



# OPERATOR'S MANUAL & PARTS DRAWINGS

## WEATHER CAB MODEL KW450





500 Venture Drive  
Orrville Oh 44667  
www.ventrac.com

### To the Owner Contact Information and Product Identification

If you need to contact an authorized Ventrac dealer for information on servicing your product, always provide the product model and serial numbers.

*Please fill in the following information for future reference. See the picture(s) below to find the location of the identification numbers. Record them in the spaces provided.*

Date of Purchase: \_\_\_\_\_

Dealer: \_\_\_\_\_

Dealer Address: \_\_\_\_\_

Dealer Phone Number: \_\_\_\_\_

Dealer Fax Number: \_\_\_\_\_

<p>Model # (A): _____</p> <p>Serial # (B): _____</p> <p style="text-align: center;">Affix Part/Serial Number label here.</p>
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# INTRODUCTION



Venture Products Inc. is pleased to provide you with your new Ventrac KW450 weather cab! We hope that Ventrac equipment will provide you with a ONE Tractor Solution.

Listed below are just some of the items that can provide you *versatility* as you use your KW450 weather cab. Please visit our web site, or contact your authorized Ventrac dealer for a complete list of items available for your new KW450 weather cab.

Accessories	Item Description	Part Number
	Directional Signal/Flasher Kit	70.2005-2
	Strobe Beacon Kit	70.2006-3
	Mirror Kit	70.2006-4
	Defrost Fan Kit	70.2006-6
	KW450 Console Fan/Heater Kit (Kubota engines)	70.2009-51
	KW450 Console Fan/Heater Kit (Kawasaki engine)	70.2009-52

## Product Description

The Ventrac KW450 weather cab is designed for the sole purpose of sheltering the operator from the weather while providing superior visibility. Standard features include a front windshield wiper, front and rear LED work lights, a large left-side entry door, right-side emergency exit, door and side windows that can be quickly and easily removed, and a 4-point seatbelt.

Optional accessories include a strobe light, directional lights, defrost fan, and heater kits. Refer to your national and/or local regulations for lighting requirements specific to your intended application.

NOTE: The KW450 weather cab cannot be used with the Ventrac KH500 versa-loader or the Ventrac RV600 Collection Vacuum.

## Why Do I Need an Operator's Manual?

This manual has been created to help you gain the important knowledge of what is needed to safely operate, maintain, and service your machine. It is divided into sections for convenient reference of the appropriate section.

You must read and understand the operator's manual for each piece of Ventrac equipment you own. Reading the operator's manual will help you become familiar with each specific piece of equipment. Understanding the operator's manual will help you, as well as others, avoid personal injury and/or damage to the equipment. Keep this manual with the machine at all times. The manual should remain with the machine even if it is sold. If this manual becomes damaged or unreadable, it should be replaced immediately. Contact your local Ventrac dealer for a replacement.

When using a Ventrac attachment, be sure to read and follow the safety and operating instructions of both the power unit and the attachment being used to ensure the safest operation possible.

The information in this manual provides the operator with the safest procedures to operate the machine while getting the maximum use out of the unit. Failure to follow the safety precautions listed in this manual may result in personal injury and/or damage to the equipment.

# INTRODUCTION

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## Using Your Manual

Throughout this manual, you will encounter special messages and symbols that identify potential safety concerns to help you as well as others avoid personal injury or damage to the equipment.

### SYMBOL DEFINITIONS



#### **ATTENTION**

This symbol identifies potential health and safety hazards. It marks safety precautions. Your safety and the safety of others is involved.

There are three signal words that describe the level of safety concern: Danger, Warning, and Caution. Safety should always be the #1 priority when working on or operating equipment. Accidents are more likely to occur when proper operating procedures are not followed or inexperienced operators are involved.

Note: Right-Hand and Left-Hand orientations may be referred to at different places throughout this manual. Right-Hand and Left-Hand is determined as if sitting on the tractor seat facing forward.

### SIGNAL WORD DEFINITIONS

#### **⚠ DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme cases.

#### **⚠ WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### **⚠ CAUTION**

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage. It may also be used to alert against unsafe practices.

## Manual Glossary

- Power Unit** A Ventrac tractor or other Ventrac engine powered device that may be operated by itself or with an attachment or accessory.
- Attachment** A piece of Ventrac equipment that requires a Power Unit for operation.
- Accessory** A device that attaches to a Power Unit or Attachment to extend its capabilities.
- Machine** Describes any "Attachment" or "Accessory" that is used in conjunction with a power unit.

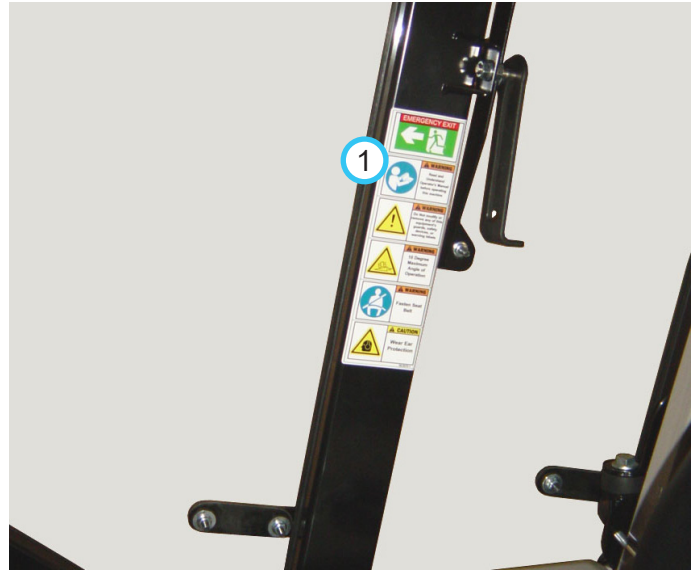
# SAFETY

## Safety Decals

The following safety decals must be maintained on your KW450 weather cab.

Keep all safety decals legible. Remove all grease, dirt, and debris from safety decals and instructional labels. If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.

When new components are installed, be sure that current safety decals are affixed to the replacement components.





# SAFETY

**A**

**⚠ WARNING**  
**Pinch Points.**  
 Moving parts can crush or cut.  
**KEEP CLEAR!**

**B**

**1**

**EMERGENCY EXIT**

**⚠ WARNING**  
 Read and Understand Operator's Manual before operating this machine

**⚠ WARNING**  
 Do Not modify or remove any of this equipment's guards, safety devices, or warning labels

**⚠ WARNING**  
 10 Degree Maximum Angle of Operation

**⚠ WARNING**  
 Fasten Seat Belt

**⚠ CAUTION**  
 Wear Ear Protection

00.0272-1

**2**

**⚠ WARNING**  
 Maximum Lifting Capacity 500 lbs (227 kg)  
 For use ONLY with Ventrac Tractor 4000 series cab.  
 Do not use if any part of this lifting sling is damaged or worn.  
 00.0272-4

Front Work Lights 15 A	Rear Work Lights 10 A
Wiper 10 A	Interior Light Defrost Fan 10 A
Strobe 5 A	Tam Signals 15 A
Heater 15 A	

00.0272-6

**C**

**⚠ DANGER**

**UNLEADED GASOLINE ONLY**

00.0332

**D**

**⚠ DANGER**

**Ultra-Low Sulphur Diesel Fuel Only**  
 15ppm Sulfur Maximum

00.0333

Decal	Description	Part Number	Quantity
A	Warning, Pinch Point	00.0218	2
B	Warning, KW350	00.0272	1
C	Danger, Gasoline Only	00.0332	1
D	Danger, Diesel Only	00.0333	1

# SAFETY



## General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



### Training Required

- The owner of this machine is solely responsible for properly training the operators.
- The owner/operator is solely responsible for the operation of this machine and prevention of accidents or injuries occurring to him/herself, other people, or property.
- Do not allow operation or service by children or untrained personnel. Local regulations may restrict the age of the operator.
- Before operating this machine, read the operator's manual and understand its contents.
- If the operator of the machine cannot understand this manual, then it is the responsibility of this machine's owner to fully explain the material within this manual to the operator.
- Learn and understand the use of all controls.
- Know how to stop the power unit and all attachments quickly in the event of an emergency.



### Personal Protective Equipment Requirements

It is the responsibility of the owner to be sure that the operators use the proper personal protective equipment while operating the machine. Required personal protective equipment includes, but is not limited to, the following list.



- Wear a certified ear protection device to prevent loss of hearing.
- Prevent eye injury by wearing safety glasses while operating the machine.
- Closed toe shoes must be worn at all times.
- Long pants must be worn at all times.
- When operating in dusty conditions, it is recommended that a dust mask be worn.

### Operation Safety

- Inspect machine before operation. Repair or replace any damaged, worn, or missing parts. Be sure guards and shields are in proper working condition and are secured in place. Make all necessary adjustments before operating machine.
- Some pictures in this manual may show shields or covers opened or removed in order to clearly illustrate any instructions. Under no circumstance should the machine be operated without these devices in place.
- Alterations or modifications to this machine can reduce safety and could cause damage to the machine. Do not alter safety devices or operate with shields or covers removed.
- Before each use, verify that all controls function properly and inspect all safety devices. Do not operate if controls or safety devices are not in proper working condition.
- Check parking brake function before operating. Repair or adjust parking brake if necessary.
- Observe and follow all safety decals.
- All controls are to be operated from the operator's station only.
- Always wear a seat belt if the machine has a roll cage/bar installed and in upright position.
- Ensure the attachment or accessory is locked or fastened securely to the power unit before operating.
- Ensure that all bystanders are clear of the power unit and attachment before operating. Stop machine if someone enters your work area.
- Always be alert to what is happening around you, but do not lose focus on the task you are performing. Always look in the direction the machine is moving.
- Look behind and down before backing up to be sure of a clear path.
- If you hit an object, stop and inspect the machine. Make all necessary repairs before operating machine again.
- Stop operation immediately at any sign of equipment failure. An unusual noise can be a warning of equipment failure or a sign that maintenance is required. Make all necessary repairs before operating machine again.

# SAFETY



## General Safety Procedures



### for Ventrac Power Units, Attachments, & Accessories

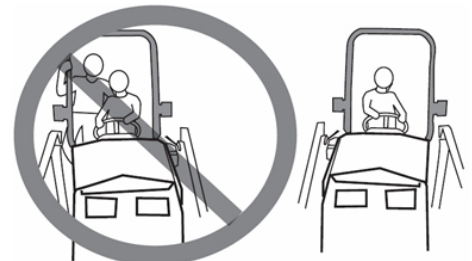
#### Operation Safety (continued)

- If equipped with a high/low range feature, never shift between high and low range while on a slope. Always move the machine to level ground and engage the parking brake before shifting range.
- Do not leave machine unattended while it is running.
- Always park the machine on level ground.
- Always shut off engine when connecting attachment drive belt to the power unit.
- Never leave the operator's station without lowering the attachment to the ground, setting the parking brake, shutting off the engine, and removing the ignition key. Make sure all moving parts have come to a complete stop before dismounting.
- Never leave equipment unattended without lowering the attachment to the ground, setting the parking brake, shutting off the engine, and removing the ignition key.
- Only operate in well-lit conditions.
- Do not operate when there is a risk of lightning.
- Never direct the discharge of any attachment in the direction of people, buildings, animals, vehicles, or other objects of value.
- Never discharge material against a wall or obstruction. Material may ricochet back towards the operator.
- Use extra caution when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Do not run the engine in a building without adequate ventilation.
- Do not touch the engine or the muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speed may increase the hazard of personal injury.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, excessive grease, and other flammable materials.

#### Preventing Accidents



- Clear working area of objects that might be hit or thrown from machine.
- Keep people and pets out of working area.
- Know the work area well before operation. Do not operate where traction or stability is questionable.
- Reduce speed when you are operating over rough ground.
- Equipment can cause serious injury and/or death when improperly used. Before operating, know and understand the operation and safety of the power unit and the attachment being used.
- Do not operate machine if you are not in good physical and mental health, if you will be distracted by personal devices, or are under the influence of any substance which might impair decision, dexterity, or judgment.
- Children are attracted to machine activity. Be aware of children and do not allow them in the working area. Turn off the machine if a child enters the work area.



#### Keep Riders Off

- Only allow the operator on the power unit. Keep riders off.
- Never allow riders on any attachment or accessory.

# SAFETY



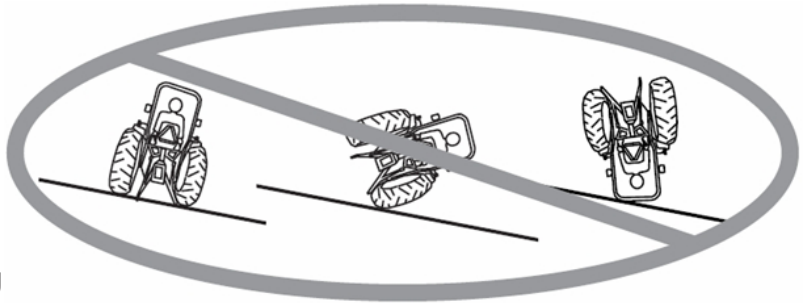
## General Safety Procedures



### for Ventrac Power Units, Attachments, & Accessories

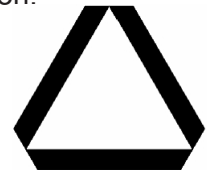
#### Operating On Slopes

- Slopes can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Be familiar with the emergency parking brake, along with the power unit controls and their functions.
- If power unit is equipped with a fold down roll bar, it must be locked in the upright position when operating on any slope.
- Use low range (if equipped) when operating on slopes greater than 15 degrees.
- Do not stop or start suddenly when operating on slopes.
- Never shift between high and low range while on a slope. Always move the power unit to level ground and engage the parking brake before shifting range or placing the power unit in neutral.
- Variables such as wet surface and loose ground will reduce the degree of safety. Do not drive where machine could lose traction or tip over.
- Keep alert for hidden hazards in the terrain.
- Stay away from drop-offs, ditches, and embankments.
- Sharp turns should be avoided when operating on slopes.
- Pulling loads on hills decreases safety. It is the responsibility of the owner/operator to determine loads that can safely be controlled on slopes.
- Transport machine with attachment lowered or close to the ground to improve stability.
- While operating on slopes, drive in an up and down direction when possible. If turning is necessary while driving across slopes, reduce speed and turn slowly in the downhill direction.
- Assure a sufficient supply of fuel for continuous operation. A minimum of one-half tank of fuel is recommended.



#### Roadway Safety

- Operate with safety lights when operating on or near roadways.
- Obey all state and local laws concerning operation on roadways.
- Slow down and be careful of traffic when operating near or crossing roadways. Stop before crossing roads or sidewalks. Use care when approaching areas or objects that may obscure vision.
- If there is doubt of safety conditions, discontinue machine operation until a time when operation can be performed safely.
- When operating near or on roadways, have a Slow Moving Vehicle Emblem clearly displayed.



#### Truck Or Trailer Transport

- Use care when loading or unloading machine into a truck or trailer.
- Use full width ramps for loading machine into a truck or trailer.
- The parking brake is not sufficient to lock the machine during transport. Always secure the power unit and/or attachment to the transporting vehicle securely using straps, chains, cable, or ropes. Both front and rear straps should be directed down and outward from the machine.
- Shut off fuel supply to power unit during transport on truck or trailer.
- If equipped, turn the battery disconnect switch to the Off position to shut off electrical power.

# SAFETY



## General Safety Procedures



### for Ventrac Power Units, Attachments, & Accessories

#### Maintenance

- Keep all safety decals legible. Remove all grease dirt, and debris from safety decals and instructional labels.
- If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.
- When new components are installed, be sure that current safety decals are affixed to the replacement components.
- If any component requires replacement, use only original Ventrac replacement parts.
- Always turn the battery disconnect to the Off position or disconnect the battery before performing any repairs. Disconnect the negative terminal first and the positive terminal last. Reconnect the positive terminal first and the negative terminal last.
- Keep all bolts, nuts, screws, and other fasteners properly tightened.
- Always lower the attachment to the ground, engage parking brake, shut off engine, and remove the ignition key. Make sure all moving parts have come to a complete stop before cleaning, inspection, adjusting or repairing.
- If the power unit, attachment, or accessory requires repairs or adjustments not instructed in the operator's manual, the power unit, attachment, or accessory must be taken to an authorized Ventrac dealer for service.
- Never perform maintenance on the power unit and/or attachment if someone is in the operator's station.
- Always use protective glasses when handling the battery.
- Check all fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, and excessive grease.
- Do not touch the engine, the muffler, or other exhaust components while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Allow the engine to cool before storing and do not store near an open flame.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speed may increase the hazard of personal injury.
- Springs may contain stored energy. Use caution when disengaging or removing springs and/or spring loaded components.
- An obstruction or blockage in a drive system or moving/rotating parts may cause a buildup of stored energy. When the obstruction or blockage is removed, the drive system or moving/rotating parts may move suddenly. Do not attempt to remove an obstruction or blockage with your hands. Keep hands, feet, and clothing away from all power-driven parts.
- Dispose of all fluids in accordance with local laws.

#### Fuel Safety



- To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
- Do not refuel machine while smoking or at a location near flames or sparks.
- Always refuel the machine outdoors.
- Do not store machine or fuel container indoors where fumes or fuel can reach an open flame, spark, or pilot light.
- Only store fuel in an approved container. Keep out of reach of children.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Remove machine from the truck or trailer and refuel it on the ground. If this is not possible, refuel the machine using a portable container, rather than from a fuel dispenser nozzle.
- Never remove fuel cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never remove fuel cap while on a slope. Only remove when parked on a level surface.
- Replace all fuel tank and container caps securely.

# SAFETY



## General Safety Procedures



### for Ventrac Power Units, Attachments, & Accessories

#### Fuel Safety (continued)

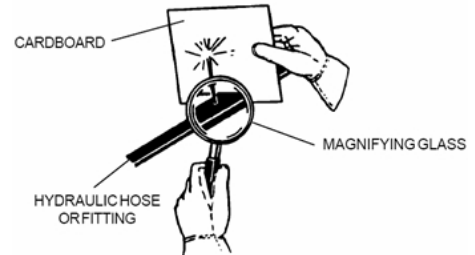
- Do not overfill fuel tank. Only fill to bottom of fuel neck, do not fill fuel neck full. Overfilling of fuel tank could result in engine flooding, fuel leakage from the tank, and/or damage to the emissions control system.
- If fuel is spilled, do not attempt to start the engine. Move the power unit away from the fuel spill and avoid creating any source of ignition until fuel vapors have dissipated.
- If the fuel tank must be drained, it should be drained outdoors into an approved container.
- Dispose of all fluids in accordance with local laws.
- Check all fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- The fuel system is equipped with a shut-off valve. Shut off the fuel when transporting the machine to and from the job, when parking the machine indoors, or when servicing the fuel system.

#### Hydraulic Safety

- Make sure all hydraulic connections are tight and all hydraulic hoses and tubes are in good condition. Repair any leaks and replace any damaged or deteriorated hoses or tubes before starting the machine.
- Hydraulic leaks can occur under high pressure. Hydraulic leaks require special care and attention.
- Use a piece of cardboard and a magnifying glass to locate suspected hydraulic leaks.



- Keep body and hands away from pinhole leaks or nozzles that eject high pressure hydraulic fluid. Hydraulic fluid escaping under high pressure can penetrate the skin causing serious injury, leading to severe complications and/or secondary infections if left untreated. If hydraulic fluid is injected into the skin, seek immediate medical attention no matter how minor the injury appears.



- Hydraulic system may contain stored energy. Before performing maintenance or repairs on the hydraulic system, remove attachments, engage parking brake, disengage weight transfer system (if equipped), shut off engine, and remove ignition key. To relieve pressure on the auxiliary hydraulic system, shut off the power unit engine and move the hydraulic control lever left and right before disconnecting the auxiliary hydraulic quick couplers.
- Dispose of all fluids in accordance with local laws.

# SAFETY

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## KW450 Safety Procedures



### **WARNING**

10 degree maximum angle of operation of power unit with weather cab installed.

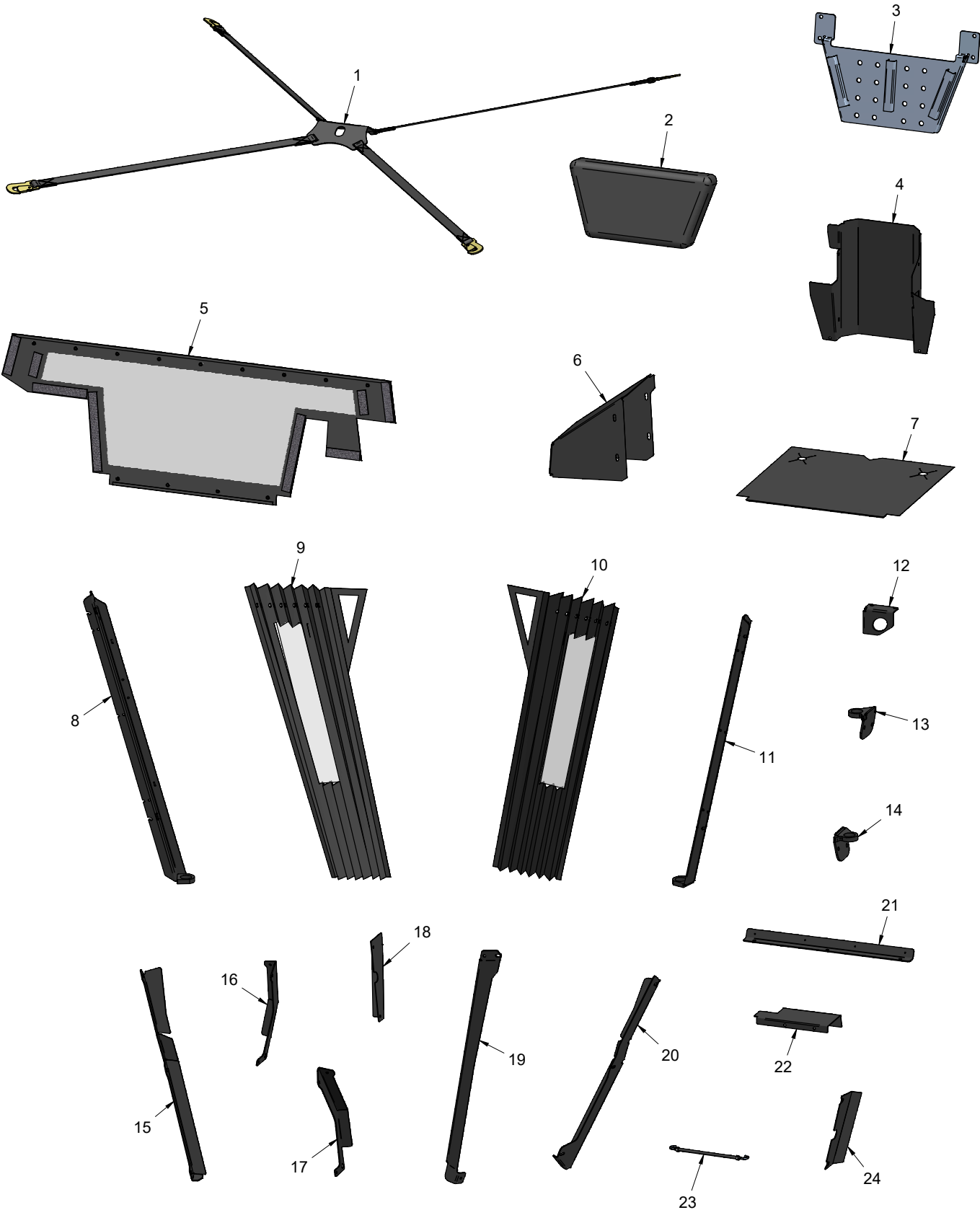
### **CAUTION**

Do not exceed 30 amp draw to weather cab and additional accessories.

- The cab door must be closed and latched during operation of power unit and KW450 weather cab.
- Window latches must be locked in either the closed or open position during operation of power unit and KW450 weather cab.
- Do not place any part of your body outside of the cab (through windows, door, or any other opening) during operation of power unit and KW450 weather cab.
- Do not place hands or fingers between power unit dash and cab front frame cross member. Pinch points may be created by the oscillation of the power unit front frame.
- Always wear the 4-point seatbelt when operating a power unit and KW450 weather cab. The seatbelt must be adjusted to fit individual operators.
- Do not operate power unit and KW450 weather cab without the headrest cushion in place.
- The KW450 weather cab is equipped with an emergency exit (the right side front window). Learn to use the emergency exit prior to operating the power unit and KW450 weather cab. Refer to General Operation section of this manual for instructions on using the emergency exit.
- The power unit's steering cylinder must be installed in the outer position when equipped with a KW450 weather cab. Damage to the power unit and/or the weather cab will occur if the steering cylinder is installed in the center or inner positions. Refer to Setup section for steering cylinder mounting instructions.

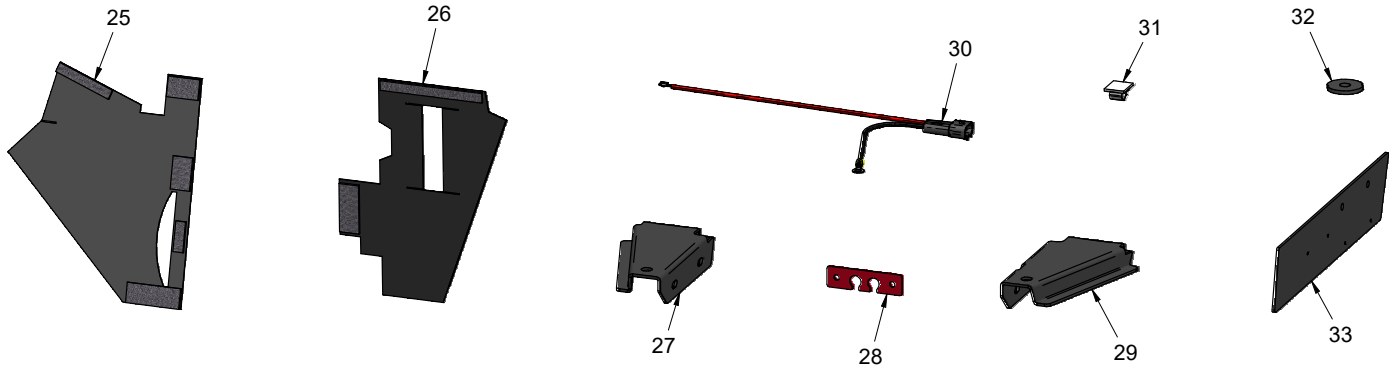
# WEATHER CAB SETUP INSTRUCTIONS

## Identification of Parts





# WEATHER CAB SETUP INSTRUCTIONS



Ref.	Name	Qty.
1	Sling, 4 Point Assy	1
2	Cushion, Headrest	1
3	Mount, Seatbelt Upper (w/seatbelt)	1
4	Cover, Pump W/Flanges	1
5	Window, Lower Rear Canvas	1
6	Cover, Fuel Tank Kw450	1
7	Canvas, Rear Frame	1
8	Support, Cab Front Rh	1
9	Canvas, Pleated Right	1
10	Canvas, Pleated Left	1
11	Support, Cab Front Lh	1
12	Bracket, Mount Support	1
13	Mount, Cab Rear Right	1
14	Mount, Cab Rear Left	1
15	Bracket, Window Right Lower	1
16	Mount, Canvas Column Right	1
17	Mount, Canvas Column Left	1
18	Bracket, Window Rear Right	1
19	Support, Door Window Lower	1
20	Bracket, Window Door Lower	1
21	Mount, Window Rear Lower	1
22	Bracket, Window Rear Top	1
23	Strap, Bellows Support	4
24	Bracket, Window Rear Left	1
25	Canvas, Column Right	1
26	Canvas, Column Left	1
27	Mount, Cab Front Right	1
28	Cover, Opt. Light Kit Access	1
29	Mount, Cab Front Left	1

Ref.	Name	Qty.
30	Harness, Wire Tractor To KW450	1
31	Clamp, Wire Mt Adh. 1/2 Gray	2
32	Washer, .531 X 1.75 3/16 Thick	4
33	Plate, Drill Template KW450	1

# WEATHER CAB SETUP INSTRUCTIONS

## Setup Instructions for Power Unit & Weather Cab

Installation Time (estimated)

3.0 hours

### ⚠ WARNING

Before making repairs or adjustment, set the parking brake, turn off engine, and remove ignition key. Always disconnect the negative battery cable from the battery when working with electrical components. Always work in a manner that does not put safety at risk!

### ⚠ WARNING

Safety glasses must be worn during installation. Ear (hearing) protection must be worn when using air or power tools.

### ⚠ WARNING

Use only the KW450 lift sling attached at all four lift points to lift the cab. Never walk or stand beneath cab when it is raised off the ground.

### ⚠ WARNING

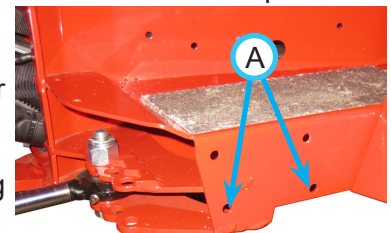
Place wheel chocks in front and back of wheels to prevent power unit from rolling during setup of power unit and weather cab.

Unless specified otherwise, use the bolt torque specifications listed below for all bolts used during setup and installation of the weather cab.

### Bolt Torque Specifications

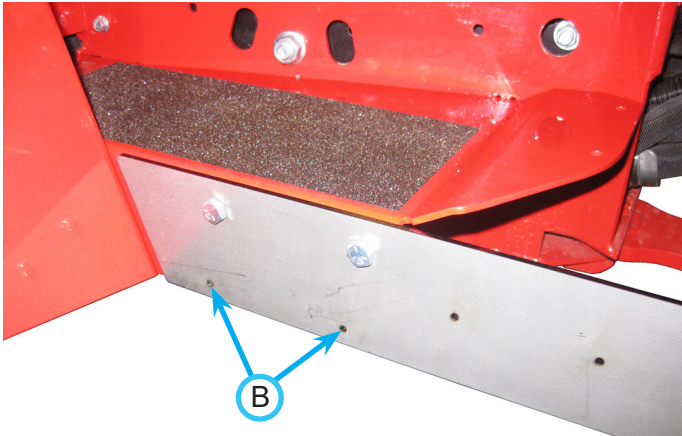
Bolt Size	Torque (English)	Torque (Metric)
1/4-20	100 in-lbs.	11.5 Nm
5/16-18	210 in-lbs.	24 Nm
3/8-16	31 ft-lbs.	42 Nm
7/16-14	50 ft.lbs	68 Nm
1/2-13	75 ft.lbs	102 Nm

- Place wheel chocks in front and back of wheels to prevent power unit from rolling.
- If power unit is equipped with a rear work light kit, the lights must be removed from the roll bar. If the cab will be removed in warm weather and the work light kit will be reinstalled, the wire harness can be left in place. If the kit is to be permanently removed, the wire harness will need to be disconnected in the power unit's tool box area and the connector will need to be removed from the harness with a metri-pack terminal removal tool. After pulling the wire harness, remove the fuse from slot 6 in the front fuse panel. Remove the light switch from the dash and install a blank plug into the cutout.
- If power unit is equipped with a directional signal light kit, the light kit must be removed from the roll bar. If the cab will be removed in warm weather and the directional signal light kit will be reinstalled, the roll bar mount brackets and the wire harness can be left in place. If the kit is to be permanently removed, disconnect the wire harness splitter from the power unit's connector. Disconnect the left and right wire harnesses from the harness splitter. Remove the connectors from the left and right harness ends with a weather pack terminal removal tool. After pulling the wire harness, remove the 10 amp fuse from slot 7 in the front fuse panel. If a back up alarm kit or a horn kit are installed, replace the 10 amp fuse with a 5 amp fuse. Remove the directional signal light switch and the hazard flasher switch from the dash and install blank plugs into the cutouts.
- If power unit is equipped with a strobe light kit, the light must be removed from the roll bar. Disconnect the wire harness in the power unit's tool box area and remove the connector from the harness with a metri-pack terminal removal tool. If the kit is to be permanently removed, pull the fuse from slot 6 in the front fuse panel. Remove the light switch from the dash and install a blank plug into the cutout.
- If power unit is equipped with a propane kit, the propane hose and wire harness must be disconnected from the lock off valve, and the propane posts must be removed from the mount brackets. This will be reinstalled after the cab is in place.
- Check the left and right outside flanges of the lower rear frame. If your power unit already has lower mounting holes (A), skip to step 13.

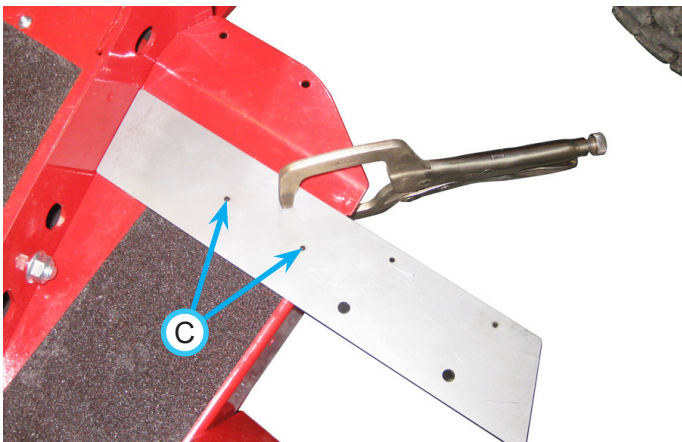


# WEATHER CAB SETUP INSTRUCTIONS

7. If your power unit does not have lower mounting holes, install the included template onto the right side of the lower rear frame. Fasten to the existing holes using included 5/16 bolts and nuts, making sure to keep the template parallel with the top surface of the foot platform. Drill 1/8" pilot holes (B) into the flange.

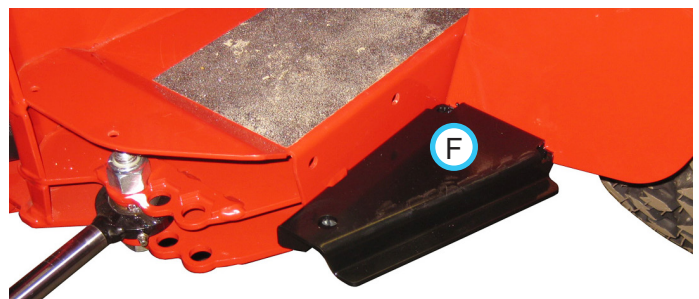
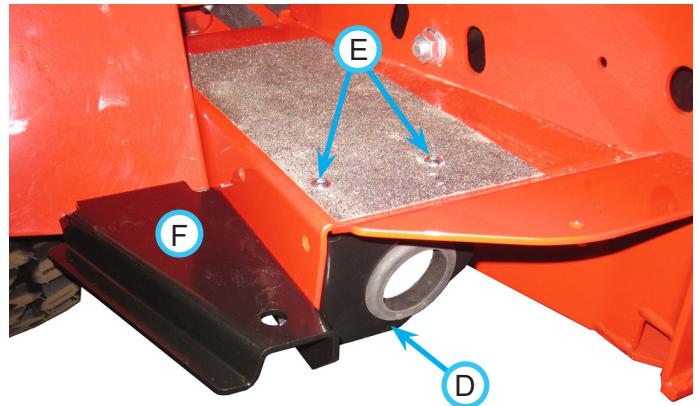


8. Move the template to the flange on the left side of the lower rear frame and drill 1/8" pilot holes.  
9. Drill out the 4) pilot holes to 11/32", remove any metal shavings, and use red touch up paint on the drilled holes.  
10. Position the template on top of the right foot platform aligning it with the frame and the break on the foot platform. Clamp the template in place.

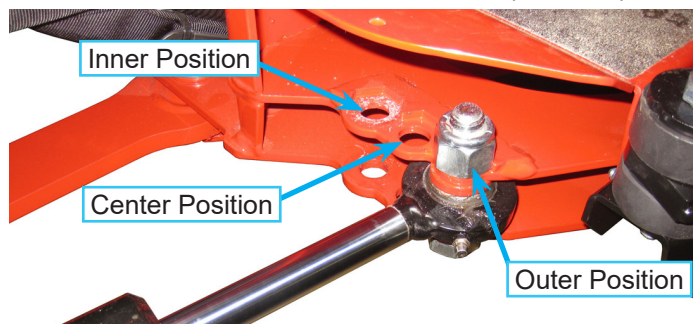


11. Drill 1/8" pilot holes (C) in the foot platform. NOTE: some units may already have the outside hole in the foot plate, covered by the flex tread.  
12. Drill out the pilot holes to 9/32", remove any metal shavings, and use red touch up paint on the drilled holes.

13. Install the mount support bracket (D) under the right foot platform. Fasten loosely with 2) 1/4" x 3/4" button head bolts (E) and flange nuts.



14. Install the right and left front cab mounts (F) on the lower mounting holes in the lower rear frame. Fasten using 3) 5/16 x 3/4" bolts and 5/16" flat washers inserted through the front cab mounts and the lower rear frame and fasten with 5/16" flange nuts. Use 1) 5/16 x 1" bolt and flat washer at the front hole of the right cab mount where the bolt also goes through the mount support bracket. Tighten the 5/16" bolts and then tighten the 1/4" bolts for the mount support plate.  
15. Install the power unit's steering cylinder in the outer position. Torque to 170 ft lbs (230 Nm).

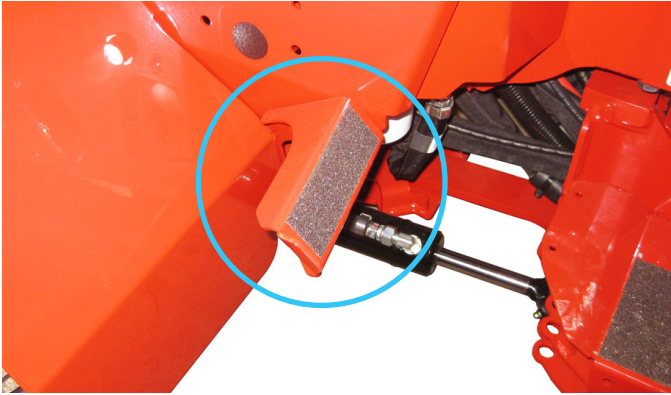


## ⚠ CAUTION

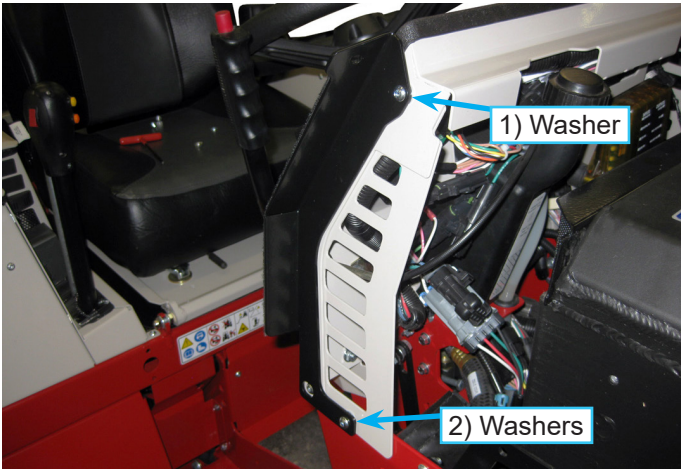
Failure to install the power unit's steering cylinder in the outer position will result in damage to the power unit and/or weather cab.

# WEATHER CAB SETUP INSTRUCTIONS

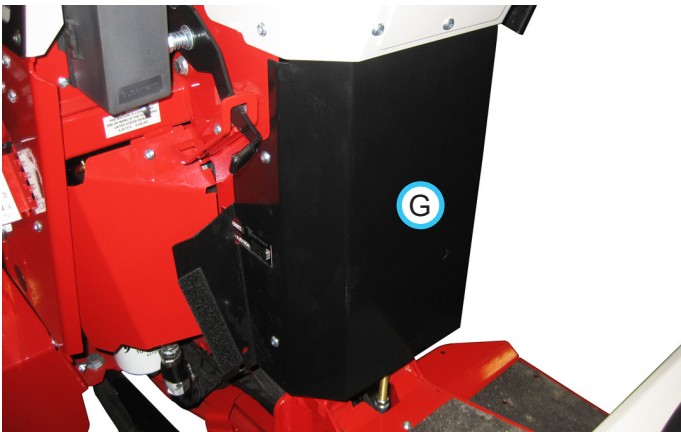
16. Remove the right and left foot pegs from the power unit front frame. Reinstall bolts and tighten.



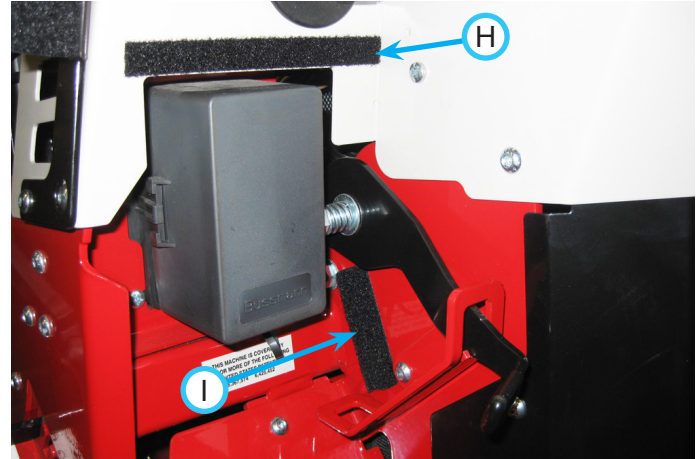
17. Remove the right dash access panel.  
18. Install the right canvas column mount and the dash access panel onto the dash using 2) 1/4" x 3/4" button head bolts and flange nuts with 1) 1/4" flat washer on the top bolt between the canvas column mount and the dash panel and 2) 1/4" flat washers on the bottom bolt between the canvas column mount and the dash access panel.



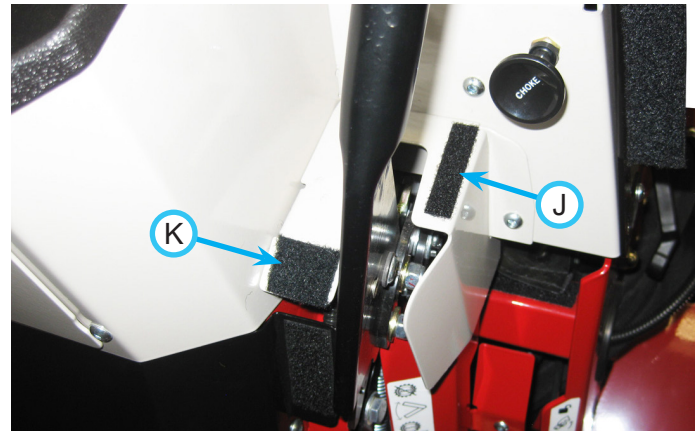
19. Repeat for left canvas column mount.  
20. Replace the pump cover on the power unit with the included pump cover with flanges (G).



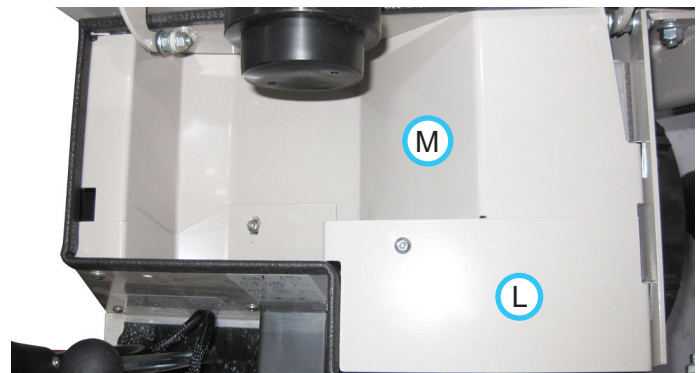
21. Install a 5" piece of 1/2" wide velcro loop (H) to the left dash panel above the front fuse panel.



22. Install a 2.5" piece of 1" wide velcro loop (I) to the front frame between the high/low shift lever and the high/low shift select bracket.  
23. Install a 2" piece of 1/2" wide velcro loop (J) to the parking brake cover in front of the parking brake.

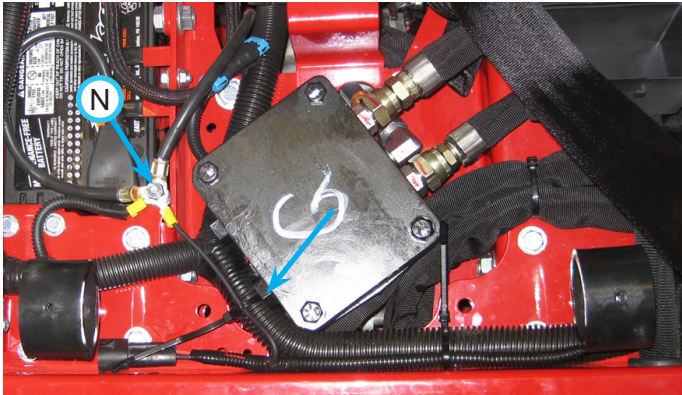


24. Install a 1" piece of 1" wide velcro loop (K) to the parking brake cover between the parking brake and the center dash panel.  
25. Disconnect the negative battery cable from the power unit's battery.  
26. Open the toolbox lid and remove the left (L) and right (M) toolbox liner panels.

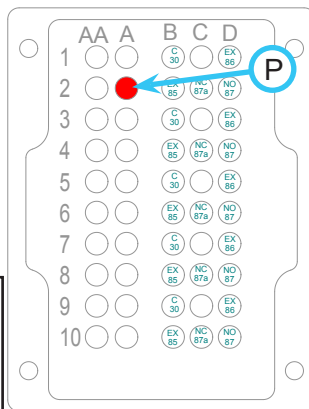
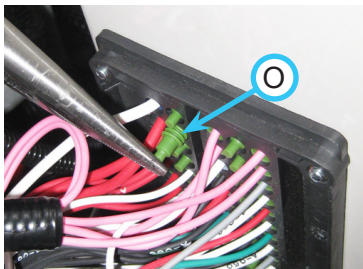


# WEATHER CAB SETUP INSTRUCTIONS

27. Place the wire harness in the power unit's seat box area. Connect the ring terminal to the ground stud (N). Route the wire with the terminal along the main harness into the tool box area. Use zip ties to fasten the wires to the main harness.

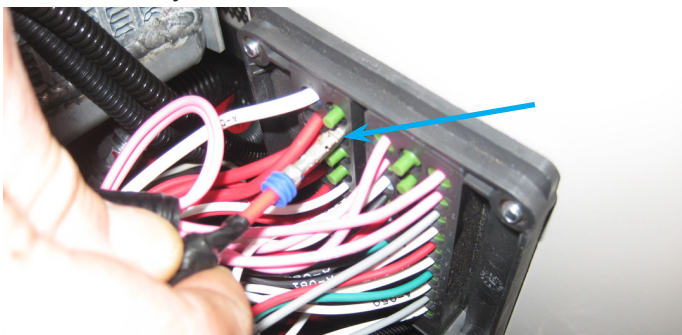


28. Use a needle nose pliers to remove the green plug (O) from position A2 (P - red highlighted position) on the rear fuse panel.



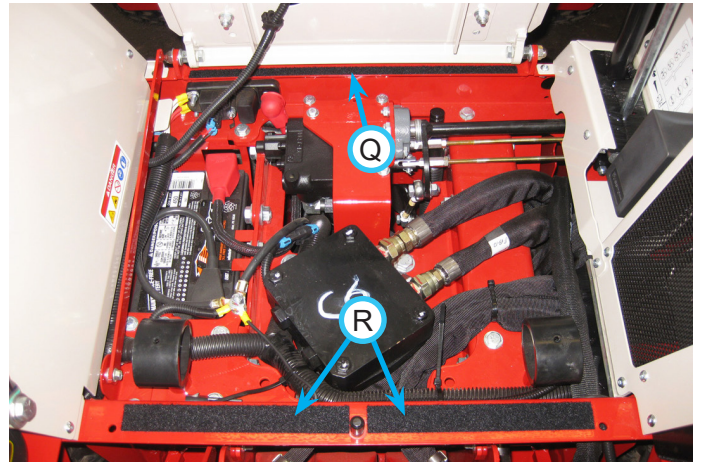
NOTE: Both the picture and the sketch are shown from the rear of the fuse panel inside the toolbox.

29. Install the terminal into position A2 in the fuse panel. NOTE: the terminal can only be installed one way. Orient the terminal with the hole pointing up and insert into the fuse panel. The terminal needs to snap into place. If necessary, use a needle nose pliers to push the terminal in, being careful not to damage the wire insulation. Double check the connection by tugging gently on the wire with your hand.



30. Reinstall the toolbox liner panels.

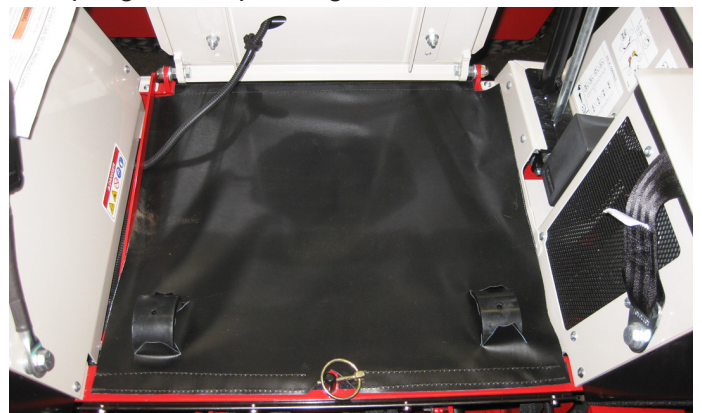
31. Tilt the seat forward as far as possible and secure in place.  
32. Install a 16" piece of 1/2" wide velcro loop (Q) to the top flange on the front of the seat box frame.



33. Install 2) 8" pieces of 1" wide velcro loop (R) to the top flange on the rear of the seat box frame.  
34. Remove the seat pin bolt and seat pin from the seat box rear flange.  
35. Install the lower rear window mount on the underside of the seat box rear flange using 2) 1/4 x 1/2" button head bolts (S) down through the outside set of holes in the seat box flange and lower rear window mount and fasten with 1/4" flange nuts.  
36. Fasten the center hole using the seat pin and bolt.



37. Install the rear frame canvas onto the velcro at the front of the seat box frame, stretch the canvas across the frame, and fasten onto the velcro at the rear of the seat box frame. Make sure the seat springs stick up through the cutouts in the canvas.



# WEATHER CAB SETUP INSTRUCTIONS

38. Remove the existing seat belt from the power unit. Install the seatbelt upper mount to the back edge of the roll bar as shown below. Install 2) U-bolts from the front of the roll bar through the holes in the seatbelt upper mount.



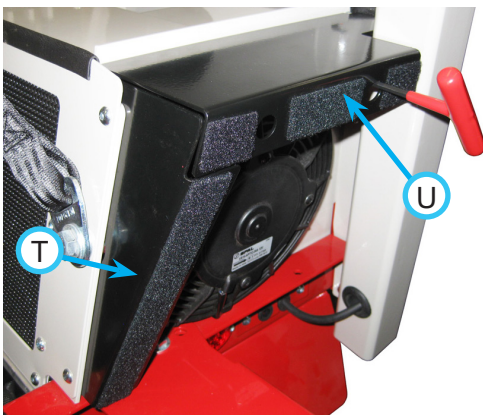
Center the seatbelt upper mount on the top of the roll bar and fasten with 4) 3/8" locking flange nuts. Make sure there are no twists in the seatbelt and fasten the lower seat belt anchors to the power unit's seat box rear panels.

Install a 7/16 x 1-1/4" bolt and 7/16" flat washer through each seat belt anchor. Add 2) 7/16" flat washers between each seat belt anchor and the seat box rear panels. Fasten to the seat box rear panels with a 7/16" flat washer and a 7/16 lock nut.

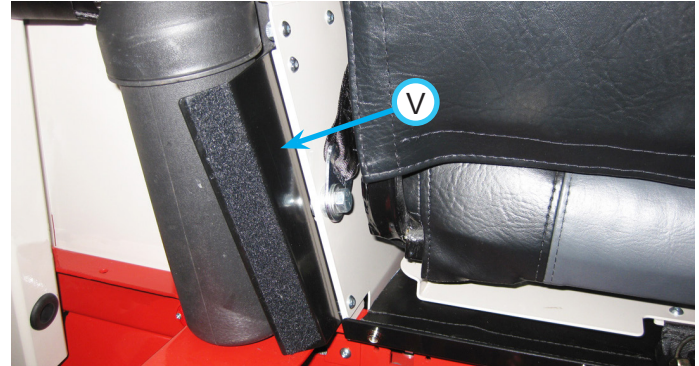


39. Remove the 2) 1/4 x 3/4" button head bolts from the inside of the right fender. Place the rear window right bracket (T) on the back side of the fender flange and fasten with 2) 1/4" button head bolts and 1/4" locking flange nuts.

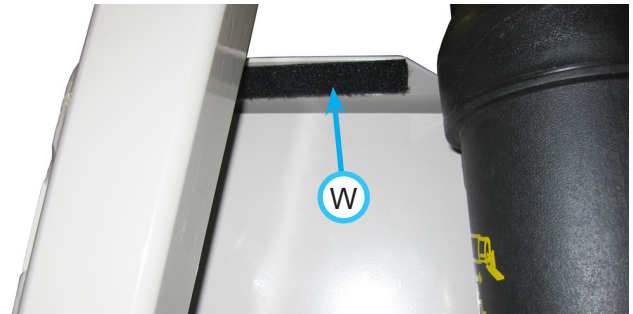
40. Remove the 2) 1/4 x 3/4" button head bolts from the right seat box rear panel above the cooling fan and install the rear window top bracket (U).



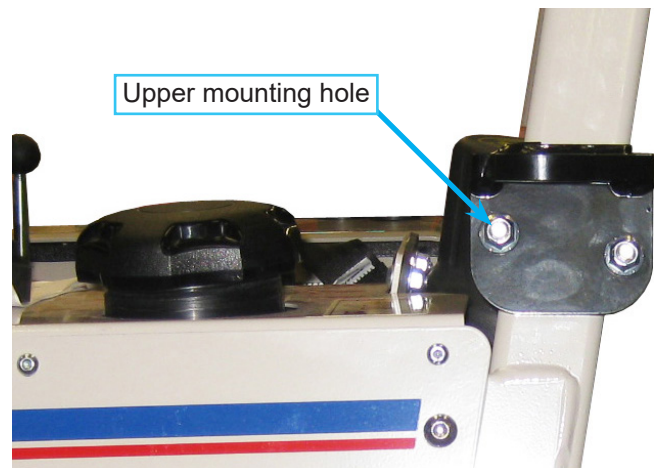
41. Remove the 2) 1/4 x 3/4" button head bolts from the inside of the left fender and discard the flange nuts. Place the rear window left bracket (V) on the back side of the fender flange and fasten with the 1/4" button head bolts through the fender and into the u-nuts on the bracket.



42. Install a 4" piece of 1" wide velcro loop (W) onto the underside of the fuel tank cover, between the manual holder and the roll bar.



43. Identify the left and right rear cab mounts. The cab mounting surface will be angled toward the front and the upper hole on the roll bar mount will also be toward the front.



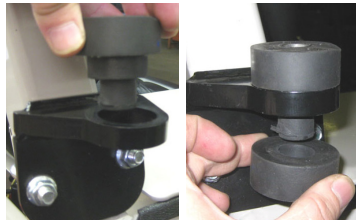
# WEATHER CAB SETUP INSTRUCTIONS

44. Install the rear cab mounts onto the roll bar using 2) U-bolts and 4) 3/8" locking flange nuts. The bottom face of the mounting flange should be parallel to the top face of the seat box panel and approximately 13-5/8" up from the bottom of the roll bar.

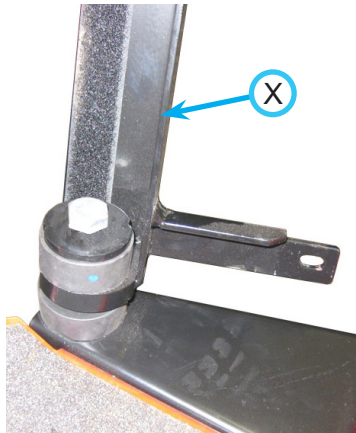
Parallel with top face of the seat box panel.



45. Install a two piece isolator in the mounting hole of both rear cab mounts. Insert the stepped piece of the isolator down through the cab mount and install the bottom piece.

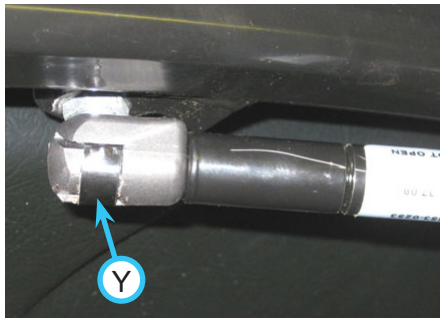


46. Place a 3/16" thick, notched washer onto a 1/2 x 3" bolt. Insert the bolt through the isolator on the right cab front support. Install the right cab front support (X) on the right front cab mount. Fasten with a 1/2" locking flange nut. Do not tighten.



47. Repeat for left cab front support.

48. Remove the gas door shock where it attaches to the cab frame. Insert a flat screwdriver under the spring clip (Y) and pry down to release. Remove the shock end from the mounting stud. Remove the door from the cab by lifting the door off the hinge pins.



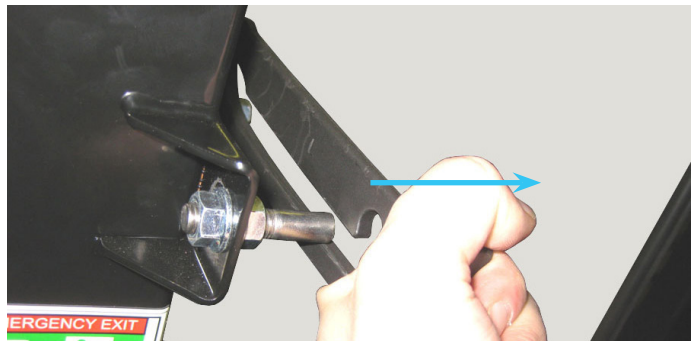
49. Remove the right front window (emergency exit). Lift up on the handle to unlatch. Push the win-

dow open slightly and lower the handle so the latch pin exits through the release slot.



Remove the window from the cab by lifting the window off the hinge pins.

50. Remove the right and left rear windows. Lift up on the handle to unlatch and push to open window. Pull the handle toward the rear of the cab until it can be removed from the latch pin.



Remove the rear windows from the cab by lifting the windows off the hinge pins.

51. Remove the fuel tank cover from the cab.  
52. Attach lift sling to a hoist and position above the weather cab. Clip the 4) lift sling hooks to the lift points at each corner of the cab.



Lift point decals are located under each lift point for easy identification.

# WEATHER CAB SETUP INSTRUCTIONS

53. Lift the weather cab and position it over the power unit.

## **⚠ WARNING**

Use only the KW450 lift sling attached at all four lift points to lift the cab.

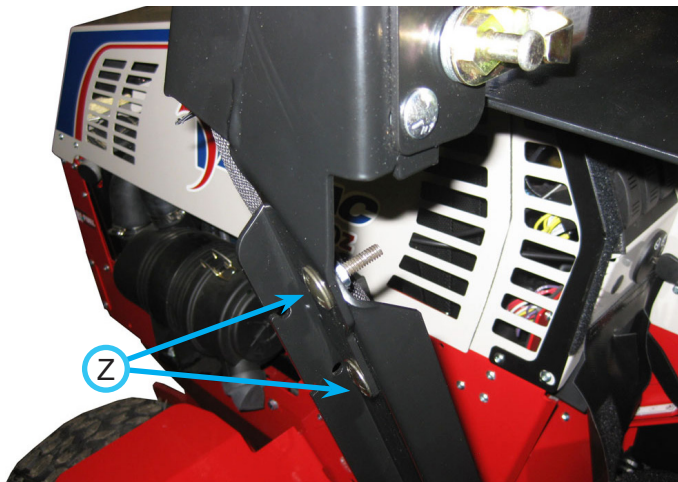
Never walk or stand beneath cab when it is raised off the ground.



54. Lower the cab onto the power unit. Insert a 1/2 x 3" bolt into the cab mount brackets and guide into the rear cab mount isolators.



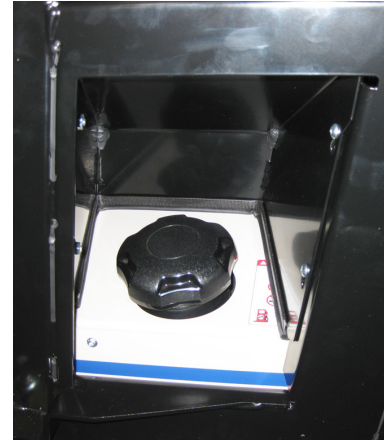
55. Raise or lower the weather cab until the front cab supports align with the cab mounting holes (cab supports mount on the inside). Install 4) 1/4 x 1-1/4" step bolts (Z) and fasten with 1/4" flange nuts. Do not tighten.



56. Lower the weather cab until the rear cab mount brackets are resting on the rear cab mount isolators. Install a 3/16" thick, notched washer onto the 1/2" bolt on the bottom side of each cab mount isolator and fasten with a 1/2" locking flange nut.

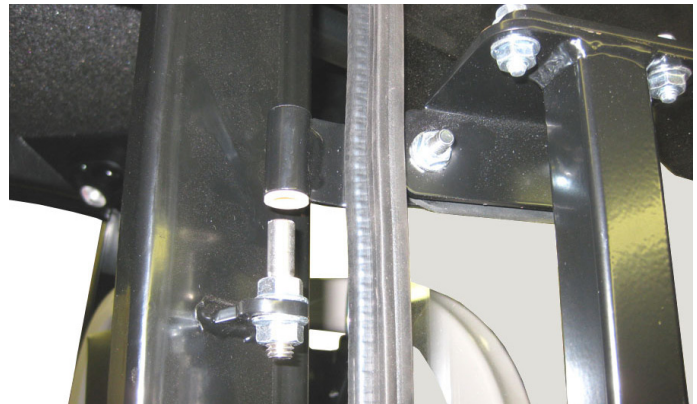
57. Tighten the hardware for the front cab supports to the cab, the front cab supports to the cab front mounts, and the cab to the cab rear mounts.

58. Install the fuel tank cover by sliding the flanges down inside the mounting flanges on the cab. Press the fuel tank cover down far enough to seal against the top of the fuel tank.



Install 2) 1/4 x 1/2" button head bolts through the front mounting flange and the front of the fuel tank cover. Fasten with 1/4" flange nuts. Install 2) 1/4 x 1/2" button head bolts through the rear holes on the fuel tank cover and through the rear mounting flange. Fasten with 1/4" flange nuts.

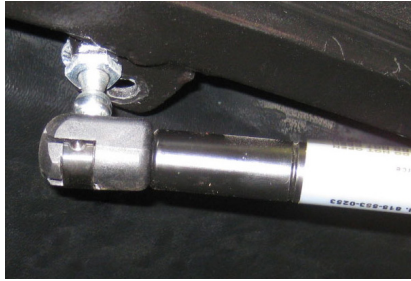
59. Install the door onto the cab by placing the hinge pivots over the hinge pins on the cab.





# WEATHER CAB SETUP INSTRUCTIONS

60. Align the gas door shock end with the mounting stud on the cab frame and press until shock end snaps over the head of the mounting stud.



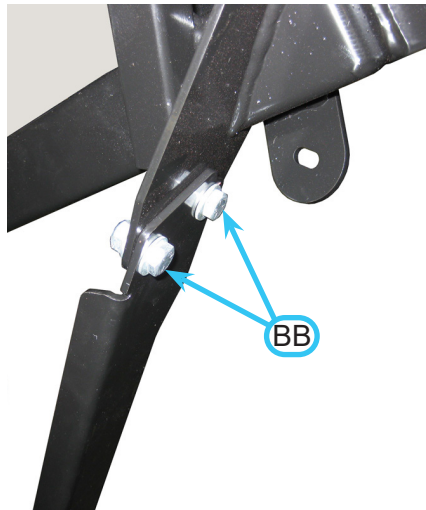
## CAUTION

The gas door shock must be installed to prevent the door from opening too far or swinging open or shut too fast. Damage to the door glass and/or weather cab glass may occur if gas door shock is not installed.

61. Install the right lower window and right lower window bracket. Remove the nuts from the 4) step bolts installed in the window. Do not remove the spacers. Insert the bolts into the 3) mounting tabs (1, 2, & 3) on the cab frame. Install the right lower window bracket (AA) on the 3) rear step bolts (2, 3, & 4) and fasten all four places with 1/4" flange nuts. Tighten only until rubber washer under the step bolt head begins to bulge slightly.



62. Install the lower door window support to the door frame with 2) 5/16 x 3/4" bolts (BB) and 5/16" flat washers. Fasten with 2) 5/16" locking flange nuts. Tighten until snug but support can still be moved.



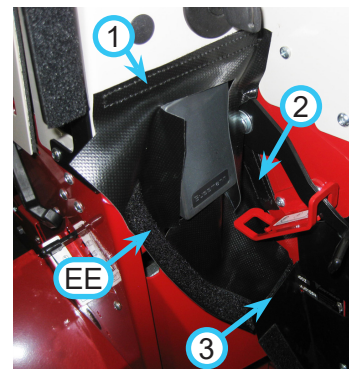
63. Install the lower door window and the lower door window bracket (DD). Remove the nuts from the 4) step bolts installed in the window. Do not remove the spacers. Insert the bolts into the two mounting tabs (1 & 2) on the door frame and the mounting hole (3) on the lower door window support (CC). Install a 1/4" flange nut on the top front bolt (1) to hold the window in place.



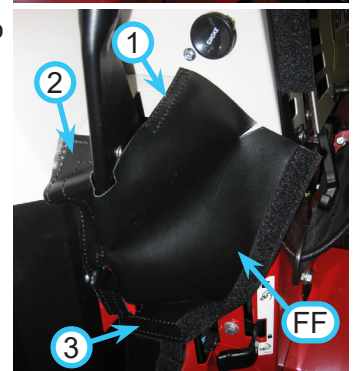
- Install the lower door window bracket (DD) on the 3) rear step bolts and fasten with 1/4" flange nuts. Tighten all four flange nuts only until rubber washer under the step bolt head begins to bulge slightly.

64. Shut the cab door and check the seal of the lower window to the power unit and weather cab. Move the bottom of the lower door window support in or out until window seals properly. Tighten the 5/16 x 3/4" bolts at the top of the lower door window support. Note: If door latch adjustment is required, refer to the service section of this manual.

65. Install the left column canvas (EE) onto the left side of the front frame column. Fasten the Velcro to the dash panel (1), the frame plate (2), and the flange on the pump cover (3).

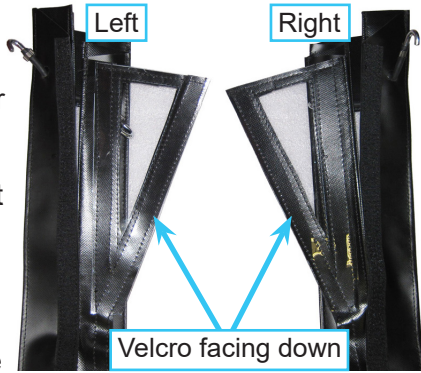


66. Install the right column canvas (FF) onto the right side of the front frame column. Fasten the Velcro to the parking brake cover (1 & 2), and the flange on the pump cover (3).



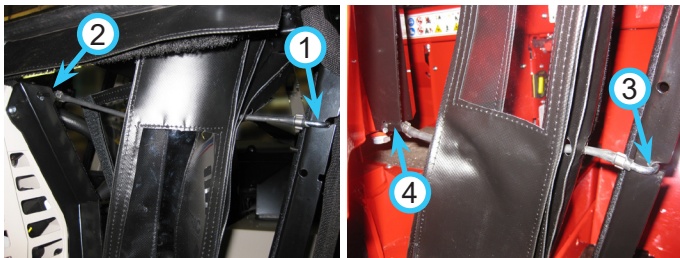
# WEATHER CAB SETUP INSTRUCTIONS

67. Lay out the canvas bellows with the Velcro on the triangular windows facing down. Identify the left and right bellows as shown.

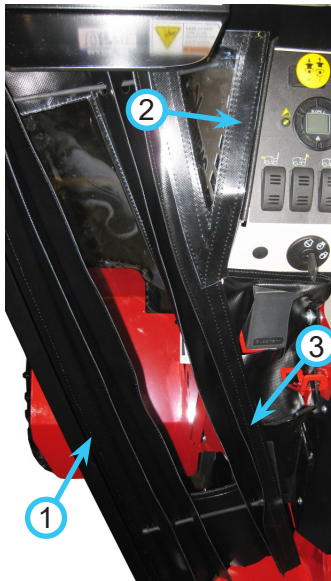


68. Install a bellows support strap through both the top and bottom sets of holes on the left and right canvas bellows.

69. Hook the top bellows support straps to the left and right cab front supports (1) and the left and right canvas column mounts (2). Hook the bottom bellows support straps to the left and right cab front supports (3) and the left and right flanges of the pump cover (4).



70. Fasten the outer Velcro strips on the canvas bellows to the Velcro strips on the left and right cab front supports (1). Fasten the Velcro strips on the triangular windows to the Velcro strips on the left and right canvas column mounts (2). Fasten the inner Velcro strips on the canvas bellows to the Velcro strips on the pump cover and the left and right column canvas (3).

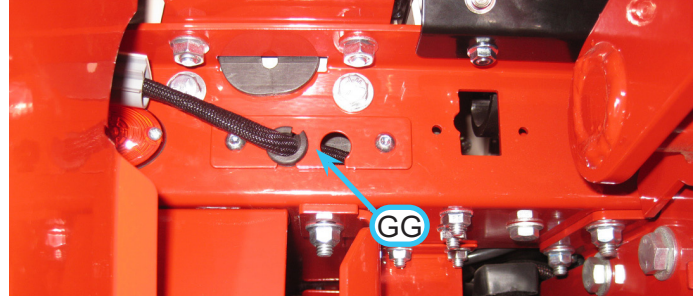


71. Remove the blank cover from the back of the seat box frame, route the wire harness through the access cutout, and connect to the wire harness installed earlier.

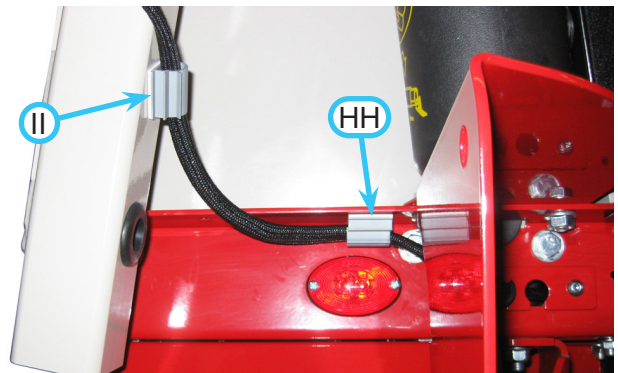
72. Remove one of the grommets from the access cover with 2) grommets and cut the grommet at one spot.

73. Install the grommet onto the wire harness and then reinstall the grommet into the access cover.

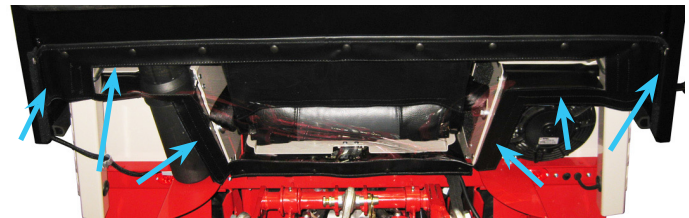
74. Install the access cover (GG) onto the seat box frame.



75. Install one adhesive clamp (HH) to the bottom of the seat box frame above the tail light. Install the other clamp (II) onto the roll bar about halfway between the seat box frame and the cab frame.



76. Snap the lower rear canvas window into place on the weather cab frame and the lower rear window mount. Attach the Velcro strips on the window to the Velcro strips on rear window brackets, the underside of the fuel tank cover, and the cab frame.



77. Install the right front window and the left and right rear side windows by placing the hinge pivots on the window over the hinge pins on the weather cab. Place the latches over the latch pins and push down to latch window.

# WEATHER CAB SETUP INSTRUCTIONS



## **CAUTION**

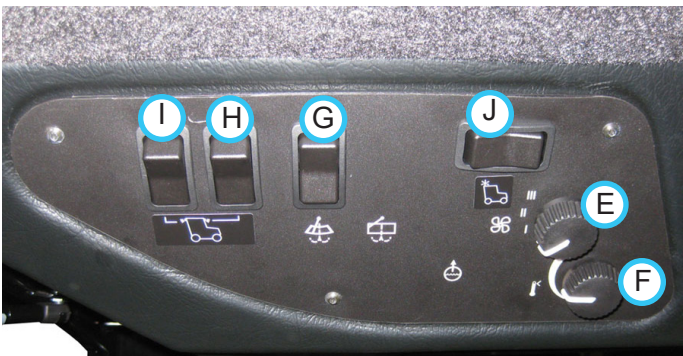
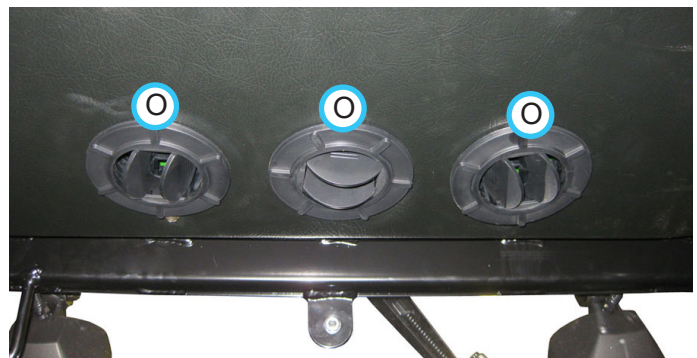
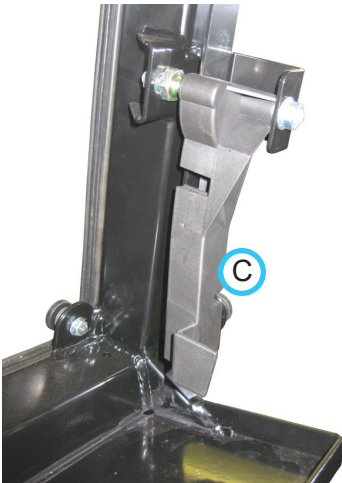
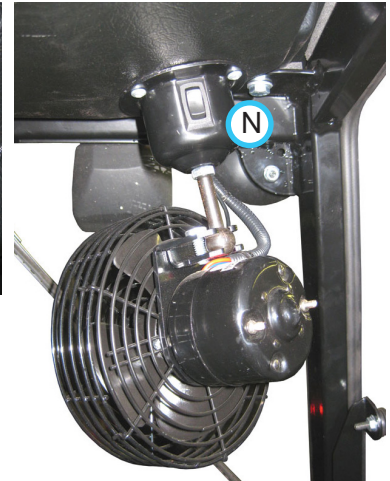
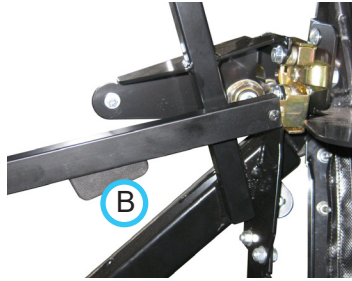
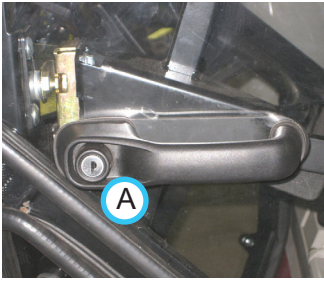
Do not exceed 30 amp draw to weather cab and additional accessories.

78. Install the 30 amp circuit breaker into slot 2 of the rear fuse panel.
79. If the power unit is equipped with a gasoline engine, install the gasoline safety decal onto the cab frame next to the fuel tank cover.



80. If the power unit is equipped with a diesel engine, install the diesel safety decal onto the cab frame next to the fuel tank cover.
81. Connect the negative battery cable to the battery. Installation is complete. For weather cab removal instructions, refer to Preparing the Weather Cab for Storage in the Service section of this manual.

# OPERATIONAL CONTROLS



## Operational Control Locations

The images above match with the following reference letters to help identify the location of operational controls for the KW450 Weather Cab.

- A - Outer Door Handle & Lock**
- B - Inner Door Handle**
- C - Emergency Exit/Window Latch Handle**
- D - Rear Side Window Latch (2 Locations)**
- E - Fan Speed Switch (Optional)**
- F - Temperature Control Dial (Optional)**
- G - Windshield Wiper Switch**
- H - Front Work Light Switch**
- I - Rear Work Light Switch**
- J - Strobe Beacon Switch (Optional)**
- K - Hazard Flasher Light Switch (Optional)**
- L - Directional Turn Signal Switch (Optional)**
- M - Interior Light & Switch**
- N - Defrost Fan & Switch (Optional)**
- O - Directional Heat Vents (Optional)**

# OPERATIONAL CONTROLS

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## Outer Door Handle & Lock (A)

Push the button on the outer door handle to unlatch the door. The outer door handle can be locked with a key. Turn the key clockwise to lock and counter-clockwise to unlock the door.

## Inner Door Handle (B)

Squeeze the button on the inner door handle to unlatch the door. The door cannot be locked from the inside.

## Emergency Exit/Window Latch Handle (C)

The emergency exit/window latch handle contains two channels for the latch pin. The lower channel allows the window to open and latch in place. The upper channel releases the handle from the latch pin and allows the window to swing completely out of the way to provide an emergency exit from the weather cab.

## Rear Side Window Latch (D)

The rear left and right side window can both be opened and latched in place. When the window is open, the latch handle can be pulled back and removed from the latch pin to allow the window to be removed from the weather cab.

## Fan Speed Switch (E)

Optional accessory. The heater fan speed switch has four positions to adjust the speed of the heater blower fan.

## Temperature Control Dial (F)

Optional accessory. The temperature control dial controls the heat output of the heater.

## Windshield Wiper Switch (G)

Pressing the top portion of the windshield wiper switch turns on the windshield wiper. Pressing the bottom portion of the switch turns the wiper off. Pressing and holding the bottom portion of the switch will cycle the windshield wiper until the switch is released. When the wiper is turned off, the wiper arm will return to the end of the stroke.

## Front Work Light Switch (H)

Pressing the top portion of the front work light switch turns the front work lights on. Pressing the bottom portion of the switch turns the lights off.

## Rear Work Light Switch (I)

Pressing the top portion of the rear work light switch turns the rear work light on. Pressing the bottom portion of the switch turns the light off.

## Strobe Beacon Switch (J)

Optional accessory. Pressing the left portion of the strobe beacon switch turns the strobe beacon on. Pressing the right portion of the switch turns the strobe beacon off.

## Hazard Flasher Light Switch (K)

Optional accessory. Pressing the right portion of the hazard flasher light switch flashes all four of the directional turn signal lights. Pressing the left portion of the switch turns the hazard flasher lights off.

## Direction Turn Signal Switch (L)

Optional accessory. Pressing the left portion of the turn signal switch turns on the left turn signal. Pressing the right portion of the turn signal switch turns on the right turn signal. Return the switch to the middle position to turn off the signals. The left and right turn signals will override the hazard flashers.

## Interior Light & Switch (M)

The switch on the light base turns the light on and off. The light swivels in the socket, which allows the light to be directed where needed.

## Defrost Fan & Switch (N)

Optional accessory. The defrost fan has two speeds. Pressing the top portion of the switch turns the fan on low. Pressing the bottom portion of the switch turns the fan on high. Return the switch to the middle position to turn the fan off. The fan can be turned to direct the air where needed.

## Directional Heat Vents (O)

Optional accessory. The heat vents can be rotated and the louvers can be tilted to direct air flow in the desired direction.

Do not rotate the vents by the louvers. Use the grip ribs on the vent flange for rotating the vents.

# GENERAL OPERATION

## Daily Inspection

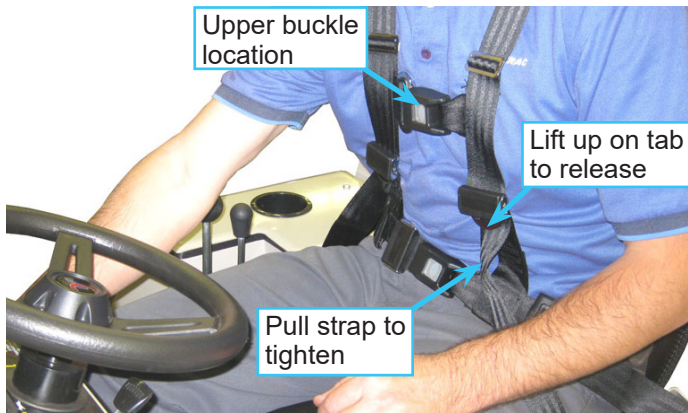
### **⚠ WARNING**

Always set the parking brake, shut off power unit engine, remove the ignition key, and ensure all moving parts have come to a complete stop before inspecting components or attempting any repair or adjustment.

1. Park machine on a level surface, with the engine shut off and all fluids cold.
2. Perform a visual inspection of both the power unit and the weather cab. Ensure the weather cab is properly mounted to the power unit. Look for loose or missing hardware, damaged components, or signs of wear.
3. Check the power unit's lights along with work lights, blinker lights, and/or strobe beacon to ensure lights are working properly.
4. Inspect window and door seals for cracks and tears. Check glass for chips or damage.
5. Inspect hydraulic hoses and fittings, fuel lines, and heater lines to ensure tight, leak free connections.
6. Refer to the power unit operator's manual. Check the power unit's engine oil, hydraulic oil, cooling system, tire pressure, and fuel level. Add fluids or service as required.
7. Repair or replace damaged or non-working components.
8. Test the power unit's operator safety interlock system\*.

## 4-Point Seatbelt

Fasten the lower buckle of the 4-point seatbelt and adjust the lap belt until snug but not tight. Tighten by pulling on the ends of the lap belt straps. Tighten both sides evenly so the buckle remains centered on the operator. Loosen by pulling up on the edge of the seatbelt strap lock facing away from the buckle.



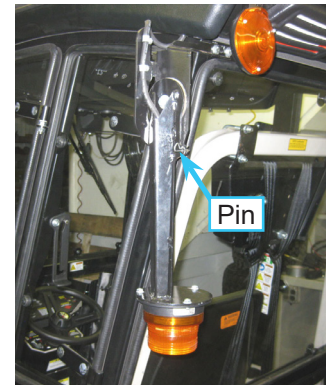
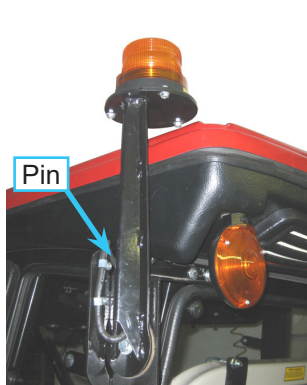
Fasten the upper buckle of the 4-point seatbelt and adjust the left and right shoulder belts. The shoulder belts must be loose enough to allow the operator to reach all dash controls, but should be snug at the point that the operator can reach the dash controls. Tighten the left and right shoulder belts by pulling on the ends of the straps. Loosen the shoulder belts by lifting up on the tab on the seatbelt strap lock.

Adjust the upper buckle location, so that the buckle catches the operator in the middle of the chest when the operator leans forward against the belt.

If the seatbelt can not be tightened or loosened far enough to properly fit the operator, the seatbelt upper mount will need to be adjusted. Refer to seatbelt upper mount adjustment in the service section of this manual.

## Strobe Beacon

The strobe beacon is mounted on an arm with two positions. The strobe beacon arm is rotated up for use, but can be rotated down for low clearance areas, transport, and storage. A hair pin secures the arm in the desired position.



\* Refer to power unit operator's manual for operation of power unit controls.

# SERVICE



## Attention

If any component requires replacement, use only original Ventrac replacement parts.

## Cleaning & General Maintenance

For best results, and to maintain the finish of the KW450, clean or wash the weather cab to remove dirt, gravel, and salt deposits. Remove any ice or snow accumulations from the roof, windows, and accessories.



## Attention

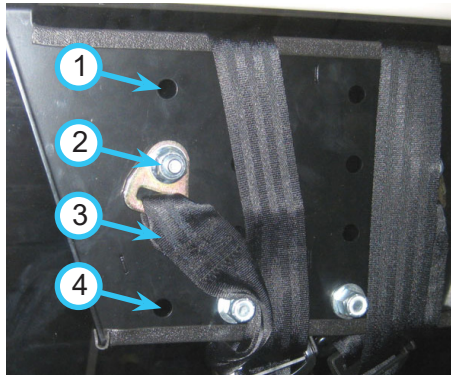
To maintain the finish of the weather cab and accessories, thoroughly wash the equipment after each use to remove any corrosive agents (e.g., salt). Failure to clean the equipment may result in corrosion of (including but not limited to) steel, aluminum, and electrical components. Equipment that will experience repeated exposure to corrosive agents should be pretreated with a corrosion preventative.

## Seatbelt Upper Mount Adjustment

The seatbelt upper mount has four seatbelt mounting positions. The seatbelt is mounted in the second position at the factory.

If the seatbelt cannot be tightened enough to properly secure the operator, move the seatbelt anchors to the first position on the seatbelt upper mount.

If the seatbelt cannot be loosened enough to fit the operator, move the seatbelt anchors down to the third or fourth position on the seatbelt upper mount.

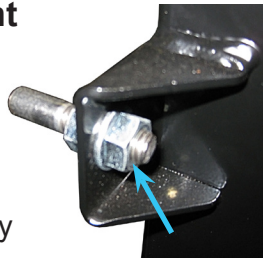


## Window Latch Adjustment

The window latch pins can be adjusted if the windows do not close properly.

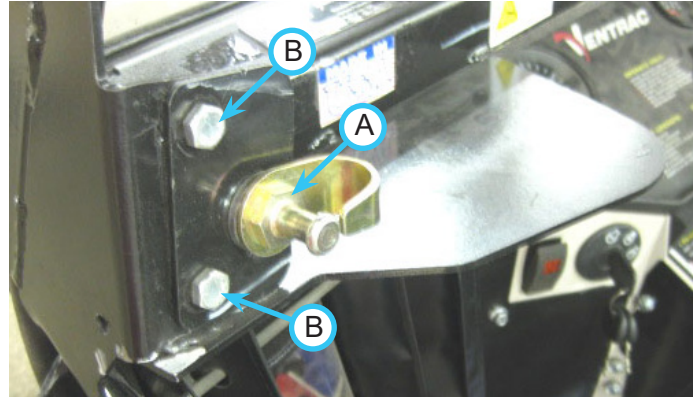
If the window does not seal correctly, loosen the nut on the window latch pin and move away from the window slightly.

If the window latch is hard to close, move the window latch pin toward the window slightly.



## Door Latch Adjustment

If the door does not latch properly, the latch pin can be adjusted. If the latch pin and door latch are misaligned vertically, loosen the nut on the back of the latch pin (A) and move the latch pin up or down until properly aligned with the door latch.



If the door does not latch because the latch pin is set too deep or if the door latches but does not seal properly, loosen the 2) latch plate bolts (B) and move the latch plate in or out to the proper depth. NOTE: Check the lower door window for proper adjustment prior to changing latch pin depth.

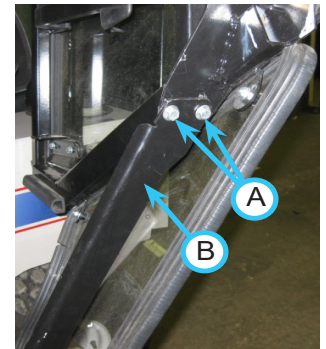
## Lower Door Window Adjustment

Check the bottom of the lower door window where it meets the left cab front support.

If there is a gap between the lower door window and the cab front support when the main door is sealed, the lower door window needs to be adjusted inward.

If the lower door window hits the cab front support too soon, it can prevent the cab door from latching or sealing properly. The lower door window needs to be adjusted outward.

Loosen the 2) bolts (A) at the top of the lower door window support (B). Move the bottom of the lower door window in or out until proper position is reached. Retighten the bolts on the lower door window support.



## Door Latch Lubrication

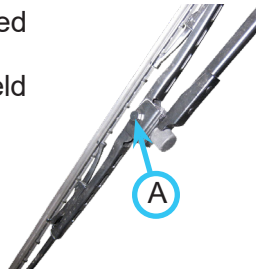
Lubricate the door latch mechanism every 50 hours with a spray lube or light weight oil. Use a cloth to protect the window glass from the spray and wipe off any excess oil to prevent dripping.

# SERVICE

## Wiper Blade Replacement

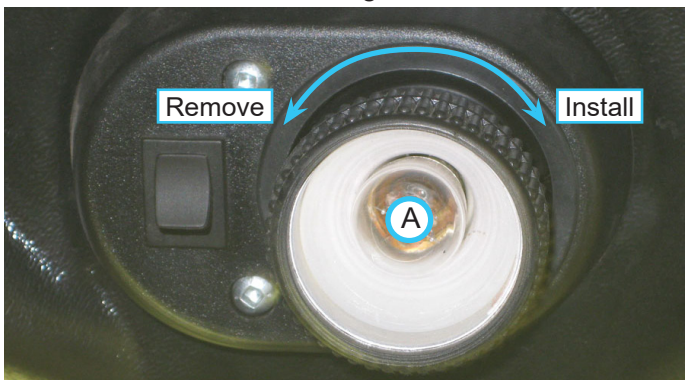
The wiper blade should be replaced on a yearly basis, or sooner if the blade does not clean the windshield effectively.

1. Remove the nut and bolt (A) that fasten the wiper blade to the wiper arm.
2. Install new wiper blade and reinstall the nut and bolt.



## Interior Light Bulb Replacement

1. Push in on the bulb (A) and turn counterclockwise to release.
2. Remove bulb from the light socket.



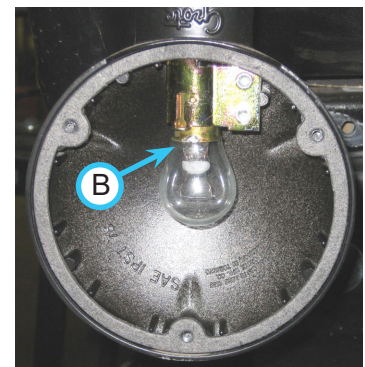
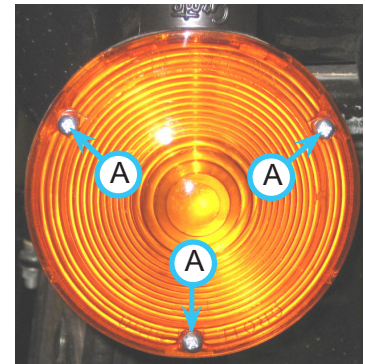
3. Align the pins on the new bulb with the slots in the light socket.
4. Push in on the bulb and turn clockwise.

## Work Light Bulb Replacement

The work lights are equipped with LEDs and do not use a replaceable bulb. If a work light no longer functions, the entire light must be replaced.

## Turn Signal Bulb Replacement

1. Remove the 3) screws (A) from the turn signal lens and remove the lens.
2. Push up on the turn signal bulb (B) and turn counterclockwise to release.
3. Remove bulb from the light socket.
4. Align the pins on the new bulb with the slots in the light socket.
5. Push in on the bulb and turn clockwise.
6. Reinstall the turn signal lens.



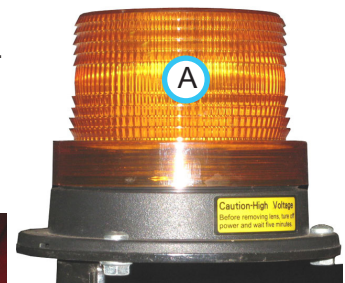
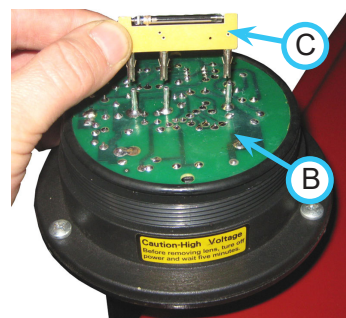
## Strobe Beacon Bulb Replacement

### CAUTION

#### High Voltage!

Before removing lens, turn off power and wait five minutes.

1. Turn the strobe beacon off and wait five minutes.
2. Unscrew the strobe lens (A) from the base.
3. Hold the circuit board (B) in place with one hand and remove the strobe bulb (C).



4. Install the new strobe bulb. Push securely onto the circuit board connectors.
5. Check to ensure the circuit board and the O-ring are in place, and reinstall the strobe lens.

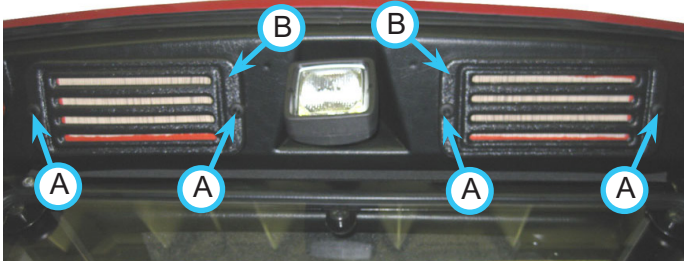


# SERVICE

## Heater Air Filter Replacement

The 2) heater air intake filters should be replaced on a yearly basis, or sooner if operating in dusty conditions.

1. Remove the 2) thumb screws (A) holding each filter cover (B) onto the cab.



2. Remove both air filters (C) from the cab air intake vents and insert the replacement filters.

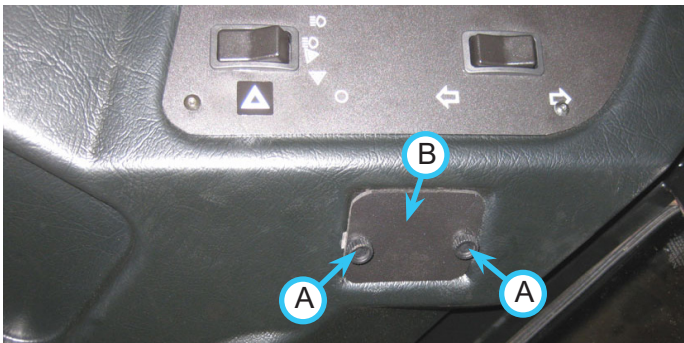


3. Reinstall the filter covers and thumb screws.

## Fuse Replacement

The fuse block is located in the headliner just in front of the right control panel.

1. Remove the 2) thumb screws (A) from the fuse block cover (B).



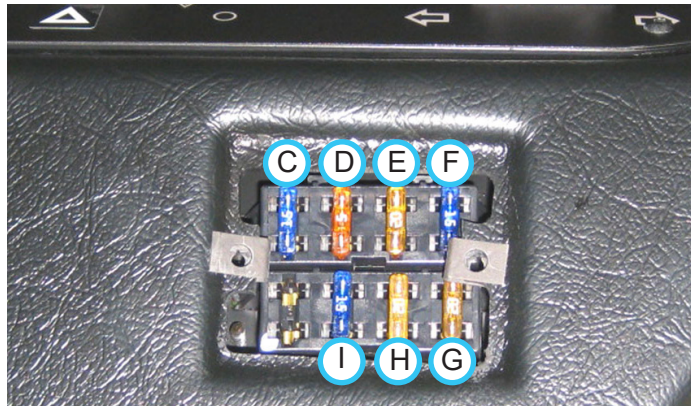
2. Remove the defective fuse from the socket.

### CAUTION

Always use the correct amperage fuse. If a fuse continuously burns out, it is a sign of a problem with the wires and/or the device being supplied power. Correct the problem before replacing the fuse.

3. Push a new fuse into the socket.

4. Reinstall the fuse block cover and thumb screws.



Ref.	Circuit	Fuse Size
C	Heater	15 A
D	Strobe Beacon	5 A
E	Windshield Wiper	10 A
F	Front Work Lights	15 A
G	Rear Work Light	10 A
H	Interior Light, Defrost Fan	10 A
I	Turn Signals	15 A

# SERVICE

## Storage

### Preparing the Weather Cab for Storage

1. Clean the weather cab.



#### Attention

To maintain the finish of the power unit and attachment, thoroughly wash the equipment to remove any corrosive agents (e.g., salt). Failure to clean the equipment may result in corrosion of (including but not limited to) steel, aluminum, and electrical components.

2. Inspect for loose or missing hardware, damaged components, or signs of wear.
3. Inspect safety decals, Replace any safety decals that are faded, illegible, or missing.

### Removing the Weather Cab

#### ⚠ WARNING

Before making repairs or adjustment, set the parking brake, turn off engine, and remove ignition key. Always disconnect the negative battery cable from the battery when working with electrical components. Always work in a manner that does not put safety at risk!

#### ⚠ WARNING

Safety glasses must be worn during removal. Ear (hearing) protection must be worn when using air or power tools.

#### ⚠ WARNING

Use only the KW450 lift sling attached at all four lift points to lift the cab. Never walk or stand beneath cab when it is raised off the ground.

#### ⚠ WARNING

Place wheel chocks in front and back of wheels to prevent power unit from rolling during removal of weather cab from the power unit.

1. Place wheel chocks in front and back of wheels to prevent power unit from rolling.
2. If the cab is equipped with spreader controls, remove and store with the spreader.

3. If the weather cab is equipped with a heater, locate the connection of the left cab heater hose and the power unit heater hose at the front edge of the power unit foot platform. Pinch the hoses on each side of the connection to prevent loss of fluid. Disconnect the heater hoses and cap the ends with the fittings provided with the heater kit. Repeat for right side heater hoses.
4. Unsnap and remove the lower rear canvas window.
5. Disconnect the cab wire harness under the power unit seat. Remove the access cover from the back of the seat box frame and remove the harness from the power unit. Reinstall the access cover. Remove the harness from the wire clamps on the seat box frame and the roll bar.
6. Remove the rear frame canvas from under the seat.
7. Unhook the 4) bellows support straps from the cab front supports and column mounts. Remove the canvas bellows with the support straps from the weather cab.
8. Remove the left column canvas from around the high/low shift lever.
9. Remove the right column canvas from around the parking brake and the neutral assist lever.
10. Remove the cab door, the right front emergency window, and the left and right rear windows.
11. Remove the right lower window and window bracket from the weather cab.
12. Remove the fuel tank cover from the weather cab.
13. Loosen the 1/2" bolts for the rear cab mounts and the 1/4" step bolts that fasten the main cab frame to the front cab supports.
14. Attach lift sling to a hoist and position above the weather cab. Clip the 4) lift sling hooks to the lift points at each corner of the cab. Lift point decals are located under each lift point for easy identification. Lift the weather cab slightly and remove the 1/4" bolts from the cab front supports and the 1/2" bolts from the rear cab mounts.

#### ⚠ WARNING

Use only the KW450 lift sling attached at all four lift points to lift the cab. Never walk or stand beneath cab when it is raised off the ground.

Lift and remove the weather cab from the power unit and place on a pallet for storage.

# SERVICE

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15. Remove the rear cab mounts from the power unit roll bar and store with the cab.
16. Loosen the 1/2" bolts that fasten the front cab supports to the front cab mounts, but do not remove. Remove the front cab mounts from the power unit foot platform and store with the cab.
17. Remove the pump cover with flanges from the power unit center column and reinstall the original pump cover.
18. Remove the left and right canvas column mounts from the power unit dash.
19. Remove the left, right, and top window brackets from the rear of the power unit.
20. Move the power unit steering cylinder to the middle mounting hole if using dual wheels or move to the inner hole for use with single wheels.
21. Reinstall the right and left foot pegs, if desired.
22. The 4-point seat belt may be left installed for use without the weather cab. If the 4-point seatbelt is removed from the power unit, the original lap belt must be reinstalled.
23. Place all cab components that were removed from the cab and power unit on the pallet inside the weather cab.
24. Reinstall the right emergency window and the right and left rear windows onto the cab.
25. Place the door inside the cab for storage, or remove the lower door window, the window support, and the lower door support bracket and place inside the cab and reinstall upper door onto the cab.
26. Secure the cab to the pallet and store at a location where it is unlikely to get damaged.

## **Removing the Weather Cab from Storage**

Inspect, clean, and install the weather cab according to the setup instructions in this manual.

# SPECIFICATIONS

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## Dimensions

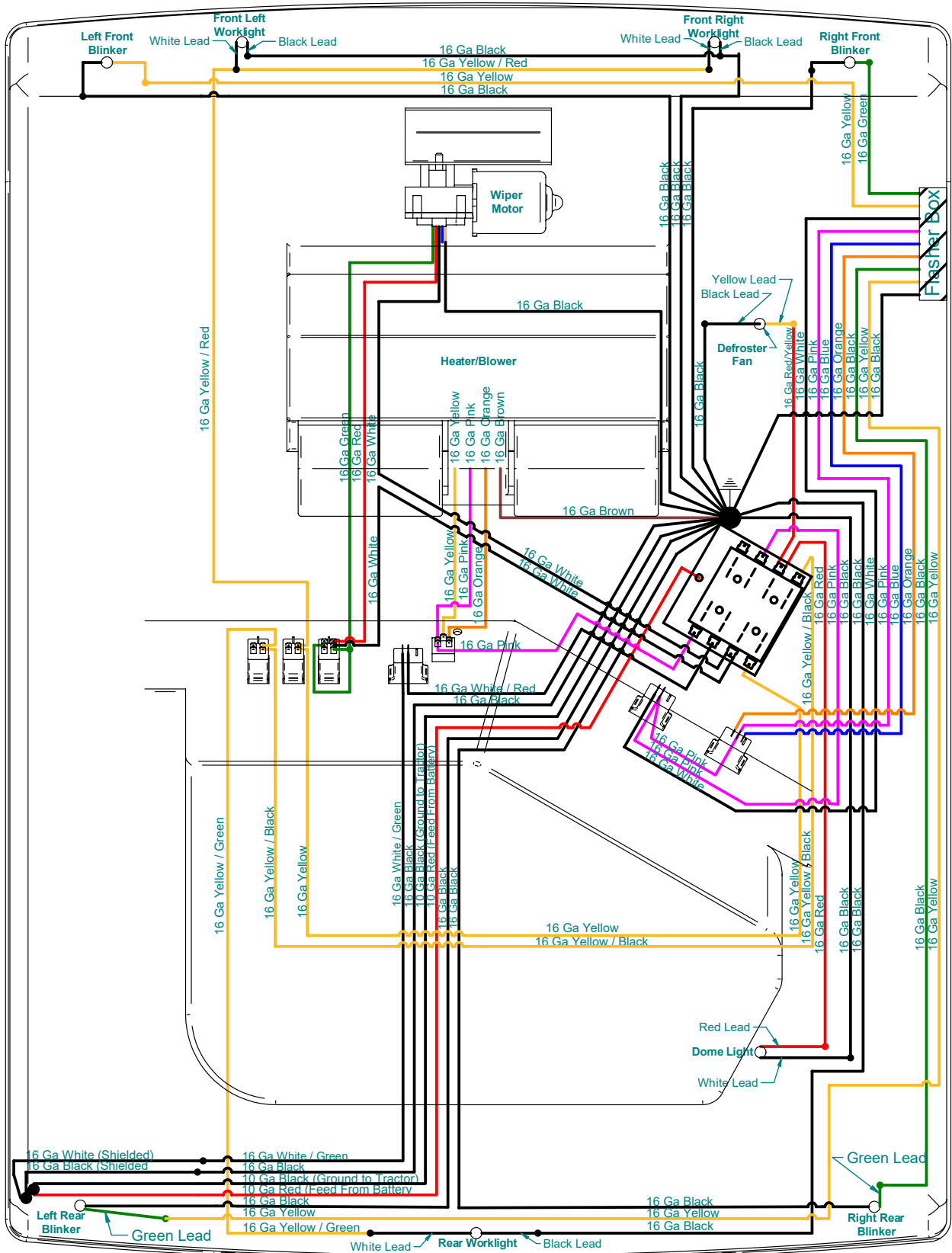
Overall Height . . . . .	.51 in. (129.5 cm)
Overall Length . . . . .	.58 in. (147.3 cm)
Overall Width . . . . .	.50.5 in. (128.3 cm)
Weight . . . . .	.400 lbs. (181.4 kg)
Height (installed on power unit) . . . . .	.80.5 in. (204.5 cm)
Height with Strobe Beacon (installed on power unit) . . . . .	.84 in. (213.3 cm)
Length (installed on power unit w/standard hitch) . . . . .	.92 in. (233.7cm)
Turning Radius (cab installed on power unit) . . . . .	.68 in. (173 cm)

## Features

- Glass on frame design
- Tempered glass
- Removable door and side windows
- Emergency exit
- Window in lower rear panel
- Windows in front pleated canvas panels
- Contoured headliner and roof assembly
- Heavy duty front wiper and wiper motor
- Front and rear LED work lights
- 4 point seatbelt
- Cushioned headrest

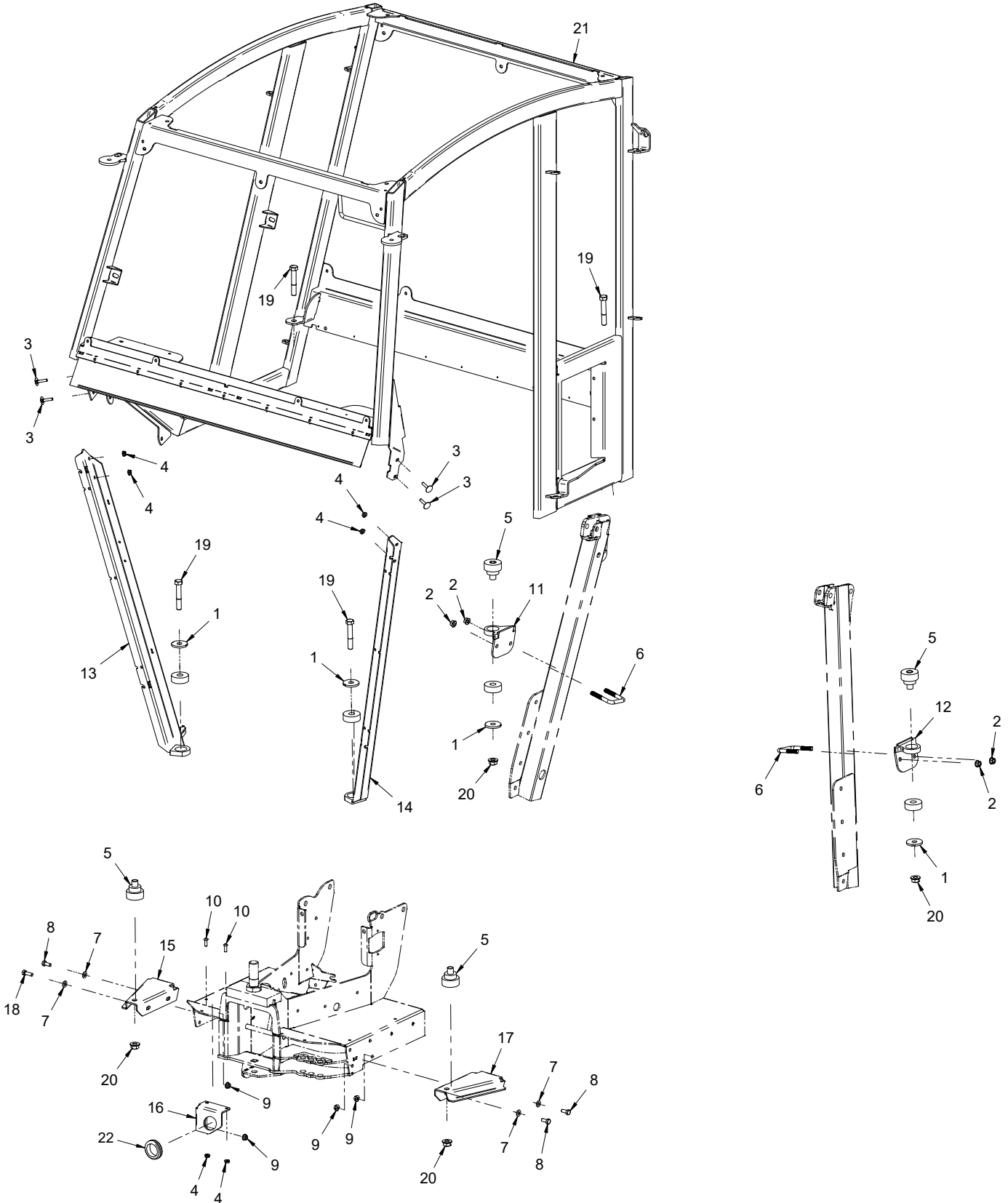
# PARTS

## ILLUSTRATED DRAWING Electrical Diagram



# PARTS

## ILLUSTRATED DRAWING Cab Frame & Mount



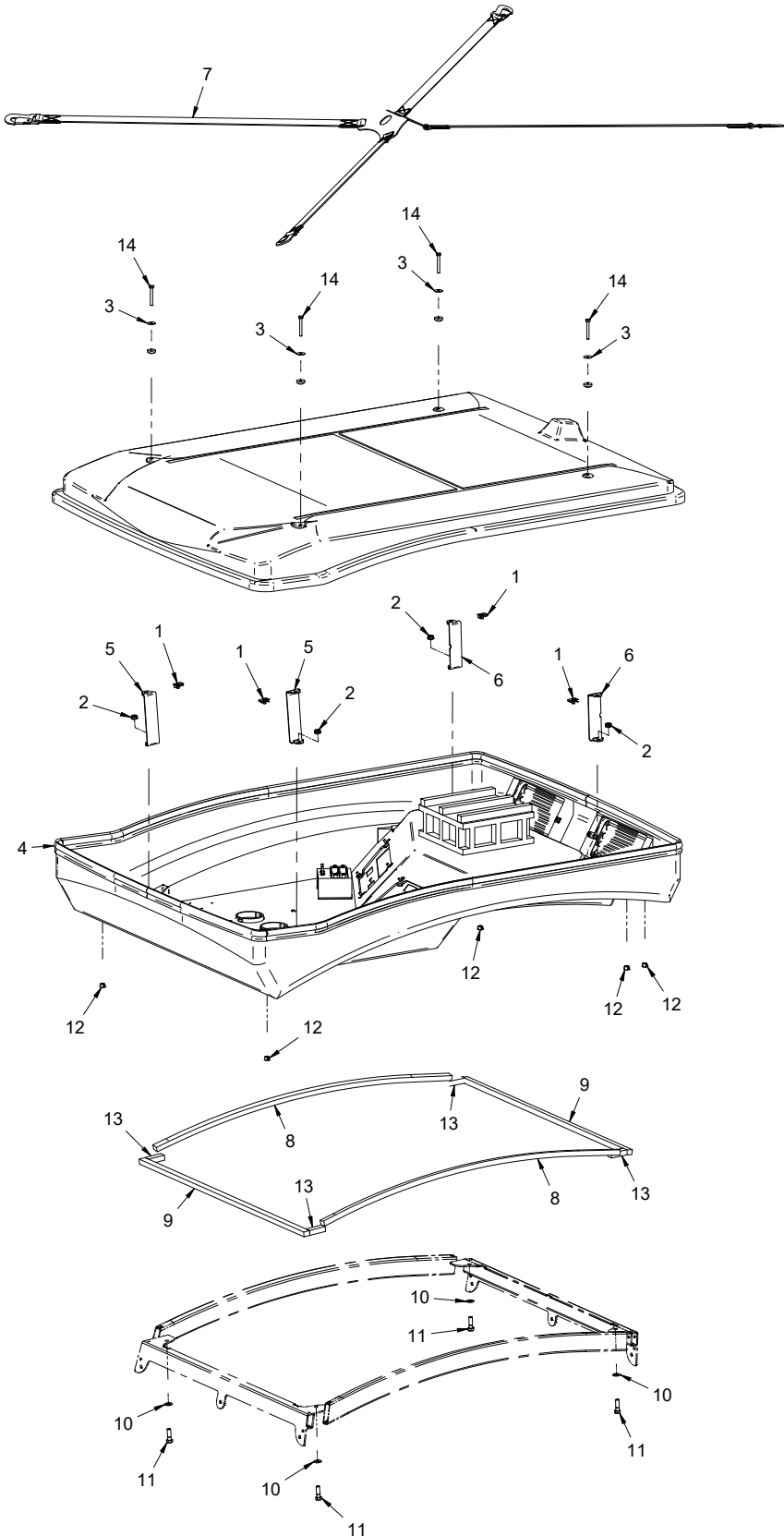
# PARTS

## Cab Frame & Mount

REF.	PART NO.	DESCRIPTION	QTY.
1	99.B0095	WASHER, .531 X 1.75 3/16 THICK	4
2	99.SF06	NUT, SF 3/8-16 USS	4
3	99.K0115	BOLT, STEP 1/4-20X1-1/4 BLACK	4
4	99.SF04	NUT, SF 1/4-20 USS	6
5	05.0123	ISOLATOR, .53 ID X 1.87 OD	4
6	11.0053	U-BOLT, 3/8-16 2-1/16" ID SQ BEND	2
7	95.05	WASHER, FLAT 5/16 SAE	4
8	90.0506	BOLT, HEX 5/16-18 UNC X 3/4"	3
9	99.SF05	NUT, SF 5/16-18 USS	4
10	99.0406	BOLT, 1/4-20 X 3/4 BSCS	2
11	64.1478	MOUNT, CAB REAR RIGHT	1
12	64.1477	MOUNT, CAB REAR LEFT	1
13	64.1474	SUPPORT, CAB FRONT RH	1
14	64.1473	SUPPORT, CAB FRONT LH	1
15	64.1733	MOUNT, CAB FRONT RIGHT	1
16	64.1738	BRACKET, MOUNT SUPPORT	1
17	64.1732	MOUNT, CAB FRONT LEFT	1
18	90.0508	BOLT, HEX 5/16-18 UNC X 1"	1
19	90.0824	BOLT, HEX 1/2-13 UNC X 3	4
20	99.E0103	NUT, LOCKING FLANG 1/2-13	4
21	62.1390	FRAME, MAIN KW450	1
22	05.0036	GROMMET, 1 1/2ID,2 1/8OD,9/16T	1

# PARTS

## ILLUSTRATED DRAWING Cab Headliner & Roof Mount





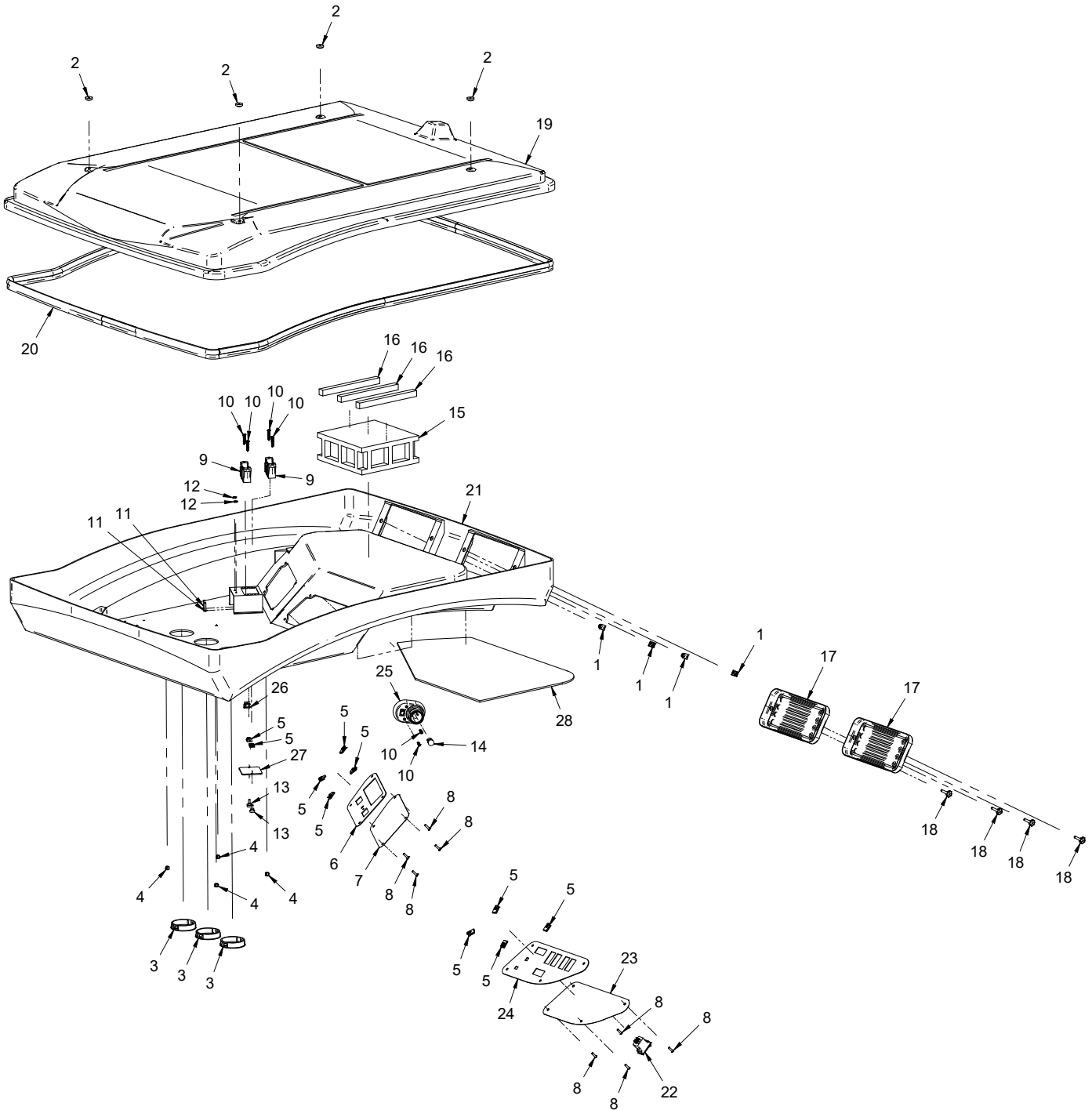
# PARTS

## Cab Headliner & Roof Mount

REF.	PART NO.	DESCRIPTION	QTY.
1	99.E0046	.NUT, "U" 1/4-20 EXTRUDED	4
2	99.E0082	.NUT, LOCKING FLANGE 3/8-16	4
3	99.B0100	.WASHER, FENDER 1/4 X 7/8 OD ZP	4
4	N/A	.HEADLINER, KW350 ASM.	1
5	64.1499	.BRACKET, ROOF MOUNT FRONT	2
6	64.1500	.BRACKET, ROOF MOUNT REAR	2
7	47.0291	.SLING, 4 POINT ASSY KW350	1
8	06.0053-38IN	.WEATHERSTRIP, 9/16 X 3/4 X 38"	2
9	06.0053-34.25IN	.WEATHERSTRIP, 9/16 X 3/4 X 34-1/4"	2
10	95.06	.WASHER, FLAT 3/8 SAE	4
11	90.0610	.BOLT, HEX 3/8-16 UNC X 1-1/4	4
12	05.0070	.PLUG, 1/2" HOLE, NYLON	5
13	06.0053-2IN	.WEATHERSTRIP, 9/16 X 3/4 X 2"	4
14	90.0420-2	.BOLT, 1/4-20 X 2" TAP ZP	4

# PARTS

## ILLUSTRATED DRAWING Headliner Assembly



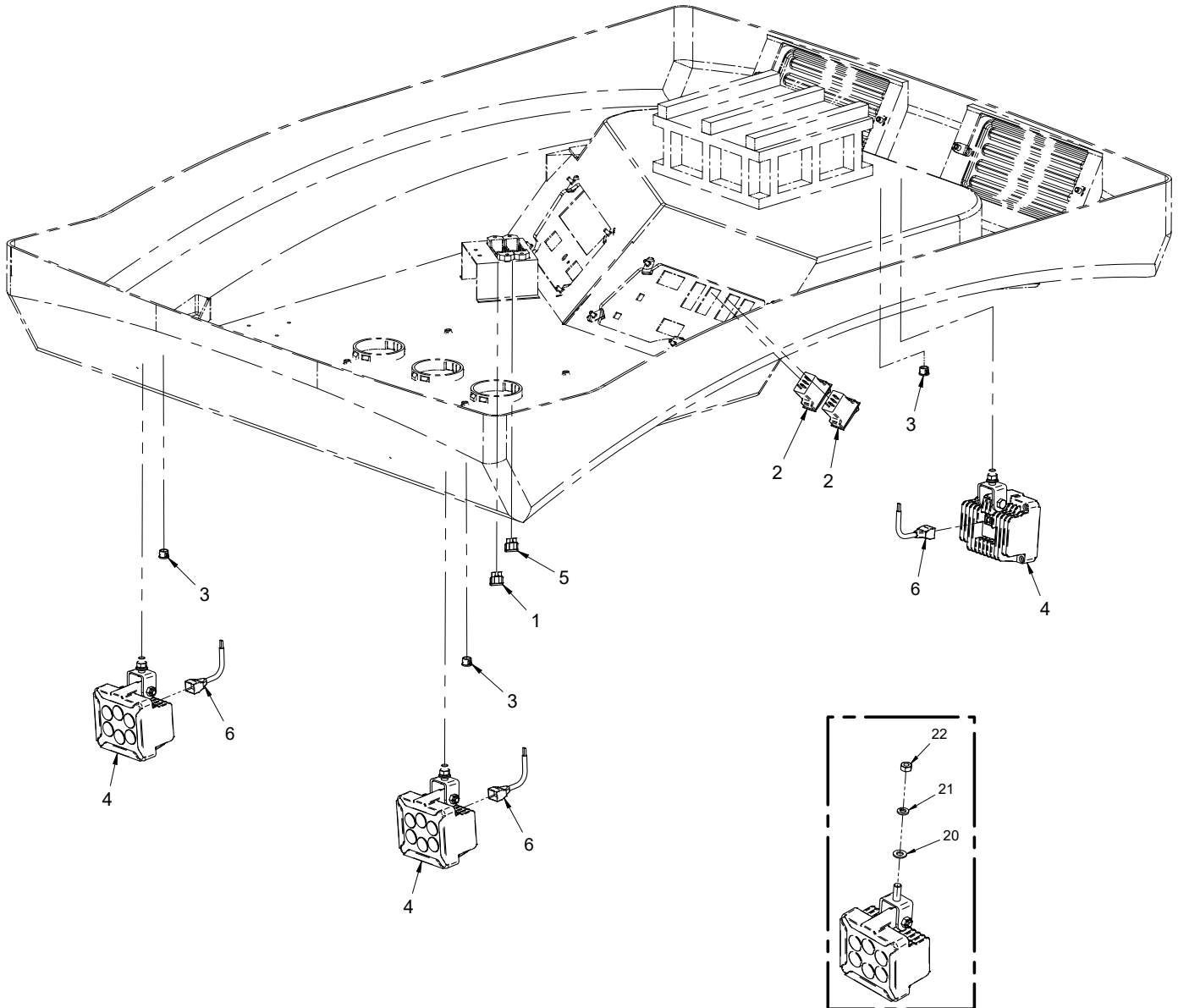
# PARTS

## Headliner Assembly

REF.	PART NO.	DESCRIPTION	QTY.
1	99.E0046	NUT, "U" 1/4-20 EXTRUDED	4
2	07.0100382	BUSHING, NEOPRENE 5MM BLACK	4
3	05.0127	PLUG, 3" HOLE SNAP-IN PLASTIC	3
4	05.0077	PLUG, 1/4" HOLE, NYLON	4
5	99.E0091	NUT, "U" #10-24 EXTRUDED	10
6	07.010014	SWITCHPLATE, DIRECTION SIGNALS	1
7	07.0100460	DECAL, DIR SIGNAL SWITCHPLATE	1
8	07.0100477	SCREW, BUTTON HEAD 10-24 X 3/4	8
9	07.0100453	BLOCK, FUSE ATO 4 PORT	2
10	99.K0118	SCREW, #8 X 1-1/4	6
11	99.K0045	MACHINE SCREW, #10-24 X 1	2
12	99.E0033	NUT, #10-24	2
13	07.010015	SCREW, NYLON THUMB 10-24	2
14	33.0057	BULB, LIGHT 3/4" BULB DIA	1
15	07.010017	ROOF SPACER, CARDBOARD	1
16	07.01030079-9IN	NDAX, 3/4" X 3/4" X 9"	3
17	07.0100153	COVER, FILTER UNVENTED	2
18	07.0102058	KNOB, 1/4-20 X 1" 4-LOBE	4
19	07.0102228	ROOF, 53" X 67" LURAN-S, RED	1
20	06.0068-185.25IN	TRIM, TRIM SEAL W/BULB X 185-1/4"	1
21	07.010011	HEADLINER, 53" X 67" BLACK	1
22	31.0049	SWITCH, WIPER ON/OFF/MON	1
23	07.0100459	DECAL, WIPER/HEATR SWITCHPLATE	1
24	07.010013	SWITCHPLATE, WIPER & HEATER	1
25	07.010016	LIGHT, DOME DIRECTIONAL BLACK	1
26	30.0317	FUSE, 10 AMP ATC BLADE - RED	1
27	30.0476	COVER, FUSE PANEL W/DECAL KW	1
28	07.010012	UPHOLSTERY, HEADLINER GRAY	1

# PARTS

## ILLUSTRATED DRAWING Front & Rear Work Lights



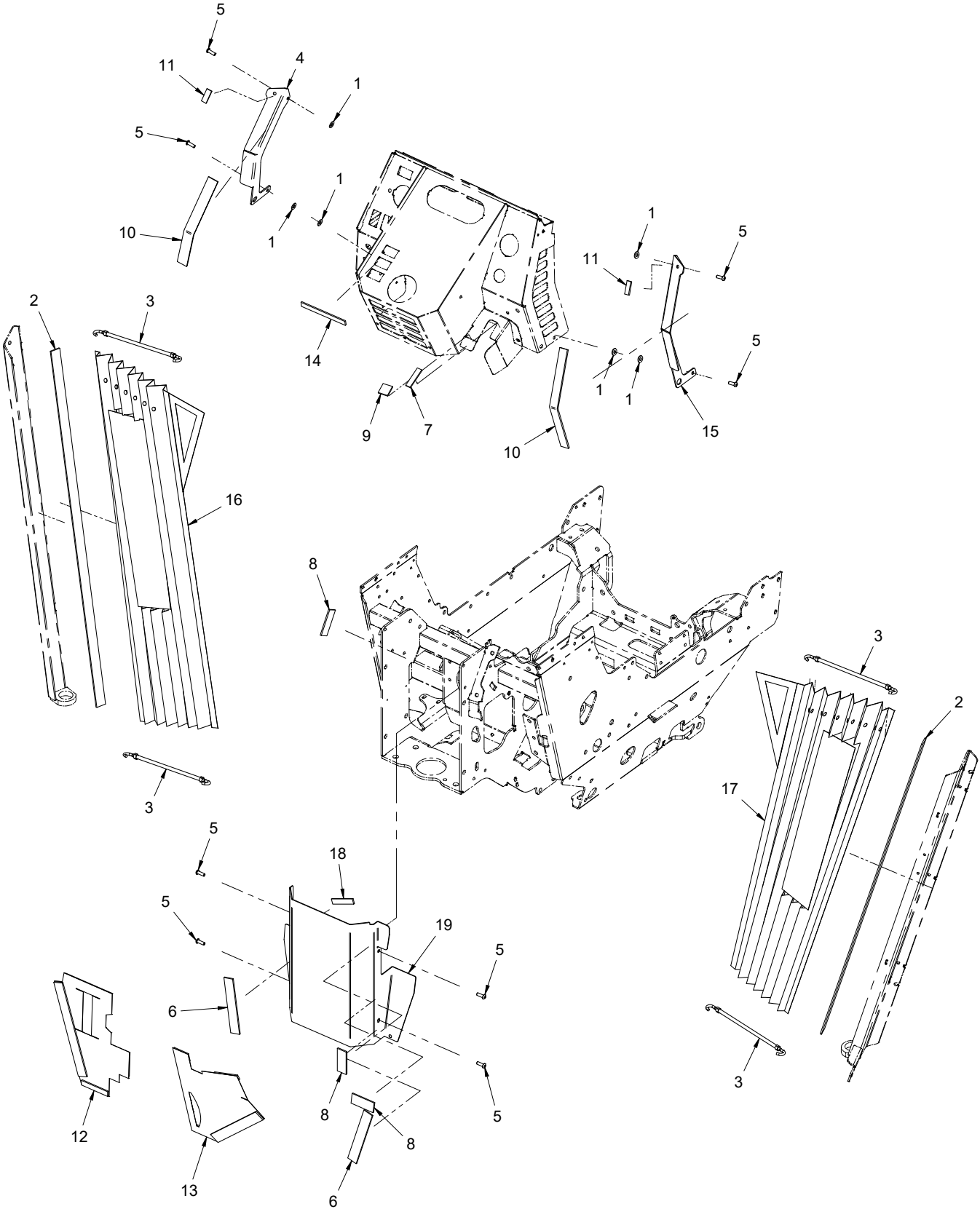
# PARTS

## Front & Rear Work Lights

REF.	PART NO.	DESCRIPTION	QTY.
1	30.0317	.FUSE, 10 AMP ATC BLADE - RED	1
2	31.0050	.SWITCH, ROCKER ON/OFF	2
3	05.0072	.SNAP BUSHING, 3/8 ID X 1/2 OD	3
4	33.0065	.LIGHT, WORK LED (Serial # 01001-01231)	3
4	33.0069	.LIGHT, WORK 3 X 3 LED (Serial # 01232-)	3
5	30.0166	.FUSE, 15 AMP ATC BLADE - BLUE	1
6	32.0161	.HARNESS, WIRE 33.0069 BULLET (Serial # 01232-)	3
20	95.05	.WASHER, FLAT 5/16 SAE	1
21	96.05	.WASHER, LOCK 5/16	1
22	99.M0025	.NUT, M8 X 1.25 ZP	1

# PARTS

## ILLUSTRATED DRAWING Canvas Bellows & Column Covers



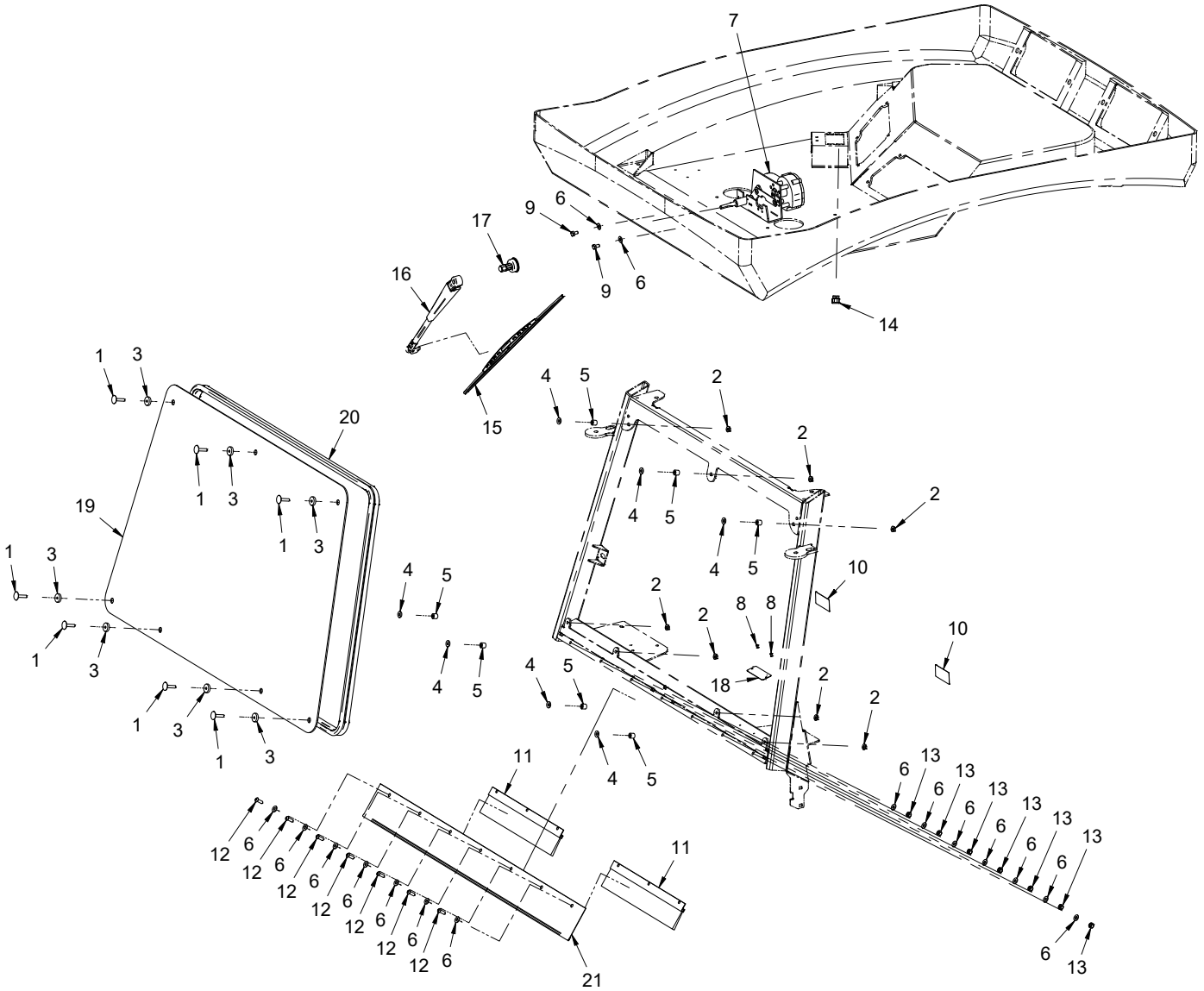
# PARTS

## Canvas Bellows & Column Covers

REF.	PART NO.	DESCRIPTION	QTY.
1	95.04	WASHER, FLAT 1/4 SAE	6
2	06.0065-35IN	VELCRO, LOOP 1" BLACK X 35"	2
3	47.0297	STRAP, BELLOWS SUPPORT	4
4	64.1739	MOUNT, CANVAS COLUMN LEFT	1
5	99.0406	BOLT, 1/4-20 X 3/4 BSCS	8
6	06.0065-5.5IN	VELCRO, LOOP, 1" BLACK X 5-1/2"	2
7	06.0071-2IN	VELCRO, LOOP, 1/2" BLACK X 2"	1
8	06.0065-2.5IN	VELCRO, LOOP 1" BLACK X 2-1/2"	3
9	06.0065-1IN	VELCRO, LOOP 1" BLACK X 1"	1
10	06.0065-9.75IN	VELCRO, LOOP 1" BLACK X 9-3/4"	2
11	06.0071-1.25IN	VELCRO, LOOP 1/2" BLACK X 1-1/4"	2
12	44.0328	CANVAS, COLUMN LEFT	1
13	44.0329	CANVAS, COLUMN RIGHT	1
14	06.0071-5IN	VELCRO, LOOP, 1/2" WIDE X 5"	1
15	64.1740	MOUNT, CANVAS COLUMN RIGHT	1
16	44.0325	CANVAS, PLEATED LEFT	1
17	44.0326	CANVAS, PLEATED RIGHT	1
18	06.0071-2.5IN	VELCRO, LOOP 1/2" BLACK X 2-1/2"	1
19	60.1180	COVER, PUMP W/FLANGES	1

# PARTS

## ILLUSTRATED DRAWING Front Windshield & Windshield Wiper





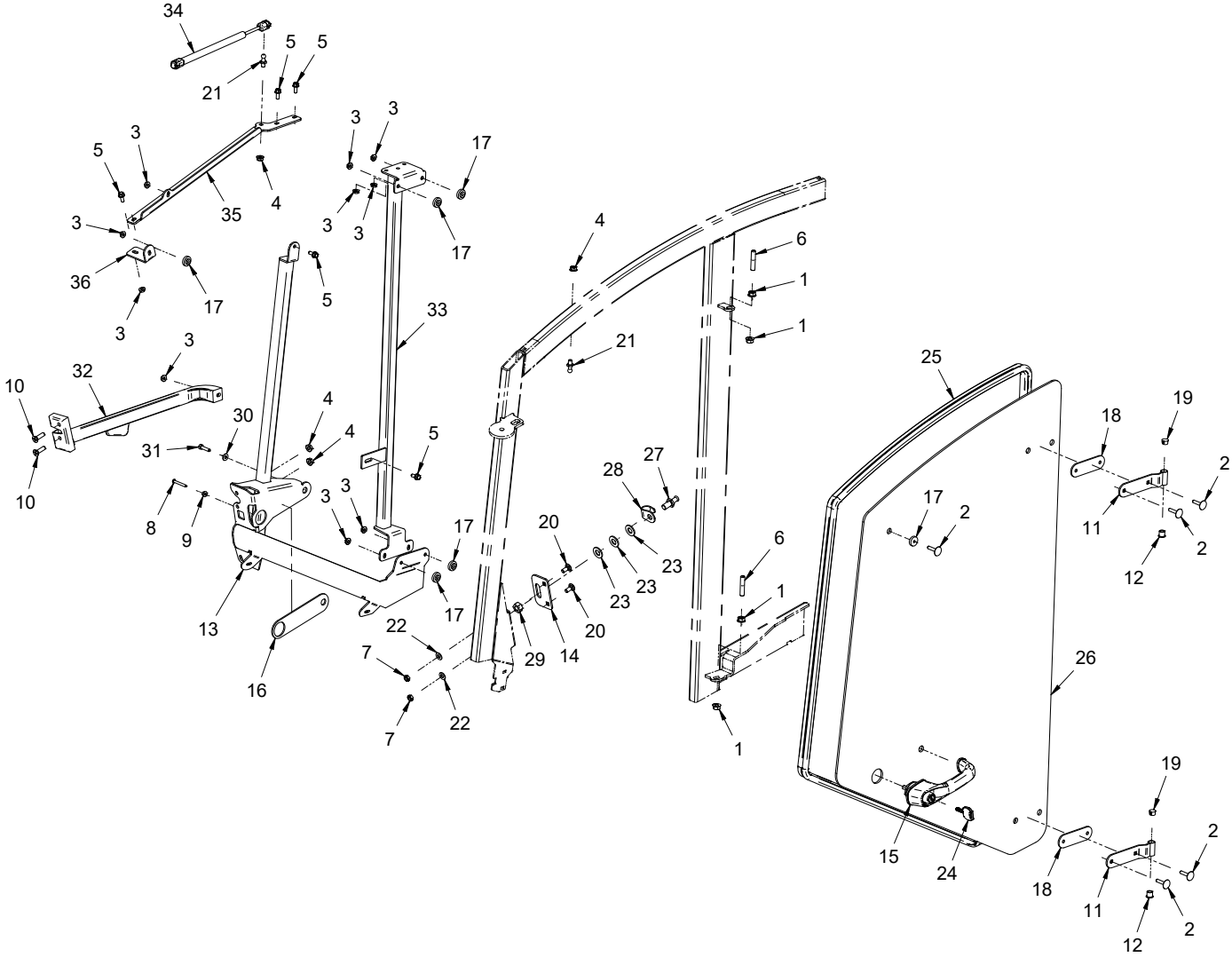
# PARTS

## Front Windshield & Windshield Wiper

REF.	PART NO.	DESCRIPTION	QTY.
1	99.K0115	.BOLT, STEP ¼-20X1-1/4 BLACK	7
2	99.SF04	.NUT, SF 1/4-20 USS	7
3	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	7
4	05.0126	.WASHER, NEOPRENE 1/4 X 5/8	7
5	05.0124	.SPACER, 1/4ID X 1/2OD X 7/16 LG.	7
6	95.04	.WASHER, FLAT 1/4 SAE	16
7	37.0056	.MOTOR, WINDSHIELD WIPER 1 SPD.	1
8	04.0029	.RIVET, POP 1/8" X 1/4"	2
9	91.0404	.BOLT, HEX 1/4-28 UNF X 1/2"	2
10	00.0218	.DECAL, WARNING PINCH POINT	2
11	79.0096	.BRUSH, CANVAS SUPPORT	2
12	99.0406	.BOLT, 1/4-20 X 3/4 BSCS	7
13	99.A04N	.LOCKNUT, NYLON 1/4-20	7
14	30.0187	.FUSE, 5 AMP ATC BLADE - TAN	1
15	47.0287	.WIPER BLADE, WINDSHIELD 21"	1
16	47.0286	.WIPER ARM, WINDSHIELD 16"	1
17	47.0301	.KIT, WIPER MOTOR HARDWARE	1
18	N/A	.DECAL, VENTRAC SERIAL NO. PLT.	1
19	44.0306	.WINDOW, FRONT WINDSHIELD 3/16	1
20	06.0072-128IN	.TRIM, SEAL DOUBLE BULB 3/16" X 128"	1
21	44.0276	.CANVAS,WINDSHIELD BOTTOM	1

# PARTS

## ILLUSTRATED DRAWING Upper Door Frame & Latch



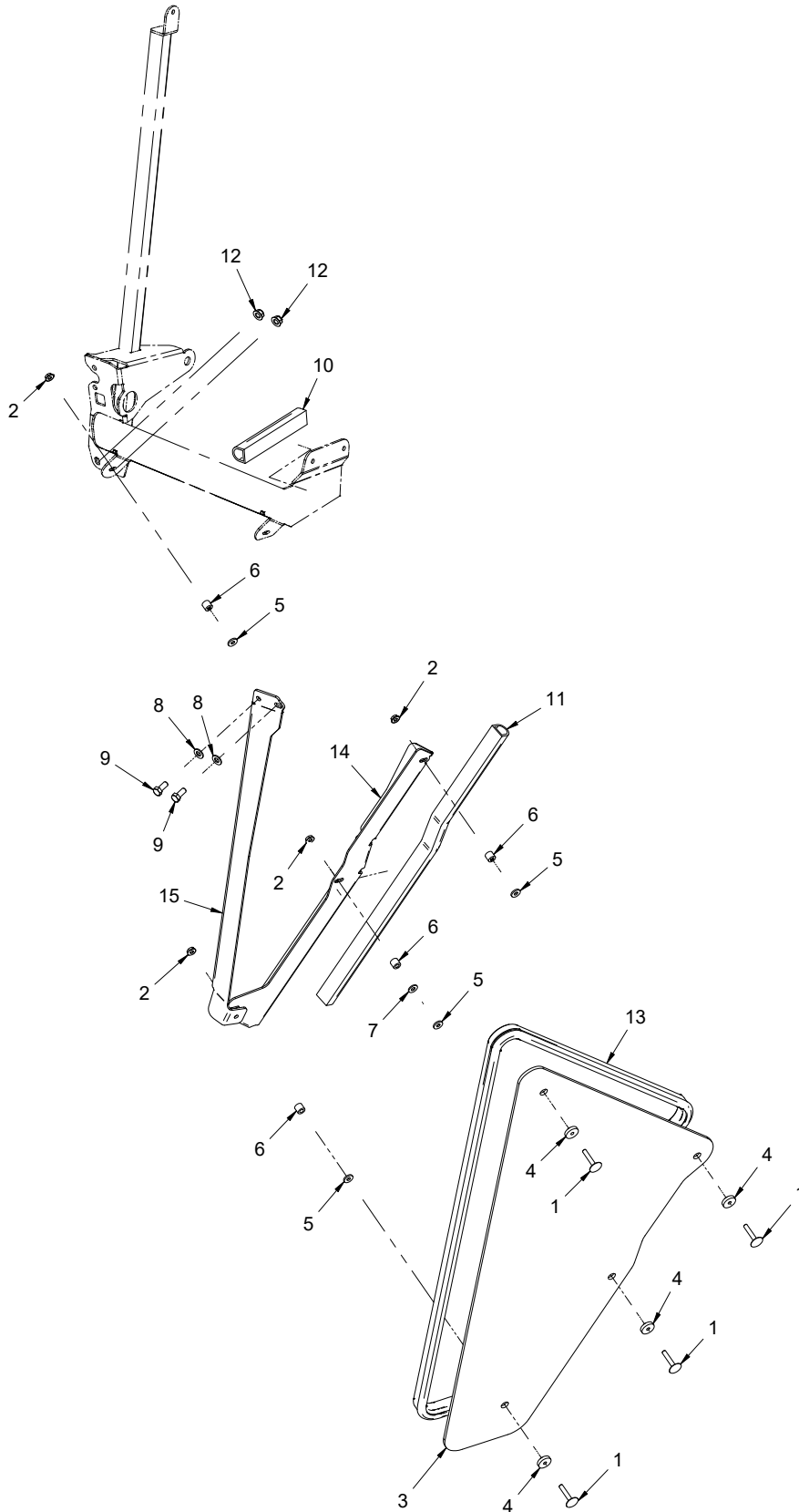
# PARTS

## Upper Door Frame & Latch

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF06	.NUT, SF 3/8-16 USS	4
2	99.K0115	.BOLT, STEP 1/4-20X1-1/4 BLACK	5
3	99.SF04	.NUT, SF 1/4-20 USS	10
4	99.SF05	.NUT, SF 5/16-18 USS	4
5	99.SF0405-1	.BOLT, SMF 1/4-20 X 5/8	5
6	99.F0043	.PIN, HINGE 3/8-16 X 1-7/8 SS	2
7	99.A05	.LOCKNUT, STOVER 5/16-18 USS	2
8	99.K0067	.MACHINE SCREW, #10-32 X 1-1/2	1
9	99.E0035	.NUT, SF #10-32	1
10	99.K0116	.MACHINE SCREW, 5/16-18 X 1-1/4	2
11	64.1480	.HINGE, GLASS MOUNT	2
12	85.B0068	.BUSHING, 3/8ID X 1/2 OD X 5/8 LG	2
13	62.1327	.FRAME, DOOR FRONT	1
14	64.1488	.MOUNT, STRIKER PIN	1
15	47.0281	.HANDLE, PUSH BUTTON ASM	1
16	44.0273	.GASKET, DOOR HANDLE INNER	1
17	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	6
18	44.0274	.GASKET, GLASS HINGE MOUNT	2
19	05.0070	.PLUG, 1/2" HOLE, NYLON	2
20	97.0506	.BOLT, CARRIAGE 5/16 X 3/4	2
21	47.0225	.STUD, BALL 10MM 5/16-18 THREAD	2
22	95.05	.WASHER, FLAT 5/16 SAE	2
23	95.08	.WASHER, FLAT 1/2 SAE	3
24	47.0298	.KEY, DOOR HANDLE	1
25	06.0072-127IN	.TRIM, SEAL DOUBLE BULB 3/16" X 127"	1
26	44.0291	.WINDOW, DOOR UPPER 3/16	1
27	47.0283	.STRIKER, DOOR LATCH	1
28	47.0284	.GUARD, STRIKER	1
29	99.M0023	.NUT, M12 X 1.0 ZP	1
30	95.04	.WASHER, FLAT 1/4 SAE	1
31	99.M0022	.BOLT, M6 X 1.0 X 25 ZP	1
32	47.0282	.LATCH, DOOR ASM	1
33	62.1328	.FRAME, DOOR REAR	1
34	47.0289	.SHOCK, GAS SPRING	1
35	64.1493	.BRACKET, DOOR FRAME TOP	1
36	64.1489	.BRACKET, DOOR GLASS MOUNT	1

# PARTS

## ILLUSTRATED DRAWING Lower Door



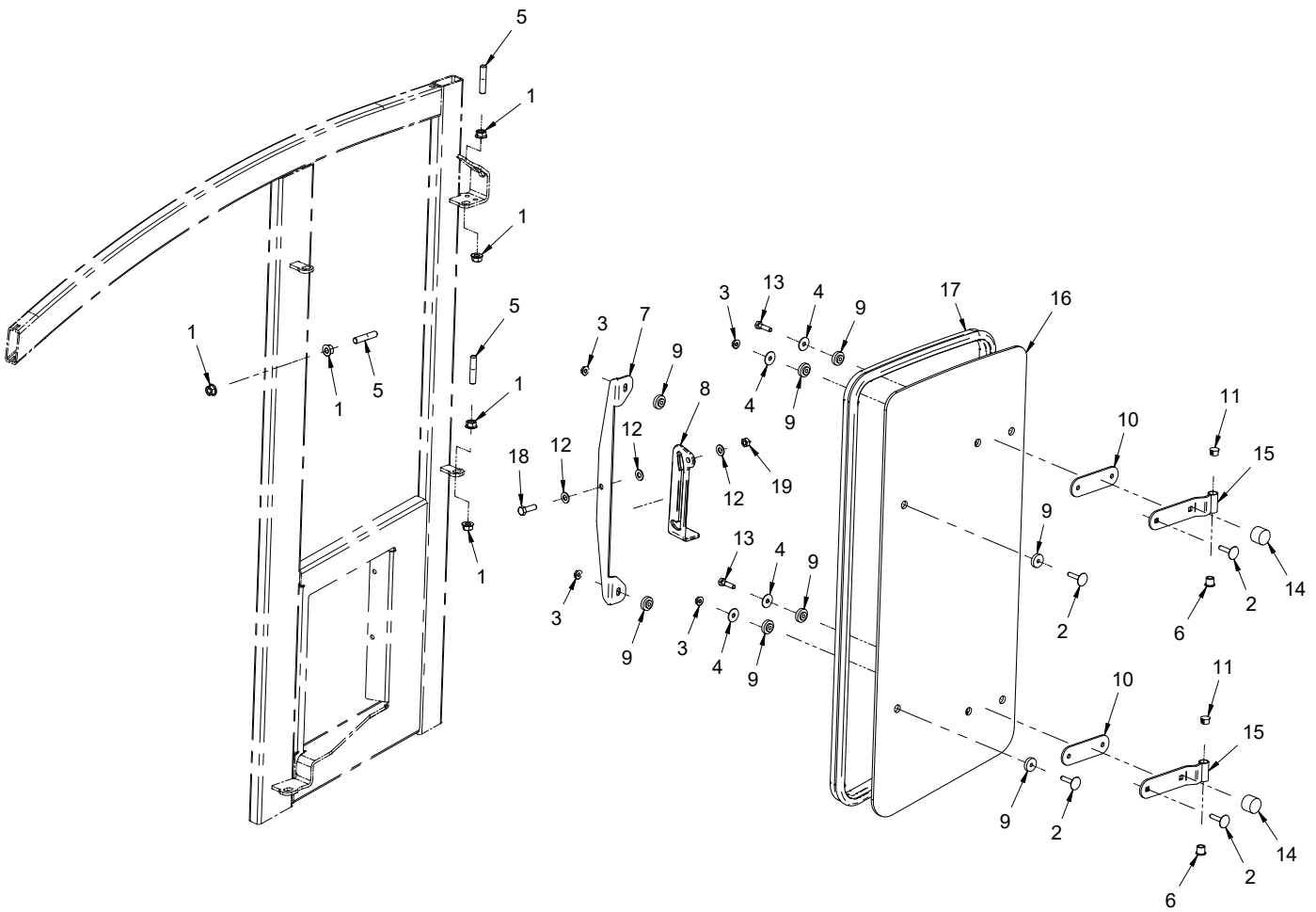
# PARTS

## Lower Door

REF.	PART NO.	DESCRIPTION	QTY.
1	99.K0119	.BOLT, STEP 1/4-20 X 1-1/2 BLK	4
2	99.SF04	.NUT, SF 1/4-20 USS	4
3	44.0292	.WINDOW, DOOR LOWER 3/16	1
4	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	4
5	05.0126	.WASHER, NEOPRENE 1/4 X 5/8	4
6	05.0124	.SPACER, 1/4ID X 1/2OD X 7/16 LG.	4
7	95.04	.WASHER, FLAT 1/4 SAE	1
8	95.05	.WASHER, FLAT 5/16 SAE	2
9	90.0506	.BOLT, HEX 5/16-18 UNC X 3/4"	2
10	06.0064-6IN	.WEATHERSTRIP, 1"X1"X6"L D-SHAPE	1
11	06.0064-23.5IN	.WEATHERSTRIP, 1"X1"X23.5"L D-SHAPE	1
12	99.E0102	.NUT, LOCKING FLANGE 5/16-18	2
13	06.0072-90IN	.TRIM, SEAL DOUBLE BULB 3/16" X 90"	1
14	64.1494	.BRACKET, WINDOW DOOR LOWER	1
15	64.1472	.SUPPORT, DOOR WINDOW LOWER	1

# PARTS

## ILLUSTRATED DRAWING Left Rear Window



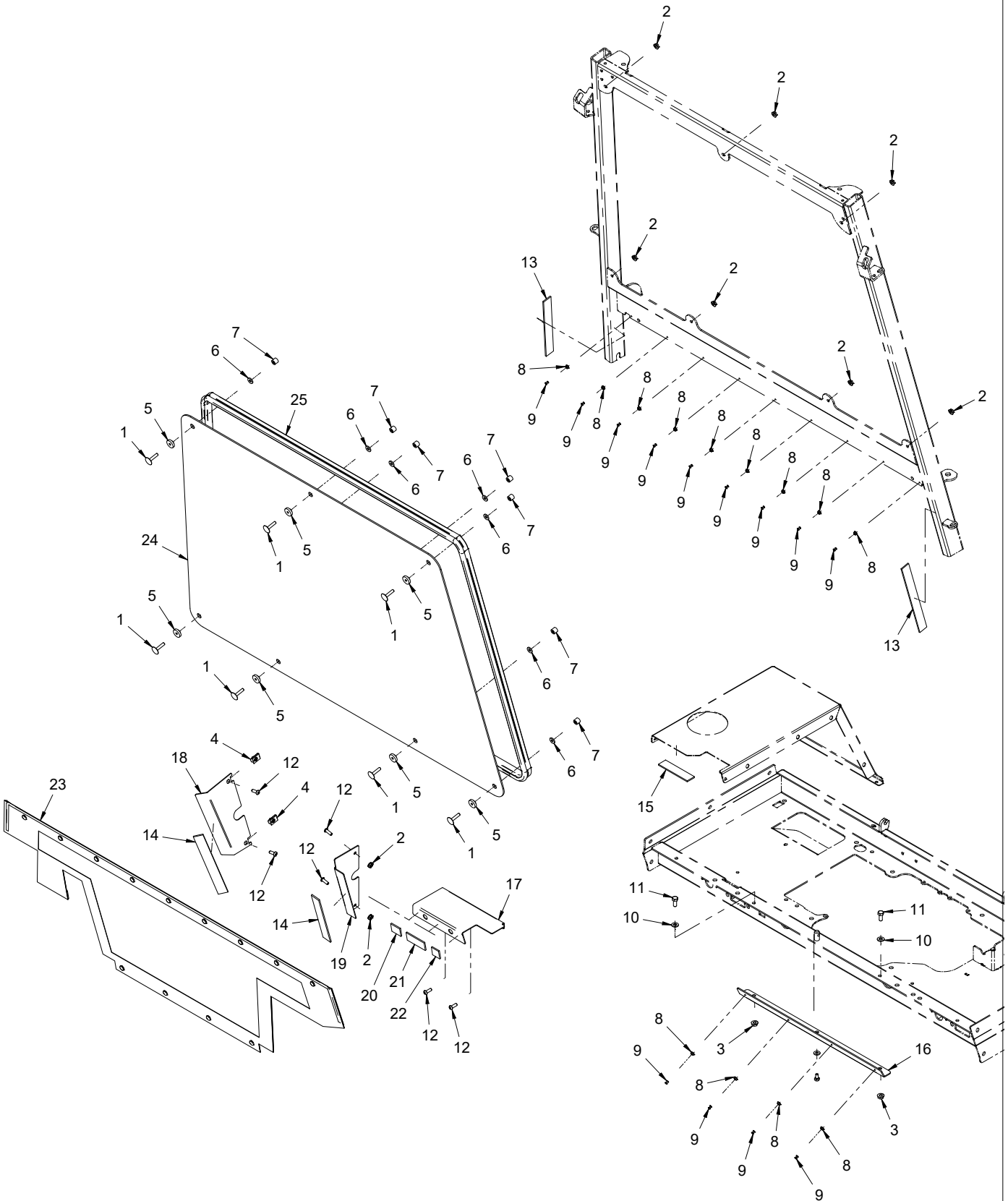
# PARTS

## Left Rear Window

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF06	.NUT, SF 3/8-16 USS	6
2	99.K0115	.BOLT, STEP 1/4-20X1-1/4 BLACK	4
3	99.SF04	.NUT, SF 1/4-20 USS	4
4	99.B0100	.WASHER, FENDER 1/4 X 7/8 OD ZP	4
5	99.F0043	.PIN, HINGE 3/8-16 X 1-7/8 SS	3
6	85.B0068	.BUSHING, 3/8ID X 1/2 OD X 5/8 LG	2
7	64.1479	.BRACKET, REAR WINDOW LATCH	1
8	07.0100028	.ARM, SIDE WINDOW LATCH RH	1
9	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	8
10	44.0274	.GASKET, GLASS HINGE MOUNT	2
11	05.0070	.PLUG, 1/2" HOLE, NYLON	2
12	95.05	.WASHER, FLAT 5/16 SAE	3
13	90.0408	.BOLT, HEX 1/4-20 UNC X 1"	2
14	05.0125	.BUMPER, NEOPRENE 1" DIA.	2
15	64.1480	.HINGE, GLASS MOUNT	2
16	44.0293	.WINDOW, LEFT REAR 3/16	1
17	06.0072-82IN	.TRIM, SEAL DOUBLE BULB 3/16" X 82"	1
18	90.0508	.BOLT, HEX 5/16-18 UNC X 1"	1
19	99.A05	.LOCKNUT, STOVER 5/16-18 USS	1

# PARTS

## ILLUSTRATED DRAWING Rear Window





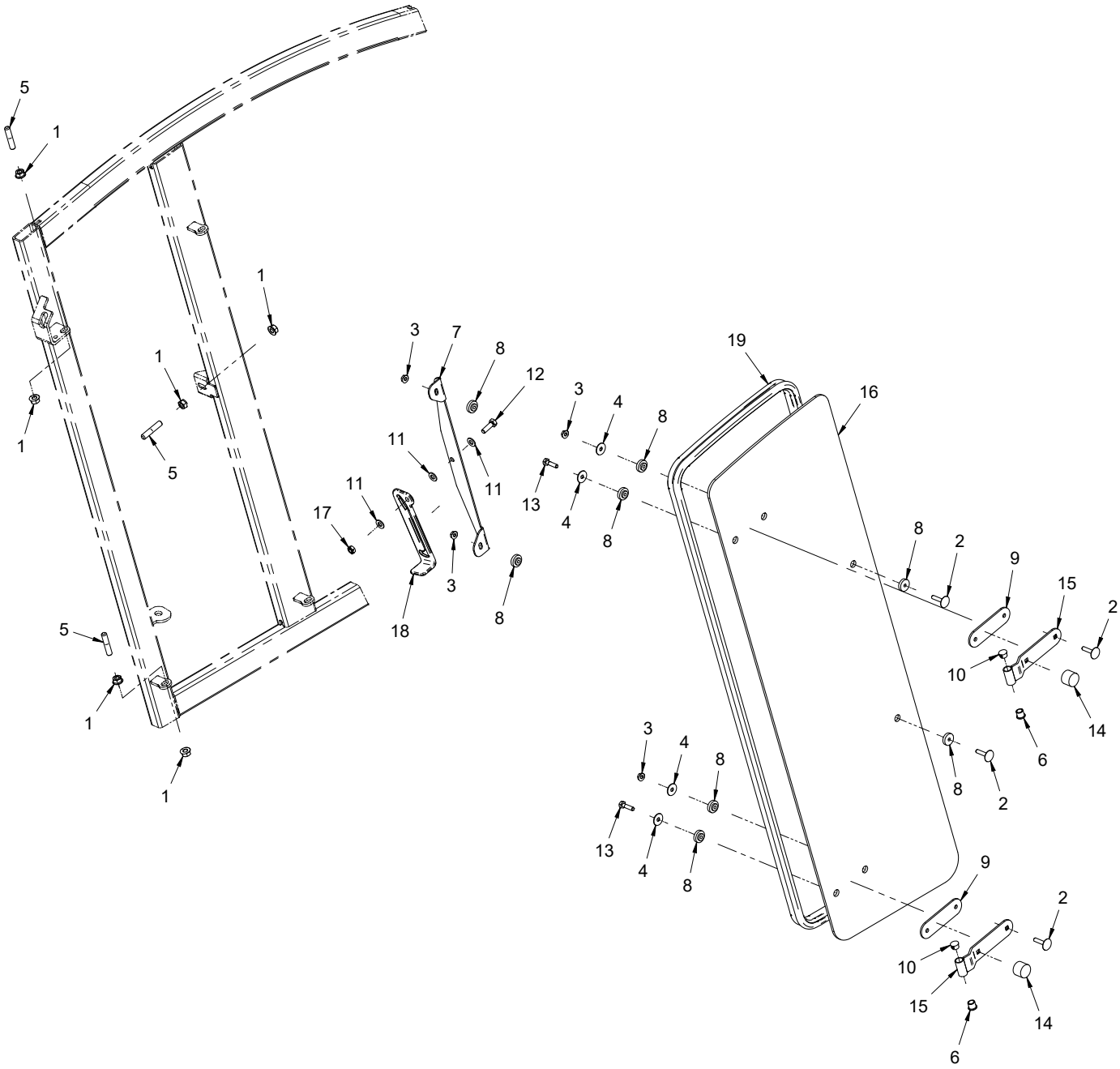
# PARTS

## Rear Window

REF.	PART NO.	DESCRIPTION	QTY.
1	99.K0115	.BOLT, STEP ¼-20X1-1/4 BLACK	7
2	99.SF04	.NUT, SF 1/4-20 USS	9
3	99.SF05	.NUT, SF 5/16-18 USS	2
4	99.E0046	.NUT, "U" 1/4-20 EXTRUDED	2
5	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	7
6	05.0126	.WASHER, NEOPRENE 1/4 X 5/8	7
7	05.0124	.SPACER, 1/4ID X 1/2OD X 7/16 LG.	7
8	04.0020	.SNAP, STUD 3/8 X 9/16 SS	13
9	04.0029	.RIVET, POP 1/8" X 1/4"	13
10	95.05	.WASHER, FLAT 5/16 SAE	2
11	90.0506	.BOLT, HEX 5/16-18 UNC X 3/4"	2
12	99.0406	.BOLT, 1/4-20 X 3/4 BSCS	6
13	06.0065-8IN	.VELCRO, LOOP 1" BLACK X 8"	2
14	06.0065-7.75IN	.VELCRO, LOOP 1" BLACK X 7-3/4"	2
15	06.0065-4IN	.VELCRO, LOOP 1" BLACK X 4"	1
16	64.1734	.MOUNT, WINDOW REAR LOWER	1
17	64.1735	.BRACKET, WINDOW REAR TOP	1
18	64.1737	.BRACKET, WINDOW REAR LEFT	1
19	64.1736	.BRACKET, WINDOW REAR RIGHT	1
20	06.0065-1.25IN	.VELCRO, LOOP 1" BLACK X 1-1/4"	1
21	06.0065-2.5IN	.VELCRO, LOOP 1" BLACK X 2-1/2"	1
22	06.0065-1IN	.VELCRO, LOOP 1" BLACK X 1"	1
23	44.0324	.WINDOW, LOWER REAR CANVAS	1
24	44.0307	.WINDOW, REAR 3/16	1
25	06.0072-140IN	.TRIM, SEAL DOUBLE BULB 3/16" X 140"	1

# PARTS

## ILLUSTRATED DRAWING Right Rear Window



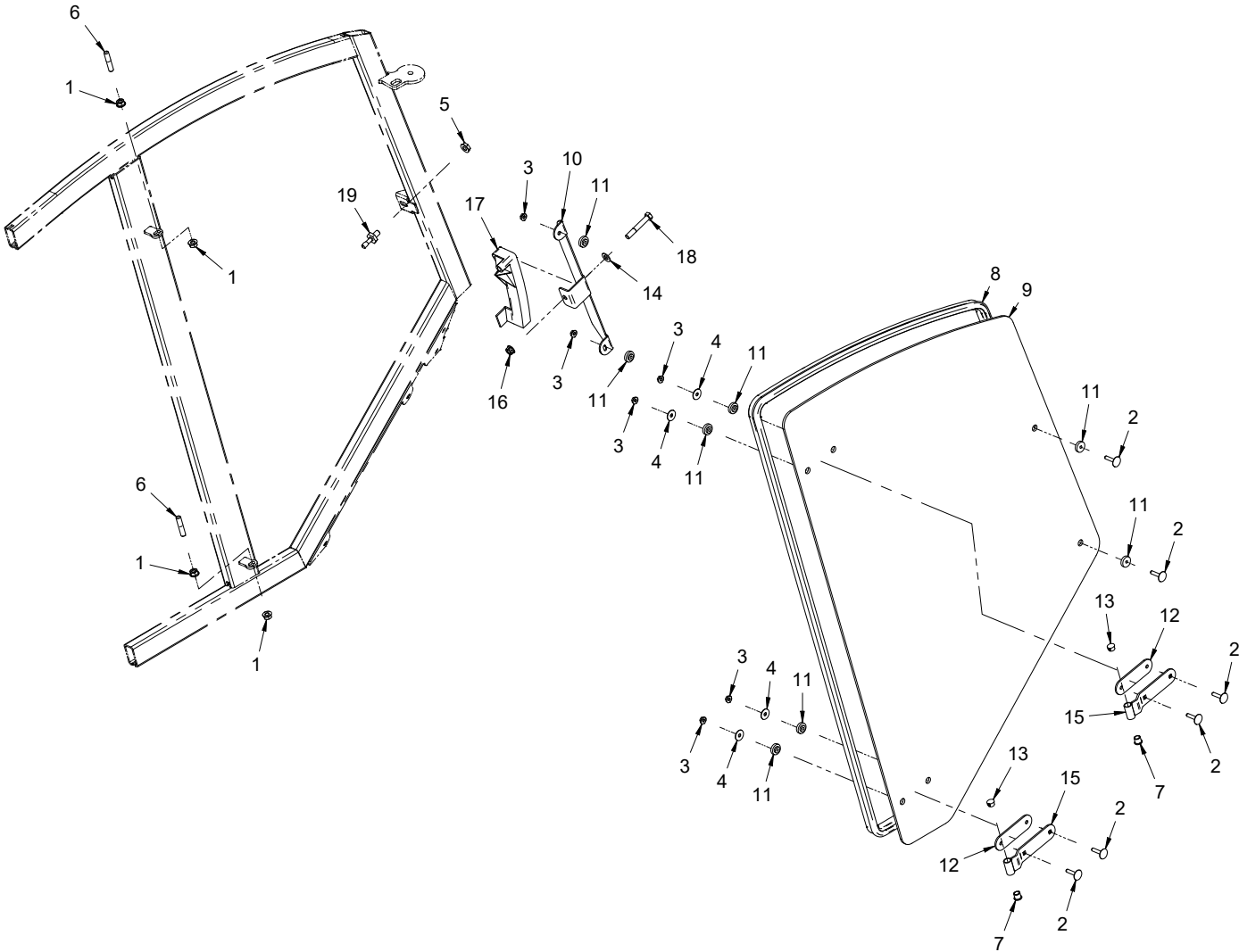
# PARTS

## Right Rear Window

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF06	.NUT, SF 3/8-16 USS	6
2	99.K0115	.BOLT, STEP 1/4-20X1-1/4 BLACK	4
3	99.SF04	.NUT, SF 1/4-20 USS	4
4	99.B0100	.WASHER, FENDER 1/4 X 7/8 OD ZP	4
5	99.F0043	.PIN, HINGE 3/8-16 X 1-7/8 SS	3
6	85.B0068	.BUSHING, 3/8ID X 1/2 OD X 5/8 LG	2
7	64.1479	.BRACKET, REAR WINDOW LATCH	1
8	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	8
9	44.0274	.GASKET, GLASS HINGE MOUNT	2
10	05.0070	.PLUG, 1/2" HOLE, NYLON	2
11	95.05	.WASHER, FLAT 5/16 SAE	3
12	90.0508	.BOLT, HEX 5/16-18 UNC X 1"	1
13	90.0408	.BOLT, HEX 1/4-20 UNC X 1"	2
14	05.0125	.BUMPER, NEOPRENE 1" DIA.	2
15	64.1480	.HINGE, GLASS MOUNT	2
16	44.0294	.WINDOW, RIGHT REAR 3/16	1
17	99.A05	.LOCKNUT, STOVER 5/16-18 USS	1
18	07.0100027	.ARM, SIDE WINDOW LATCH LH	1
19	06.0072-110IN	.TRIM, SEAL DOUBLE BULB 3/16" X 110"	1

# PARTS

## ILLUSTRATED DRAWING Right Front Window/Emergency Exit



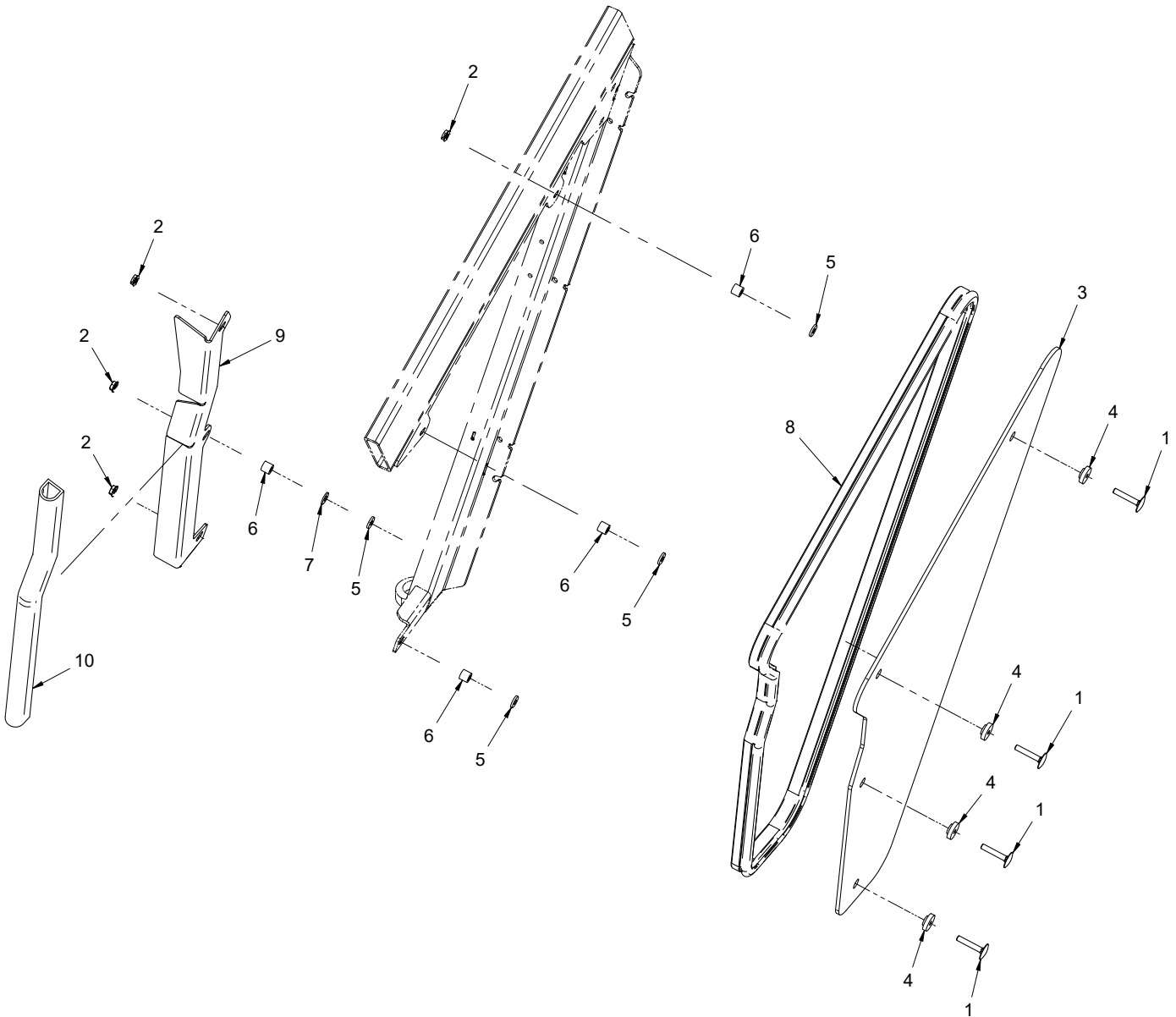
# PARTS

## Right Front Window/Emergency Exit

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF06	.NUT, SF 3/8-16 USS	4
2	99.K0115	.BOLT, STEP 1/4-20X1-1/4 BLACK	6
3	99.SF04	.NUT, SF 1/4-20 USS	6
4	99.B0100	.WASHER, FENDER 1/4 X 7/8 OD ZP	4
5	99.M0021	.NUT, SMF M10 X 1.5	1
6	99.F0043	.PIN, HINGE 3/8-16 X 1-7/8 SS	2
7	85.B0068	.BUSHING, 3/8ID X 1/2 OD X 5/8 LG	2
8	06.0072-126IN	.TRIM, SEAL DOUBLE BULB 3/16" X 126"	1
9	44.0295	.WINDOW, RIGHT FRONT ESC 3/16	1
10	64.1491	.BRACKET, FRONT WINDOW LATCH	1
11	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	8
12	44.0274	.GASKET, GLASS HINGE MOUNT	2
13	05.0070	.PLUG, 1/2" HOLE, NYLON	2
14	95.06	.WASHER, FLAT 3/8 SAE	1
15	64.1480	.HINGE, GLASS MOUNT	2
16	99.E0082	.NUT, LOCKING FLANGE 3/8-16	1
17	07.0100017	.ARM, ESCAPE WINDOW LATCH	1
18	90.0620	.BOLT, HEX 3/8-16 UNC X 2-1/2	1
19	07.0100019	.PIN, WINDOW ARM	1

# PARTS

## ILLUSTRATED DRAWING Lower Right Window



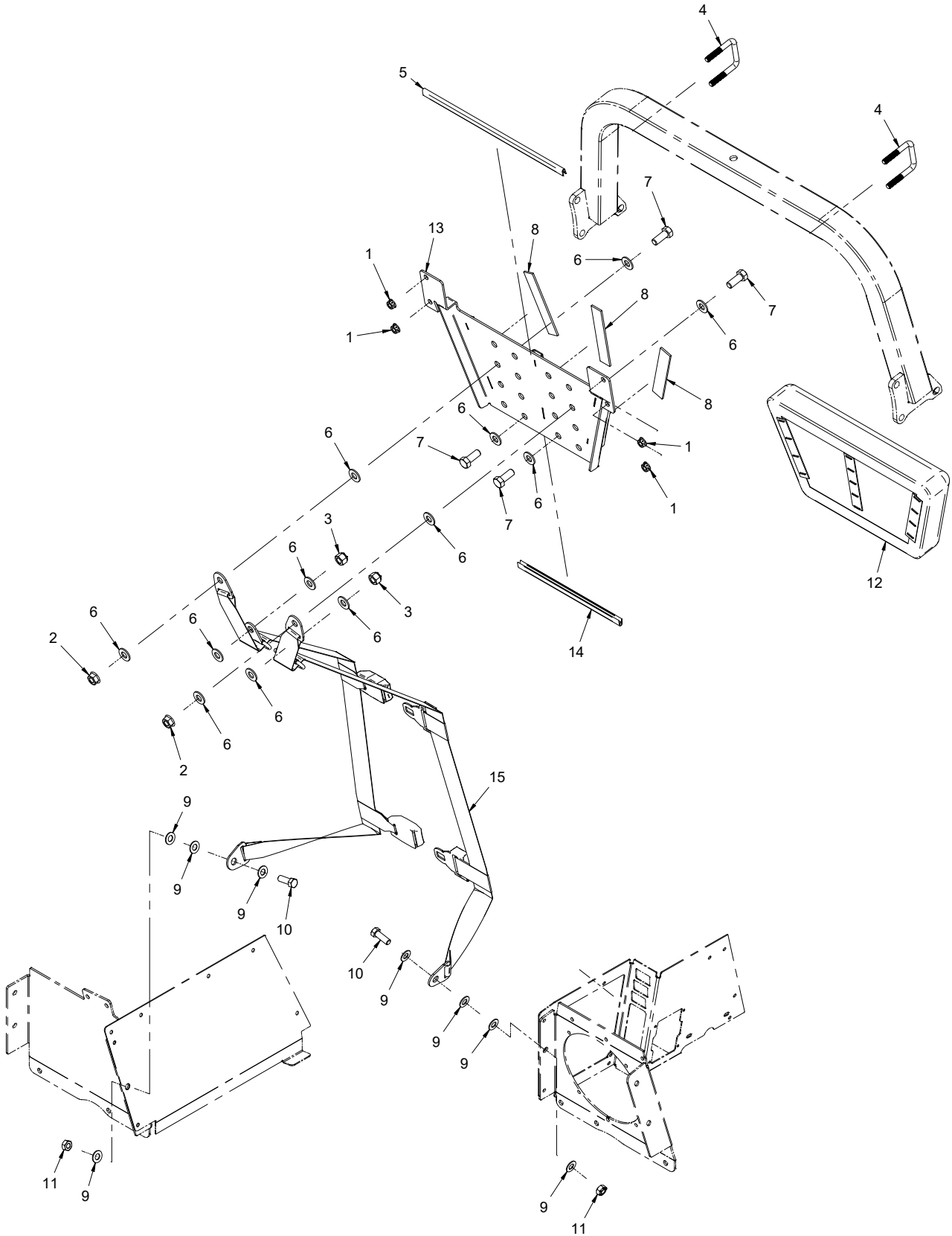
# PARTS

## Lower Right Window

REF.	PART NO.	DESCRIPTION	QTY.
1	99.K0119	.BOLT, STEP 1/4-20 X 1-1/2 BLK	4
2	99.SF04	.NUT, SF 1/4-20 USS	4
3	44.0296	.WINDOW, RIGHT LOWER 3/16	1
4	07.0100382	.BUSHING, NEOPRENE 5MM BLACK	4
5	05.0126	.WASHER, NEOPRENE 1/4 X 5/8	4
6	05.0124	.SPACER, 1/4ID X 1/2OD X 7/16 LG	4
7	95.04	.WASHER, FLAT 1/4 SAE	1
8	06.0072-88IN	.TRIM, SEAL DOUBLE BULB 3/16" X 88"	1
9	64.1495	.BRACKET, WINDOW RIGHT LOWER	1
10	06.0064-24IN	.WEATHERSTRIP, 1"X1"X24"L D-SHAPE	1

# PARTS

## ILLUSTRATED DRAWING Four Point Seatbelt





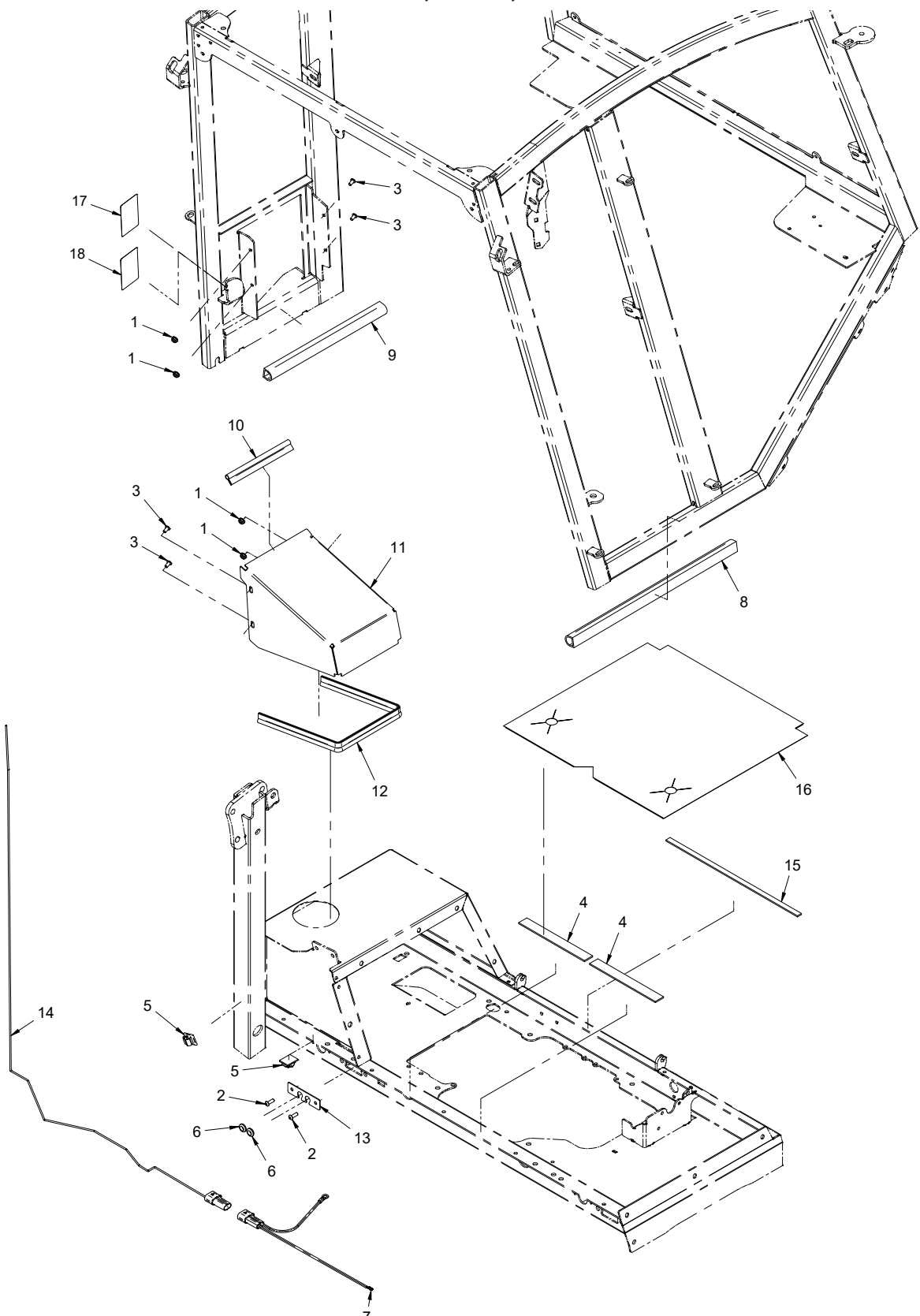
# PARTS

## Four Point Seatbelt

REF.	PART NO.	DESCRIPTION	QTY.
1	99.E0082	.NUT, LOCKING FLANGE 3/8-16	4
2	99.SF08	.NUT, SF 1/2-13 USS	2
3	99.A08N	.LOCKNUT, NYLON 1/2-13 USS	2
4	11.0053	.U-BOLT, 3/8-16 2-1/16" ID SQ BEND	2
5	06.0050-14.88IN	.TRIM, TRIM LOC 1/2 X 3/16 X 14-7/8"	1
6	95.08	.WASHER, FLAT 1/2 SAE	12
7	90.0810	.BOLT, HEX 1/2-13 UNC X 1-1/4	4
8	06.0065-6IN	.VELCRO, LOOP 1" BLACK X 6"	3
9	95.07	.WASHER, FLAT 7/16 SAE	8
10	90.0710	.BOLT, HEX 7/16-14 UNC X 1-1/4	2
11	99.A07	.LOCKNUT, STOVER 7/16-14 USS	2
12	47.0288	.CUSHION, HEADREST	1
13	64.1490	.MOUNT, SEATBELT UPPER	1
14	06.0050-11.88IN	.TRIM, TRIM LOC 1/2 X 3/16 X 11-7/8"	1
15	47.0280	.SEAT BELT, 4 POINT	1

# PARTS

## ILLUSTRATED DRAWING Fuel Tank Cover, Seals, Wire Harness



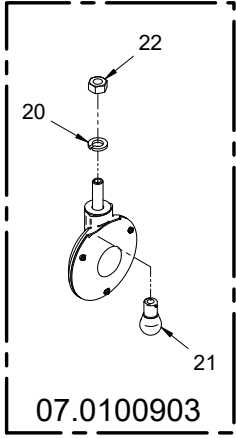
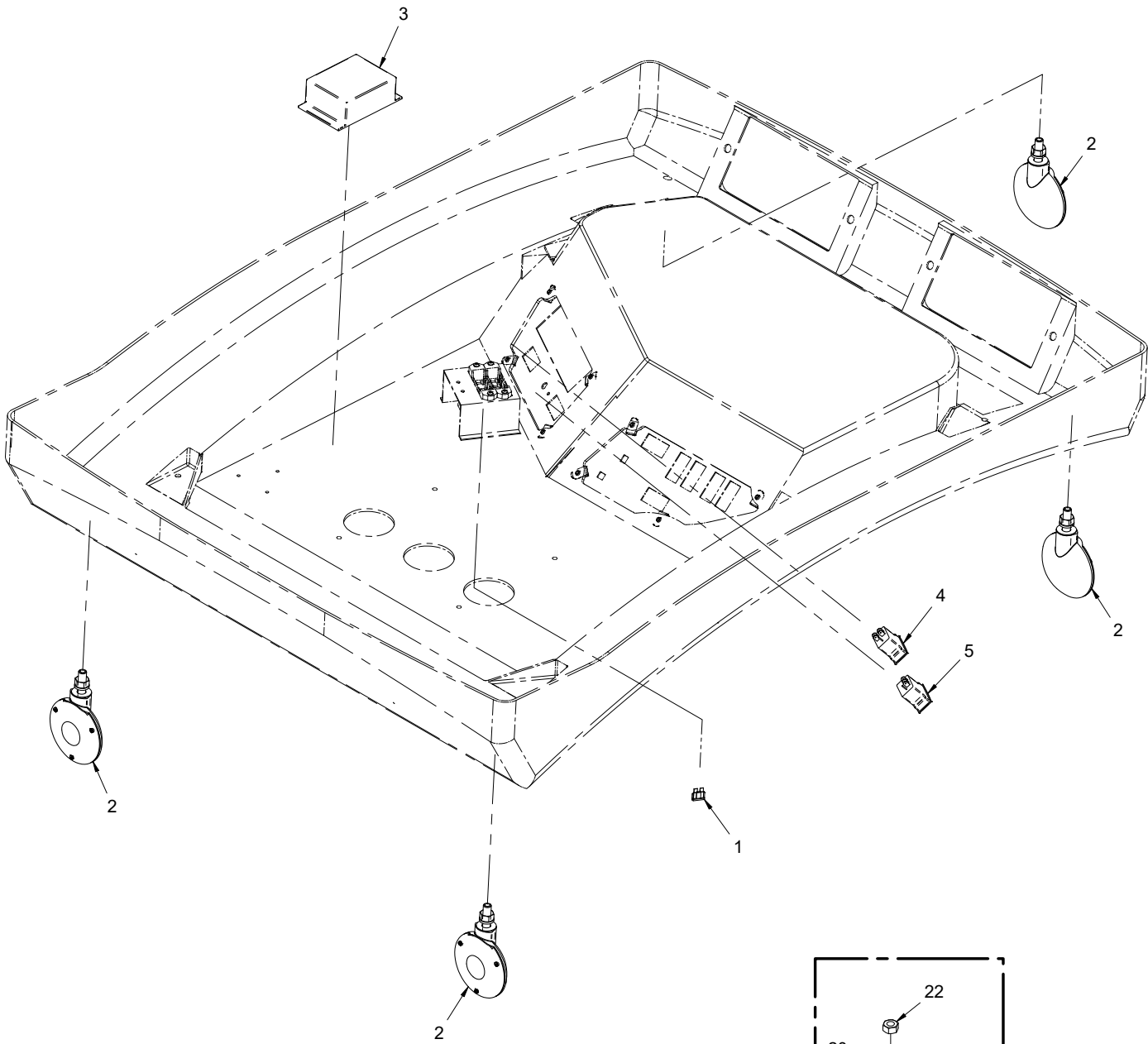
# PARTS

## Fuel Tank Cover, Seals, Wire Harness

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF04	.NUT, SF 1/4-20 USS	4
2	99.0406	.BOLT, 1/4-20 X 3/4 BSCS	2
3	99.0404	.BOLT, 1/4-20 X 1/2 BSCS	4
4	06.0065-8IN	.VELCRO, LOOP 1" BLACK X 8"	2
5	30.0217	.CLAMP, WIRE MT ADH. 1/2 GRAY	2
6	05.0136	.GROMMET, 7/16ID, 3/4OD, 1/4THK	2
7	32.0129	.HARNESS, WIRE TRACTOR TO KW450	1
8	06.0064-20IN	.WEATHERSTRIP, 1" X1"X20"L D-SHAPE	1
9	06.0064-14IN	.WEATHERSTRIP, 1" X 1" X 14" D-SHAPE	1
10	06.0043-7.5IN	.TRIM, TRIM SEAL W/BULB X 7-1/2"	1
11	60.1177	.COVER, FUEL TANK KW450	1
12	06.0043-21.5IN	.TRIM, TRIM SEAL W/BULB X 21-1/2"	1
13	60.1175	.COVER, OPT. LIGHT KIT ACCESS	1
14	32.0124	.HARNESS, WIRE - KW450	1
15	06.0071-16IN	.VELCRO, LOOP, 1/2" WIDE X 16"	1
16	44.0327	.CANVAS, REAR FRAME	1
17	00.0332	.DECAL, GASOLINE ONLY	1
18	00.0333	.DECAL, DIESEL ONLY	1

# PARTS

## ILLUSTRATED DRAWING 70.2005-2 Directional Signal/Flasher Kit



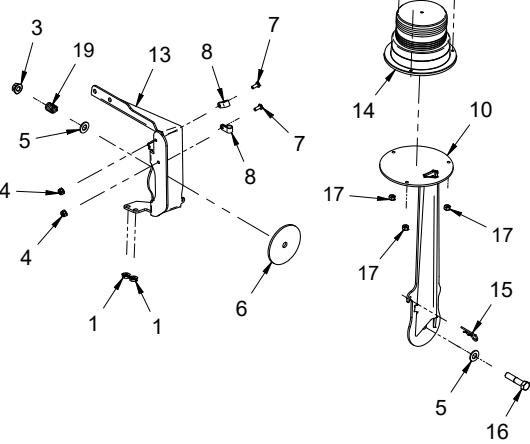
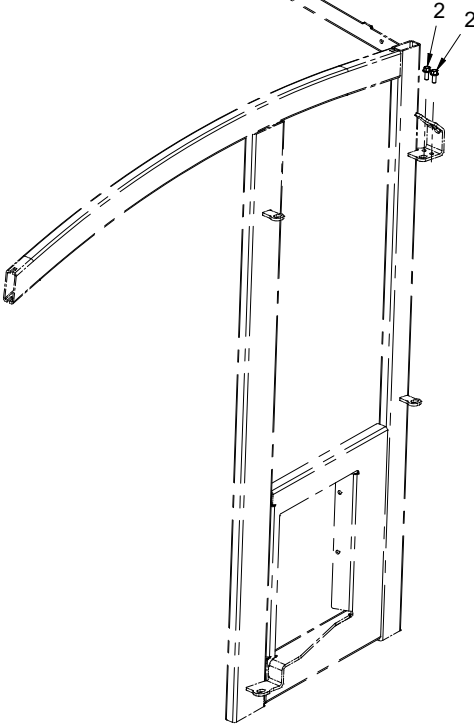
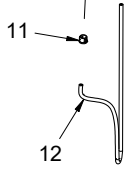
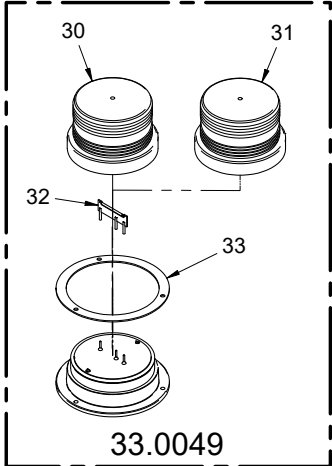
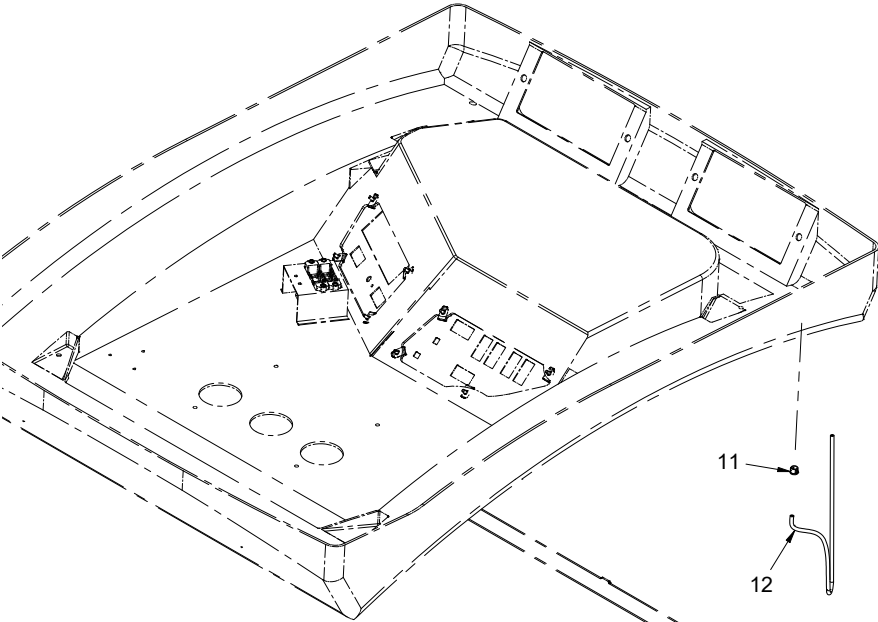
# PARTS

## 70.2005-2 Directional Signal/Flasher Kit

REF.	PART NO.	DESCRIPTION	QTY.
1	30.0166	.FUSE, 15 AMP ATC BLADE - BLUE	1
2	07.0100903	.LIGHT, AMBER W/BULLETS	4
3	07.0101752	.FLASHER, DUAL RATE	1
4	31.0051	.SWITCH, ROCKER ON/OFF/ON	1
5	31.0050	.SWITCH, ROCKER ON/OFF	1
20	96.08	.WASHER, LOCK 1/2	1
21	33.0058	.BULB, LIGHT 1" BULB DIA	1
22	99.M0026	.NUT, M12 X 1.25	1

# PARTS

## ILLUSTRATED DRAWING 70.2006-3 Strobe Beacon Kit



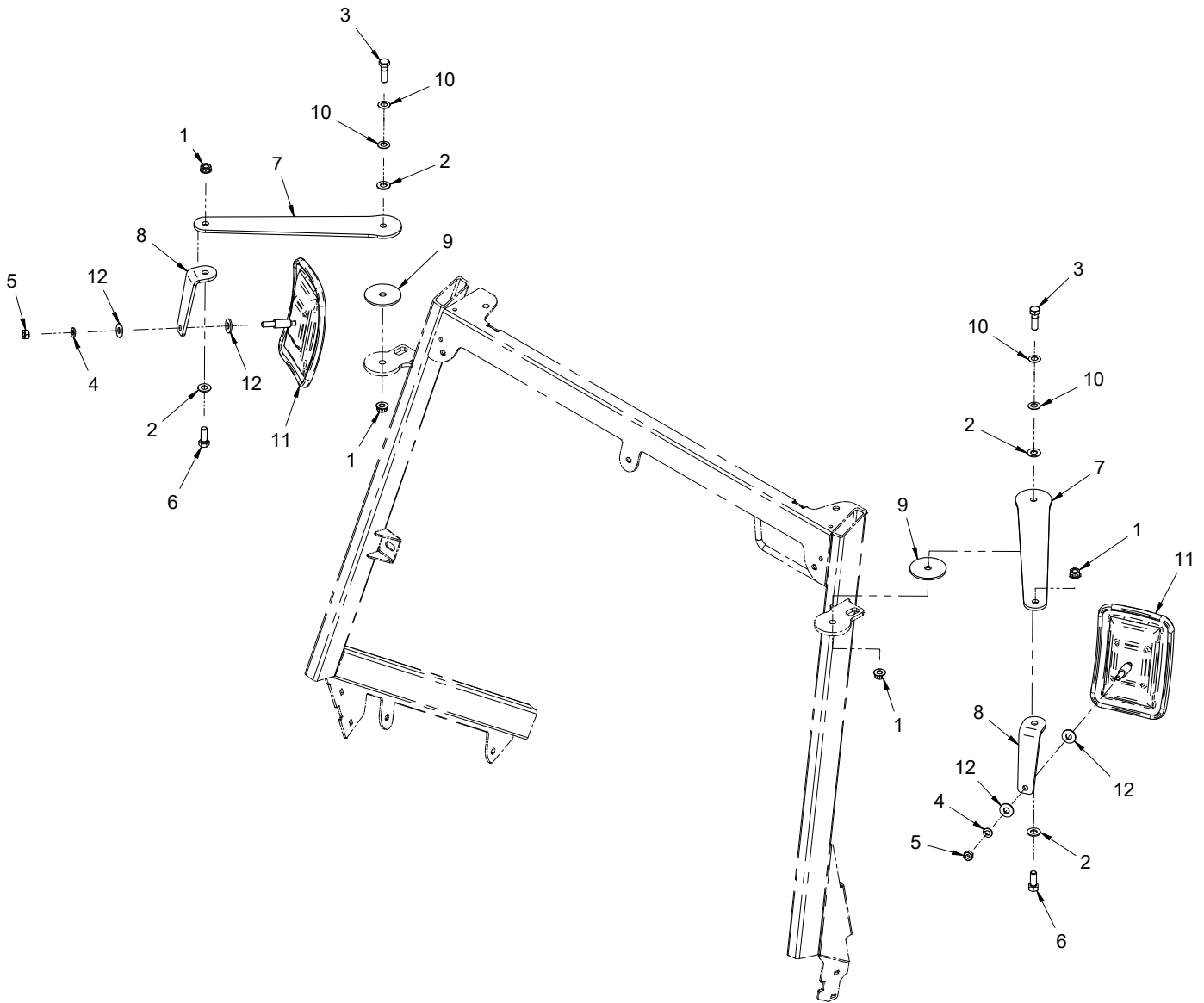
# PARTS

## 70.2006-3 Strobe Beacon Kit

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF04	.NUT, SF 1/4-20 USS	2
2	99.SF0405-1	.BOLT, SMF 1/4-20 X 5/8	2
3	99.E0082	.NUT, LOCKING FLANGE 3/8-16	1
4	99.E0035	.NUT, SF #10-32	2
5	95.06	.WASHER, FLAT 3/8 SAE	2
6	05.0013	.WASHER, FRIC. 3 OD X 13/32 ID	1
7	99.K0062	.MACHINE SCREW, #10-32 X 1/2	2
8	30.0143	.CLAMP, WIRE MT 5/16 NYLON WHT	2
9	30.0187	.FUSE, 5 AMP ATC BLADE - TAN	1
10	62.1331	.FRAME, STROBE LIGHT ARM	1
11	05.0072	.SNAP BUSHING, 3/8 ID X 1/2 OD	1
12	32.0098	.HARNESS, WIRE - KW350 STROBE	1
13	64.1502	.BRACKET, STROBE LIGHT MOUNT	1
14	33.0049	.LIGHT, STROBE AMBER	1
15	02.HP0313	.HAIRPIN, 3/32 X 1-5/8	1
16	90.0614	.BOLT, HEX 3/8-16 UNC X 1-3/4	1
17	99.A1032N	.LOCKNUT, NYLON 10-32 STAINLESS	3
18	99.K0071	.MACHINE SCREW, #10-32 X 5/8	3
19	41.0039	.SPRING, COMP. 9/16 OD X 5/8	1
30	33.0050	.LENS, STROBE - AMBER 3-1/2"	1
31	33.0051	.LENS, STROBE - BLUE 3-1/2"	1
32	33.0052	.BULB, STROBE LIGHT FOR 33.0049	1
33	33.0049-1	.RING, CLAMP	1

# PARTS

## ILLUSTRATED DRAWING 70.2006-4 Mirror Kit





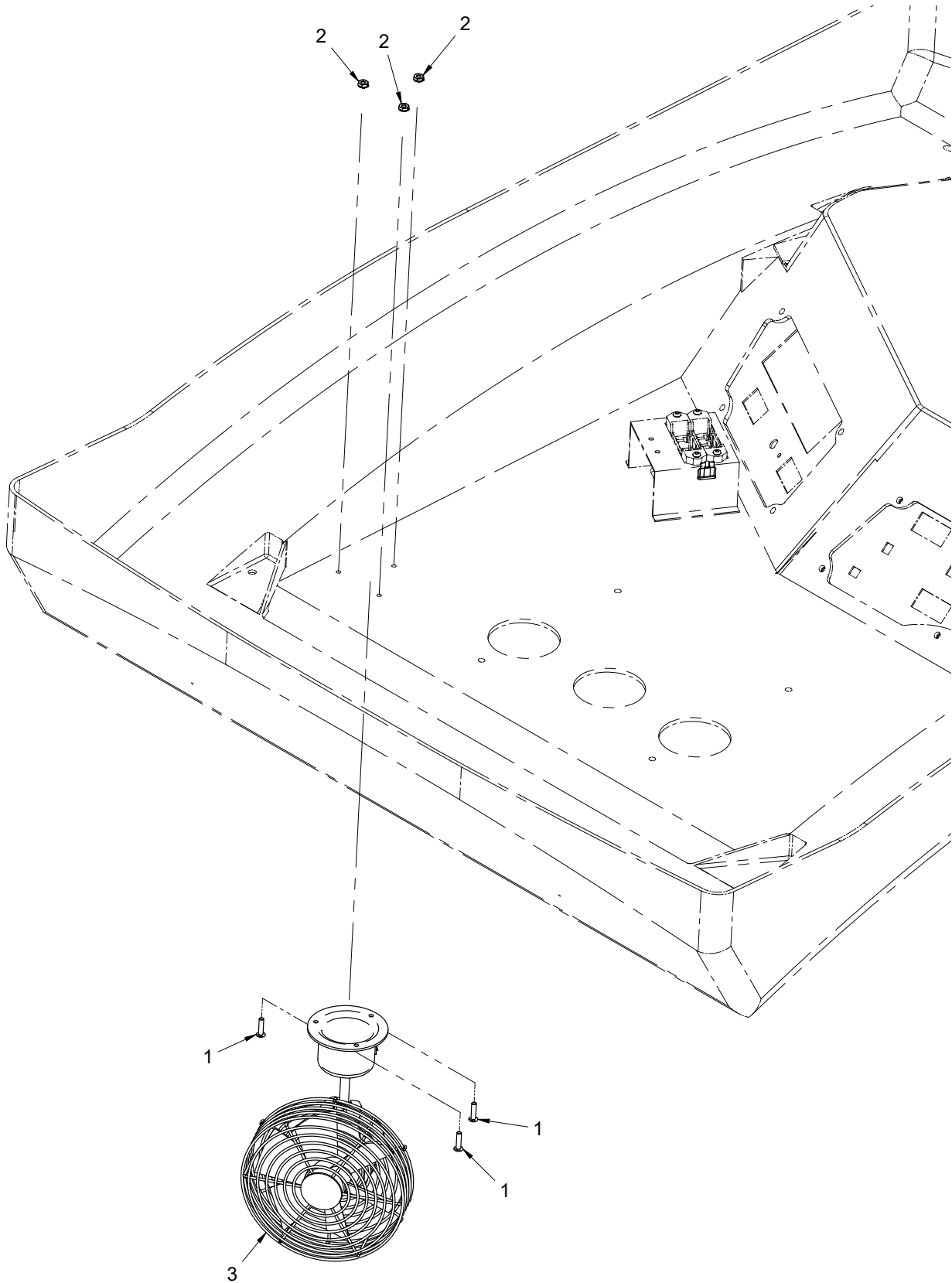
# PARTS

## 70.2006-4 Mirror Kit

REF.	PART NO.	DESCRIPTION	QTY.
1	99.E0082	.NUT, LOCKING FLANGE 3/8-16	4
2	95.06	.WASHER, FLAT 3/8 SAE	4
3	90.0610	.BOLT, HEX 3/8-16 UNC X 1-1/4	2
4	96.05	.WASHER, LOCK 5/16	2
5	99.M0025	.NUT, M8 X 1.25 ZP	2
6	90.0608	.BOLT, HEX 3/8-16 UNC X 1	2
7	64.1496	.BRACKET, MIRROR ARM	2
8	64.1497	.BRACKET, MIRROR MOUNT	2
9	05.0002	.WASHER, FRIC. 2-1/4 X 13/32	2
10	41.0099	.SPRING, DISC 3/8 ID X 3/4 OD	4
11	47.0290	.MIRROR, CONVEX 5" X 7"	2
12	94.05	.WASHER, FLAT 5/16 USS	4

# PARTS

## ILLUSTRATED DRAWING 70.2006-6 Defrost Fan Kit



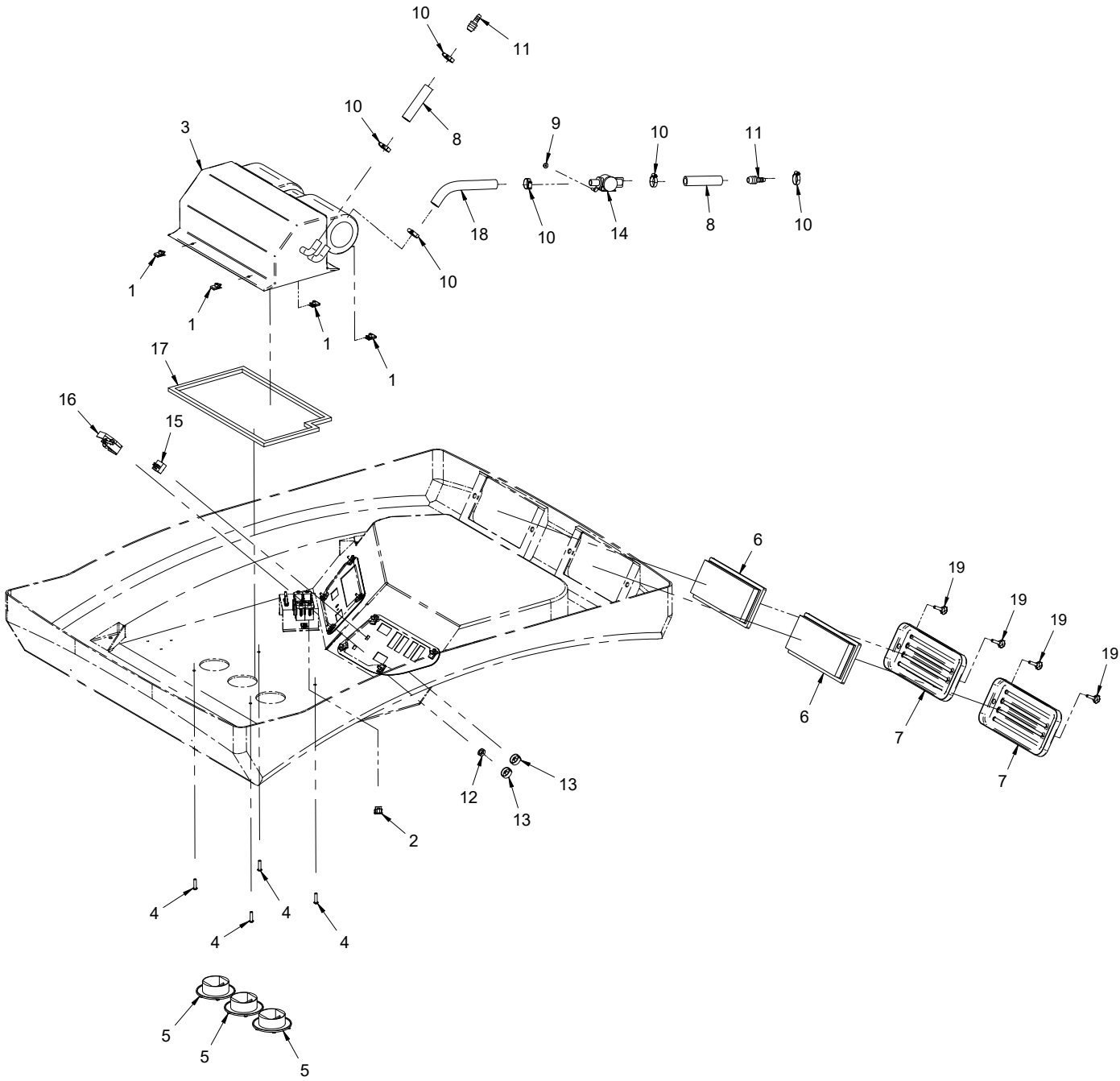
# PARTS

## 70.2006-6 Defrost Fan Kit

REF.	PART NO.	DESCRIPTION	QTY.
1	99.K0047	MACHINE SCREW, #10-32 X 3/4	3
2	99.E0049	NUT, WASHER #10-32 (STAR NUT)	3
3	37.0051	FAN, DEFROSTER	1

# PARTS

## ILLUSTRATED DRAWING 70.8106 Console Fan/Heater Kit



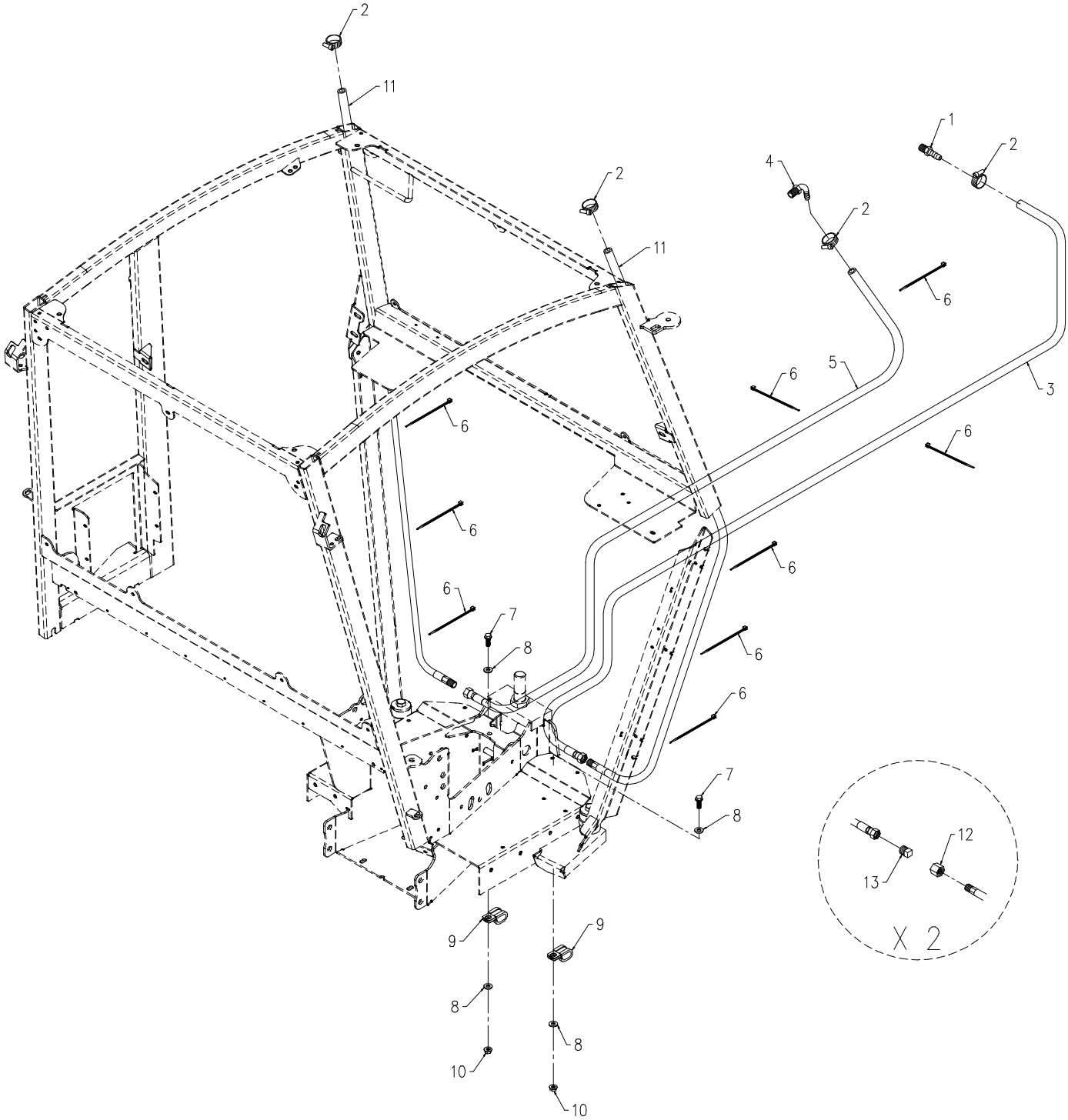
# PARTS

## 70.8106 Console Fan/Heater Kit

REF.	PART NO.	DESCRIPTION	QTY.
1	99.E0046	NUT, "U" 1/4-20 EXTRUDED	4
2	30.0166	FUSE, 15 AMP ATC BLADE - BLUE	1
3	07.0101034	HEATER, UNIT	1
	07.010026	HEATER, BLOWER ASSEMBLY	1
	07.0100194	CORE, HEATER	1
	07.0100816	MOTOR, FAN	1
	07.0100818	FAN, REEL ONLY	1
	07.0100821	HOUSING, FAN	1
4	07.0100441	SCREW, BUTTON HEAD 1/4 X 1"	4
5	07.0100405	VENT, LOUVER	3
6	07.0101452	FILTER, AIR	2
7	07.0101451	RETAINER, AIR FILTER VENTED	2
8	07.0101065-4IN	HOSE, 5/8" ID X 4"	2
9	99.E0098	NUT, SRF # 10-24	1
10	11.0052	CLAMP, HOSE SS 13/16 X 1-1/2	6
11	07.0101077	REDUCER, 5/8 X 3/8 BARB, NYLON	2
12	07.0101223	NUT, 7/16" X 28 UNEF ZP	1
13	07.0100817	KNOB, HEATER	2
14	07.0100819	VALVE, ROTARY	1
15	07.0100158	SWITCH, 3-SPEED FAN	1
16	07.0100820	CABLE, ACTUATOR W/NUT	1
17	07.0101167	TAPE, FOAM 3/8 X 1/2 -55" LONG	1
18	07.0101065-18IN	HOSE, 5/8" ID X 18"	1
19	07.0102058	KNOB, 1/4-20 X 1" 4-LOBE	4

# PARTS

## ILLUSTRATED DRAWING 70.8136 Kubota Heater Install Kit For 4500Y & 4500Z



# PARTS

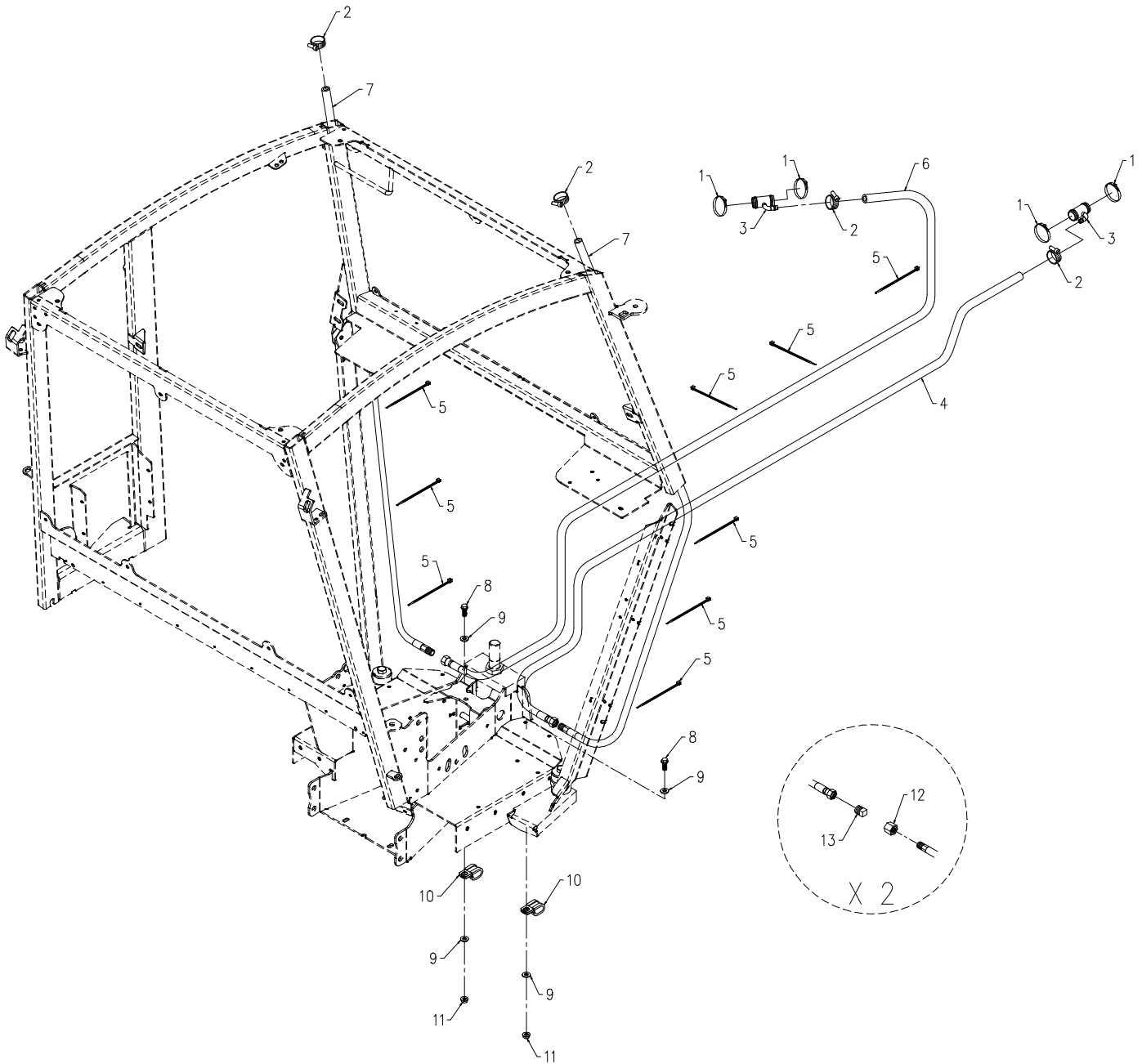
## 70.8136 Kubota Heater Install Kit For 4500Y & 4500Z

REF.	PART NO.	DESCRIPTION	QTY.
1	29.BF06MBSPT06	.FITTING, 3/8 BRB X 3/8 M BSPT	1
2	11.0032	.CLAMP, HOSE S/S 7/16-25/32	4
3	22.0064	.HOSE, 3/8x45.00 HTR SAE J20R3	1
4	29.BF06MP0490	.FITTING, 3/8 BARB X 1/4 MP 90	1
5	22.0065	.HOSE, 3/8x28.50 HTR SAE J20R3	1
6	30.0037	.TYTON TIE, #50 .18 X 8 BLACK	10
7	99.SF0406	.BOLT, SRF 1/4-20 X 3/4	2
8	94.04	.WASHER, FLAT 1/4 USS	4
9	11.0046	.CLAMP, CUSHIONED METAL 1/2"	2
10	99.SF04	.NUT, SRF 1/4-20 USS	2
11	22.0045	.HOSE, 3/8x94.00 HTR SAE J20R3	2
12	25.304-C-06^	.FITTING, CAP 3/8 #6 JIC	2
13	25.2408-06^	.FITTING, PLUG -6 MJIC	2

^These fittings are used to plug the hoses when the cab is removed from the power unit.

# PARTS

## ILLUSTRATED DRAWING 70.8137 Kawasaki Heater Install Kit For 4500P





# PARTS

## 70.8108 Kawasaki Heater Install Kit For 4500P

REF.	PART NO.	DESCRIPTION	QTY.
1	11.0052	.CLAMP, HOSE SS 13/16 X 1-1/2	4
2	11.0032	.CLAMP, HOSE S/S 7/16-25/32	4
3	47.0293	.TUBE, KAW. RAD. W/HEATER PORT	2
4	22.0048	.HOSE, 3/8x38.00 HTR SAE J20R3	1
5	30.0037	.TYTON TIE, #50 .18 X 8 BLACK	10
6	22.0046	.HOSE, 3/8x50.00 HTR SAE J20R3	1
7	22.0045	.HOSE, 3/8x94.00 HTR SAE J20R3	2
8	99.SF0406	.BOLT, SRF 1/4-20 X 3/4	2
9	94.04	.WASHER, FLAT 1/4 USS	4
10	11.0046	.CLAMP, CUSHIONED METAL 1/2"	2
11	99.SF04	.NUT, SRF 1/4-20 USS	2
12	25.304-C-06^	.FITTING, CAP 3/8 #6 JIC	2
13	25.2408-06^	.FITTING, PLUG -6 MJIC	2

^These fittings are used to plug the hoses when the cab is removed from the power unit.

# WARRANTY



## LIMITED WARRANTY - VENTRAC TURF EQUIPMENT

Venture Products, Inc., (henceforth referred to as V.P.I.) warrants on the terms and conditions herein, that it will repair, replace, or adjust any part manufactured by Venture Products Inc., and found by Venture Products, Inc., to be defective in material and/or workmanship during the applicable warranty term.

All Ventrac commercial equipment purchased and registered on or after January 1, 2019 will carry a 2-year commercial warranty. The warranty period begins on the date of original customer purchase:

<b>Ventrac Commercial Equipment</b>	<b>Warranty Term</b>
2100 SSV & Attachments	2-year
3000 Series Tractors & Attachments	2-year
4000 Series Tractors & Attachments	2-year

All Ventrac add-on kits and accessories such as: 3-point hitch, 12V front & rear power outlets, foot pedal, dual wheel kit, etc., will be covered under the above warranty periods provided they are installed by an Authorized Ventrac Dealer. This warranty may be transferred and will carry the remainder of the warranty starting from the original purchase/registration date with the dealership and/or V.P.I.

The engine warranty is covered by its respective engine manufacturer. Please refer to the engine manufacturer's warranty statement that is included in the owner's manual.

For warranty consideration on Ventrac commercial equipment, including any defective part, must be returned to an Authorized Ventrac Dealer within the warranty period. The warranty shall extend to the cost to repair or replace (as determined by V.P.I.) the defective part. The expense of pickup and delivery of equipment, service call drive time or any transportation expense incurred for warranty repair is the sole responsibility of the owner and is not covered under warranty by Ventrac and/or V.P.I. Ventrac and V.P.I.'s responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Ventrac equipment. Proof of purchase may be required by the dealer to substantiate any warranty claim. Only warranty work performed and submitted by an Authorized Ventrac Dealer may be eligible for warranty credit.

This warranty extends only to Ventrac commercial equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does NOT cover: (a) any defects, damage or deterioration due to normal use, wear and tear, or exposure; (b) normal maintenance services, such as cleaning, lubrication, oil change; (c) replacement of service items, such as oil, lubricants, spark plugs, belts, rubber hoses, bearings or other items subject to normal service replacement; (d) damage or defects arising out of, or relating to abuse, misuse, neglect, alteration, negligence or accident; (e) repair or replacement arising from operation of, or use of the equipment which is not in accordance with operating instructions as specified in the operator's manual or other operational instructions provided by V.P.I.; (f) repair or replacement arising as a result of any operation from Ventrac equipment that has been altered or modified so as to, in the determination of V.P.I., adversely affect the operation, performance or durability of the equipment or that has altered, modified or affected the equipment so as to change the intended use of the product; (g) repair or replacement necessitated by the use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the equipment or other than as recommended in the operator's manual or other operational instructions provided by V.P.I.; (h) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the equipment; or (i) damage or defects due to or arising out of repair of Ventrac equipment by person or persons other than an authorized Ventrac service dealer or the installation of parts other than genuine Ventrac parts or Ventrac recommended parts.

# WARRANTY

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## LIMITED WARRANTY - VENTRAC TURF EQUIPMENT

The sole liability of V.P.I. with respect to this warranty shall be the repair and replacement as set forth herein. V.P.I. shall have no liability for any other cost, loss, or damage. In particular V.P.I. shall have no liability or responsibility for: (i) expenses relating to gasoline, oil, lubricants; (ii) loss, cost or expense relating to transportation or delivery of turf equipment from the location of owner or location where used by owner to or from any Authorized Ventrac Dealer; (iii) travel time, overtime, after hours' time or other extraordinary repair charges or charge relating to repairs or replacements outside of normal business hours at the place of business of an Authorized Ventrac Dealer; (iv) rental of like or similar replacement equipment during the period of any warranty repair or replacement work; (v) any telephone or telegram charges; (vi) loss or damage to person or property other than that covered by the terms of this warranty; (vii) any claims for lost revenue, lost profit or additional cost or expense incurred as a result of a claim of breach of warranty; or (viii) attorney's fees.

The remedies of buyer set forth herein are exclusive and are in lieu of all other remedies. The liability of V.P.I., whether in contract, tort, under any warranty, or otherwise, shall not extend beyond its obligation as set forth herein. V.P.I. shall not be liable for cost of removal or installation nor shall V.P.I. be responsible for any direct, indirect, special or consequential damages of any nature. In no event shall V.P.I. be liable for any sum in excess of the price received for the goods for which liability is claimed.

There are no representations or warranties which have been authorized to the buyer of the Ventrac commercial equipment other than set forth in this warranty. Any and all statements or representations made by any seller of this equipment, including those set forth in any sales literature or made orally by any sales representative, are superseded by the terms of this warranty. Any affirmation of fact or promise made by V.P.I. or any of its representatives to the buyer which relates to the goods that are the subject to this warranty shall not be regarded as part of the basis of the bargain and shall not be deemed to create any express warranty that such goods shall conform to the affirmation or promise.

No employee, distributor, or representative is authorized to change the foregoing warranties in any way or grant any other warranty on behalf of V.P.I.

Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion on limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to all Ventrac commercial equipment sold by Venture Products Inc.