



Club Car Carryall ROPS Cab
Complete Cab Assembly
p/n: 47587415001
compatible with Carryall models 300, 500, 550, and 700

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:

- **47587415003**..... Kit, Cab, Basic, Curtis
- **47690985001**..... Kit, 2P Doors & Rear Window, Curtis
- **47690985001**..... Kit, Windshield, AS1, Curtis
- **47587416001**..... Kit, Mirror, Interior, Curtis
- **47587417001**..... Kit, Mirror Set, Side, Curtis
- **47587420001**..... Kit, Console, Overhead, Curtis
- **47587420002**..... Kit, Console, Overhead W/O Fans, Curtis
- **47587421001**..... Kit, Dome Light, Curtis*
- **47587418001**..... Kit, Beacon, Curtis*
- **47587419001**..... Kit, Work Light, Front, Curtis*
- **47587419002**..... Kit, Work Light, Rear, Curtis*
- **47693131001**..... Kit, Windshield Washer, Curtis*

* Requires 47587420001 or 47587420002 (Overhead Console)

Approximate Installation Time *
Experienced Dealer Technician – 3 Hours
Average Dealer Technician – 3.5 Hours
Do-It-Yourself – 4 Hours

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 47587415001, Complete Cab Kit, Curtis is approximately 300lbs (136kg).

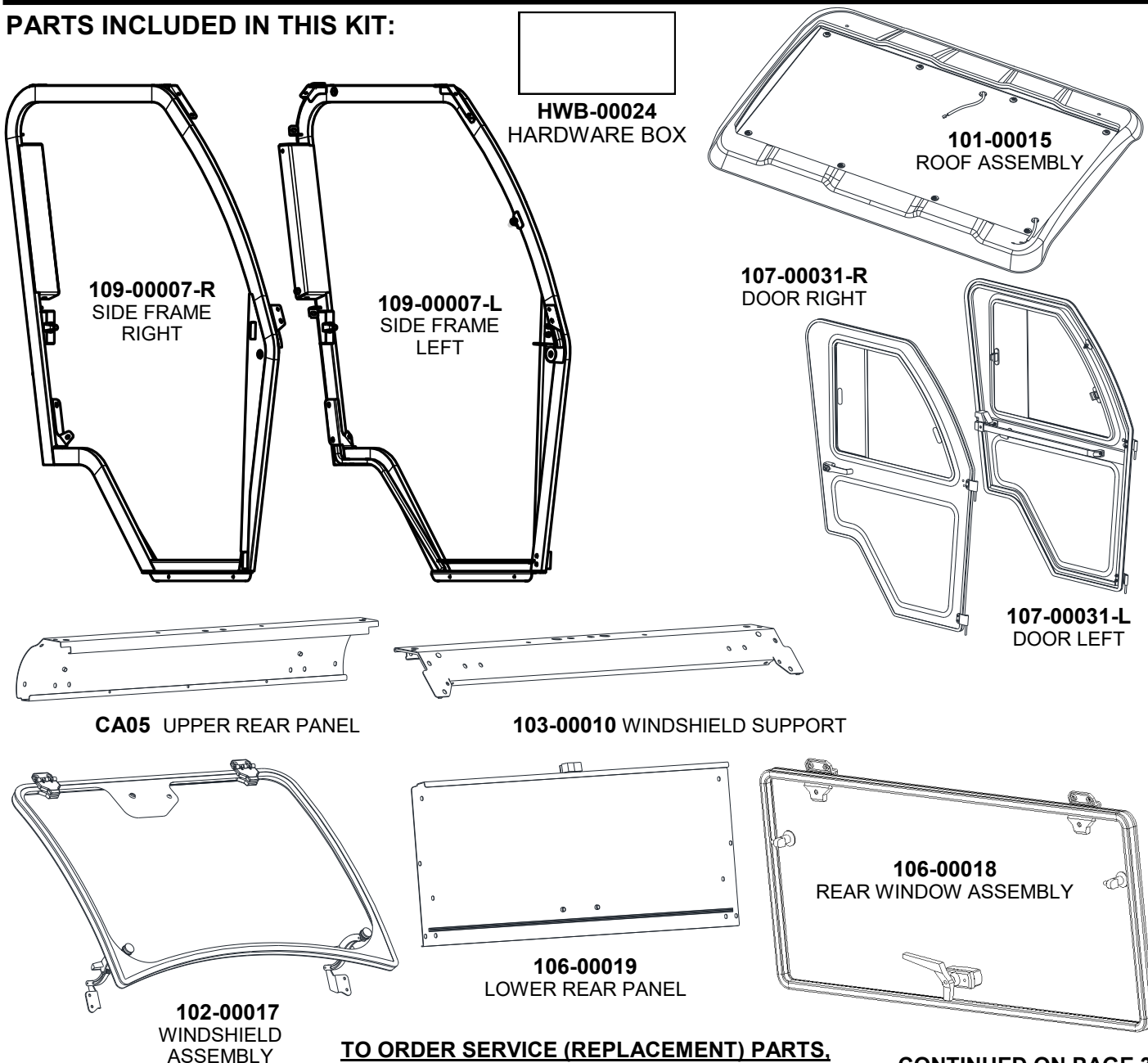
⚠ WARNING: Exposure to Carbon Monoxide can cause illness, serious injury or death.

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 (not included) must be installed onto gasoline vehicles of model year 2018 and prior to avoid illness, serious injury or death from Carbon Monoxide.

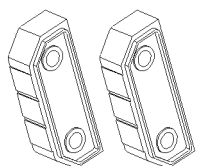
⚠ WARNING: Serious injury or death:

- 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:

TO ORDER SERVICE (REPLACEMENT) PARTS.
SEE PAGES 18-20

CONTINUED ON PAGE 3

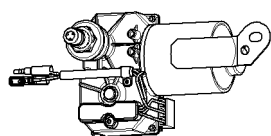
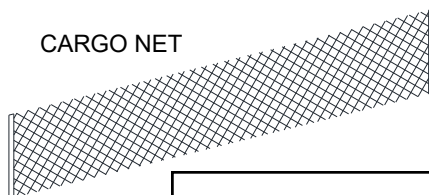
PARTS IN THIS KIT (continued):

HINGE SPACER
BLOCKS (QTY:4)

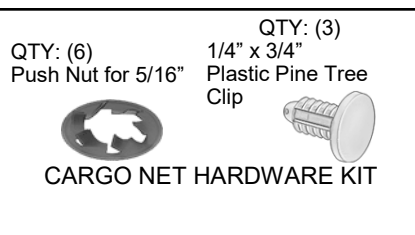


1" Dome Plugs
(QTY:2)

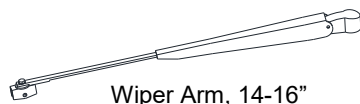
CARGO NET



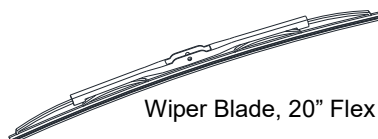
Wiper Motor, 110°



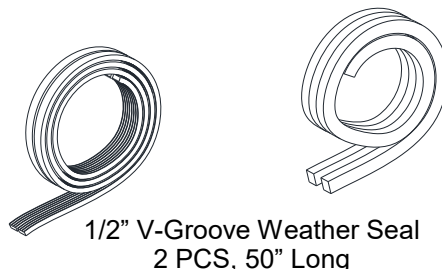
1/2" x 9/16" Foam Rubber
2 PCS, 31" Long



Wiper Arm, 14-16"



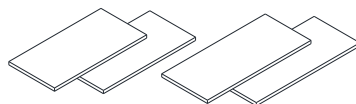
Wiper Blade, 20" Flex



1/2" V-Groove Weather Seal
2 PCS, 50" Long



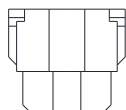
Arch Rubber
2 PCS, 4" Long, 2 PCS, 6" Long



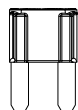
2" Foam Tape
2 PCS, 4" Long,
2 PCS, 4-1/2" Long



8" Wire tie
(QTY:2)



7.5 Amp
ATO/ATC
Fuse



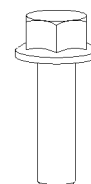
7.5 Amp
mini Fuse

QTY: (2)
3/8-16 x 1-1/4"
Button Head Bolt



QTY: (4)
1/4-20 x 2-1/4"
Flanged Hex Bolt

QTY: (6)
5/16-18 x 1"
Flanged Hex
Bolt



CA-HWK-A

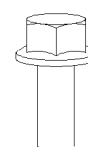
QTY: (2)
3/8" SAE Flat
Washer



QTY: (8)
1/4" x 1" OD
Fender Washer



QTY: (24)
5/16-18 x 3/4"
Flanged Hex



QTY: (18)
5/16-18 Flanged
Lock Nut



QTY: (4)
1/4-20 Flanged
Lock Nut

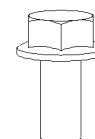


CA-HWK
CARRYALL HARDWARE KIT

QTY: (4)
5/16-18 x 1-1/2"
Flat Head Bolt



QTY: (4)
5/16-18 x 3/4"
Flanged Hex Bolt



QTY: (8)
5/16-18 Flanged
Lock Nut



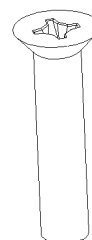
CAWS-HWK

WINDSHIELD HARDWARE KIT

9PWK-HB

Glass Mounting Kit for Wiper Systems
(See IM-9PWK for contents)

QTY: (4)
5/16-18 x 1-1/2"
Flat Head Bolt



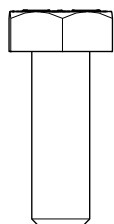
QTY: (4)
5/16-18 Flanged
Lock Nut

HWK-00042

REAR WINDOW HARDWARE KIT

TO ORDER SERVICE (REPLACEMENT) PARTS,
SEE PAGES 18-20

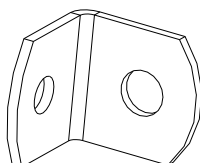
CONTINUED ON PAGE 4

PARTS IN THIS KIT (continued):

QTY: (6)
7/16-20x 1"
Hex Bolt



QTY: (6)
7/16-20
Lock Nut



QTY: (2)
Seat Belt
Angle Bracket

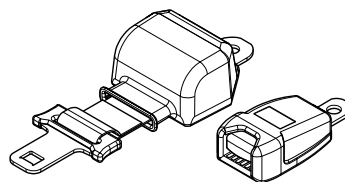


QTY: (2)
7/16" SAE Flat
Washer

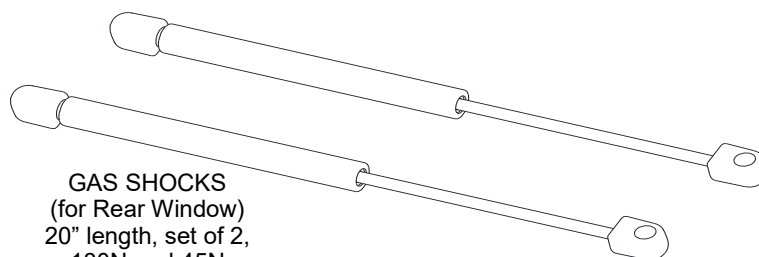


QTY: (2)
7/16" x 2"OD
Seat Belt Washer

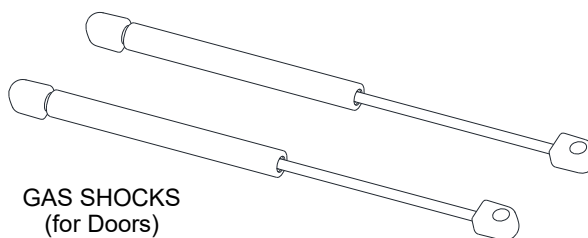
HWK-00039
SEAT BELT HARDWARE KIT



**SEAT BELTS, RETRACTOR
& LATCH (2 OF EACH)**



GAS SHOCKS
(for Rear Window)
20" length, set of 2,
180N and 45N



GAS SHOCKS
(for Doors)
14-1/2" length, set of 2,
both 100N



**ROLL-OVER
PROTECTIVE
STRUCTURE:**
47587415001
47587415002
47587415003

To maintain seat-belted
occupant protection and ROPS certification:
• Replace damaged
ROPS, do not repair
or revise.
• Any alteration of
ROPS must be
approved by
manufacturer.

CERTIFICATION

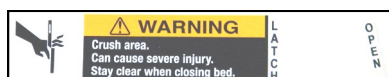
ROPS - ISO 3471

**CLUB CAR
CARRYALL MODELS
& MAXIMUM MASS:**

300 - 864 kg
500 - 956 kg
550 - 1044 kg
700 - 1361 kg



CURTIS INDUSTRIES LLC.
WORCESTER, MA



Tilt Bed Warning Decal



Gas/Fire Warning Decal

ROPS Certification Decal

TO ORDER SERVICE (REPLACEMENT) PARTS, SEE PAGES 18-20

Tools Required:

- T40 Torx driver
 - Ratchet with 3/8", 7/16", 1/2" and 9/16" sockets
 - (Optional) Air or electric powered socket driver
- NOTE: Powered driver is not recommended for bolts into threaded inserts in the roof and rear frame.
- 3/8", 7/16" and 1/2" and 9/16" open-end wrenches
 - 2.5mm, 5/32", 3/16" and 7/32" Allen wrenches or drivers.
 - #3 Phillips Screwdriver (right-angle or socket driver recommended)
 - 5/16" nut driver or flat screwdriver.
 - Power hand drill and 5/16" drill bit.

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 front hood from the Carryall. Apply one 4" strip of Arch rubber to either side of the hood (**Figure 1.2**).

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

1.3 Apply a 6" piece of Arch rubber to the upper rear corner of the left and right fender (**Figure 1.3**). For best results, pull the rubber into the gap between the dashboard and fender with the adhesive side toward the fender. Pull until the rear end of the rubber aligns with the rear of the gap and press the rubber into place as shown.

1.4 Apply a 4" long and 4-1/2" long 2" foam tape strip to both sides of the front compartment near the rear corner (**Figure 1.4**).

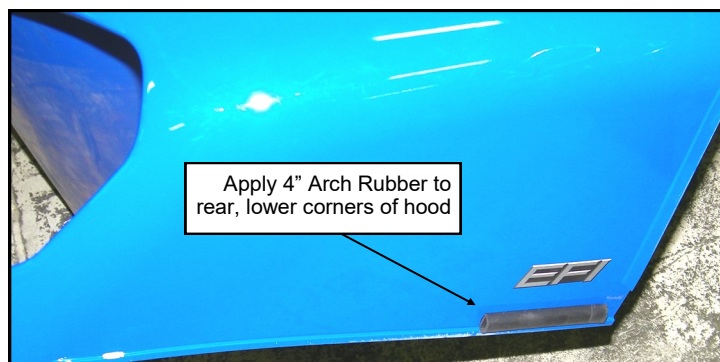


Figure 1.2: Hood Rubber

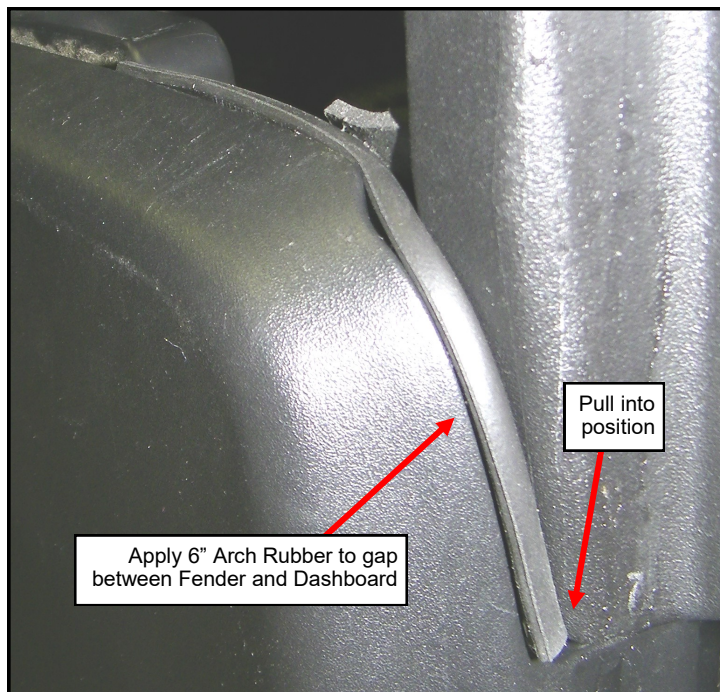


Figure 1.3: Fender Rubber (left side shown)

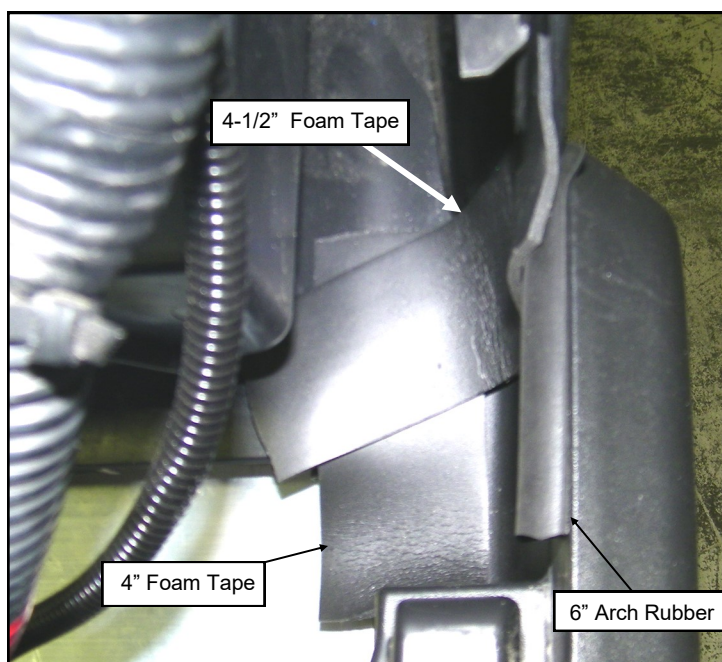


Figure 1.4: Under-hood Rubber (left side shown)

1. CARRYALL PREPARATION (continued):

- 1.5 Remove and discard the bolts holding the seat back to the side bolsters (**Figure 1.5**).
- 1.6 Remove and discard the plastic caps, bolts and washers at either side of the dashboard (**Figure 1.6**).
- 1.7 Apply one thick foam strip along the front of the foot well and beside the dashboard (**Figure 1.7**). Start at the bottom corner and work up. Trim any excess at the upper corner flush to the dashboard.

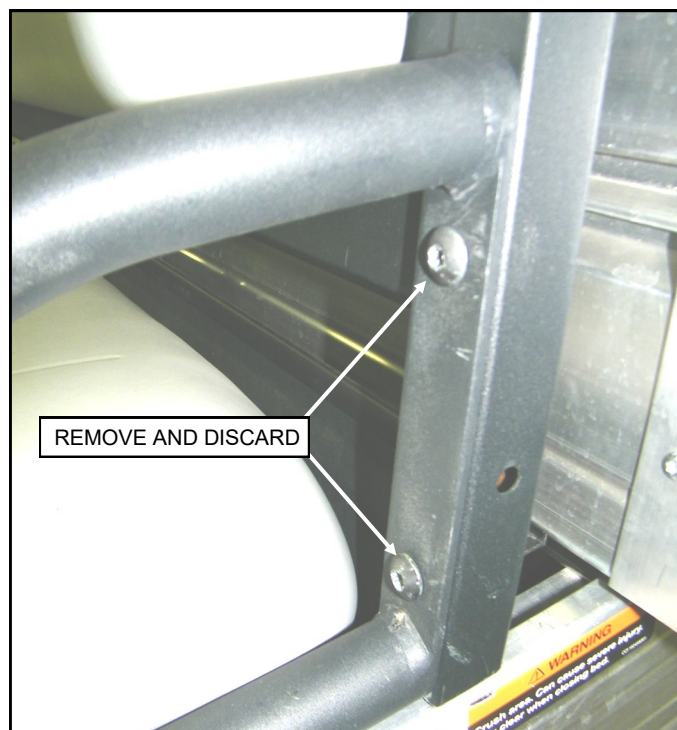


Figure 1.5: Seat Side Bolts

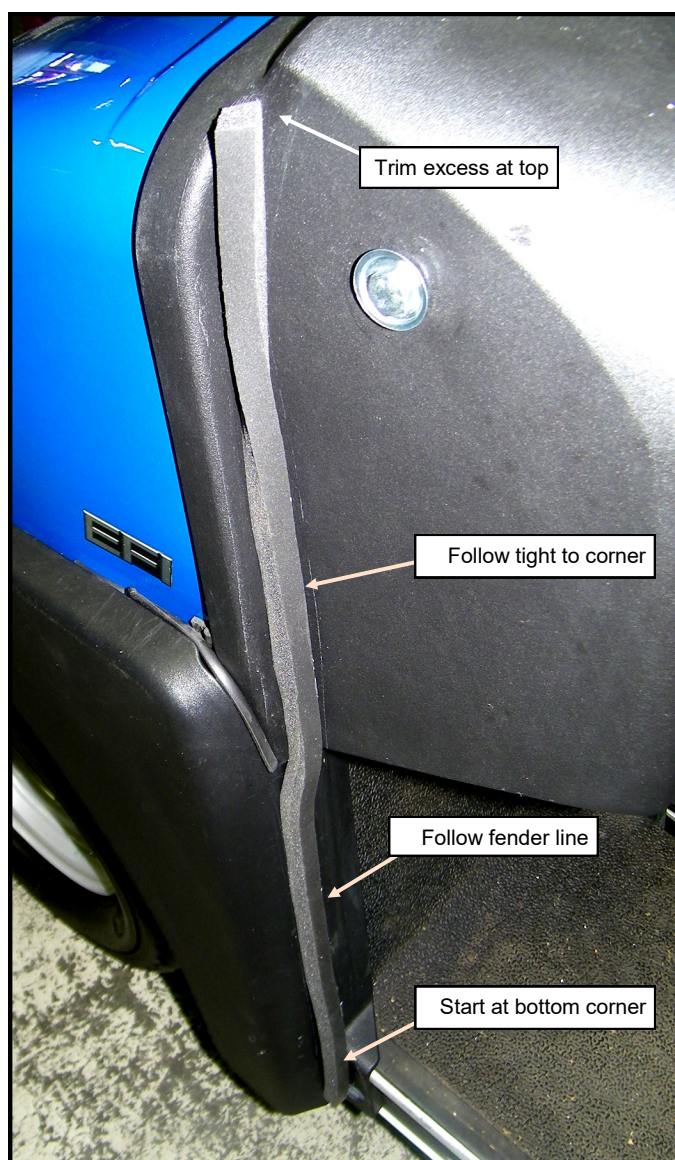


Figure 1.7: Dashboard Side Rubber



Figure 1.6: Dashboard Side Bolts

2. CAB STRUCTURE:

NOTE: The complete cab assembly kit 47587415001 includes doors mounted onto side frames for shipment. Remove the doors from the frames prior to assembly by unlatching the door and lifting it off the frame pins.

- 2.1 Apply one strip of 1/2" V-groove weather seal rubber to the rear of the cab frame (**Figure 2.1**). Peel the paper from one end and press the rubber onto the frame, starting at the bottom corner. Continue to peel and press the rubber over the upper corner of the frame. Route the rubber onto the upper tab, beside the outer edge of the slots as shown.

NOTE: This weather strip rubber must be installed onto the frame prior to installing the lower and upper rear panel, to ensure a tight seal and dampen vibration.

2.2 QTY Hardware Required:

- (2) 3/8-16 x 1-1/4" Button Socket Head Bolts
- (2) 3/8" SAE Flat Washers

Place a side frame onto the Carryall, resting on the floorboard and against the side bolsters (**Figures 2.2 and 2.3**). Push the frame forward against the dashboard and install a button head bolt with washer through the hole in the frame into the captive nuts at the sides of the dashboard (**Figure 2.2**).

2.3 QTY Hardware Required:

- (4) 1/4-20 x 2-1/4 Flanged Hex Bolts
- (4) 1/4" x 1" Fender Washers

Per **Fig. 2.3**, insert a 1/4" bolt with one fender washer through each of the two holes in the bracket at the rear of the side frame, through the seat back. Do not install a nut at this time.

- 2.4 Repeat steps 2.1 through 2.3 for the other side frame.

NOTE: Leave all fasteners loose or finger-tight until the entire cab frame structure and roof is assembled at step 4, unless otherwise specified.



Fig. 2.2: Frame to Dash bolts

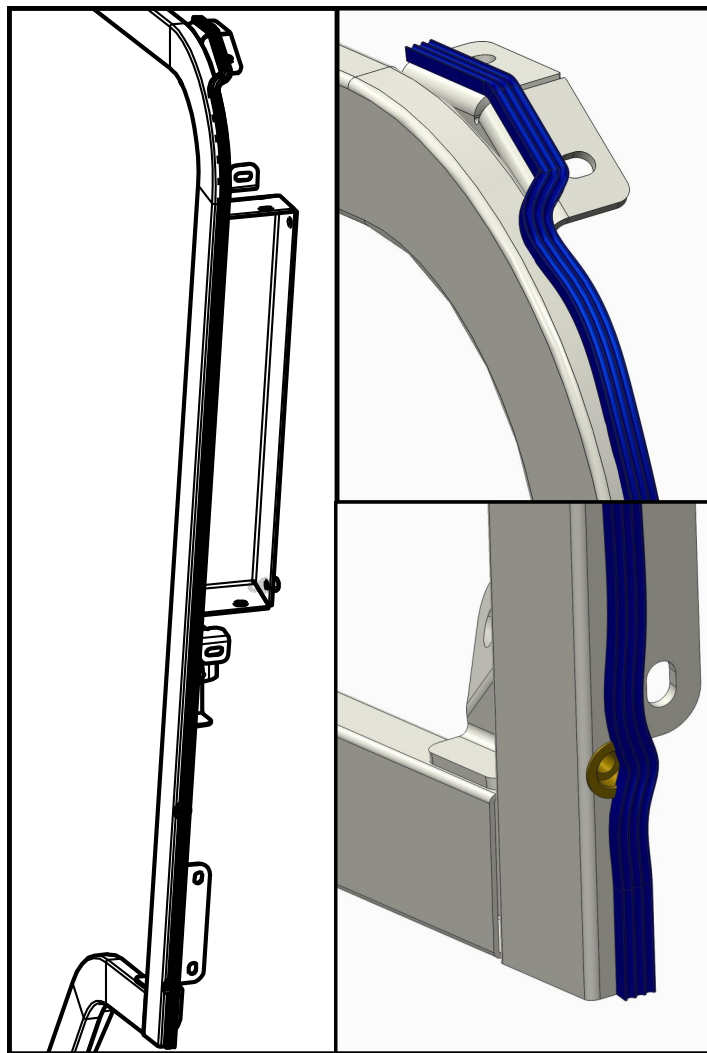


Figure 2.1: Frame Rear Rubber

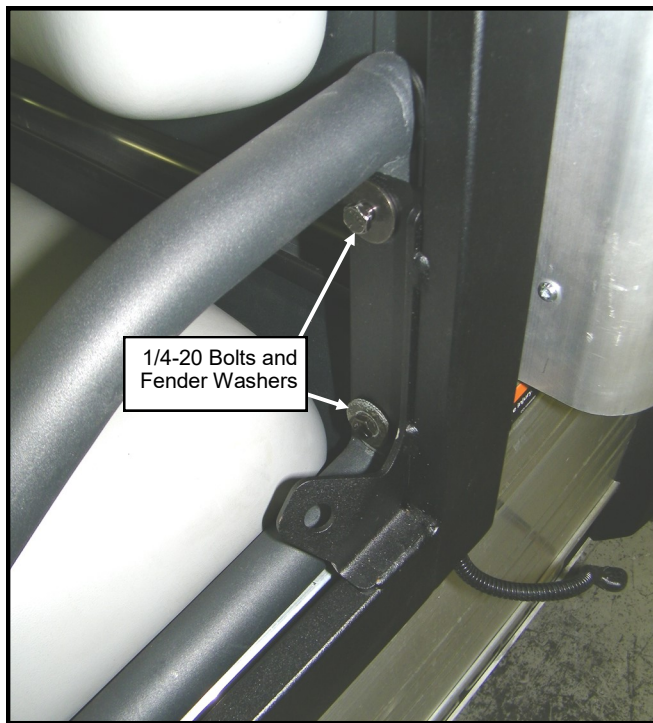


Fig. 2.3: Frame and Seat bolts

2. CAB STRUCTURE (continued):

2.5 LOWER REAR PANEL:

QTY Hardware Required:

- (8) 5/16-18 x 3/4" Flanged Hex Head Bolts
- (4) 5/16-18 Flanged Hex Lock Nuts

Place the Lower Rear Panel flush against bottom ROPS support, and over the 1/4" bolts installed in step 2.2 (**Figure 2.5**). Install a 5/16" bolt into the two threaded inserts in the rear of each frame, and a 5/16" bolt and nut in the two holes in each upper corner of the rear panel.

NOTE: Use of a power driver into the threaded inserts of the frame is not recommended, to help avoid cross-threading the inserts.

2.6 QTY Hardware Required:

- (4) 1/4" x 1" Fender Washers
- (4) 1/4-20 Flanged Hex Lock Nuts

Install a fender washer and 1/4" nut onto the four bolts through the frame and seat from step 2.2.

2.7 UPPER REAR PANEL:

QTY Hardware Required:

- (6) 5/16-18 x 1" Flanged Hex Head Bolts
- (6) 5/16-18 Flanged Hex Lock Nuts

Install the Upper Rear Panel onto the frame by resting the lower flange on top of ROPS support and rotating the panel forward (**Figure 2.7**). Install six 5/16" x 1" bolts and nuts through the four holes in the rear face of the panel and two through the lower flange.

Tighten the 4 bolts shown in (**Figure 2.7**) until snug..

NOTE: These longer 5/16" bolts are used in the Upper Rear Panel to hold the cargo net, and are found in a small bag inside the Cab hardware kit.

2.8 WINDSHIELD SUPPORT:

QTY Hardware Required:

- (4) 5/16-18 x 3/4" Flanged Hex Head Bolts
- (4) 5/16-18 Flanged Hex Lock Nuts

Place the Windshield Support onto the front tabs of the frame, and install 5/16" bolts and nuts through the four front holes of the windshield support, tighten bolts until snug. (**Figure 2.8**).

NOTE: Do not install bolts through the holes in the top of the Windshield Support or Upper Rear Panel. These holes will be utilized to install the roof.

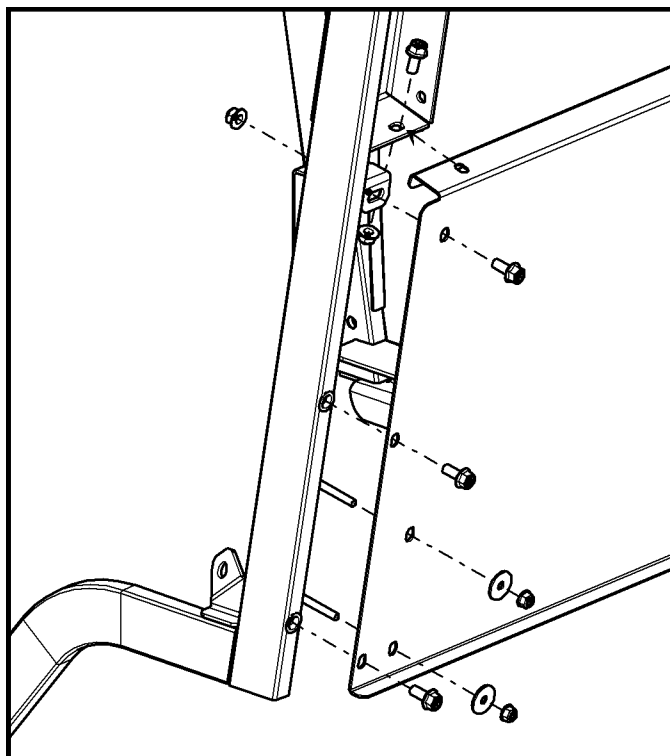


Figure 2.5: Lower Rear Panel

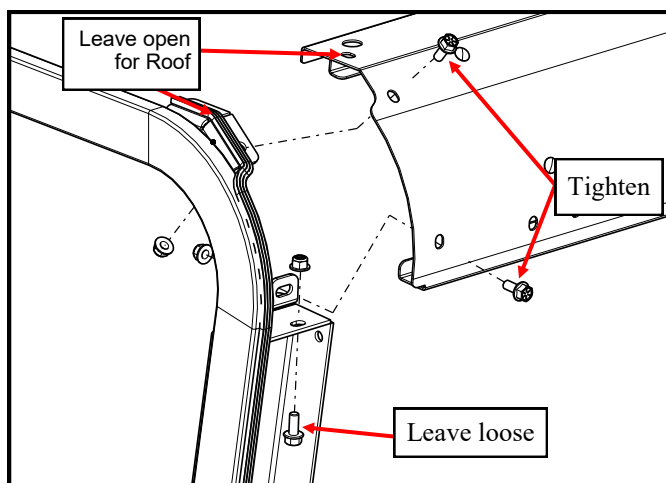


Figure 2.7: Upper Rear Panel

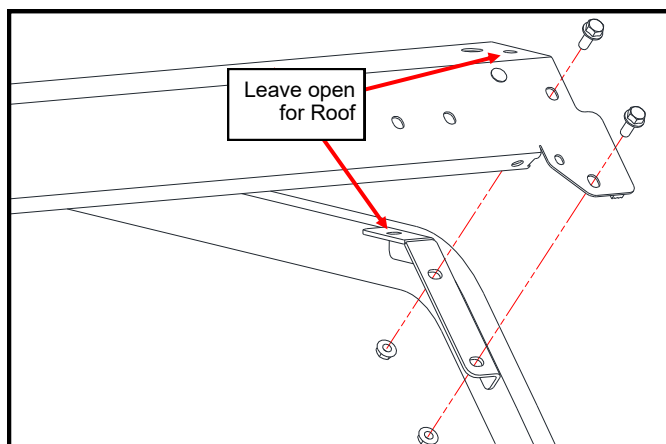


Figure 2.8: Windshield Support

3. WINDSHIELD:

NOTE: The Windshield may be installed after the Roof if a right-angle or socket Phillips driver is available, or if the plastic roof will be removed for installation of accessories.

3.1 QTY Hardware Required:

- (4) 5/16-18 x 1-1/2" Flat Head Phillips Bolts
- (4) 5/16-18 Flanged Hex Lock Nuts

Install a hinge spacer block and two 5/16" flat head Phillips bolts onto each hinge of the Windshield (**Figure 3.1**). With assistance, place the Windshield onto the Windshield Support and hand-tighten four 5/16" nuts.

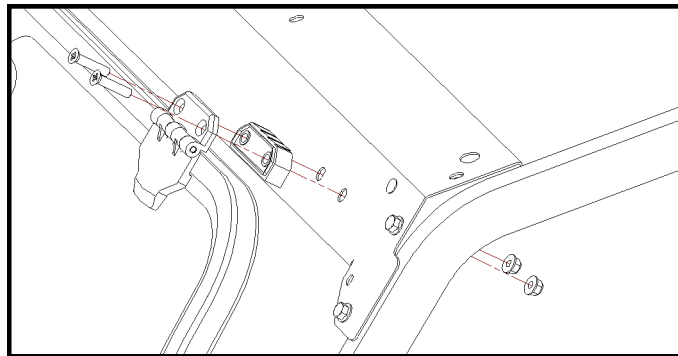


Figure 3.1: Windshield to Support

3.2 QTY Hardware Required:

- (4) 5/16-18 x 3/4" Flanged Hex Head Bolts
- (4) 5/16-18 Flanged Hex Lock Nuts

Open the Windshield and place the Windshield Latch Brackets against the inside of the brackets on the side frames, and secure with two 5/16" bolts and nuts per bracket. (**Figure 3.2**).

- #### 3.3
- Center the windshield on the side frames and tighten Windshield hinge hardware to 7 ft.-lbs. (9.5 N-m).

Caution: The windshield hinges are plastic components. Do not over tighten the 5/16-18 flat head screws.

NOTE: The front corners of the side frames, at the bottom corners of the windshield, may pull in when the rest of the cab is tightened. The windshield hinges can be readjusted up or down to re-center if necessary.

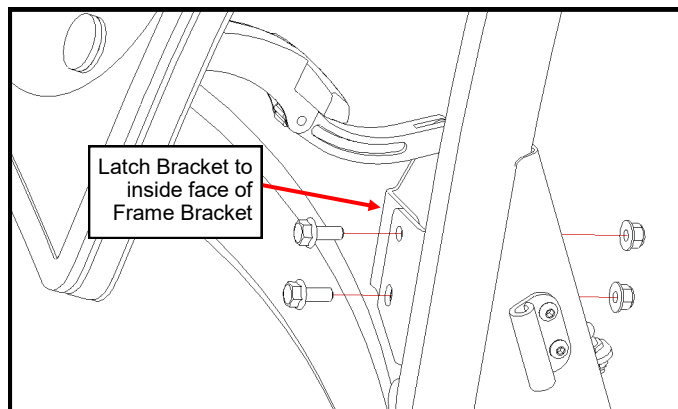


Figure 3.2: Windshield Latch Brackets

4. ROOF:

NOTE: If installing a dome light, beacon light, or work lights, remove the plastic roof from the metal roof pan at this time to aid in installation.

- #### 4.1
- With assistance, place the roof assembly on top of the frame (**Figure 4.1**) and feed the wire at the front-center of the metal roof pan through the larger hole at the center, closer to the driver's side in the windshield support.

4.2 QTY Hardware Required:

- (8) 5/16-18 x 3/4" Flanged Hex Head Bolts
- Align the threaded inserts in the roof with the holes in the windshield support and upper rear panel and install four 5/16-18 x 3/4" bolts through each panel and into the inserts in the roof (**Figure 4.1**).

NOTE: Use of a power driver into the threaded inserts of the roof is not recommended, to help avoid cross-threading the inserts.

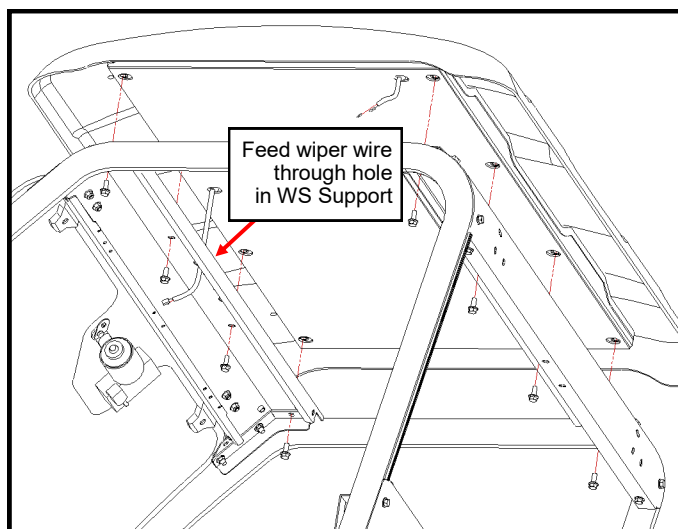


Figure 4.1: Roof Installation

Tools Required:

- Ratchet with 1/2" socket.
- 1/2" open-end wrench
- #3 Phillips Screwdriver

5. REAR WINDOW INSTALLATION:**5.1 QTY Hardware Required:**

- (4) 5/16-18 x 1-1/2" Flat Head Phillips Bolts
- (4) 5/16-18 Flanged Hex Lock Nuts

Install a hinge spacer block and two flat head bolts onto each hinge of the Rear Window (**Fig. 5.1**). With assistance, place the Rear Window onto the Upper Rear Panel and hand-tighten four nuts onto the bolts.

5.2 Close and latch the Rear Window. With assistance, lift each side of the window and hand tighten the hinge bolts, with the bolts approximately centered in the slots. Check for fit against the latch and relative to the frames along the sides. If necessary, loosen the hinge bolts and adjust as needed. Tighten the hinge bolts to 7 ft.-lbs. (9.5 N-m).

5.3 Select the two longer gas shocks (20" long). Open the window to slightly less than 90°. Install a Gas Shock onto the Ball Studs of the frame and window (**Fig. 5.3**), on both sides of the window. The cylinder end must be attached to the Rear Window as shown to ensure seals stay lubricated.

NOTE: This kit includes two Gas Shocks of two different strengths (180 Newtons and 45 Newtons). Either shock can be installed to either side with no effect on performance.

OPERATION:

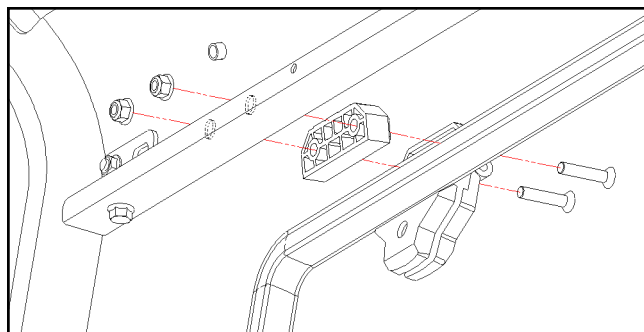
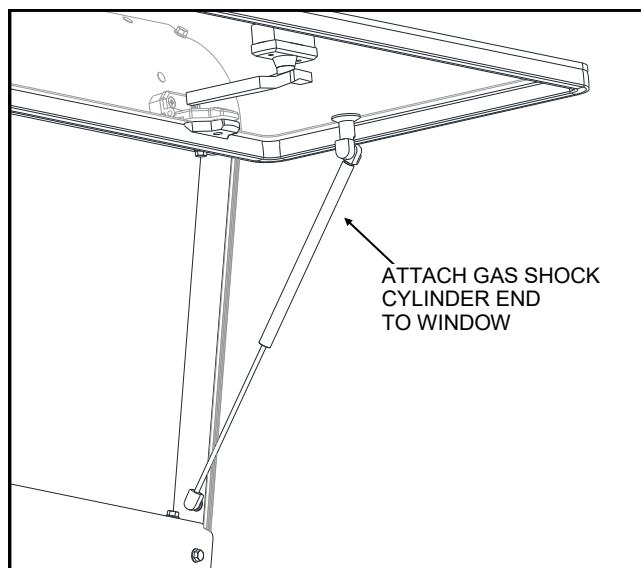
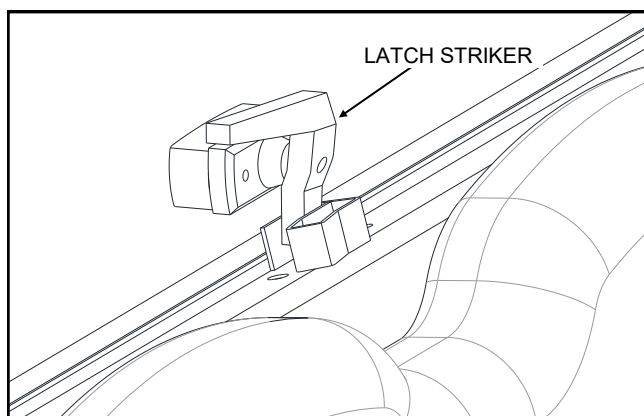
- For venting of the Rear Window, secure the latch into the outer slot of the latch striker on the rear panel (**Figure 5.4**).
- The gas shocks will hold the Rear Window fully open upon releasing the latch, and the Carryall can be operated with the window fully open.
- The Rear Window will not interfere with the Cargo Bed in the vented or fully open position.
- The cargo bed must be lowered to be able to close the Rear Window from the fully open position.

6. TAILPIPE EXTENSION (2018 and older):

WARNING: A Tailpipe extension must be installed onto gasoline vehicles of model year 2018 and prior to avoid illness, serious injury or death from Carbon Monoxide.

For these models with a Subaru gasoline engine, purchase the **8SV-CA16-B4** Tail Pipe Extension and install per the included instructions.

Carryall model years 2019 and newer with a Kohler gasoline engine do not require a tailpipe extension.

**Figure 5.1: Rear Window Hinges****Figure 5.3: Rear Window Gas Shocks****Figure 5.4: Rear Window Vented Position**

7. FASTENER TIGHTENING:

- 7.1 Check alignment of the cab parts to be as square as possible, and tighten all bolts to torque specified on page 21 in the following order:
- Six 5/16" bolts in back face of lower rear panel
 - Four 1/4" bolts through seat and rear face of lower rear panel
 - Two 5/16" bolts connecting lower panel to ROPS support
 - Tighten the 3/8" bolts in the front of the frame to 24 ft.-lbs. (32.5 N-m) and insert a 1" plug into the holes in the panel at the front of the frame.
 - Four 5/16" bolts into roof at Windshield Support.
 - Four 5/16" bolts into roof at Upper Rear Panel.
 - Four 5/16" bolts through Windshield Support and frame.
 - Six 5/16" bolts through Upper Rear Panel and frame.
- 7.2 Open and close the windshield latches to verify smooth operation, then tighten the four bolts for the windshield latches to 17 ft.-lbs. (23.0 N-m). Loosen and re-adjust the bolts in the windshield support if necessary. The windshield latches may be turned slightly relative to the windshield if they do not operate smoothly.
- 7.3 Drill a 5/16" hole through the two holes in the lower flange of each floorboard (**Figure 7.4**), through the structure of the Carryall, and install a 5/16" bolt and nut through these holes. Tighten to 17 ft.-lbs. (23 N-m)
- QTY Hardware Required:
- (4) 5/16-18 x 3/4" Flanged Hex Head Bolts
 - (4) 5/16-18 Flanged Hex Lock Nuts

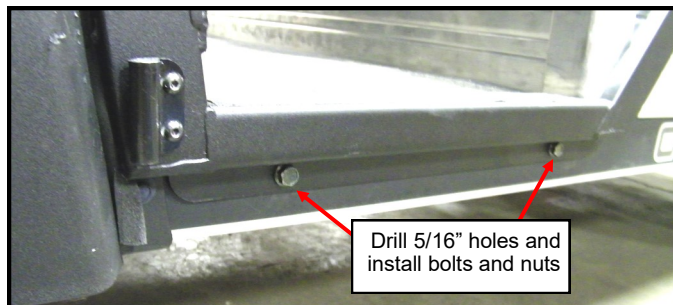


Figure 7.3: Floorboard bolts

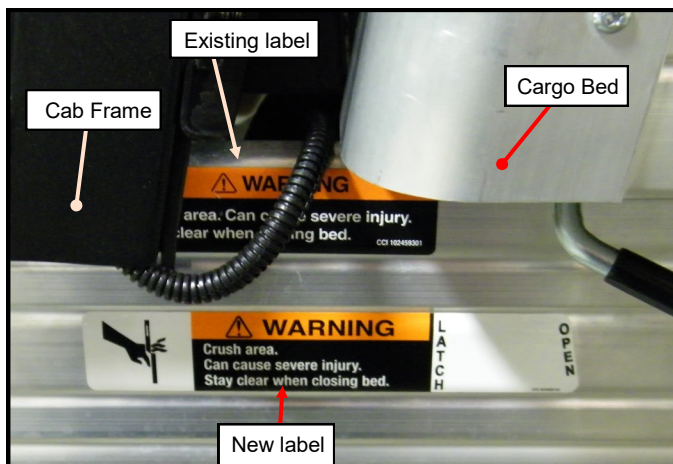


Figure 8.1: Tilt Bed Warning Label

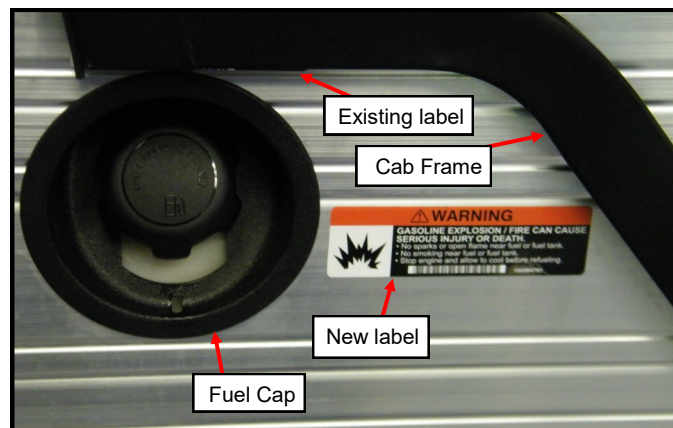


Figure 8.2: Gas/Fire Warning Label

8. WARNING LABELS:

- 8.1 Apply the Tilt Bed Warning Label on the driver's side of the Carryall, near the front of the Cargo Bed and below the cab frame as shown (**Figure 8.1**).
- 8.2 **Gasoline Vehicles only:** Apply the Gas/Fire Warning Label forward of the Fuel Cap as shown (**Figure 8.2**).
- 8.3 Apply ROPS Certification Label to the driver's side cab frame as shown (**Figure 8.3**).

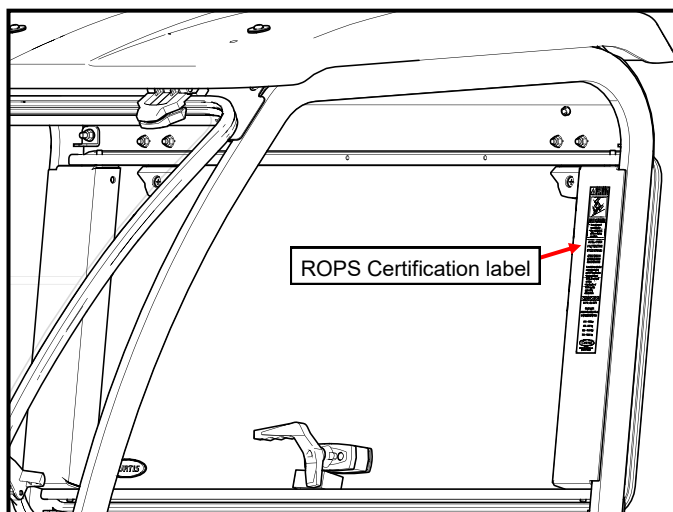


Figure 8.3: ROPS Certification Label

9. WIRING:

- 9.1 Connect the bullet terminals from the frame wire harness to the roof wire harness, and push the harnesses up into the roof panel until none of the terminals are visible (**Figure 9.1**).

NOTE: The Overhead Console connects in-line with the standard cab wiring. Connect the standard wiring at this time to verify function.

- 9.2 Connect the two male bullet terminals to the female bullets under the seat on the passenger's side, Red to Yellow and Black to Black (**Figure 9.2**).

NOTE: If installing Overhead Console (47587420001) skip directly to step 9.6. There is no need to change fuse.

Electric Vehicles:

- 9.3 Locate the fuse block under the front hood. Remove the 10 Amp fuse and install the 7.5 Amp mini fuse. (**Figure 9.3**)

Gasoline Vehicles:

- 9.4 Remove the screw that secures the cover to the electronic component box in the compartment under the driver seat as shown. Retain the screw and cover for reinstallation. (**Figure 9.4**).

- 9.5 Replace the 10 Amp fuse with a 7.5 Amp ATO/ATC fuse. (**Figure 9.5**) Reattach the cover onto the electronic component box. Tighten screw to 17 in.-lbs. (1.9 Nm).

- 9.6 Use a cable tie to secure the Frame Wire Harness to the slot in the bottom of the seat back near the driver's side (**Figure 9.6**). If applicable, use a second cable tie to secure the Wire Harness to the seat back through the hole near the passenger's side.

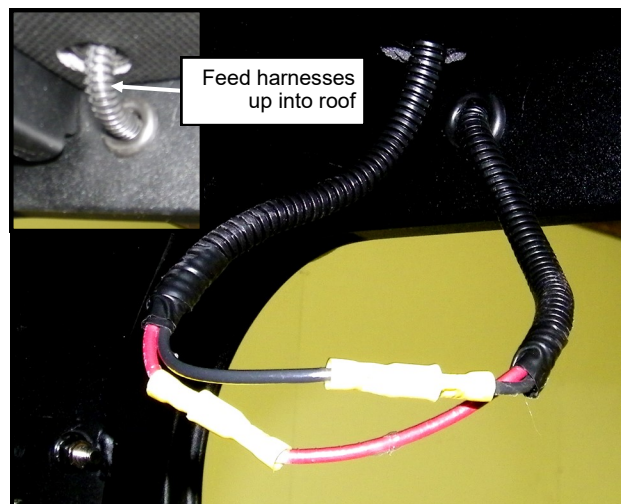


Figure 9.1: Side Frame and Roof connection

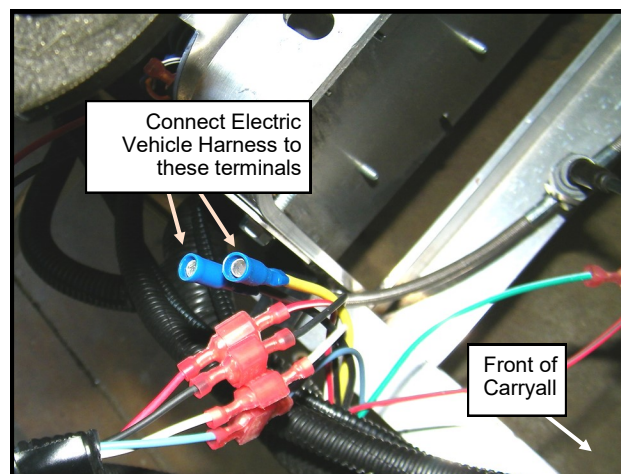


Fig. 9.2: Vehicle connection, electric vehicle shown

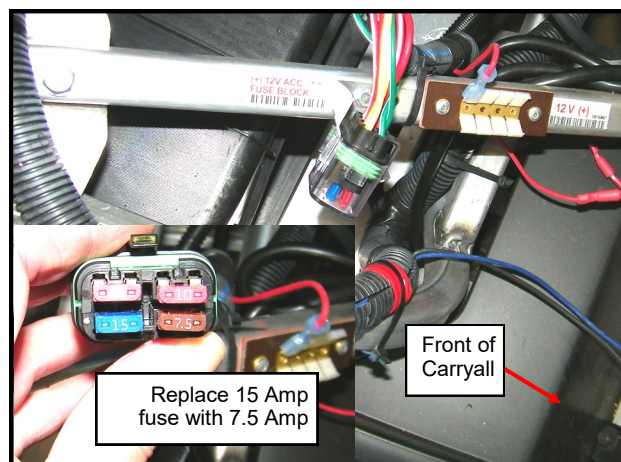


Figure 9.3: Front compartment Fuse Block (Electric vehicles only)

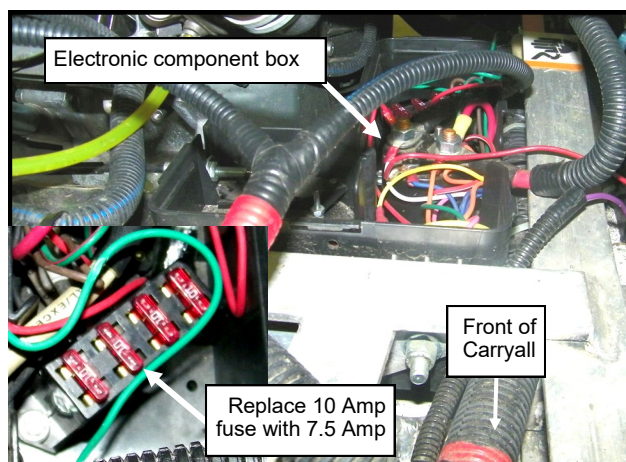


Figure 9.4: Electronic Component Box (Gasoline vehicles only)



Figure 9.6 Wire Tie under seat (Gas vehicle shown)

10. WIPER:

- 10.1 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.
- 10.2 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 10.2)** Do not tighten completely at this time.
- 10.3 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 10.2)**
- 10.4 Tighten hex nut on motor shaft to 30 inch-lbs and the hex head bolt to 75 inch-lbs.

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

- 10.5 Attach the connectors at the center of the windshield support to the connectors on wiper motor.
- 10.6 Remove screw and locknut from wiper arm, and insert screw through upper mounting hole in wiper blade and wiper arm hole. **(Figure 10.6)** Secure with the locknut.

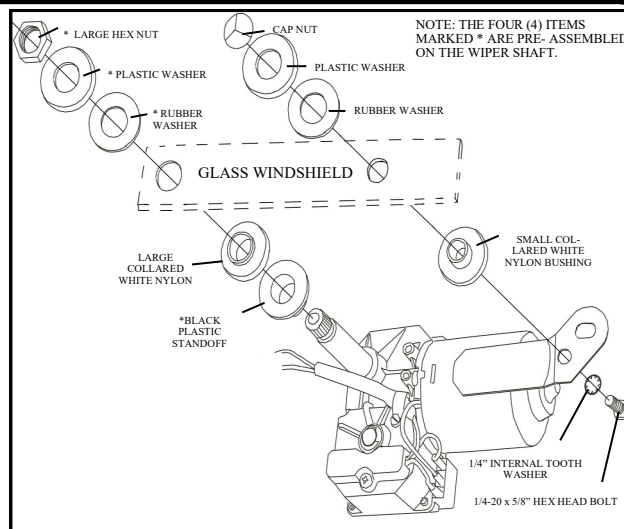


Figure 10.2: Wiper Motor Installation

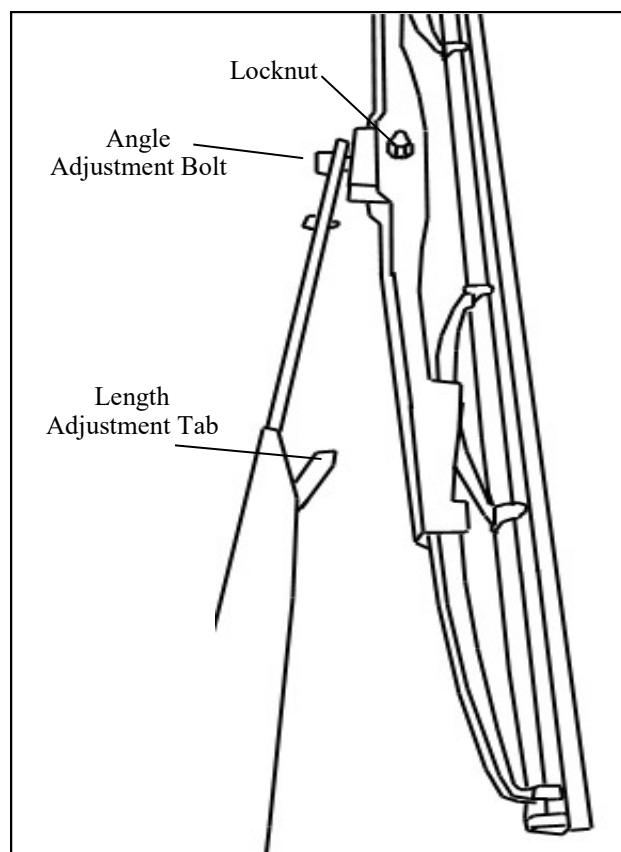


Figure 10.6: Wiper arm

10. WIPER (CONTINUED):

10.7 Use Length adjustment tab and angle adjustment bolt on wiper arm to adjust arm noted in figure 10.6, to following specifications. **(Figure 10.7):**

- Rotate blade 5 to 15° counter-clockwise relative to the arm.
 - Arm length set to maximum extension.
 - Far end of wiper blade 9 to 10 inches (228 to 254mm) from the passenger's side of the windshield.
- 10.8 Plug wiper into harness from roof and turn the wiper motor on then off to allow the motor to park.
- 10.9 Turn the wiper motor on and watch the sweep path. Verify the wiper blade does not touch the windshield edge rubber or hinge at any point.
- 10.10 Adjust the arm length or blade angle if needed. Tighten all hardware per values on previous page.

NOTE: If the wiper motor does not function, verify:

- All wire connections are fully seated.
- Proper wires are connected, positive and negative.
- No wires are shorted to ground and all wire insulation is intact.
- The Vehicle battery is not discharged.

11. REAR CARGO NET:

- 11.1 Place one end of the cargo net over the three bolts at one side of the Upper Rear Panel **(Figure 11.1)** and install a Push Nut over each of the bolts and netting.
- 11.2 Stretch the net to the opposite side of the Upper Rear Panel, over the three bolts, and install a push nut onto the bolts.
- 11.3 Stretch the net to the bottom flange of the Upper Rear Panel and push a plastic pine tree clip through the holes in the flange and the bottom of the net **(Figure 11.3)**.

NOTE: The cargo net is intended to hold small items such as work gloves, and is not recommended for items weighing over 1/2 lb. (226 Grams).

12. CARE AND MAINTENANCE:

- Check and tighten all hardware after 20 hours of operation. Periodically inspect and tighten hardware for the remainder of the unit's service life.
- **NEVER USE AN ALCOHOL-BASED PRODUCT FOR CLEANING PLASTIC WINDOWS.** Do not use **WINDEX, GLASS PLUS, FANTASTIC**, etc. Use of these products will result in deterioration of the plastic windows.
- Clean the enclosure surfaces thoroughly with warm soapy water and a COTTON cloth or chamois. Be sure to use mild soap.

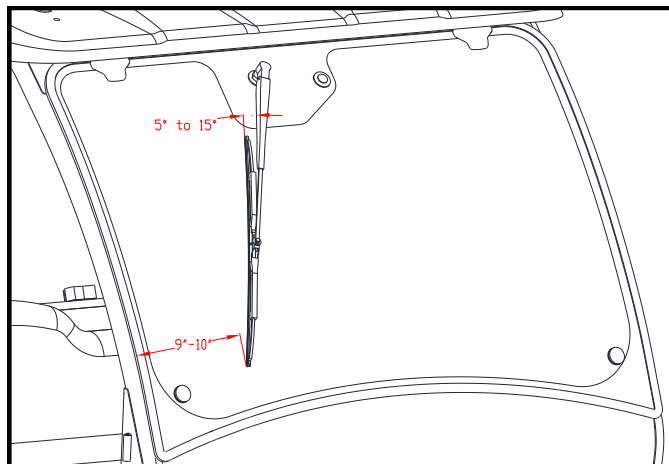


Figure 10.7: Wiper Arm parked location

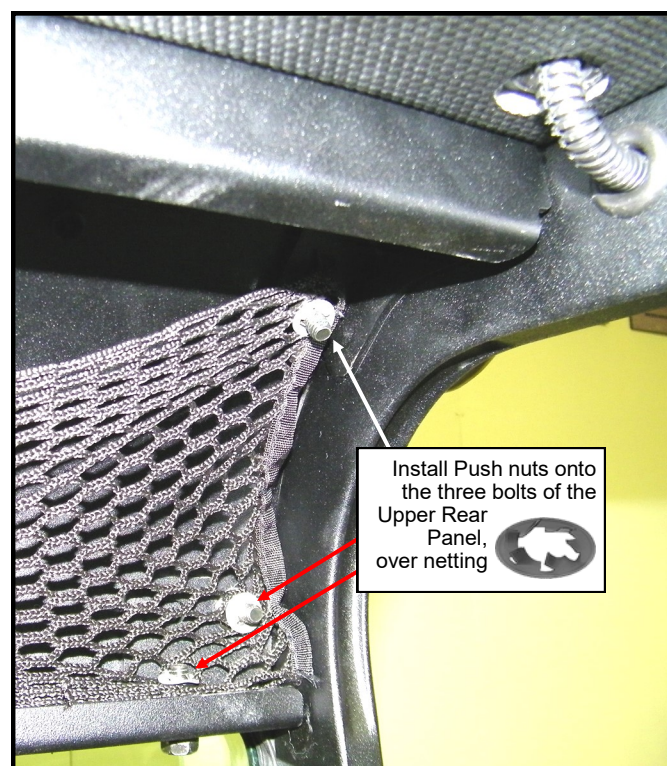


Figure 11.1: Cargo net push nuts

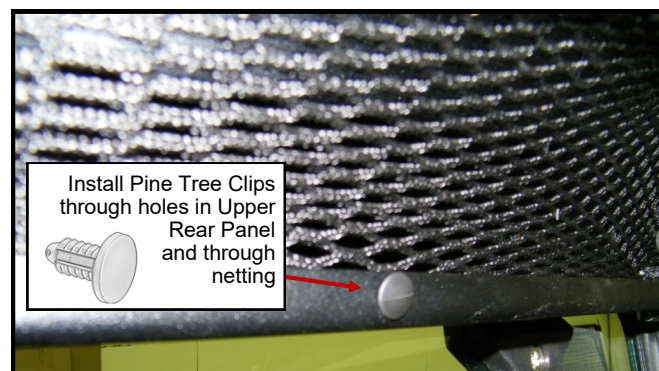


Figure 11.3: Cargo net center clips

13. SEAT BELTS:

NOTE: Hinges on seat base must be removed before seat belt installation.

- 13.1 Remove the seat base, and remove screws from hinges, (2) each hinge (4) total.
 - 13.2 Reinstall seat base.
 - 13.3 Mount Seat belt to the driver side mounting bracket on side frame using (1) 7/16-14 x 1" hex head bolt and 7/16-14 lock nut as shown in figure 13.1. Tighten mounting hardware to 50 ft.-lbs. (67.8 N-m). (**Figure 13.3**)
 - 13.4 Repeat step 13.3 for the Seat belt on the passenger side.
 - 13.5 Attach mounting bracket through large hole in lower rear panel on driver's side using (1) 7/16-14 x 1", (2) 7/16" flat washer, (1) 9SB3 fender washer, and (1) 7/16-14 lock nut. Tighten mounting hardware to 50 ft-lb (67.8 N-m). (**Figure 13.5**)
 - 13.6 Secure receiver latch to mounting bracket (9SB2) with (1) 7/16-14 x 1" hex head bolt and (1) 7/16-14 lock nut. Tighten hardware to 50 ft.-lbs. (67.8 N-m). (**Figure 13.6**)
- NOTE: Be sure that orientation of receiver latch is so the button is closest to the center of the cab.
- 13.7 Repeat steps 13.5 and 13.6 for passenger side receiver latch.

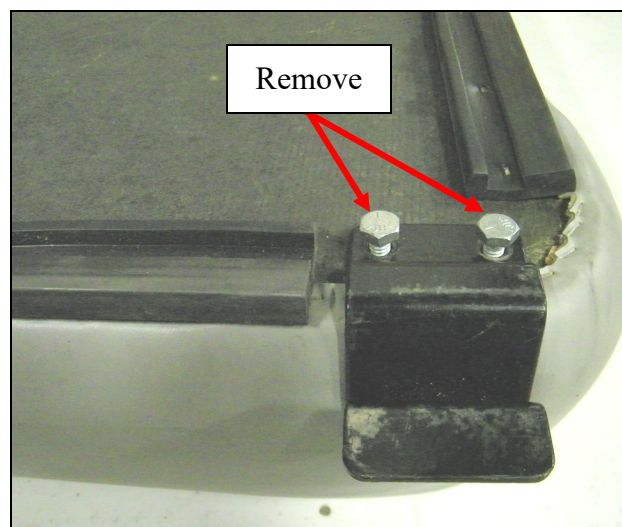


Fig. 13.1: Seat Base

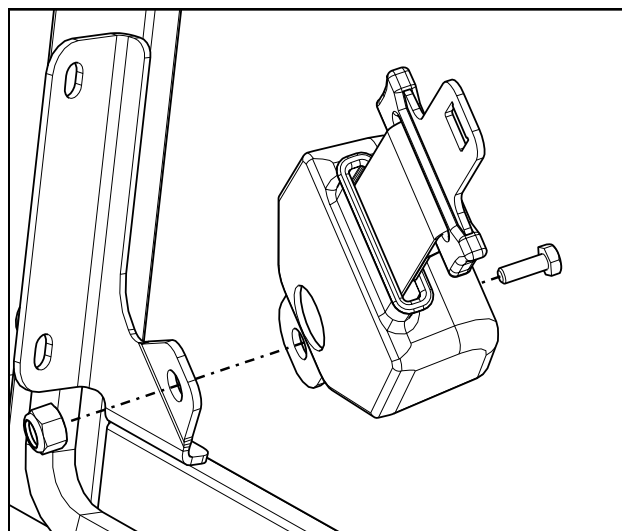


Fig. 13.3: Seat belt

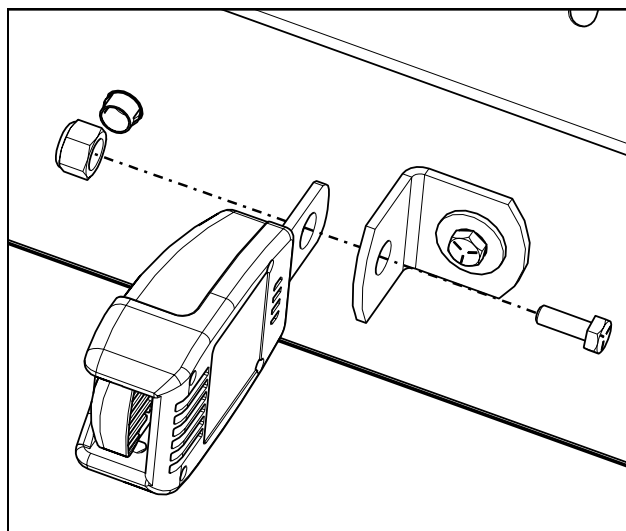


Fig. 13.6: Receiver Latch

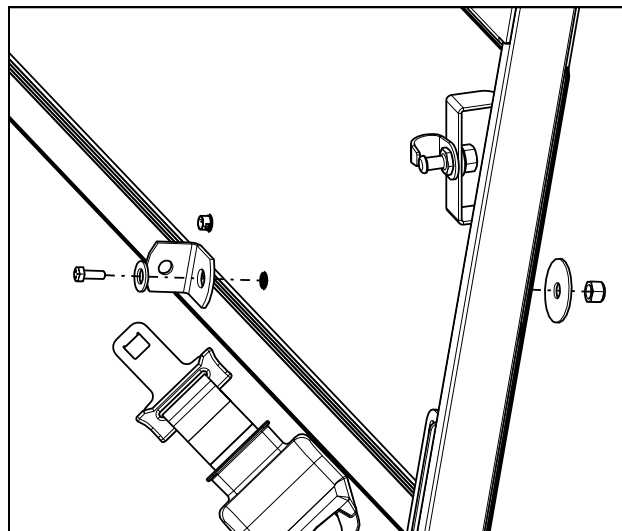


Fig. 13.5: Mounting bracket

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

14. DOOR INSTALLATION:

14.1 Apply a small amount of grease to both pins on each door.

14.2 Holding the door perpendicular to the vehicle, lower the door hinge pins into the hinge sleeves on the frame. **(Figure 14.1).**

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

14.3 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. Use a long straight edge to ensure that the hinges are in-line with each other.

14.4 With an assistant sitting inside the vehicle, tighten the (4) 1/4-20 hinge screws and nuts.

Note: See Door Troubleshooting section on page 17 for information about adjusting the door latches and hinges.

14.5 Open the door to slightly less than 90°. Install the Gas Shock onto the Ball Studs of the frame and door **(Figure 14.5)**. The cylinder end must be attached to the door as shown to ensure seals stay lubricated.

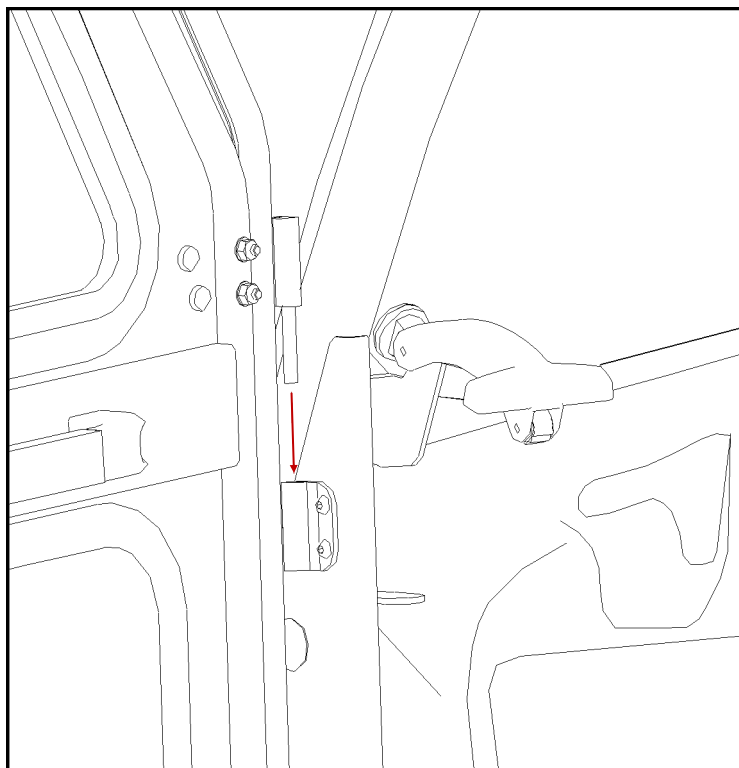


Figure 14.1: Door hinge pins into frame sleeves

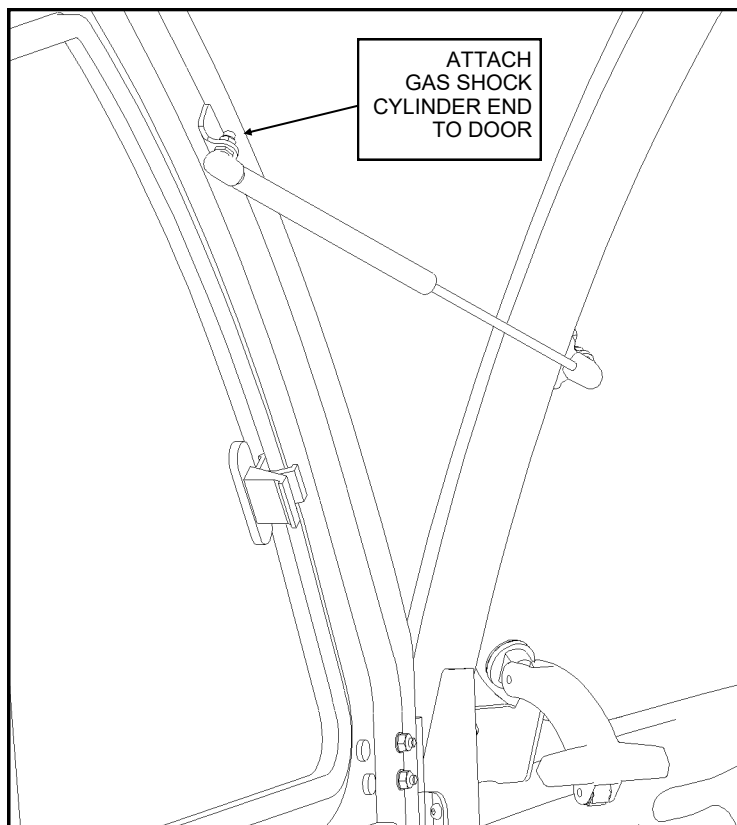
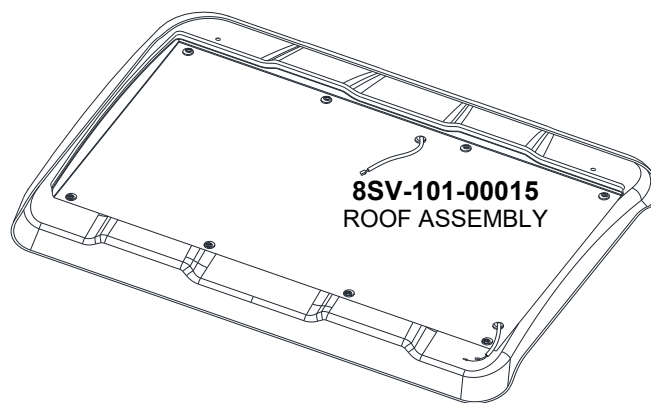
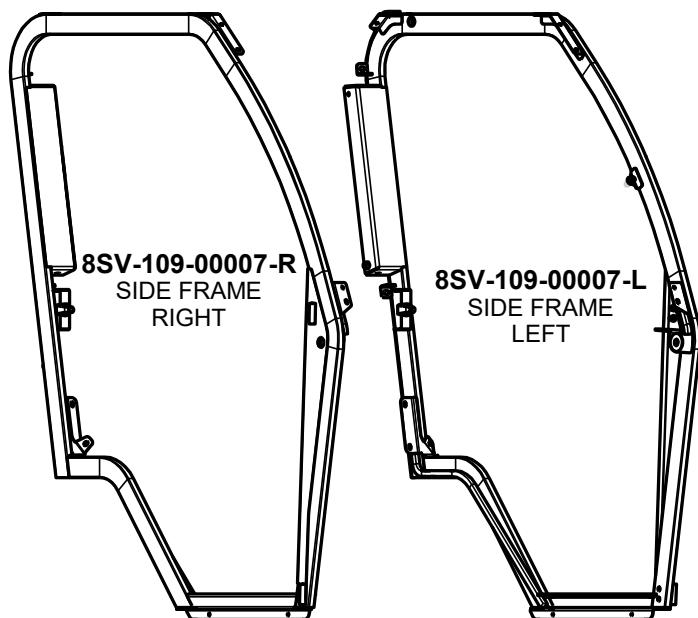


Figure 14.5: Door gas shock

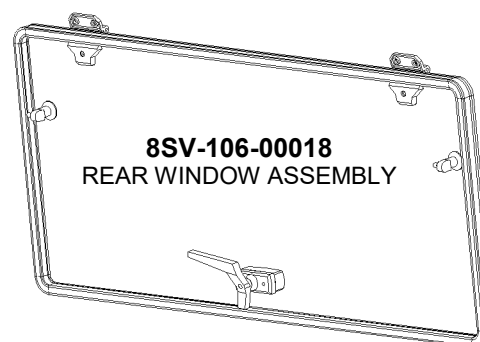
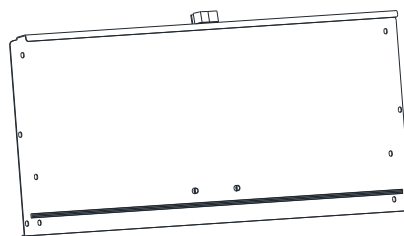
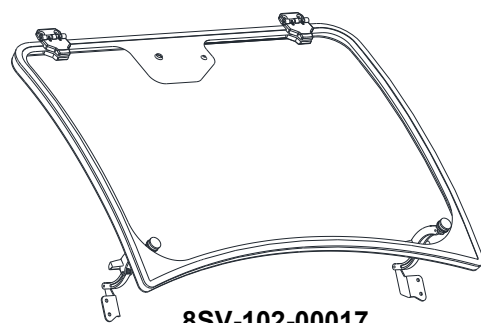
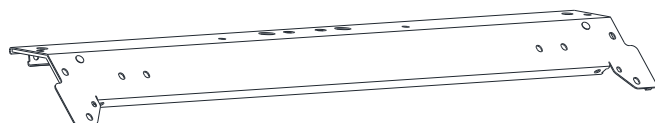
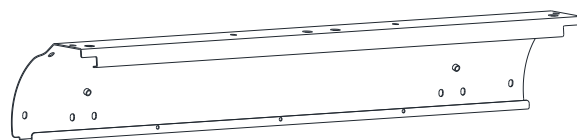
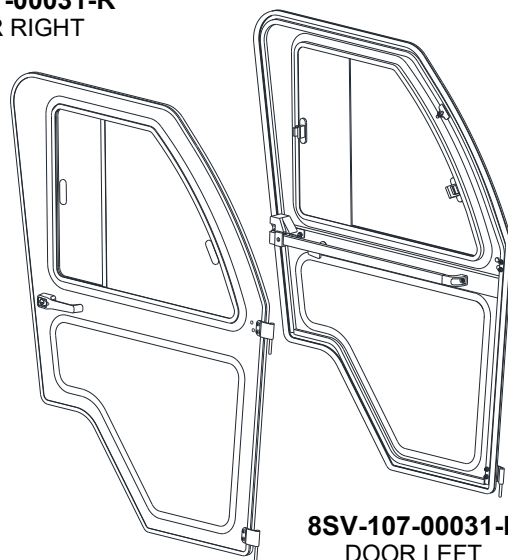
DOOR TROUBLESHOOTING

Condition	Possible Solution
<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 front of the handle. Move interior door latch forward or backward.
<ul style="list-style-type: none"> Door is not aligned to vehicle 	<ul style="list-style-type: none"> Loosen door hinges. With the door unlatched, lift up (or lower down) on the door handle until the door is aligned with the vehicle. Have an assistant sit inside the vehicle and determine the new height required for the striker pin. Have the assistant adjust the height of the striker pin. Re-latch the door and tighten all fasteners.

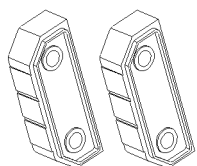
SERVICE PARTS:



8SV-107-00031-R
DOOR RIGHT



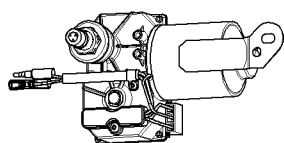
CONTINUED ON PAGE 3

SERVICE PARTS:

HINGE SPACER
BLOCKS (QTY:2)



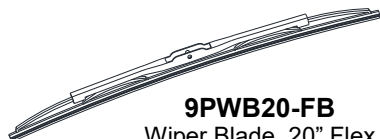
1" Dome Plugs
(QTY:2)



8SV-9PWM110-SA
Wiper Motor, 110°



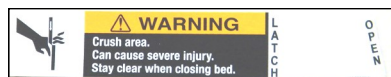
9PWA14/16
Wiper Arm, 14-16"



9PWB20-FB
Wiper Blade, 20" Flex



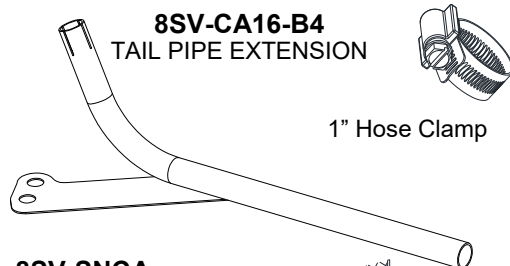
Arch Rubber
2 PCS, 4" Long, 2 PCS, 6" Long
9SV-PRO9-10 (10-Foot Length)



9SV-9DL-158
Tilt Bed Warning Decal



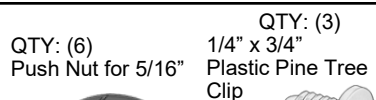
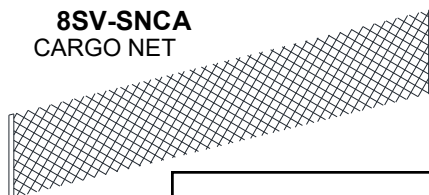
8" Wire tie
(QTY:2)



8SV-CA16-B4
TAIL PIPE EXTENSION

1" Hose Clamp

8SV-SNCA
CARGO NET

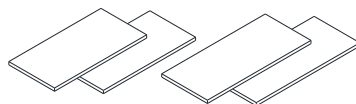


9SV-CACNHWK
CARGO NET HARDWARE KIT

1/2" x 9/16" Foam Rubber
2 PCS, 31" Long
9SV-PR43-4 (4-Foot Length)



1/2" V-Groove Weather Seal
2 PCS, 50" Long
9SV-PR20-10 (10-Foot Length)



2" Foam Tape
2 PCS, 4" Long,
2 PCS, 4-1/2" Long
9SV-PR35-5 (5-Foot Length)



9SV-9DL-186
Gas/Fire Warning Decal

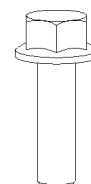
QTY: (2)
3/8-16 x 1-1/4"
Button Head Bolt



QTY: (4)
1/4-20 x 2-1/4"
Flanged Hex Bolt



QTY: (6)
5/16-18 x 1"
Flanged Hex Bolt



CA-HWK-A

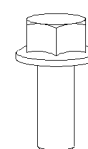
QTY: (2)
3/8" SAE Flat
Washer



QTY: (8)
1/4" x 1" OD
Fender Washer



QTY: (24)
5/16-18 x 3/4"
Flanged Hex



QTY: (18)
5/16-18 Flanged
Lock Nut



QTY: (4)
1/4-20 Flanged
Lock Nut

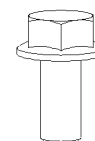


9SV-CAHWK
CARRYALL HARDWARE KIT

QTY: (4)
5/16-18 x 1-1/2"
Flat Head Bolt



QTY: (4)
5/16-18 x 3/4"
Flanged Hex



QTY: (8)
5/16-18 Flanged
Lock Nut

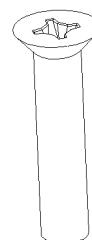


9SV-CAWSHWK
WINDSHIELD HARDWARE KIT

9SV-PWKHB

Glass Mounting Kit for Wiper Systems
(See IM-9PWK for contents)

QTY: (4)
5/16-18 x 1-1/2"
Flat Head Bolt

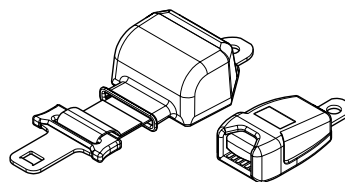


QTY: (4)
5/16-18 Flanged
Lock Nut

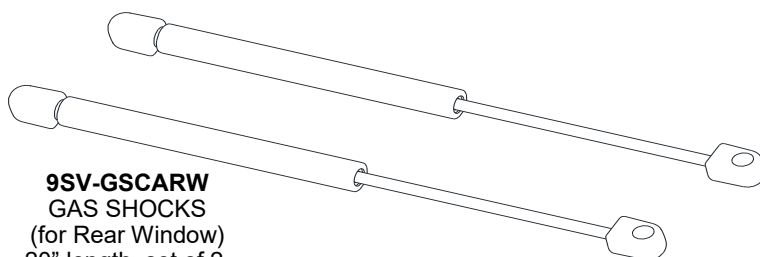
9SV-HWK-00042
REAR WINDOW HARDWARE KIT

ADDITIONAL SERVICE PARTS:

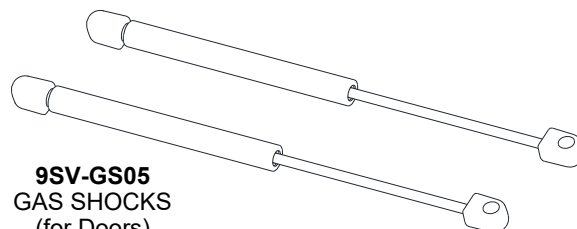
- **9SV-HWS** Glass Hinge Kit with bushing and spacer blocks, (set of 2)
- **8SV-CA10-B4** Windshield Latch & Bracket Assembly, Single Post (set of one left and one right)
- **9SV-GS02A** Ball Studs, 10mm (bag of 10)
- **9SV-DSTRH** Door Striker hardware
- **9SV-WH-00044** Frame Wire Harness
- **9SV-WH-00045** Wiper Wire Harness
- **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
- **8SV-CA01P** Plastic Roof Panel
- **8SV-CA01M-B4** Metal Roof Panel
- **9SV-WL2** Fully Opening Glass Latch Kit with bushing and spacer blocks, set of left/right
- **9SV-GSM** Gas Shock Mount for Glass, set of 2
- **9SV-HSLP** Hinge Set with 1 each left and right hinge pins and 2 sleeves
- **9SV-OHRLCC** Outer Door Handle, set of 2
- **9SV-DL02** Door Latch kit, non-locking w/ grab handle (set of left/ right)
- **8SV-CA11-B4** Door Latch Mounts (set of left/right)
- **8SV-SWCAL** Sliding Window, Left, with rubber
- **8SV-SWCAR** Sliding Window, Right, with rubber
- **8SV-CADRLW** Lower Door Window with rubber
- **9SV-PR10-10** Window Mounting Rubber, 10-Foot Length
- **9SV-PR17-20** 3/4" Side Bulb Rubber 1/16" grip, 20-Foot Length
- **9SV-DP02** Dome Plug 1" (QTY 15)



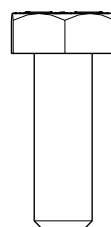
9SV-PR1
SEAT BELTS, RETRACTOR
& LATCH (1 OF EACH)



9SV-GSCARW
GAS SHOCKS
(for Rear Window)
20" length, set of 2,
180N and 45N



9SV-GS05
GAS SHOCKS
(for Doors)
14-1/2" length, set of 2,
both 100N



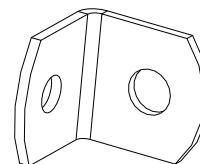
QTY: (6)
7/16-20x 1"
Hex Bolt



QTY: (6)
7/16-20
Lock Nut



QTY: (2)
7/16" SAE Flat
Washer



QTY: (2)
Seat Belt
Angle Bracket



QTY: (2)
7/16" x 2"OD
Seat Belt Washer

9SV-HWK-00039
SEAT BELT HARDWARE KIT



**ROLL-OVER
PROTECTIVE
STRUCTURE:**

47587415001
47587415002
47587415003

To maintain seat-belted occupant protection and ROPS certification: • Replace damaged ROPS, do not repair or reuse. • Any alteration of ROPS must be approved by manufacturer.

CERTIFICATION

ROPS - ISO 3471

CLUB CAR
CARRYALL MODELS
& MAXIMUM MASS:

300 - 864 kg

500 - 956 kg

550 - 1044 kg

700 - 1361 kg



CURTIS INDUSTRIES, LLC
WORCESTER, MA

9SV-9DL-213

ROPS Certification Decal








Torque Specs. for Structural Bolts

This page is for use primarily when dealing with high-strength vehicle fasteners such as ROPS hardware that hold the structure together for safety. This page can also be used for other solid metal-to-metal joints. Do not use these high torque values on any of the following applications involving: tubing, plastic, nylon or rubber washers, threaded inserts, etc.. See next page regarding less critical fasteners.

The values below apply to fasteners that are dry or lubricated with normal engine oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

Remember to always use the same grade or property class when replacing bolts.

IMPORTANT: on all PLATED GRADE 8 bolts, reduce torque 15% from listed bolt torque specification.

SAE Grade No.		2				5				8*			
Bolt head identification mark as per grade. NOTE: Manufacturing Marks Will Vary						  				  			
Bolt Size		TORQUE				TORQUE				TORQUE			
		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters	
Inches	Millimeters	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	6.35	5	6	7	8	9	11	12	15	12	15	16	20
5/16	7.94	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	9.53	20	23	27	31	35	42	48	57	45	54	61	73
7/16	11.11	30	35	41	47	54	64	73	87	70	84	95	114
1/2	12.70	45	52	61	70	80	96	109	130	110	132	149	179
9/16	14.29	65	75	88	102	110	132	149	179	160	192	217	260
5/8	15.88	95	105	129	142	150	180	203	244	220	264	298	358
3/4	19.05	150	185	203	251	270	324	366	439	380	456	515	618
7/8	22.23	160	200	217	271	400	480	542	651	600	720	814	976
1	25.40	250	300	339	406	580	696	787	944	900	1080	1220	1464
1-1/8	25.58	-	-	-	-	800	880	1085	1193	1280	1440	1736	1953
1-1/4	31.75	-	-	-	-	1120	1240	1519	1681	1820	2000	2468	2712
1-3/8	34.93	-	-	-	-	1460	1680	1980	2278	2380	2720	3227	3688
1-1/2	38.10	-	-	-	-	1940	2200	2631	2983	3160	3560	4285	4827

*Thick Nuts must be used with Grade 8 bolts

METRIC BOLT TORQUE SPECIFICATIONS



Size of Screw	Property Class	Course Thread			Fine Thread		
		Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	5.6	1.0	3.6-5.8	4.9-7.9	-	-	-
	8.8		5.8-9.4	7.9-12.7		-	-
	10.9		7.2-10	9.8-13.6		-	-
M8	5.6	1.25	7.2-14	9.8-19	1.0	12-17	16.3-23
	8.8		17-22	23-29.8		19-27	25.7-36.6
	10.9		20-26	27.1-35.2		22-31	29.8-42
M10	5.6	1.5	20-25	27.1-33.9	1.25	20-29	27.1-39.3
	8.8		34-40	46.1-54.2		35-47	47.4-63.7
	10.9		38-46	51.5-62.3		40-52	54.2-70.5
M12	5.6	1.75	28-34	37.9-46.1	1.25	31-41	42-55.6
	8.8		51-59	69.1-79.9		55-68	75.9-92.1
	10.9		57-66	77.2-89.4		62-75	84-101.6
M14	5.6	2.0	49-56	66.4-75.9	1.5	52-64	70.5-86.7
	8.8		81-93	109.8-126		90-106	122-143.6
	10.9		96-109	130.1-147.7		107-124	145-168
M16	5.6	2.0	67-77	90.8-104.3	1.5	69-83	93.6-112.5
	8.8		116-130	157.2-176.2		120-138	162.6-187
	10.9		129-145	174.8-196.5		140-158	189.7-214.1
M18	5.6	2.0	88-100	119.2-136	1.5	100-117	136-158.5
	8.8		150-168	203.3-227.6		177-199	239.8-269.6
	10.9		175-194	237.1-262.9		202-231	273.7-313
M20	5.6	2.5	108-130	146.3-176.2	1.5	132-150	178.9-203.3
	8.8		186-205	252-277.8		206-242	279.1-327.9
	10.9		213-249	288.6-337.4		246-289	333.3-391.6

Tightening of Non-Structural Bolts

For light or medium duty fastening, Curtis recommends using a general industry standard of tightening until snug and then giving an additional one quarter turn of the tool as deemed reasonable for the application (i.e.: at the installer's discretion).

If torque values are required, the examples listed below are intended as a reasonable reference for use in the majority of non-structural fastener applications such as: small diameter fasteners; bolts passing thru tubing, glass, plastic, nylon or rubber washers, threaded inserts, etc.

If more than one application below applies, use the lower torque value.

FASTENER SIZE:	FASTENER TYPE:	WASHER MATERIAL:	APPLICATION:	TORQUE (INCH-POUNDS) (±5)
#10	Machine Screws	-	in Nylon P-Clamps	20
#10	Machine Screws	-	Strobe Light (plastic base)	35
M5	Set Screws	-	Wiper Arm	20
1/4"	Cap Nut	-	Windshield Wiper	20
1/4"	Bolts	-	Tubing (5/8" to 3/4" wide)	132
1/4"	Bolts	Rubber	-	60
1/4"	Bolts	Nylon / Plastic	-	72
1/4"	Bolts	-	Factory Installed Threaded Inserts	132
5/16"	Bolts	-	Tubing (1" or wider)	60
5/16"	Flat Head Bolts	-	Plastic Windshield Hinge	79
5/16"	Bolts	Rubber	-	120
5/16"	Bolts	Nylon / Plastic	-	150
5/16"	Ball Studs	-	-	150
5/16"	Bolts	-	Factory Installed Threaded Inserts	240
3/8"	Bolts	-	Tubing	120
M12	Door Striker Pins	-	-	120