

FTI-TLP2: Vehicle Coverage and Preparation Notes

MAKE	MODEL	YEAR	INSTALL	PTS	LIGHTS	STARTER	DCM	I/O CHANGES
DL-TL7 Toyota	Highlander Hybrid PTS AT	2022	Type 4X	Optional	Park / Auto Type 2	Hybrid 5	Type 3	Green White/Blue n/a

This installation requires **BLADE-AL(DL)-TL7** firmware, flash module and update controller before beginning the installation.

Install Type 4X: Main Body ECU (driver side kick panel), steering lock connector, starter connection and DCM cut are required.

Harness Modification Required: The 2022 model year vehicles no longer have an SLC connector. 12V power, ignition, and ground connections require removal of the SLC connector. Connections are as illustrated, 12V is located at pin #5, and ignition is located at pin #12 of the 32 pin MBECU connector, ground is located at pin #4 of the OBD-II connector, and the green/red SLC connection is not required, insulate and secure.

CAN: Vehicle CAN data is gathered through connections at the Main Body ECU, no other connections are required.

Lights: Parking lights are handled using the pre-terminated **green/white** wire bundled with the BLADE connector, Autolight control requires an additional relay and wiring. Remove the (-) pk light wire from the controller's gray I/O connector and replace with the one specified, for status and diagnostic reporting. Connect relay and wiring to the headlight switch connector [B] as illustrated.

Locks: This installation type requires additional connections to the vehicle door locks to ensure proper synchronization with the OEM remotes. **The 6-pin lock connector is required for correct operation.** Connect to the control module lock output port.

Yellow (starter): The starter wire (yellow) connects to the purple starter wire (pin #4, black 54-pin connector) at the hybrid ECU, located behind the glove box.

Blue/Yellow (PTS): The PTS wire (blue/yellow) is optional. If Idle Mode is not desired, trim as necessary, then insulate and secure.

Idle Mode is not a supported feature of the FTI-TLP2 Harness: The Idle Mode feature which allows the user to exit a running has been excluded from the FTI-TLP2 harness wiring. If this feature is desired, please refer to the full BLADE installation diagram for the applicable wiring and make the required connection to the vehicle PTS button.

TAKEOVER NOT SUPPORTED: THE VEHICLE WILL SHUT DOWN UPON OPENING DRIVER'S DOOR

FTI-TLP2: Installation and Configuration Notes

- X MODIFICATION REQUIRED
- A CONNECTIONS REQUIRED
- B CONNECTIONS REQUIRED
- C CONNECTION OPTIONAL
- D CONNECTION REQUIRED
- E CONNECTION REQUIRED



FEATURE COVERAGE																									
IMMOBILIZER DATA	3X LOCK REM START	PTS CONTROL	ARM OEM ALARM	DISARM OEM ALARM	A/M ALARM CTRL FROM OEM REMOTE	A/M RS CONTROL FROM OEM REMOTE	PRIORITY UNLOCK	DOOR LOCK	DOOR UNLOCK	TRUNK/HATCH RELEASE	DOOR STATUS OUT	TRUNK STATUS OUT	TACHOMETER OUT	BRAKE STATUS OUT	E-BRAKE STATUS	PARKING LIGHTS	AUTOLIGHT CONTROL								

•FT-DAS Required for manual transmission.
 •BOTH Red & Red/White MUST be connected with high current application.

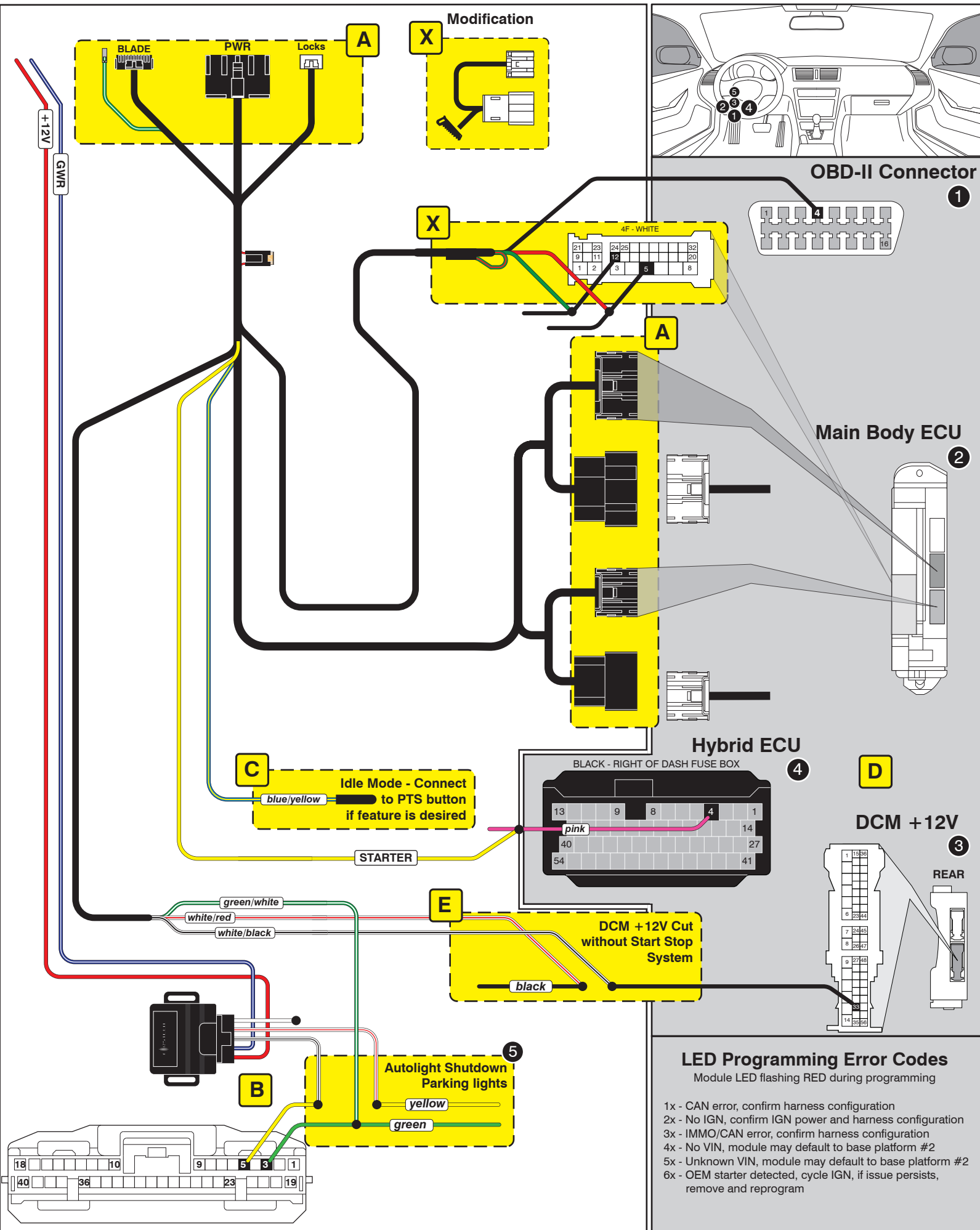
Jumper Setting

CM7000/7200 Cut loop for A/T

CM-900S/900AS

CM900AS/900S Jumper

START
ACC
IGN1



CARTRIDGE INSTALLATION



1 Slide cartridge into unit. Notice button under LED.

2

Ready for Module Programming Procedure.

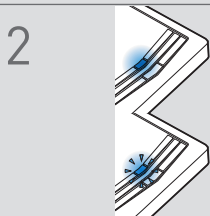
MODULE PROGRAMMING PROCEDURE

NOTE

I IMPORTANT: The hood must be closed.



1 Push start button twice [2x] to ON position.

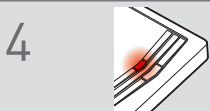


2 Wait, if LED turns solid BLUE for 2 seconds, proceed to step 7.

If LED flashes BLUE rapidly, proceed to step 3.



3 Push start button once [1x] to OFF position.



4 Wait, LED will turn solid RED. (This may take up to 5 minutes.)



5 Push start button twice [2x] to ON position.



6 Wait, LED will turn solid BLUE for 2 seconds.



7 Push start button once [1x] to OFF position.

8

Module Programming Procedure completed.