## PART NUMBER: 250-9001

#### KIT CONTENTS

ITEM	QTY	DESCRIPTION	
1	1	CRUISE CONTROL SWITCH/HARNESS	
2	1	ECM HARNESS	
3	1	HARDWARE PACKAGE	
4	1	CLOCKSPRING HARNESS	
5			

#### SERVICE PARTS

ITEM	QTY	Description	PART NUMBER	
1	1	CONTROL SWITCH	250-2716	
2	1	Clockspring/ECM Harness	250-2728	
3	1	Hardware Package	250-2714	

#### HARDWARE PACKAGE CONTENTS

ITEM	Qтy	DESCRIPTION	
1	2	#10 Screws, T-25	
2	3	Posi-Tap Connectors	
3	1	Convoluted tubing, 36 inches	
4	5	Cable Ties	
5	3	#6 Screws, T-15	

### ADDITIONAL ITEMS REQUIRED FOR INSTALL

ITEM	QTY	DESCRIPTION	
1	N/A	ELECTRICAL TAPE	
2			
3			
4			

#### **CONFLICTS**

Note:			

### RECOMMENDED TOOLS

SAFETY TOOLS	
Special Tools	
Installation Tools	
Fastener Removal Tool	Wire Cutters
Trim Removal Tool	Phillips screwdriver
10-мм Deep Socket	Pliers
T15 Driver	T25-Driver
SPECIAL CHEMICALS	_

FORM #5071, REV. H, 04-07-11



1-800-343-1382

Please call for technical assistance. You will need your invoice number.

## RECOMMENDED SEQUENCE OF APPLICATION

VEHICLE PREPARATION PAGE 2		
ECM HARNESS CONNECTIONS PAGE 3		
CONTROL SWITCH PAGE 4		
REASSEMBLY AND VEHICLE TEST PAGE 5		

\* MANDATORY

#### LEGEND



**STOP:** DAMAGE TO VEHICLE MAY OCCUR. DO NOT PROCEED UNTIL PROCESS COMPLIANCE HAS BEEN MET.



 $\underline{\text{\bf OPERATOR SAFETY:}}$  Use Caution to Avoid Risk of Injury.



CRITICAL PROCESS: PROCEED WITH CAUTION TO ENSURE A QUALITY INSTALLATION. THESE POINTS WILL BE AUDITED ON A COMPLETED VEHICLE INSTALLATION.



**GENERAL PROCESS:** THIS HIGHLIGHTS SPECIFIC PROCESSES TO ENSURE A QUALITY INSTALLATION. THESE POINTS WILL BE AUDITED DURING THE ACCESSORY INSTALLATION.



**TOOLS & EQUIPMENT:** THIS CALLS OUT THE SPECIFIC TOOLS AND EQUIPMENT REQUIRED FOR THE PROCESS.



**REVISION MARK:** THIS MARK HIGHLIGHTS A CHANGE IN INSTALLATION WITH RESPECT TO PREVIOUS ISSUE.

#### SPECIAL NOTE: INSTALLATION SEQUENCES

AFTER SAFETY MANDATED PREPARATORY STEPS HAVE BEEN TAKEN, THE INSTALLATION SEQUENCE IS THE SUGGESTED METHOD FOR COMPLETING THE ACCESSORY INSTALLATION. IN SOME INSTANCES THE SUGGESTED SEQUENCE IS WRITTEN FOR ONE ASSOCIATE TO INSTALL AND IN OTHERS THE SEQUENCE IS GIVEN AS PART OF A TEAM ACCESSORY INSTALLATION. UNLESS OTHERWISE STATED IN THE DOCUMENT, THE ASSOCIATES MAY PERFORM THE INSTALLATION STEPS IN ANY ORDER TO MAKE THE INSTALLATION AS EFFICIENT AS POSSIBLE WHILE MAINTAINING CONSISTENT QUALITY.

# VEHICLE PREPARATION





- REMOVE THE NEGATIVE BATTERY CABLE BEFORE INSTALLING THE CRUISE CONTROL COMPONENTS FOR SAFETY PRECAU-TIONS. FIGURE 1.
- 2. JEEP WRANGLER APPLICATIONS: REMOVE AIRBAG BY USING TRIM TOOL TO RELEASE (3) METAL CLIPS AS SHOWN IN FIGURE 2.



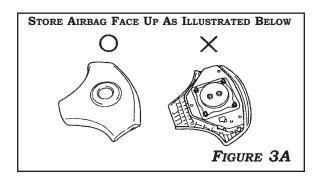
CAUTION: ENSURE THAT BATTERY HAS BEEN DISCONNECTED FOR MORE THAN 90 SECONDS PRIOR TO REMOVAL OF AIRBAG; FAILURE TO HEED THIS WARNING MAY RESULT IN AIRBAG DISCHARGE AND MAY CAUSE SERIOUS INJURY OR DEATH.

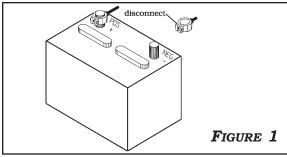
- 3. Dodge Caliber, Jeep Compass/Patriot applications: remove airbag by extracting the (2) 10mm screws as illustrated in *Figure 2A*.
- **4.** Press in sides of both connectors to remove airbag as illustrated in *Figure 3*.



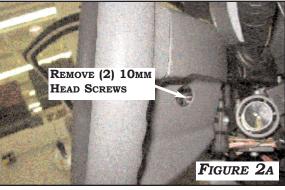
CAUTION: BE SURE TO STORE AIRBAG FACE UP AS ILLUSTRATED IN FIGURE 3A TO REDUCE INJURY IN EVENT OF ACCIDENTAL DISCHARGE OF AIRBAG.

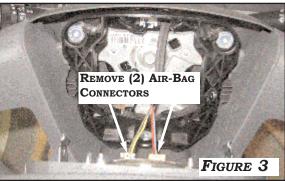
- **5. Jeep Wrangler** Applications: Remove **13mm** center bolt to take off steering wheel, then skip to **Step 2** on page 4.
- **6. Dodge Caliber, Jeep Compass/Patriot** Applications: Remove **(3) Torx 25** screws to release center bracket inside steering wheel. **Figure 4**

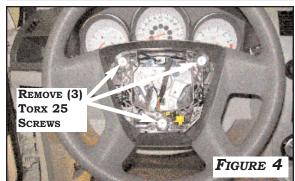












# **VEHICLE PREPARATION**

# (CONT.)





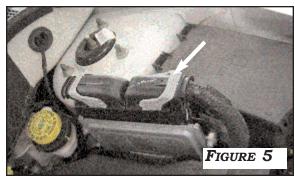
- 7. Remove ECM connector furthest away from firewall. *Figure 5*.
- **8.** Press in tab to remove top cover of connector to access pin locations. *Figure 6.* Then release center slot clip as shown in *Figure 7.*

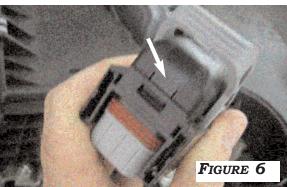
At this point, look for wires in Pin locations 13, 26, and 27. If wires are present, then the installation of the ECM harness is not required. Reassemble the connector and skip to the control switch installation on page 5.

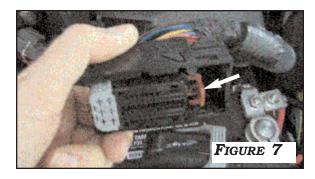
9. Use precision tool to break plastic insert in opening of Pin 13, 26 and 27 of connector (*Figure 8*). Then push out remains on reverse side as shown in *Figures 9-10*.

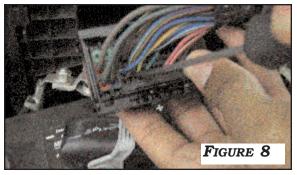


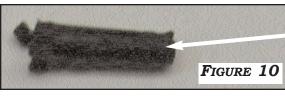
CAUTION: BE SURE PLASTIC INSERT IS FULLY REMOVED BEFORE INSERTING EACH PIN. FIGURE 10.

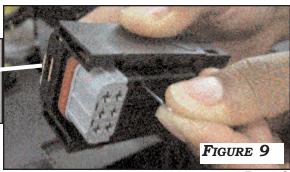












# VEHICLE PREPARATION

## **ECM HARNESS CONNECTIONS**

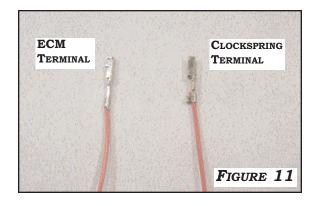


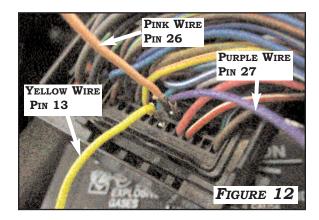


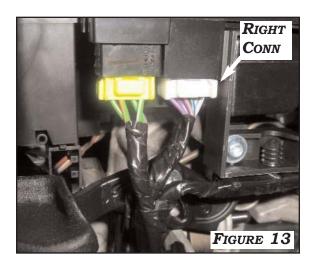


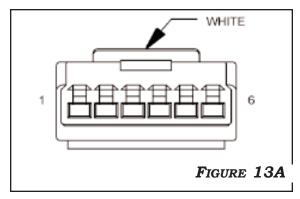
CAUTION: BE SURE TO USE THE CORRECT TERMINAL AT THE ECM AND CLOCKSPRING AS SHOWN IN FIGURE 11. NOTE: THE CLOCKSPRING TERMINAL IS THE BIGGER OF THE TWO. IF CLOCKSPRING/ECM HARNESS IS TWO SEPARATE PIECES, MATE HARNESSES COLOR TO COLOR.

- 1. INSERT YELLOW WIRE TO PIN 13, PINK WIRE TO PIN 26, AND **PURPLE WIRE** OF THE CLOCKSPRING/ECM HARNESS TO PIN 27 OF CONNECTOR. FIGURE 12. REASSEMBLE CONNECTOR. BE SURE TO PLACE CONNECTOR BACK ON ECM SECURELY. WRAP CONVOLUTED TUBING AROUND WIRES OF HARNESS.
- 2. ROUTE THE CLOCKSPRING/ECM HARNESS FROM ECM THROUGH FIREWALL TO INSIDE OF VEHICLE. REMOVE LOWER STEERING SHROUD. LOCATE RIGHT CONNECTOR AT BACK SIDE OF CLOCK SPRING. FIGURE 13. IF POSITIONS 6, 5, AND 4 ARE BLANK, USE CLOCKSPRING/ECM HARNESS IN KIT. INSERT VIOLET WIRE INTO PIN 6. INSERT YELLOW WIRE TO PIN 5. INSERT PINK WIRE TO PIN 4. FIGURE 13A. If OEM wires are present in the back side of CLOCK SPRING CONNECTOR, CUT PINS OFF OF THE CLOCKSPRING/ECM HARNESS AND USE SUPPLIED POSI-TAP CONNECTORS TO CONNECT TO EXISTING WIRES.







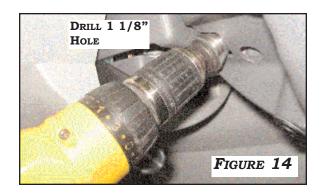


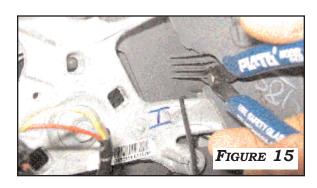
# **INSTALLATION**

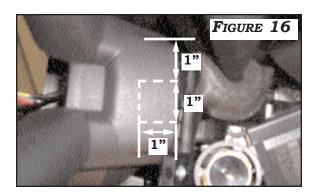
## **CONTROL SWITCH**

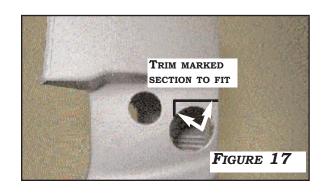


- Turn Steering wheel to Left position to drill 1 1/8" Hole in center of existing outline for Switch location. Figure 14. Cut out remaining ribs inside steering wheel as shown in Figure 15.
- **2. Jeep Wrangler** applications: Use dremel or other cutting tool to trim out right section of steering wheel as shown in **Figure 16**.
- **3. Dodge Caliber, Jeep Compass/Patriot** applications: Use dremel or de-burring tool to trim to fit Cruise Control Switch. **Figure 17.**









## **INSTALLATION**

# **CONTROL SWITCH (CONT.)**

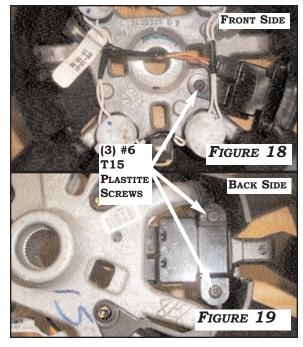
- 4. Jeep Wrangler applications: Use (3) #6, T15 screws provided in hardware bag to mount cruise control switch. Figure 18 & 19
- 5. Dodge Caliber, Jeep Compass/Patriot applications: Use (2) #10, T25 screws provided in hardware bag to mount cruise control switch. Figure 20
- 6. For switch with harness connector: Remove factory 6-pin connector of vehicle and extact Pins 2 and 3 (Horn). Figure 21. Replace factory connector with Rostra switch connector. Connect remaining two wires from Rostra switch connector to to wires that were extracted from factory connector.

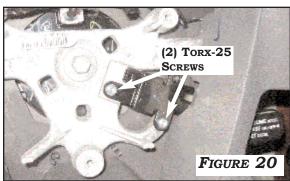
FOR SWITCH WITH HARNESS TERMINALS: LOCATE WHITE 6 PIN CONNECTOR INSIDE STEERING WHEEL. INSERT CRUISE CONTROL HARNESS WIRES TO THE FOLLOWING PIN LOCATIONS IN BACK-SIDE OF CONNECTOR:

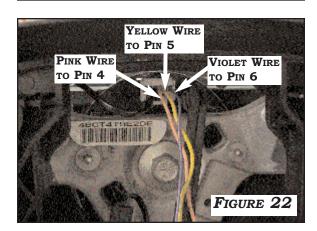
PINK WIRE TO PIN 4; YELLOW WIRE TO PIN 5; VIOLET WIRE TO PIN 6. CONNECT BLACK 3 PIN CONNECTOR OF CRUISE CONTROL HARNESS TO CRUISE CONTROL SWITCH. FIGURE 22

7. REINSTALL CENTER BRACKET INSIDE STEERING WHEEL, OR COMPLETE STEERING WHEEL IF APPLICABLE.









# **INSTALLATION**

## REASSEMBLY







- 1. REINSTALL AIRBAG.
- RECONNECT NEGATIVE BATTERY CABLE AND TORQUE NUT TO 35 FT\*LBS.

## **TESTING**

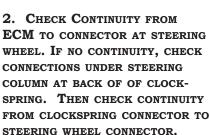
WHILE DRIVING VEHICLE, PRESS [ON/OFF] BUTTON ON CRUISE SWITCH TO ENGAGE CRUISE CONTROL. WITH VEHICLE ABOVE MINIMUM SET SPEED (REFER TO OWNER'S MANUAL), VERIFY THE FOLLOWING:

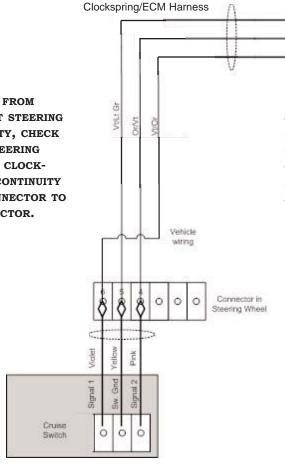
- 1. Pressing [Set] on cruise switch causes cruise to control vehicle at desired speed.
- 2. Pressing vehicle's **Brake** pedal or shifting into Neutral returns control of vehicle speed to driver.
- **3.** Pressing **[Resume]** on cruise switch causes cruise to return vehicle to desired speed.
- **4.** Pressing **[Cancel]** on cruise switch returns control of vehicle speed to driver. Pressing **[Resume]** on cruise switch causes cruise to return vehicle to desired speed.
- **5.** Pressing **[On/Off]** turns off cruise and returns control of vehicle speed to driver. Previously Set speed is removed from cruise's memory.





## TROUBLESHOOTING





1. CHECK VOLTAGES ON THE PINK WIRE IN THE ECM AT POSITION 26 FOR 5 VOLTS. THE VIOLET WIRE AT POSITION 27 SHOULD READ 5 VOLTS. THE YELLOW WIRE AT POSITION 13 SHOULD HAVE A GROUND NO HIGHER THAN 3 OHMS OF RESISTANCE.

Signal 2 5 volts

Signal 1 5 volts

C1 connector to ECM

∞ <sup>27</sup>

Pink

Violet

○ 13 Sw. Gnd

4. CHECK CONTROL SWITCH.
UNPLUG CONNECTOR AT THE
STEERING WHEEL AND MEASURE
RESISTANCE ACROSS THE FOLLOWING
WIRES LISTED BELOW:

### **PINK-PURPLE**

ON/OFF: 6.6 Ohms SET: 5.13 Ohms

RESUME: 10.50 Ohms CANCEL: 4.46 Ohms

### **PINK-YELLOW**

ON/OFF: 6.2 Ohms SET: 0.79 Ohms RESUME: 1.7 Ohms CANCEL: 3.2 Ohms

## **PURPLE-YELLOW**

ON/OFF: 0.46 Ohms SET: 4.35 Ohms RESUME: 8.80 Ohms CANCEL: 1.16

3. CHECK CONTROL SWITCH VOLTAGE.

LOCATE 6-PIN CONNECTOR AT STEERING WHEEL
AND MEASURE VOLTAGE ACROSS THE FOLLOWING
WIRES LISTED BELOW:

VIOLET WIRE PIN 6 TO VT/BRN (YELLOW) WIRE PIN 5

PRESS SET=3.35 VOLTS
PRESS RESUME=4.0 VOLTS
PRESS ON/OFF=0.90 VOLTS
PRESS CANCEL=1.80 VOLTS

VT/ORN (PINK) WIRE PIN 4 TO VT/BRN (YELLOW) WIRE PIN 5

PRESS SET=1.35 VOLTS
PRESS RESUME=2.25 VOLTS
PRESS ON/OFF=3.75 VOLTS
CANCEL=3.0 VOLTS

