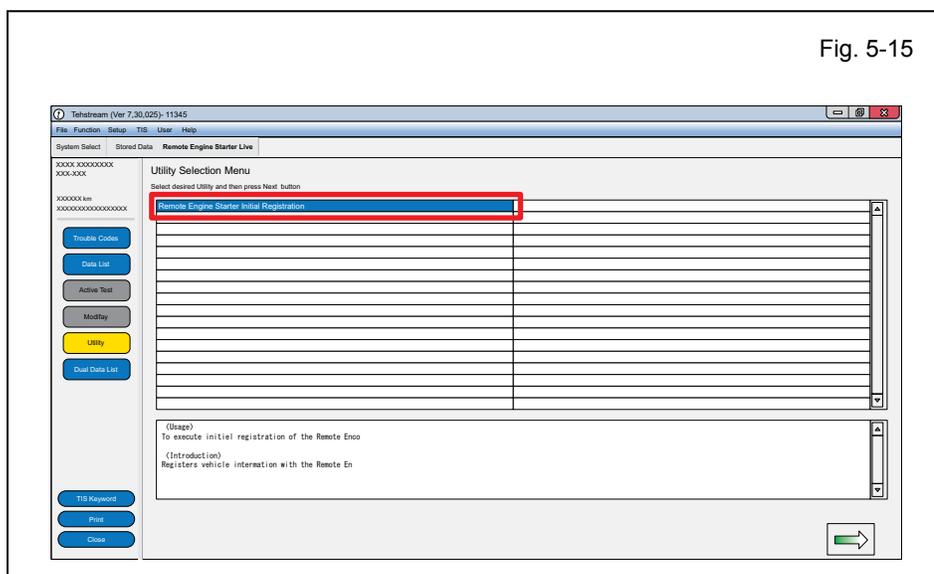
x. Select "Remote Engine Starter Initial Registration."

Fig. 5-16
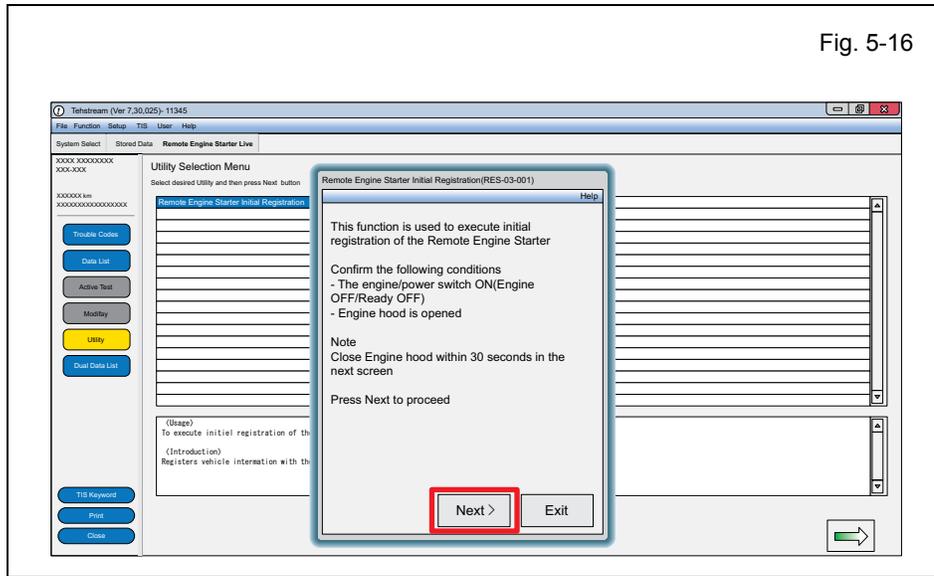
y.   Click "Next>"
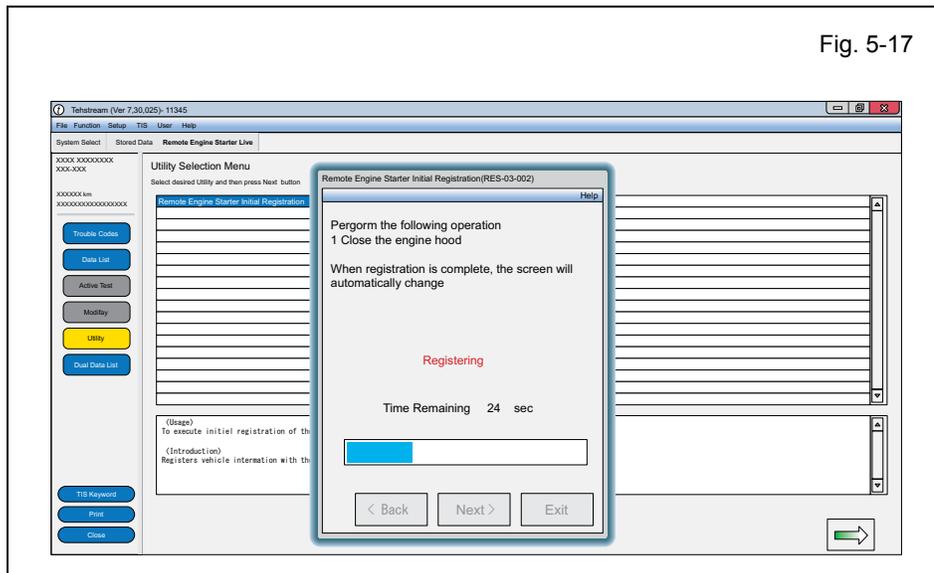
z.   Close the Hood within 30 seconds.

Fig. 5-17

aa. Click "Exit."

Fig. 5-18

Fig. 5-19
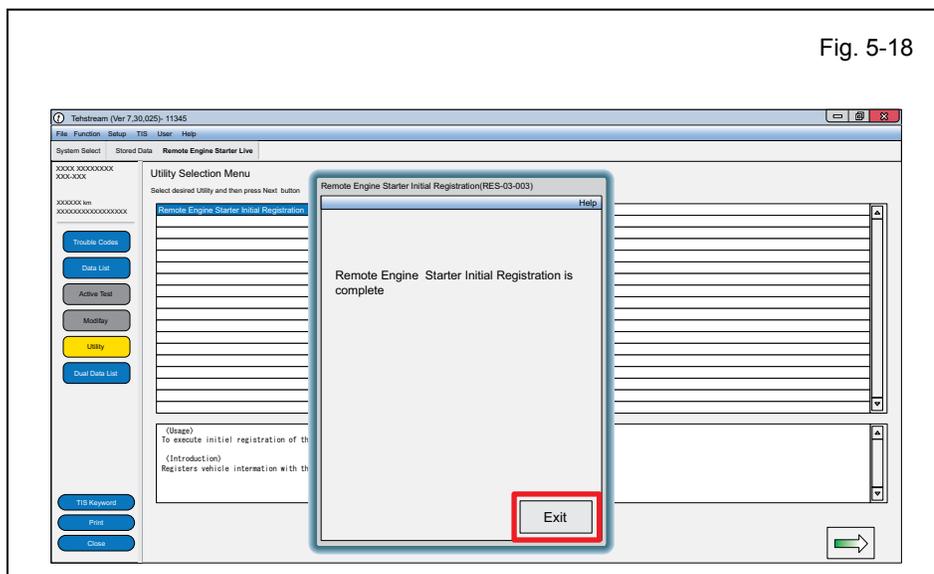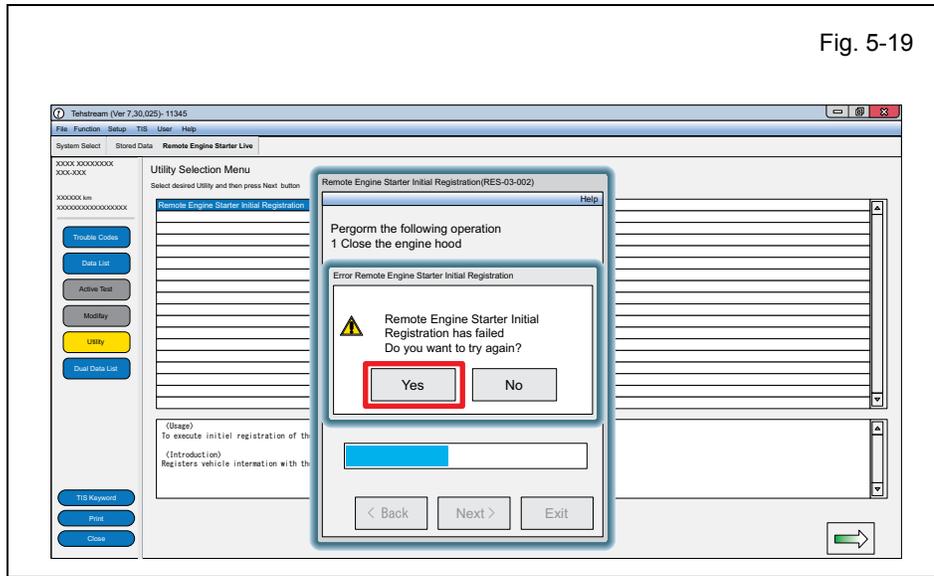
IF THIS PROCEDURE FAILED

- Click "Yes."
- Start again from step y.

Fig. 5-20
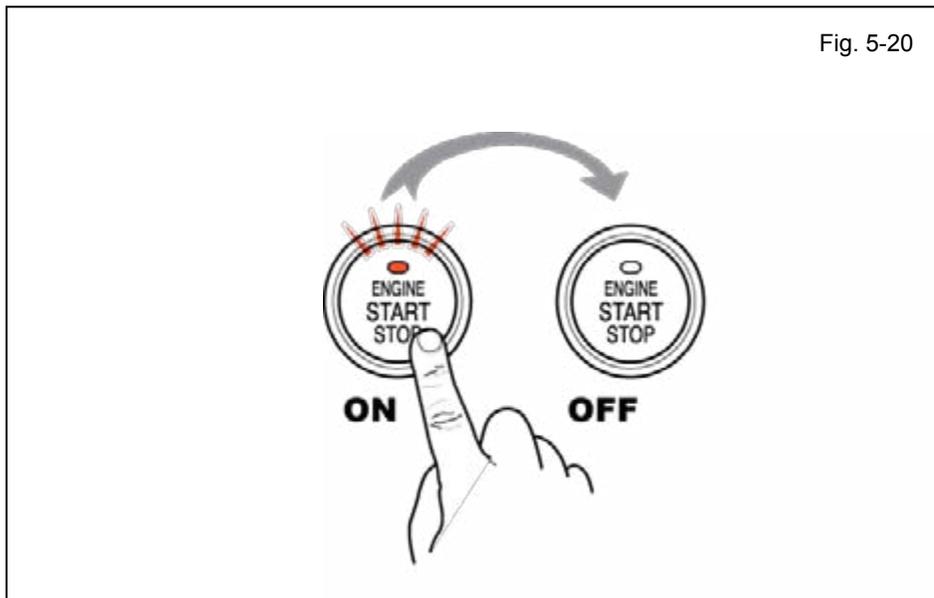
ab. Press the "ENGINE START STOP" Button once to switch the ignition off.

6. Complete the Installation.

a. Position the Negative Battery Cable at the original factory position.

- Tighten the Nut to 48 in•lbf (5.4 N•m)

CAUTION: Do not touch the positive terminal.

b. Clean up and Remove trash.

c. Sealed in its protective bag, place the Owner's Manual in the Glove Box.
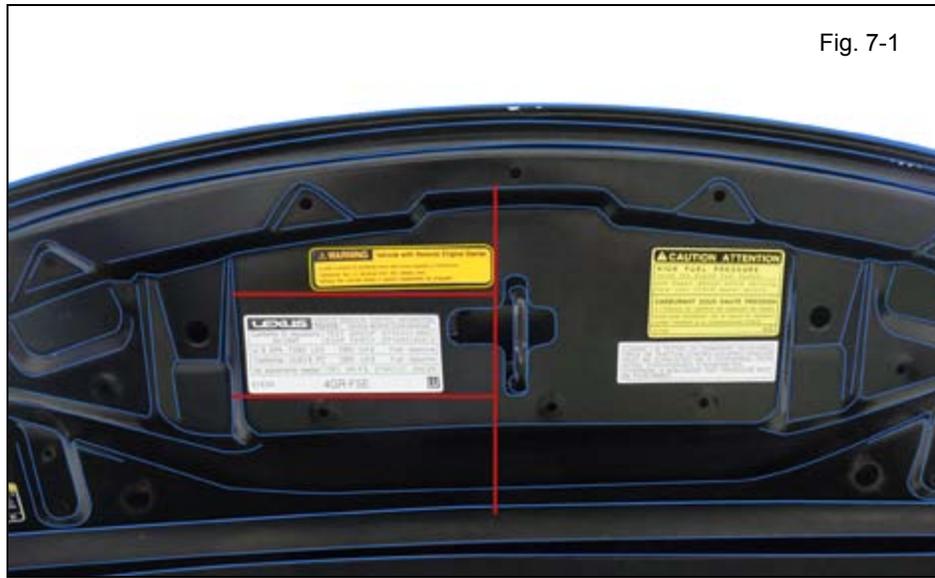
Fig. 7-1

7. Tag and Labels.

a. Using VDC approved cleaner and cleaning method, clean the area indicated in the Underside of the Hood.

b. Attach the Engine Room Label as shown.

CAUTION: Do not touch the adhesive surface.
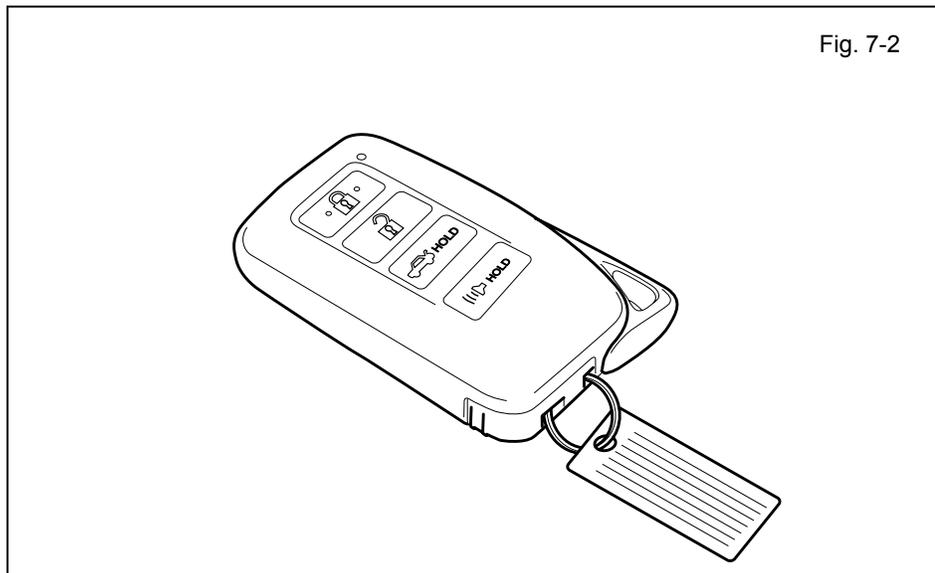
Fig. 7-2

c. Attach the Key Tag.

REPEAT: step c with the other Smart Key.

Clear Tape   Fig. 7-3

10 mm

PARALLEL

1–5 mm

HOW TO ALIGN TO THE ETCHING
HOW TO ALIGN TO OTHER LABELS

PARALLEL

MOLDING
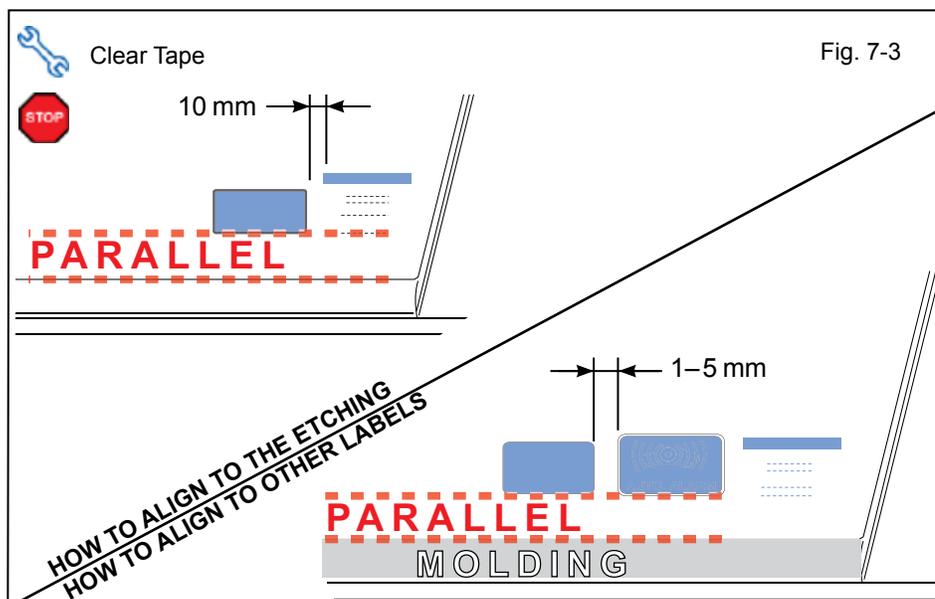
d. Use Household Glass Cleaner to clean the inside of the Front Door Window.

e. Use a piece of Clear Tape to lift the Label off its protective backing.

CAUTION: Do not touch the adhesive surface.

f. Attach the Label as shown.

NOTE: Make sure to Align according to Etching or Other Label.

REPEAT: steps d-f with the other Front Window.

Accessory Function Checks

Close the hood, enter the vehicle and close all doors. Place the shift lever in the "P" (Park) position, set the parking brake and make sure the Vehicle is off.

	Perform	**Look For**
1	Press the remote control's lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.	The hazard lights flash after 3 seconds. The engine starts. The hazard lights flash repeatedly for 10 seconds.
2	With the engine running, pull the hood release handle. **NOTE**: *Wait 30 seconds before pulling the hood release handle for the Security Alarm to trigger.*	The engine stops. The hazard lights flash once. The security alarm triggers. (Only if equipped with OE Factory Alarm, not Genuine Accessory alarm, and only if armed)

Vehicle Appearance Check

	Perform	**Look For**
☐	After accessory installation and removal of protective cover(s), perform a visual inspection of the vehicle.	Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)

Vehicle Function Checks

Function		Function	

Enter the Vehicle

☐	Dome/Courtesy Lights	☐	Horn

Start the Vehicle

☐	Panel/Switch Illumination	☐	Gauges
☐	Check Engine Light *If the warning light remains on, it may indicate a system malfunction.*	☐	ABS Light (if equipped) *If the warning light remains on, it may indicate a system malfunction.*
☐	Lamp Failure Sensor *If the warning light remains on, it may indicate a system malfunction.*	☐	Track/Skid Control Light (if equipped) *If the warning light remains on, it may indicate a system malfunction.*
☐	Seat Belt Warning Light *If the warning light remains on, it may indicate a system malfunction.*	☐	Tire Pressure Monitoring System (TPMS) *Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.* *After TPMS activation and PDS of the Vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.*
☐	Air Bag Warning Light *If the warning light remains on, it may indicate a system malfunction.*		
☐	Cruise Control Light (if equipped)		

Using a Mirror or Assistant check the following.

☐	Trunk/Tailgate/Bed Lights (if equipped)	☐	Tail Lights
☐	Brake Lights	☐	Daytime Running Lights (if equipped)
☐	Backup Lights	☐	Marker Lights
☐	Clearance Sonar (if equipped)	☐	Turn Signal Lights

Stop the Engine, Place the Vehicle's IG in the ON position.

☐	Hazard Lights	☐	Fog Lights (if equipped)
☐	Head Light	☐	Accessory Controls/Illumination (if equipped)
☐	High Beams	☐	Convenience Memory Settings (if equipped)
☐	Power Side Mirrors (if equipped)	☐	Rear Sunshade (if equipped)
☐	Power Sliding Door (if equipped)	☐	Power Back Door/Hatch (if equipped)

	Function		Function
☐	Front Wiper/Washer	☐	Rear Wiper/Washer (if equipped)
☐	Power Sun/Moon Roof (if equipped)	☐	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
☐	Clock (if equipped)	☐	Navigation System (if equipped)
☐	Audio/Video (if equipped)	☐	USB Connections (if equipped)
☐	Steering Wheel Audio Control (if equipped)	☐	HVAC
☐	Front Windshield Defogger (if equipped)	☐	Rear Window Defogger (if equipped)
☐	Side Mirror Defogger (if equipped)	☐	Accessory Power Socket (if equipped)
☐	Massage Seats (if equipped)	☐	Heated/Vented Seats (if equipped)

	Function		Function
☐	Glove Box Light (if equipped)	☐	Trunk or Back Door/Hatch Cancel Switch (if equipped)
☐	Passenger Side Foot Lamp		

	Function		Function
☐	Power Locks (if equipped)	☐	Power Windows (if equipped)
☐	Power Seats (if equipped)	☐	Key Sensor Buzzer