INSTALLATION GUIDE

TL6

DIRECTECHS

Designed by Installers for Installers

This product is intended for installation by a professional installer only! Attempts to install this product by a person other than a trained professional may result in severe damage to a vehicle's electrical system and components.

2019-03-29

DIRECTED®

Contents

Warning! Safety first

⚠ The following safety warnings must be observed at all times:

- Due to the complexity of this system, installation of this product must only be performed by an authorized Directed dealer.
- When properly installed, this system can start the vehicle via a command signal from the remote control. Therefore, never operate the system in an area that does not have adequate ventilation.

The following precautions are the sole responsibility of the user; however, authorized Directed dealers should:

- Never use a test light or logic probe when installing this unit. Always use a multimeter.
- Never operate the system in an enclosed or partially enclosed area without ventilation (such as a garage).
- When parking in an enclosed or partially enclosed area or when having the vehicle serviced, the remote start system must be disabled using the installed toggle switch. It is the user's sole responsibility to properly handle and keep out of reach from children all remote controls to assure that the system does not unintentionally remote start the vehicle.
- USER MUST INSTALL A CARBON MONOXIDE DETECTOR IN OR ABOUT THE LIVING AREA ADJACENT TO THE VEHICLE. ALL DOORS LEADING FROM ADJACENT LIVING AREAS TO THE ENCLOSED OR PARTIALLY ENCLOSED VEHICLE STORAGE AREA MUST REMAIN CLOSED AT ALL TIMES.

Use of this product in a manner contrary to its intended mode of operation may result in property damage, personal injury, or death. Except when performing the Safety Check outlined in this installation guide, (1) Never remotely start the vehicle with the vehicle in gear, and (2) Never remotely start the vehicle with the keys in the ignition. The user is responsible for having the neutral safety feature of the vehicle periodically checked, wherein the vehicle must not remotely start while the car is in gear. This testing should be performed by an authorized Directed dealer in accordance with the Safety Check outlined in this product installation guide. If the vehicle starts in gear, cease remote start operation immediately and consult with the user to fix the problem immediately.

OPERATION OF THE REMOTE START MODULE IF THE VEHICLE STARTS IN GEAR IS CONTRARY TO ITS INTENDED MODE OF OPERATION. OPERATING THE REMOTE START SYSTEM UNDER THESE CONDITIONS MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY. IMMEDIATELY CEASE THE USE OF THE UNIT AND REPAIR OR DISCONNECT THE INSTALLED REMOTE START MODULE. DIRECTED WILL NOT BE HELD RESPONSIBLE OR PAY FOR INSTALLATION OR REINSTALLATION COSTS.

Remote starters for manual transmission pose significant risks if not properly installed and operated. When testing to ensure the installation is working properly, only remote start the vehicle in neutral gear, on a flat surface and with a functional, fully engaged parking brake. Do not allow anyone to stand in front of or behind the vehicle.

This product should not be installed in any convertible vehicles, soft or hard top with a manual transmission. Installation in such vehicles may pose certain risk.

Introduction

The TL6 firmware for Directed Digital Solutions is compatible with specific Lexus and Toyota vehicles. It is a complete solution for remote start, security (if applicable), bypass interface, and convenience. This guide provides information on the installation of the module using TL6. If you would prefer using this system as a digital solution, go to www.directechs.com and search for the make, model and year of the vehicle. This will allow you to find the proper firmware and corresponding installation guide.
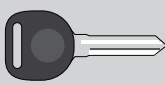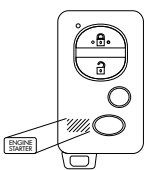
⚠️ **Warning!** This module can only be programmed via the web tool, which can be found on www.directechs.com or using the Directechs Mobile application for mobile devices. Features and functions will become accessible when you connect the module using the XKLoader.

Pre-installation and application warnings

Start here

Firmware notes: This section highlights important information for this specific firmware and will assist in pricing accordingly, as well as bringing awareness to any operational or vehicle limitations.

T-Harness compatible	No ☒		Keys required for programming	1	Keys required for operation	0

- Keyless and Smart Key will remain functional during remote start.
- No takeover feature is available on Push-to-Start vehicles.
- By default, the tach is set to 1000 rpm on hybrid vehicles.
- If the vehicle is already equipped with an OEM remote starter, the installer must disconnect it before installing the DS4+ otherwise it will not program.
- How to know if the vehicle is equipped with an OEM remote starter:

1- An "ENGINE STARTER" sticker should be on the remote.

2- Remote start the OEM remote starter:
Press the remote control's lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.

x2 & Press & Hold for 3 seconds

The parking lights flash after 3 seconds. The engine starts and the parking lights flash repeatedly for 20 seconds.

- **If the vehicle is equipped with an Add-On Lexus/Toyota OEM remote starter**: The factory remote starter must be permanently disconnected before programming the Directed interface as both modules cannot coexist. See locating the OEM Remote Start on page 5.
- **If the vehicle is equipped with a BCM Enabled Lexus/Toyota OEM remote starter:** The vehicle does not have a physical remote starter and only one module can be programed at a time. In this case temporally disable the OEM remote start system using the following process:
  1. Remove the fuse powering the OEM Remote Starter. See locating the fuse powering the OEM Remote Starter on page 5.
  2. Perform a module reset, see page 38.
  3. Perform the Module Programming steps on page 35.
  4. After programming is successful replace the fuse powering the OEM Remote Starter.
- Unless specified otherwise, all connectors are displayed from the wire side, with the exception of the OBDII diagnostic connector.
- Refer to the "Vehicle wiring reference chart" following each installation type.

General notes: This section highlights important information for this specific firmware.

[1] The installation of an aftermarket hood pin is **ONLY** required on vehicles that are **NOT** equipped with a factory hood pin.
[2] The siren is **ONLY** required when enabling the security features during module flashing.
[3] Connection required **ONLY** if Pit-Stop/Idle mode is desired.
[4] Connection required **ONLY** if vehicle is equipped with Autolights.

Additional parts required (maximum required):

2 x 1A Diodes	0 x Relay	0 x Resistor	1 x 7.5A Fuse

OEM Remote Start Fuse Location

Make	Model	Year	Fuse Location	Fuse Name	Fuse Value
Lexus	ES 300h (Smart Key)	2013-2015	Engine room relay box, left side of engine compartment.	Mayday	5A
Lexus	ES 350 (Smart Key)	2013-2015	Engine room relay box, left side of engine compartment.	Mayday	5A
Lexus	GS 350 (Smart Key)	2013-2016	Engine room relay box, right side of engine compartment.	DCM	7.5A
Lexus	GS 450h (Smart Key)	2013-2015	Bottom of luggage room junction box, left rear quarter panel.	DCM	7.5A

Physical OEM Remote Start Fuse Location

Make	Model	Year	OEM Remote Start Location
Toyota	Avalon (Smart Key)	2013-2016	Behind glovebox upper right hand side.
Toyota	Avalon Hybrid	2013-2016	Behind glovebox upper right hand side.
Toyota	Camry (Smart Key)	2013-2016	Behind glovebox upper left hand side.
Toyota	Camry Hybrid	2013-2016	Behind glovebox upper left hand side.
Toyota	RAV4 (Smart Key)	2013-2015	High above drivers kick panel.

Vehicle application guide

The following table lists the vehicles and features which are compatible with this product. The number assigned to each year allows you to determine which installation type should be used for your vehicle.

Vehicles	2019	2018	2017	2016	2015	2014	2013	2012	PK-Immobilizer Bypass-Data No Key Req'd	DL-Arm Factory Security	DL-Disarm Factory Security	DL-Door Lock Control	DL-Door Unlock	DL-Driver Priority Unlock	DL-Trunk / Hatch Release	FOB-Control of aftermarket alarm with OEM remote	RS-3x LOCK START (Start control using OEM Remote)	RS-3x LOCK STOP (Stop control using OEM Remote)	RS-SmartStart	RS-Tach / RPM Output	SS-Entry Monitoring ALL Door Pins	SS-Entry Monitoring Hood Pin	SS-Entry Monitoring Trunk/Hatch Pin	SS-Factory Alarm Trigger Monitoring	ST-Brake Status (foot brake)	ST-Door Locks Status	ST-E-Brake Status	ST-Ignition Status
Lexus																												
ES 300h (Smart Key)					3	3	3		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ES 350 (Smart Key)					1	1	1		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GS 350 (Smart Key)		8	8	8	2	2	2		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GS 450h (Smart Key)					2	2	2		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Toyota																												
Avalon (Smart Key)		6	6	6	4	4	4		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Avalon Hybrid				6	4	4	4		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Camry (Smart Key)			6	6	4	4	4	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Camry Hybrid			6	6	4	4	4	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Corolla (Smart Key)	10	10	10	5	5	5			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Prius c (Smart Key)	11	11	11	11	4	4	4	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Prius v (Smart Key)		9	9						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RAV4 (Smart Key)		6	6	6	4	4	4		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RAV4 Hybrid		7	7	7					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Legend:
AV: Horn & Light Controls
CC: Comfort & Convenience Controls
DL: OE Door Lock & Alarm Controls
FOB: Sync CAN Interface w/ FOB Remote
PK: Transponder & Immobilizer Override
RS: Remote Start & Engine Controls
SS: Integrated Security & Monitoring
ST: Function/Feature Status

Wiring connections

The wiring connections listed below are specific to this firmware.

Main power harness (H1), 12-pin thick gauge connector

Conn./Pin	Color	Description
H1/1	White	Relay 3 COM – No Connection [1]
H1/2	White/Brown	Relay 3 N.O. – No Connection [1]
H1/3	Brown/Red	Relay 2 N.O.– (-) Ground
H1/4	Yellow/Red	Relay 2 COM – (-) SLP Output
H1/5	Orange/Red	Relay 2 N.C. – No Connection
H1/6	Yellow	Relay 1 COM – Autolight Interrupt (conn.side) [1]
H1/7	White	Relay 3 COM – No Connection [1]
H1/8	White/Brown	Relay 3 N.O. – No Connection [1]
H1/9	Black	(-) Ground
H1/10	Red	(+) 12 Volt Input
H1/11	Orange/Yellow	Relay 1 N.C. – Autolight Interrupt (vehicle side) [1]
H1/12	Brown	Relay 1 N.O. – No Connection [1]

Auxiliary output harness (H2), 16-pin black connector

Conn./Pin	Color	Description
H2/1	Violet/Brown	No Connection
H2/2	Yellow/Black	Immo. Data 1
H2/3	Orange/Black	Immo. Data 2
H2/4	Tan	HS CAN Low
H2/5	Tan/Black	HS CAN High
H2/6	Light Green	No Connection
H2/7	Orange/Green	HS CAN High 2
H2/8	Orange/Brown	HS CAN Low 2
H2/9	Violet/Green	No Connection
H2/10	Green/Black	(-) Parking Lights Output [2]
H2/11	White/Violet	No Connection [2]
H2/12	White/Red	No Connection [2]
H2/13	Lt. Blue/Black	(-) Push-to-Start Output [2]
H2/14	Green/Red	(+) Starter Enable [2]
H2/15	N/A	No Connection
H2/16	Violet/Yellow	No Connection

1. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed.
2. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed. Note that they are low current and a relay may be necessary.

Analog harness (H3), 18-pin white connector

Conn./Pin	Color	Description
H3/1	Lt. Blue/Red	No Connection
H3/2	Black/White	(-) Parking Brake Input (Manual Transmission) [2]
H3/3	Gray	(-) Hood Input [2]
H3/4	N/A	No Connection
H3/5	Gray/Black	(+) Glow Plug Input [2]
H3/6	Violet/White	(AC) Tach Input [2]
H3/7	Dark Blue	(-) Unlock Output [1]
H3/8	Brown/Black	No Connection [1]
H3/9	Red/White	(-) Trunk Release Output [1]
H3/10	White/Green	(-) Door Input [2]
H3/11	Yellow/Green	(+) Door Input [2]
H3/12	Blue/Red	No Connection
H3/13	Light Blue	(-) Trunk Trigger Input [2]
H3/14	Pink/Yellow	(-) Activation (Start Trigger) Input
H3/15	Dark Green	(-) Lock Output [1]
H3/16	Brown/White	(+) Brake Input [2]
H3/17	Brown	(+) Siren Output [1]
H3/18	Blue/White	No Connection [1]

MC501 harness (H4), 8 thick-gauge wires (optional)

Conn./Pin	Color	Description
H4/1	Pink/White	No Connection
H4/2	Red/White	No Connection
H4/3	Pink	No Connection
H4/4	Red	No Connection
H4/5	Orange	No Connection
H4/6	Red	No Connection
H4/7	Green	No Connection
H4/8	Violet	No Connection

1. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed. Note that they are low current and a relay may be necessary.
2. These connections are only required if the corresponding statuses are not supported by the firmware. See "Vehicle application guide" on page 6 for a list of compatible features.

Installation (wiring diagrams & vehicle wiring reference charts)

Type 1

⚠️ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (**1 2 3**).

Certification ECU
(white conn. behind glove box)

E

19 20 21 22 23 24 25 26 27 28 29 **30**
7 8 9 10 11 12 13 14 15 16 17 18
1 2 3 4 5 6

3 (-) PTS: **Violet**, pin 30

OBDII Diagnostic Connector
(connector side view)

B

HS CAN High: **Blue**, pin 6

1 [.......] 8
9 [......] 16

HS CAN Low: **White**, pin 14   (+) 12V: **Blue**, pin 16

Steering Lock
(black conn. under steering column)

A

7 6 5 4 3 2 1

(-) SLP: **Pink**, pin 4

BTX: **Blue**, pin 25 — Immo. Data 1: **Yellow/Black**: 2

Body ECU
(white conn. at dash fuse box)

BRX: **Red**, pin 26 — Immo. Data 2: **Orange/Black**: 3

Cut ✂ — HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

4 (-) Autolights: **Green**, pin 28

(-) Parking Lights Output: **Green/Black**: 10

Fuse 7.5A

Remote Start Safety Override Switch

⚠️ The Remote Start Safety Override Switch **MUST** be in the ON position.

D

19 20 21 22 23 24 25 26 27 28 29 30
7 8 9 10 11 12 13 14 15 16 17 18
1 2 3 4 5 6

Main Body ECU

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

(-) Parking Lights: **White**, pin 30

Hood Pin

1 (-) Hood Input: **Gray**: 3

11: **Orange/Yellow**: Autolight Interrupt (veh. side) **4**

10: **Red**: (+) 12V Input

(-) Lock: **Red**, pin 11   (-) Unlock: **Gray**, pin 24

(-) Unlock Output: **Dark Blue**: 7

9: **Black**: (-) Ground

(-) Trunk Release Output: **Red/White**: 9

6: **Yellow**: Autolight Interrupt (conn. side) **4**

(-) Lock Output: **Dark Green**: 15

4: **Yellow/Red** :(-) SLP Output

Body ECU
(white conn. at dash fuse box)

2 (+) Siren Output: **Brown**: 17

3: **Brown/Red** :(-) Ground

C

17 18 19 20 23 22 23 24 25 26 27 28
5 6 7 8 9 10 11 12 13 14 15 16
1 2 3 4

Siren

(-) Trunk Release: **Red**, pin 5

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

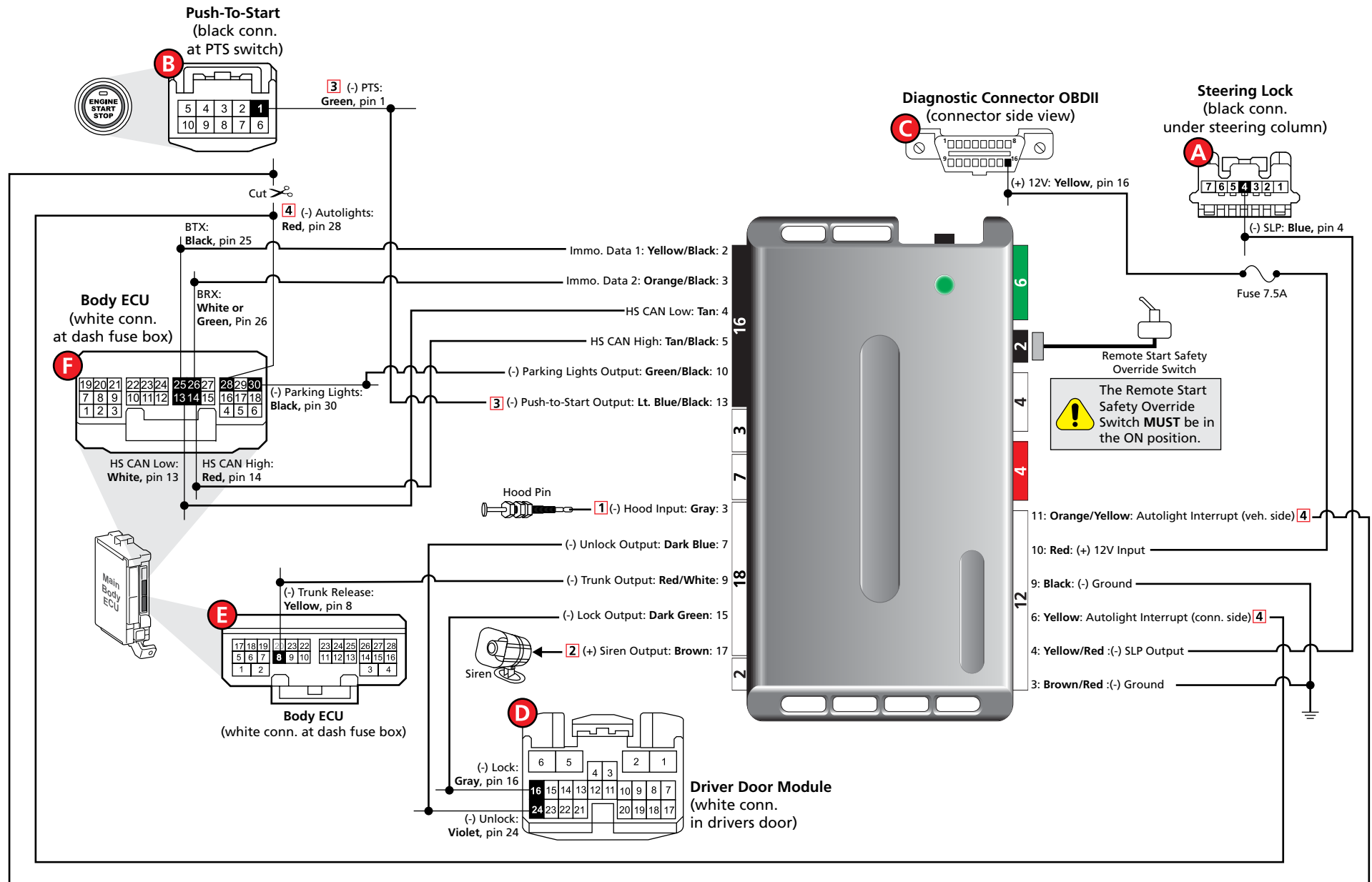| Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Lexus ES 350 (Smart Key) 2013-2015							
SLP	Pink	4	(-)	Steering lock under steering column.	Black	7	A
HS CAN High	Blue	6	Data	OBDII.	Black	16	B
HS CAN Low	White	14	Data	OBDII.	Black	16	B
12V	Blue	16	(+)	OBDII.	Black	16	B
Trunk Release	Red	5	(-)	Body ECU on dash fusebox. Bottom connector.	White	28	C
BTX	Blue	25	Data	Body ECU on dash fusebox. Middle connector.	White	30	D
BRX	Red	26	Data	Body ECU on dash fusebox. Middle connector.	White	30	D
Parking Lights	White	30	(-)	Body ECU on dash fusebox. Middle connector.	White	30	D
Autolights	Green	28	Cut	Body ECU on dash fusebox. Middle connector.	White	30	D
Lock	Red	11	(-)	Body ECU on dash fusebox. Middle connector.	White	30	D
Unlock	Gray	24	(-)	Body ECU on dash fusebox. Middle connector.	White	30	D
PTS	Violet	30	(-)	Certification ECU behind glovebox. Top connector.	White	30	E

Type 2

⚠ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Push-To-Start
(black conn. at PTS switch)

B

ENGINE START STOP

5 4 3 2 1
10 9 8 7 6

3 (-) PTS: **Green, pin 1**

Cut ✂

4 (-) Autolights: **Red, pin 28**

BTX: **Black, pin 25**

Body ECU
(white conn. at dash fuse box)

F

19 20 21 22 23 24 25 26 27 28 29 30
7 8 9 10 11 12 13 14 15 16 17 18
1 2 3 4 5 6

BRX: **White or Green, Pin 26**

(-) Parking Lights: **Black, pin 30**

HS CAN Low: **White, pin 13**   HS CAN High: **Red, pin 14**

Main Body ECU

Diagnostic Connector OBDII
(connector side view)

C

1 8
9 16

(+) 12V: **Yellow, pin 16**

Steering Lock
(black conn. under steering column)

A

7 6 5 4 3 2 1

(-) SLP: **Blue, pin 4**

Fuse 7.5A

Immo. Data 1: **Yellow/Black: 2**
Immo. Data 2: **Orange/Black: 3**
HS CAN Low: **Tan: 4**
HS CAN High: **Tan/Black: 5**
(-) Parking Lights Output: **Green/Black: 10**
3 (-) Push-to-Start Output: **Lt. Blue/Black: 13**

16

6

2

4

Remote Start Safety Override Switch

The Remote Start Safety Override Switch **MUST** be in the ON position.

Hood Pin

1 (-) Hood Input: **Gray: 3**

(-) Unlock Output: **Dark Blue: 7**
(-) Trunk Output: **Red/White: 9**
(-) Lock Output: **Dark Green: 15**
2 (+) Siren Output: **Brown: 17**

Siren

3

7

18

12

2

(-) Trunk Release: **Yellow, pin 8**

E

17 18 19 20 21 22 23 24 25 26 27 28
5 6 7 8 9 10 11 12 13 14 15 16
1 2 3 4

Body ECU
(white conn. at dash fuse box)

D

6 5   2 1
          4 3
16 15 14 13 12 11 10 9 8 7
24 23 22 21   20 19 18 17

Driver Door Module
(white conn. in drivers door)

(-) Lock: **Gray, pin 16**
(-) Unlock: **Violet, pin 24**

11: **Orange/Yellow:** Autolight Interrupt (veh. side) 4
10: **Red:** (+) 12V Input
9: **Black:** (-) Ground
6: **Yellow:** Autolight Interrupt (conn. side) 4
4: **Yellow/Red** :(-) SLP Output
3: **Brown/Red** :(-) Ground

11

Directed Digital Solutions TL6
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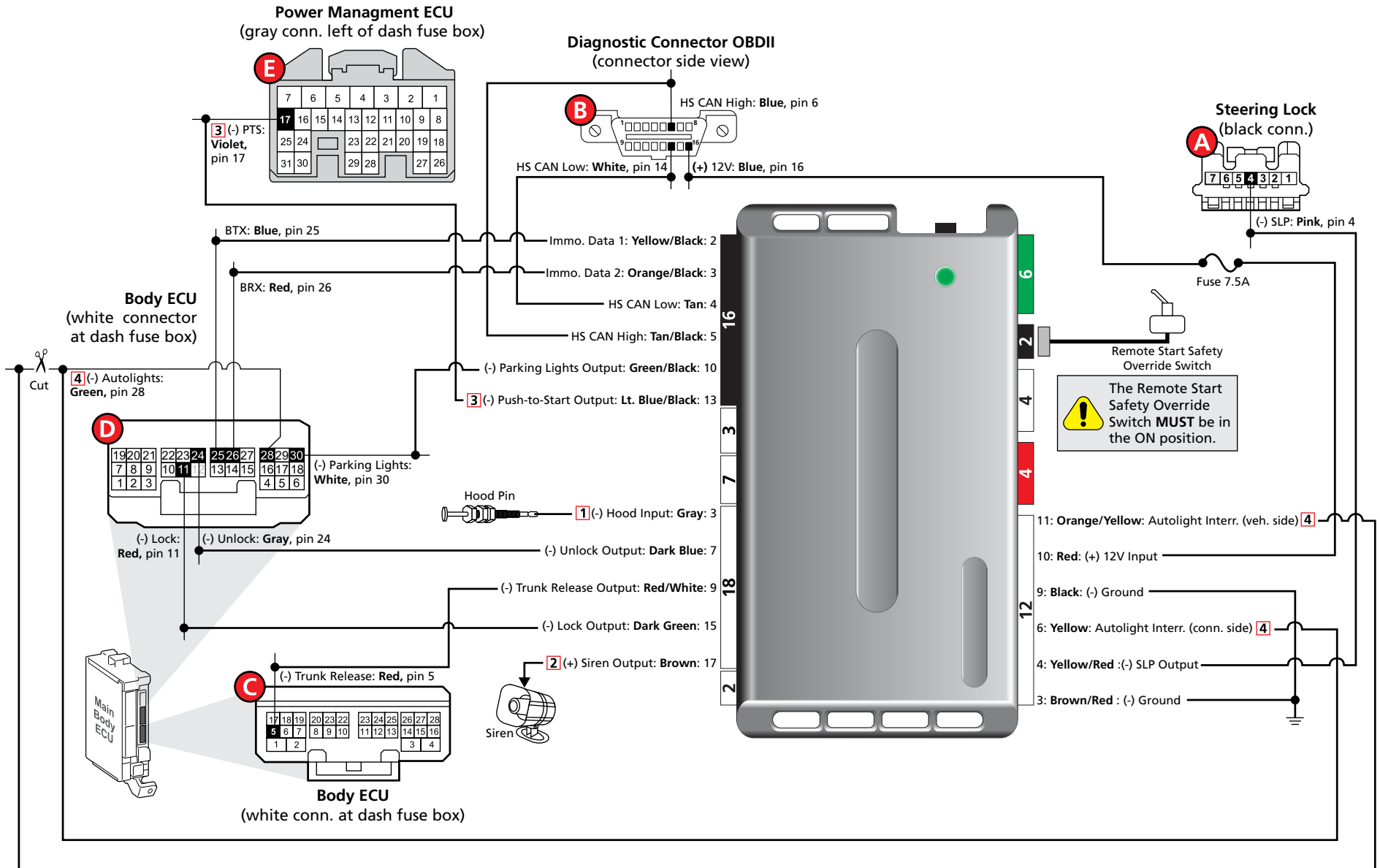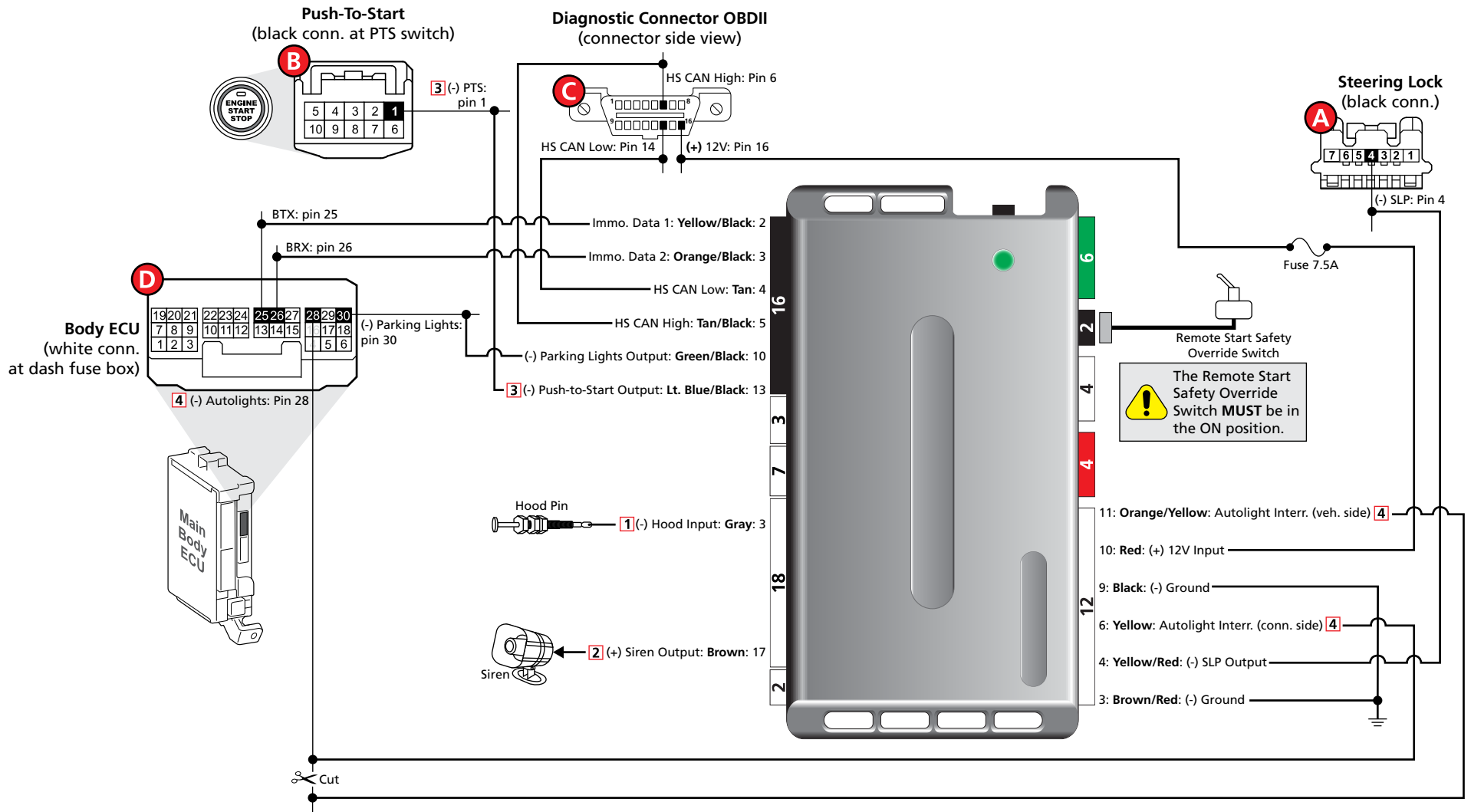
Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

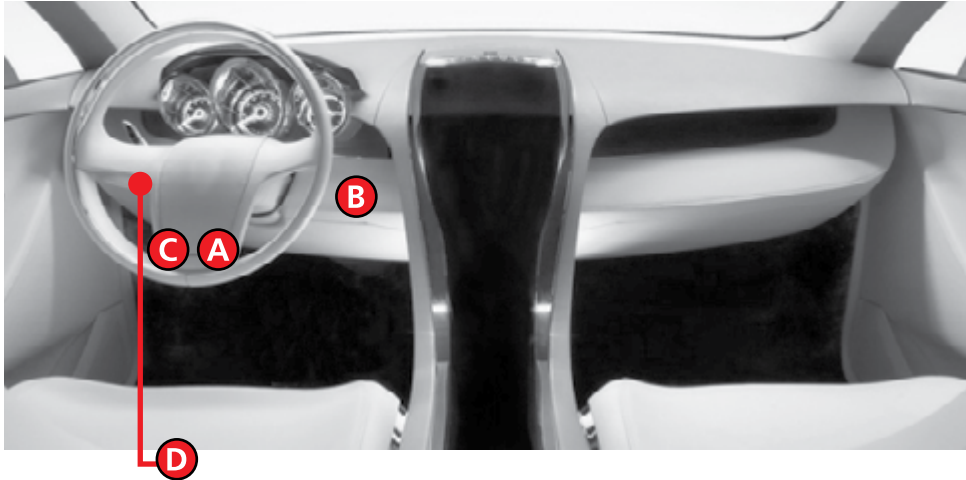| Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Lexus GS 350 (Smart Key) 2013-2015							
SLP	Blue	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Green	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Yellow	16	(+)	OBDII.	Black	16	C
Lock	Gray	16	(-)	DDM (Driver Door Module).	White	24	D
Unlock	Violet	24	(-)	DDM (Driver Door Module).	White	24	D
Trunk Release	Yellow	8	(-)	Body ECU on dash fuse box. Bottom connector.	White	28	E
HS CAN High	Red	14	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
HS CAN Low	White	13	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
BTX	Black	25	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
BRX	White or Green	26	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
Parking Lights	Black	30	(-)	Body ECU on dash fusebox. Middle connector.	White	30	F
Autolights	Red	28	Cut	Body ECU on dash fusebox. Middle connector.	White	30	F
Lexus GS 450h (Smart key) 2013-2015							
SLP	Blue	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Green	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Yellow	16	(+)	OBDII.	Black	16	C
Lock	Gray	16	(-)	DDM (Driver Door Module).	White	24	D
Unlock	Violet	24	(-)	DDM (Driver Door Module).	White	24	D
Trunk Release	Yellow	8	(-)	Body ECU on dash fuse box. Bottom connector.	White	28	E
HS CAN High 1	Red	14	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
HS CAN Low 1	White	13	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
BTX	Black	25	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
BRX	White or Green	26	Data	Body ECU on dash fusebox. Middle connector.	White	30	F
Parking Lights	Black	30	(-)	Body ECU on dash fusebox. Middle connector.	White	30	F
Autolights	Red	28	Cut	Body ECU on dash fusebox. Middle connector.	White	30	F

Type 3

⚠️ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Power Managment ECU
(gray conn. left of dash fuse box)

E

7	6	5	4	3	2	1
17	16	15	14	13	12	11	10	9	8
25	24		23	22	21	20	19	18
31	30		29	28		27	26

3 (-) PTS:
Violet,
pin 17

Diagnostic Connector OBDII
(connector side view)

B

HS CAN High: **Blue**, pin 6

HS CAN Low: **White**, pin 14   (+) 12V: **Blue**, pin 16

Steering Lock
(black conn.)

A

| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

(-) SLP: **Pink**, pin 4

BTX: **Blue**, pin 25

BRX: **Red**, pin 26

Body ECU
(white connector
at dash fuse box)

Cut

4 (-) Autolights:
Green, pin 28

D

19	20	21		22	23	24		25	26	27		28	29	30
7	8	9		10	**11**		13	14	15		16	17	18
1	2	3								4	5	6

(-) Lock:
Red, pin 11

(-) Unlock: **Gray**, pin 24

Immo. Data 1: **Yellow/Black**: 2

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

(-) Parking Lights Output: **Green/Black**: 10

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

(-) Parking Lights:
White, pin 30

Hood Pin

1 (-) Hood Input: **Gray**: 3

(-) Unlock Output: **Dark Blue**: 7

(-) Trunk Release Output: **Red/White**: 9

(-) Lock Output: **Dark Green**: 15

2 (+) Siren Output: **Brown**: 17

(-) Trunk Release: **Red**, pin 5

C

17	18	19		20	23	22		23	24	25		26	27	28
5	6	7		8	9	10		11	12	13		14	15	16
1	2										3	4

Siren

Body ECU
(white conn. at dash fuse box)

Main Body ECU

16
3
7
18
2

6
2
4
4
12

Fuse 7.5A

Remote Start Safety Override Switch

⚠️ The Remote Start
Safety Override
Switch **MUST** be in
the ON position.

11: **Orange/Yellow**: Autolight Interr. (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interr. (conn. side) 4

4: **Yellow/Red** :(-) SLP Output

3: **Brown/Red** : (-) Ground

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.
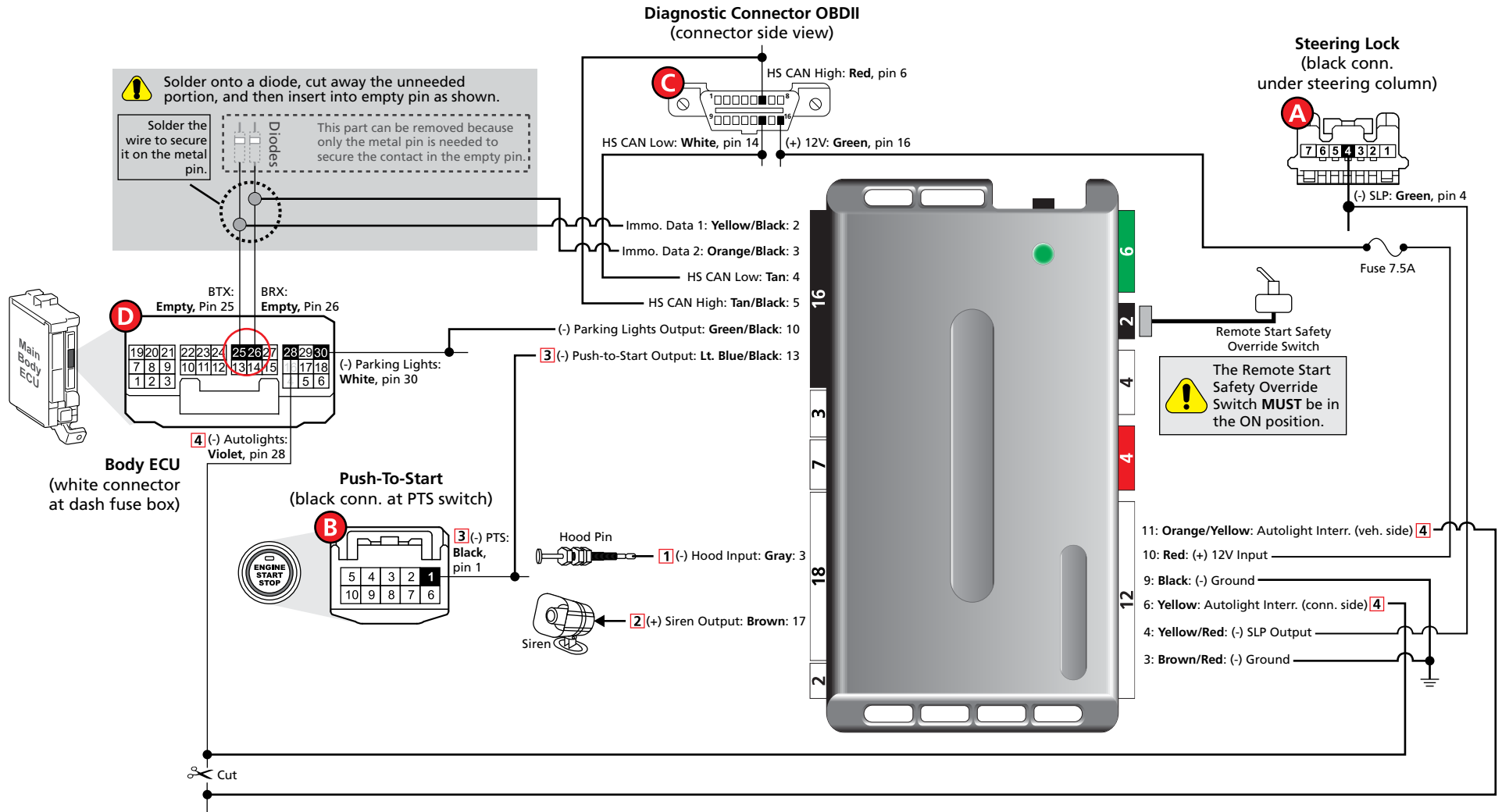

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Lexus ES 300h (Smart Key) 2013-2015							
SLP	Pink	4	(-)	Steering lock under steering column.	Black	7	A
HS CAN High	Blue	6	Data	OBDII.	Black	16	B
HS CAN Low	White	14	Data	OBDII.	Black	16	B
12V	Blue	16	(+)	OBDII.	Black	16	B
Trunk Release	Red	5	(-)	Body ECU on dash fuse box. Bottom connector.	White	28	C
BTX	Blue	25	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
BRX	Red	26	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
Parking Lights	White	30	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Autolights	Green	28	Cut	Body ECU on dash fuse box. Middle connector.	White	30	D
Lock	Red	11	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Unlock	Gray	24	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
PTS	Violet	17	(-)	Power management ECU left of dash fuse box.	Gray	31	E

Type 4

⚠ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Push-To-Start
(black conn. at PTS switch)

B

ENGINE START STOP

5	4	3	2	**1**
10	9	8	7	6

3 (-) PTS: pin 1

Diagnostic Connector OBDII
(connector side view)

C

HS CAN High: Pin 6

HS CAN Low: Pin 14   **(+)** 12V: Pin 16

Steering Lock
(black conn.)

A

7	6	5	4	3	2	1

(-) SLP: Pin 4

BTX: pin 25

BRX: pin 26

Body ECU
(white conn. at dash fuse box)

D

19	20	21	22	23	24	25	26	27	28	29	30
7	8	9	10	11	12	13	14	15		17	18
1	2	3								5	6

(-) Parking Lights: pin 30

4 (-) Autolights: Pin 28

Main Body ECU

Immo. Data 1: **Yellow/Black**: 2

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

(-) Parking Lights Output: **Green/Black**: 10

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

16

6

2

Remote Start Safety Override Switch

⚠ The Remote Start Safety Override Switch **MUST** be in the ON position.

Fuse 7.5A

Hood Pin

1 (-) Hood Input: **Gray**: 3

2 (+) Siren Output: **Brown**: 17

Siren

4

3

7

18

2

4

12

11: **Orange/Yellow**: Autolight Interr. (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interr. (conn. side) 4

4: **Yellow/Red**: (-) SLP Output

3: **Brown/Red**: (-) Ground

✂ Cut

15

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

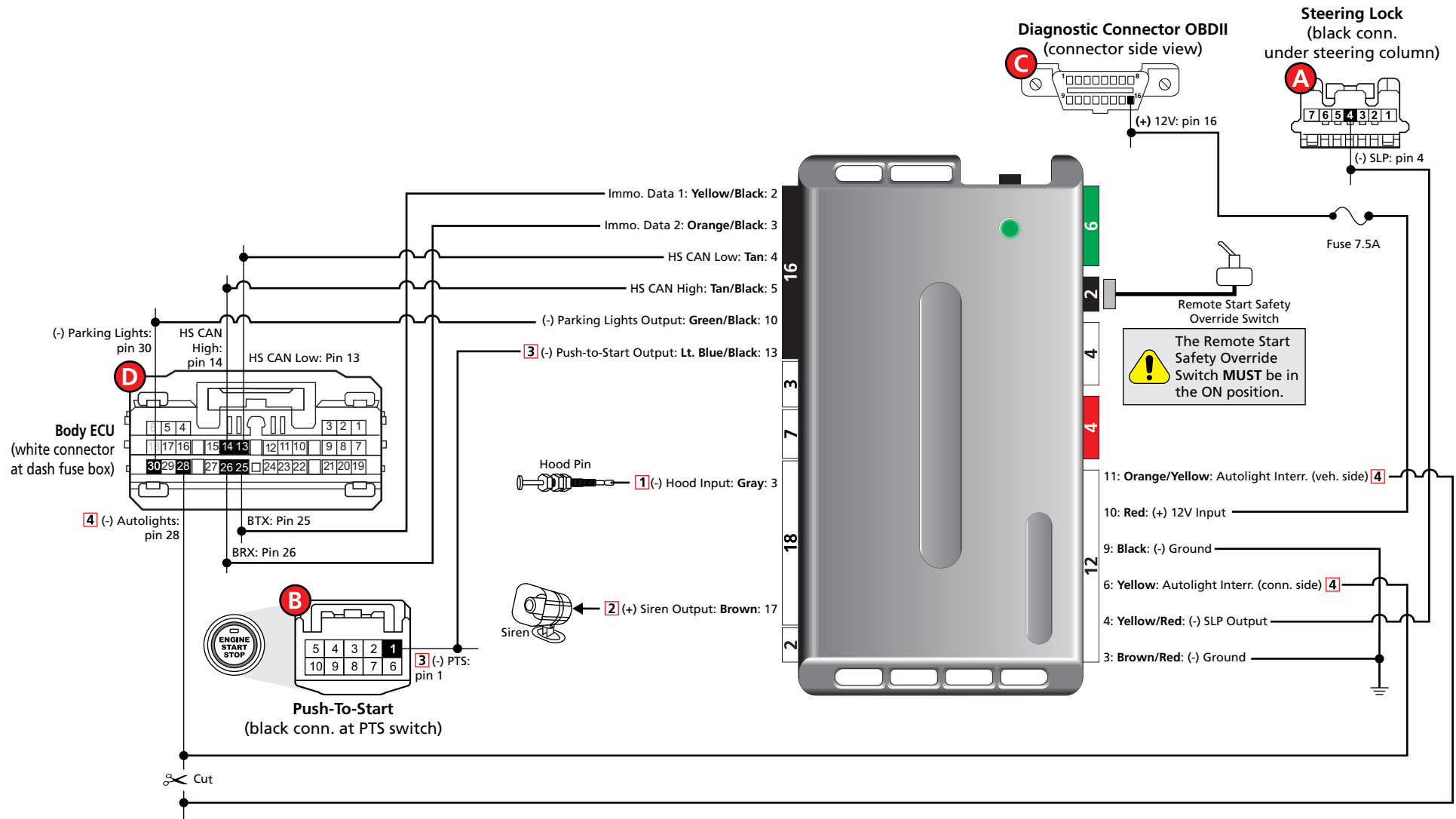| Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Avalon (Smart Key) 2013-2015							
SLP	Green	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
HS CAN High	Blue	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Brown	25	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
BRX	Lt. Green	26	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
Parking Lights	Red	30	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Autolights	Tan	28	Cut	Body ECU on dash fuse box. Middle connector.	White	30	D
Toyota Avalon Hybrid 2013-2015							
SLP	Green	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
HS CAN High	Blue	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Brown	25	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
BRX	Lt. Green	26	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
Parking Lights	Red	30	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Autolights	Tan	28	Cut	Body ECU on dash fuse box. Middle connector.	White	30	D
Toyota Camry (Smart Key) 2012-2015							
SLP	Pink	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
HS CAN High	Blue	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Green	25	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
BRX	Red	26	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
Parking Lights	White or Black	30	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Autolights	Green	28	Cut	Body ECU on dash fuse box. Middle connector.	White	30	D

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Camry Hybrid (Smart Key) 2012-2015							
SLP	Pink	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
HS CAN High	Blue	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Green	25	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
BRX	Red	26	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
Parking Lights	White or Black	30	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Autolights	Green	28	Cut	Body ECU on dash fuse box. Middle connector.	White	30	D
Toyota Prius c (Smart Key) 2012-2015							
SLP	Pink	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Lt. Blue	1	(-)	PTS (Push-to-Start) switch.	White	10	B
HS CAN High	Gray	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Lt. Blue	16	(+)	OBDII.	Black	16	C
BTX	Black	25	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
BRX	Red	26	Data	Body ECU on dash fuse box. Middle connector.	White	30	D
Parking Lights	Lt. Blue	30	(-)	Body ECU on dash fuse box. Middle connector.	White	30	D
Autolights	Red	28	Cut	Body ECU on dash fuse box. Middle connector.	White	30	D
Toyota RAV4 (Smart Key) 2013-2015							
SLP	Green	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Dk. Green	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
HS CAN High	Black	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Blue	16	(+)	OBDII.	Black	16	C
BTX	Blue	25	Data	Body ECU back of fuse box. Middle connector.	White	30	D
BRX	Red	26	Data	Body ECU back of fuse box. Middle connector.	White	30	D
Parking Lights	White	30	(-)	Body ECU back of fuse box. Middle connector.	White	30	D
Autolights	Green	28	Cut	Body ECU back of fuse box. Middle connector.	White	30	D

Type 5

⚠ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Diagnostic Connector OBDII
(connector side view)

Steering Lock
(black conn. under steering column)

⚠ Solder onto a diode, cut away the unneeded portion, and then insert into empty pin as shown.

Solder the wire to secure it on the metal pin.

Diodes

This part can be removed because only the metal pin is needed to secure the contact in the empty pin.

C

HS CAN High: **Red**, pin 6

HS CAN Low: **White**, pin 14   (+) 12V: **Green**, pin 16

A

7 6 5 4 3 2 1

(-) SLP: **Green**, pin 4

Immo. Data 1: **Yellow/Black**: 2

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

Fuse 7.5A

Remote Start Safety Override Switch

⚠ The Remote Start Safety Override Switch **MUST** be in the ON position.

BTX: **Empty, Pin 25**   BRX: **Empty, Pin 26**

D

19 20 21 22 23 24 25 26 27 28 29 30
7 8 9 10 11 12 13 14 15 16 17 18
1 2 3 4 5 6

(-) Parking Lights Output: **Green/Black**: 10

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

(-) Parking Lights: **White**, pin 30

Main Body ECU

Body ECU
(white connector at dash fuse box)

4 (-) Autolights: **Violet**, pin 28

Push-To-Start
(black conn. at PTS switch)

B

ENGINE START STOP

5 4 3 2 1
10 9 8 7 6

3 (-) PTS: **Black**, pin 1

Hood Pin

1 (-) Hood Input: **Gray**: 3

2 (+) Siren Output: **Brown**: 17

Siren

11: **Orange/Yellow**: Autolight Interr. (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interr. (conn. side) 4

4: **Yellow/Red**: (-) SLP Output

3: **Brown/Red**: (-) Ground

Cut

16 6 2 4 4 3 7 18 12 2

18

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

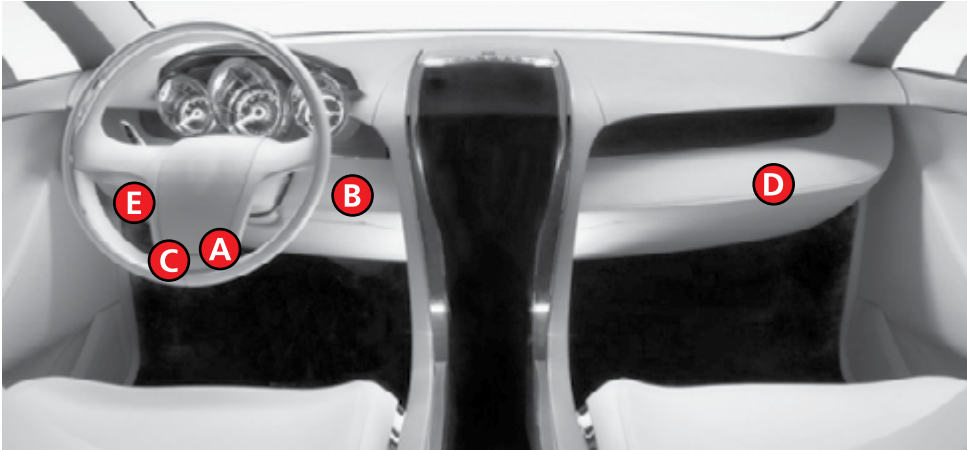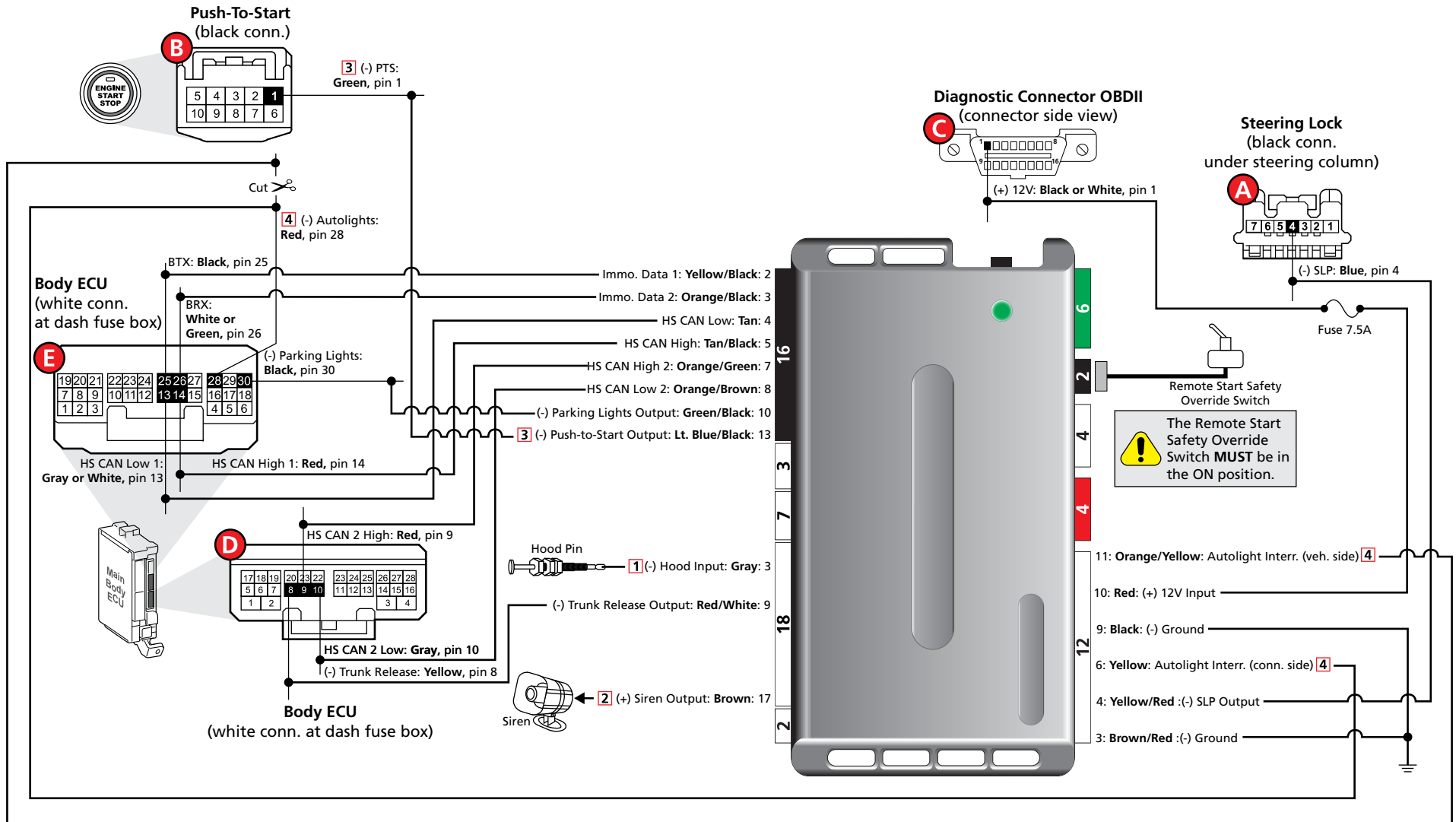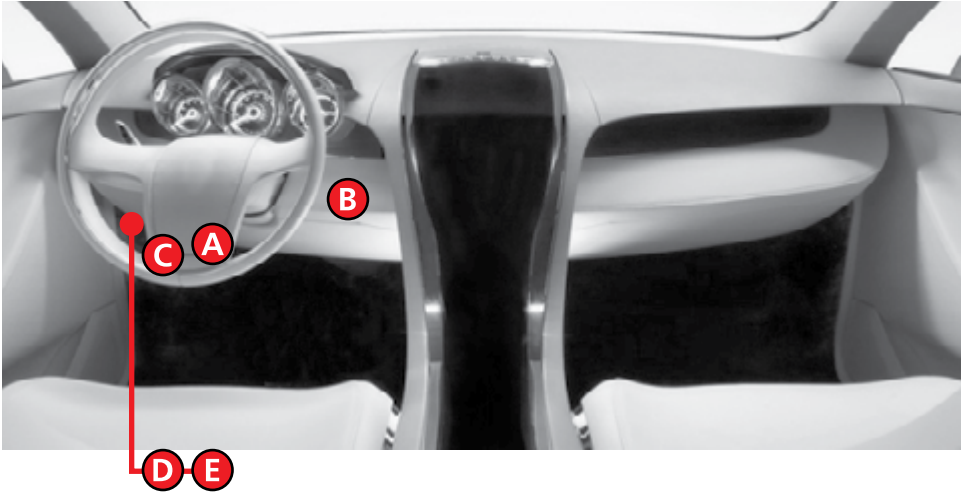| Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Corolla (Smart Key) 2014-2016							
SLP	Green	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Black	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
HS CAN High	Red	6	Data	OBDII.	Black	16	C
HS CAN Low	White	14	Data	OBDII.	Black	16	C
12V	Green	16	(+)	OBDII.	Black	16	C
BTX	Empty	25	Data	Body ECU on dash fusebox. Middle connector.	White	30	D
BRX	Empty	26	Data	Body ECU on dash fusebox. Middle connector.	White	30	D
Parking Lights	White	30	(-)	Body ECU on dash fusebox. Middle connector.	White	30	D
Autolight	Violet	28	cut	Body ECU on dash fusebox. Middle connector.	White	30	D

Type 6

⚠️ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (**1 2 3**).

Diagnostic Connector OBDII
(connector side view)

C

(+) 12V: pin 16

Steering Lock
(black conn.
under steering column)

A

7 6 5 4 3 2 1

(-) SLP: pin 4

Immo. Data 1: **Yellow/Black**: 2

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

16

6

(-) Parking Lights Output: **Green/Black**: 10

2

Fuse 7.5A

Remote Start Safety
Override Switch

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

4

(-) Parking Lights:
pin 30

HS CAN
High:
pin 14

HS CAN Low: Pin 13

D

Body ECU
(white connector
at dash fuse box)

6 5 4 | 3 2 1
18 17 16 | 15 14 13 | 12 11 10 | 9 8 7
30 29 28 | 27 26 25 | 24 23 22 | 21 20 19

4 (-) Autolights:
pin 28

BTX: Pin 25

BRX: Pin 26

3

⚠️ The Remote Start
Safety Override
Switch **MUST** be in
the ON position.

4

Hood Pin

1 (-) Hood Input: **Gray**: 3

11: **Orange/Yellow**: Autolight Interr. (veh. side) **4**

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interr. (conn. side) **4**

4: **Yellow/Red**: (-) SLP Output

3: **Brown/Red**: (-) Ground

18

12

2

B

ENGINE
START
STOP

5 4 3 2 **1**
10 9 8 7 6

3 (-) PTS:
pin 1

2 (+) Siren Output: **Brown**: 17

Siren

Push-To-Start
(black conn. at PTS switch)
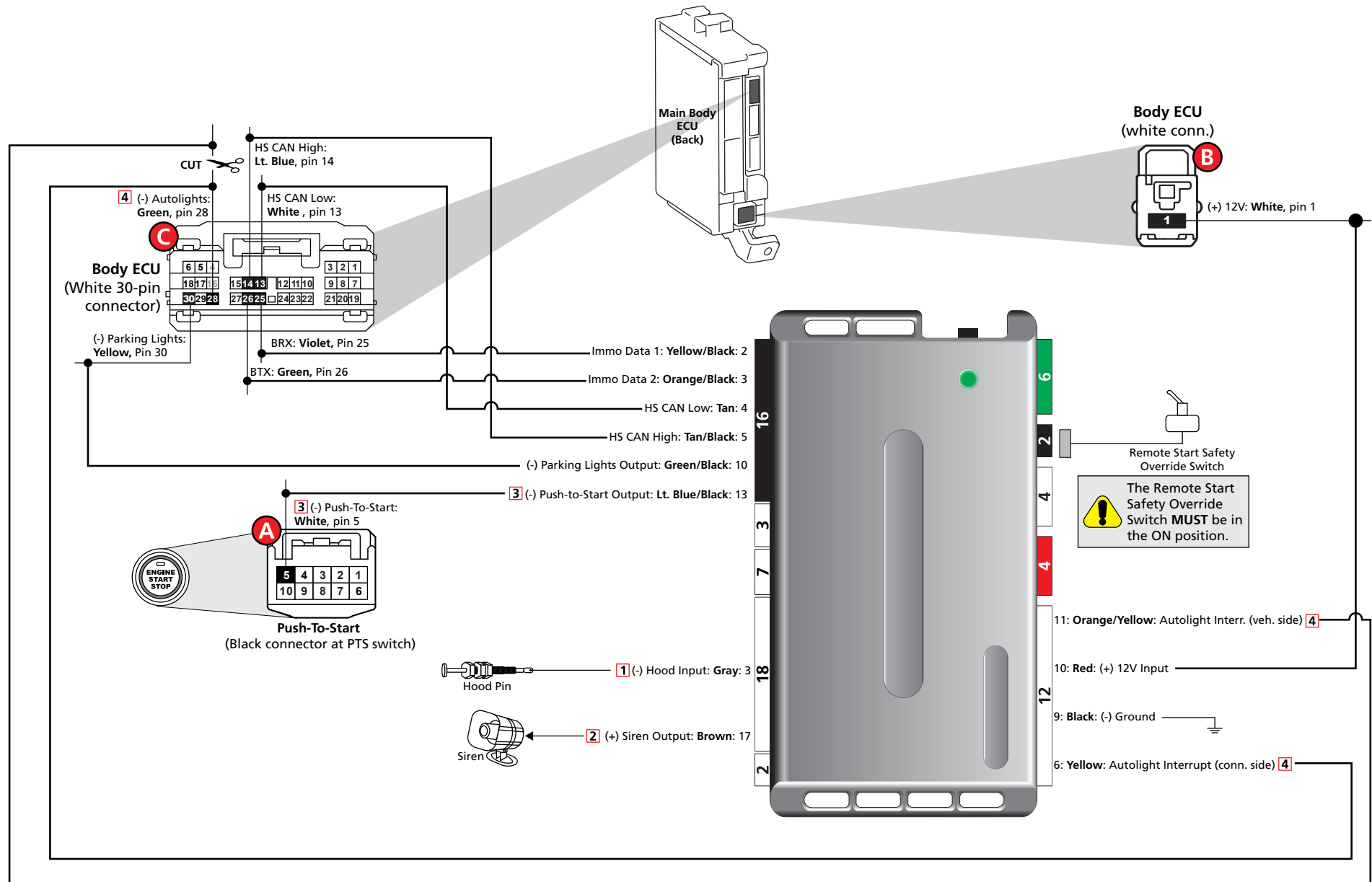
✂ Cut

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

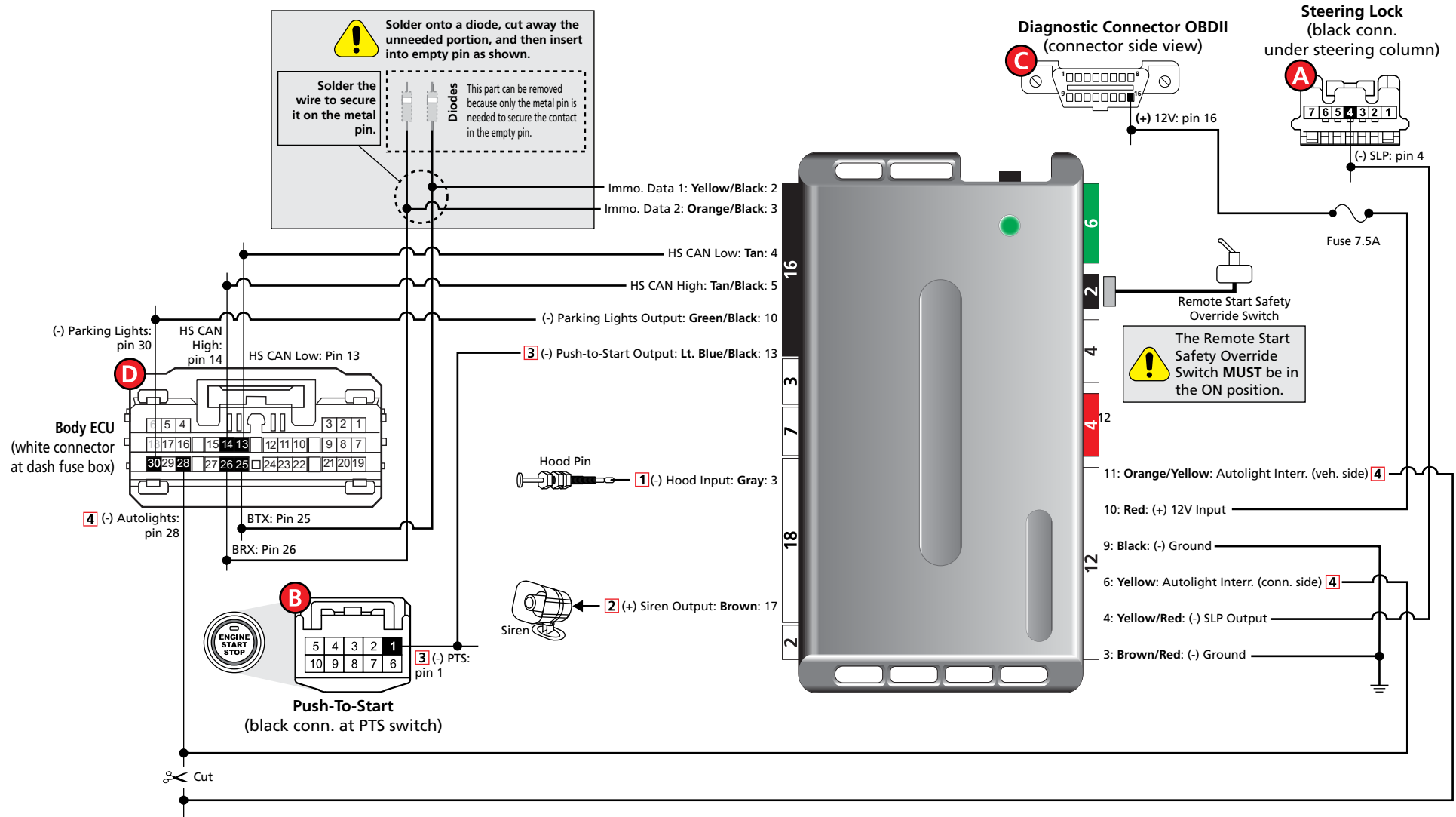| Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Avalon (Smart Key) 2016-2018							
SLP	Green	4	(-)	Steering lock under steering column.	Black or Blue	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Brown	25	Data	Body ECU on bottom dash fuse box.	White	30	D
BRX	Lt. Green	26	Data	Body ECU on bottom dash fuse box.	White	30	D
Parking Lights	Red	30	(-)	Body ECU on bottom dash fuse box.	White	30	D
Autolights	Tan	28	Cut	Body ECU on bottom dash fuse box.	White	30	D
HS CAN High	Pink or Lt. Blue	14	Data	Body ECU on bottom dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	D
Toyota Avalon Hybrid 2016							
SLP	Green	4	(-)	Steering lock under steering column.	Black or Blue	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Brown	25	Data	Body ECU on bottom dash fuse box.	White	30	D
BRX	Lt. Green	26	Data	Body ECU on bottom dash fuse box.	White	30	D
Parking Lights	Red	30	(-)	Body ECU on bottom dash fuse box.	White	30	D
Autolights	Tan	28	Cut	Body ECU on bottom dash fuse box.	White	30	D
HS CAN High	Pink	14	Data	Body ECU on bottom dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	D
Toyota Camry (Smart Key) 2016-2017							
SLP	Green or Pink	4	(-)	Steering lock under steering column.	Black or Blue	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Green	25	Data	Body ECU on bottom dash fuse box.	White	30	D
BRX	Red	26	Data	Body ECU on bottom dash fuse box.	White	30	D
Parking Lights	Black	30	(-)	Body ECU on bottom dash fuse box.	White	30	D
Autolight	Green	28	cut	Body ECU on bottom dash fuse box.	White	30	D
HS CAN High	Pink	14	Data	Body ECU on bottom dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	D

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Camry Hybrid 2016-2017							
SLP	Green or Pink	4	(-)	Steering lock under steering column.	Black or Blue	7	A
PTS	Violet	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Red	16	(+)	OBDII.	Black	16	C
BTX	Green	25	Data	Body ECU on bottom dash fuse box.	White	30	D
BRX	Red	26	Data	Body ECU on bottom dash fuse box.	White	30	D
Parking Lights	Black	30	(-)	Body ECU on bottom dash fuse box.	White	30	D
Autolight	Green	28	cut	Body ECU on bottom dash fuse box.	White	30	D
HS CAN High	Pink	14	Data	Body ECU on bottom dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	D
Toyota RAV4 (Smart Key) 2016-2018							
SLP	Lt. Green	4	(-)	Steering lock under steering column.	Black or Blue	7	A
PTS	Dk. Green	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Blue	16	(+)	OBDII.	Black	16	C
BTX	Blue	25	Data	Body ECU on bottom dash fuse box.	White	30	D
BRX	Red	26	Data	Body ECU on bottom dash fuse box.	White	30	D
Parking Lights	White	30	(-)	Body ECU on bottom dash fuse box.	White	30	D
Autolights	Green	28	Cut	Body ECU on bottom dash fuse box.	White	30	D
HS CAN High	Green	14	Data	Body ECU on bottom dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	D

Type 7

⚠ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).
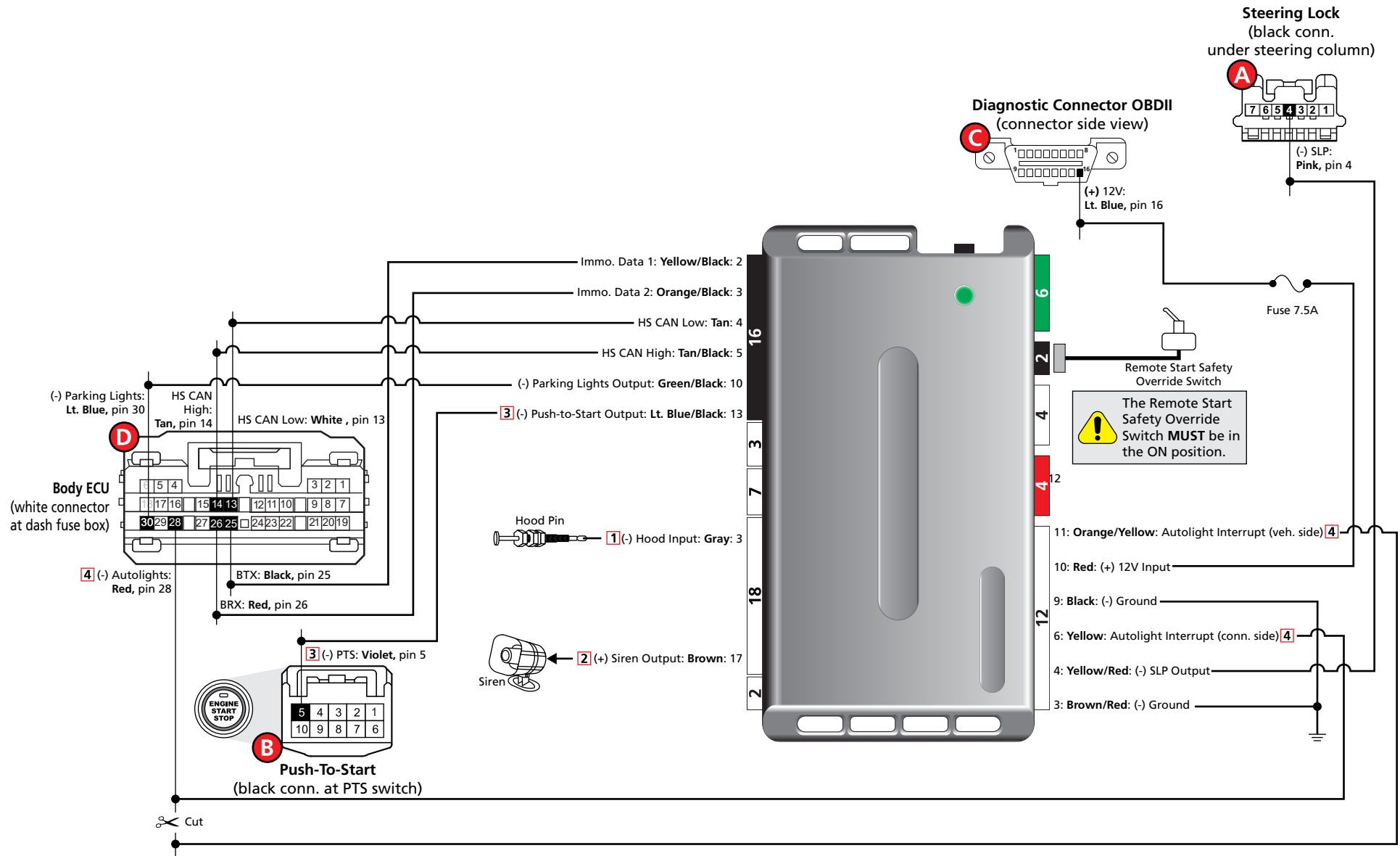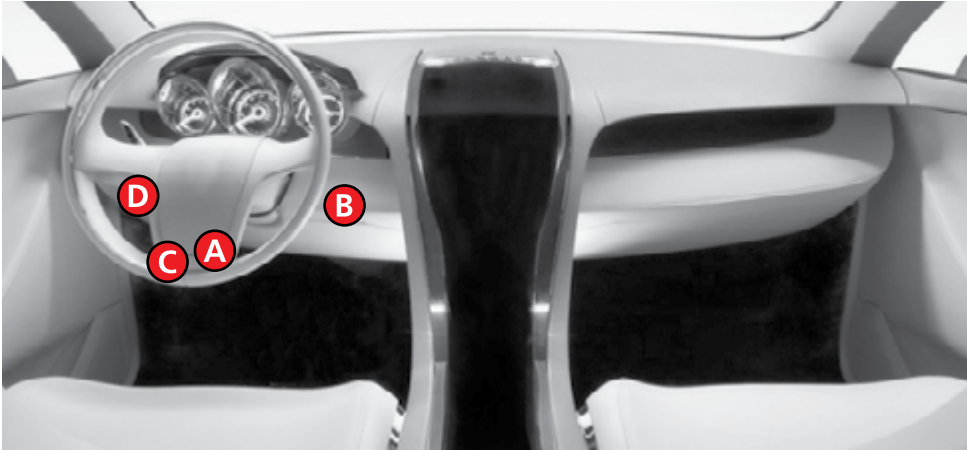
FUSES

BODY ECU

Body ECU
(white conn. at dash fuse box)

E

HS CAN High: **Green**, pin 14

HS CAN Low: **White**, Pin 13

(-) Parking Lights: **White**, pin 30

4 (-) Autolights: **Green**, pin 28

BTX: **Blue**, Pin 25

BRX: **Red**, Pin 26

Diagnostic Connector OBDII
(connector side view)

C

(+) 12V: **Blue**, pin 2

Steering Lock
(black conn. under steering column)

A

(-) SLP: **Lt. Green**, pin 4

Fuse 7.5A

Immo. Data 1: **Yellow/Black**: 2

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

(-) Parking Lights Output: **Green/Black**: 10

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

(+) Start Enable Output: **Green/Red**: 14

Remote Start Safety Override Switch

⚠ The Remote Start Safety Override Switch **MUST** be in the ON position.

B

ENGINE START STOP

3 (-) PTS: **Dk. Green**, pin 1

Push-To-Start
(black conn. at PTS switch)

(+) Start Enable: **Lt. Blue**, pin 7

D

Certification ECU
(white conn. behind glove box)

Hood Pin

1 (-) Hood Input: **Gray**: 3

2 (+) Siren Output: **Brown**: 17

Siren

11: **Orange/Yellow**: Autolight Interr. (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interr. (conn. side) 4

4: **Yellow/Red**: (-) SLP Output

3: **Brown/Red**: (-) Ground

✂ Cut

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota RAV4 Hybrid (Smart Key) 2016-2018							
SLP	Lt. Green	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Dk. Green	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Blue	16	(+)	OBDII.	Black	16	C
Start Enable	Lt. Blue	7	(+)	Certification ECU behind glove box.	White	18	D
BTX	Blue	25	Data	Body ECU on bottom dash fuse box.	White	30	E
BRX	Red	26	Data	Body ECU on bottom dash fuse box.	White	30	E
Parking Lights	White	30	(-)	Body ECU on bottom dash fuse box.	White	30	E
Autolights	Green	28	Cut	Body ECU on bottom dash fuse box.	White	30	E
HS CAN High	Green	14	Data	Body ECU on bottom dash fuse box.	White	30	E
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	E

Type 8

⚠ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram ([1][2][3]).

Push-To-Start
(black conn.)

(B)

[3] (-) PTS: **Green, pin 1**

Diagnostic Connector OBDII
(connector side view)

(C)

(+) 12V: **Black or White, pin 1**

Steering Lock
(black conn. under steering column)

(A)

(-) SLP: **Blue, pin 4**

Fuse 7.5A

Cut ✂

[4] (-) Autolights: **Red, pin 28**

BTX: **Black, pin 25**

Immo. Data 1: **Yellow/Black**: 2

Body ECU
(white conn. at dash fuse box)

(E)

BRX: **White or Green, pin 26**

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

(-) Parking Lights: **Black, pin 30**

HS CAN High 2: **Orange/Green**: 7

HS CAN Low 2: **Orange/Brown**: 8

(-) Parking Lights Output: **Green/Black**: 10

[3] (-) Push-to-Start Output: **Lt. Blue/Black**: 13

HS CAN Low 1: **Gray or White, pin 13**

HS CAN High 1: **Red, pin 14**

Remote Start Safety Override Switch

⚠ The Remote Start Safety Override Switch **MUST** be in the ON position.

HS CAN 2 High: **Red, pin 9**

(D)

Hood Pin

[1] (-) Hood Input: **Gray**: 3

11: **Orange/Yellow**: Autolight Interr. (veh. side) [4]

10: **Red**: (+) 12V Input

(-) Trunk Release Output: **Red/White**: 9

9: **Black**: (-) Ground

HS CAN 2 Low: **Gray, pin 10**

(-) Trunk Release: **Yellow, pin 8**

6: **Yellow**: Autolight Interr. (conn. side) [4]

[2] (+) Siren Output: **Brown**: 17

Siren

4: **Yellow/Red** :(-) SLP Output

3: **Brown/Red** :(-) Ground

Body ECU
(white conn. at dash fuse box)

Main Body ECU

25

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Lexus GS 350 (Smart Key) 2016-2018							
SLP	Blue	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Green	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Black or White	16	(+)	OBDII.	Black	16	C
HS CAN High 2	Red	9	Data	Body ECU on dash fusebox. Bottom connector.	White	28	D
HS CAN Low 2	Gray	10	Data	Body ECU on dash fusebox. Bottom connector.	White	28	D
Trunk Release	Yellow	8	(-)	Body ECU on dash fusebox. Bottom connector.	White	28	D
HS CAN High 1	Red	14	Data	Body ECU on dash fusebox. Middle connector.	White	30	E
HS CAN Low 1	Gray or White	13	Data	Body ECU on dash fusebox. Middle connector.	White	30	E
BTX	Black	25	Data	Body ECU on dash fusebox. Middle connector.	White	30	E
BRX	White or Green	26	Data	Body ECU on dash fusebox. Middle connector.	White	30	E
Parking Lights	Black	30	(-)	Body ECU on dash fusebox. Middle connector.	White	30	E
Autolights	Red	28	Cut	Body ECU on dash fusebox. Middle connector.	White	30	E

Type 9

⚠️ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Main Body ECU (Back)

Body ECU (white conn.)

Ⓑ

(+) 12V: **White**, pin 1

1

HS CAN High: **Lt. Blue**, pin 14

CUT ✂

HS CAN Low: **White**, pin 13

4 (-) Autolights: **Green**, pin 28

Ⓒ

Body ECU (White 30-pin connector)

6	5						3	2	1
18	17	16	15	14	13	12	11	10	9	8	7
30	29	28	27	26	25		24	23	22	21	20	19

(-) Parking Lights: **Yellow**, Pin 30

BRX: **Violet**, Pin 25

BTX: **Green**, Pin 26

Immo Data 1: **Yellow/Black**: 2

Immo Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

(-) Parking Lights Output: **Green/Black**: 10

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

3 (-) Push-To-Start: **White**, pin 5

Ⓐ

ENGINE START STOP

Push-To-Start (Black connector at PTS switch)

5	4	3	2	1
10	9	8	7	6

1 (-) Hood Input: **Gray**: 3

Hood Pin

2 (+) Siren Output: **Brown**: 17

Siren

Remote Start Safety Override Switch

⚠️ The Remote Start Safety Override Switch **MUST** be in the ON position.

11: **Orange/Yellow**: Autolight Interr. (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interrupt (conn. side) 4

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Prius V (Smart Key) 2017-2018							
PTS	White	5	(-)	PTS (Push-to-Start) switch.	Black	10	A
12V	White	1	(+)	Main Body ECU on dash fuse box.	White	1	B
Parking Lights	Yellow	30	(-)	Main Body ECU on dash fuse box.	White	30	C
BRX	Violet	25	Data	Main Body ECU on dash fuse box.	White	30	C
BTX	Green	26	Data	Main Body ECU on dash fuse box.	White	30	C
HS CAN High	Lt. Blue	14	Data	Main Body ECU on dash fuse box.	White	30	C
HS CAN Low	White	13	Data	Main Body ECU on dash fuse box.	White	30	C
Autolights	Green	28	Cut	Main Body ECU on dash fuse box.	White	30	C

Type 10

⚠ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Solder onto a diode, cut away the unneeded portion, and then insert into empty pin as shown.

Solder the wire to secure it on the metal pin.

Diodes This part can be removed because only the metal pin is needed to secure the contact in the empty pin.

Diagnostic Connector OBDII (connector side view)

C

(+) 12V: pin 16

Steering Lock (black conn. under steering column)

A

7 6 5 4 3 2 1 / 8

(-) SLP: pin 4

Immo. Data 1: **Yellow/Black**: 2
Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4
HS CAN High: **Tan/Black**: 5

16

6

2

(-) Parking Lights Output: **Green/Black**: 10

Fuse 7.5A

Remote Start Safety Override Switch

(-) Parking Lights: pin 30

HS CAN High: pin 14

HS CAN Low: Pin 13

D

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

3

4

⚠ The Remote Start Safety Override Switch **MUST** be in the ON position.

Body ECU (white connector at dash fuse box)

6 5 4 | 3 2 1
18 17 16 | 15 14 13 | 12 11 10 | 9 8 7
30 29 28 | 27 26 25 | 24 23 22 | 21 20 19

4 (-) Autolights: pin 28

BTX: Pin 25

BRX: Pin 26

Hood Pin

1 (-) Hood Input: **Gray**: 3

7

4 12

11: **Orange/Yellow**: Autolight Interr. (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interr. (conn. side) 4

4: **Yellow/Red**: (-) SLP Output

3: **Brown/Red**: (-) Ground

18

12

2

B

ENGINE START STOP

5 4 3 2 1
10 9 8 7 6

3 (-) PTS: pin 1

Push-To-Start (black conn. at PTS switch)

Siren

2 (+) Siren Output: **Brown**: 17

✂ Cut

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Corolla (Smart Key) 2017-2019							
SLP	Green	4	(-)	Steering lock under steering column.	Black	7	A
PTS	Black	1	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Green	16	(+)	OBDII.	Black	16	C
BTX	Empty, insert pin	25	Data	Body ECU back of dash fuse box.	White	30	D
BRX	Empty, insert pin	26	Data	Body ECU back of dash fuse box.	White	30	D
Parking Lights	White	30	(-)	Body ECU back of dash fuse box.	White	30	D
Autolight	Violet	28	cut	Body ECU back of dash fuse box.	White	30	D
HS CAN High	Black	14	Data	Body ECU back of dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU back of dash fuse box.	White	30	D

Type 11

⚠️ Refer to "Pre-installation and application warnings" on page 4 for important information, such as the description of special notes referenced in the diagram (1 2 3).

Steering Lock
(black conn.
under steering column)

Ⓐ

7 6 5 4 3 2 1

(-) SLP:
Pink, pin 4

Diagnostic Connector OBDII
(connector side view)

Ⓒ

(+) 12V:
Lt. Blue, pin 16

Fuse 7.5A

Remote Start Safety
Override Switch

⚠️ The Remote Start
Safety Override
Switch **MUST** be in
the **ON** position.

Immo. Data 1: **Yellow/Black**: 2

Immo. Data 2: **Orange/Black**: 3

HS CAN Low: **Tan**: 4

HS CAN High: **Tan/Black**: 5

(-) Parking Lights Output: **Green/Black**: 10

3 (-) Push-to-Start Output: **Lt. Blue/Black**: 13

(-) Parking Lights:
Lt. Blue, pin 30

HS CAN
High:
Tan, pin 14

HS CAN Low: **White ,** pin 13

Ⓓ

Body ECU
(white connector
at dash fuse box)

5 4   3 2 1
17 16   15 14 13   12 11 10   9 8 7
30 29 28   27 26 25   24 23 22   21 20 19

4 (-) Autolights:
Red, pin 28

BTX: **Black,** pin 25

BRX: **Red,** pin 26

3 (-) PTS: **Violet,** pin 5

Ⓑ

Push-To-Start
(black conn. at PTS switch)

ENGINE START STOP

5 4 3 2 1
10 9 8 7 6

✂ Cut

Hood Pin

1 (-) Hood Input: **Gray**: 3

2 (+) Siren Output: **Brown**: 17

Siren

11: **Orange/Yellow**: Autolight Interrupt (veh. side) 4

10: **Red**: (+) 12V Input

9: **Black**: (-) Ground

6: **Yellow**: Autolight Interrupt (conn. side) 4

4: **Yellow/Red**: (-) SLP Output

3: **Brown/Red**: (-) Ground

31

Vehicle wiring reference chart

This section provides vehicle wiring information to guide you through the various stages of your installation. Refer to www.directechs.com for additional information.

Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	Ref.
Toyota Prius C (Smart Key) 2016-2019							
SLP	Pink	4	(-)	Steering lock under steering column.	Black or Blue	7	A
PTS	Violet	5	(-)	PTS (Push-to-Start) switch.	Black	10	B
12V	Lt. Blue	16	(+)	OBDII.	Black	16	C
BTX	Black	25	Data	Body ECU on bottom dash fuse box.	White	30	D
BRX	Red	26	Data	Body ECU on bottom dash fuse box.	White	30	D
Parking Lights	Lt. Blue	30	(-)	Body ECU on bottom dash fuse box.	White	30	D
Autolights	Red	28	Cut	Body ECU on bottom dash fuse box.	White	30	D
HS CAN High	Tan	14	Data	Body ECU on bottom dash fuse box.	White	30	D
HS CAN Low	White	13	Data	Body ECU on bottom dash fuse box.	White	30	D

Connecting the module

⚠ Important!

Before connecting the Directed Digital Solutions, it is important to ensure that the proper feature and function programming is selected using the configuration wizard. Visit www.directechs.com to use the latest version of the online tool.

Flashing a module using your computer:
1. **Disconnect** the main module from any (+) 12V power source, then **connect** it to your computer using the **XKLoader2**.
2. Go to **www.directechs.com** using Internet Explorer; the configuration wizard will be displayed automatically.
3. Follow the instructions in the pop up window that will be displayed when the module is detected.

Flashing a module using your smartphone or tablet:
1. **Disconnect** the main module from any (+) 12V power source, then **connect** it to the **XKLoader3**.
2. Launch the **Directechs Mobile** app on your smartphone or tablet.
3. Select **FLASH YOUR MODULE** and follow the on-screen instructions.

When the flashing operation is successful, you can proceed with the instructions below.

Manual or automatic transmission selection

The yellow loop on the Directed Digital Solutions controls which transmission type the unit is configured for. The state of the loop (uncut or cut) when the main module is powered up will determine which type is selected.
*   Uncut (default): Manual transmission.
*   Cut: Automatic transmission.

For safety reasons, all Directed Digital Solutions are shipped ready to use with a manual transmission (the yellow loop is untouched). If the loop is cut after power has been applied, it is necessary to cycle power to the main module (via the white 12-pin main power harness) so the unit will see the state change on the loop and appropriately configure the transmission type.

Ready mode

To successfully remote start a vehicle equipped with a manual transmission, the Ready Mode feature must be enabled before exiting the vehicle. Please refer to the Owner's Guide for more details on this required process.

Additional connections required for vehicles equipped with a manual transmission (if not supported by firmware)

Connection	Description
(-) E-Brake Status Input (Black/White, pin 2)	Must be connected to a working emergency brake in the vehicle. Although most vehicles have simple (-) trigger emergency brake circuits note some vehicles do not and may require unique integration methodologies.
(-) Door Trigger Input (White/Green, pin 10) OR (+) Door Input (Yellow/Green, pin 11)	Must be connected to a working door trigger in the vehicle, which monitors all doors. The unit must monitor the door pins to allow the Ready Mode process to be enabled. **Note**: Some vehicles may require unique integration methodologies for this circuit.
(AC) Tachometer Input (Violet/White, pin 6)	Must be connected to a working tachometer signal in the vehicle (fuel injector, ignition coil, true tach, etc.) and learned successfully to the Directed Digital Solutions.

Note: Refer to www.directechs.com for more information.

Optional sensors

Note: The sensor port is only active on hybrid systems.

The 4-pin sensor port is compatible with a number of different Directed sensors including, but not limited to:
- Shock Sensor – 504D
- Field Disturbance Sensor – 508D
- Ultrasonic Sensor – 509U

Note: In the case of 508D, power and ground must be hardwired to the vehicle – power and ground should **NOT** be obtained from the 4-pin sensor port.

Each sensor will have its own instructions, which must be followed for installation and adjustment.

RF Systems

An RF System consists of one or multiple remotes, a Control Center (antenna), and an antenna cable – various combinations exist. An RF System allows the vehicle owner to control the system with enhanced range. Two-way models are available. Please follow the instructions included with the kit for appropriate installation and programming information.

When flashing the Directed Digital Solutions, make sure to pick the remote you will be using. This way the main module will have the necessary firmware to interact with the remote and Control Center (antenna) combination.

When used in conjunction with SmartStart

Disconnect power from the Directed Digital Solutions before connecting the SmartStart module. Failing to do so could damage main module. To enable D2D communication between the Directed Digital Solutions and the SmartStart one of the following actions must be executed:
- SmartStart with **Loops** – The brown loop must be cut.
- SmartStart with **Pigtails** – The gray wire must be connected to a ground source.
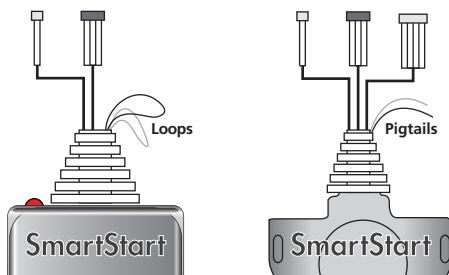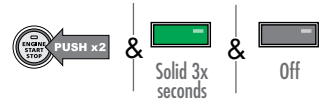
⚠️ **DO NOT** connect the SmartStart 2-pin power harness when using the Directed Digital Solutions. Power and ground will be provided by the D2D connector on main module. Refer to the SmartStart documentation for further details.

Module programming

⚠️ Refer to "LED diagnostics and troubleshooting" on page 36 for more information and for troubleshooting purposes.

To connect the module:

1 Please **ensure** that the vehicle is in a safe location and cannot move forward during programming. For vehicles equipped with a manual transmission, make sure the gearshift lever is in the neutral position.

2 **Connect** all the harnesses to the Directed Digital Solutions, **EXCEPT** the 12-pin main power harness.

Connect all but the 12-pin harness

3 **Connect** the 12-pin main power harness, and wait until the LED turns ON solid red.

Must be connected LAST

Solid

4 **Wait 4 seconds before turning the ignition ON.**
LED flashes orange if OEM remote starter has been detected. See the section "If the Vehicle is Equipped with an OEM Remote Starter" on page 6.

Flashes Orange

5 **Press** the Push-to-Start (PTS) button <u>twice</u> to turn the ignition ON. The green LED turns ON for 3 seconds and shuts OFF.

PUSH x2 & Solid 3x seconds & Off

6 If the LED flashes orange, **press** the programming button 5 times. The LED will turn ON solid orange for 3 seconds, otherwise proceed to the next step.

Flashes orange & Press x5 & Solid 3x seconds

7 **Press** the Push-to-Start (PTS) button <u>once</u> to turn vehicle ignition OFF once the module is successfully programmed.

PUSH x1

8 **Pair** remotes (if applicable). For information on how to pair a specific remote, please refer to its corresponding owner documentation, which can be found inside the product packaging of the complete system or on www.directechs.com.*

Pair remotes*

9 By default, the tachometer is preprogrammed for the vehicle. For instructions on how to program tach, see page 39.

Initialize tachometer

* Your aftermarket remote may differ from the model shown in the illustrations.

You have successfully completed the module programming sequence.

LED diagnostics and troubleshooting

This section provides LED diagnostics and troubleshooting information to guide you through the various stages of your installation.

Module programming

LED	Description	Troubleshooting
Off	Module has no power.	Make sure the D2D harness is connected and that 12 Volt is present between the red and black wires. If 12 Volt is present, the module may be defective.
Solid red	Waiting to begin the programming sequence.	Ensure the correct programming procedure is being followed.
Flashes red & green	Initialization failed.	Reset the module and complete the programming again. If the issue persists, please contact Technical Support.
Solid orange	Transponder functions were skipped.	(If compatible) when the RXT mode is not desired or convenience features are needed, please reset and reprogram the module.
Flashes green	All required CAN networks has been detected.	Normal operation.
Flashes orange	1 of 2 CAN networks has been detected.	Normal operation.
Flashes orange slowly	Key2GO initiated.	Please follow the steps indicated in "Module programming" on page 35 to complete the Key2GO programming.
Solid green x 3 secs	Module was successfully programmed with all functions.	Normal operation.
Solid orange x 3 secs	Module was successfully programmed without transponder functions.	Normal operation.

Module programming – Error codes

LED	Description	Troubleshooting
Flashes red x 1	CAN2 not detected.	Check the CAN2 Orange/Green and Orange/Brown wire connections. Wake up the data bus by turning the ignition on and try again. If your installation does not require this connection, skip this step by pressing the programming button 5 times.
Flashes red x 1	J1850 not detected.	Check the J1850 wire connection. Wake up the data bus by turning the ignition on and try again.
Flashes red x 2	CAN1 not detected.	Check the CAN1 Tan and Tan/Black wire connections. Wake up the data bus by turning the ignition on and try again. If your installation does not require this connection, skip this step by pressing the programming button 5 times.
Flashes red x 3	Bypass data not detected.	Check the bypass line connection. If more than one wire is used, make sure they are not inverted. Ensure the vehicle still operates correctly using the factory key.
Flashes red x 4	Bypass processing error.	The bypass calculation failed. Reset the module and try again. If the condition persists, please contact Technical Support.
Flashes red x 5	ISO 1 not detected.	The Yellow/Black wire did not detect the expected signal. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" on page 9 to check the connections.
Flashes red x 6	ISO 2 not detected.	The Orange/Black wire did not detect the expected signal. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" on page 9 to check the connections.
Flashes red x 7	MUX not detected.	The Violet/Green or Violet/Brown wire did not detect the expected voltage value. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" on page 9 to check the connections.

External module synchronization

LED	Description	Troubleshooting
(Flashes red, red, then orange) x 10	OBDII feature not supported.	The diagnostic data bus was not detected, therefore the SmartStart features will be limited.

Active Ground When Running (Status)

LED	Description	Troubleshooting
Flashes green	Ground When Running (Status) command received.	The module has initialized the remote start sequence.
Flashes red & orange	Ignition ON command received.	The module has received the Ignition ON command and is processing the remote start sequence.
Flashes green quickly	Start ON command received.	The module has received the Start ON command and is processing the remote start sequence.
Flashes red x 10	PTS shutdown error.	The PTS output from the module was not activated due to safety protection.
Flashes red x 21	CAN bus incorrectly detected.	Verify the CAN1 and CAN2 connections. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" on page 9 to check the connections.

Commands

LED	Description	Troubleshooting
Flashes orange x 1	LOCK command received.	
Flashes orange x 2	UNLOCK command received.	
Flashes orange x 3	TRUNK command received.	If the bypass module fails to flash, it did not receive the signal.
Flashes orange x 4	AUX1 command received.	Commands can come from RF or D2D.
Flashes orange x 5	AUX2 command received.	
Flashes orange x 6	AUX3 command received.	

Shutdown codes

LED	Description	Troubleshooting
Flashes green x 1	Takeover successful.	Normal operation.
Flashes red x 1	Runsafe was not disabled.	No UNLOCK command was received prior to opening the door, or the 45 second timer expired in takeover mode.
Flashes red x 2	Brake was not detected.	The brakes were not detected, which prevents the system from shutting down the vehicle.
Flashes red x 3	Smart key was not detected.	The smart key was not detected, which prevents the system from shutting down the vehicle.
Flashes red x 4	Speed was detected.	The vehicle was detected as moving, which prevents the system from shutting it down.

Analog error codes

LED	Description	Troubleshooting
Flashes red, green & orange	DEI feature error.	A feature config file mismatch was detected. Please contact Technical Support.

Soft reset

A module reset will only erase the steps performed in "Module programming" on page 35. The firmware and settings flashed to the module will not be affected.

1	If required for your installation, **connect** all the harnesses to the Directed Digital Solutions, **EXCEPT** the 12-pin main power harness. **Press** and **hold** the programming button, then **connect** the 12-pin harness to the module.	
2	**Wait** 3 seconds until the LED turns ON solid orange then **release** the programming button. The LED turns ON solid red.	
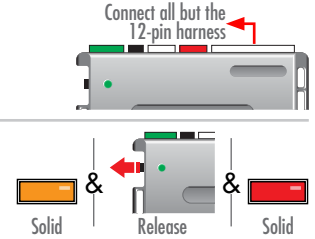
Hard reset

Warning Against Executing a Hard Reset!
A hard reset will revert the flashed firmware back to its default settings. Depending on the installation, some settings may need to be reconfigured. Connect your module to a computer and use the web configuration tool to edit its programmable features.

1	If required for your installation, **connect** all the harnesses to the Directed Digital Solutions, **EXCEPT** the 12-pin main power harness. **Press** and **hold** the programming button, then **connect** the 12-pin harness to the module.	
2	After 3 seconds the LED turns ON solid orange. **Keep holding** the programming button until the LED flashes red, then orange slowly.	
3	**Release** the programming button. The LED turns ON solid red.	
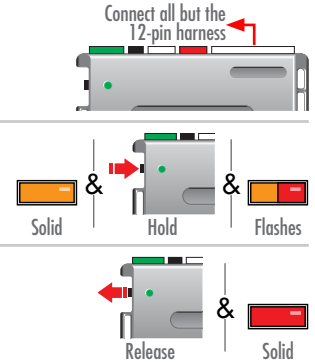
Learning the Tach (not needed with Virtual Tach)

Tach comes preprogrammed, therefore learning is not required; however, it can be readjusted with the following operations:
1. Start the vehicle using the key.
2. Within 5 seconds, press and hold the Control Center* (antenna) or the main module programming button, until the LED on the Control Center (antenna) or the main module turns ON solid.
3. Release the button. Tachometer value is now stored in memory.
If the LED does not turn ON solid, find an alternate tach source.

* If the Control Center (antenna) was not included in your kit, the tach can be programmed using the programming button directly on the main module.

Note: When the tachometer is programmed, the main module automatically enters the Tachometer engine checking mode.

Initializing Virtual Tach (not needed with hardwired or data tach applications)

To program Virtual Tach:
1. After the install is complete, remote start the engine. The programming operation may require 3 cranks of the starter before the engine starts and runs. Do not turn off the remote start if this happens, it is a normal programming operation.
2. Once the engine begins running, let it run for at least 30 seconds.
3. Using the Remote, send the Remote start command to turn remote start off. Virtual Tach is programmed. To reset Virtual Tach, a module reset must be done.

Note: Virtual Tach cannot be used in Manual Transmission Mode. It is also not recommended for diesel trucks.

Virtual Tach handles disengaging the starter motor during remote starting – it does not address over-rev. If the customer wants to have the over-rev protection capability, the tach wire or data tach must be used.

Important! After successfully learning Virtual Tach, a small minority of vehicle starters may over crank or under crank during remote start. Use the VirtualTach Fine tune feature in the configuration wizard to adjust the starter output time in 50mS increments to compensate for such an occurrence.

Limited lifetime consumer warranty

Directed Electronics. ("Directed") promises to the original purchaser to repair or replace (at Directed's election) with a comparable reconditioned model any Directed unit (hereafter the "unit"), excluding without limitation the siren, the remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during the lifetime of the vehicle provided the following conditions are met: the unit was purchased from an authorized Directed dealer, the unit was professionally installed and serviced by an authorized Directed dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorized Directed dealer; and the unit is returned to Directed, shipping prepaid with a legible copy of the bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number and address; the authorized dealers name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle; vehicle license number and vehicle identification number. All components other than the unit, including without limitation the siren, the remote transmitters and the associated sensors and accessories, carry a one-year warranty from the date of purchase of the same. ALL PRODUCTS RECEIVED BY DIRECTED FOR WARRANTY REPAIR WITHOUT PROOF OF PURCHASE FROM AN AUTHORIZED DEALER WILL BE DENIED. This warranty is non-transferable and is automatically void if: the unit's date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. Directed, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED; AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECTED DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. DIRECTED SECURITY SYSTEMS, INCLUDING THIS UNIT, ARE DETERRENTS AGAINST POSSIBLE THEFT. DIRECTED IS NOT OFFERING A GUARANTEE OR INSURANCE AGAINST VANDALISM, DAMAGE OR THEFT OF THE AUTOMOBILE, ITS PARTS OR CONTENTS; AND HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, LIABILITY FOR THEFT, DAMAGE AND/OR VANDALISM. THIS WARRANTY DOES NOT COVER LABOR COSTS FOR MAINTENANCE, REMOVAL OR REINSTALLATION OF THE UNIT OR ANY CONSEQUENTIAL DAMAGES OF ANY KIND. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE UNIT. DIRECTED SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGE TO VEHICLE, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE, THE MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR REPAIR THE CONTROL MODULE SUBJECT TO THE CONDITIONS AS DESCRIBED HEREIN. THIS WARRANTY IS VOID IF THE UNIT HAS NOT BEEN PURCHASED FROM DIRECTED, OR AN AUTHORIZED DIRECTED DEALER, OR IF THE UNIT HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLIGENCE, ACTS OF GOD, NEGLECT, IMPROPER SERVICE, OR OTHER CAUSES NOT ARISING OUT OF DEFECT IN MATERIALS OR CONSTRUCTION.

Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights that vary from State to State.

This warranty is only valid for sale of product(s) within the United States of America and in Canada. Product(s) sold outside of the United States of America or Canada are sold "AS-IS" and shall have NO WARRANTY, express or implied.

For further details relating to warranty information of Directed products, please visit the support section of Directed's website at: www.directed.com.

This product may be covered by a Guaranteed Protection Plan ("GPP"). See your authorized Directed dealer for details of the plan or call Directed Customer Service at 1-800-876-0800.

(920-10011-01 2011-06)

Quick Reference Guide

Sending commands to your vehicle

Whether you want to remote start the engine, lock/unlock the doors or pop the trunk, there are 3 possible ways you can send commands to your vehicle, using the:

- Factory remote.
- Aftermarket remote.
- Directed SmartStart application via your smartphone.

If applicable, you can also start the engine remotely by pressing the Lock button 3 times quickly on your factory remote.

Vehicle takeover

No vehicle takeover available for push-to-start models. The engine will stop when a door is opened.

Pit stop/idle mode

1	**Stop** the vehicle in a safe parking spot and **put** the gear in Park (P).	Put gear in Park **P**
2	**Press** the Remote Start button on the transmitter.* The parking lights will flash once to indicate the vehicle is now in Pit Stop Mode.	Press Remote Start button* & Parking lights flash x1
3	It is safe to **leave** the engine running and **exit** the vehicle with the factory remote in hand. **Note**: We recommend that you always **lock** the doors of your vehicle when leaving it unattended.	Exit vehicle with remote
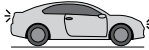
* Icon and remote appearance may differ depending on the model purchased.

List of available commands

Note that the information below is for many Viper, Clifford, Python, Autostart and AstroStart models. Icons and commands may differ depending on the model and options purchased. Refer to your authorized installation center for more specific information.

Button(s)	Actions
🔒	**Press** & **hold** for 1 second to lock.
🔓	**Press** & **hold** for 1 second to unlock.
⊙ ⚡ ⚊*	**Press** & **hold** for 1 second to remote start.
(AUX) 🚗 🔑*	**Press** & **hold** for 5 seconds to activate the trunk release (optional).

* Icon and remote appearance may differ depending on the model purchased.

SmartStart compatible

This system is compatible with Directed SmartStart. For a complete list of supported features, please visit www.mysmartstart.com.

What is SmartStart?

Now you can remote start, lock and unlock your car just by pushing a button on your smartphone; using the SmartStart App from Directed, the leader in vehicle security and remote start. The simple graphical interface gives you control over the following features of your installed remote start or security with remote start system:

- Lock/Arm
- Unlock/Disarm
- Remote Car Starter
- Trunk Release
- Panic
- Aux Channels

You can also control multiple vehicles – great for families – and assign more than one user to control a vehicle. It's easy with SmartStart! But, this is only the beginning! SmartStart is loaded with additional features including GPS tracking, SmartSchedule, vehicle status, roadside assistance, parked car finder and more.

The application enables a "Cloud-Connected Car" like never before, providing 2-way interaction with your vehicle. Connectivity is managed through the Directed Cloud Services (DCS) network linking car, app, end user, and the Internet.

For more information, visit www.mysmartstart.com.

Notes

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