

Form No: 3365-161 REV B

TORO

ROPS CERTIFIED HARD CAB

Model No: 30860 – 2010 and After

This cab is intended to be used on the following **TORO** product:

Groundsmaster Series[®]
GM4500, GM4700



www.toro.com

©2005 by The Toro Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196

This cab is manufactured for **TORO**
by Jodale Perry Corporation



CAUTION

Read and follow all safety statements and assembly instructions before attempting to mount or operate vehicle with cab installed.



CAUTION

The resulting noise levels when using this product will exceed OSHA standards for an 8 hour work day and hearing protection with a Noise Reduction Rating (NRR) of 22 or higher is required.



CAUTION

This unit is heavy, and should be mounted with a minimum of two personnel and a hoist.



INSTALLER

Leave these instructions with end user. If manual is lost or damaged, please contact your **TORO** dealer / distributor for replacement.



END USER

Keep this manual for future reference.

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SAFETY INSTRUCTIONS

BEFORE OPERATING

- Read and understand the contents of this material before operating the vehicle. Become thoroughly familiar with the controls, capabilities and proper use of equipment.
- **DO NOT** weld, cut, drill, or modify cab structure in any manner.
- **DO NOT** allow children to operate vehicle. Do not allow adults to operate with out proper training.
- Keep all shields and safety devices in place. If a safety device, shield, or decal malfunctions, becomes damaged or illegible replace it before operating is recommended. To assure vehicle is in safe operating condition, tighten any loose nuts, bolts, and screws.

SAFETY INSTRUCTIONS

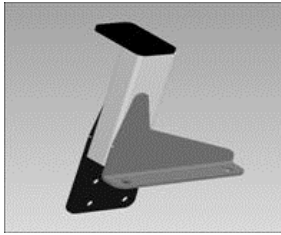
While operating

- Avoid sudden stops or sharp turns.
- Always use safety belts.
- Never allow riders on top of cab while operating vehicle.
- Stay alert for hidden hazards and traffic.
- Avoid sudden starts and excessive speeds.
- Use extreme care when working around fences, ditches or on hillsides.
- Check clearances carefully before driving under any objects.
- Avoid operating sideways on a steep slope whenever possible.
- Wait for vehicle to come to a full stop and engage parking brake before leaving vehicle.
- Wear hearing protection during operation

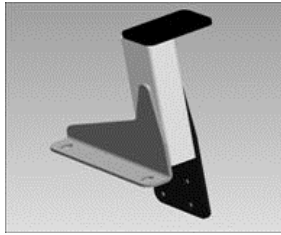
Maintenance

- To ensure cab is in safe operating condition, keep all fasteners tight.
- Replace a damaged cab. Do not repair or revise. Any alterations to a cab must be approved by the manufacturer.
- To be sure of optimum performance and safety, always purchase genuine TORO replacement parts and accessories. Replacement parts and accessories not made by a TORO approved manufacturer could be dangerous. Such use could void warranty of the TORO COMPANY.
- Thoroughly inspect cab and cab mounting periodically.

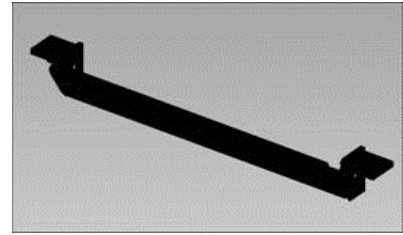
PARTS PHOTOS



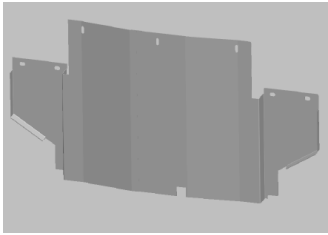
Front Mounting Bracket Left



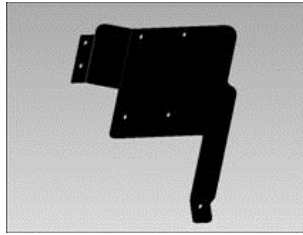
Front Mounting Bracket Right



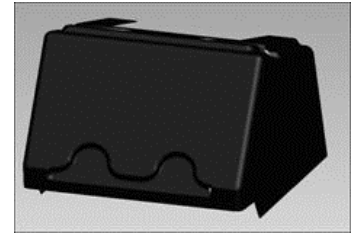
Front Mounting Bracket



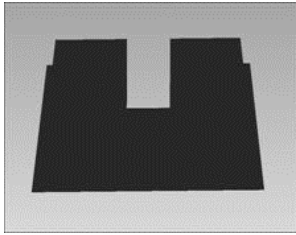
Rear Shielding



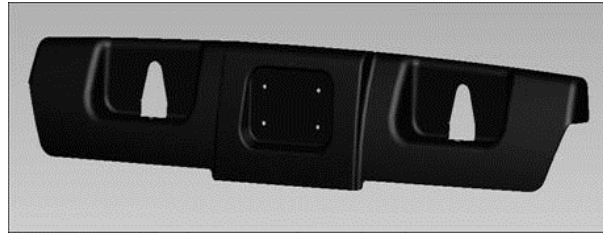
Washer Tank Holder



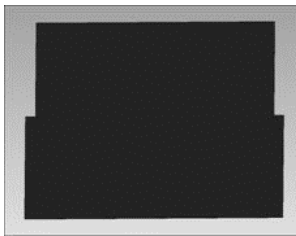
Steering Wheel Cover



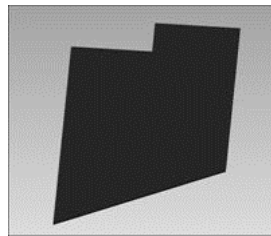
Floor Mat



Front Bumper



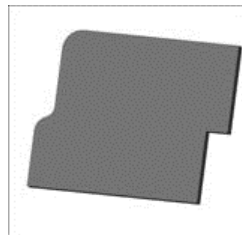
Rear Center Upholstery



Rear Left & Right Upholstery



Lift Brackets



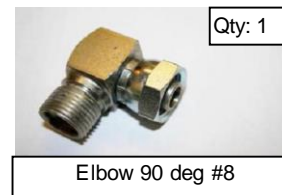
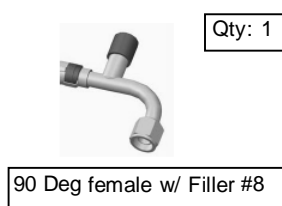
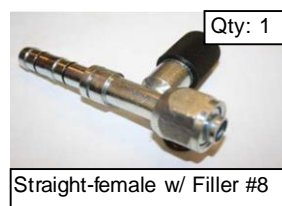
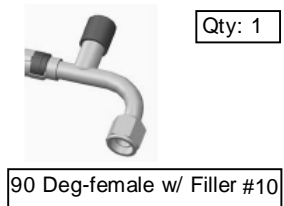
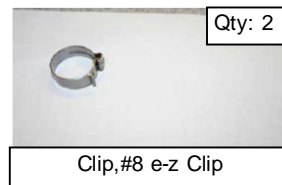
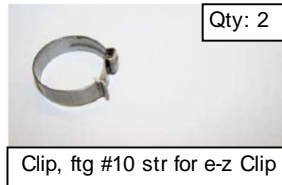
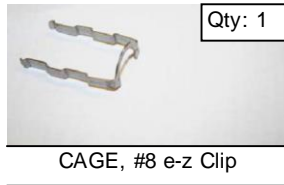
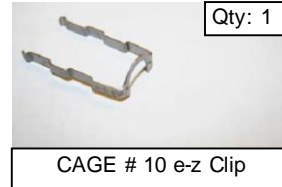
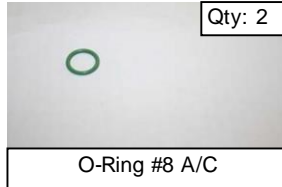
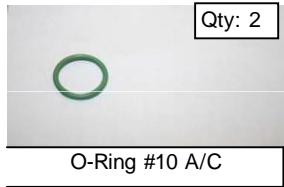
Heat Protective Mylar

LOOSE PARTS PHOTOS

 Qty: 4	 Qty: 4	 Qty: 2
Bolt, Hex, 5/8" x 3 1/2", YD	Nut, Nylon Lock, 5/8" YD	Washer, 5/8" x 2 1/2"
 Qty: 2	 Qty: 2	 Qty: 2
Washer, 5/8" x 2 1/2" Cut	Rubber Washer 2 1/2" x 9/16"	Rubber Washer 2 1/2" x 9/16"
 Qty: 4	 Qty: 3	 Qty: 6
Rubber Isolator 2 1/2" x 3/4"	Bolt, BH, 1/4" x 1" NC, MB	Nut, Flange, 1/4" MB
 Qty: 2	 Qty: 2	 Qty: 7
3/8" x 3" Hex Bolt	3/8" Nut Lock	Bolt, Flange, 5/16 x 3/4, YD
 Qty: 3	 Qty: 3	 Qty: 1
Nut, Flange, 5/16" YD	Bolt, Flange, 1/4" x 1/2" YD	3M HI-Strength Adhesive
 Qty: 1	 Qty: 1	 Qty: 1
Tank, Washer, 2L	Toro COQ Card	Electrical Jumper Harness

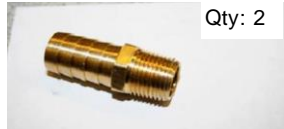
LOOSE PARTS PHOTOS

A/C Parts



LOOSE PARTS PHOTOS

Heater Parts



Qty: 2

fitting 3/8npt x 5/8barb x 180°



Qty: 2

Clamp, Hose, HS24



Qty: 2

Clamp, Hose, HS10



Qty: 1

Rear Mounting Bracket Left



Qty: 1

Rear Mounting Bracket Right



Qty: 1

Front Mounting Bracket



Qty: 1

Rear Shielding



Qty: 1

Washer Tank Holder Bracket



Qty: 2

Lift Bracket (2")



Qty: 1

Steering Cover w/mylar



Qty: 1

Front Bumper (Plastic)



Qty: 1

Floor Mat



Qty: 1

Rear Center Upholstery



Qty: 1

Rear Left Upholstery



Qty: 1

Rear Right Upholstery



Qty: 1

Heat Protective Mylar



Qty: 1

Box 44" x 26" x 12"



Qty: 1

Splicer, 1 1/4"OD

Qty: 1



Washer Tank Mounting
Bracket for Tier 4 Models

Qty: 1



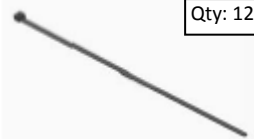
Screw-HH [1/4-20 X 2.750]

Qty: 1



Washer-Flat, .281 X .625

Qty: 12



Tie-Cable (14.5 LG)

Qty: 2



Nut-Flange, NI [1/4-20 UNC]

ROPS Certified Cab, Roll Over Protection Structure Inspection Guide

Cab has been certified to ISO 21299 standard

ROPS certified cab like any other safety devices needs to be periodically inspected to verify that the integrity of the devise has not been compromised though normal machine use, misuse, age degrading, modifications, or rollovers.

Some mechanical discretion is essential, therefore personnel who inspect the cab need to comprehend and understand the significance of issues like structural corrosion, cracks, and deformation. Conservatism is the essential rule. If in doubt, remove the machine from service and contact cab manufacturer for assistance. Examples are:

- Permanent deformation or twisting.
- Missing, damaged, or loose mounting hardware.
- Mounting hardware that is of a grade lesser than specified.
- Any cracks in structure (structural members and/or welds).
- Significant corrosion.
- Modifications, i.e. unauthorized welds or holes.
- Missing or unreadable labels.
- Machine GVW (including attachments, restrained payload, fuel and operator) in excess of the maximum weight specified on the machine label.
- Missing or unusable operator restraint devices. (i.e. seat belts)
- Any unauthorized repair.
- Incomplete/improper installation.

Other conditions may require imminent service but may not render the unit immediately unusable. Examples are:

- Faded paint.
- Faded hard to read labels.
- Heavily soiled operator restraints. (seat belts)
- Slightly corroded mounting hardware.
- Cab must be inspected immediately after any type of collision, rollover, or impact. If any damage is evident, the cab must be removed from service, repaired and/or replaced.
- When cab is removed or reinstalled, mounting hardware must be examined for signs of over stressing. Damaged mounting hardware must be replaced before placing the cab back in service.
- Operators are to be instructed to properly adjust and use restraints, seatbelts, at all times.

Replace decals immediately if damaged or missing.



- **Warning - read the Operator's Manual; wear the seat belt, avoid tipping the machine.**

- **Warning – wear hearing protection.**

Part No: 119-0010
Located on the right lower A-Post

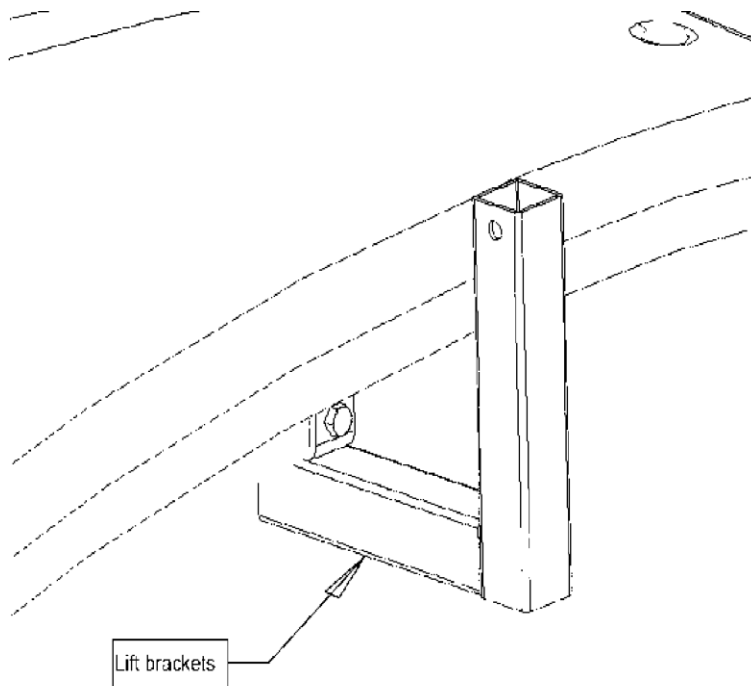
VEHICLE PREPARATION

1. Position the machine on a level surface. Set the parking brake, lower the cutting units, turn the ignition off and remove the key.
2. Remove the plastic storage container (box), LH.
3. Remove the battery and the fasteners from the RH box and move the box aside. (to the center of machine)
4. Remove the 2-Post ROPS, 2-Post ROPS bracket and the bottom plate. (keep all bolts for re-installation)
5. Move seat full forward and tilt the seat back full forward.
6. Remove plastic front cover and lights.
7. Install alternator and A/C compressor kit, Model 30862 per instructions.
8. Install rear wheel weight kit, 104-1478, per instructions.

CAB PREPARATION

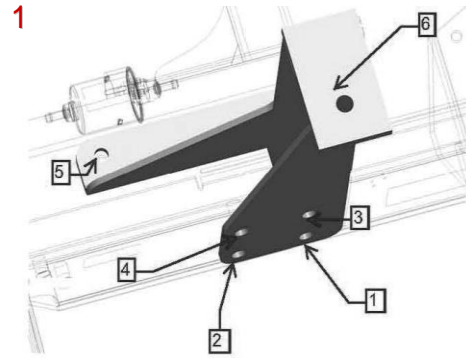
Step 1. Open RH Door and LH Door.

Step 2. Install lift brackets to upper door cross tube using 3/8" X 3.0" long bolt (Qty=2) and nut (Qty=2) into 3/8" diameter hole provided; as shown.

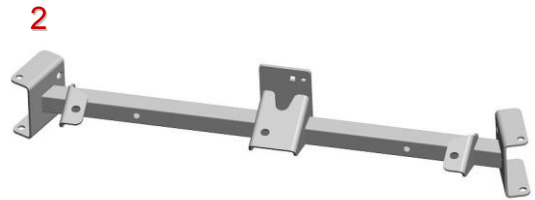


INSTALLATION INSTRUCTIONS

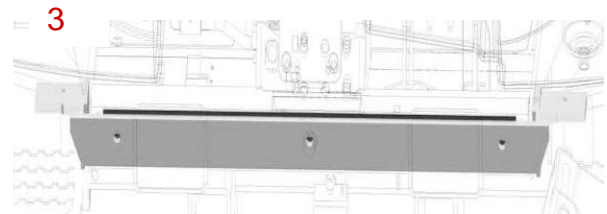
1. Assemble the rear mounting bracket (LH & RH) using hex head flange bolts 1/2" x 1 1/4" long and 1/2" x 6" (previously removed ROPS hardware). Install all bolts finger tight first. Leave bolts finger tight.
Torque bolts only after installation of the cab



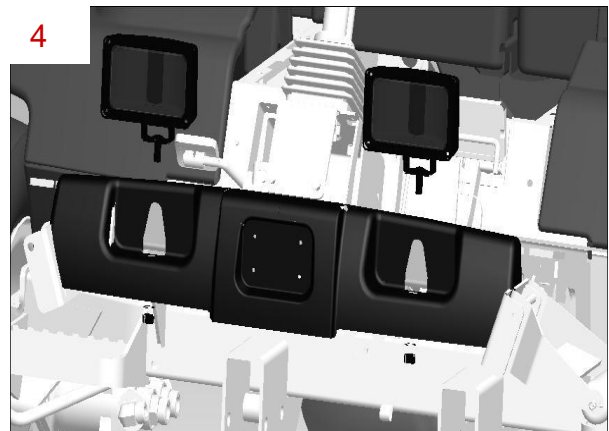
2. Remove the front vehicle bracket (Toro P/N=117-4760-01). Remove the actuator mounting bolt, then slide the light harnesses out of the way prior to removing the 3 main bracket bolts.



3. Jodale Perry (JDP) front cab bracket between Toro's bracket and frame. Align the holes and hand tighten the hex head flange bolts, 1/2" x 1-1/4" long, Torque the bolts to 85 ft-lbs. **Figure 3**

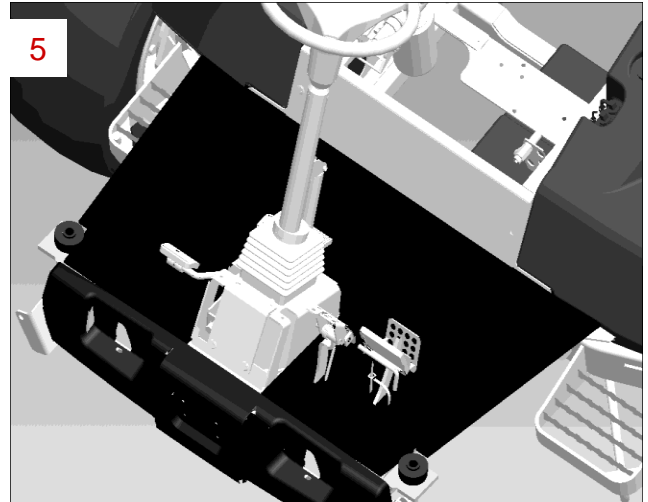


- Install front plastic cover (included in parts box) and lights in previous space. Tighten lights bolts. Remove Toro logo plate from production plastic cover and install onto new front plastic cover, using production hardware. **Figure 4**

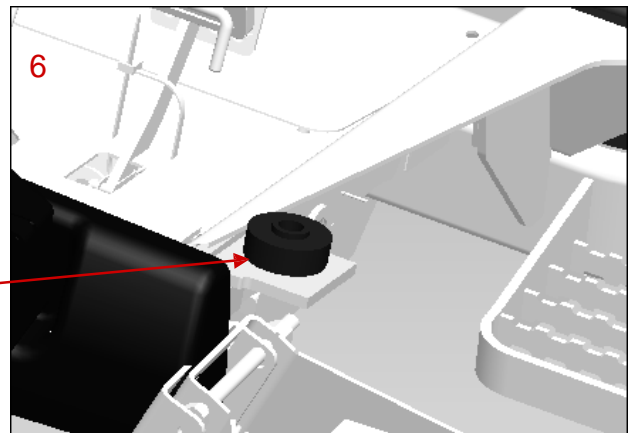


INSTALLATION INSTRUCTIONS

5. Take floor mat and 3M HI-Strength spray adhesive. Dry fit the floor mat. Once fitted, glue floor mat down following 3M instructions. (Floor mat is oversized on LH & RH about 1 1/2". After cab mounting process cut off the rest of floor mat). **Figure 5**



6. Install the rubber mount isolators, Qty 4 . **Figure 6**

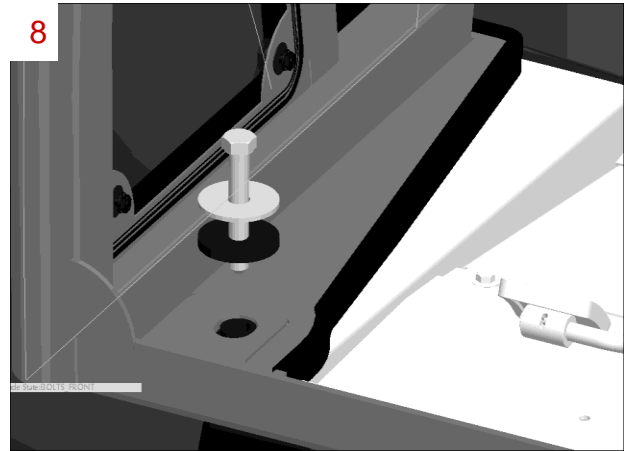


7. Lift the cab and move to the front of vehicle and match to the center of the vehicle. Then, gradually move cab rearward onto the vehicle. Align and move cab down. **Be careful, watch both sides while moving rearwards.** **Figure 7**

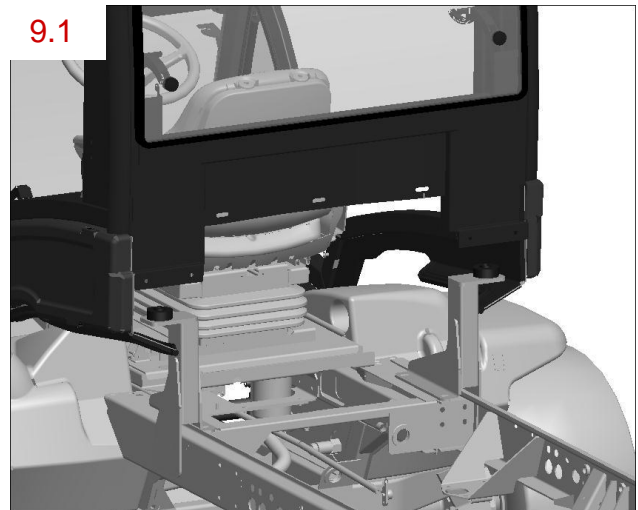


INSTALLATION INSTRUCTIONS

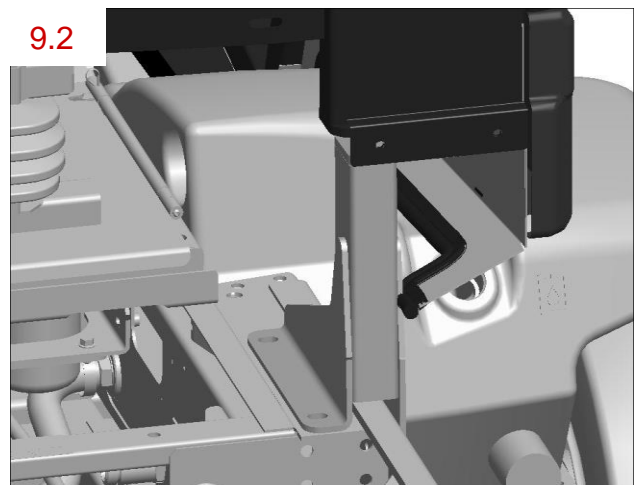
8. When the front holes are above the isolators at the front align the holes and put the bolts $5/8"$ x $3-1/2"$ long with $2-1/2"$ washer and $1/4"$ x $2-1/2"$ x $9/16"$ rubber washer through the isolator to keep the position of the cab. Then move the cab down slowly. **Figure 8**



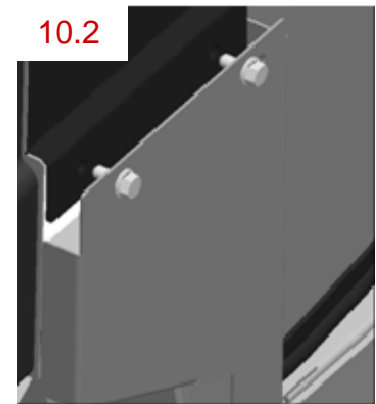
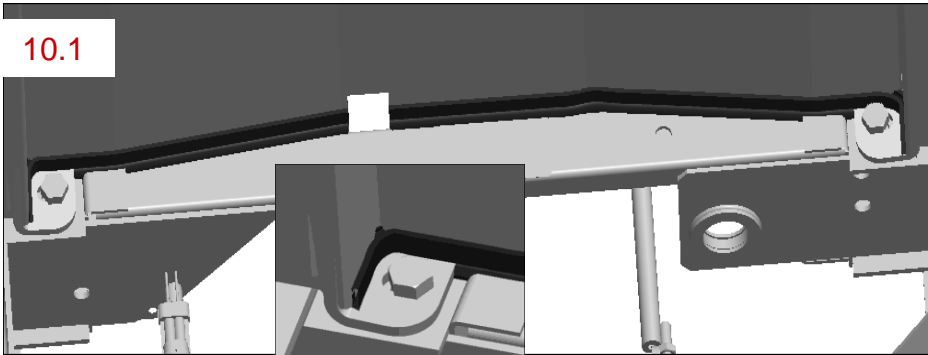
9. Paying attention to the cab shielding (LH & RH), lower the cab onto the machine. Aligning the mounting holes in the rear bracket, hand tighten the rear of the cab using the $5/8"$ x $3-1/2"$ bolts. **Figure 9.1.** Pay attention for the bulb seal on the sides (LH & RH). **Figure 9.2**



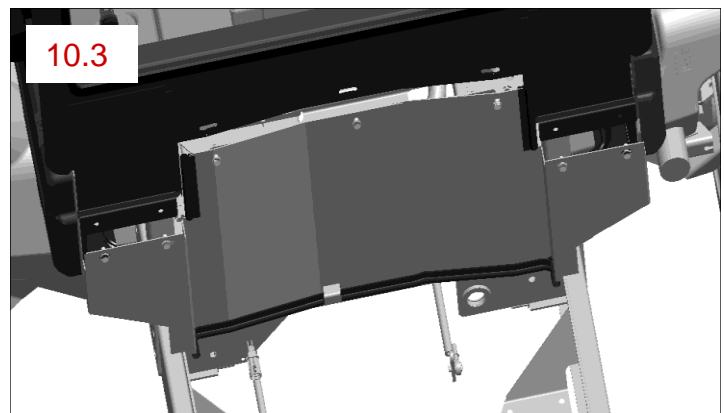
- Torque the bolts of the rear brackets (LH & RH) to 85 ft-lbs **first**. Then torque the mounting bolts of the cab to 85 ft-lbs.



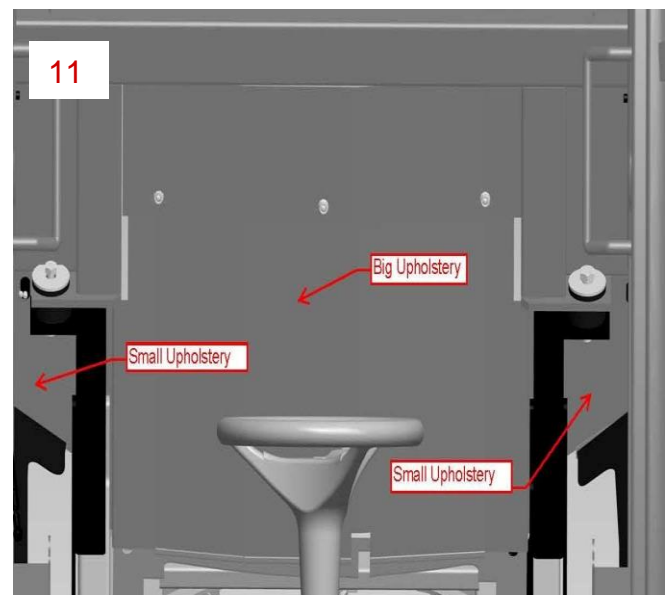
INSTALLATION INSTRUCTIONS



11. Take the rear shielding and insert it behind the bolts. **Figure 10.1** Take 5/16" x 3/4" bolts and bolt into the weld nuts. **Figure 10.2** If necessary push the rear shielding to align the holes of the cab and bolt the shielding together. Use 5/16" x 3/4" bolts and 5/16" nuts. **Figure 10.3**



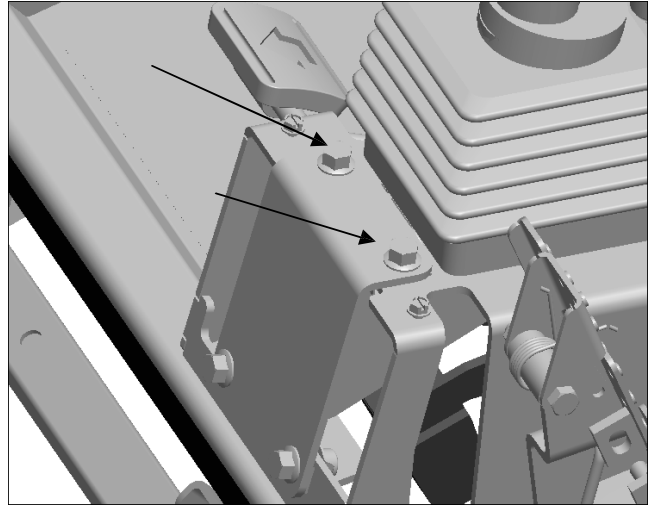
12. Take 3M HI-Strength 90 Spray Adhesive (included in Parts Box) and the rear shielding upholstery; spray the foam side of the upholstery and place the upholstery on the inside of the rear shielding. Glue the two small pieces of upholstery on the left and right side of the rear shielding. **Figure 11**



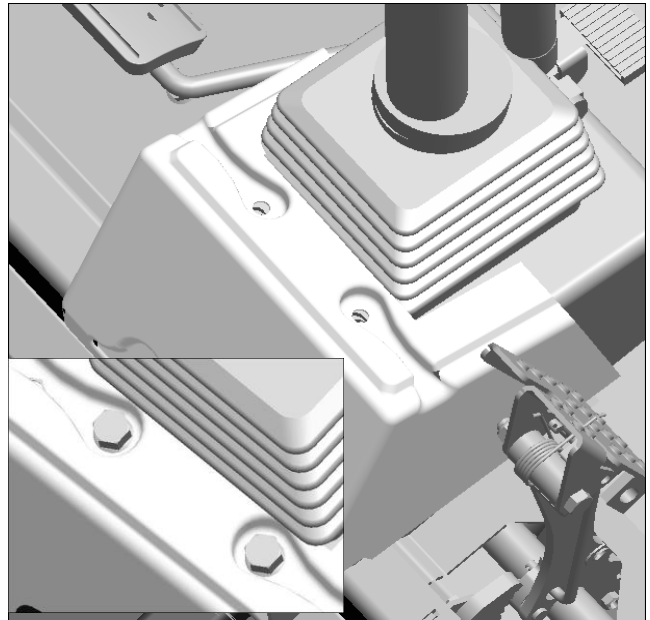
13. Move the right side storage box back in the previous position and install the left side storage box. Bolt on both boxes with previous bolts. Re-install the battery.

INSTALLATION INSTRUCTIONS

14. Remove the bolts to install steering valve cover. Keep them for re-installation.

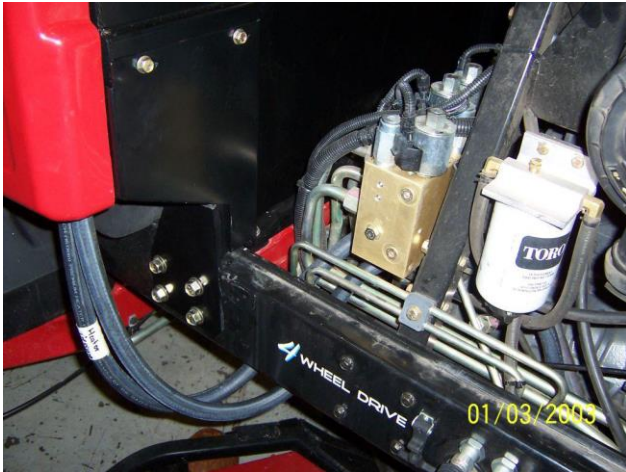


15. Insert steering valve cover and re-use the bolts. Tighten the bolts.



Note. Before continuing cut the heater hose as follows, Pressure @ 71" and Suction @ 82". It is measured from the back left corner of the cab.

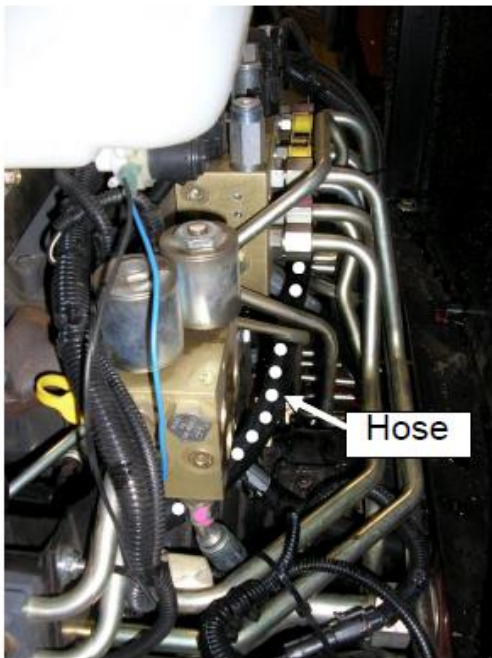
Heater Hose on Models 30857 & 30858 Heater Hose Routing (Pressure)



Back Left Corner of Cab



← Front, Left side,



Right side, Front →

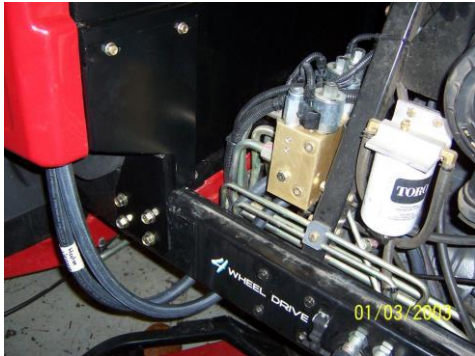


Right side, Front →

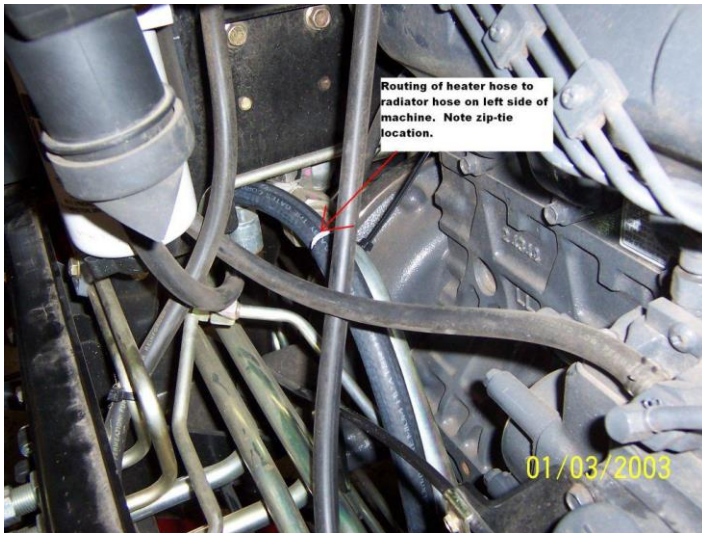


Right side, Front →

Heater Hose on Models 30857 & 30858 Heater Hose Routing (Suction)



Back Left Corner of Cab



Routing of heater hose to radiator hose on left side of machine. Note zip-tie location.



Front

Left Side View

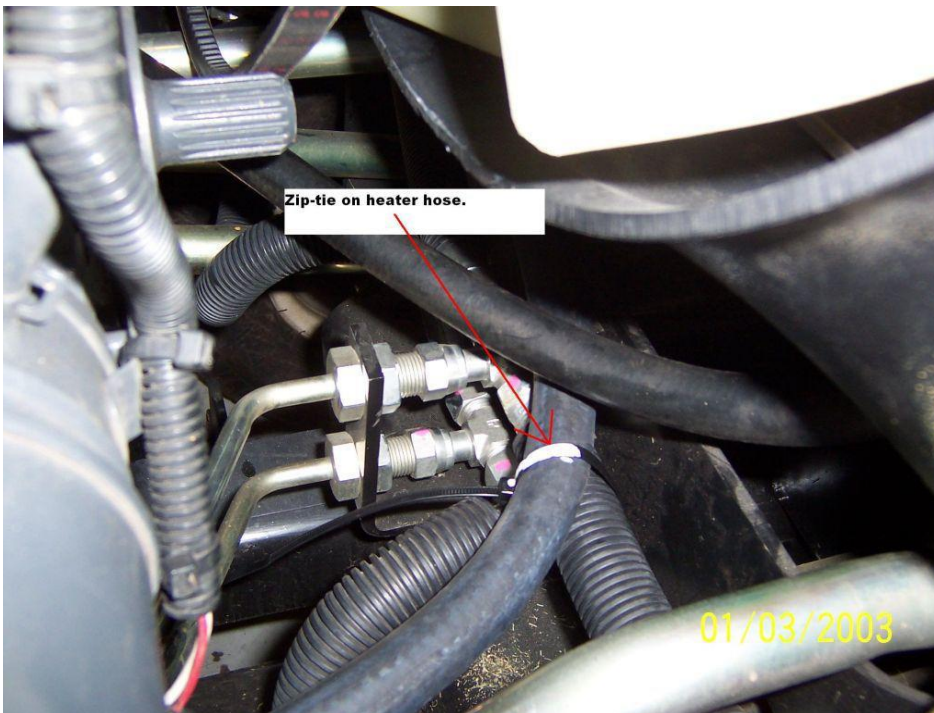
Back



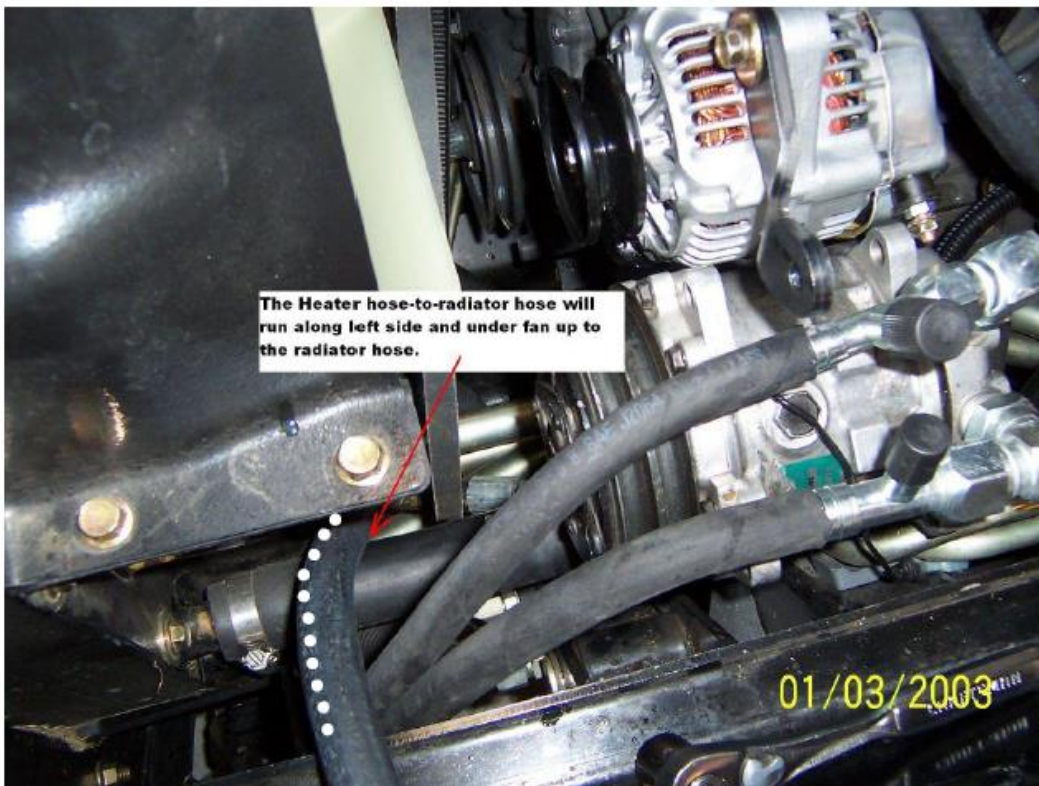
Heater hose, left side zip-tie locations.

Left Side View

Heater Hose Routing (Suction) Cont.



Left Side View
Towards Back



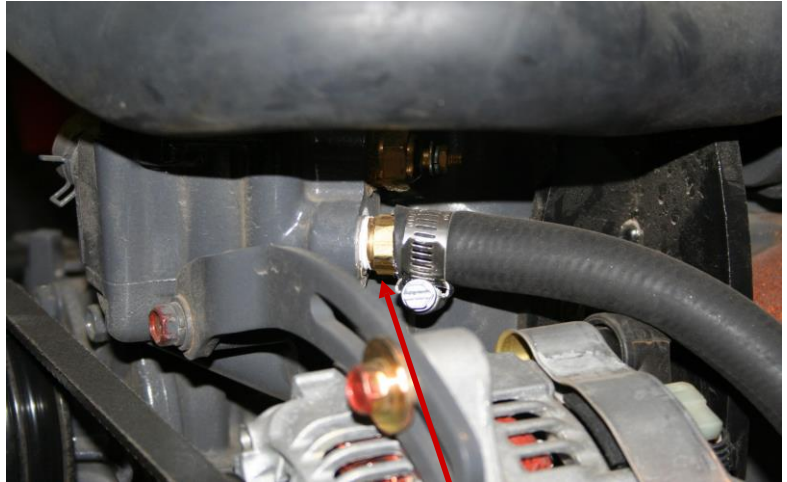
Right Side View
Towards Front



Heater Connections on Models 30857 & 30858

Heater Connection Pressure side

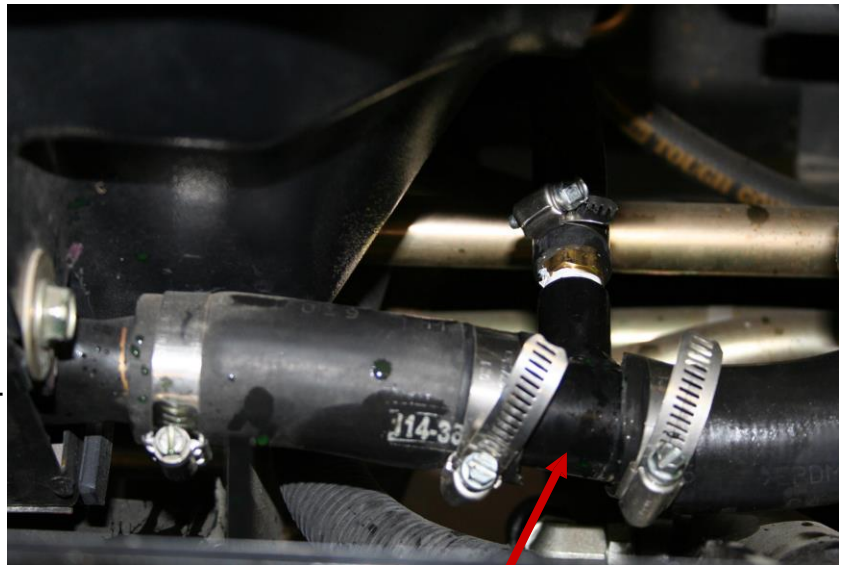
Remove radiator cap and drain the antifreeze before working on the connections.



Remove the plug and install the brass fitting, 3/8" NPT x 5/8" barb x 180° with Teflon tape. Cut the heater pressure hose 71" long (from corner of the cab). Attach the heater hose and secure with 100914 hose clamp.

Heater Connection Suction Side

Assemble the 3/8" NPT x 5/8" x 180° barb, using Teflon tape on the threads. Locate the bottom radiator hose and cut it approx. 5-6" from the radiator. Insert the 1 x 3/8" splicer and secure in place with 2 x 102494 hose clamps. Attach the 82" long (from corner of the cab), heater hose and secure with 100914 hose clamps.



Make sure to replace the plug or close the tap; whichever was used to drain the antifreeze. Refill the radiator and run the machine long enough to circulate the antifreeze. Check the level of fluid in the radiator and top up if needed and replace the radiator cap.

Heater Hoses on Models 30873 & 30874

1. Heater Hoses are cut to Pressure @ 80", Suction @75", measured from corner of the cab, as shown in Figure 1.
2. Heater Hoses drop down from Back Left corner of Cab and raising up from below Frame and towards the Rear of the unit along the Hard lines, as shown in Figure 3.
3. Use 4 Zip Ties to secure the hose with hard Lines, as shown in Figure 3.
4. Barb Fittings [3/8" NPT X 5/8" Barb] are assembled on the Engine as shown in Figure 2.
5. Do not use T-Fitting on Model number 30874 & 30873.

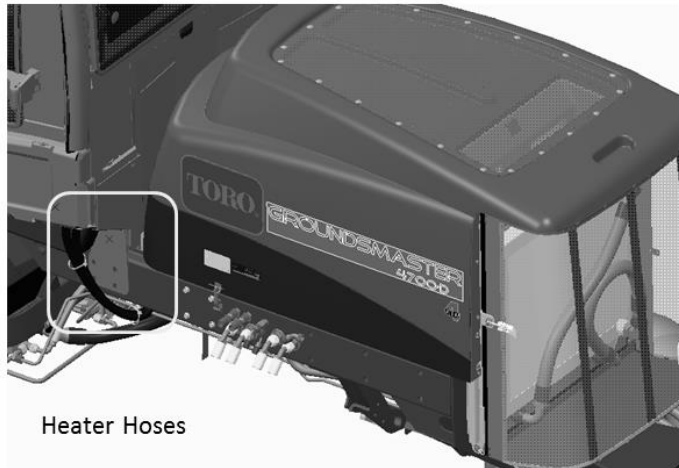


Figure 1

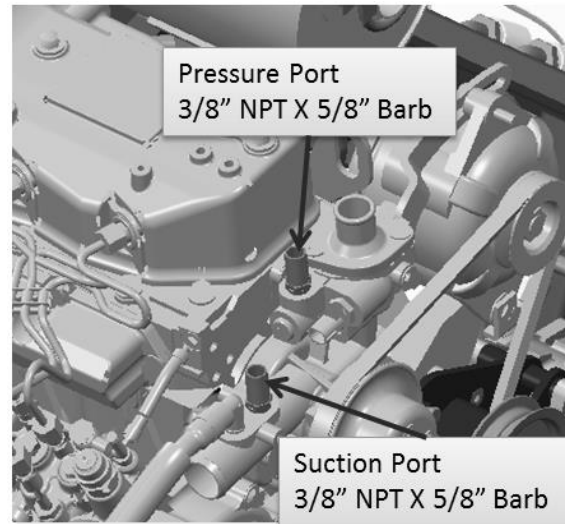


Figure 2

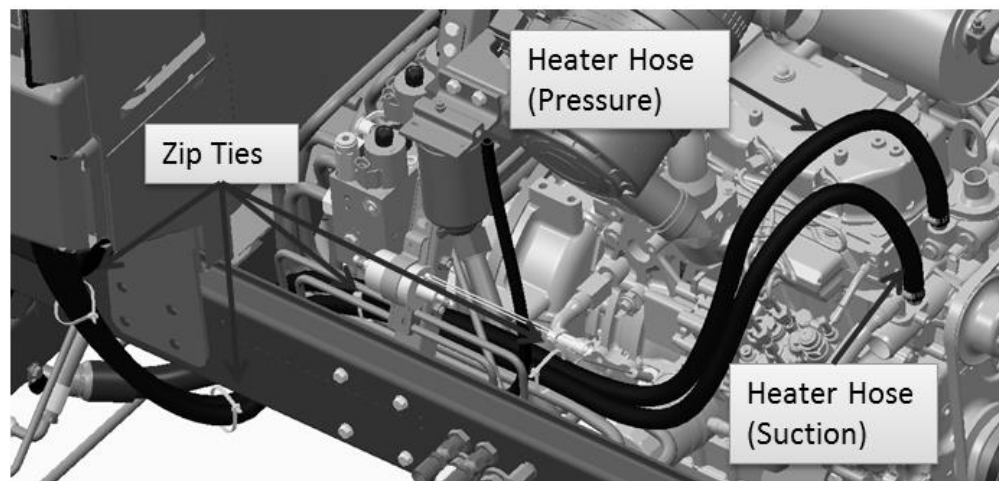


Figure 3

Heater Hoses on Models: 30881 & 30882

1. Heater Hoses are cut to Pressure @ 80", Suction @75", measured from corner of the cab, as shown in Figure 1.
2. Heater Hoses drop down from Back Left corner of Cab and raising up from below Frame and towards the Rear of the unit along the Hard lines, as shown in Figure 3.
3. Use 4 Zip Ties to secure the hose with hard Lines, as shown in Figure 2
4. Barb [3/8" NPT X 5/8" Barb] and T-Fittings are assembled on the Engine as shown in Figure 3.

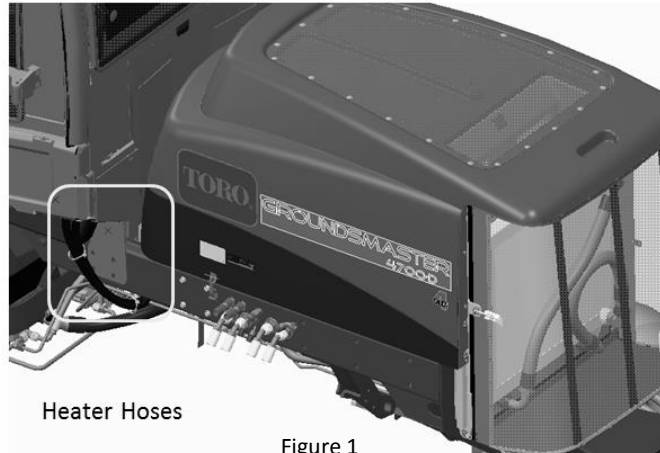


Figure 1

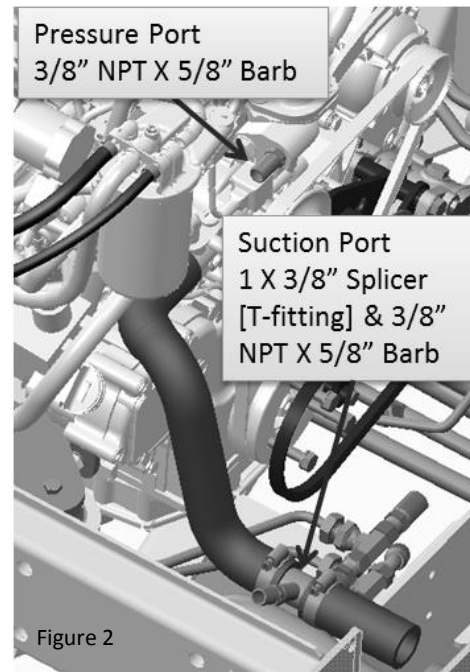


Figure 2

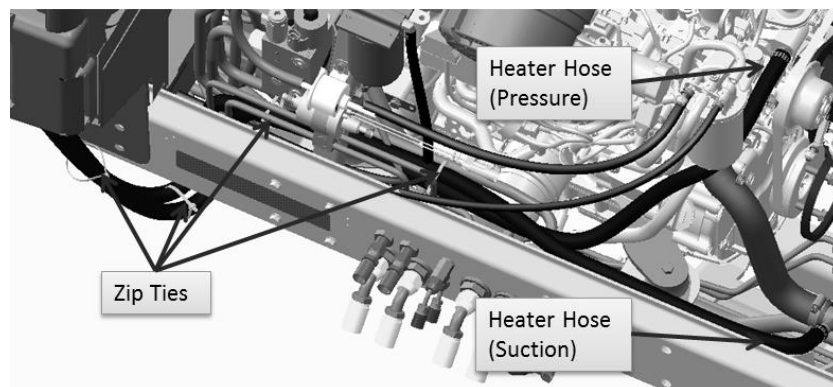


Figure 3

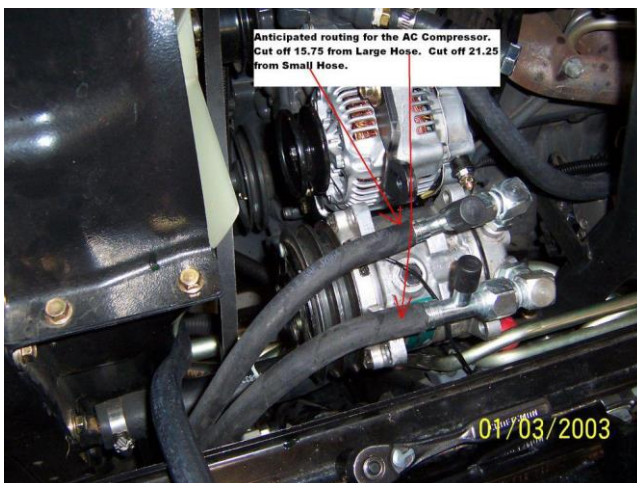
A/C Hose Routing for Models 30857 & 30858



Back Right Hand
Corner of Cab



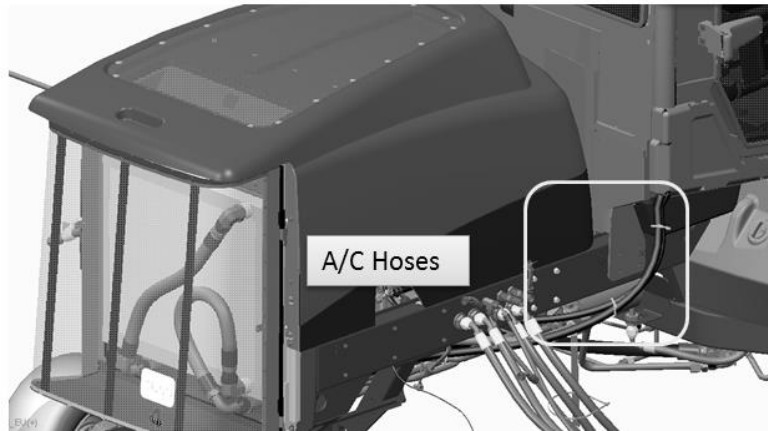
Right Side View



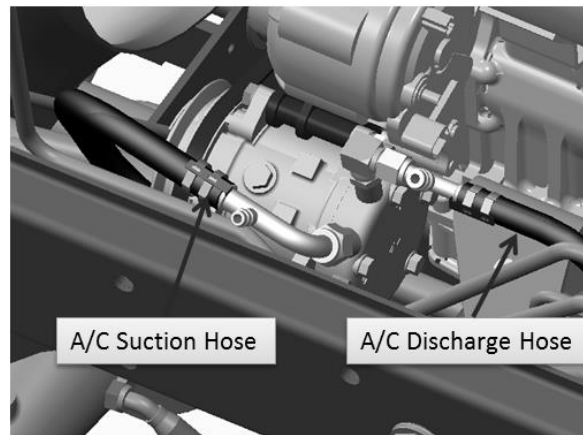
Right Side View

A/C Hose Routing on Models 30873, 30874, & 30882

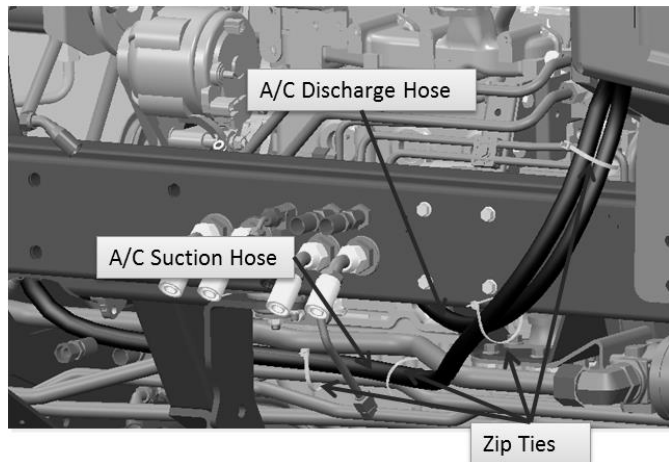
1. A/C Hoses Drop down from Back Right corner of Cab, as shown in Figure 1.



2. Suction Hose is routed along the Hard line with zip ties, as shown in Figure 2 & 3.
3. Discharge Hose is routed raising up from below Frame and towards the front of the A/C Compressor, as shown in Figure 2 & 3.



4. Use 4 Zip Ties to secure the hose with hard Lines, as shown in Figure 3.



Installation of A/C fittings on the Hose

(Use the supplied fittings)

The following is taken from an Aeroquip Manual

E-Z STEP 2: Slip on two clips.

Install two proper-sized clips onto the cut end of the hose. Orientation of the clips does not affect the performance of the connection. However, for ease of assembly, both clips should have the same orientation.

NOTE: Failure to slide the clips over the hose at this time will require the clips to be stretched over the hose or fitting later. This may permanently damage the clip.



E-Z STEP 3: Oil the nipple.

Lubricate the nipple with a generous amount of the refrigeration or A/C system's compressor lubricating oil. This MUST be done to lower the force of nipple insertion.



E-Z STEP 4: Insert the nipple into the hose.

Insert the nipple into the hose. To ensure that the nipple is fully inserted, check the gap between the cut end of the hose and the shoulder on the nipple. Care should be taken to avoid kinking or other damage to the hose during nipple insertion.

NOTE: Be sure to wipe excess oil from the nipple and hose.



E-Z STEP 5: Snap on the cage.

Snap the cage into the groove on the nipple. The arms should extend over the hose length. When the cage has been correctly installed in the cage groove, the cage will be able to rotate in the groove. This step MUST be performed to ensure:

1. The clips will be located over the O-rings on the nipple
2. The connection will be compatible with the connection's pressure rating



E-Z STEP 6: Slide the clips.

Slide the clips over the cage arms and into the channels on each arm.



E-Z STEP 7: Close the clips.

Use the FT1357 pliers to close the clips. The pliers should be positioned squarely on the clip connection points and should remain square during the closing of the clip.



Nose of the pliers should be firmly seated under the assembly bump and lock latch.



correct



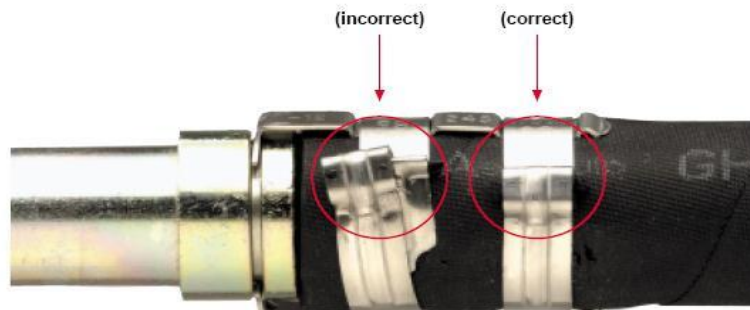
incorrect

For easiest assembly, the clasp should be closed between the cage arms.



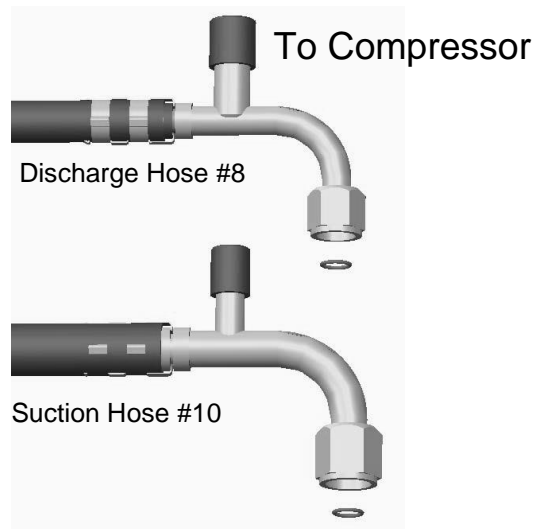
• NOTICE •

If the pliers are not kept square during closing of the clip, the clasp may have an offset. Use the pliers to correct the clasp alignment.



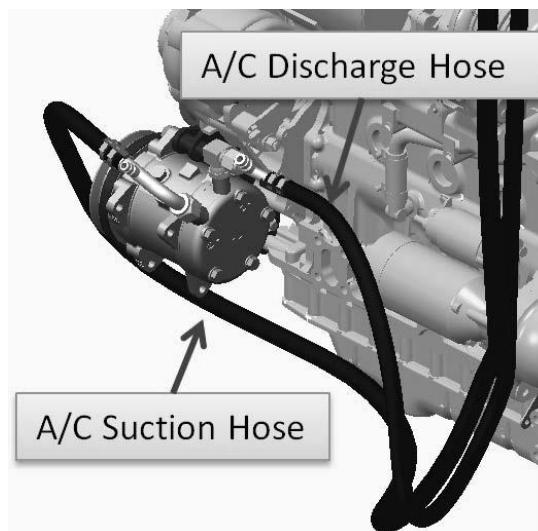
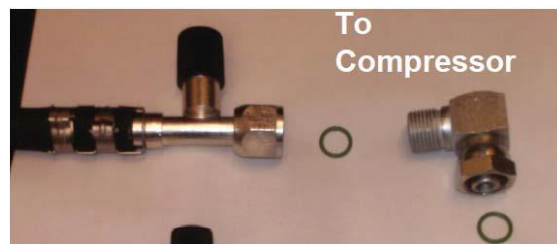
Connecting A/C Hoses to Compressor on Models 30657 & 30858

- Once the A/C Hoses have been routed and cut to length, the ends can be attached to the hoses following the procedure on pages 27 - 29.
- Then the “O” rings can be installed and the 90 deg fittings to the compressor. (**Make sure to use A/C oil on the “O” rings**).



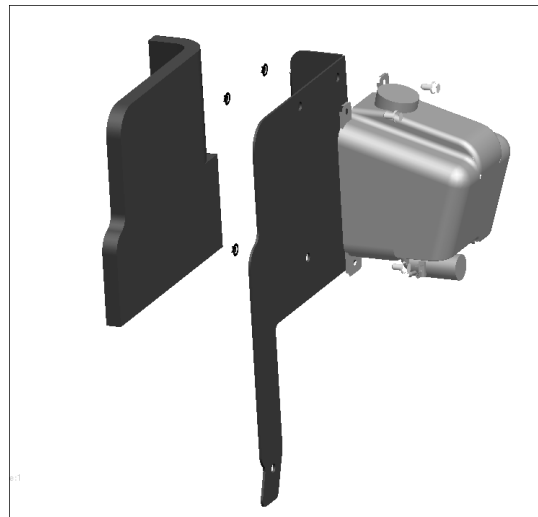
Connecting A/C Hoses to Compressor on Models 30573, 30874, 30881 & 30882

- Once the A/C Hoses have been routed and cut to length, the ends can be attached to the hoses following the procedure on pages 27 - 29.
- Then the “O” rings can be installed and the 90 deg fittings to the compressor. (**Make sure to use A/C oil on the “O” rings**).

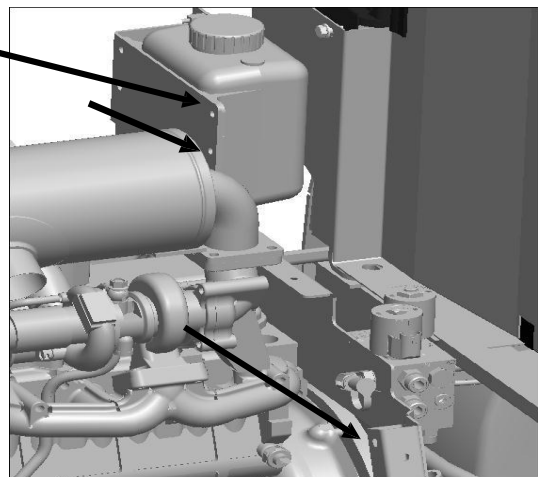


Washer Tank Installation on Models 30857 & 30858

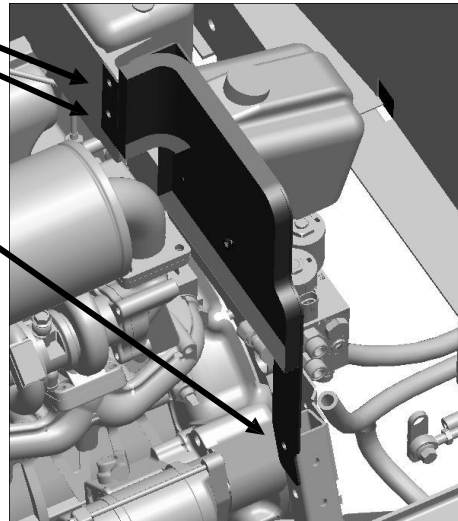
1. Take washer tank holder and install washer tank to the holder. Use 3 x 1/4" x 1/2" flange bolts and 1/4" nuts .
2. Take Mylar (included in parts box) and stick it to the rear of the washer tank holder. Cover nuts with the Mylar.



3. Remove bolts and nuts from overflow tank and from holder.



4. Install washer tank assembly to the overflow tank and the holder. Re-use bolts you removed before.
5. Cut and install hose to washer tank.
6. Connect cab harness to traction unit harness located near the right rear corner of the cab.



Mounting the Washer Bottle on Models 30873, 30874, 30881 & 30882

1. Washer Bottle bracket is mounted to the channel post on LH side of the Radiator, below the over flow bottle, as shown in Figure 2. Use the hardware specified in Figure 1.

SI No	Toro Part Number	Description	Quantity
1	127-6385	BRACKET-WASHER BOTTLE	1
2	321-4	SCREW-HH [1/4-20 X 2.750]	2
3	3256-22	WASHER-FLAT, .281X.625	2
4	104-7201	NUT-FLANGE, NI [1/4-20 UNC]	2

Figure 1

2. Use 3 X ¼" X ½" Flange Bolts and ¼" Nuts to mount the Washer Bottle Bracket [127-6385]

3. Washer Bottle Hose/Tube routed by the LH side of the engine towards the front of unit and turning right above the manifold mounting bracket towards the right corner of cab, as shown in Figure 3.

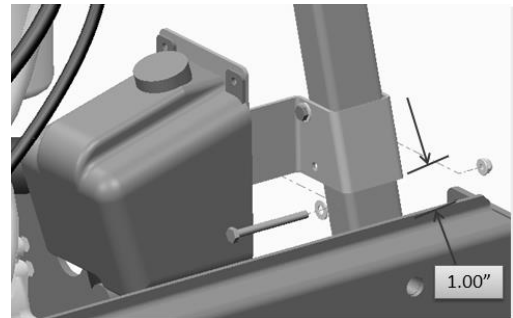


Figure 2

4. Jumper Wire Harness is similarly routed along the Washer Bottle Hose /Tube.
5. Use 4 zip ties to secure the tube and harness with main harness of the unit.

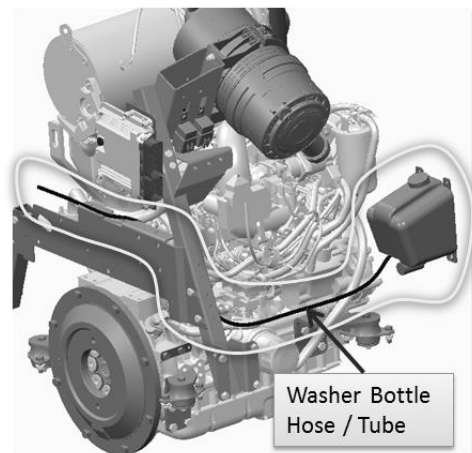


Figure 3

TO THE PURCHASER

All products are designed to give safe, dependable service if they are operated and maintained according to instructions. Read and understand this manual before installation or operation.

This manual has been prepared to assist the owner and operators in the safe installation, and suitable maintenance of this cab. The information is applicable to products at the time of manufacture and does not include modifications made afterwards.

Read and understand mounting instructions before attempting to mount cab. Familiarize yourself with the operating instructions and all safety recommendations contained in this manual, and on the tractor. Follow the safety recommendations and make sure that those with whom you work follow them.

DIRECTION REFERENCE

All references to right and left, forward or rearward, are from the operators' seat, facing the steering wheel.

To assist you dealer in handling your needs, please record hereafter the model number and serial number of your cab and tractor. It is also advisable to supply them to your insurance company. It will be helpful in the event that the cab or tractor is lost or stolen.

TRACTOR CAB: _____

MODEL: _____

SERIAL NUMBER: _____

DATE OF PURCHASE: _____

DEALER NAME: _____