

John Deere Z994R (p/n: 1JDZ994RPR3)

Cab with A/C

(fits both 60" and 72" mower decks.

Does not fit with mulching or 54" deck)

Requires Premium Seat

While this cab kit was designed to fit on the vehicle listed above, manufacturing tolerances and vehicle assembly may affect cab fitment. It is the responsibility of the cab installer to check all vehicle pedals and levers for full functionality and, as required, adjust the cab fitment to prevent any interference of the cab components with the travel of pedals or levers.



Premium Cab Shown with Options

Available Options:

- 1. Side View Mirrors (P/N: 9PM5)
- 2. Switch Panel (P/N: 1JDZ994RCK) (req'd for following 2 items)
- 3. Front LED Work Lights (P/N: 1ZTRLK)
- 4. Front Wiper/Washer Kit (P/N: 1ZTRWK)

Approximate Installation Time *

Experienced Dealer Technician – 4 Hours

Average Dealer Technician - 6 Hours

Do-It-Yourself - 6-8 Hours

(*=Not including accessories)

Approximate Product Specifications

Floorboard to Roof Height: 59 inches

Weight: 332 lbs.

Cab Width: 50 inches

Register your new product quickly online at Curtiscab.com/product-registration/



Curtis encourages all customers to register their Curtis products. However, failure to do so will not diminish right to warranty. Curtis Industries does not sell or share your information with anyone else.

Download a digital copy of your installation instructions online at <u>Curtiscab.com/literature/</u>



Curtis strives to continuously improve our products, technical documentation, etc. Therefore, the installation manual for this product may have been updated after your product was packaged. The latest revision of the installation manual can always be found at the website above.

The contents of this envelope are the property of the owner. Leave with the owner when installation is complete.

Rev. B, 12/10/2024

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WARNINGS, TIPS, & REQUIRED TOOLS

Curtis cabs feature an assembly of parts designed for your vehicle which require adjustment and alignment of components to accommodate vehicle variations and provide proper weather protection. For accurate installation, proper operation, and years of satisfaction, please read and understand the installation and owner's manual fully prior to installing the cab.

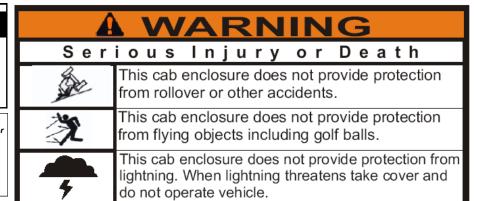
From all of us at Curtis, we thank you for choosing our product.



Curtis Cabs, blades and general accessories add additional weight to the base vehicle. All Curtis accessory weights are listed in product brochures. Deduct the accessory's total weight from the vehicle's rated capacity and never exceed the vehicle's rated capacity including driver and passenger.

WARNING Exposure to Carbon Monoxide can Cause illness, serious injury or death. Never operate vehicle if suspicious of Carbon Monox-

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.



California Health and Safety Proposition 65 Warning: This product may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

GENERAL INFORMATION BEFORE YOU START

HELPFUL HINTS:

- •Refer to parts diagram found in the service parts section of this manual to help identify parts during the assembly process.
- •To assist with the cab installation, leave all fasteners loose for later adjustment unless otherwise specified.
- •Read and understand all instructions before beginning.
- •Apply a silicone sealant to seal any minor gaps that may occur due to vehicle variations.
- •Use caution to avoid damaging the factory installed threaded inserts or weld nuts. Begin the thread engagement by hand to avoid or correct potential cross threading.
- •Make sure the areas where the supplied self-adhesive hook Velcro will be applied are clean and dry and at room temperature for best adhesion.
- •Before installing parts with factory installed rubber, make sure the rubber is fully installed onto the parts for proper fit and sealing.

TOOLS REQUIRED:

- •Set of Standard and Metric Sockets (3/8" + 1/2" Drive)
- ◆T25 Torx Bit
- ●3/8" + 1/2" Drive Ratchets and Long Drive Extension
- Set of Standard and Metric Open-End Wrenches
- •Set of Standard and Metric Allen Wrenches
- •#1, #2, and #3 Phillips Head Screwdrivers
- •Flat Head Screwdriver
- •Grease Pencil or Marker
- •Torque Wrench (3/8" and 1/2" Drive)
- •Rubber Mallet or Plastic Dead Blow Hammer
- •Bungee Cord or Twine
- Hoisting Strap
- Narrow Plastic Putty Knife
- Cut-Off Wheel or Jigsaw
- •3/4" Ratchet Wrench

- Drill/Driver
- •Center Punch
- ●9/32" Drill Bit
- •#2 and #3 Phillips Head Bit
- Utility Knife
- Pair of Scissors
- Shears
- Grease
- •Black Silicone Sealant
- Steel Straight Edge
- Belt tension gauge
- Angle Wire Cutters
- Needle Nose Pliers

STEP 1: (VEHICLE PREP)

- **1.1** Park vehicle in a location accessible by an overhead hoist.
- **1.2** Disconnect the negative battery terminal.
- **1.3** Remove screw and P-Clamp found on the engine holding wire harness in place. See Fig. 1.3.

Tools required

13mm socket

1.4 Remove cover and grille from vehicle. Set aside grille for later re-work and keep all removed mounting hardware . See Fig. 1.4.

Tools required

T25 Torx Bit

1.5 Per Figure 1.5, cut off the right flange of grille at marked edge. Apply touch-up paint to the cut edges.

Tools required

Cut-Off Wheel or Jigsaw

1.6 Remove right fender.

Remove sleeve and retainer and set aside for later re-installation. Remove bracket and M8X1.25 Lock Nut. See Figures 1.4 & 1.6

Remove Torx fasteners around instrument panel.

Remove two fasteners securing the bottom of the fender.

Tools required

T25 Torx Bit 10mm socket or wrench 13mm socket and wrench

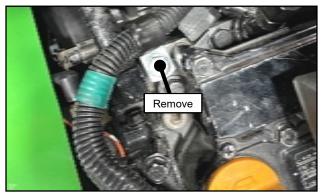


Fig. 1.3 (Remove Screw and P-Clamp)



Fig. 1.4 (Remove Cover and Grille)

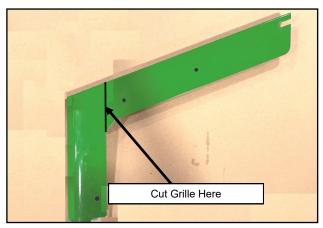


Fig. 1.5 (Cut Right Flange of Grille off)

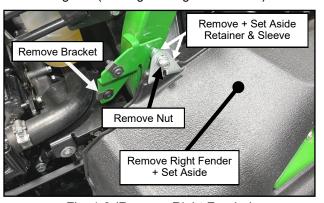


Fig. 1.6 (Remove Right Fender)

STEP 1: (VEHICLE PREP CONT'D.)

1.7 Loosen alternator and remove OEM pulley and spacer.

Install double V-Belt Pulley, per Fig 1.7. Retension belt, apply finger pressure to the belt approximately halfway between the alternator and water pump pulleys. Belt should deflect between 3/8"-1/2". Adjust if too tight or too loose.

Tools required

24mm socket 13mm socket or wrench 15mm socket or wrench

1.8 Loosen the (2) hose clamps found on the hose connecting the engine to the air cleaner. Next, remove the air cleaner and (2) mounting screws/ nuts from the mounting bracket. Set aside hose, air cleaner and hardware for later re-installation. See Figure 1.8.

Assembly Tip: For easier removal of air cleaner and later install, remove Cover found over the radiator

CAUTION!: DO NOT RUN THE VEHICLE UNTIL STEP 2.38.

Tools required

13mm socket or wrench 5/16" socket or wrench

1.9 Remove cover from 2-pin connector found on right side of vehicle. Next, cut wire tie and ensure connector is accessible. See Figure 1.9.

Tools required

Angle Wire Cutters

1.10 Install spacer on outside of compressor mounting bracket as shown on Fig 1.10. Use hardware listed below.

Hardware Used

1/4-20X1" Button Head Cap Screw 1 1/4-20 Flange Lock Nut 1

Tools required

5/32" Allen Wrench 7/16" Socket or Wrench

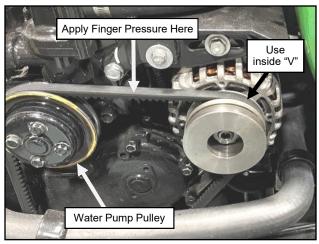


Fig. 1.7 (Install Double V-Pulley)

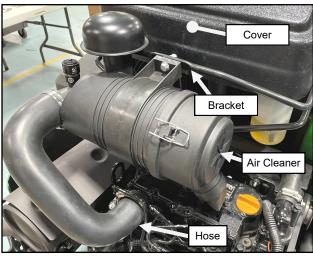


Fig. 1.8 (Remove Hose and Air Cleaner)

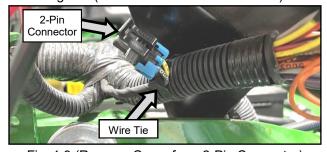


Fig. 1.9 (Remove Cover from 2-Pin Connector)

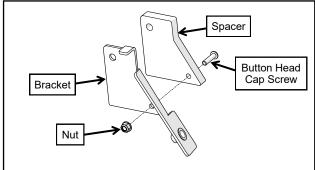


Fig. 1.10 (Install Spacer to Bracket)

STEP 1: (VEHICLE PREP CONT'D.)

1.11 Install Bracket and Spacer assembly from Step 1.10, on the outside of the right R.O.P.S. as well as the sleeve and retainer with new M8X1.25 Nut per fig 1.11. Leave hardware loose.

Hardware Used M8X1.25 Lock Nut

Qty 1

Tools required

13mm socket and wrench

1.12 Re-install right fender removed from step 1.4. At this time, leave hardware installed on step 1.11 loose. See Figure 1.12.

Tools required

T25 Torx Bit 10mm socket or wrench 13mm socket and wrench

1.13 Remove and set aside footrests (this includes bolts, fender washers, and nuts). Next, remove M10 Carriage bolt and nut found below brake pedal. See Fig. 1.13.

Tools required

13mm socket and wrench 15mm socket

1.14 Remove (2) M10 lock nuts and washers from the left side of the vehicle's caster arm per Fig. 1.14a. Install front mount using the recently removed M10 lock nut. Leave mounts loose per Fig. 1.14b. Repeat on right side of vehicle.

Tools required

18mm wrench 19mm socket

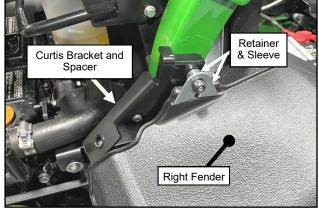


Fig. 1.11 (Install Bracket & Spacer)



Fig. 1.12 (Re-Install Right Fender)

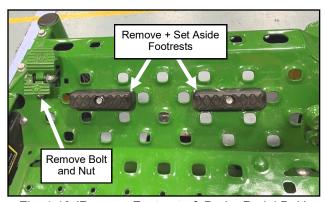


Fig. 1.13 (Remove Footrests & Brake Pedal Bolt)



Fig. 1.14b (Install Front Mount, Left Side)

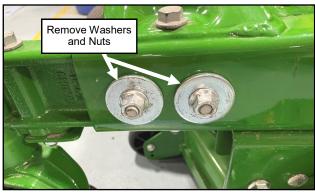


Fig. 1.14a (Remove M12 Washers and Nuts)

STEP 1: (VEHICLE PREP CONT'D.)

1.15 Remove ballast box from shipping pallet. Next, install ballast box on the font edge, of the vehicle. Install top bolts first into the vehicle's floorboard (do not fully tighten). Place backing plate between the underside of the floorboard and locking nuts. Next, install front lower carriage bolts from inside the vehicle floorboard outwards to the front of the vehicle. To tighten down the lock nuts, you will need a 3/4" rachet wrench to access the nuts found on the inside of the ballast box. Fully tighten the front bolts and then the top bolts. See Figures 1.15a and 1.15b.

Hardware Used	<u>Qty</u>
1/2-13X1-1/4" Carriage Bolt	4
1/2-13 Flange Lock Nut	4

Tools required

3/4" Ratchet Wrench 3/4" Socket or Wrench

1.16 Place the footrest lip floormat on the vehicle. Place floormat material found on the lower right and left into the sides of the vehicle frame. Install 5/16" hardware into square hole to the right of the pedal. Next, install 3/8" hardware below the pedal making sure 3/8" washers are wedged between the vehicle and clipped washer. Re-install the vehicle footrests. Now fully tighten hardware. See Figures 1.16a and 1.16b.

Hardware Used	Qty
3/8-16X1-1/2" Flange Hex Screw	1
3/8" Clipped Washer (in Hardware Box)	1
3/8" Washer	2
3/8-16 Flange Lock Nut	1
5/16-18X1" Flange Hex Screw	1
5/16" Fender Washer	1
5/16-18 Flange Lock Nut	1

Tools required

13mm socket and wrench 1/2" socket and wrench 9/16" socket and wrench

1.17 Install the footrest floormat making sure the rubber is on the top surface (foam on bottom). Push the extra material into the back edge and sides to fully seal the floorboard. See Fig. 1.17.

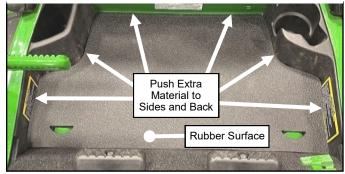


Fig. 1.17 (Install Footrest Floormat)

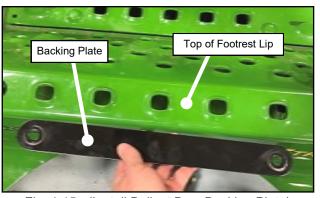


Fig. 1.15a (Install Ballast Box, Backing Plate)

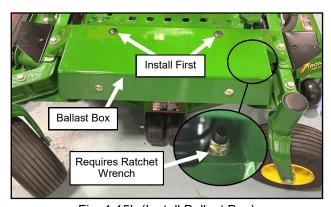


Fig. 1.15b (Install Ballast Box)

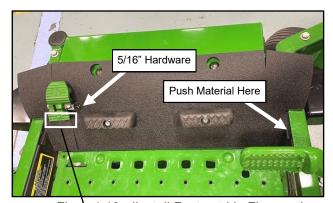


Fig. \ 1.16a (Install Footrest Lip Floormat)

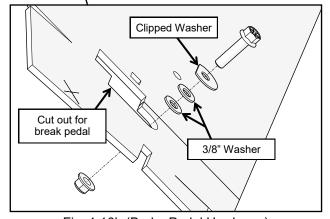


Fig. 1.16b (Brake Pedal Hardware)

STEP 1: (VEHICLE PREP CONT'D.)

- 1.18 Tilt the seat forward.
- **1.19** Disconnect 2-pin connector from the underside of the seat.

Remove harness clip from the seat frame.

Remove/set aside spring lock pin from prop rod.

While holding the seat, remove the prop rod from the seat frame and set the seat back down. See Figure 1.19.

Tools required

Needle Nose Pliers

1.20 Remove and save seat frame hinge bolts and nuts per Fig. 1.20. Remove seat from vehicle.

Tools required

13mm socket and wrench

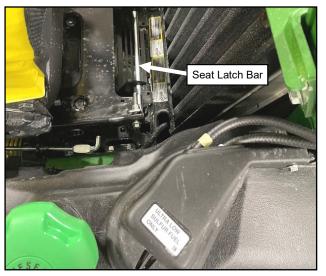


Fig. 1.18 (Tilt Seat Forward)

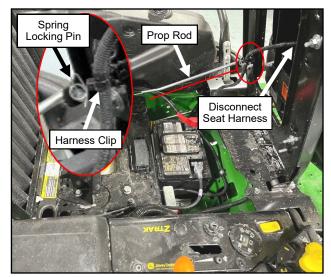


Fig. 1.19 (Disconnect Seat Connector & Prop Rod)



Fig. 1.20 (Remove Front Hinge Bolts)

STEP 1: (VEHICLE PREP CONT'D.)

1.21 Apply 5/8" wide P.S.A. Velcro to the bottom edge of Arm Restrictors. See Fig. 1.21.

Tools required

Scissors

1.22 Install the arm restrictors using 1/4-20 hardware, making sure the locating pin is on the front hole as shown in Figure 1.22.

Hardware Used	Qty
1/4-20X3/4" Flange Hex Screw	2
1/4-20 Flange Lock Nut	2

Tools required 3/8" socket

7/16" wrench

1.23 Install (13) pieces of Velcro as shown in Figure 1.23.

Tools required

Scissors

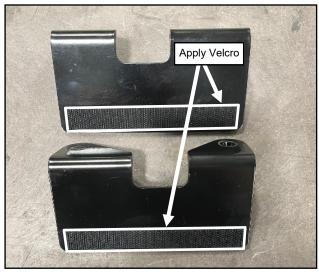


Fig. 1.21 (Install Velcro to Arm Restrictors)

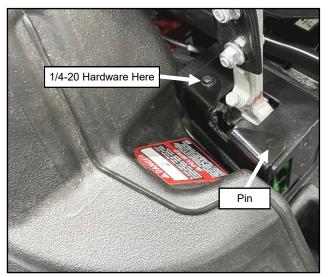


Fig. 1.22 (Install Arm Restrictors, Right)

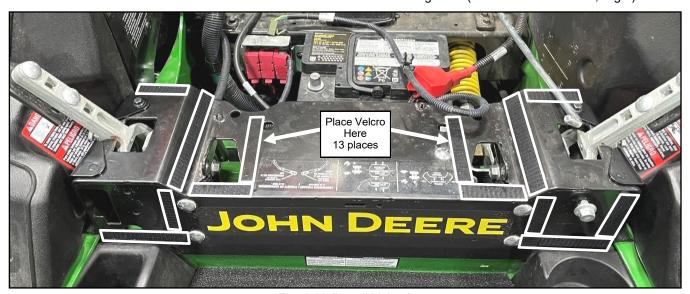


Fig. 1.23 (Install Velcro)

STEP 1: (VEHICLE PREP CONT'D.)

1.24 Remove and set aside the (4) nuts and washers holding the seat frame to the seat adjuster rails. Next, remove frame from the seat. See Figure 1.24.

Tools required

13mm deep socket

1.25 Install (4) Clip-On Nuts using a socket to push them onto the screws going through the (2) adjuster rails. See Figure 1.25 with detail.

Hardware Used

M8X1.25 Clip-On Nut

Qty

Tools required

7/16" deep socket Socket wrench extension

1.26 Place supplied seat pan assembly onto seat. Next, re-install seat frame onto the seat pan. Loosely install OEM washers and nuts back on. Fully tighten left side hardware first followed by the right side. See Figures 1.24 and 1.26.

Tools required

13mm deep socket

1.27 Install supplied release lever by pushing through the underside of seat pan's rubber filler. Placing the hole of the lever onto the seat frame's latch bar mounting bolt and the fork of the lever onto the latch bar. Install lock nut onto the mounting bolt. See Figures 1.26 and 1.27.

Hardware Used

M10X1.5 Hex Lock Nut

Qty

Tools required

17mm wrench and socket



Fig. 1.28 (Install Release Lever)

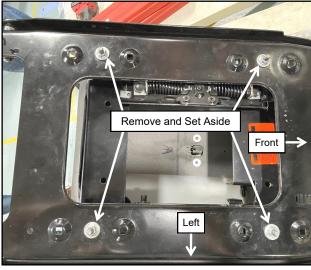


Fig. 1.24 (Remove Seat Frame)

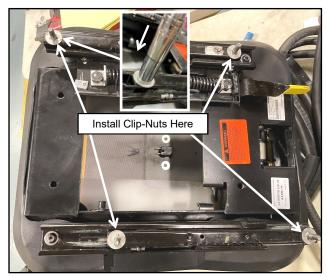


Fig. 1.25 (Install (4) Clip-On Nuts)

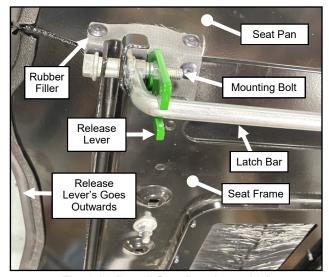


Fig. 1.26 (Install Seat Pan Assembly)

STEP 1: (VEHICLE PREP CONT'D.)

1.28 Re-install seat with seat pan assembly back onto the vehicle by re-installing OEM hinge bolts and nuts per figure 1.28.

Tools required

13mm socket and wrench

1.29 Tilt the seat forward, while holding the seat, reinstall the prop rod to the seat frame and re-install spring lock pin. Next, reconnect 2-pin connector from the underside of the seat and re-install the harness clip to the seat frame. Lower the seat back down. See Figure 1.29.

Tools required

Needle Nose Pliers

1.30 Install left and right R.O.P.S. brackets onto the vehicle's R.O.P.S. See Figures 1.30a and 1.30b.

Hardware Used	Qty
5/8-11X1-1/4" Hex Flange Bolt	4
5/8-11 Flange Hex Lock Nut	4

Tools required

15/16" wrench and socket



Fig. 1.28 (Re-Install Seat with Seat Pan)

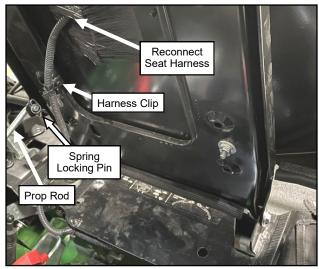


Fig. 1.29 (Reconnect Seat Connector & Prop Rod)



Fig. 1.30b (Install R.O.P.S bracket, right)



Fig. 1.30a (Install R.O.P.S bracket, left)

STEP 1: (VEHICLE PREP CONT'D.)

1.31 Remove compressor (with guard and tensioner) from the compressor and tensioner mounts and keep the three 3/8" screws and three 3/8" nuts with compressor. Support the compressor using a bungee cord or rope. Do not ever use the hoses to support the compressor or damage may occur. Next, remove compressor and tensioner mounts from rear shipping bracket and discard the three 5/16" screws and three 5/16" nuts. See Figure 1.31.

Tools required

1/2" socket and wrench 9/16" socket or wrench 5/16" Allen wrench

- **1.32** Disconnect the white wire connectors shown in Figure 1.32, and pull the harness out from behind the fuel hardlines.
- **1.33** Re-route the wire harness between the fuel hardlines as shown in Figures 1.33a and 1.33b and reconnect the white connectors.

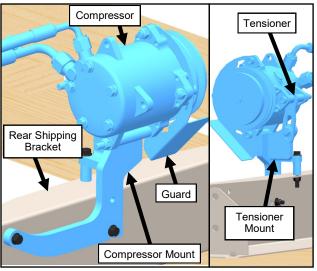


Fig. 1.31 (Remove Compressor Mount)



Fig. 1.32 (Disconnect White Connectors)

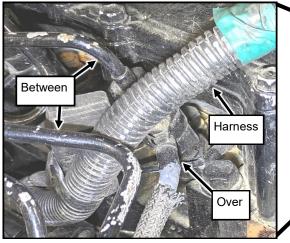


Fig. 1.33b (Route Wires)

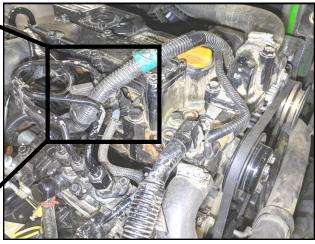


Fig. 1.33a (Route Wires)

STEP 1: (VEHICLE PREP CONT'D.)

- **1.34** Unwrap the loom tape next to the water temperature sensor wires. Move the exit point of the wires about 2" forward from where the dashed lines show in figure 1.34. Tape the wires in place and add the supplied wire loom.
- 1.35 With a fender washer and supplied red Loctite, partially thread in an M8x1.25 x 25 hex screw into the lower hole shown in Figure 1.35. The screw and washer should be far enough out so the compressor bracket can slide on.

Hardware Used	Qty
M8x1.25 x 25 flanged hex screw	1
M8 fender washer (15/16" OD)	1

Tools required

13mm wrench or socket

1.36 Snake the compressor bracket arm between the hardlines and the engine and pivot down onto the previously installed screw. See Figure 1.36.

Ensure washer is under the head of the bolt and not between the bracket and engine block.

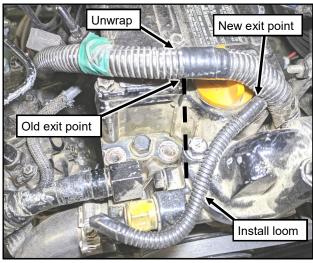


Fig. 1.34 (Move and wrap water temp. sensor wires)

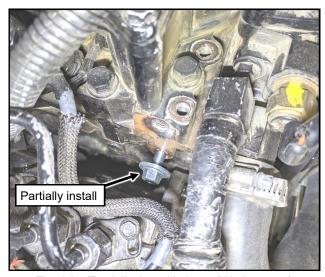


Fig. 1.35 (Partially thread in lower M8x25 screw)

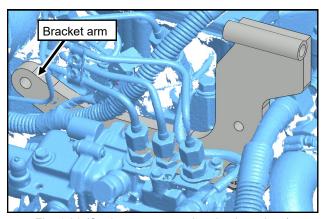


Fig. 1.36 (Snake compressor bracket into place)

STEP 1: (VEHICLE PREP CONT'D.)

1.37 With a fender washer and supplied red Loctite, loosely thread in an M8x1.25 x 25 hex screw into the hole shown in Figure 1.37.

Hardware UsedQtyM8x1.25 x 25 flanged hex screw1M8 fender washer (15/16" OD)1

Tools required

13mm wrench or socket

1.38 With a fender washer and supplied red Loctite, loosely thread in an M8x1.25 x 18 socket head screw into the hole shown in Figure 1.38.

Hardware UsedQtyM8x1.25 x 18 socket head screw1M8 fender washer (15/16" OD)1

Tools required

6mm Allen wrench

1.39 With 5/16" washers and supplied red Loctite, loosely thread in two M8x1.25 x 50 hex screws into the tensioner mount holes shown in Figure 1.39.

Hardware UsedQtyM8x1.25 x 50 flanged hex screws25/16 washer (11/16" OD)2

Tools required

13mm wrench or socket

1.40 Torque all three screws on the compressor mount to 19 ft-lbs (26 N-M). Using a square, adjust the tensioner mount to be perpendicular to the compressor mount and torque the two tensioner mount screws to 19 ft-lbs (26 N-M). See Figure 1.4.

Tools required

13mm wrench or socket 6mm Allen wrench bit Torque Wrench Square

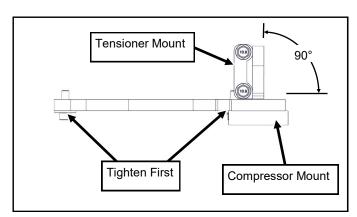


Fig. 1.4 (Torque Mounting Screws)

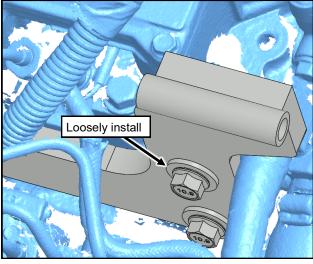


Fig. 1.37 (Loosely install second M8x1.25 x 25 screw)

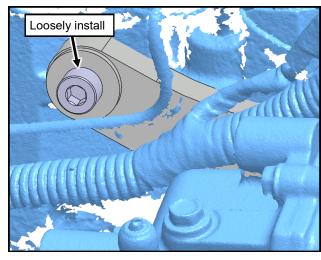


Fig. 1.38 (Loosely install M8x1.25 x 25 socket head screw)

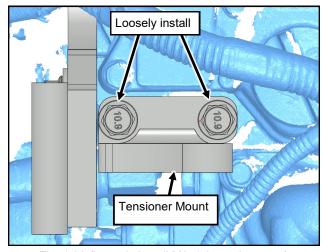


Fig. 1.39 (Loosely install M8x1.25 x 50 screws)

STEP 1: (VEHICLE PREP CONT'D.)

1.41 Clean the vehicle frame rails on either side of the floorboard. Apply P.S.A. D-Rubber (9PR09) to the top surface of the frame rails. Apply along the inner edge of the surface as shown in Figure 1.41. Repeat for left side.

Tools required Scissors

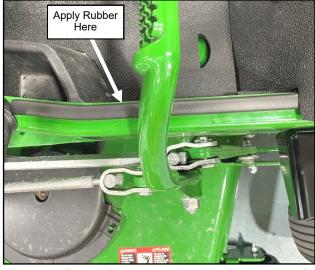


Fig. 1.41 (Install Rubber to Vehicle's Frame, Right)

STEP 2: (CAB INSTALLATION)

- **2.1** Remove the doors from the cabin and set aside carefully to prevent scratching the panels.
- 2.2 Lower the mower deck to 2"
- **2.3** Position a lifting strap so that it sits roughly 7-1/2" behind the gas shock mount as shown in Figure 2.3.
- 2.4 Put tension on the lifting strap with the overhead hoist. Remove and discard the (4) bolts holding the rear of the cab down to the rear shipping bracket (located inside the cab) as well as the (4) bolts holding the floorboards to the front shipping brackets. See Figures 2.4a, b, and c.

Tools required

1/2" wrench or socket

- 2.5 With assistance, lift the cabin and position over the vehicle. Be sure to support the A/C compressor so that it never hangs from the hoses.
- 2.6 Lower the cab slowly onto the vehicle being careful to not scratch the fenders with the rear edge of the floorboards.



Fig. 2.3 (Position Lifting Strap)



Fig. 2.4a (Tension Lifting Strap)

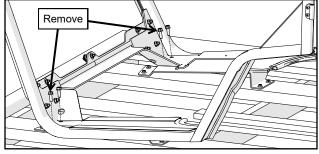


Fig. 2.4b (Remove Front Shipping Bracket Bolts)

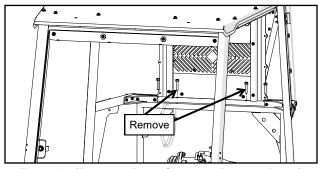


Fig. 2.4c (Remove Rear Shipping Bracket Bolts)

STEP 2: (CAB INSTALLATION)

2.7 Install the back of the cab to R.O.P.S mounts per Figure 2.7.

<u>Hardware Used</u>	Qty
5/16-18X1-3/4" Flange Hex Screw	4
5/16-18 Flange Lock Nut	4

Tools required

1/2" wrench and socket

2.8 Install the front of the cab to front mounts per Figure 2.8.

Hardware Used	<u>Qty</u>
5/16-18X1" Flange Hex Screw	4
5/16-18 Flange Lock Nut	4

Tools required

1/2" wrench and socket

2.9 Fully tighten front mount hardware going into the vehicle's side frame. Torque to 110 ft-lbs. (150 Nm). See Figure 2.9.

Tools required

18mm wrench 18mm socket Torque Wrench

2.10 Install one of the supplied brushes to the underside of the right cab floorboard.

Next, install a second brush along with the supplied floorboard insert on the inboard side of the deck lift lever. See Figure 2.10.

Hardware Used	<u>Qty</u>
#8-32 X5/8" Pan Head Screw	6
#8-32 Flange Lock Nut	6

Tools required

11/32" wrench or socket #2 Phillips bit or screw driver

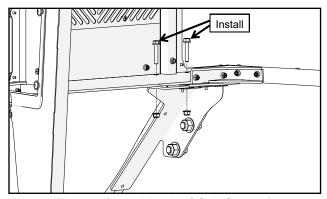


Fig. 2.7 (Install Back of Cab Screws)

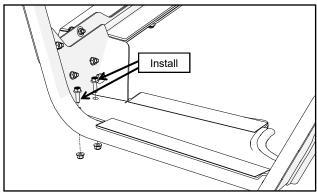


Fig. 2.8 (Install Front Mount Screws)



Fig. 2.9 (Tighten Vehicle Frame Bolts, Left)

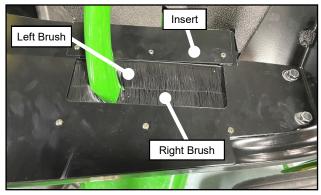


Fig. 2.10 (Install Brushes and Insert, Right)

STEP 2: (CAB INSTALLATION)

2.11 To install the compressor, run hoses from the left to right side of the vehicle over the engine. Install the preassembled compressor to the compressor and tensioner mounts. See Figures 2.11a and 2.11b. Leave hardware loose.

Hardware Used	<u>Qty</u>
3/8-16 x 1-1/4" Flange Hex Screw	1
3/8-16 x 4-1/2" Socket Head Cap Screw	1
3/8-16 Flange Lock Nuts	2

Tools required

9/16" wrench and socket 5/16" Allen wrench

- 2.12 Install V-Belt onto the outer "V" groove of the compressor and install the other end onto the double pulley found on the alternator. See Figure 2.12.
- 2.13 Tension belt by placing a straight edge tangent to compressor pulley and alternator pulley. Place belt tension tester in the center and perpendicular to the belt between the (2) pulleys and next to the straight edge. Push the tensioner towards the theoretical center making sure that a deflection force of 3.1 lbs. gets 0.2 inches of belt deflection at the center of the belt. See Figures 2.12 and 2.13. Tighten hardware and verify correct tension.

Tools required

9/16" wrench and socket 5/16" Allen wrench Belt tensioner tester Straight edge

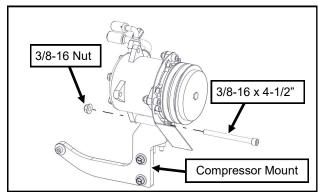


Fig. 2.11a (Install compressor)

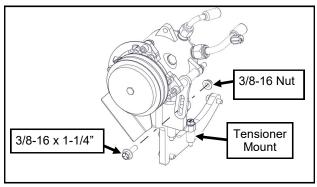


Fig. 2.11b (Install compressor)

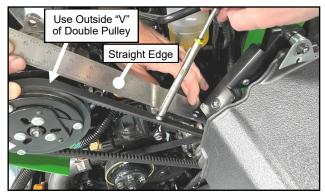
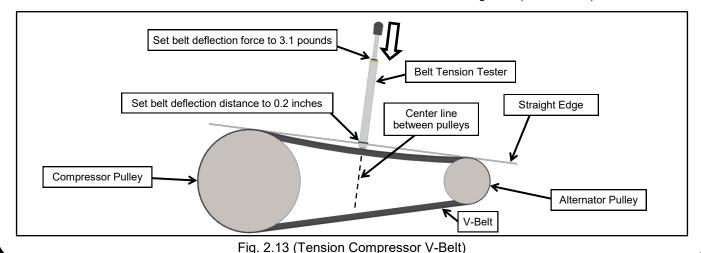


Fig. 2.12 (Install V-Belt)



STEP 2: (CAB INSTALLATION)

- **2.14** Slide the seat rearward then tilt seat forward.
- **2.15** Install right filler onto the cab from the outside using provided hardware per Figure 2.15. Note: side screws have lock nuts on the inside.

Hardware Used	Qty
5/16-18X3/4" Flange Hex Screw	4
5/16-18 Flange Lock Nut	2

Tools required

1/2" wrench and socket

2.16 Install left filler onto the cab from the inside using provided hardware per Figures 2.16a and b.

Hardware Used	Qty
5/16-18X3/4" Flange Hex Screw	5

Tools required

1/2" wrench and socket

2.17 Apply P.S.A. Velcro on the left fender up the left filler per Figure 2.17. Continue the Velcro on the lower edge of the window.

Tools required Scissors



Fig. 2.15 (Install Right Filler)

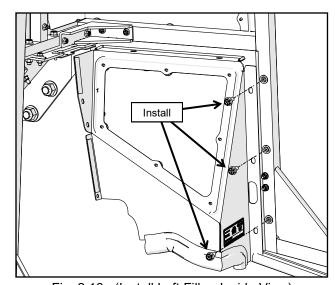


Fig. 2.16a (Install Left Filler, Inside View)

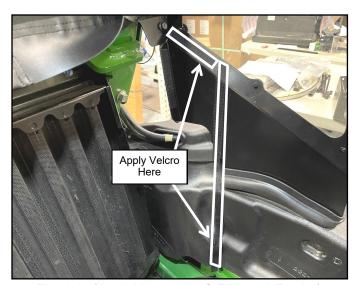


Fig. 2.17 (Apply Velcro to Left Filler and Fender)

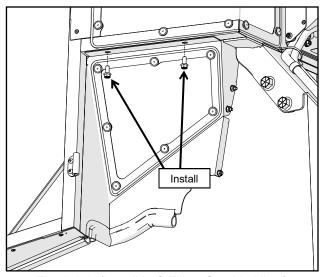


Fig. 2.16b (Install Left Filler, Outside View)

STEP 2: (CAB INSTALLATION)

2.18 Place the rear panel assembly onto the R.O.P.S. brackets. Apply pressure towards the AC Unit. Install the top horizonal screws first and then the (4) screws in two rear fillers. Attach to the previously installed Velcro. See Figure 2.18.

<u>Hardware Used</u>	Qty
1/4-20X5/8" Flange Hex Screw	4
1/4-20X3/4" Flange Hex Screw	2
1/4-20 Flange Lock Nut	6

Tools required

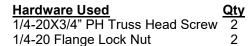
3/8" wrench or socket 7/16" wrench or socket

2.19 At the bottom of the left side rear panel assembly, there is a small piece of Velcro. Place a piece of P.S.A. Velcro onto the rear fender as shown in Figure 2.19. Attach lower corner of rear panel vinyl onto installed Velcro.

Tools required

Scissors

2.20 Once the rear panel's vinyl filler is fully installed onto the mating Velcro, install hardware through the Vinyl into the (2) fillers. See Figures 2.20a and b. Do not over tighten or vinyl will be damaged.



Tools required

#3 Phillips Head Screwdriver 7/16" wrench or socket

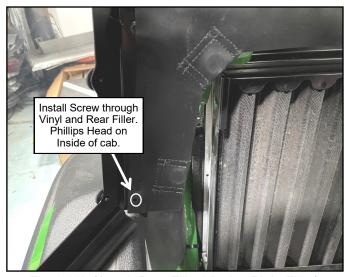


Fig. 2.20b (Attach Rear Filler Vinyl to Right Filler)

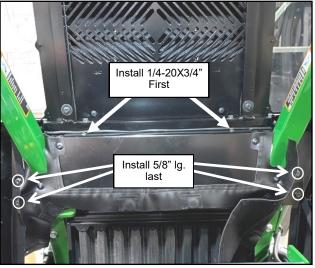


Fig. 2.18 (Install Rear Panel Assembly)

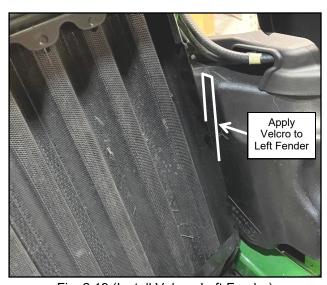


Fig. 2.19 (Install Velcro, Left Fender)

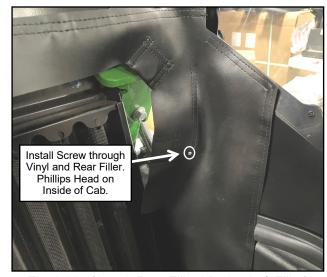


Fig. 2.20a (Attach Rear Filler Vinyl to Left Filler)

STEP 2: (CAB INSTALLATION)

2.21 Slide the supplied right hand drive handle boot down over the drive handles. (The right filler does not have the hole shown in Figure 2.22)

Press the sewn-on foam into the gap between the frame and fender and attach the boot to the pre-installed Velcro.

Move the drive handle forward and backwards as well as left to right to determine best spot for locating Velcro onto drive handles that will secure the top edge of the boot. Mark the top edge at the appropriate location. See Figure 2.21.

Slide the boot down the handle and apply Velcro around the handle below the mark.

Secure the top of the boot to the Velcro.

Tools required

Scissors Marker

2.22 Repeat installation for the left boot.

Slide the hole in the left boot over the head of the adjustment bolt as shown in Figure 2.22 upon installation.

Tools required

Scissors Marker



Fig. 2.21 (Loosely Install Drive Handle Filler, Right)

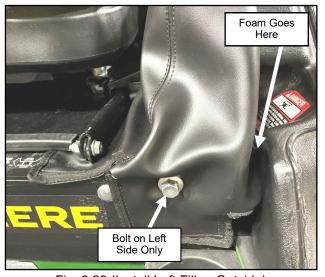


Fig. 2.22 (Install Left Filler, Outside)

STEP 2: (CAB INSTALLATION)

2.23 Remove the (2) clips found on the sides of the air cleaner mount and set aside. See Figure 2.23a. Rotate both the elbow that houses the "Air Restriction Indicator" as well as the body of the air cleaner in the mount roughly 180 degrees until it looks like Figure 2.23b.

Tools required

Flat Head Screw Driver

2.24 Per Figure 2.24, install relocation bracket making sure fender washers are placed between relocation bracket and vehicle's bracket.

Hardware Used	Qty
5/16-18X1" Flange Hex Screw	2
.349 X 1.129 Fender Washer	2
5/16-18 Flange Lock Nut	2

Tools required

1/2" wrench and socket

2.25 Re-install reconfigured air intake per Figure 2.25. Make sure air intake is pointed vertically. At that point, re-install clips into the air cleaner's mount removed on step 2.23. Fully tighten down hose clamps found on the engine and air cleaner. Make sure the extra part of the hose clamp located on engine is pointing down away from the fuel lines. If radiator cover was removed on step 1.8, re-install now.

Hardware Used

Use hardware set aside on step 1.8

Tools required

13mm wrench and socket



Fig. 2.25 (Install Reconfigured Air Cleaner)

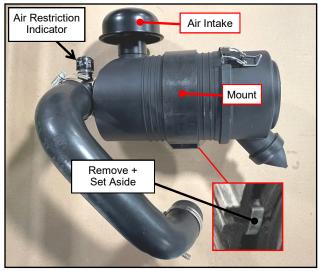


Fig. 2.23a (Reconfigure Air Cleaner, Stock)



Fig. 2.23b (Reconfigure Air Cleaner, New)

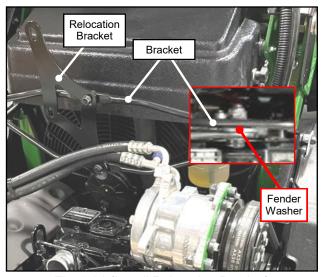


Fig. 2.24 (Install Relocation Bracket)

STEP 2: (CAB INSTALLATION)

2.26 Secure the larger AC hose and the wire harness to the ROPS brackets using p-clamps as shown in Figure 2.26.

Adjust hose and clamps so that the hoses are away from the hot muffler when p-clamps are tightened.

<u>Hardware Used</u>	<u>Qty</u>
1/4-20X1" Button Head Screw	3
1/4-20 Flange Lock Nut	3
3/4" P-Clamp	3
11" Heavy Duty Wire Ties	As Needed

Tools required

5/32" allen wrench 7/16" wrench or socket Angle Wire Cutters

2.27 Run drain hose for AC Unit down in front of the alternator and out the bottom of the vehicle. Keep hose away from moving components and hot engine parts. See Figures 2.27a, b, and c for routing recommendations. Use provided Wire Ties as needed.

<u>Hardware Used</u>	<u>Qty</u>
11" Heavy Duty Wire Ties	As Needed

Tools required Angle Wire Cutters

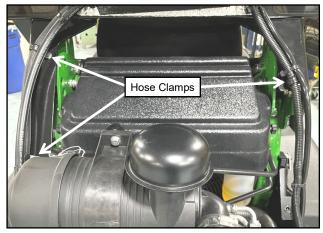


Fig. 2.26 (Install Hose Clamps on R.O.P.S Brackets)

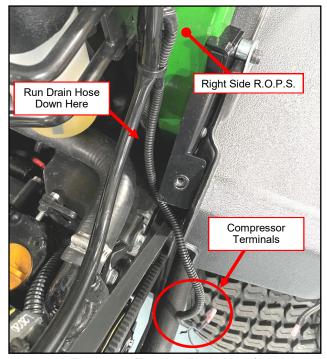


Fig. 2.27a (Routing Drain Hose)

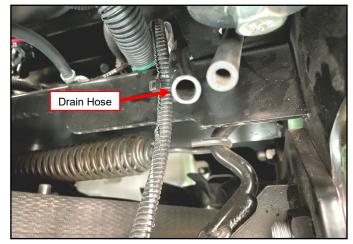


Fig. 2.27c (Drain Hose at Bottom of Vehicle)

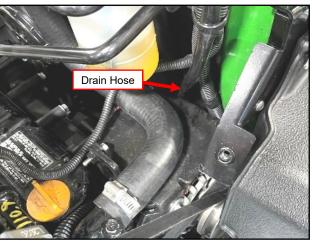


Fig. 2.27b (Drain Hose Between Radiator and R.O.P.S.)

STEP 2: (CAB INSTALLATION)

2.28 Per Figures 2.28a and b, run compressor part of the AC wire harness (ring and push-on terminals) to the compressor. Remove 3/8" Lock Nut and install ground ring terminal. Re-install 3/8" Lock Nut and connect the push-on terminal to terminal found on the compressor. Use supplied Wire Ties as need.

<u>Hardware Used</u>
11" Heavy Duty Wire Ties

As Needed

Tools required
9/16" wrench or socket
5/16" allen wrench
Angle Wire Cutters

2.29 Pass the AC Wire Harness between the Radiator and right R.O.P.S as shown in Figure 2.28a. Continue to run the harness down the inside of the right fender. Connecting the harness' 2-pin connector to the vehicle harness per Figure 2.29. Use supplied Wire Ties as needed.

<u>Hardware Used</u>
11" Heavy Duty Wire Ties
As Needed

Tools required
Angle Wire Cutters

2.30 Run the harness (fuse holder side) to the Positive Terminal on the Vehicle's battery per Figure 2.30a. Next, run the black wire ring terminal to the disconnected battery wire and install onto the ground lug. Reconnect lug onto the battery per Figure 2.30b.

Hardware UsedQty11" Heavy Duty Wire TiesAs Needed

Tools required
1/2" wrench or socket
Angle Wire Cutters



Fig. 2.30b (Run Harness to (-) Terminal on Battery)

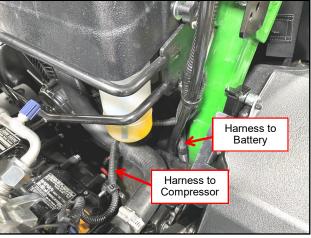


Fig. 2.28a (Routing AC Wire Harness)

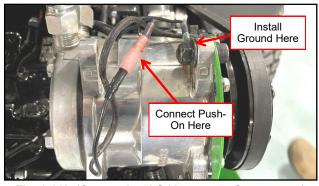


Fig. 2.28b (Connecting AC Harness to Compressor)



Fig. 2.29 (Run Harness on Inside of Right Fender)



Fig. 2.30a (Run Harness to (+) Terminal on Battery)

STEP 2: (CAB INSTALLATION)

2.31 Re-install the modified grille using (2) screws removed on step 1.4 to secure the left side. See Figure 2.31.

Hardware Used

Use hardware set aside on step 1.4

Tools required

T25 Torx Bit

2.32 Install Compressor Shroud onto right side of vehicle using (2) screws removed from step 1.4 and (1) 5/16-18 screw. See Figures 2.32a and b. Use the (3) holes found in the shroud as guides for drilling the grille shown on Figure 2.32a. Apply touch up paint to drilled holes.

Hardware Used

<u>Qty</u>

5/16-18X3/4" Flange Hex Screw 1
Use hardware set aside on step 1.4

Tools required

T25 Torx Bit 1/2" wrench or socket Center Drill 9/32" Drill Bit Drill

2.33 Per Figure 2.33, install hardware through shroud into grille.

Hardware Used

<u>Qty</u>

1/4-20X5/8" Flange Hex Screw 1/4-20 Flange Lock Nut

Tools required

3/8" wrench or socket 7/16" wrench or socket



Fig. 2.31 (Install Re-Worked Grille)

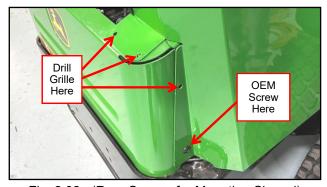


Fig. 2.32a (Rear Screws for Mounting Shroud)



Fig. 2.32b (Front Screws for Mounting Shroud)

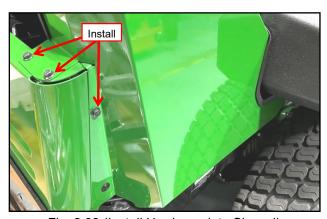


Fig. 2.33 (Install Hardware into Shroud)

STEP 2: (CAB INSTALLATION)

2.34 Per Figure 2.34, tighten hardware clamping the right fender. Making sure retainer sits in groove found in fender. Note: 5/16-18 screw may need to be adjusted so compressor shroud has proper fit with bracket.

Tools required

13mm wrench and socket 1/2" wrench or socket (if needed)

2.35 Using a narrow plastic putty knife, push bulb rubber down in areas between the side frame and the vehicle's fender where gaps occur. If there are still gaps, cut 1/2" X 9/16" rubber foam (into 2" pieces) and install into any gaps that may be found between the left side of the cab and fender. On the right side, at the corner of the side frame and rear filler, as well as near the floorboard. Make sure to apply adhesive side onto the fenders of the vehicle. Per Figures 2.35a and b.

Tools required

Scissors Narrow Plastic Putty Knife

2.36 Per Figure 2.36a, re-install the left and right doors. Next, install gas shocks onto the doors and side frames as shown on figure 2.36b. Make sure rod side gas shock is on the door side.

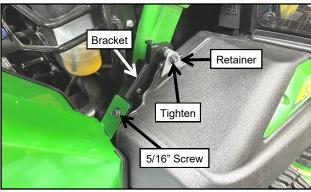


Fig. 2.34 (Tighten Hardware to Clamp Fender)

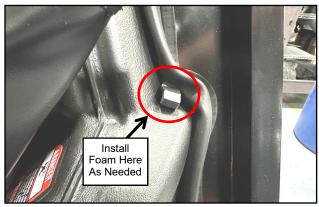


Fig. 2.35a (Install Foam on Left Fender)



Fig. 2.35b (Install Foam on Right Fender)

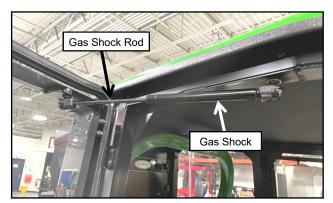


Fig. 2.36b (Install Door Gas Shock, Right)

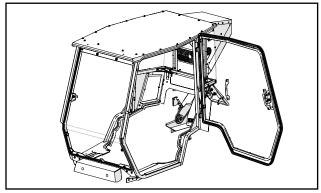


Fig. 2.36a (Re-Install Door, Left)

STEP 2: (CAB INSTALLATION)

2.37 Pre-install the supplied Velcro to the parking brake filler. Leave the release tape on until filler is in place.

Tools required

Scissors

- 2.38 Lower the mower deck. Clean the underside of the floor thoroughly in the vicinity of the parking brake. Block the mower rear wheels and release the parking brake.
- 2.39 Position the filler in place under the floor and around the frame. Once confident of filler position, remove the release tape and attach the filler one piece at a time. Reference all photos on this page.



Fig. 2.39a (Under floor Velcro position)



Fig. 2.39b (Velcro on left frame)



Fig. 2.39c (Filler, Left)



Fig. 2.39d (Filler, Right)



Fig. 2.39e (Filler, Rear)

STEP 2: (CAB INSTALLATION)

- 2.40 Lower the seat down.
- **2.41** Turn on vehicle and test operation of the A/C Unit. If the A/C Unit does not function properly, check out the "Troubleshooting" section of this manual. See Figure 2.38 for basic A/C operation.
- **2.42** Next, install any accessories purchased for this vehicle.
- **2.43** The cab installation is now complete.

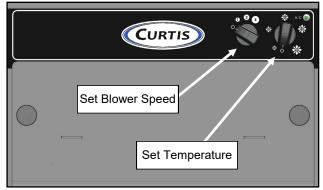


Fig. 2.41 (Test A/C Unit Functionality)

CAB FEATURES & OPERATION

AIR CONDITIONING OPERATION

See Figure 2.38 above. Turn the 4 -position ventilation switch to activate the blower. This can be used as just a blower with the A/C compressor turned off.

Rotate the A/C switch to the desired temperature setting to turn the compressor on/off.

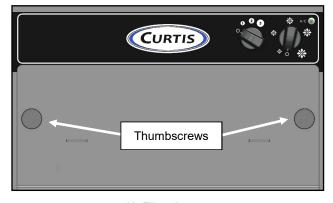
In order for the A/C compressor to function, the vehicle throttle must be set at full speed.

The blower must be turned on in order for the A/C compressor to function.

AIR FILTER CHECK

Remove the two thumbscrews on the face of the A/C and slide the drawer out to access the air filter.

Change the filter as needed based on operating conditions.



Air Filter Access

CARE AND MAINTENANCE

- •DO NOT use glass cleaner to clean windows. It will damage the material. Mild dish soap and water should be used to clean all window panels. Use a soft bristled brush or sponge to clean panels.
- Avoid wiping the windows while they are dry. Hose down with water to remove heavy debris before wiping windows. Water acts as a lubricant to help prevent scratches.
- •Re-apply grease periodically as needed to the door striker pins, door latch assemblies, and the door hinges.
- •Check the belt tension after the first 10 hours of use.
- •Check and tighten hardware after 40 hours of operation. Periodically inspect and tighten hardware for the remainder of the unit's life. Check for any wearing or chaffing on hoses or wiring and correct as necessary.
- •Wash the painted surfaces of the cab with commercial automotive cleaning products.
- •Change cabin air filter as required depending on usage conditions.
- •Inspect/clean the exterior of the condenser of all dust and debris daily.
- •This product is designed with the use of R134a as a refrigerant. Never substitute other refrigerants, use of any other refrigerant will void warranty.
- •Charge unit with 2.3 lbs. of R134a refrigerant.
- Apply vacuum for a minimum of 30 minutes prior to charging the air conditioner with R134a.
- •Do not vent refrigerant to the atmosphere. If the unit has to be discharged for any reason, recover the refrigerant in compliance with federal, state, and local laws.
- •Refrigerant Oil use only ZEROL ESTER 68SL to replenish any oil lost during refrigerant recovery.
- •Replace the drier receiver (9SV-9AC-00003) when replacing a compressor (9SV-9AC-00006).

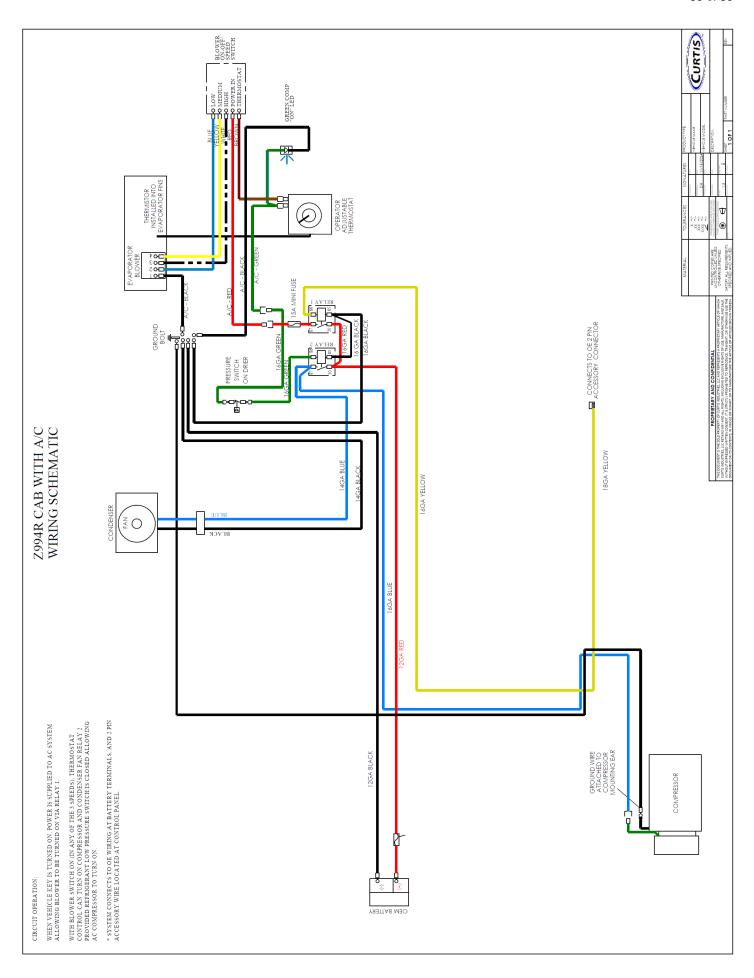
TROUBLESHOOTING

- Check all electrical connections to ensure that proper connections are made and terminals are all tight.
- Check Battery Condition:

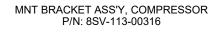
Resting/No Load Voltage should be 12.35V or greater.

Terminals should be clean and tight.

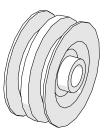
- •Check all fuses:
 - 30 amp fuse located at battery
 - 15 amp fuse located near relays, located inside the air conditioner (accessible with filter drawer removed).
- •Check both relays. Located inside the air conditioner (accessible with filter drawer removed).
- •Check the tension of the OEM and secondary drive v-belts

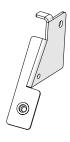


PULLEY, DOUBLE, 34 DEG V-BELT P/N: 9SV-MP-00077



SPACER, RIGHT FENDER P/N: 8SV-SM-02425



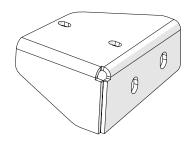


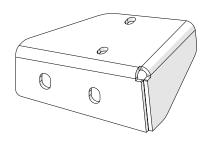


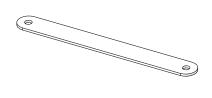
MOUNT BRACKET, FB, LEFT P/N: 8SV-SM-02455-L

MOUNT BRACKET, FB, RIGHT P/N: 8SV-SM-02455-R

BACKING PLATE, BALLAST BOX P/N: 8SV-SM-02478



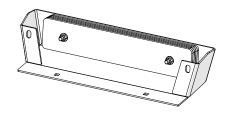


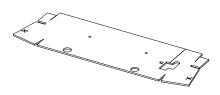


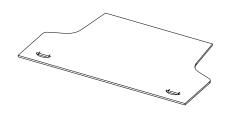
BALLAST BOX W/ WEIGHTS P/N: 8SV-113-00326

FLOOR MAT, FOOTREST LIP P/N: 8SV-9FR-00090

FLOOR MAT, FOOTREST P/N: 8SV-9FR-00089







CLIPPED WASHER, 3/8" X 1-1/4" P/N: 8SV-SM-02548

ARM RESTRICTOR BRKT ASS'Y, L P/N: 8SV-113-00320-L

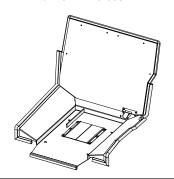
ARM RESTRICTOR BRKT ASS'Y, R P/N: 8SV-113-00320-R



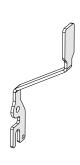




SEAT PAN ASSEMBLY P/N: 8SV-113-00314



LEVER, SEAT RELEASE P/N: 8SV-SM-02391



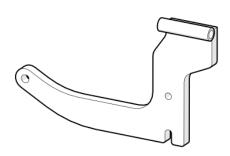
ROPS MOUNT ASSEMBLY, LEFT P/N: 8SV-110-00118-L



ROPS MOUNT ASSEMBLY, RIGHT P/N: 8SV-110-00118-R



WELDMENT, COMP. MOUNT P/N: 8SV-WA-00767-ZC



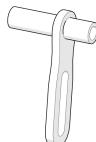
TENSIONER MOUNT P/N: 8SV-MP-00115-ZC



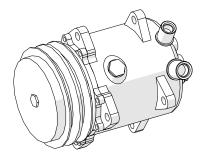
A/C COMPRESSOR P/N: 8SV-9AC-00048-A

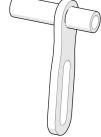


GUARD, BELT **TENSIONER** P/N: 8SV-SM-02435 P/N: 8SV-WA-00772-ZC

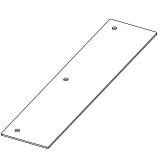


FLEX BRUSH, 1.6" X .012" X 9" (PAIR) P/N: 8SV-9SL-00021

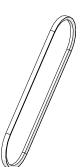




FLOORBOARD FILLER P/N: 8SV-SM-02458



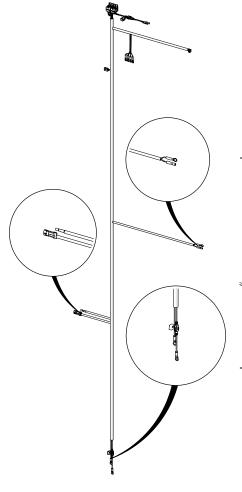
V-BELT P/N: 9SV-9BLT-16



REAR FILLER, LEFT P/N: 8SV-111-00046-L



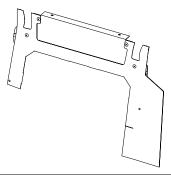
WIRE HARNESS, A/C P/N: 9SV-WH-00147



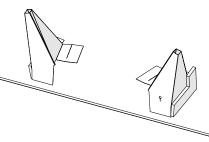
REAR FILLER, RIGHT P/N: 8SV-111-00046-R



REAR PANEL ASSEMBLY P/N: 8SV-106-00047



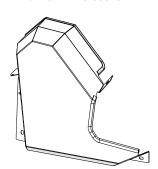
DRIVE HANDLE FILLER ASSY (1L, 1R) W/ VELCRO; P/N: 8SV-112-00082



AIR FILTER RELOCATION BRACKET P/N: 8SV-SM-02318



COVER ASSY, SIDE, COMPRESSOR P/N: 8SV-113-00315



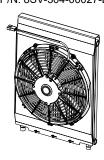
A/C UNIT, REAR MOUNTED, BLACK P/N: 8SV-301-00006-BP



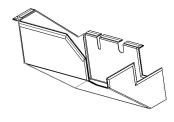
COVER ASSEMBLY, A/C, BLACK P/N: 8SV-303-00013-BP



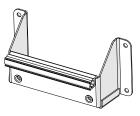
CONDENSER, PLENUM & FAN, BLACK P/N: 8SV-304-00027-BP



PARKING BRAKE FILLER P/N: 8SV-112-00095



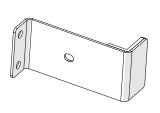
CONDENSER SUPPORT ASSEMBLY, BLACK P/N: 8SV-304-00029-BP

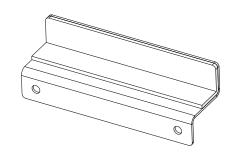


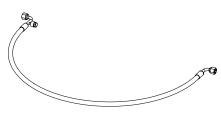
CONDENSER CLAMP ASSEMBLY, A/C, SIDE, BLACK; P/N: 8SV-304-00030-BP

CONDENSER CLAMP ASSEMBLY, A/C, BOTTOM, BLACK; P/N: 8SV-304-00031-BP

HOSE, #8, COMP TO COND P/N: 8SV-305-00022



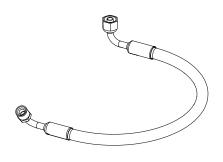


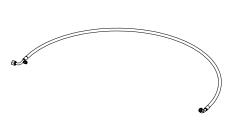


HOSE, #6, DRIER TO EVAP P/N: 8SV-305-00023

HOSE, #10 EVAP TO COMP P/N: 8SV-305-00024

HOSE, #6, COND TO DRYER P/N: 8SV-305-00025



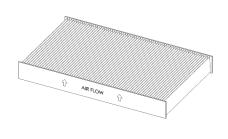


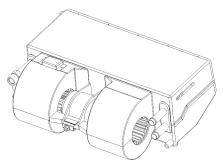


AIR FILTER P/N: 9SV-9HR-00032

EVAPORATOR P/N: 8SV-9AC-00046

LOUVERED PLUG WITH FILTER P/N: 9SV-9DP25





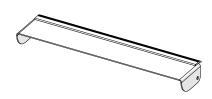


KNOB P/N: 9SV-OHC-27

DIVERTER FLAP ASSEMBLY, A/C P/N: 8SV-113-00258-BP

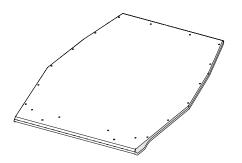
REAR MOUNT FRAME ASSEMBLY P/N: 8SV-113-00323







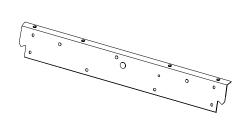
ROOF ASSEMBLY P/N: 8SV-101-00067

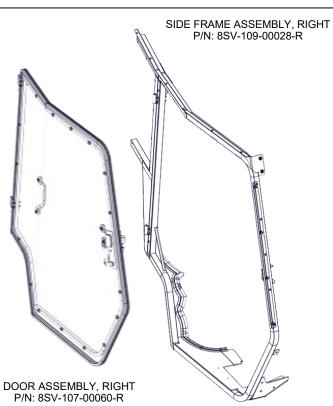


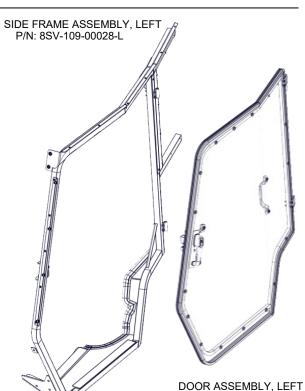
WINDSHIELD ASSEMBLY P/N: 8SV-102-00041



WINDSHIELD SUPPORT ASSEMBLY P/N: 8SV-103-00031







REAR LEG, LEFT, W/ HARDWARE P/N: 8SV-108-00030-L



REAR LEG, RIGHT, W/ HARDWARE P/N: 8SV-108-00030-R



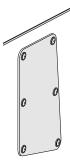
REAR LEFT FILLER WINDOW, W/ HARWARE + RUBBER; P/N: 8SV-P-00168

P/N: 8SV-107-00060-L

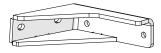


REAR RIGHT FILLER WINDOW, W/ HARWARE + RUBBER; P/N: 8SV-P-00169 WELDMENT, LOWER BRACE, LEFT P/N: 8SV-WA-00574-L

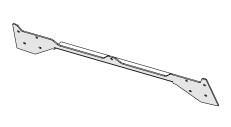
WELDMENT, LOWER BRACE, RIGHT P/N: 8SV-WA-00574-R

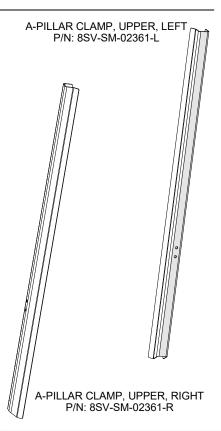




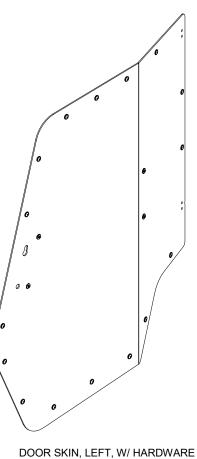


WINDSHIELD SUPPORT, LOWER P/N: 8SV-SM-02454





DOOR SKIN, RIGHT, W/ HARDWARE P/N: 9SV-P-00167-R



P/N: 9SV-P-00167-L

ADDITIONAL SERVICE PARTS

PART NUMBER	DESCRIPTION
9SV-HWK-00182	HARDWARE KIT, JDZ994
9SV-OHRL-G	OUTSIDE DOOR HANDLE (SET OF 2)
9SV-GH	INTERIOR GRAB HANDLE (SET OF 2)
9SV-HSLP	HINGE PINS AND SLEEVES (2L + 2R)
9SV-DP10	DOME PLUG, .375" HOLE (BAG OF 10)
9SV-DP16	DOME PLUG, .750" HOLE (BAG OF 4)
9SV-DP04	DOME PLUG, 1.125" HOLE (BAG OF 15)
9SV-9OR-01	O-RINGS, (INCL 1 OF EA: .301" ID .426" ID .551" ID)
9SV-GS02A	BALL STUD 10MM (BAG OF 10)
9SV-DL06S	INTERIOR DOOR LATCH W/COVER (1L +1R)
9SV-9AC-00001	CONDENSER
9SV-85-01-0022	RELAY, 12V, 20/40A, SPDT, MINI ISO
9SV-9AC-00003	DRIER RECEIVER
9SV-9AC-00005	PRESSURE SWITCH, 2-28KG/CM2
9SV-9AC-00007	AXIAL FAN FOR CONDENSER
9SV-DSTRH	DOOR STRIKER PIN (BAG OF 5)
9SV-GS02Q	GAS SHOCK 12-3/8" (SET OF 2)
9SV-9AC-00046-BS	BLOWER SWITCH
9SV-9AC-00046-TS	THERMOSTAT SWITCH
9DL01H	KEYS, SET OF 2 ON A RING, FOR HANDLE 1096-1, KEY CODE C40

TRIM LOK, STD, 1/16" - 1/8" GRIP

5/8" STD BULB, 1/16" GRIP

P.S.A.

9SV-PRO9-10

ARCH RUBBER 3/4" SIDE BULB, 1/4" GRIP

ARCH PSA, .20" X.15"

1" ROUND BULB, 1/16" GRIP

1/2" WEATHERSEAL







9SV-PR38-15



9SV-PR53-15



9SV-PR19-10



9SV-PR20-10

9SV-PRO1-20 3/4" OVAL BULB WITH 3/16" GRIP

9SV-PRO2-15 1/2" X 9/16" RUBBER FOAM



9SV-PR52-10

9SV-PR43-4

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. <u>Do not</u> 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. Bolt head identification mark as per grade.	2	5	8*
NOTE: Manufacturing Marks Will Vary			

			TORG	QUE		TORQUE			TORQUE				
Bolt	t Size	Pound	ls Feet	Newtor	n-Meters	Pound	ls Feet	Newton	-Meters	Pound	ls Feet	Newtor	-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

5.6 8.8 10.9

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