

Automotive Data Solutions Inc.

# INSTALL GUIDE ADS-AL(DL)-SUB-EN

# SUB

**AVAILABLE FOR: ADS-AL CA**

*Rev. Date: September 24, 2013*

*Doc. No.: ##12174##*

VERSION FRANÇAISE DISPONIBLE EN LIGNE AU [WWW.IDATALINK.COM](http://WWW.IDATALINK.COM)

PLEASE VISIT [WWW.IDATALINK.COM/SUPPORT](http://WWW.IDATALINK.COM/SUPPORT) FOR COMPLETE PRODUCT DETAILS

The brand names and logos found in this guide are property of their respective owners. Automotive Data Solutions Inc. © 2013

## SUBARU SCION

**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

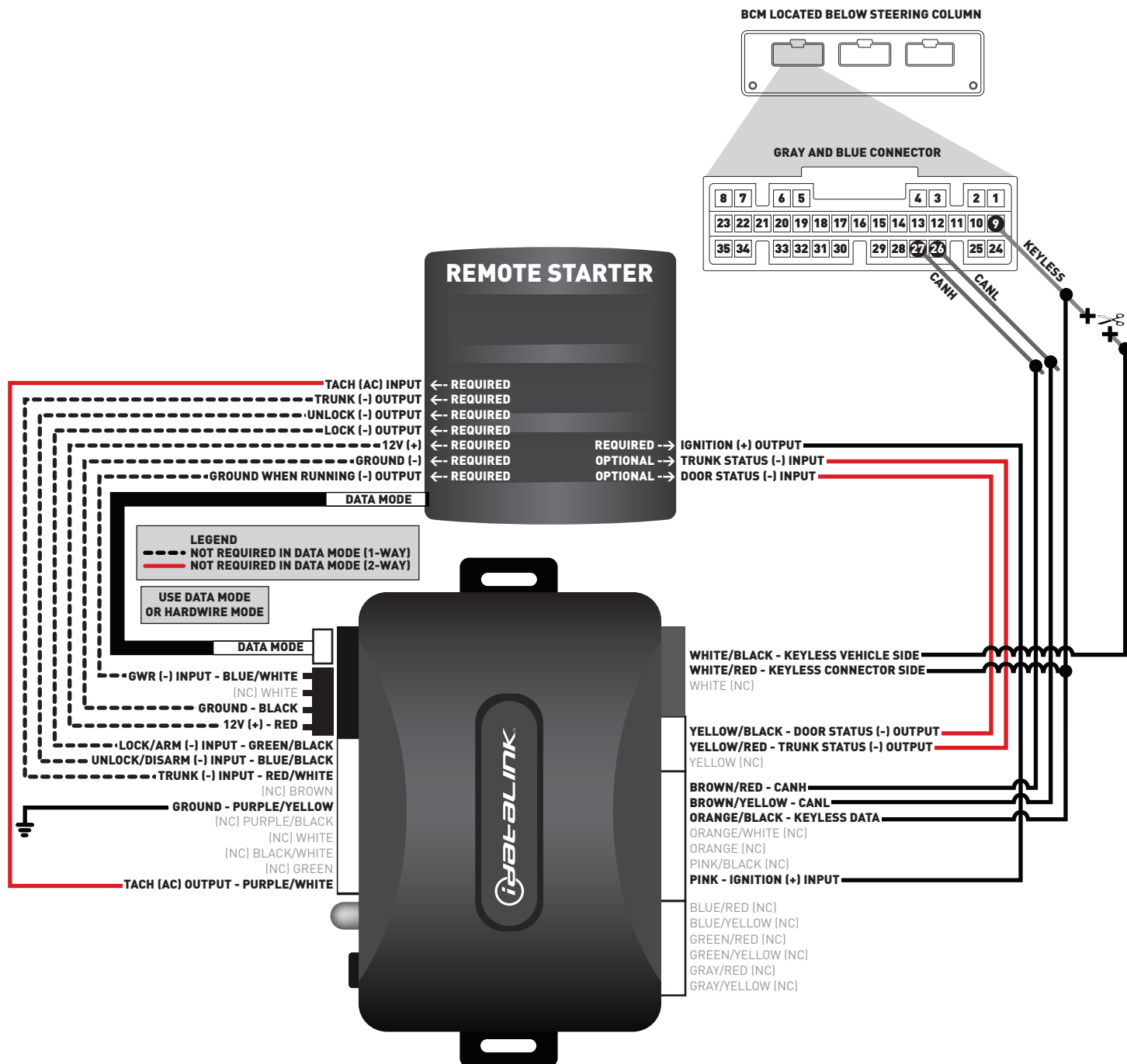
| MAKE   | MODEL                 | YEAR  | INSTALL TYPE | FEATURES      |                  |           |             |                 |                     |                   |                    |                     |                           |
|--------|-----------------------|-------|--------------|---------------|------------------|-----------|-------------|-----------------|---------------------|-------------------|--------------------|---------------------|---------------------------|
|        |                       |       |              | ARM OEM ALARM | DISARM OEM ALARM | DOOR LOCK | DOOR UNLOCK | PRIORITY UNLOCK | TRUNK/HATCH RELEASE | TACHOMETER OUTPUT | DOOR STATUS OUTPUT | TRUNK STATUS OUTPUT | BRAKE PEDAL STATUS OUTPUT |
| SCION  | FR-S STD key*         | 13    | 4            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | BRZ STD key*          | 13    | 4            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
| SUBARU | Forester STD key*     | 09-13 | 2            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Forester STD key*     | 14    | 3            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Impreza STD key*      | 08-11 | 2            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Impreza STD key*      | 12-13 | 3            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Legacy STD key*       | 05-09 | 1            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Legacy STD key*       | 10-13 | 3            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Outback STD key*      | 05-09 | 1            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Outback STD key*      | 10-13 | 3            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | Tribeca STD key*      | 06-13 | 1            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | WRX/STi STD key*      | 12-13 | 2            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |
|        | XV Crosstrek STD key* | 13    | 3            | •             | •                | •         | •           | •               | •                   | •                 | •                  | •                   | •                         |

\*IMPORTANT: The Transponder Bypass feature is available using a second module flashed with the TB-SUB firmware.  
The TB-SUB firmware has an extended vehicle coverage.

### 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 |
|--------|---------|-------|------------------|----------------|-----------------|----------------|----------|--------------|----------|----------------------------|-------------------|
| SUBARU | Legacy  | 05-09 | CanH             | ~              | Gray/Blue       | 35 pin         | 27       | Pink         | [DATA]   | BCM, below steering column | ~                 |
|        |         |       | CanL             | ~              | Gray/Blue       | 35 pin         | 26       | Purple       | [DATA]   | BCM, below steering column | ~                 |
|        |         |       | Keyless Data     | ~              | Gray/Blue       | 35 pin         | 09       | Yellow/Green | [DATA]   | BCM, below steering column | ~                 |
|        | Outback | 05-09 | CanH             | ~              | Gray/Blue       | 35 pin         | 27       | Pink         | [DATA]   | BCM, below steering column | ~                 |
|        |         |       | CanL             | ~              | Gray/Blue       | 35 pin         | 26       | Purple       | [DATA]   | BCM, below steering column | ~                 |
|        |         |       | Keyless Data     | ~              | Gray/Blue       | 35 pin         | 09       | Yellow/Green | [DATA]   | BCM, below steering column | ~                 |
|        | Tribeca | 06-13 | CanH             | ~              | Gray/Blue       | 35 pin         | 27       | Pink         | [DATA]   | BCM, below steering column | ~                 |
|        |         |       | CanL             | ~              | Gray/Blue       | 35 pin         | 26       | Purple       | [DATA]   | BCM, below steering column | ~                 |
|        |         |       | Keyless Data     | ~              | Gray/Blue       | 35 pin         | 09       | Yellow/Green | [DATA]   | BCM, below steering column | ~                 |

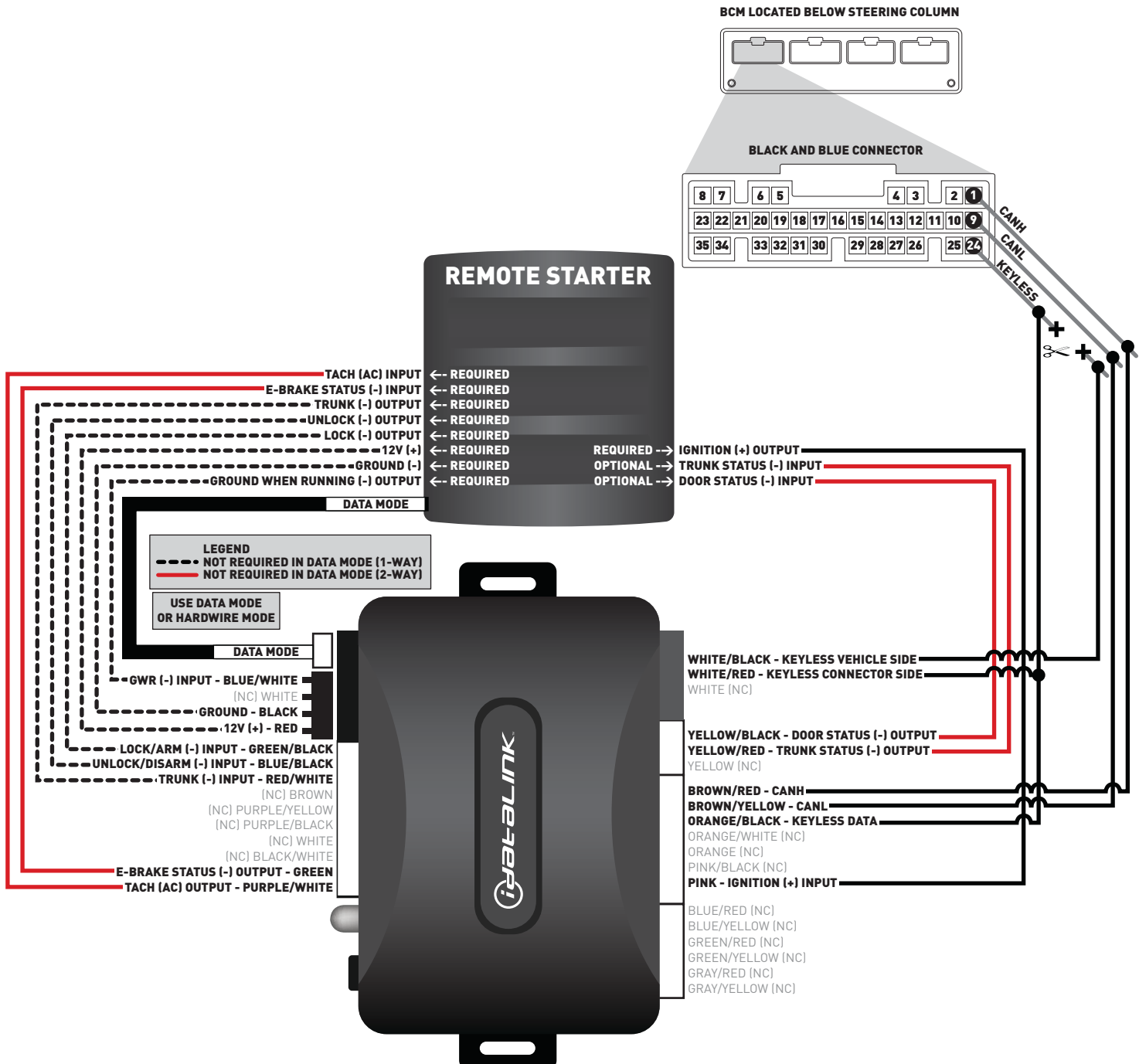
### TYPE 1 - WIRING DIAGRAM



### TYPE 2 - WIRE CROSS REFERENCE CHART

| MAKE   | MODEL    | YEAR  | WIRE DESCRIPTION | CONNECTOR NAME | CONNECTOR COLOR | CONNECTOR TYPE | POSITION | WIRE COLOR   | POLARITY | MODULE LOCATION            | COMPONENT LOCATOR |
|--------|----------|-------|------------------|----------------|-----------------|----------------|----------|--------------|----------|----------------------------|-------------------|
| SUBARU | Forester | 09-13 | CanH             | ~              | Black/Blue      | 35 pin         | 01       | Pink         | [DATA]   | BCM, below steering column | ~                 |
|        |          |       | CanL             | ~              | Black/Blue      | 35 pin         | 09       | Blue         | [DATA]   | BCM, below steering column | ~                 |
|        |          |       | Keyless Data     | ~              | Black/Blue      | 35 pin         | 24       | Gray/Red     | [DATA]   | BCM, below steering column | ~                 |
|        | Impreza  | 08-11 | CanH             | ~              | Black/Blue      | 35 pin         | 01       | Pink         | [DATA]   | BCM, below steering column | ~                 |
|        |          |       | CanL             | ~              | Black/Blue      | 35 pin         | 09       | LtGreen/Red  | [DATA]   | BCM, below steering column | ~                 |
|        |          |       | Keyless Data     | ~              | Black/Blue      | 35 pin         | 24       | Yellow/Green | [DATA]   | BCM, below steering column | ~                 |
|        | WRX/STi  | 12-13 | CanH             | ~              | Black/Blue      | 35 pin         | 01       | Pink         | [DATA]   | BCM, below steering column | ~                 |
|        |          |       | CanL             | ~              | Black/Blue      | 35 pin         | 09       | LtGreen/Red  | [DATA]   | BCM, below steering column | ~                 |
|        |          |       | Keyless Data     | ~              | Black/Blue      | 35 pin         | 24       | Yellow/Green | [DATA]   | BCM, below steering column | ~                 |

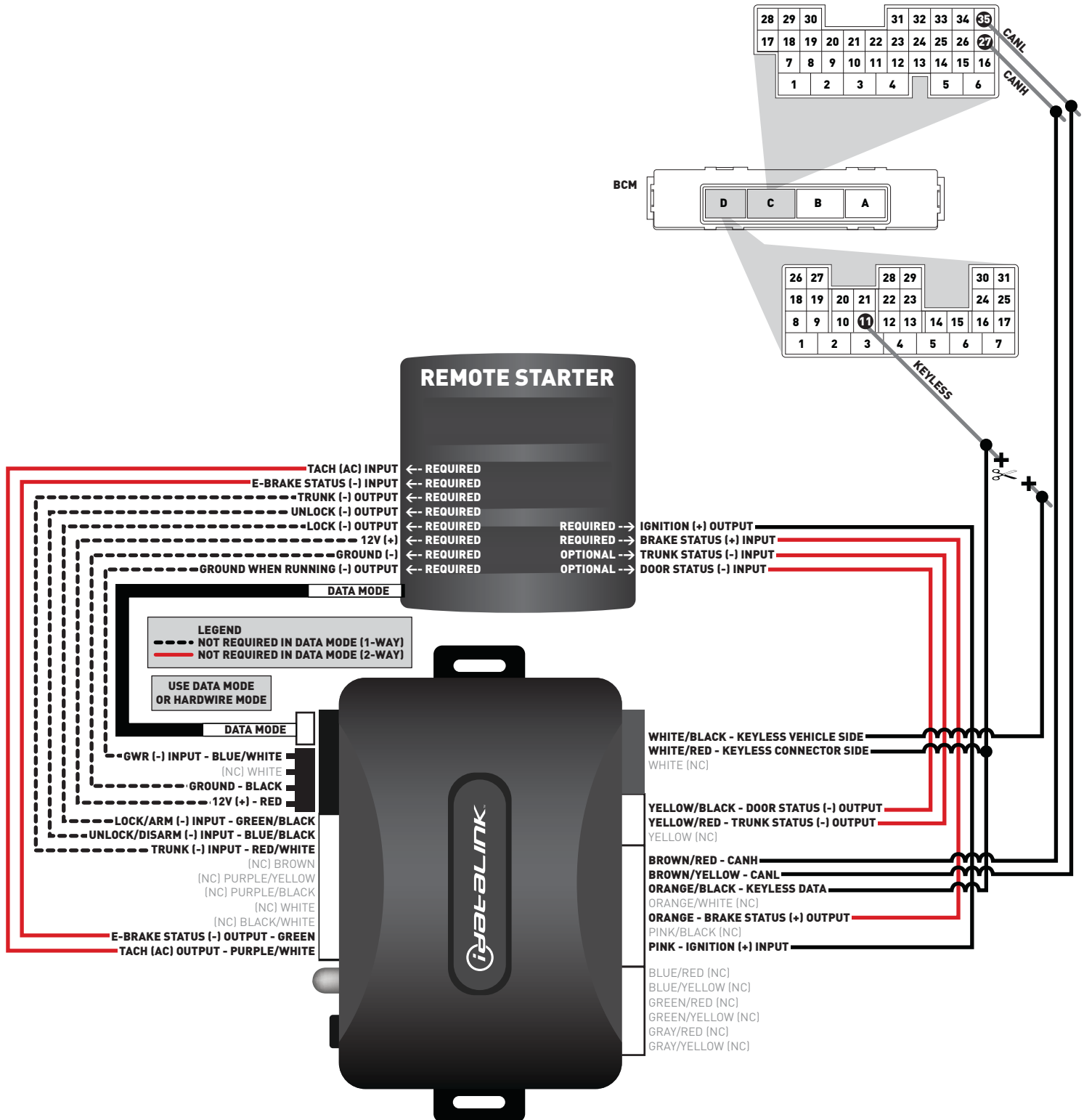
### TYPE 2 - WIRING DIAGRAM



### TYPE 3 - WIRE CROSS REFERENCE CHART

| MAKE   | MODEL        | YEAR  | WIRE DESCRIPTION | CONNECTOR NAME | CONNECTOR COLOR | CONNECTOR TYPE | POSITION | WIRE COLOR | POLARITY | MODULE LOCATION                   | COMPONENT LOCATOR |
|--------|--------------|-------|------------------|----------------|-----------------|----------------|----------|------------|----------|-----------------------------------|-------------------|
| SUBARU | Forester     | 14    | Keyless          | D              | ~               | 31 pin         | 11       | Green      | (DATA)   | BCM behind fusebox                | ~                 |
|        |              |       | CanL             | C              | ~               | 35 pin         | 35       | Blue       | (DATA)   | BCM behind fusebox                | ~                 |
|        |              |       | CanH             | C              | ~               | 35 pin         | 27       | Red        | (DATA)   | BCM behind fusebox                | ~                 |
|        | Impreza      | 12-13 | Keyless          | D              | ~               | 31 pin         | 11       | Red        | (DATA)   | BCM behind fusebox                | ~                 |
|        |              |       | CanL             | C              | ~               | 35 pin         | 35       | Blue       | (DATA)   | BCM behind fusebox                | ~                 |
|        |              |       | CanH             | C              | ~               | 35 pin         | 27       | Red        | (DATA)   | BCM behind fusebox                | ~                 |
|        | Legacy       | 10-13 | Keyless          | D              | ~               | 31 pin         | 11       | Yellow     | (DATA)   | BCM right side of steering column | ~                 |
|        |              |       | CanL             | C              | ~               | 35 pin         | 35       | Blue       | (DATA)   | BCM right side of steering column | ~                 |
|        |              |       | CanH             | C              | ~               | 35 pin         | 27       | Red        | (DATA)   | BCM right side of steering column | ~                 |
|        | Outback      | 10-13 | Keyless          | D              | ~               | 31 pin         | 11       | Yellow     | (DATA)   | BCM right side of steering column | ~                 |
|        |              |       | CanL             | C              | ~               | 35 pin         | 35       | Blue       | (DATA)   | BCM right side of steering column | ~                 |
|        |              |       | CanH             | C              | ~               | 35 pin         | 27       | Red        | (DATA)   | BCM right side of steering column | ~                 |
|        | XV Crosstrek | 13    | Keyless          | D              | ~               | 31 pin         | 11       | Red        | (DATA)   | BCM behind fusebox                | ~                 |
|        |              |       | CanL             | C              | ~               | 35 pin         | 35       | Blue       | (DATA)   | BCM behind fusebox                | ~                 |
|        |              |       | CanH             | C              | ~               | 35 pin         | 27       | Red        | (DATA)   | BCM behind fusebox                | ~                 |

### TYPE 3 - WIRING DIAGRAM

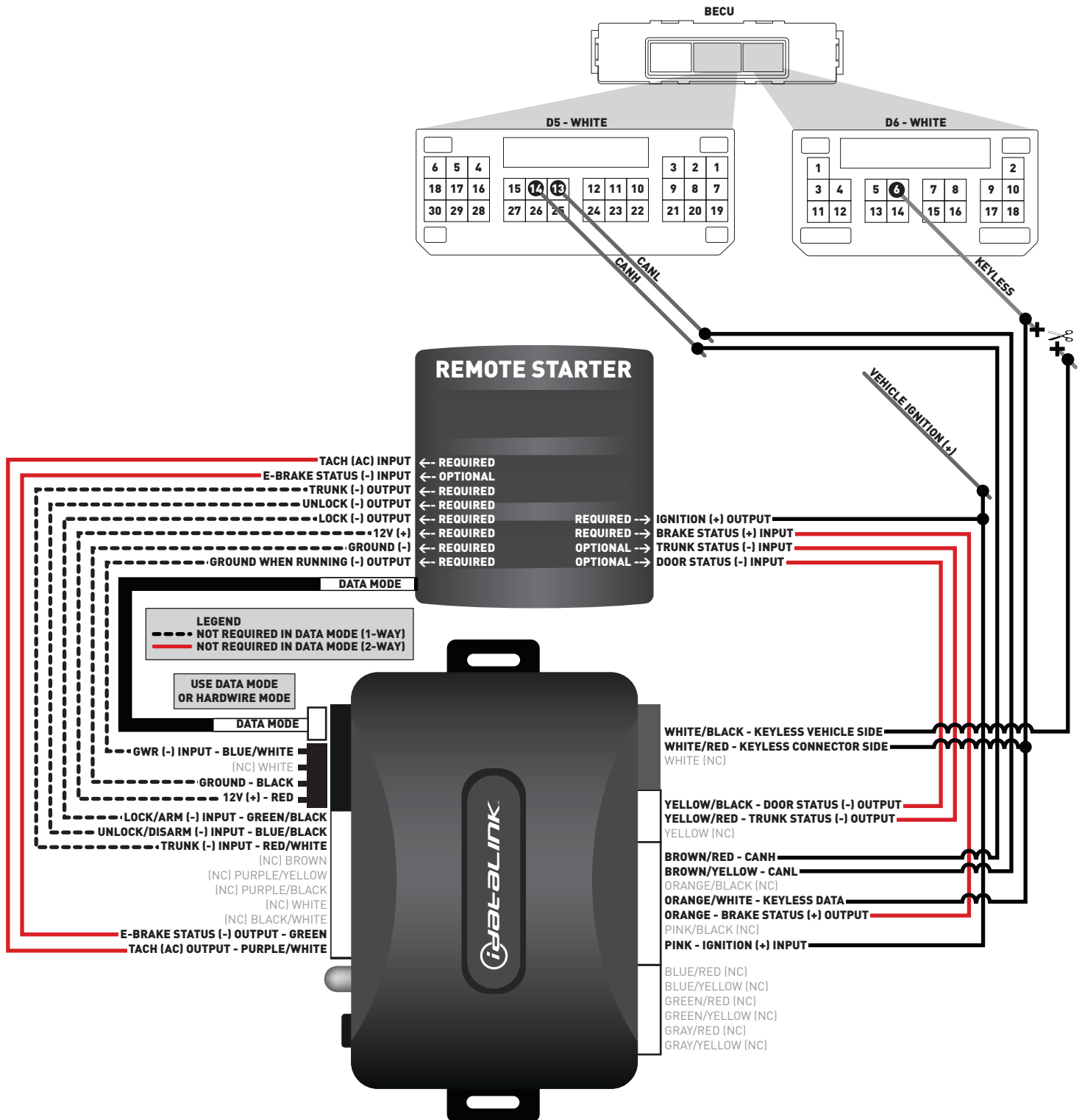




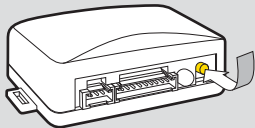
### TYPE 4 - WIRE CROSS REFERENCE CHART

| MAKE   | MODEL | YEAR | WIRE DESCRIPTION | CONNECTOR NAME | CONNECTOR COLOR | CONNECTOR TYPE | POSITION | WIRE COLOR | POLARITY | MODULE LOCATION             | COMPONENT LOCATOR |
|--------|-------|------|------------------|----------------|-----------------|----------------|----------|------------|----------|-----------------------------|-------------------|
| SCION  | FR-S  | 13   | CanH             | D5             | White           | 30 pin         | 14       | Pink       | (DATA)   | BECU, below steering column | ~                 |
|        |       |      | CanL             | D5             | White           | 30 pin         | 13       | LtGreen    | (DATA)   | BECU, below steering column | ~                 |
|        |       |      | Keyless Data     | D6             | White           | 18 pin         | 06       | Purple     | (DATA)   | BECU, below steering column | ~                 |
| SUBARU | BRZ   | 13   | CanH             | D5             | White           | 30 pin         | 14       | Pink       | (DATA)   | BECU, below steering column | ~                 |
|        |       |      | CanL             | D5             | White           | 30 pin         | 13       | LtGreen    | (DATA)   | BECU, below steering column | ~                 |
|        |       |      | Keyless Data     | D6             | White           | 18 pin         | 06       | Purple     | (DATA)   | BECU, below steering column | ~                 |

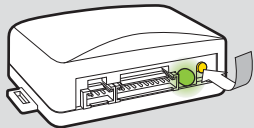
### TYPE 4 - WIRING DIAGRAM



## INSTALLATION MODE SELECTION

- 1**  Press and release programming button to select installation mode.

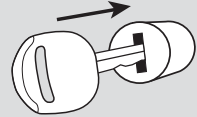
 LED flashes (1X) once = DATA MODE  
LED flashes (2X) twice = STANDARD HARDWARE MODE

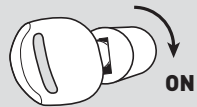
- 2**  Press and hold programming button until LED turns solid GREEN to register selection.

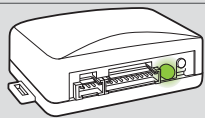


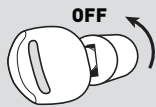
After registration, follow Factory Reset Procedure to change installation mode and restart this procedure.

## MODULE PROGRAMMING PROCEDURE

- 1**  Insert key into ignition.

- 2**  Turn key to ON position.

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

- 4**  Turn key to OFF position.

- 5** Module Programming Procedure completed.

## IDENTIFY VEHICLE YEAR

1

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

● 4 3 A 5 Y 1 N 5 T **A** L 8 D 5 R O X ●

2

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

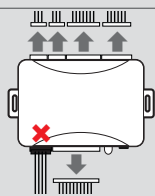
|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| L → 1990 | S → 1995 | Y → 2000 | 5 → 2005 | A → 2010 |
| M → 1991 | T → 1996 | 1 → 2001 | 6 → 2006 | B → 2011 |
| N → 1992 | V → 1997 | 2 → 2002 | 7 → 2007 | C → 2012 |
| P → 1993 | W → 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        |

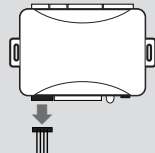
## FACTORY RESET PROCEDURE

1



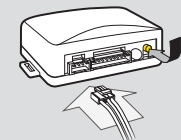
**DISCONNECT** all connectors from module **EXCEPT** the black 4-PIN standard or optional data connector.

2



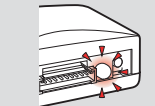
**DISCONNECT** black 4-PIN standard or optional data connector.

3



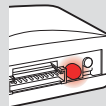
**PRESS AND HOLD** programming button while connecting either 4-PIN standard or optional data connector.

4



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

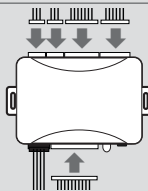
5



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.