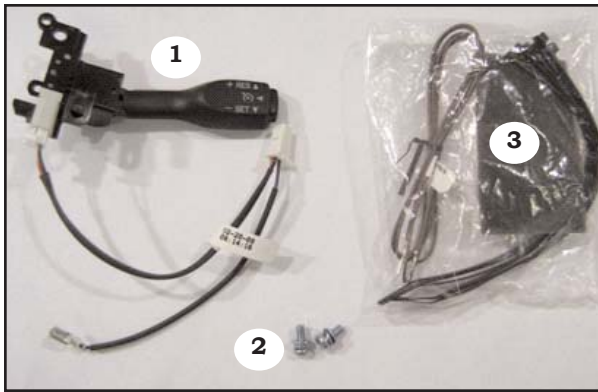


PART NUMBER: 250-1731



BASE KIT CONTENTS

ITEM	QTY	DESCRIPTION
1	1	CONTROL SWITCH ASSEMBLY
2	2	SCREWS (M5)
3	3	HARDWARE CONTENTS

HARDWARE BAG CONTENTS

ITEM	QTY	DESCRIPTION
1	1	CRUISE ECM HARNESS FOR COROLLA
2	1	CRUISE ECM HARNESS FOR TACOMA
3	4	WIRE TIES
4	1	FOAM TAPE
5		
6		

ADDITIONAL ITEMS REQUIRED FOR INSTALL

ITEM	QTY	DESCRIPTION
1	1	

CONFLICTS

NOTE:

RECOMMENDED TOOLS

PERSONAL & VEHICLE PROTECTION	
SAFETY GLASSES	
FENDER COVER	
GLOVES (OPTIONAL)	
SPECIAL TOOLS	
BATTERY POST PROTECTOR	
INSTALLATION TOOLS	
TRIM REMOVAL TOOL	PHILLIPS SCREWDRIVER
10-MM WRENCH	T-30 BIT
3/4 WRENCH DRIVE	TORQUE WRENCH
DRILL BITS	1/4" AND 1 1/2" HOLE SAW
14MM WRENCH	
SPECIAL CHEMICALS	

SERVICE TOOL CONTENTS

ITEM	QTY	DESCRIPTION	PART NUMBER








GENERAL APPLICABILITY

ALL TACOMA MODELS

SERVICE PARTS

ITEM	PART#	DESCRIPTION
1	250-2709	TUNDRA ECM HARNESS
2		

LEGEND

-  **STOP:** DAMAGE TO VEHICLE MAY OCCUR. DO NOT PROCEED UNTIL PROCESS COMPLIANCE HAS BEEN MET.
-  **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.
-  **VEHICLE PROTECTION:** THIS CALLS OUT FOR PROTECTION OF VEHICLE REQUIRED FOR THIS PROCESS.

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.

INSTALLATION

VEHICLE PREPARATION:

1. DISCONNECT THE CABLE FROM THE NEGATIVE TERMINAL OF THE BATTERY. **FIGURE 1**



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.

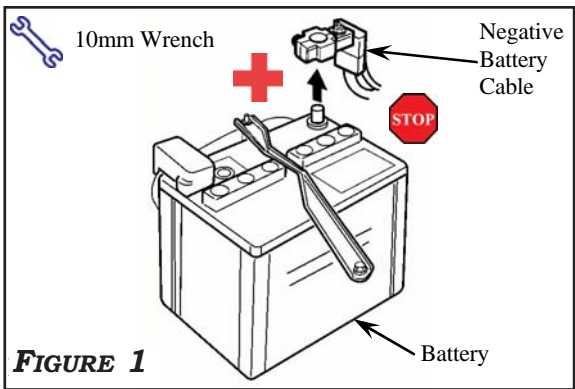


FIGURE 1



2. REMOVE AIRBAG BY RELEASING SIDE PANELS FROM STEERING WHEEL AND EXTRACTING THE TWO 30 TORX SCREWS AS ILLUSTRATED IN **FIGURE 2**.

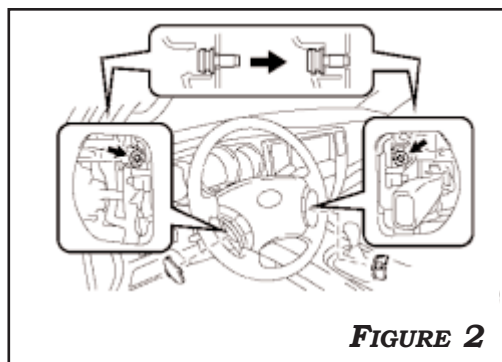


FIGURE 2

3. REMOVE GROUND TERMINAL AND DUMMY HORN/CRUISE CONNECTOR FROM STEERING WHEEL AND DISCARD. **IF GROUND HARNESS FOR HORN IS PRESENT ON A SEPARATE VEHICLE CONNECTOR, LEAVE HORN WIRE CONNECTED.** UTILIZE SMALL SCREWDRIVER TO REMOVE AIRBAG CONNECTORS AS ILLUSTRATED IN **FIGURE 3**.

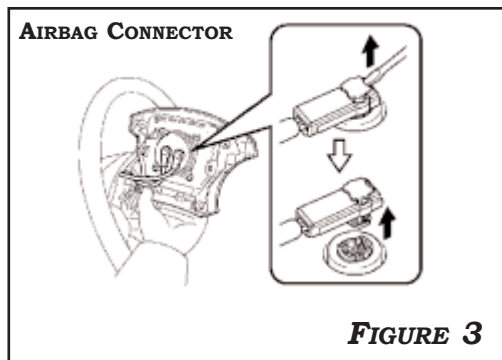


FIGURE 3



CAUTION: BE SURE TO STORE AIRBAG FACE UP AS ILLUSTRATED IN **FIGURE 4** TO REDUCE INJURY IN EVENT OF ACCIDENTAL DISCHARGE OF AIRBAG.

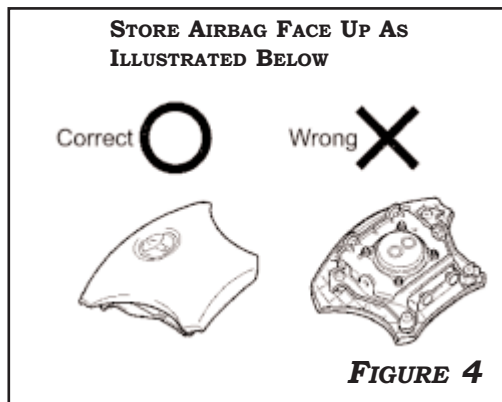


FIGURE 4

INSTALLATION

CONTROL SWITCH



1. USING THE **SWITCH HOLE CUTTING TEMPLATES** ON PAGE 7, PLACE THE TEMPLATE ON THE INSIDE OF THE TRIM PIECE AS SHOWN AND DRILL A 1 1/2" HOLE INTO THE SHROUD FOR THE CONTROL SWITCH. **FIGURE 5**

2. MOUNT CRUISE CONTROL SWITCH WITH TWO (2) PHILLIPS SCREWS PROVIDED. **IF GROUND HARNESS FOR HORN IS PRESENT ON A SEPARATE VEHICLE CONNECTOR, REMOVE HORN GROUND FROM CRUISE HARNESS. PLUG IN CRUISE SWITCH CONNECTOR AND RECONNECT GROUND TERMINAL. FIGURES 6-7**



3. REINSTALL AIRBAG.

TESTING



1. RECONNECT NEGATIVE BATTERY CABLE AND TORQUE TO **3FT*LBS.**



2. TURN THE IGNITION TO THE "ON" POSITION. PRESS THE "CRUISE ON-OFF" BUTTON. THIS TURNS THE SYSTEM ON. THE INDICATOR LIGHT IN THE INSTRUMENT PANEL WILL COME ON. IF THE LIGHT DOES NOT COME ON, OR FLASHES, DISCONNECT NEGATIVE BATTERY TERMINAL AND CONTINUE TO NEXT PAGE.

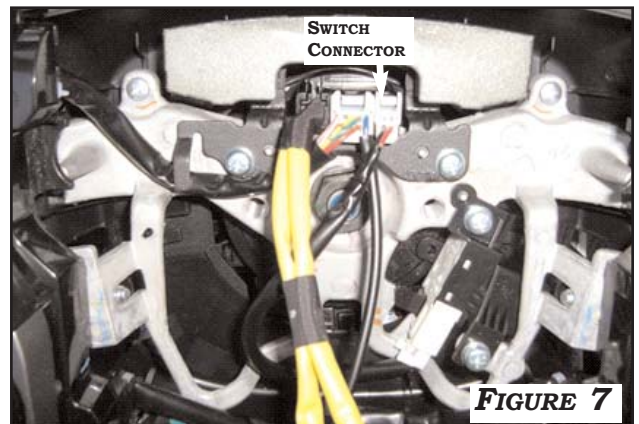
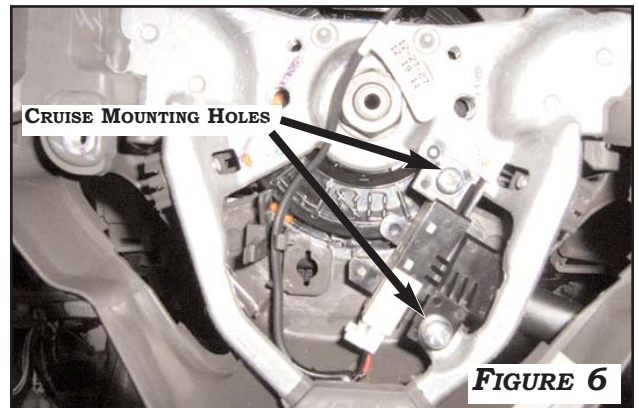
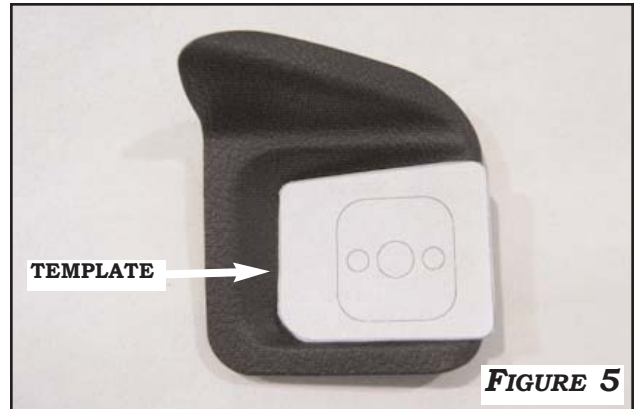


3. ENSURE CRUISE DISENGAGES WHEN VEHICLE IS SHIFTED INTO NEUTRAL OR CLUTCH IS DEPRESSED. ALSO ENSURE CRUISE DISENGAGES WHEN BRAKE IS DEPRESSED.



REASSEMBLY

1. REINSTALL TRIM PIECES TAKING SPECIAL CARE TO ENSURE HARNESSSES AND WIRING CONNECTIONS ARE PROPERLY SECURED.
2. BE SURE HARNESS IS NOT PINCHED OR BOUND.



INSTALLATION

CRUISE ECM HARNESS



1. DISENGAGE 4 CLIPS TO REMOVE LOWER STEERING WHEEL SHROUD. **FIGURE 9.**
2. LOCATE CONNECTOR **J45** CONNECTOR BEHIND STEERING WHEEL AT RIGHT SIDE OF SUB ASSEMBLY. **FIGURE 10.** REMOVE CONNECTOR. **BE SURE TO PUSH OUT TERMINAL RETAINER AT THE CENTER OF CONNECTOR. FIGURE 11.** IF PRESENT, REMOVE THE **YELLOW WIRE** IN **PIN 1** OF CONNECTOR **J45.** **SEE FIGURE 12.** INSERT THE **CLOCK-SPRING** TERMINAL FROM THE COROLLA CRUISE ECM HARNESS (**BLACK WIRE**) TO **PIN 1** OF CONNECTOR **J45.** CAREFULLY LOCK TERMINAL INTO PLACE. PULL THE TERMINAL BACK GENTLY TO CHECK WHETHER IT IS LOCKED CORRECTLY.
3. IF A WIRE IS PRESENT IN **PIN 2** OF CONNECTOR **J45,** REASSEMBLE CONNECTOR AND SEE TESTING INSTRUCTIONS. **BE SURE RETAINER IS PRESSED IN BEFORE REINSTALLING CONNECTOR.**
4. IF A WIRE IS NOT PRESENT, INSERT THE **CLOCKSPRING** TERMINAL FROM THE CRUISE GROUND HARNESS (BLACK WIRE) TO **PIN 2** OF CONNECTOR **J45.** CAREFULLY LOCK TERMINAL INTO PLACE. **FIGURE 12.** REASSEMBLE CONNECTOR. **BE SURE RETAINER IS PRESSED IN BEFORE REINSTALLING.**
5. REMOVE THE DRIVER SIDE KICK PANEL. ROUTE THE GROUND HARNESS TO VEHICLE GROUND POINT. REMOVE THE 10MM GROUND SCREW. INSTALL THE **GROUND** TERMINAL FROM THE **BLACK** CRUISE ECM HARNESS TO GROUND POINT. **FIGURE 13**
6. SEE TESTING INSTRUCTIONS ON PAGE 3.

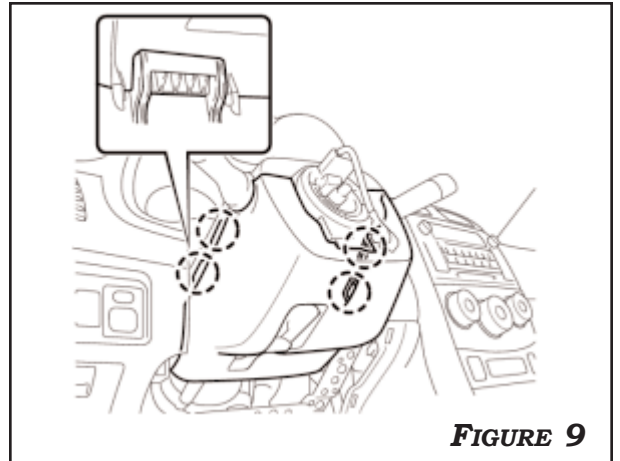


FIGURE 9

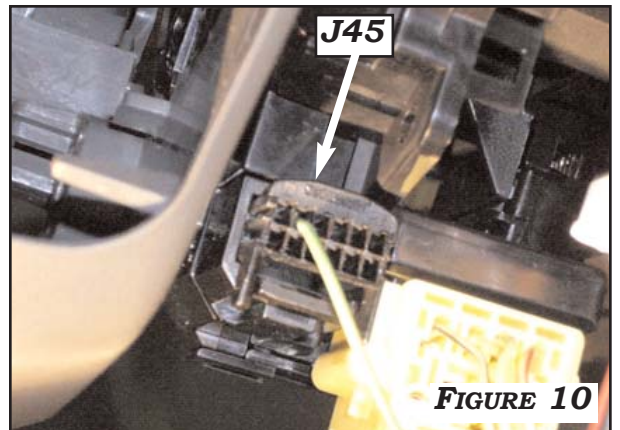


FIGURE 10

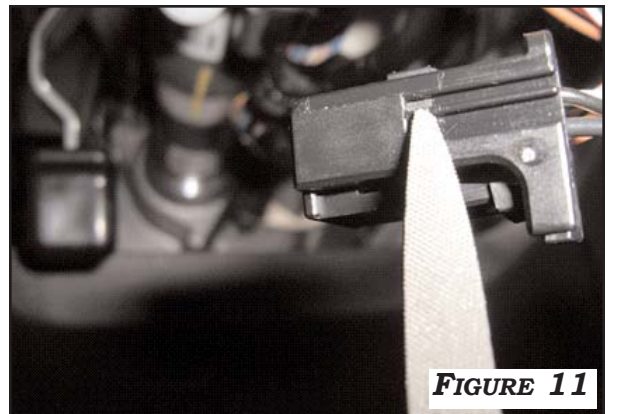


FIGURE 11



FIGURE 13

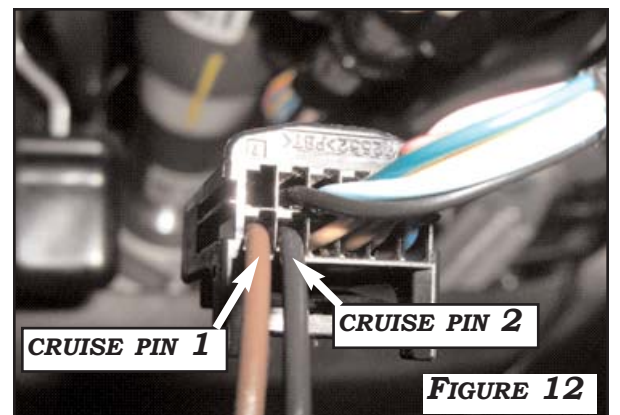


FIGURE 12

INSTALLATION



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.

TUNDRA CRUISE ECM HARNESS



NOTE: TUNDRA APPLICATIONS MAY REQUIRE ADDING LENGTH TO THE COROLLA ECM HARNESS BLACK WIRE TO REACH THE ECM.

1. ROUTE THE COROLLA CRUISE ECM HARNESS THROUGH THE GROMMET ON THE FIREWALL. LOCATE CONNECTOR **A24** AT PASSENGER SIDE IN THE ENGINE COMPARTMENT. RELEASE CONNECTOR FROM THE ECM AND REMOVE THE PLASTIC COVER. **FIGURE 14.**
2. LOCATE **PIN 45**, IN WHICH IF PRE-WIRED WOULD BE A **BROWN WIRE**. **FIGURE 15.** IF BROWN WIRE IS PRESENT, REMOVE ECM TERMINAL FROM COROLLA CRUISE ECM HARNESS AND ATTACH TO FACTORY BROWN WIRE OF PIN 45, THEN REPEAT TESTING PROCEDURE. IF WIRE IS NOT PRESENT, REMOVE THE RUBBER SEAL IN **PIN 45**. **BE SURE TO PUSH OUT TERMINAL RETAINER AT THE CENTER OF CONNECTOR WITH SPECIAL TOOL**. **FIGURE 16.** USE ECM TERMINAL WITH RUBBER SEAL AS SHOWN IN **FIGURE 17.**
3. INSERT THE **ECM** TERMINAL FROM THE COROLLA CRUISE ECM HARNESS TO **PIN 45** OF CONNECTOR **A24** CAREFULLY LOCKING TERMINAL INTO PLACE. PULL THE TERMINAL BACK GENTLY TO CHECK WHETHER IT IS LOCKED CORRECTLY. **NOTE: IF THE TERMINAL TO LOCKING CLIP DOES NOT LOCK FIRMLY, TERMINAL RETAINER CAN NOT LOCK AT FULL LOCK POSITION SO THE TERMINAL BACKS OUT FROM CONNECTOR.** PRESS IN RUBBER SEAL ON HARNESS INTO CONNECTOR HOUSING. REASSEMBLE CONNECTOR **A24** AND PLACE BACK ONTO ECM.

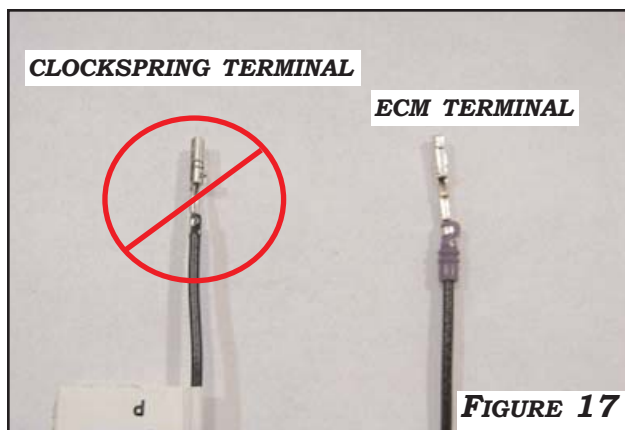
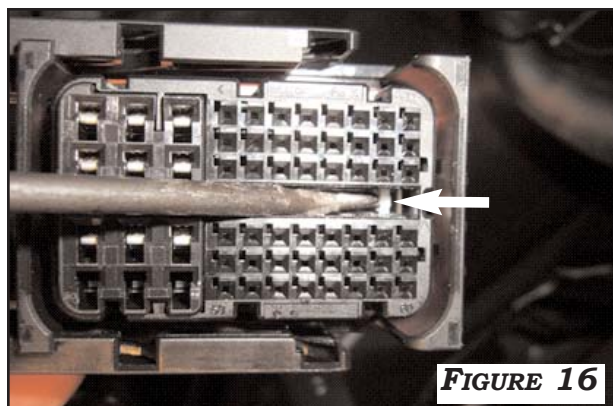
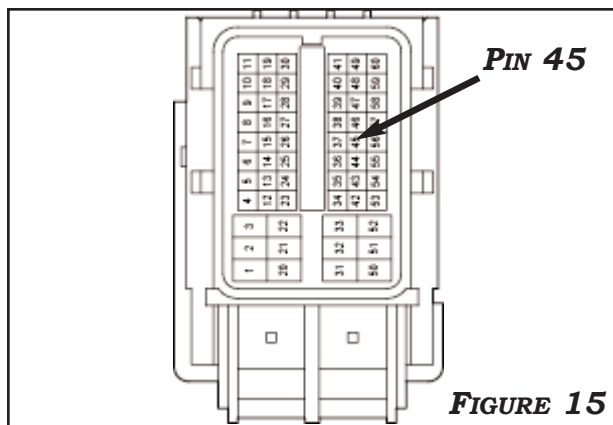
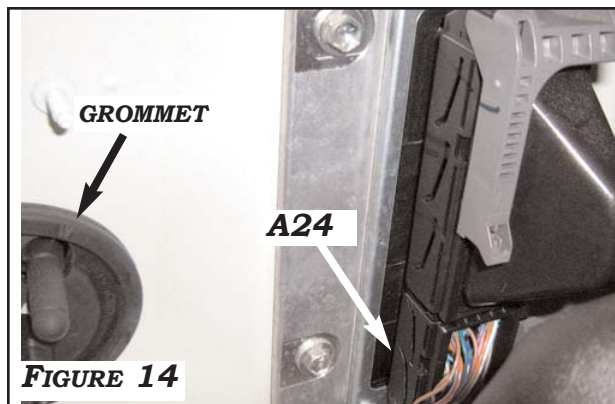


4. REPEAT TESTING PROCEDURE.

REASSEMBLY

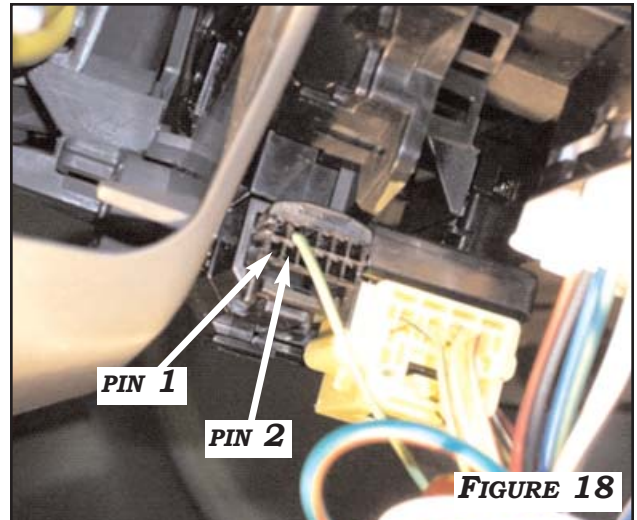


1. REINSTALL TRIM PIECES TAKING SPECIAL CARE TO ENSURE HARNESSES AND WIRING CONNECTIONS ARE PROPERLY SECURED.
2. BE SURE HARNESS IS NOT PINCHED OR BOUND.

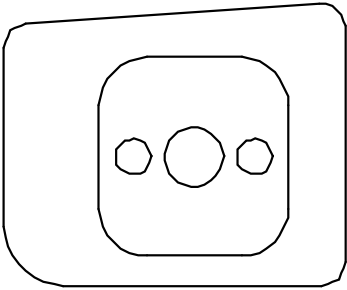


TROUBLESHOOTING

1. LOCATE CONNECTOR **J45** OF CLOCKSPEED BELOW RIGHT HAND SIDE STEERING COLUMN. REFER TO **FIGURE 18**
2. WITH IGNITION SWITCH ON, PLACE POSITIVE LEAD OF METER ON **PIN 1** (DC).
3. PLACE COMMON LEAD ON **PIN 2** (GROUND). CONFIRM READINGS ARE AS FOLLOWS:
 - A. KEY ON: 12VOLTS.
 - B. KEY ON, PRESS CRUISE SWITCH 'ON' AND HOLD: 0 VOLTS.
 - C. KEY ON, PRESS CRUISE SWITCH 'SET' AND HOLD: 6 VOLTS.
 - D. KEY ON, PRESS CRUISE SWITCH 'RESUME' AND HOLD: 3 VOLTS.
4. IF THE VOLTAGES ARE DIFFERENT REPLACE CONTROL SWITCH.
5. IF THERE IS NOT 12VOLTS ON **PIN 1**, THEN DO A CONTINUITY TEST FROM THE CONTROL SWITCH (BEHIND AIR BAG) TO THE COMPUTER.
6. IF NO CONTINUITY, THEN CHECK PIN INSERTIONS AT CONTROL SWITCH, CLOCKSPEED AND COMPUTER.
7. IF CONTINUITY IS GOOD, THEN VERIFY PIN POSITIONS AT CLOCKSPEED AND COMPUTER.
8. IF ALL POSITIONS CHECK OK AND CONTINUITY IS GOOD, THEN THERE IS A COMPUTER PROBLEM. CONSULT A TOYOTA DEALER.



TUNDRA TEMPLATE





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