

# **GENUINE PARTS**

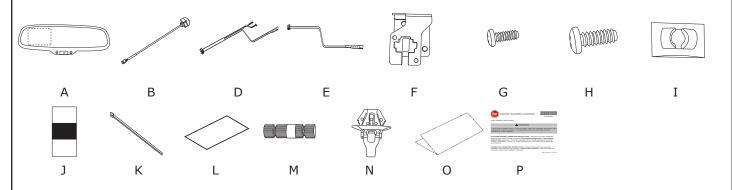
# **INSTALLATION INSTRUCTIONS**

**DESCRIPTION:** In-mirror RearView Monitor

APPLICATION: NV Cargo
PART NUMBER: 999Q6 HX010

### KIT CONTENTS:

Item	Qty.	Part Description	Service Part Number
Α	1	In-mirror RearView Monitor	999Q6 HX000S4
В	1	Camera	
С	1	Parts Kit	999Q6 HX000S2
D	1	Harness (Long)	
Е	1	Harness (Short)	
F	1	Camera Bracket	
G	2	M3 x 6mm Phillip Screw w/ Loctite	
Н	2	• 6/32" x 3/8" Black Phillip Screw	
I	2	Speed Nut	
J	2	Butyl Gum	
K	55	Wire Tie	
L	9	Foam Tape	
М	2	• Posi-Tap™	
N	7	B-Pillar Clip	24225 C9901
0	1	User Guide	
Р	1	Manual, Installation Instruction Download	999V2 AW000



# TOOLS REQUIRED:

Phillips Screwdriver

3mm Flat Scredriver

T-20 Torx Head Driver

Panel Removal Tool

Side Cutters

10mm Socket Wrench

8mm Socket Wrench

Needle Nose Pliers

Dremel Tool (or equivalent)

3/16" Drill Bit

**Dremel Cutting Tool** 

Shop Light

Clean Rag

Fish Wire

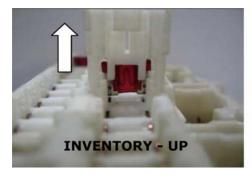
- 1) Apply parking brake.
- 2) Confirm the vehicle is no longer in the default shipping state (extended storage switch pulled up and BCM in transit mode). Failure to confirm the vehicle has been removed from this state will result in loss of normal vehicle operation. The confirmation requires two checks:
  - 2a) Locate the exended storage switch in the cabin fuse block. Once located, check that it is in the "customer" position. See below for reference.
- 2B) To remove transit mode is by doing as follows:
  - 1. Remove fuse cover lid
  - 2. Push down shorting pin
  - 3. Ign on 2 times without turn the vehicle on.

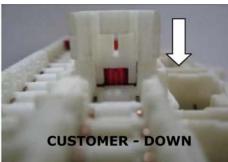




To put transit mode back is by doing as follows:

- 1. Ign Off
- 2. Remove fuse cover lid
- 3. Pull up shorting pin
- 4. Assemble fuse cover lid
- 5. Ign On 2 times without turn the vehicle on.
- 6. Confirm transit mode condition on meter.



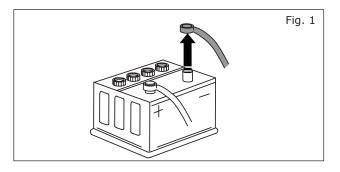


NOTE: Typical vehicle condition shown above. Switch is easily identifiable by the permanent, push-pull fuse holder. Actual position on the fuse block may vary, vehicle to vehicle.

3) Turn ignition switch to "ON" position.

	Presets	1	2	3	4	5	6	
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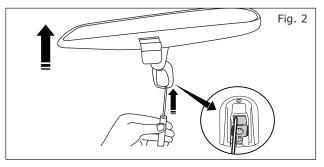
- 4) Put shift lever in "P" position for A/T and CVT or "1st" for M/T.
- 5) Turn ignition switch to "OFF" position.



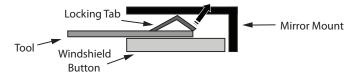
6) Disconnect the negative battery terminal.

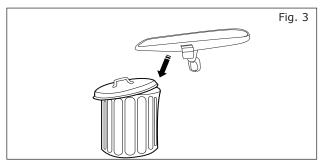
# **A** CAUTION

Do not use excessive force when removing OE mirror from windshield. The window button may separate from windshield or the windshield could break.

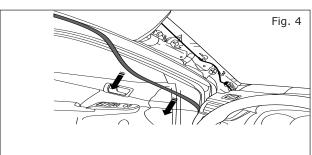


- 7) Removal of OE rearview mirror.
  - a) Slide flat end of 3mm screwdriver into opening at bottom of mirror mount until resistance is felt.
  - b) Apply additional upward force and twist 90 degrees to lift lock spring.
  - c) Lift mirror upward off mirror mount while applying pressure with screwdriver.

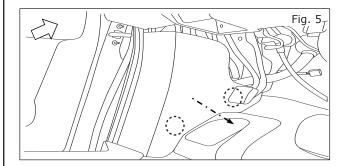




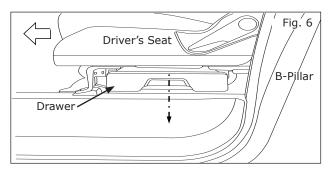
8) Discard Mirror



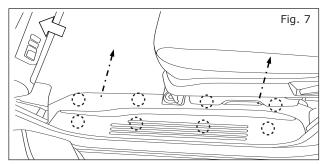
9) Using a panel removal tool, loosen the driver side weather strip and remove from the top of the A-pillar to the insturment panel.



10) Remove lower dash side finisher by pulling towards passenger side of vehicle. (Fig. 5)

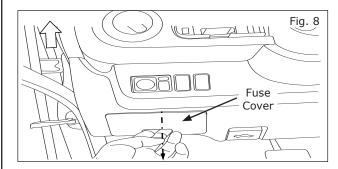


11) Remove driver side seat drawer by pulling outwards. (Fig. 6)

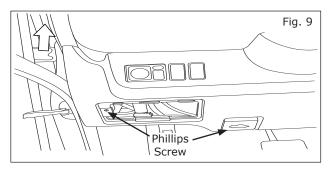


12) Remove driver side kicking plate by disengaging clips with panel removal tool. (Fig. 7)

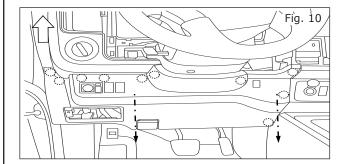
NOTE: If driver side kicking plate panel clips be come damaged, replace panel clip. (P/N 15-53 10701)



- 13) Remove driver-side lower finisher. (Fig. 8)
  - a) Pull outward on fuse cover and remove from dash finisher.



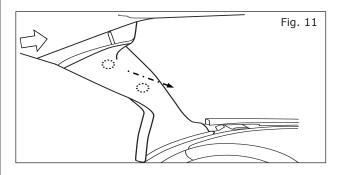
- 14) Remove 1 phillips screw from fuse cover area. (Fig. 9)
  - a) Partially pull outward on hood release lever to expose 1 phillips screw. Remove screw.



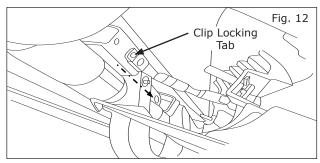
- 15) Pull outward on lower dash finisher to remove. (Fig. 10)
  - a) Remove all connectors from back of dash finisher.

# **A** CAUTION

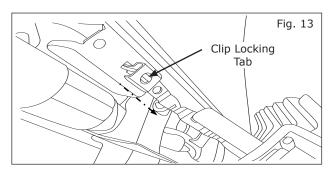
Exercise caution when removing and installing LH front pillar garnish due to side airbag placement.



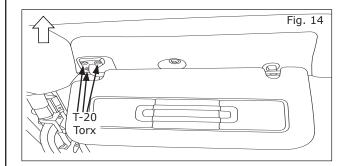
- 16) Remove LH front pillar garnish. (Fig. 11)
  - a) Disengage fixing clip and metal clip with panel removal tool.



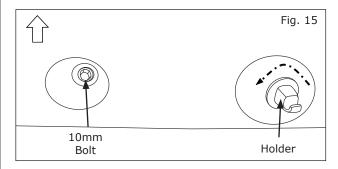
17) Press inward on LH front pillar garnish clip and pull downward. (Fig. 12)



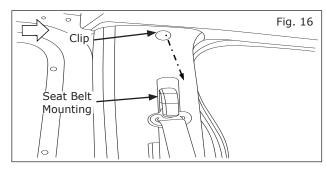
- 18) Continue pressing inward on LH front pillar garnish clip and pull downward to completely remove clip. (Fig. 13)
  - a) Remove LH front pillar garnish from vehicle body.



19) Remove driver side sun-visor assembly. (Fig. 14)

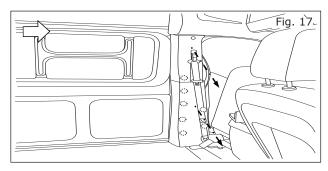


- 20) Remove driver side sun-visor holder by rotating CCW  $90^{\circ}$ . (Fig. 15)
- 21) Remove 10mm bolt securing headliner to roof.



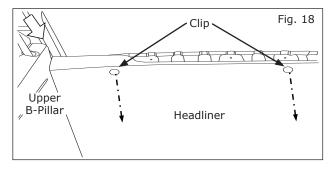
22) Partially loosen driver-side B-pillar panels. (Fig. 16)
a) Remove upper B-pillar clip and remove 10mm

bolt.

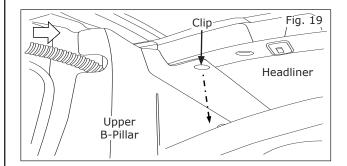


23) Pull outward on upper and lower panels to partially loosen panels. (Fig. 17)

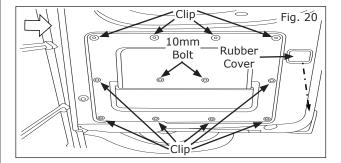
NOTE: Driver-side upper and lower B-pillar panels do not need to be fully removed.



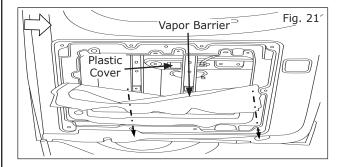
24) Loosen rear of headliner by removing plastic clips with panel removal tool. (Fig. 18)



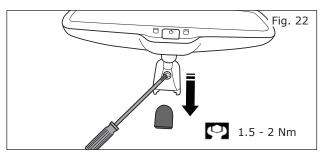
25) Loosen driver side headliner by removing plastic clip with panel removal tool. (Fig. 19)



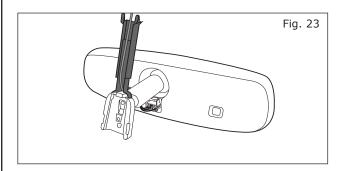
- 26) Disassemble driver side rear door panel. (Fig. 20)
  - a) Using panel removal tool, remove 10 panel clips.
  - b) Using 10mm socket, remove 2 10mm bolts.
  - c) Remove door panel.
  - d) Remove rubber cover.



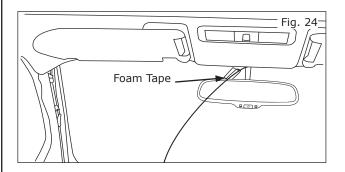
 Partially remove rear vapor barrier by releasing top portion to gain access to plastic cover. (Fig. 21)



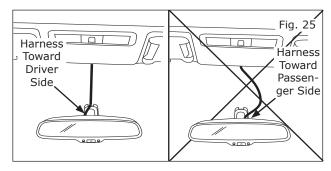
- 28) Install In-mirror Rearview Monitor Mirror.
  - a) Plug the harness connector into the back of the Inmirror RearView Monitor.
  - b) Slide the In-mirror RearView Monitor mirror base over the button on the windshield.
  - Using a T-20 Torx head driver, tighten the screw on the mirror mount 1.5 - 2.0 Nm (1.3 ft - lbs.) (Fig. 22)



- 29) If a wire cover was removed from the OE mirror, discard the OE wire cover and use the new wire cover from kit contents.
  - a) Route harness into the grove of the wire cover and attach to the mirror mount.
  - Slide the forks on top of the wire cover, into the headliner. (Fig. 23)
  - c) Verify cover is properly seated and aligned

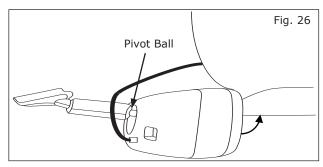


30) Wrap 1 piece of foam tape around harness and using panel removal tool, tuck between headliner and roof above mirror. (Fig. 24)



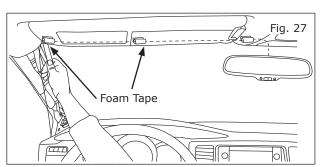
31) Route the harness into the headliner, ensuring harness is centered above mirror. (Fig. 25)

NOTE: Ensure the harness is routed to the driver side of the mirror.

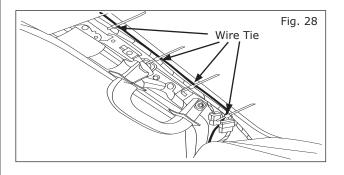


32) Ensure the mirror pivot ball closest to the mirror head is adjusted upward to ensure there is enough slack with the harness. (Fig. 26)

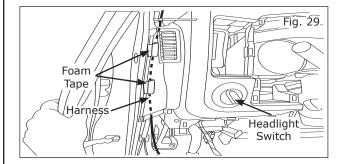
NOTE: Ensure there is enough slack present to allow for adjustment of mirror.



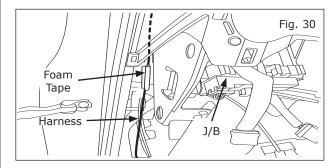
- 33) Wrap 1 piece of foam tape around harness at center of driver side sun visor and where the headliner bends towards driver side door. (Fig. 27)
  - Using panel removal tool, tuck the harness between headliner and roof.



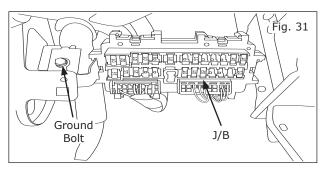
34) Route harness down driver side A-pillar and secure to existing vehicle harness with 4 wire ties. (Fig. 28)



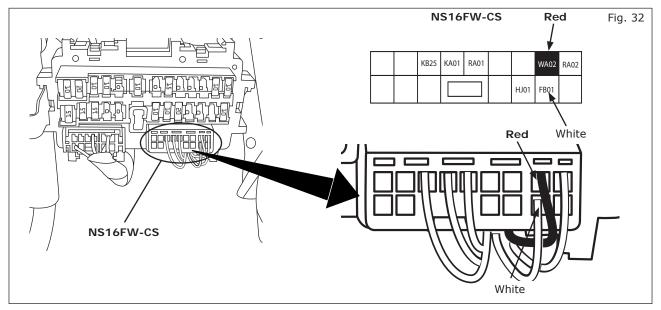
35) Wrap 2 pieces of foam tape around mirror harness (including red and black wires) and tuck between metal bracket and center dash. (Fig. 29)

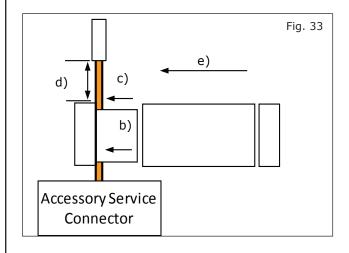


36) Wrap 1 piece of foam tape around harness to protect from metal frame near center dash in location shown. (Fig. 30)



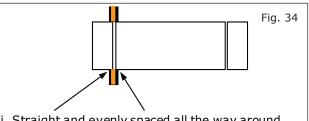
- 37) Locate the 8mm ground bolt in driver side dash area, near J/B, and remove. (Fig. 31)
  - a) Install ring terminal from Black wire of mirror harness over ground bolt and reinstall.
- 38) Secure gray end of the wire tap to **Red Wire** in J/B in driver side kick panel area. (Fig. 32)
  - a) See steps 39 53 for wire tap installation instructions.
  - b) Red mirror harness wire will be used as the accessory wire.





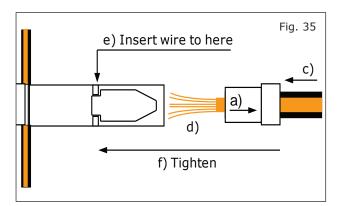
- 39) Tap accessory service wire. (Fig. 33)
  - a) Identify and confirm correct wire in the Accessory Service Connector to be tapped.
  - Remove cap (slot side) from tap body.
  - Slide cap around single accessory wire.
  - Position cap  $\geq$  6.35mm(0.25in) away from the heat shrink end of the Accessory Service Connector (measurement for first posi-tap installed on the circuit).
  - Tighten the tap **TIGHT** with finger pressure.
  - Tighten by another quarter turn.

NOTE: Figures are not to scale.

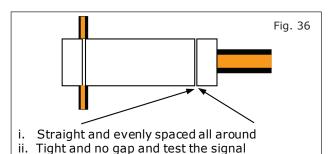


- i. Straight and evenly spaced all the way around
- ii. Tighten and minimize gap (wire jacket should be crushed)
- 40) Inspect the tap to ensure correct installation. (Fig. 34)
  - a) Pull on wire lightly to ensure connection.
  - b) Inspect the tap to ensure correct installation.
  - Test signal to ensure that it is working.

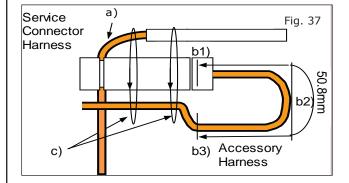
NOTE: Avoid putting pressure on the vehicle wire and tap for the remainder of the installation.



- 41) Tap accessory wire. (Fig. 35)
  - a) Remove tap (non-pierce) side from tap.
  - Remove the protective stub from the wire.
  - Insert wire through the non-pierce side. c)
  - Spread the individual strands into fan shape. d)
  - Insert wire into the tap body and ensure that it is all the way in.
  - Tighten the tap **TIGHT** with finger pressure. f)
  - Tighten by another quarter turn.

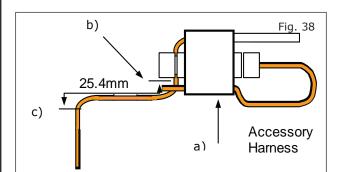


- 42) Confirm the tapped accessory wire. (Fig. 36)
  - a) Pull on the wire lightly to ensure connection.
  - b) Inspect the tap to ensure correct installation.
  - c) Test the signal to ensure it is working.

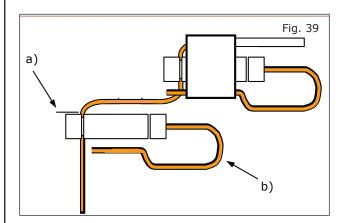


- 43) Forming strain relief loop (always required). (Fig. 37)
  - a) Gently bend the end of the pierced wire (where it exits the cap) down toward the body of the positap.
  - b) On the tapped wire of the non-piecrce side; starting at point b1) measure 50.8mm(2in.) to point b3). Make the first bend of the loop b2), half the distance measured 25.4mm(1in.), and up toward the body of the posi-tap, make the second bend of the loop b3).
  - c) Secure the pierced wire on the heat shrink side and the tapped wire on the non-pierce side to the body of the tap with electrical tape (≥2 Revolutions).

NOTE: If securing multiple taps to single circuit continue to Step 44, if tapping different circuits repeat steps 39-43 as required, then proceed to step 48.



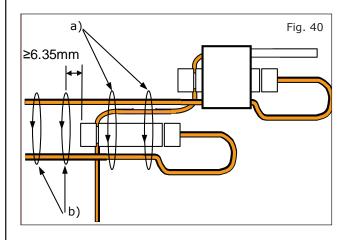
- 44) Multiple posi-taps on the same wire; first tap. (Fig. 38)
  - a) The first accessory is tapped, relieved and secured as shown in Fig 1 thru 5 (these steps are always the same).
  - b) Measure 25.4mm(1in) from point b) to point c) on the pierced wire.
  - c) At points b) & c), bend the pierced wire gently to form the "staircase" shape.



- 45) Multiple posi-taps; second accessory. (Fig. 39)
  - a) Tap second accessory at point b), making sure to preserve "staircase shape".
  - b) After tapping second accessory, form a strain relief loop for the tapped wire on the non-pierce side as shown in Fig c) and detailed in step 5b.

NOTE: Do not secure before reading step 8.

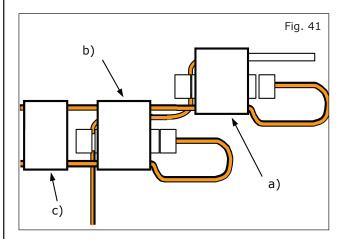
Repeat as necessary.



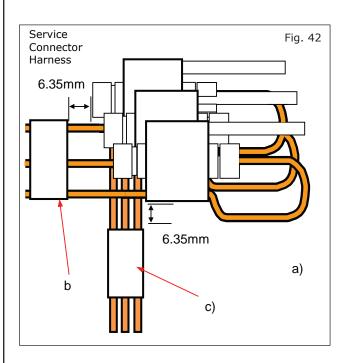
- 46) Securing multiple posi-taps on the same circuit (Fig. 40)
  - a) Secure the pierced and tapped wires from the first posi-tap, along with the tapped wire from the non pierce side of the 2nd posi-tap to the body of the 2nd tap with electrical tape (≥ 2 revolutions).
  - b) Secure the tapped wires from the non-pierced sides of each tap to each other with electrical tape (≥ 2 revolutions)at a distance of ≥6.35mm(0.25in) from the head of last posi-tap shown in Fig b).

Note: No single wire should be posi-tapped more than 4 times to maintain integrity.

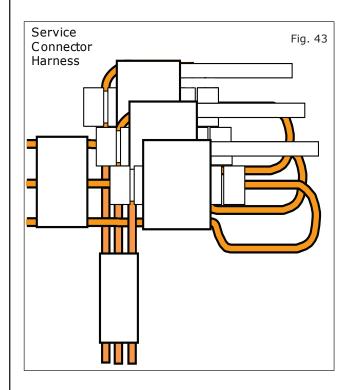
Repeat as necessary



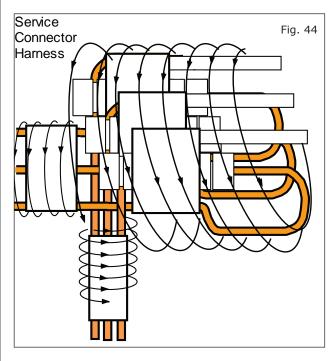
- 47) Multiple accessory taps on the same circuit secured. (Fig. 41)
  - The first accessory is tapped, relieved and has the pierced wire on the heat shrink side and the tapped wire on the non-pierce side secured to the first tap as shown in Fig a).
  - b) The second accessory is tapped, relieved and has the pierced wire, the tapped wire on the non-pierce side and the tapped wire from the non-pierce side of the first posi-tap secured to the second tap as shown in Fig b).
  - c) Finally the tapped wires on the non-pierce side of the first and subsequent posi-taps are secured to each other as shown in Fig c).



- 48) Multiple accessory taps on different circuits secured together. (Fig. 42)
  - The tapped accessories (with wires already secured to tap bodies) are stacked slightly staggered on top of each other as shown in Fig a).
  - b) The tapped wires on the non-pierce side of all the posi-taps are secured to each other with electrical tape ( $\geq$  2 revolutions)at a distance of  $\geq$ 6.35mm(0.25in) as shown in Fig b).
  - c) The pierced wires of the first and subsequent positaps are secured to each other with electrical tape (≥ 2 revolutions)at a distance of ≥6.35mm(0.25in) as shown in Fig c).

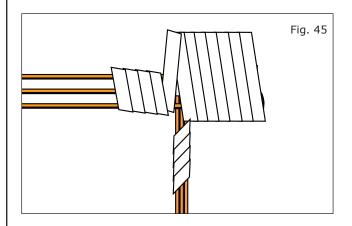


- 49) Prep for foam wrap. (Fig. 43)
  - a) Make sure the accessory taps have been wrapped appropriately as detailed previously and as shown in Fig 43)

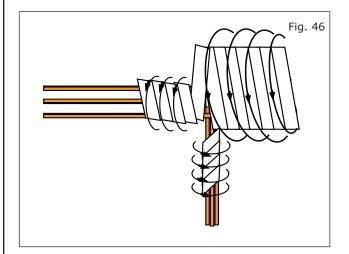


- 50) Pre- foam protective wrap. (Fig. 44)
  - a) Starting at the heat shrink; firmly wrap the positap bundle with electircal tape or non-adhesive wire harness tape, making sure to overlap the previous revolution.

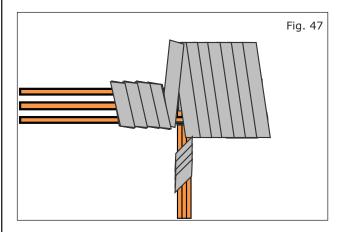
Note: If using non adhesive tape secure at the of wrap with electrical tape ≥ 2 revolutions.



- 51) Finished protective wrap. (Fig. 45)
  - a) Make sure the finished wrap looks similar to Fig. 45

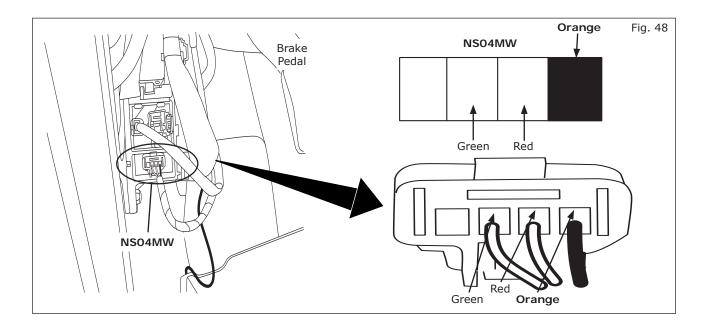


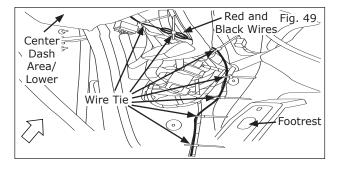
- 52) Foam wrap for posi-tap bundle (foam strips) (Fig. 46)
  - a) Wrap the posi-tap bundle with foam tape, following a pattern similar to the electrical tape, making the best use of foam strips provided.



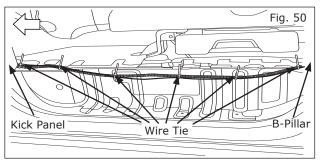
- 53) Finished foam wrap for bundle (strips-top view) (Fig. 47)
  - a) Make sure the finished wrap looks similar to Fig. 47

- 54) Secure black harness wire to existing vehicle reverse circuit. (Fig. 48)
  - Locate lower connector at driver side lower kick panel area.
  - b) Locate Orange wire in connector.
  - c) See steps 39 53, pages 10-14 for wire tap installation instructions.
  - Black mirror harness wire will be used as the accessory wire.

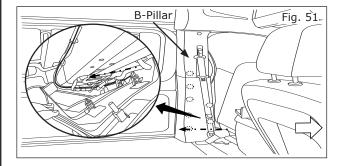




55) Bundle excess red and black harness wires and secure to existing vehicle harness with 1 wire tie in kick panel area. (Fig. 49)

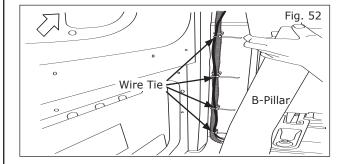


- 56) Route video harness to rear gate. (Fig. 50)
  - Secure harness to existing vehicle harness with 6 wire ties in kick panel area.
  - Route harness from kick panel area toward B-pillar and secure video harness to existing vehicle harness with 6 wire ties.

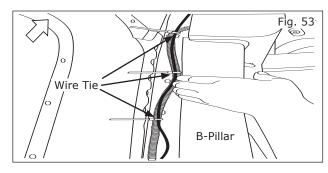


57) Route video harness through bottom of B-pillar trim. (Fig. 51)

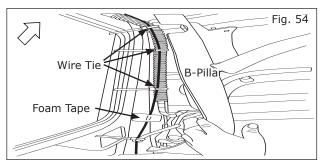
NOTE: For vehicles containing OE harness in B-pillar, proceed to next step. For vehicle's NOT containing OE harness in B-pillar, proceed to step 61.



58) Route video harness up driver side B-pillar and secure to existing vehicle harness with 4 wire ties. (Fig. 52)

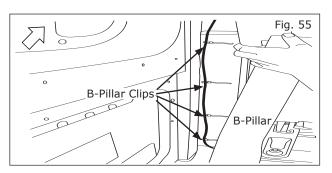


59) Continue routing video harness up B-pillar and secure to existing vehicle harness with 3 wire ties. (Fig. 53)

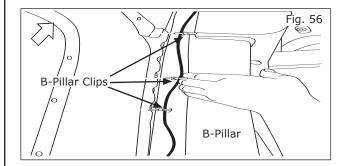


- 60) Secure video harness to vehicle body with 1 piece of foam tape in location shown. (Fig. 54)
  - a) Secure video harness to existing vehicle harness in upper B-pillar with 3 wire ties.

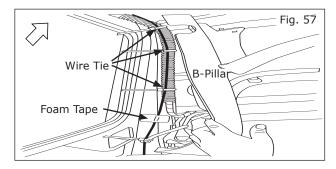
NOTE: Skip to step 64.



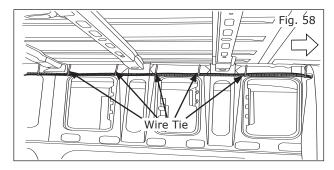
61) Route video harness up driver side B-pillar and secure to existing vehicle cut outs using 4 B-pillar clips. (Fig. 55)



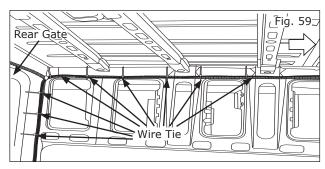
62) Continue routing video harness up B-pillar and secure to existing vehicle cut outs using 3 B-pillar clips. (Fig. 56)



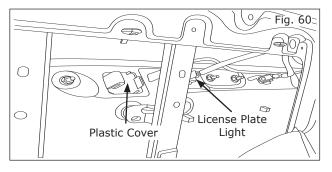
- 63) Secure video harness to vehicle body with 1 piece of foam tape in location shown. (Fig. 57)
  - a) Secure video harness to existing vehicle harness in upper B-pillar with 3 wire ties.



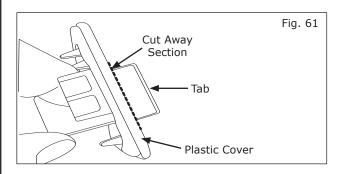
64) Continue routing vehicle harness to rear of vehicle, securing to existing vehicle harness with 5 wire ties. (Fig. 58)



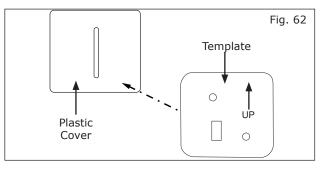
- 65) Secure to existing vehicle harness with 9 wire ties. (Fig. 59)
  - Remove black electrical tape and tubing from harness end.



- 66) Install camera. (Fig. 60)
  - a) Remove plastic cover outward from driver side rear door, near rear finisher.

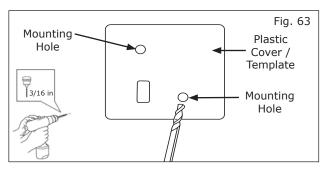


67) File down entire protruding tab from plastic cover.
This will allow the camera bracket to be installed on the plastic cover properly. (Fig. 61)

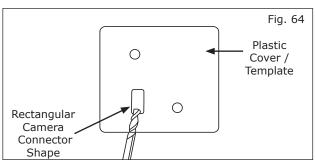


68) Cut out template (on a bench away from the vehicle) located on last page of instructions and attach to plastic cover. (Fig. 62)

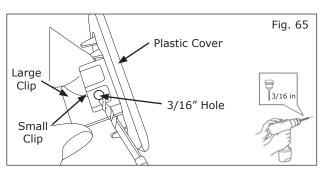
NOTE: Ensure plastic cover is facing upward by observing the "up" arrow on the back of the cover. Ensure paper template is facing upward by observing the "up" arrow on the front of the template.



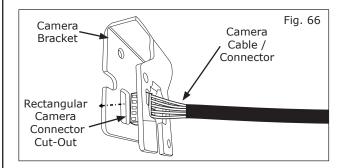
69) Using a drill and 3/16" drill bit, drill out both camera bracket mounting holes. (Fig. 63)



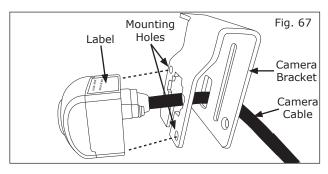
70) Using a dremel tool and bit, cut away the rectangular camera connector shape. (Fig. 64)



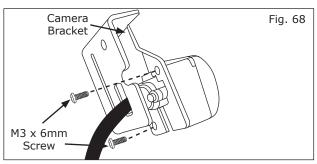
- 71) Orient plastic cover so that the small clip located on the back of the cover is accessible. (Fig. 65)
  - a) Using a drill and 3/16" drill bit, drill out a hole on the bottom portion of the lower small clip.



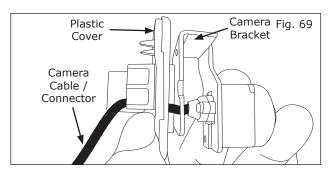
72) Route camera connector and cable through camera bracket rectangular connector cut-out as shown. (Fig. 66)



73) Orient camera onto camera bracket as shown, paying close attention to the orientation of the camera bracket and camera label. (Fig. 67)

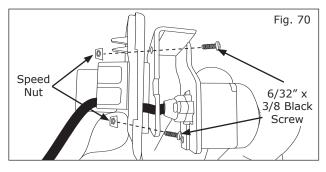


74) Secure camera to camera bracket using 2 M3 x 6mm w/ loctite phillip's screws as shown. (Fig. 68)

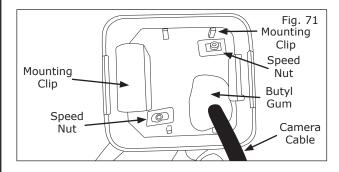


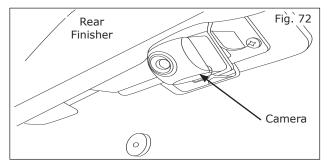
- 75) Route camera harness through rectangular cut out in plastic cover. (Fig. 69)
  - a) Orient camera and camera bracket onto plastic cover as shown.

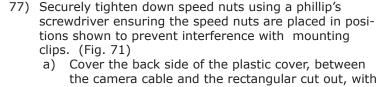
NOTE: Ensure plastic cover is facing upward by observing the "up" arrow on the back of the cover.



- 76) Secure camera bracket to plastic cover by inserting 2 6/32" x 3/8" black phillip's screws into locating holes as shown. (Fig. 70)
  - a) Place 2 speed nuts onto the back of the 2  $6/32'' \times 3/8''$  phillip's screws.







back of cover.

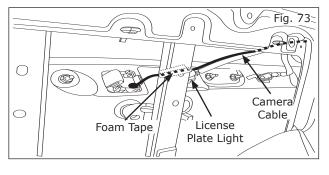
2 pieces of butyl gum to prevent water intrusion.

NOTE: Do not allow speed nuts to cover foam on

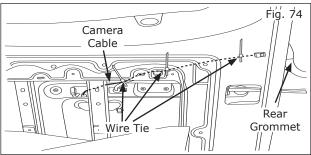
78) Route the camera cable through the front of the driver side rear door, through the cut out in the body of where the plastic cover was previously removed. (Fig. 72)

a) Insert the plastic cover into the opening, ensuring the cover is securely fastened.

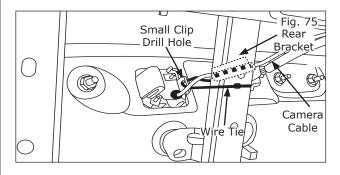
NOTE: An audible click should be heard when cover is securely fastened.



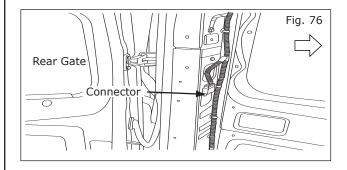
79) Attach 1 piece of foam tape around camera harness in location shown, to prevent harness from contacting metal body. (Fig. 73)



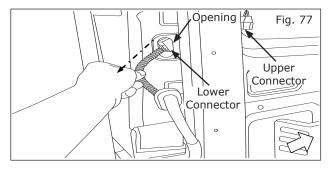
80) Route camera harness toward rear grommet, securing to existing vehicle harness with 3 wire ties. (Fig. 74)



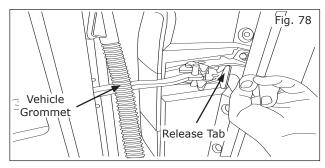
- 81) Secure camera bracket and plastic cover to rear body. (Fig. 75)
  - Route 1 wire tie through small clip drill hole on plastic cover and secure to rear body bracket.



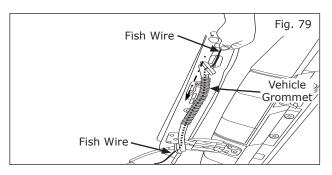
82) Locate connector in rear of driver side vehicle body, near rear gate and disconnect. (Fig. 76)



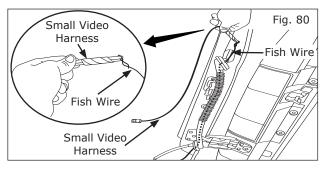
83) Pull bottom portion of connector and harness outward through opening in rear of vehicle body. (Fig. 77)



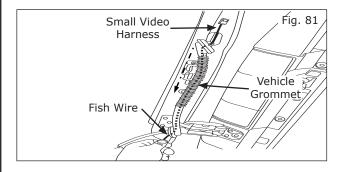
- 84) Release driver side rear door by pressing release tab. (Fig. 78)
  - Open driver side rear door as far as possible to gain access to vehicle grommet.



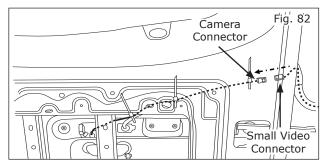
- 85) Release driver side rear door grommet from door and body side. (Fig. 79)
- 86) Starting from the door side of grommet, route fish wire (or equivalent) through rear grommet and out opposite end of grommet.



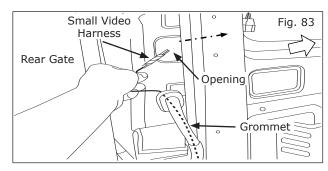
- 87) Route small video harness through rear grommet and into vehicle body. (Fig. 80)
  - a) Wrap fish wire (or equivalent) around end of tubing of small video harness.



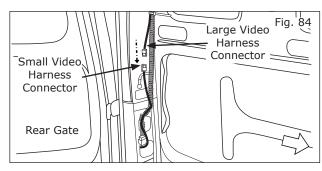
- 88) Route small video harness through rear grommet, ensuring opposite end of harness does not pull through grommet. (Fig. 81)
  - a) Remove fish wire from harness.



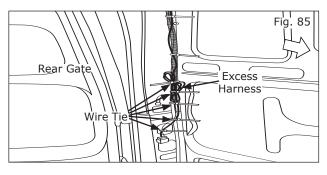
- 89) Route small video harness 5 pin white connector into opening in driver side rear door, where vehicle grommet was removed. (Fig. 82)
  - Route small video harness 5 pin white connector to camera cable 5 pin white connector and connect.



- 90) Route small video harness from bottom of rear grommet, through opening and into driver side rear body. (Fig. 83)
  - Remove black electrical tape and tubing from harness end.



91) Route small video harness green connector to large video harness green connector in driver side rear body and connect. (Fig. 84)



- 92) Secure small video harness to existing vehicle harness with 3 wire ties. (Fig. 85)
- 93) Bundle any excess video harness and secure to existing vehicle harness with 2 wire ties.

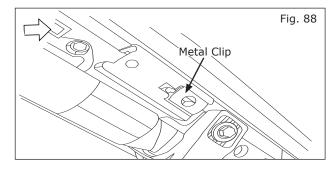
ACCE	SSORY CHECK:
	Testing
	Tighten negative battery terminal nut to 4.1 Nm.
	Turn the ignition switch to ON.
	Ensure vehicle is in well lit area.
	Check to see that the green LED is illuminated. If it is not, press the " 🖒 " button to turn it on.
	Cover the forward-looking photocell (located to the driver side of the wire harness connection on the back of the mirror) with a dark cloth or towel. After a few seconds, the mirror should begin to darken. Timing will vary with ambient light levels and a flashlight may be shined on the rearward photocell if needed, to accelerate effect.
	Rearward Photocell  Dark Cloth or Towel  Remove the cover from the forward-looking photocell and the mirror will begin to clear.  With your foot on the brake pedal, move the gear selector lever into reverse.  A clear image should display in the left hand side of the mirror. Move the gear selector lever back into park. The image should now disappear.
	INACE
	Diagnostic flow chart is available on pages 26, 27, and 28 for troubleshooting.
$\equiv$	Check all Critical Installation Steps.
=	·
	Check all torque values
	Auto-Dimming mirror, pg. 7, step 28c, fig. 22
	Verify all wiring is secure and not exposed.
	Trim all excess wire ties flush.
一	Check all vehicle electrical systems that the accessory interfaces with.
	Power mirror switch.
	Traction control switch.  License plate lamp.

# **A** CAUTION

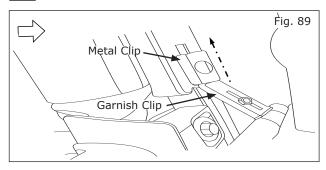
Use caution when re-installing interior components to avoid damage, scratches, or breaking of mounting clips. Refer to the vehicle service manual for more information.

LH front pillar garnish.

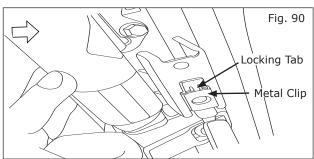
Ensure metal clip in A-pillar body is seated properly.



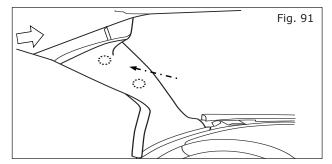
Insert LH front pillar garnish clip from LH front pillar garnish into metal clip of A-pillar body.



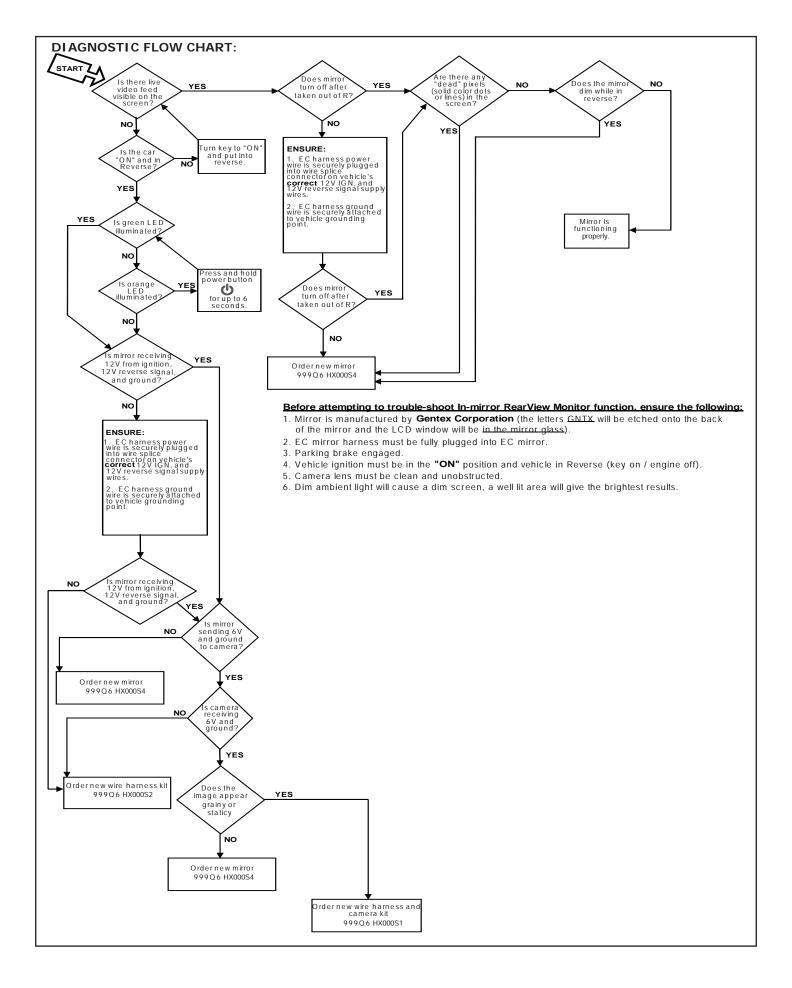
Continue inserting LH front pillar garnish clip until locking tab is securely fastened at top of metal clip.



Push finisher toward vehicle body to securely attach.



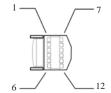
ACCESSORY CHECK: RE-INSTALLATION OF REMOVED PARTS:				
Rear door grommet.				
Re-attach vehicle grommet to door and body side.				
Ensure Arrows on vehicle grommet are facing upwards.				
Arrow Facing Upward				
Ensure Grommet Guide Features are facing the center of the vehicle.				
Fig. 93  Grommet Guide Features				
Re-install all removed vehicle parts. Refer to the vehicle service manual as necessary.				
FINAL INSPECTION:				
Verify re-installed trim parts for proper flush fit (no gap, no waviness, etc).				
Verify all clips are fully engaged and locked.				
Verify re-installed trim parts are free from cracks, scratches, or stress cracks.				
Verify vehicle headliner, seat, steering wheel, center console, floor carpets, etc. are not	t soiled.			
Verify interior and exterior is not damaged.				
Turn ignition switch to "ON" and confirm proper operation of Vehicle Systems.				
If equipped, verify all window and sunroof one touch operation and perform th necessary. Refer to the vehicle service manual for more details.  Confirm proper audio function (AM, FM, SAT, CD and AUX).  Re-program radio presets and other vehicle settings to the recorded settings.	e reset procedure if			
Start engine and verify that there are no new Diagnostic Trouble Codes. Turn ignition	switch to "OFF".			
Place the Owner Manual, Quick Reference Guide, and/or other Manual in the glove box				



# **DIAGNOSTIC FLOW CHART:** Before attempting to trouble-shoot EC mirror Auto-Dimming function, ensure the following: 1. Mirror is manufactured by Gentex Corporation (the letters GNTX will be etched onto the back of the mirror and the compass display window will be in the mirror glass). 2. EC mirror harness must be fully plugged into EC mirror. Vehicle ignition must be in the "ON" position. START / VERIFY AUTO-DIMMING FUNCTION: Is green LED YES illuminated? Cover forward - facing photo cell with dark cloth or tape. Shine light from flashlight, shoplight, etc. at rearward facing photocell. NO Press power button on EC mirror. Does mirror YES Mirror is functioning Is green LED YES darken? properly illuminated? NO NO Order service part 999Q6 HX000S4 remove existing EC mirror and replace with new 12V being YES delivered to EC mirror? with new NO NOTE: **ENSURE:** Auto-dimming mirror malfunctions may occur due to: 1. EC harness power wire is securely plugged into red wire of 16-pin J/B con-Order service part Obstructions blocking either the forward-facing or rearward-facing photo-cells. 999Q6 nector. 2. Non-factory tinting of windows. HX000S4, remove existing EC mirror and replace with 2. Check fuse corresponding to connection point on 16-pin connector, to see if it needs to be replaced. new. 3. EC harness ground wire is securely attached to vehicle gounding point. YES 12V being delivered to F.C. mirror? NO Order service part 999Q6 HX000S2 remove existing EC mirror wiring and replace with new.

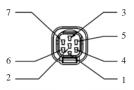
## **DIAGNOSTIC FLOW CHART:**

## LONG HARNESS:



Terminal Insertion View

Pin	Wire Color	Function
1	Black	Video -
2	Red	Video +
3	Black	Mirror Ground
5	Black	Reverse Signal
6	Red	Mirror Ignition
7	Green	Camera Power
8	White	Camera Ground



Mating View

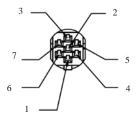
Pin	Wire Color	Function
1	Yellow	Drain
4	Red	Video +
5	Black	Video -
6	Green	Camera Power
7	White	Camera Ground

## **SHORT HARNESS:**



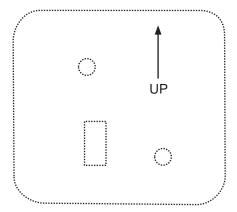
Terminal Insertion View

Pin	Wire Color	Function
1	Green	Camera Power
2	White	Camera Ground
3	Yellow	Drain
4	Black	Video -
5	Red	Video +

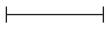


Mating View

Pin	Wire Color	Function
1	Yellow	Drain
4	Green	Camera Power
5	White	Camera Ground
6	Red	Video +
7	Black	Video -



• Before cutting out template, measure line below to ensure accuracy.



1 Inch (25.4 mm)