

**Rostra RearSight
250-8800-CCD & 250-8804-CCD
Installation Instructions**



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PARTS IDENTIFICATION

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	250-8800	3.5 REARSIGHT MONITOR/MIRROR/STANDARD
	1	250-8804	3.5 REARSIGHT MONITOR/MIRROR/SLIM
2	1	250-8545	3.5 MONITOR INTERFACE HARNESS/STANDARD
	1	250-8566	3.5 MONITOR INTERFACE HARNESS/SLIM
3	1	250-8550	CAMERA EXTENSION HARNESS
4	1	250-8112	REAR CAMERA ASSEMBLY
5	1	250-8567	SACK PARTS: TIE STRAPS, T-TAPS, SEALING PUTTY



HELPFUL HINTS

1. BEFORE STARTING INSTALLATION:

FAMILIARIZE YOURSELF WITH THE INSTALLATION INSTRUCTIONS AND REARSIGHT COMPONENTS.

2. ANTI-THEFT RADIO:

IF VEHICLE IS EQUIPPED WITH AN ANTI-THEFT RADIO, THE RADIO CODE MUST BE WRITTEN DOWN PRIOR TO DISCONNECTING BATTERY CABLE. THE CODE MUST BE REENTERED WHEN THE NEGATIVE BATTERY CABLE IS REINSTALLED.

3. REMOVAL OF NEGATIVE BATTERY CABLE:

DISCONNECT THE **NEGATIVE BATTERY CABLE** FOR **THREE MINUTES** BEFORE INSTALLING THE REARSIGHT COMPONENTS TO AVOID UNINTENDED AIRBAG DEPLOYMENT.

FIGURE 1

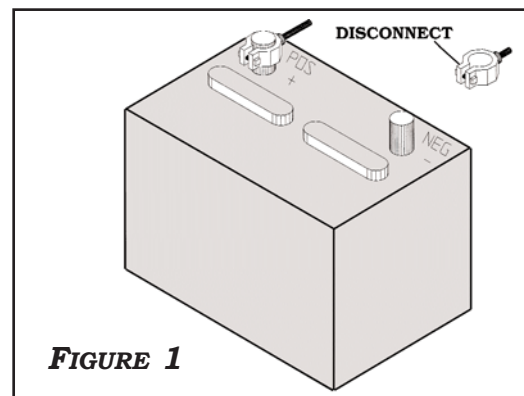


FIGURE 1

4RUNNER INSTALLATION



CAUTION: It is advisable to disconnect the negative battery cable for 3 minutes before beginning installation, to avoid unintended air bag deployment. Note and record any anti-theft radio codes prior to disconnecting.



VEHICLE PREPARATION



1. REMOVE THE MIRROR BASE COVER. PUSH THE LEVER, AND THEN SLIDE AND REMOVE THE INNER REAR VIEW MIRROR.

FIGURE 2

2. REMOVE THE 2 SCREWS, DETACH THE 3 CLIPS, AND DISCONNECT THE CONNECTOR TO REMOVE MAP LIGHT ASSEMBLY.

FIGURE 3

3. USING A TRIM TOOL, DETACH THE 4 CLIPS, 10 CLAWS AND 2 GUIDES AND REMOVE THE DRIVER SIDE DOOR SCUFF PLATE.

FIGURE 4

4. DETACH THE CLIP AND CLAW AND REMOVE THE LEFT SIDE KICK PANEL.

FIGURE 5

5. REMOVE 2 BOLTS AND DISENGAGE CLIPS. DISCONNECT EACH CONNECTOR AND HOOD CABLE ASSEMBLY TO REMOVE THE LOWER INSTRUMENT FINISH PANEL.

FIGURE 6

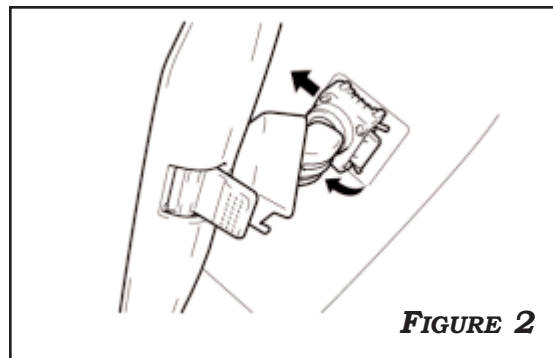


FIGURE 2

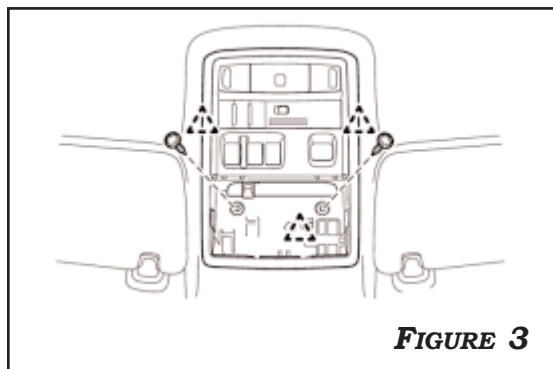


FIGURE 3

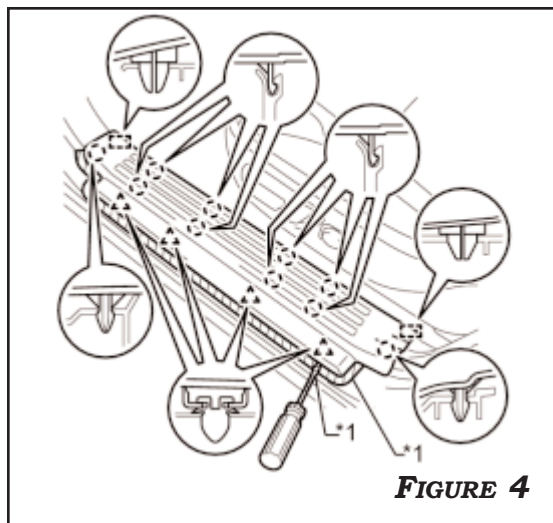


FIGURE 4

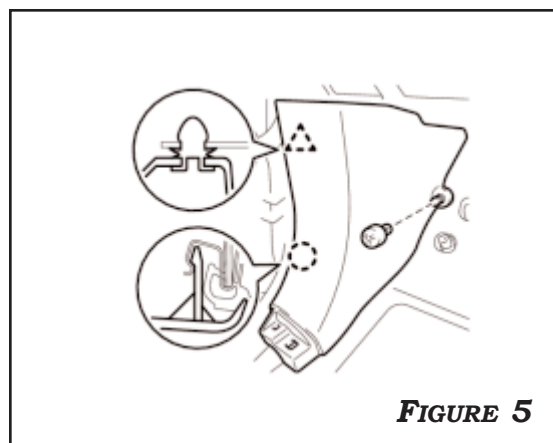


FIGURE 5

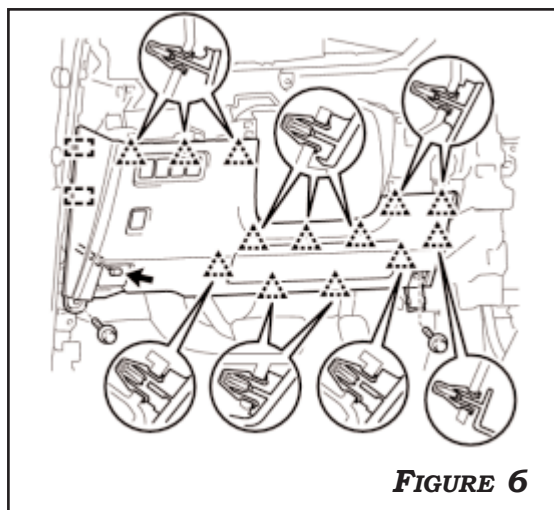


FIGURE 6

4RUNNER INSTALLATION

VEHICLE PREPARATION CONTINUED...



6. USE NEEDLE NOSE PLIERS TO TURN AND RELEASE CLIP A. DISENGAGE 2 CLIPS TO REMOVE THE LEFT FRONT PILLAR.

FIGURE 7

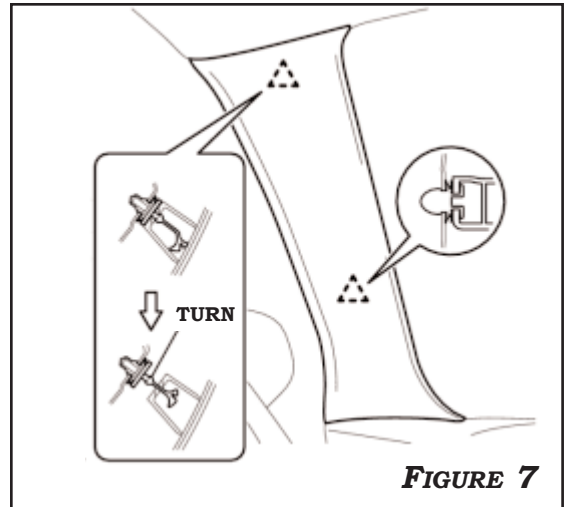


FIGURE 7

7. USE TRIM TOOL TO DISENGAGE THE 9 CLIPS AND REMOVE THE LEFT REAR DOOR SCUFF PLATE. **FIGURE 8**

8. REMOVE LEFT COMPARTMENT SIDE COVERS. REMOVE 3 BOLTS AND DISENGAGE 7 CLIPS TO RELEASE LEFT SIDE COMPARTMENT PANELS. **FIGURE 9**

9. REMOVE THE BACK DOOR PULL HANDLE. DETACH 12 CLIPS TO REMOVE BACK DOOR TRIM PANEL. **FIGURE 10**

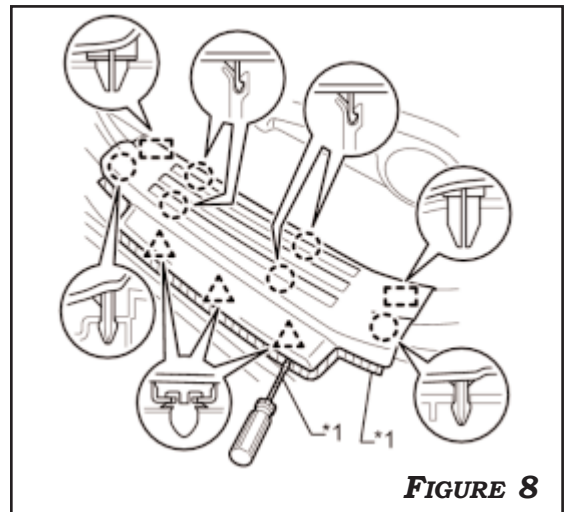


FIGURE 8

10. REMOVE (4) 10MM NUTS, DISCONNECT CONNECTORS, AND DISENGAGE THE CLIPS TO REMOVE THE BACK DOOR OUTSIDE GARNISH SUB-ASSEMBLY. **FIGURE 11**

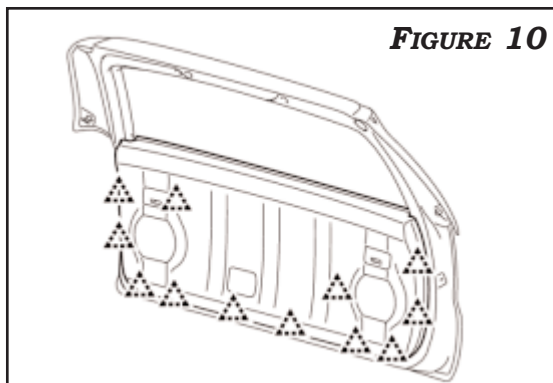


FIGURE 10

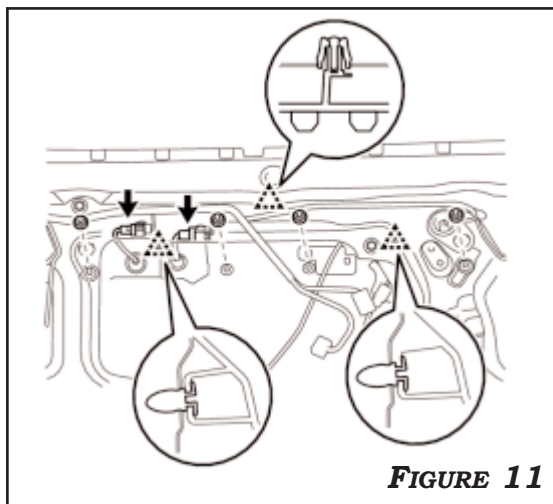


FIGURE 11

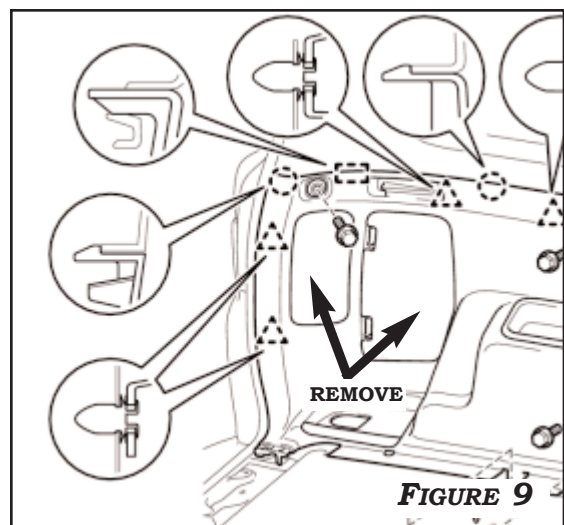


FIGURE 9

4RUNNER INSTALLATION

INSTALLING MONITOR/MIRROR



1. MOUNT REARSIGHT MIRROR ON EXISTING WINDSHIELD LUG AND TIGHTEN SCREW. **FIGURE 12**

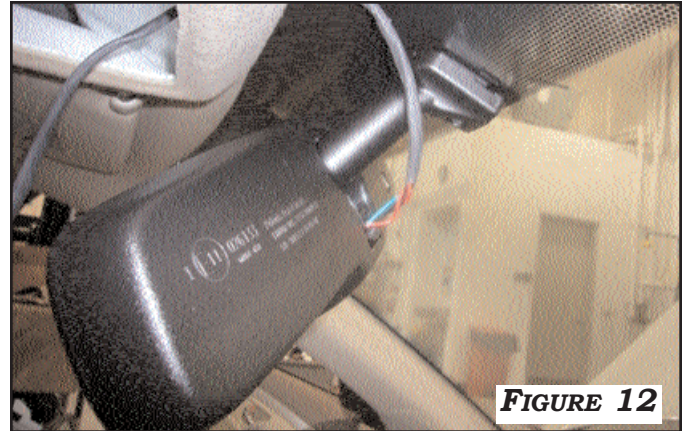


FIGURE 12

2. ROUTE MIRROR HARNESS UP WINDSHIELD AND BEHIND THE HEADLINER TO CONSOLE OPENING. ROUTE THE END OF THE CAMERA EXTENSION HARNESS MARKED "TO MIRROR" WITH THE MALE CONNECTORS UP THE CENTER OF THE WINDSHIELD AND BEHIND HEADLINER TO THE CONSOLE OPENING. **FIGURE 13**

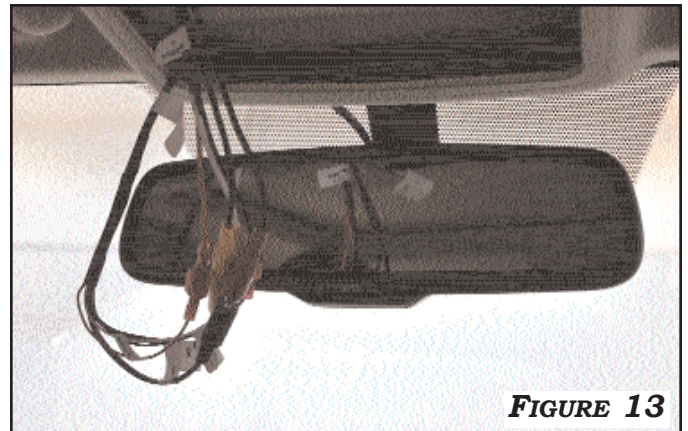


FIGURE 13

3. CONNECT **MALE RCA** VIDEO CONNECTOR OF CAMERA EXTENSION HARNESS TO **VIDEO** INPUT (YELLOW CONNECTOR) OF MIRROR HARNESS. CONNECT **MALE DC** POWER CONNECTOR OF CAMERA EXTENSION HARNESS TO CAMERA **POWER** OUTPUT (BLACK CONNECTOR) OF REARSIGHT MIRROR HARNESS. CONNECT RED, WHITE, AND BLACK WIRES OF POWER EXTENSION HARNESS AS SHOWN IN **FIGURE 12**. WRAP ALL **RCA** AND **DC** CONNECTORS WITH THE FOAM TAPE PROVIDED. **FIGURE 14**

ROUTING HARNESSES AND POWER CONNECTIONS



1. ROUTE **CAMERA EXTENSION HARNESS** AND **MIRROR POWER HARNESS** (RED, BLACK AND WHITE WIRES) ABOVE HEADLINER TO DRIVER-SIDE A-PILLAR. ROUTE HARNESSES DOWN THE A-PILLAR USING THE FACTORY RETAINING CLIPS OR FOAM TAPE WHENEVER POSSIBLE. IF THE VEHICLE HAS SIDE CURTAIN AIRBAGS, BE SURE TO SECURE THE HARNESS SO THAT IT DOES NOT INTERFERE WITH AIRBAG DEPLOYMENT. ROUTE THE HARNESSES FROM THE A-PILLAR TO THE KICK PANEL. **FIGURE 15**

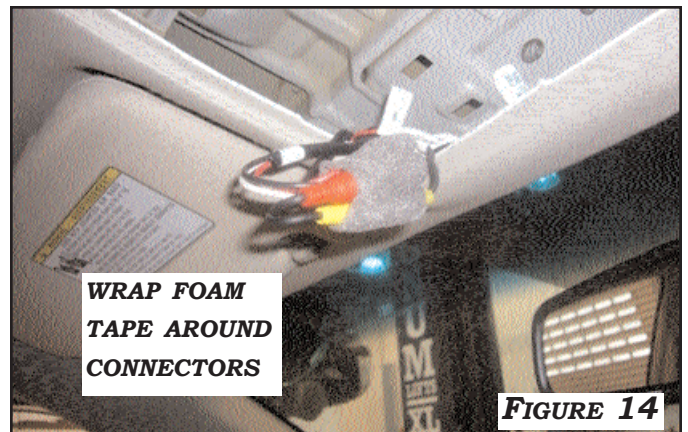


FIGURE 14

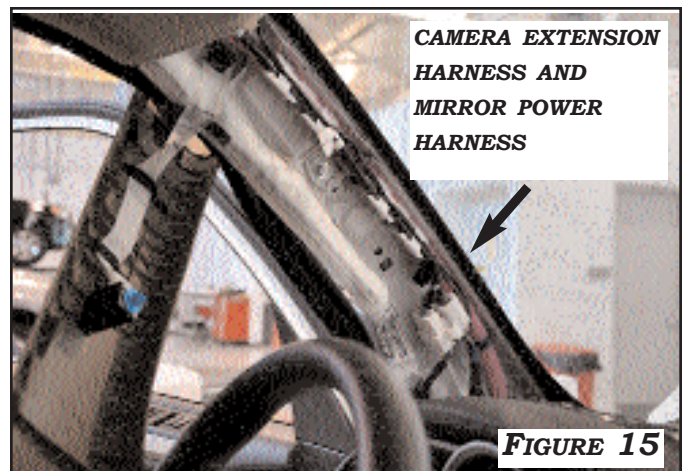


FIGURE 15

4RUNNER INSTALLATION

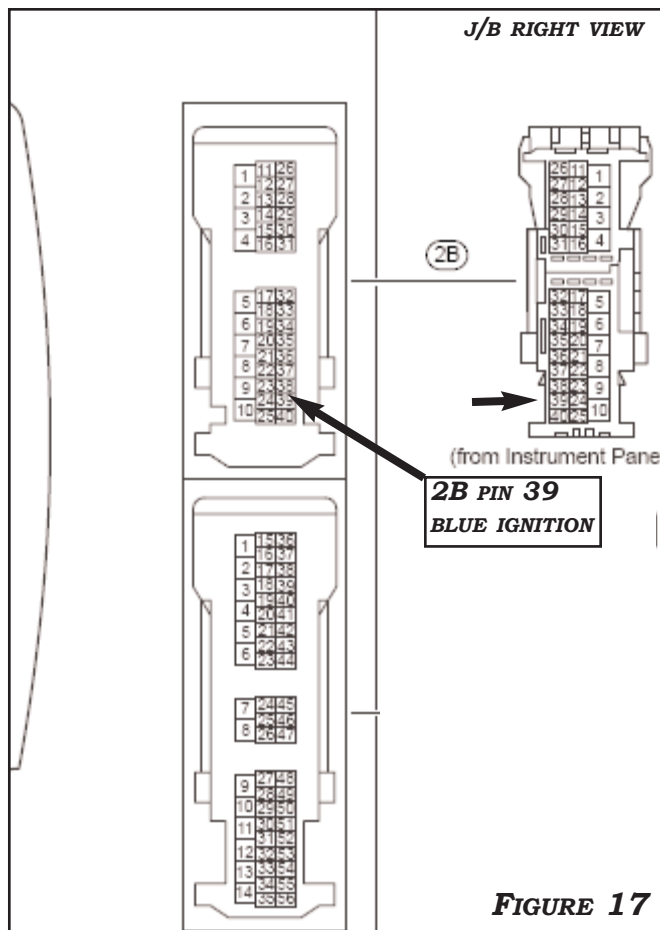
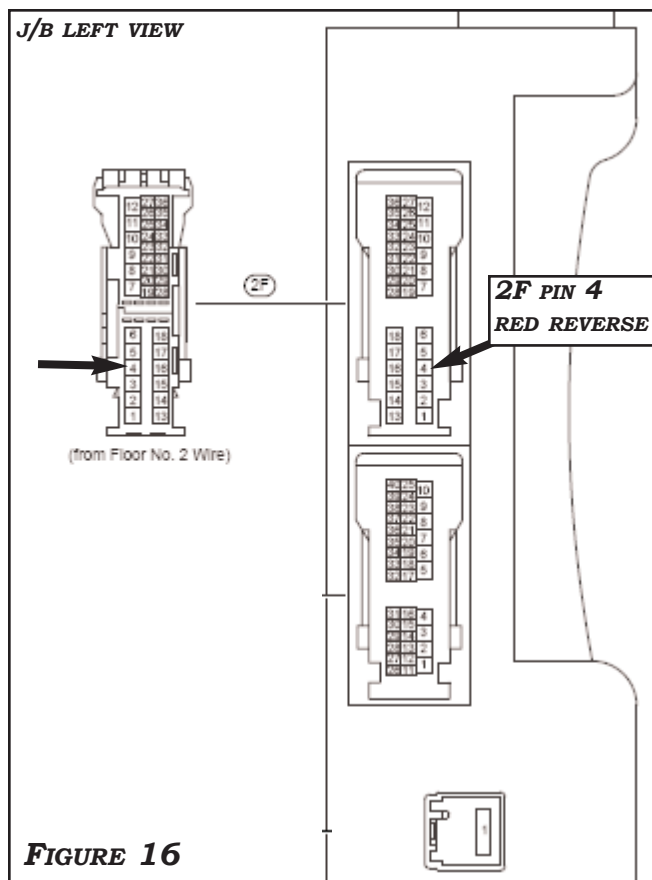
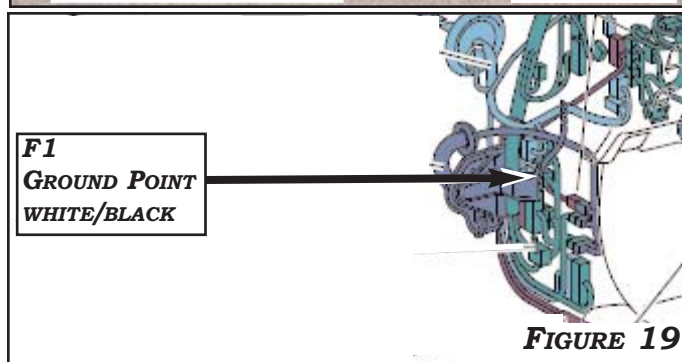
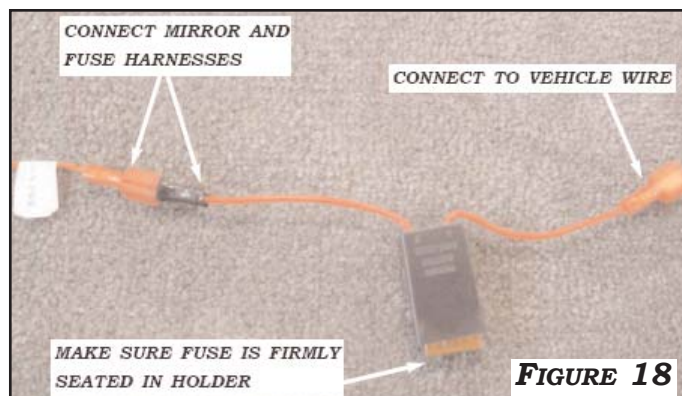
ROUTING HARNESSES

AND POWER CONNECTIONS CONTINUED...



2. LOCATE WHITE CONNECTOR **2F** AT THE LEFT SIDE JUNCTION OF THE BOX. USE THE SUPPLIED RED T-TAP CONNECTOR TO CONNECT THE **WHITE REVERSE WIRE** OF THE **MIRROR POWER HARNESS** TO THE **RED WIRE** IN **PIN 4** OF WHITE CONNECTOR **2F** (BACK UP LIGHT CIRCUIT). LOCATE WHITE CONNECTOR **2B** AT THE RIGHT SIDE OF THE JUNCTION BOX. USE THE SUPPLIED RED T-TAP CONNECTOR TO CONNECT THE **RED IGNITION WIRE** OF THE **MIRROR POWER HARNESS** TO THE **BLUE WIRE** IN **PIN 39** OF CONNECTOR **2B** (REAR VIEW MONITOR CIRCUIT). **USE THE SUPPLIED FUSE HARNESS BETWEEN THE RED IGNITION WIRE OF THE MIRROR POWER HARNESS AND YELLOW WIRE OF VEHICLE..** USE A BLUE T-TAP TO CONNECT THE **BLACK GROUND WIRE** OF THE MIRROR POWER HARNESS TO THE **WHITE/BLACK WIRE** IN **GROUND POINT F1**. SECURE ALL HARNESSES WITH WIRE TIES. **FIGURES 16-19**

3. ROUTE THE CAMERA EXTENSION HARNESS FROM THE KICK PANEL UNDER THE DOOR SILL TRIM AND BESIDE THE REAR SEAT TO THE CARGO AREA. USE THE FACTORY WIRE CHANNELS AND RETAINING CLIPS. ROUTE THE HARNESS ALONG THE FLOOR UNDER THE LEFT REAR TRIM PANELS AND UP THE LEFT D-PILLAR ABOVE THE HEADLINER TO THE REAR DOOR HOSE GROMMET. PULL THE HARNESS THROUGH THE HOSE, USING SOAPY WATER AS A LUBRICANT. *OPTIONAL: WATER ALCOHOL/SOLUTION CAN BE USED. ROUTE THE HARNESS FROM THE HOSE INSIDE THE REAR DOOR TO THE AREA WHERE THE OUTSIDE GARNISH SUB-ASSEMBLY WAS REMOVED. FOLLOW THE FACTORY HARNESSES WHERE POSSIBLE. SECURE THE HARNESS WITH WIRE TIES OR FOAM TAPE. **FIGURE 20-22**



4RUNNER INSTALLATION

MOUNTING CAMERA AND PCB



NOTE: INSTALLATION TEMPERATURE

SURFACE TEMPERATURE MUST BE BETWEEN 70 DEGREES F AND 110 DEGREES F FOR OPTIMUM INSTALLATION.

1. CLEAN THE LEFT SIDE OF THE BOTTOM OF THE LICENSE PLATE TRIM PIECE WITH ALCOHOL. PEEL THE CLEAR LINER OFF OF THE DOUBLE-SIDED TAPE ON THE CAMERA ASSEMBLY AND MOUNT THE CAMERA ASSEMBLY TO THE TRIM PIECE. CENTER CAMERA SHROUD ON TRIM PIECE AS SHOWN FOR ALIGNMENT. BE SURE THE CAMERA ASSEMBLY IS PRESSED DOWN FIRMLY ON THE TRIM PIECE FOR FIVE SECONDS BEFORE RELEASING. REMOVE THE PHILLIPS SCREW FROM THE LEFT LICENSE PLATE LIGHTING ASSEMBLY. **FIGURE 23.** ROUTE THE CAMERA HARNESS INSIDE THE TRIM PIECE AS SHOWN.

FIGURE 24

2. CUT A SLIT IN THE EXISTING TRIM PIECE HARNESS GROMMET AND INSERT THE CAMERA HARNESS. USE THE SUPPLIED SEALING PUTTY WHERE THE HARNESS ENTERS THE GROMMET. INSERT HARNESS AND GROMMET INTO THE REAR DOOR AND REINSTALL THE TRIM PIECE ONTO THE VEHICLE. BE SURE THE HARNESS IS NOT BOUND OR PINCHED.

3. CONNECT **RCA** CONNECTOR AND **DC POWER** CONNECTOR OF CAMERA HARNESS TO THE EXTENSION HARNESS. WRAP **RCA** AND **DC** CONNECTORS WITH FOAM TAPE PROVIDED. PROPERLY BUNDLE AND SECURE EXCESS HARNESS INSIDE OF REAR DOOR. BE SURE HARNESS IS NOT BINDING AND IS CLEAR OF MOVING PARTS. **FIGURE 25**

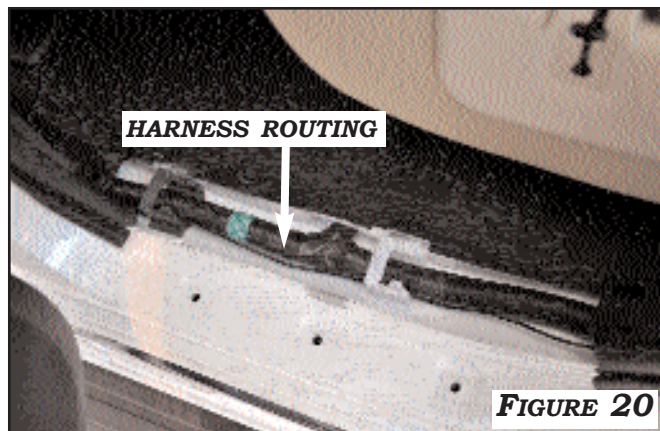


FIGURE 20

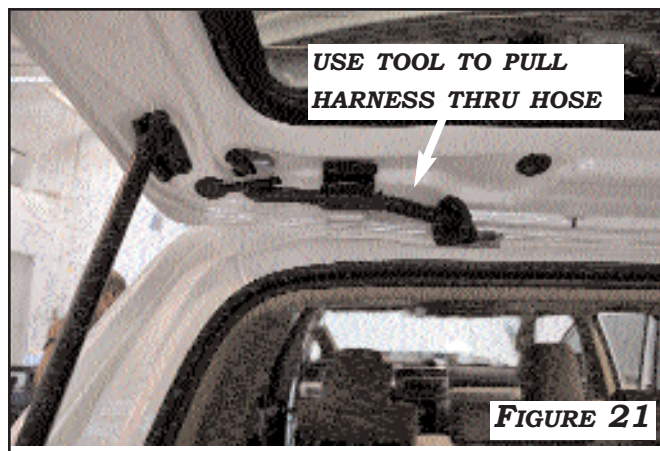


FIGURE 21

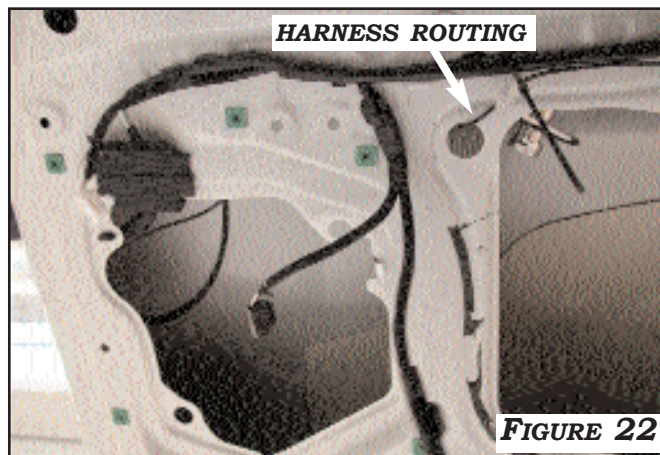


FIGURE 22

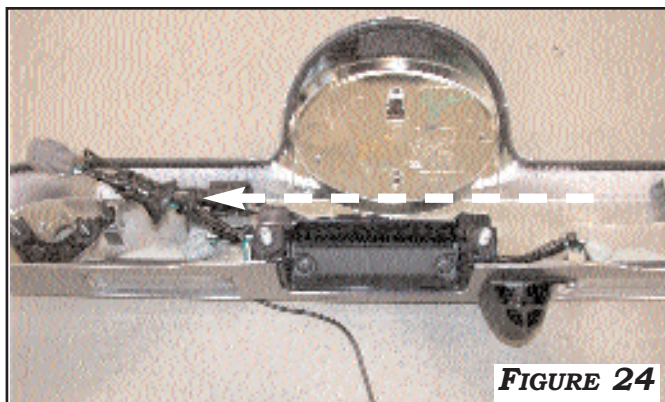


FIGURE 24

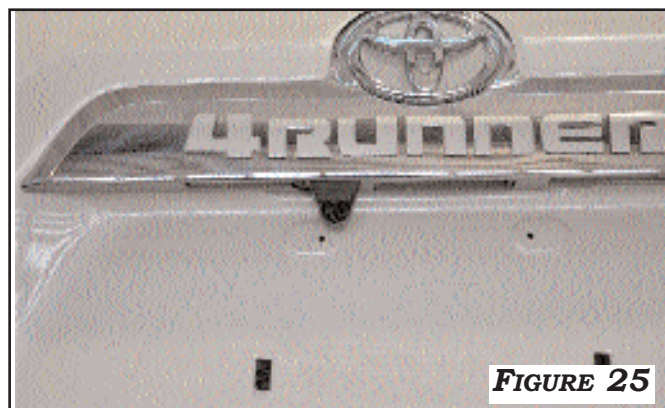


FIGURE 25

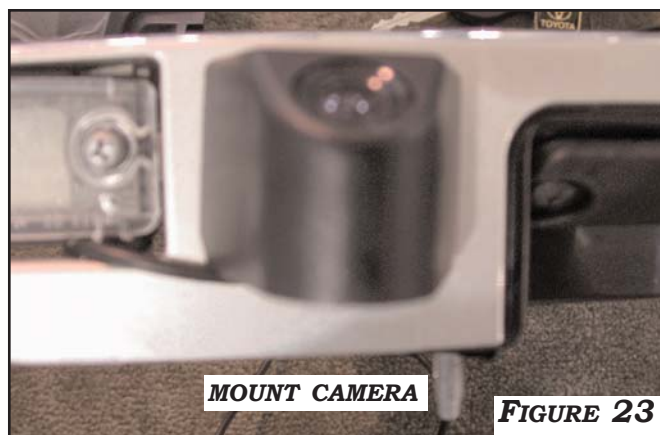
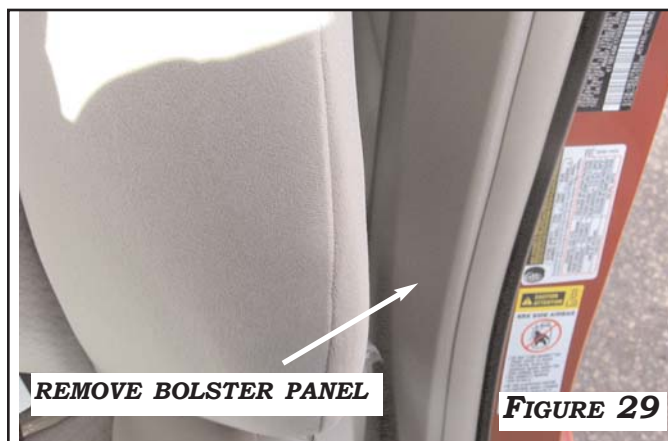
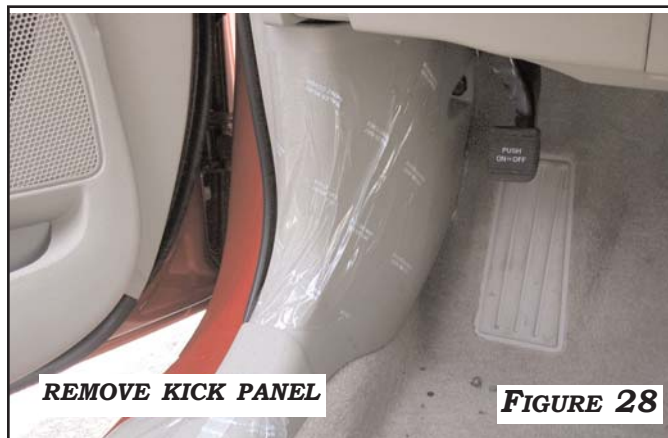
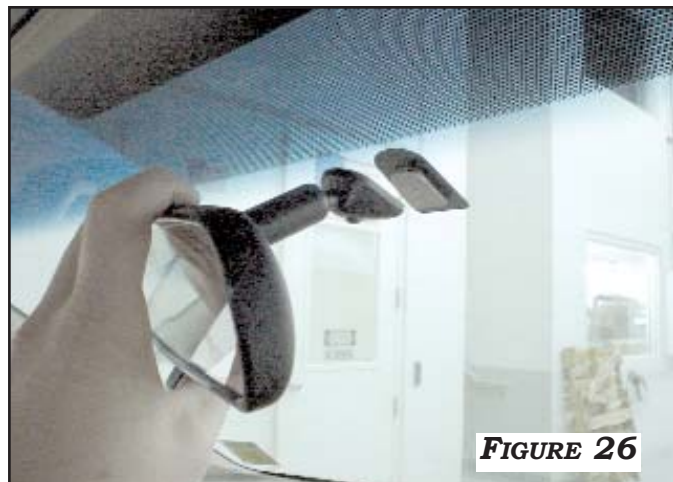


FIGURE 23

CAMRY INSTALLATION

VEHICLE PREPARATION

1. LOOSEN **Torx-20** WINDSHIELD LUG MOUNT SCREW AND REMOVE EXISTING REARVIEW MIRROR. **FIGURE 26**
2. REMOVE OVERHEAD CONSOLE BY PULLING DOWN THE MAP LIGHT CONSOLE IN THE AREA AS SHOWN (**FIGURE 2**), RELEASING (**2**) CLIPS AND DISCONNECTING THE HARNESS CONNECTORS. REMOVE THE DRIVER SIDE SUNVISOR RETAINING CLIP.
3. REMOVE OR LOOSEN DRIVER SIDE TRIM PANELS INCLUDING: A-PILLAR TRIM, GLOVE BOX, KICK PANEL AND DOOR SILL TRIM; B-PILLAR KICK PANEL AND REAR DOOR SILL TRIM. REMOVE THE REAR SEAT BOTTOM CUSHION, DRIVER SIDE BOLSTER CUSHION, AND THE TRUNK LID LINING. **FIGURES 27-30**
4. REMOVE THE TRIM PIECE ABOVE THE LICENSE PLATE BY REMOVING FOUR (4) 10MM NUTS AND ONE (1) PLASTIC CLIP. **FIGURE 31**



CAMRY INSTALLATION

INSTALLING MONITOR/MIRROR

1. MOUNT REARSIGHT MIRROR ON EXISTING WINDSHIELD LUG AND TIGHTEN SCREW. **FIGURE 32**

2. ROUTE MIRROR HARNESS UP WINDSHIELD AND BEHIND THE HEADLINER TO CONSOLE OPENING. ROUTE THE END OF THE CAMERA EXTENSION HARNESS MARKED "TO MIRROR" WITH THE MALE CONNECTORS UP THE CENTER OF THE WINDSHIELD AND BEHIND HEADLINER TO THE CONSOLE OPENING. **FIGURE 33**

3. CONNECT **MALE RCA** VIDEO CONNECTOR OF CAMERA EXTENSION HARNESS TO **VIDEO 1** INPUT (BLACK CABLE) OF MIRROR HARNESS. CONNECT **MALE DC** POWER CONNECTOR OF CAMERA EXTENSION HARNESS TO CAMERA **POWER 1** OUTPUT (GREEN CABLE) OF REARSIGHT MIRROR HARNESS. CONNECT RED, WHITE, AND BLACK WIRES TO POWER EXTENSION HARNESS. WRAP ALL **RCA** AND **DC** CONNECTORS WITH THE FOAM TAPE PROVIDED. **FIGURE 34**

ROUTING HARNESSES AND POWER CONNECTION

1. ROUTE **CAMERA EXTENSION HARNESS** AND **MIRROR POWER HARNESS** (RED, BLACK AND WHITE WIRES) ABOVE HEADLINER TO DRIVER-SIDE A-PILLAR. ROUTE HARNESSES DOWN THE A-PILLAR USING THE FACTORY RETAINING CLIPS OR FOAM TAPE WHENEVER POSSIBLE. IF THE VEHICLE HAS SIDE CURTAIN AIRBAGS, BE SURE TO SECURE THE HARNESS SO THAT IT DOES NOT INTERFERE WITH AIRBAG DEPLOYMENT. ROUTE THE HARNESSES FROM THE A-PILLAR TO THE KICKPANEL. **FIGURE 35**

2. LOCATE BLUE CONNECTOR **EN2**. AT THE DRIVER SIDE KICK-PANEL. USE THE SUPPLIED BLUE T-TAP CONNECTOR TO CONNECT THE **RED IGNITION WIRE** OF THE **MIRROR POWER HARNESS** TO THE **RED WIRE IN PIN 11** OF BLUE CONNECTOR **EN2**. USE A RED T-TAP TO CONNECT THE **BLACK GROUND WIRE** OF THE MIRROR POWER HARNESS TO THE **WHITE/BLACK WIRE IN PIN 10** OF BLUE CONNECTOR **EN2**. LOCATE WHITE CONNECTOR **EN1**. USE THE SUPPLIED RED T-TAP CONNECTOR TO CONNECT THE **WHITE REVERSE WIRE** OF THE **MIRROR POWER HARNESS** TO THE **RED WIRE IN PIN 9** OF CONNECTOR **EN1**. SECURE ALL HARNESSES WITH WIRE TIES. **FIGURE 36**

3. ROUTE THE CAMERA EXTENSION HARNESS FROM THE KICK-PANEL UNDER THE DOOR SILL TRIM, BEHIND B-PILLAR TRIM, UNDER THE REAR DOOR SILL TRIM AND BENEATH/BEHIND THE DRIVER REAR SEAT BOLSTER TO THE TRUNK. USE THE FACTORY WIRE CHANNELS AND RETAINING CLIPS. ROUTE THE HARNESS BELOW THE REAR DECK AND UP THE LEFT TRUNK HINGE TO THE TRUNK LID AND THE AREA BEHIND THE LICENSE PLATE. FOLLOW THE FACTORY HARNESSES WHERE POSSIBLE. SECURE THE HARNESS WITH WIRE TIES OR FOAM TAPE. **FIGURE 37**



FIGURE 32

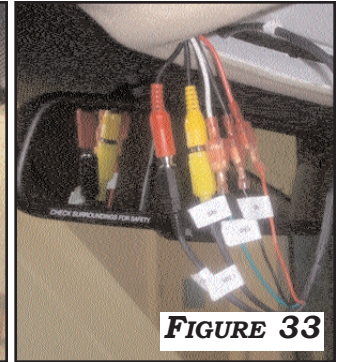


FIGURE 33

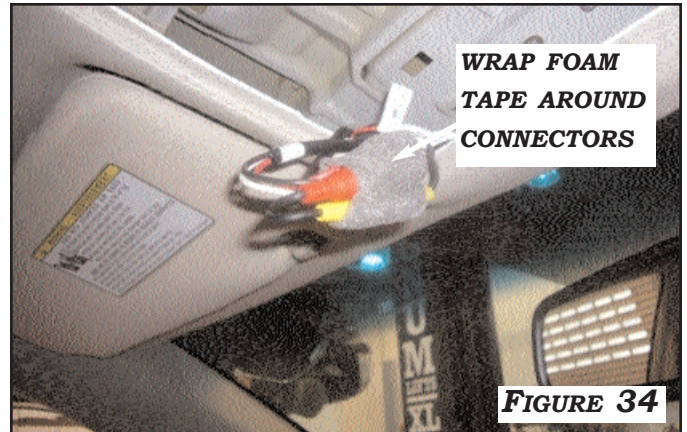


FIGURE 34



FIGURE 35

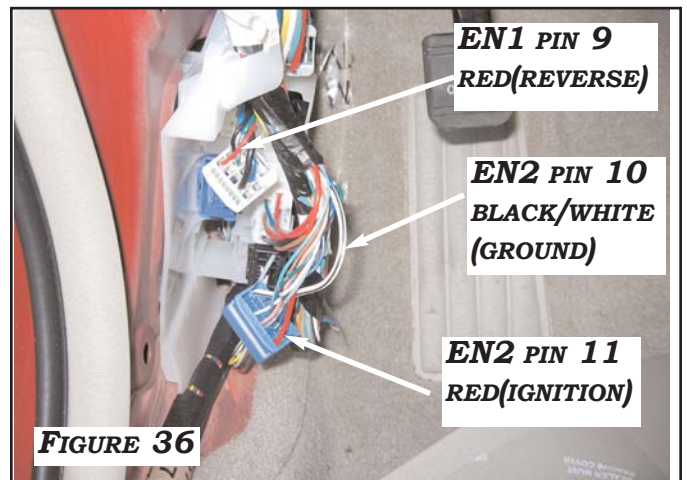


FIGURE 36

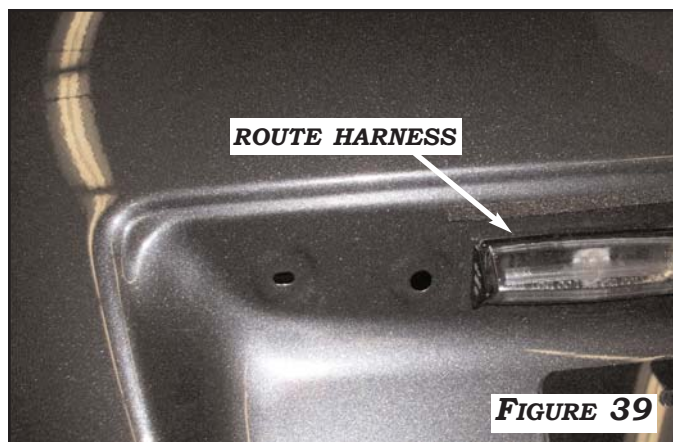
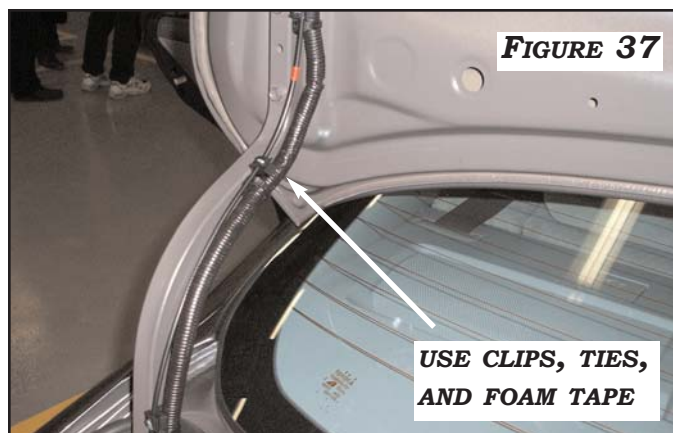
CAMRY INSTALLATION

MOUNTING CAMERA

1. CLEAN THE LEFT SIDE OF THE BOTTOM OF THE LICENSE PLATE TRIM PIECE WITH ALCOHOL. PEEL THE CLEAR LINER OFF OF THE DOUBLE-SIDED TAPE ON THE CAMERA ASSEMBLY AND MOUNT THE ASSEMBLY TO THE TRIM PIECE USING THE EDGES FOR ALIGNMENT AS SHOWN IN **FIGURE 38**. BE SURE TO PRESS THE CAMERA ASSEMBLY DOWN FIRMLY ON THE TRIM PIECE FOR FIVE SECONDS BEFORE RELEASING.

2. REMOVE THE LEFT LICENSE PLATE LIGHT FIXTURE ON TRUNK LID. ROUTE THE CAMERA HARNESS THROUGH THE LEFT LIGHT FIXTURE OPENING. **FIGURE 39**. ADD THE SUPPLIED SEALING PUTTY TO THE AREA HARNESS IS ROUTED THROUGH. REINSTALL THE TRIM PIECE ONTO THE VEHICLE. BE SURE THE HARNESS IS NOT BOUND OR PINCHED. **FIGURE 40**

4. DISCONNECT CAMERA HARNESS AT THE(CENTER) **6-PIN DIN** CONNECTOR AND DISCARD. CONNECT THE CAMERA HARNESS TO THE EXTENSION HARNESS. WRAP CONNECTORS WITH FOAM TAPE PROVIDED. PROPERLY BUNDLE AND SECURE EXCESS HARNESS INSIDE OF REAR DOOR. BE SURE HARNESS IS NOT BINDING AND IS CLEAR OF MOVING PARTS.



HIGHLANDER INSTALLATION

VEHICLE PREPARATION

1. LOOSEN **Torx-20** WINDSHIELD LUG MOUNT SCREW AND REMOVE EXISTING REARVIEW MIRROR. **FIGURE 41**
2. REMOVE OVERHEAD CONSOLE BY REMOVING THE PHILIPS SCREWS IN THE SUNGLASS HOLDER AND PULLING DOWN THE MAP LIGHT CONSOLE AS SHOWN IN **FIGURE 42**. REMOVE THE PASSENGER SUNVISOR RETAINING CLIP.
3. REMOVE OR LOOSEN PASSENGER SIDE TRIM PANELS INCLUDING: A-PILLAR TRIM, KICK PANEL AND DOOR SILL TRIM; B-PILLAR KICK PANEL AND REAR DOOR SILL TRIM. REMOVE THE BLACK COMPARTMENTS IN THE DRIVER SIDE REAR CARGO FLOOR. **FIGURES 43-45**
4. REMOVE THE MOLDED TRIM PIECE ABOVE THE LICENSE PLATE BY REMOVING FIVE (5) 10MM NUTS AND TWO (2) PLASTIC CLIPS. (**FIGURE 46**) MASK THE DOOR AROUND THE TRIM PIECE TO PREVENT SCRATCHING DURING REMOVAL.



FIGURE 41

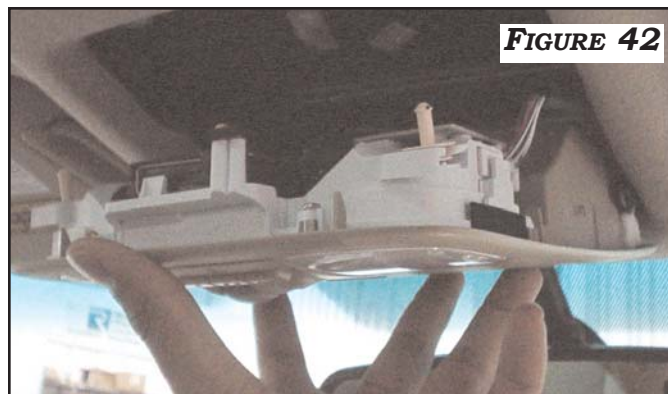
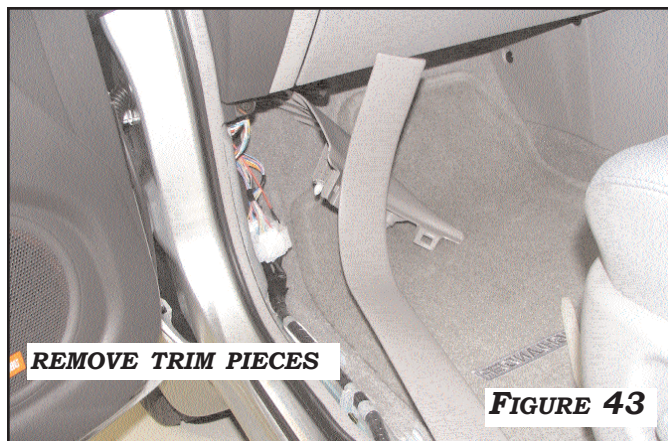
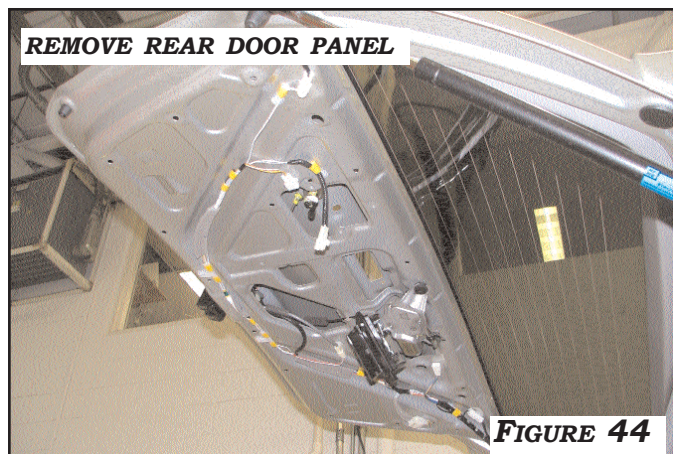


FIGURE 42



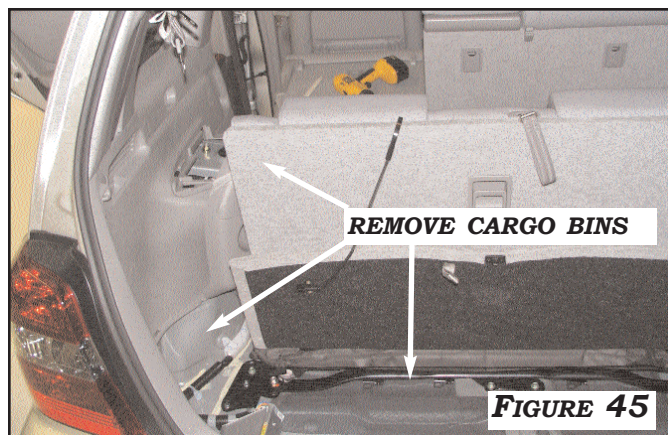
REMOVE TRIM PIECES

FIGURE 43



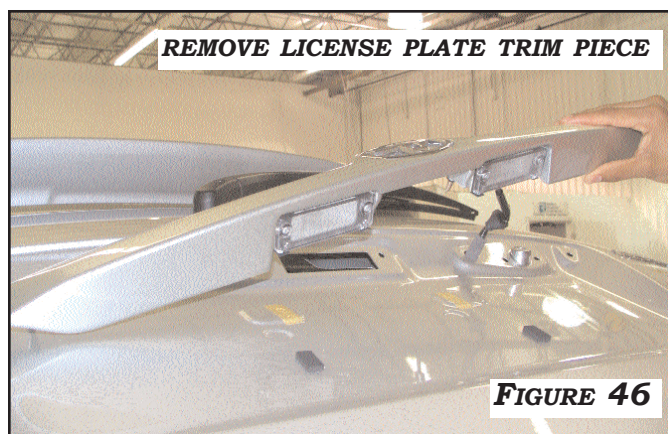
REMOVE REAR DOOR PANEL

FIGURE 44



REMOVE CARGO BINS

FIGURE 45



REMOVE LICENSE PLATE TRIM PIECE

FIGURE 46

HIGHLANDER INSTALLATION

INSTALLING MONITOR/MIRROR

1. MOUNT REARSIGHT MIRROR ON EXISTING WINDSHIELD LUG AND TIGHTEN SCREW. **FIGURE 47**

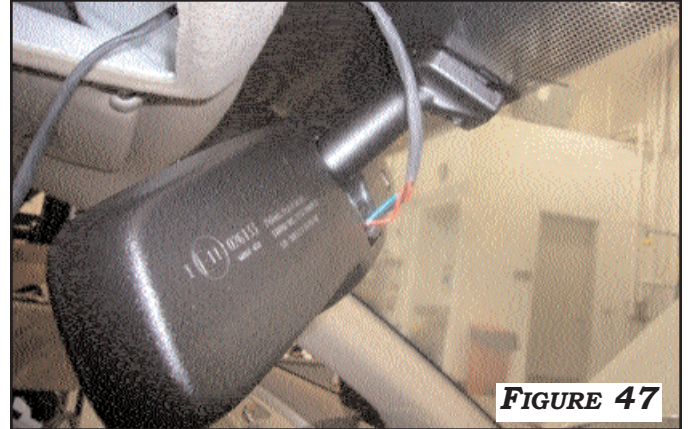


FIGURE 47

2. ROUTE MIRROR HARNESS UP WINDSHIELD AND BEHIND THE HEADLINER TO CONSOLE OPENING. ROUTE THE END OF THE CAMERA EXTENSION HARNESS MARKED "TO MIRROR" WITH THE MALE CONNECTORS UP THE CENTER OF THE WINDSHIELD AND BEHIND HEADLINER TO THE CONSOLE OPENING.

3. CONNECT **MALE RCA** VIDEO CONNECTOR OF CAMERA EXTENSION HARNESS TO **VIDEO** INPUT (YELLOW CONNECTOR) OF MIRROR HARNESS. CONNECT **MALE DC** POWER CONNECTOR OF CAMERA EXTENSION HARNESS TO CAMERA **POWER** OUTPUT (BLACK CONNECTOR) OF REARSIGHT MIRROR HARNESS. CONNECT RED, WHITE, AND BLACK WIRES OF POWER EXTENSION HARNESS AS SHOWN IN **FIGURE 48**. WRAP ALL **RCA** AND **DC** CONNECTORS WITH THE FOAM TAPE PROVIDED. **FIGURE 49**

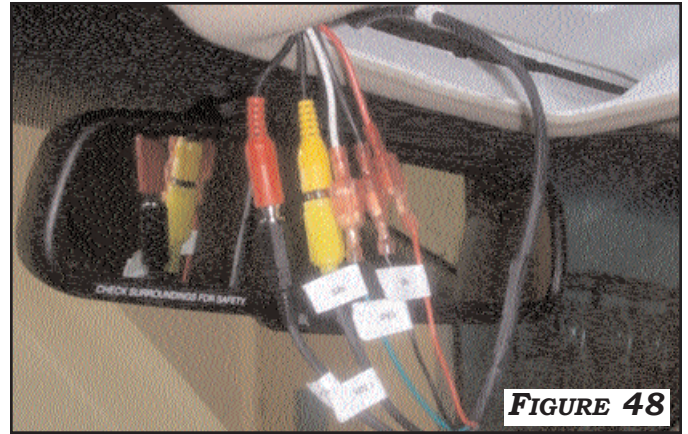


FIGURE 48

ROUTING HARNESSES AND POWER CONNECTIONS

1. ROUTE **CAMERA EXTENSION HARNESS** AND **MIRROR POWER HARNESS** (RED, BLACK AND WHITE WIRES) ABOVE HEADLINER TO DRIVER-SIDE A-PILLAR. ROUTE HARNESSES DOWN THE A-PILLAR USING THE FACTORY RETAINING CLIPS OR FOAM TAPE WHENEVER POSSIBLE. IF THE VEHICLE HAS SIDE CURTAIN AIRBAGS, BE SURE TO SECURE THE HARNESS SO THAT IT DOES NOT INTERFERE WITH AIRBAG DEPLOYMENT. ROUTE THE HARNESSES FROM THE A-PILLAR TO THE KICK PANEL. **FIGURE 50**

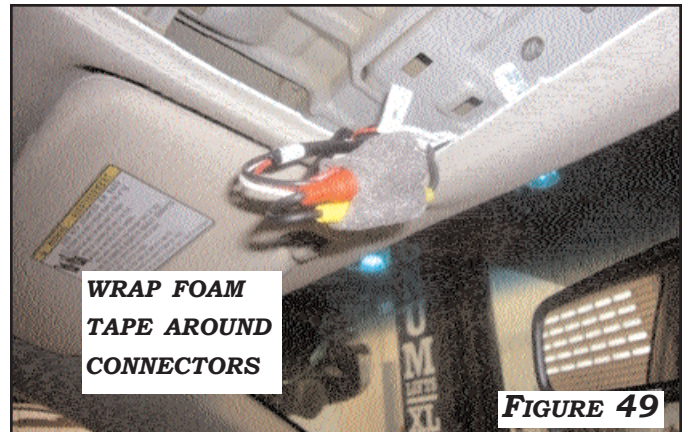


FIGURE 49

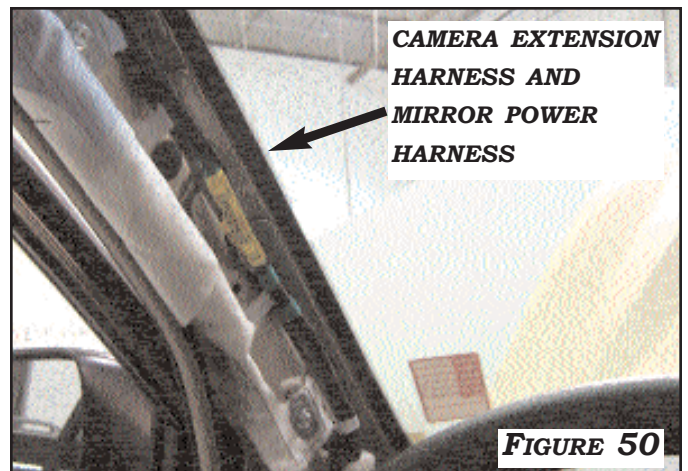


FIGURE 50

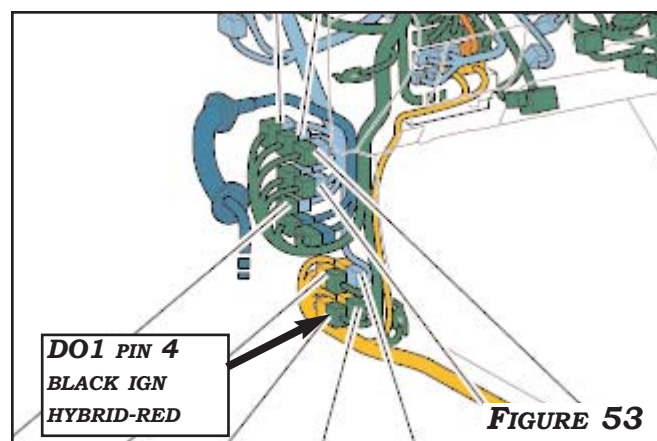
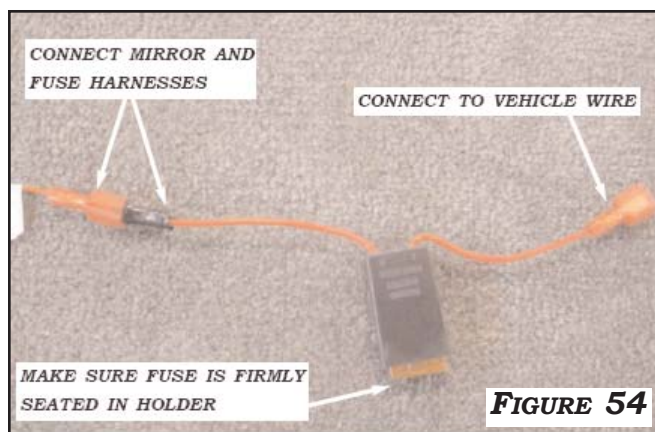
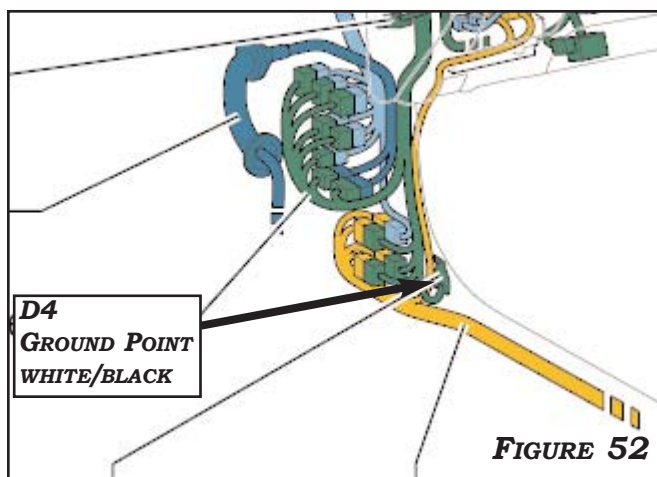
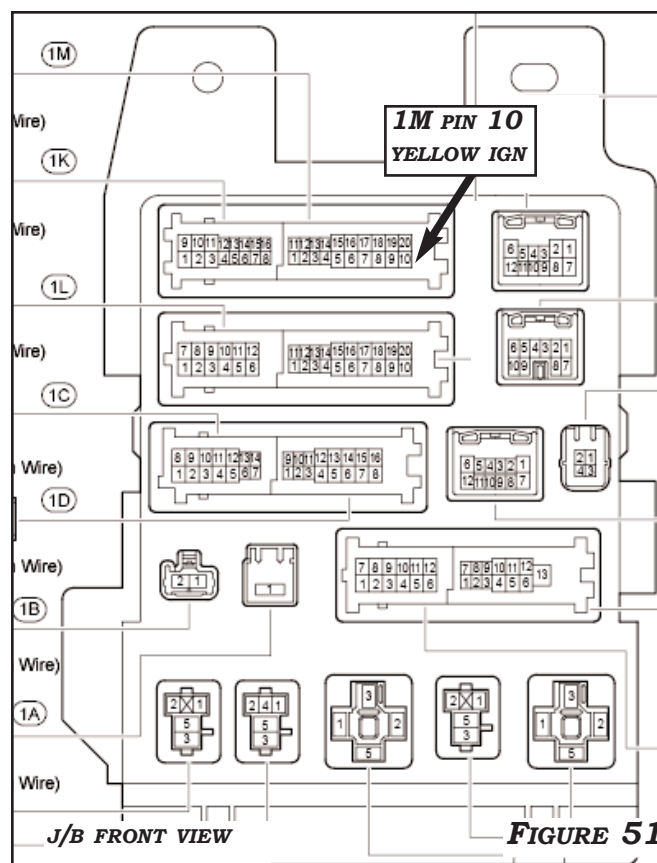
HIGHLANDER INSTALLATION

ROUTING HARNESSES

AND POWER CONNECTIONS CONTINUED...

2. LOCATE WHITE CONNECTOR **1M** AT THE DRIVER SIDE JUNCTION BOX. USE THE SUPPLIED RED T-TAP CONNECTOR TO CONNECT THE **RED IGNITION WIRE** OF THE **MIRROR POWER HARNESS** TO THE **YELLOW WIRE** IN **PIN 10** OF WHITE CONNECTOR **1M** (POWER OUTLET CIRCUIT). **USE THE SUPPLIED FUSE HARNESS BETWEEN THE RED IGNITION WIRE OF THE MIRROR POWER HARNESS AND YELLOW WIRE OF VEHICLE..** USE A RED T-TAP TO CONNECT THE **BLACK GROUND WIRE** OF THE MIRROR POWER HARNESS TO THE **WHITE/BLACK WIRE** IN **GROUND POINT D4**. LOCATE GRAY CONNECTOR **DO1** AT THE DRIVER SIDE KICK PANEL. USE THE SUPPLIED RED T-TAP CONNECTOR TO CONNECT THE **WHITE REVERSE WIRE** OF THE **MIRROR POWER HARNESS** TO THE **BLACK WIRE (HYBRID-RED WIRE)** IN **PIN 4** OF CONNECTOR **DO1**. SECURE ALL HARNESSES WITH WIRE TIES. **FIGURES 51-54**

3. ROUTE THE CAMERA EXTENSION HARNESS FROM THE KICK PANEL UNDER THE DOOR SILL TRIM AND BESIDE THE REAR SEAT TO THE CARGO AREA. USE THE FACTORY WIRE CHANNELS AND RETAINING CLIPS. ROUTE THE HARNESS ALONG THE FLOOR UNDER THE LEFT REAR TRIM PANELS AND UP THE LEFT D-PILLAR ABOVE THE HEADLINER TO THE REAR DOOR HOSE GROMMET. PULL THE HARNESS THROUGH THE HOSE, USING SOAPY WATER AS A LUBRICANT. *OPTIONAL: WATER ALCOHOL/SOLUTION CAN BE USED. ROUTE THE HARNESS FROM THE HOSE INSIDE THE REAR DOOR TO THE AREA WHERE THE OUTSIDE GARNISH SUB-ASSEMBLY WAS REMOVED. FOLLOW THE FACTORY HARNESSES WHERE POSSIBLE. SECURE THE HARNESS WITH WIRE TIES OR FOAM TAPE. **FIGURE 55-56**



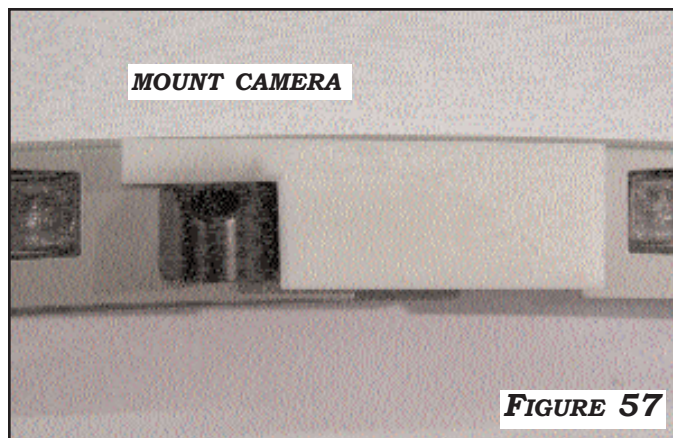
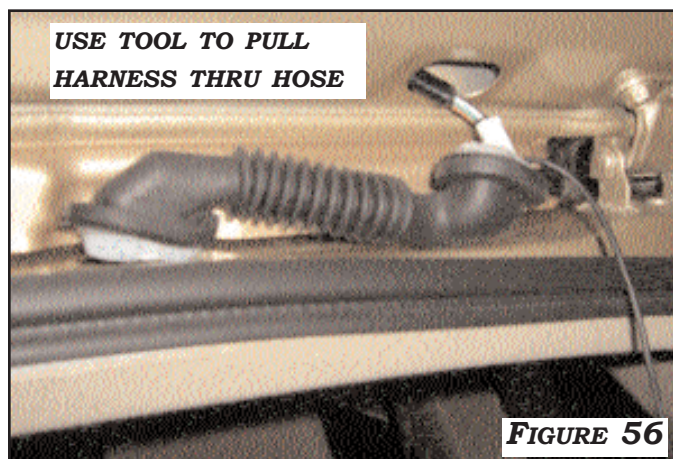
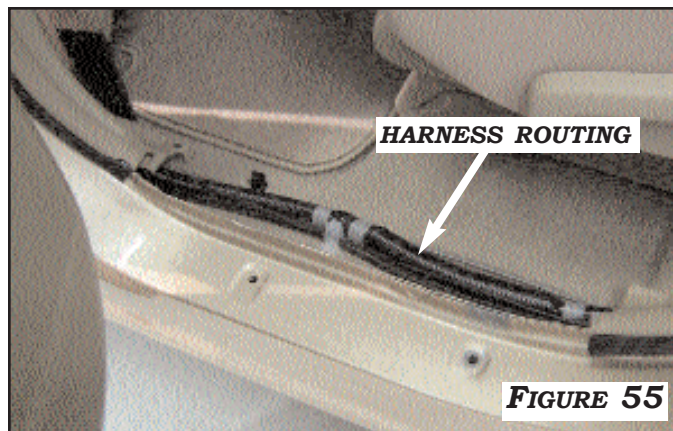
HIGHLANDER INSTALLATION

MOUNTING CAMERA

1. CLEAN THE LEFT SIDE OF THE BOTTOM OF THE LICENSE PLATE TRIM PIECE WITH ALCOHOL. ATTACH THE REARSIGHT HIGHLANDER REAR CAMERA MOUNTING TEMPLATE TO THE TRIM PIECE USING THE CENTER LICENSE PLATE LIGHT CAVITY AS A GUIDE AS SHOWN IN **FIGURE 57**. **NOTE: DIO CAMERA TEMPLATE IS ON PAGE 26**. PEEL THE CLEAR LINER OFF OF THE DOUBLE-SIDED TAPE ON THE CAMERA ASSEMBLY AND MOUNT THE ASSEMBLY TO THE TRIM PIECE USING THE TEMPLATE FOR ALIGNMENT. BE SURE TO PRESS DOWN CAMERA ASSEMBLY FIRMLY ON THE TRIM PIECE FOR FIVE SECONDS BEFORE RELEASING. REMOVE THE MOUNTING TEMPLATE FROM THE TRIM PIECE.

2. CUT A SLIT IN THE EXISTING HARNESS GROMMET AND INSERT THE CAMERA HARNESS. USE THE SUPPLIED SEALING PUTTY WHERE THE HARNESS ENTERS THE GROMMET. INSERT HARNESES AND GROMMET INTO THE REAR DOOR. **FIGURE 58**. REINSTALL THE TRIM PIECE ONTO THE VEHICLE. BE SURE THE HARNESS IS NOT BOUND OR PINCHED. **FIGURE 59**

3. DISCONNECT CAMERA HARNESS AT THE(CENTER) **6-PIN DIN** CONNECTOR AND DISCARD. CONNECT THE CAMERA HARNESS TO THE EXTENSION HARNESS. WRAP CONNECTORS WITH FOAM TAPE PROVIDED. PROPERLY BUNDLE AND SECURE EXCESS HARNESS INSIDE OF REAR DOOR. BE SURE HARNESS IS NOT BINDING AND IS CLEAR OF MOVING PARTS.



SEQUOIA INSTALLATION



CAUTION: It is advisable to disconnect the negative battery cable for 3 minutes before beginning installation, to avoid unintended air bag deployment. Note and record any anti-theft radio codes prior to disconnecting.

VEHICLE PREPARATION



1. RELEASE PULL HANDLE TRIM COVER TO REMOVE 10MM SCREW. **FIGURE 60**

2. REMOVE BACK DOOR TRIM PANELS. **FIGURE 61**

3. MAKE (2) 12" VERTICAL CUTS INTO PLASTIC AND LET FOLD DOWN AS SHOWN IN **FIGURE 62** TO ACCESS THE FACTORY CAMERA CONNECTOR.

4. REMOVE (2) 10MM NUTS AND DISCONNECT THE **V17** CAMERA CONNECTOR FROM DUMMY HOUSING. **FIGURE 63**. DISCARD DUMMY HOUSING. **USE THE WASHERS SUPPLIED IN HARDWARE BAG TO APPLY BEHIND THE NUTS WHEN RE-INSTALLING. FIGURE 64**

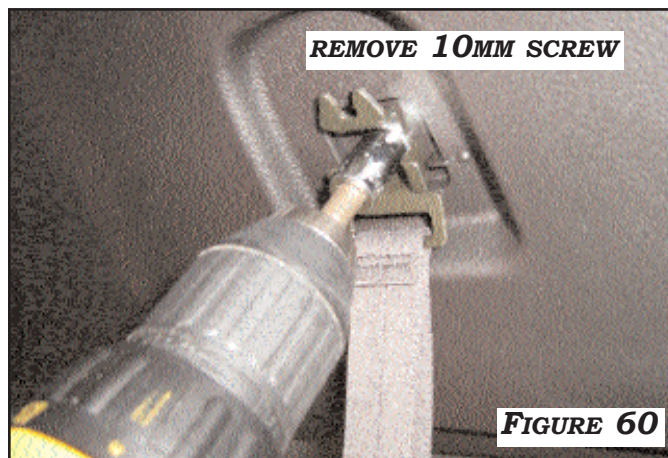


FIGURE 60

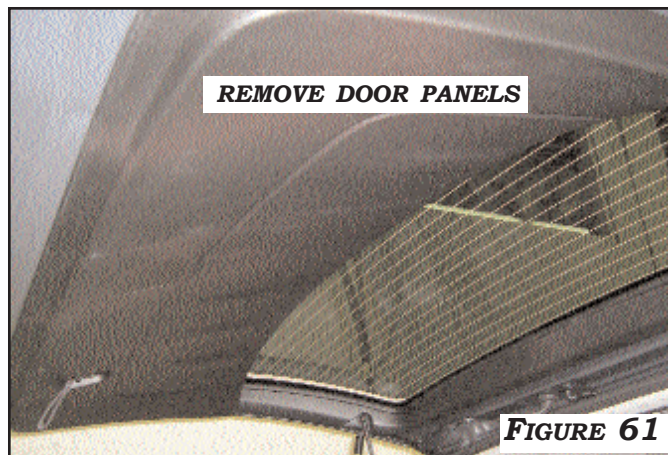


FIGURE 61

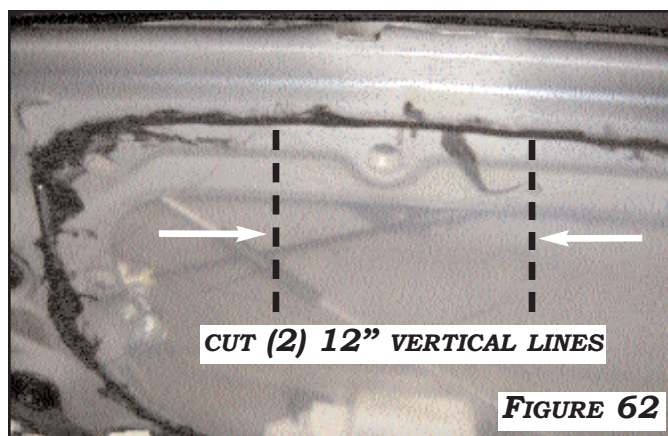


FIGURE 62

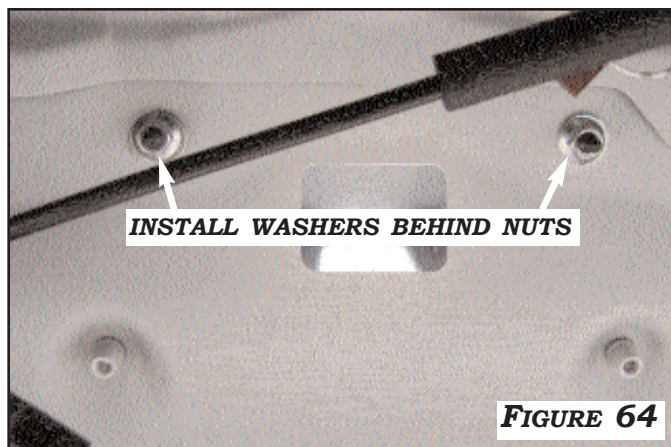


FIGURE 64

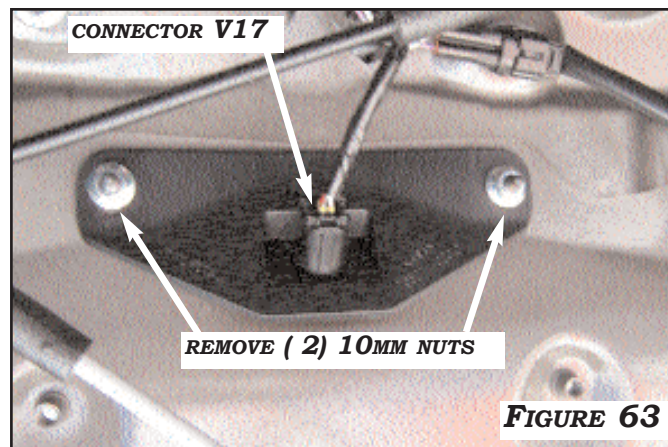


FIGURE 63

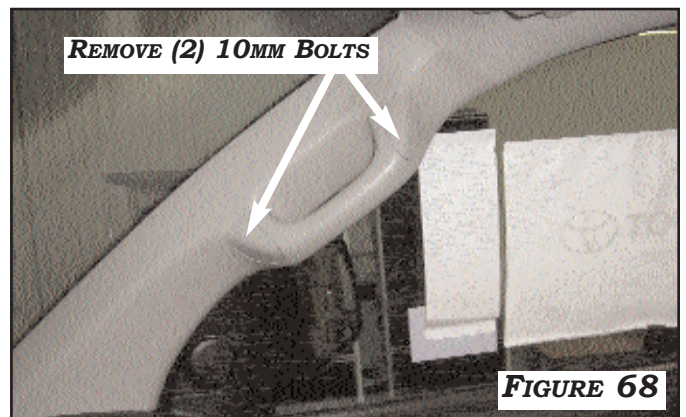
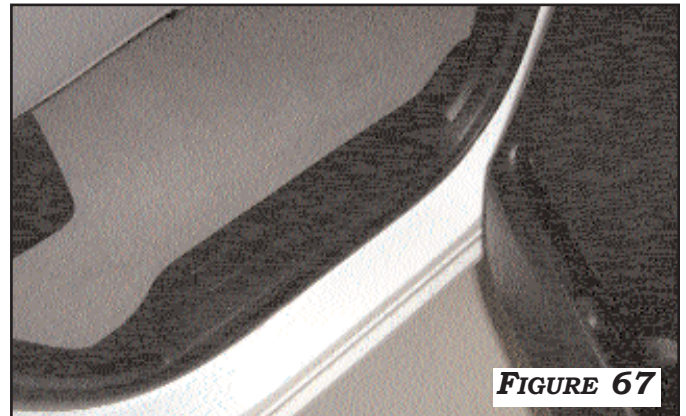
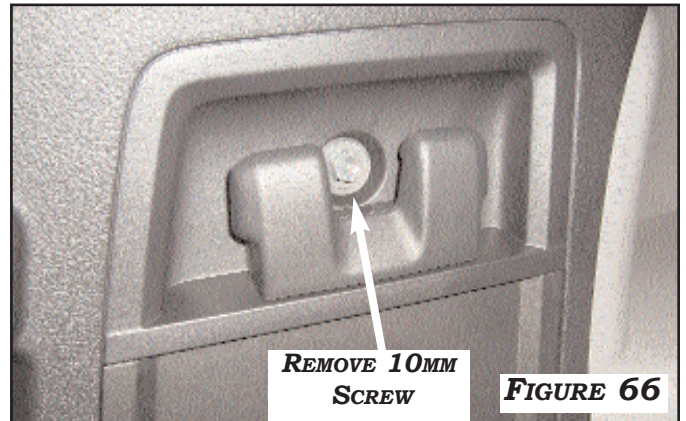
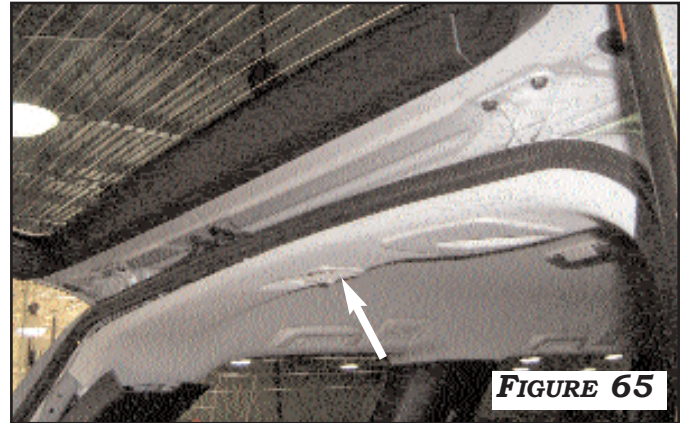
SEQUOIA INSTALLATION

VEHICLE PREPARATION CONTINUED...



1. REMOVE REAR OVERHEAD LIGHT AND TRIM PANEL TO RELEASE HEADLINER. **FIGURE 65.** REMOVE **10MM** BOLT AND PLASTIC CLIPS TO RELEASE THE PASSENGER SIDE REAR CARGO TRIM PANELS. **FIGURE 66**

2. REMOVE OR LOOSEN PASSENGER SIDE TRIM PANELS INCLUDING: A-PILLAR TRIM (REMOVE **2** 10MM BOLTS), KICK-PANEL, AND DOOR SILL TRIM; B-PILLAR WEATHERSTRIP, AND SCUFF PANELS. **FIGURES 67-68**



SEQUOIA INSTALLATION

INSTALLING MONITOR/MIRROR



1. MOUNT REARSIGHT MIRROR ON EXISTING WINDSHIELD LUG AND TIGHTEN SCREW. **FIGURE 69**

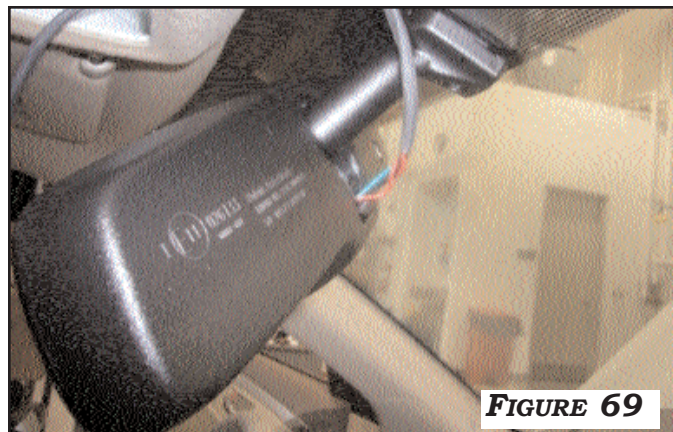


FIGURE 69

2. ROUTE MIRROR HARNESS UP WINDSHIELD AND BEHIND THE HEADLINER TO CONSOLE OPENING. ROUTE THE END OF THE CAMERA EXTENSION HARNESS MARKED "TO MIRROR" WITH THE MALE CONNECTORS UP THE CENTER OF THE WINDSHIELD AND BEHIND HEADLINER TO THE CONSOLE OPENING. **FIGURE 70**



FIGURE 70

3. CONNECT **MALE RCA** VIDEO CONNECTOR OF CAMERA EXTENSION HARNESS TO **VIDEO** INPUT (YELLOW CONNECTOR) OF MIRROR HARNESS. CONNECT **MALE DC** POWER CONNECTOR OF CAMERA EXTENSION HARNESS TO CAMERA **POWER** OUTPUT (BLACK CONNECTOR) OF REARSIGHT MIRROR HARNESS. CONNECT RED, WHITE, AND BLACK WIRES OF POWER EXTENSION HARNESS AS SHOWN IN **FIGURE 10**. WRAP ALL **RCA** AND **DC** CONNECTORS WITH THE FOAM TAPE PROVIDED. **FIGURE 71**

ROUTING HARNESSES AND POWER CONNECTIONS



1. ROUTE **CAMERA EXTENSION HARNESS** AND **MIRROR POWER HARNESS** (RED, BLACK AND WHITE WIRES) ABOVE HEADLINER TO DRIVER-SIDE A-PILLAR. ROUTE HARNESSES DOWN THE A-PILLAR USING THE FACTORY RETAINING CLIPS OR FOAM TAPE WHENEVER POSSIBLE. IF THE VEHICLE HAS SIDE CURTAIN AIRBAGS, BE SURE TO SECURE THE HARNESS SO THAT IT DOES NOT INTERFERE WITH AIRBAG DEPLOYMENT. ROUTE THE HARNESSES FROM THE A-PILLAR TO THE KICK PANEL. **FIGURE 72**

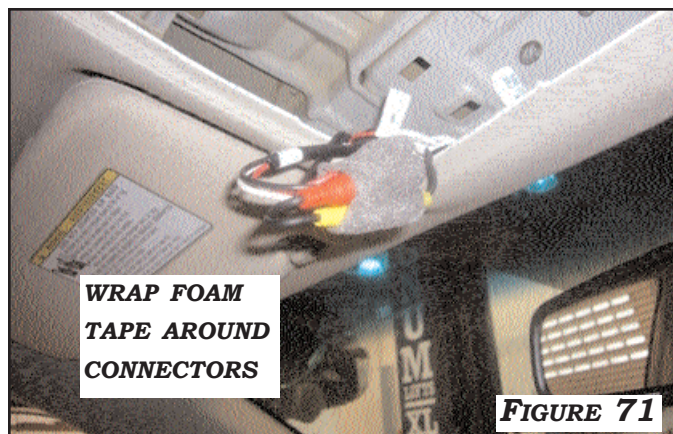


FIGURE 71

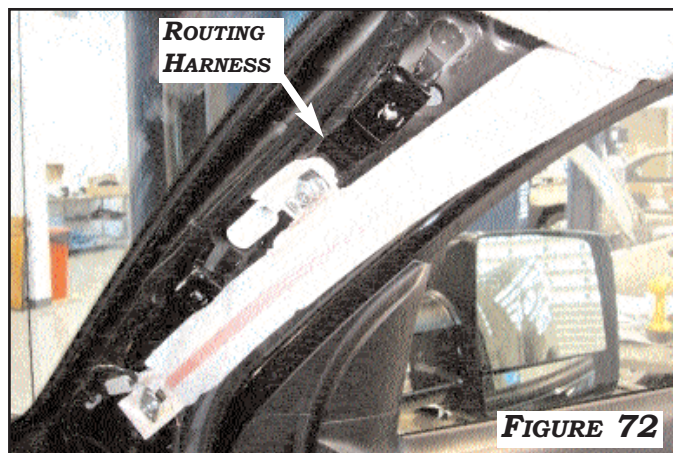


FIGURE 72

SEQUOIA INSTALLATION

MONITOR POWER CONNECTIONS AND ROUTING HARNESSES



4. LOCATE THE WHITE (SECOND FROM TOP) CONNECTOR **AH4** AT THE KICKPANEL. USE THE SUPPLIED RED T-TAP TO CONNECT THE **RED IGNITION WIRE** OF THE POWER HARNESS TO THE **GREEN WIRE IN PIN 10** OF CONNECTOR **AH4**.

FIGURE 73. USE THE SUPPLIED FUSE HARNESS BETWEEN THE **RED IGNITION WIRE** OF THE MIRROR POWER HARNESS AND **GREEN WIRE** OF VEHICLE. **FIGURE 74.** USE THE SUPPLIED RED T-TAP TO CONNECT THE **WHITE REVERSE WIRE** OF THE POWER HARNESS TO THE **BLUE WIRE IN PIN 11** OF CONNECTOR **AH4**. **FIGURE 73.** USE THE SUPPLIED BLUE T-TAP TO CONNECT THE **BLACK GROUND WIRE** OF THE POWER HARNESS TO THE **WHITE/BLACK WIRE** AT **GROUND POINT H3**. **FIGURE 75.** SECURE ALL HARNESSES WITH WIRE TIES.

5. ROUTE THE TRUCK EXTENSION HARNESS FROM THE KICK-PANEL, UNDER B-PILLAR, AND REAR DOOR SCUFF PLATE. USE THE FACTORY WIRE CHANNELS AND RETAINING CLIPS. CONTINUE ROUTING HARNESS THROUGH PASSENGER SIDE REAR CARGO PANELS WITH THE EXISTING VEHICLE WIRING. **FIGURE 76.** ROUTE THE TRUCK EXTENSION HARNESS THROUGH THE EXISTING GROMMET AND INSIDE THE CARGO DOOR AS SHOWN IN **FIGURE 77**.

NOTE: BE SURE TO ROUTE HARNESS AWAY FROM ANY MOVING PARTS OF THE WINDOW.

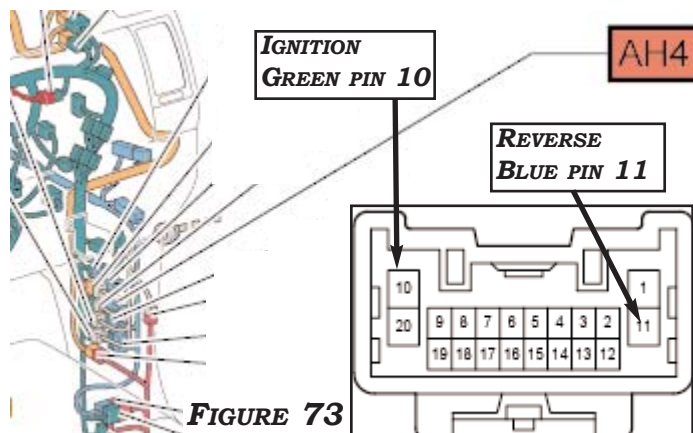


FIGURE 73

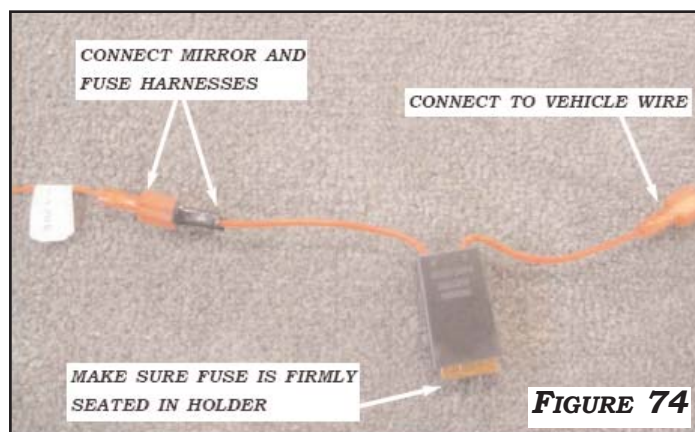


FIGURE 74

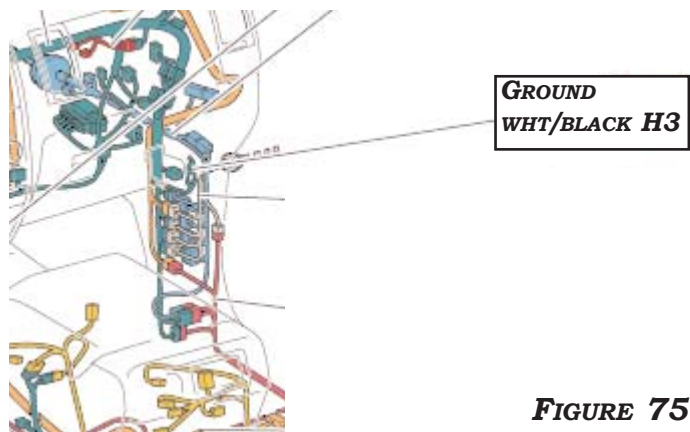


FIGURE 75

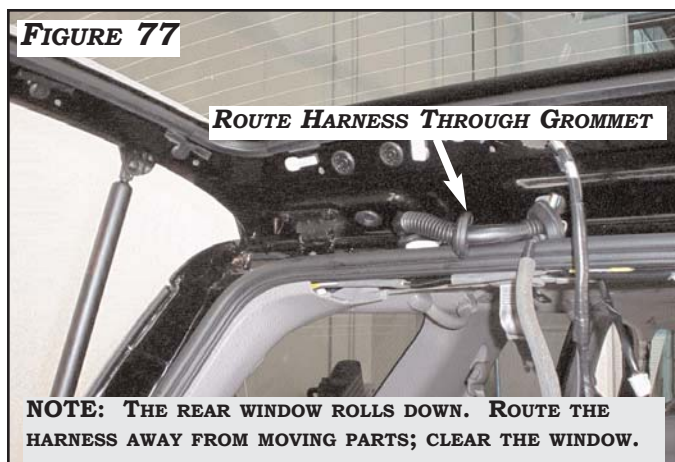


FIGURE 77

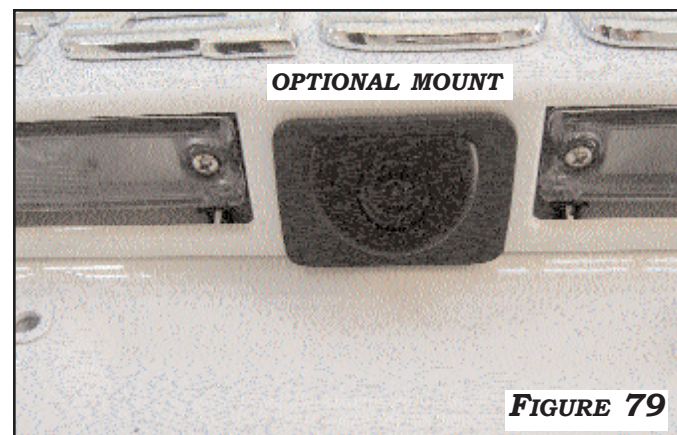
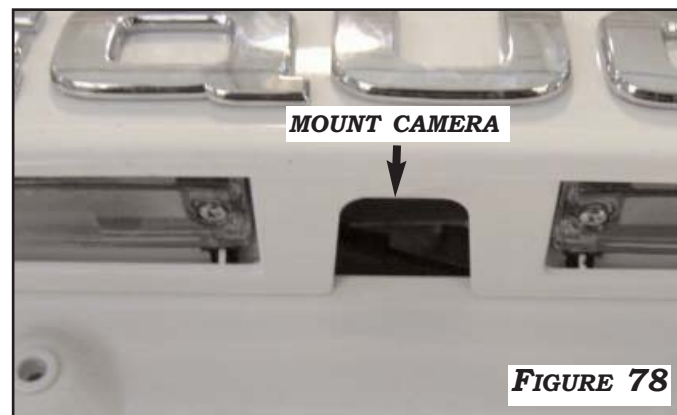


FIGURE 76

CAMERA INSTALLATION AND POWER CONNECTIONS



1. CLEAN THE CAMERA PLACEMENT AREA WITH THE SUPPLIED ALCOHOL PAD.
2. INSERT CAMERA HARNESS THROUGH LICENSE PLATE TRIM PIECE ACCESS HOLE.
3. PEEL THE RED LINER OFF THE DOUBLE-SIDED TAPE ON THE CAMERA ASSEMBLY AND MOUNT THE CAMERA TO THE TRIM PIECE. BE SURE TO PUSH THE CAMERA ASSEMBLY FIRMLY INTO THE GAP IN THE FIXTURE, AND PRESS FIRMLY FOR FIVE SECONDS BEFORE RELEASING. **FIGURE 78**
4. **FIGURE 79** IS AN OPTIONAL MOUNTING PLACEMENT USING A CUSTOM MADE TRIM BEZEL USING THE DRILL IN CAMERA SHROUD.
5. APPLY THE SUPPLIED SEALING PUTTY TO THE BACK SIDE OF CAMERA ASSEMBLY TO SEAL ANY OPENING AREA BEHIND CAMERA.
6. CONNECT THE CAMERA ASSEMBLY HARNESS TO THE TRUCK EXTENSION HARNESS. **FIGURE 80.** SECURE THE HARNESS WITH WIRE TIES AND WRAP THE CONNECTORS WITH FOAM TAPE.



TUNDRA INSTALLATION



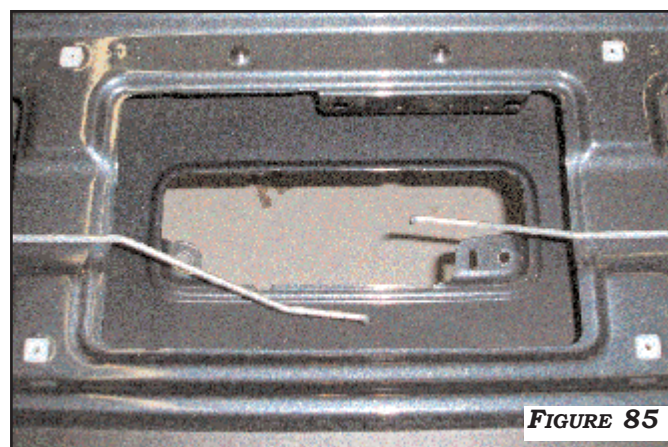
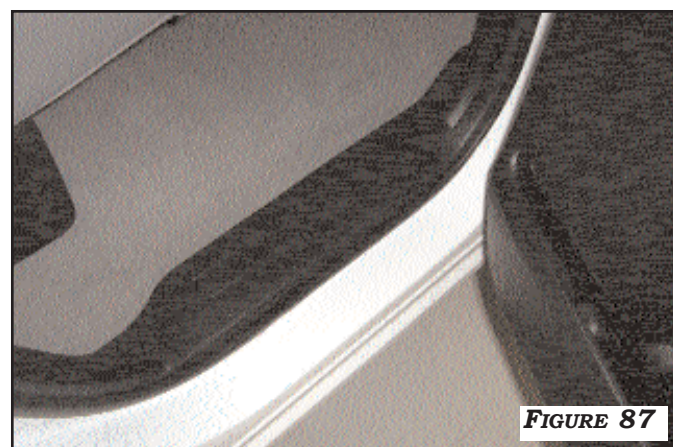
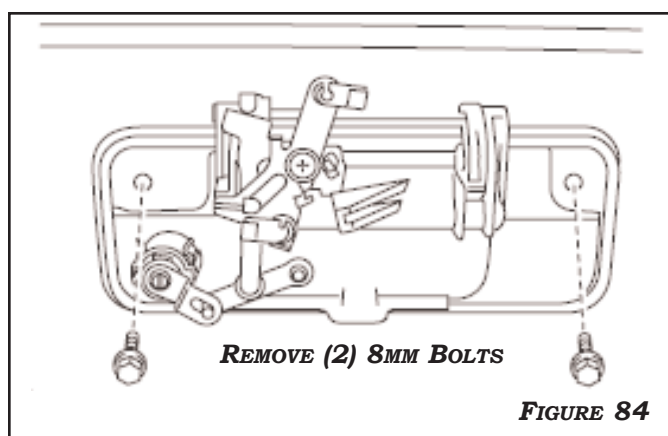
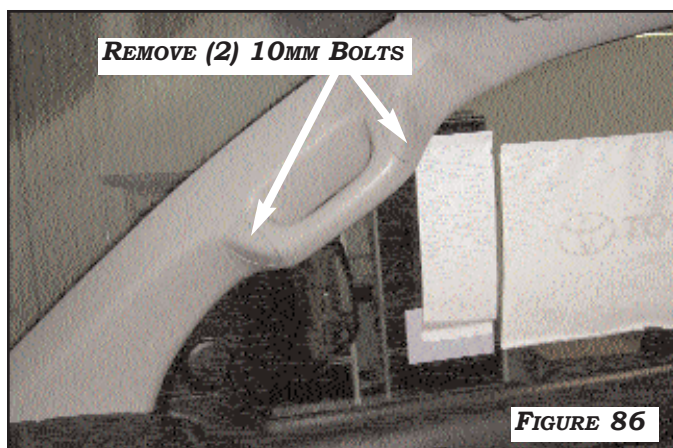
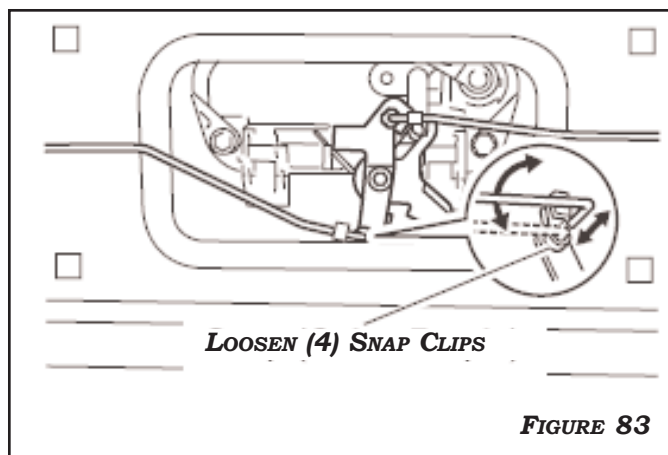
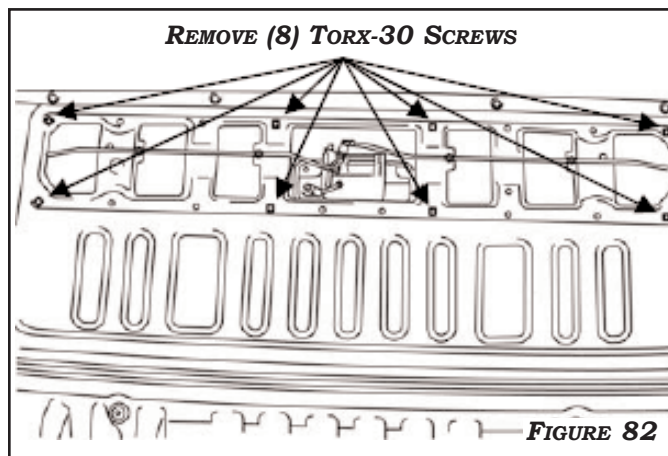
CAUTION: It is advisable to disconnect the negative battery cable for 3 minutes before beginning installation, to avoid unintended air bag deployment. Note and record any anti-theft radio codes prior to disconnecting.



VEHICLE PREPARATION



1. REMOVE THE TAIL GATE HOLE SERVICE COVER BY REMOVING EIGHT (8) TORX-30 SCREWS. **FIGURE 82**
2. DISCONNECT THE LATCH MECHANISM CONTROL RODS FROM THE LATCH BY UNSNAPPING THE FOUR (4) ORANGE AND PURPLE CLIPS. **FIGURE 83**
3. REMOVE THE TWO (2) 8MM BOLTS ON HOLDING THE LATCH TO THE TAILGATE AND REMOVE THE LATCH. **FIGURES 84-85.**
4. REMOVE OR LOOSEN PASSENGER SIDE TRIM PANELS INCLUDING: A-PILLAR TRIM (REMOVE 2 10MM BOLTS), KICK-PANEL, AND DOOR SILL TRIM; B-PILLAR WEATHERSTRIP, AND SCUFF PANELS. **FIGURES 86-87.**



TUNDRA INSTALLATION

MONITOR POWER CONNECTIONS AND ROUTING HARNESSES



1. LOCATE THE POWER CONNECTIONS AT THE MIRROR HARNESS. CONNECT THE YELLOW **MALE RCA** VIDEO CONNECTOR OF THE TRUCK EXTENSION HARNESS TO THE **VIDEO** (YELLOW CONNECTOR) OF THE MIRROR HARNESS. CONNECT THE RED **MALE DC** POWER CONNECTOR OF THE TRUCK EXTENSION HARNESS TO THE MIRROR **POWER** OUTPUT (BLACK CONNECTOR) OF THE MIRROR HARNESS. WRAP ALL **RCA** AND **DC** CONNECTORS WITH THE FOAM TAPE AND WIRE TIES PROVIDED.
2. ROUTE HARNESSES ABOVE HEADLINER TO PASSENGER-SIDE A-PILLAR. ROUTE HARNESSES DOWN THE A-PILLAR USING FACTORY RETAINING CLIPS OR FOAM TAPE WHENEVER POSSIBLE. **IF THE VEHICLE HAS SIDE CURTAIN AIRBAGS, BE SURE TO SECURE THE HARNESSES SO THAT IT DOES NOT INTERFERE WITH AIRBAG DEPLOYMENT.** ROUTE THE HARNESSES FROM THE A-PILLAR TO THE PASSENGER SIDE KICK-PANEL. **FIGURE 88**
3. LOCATE THE WHITE BOTTOM CONNECTOR **AJ2** AT THE KICK PANEL. USE THE SUPPLIED RED T-TAP TO CONNECT THE **WHITE REVERSE WIRE** OF THE POWER HARNESS TO THE **BLUE WIRE** IN **PIN 3** OF CONNECTOR **AJ2**. **FIGURE 89.** USE THE SUPPLIED BLUE T-TAP TO CONNECT THE **BLACK GROUND WIRE** OF THE POWER HARNESS TO THE **WHITE/BLACK WIRE** AT **GROUND POINT J3**. **FIGURE 10.** LOCATE THE BLUE CONNECTOR **MJ1** (SECOND FROM BOTTOM AT THE KICK PANEL. USE THE SUPPLIED RED T-TAP TO CONNECT THE **RED IGNITION WIRE** OF THE POWER HARNESS TO THE **GREEN WIRE** OF CONNECTOR **MJ1** IN **PIN 6**. **FIGURE 91.** USE THE SUPPLIED FUSE HARNESS BETWEEN THE **RED IGNITION WIRE** OF THE MIRROR POWER HARNESS AND **GREEN WIRE** OF VEHICLE. **FIGURE 92.** SECURE ALL HARNESSES WITH WIRE TIES.

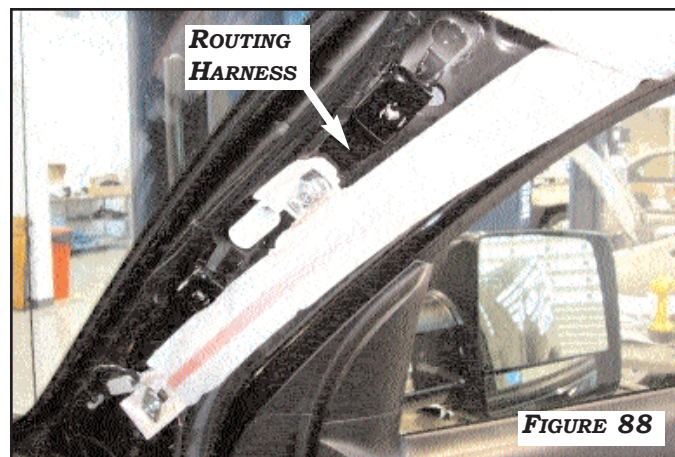


FIGURE 88

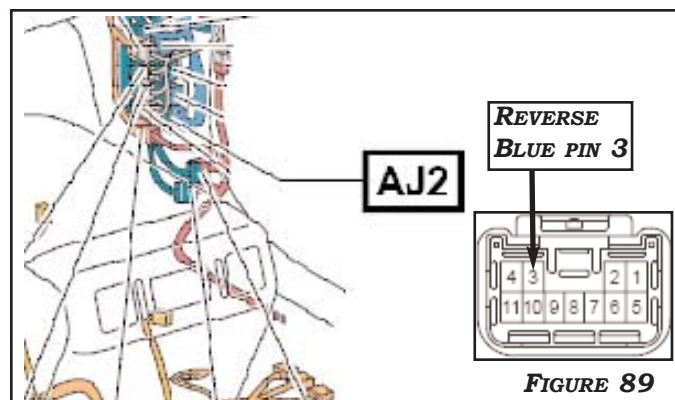


FIGURE 89

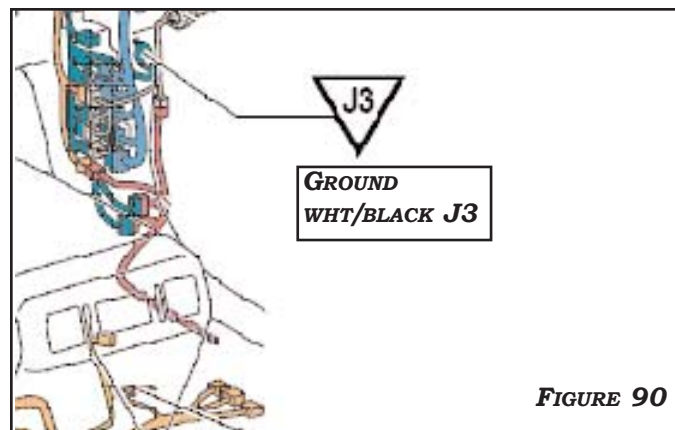


FIGURE 90

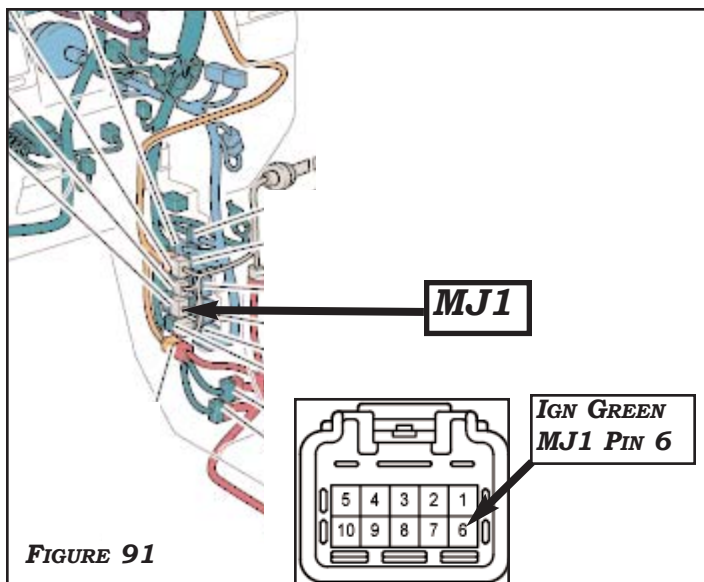


FIGURE 91

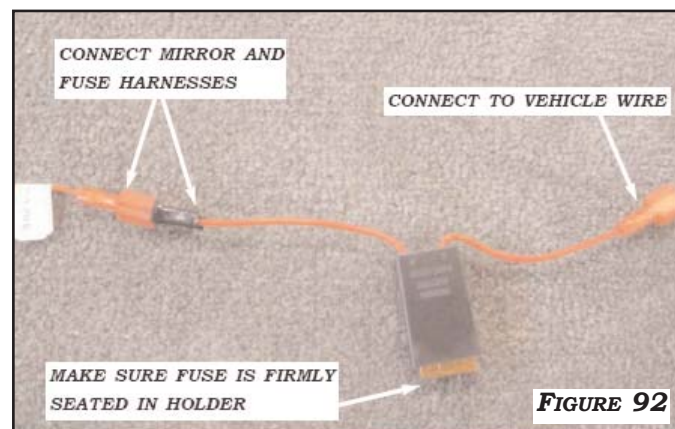


FIGURE 92

TUNDRA INSTALLATION

MONITOR POWER CONNECTIONS AND ROUTING HARNESSES CONTINUED...



5. ROUTE THE TRUCK EXTENSION HARNESS FROM THE KICK-PANEL, UNDER B-PILLAR, AND REAR DOOR SCUFF PLATE. USE THE FACTOR WIRE CHANNELS AND RETAINING CLIPS. EXIT THE TRUCK EXTENSION HARNESS THROUGH GROMMET UNDER THE REAR PASSENGER SIDE CARPET. **FIGURE 93.** ROUTE THE TRUCK EXTENSION HARNESS WITH THE EXISTING VEHICLE WIRING UNDER TRUCK BED. **FIGURE 94.** CONTINUE ROUTING HARNESS TO REAR OF TRUCK AT THE AREA NEAR THE RIGHT SIDE OF SPARE TIRE.

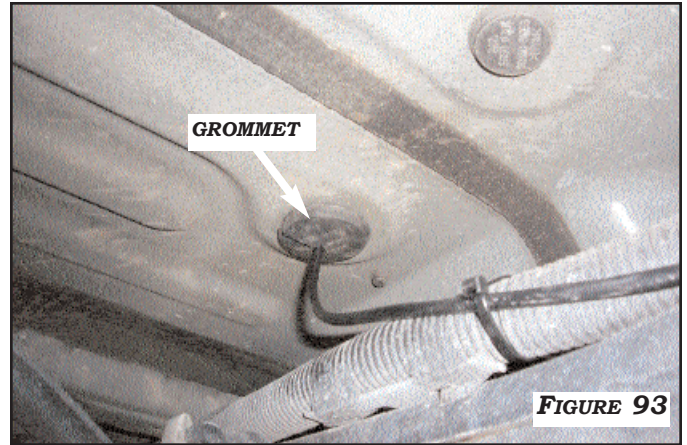


FIGURE 93



FIGURE 94

CAMERA INSTALLATION



1. CUT OUT THE CAMERA HOLE DRILLING TEMPLATE ON PAGE 26 OF THIS MANUAL. AFFIX IT TO THE TAIL GATE LATCH AS SHOWN IN **FIGURE 95.** DRILL A 1/4" PILOT HOLE AND THEN ENLARGE IT TO 1-1/16". CLEAN AND DE-BURR THE HOLE.
2. INSERT THE REARSIGHT CAMERA INTO THE HOLE TO CHECK FOR FITMENT. **DO NOT** REMOVE THE LINING ON THE TAPE OF THE CAMERA SHROUD YET. IF THE CAMERA WON'T FIT FLUSH WITH THE LATCH, USE A KNIFE TO CHAMFER THE INNER EDGE OF THE HOLE SO THAT THE CAMERA WILL FIT. CLEAN THE OUTSIDE AREA AROUND THE HOLE WITH THE SUPPLIED ALCOHOL PAD AND THEN MOUNT THE CAMERA TO THE LATCH USING THE MOUNTING TAPE. MOUNT THE LATCH INTO THE TAILGATE. **FIGURES 96-97**

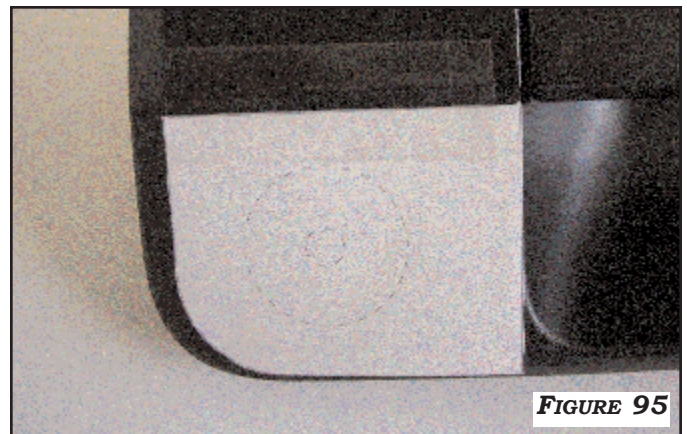


FIGURE 95



FIGURE 96

CAMERA POWER CONNECTIONS AND ROUTING HARNESS



1. CLEAN THE AREA SHOWN IN **FIGURE 97** WITH ALCOHOL AND MOUNT THE CAMERA PCB TO THIS SPOT USING THE DOUBLE-SIDED TAPE. SECURE THE HARNESS WITH WIRE TIES AS SHOWN. ROUTE THE CAMERA HARNESS TO THE RIGHT OF THE TAILGATE, SECURING WITH WIRE TIES AS SHOWN IN **FIGURE 98**. **APPLY THE CONVOLUTED TUBING IN THE HARDWARE BAG TO THE TAILGATE EXTENSION HARNESS.** CONNECT THE CAMERA HARNESS TO THE TAILGATE EXTENSION HARNESS BY SCREWING THE TWO CONNECTORS TOGETHER. SECURE THE CONNECTOR TO THE TAILGATE WITH FOAM TAPE TO PREVENT RATTLES. **FIGURE 99**
2. ROUTE THE TAILGATE EXTENSION HARNESS TO THE HOLE AT THE BOTTOM RIGHT SIDE OF THE TAILGATE. PULL THE CONNECTOR THROUGH, THEN INSERT ROUTE THE HARNESS UNDER THE BED THROUGH THE SECOND HOLE AS SHOWN IN **FIGURE 100**. CLEAN THE AREA WITH ALCOHOL THEN ATTACH THE SUPPLIED ADHESIVE HARNESS CLIP TO THE BOTTOM OF THE TAILGATE TO SECURE THE HARNESS AS SHOWN IN **FIGURE 101**.
3. CONNECT THE TAILGATE EXTENSION HARNESS TO THE TRUCK EXTENSION HARNESS UNDER THE BED AS SHOWN IN **FIGURE 102**. CLEAN THE AREA WITH ALCOHOL THEN ATTACH THE SUPPLIED ADHESIVE HARNESS CLIP TO THE BOTTOM OF THE TRUCK BED TO SECURE THE DUMMY PLUG OF THE TRUCK EXTENSION HARNESS AS SHOWN.

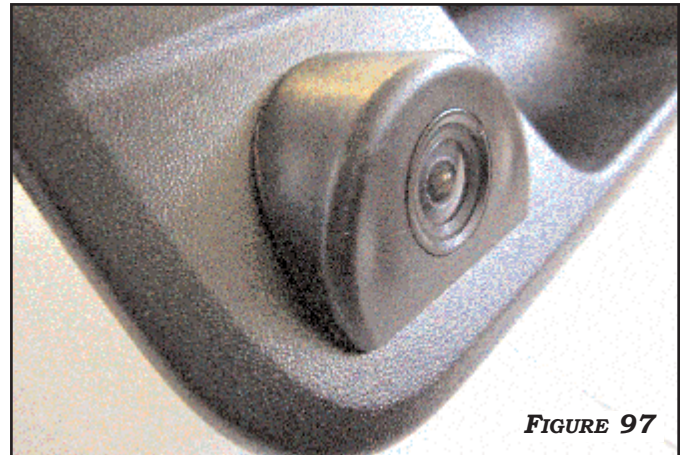


FIGURE 97

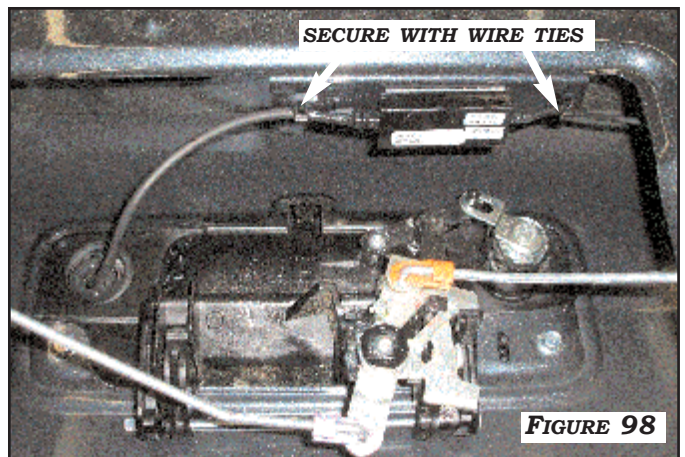


FIGURE 98



FIGURE 99



FIGURE 101

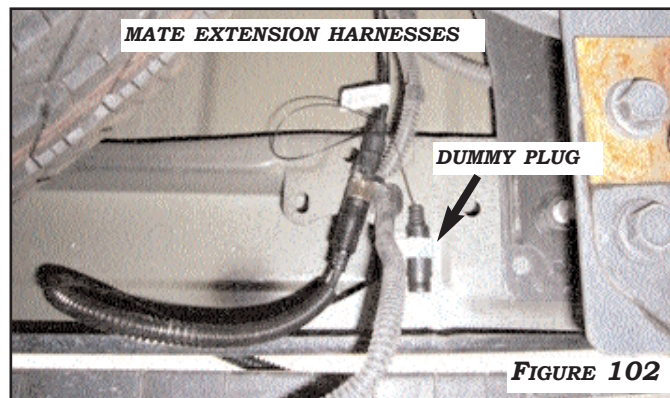


FIGURE 102

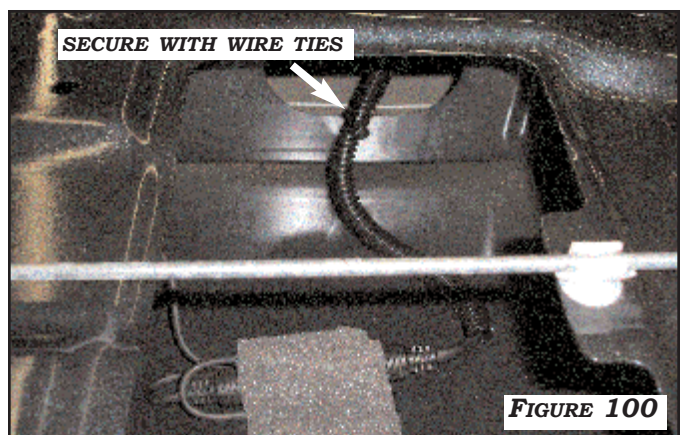
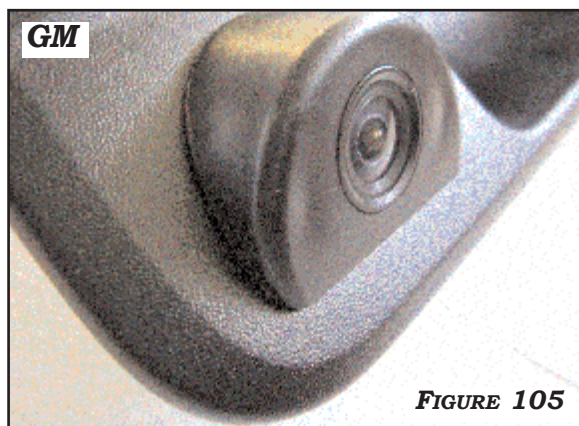
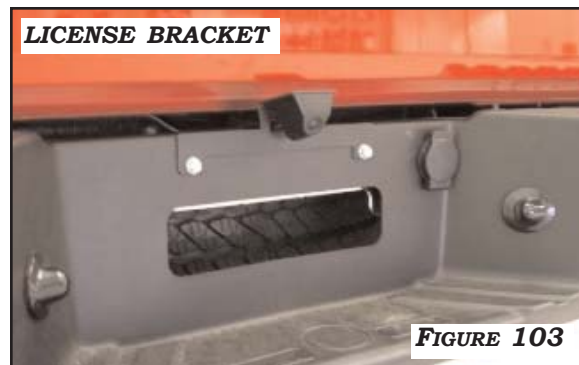


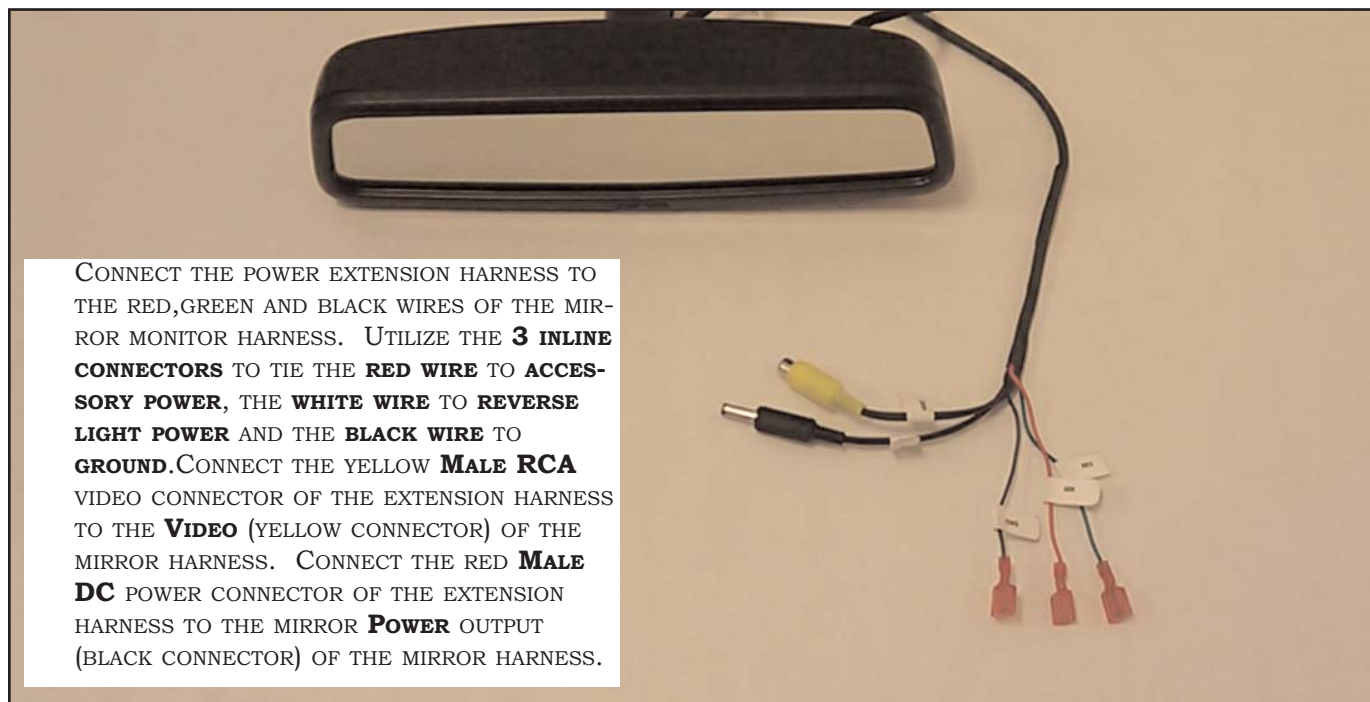
FIGURE 100

TRUCK CAMERA INSTALLATION

1. THE **CAMERA ASSEMBLY** IS FITTED WITH A **SHROUD** WHICH ALLOWS MOUNTING TO THE **LICENSE PLATE BRACKET** (SEE **FIGURE 103**), SEE **FORM #5086** FOR CONVERSION OF SHROUD FOR SHOWN DRILL MOUNT. (SEE **FIGURES 104 & 105**). DRILL A 1/4" PILOT HOLE AND THEN ENLARGE IT TO 1-1/16". CLEAN AND DE-BURR THE HOLE. YOU MUST CLEAN THE MOUNTING AREA THOROUGHLY WITH THE PROVIDED ALCOHOL PAD, LET DRY, THEN APPLY DIRECT PRESSURE FOR **30 SECONDS** TO ENSURE PROPER ADHESION.
2. USE THE **30FT CAMERA EXTENSION HARNESS** TO CONNECT THE MIRROR MONITOR TO THE CAMERA. ROUTE THE EXTENSION HARNESS WITH EXISTING WIRING ALONG THE VEHICLE.
3. SEE **FIGURE 103** FOR ORIENTATION OF THE LICENSE PLATE BRACKET.



MONITOR WIRING DIAGRAM



TESTING AND REASSEMBLY

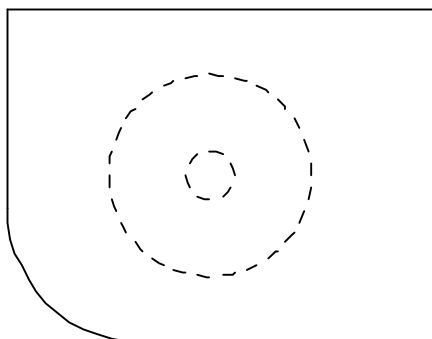
TESTING

1. RECONNECT NEGATIVE BATTERY CABLE AND TORQUE TO **3 FT LBS**. RE-ENTER ANY THEFT DETERRENT INFORMATION, IF APPLICABLE.
2. TURN THE IGNITION SWITCH **ON**. PUT THE VEHICLE IN REVERSE. VERIFY THAT THE REARSIGHT MIRROR IS ON AND THAT THE CAMERA'S PICTURE APPEARS.
3. IF THERE IS NO PICTURE, VERIFY ALL CONNECTIONS ARE SECURE.

REASSEMBLY

1. REINSTALL ALL TRIM PIECES TAKING SPECIAL CARE TO ENSURE HARNESSES AND WIRING CONNECTIONS ARE PROPERLY SECURED.
2. BE SURE HARNESS IS NOT PINCHED OR BOUND BY TRIM PIECES.
3. PLACE THE OWNER'S CARD IN THE GLOVE BOX.
4. RECONNECT ALL DISCONNECTED BULBS AND CHECK FOR FUNCTION.

TEMPLATES



**CUT OUT THIS TEMPLATE. USE
CENTER HOLE FOR PILOT. FINISHED
HOLE SIZE SHOULD BE 1-1/16"**

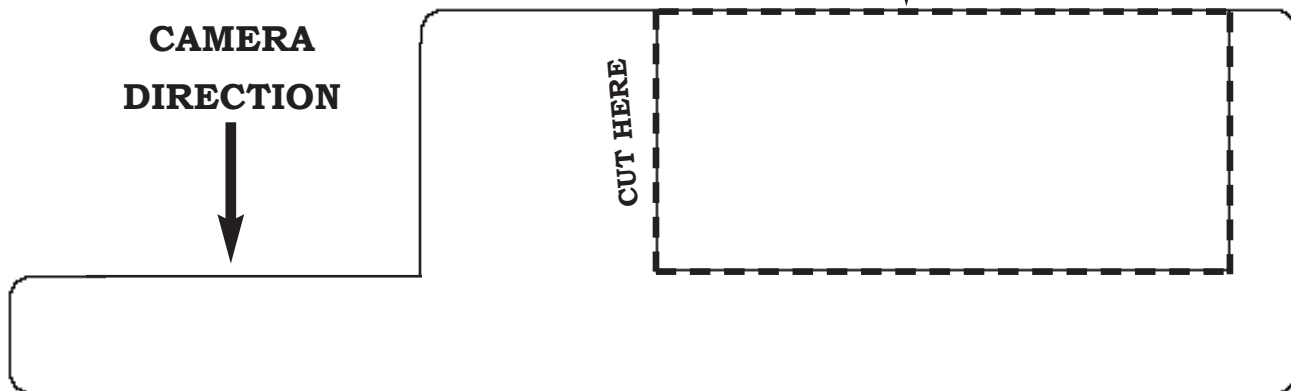
HIGHLANDER CAMERA TEMPLATE

**CAMERA
DIRECTION**



CUT HERE

**ALIGN WITH TRIM
PANEL CENTER CAVITY**



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