Automotive Data Solutions Inc.

INSTALL GUIDE
ADS-AL(DL)-TL7-EN

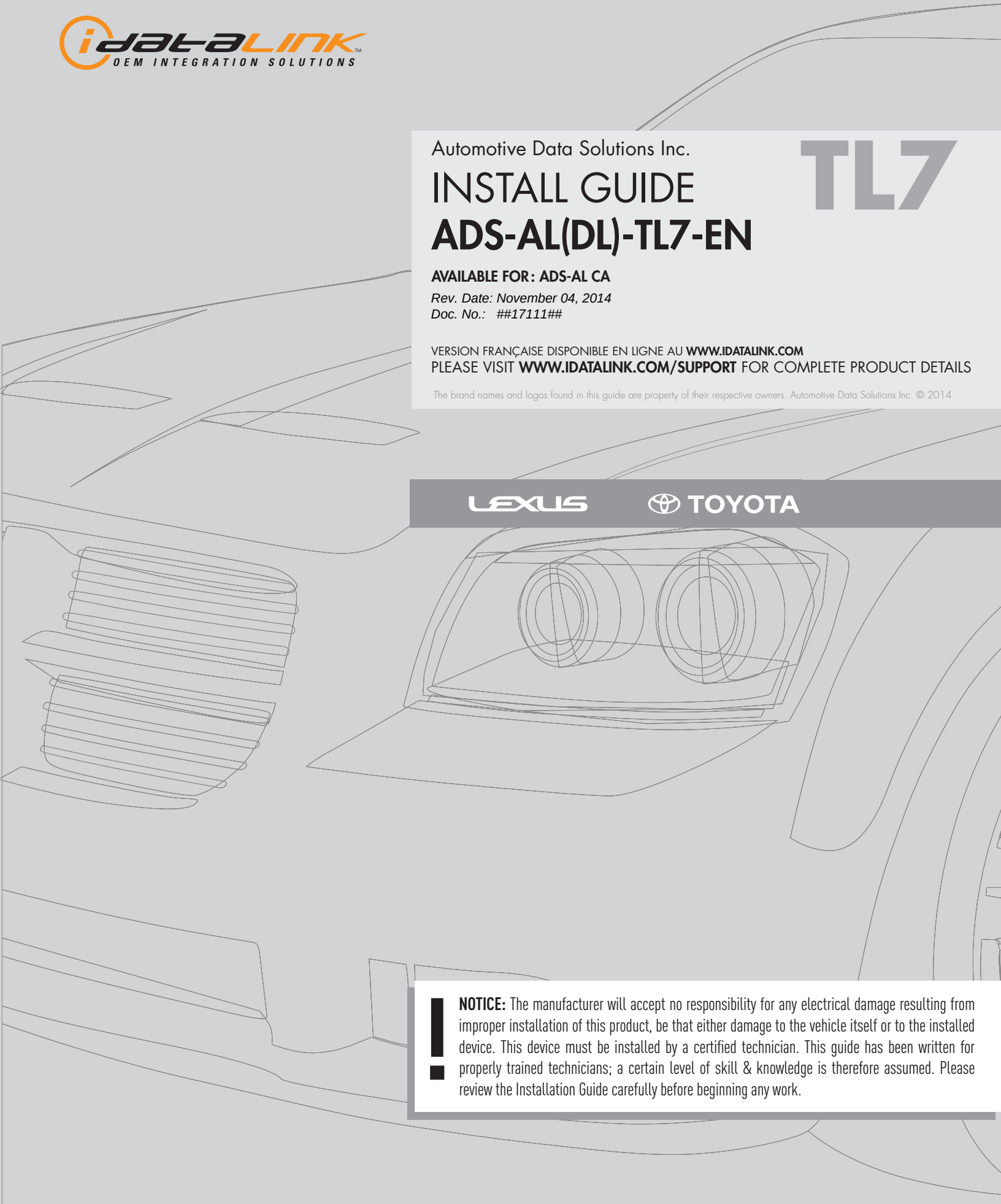
TL7

AVAILABLE FOR: ADS-AL CA

Rev. Date: November 04, 2014
Doc. No.: ##17111##

VERSION FRANÇAISE DISPONIBLE EN LIGNE AU **WWW.IDATALINK.COM**
PLEASE VISIT **WWW.IDATALINK.COM/SUPPORT** FOR COMPLETE PRODUCT DETAILS

LEXUS TOYOTA



NOTICE: The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. This guide has been written for properly trained technicians; a certain level of skill & knowledge is therefore assumed. Please review the Installation Guide carefully before beginning any work.

INSTALL TYPE SELECTION

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES																	
				DATA IMMOBILIZER BYPASS	3X LOCK REMOTE START	PUSH TO START CTRL	ARM OEM ALARM	DISARM OEM ALARM	A/M ALARM CTRL FROM OEM REMOTES	A/M RS CTRL FROM OEM REMOTES	PRIORITY UNLOCK	DOOR LOCK	DOOR UNLOCK	POWER LIFTGATE	TRUNK/HATCH RELEASE	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	HOOD STATUS OUTPUT	TACHOMETER OUTPUT	BRAKE PEDAL STATUS OUTPUT	E-BRAKE OUTPUT
LEXUS	IS250 PTS	14-15	1	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
	IS350 PTS	14-15	1	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
TOYOTA	Highlander PTS	14-15	1	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	Highlander Hybrid PTS	14-15	1	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•

WARNING: DOOR LOCK SYNCHRONIZATION

IMPORTANT

The door lock signal is encrypted on select models. In order for the bypass to operate properly, it must be synchronized with that encrypted signal. However, when the vehicle is driven, data is sent along the bus that desynchronizes the bypass with the encryption.

To regain synchronization once the engine is shut off, the bypass must see the factory keyless codes (OEM remote or proximity lock/unlock codes). This solution will resynchronize automatically upon seeing the first factory keyless code and will operate normally (both convenience and immobilizer bypass/remote starter functionality).

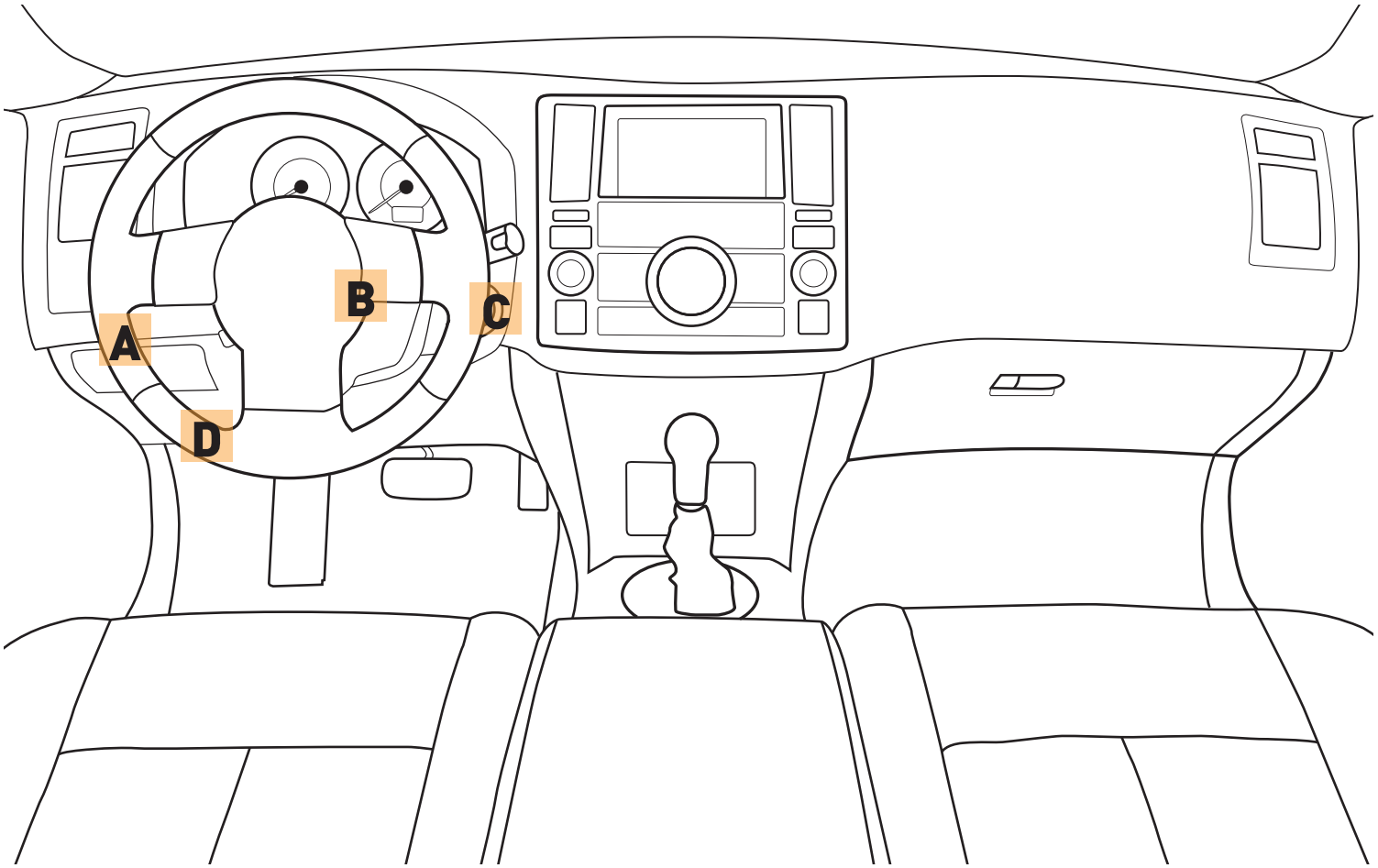
Conversely, if the vehicle is driven and the factory keyless system is not used to lock or unlock, the aftermarket remote will not be able to lock or unlock until the bypass receives factory keyless code at least once as described above.

If one does not intend to use factory keyless after driving the vehicle, additional wiring is required to ensure the bypass remains synchronized with the encryption. Remote starter door locks must be hardwired (see wiring diagram). This will permit lock/unlock with the aftermarket remote at all times without necessitating the use of the factory keyless system.

Please note that this firmware also supports "External Remote Control Arm and Disarm" which means that the bypass can arm and disarm the aftermarket alarm using OEM Keyless when paired with most popular remote starter brands. When used exclusively in this manner (i.e. without aftermarket remote controls), hardwired remote starter door locks (as described above) become unnecessary.

Finally, as factory keyless operates normally during remote start with this solution and take-over is not supported, a one-button remote control is a very good choice for these vehicles in order to prevent any possible user issues.

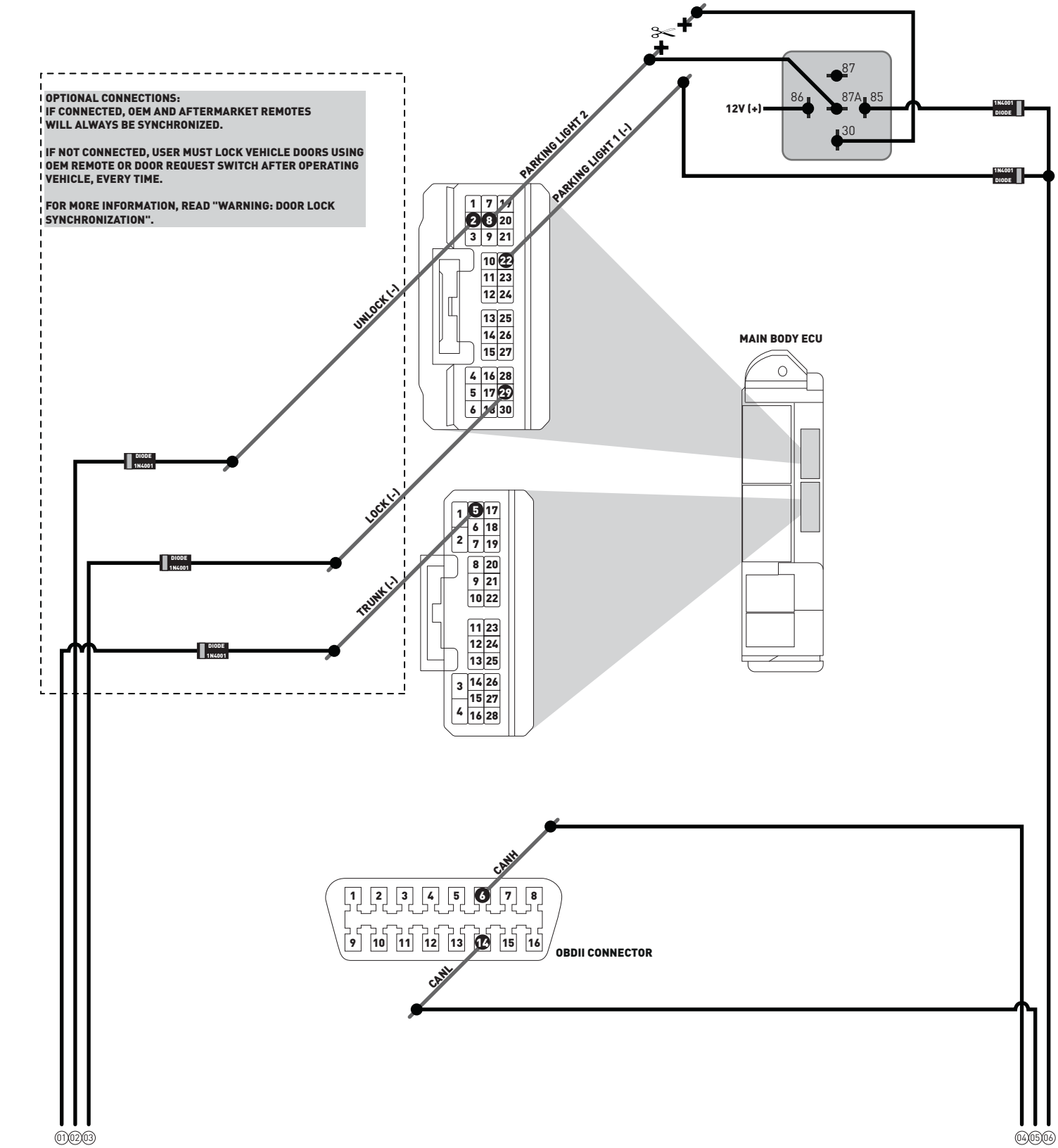
COMPONENT LOCATOR



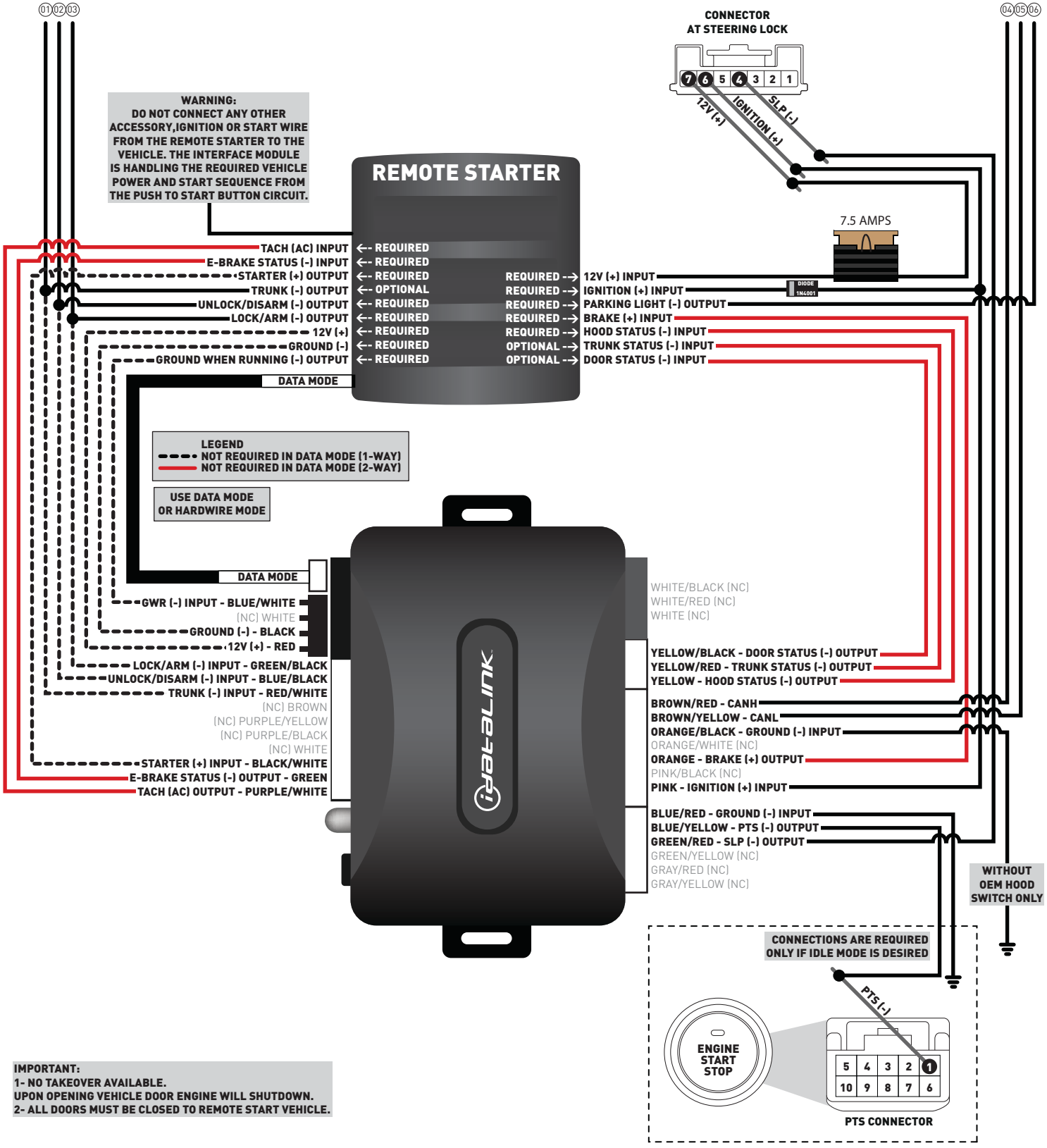
TYPE 1 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
LEXUS	IS250/IS350 PTS	14-15	CanH	N20	Black	16 pin	06	White	(DATA)	OBDII connector	D
			CanL	N20	Black	16 pin	14	Black	(DATA)	OBDII connector	D
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A
			Parking Light 2	F19	White	30 pin	08	Pink	~	Main Body ECU	A
			Parking Light 1	F19	White	30 pin	22	Black	(-)	Main Body ECU	A
			Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A
TOYOTA	Highlander PTS	14-15	CanH	F25	White	16 pin	06	Purple	(DATA)	OBDII connector	D
			CanL	F25	White	16 pin	14	White	(DATA)	OBDII connector	D
			12V	F54	Black	07 pin	07	Black	(+)	Steering lock	B
			Ignition	F54	Black	07 pin	06	Red	(+)	Steering lock	B
			SLP	F54	Black	07 pin	04	LtGreen	(-)	Steering lock	B
			PTS	F49	Black	10 pin	01	Purple	(-)	PTS button	C
			Lock/Arm	K2	White	30 pin	29	Violet	(-)	Main Body ECU	A
			Unlock/Disarm	K2	White	30 pin	02	LtBlue	(-)	Main Body ECU	A
			Parking Light 2	K2	White	30 pin	08	Black	~	Main Body ECU	A
			Parking Light 1	K2	White	30 pin	22	LtGreen	(-)	Main Body ECU	A
			Trunk Release	K1	White	28 pin	05	Gray	(-)	Main Body ECU	A
	Highlander Hybrid PTS	14-15	CanH	F25	White	16 pin	06	Purple	(DATA)	OBDII connector	D
			CanL	F25	White	16 pin	14	White	(DATA)	OBDII connector	D
			12V	F54	Black	07 pin	07	Black	(+)	Steering lock	B
			Ignition	F54	Black	07 pin	06	Red	(+)	Steering lock	B
			SLP	F54	Black	07 pin	04	LtGreen	(-)	Steering lock	B
			PTS	F49	Black	10 pin	01	Purple	(-)	PTS button	C
			Lock/Arm	K2	White	30 pin	29	Violet	(-)	Main Body ECU	A
			Unlock/Disarm	K2	White	30 pin	02	LtBlue	(-)	Main Body ECU	A
			Parking Light 2	K2	White	30 pin	08	Black	~	Main Body ECU	A
			Parking Light 1	K2	White	30 pin	22	LtGreen	(-)	Main Body ECU	A
			Trunk Release	K1	White	28 pin	05	Gray	(-)	Main Body ECU	A

TYPE 1 - WIRING DIAGRAM - 1 OF 2

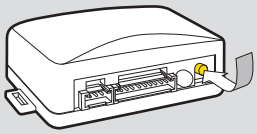


TYPE 1 - WIRING DIAGRAM - 2 OF 2



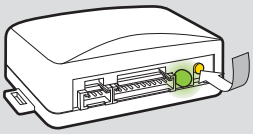
IMPORTANT:
1- NO TAKEOVER AVAILABLE.
UPON OPENING VEHICLE DOOR ENGINE WILL SHUTDOWN.
2- ALL DOORS MUST BE CLOSED TO REMOTE START VEHICLE.

INSTALLATION MODE SELECTION

1 

Press and release programming button to select installation mode.

LED flashes (1X) once = DATA MODE
LED flashes (2X) twice = STANDARD HARDWIRE MODE

2 

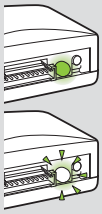
Press and hold programming button until LED turns solid GREEN to register selection.

! After registration, follow Factory Reset Procedure to change installation mode and restart this procedure.

MODULE PROGRAMMING PROCEDURE

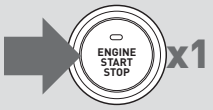
1 

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

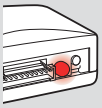
2 

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

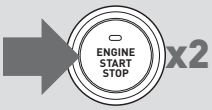
If LED flashes GREEN rapidly, proceed to step 3.

3 

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

4 

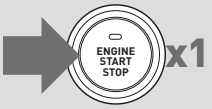
Wait, LED will turn solid RED. (This may take up to 5 minutes.)

5 

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

6 

Wait, LED will turn solid GREEN for **2 seconds**.

7 

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

8 Module Programming Procedure completed.

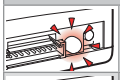
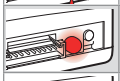
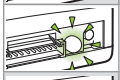
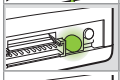
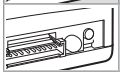
IDENTIFY VEHICLE YEAR

1 Locate the Vehicle Identification Number (VIN) and identify the 10th character.

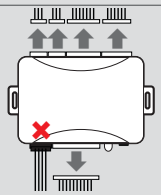
2 Match the VIN's 10th character to its corresponding year.

L → 1990	**S** → 1995	**Y** → 2000	**5** → 2005	**A** → 2010
M → 1991	**T** → 1996	**1** → 2001	**6** → 2006	**B** → 2011
N → 1992	**V** → 1997	**2** → 2002	**7** → 2007	**C** → 2012
P → 1993	**W** → 1998	**3** → 2003	**8** → 2008	**D** → 2013
R → 1994	**X** → 1999	**4** → 2004	**9** → 2009	**E** → 2014

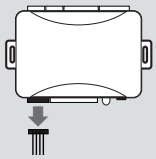
MODULE DIAGNOSTICS

LED STATUS		DIAGNOSTICS		
		DURING PROGRAMMING	**DURING REMOTE START**	**WITH IGNITION OFF**
	Flashing RED	Missing/wrong information from firmware or vehicle	Incorrectly programmed	Incorrectly programmed or connected
	Solid RED	Waiting for more vehicle information	Incorrectly programmed	Not programmed waiting for more vehicle information
	Flashing GREEN	Additional steps required to complete programming	Correctly programmed and operational	False ground when running status from remote starter
	Solid GREEN then OFF	Correctly programmed	Reset in progress	Reset in progress
	OFF	No activity or already programmed	Invalid ground when running status from remote starter	At rest and ready for a remote start sequence

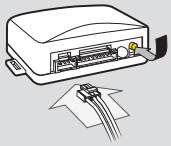
FACTORY RESET PROCEDURE

1 

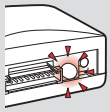
DISCONNECT all connectors from module **EXCEPT** the black 4-PIN standard or optional data connector.

2 

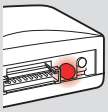
DISCONNECT black 4-PIN standard or optional data connector.

3 

PRESS AND HOLD programming button while connecting either 4-PIN standard or optional data connector.

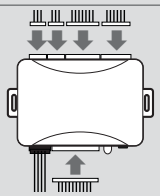
4 

When LED flashes red, **RELEASE** programming button.

5 

LED will turn solid red for 2 seconds.

RESET COMPLETED.

6 

RECONNECT all connectors.

7 Repeat programming procedure.

! Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.