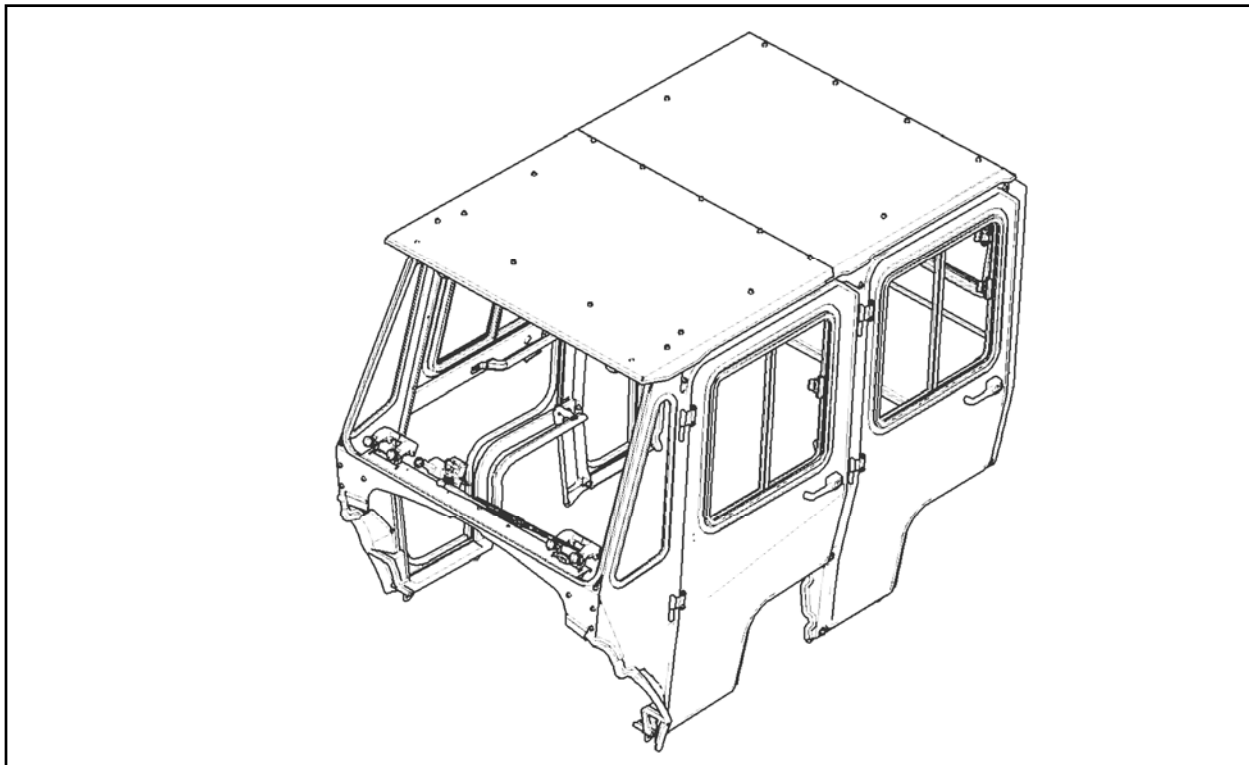




Club Car Carryall 4x4 4-Seater Cab
Complete Cab Assembly
p/n: 47617514001
compatible with Carryall 1700 and XRT 1550 SE models
(Note: for gasoline engines, the following kit is also
required: Harness, Relay, p/n: 47641905001)

The contents of this manual are the property of the owner.
 Be sure to leave with the owner when installation is complete.



CAB COMPONENTS AND OPTIONS:

- **47617514001**.....Kit, Cab, Complete, Curtis
- **47617522001**.....Kit, Console, Overhead, Curtis
- **47587421001**.....Kit, Dome Light, Curtis*
- **47587418001**.....Kit, Beacon, Curtis*
- **47587419001**.....Kit, Work Light, Front, Curtis*
- **47617515001**.....Kit, Heater, Curtis*
- **47617518001**.....Kit, Windshield Washer, Curtis*
- **47587416001**.....Kit, Mirror, Interior, Curtis
- **47587417001**.....Kit, Mirror Set, Side, Curtis

* Requires 47617522001 (Overhead Console)

Approximate Installation Time *

Experienced Dealer Technician – 4 Hours
Average Dealer Technician – 5 Hours
Do-It-Yourself – 6 Hours

* Not including accessories

BEFORE YOU START:

- Read and understand all instructions before beginning.
- To assist with the cab installation, leave all bolts loose for later adjustment unless otherwise specified.
- Use caution to avoid damaging the factory installed threaded inserts. Begin the bolt engagement by hand to guard against potential cross threading.

SAFETY INFORMATION:

⚠ WARNING: Cabs and general accessories add additional weight to the base vehicle. Deduct the accessory's total weight from the vehicle's rated capacity including driver and passenger. Never operate the vehicle outside of its rated weight capacity.

- Weight of the 47617514001, Complete Cab Kit, Curtis is approximately 532lbs (229kg).

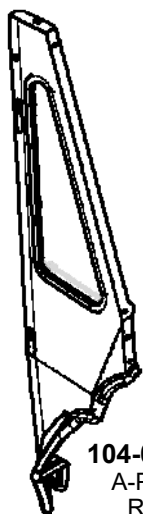
⚠ WARNING: Exposure to Carbon Monoxide can cause illness, serious injury or death.

Never operate vehicle if suspicious of Carbon Monoxide. Inspect exhaust system for leaks monthly. Leaks can result from loose connections, corrosion, cracks or other damage to the exhaust manifold. If leaks are found, repair or replace exhaust system. Do not use vehicle until repair or replacement is complete.

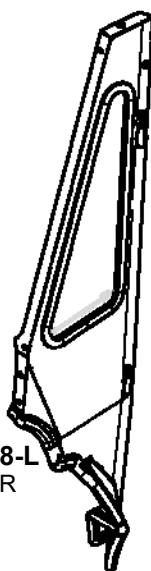
A Tailpipe extension is supplied with every cab and must be installed onto gasoline vehicles to avoid illness, serious injury or death from Carbon Monoxide.

⚠ WARNING: Serious injury or death:

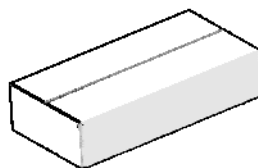
- This cab enclosure does not provide protection from flying objects including golf balls.
- This cab enclosure does not provide protection from lightning. When lightning threatens, take cover and do not operate vehicle.

PARTS INCLUDED IN THIS KIT:

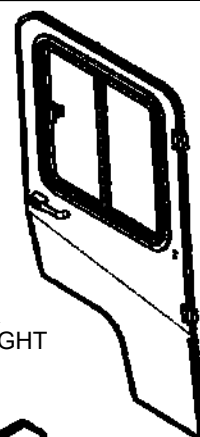
104-00008-R
A-PILLAR
RIGHT



104-00008-L
A-PILLAR
LEFT



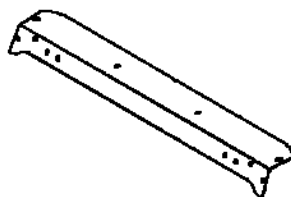
HWB-00032
HARDWARE BOX



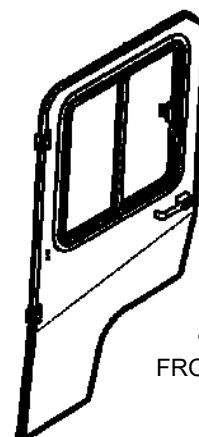
107-00015-R
FRONT DOOR, RIGHT



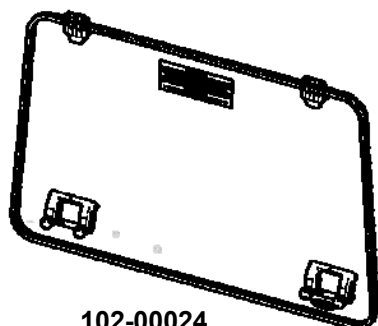
105-00016 COWL



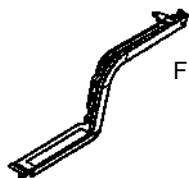
103-00009 WINDSHIELD SUPPORT



107-00015-L
FRONT DOOR, LEFT



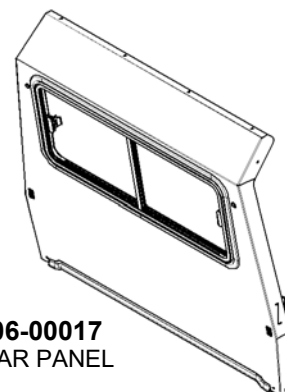
102-00024
WINDSHIELD
ASSEMBLY



113-00046-L
FRONT FLOORBOARD
PANEL, LEFT



113-00046-R
FRONT FLOORBOARD
PANEL, RIGHT

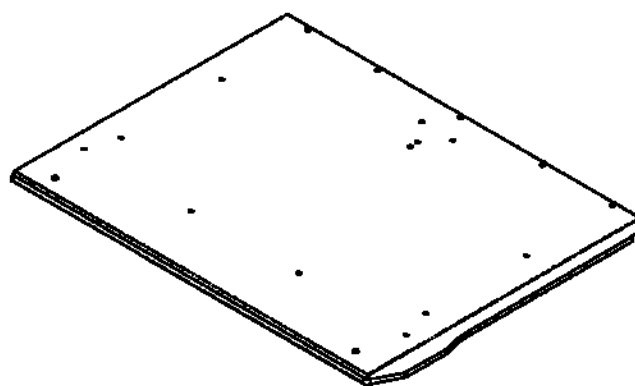
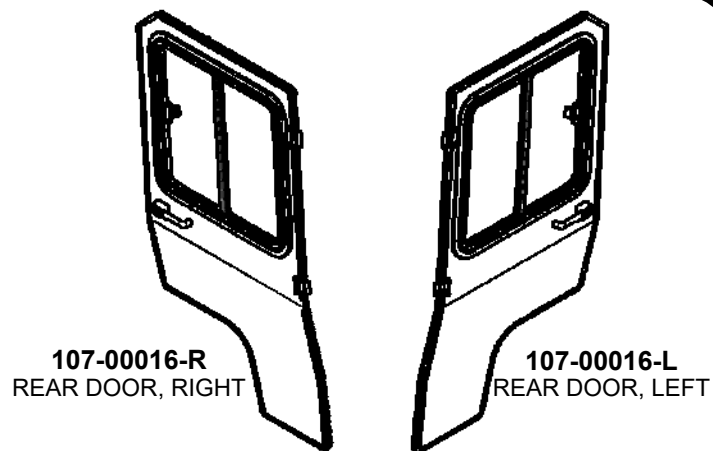
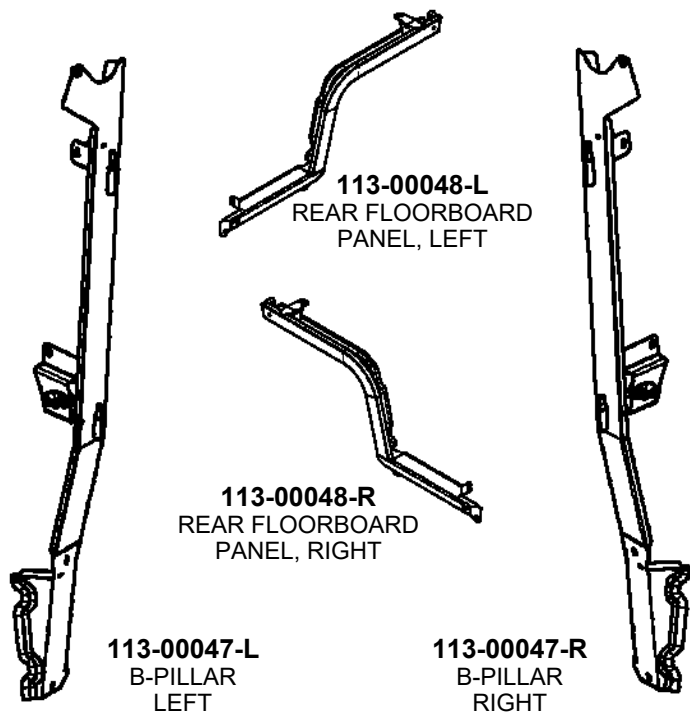


106-00017
REAR PANEL

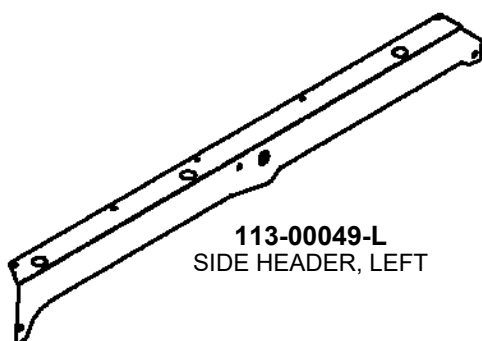
**TO ORDER SERVICE (REPLACEMENT) PARTS SEE
PAGES 15-18**

CONTINUED ON PAGE 3

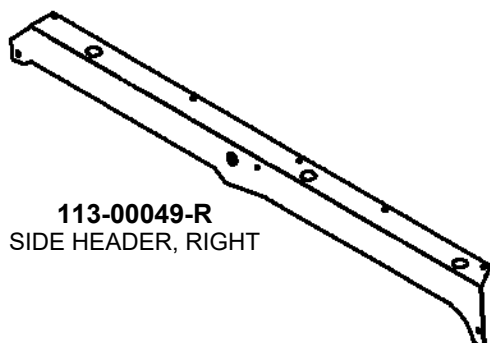
PARTS IN THIS KIT:



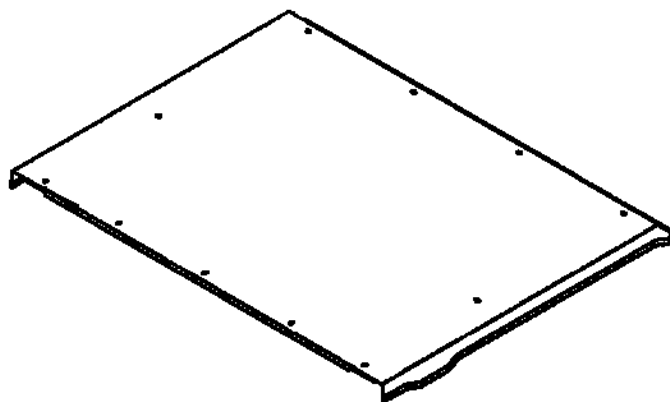
101-00013
FRONT ROOF



113-00049-L
SIDE HEADER, LEFT



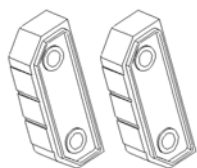
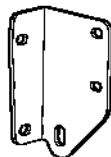
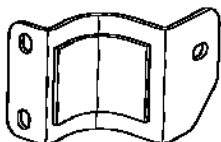
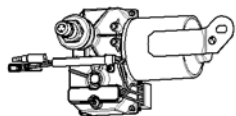
113-00049-R
SIDE HEADER, RIGHT



101-00014
REAR ROOF

**TO ORDER SERVICE (REPLACEMENT) PARTS SEE
PAGES 16-18**

CONTINUED ON PAGE 4

PARTS IN THIS KIT (Hardware box contents):HINGE SPACER
BLOCKS (QTY:2)**110-00044-L**
ROPS INNER BRACKET,
COWL, LEFT**SM-00954-L**
ROPS OUTER BRACKET,
COWL, LEFT**110-00044-R**
ROPS INNER BRACKET,
COWL, RIGHT**SM-00954-R**
ROPS OUTER BRACKET,
COWL, RIGHT

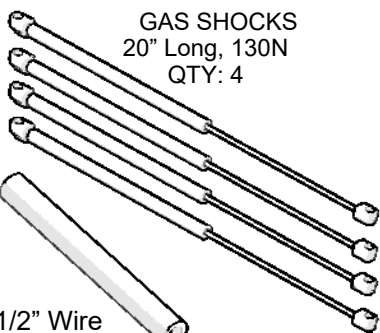
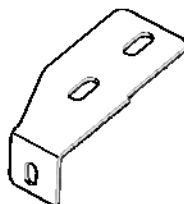
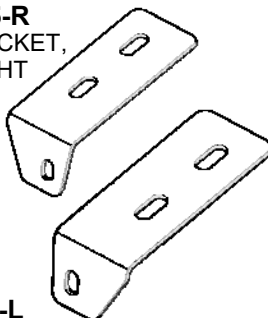
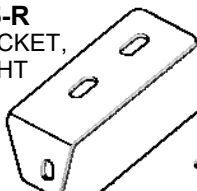
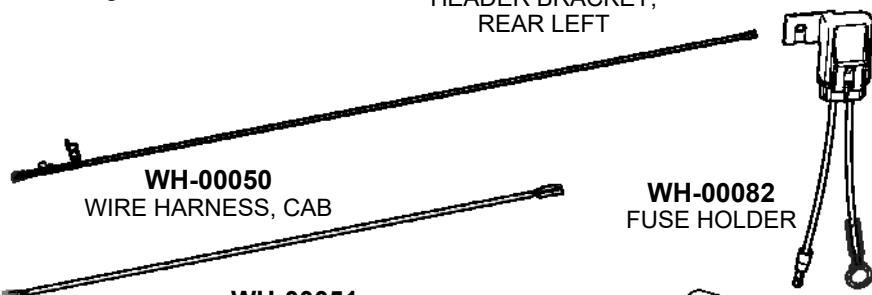
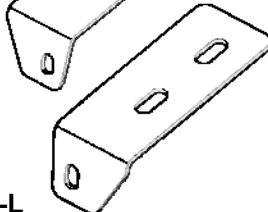
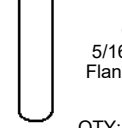
Wiper Motor, 110°



Wiper Arm, 14-16"



Wiper Blade, 20" Flex

GAS SHOCKS
20" Long, 130N
QTY: 41/2" Wire
Loom
6" Long**SM-00641-R**
HEADER BRACKET,
FRONT RIGHT**SM-00641-L**
HEADER BRACKET,
FRONT LEFT**SM-00655-R**
HEADER BRACKET,
REAR RIGHT**SM-00655-L**
HEADER BRACKET,
REAR LEFT**WH-00050**
WIRE HARNESS, CAB**WH-00051**
WIRE HARNESS, WIPER**WH-00082**
FUSE HOLDER8" Wire tie
(QTY:2)1/2" V-Groove
Weather Seal
60" LongKeys: set of 2 on a ring
QTY: 2 pairs**PWKHB**Glass Mounting Kit for Wiper Systems
(See IM-9PWK for contents)**TO ORDER SERVICE (REPLACEMENT) PARTS SEE
PAGES 16-18**QTY: (4)
Brass WasherQTY: (4)
5/16-18 x 1-3/4"
Flat Head BoltQTY: (2)
5/16-18 x 1/1/4"
Flanged Hex BoltQTY: (26)
5/16-18 x 3/4"
Flanged Hex BoltQTY: (12)
Nylon
WasherQTY: (8)
5/16-18 x 1"
Flanged
Hex BoltQTY: (2)
5/16" x 1-1/4"OD
Rubber WasherQTY: (4)
1/4-20 x 3/4"
Flanged
Hex BoltQTY: (4)
M10 Flanged
Lock NutQTY: (4)
1/4-20 Flanged
Lock NutQTY: (44)
5/16-18 Flanged
Lock Nut**HWK-00045-B**
CARRYALL HARDWARE KITQTY: (4)
Brass WasherQTY: (4)
5/16-18 x 2-3/4"
Flanged Hex BoltQTY: (2)
M10 x 110mm
Flanged
Hex BoltQTY: (2)
5/16-18 x 1/1/4"
Flanged Hex BoltQTY: (23)
5/16-18 x 3/4"
Flanged
Hex BoltQTY: (2)
M10 x 70mm
Flanged Hex BoltQTY: (4)
M10 Flanged
Lock NutQTY: (4)
Ball Stud
10mmQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock NutQTY: (4)
M10 Flanged
Lock Nut**HWK-00046**
WINDSHIELD HARDWARE KIT

TOOLS REQUIRED:

- Ratchet with 3/8", 7/16", 1/2" and 15mm sockets
 - 200 inch-lb and 90 ft-lb Torque Wrenches.
 - (Optional) Air or electric powered socket driver
- NOTE: Powered driver is not recommended for bolts into threaded inserts used to secure the roof and side headers.
- 3/8", 7/16" and 1/2" and 15mm open-end wrenches
 - 2.5mm Allen wrench or driver.
 - #3 Phillips Screwdriver (right-angle or socket driver recommended)
 - Flat screwdriver.
 - Bar clamps (padded).
 - Power hand drill, 3/8" drill bit, #2 Phillips bit.
 - Electrical tape.

1. CARRYALL PREPARATION:

NOTE: The seat of the Carryall can be removed and the cargo bed can be raised as needed for access to bolts and wiring.

- 1.1 Disconnect the battery terminals; negative (-) first then positive (+). **WARNING:** Do not allow any tools or other metal objects to contact between terminals.
- 1.2 Remove the two screws and rubber bushings from the front of the runner panels on both sides of the vehicle. (**Figure 1.2**).

NOTE: Be sure the area is clean, dry, and at room temperature before adhering any rubber.

- 1.3 Using a 3/8" drill bit, drill through the existing holes in the plastic runner panels where the screws and bushings were removed.
- 1.4 Remove and discard the rear M10 bolt and nut at the bottom of the side bolster next to the seat, on both sides of the vehicle. Retain the washers for later use. (**Figure 1.4**).
- 1.5 Remove the M10 bolt and nut at the bottom of the front ROPS tubes, to the side of the dashboard, on both sides of the vehicle. (**Figure 1.5**).
- 1.6 Remove and discard the M10 bolt and nut from the center ROPS tube on either side of the Carryall. (**Figure 1.6**).
- 1.7 From the front left wheel well, look up under the front fenders and locate the existing drain hole underneath the cowl. Turn the wheels to allow access and drill a 3/8" drain hole in the opposite corner of the black plastic fender. This will prevent water from running onto the operator's feet during heavy rain. (**Figure 1.7**).
- 1.8 Repeat step 1.7 for right side.

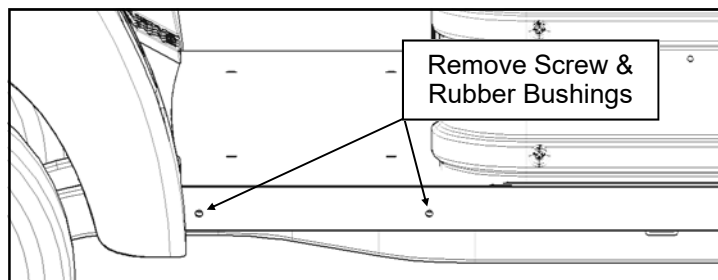


Figure 1.2: Runner panel screws and bushings

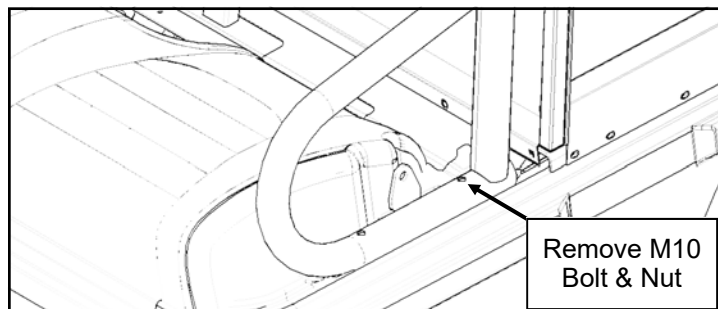


Figure 1.4: Seat side bolster screws

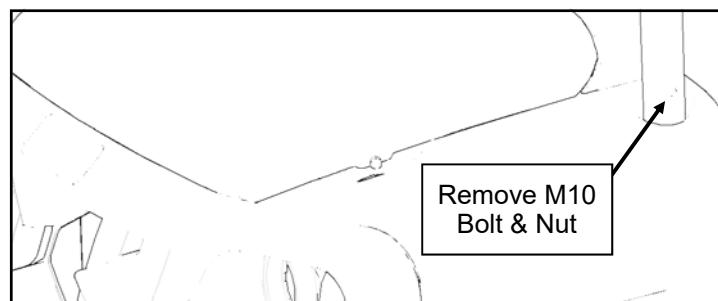


Figure 1.5: Lower front ROPS screws

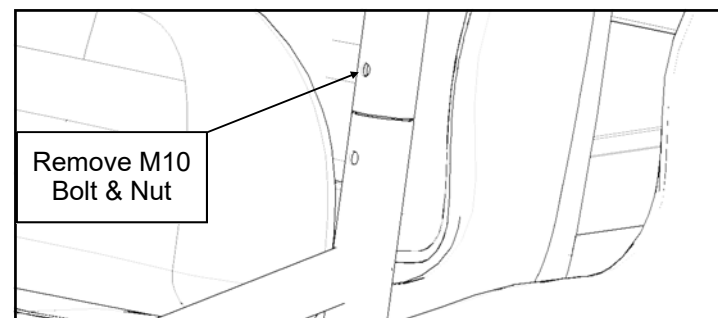


Figure 1.6: Center side ROPS bolts

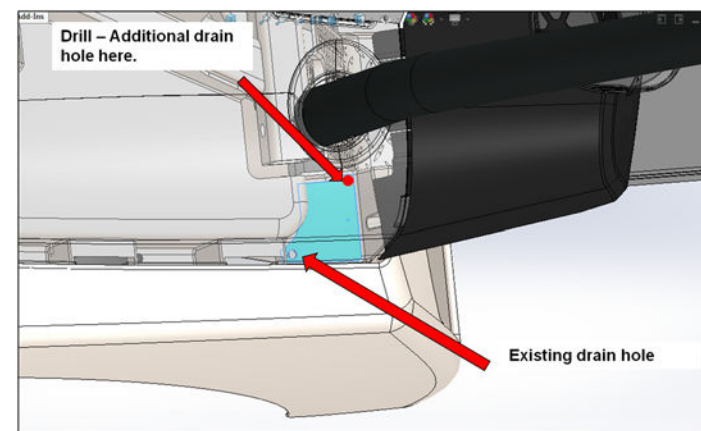


Figure 1.7: Additional drain hole (viewed from above)

2. REAR PANEL:

2.1 Lift the Carryall dump bed and secure it in the raised position.

2.2 QTY Hardware Required:

- (2) 5/16-18 x 3" Flanged hex bolt
- (2) 5/16 x 1-1/4" Steel fender washer
- (2) 5/16 x 1-1/4" Rubber fender washer
- (2) 5/16-18 Flanged nut

With assistance, slide the rear panel behind the Carryall ROPS, in front of the dump bed. Place the rear panel against the back of the ROPS and per **figure 2.2** secure it with two (2) 5/16 x 3" bolts, with steel and rubber fender washers, through the rear panel and the holes in the ROPS, with a nut on the inside. Leave bolts loose.

NOTE: Leave all fasteners loose or finger-tight until the entire cab frame structure and roof is assembled at step 11, unless otherwise specified.

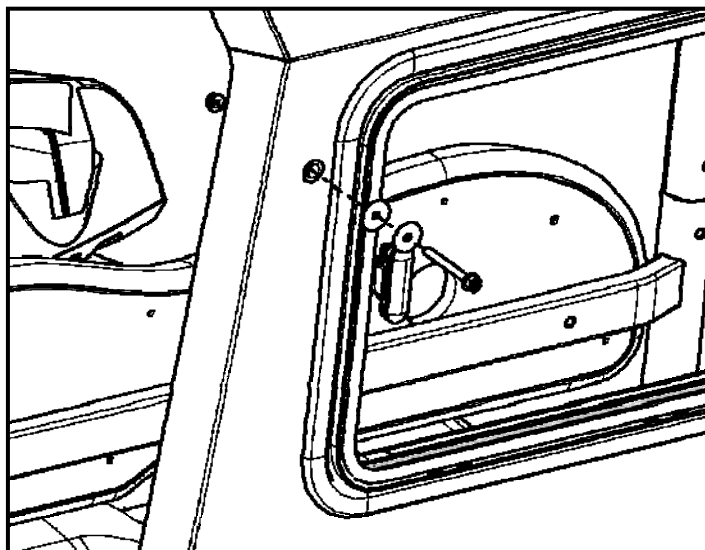


Figure 2.2: Rear panel

3. REAR FLOORBOARD PANELS:

3.1 Place the left floorboard panel against the side of the Carryall and inside the lower corner of the rear panel, and align the holes in the panel to the holes in the side runner panels and the seat side bolster.

3.2 QTY Hardware Required:

- (2) 5/16-18 x 2-3/4" Flanged hex bolt
- (2) 5/16-18 Flanged nut

Install two (2) 5/16" x 2-3/4" bolts through the holes under the floorboard, through the Carryall frame and install a nut on the bolts, on the inside of the frame. Leave bolts loose. (**Figure 3.2**).

3.3 QTY Hardware Required:

- (1) M10 x 1.50 x 110mm Flanged hex bolt
- (1) M10 x 1.50 Flanged nut

Install one (1) M10 x 110mm bolt through the bracket at the rear of the floorboard panel and through the seat side bolster. Install the large washer from step 1.4, and a new M10 flanged nut on the bolts, under the Carryall frame. Leave bolts loose. (**Figure 3.2**).

3.4 QTY Hardware Required:

- (1) 5/16-18 x 1-1/4" Flanged hex bolt
- (1) 5/16-18 x 3/4" Flanged hex bolt
- (1) 5/16 Fender washer
- (2) 5/16-18 Flanged nut

Connect the rear floorboard panels to the rear panel with one (1) 5/16 x 1-1/4" bolt with fender washer outside, through the side of the rear panel and through the fender panel, install a nut inside. Attach the rear panel to the rear tab of the fender panel with one (1) 5/16 x 3/4" bolt outside and nut inside. Leave loose. (**Figure 3.4**).

3.5 Repeat steps 3.1 through 3.4 for the opposite side.

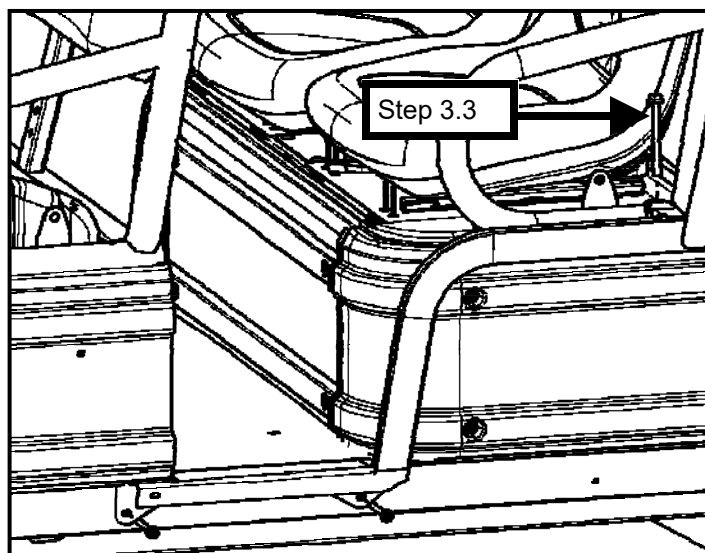


Figure 3.2: Rear floorboard panel

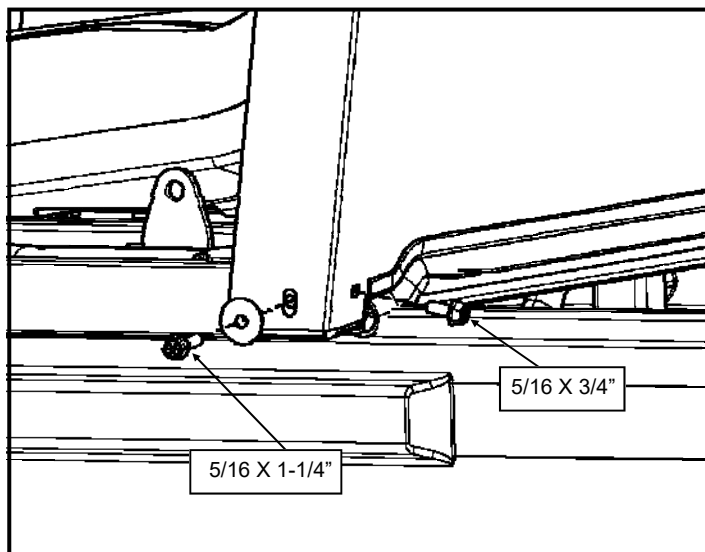


Figure 3.4: Floorboard panel to rear panel (left shown)

4. B-PILLAR PANELS:

4.1 QTY Hardware Required:

- (1) 5/16-18 x 2-1/2" Flanged hex bolt
- (1) 5/16-18 Flanged nut
- (1) M10 x 1.50 x 70mm Flanged hex bolt
- (1) M10 x 1.50 Flanged nut

Place the B-pillar panel onto the side of the Carryall over the center ROPS tube, then place one (1) 5/16 x 2-1/2" bolt through the upper bracket, one (1) M10 x 70mm bolt through the lower bracket and through the holes in the ROPS and secure with a 5/16" and 10mm nut, respectively. Leave bolts loose (**Figure 4.1**).

NOTE: The two (2) 5/16 x 2-1/2" long bolts are in a separate bag in the 1700 hardware kit.

4.2 QTY Hardware Required:

- (2) 5/16-18 x 3/4" Flanged hex bolt
- (1) 5/16 Fender washer
- (2) 5/16-18 Flanged nut

Connect the B-pillar to the front of the rear floorboard with two (2) 5/16 x 3/4" bolts and nuts. Leave loose. (**Figure 4.1**).

4.3 Repeat for the opposite side.

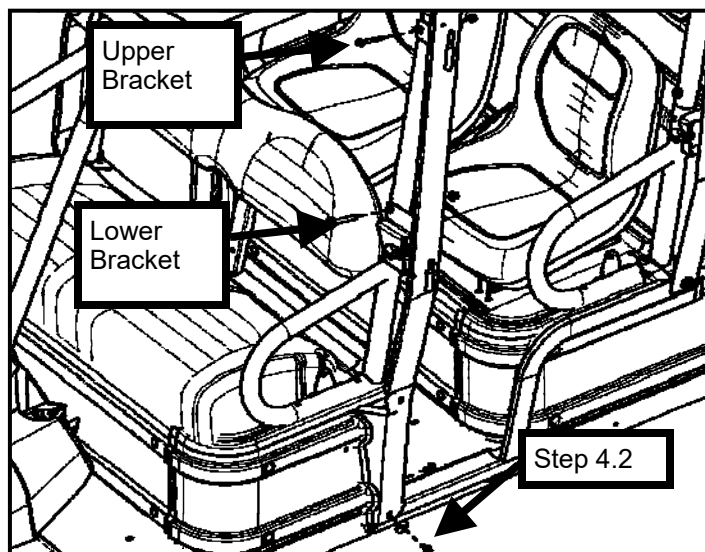


Figure 4.1: B-Pillar panel, (left shown)

5. FRONT FLOORBOARD PANELS:

5.1 Place the floorboard panel against the side of the Carryall and inside the lower corner of the rear panel, and align the holes in the panel to the holes in the side runner panels and the seat side bolster.

5.2 QTY Hardware Required:

- (2) 5/16-18 x 2-3/4" Flanged hex bolt
- (2) 5/16-18 Flanged nut

Install two (2) 5/16" x 2-3/4" bolts through the holes under the floorboard, through the Carryall frame and install a nut on the bolts, on the inside of the frame. Leave bolts loose. (**Figure 5.2**).

5.3 QTY Hardware Required:

- (1) M10 x 1.50 x 110mm Flanged hex bolt
- (1) M10 x 1.50 Flanged nut

Install one (1) M10 x 110mm bolts through the bracket at the rear of the fender panel and through the seat side bolster. Install the large washer from step 1.4, and a new M10 flanged nut on the bolts, under the Carryall frame. Leave bolts loose. (**Figure 5.2**).

5.4 QTY Hardware Required:

- (1) 5/16-18 x 1-1/4" Flanged hex bolt
- (1) 5/16-18 x 3/4" Flanged hex bolt
- (2) 5/16-18 Flanged nut

Connect the floorboard panels to the B-pillar with one (1) 5/16 x 1-1/4" bolt with fender washer outside, through the side and through the tube of the fender panel, with a nut inside. Attach the rear panel to the rear tab of the fender panel with one (1) 5/16 x 3/4" bolt outside and nut inside. Leave loose. (**Figure 5.4**).

5.5 Repeat steps 5.1 through 5.4 for the opposite side.

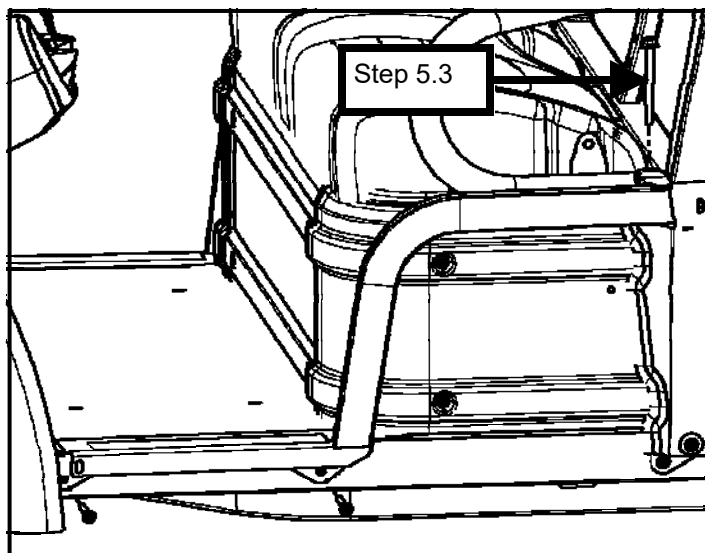


Figure 5.2: Front floorboard panel

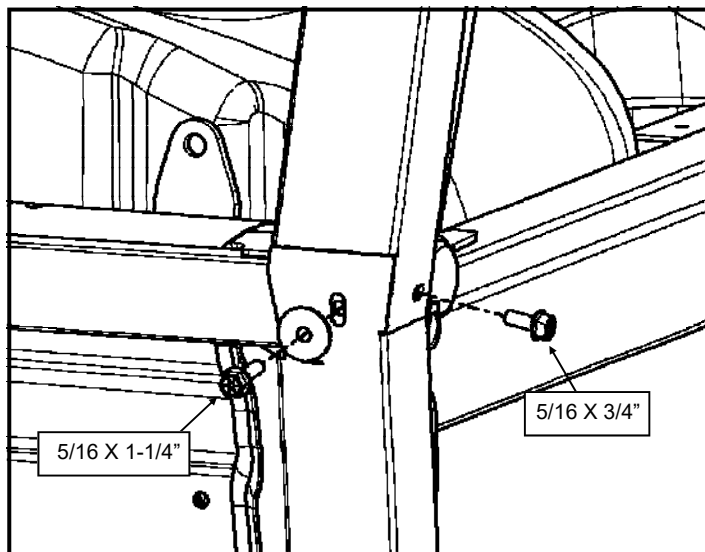


Figure 5.4: Floorboard panel to B-pillar panel (left)

6. A-PILLAR PANELS:

6.1 QTY Hardware Required:

- (1) M10x1.5 x 70mm Flanged hex bolt
- (1) M10x1.5 Flanged Nut

Per figure 6.1, place an outer cowl ROPS bracket against the outside of the front ROPS. Secure the bracket to the ROPS tube with an M10 x 70mm bolt and nut. Leave loose. **(Figure 6.1).**

- 6.2 Place the A-pillar panel onto the back of the Carryall front fender, against the front of the cowl bracket and against the outside of the cab floorboard. Use a bar clamp to hold the top of the A-pillar to the ROPS until the side headers and windshield support are in place.

6.3 QTY Hardware Required:

- (1) 5/16-18 x 3/4" Flanged hex bolt
- (1) 5/16-18 Flanged nut

Per figure 6.3, connect the A-pillar to the floorboard with one (1) 5/16 x 3/4" bolt and nut. Leave loose. **(Figure 6.3).**

NOTE: for an optimal seal and more finished look, push the bulb rubber on the top portion of the A-pillar toward the rear/interior of the cab.

- 6.4 Repeat for the opposite side.

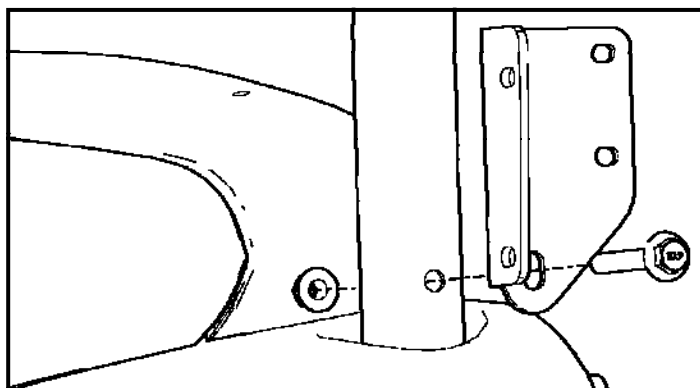


Figure 6.1: Cowl ROPS Outer bracket, (left shown)

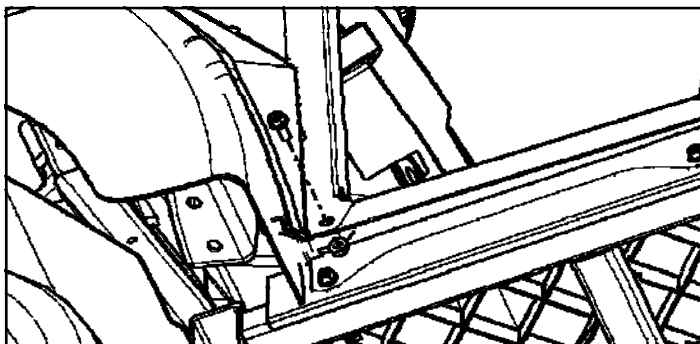


Figure 6.3: A-Pillar panel, (left shown)

7. SIDE HEADERS:

7.1 QTY Hardware Required:

- (3) 5/16-18 x 3/4" Flanged hex bolt
- (1) 5/16-18 x 5/8" Flanged hex bolt
- (1) 5/16-18 Flanged nut

Place the left side header against the A-pillar and rear panel, and secure to the threaded inserts in the A-pillar and B-pillar with (3) 5/16 x 3/4" screws, and to the rear panel with one (1) 5/16 x 5/8" screw and nut. **(Figure 7.1).**

NOTE: These two (2) 5/8" long bolts are in a separate bag in the hardware kit, and are used to attach the side headers to the rear panel.

- 7.2 Torque the bolt to the B-pillar to 24-29 ft-lbs, as it will not be accessible after the roof is installed. Leave the front and rear bolts loose.

7.3 QTY Hardware Required:

- (2) 5/16-18 x 3/4" Flanged hex bolt
- (1) 10mm Ball stud (5/16-18 thread)
- (3) 5/16-18 Flanged nut

Attach the side header to the A-pillar with a front header bracket, with a Ball stud in the rear hole in the header and two (2) 5/16 x 3/4" bolts and nuts. Leave bolts loose **(Figure 7.3).**

NOTE: The side header brackets are different for front and rear, right and left. Refer to the parts guide on page 4 to match bracket to illustration.

7.4 QTY Hardware Required:

- (2) 5/16-18 x 3/4" Flanged hex bolt
- (1) 10mm Ball stud (5/16-18 thread)
- (3) 5/16-18 Flanged nut

Attach the side header to the B-pillar with a rear header bracket, with a Ball stud in the rear hole in the header and two (2) 5/16 x 3/4" bolts, and secure with nuts. Leave loose **(Figure 7.4).**

- 7.5 Repeat for the opposite side.

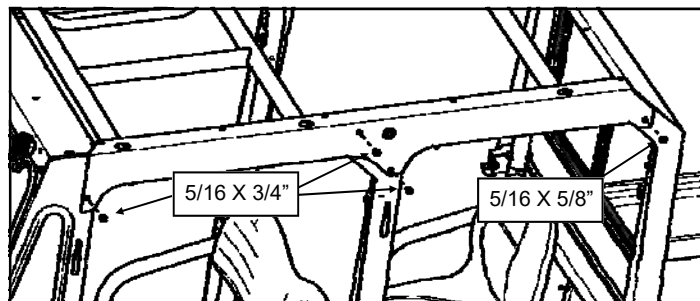


Figure 7.1: Side headers (left shown)

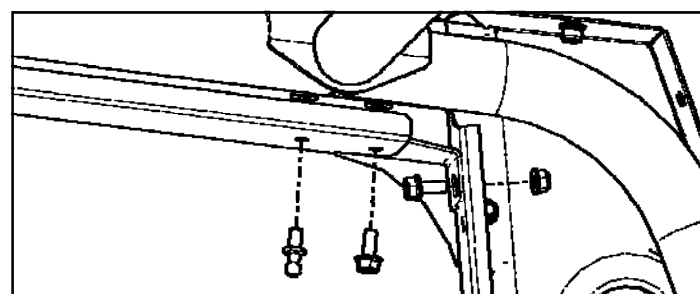


Figure 7.3: Side headers A-pillar bracket (left shown)

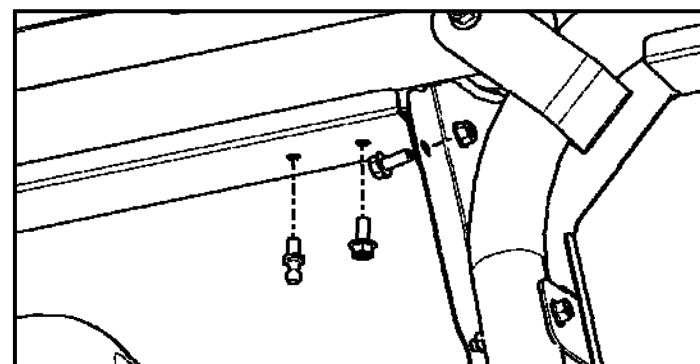


Figure 7.4: Side headers B-pillar bracket (left shown)

8. A-PILLAR WEATHERSEAL:

- 8.1 Cut the supplied strip of 1/2" V-groove weather seal rubber, in half, for two 30-inch lengths. Apply one strip to the front of the A-pillar (**Figure 8.1**). Peel the paper from one end and press the rubber onto the frame, starting at the lower hole and 3/4" from the inside edge. Continue to peel and press the rubber aligned with the inside edge of the A-Pillar. Repeat for the other side.

NOTE: This weather strip rubber must be installed onto the frame prior to installing the Windshield Support and Cowl.

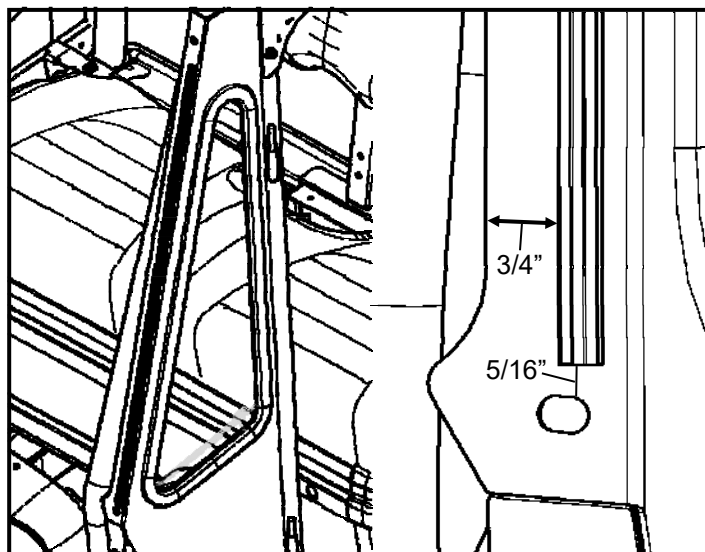


Figure 8.1: A-pillar Weatherseal

9. WINDSHIELD SUPPORT:

9.1 QTY Hardware Required:

- (2) 5/16-18 x 3/4" Flanged hex bolt
- (2) 5/16-18 Flanged nut

With an assistant, place the windshield support onto the upper front of both A-pillars and secure with one (1) 5/16 x 3/4" bolt and nut per side. Leave bolts loose, (**Figure 9.1**).

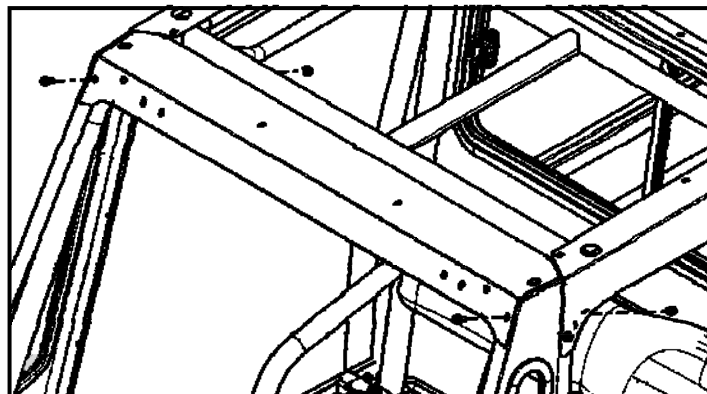


Figure 9.1: Windshield support

10. COWL:

10.1 QTY Hardware Required:

- (2) 5/16-18 x 3/4" Flanged hex bolt
- (2) 5/16-18 Flanged nut

With an assistant, place the cowl on the front of the A-pillars and attach with two (2) 5/16 x 3/4" screws and nuts at the locations shown. Leave loose. (**Figure 10.1**).

NOTE: for an optimal seal and more finished look, push the bulb rubber on the top portion of the A-pillar, toward the rear/interior of the cab. Tuck foam on cowl against vehicle hood and fenders as required keeping it behind the sheet metal cowl. Flat rubber strips in front of ROPS tubes should be folded forward to cover holes in fenders.

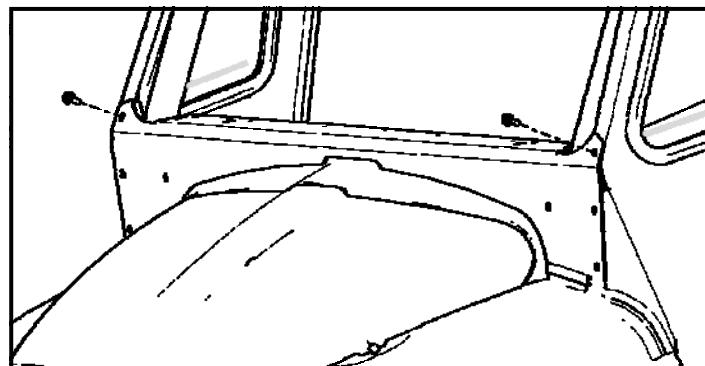


Figure 10.1: Cowl

10. COWL (Continued):

10.2 QTY Hardware Required:

(2) 5/16-18 x 1" Flanged hex bolt

(2) 5/16-18 Flanged nut

Secure the cowl to the outer ROPS bracket with two (2) 5/16 x 1" bolts and nuts. Leave loose.

(Figure 10.2).

10.3 QTY Hardware Required:

(1) 5/16-18 x 3/4" Flanged hex bolt

(2) 5/16-18 x 1" Flanged hex bolt

(3) 5/16-18 Flanged nut

Place an inner cowl ROPS bracket against the inside of the cowl and ROPS tube. Secure the bracket to the cowl with a 5/16 x 3/4" bolt and nut, and secure the inner and outer brackets together with two 5/16 x 1" bolts and nuts. Leave loose.

(Figure 8.3).

10.4 Repeat steps 10.2 and 10.3 for the opposite side

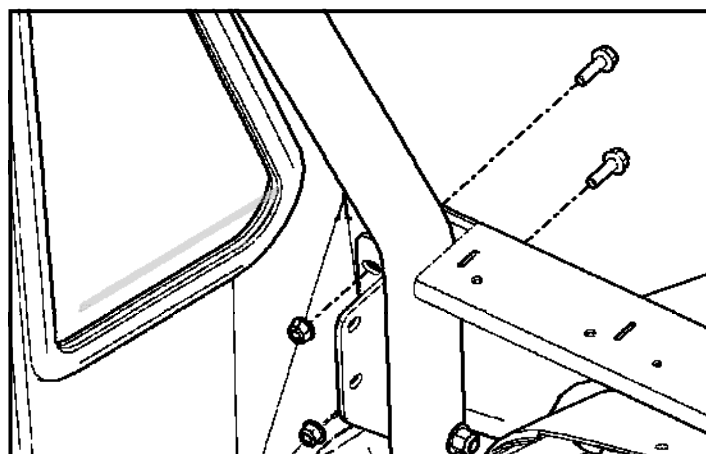


Figure 10.2: Cowl ROPS Outer bracket (Left shown)

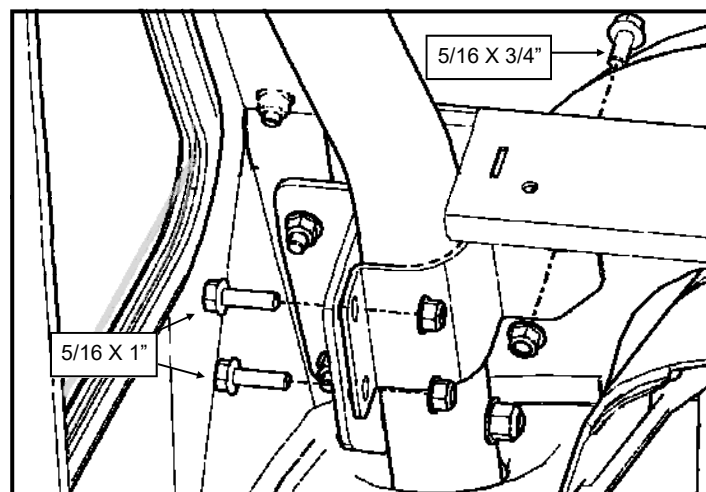


Figure 10.3: Cowl ROPS Inner bracket (Left shown)

11. ROOF:

11.1 Using a screwdriver or awl, poke through the headliner through the holes in the front and rear roof, from the underside to avoid separating the headliner from the sheet metal of the roof.

11.2 QTY Hardware Required:

(19) 5/16-18 x 3/4" Flanged hex bolt

(19) 5/16 Plastic washer

(3) 5/16 x 1-1/4" Fender washer

(17) 5/16-18 Flanged nut

With an assistant, place the rear roof onto the top of the cab then the front roof on top, and align to the holes in the cab. With a plastic washer on each bolt, insert 5/16 x 3/4" bolts through the roof into the threaded inserts in the A-pillars first, then through the holes at the corners of the rear roof, then the rest of the holes. Install nuts underneath all bolts excluding the two for the A-pillars using fender washers under the three bolts between the front and rear roof in the center. Leave bolts loose. (Figure 11.2).

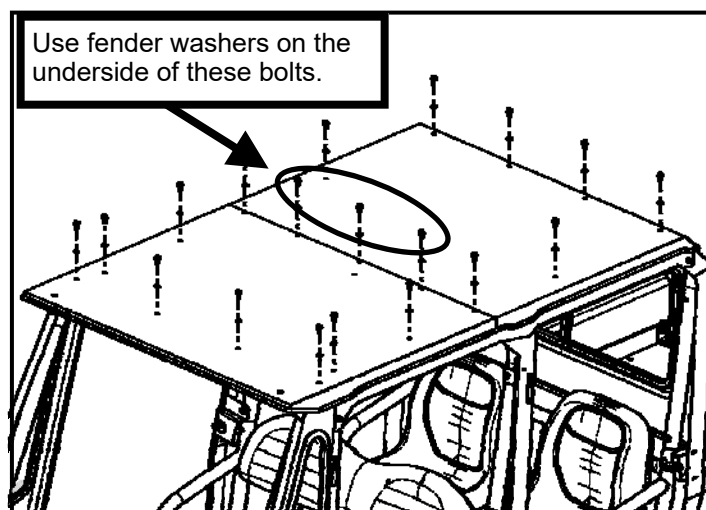


Figure 11.2: Roof

12. TIGHTEN CAB HARDWARE:

12.1 Check alignment of the cab parts to be as square as possible and torque all bolts as specified in the following order:

- (4L, 4R) 5/16" bolts/nuts under each floorboard (ref. steps 3.2 and 5.2). **120±5 inch-lbs.**
- (2L, 2R) M10 bolt/nut at each side of seat through side bolster (ref. steps 3.2 and 5.2). **33-40 ft-lbs.**
- (1L, 1R) 5/16" bolt/nut at upper rear panel through ROPS (ref. step 2.2). **120±5 inch-lbs.**
- (1L, 1R) 5/16" bolt/nut at bottom rear corner of rear panel to floorboard panel (ref. step 3.4). **24-29 ft-lbs.**
- (2L, 2R) 5/16" bolt/nut at bottom of B-Pillar (ref. step 4.2). **24-29 ft-lbs.**
- (2L, 2R) 5/16" bolts/nuts at bottom side corner of rear panel and B-Pillar (through tubing) (ref. step 4.2). **60±5 inch-lbs.**
- (1L, 1R) 5/16" bolt/nut at lower outside of A-Pillar to floorboard (ref. step 6.3). **24-29 ft-lbs.**
- (4L, 4R) 5/16" bolts/nuts at cowl to A-pillar (ref. step 10.1 through 10.3). **24-29 ft-lbs.**

13. WINDSHIELD:

13.1 QTY Hardware Required:

- (4) 5/16-18 x 1-3/4" Flat head bolt
- (4) 5/16-18 Flanged nut

Install a spacer block and two 5/16 bolts from the hardware box onto each windshield hinge. With an assistant, place the windshield onto the windshield support and secure the 5/16 x 1-3/4" flat-head bolts with nuts. Leave bolts loose. (Figure 12.1).

13.2 QTY Hardware Required:

- (4) 1/4-20 x 3/4" Flanged hex bolt
- (4) 1/4-20 Flanged nut

With the latches locked open, secure the windshield latches to the cowl with two (2) 1/4 x 3/4" bolts per latch. Leave loose. (Figure 13.2).

13.3 With assistance, lift up on the bottom of the windshield and close the latches. Check the windshield and latch alignment and tighten windshield hardware. Adjusting windshield up or down will affect latch position:

- Adjust up
 - increase latch clearance with windshield while opening
 - decrease latch clearance with dashboard while closed
- Adjust down
 - decrease latch clearance with windshield while opening
 - increase latch clearance with dashboard while closed

13.4 Torque windshield hinges to 150±5 inch-lbs. Torque windshield latches to 170±5 inch-lbs. Check for smooth operation of latches by opening and closing. Confirm latches are not binding on their own rivet heads when closing. Adjust if necessary.

NOTE: A right-angle, socket or short driver (#3 Phillips) is recommended to hold the windshield latch bolts due to clearance with the roof.

- (1L, 1R) 10mm bolts/nuts outer cowl ROPS brackets to ROPS (ref. step 1.5). **33-40 ft-lbs.**
- (2L, 2R) 5/16" bolts/nuts outer cowl ROPS brackets to inner cowl ROPS bracket (ref. step 10.3). **120±5 inch-lbs.**
- (1L, 1R) 5/16" bolt/nut at windshield support to A-pillar (ref. step 9.1). **24-29 ft-lbs.**
- (1L, 1R) 5/16" bolt to threaded insert for side header to A-pillar. (ref. step 7.1) **24-29 ft-lbs.**
- (1L, 1R) 5/16" bolt/nut for side header to rear panel (ref. step 7.1). **24-29 ft-lbs.**
- (1L, 1R) M10 bolt/nut at center of B-Pillar through ROPS (ref. step 4.1). **33-40 ft-lbs.**
- (1L, 1R) 5/16" bolt/nut at top of B-Pillar through ROPS (ref. step 4.1). **150±5 inch-lbs.**
- (2L, 2R) 5/16" bolts for side header to B-pillar (ref. step 7.1). **24-29 ft-lbs.**
- (2L, 2R) 5/16" bolts/nuts header brackets to A and B-pillar (ref. step 7.3 and 7.4). **24-29 ft-lbs.**
- (2L, 2R) 5/16" bolts/nuts at header brackets to header (ref. step 7.3 and 7.4). **24-29 ft-lbs.**
- (2L, 2R) Ball Stud/nuts at header brackets to header (ref. step 7.3 and 7.4). **150±5 inch-lbs.**
- (3) 5/16" bolts/nuts at center roof seam (ref. step 11.2). **150±5 inch-lbs.**
- (16) 5/16" bolts/nuts at roof perimeter to cab (ref. step 11.2). **150±5 inch-lbs.**

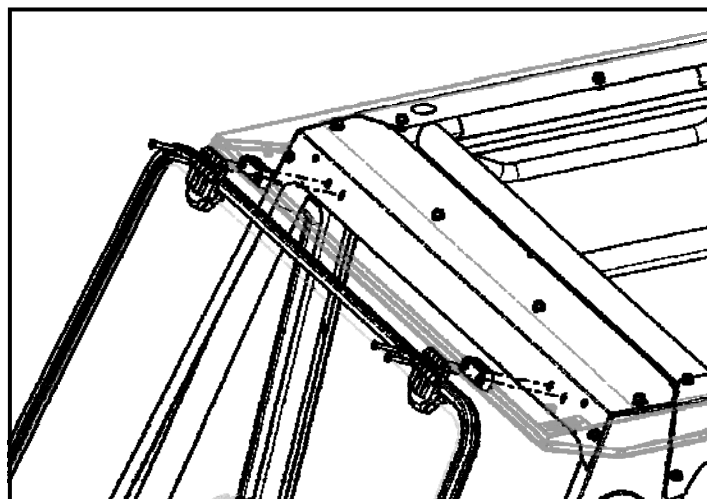


Figure 13.1: Windshield hinges

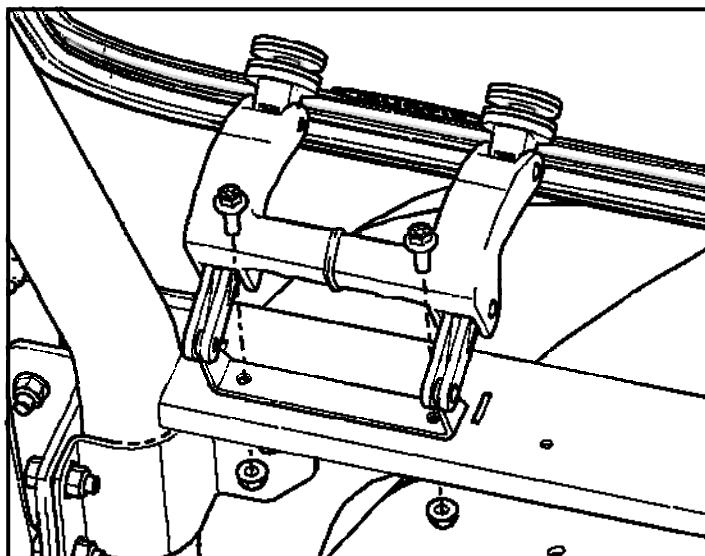


Figure 13.2: Windshield latches

14. WIPER:

- 14.1 Remove hardware from motor shaft except the black plastic standoff, and place large white nylon bushing from wiper hardware kit (9PWK-HB) onto motor shaft.
- 14.2 From inside of cab, insert motor shaft through the larger hole in the windshield until the white nylon bushing is against the windshield. Replace the rubber washer, plastic washer and hex nut on the outside of the windshield. **(Figure 14.2)** Do not tighten completely at this time.
- 14.3 From inside, put small white nylon bushing with the collar into the small hole in the windshield and pivot the wiper motor so that the small hole aligns with the hole in the bushing. Insert the 1/4-20 bolt through the internal tooth washer, the hole in the wiper motor bracket, the small bushing, and finally the windshield. Next install the rubber washer, plastic washer, and cap nut on outside of windshield. **(Figure 14.2).**
- 14.4 Tighten hex nut on motor shaft to 30 inch-lbs and the hex head bolt to 20 inch-lbs.

CAUTION: Over tightening wiper mounting hardware can damage windshield and components. Tighten only to specific values.

- 14.5 Remove screw and locknut from wiper arm, and insert screw through upper mounting hole in wiper blade, and wiper arm hole. **(Figure 14.5)** Secure with the locknut. Adjust the arm length to maximum extension.
- 14.6 Place the wiper arm onto the motor shaft, with the arm pointed towards the driver's side and the wiper blade above the windshield latch. **(Figure 14.6)**
- 14.7 Press the wiper arm onto the shaft making sure that the arm is fully seated on motor shaft. Tighten the set screws to 20±5 in-lbs to secure the arm to the shaft.

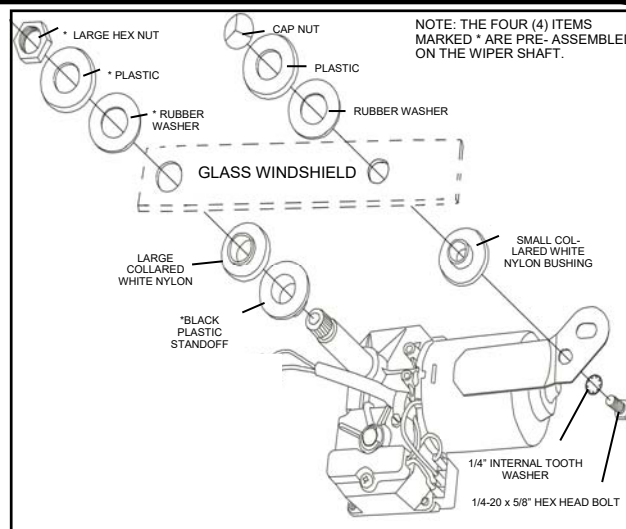


Figure 14.2: Wiper Motor Installation

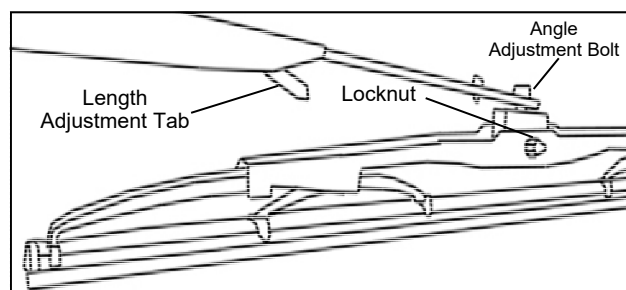


Figure 14.5: Wiper arm

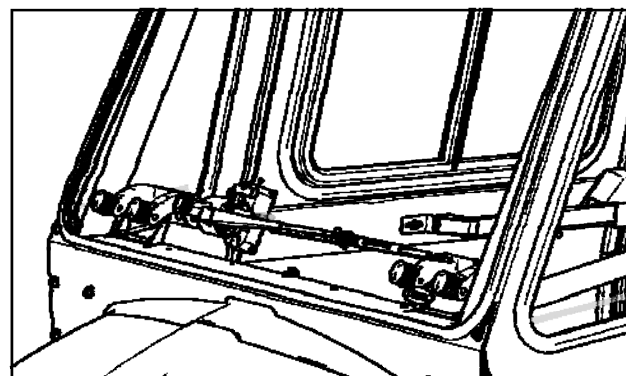


Figure 14.6: Wiper arm placement

15. WIPER WIRING:

- 15.1 (Diesel Only, for gasoline vehicles follow the instructions included with the gas vehicle adapter kit (AWD Gas Relay Harness, p/n: 47641905001), in place of this step. Once complete, return to step 15.2.) Remove the cover from the relay box. Attach the fuse harness provided to the vehicle accessory wire with the female bullet terminal (W148). Connect the ring terminal to the positive battery post.

Attach the black ring terminal from the cab wire harness to the ground lug on the frame behind the battery. **(Figure 15.1)** Plug the female push-on terminal from the cab wire harness into the mating connector on the remaining wire (W149).

- 15.2 Feed the cab wire harness down under the vehicle, through the gap behind the battery. Feed the harness above the frame, through the spaces in the vehicle floor panel, and up to the front fender. **(Figure 15.2)**

- 15.3 Feed the cab wire harness above the vehicle frame, behind the plastic wheel liner and through the gap under the dashboard as shown. **(Figure 15.3)**

- 15.4 Connect the wiper wire harness, smaller terminals, to the windshield wiper, and connect the other end to the cab wire harness.

- 15.5 Reconnect the battery terminals; positive (+) first then negative (-). **WARNING:** Do not allow any tools or other metal objects to contact between terminals.

NOTE: The cab harness will not be powered unless the vehicle key is on. Make sure the key remains off until all connections are made.

- 15.6 With the vehicle key off, flip the switch on the wiper (down for on) and verify the wiper remains off. Turn the vehicle key on and verify the wiper turns on and sweeps toward the passenger side. Flip the wiper switch off (up) and verify the wiper parks in its original position.

NOTE: The wiper will not park without the vehicle key on. The wiper will stop in its current position if the key is turned off first.

- 15.7 **QTY** Hardware Required (from HWK-00046):

- (1) 3/8" Cable clamp
- (1) #10 x 1/2" Self-drilling screw

Open the windshield to the fully vented position. Align a cable clamp with the hole in the center of the cowl and adjust the slack in the wiper wire to allow the windshield to open and close freely, without pinching the harness or putting too much tension on the wires. Secure the cable clamp with a #10 self-drilling screw. **(Figure 15.7)**

NOTE: Power driver settings vary. Select mid range torque to fully seat the screw and secure the cable clamp.

- 15.8 **QTY** Hardware Required (from HWK-00046):

- (2) 3/8" Cable clamp
- (2) #10-32 x 1/2" Pan head bolt
- (2) #10-32 Nylon-insert lock nut

Attach the wiper harness to the driver's side of the cowl with two cable clamps and #10-32 nuts underneath, with a #10-32 x 1/2" bolt from above through the holes in the cowl. **(Figure 15.7).** Torque screws to 20±5 inch-lbs.

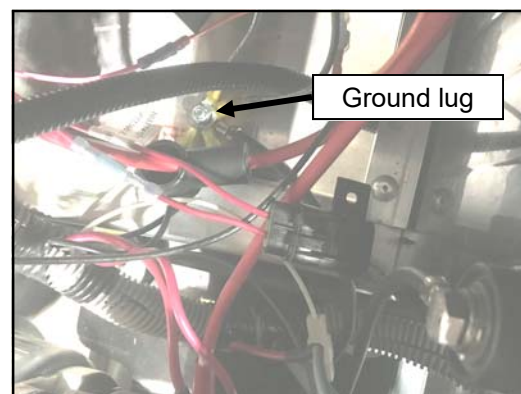


Figure 15.1: Cab power connections

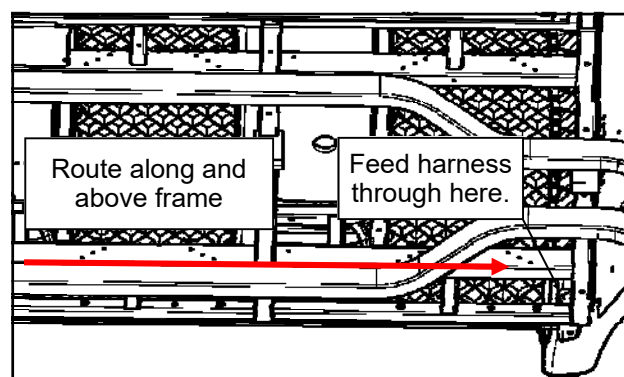


Figure 15.2: Cab harness routing

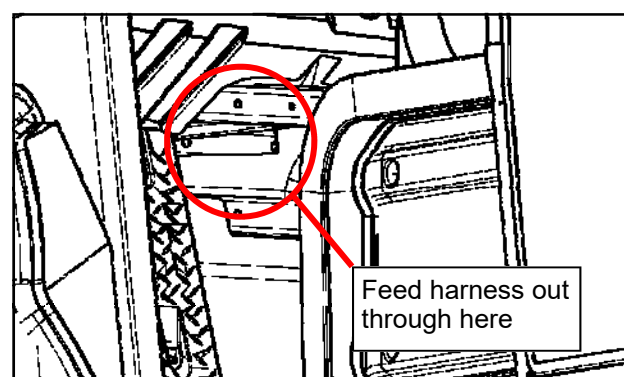


Figure 15.3: Cab harness routing

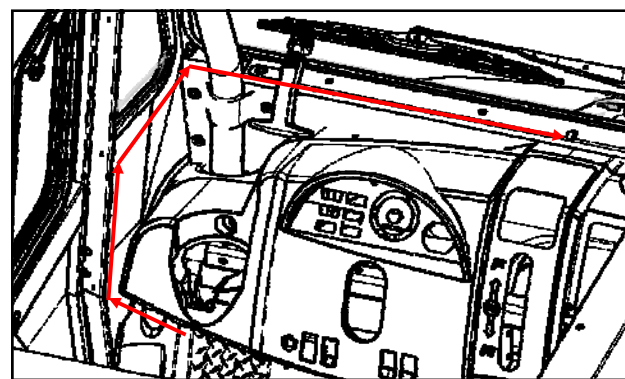


Figure 15.7: Wiper harness routing

15. WIPER WIRING (Continued):

- 15.10 Install the 6" long strip of 1/2" wire loom over the Connectors for the wiper and against the wiper motor and secure with electrical tape.
- 15.11 Route the wire harness against the left of the dashboard and remove all slack. Feed the slack in the harness toward the rear of the vehicle and into the battery compartment. Coil the cab harness and secure it with a cable tie to the vehicle harness, along with the tab on the relay. (Figure 15.8)

16. DOOR INSTALLATION:

Tools Required (for adjustments only):

- Ratchet with 3/8", 7/16" and 1/2" sockets.
 - 3/8", 7/16" and 1/2" open-end wrenches
 - Two 3/4" open-end wrenches.
 - 5/32" Allen wrench or driver.
 - #3 Phillips Screwdriver
 - Grease
- 16.1 Apply a small amount of grease to both pins on each A-pillar and B-pillar. Install brass washers from hardware kit over pins.

- 16.2 **NOTE:** The front and rear doors are different. Refer to the parts guide on pages 2 and 3 to match doors to illustration.

Holding the door perpendicular to the vehicle, lower the door hinge sleeves into the hinge pins on the cab. (Figure 16.2).

NOTE: Loosen the bolts on the hinges on the door if the pins do not slide easily and fully into the sleeves.

- 16.3 Gently close the door, lifting on the door handle if necessary, to allow the latch to lock around the striker pin. Ensure that you have heard (2) clicks of the latch.

- 16.4 With an assistant sitting inside the vehicle, tighten the (4) 1/4-20 hinge screws and nut

NOTE: See Door Troubleshooting section on page 15 for information about adjusting the door latches and hinges.

- 16.5 Torque hinge bolts to 170±5 inch-lbs.
Torque striker bolts to 120±5 inch-lbs.
- 16.6 Open the door and install the Gas Shock onto the Ball Studs of the frame and door (Figure 16.5). The cylinder end must be attached to the door as shown to ensure seals stay lubricated.
- 16.7 Repeat steps 16.2 through 16.6 for the other three doors.

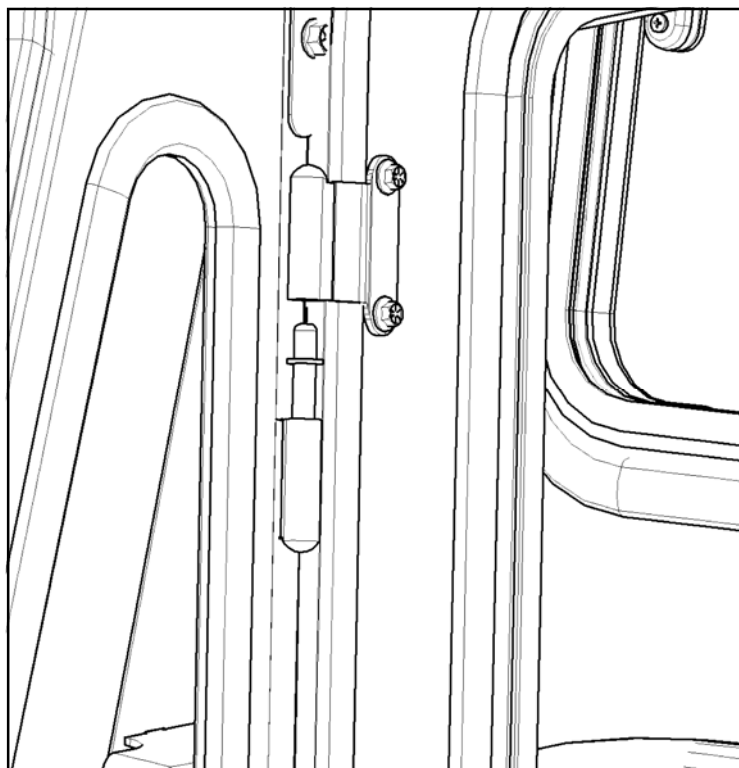


Figure 16.2: Door hinge pins into frame sleeves

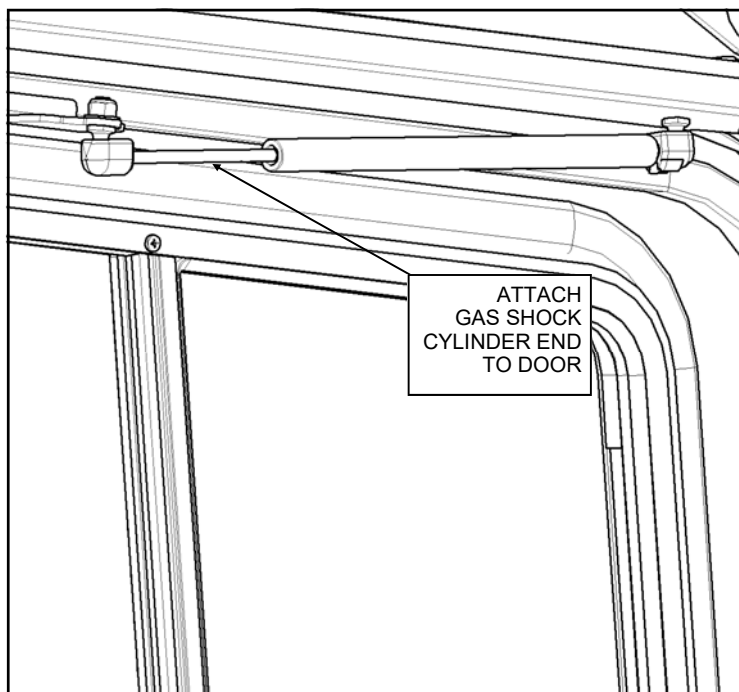


Figure 16.6: Door gas shock

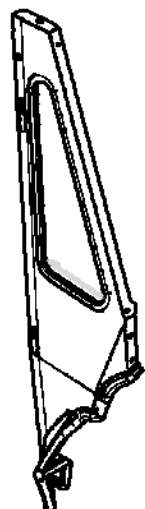
DOOR TROUBLESHOOTING

Condition	Possible Solution
<ul style="list-style-type: none"> Door is not aligned to vehicle 	<ul style="list-style-type: none"> Loosen door hinges and striker pin. Move the striker pin up or down in the slot. With assistance, check the door alignment by lifting up on the handle to align with the striker pin and latching. Set the door so that the rear of the door is slightly higher than where you want final alignment. Re-latch the door and tighten hinges. Open the door. It will drop slightly and the striker pin will need to be lowered accordingly.
<ul style="list-style-type: none"> Door seal has gaps when latch is fully closed with 2 clicks. 	<ul style="list-style-type: none"> Loosen striker pin, move in and retighten. Remove plastic cover from front of latch and loosen Phillips head screws. Adjust latch closer to door and retighten.
<ul style="list-style-type: none"> Door latch will not achieve 2 clicks. 	<ul style="list-style-type: none"> Loosen striker pin, move out and retighten. Remove plastic cover from front of latch and loosen Phillips head screws. Adjust latch further from door and retighten.
<ul style="list-style-type: none"> Door latch and striker pin do not line up vertically 	<ul style="list-style-type: none"> Loosen striker pin and move up or down. Use (2) 3/4" wrenches to adjust striker pin.
<ul style="list-style-type: none"> Door latch and striker pin do not line up horizontally 	<ul style="list-style-type: none"> Remove plastic covers on interior door latch. Loosen (2) 1/4-20 flanged hex screws on the latch mount and (1) 1/4-20 pan head screw at the back of the handle. Move interior door latch forward or backward.

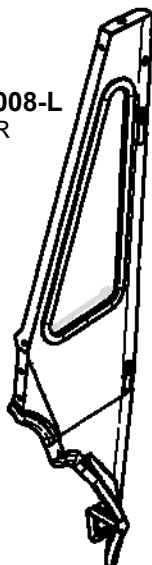
After completing above procedures torque any hardware that has been loosened as detailed below.

- Door latch mounts to door (1/4-20 bolts into inserts) 160 inch lbs. \pm 5 inch lbs
- Hinge bolts 100" inch lbs. \pm 5 inch lbs.
- Door latch to latch mount (Flat Head Phillips screws) 110 in lbs. \pm 5 inch lbs
- Striker bolts 25 ft. lbs. \pm 5 ft. lbs.

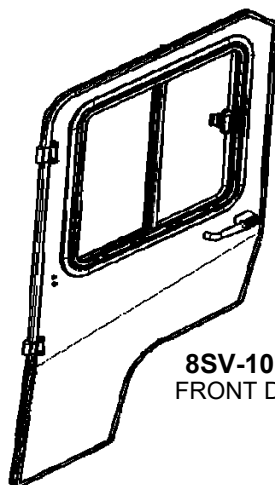
SERVICE PARTS:



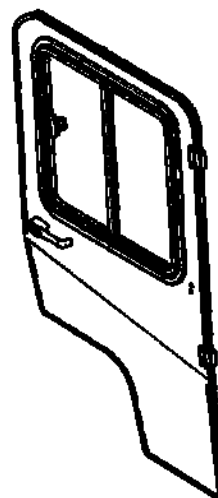
8SV-104-00008-L
A-PILLAR
LEFT



8SV-104-00008-R
A-PILLAR
RIGHT



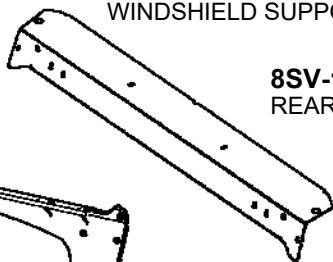
8SV-107-00015-L
FRONT DOOR, LEFT



8SV-107-00015-R
FRONT DOOR, RIGHT

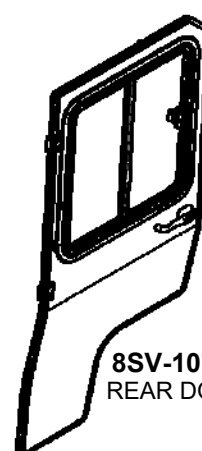
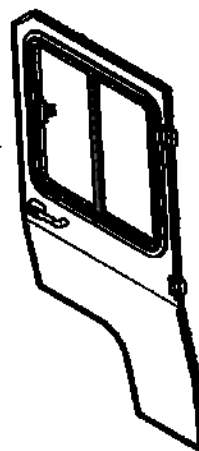


8SV-105-00016 COWL

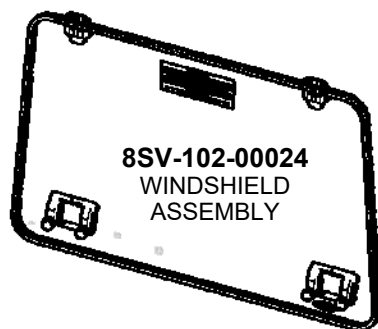


8SV-103-00009
WINDSHIELD SUPPORT

8SV-107-00016-R
REAR DOOR, RIGHT



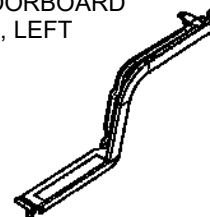
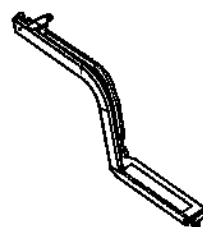
8SV-107-00016-L
REAR DOOR, LEFT



8SV-102-00024
WINDSHIELD
ASSEMBLY

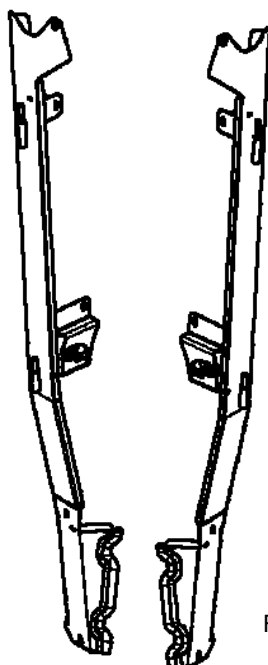
8SV-113-00046-R
FRONT FLOORBOARD
PANEL, RIGHT

8SV-113-00046-L
FRONT FLOORBOARD
PANEL, LEFT



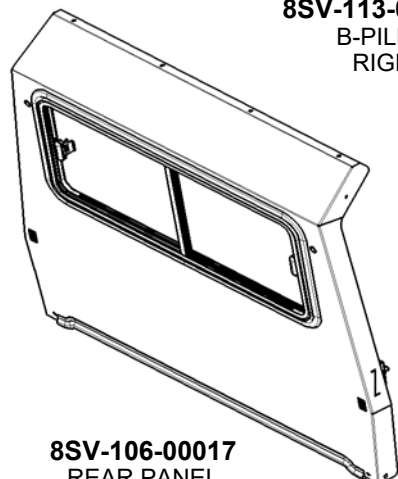
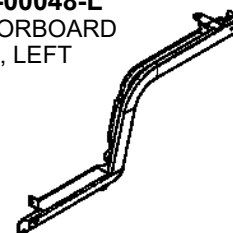
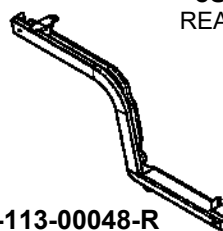
8SV-113-00047-R
B-PILLAR
RIGHT

8SV-113-00047-L
B-PILLAR
LEFT



8SV-113-00048-L
REAR FLOORBOARD
PANEL, LEFT

8SV-113-00048-R
REAR FLOORBOARD
PANEL, RIGHT

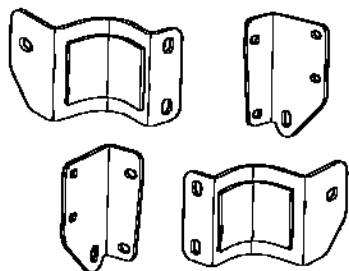
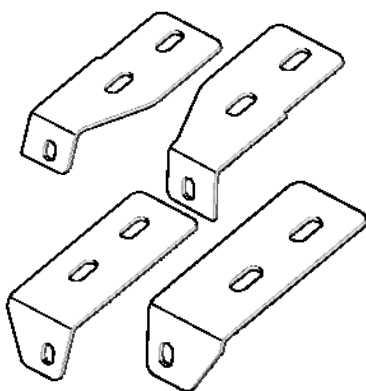


8SV-106-00017
REAR PANEL

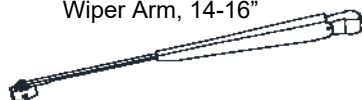
CONTINUED ON PAGE 17

SERVICE PARTS:**8SV-110-00044**

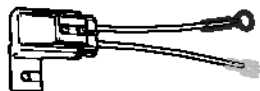
ROPS COWL BRACKETS, SET OF 4

**8SV-SM-00641**HEADER BRACKETS
SET OF 4**9PWA14-16**

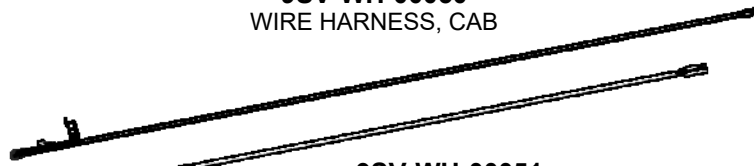
Wiper Arm, 14-16"

**9PWB20-FB**

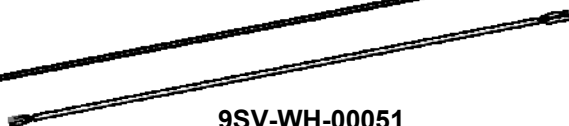
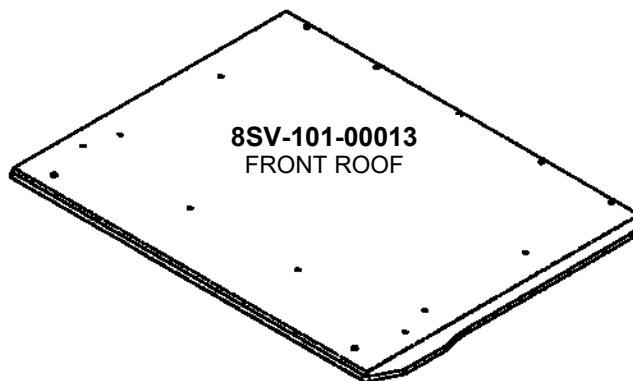
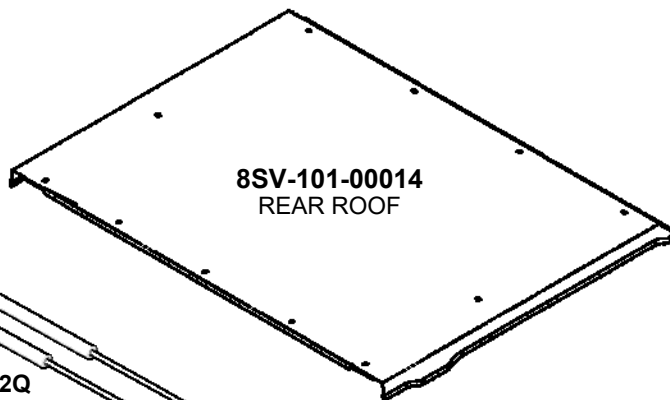
Wiper Blade, 20" Flex

**9SV-WH-00082**
FUSE HOLDER**9SV-WH-00050**

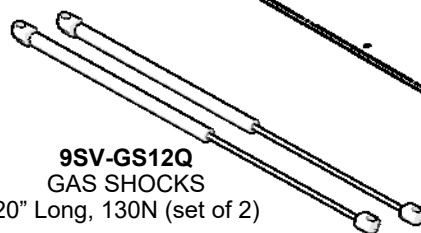
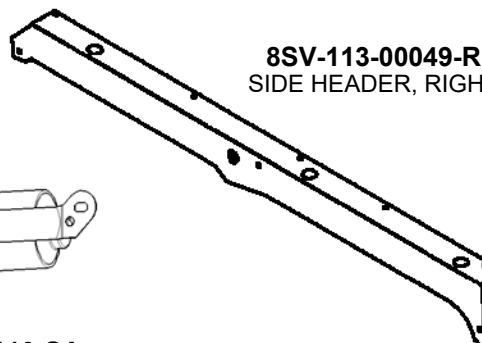
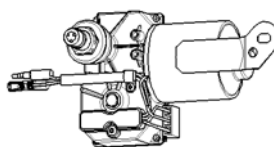
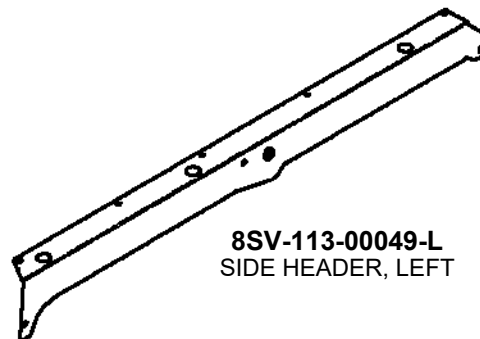
WIRE HARNESS, CAB

**9SV-WH-00051**

WIRE HARNESS, WIPER

**8SV-101-00013**
FRONT ROOF**8SV-101-00014**
REAR ROOF**9SV-GS12Q**
GAS SHOCKS

20" Long, 130N (set of 2)

**8SV-113-00049-R**
SIDE HEADER, RIGHT**8SV-9PWM110-SA**
Wiper Motor, 110°**8SV-113-00049-L**
SIDE HEADER, LEFT

CONTINUED ON PAGE 18

ADDITIONAL SERVICE PARTS:

- **9SV-HWS** Glass Hinge Kit with bushing and spacer blocks, (set of 2)
- **9SV-A9WL05** Latch, Pop-Out, Double Arm, 3.5in Opening, 1 Piece
- **9PWK-HB** Glass Mounting Kit for Wiper
- **9SV-GS02A** Ball Studs, 10mm (bag of 10)
- **9SV-9PHW010-W** Brass Hinge Washer (set of 4)
- **9SV-DSTRH** Door Striker hardware
- **9SV-PRO2-15** Standard Bulb Rubber, (5/8"), 15-Foot Length
- **9SV-PR38-15** 3/4" Side Bulb Rubber 1/4" grip, 15-Foot Length
- **9SV-OHRLCC** Outer Door Handle, set of 2
- **9SV-DL03** Door Latch kit, non-locking w/ grab handle (set of left/right)
- **8SV-9SW-00011-L** Sliding Window, Left, with rubber
- **8SV-9SW-00011-R** Sliding Window, Right, with rubber
- **8SV-9SW-00012** Sliding Window, Rear, with rubber
- **9SW-LATCH** Sliding Window Latch
- **9SV-PR10-10** Window Mounting Rubber, 10-Foot Length
- **9SV-PR17-20** 3/4" Side Bulb Rubber, 1/16" grip, 20-Foot Length
- **9SV-PR01-20** Standard trim lock 20'
- **9SV-PR02-15** Standard bulb rubber 15'
- **9SV-PR09-10** Arch PSA rubber 10'
- **9SV-PR17-20** Side Bulb rubber, 3/4" - 20'
- **9SV-PR19-10** 1" Round Bulb rubber, - 10'
- **9SV-PR38-15** 3/4" side bulb 1/4" Grip - 15'
- **9SV-PR39-5** Foam Seal 1 X 1/8" - 5'
- **9SV-PR43-15** 1/2" X 9/16" Rubber Foam- 15'
- **9SV-PR53-15** Arch PSA rubber .2 X .15- 15'
- **9SV-DP02** Dome Plug 1" (QTY 15)
- **9SV-DP11** Dome Plug 1/2" (QTY 10)
- **9SV-DP01** Dome Plug 7/16" (QTY 15)
- **9SV-DP10** Dome Plug 3/8" (QTY 10)
- **8SV-HKWTB-R** Hinge Kit, Top & Bottom, Left (front hinged)
- **8SV-HKWTB-L** Hinge Kit, Top & Bottom, Right (front hinged)
- **9SV-9GR06** Grommet Bumpers for Mirror Holes (QTY 4)

