

HONDA / HYUNDAI / KIA

Part Number: 250-1859

ELECTRONIC CRUISE KIT

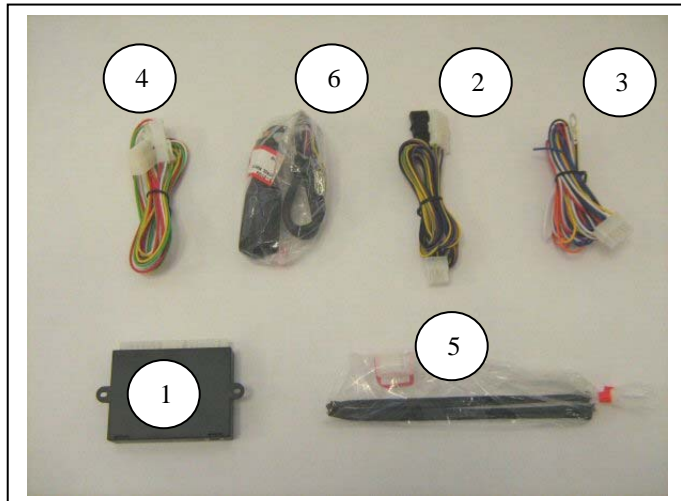
AUTOMATIC AND MANUAL TRANSMISSION

General Applicability

2010- Honda Insight
 07- Kia Optima / Forte / Rondo/ 10- Sedona
 2012- Kia Soul / Rio
 10- Hyundai Tucson / Elantra Touring ETC
 2012- Accent / Elantra/ Genesis

Item #	Qty.	Description
1. 250-2763	1	Cruise Control Module
2. 250-2760	1	Switch Harness
3. 250-2759	1	Main Wiring Harness
4. 250-2771	1	Pedal Interface Harness
5. 250-2767	1	Hardware Kit
6. 250-3742	1	Control Switch

Kit Contents/Service Parts



Contents of Hardware Bag

Qty	Description
8	Wire Zip Ties

Recommended Tools

Safety Tools	
Gloves, Safety Glasses	
Special Tools	
Volt-Ohm Meter	
Installation Tools	
Side cutter	To cut wire ties
Drill Bit or Knockout Punch	9.5mm or 3/8" (for switch)
10mm wrench	
Soldering Tool	
Special Chemicals	

Conflicts

Note:

Recommended Sequence of Application

Item #	Accessory
1	
2	
3	

Legend

	STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.
	OPERATOR SAFETY: Use caution to avoid risk of injury
	CRITICAL PROCESS: Proceed with caution to ensure a quality installation.
	GENERAL PROCESS: This highlights specific processes to ensure a quality installation.
	TOOLS & EQUIPMENT: This calls out the specific tools and equipment required for this process

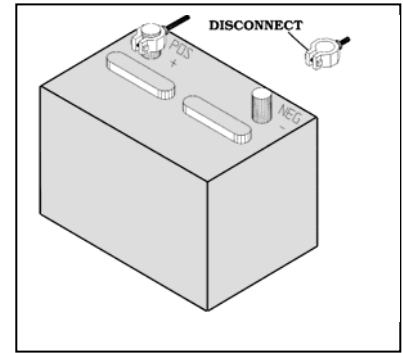
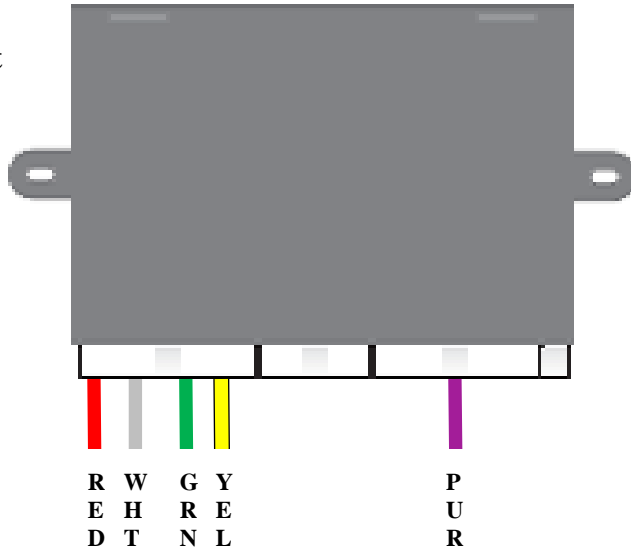
DUE TO SENSITIVE NATURE OF SIGNALS USED FOR THIS PRODUCT ALL NON PLUG AND PLAY CONNECTIONS MUST BE SOLDERED.



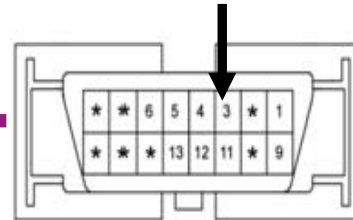
FAILURE TO COMPLY WITH THIS REQUIREMENT WILL VOID WARRANTY.

THIS DEVICE IS NOT INTENDED FOR USE IN VEHICLES WITH 2-WAY RADIOS.

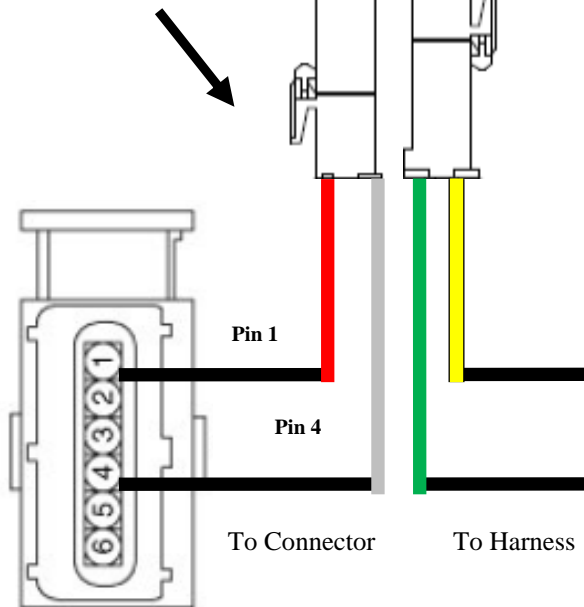
2012- Kia Rio
2012- Hyundai Accent



VSS DIAGNOSTICS BROWN or PINK PIN 3



Connect to the accelerator pedal

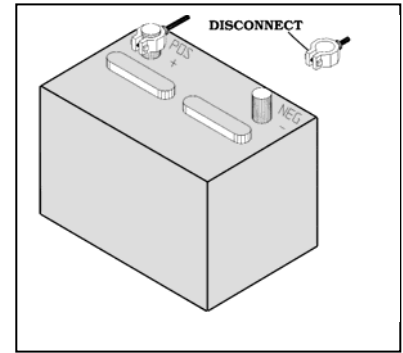
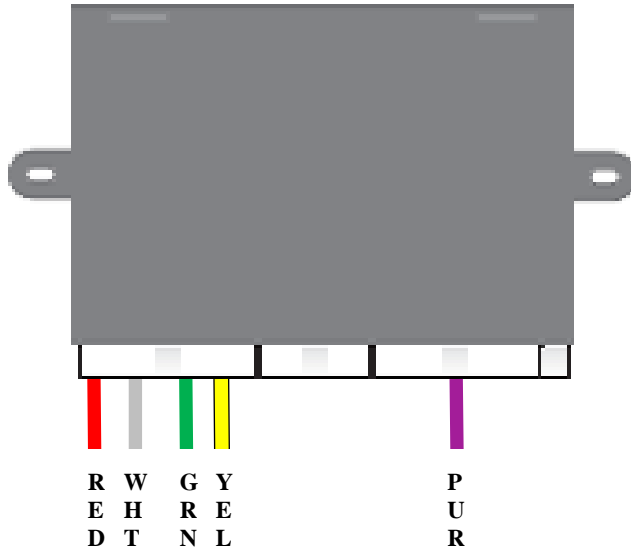


Cut wire at pins 1 and 4 of the accelerator pedal harness and solder connections using the chart below:

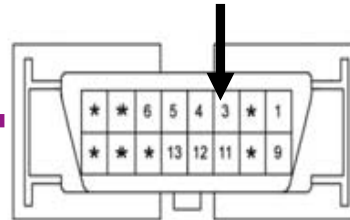
2012 KIA RIO and HYUNDAI ACCENT CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	YELLOW 1
CONNECTOR	WHITE	GREEN or WHITE 4
HARNESS	YELLOW	YELLOW 1
HARNESS	GREEN	GREEN or WHITE 4

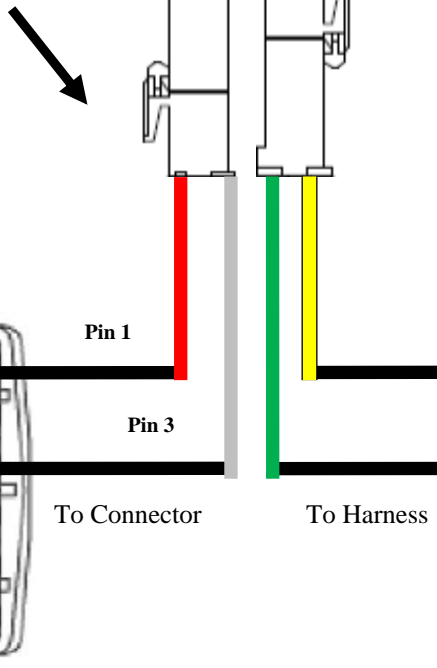
2012- Kia Soul



VSS DIAGNOSTICS RED/ORANGE PIN 3



Connect to the accelerator pedal

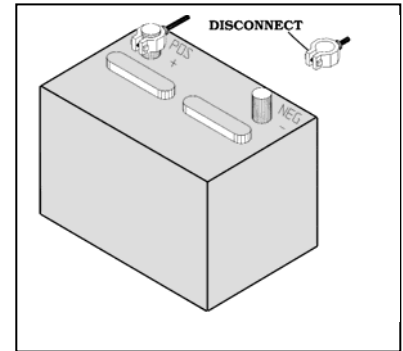
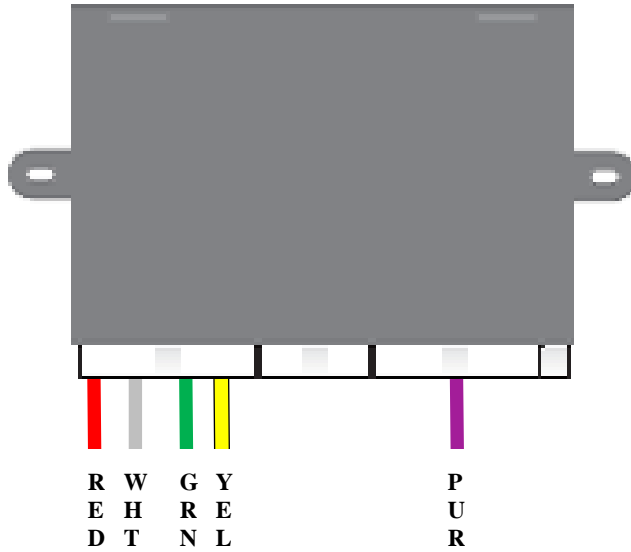


Cut wire at pins 1 and 3 of the accelerator pedal harness and solder connections using the chart below:

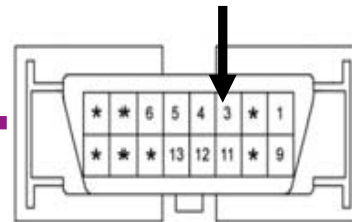
2012 KIA SOUL CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	BLACK OR YELLOW 1
CONNECTOR	WHITE	YELLOW/ORANGE 3 OR GREEN
HARNESS	YELLOW	BLACK OR YELLOW 1
HARNESS	GREEN	YELLOW/ORANGE 3 OR GREEN

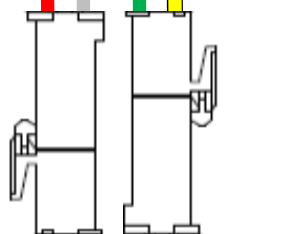
2012- Kia Forte



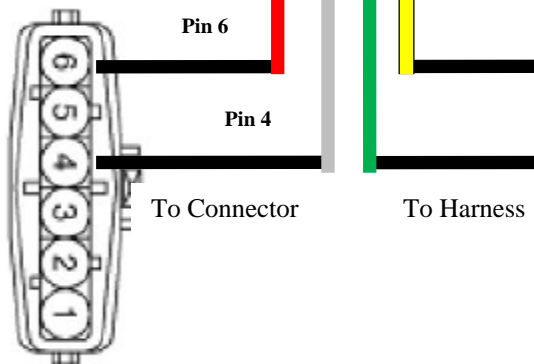
VSS DIAGNOSTICS GRAY/ORANGE PIN 3



Connect to the accelerator pedal



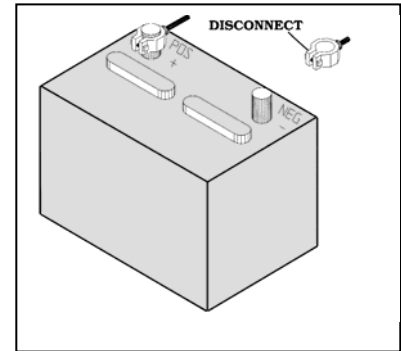
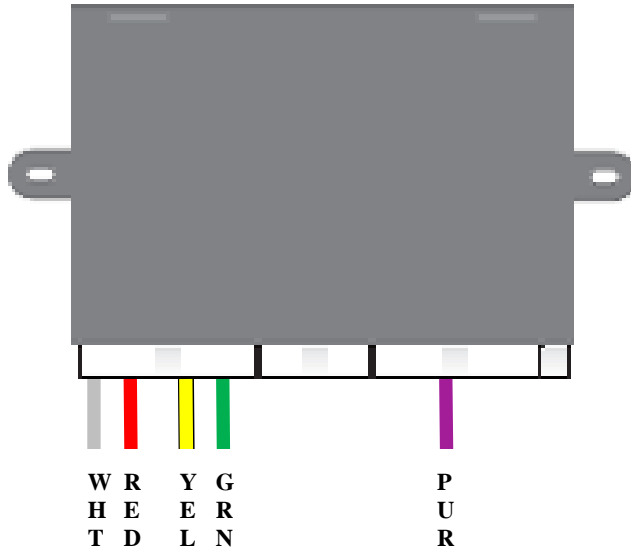
Cut wire at pins 4 and 6 of the accelerator pedal harness and solder connections using the chart below:



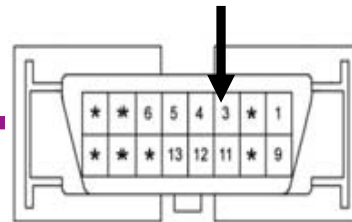
2012 KIA FORTE CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	GRAY 6
CONNECTOR	WHITE	ORANGE 4
HARNESS	YELLOW	GRAY 6
HARNESS	GREEN	ORANGE 4

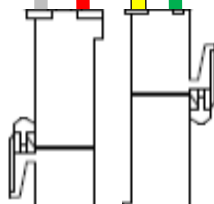
2011- 2012
Kia Optima



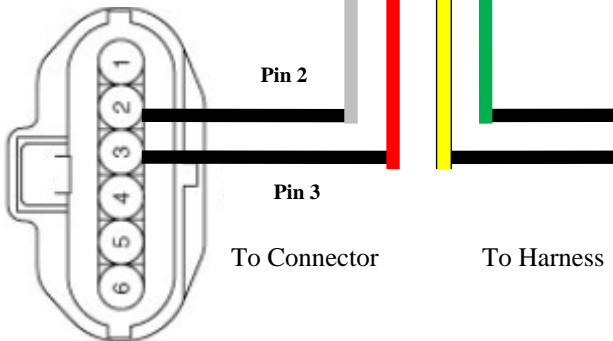
VSS DIAGNOSTICS WHITE PIN 3



Connect to the
accelerator pedal



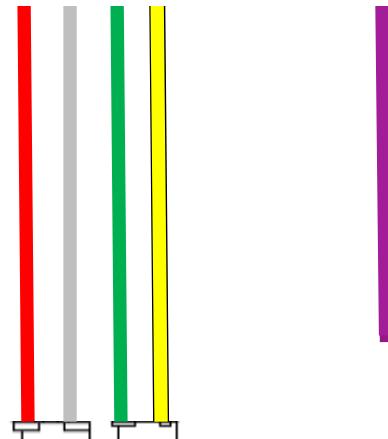
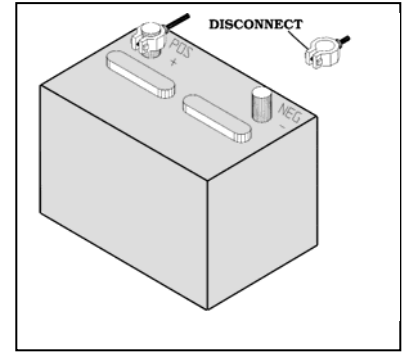
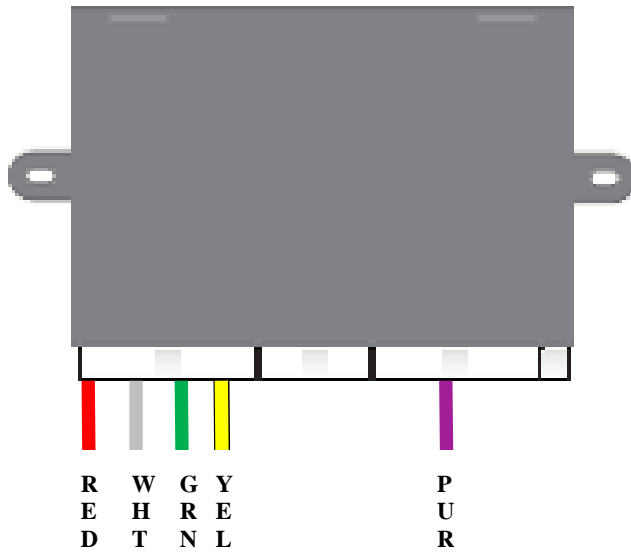
Cut wire at pins 2 and 3 of the accelerator pedal harness and solder connections using the chart below:



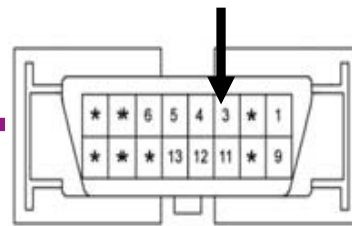
2012 KIA OPTIMA CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	GREEN/BLACK 3
CONNECTOR	WHITE	YELLOW/ORANGE 2
HARNESS	YELLOW	GREEN/BLACK 3
HARNESS	GREEN	YELLOW/ORANGE 2

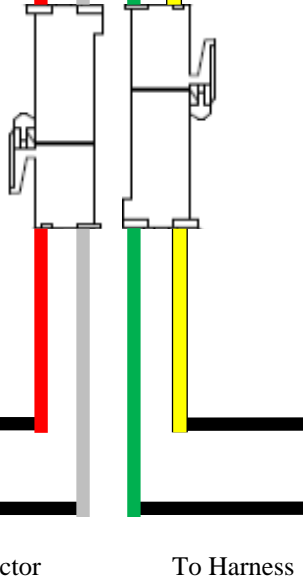
2011- Hyundai Genesis



VSS DIAGNOSTICS BLUE PIN 3



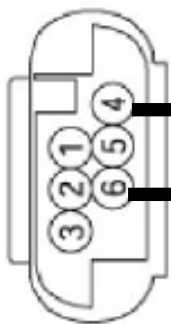
Connect to the accelerator pedal



Cut wire at pins 4 and 6 of the accelerator pedal harness and solder connections using the chart below:

2012 HYUNDAI GENESIS CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	YELLOW OR PINK 4
CONNECTOR	WHITE	PINK OR WHITE 6
HARNESS	YELLOW	YELLOW OR PINK 4
HARNESS	GREEN	PINK OR WHITE 6



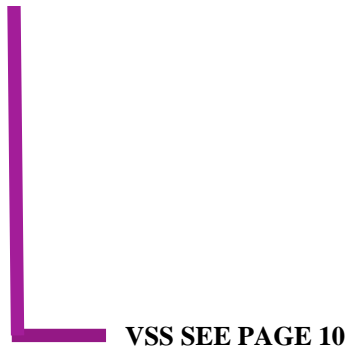
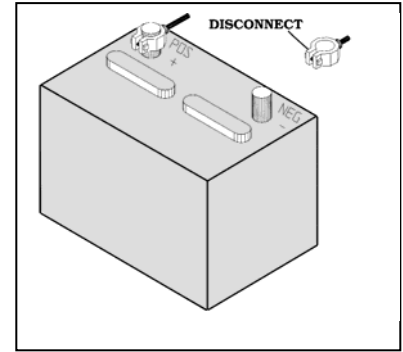
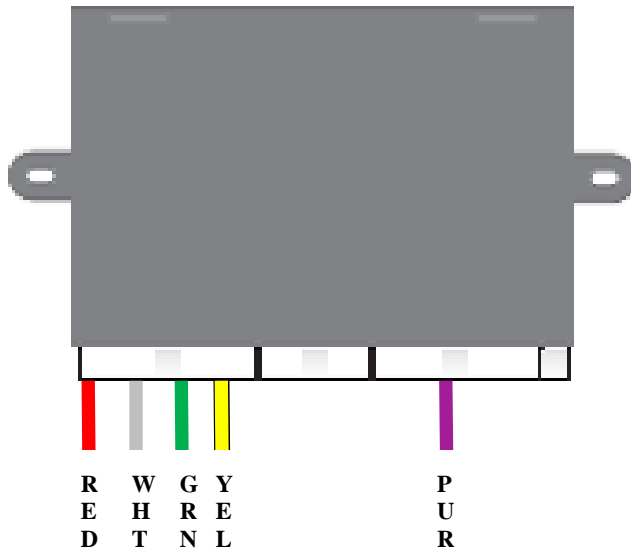
Pin 4

Pin 6

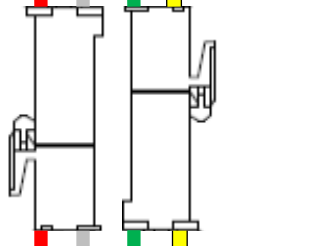
To Connector

To Harness

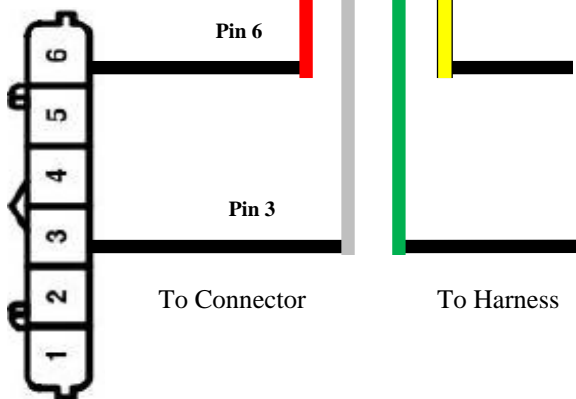
2010- Honda Insight



Connect to the accelerator pedal



Cut wire at pins 3 and 6 of the accelerator pedal harness and solder connections using the chart below:



2012 HONDA INSIGHT CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	PURPLE 6
CONNECTOR	WHITE	YELLOW 3
HARNESS	YELLOW	PURPLE 6
HARNESS	GREEN	YELLOW 3

Pedal Interface Harness Connections Continued....



07-10 OPTIMA, RONDO CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	BLUE
CONNECTOR	WHITE	GREEN/ORANGE
HARNESS	YELLOW	BLUE
HARNESS	GREEN	GREEN/ORANGE

VSS SEE PAGE 10

2012 ELANTRA CONNECTIONS (See page 2 instructions)

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	BLUE 1
CONNECTOR	WHITE	PINK 4
HARNESS	YELLOW	BLUE 1
HARNESS	GREEN	PINK 4

VSS DIAGNOSTICS YELLOW WIRE PIN 3

10- SEDONA CONNECTIONS

Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	GREEN/ORANGE
CONNECTOR	WHITE	WHITE
HARNESS	YELLOW	GREEN/ORANGE
HARNESS	GREEN	WHITE

VSS DIAGNOSTICS WHITE/BLACK WIRE

TUCSON CONNECTIONS (See page 5 instructions)

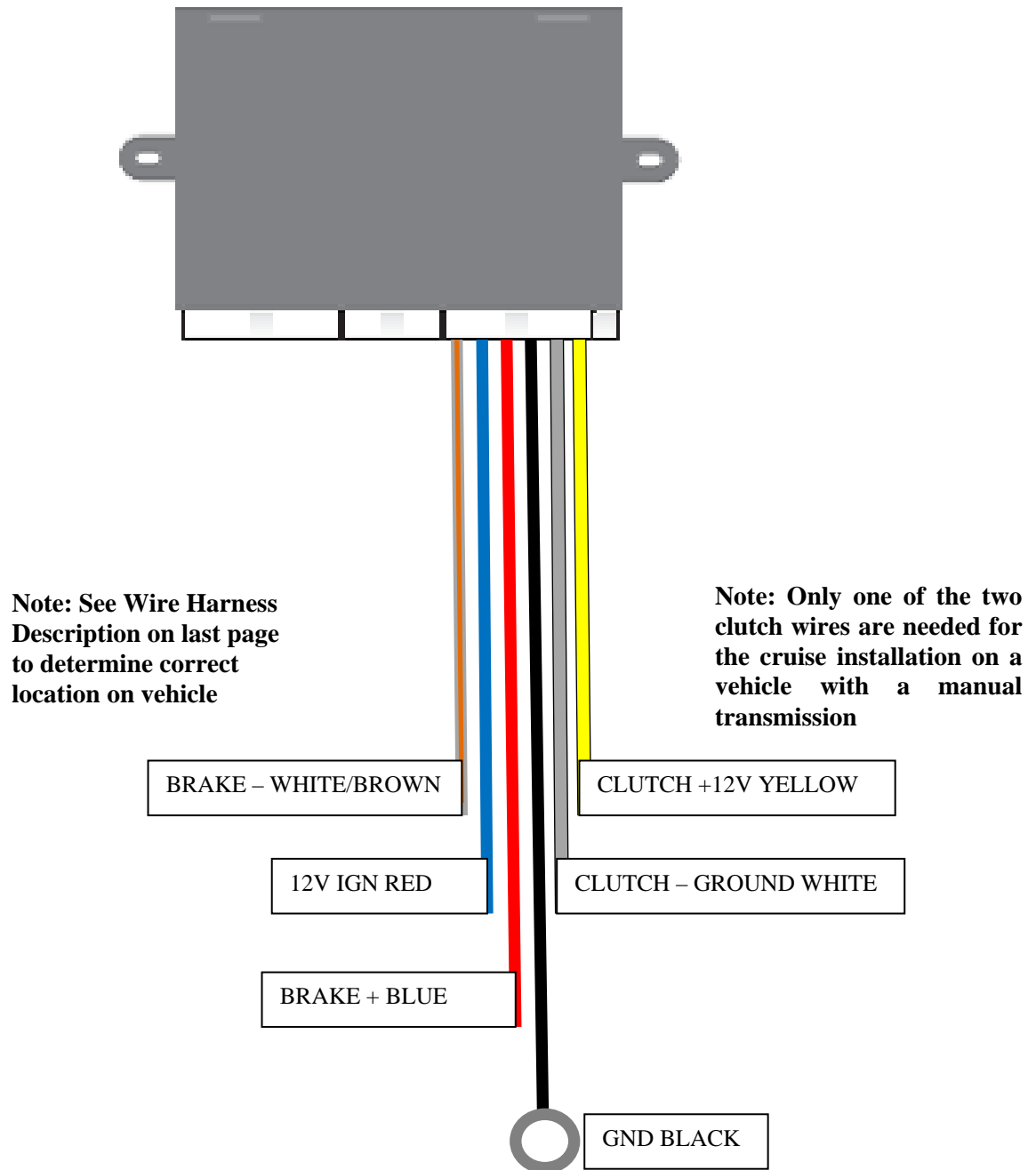
Splice & Solder Direction	Cruise Harness Color	Vehicle Wire
CONNECTOR	RED	BLUE/ORANGE 3
CONNECTOR	WHITE	ORANGE 2
HARNESS	YELLOW	BLUE/ORANGE 3
HARNESS	GREEN	ORANGE 2

VSS DIAGNOSTICS BROWN WIRE PIN 3

C. Wiring Connections (See Wiring Harness Description on last page)



1. The Main Wiring Harness connection locations are not listed for some vehicles in these instructions. Use the following wiring diagram with **Wiring Harness Description** on page 13 to make the following connections:



D. Insight Wiring Connections (It is advisable use solder for all wiring connections)



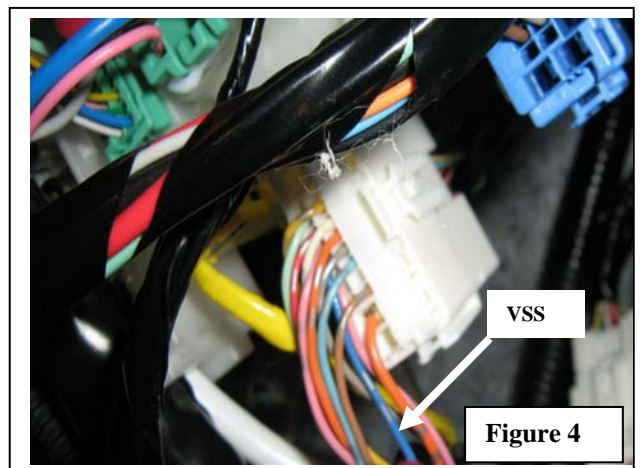
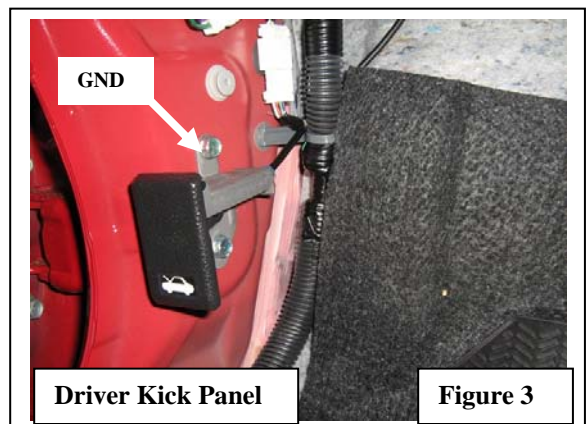
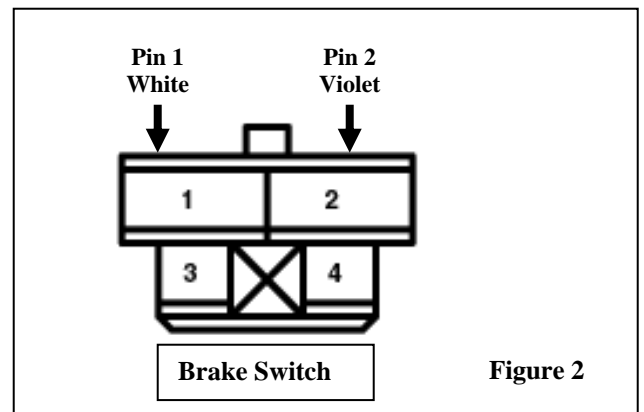
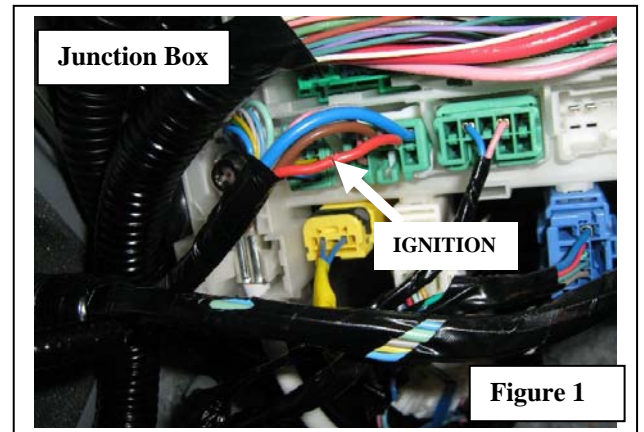
1. Locate the following wires to connect to the main harness from the control module:

Function	See Fig.	Vehicle Color
IGN	1	RED
BRAKE +	2	VIOLET
BRAKE -	2	WHITE
GROUND	3	GROUND POINT
VSS	4	BLUE
CLUTCH SWITCH		PAGE 15

2. Connect the Main Harness to vehicle wire by using the chart below.

Function	Cruise Harness Color	Vehicle Wire
IGN	RED	RED
BRAKE +	BLUE	VIOLET
BRAKE -	WHITE/BROWN	WHITE
VSS	VIOLET	BLUE
CLUTCH SWITCH	WHITE	PAGE 15

3. Apply the **Black Ground Wire** from the Main Harness to the Vehicle Ground Point at the kick panel. **Figure 3**
4. **VSS:** Locate the fuse/relay box under the driver side dash. Look for bottom **white connector** between yellow and blue connector. Connect the **Violet Wire** from the Main Wiring Harness to the **Blue Wire** of the connector. **Figure 4**



E. Tucson /Elantra Touring ETC Wiring Connections (It is advisable use solder for all wiring connections)



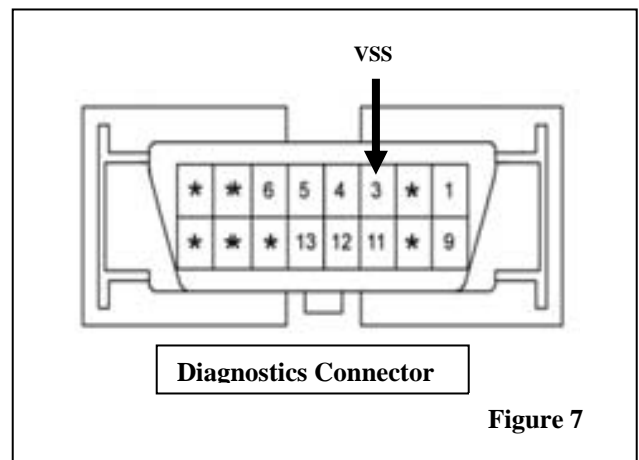
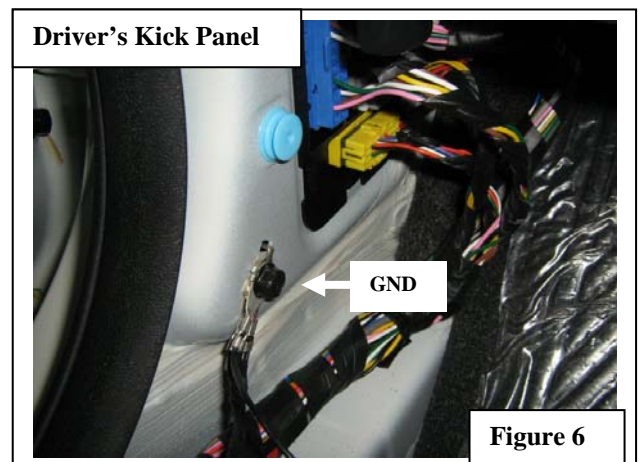
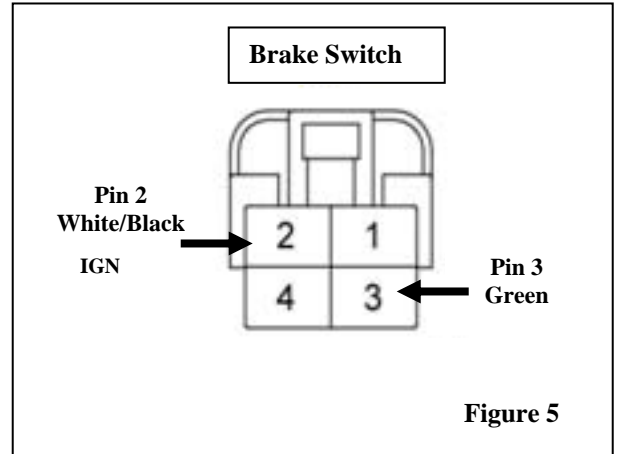
1. Locate the following wires to connect to the main harness from the control module:

Function	See Fig.	Vehicle Color
IGN	5	WHITE/BLACK OF BRAKE SWITCH
BRAKE +	5	WHITE/BLACK
BRAKE -	5	GREEN
GROUND	6	GROUND POINT
VSS	7	BROWN
CLUTCH SWITCH		PAGE 15

2. Connect the Main Harness to vehicle wire by using the chart below:

Function	Cruise Harness Color	Vehicle Wire
IGN	RED	WHITE/BLACK
BRAKE +	BLUE	WHITE/BLACK
BRAKE -	WHITE/BROWN	GREEN
VSS	VIOLET	BROWN
CLUTCH SWITCH	WHITE	PAGE 15

3. **VSS:** Locate the diagnostics connector under the driver side dash. Look for bottom **black connector** at bottom of dash panel. Connect the **Violet Wire** from the Main Wiring Harness to the **Brown Wire** in **Pin 3** of the connector. **Figure 7**



F. 07-10 Optima Wiring Connections (It is advisable use solder for all wiring connections)



1. Locate the following wires to connect to the main harness from the control module:

Function	See Fig.	Vehicle Color
IGN	8	RED
BRAKE +	9	PINK
BRAKE -	9	BROWN
GROUND	10	BLACK
VSS	11	GRAY
CLUTCH SWITCH	12	BLACK

2. Connect the Main Harness to vehicle wire by using the chart below:

Function	Cruise Harness Color	Vehicle Wire
IGN	RED	RED
BRAKE +	BLUE	PINK
BRAKE -	WHITE/BROWN	BROWN
VSS	VIOLET	GRAY OR BLUE
CLUTCH SWITCH	WHITE	BLACK

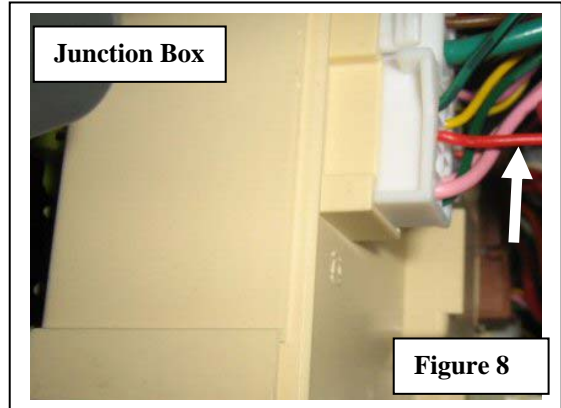


Figure 8

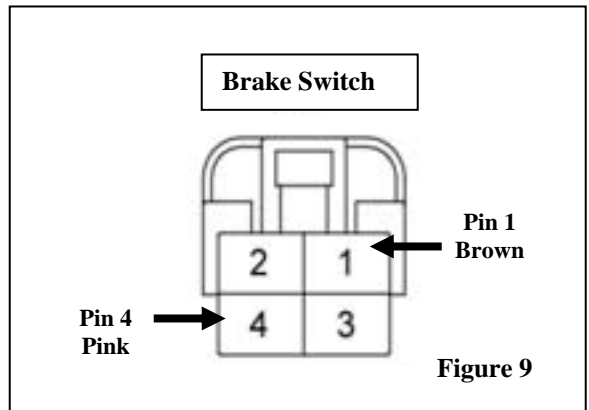


Figure 9

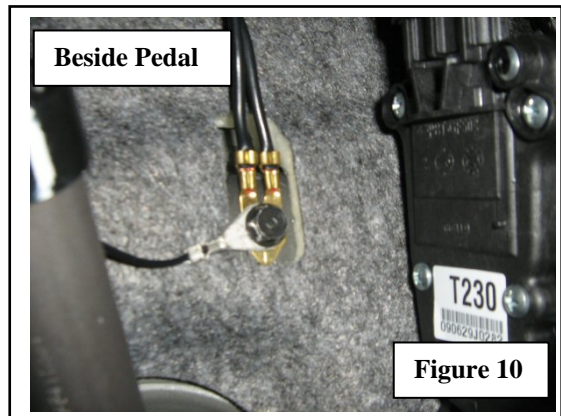
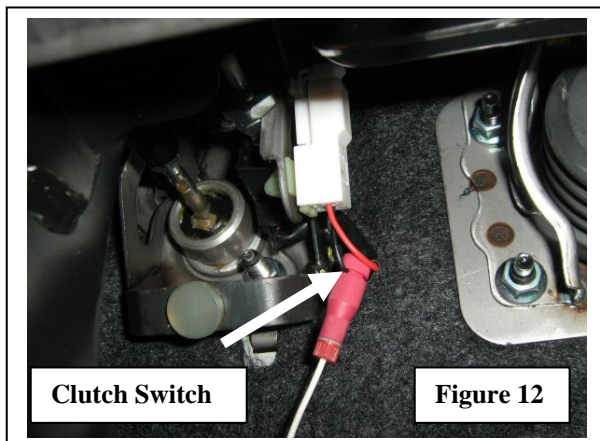
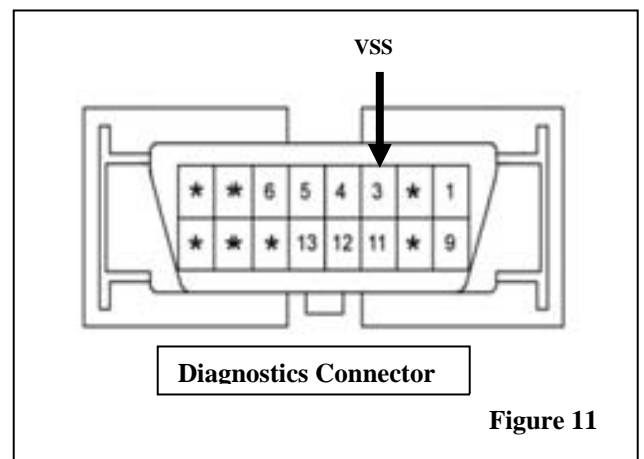


Figure 10



Clutch Switch

Figure 12



Diagnostics Connector

Figure 11

G. Install Control Switch



1. Use the **lever wedges** on the **Control Switch** at an angle template to drill a 3/8" or 9.5mm hole in the lower shroud of the steering column cover. Position lock-washers as shown. **Figure 13**
2. Apply nut and position **Control Switch** for driver's best view.
3. Assemble (2) 3-pin connectors from the sack parts to the mating wire colors on the **Control Switch Harness**. Use the diagram to mate the **module harness** to **switch harness**. **Figure 14**
4. Route the assembled **Control Switch Harness** to the mating connector of the **Cruise Control module**.
5. Secure the **Control Switch Harness** with zip ties away from moving parts.

I. Testing



1. Reconnect negative battery cable and torque to 35 in*lbs. Reenter anti-theft radio codes.
2. Turn ignition on. Apply the on/off button of Cruise Control Switch.

J. Reassembly



1. Reinstall all removed pieces taking care to ensure harnesses and wiring connections are properly secured.
2. Make sure all harnesses are not pinched or bound by trim pieces.

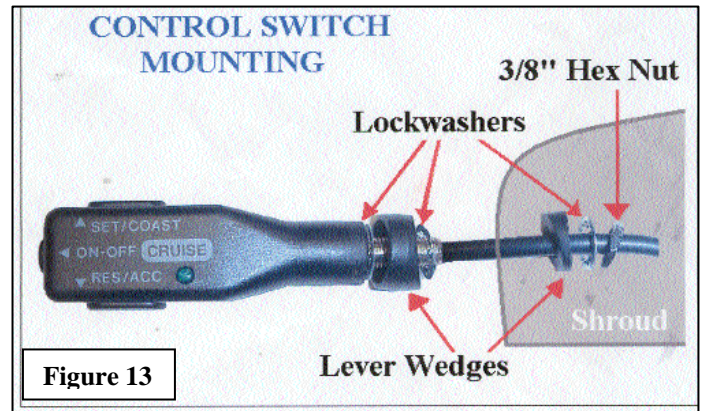


Figure 13

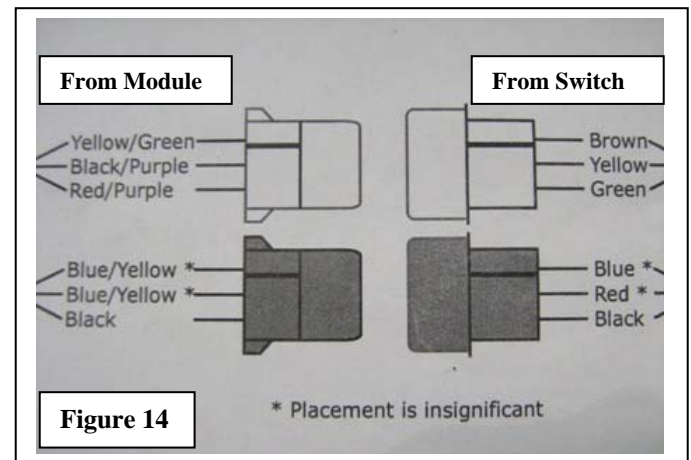


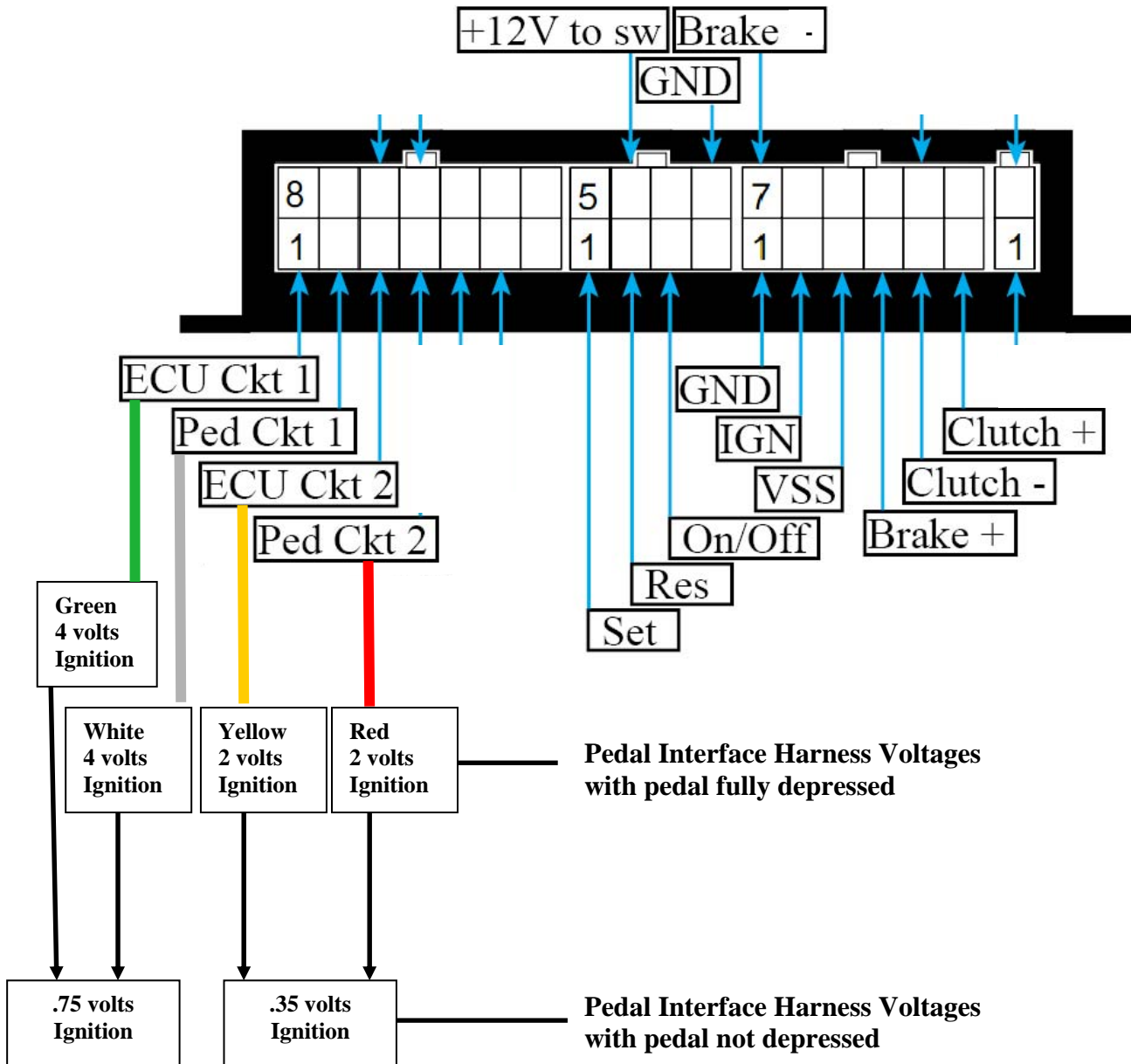
Figure 14



Tucson

Figure 15

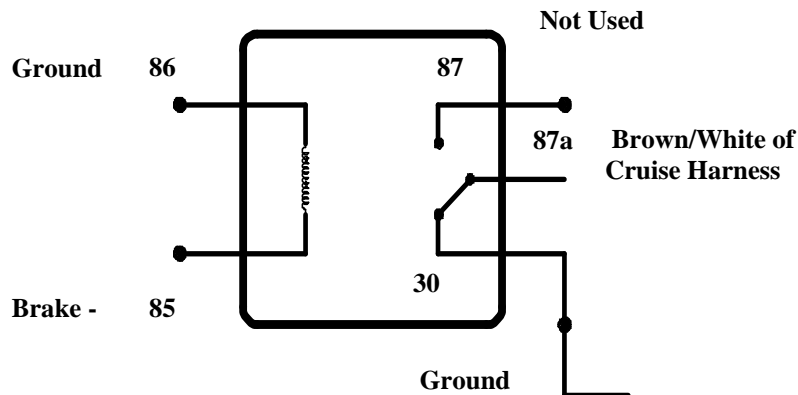
Section II - Wiring Diagram



WIRING HARNESS DESCRIPTION

Function	Color	Results	Fault Conditions
Ignition	Red	+12V when switched on and +0V when switched off. Ignition must be greater than +10V while cranking vehicle.	No power, voltage drop, or intermittent connection will cause Loss of pedal or "Limp Mode" condition.
Brake positive +	Blue	"Hot" side of brake switch. +12V all the time.	Cruise will not function if this connection is not installed correctly.
Brake negative -	Brown/White	"Cold" side of Brake switch. Zero (0) resistance to ground when brake is not pressed. +12V when brake is pressed.	Cruise will not function if this connection is not installed correctly. If connection is good, and there is a high resistance to ground, a 5 terminal relay will be required to complete installation. See diagram below.
Ground	Black	Lowest resistance to ground closest to zero (0) ohms as possible. Use a vehicle ground point where other ground wires are connected to.	A bad ground connection will cause the following conditions: Cruise will not function; Loss of pedal or "Limp Mode" condition.
Clutch (GND triggered)	White	Ground active wire at switch when clutch is depressed.	Cruise will not function if wrong wire is connected –OR– ⚠️Cruise will not disengage when clutch is depressed.
Clutch (+12V triggered)	Yellow	+12V active wire at switch when clutch is depressed.	Cruise will not function if wrong wire is connected –OR– ⚠️Cruise will not disengage when clutch is depressed.

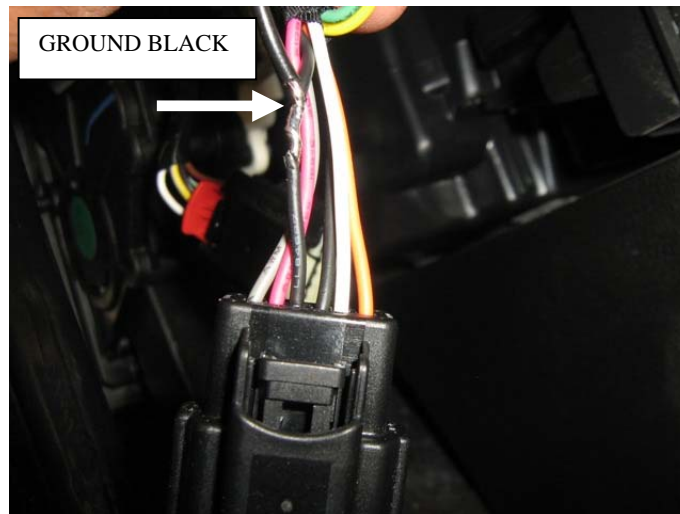
5 Terminal Relay for Brake Switch



TECHNICAL TIPS

Loss of Pedal/Limp Mode/Check Engine:

1. Check Red power wire at control module for +12 volts with ignition on and 0 volts when switched off. Ignition must be greater than 10 volts while cranking and with engine running.
2. Check Black ground wire for lowest resistance to ground and less than 5 ohms. Use a vehicle ground point where other ground wires are connected to.
3. Check Pedal Interface Harness connections for cold solder joints. **Do not use splice connectors.** Check 2-pin connectors of Pedal Interface Harness for complete connection. Check continuity from each spliced vehicle wire at accelerator pedal to Pedal Interface Harness connector at control module.
4. If steps 1-3 meet specification, locate a ground circuit at accelerator pedal by **checking resistance to ground using a multi-meter.** Once ground wire is found at the accelerator pedal, remove cruise ground from vehicle ground point. Cut off terminal and solder cruise ground to accelerator pedal ground. See example below:



TECHNICAL TIPS

Control Switch Test

1. Be sure terminals are fully inserted a white and black 3pin connectors before performing switch test.

Yellow/Green wire at control module	On/Off: +12 volts press on, 0 volts press off
Purple/Red wire at control module	Set/Coast: +12 volts press and hold set
Purple/Black wire at control module	Resume/Acc: +12 volts press and hold resume
Red & Blue wire at black 3pin connector	+10-12 volts
Black wire at black 3pin connector	Less than 5 ohms resistance to ground

NOTES:

