

Automotive Data Solutions Inc.

# INSTALL GUIDE

## ADS-AL(DL)-CH4-EN

# CH4

**AVAILABLE FOR: ADS-AL CA**

*Rev. Date: October 28, 2015*

*Doc. No.: ##23958##*

U.S. PATENT NO. 8,856,780

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

The brand names and logos found in this guide are property of their respective owners. Automotive Data Solutions Inc. © 2015

**CHRYSLER DODGE**

**Jeep**



**RAM**

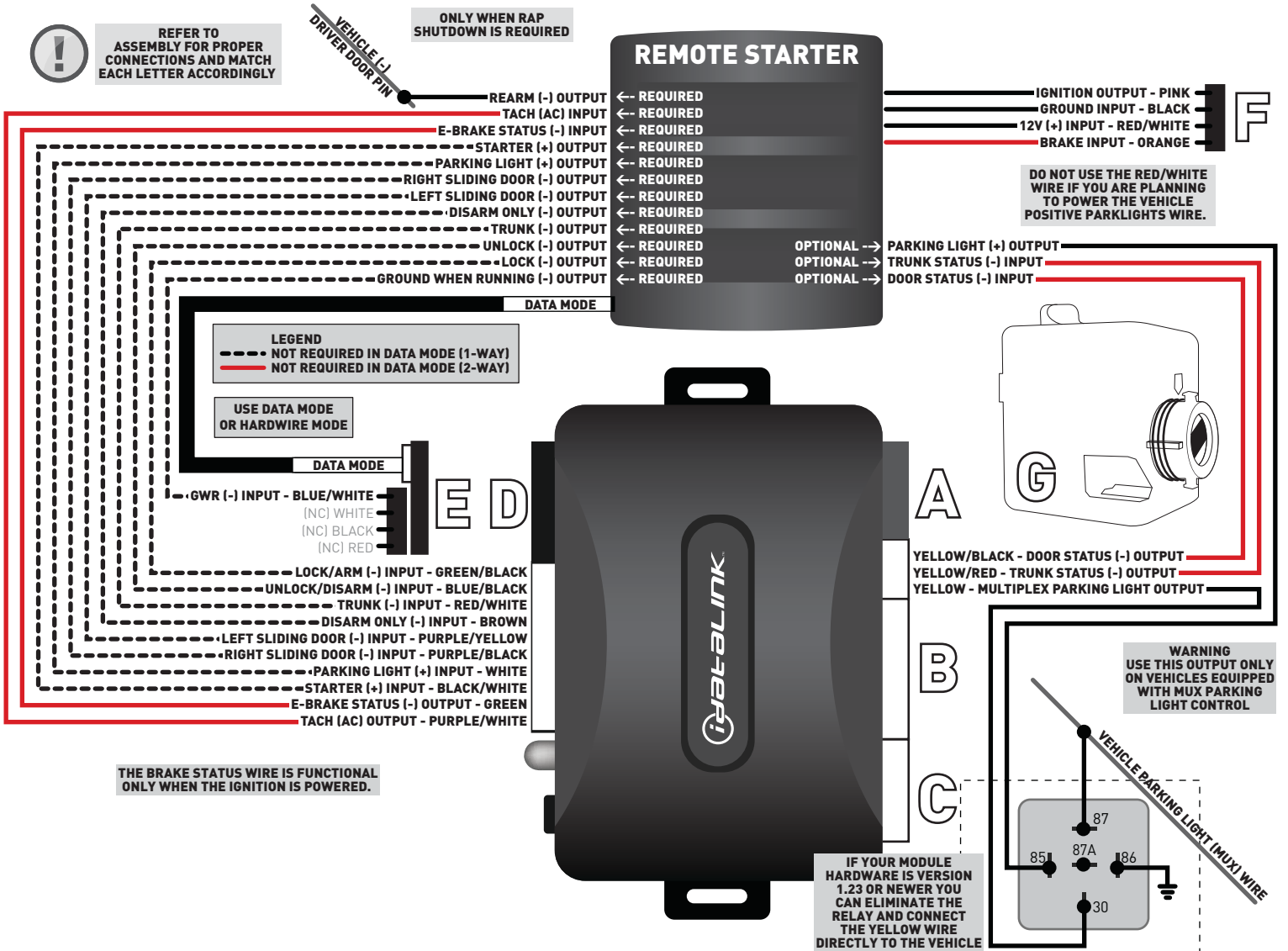
**NOTICE:** The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. This guide has been written for properly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

### INSTALL TYPE SELECTION

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES																			
				DATA IMMOBILIZER BYPASS	PRIORITY UNLOCK	DOOR LOCK	DOOR UNLOCK	ARM OEM ALARM	DISARM OEM ALARM	TRUNK/HATCH RELEASE	POWER LIFTGATE	POWER SLIDING DOOR (L)	POWER SLIDING DOOR (R)	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	RAP SHUTDOWN CTRL	BRAKE PEDAL STATUS OUTPUT	E-BRAKE OUTPUT	TACHOMETER OUTPUT	DATA/MUX IGNITION CTRL	SECURE TAKEOVER	PARKING LIGHT CTRL	
CHRYSLER	300	08-10	1 or 2	•	•	•	•	•	•	•								•	•	•	•	•	•
	Town & Country	08-14	1 or 2	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
DODGE	Caravan	08-10	1 or 2	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
	Challenger	08-14	1 or 2	•	•	•	•	•	•				•	•				•	•	•	•	•	•
	Charger	08-10	1 or 2	•	•	•	•	•	•	•								•	•	•	•	•	•
	Durango	11-13	1 or 2	•	•	•	•	•	•					•				•	•	•	•	•	•
	Grand Caravan	08-16	1 or 2	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
	Journey	09-10	1 or 2	•	•	•	•	•	•	•					•	•		•	•	•	•	•	•
	Magnum	08	1 or 2	•	•	•	•	•	•	•								•	•	•	•	•	•
	Ram 1500	09	1 or 2	•	•	•	•	•	•						•			•	•	•	•	•	•
JEEP	Commander	08-10	1 or 2	•	•	•	•	•	•	•								•	•	•	•	•	
	Grand Cherokee	08-13	1 or 2	•	•	•	•	•	•	•								•	•	•	•	•	
RAM	C/V	10-13	1 or 2	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
	1500	10-12	1 or 2	•	•	•	•	•	•					•				•	•	•	•	•	
	2500	10-12	1 or 2	•	•	•	•	•	•					•				•	•	•	•	•	
	3500	10-12	1 or 2	•	•	•	•	•	•					•				•	•	•	•	•	
	4500	11-12	1 or 2	•	•	•	•	•	•					•				•	•	•	•	•	
	5500	11-12	1 or 2	•	•	•	•	•	•					•				•	•	•	•	•	
VOLKSWAGEN	Routan	09-12	1 or 2	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•

Visit our website for advanced features.

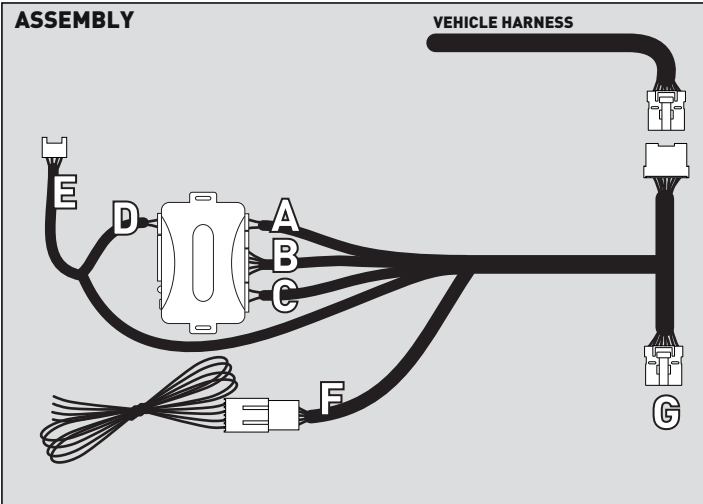
### TYPE 1 - WIRING DIAGRAM



THE BRAKE STATUS WIRE IS FUNCTIONAL ONLY WHEN THE IGNITION IS POWERED.

#### ADS-HRN CHTIP ASSEMBLY

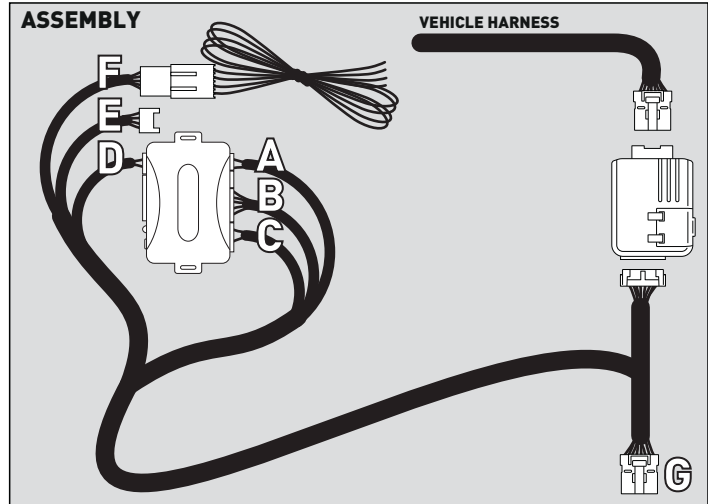
#### SOLD SEPARATELY



**OR**

#### ADS-HRN CH4 ASSEMBLY

#### SOLD SEPARATELY



### TYPE 2 - WIRE CROSS REFERENCE CHART - 1 OF 3

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
CHRYSLER	300	08-10	CanH	~	~	12 pin	5	White/Black	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	Black	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	At switch or driver kick panel	~
	Town & Country	08-10	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~
	Town & Country	11-14	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Green	MUX	Parking light switch	~
DODGE	Caravan	08-10	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~
	Challenger	08-14	CanH	~	~	12 pin	5	White/Black	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~
	Charger	08-10	CanH	~	~	12 pin	5	White/Black	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	Black	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	At switch or driver kick panel	~
	Durango	11-13	CanH	~	~	12 pin	5	White/LtGreen	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple/Gray	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White	MUX	Parking light switch	~
	Grand Caravan	08-10	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~
Grand Caravan	11-16	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~	
		CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~	
		Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~	
		Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~	
		Parking Light	~	~	~	~	White/Green	MUX	Parking light switch	~	

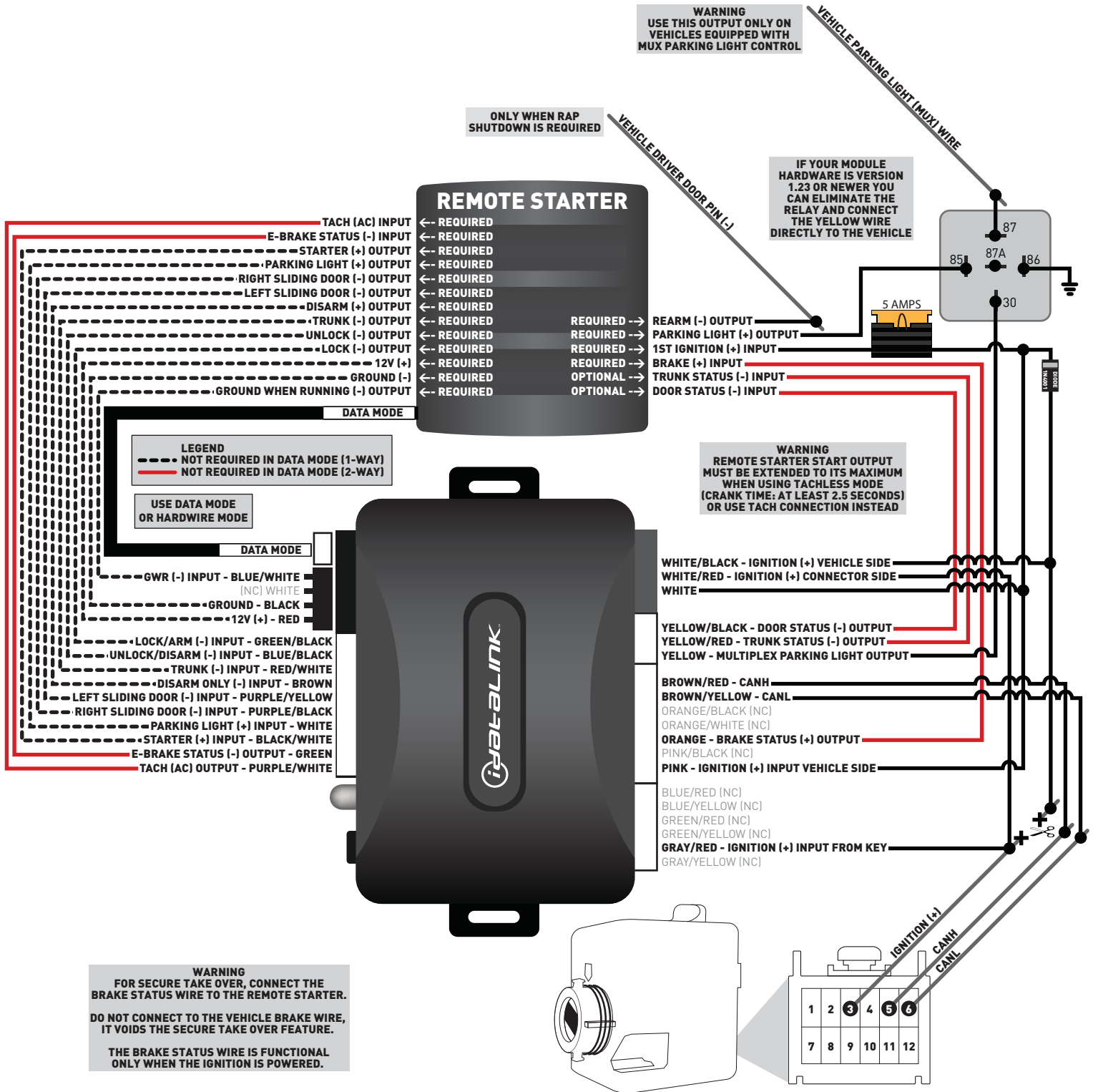
### TYPE 2 - WIRE CROSS REFERENCE CHART - 2 OF 3

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
DODGE	Journey	09-10	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Purple	(+)	Passenger kick panel	~
	Magnum	08	CanH	~	~	12 pin	5	White/Black	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	Black	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~
	Ram 1500	09	CanH	~	~	12 pin	5	White/LtGreen	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple/Gray	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White	MUX	Parking light switch	~
JEEP	Commander	08-10	CanH	~	~	12 pin	5	White/LtGreen	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver door	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	N/A	(-)	At pin 1 of relay 7 in IPM	~
	Grand Cherokee	08-10	CanH	~	Black	12 pin	5	White/LtGreen	(DATA)	Ignition node	~
			CanL	~	Black	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	20 pin	5	Purple	(-)	Driver door module	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	1	N/A	(-)	At pin 1 of relay 7 in IPM, under hood	~
	Grand Cherokee	11-13	CanH	~	Black	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	Black	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel, door harness	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	Black	10 pin	1	White/LtGreen	(MUX)	Headlight switch	~
RAM	1500 / 2500 / 3500	10-12	CanH	~	~	12 pin	5	White/LtGreen	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple/Gray	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White	MUX	Parking light switch	~
	4500 / 5500	11-12	CanH	~	~	12 pin	5	White/LtGreen	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/LtBlue	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple/Gray	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White	MUX	Parking light switch	~
	C/V	10	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~

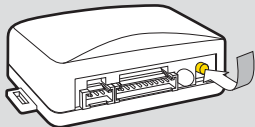
### TYPE 2 - WIRE CROSS REFERENCE CHART - 3 OF 3



MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
RAM	C/V	11-13	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Green	MUX	Parking light switch	~
VOLKSWAGEN	Routan	09-12	CanH	~	~	12 pin	5	White/LtBlue	(DATA)	Ignition node	~
			CanL	~	~	12 pin	6	White/Brown	(DATA)	Ignition node	~
			Driver Door Pin	~	~	~	~	Purple	(-)	Driver kick panel	~
			Ignition	~	~	12 pin	3	Pink/White	(+)	Ignition node	~
			Parking Light	~	~	~	~	White/Brown	MUX	Parking light switch	~

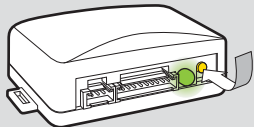
## TYPE 2 - WIRING DIAGRAM



### INSTALLATION MODE SELECTION

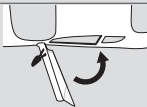
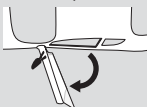
**1**  Press and release programming button to select installation mode.

 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.

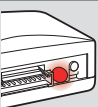
**!** After registration, follow Factory Reset Procedure to change installation mode and restart this procedure.

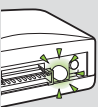
### MODULE PROGRAMMING PROCEDURE

**1**  Close driver door.  
 Re-open driver door to wake up data bus.

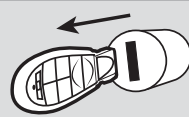
**2**  Insert key into ignition.


**3**  Turn key to ON position.

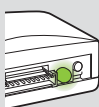
**4**  LED will turn solid RED.

**5**  Within **5 seconds**, LED will flash GREEN rapidly.

**6**  Turn key to OFF position.

**7**  Remove key.

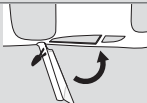
**8**  Press UNLOCK on the OEM remote.  
 If vehicle is not equipped with OEM remote, press module programming button.

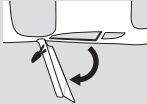
**9**  Wait, LED will turn solid GREEN for **2 seconds**.


**10** Module Programming Procedure completed.

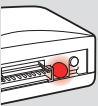


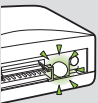
### MODULE PROGRAMMING PROCEDURE - PUSH TO START


**1**  Close driver door.


 Re-open driver door to wake up data bus.

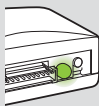
**2**  **DO NOT PRESS BRAKE PEDAL**  
Push start button twice [2x] to ON position.

**3**  LED will turn solid RED.

**4**  Within **5 seconds**, LED will flash GREEN rapidly.

**5**  **DO NOT PRESS BRAKE PEDAL**  
Push start button once [1x] to OFF position.

**6**  Press UNLOCK on the OEM remote.

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

**8** Module Programming Procedure completed.

### IDENTIFY VEHICLE YEAR

**1** Locate the Vehicle Identification Number (VIN), identify the 10th character then match it to its corresponding year.



A	1980	L	1990	Y	2000	A	2010
B	1981	M	1991	1	2001	B	2011
C	1982	N	1992	2	2002	C	2012
D	1983	P	1993	3	2003	D	2013
E	1984	R	1994	4	2004	E	2014
F	1985	S	1995	5	2005	F	2015
G	1986	T	1996	6	2006	G	2016
H	1987	V	1997	7	2007	H	2017
J	1988	W	1998	8	2008	J	2018
K	1989	X	1999	9	2009	K	2019

### 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

- DISCONNECT** all connectors from module **EXCEPT** the black 4-PIN standard or optional data connector.
- DISCONNECT** black 4-PIN standard or optional data connector.
- PRESS AND HOLD** programming button while connecting either 4-PIN standard or optional data connector.
- When LED flashes red, **RELEASE** programming button.

- LED will turn solid red for 2 seconds.  
**RESET COMPLETED.**
  - RECONNECT** all connectors.
  - Repeat programming procedure.
- !** Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.

### WARNING: READ BEFORE REMOTE STARTING THE VEHICLE

#### IMPORTANT

I All vehicle doors must be closed and locked prior to remote start sequence. Failure to comply will result in remote starter malfunction.

### TAKE OVER PROCEDURE - TO THE VEHICLE OWNER

#### NOTE

I All vehicle doors must be closed and locked prior to remote start sequence.

**TIME RESTRICTION COMING UP !**

**1** Press UNLOCK on after-market remote.

**2** **TIME RESTRICTION**  
Within 45 SECONDS from previous step:  
Open vehicle door.  
Enter vehicle.

**3** Insert key into ignition.

**4** Turn key to ON position.  
Wait 2 seconds for key validation.

**5** Press and release BRAKE pedal.

**6** Take over procedure completed.

Failure to follow procedure within time restriction will result in vehicle engine shutdown.

### TAKE OVER PROCEDURE - PUSH TO START - TO THE VEHICLE OWNER

#### NOTE

I All vehicle doors must be closed and locked prior to remote start sequence.

**TIME RESTRICTION COMING UP !**

**1** Press UNLOCK on after-market remote.

**2** **TIME RESTRICTION**  
Within 45 SECONDS from previous step:  
Open vehicle door.  
Enter vehicle.

**3** **DO NOT PRESS BRAKE PEDAL**  
Push start button twice [2x] to ON position.

Wait 2 seconds for key validation.

**4** Press and release BRAKE pedal.

**5** Take over procedure completed.

Failure to follow procedure within time restriction will result in vehicle engine shutdown.