



**BLADE, PIVOT BEAM, A-FRAME AND  
LIGHT TOWER ASSEMBLY  
7600LT & 8000LT Snowplow  
Installation Instructions**

**⚠ CAUTION**

Read this document before installing the snowplow.

**⚠ CAUTION**

See your BLIZZARD® outlet/Web site for specific vehicle application recommendations before installation. The Undercarriage Selection Guide has specific vehicle and snowplow requirements.

# SAFETY

## SAFETY DEFINITIONS

### ⚠ WARNING

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

### ⚠ CAUTION

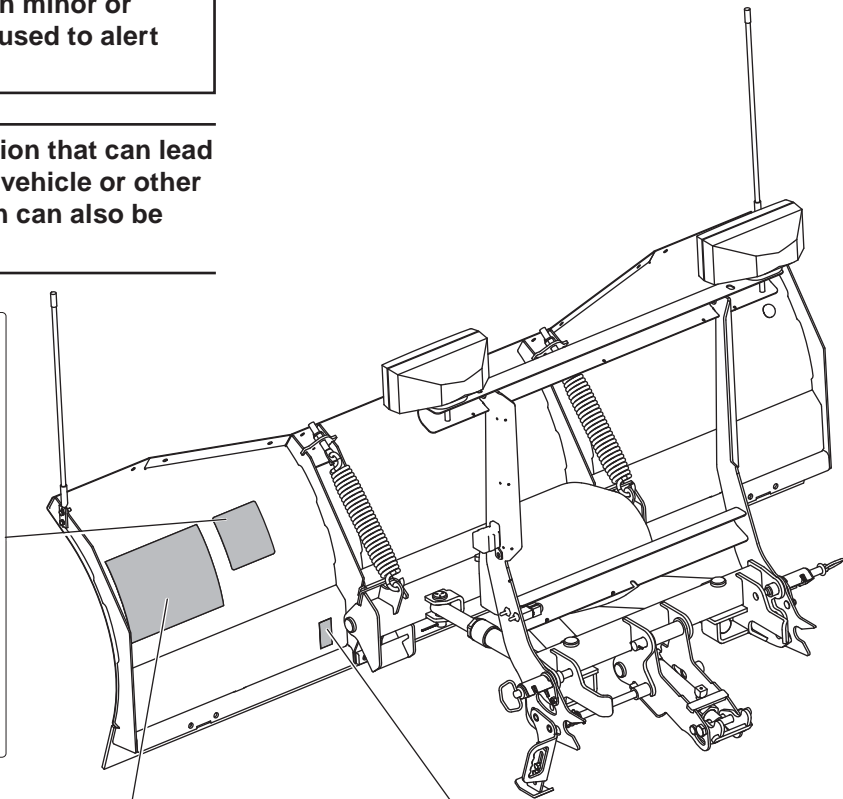
Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTE:** Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

## WARNING/CAUTION & INSTRUCTION LABELS

Become familiar with and inform users about the warning and instruction labels on the back of the blade.

**NOTE:** If labels are missing or cannot be read, see your sales outlet.



**⚠ WARNING**

LOWER BLADE WHEN VEHICLE IS PARKED.

DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.

REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.

**⚠ CAUTION**

READ OWNER'S MANUAL BEFORE OPERATING OR SERVICING SNOWPLOW.

TRANSPORT SPEED SHOULD NOT EXCEED 45 MPH. FURTHER REDUCE SPEED UNDER ADVERSE TRAVEL CONDITIONS.

PLOWING SPEED SHOULD NOT EXCEED 10 MPH.

SEE YOUR SALES OUTLET/WEB SITE FOR SPECIFIC VEHICLE APPLICATION RECOMMENDATIONS.

ATTACH	⚠ WARNING: Keep fingers away from snowplow and truck attachment points. POWER HITCH™ arm raises behind undercarriage pushbeam.	DETACH
<ol style="list-style-type: none"> <li>1. Slowly drive vehicle forward to engage mount adapter into A-frame.</li> <li>2. Turn power switch to center or "OFF" position.</li> <li>3. Plug in electrical harnesses.</li> <li>4. Push and hold power switch RIGHT and push UP and hold arm/blade operation switch. Arm will engage mount adapter and pull snowplow towards vehicle.</li> <li>5. Install both hitch pins. Hitch pin is fully engaged when pin handle is against the pin guide plate.</li> <li>6. While holding power switch RIGHT, push DOWN and hold arm/blade operation switch. Arm will disengage mount adapter to relieve tension on the stand.</li> <li>7. Pull and raise the stand until the stand pin seats into upper hole on the A-frame.</li> <li>8. Turn power switch to left or "Plowing" position.</li> </ol>		<ol style="list-style-type: none"> <li>1. Lower snowplow onto ground with blade straight. Turn plow control in cab to "OFF" position.</li> <li>2. Turn power switch to center or "OFF" position.</li> <li>3. While holding the power switch RIGHT, push DOWN and hold the arm/blade operation switch. Arm will disengage mount adapter to relieve tension on the stand.</li> <li>4. Pull and lower the stand until stand pin seats into lower hole on the A-frame and stand and light tower side plates contact.</li> <li>5. Push and hold power switch RIGHT and push UP the arm/blade operation switch. Arm will engage mount adapter and pull snowplow tightly to vehicle.</li> <li>6. Remove both hitch pins.</li> <li>7. While holding power switch RIGHT, push DOWN and hold arm/blade operation switch to fully lower arm.</li> <li>8. Unplug electrical harnesses.</li> </ol>
	<p>Read Owner's Manual for Complete Instructions.</p>	

**⚠ WARNING**

**Crush hazard**

**Keep feet clear**

29256

U.S. Patents 5,420,480; 5,638,615; 5,899,007; 6,178,669; 6,253,470; 6,276,076; 6,393,737; 6,408,549; 6,412,199; 6,442,877; 6,615,513; 7,134,227; RE 35,700; 4828  
CAN Patents 2,050,425; 2,194,922; 2,220,743; 2,250,529; 2,353,145; 2,358,324; 2,469,190; and other patents pending.

# SAFETY

## SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury and/or equipment and property damage. Read and understand labels and the Owner's Manual before installing, operating or making adjustments.

### **⚠ WARNING**

Lower blade when vehicle is parked. Temperature changes could change hydraulic pressure, causing the blade to drop unexpectedly or damaging hydraulic components. Failure to do this could result in serious personal injury.

### **⚠ WARNING**

The driver shall keep bystanders clear of the blade when it is being raised, lowered or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

### **⚠ WARNING**

Keep hands and feet clear of the blade and A-frame when mounting or removing the snowplow. Moving or falling assemblies could cause personal injury.

### **⚠ WARNING**

Do not exceed GVWR or GAWR including the blade and ballast. The rating label is found on the driver-side vehicle door cornerpost.

### **⚠ WARNING**

To prevent accidental movement of the blade, always turn the ON/OFF switch to OFF whenever the snowplow is not in use. The control indicator light will turn off.

### **⚠ WARNING**

Remove blade assembly before placing vehicle on hoist.

### **⚠ CAUTION**

Overtightening springs will not increase blade trip force and can damage the springs.

### **⚠ CAUTION**

Refer to the Undercarriage Selection Guide for minimum vehicle recommendations and ballast requirements.

## HYDRAULIC SAFETY

### **⚠ WARNING**

Hydraulic fluid under pressure can cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.

- Always inspect hydraulic components and hoses before using. Replace any damaged or worn parts immediately.
- If you suspect a hose leak, DO NOT use your hand to locate it. Use a piece of cardboard or wood.

## FUSES

The BLIZZARD® electrical and hydraulic systems contain several blade-style automotive fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Fuse Replacement, including fuse ratings and locations, is located in the Maintenance Section of the Owner's Manual.

## PERSONAL SAFETY

- Remove ignition key and put the vehicle in park or in gear to prevent others from starting the vehicle during installation or service.
- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- Do not wear jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

# SAFETY

## FIRE AND EXPLOSION

### WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

## CELL PHONES

A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communication Equipment such as cell phones or two-way radios.

## VENTILATION

### WARNING

Vehicle exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

## BATTERY SAFETY




### CAUTION

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.  
Batteries contain sulfuric acid which burns skin, eyes and clothing.  
Disconnect the battery before removing or replacing any electrical components.

## TORQUE CHART

### CAUTION

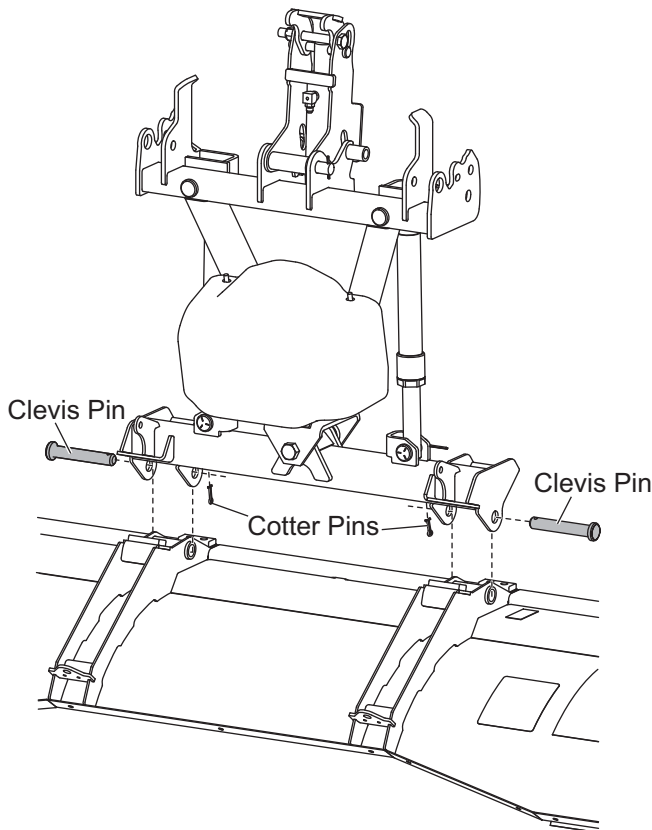
Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper personal protective safety equipment.

Recommended Fastener Torque Chart (ft-lb)			
Size	 SAE Grade 2	 SAE Grade 5	 SAE Grade 8
1/4-20	6	9	13
5/16-18	11	18	28
3/8-16	19	31	46
3/8-24	24	46	68
7/16-14	30	50	75
1/2-13	45	75	115
9/16-12	66	110	165
5/8-11	93	150	225
3/4-10	150	250	370
7/8-9	150	378	591
1-8	220	583	893
Metric Grade 8.8 (ft-lb)			
Size	Torque	Size	Torque
M 6	7	M 12	60
M 8	17	M 14	95
M 10	35	M 16	155
These torque values apply to fasteners except those noted in the instruction.			

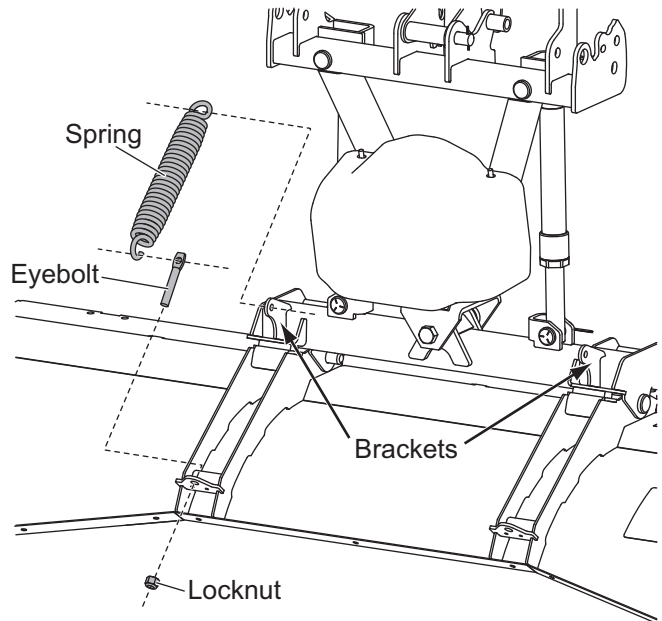
# INSTALLATION INSTRUCTIONS

## BLADE TO A-FRAME

1. Place some cardboard or wood on the floor where the blade will be assembled. Remove the blade from the pallet and place it face down. Position the A-frame assembly onto the blade, aligning the pivot beam holes with the pivot holes in the blade. Insert two 1" x 6" clevis pins from the outside. Secure the pivot beam by installing 1/4" x 1-1/2" cotter pins in the two clevis pins.



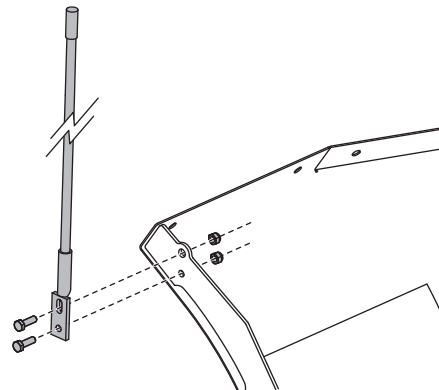
2. Hook a spring to each of the pivot beam brackets indicated in the diagram. Hook an eyebolt to the other end of each trip spring.



3. Push the threaded ends of the eyebolts through the two holes in the spring bar on the blade. Attach a 5/8" locknut to each eyebolt.

**⚠ CAUTION**  
Overtightening springs will not increase blade trip force and can damage the springs.

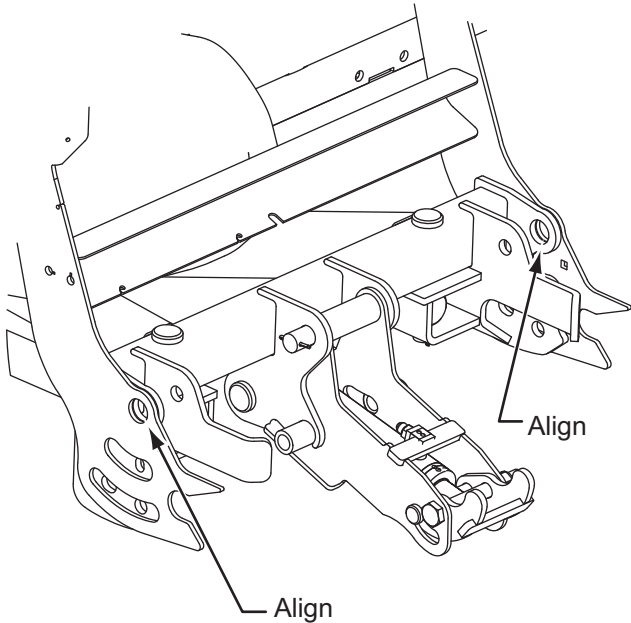
4. Tighten the locknuts until the coils of the trip springs begin to separate (a piece of paper should pass between the second and third coils).
5. Stand the blade and A-frame assembly upright and support it in a level position using a block under the main A-frame tube. Install the blade guides using 5/16" x 1" cap screws and 5/16" locknuts.



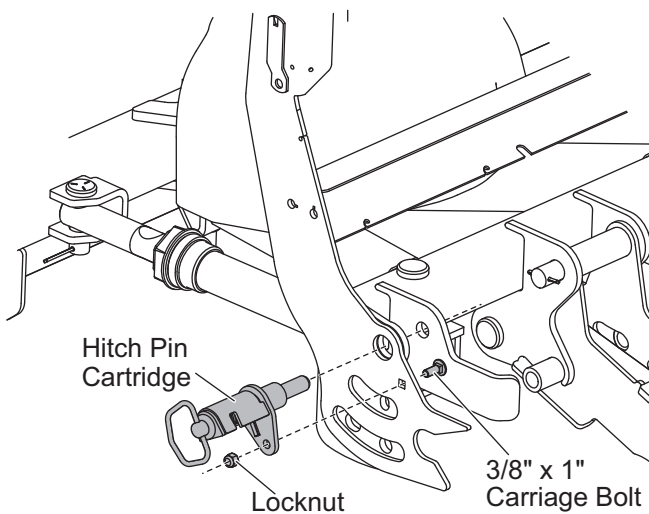
# INSTALLATION INSTRUCTIONS

## LIGHT TOWER TO A-FRAME ASSEMBLY

1. Position the light tower at the rear of the A-frame, aligning the hitch pin holes on the light tower with the hitch pin holes on the A-frame.



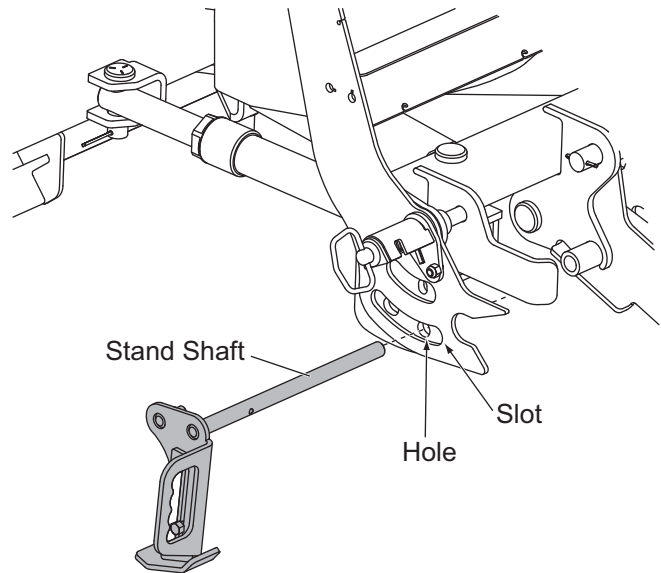
2. Insert the hitch pin cartridge through the hitch pin holes on the driver's side. Secure with a 3/8" x 1" carriage bolt and a 3/8" locknut assembled from the inside out. Repeat on the passenger's side.



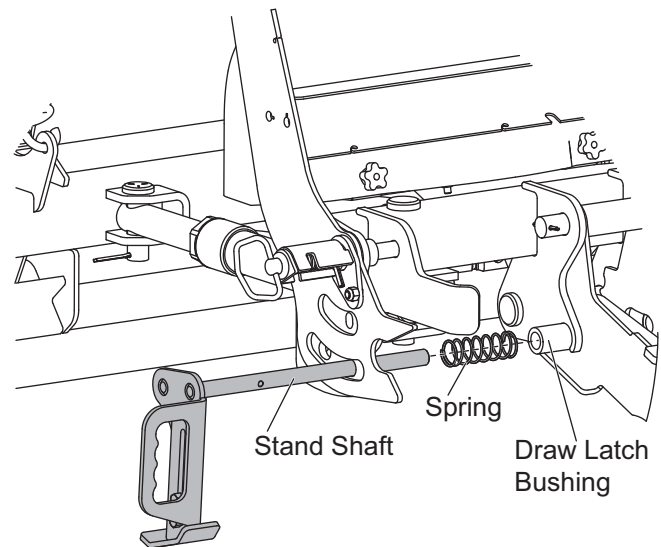
3. Tip the light tower toward the blade assembly.

## STAND ASSEMBLY TO A-FRAME ASSEMBLY

1. Guide the stand shaft through the driver-side lower light tower slot and through the rearward lower A-frame holes.

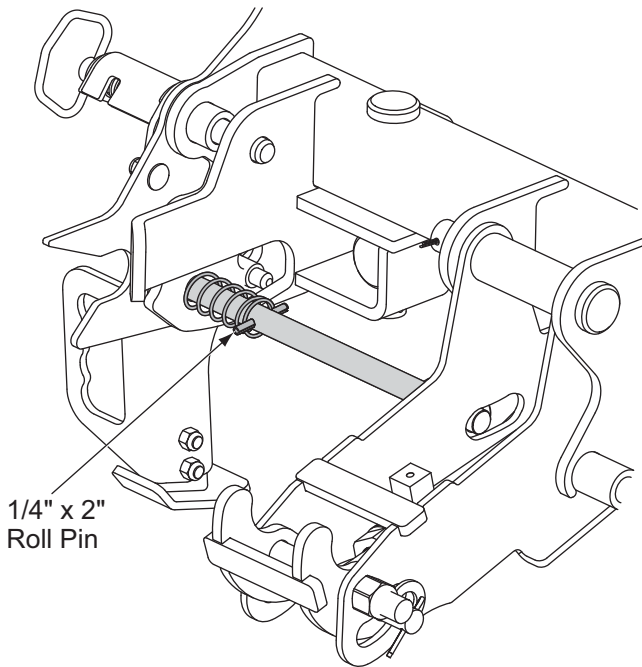


2. Place the spring over the stand shaft. Lubricate the end of the shaft with general purpose petroleum grease. Guide the stand shaft into the draw latch bushing.

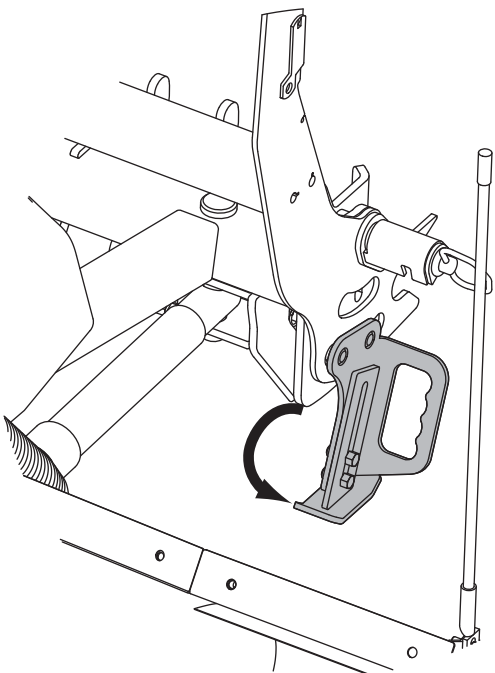


# INSTALLATION INSTRUCTIONS

- Compress the spring against the A-frame and retain using a 1/4" x 2" roll pin through the stand shaft hole.

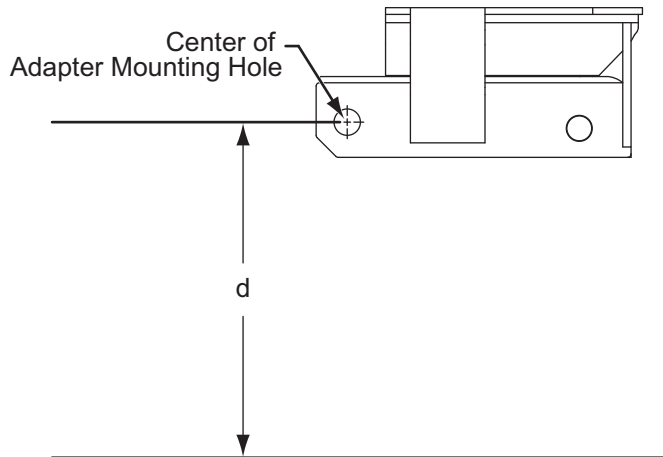


- Position the light tower in the vertical position while rotating the stand assembly into the locked down position.



## MOUNT ADAPTER INSTALLATION

- Before assembling the mount adapter to the vehicle undercarriage, determine if the height adjustment plates are needed.
- Prior to measuring the vehicle undercarriage height, the undercarriage must be installed, and ballast must be installed if required. Park the vehicle on a level surface. Measure the distance from the ground to the center of the adapter mounting hole on the undercarriage.



Refer to the chart below to determine if height adjustment plates are required and, if so, which plate to install.

- Use dimension "d" from Step 2 and follow the chart below:

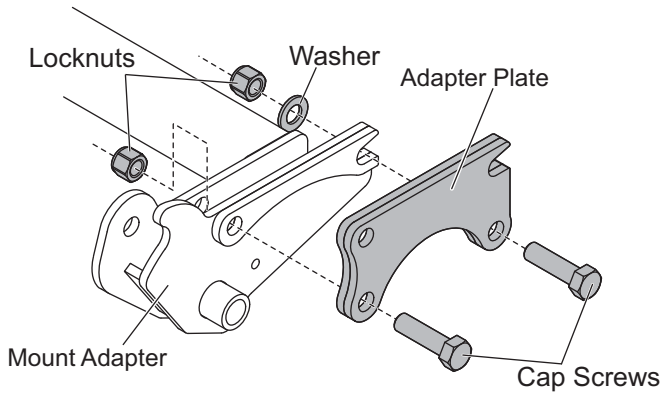
Height Adjustment Plate Selection Chart	
Dimension "d"	Height Adapter Plate Required
12.5" – 14.0"	None
14.0" – 15.5"	Height Adjustment Plate (Short)
15.5" – 17.0"	Height Adjustment Plate (Tall)

# INSTALLATION INSTRUCTIONS

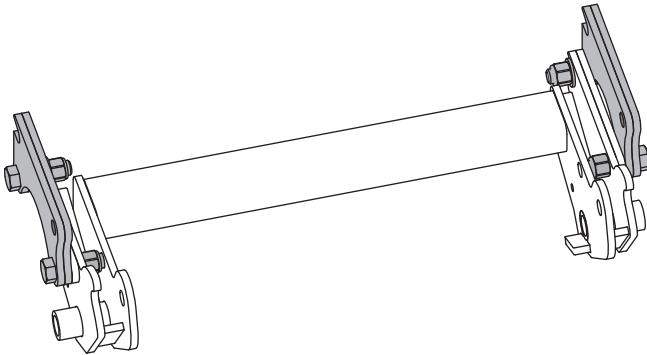
4. If adapter plates are required, install as follows:

Position the adapter plate against the driver's side portion of the mount adapter as shown. Insert a 3/4" x 2-3/4" cap screw through the lower front adapter plate hole and through the appropriate hole on the mount adapter. Secure with a locknut.

Insert a cap screw through the rear adapter plate hole, through the slot on the mount adapter and through a washer. Secure with a locknut.

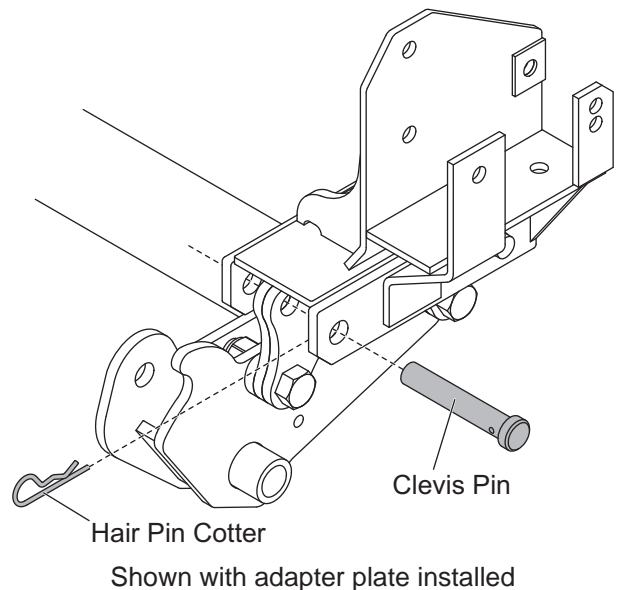
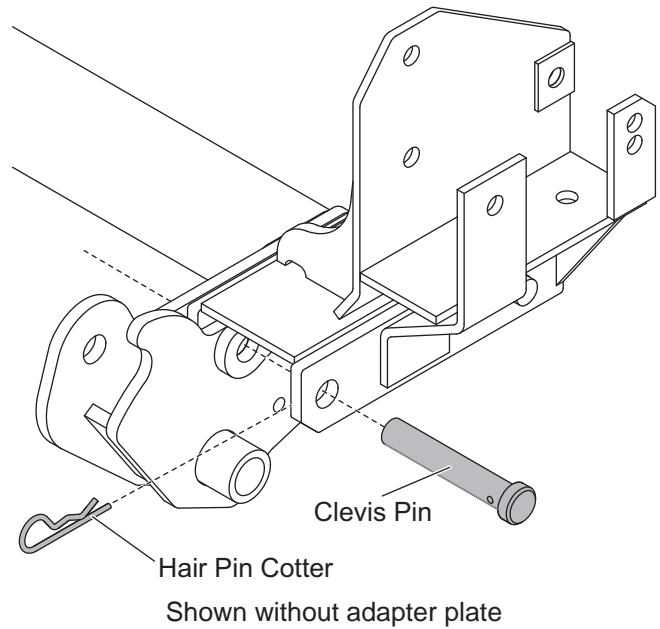


Repeat for the passenger's side. Tighten all eight fasteners according to torque chart on page 4.



5. Position the mount adapter between the undercarriage brackets on each side. Align the notches in rear of the mount adapter with pins in vehicle undercarriage. Rotate up and secure with a 3/4" x 4-3/8" clevis pin and hair pin cotter on each side.

**NOTE: If mount adaptor does not rotate into position, loosen mount hardware, secure mount adaptor into position and retighten mount hardware.**

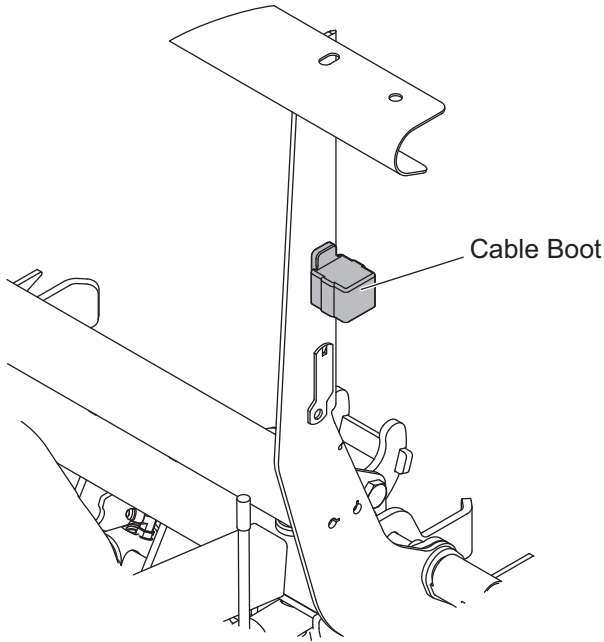




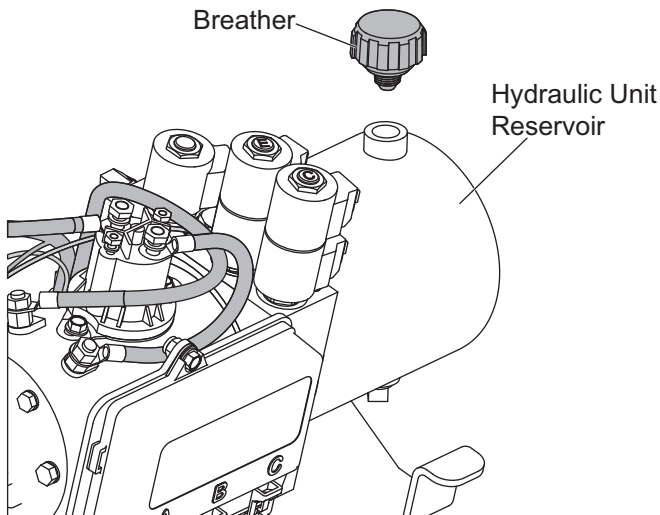
# INSTALLATION INSTRUCTIONS

## HYDRAULIC UNIT PREPARATION

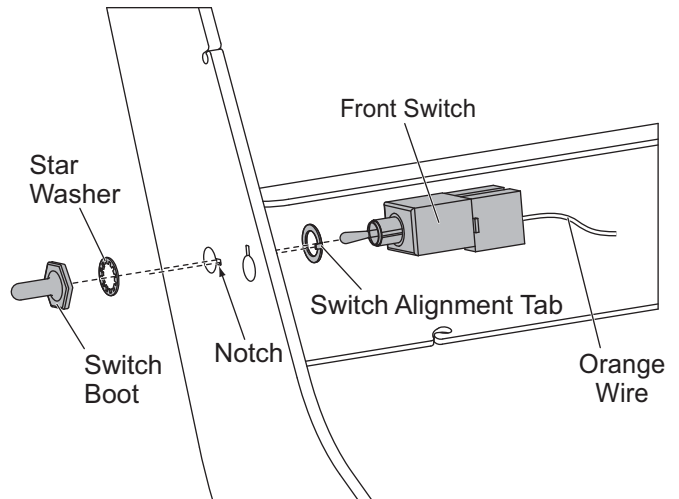
1. Install the cable boot on the driver-side light tower upright.



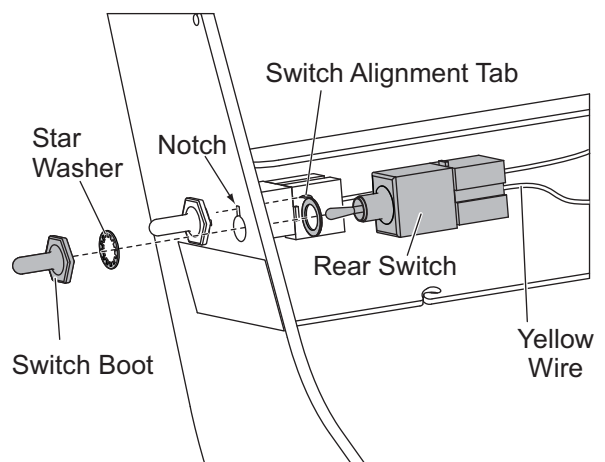
2. Remove the hydraulic unit cover.
3. Uncoil the plow harness and route under the lower light tower support and up to the cable boot.
4. Locate the bagged breather assembly. The hydraulic system is supplied with the correct amount of fluid. Slowly loosen the pipe plug on the top of the reservoir to relieve any pressure, then discard it. Install the breather into the reservoir.



5. Route the switch harness under the lower light tower support and up to the switch holes on the driver's side of the light tower.
6. Determine where each switch will be mounted. The "Momentary ON, OFF, ON" switch, with the orange wire running to it, is mounted in the switch hole closest to the blade. The "Momentary ON, OFF, Momentary ON" switch, with the yellow wire running to it, is mounted in the switch hole farthest from the blade.
7. Route the "Momentary ON, OFF, ON" switch through the hole closest to the blade making sure that the switch alignment tab aligns with the notch in the switch hole. Secure with a star washer and switch boot. Tighten until the switch is firmly in place (see illustration).



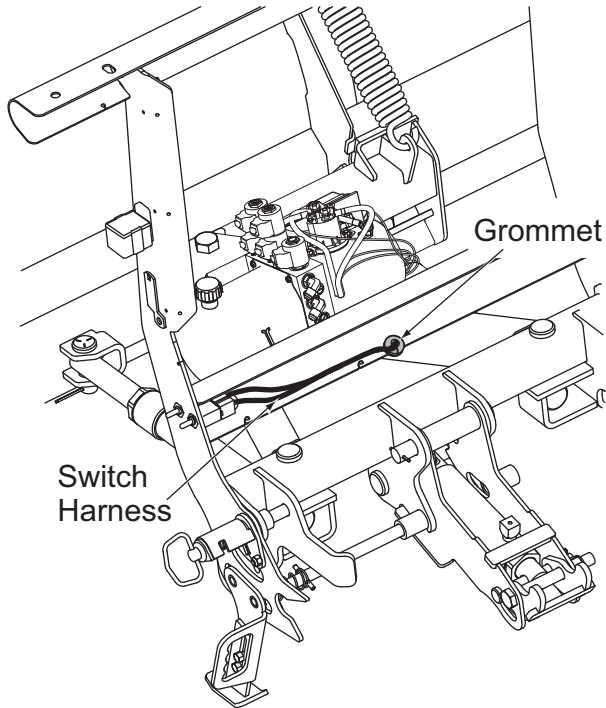
8. Repeat for the "Momentary ON, OFF, Momentary ON" switch in the hole farthest from the blade.



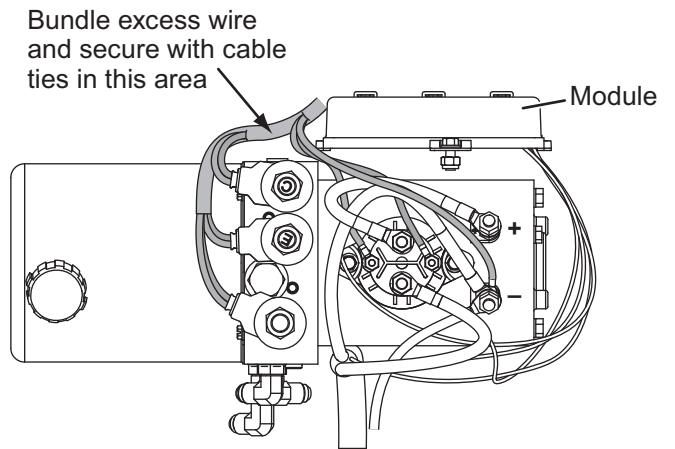
# INSTALLATION INSTRUCTIONS

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9. Insert the rubber grommet from the parts bag into the notch in the light tower support. Route the harness through the grommet.



10. Bundle the remaining loose wires at the hydraulic unit.



# INSTALLATION INSTRUCTIONS

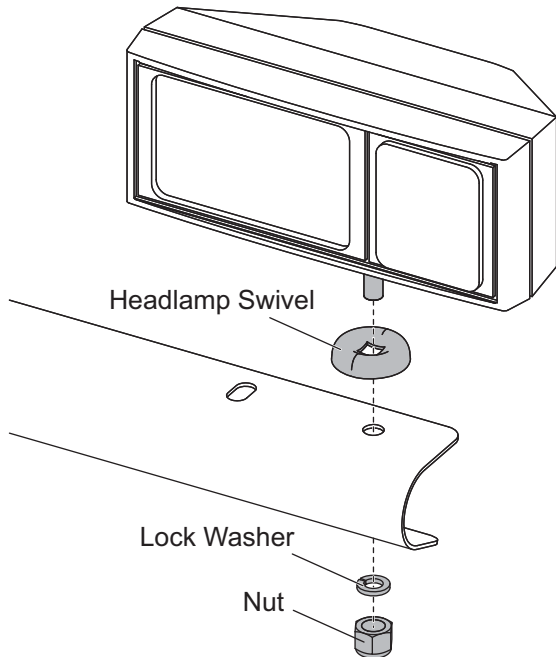
## HEADLAMP INSTALLATION

### **⚠ WARNING**

**Your vehicle must be equipped with snowplow headlamps and directional lights.**

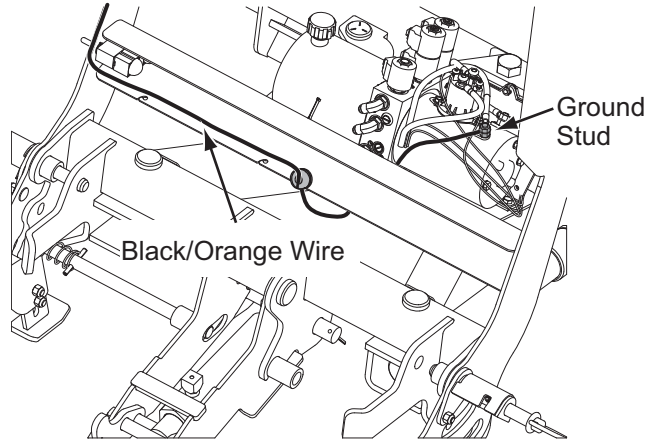
The headlamps and hardware are found in the headlamp box.

1. With the wire harness behind the light tower, attach the headlamps to the hole in the headlamp channel (not in the slot) with the headlamp swivel on top and 1/2" lock washer and 1/2" nut underneath.

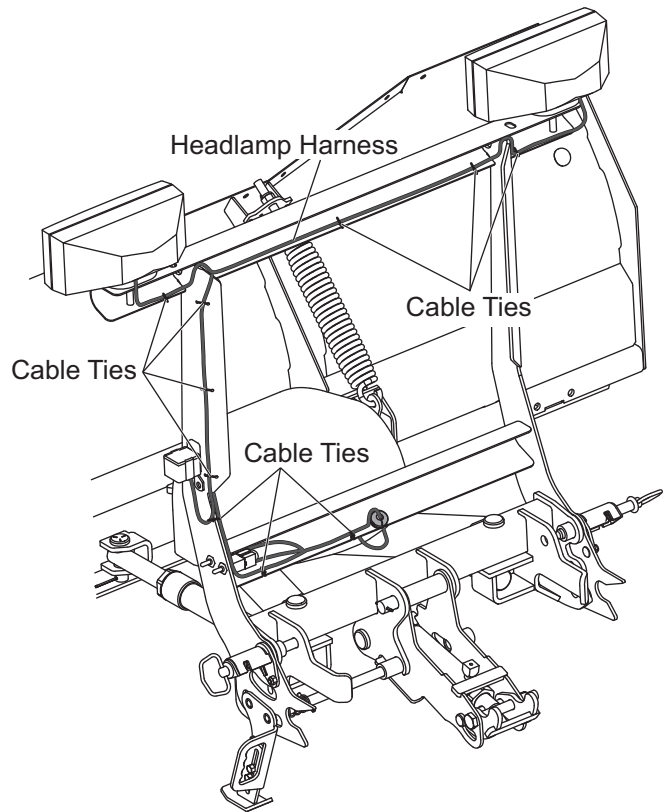


2. Route the black/orange wire down the driver-side upright, across the light tower support channel and along the switch harness to the motor ground stud. Remove the outer nut and lock washer from the motor ground stud. Attach the

ring terminal on the end of the black/orange wire to the motor ground stud and secure with the previously removed lock washer and nut. Tighten to 50–60 in-lb on terminal.



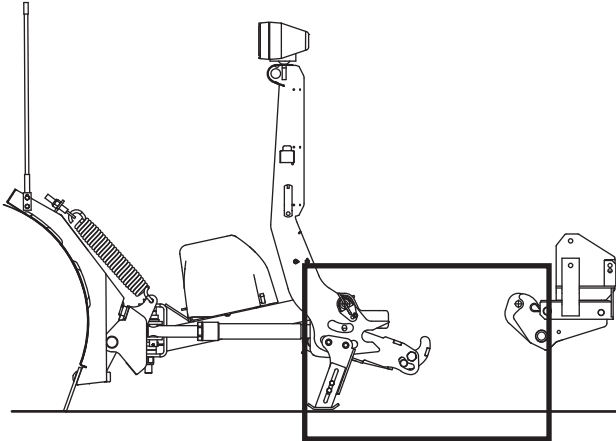
3. Reinstall the cover.
4. Use cable ties to retain the black/orange wire, the switch harness, headlamp harness and the vehicle power cables.



# OPERATIONAL TEST AND FINAL ADJUSTMENTS

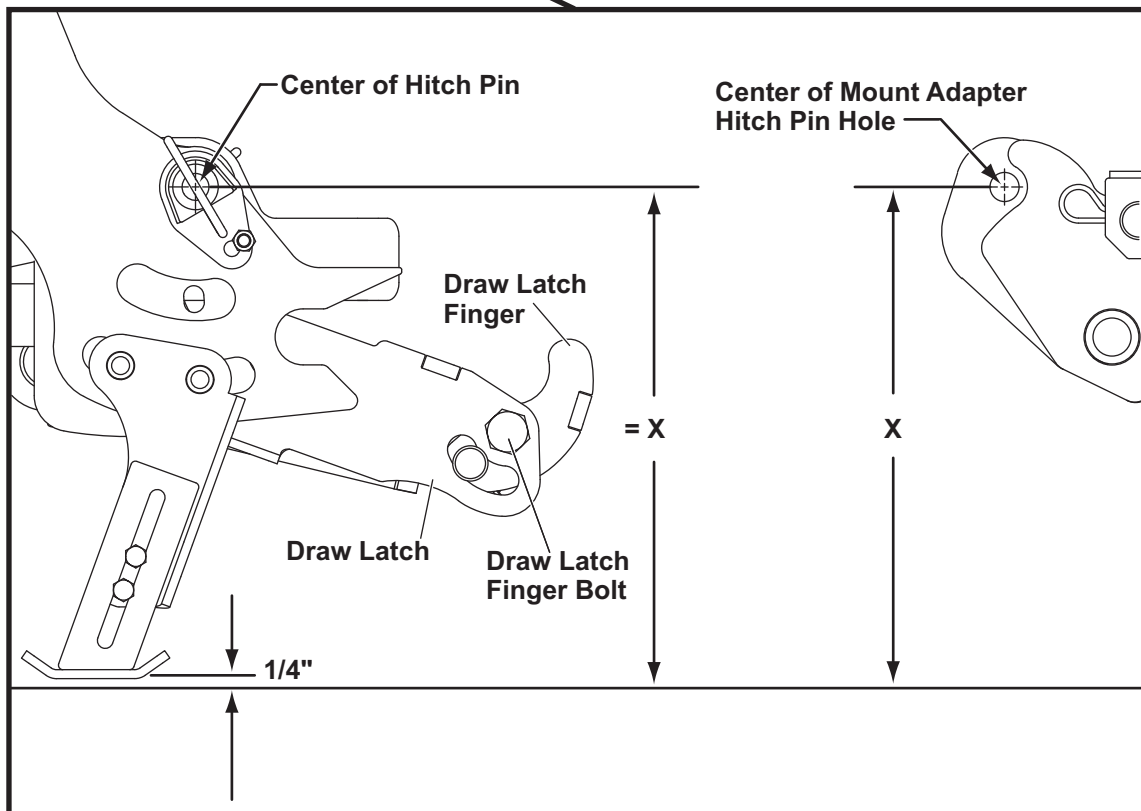
## FINAL INSPECTION AND ADJUSTMENT

1. Measure the height at the center of the mount adapter hitch pin hole.
2. Position a floor jack under the rear of the A-frame. With the stand in the lowered, locked position, elevate the rear of the snowplow until the center of the hitch pin dimension equals the dimension from Step 1 (see illustration below).



3. Loosen the stand fasteners. Adjust the stand length so that the bottom of the stand shoe is 1/4" above the ground.
4. Retighten the stand fasteners according to the torque chart.
5. Lower the snowplow onto the stand and remove the floor jack.
6. Attach the snowplow to the vehicle per the system instructions located on the back of the blade.
7. Run the blade through all functions to verify proper operation.

**NOTE: Verify draw latch rotates upward before draw latch finger rotates inward to ensure proper hitching operation. If draw latch finger rotates inward first, tighten draw latch finger bolt 1/4 turn until proper operation is achieved.**



# OPERATIONAL TEST AND FINAL ADJUSTMENTS

## BLADE DROP SPEED ADJUSTMENT

### **⚠ WARNING**

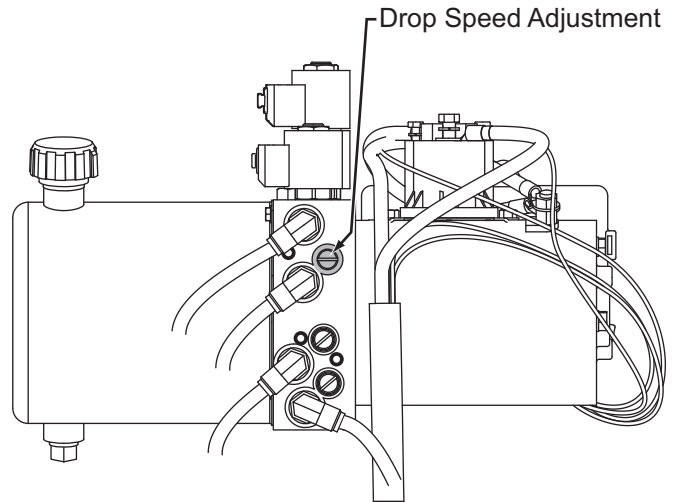
Keep 8' clear of the blade drop zone when it is being raised, lowered or angled. Do not stand between the vehicle and blade or directly in front of blade. If the blade hits you or drops on you, you could be seriously injured.

1. The plow drop speed may be adjusted by turning the needle valve.

**NOTE:** The blade will not drop when drop speed needle valve is fully tightened (clockwise). Turn OFF the plow control, turn the needle valve 1/8 turn outward (counterclockwise), then proceed with blade drop speed adjustment.

2. Lower the blade to the ground before making adjustment.

3. Turn the needle valve inward (clockwise) to decrease the drop speed. Turn the needle valve outward (counterclockwise) to increase the drop speed.
4. Stand 8' clear of the blade drop zone when checking adjustment.



# OPERATIONAL TEST AND FINAL ADJUSTMENTS

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## VEHICLE LIGHTING CHECK

1. Verify the operation of all vehicle front lighting prior to connecting the snowplow harness.
2. Check the operation of the snowplow lamps with snowplow mounted to vehicle and all harnesses connected.

### Turn signals and parking lamps

Parking lamps ON:

- Both vehicle and snowplow parking lamps should be ON at the same time.

Driver-side turn signal ON:

- Both vehicle and snowplow driver-side turn signal lamps should flash at the same time.

Passenger-side turn signal ON:

- Both vehicle and snowplow passenger-side turn signal lamps should flash at the same time.

## Headlamps

Move vehicle headlamp switch to the "ON" position. Connecting and disconnecting the snowplow lighting harness plug should switch the lights between vehicle and snowplow as follows:

Snowplow lighting harness DISCONNECTED:

- Vehicle headlamps should be ON.
- Snowplow headlamps should be OFF.

Snowplow lighting harness CONNECTED:

- Snowplow headlamps should be ON.
- Vehicle headlamps should be OFF.

Dimmer switch should toggle headlamps between high and low beams. The high beam indicator on the dash should light when headlamps are placed in high beam.

# OPERATIONAL TEST AND FINAL ADJUSTMENTS

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## Daytime Running Lamps (DRLs)

An operational check of the vehicle and snowplow DRLs will depend on the vehicle model, vehicle DRL system and type of Isolation Module installed. Due to the variations in the OEM DRL systems and the different Isolation Module options available, checking the functionality of the snowplow DRLs will depend on the type of module installed on the vehicle.

With headlamp switch OFF, activate the vehicle DRLs.

Snowplow lighting harness DISCONNECTED:

- Vehicle DRLs should be ON.
- Snowplow headlamps should be OFF.

Snowplow lighting harness CONNECTED and vehicle in DRL mode:

- Check snowplow DRL function per the type of Isolation Module installed.

Refer to the Mechanic's Guide for information on the Isolation Module DRL functions.

## Hand-Held Control

The snowplow plugs **do** need to be connected to the vehicle harness connectors. The control indicator light should light whenever the control ON/OFF switch and the ignition (key) switches are both in the "ON" position, and the Power Switch on the light tower is in the "PLOWING" position. If the Power Switch is in the "OFF" position, the control indicator light will flash.

3. Connect all snowplow and vehicle harnesses. Raise the snowplow and aim snowplow headlamps according to the Snowplow Headlamp Beam Aiming instructions included with the headlamps and any state or local regulations.

### CAUTION

**On 2-plug electrical systems, plug covers shall be used whenever snowplow is disconnected. Vehicle Battery Cable is 12-volt unfused source.**

4. Check aim of vehicle headlamps with snowplow removed.
5. When the snowplow is removed from the vehicle, install plug covers on the vehicle battery cable and lighting harness. Insert the snowplow battery cable and lighting harness into the cable boot on the snowplow.



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