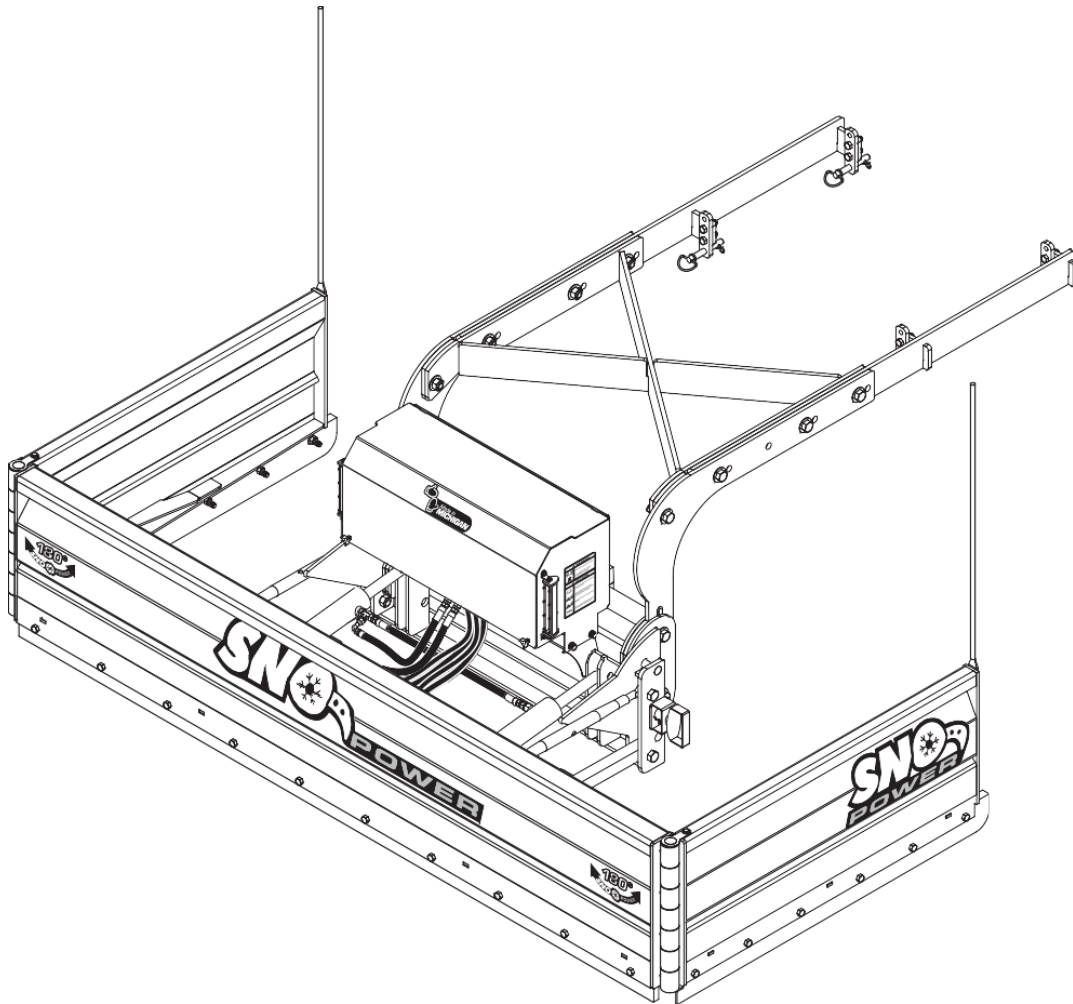




Commercial Rear Plow System HW16 Operator's Manual



REV. October 2020

Sno-Power
Muskegon, Michigan

US Patents
US 9,555,746, B2
US 9,896,040, B2
US 10,150,428, B2

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IDENTIFICATION

Record Identification Numbers

If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

You will need to locate the model and serial number for the plow and record the information in the spaces provided.

Date of purchase: _____

Dealer name: _____

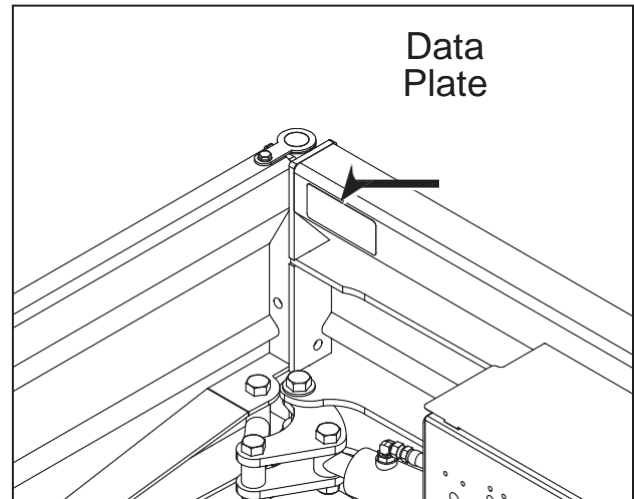
Dealer phone: _____

PRODUCT IDENTIFICATION NUMBER:

Model Number: _____

Serial Number: _____

Register this information with Sno-Power by email at **info@sno-power.com**, be sure to include your contact information as well as product identification information for warranty and service bulletins.



Identification information can be found on this data plate.

INTRODUCTION

Using Your Operator's Manual


This manual is an important part of your plow and should remain with the plow when you sell it.

Use the safety and operating information in the plow operator's manual to operate and service the plow safely and correctly.

This operator's manual explains the features and promotes the safe use of this plow. Please read it in its entirety and follow the instructions carefully so that you may have many years of safe and productive operation.

Special Messages

This operator's manual contains special messages to bring attention to potential safety concerns, equipment damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

This is the safety alert symbol (). It is used throughout this manual and on the plow's safety decal to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death. Read these instructions carefully. It is essential that you read the instructions and safety precautions before you attempt to work on or use this plow.

DANGER

This symbol with the "DANGER" indicates an immediate hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

This symbol with the "WARNING" indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

This symbol with the word "CAUTION" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

SPECIFICATIONS

Electrical System	
Charging System	Vehicle
Fuse	250 Amp Main
Battery	12-volt Group U1
Voltage	12-volt
Lights	Two (2) 18 Watt High-Intensity Cree LED Slim Light Bars
Circuit Breaker	200 Amp
Capacities	
Hydraulic Oil	Approximately 5 quarts.
Dimensions	
Plow Width - Full Open Position	16'
Plow Width - Closed/Driving Position	8'
Plow Width - Main Board	101"
Plow Width - Wings	Approximately 48" each
Plow Height	22"
Plow Length - Plow Only	48"
Plow Length - Complete Plow and Hitch System	Approximately 92"
Plow Weight - Plow Only	Approximately 895 lbs.
Plow Weight - Complete Plow and Hitch System	Approximately 1450 lbs.

SAFETY

Operator Training Required

- Read and understand the operator's manual and other training material. If the operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. Read before servicing and attaching plow. This publication is available in other languages.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained. The owner of this plow is responsible for training the users.
- Never let children or untrained people operate or service the plow. Local regulations may restrict the age of the operator. Only drivers with a valid license should operate the plow.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people, or property.
- Operators should be trained using the plow in an open, unobstructed area under the direction of an experienced operator.

Wear Appropriate Clothing

- Always wear safety goggles, or safety glasses with side shields, and a hard hat when servicing the plow.
- Wear close fitting clothing and safety equipment appropriate for the job.

Preparation

- Evaluate the area to be cleared and determine how to properly and safely perform the job.
- Inspect the area where the plow is to be used and flag all objects such as curbs, speed bumps, etc. which can be destroyed or damage the plow. **Pre-inspection** of each property before the snow season is a good practice.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive. Do not smoke while handling fuel.
- Check that the operator's remote control is functioning properly. **DO NOT** operate unless the controls are functioning properly.
- Refer to dealer or website for specific vehicle application recommendations.
- Warning and information decals are placed on this product to inform the operator to take safety precautions. Decals must be in place and readable before operating plow. Replace all worn or damaged decals.
- Inspect equipment bolts and pins when attaching or detaching the plow and before traveling. Components that are loose, worn or damaged could cause an accident.
- NEVER insert fingers in hitch pin holes to check alignment. Sudden movement of the plow will severely injure fingers.

Inspect Working Area

- Evaluate areas to be cleared and determine how to properly and safely perform the job.
- Study working area. Set up a safe plowing pattern. Do not plow where traction or stability is doubtful.
- Flag the area for objects such as curbs, speed bumps, etc. which can be destroyed or damage the plow. Keep people and pets out of working area.
- Test drive through area with the plow lifted. Reduce speed when you travel over rough areas.

Operating

- **NEVER** run an engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Avoid touching hot surfaces such as engine, radiator, and hoses.
- Operate in daylight or good artificial light. Keep away from obstructions, hidden potholes and other hazards.
- Slow down and use extra care on inclines. Snow conditions can affect the vehicle's stability. Use caution while operating near drop-offs. **DO NOT** operate the truck or plow within 5 feet of an embankment or drop-off.
- Slow down and use caution when making turns and when changing directions on inclines.
- **NEVER** operate with the shields, or other guards, not securely in place.
- Stop on level ground, engage parking brake, lower plow, shut off engine, and remove key before leaving the vehicle for any reason.
- Stop equipment and inspect plow if an abnormal condition occurs. Make necessary repairs before resuming operations.
- Keep hands and feet away from the plow. Keep all body parts, including your head, inside the vehicle. **NEVER** put your head out the window for improved vision. This will cause severe injury or death.
- Look behind and down before backing up to be sure of a clear path.
- Never carry passengers. Keep pets and bystanders away.
- Slow down and use caution when making turns and crossing roads and sidewalks. Watch for traffic when operating near or crossing roadways.
- **DO NOT** operate the vehicle while under the influence of alcohol, drugs and/or medications that impair judgement and reaction. An accident may result in serious injury or death.
- Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Always use a strobe light while plowing snow.
- Inspect plow before you operate. Be sure hardware is tightened securely. Repair or replace damaged, badly worn, or missing parts. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate. Do not alter the plow or components.
- Keep safety decals visible when installing accessories and attachments.
- Do not wear radio or music headphones. Safe service and operation require your full attention.
- The operator is responsible for safe operation of the vehicle and plow. Avoid distractions and pay attention to the road.
- **NEVER** use mobile communication equipment while driving. Wait until it is safe to operate mobile communication devices such as cell phones, two way radios, etc. Local regulations may apply. Failure to observe safety instructions could result in personal injury or property damage.
- When vehicle is left unattended, stored, or parked:
 - a. Lower plow.
 - b. Remove the key.
 - c. Lock vehicle.

- Plow speed should not exceed 10 mph (16 km/h).
- Transport speed should not exceed 45 mph (72 km/h). Further reduce speed under adverse travel conditions.
- Do not exceed Gross Vehicle Weight Rating (GVWR) or Gross Axle Weight Rating (GAWR) including blade and ballast.
- When attaching or detaching the plow or making adjustments:
 - a. Stop the engine.
 - b. Place the transmission in NEUTRAL or PARK.
 - c. Turn the key to the OFF position.
 - d. Engage the parking brake.
 - e. Turn OFF the plow controller.
- Keep people away from plow when raising or positioning plow wings.
- Keep hands and feet away from the plow and frame when attaching or detaching plow.
- Do not stand between the vehicle and plow or directly in front of plow when it is being raised, lowered or angled. Clearance between vehicle and plow decreases as the plow is operated. Injury or death can result from the plow striking a body or dropping on hands or feet.
- Do not place any part of body under a raised plow. Accidental movement of the plow will cause injury.
- Only use plow for plowing snow. Using the plow for other purposes could cause damage, serious injury or death.
- Wear a seat belt when plowing snow. Local regulations may apply. Hidden obstructions will cause the vehicle to stop suddenly resulting in personal injury. Failure to observe safety instructions could result in serious injury or death.
- Use caution while the hydraulic unit is operating and plow is raised. Lower plow to the ground when vehicle is parked in case of hydraulic failure. Failure to observe safety instructions could result in serious injury or death.
- Installing a snow plow on your new vehicle may affect the warranty. Refer to vehicle manufacturer's owner's manual for warranty information. Failure to comply will result in vehicle damage.
- Warranty will be void if plow has been improperly assembled or installed.
- **CAUTION:** Avoid damage to the vehicle's electrical system by disconnecting the battery before beginning plow installation. **DO NOT BURN** holes or **WELD** vehicle frame in any way. This may cause frame failure. Failure to comply will result in vehicle damage.
- Modern trucks are equipped with air bags. **DO NOT** disable, remove or relocate sensors or any components required for the operation of air bags.
- Check that the plow is attached and functioning properly before moving vehicle. **DO NOT** operate unless it is functioning properly.
- Do not make changes to plow position while traveling, which could cause the plow to accidentally lower. Failure to comply could result in serious injury or death.
- To avoid sudden plow movement, press the On/Off button to OFF when the plow is not in use. The Power Light will not be illuminated.
- Never operate vehicle with fogged over windows. Refer to vehicle manufacturer's owner's manual.
- Always maintain the correct amount of down pressure when clearing snow and ice.

Parking Safely

1. Stop vehicle on a level surface, not on an incline.
2. Lower plow.
3. Engage the parking brake.
4. Stop the engine.
5. Remove the key.
6. Wait for engine and all moving parts to stop before you leave the vehicle.
7. Lock the vehicle.
8. Disconnect the negative battery cable before servicing the equipment.

Protect Children

- Death or serious injury can occur when young children associate having fun with snow plowing equipment simply because someone has given them a ride while plowing snow.
- Children are attracted to snow plowing equipment and activities. They don't understand the dangers or the fact that the operator is unaware of their presence.
- Children who have been given rides in the past may suddenly appear in the work area for another ride and be run over or backed over by the plow vehicle.
- Tragic accidents with children can occur if the operator is not alert to the presence of children, especially when a child approaches a vehicle from behind. **Before and while backing up, look down and behind** the vehicle carefully, especially for children.
- **NEVER** carry children on the plow. Do not tow children in a cart or trailer. They can fall off and be seriously injured or interfere with safe machine operation.
- Never use the truck and plow as a recreational vehicle or to entertain children.
- Never allow children or an untrained person to operate the vehicle or plow. Instruct all operators not to give children a ride in or on the vehicle when plowing.

- Keep children indoors, out of the work area, and in the watchful eye of a responsible adult, other than the operator, when the truck and plow are being operated.
- Stay alert to the presence of children. Never assume that children will remain where you last saw them. Turn the truck and plow OFF if a child enters the work area.

Keep Riders Off

- Only allow the operator in the vehicle. No riders should be allowed in or on the truck or plow.
- Riders on the plow vehicle may be struck by foreign objects or thrown off the truck or plow causing serious injury.
- Riders obstruct the operator's view resulting in the plow vehicle being operated in an unsafe manner.

Avoid Steep Inclines

- Inclines are a major factor related to loss-of-control accidents, which can result in severe injury or death. **Operation on all inclines requires extra caution and is not recommended.**
- Watch for holes, ruts, bumps, rocks, speed bumps, or other hidden objects. Uneven terrain could damage the plow.
- Choose a low ground speed so you will not have to stop while on an incline.
- Tires may lose traction on inclines even though the brakes are functioning properly.
- Avoid starting, stopping or turning on an incline. If the tires lose traction, turn and proceed slowly, straight down the incline.
- Keep all movement on inclines slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.
- Do not plow near drop-offs, ditches, embankments, or bodies of water. The vehicle could suddenly roll over if a wheel goes over the edge or the edge caves in.

- Follow the manufacturer's recommendations for wheel weights or counterweights for added stability when operating on inclines or using front or rear mounted attachments. Remove weights when not required.
- Plow speed should not exceed 10 mph (16 km/h). Avoid quick stops while plowing.

Maintenance and Storage

- **NEVER** operate vehicle in a closed area where dangerous carbon monoxide fumes can collect.
- Put vehicle in NEUTRAL or PARK, lower plow, engage parking brake, stop engine and remove key. Wait for all movement to stop before adjusting, cleaning or repairing.
- Clean all snow from vehicle and plow.
- Park vehicle on level ground. Never allow untrained personnel to service the plow. Understand service procedure before doing work.
- Before servicing plow, carefully release pressure from any components with stored energy, such as hydraulic components or springs.
- Disconnect battery before making any repairs. Disconnect the negative terminal first and the positive last. Reconnect positive first and negative last.
- Use care when checking the plow. Wear gloves, and use caution when servicing equipment. Only **REPLACE** plow components. **Never attempt to straighten or weld them.**
- Keep hands, feet, clothing, jewelry and long hair away from moving parts. Do not make adjustments with the engine running.
- Charge battery in an open well ventilated area, away from spark and flames. Unplug charger before connecting or disconnecting from battery. Wear protective clothing and use insulated tools.
- Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.
- Always keep a fire extinguisher available. A 5 lb or larger CO² or dry chemical unit specified for gasoline, chemical or electrical fires, is recommended.
- When adjusting, cleaning, repairing, or maintaining the plow:
 - a. Stop the engine.
 - b. Place the transmission in NEUTRAL or PARK.
 - c. Turn the key to the OFF position.
 - d. Engage the parking brake.
 - e. Turn OFF the plow controller.
 - f. Disconnect the vehicle harness.
 - g. Detach the plow.
- Never hoist or lift the vehicle with the plow attached. Detach plow before hoisting or lifting vehicle.

Avoid High Pressure Fluids

- Hydraulic hoses and lines can fail due to physical damage, kinks, age, and exposure. Check hoses and lines regularly. Replace damaged hoses and lines.
- Hydraulic fluid connections can loosen due to physical damage and vibration. **Check connections regularly.** Tighten loose connections.
- Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.
- If an accident occurs, **see a doctor immediately.** Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.
- Different kinds of hydraulic fluid should not be mixed. Some fluids are not compatible and can cause performance problems and product damage.

Handling Fuel Safely

To avoid personal injury or property damage, **use extreme care in handling fuel.** Fuel is extremely flammable and fuel vapors are explosive:

- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Never remove the fuel tank cap or add fuel with the vehicle running. Refer to vehicle manufacturer's owner's manual.
- Clean up spilled fuel immediately. If fuel is spilled on clothing, change clothing immediately. If fuel is spilled near vehicle, do not attempt to start the engine but move the vehicle away from the area of spillage. Avoid creating any source of ignition until fuel vapors have dissipated.
- Never store the vehicle or fuel container where there is an open flame, spark, or pilot light such as on a water heater or other appliance.
- Prevent fire and explosion caused by static electric discharge. Static electric discharge can ignite fuel vapors in an ungrounded fuel container.
- 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 fueling.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until the fueling is complete. Do not use a nozzle lock open device.
- Never transport fuel container in truck bed.

DECALS



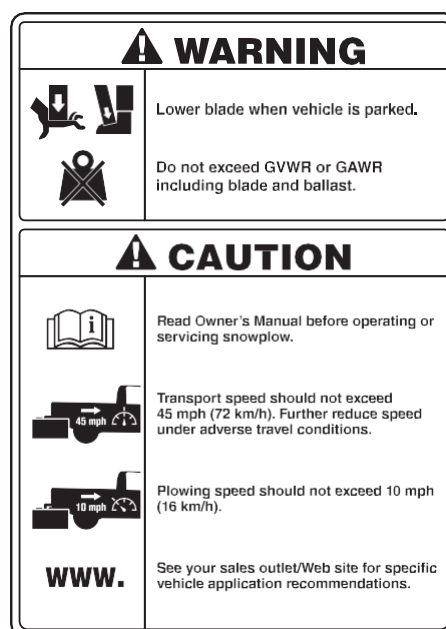
Main Board



Left and Right Wings



Power Box Cover & Main Blade



Power Box



Main Board

COMPONENT IDENTIFICATION**Wireless Remote Control****CAUTION**

Avoid injury! Learn the proper use of the motion control and practice at low speed until becoming proficient and comfortable with the operation of the plow.

Take a moment to familiarize yourself with the controls on the remote. A clear understanding of the operation and function of each control is essential to the safe and productive use of the plow.

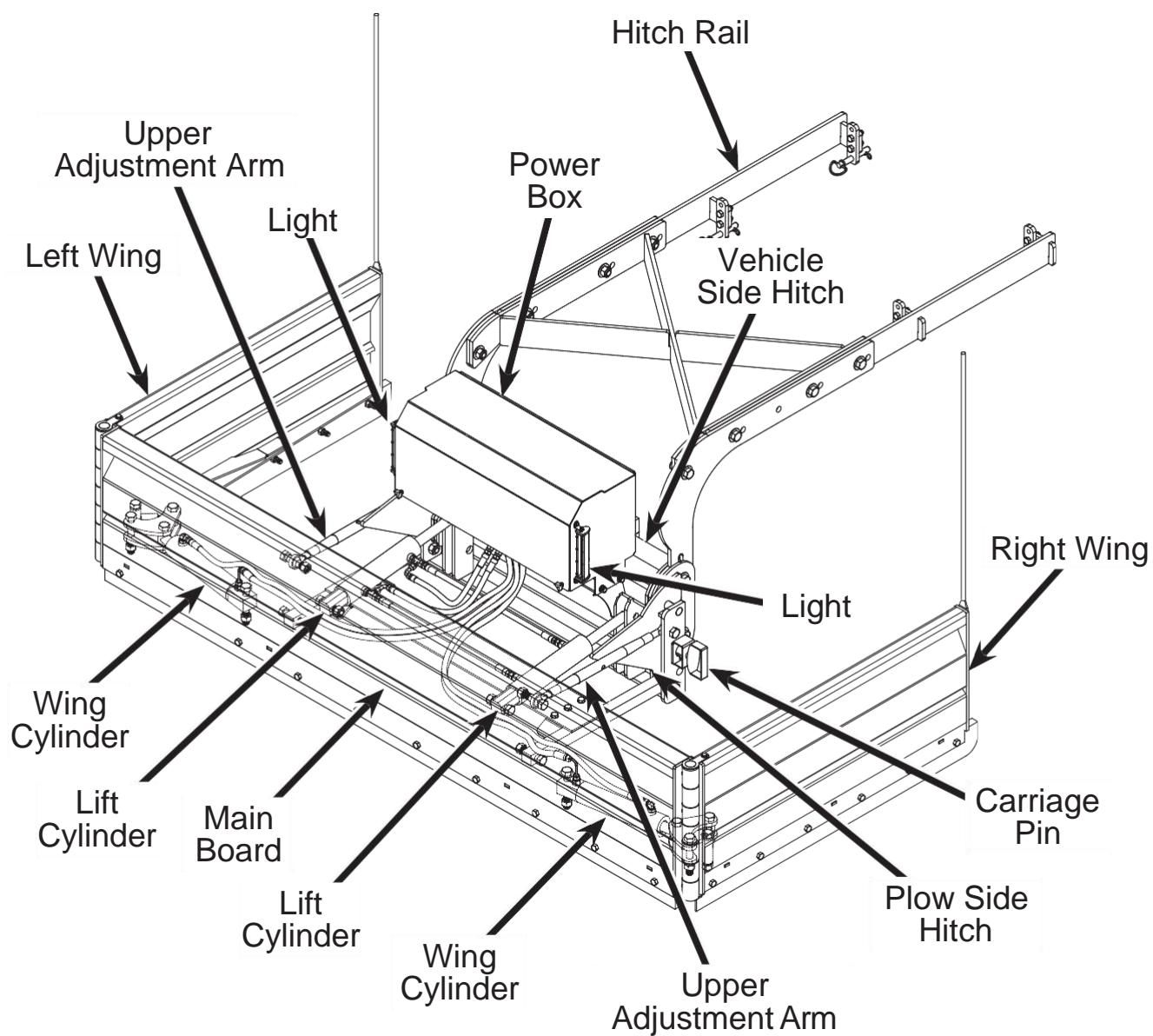


The functions of the remote control buttons and lights are:

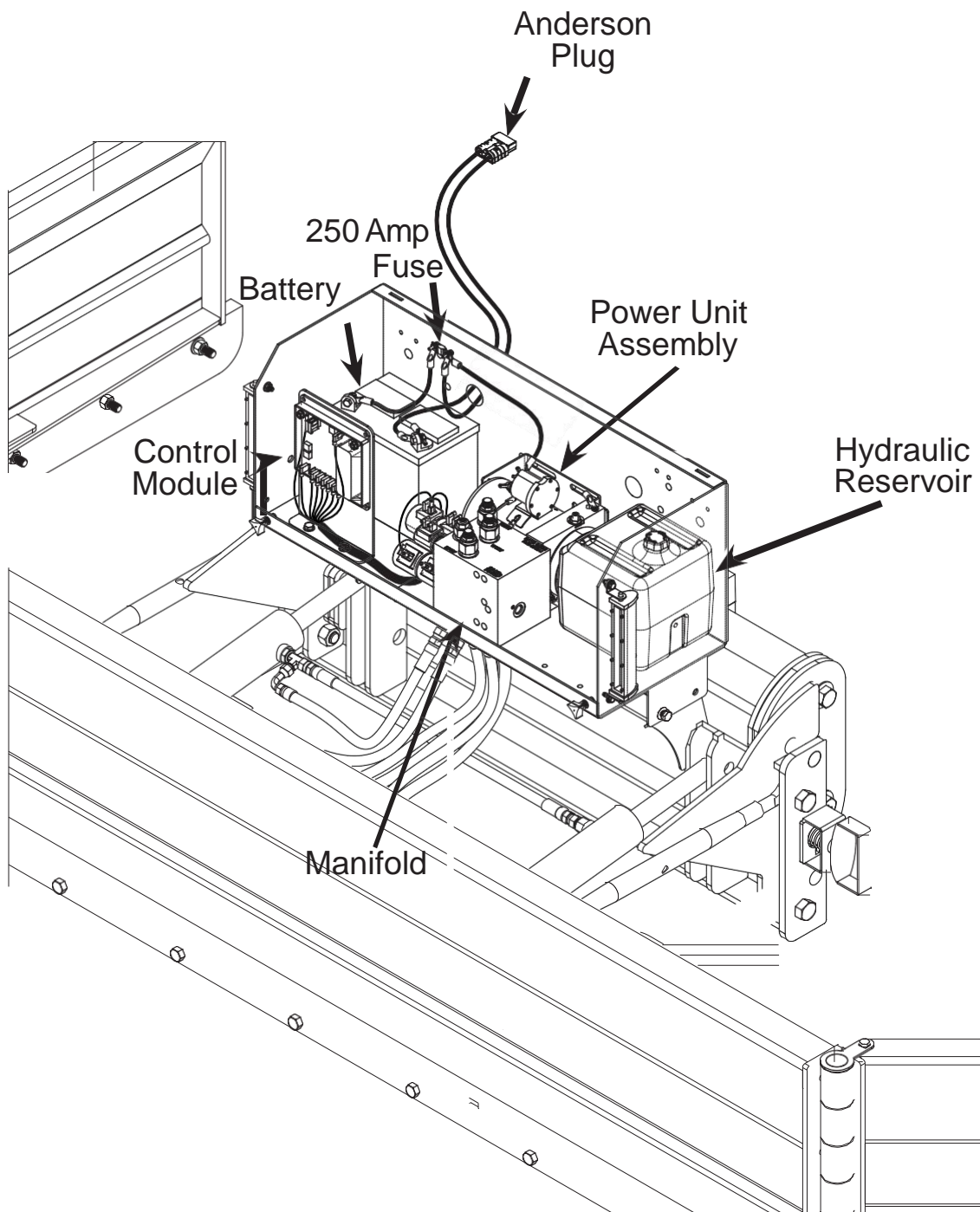
- **BATTERY LIGHT** - When the **BATTERY** light is illuminated the battery is functioning properly.
- **POWER LIGHT** - When the **POWER** light is illuminated the power is ON.
- **RIGHT WING IN** - To move the right wing IN, press and hold the **RIGHT WING IN** button until wing reaches the desired position.
- **RIGHT WING OUT** - To move the right wing OUT, press and hold the **RIGHT WING OUT** button until wing reaches the desired position.
- **PLOW UP** - To move the plow UP, press and hold the **PLOW UP** button until plow reaches the desired position.
- **STROBE ON** - To control the strobe light, press the **STROBE ON** button.
- **LIGHTS OFF** - To turn OFF the lights on the sides of the power pack, press the **LIGHTS OFF** button.
- **LED LIGHT ON** - To turn ON the lights on the sides of the power pack, press the **LED LIGHT ON** button.
- **ALL IN/UP** - To move the plow and wings UP, press and hold the **ALL IN/UP** button until plow and wings reach the desired position.
- **PLOW DOWN** - To move the plow DOWN, press and hold the **PLOW DOWN** button until plow reaches the desired position.
- **ON/OFF** - The **ON/OFF** button controls power to the plow.
- **LEFT WING OUT** - To move the left wing OUT, press and hold the **LEFT WING OUT** button until wing reaches the desired position.
- **LEFT WING IN** - To move the left wing IN, press and hold the **LEFT WING IN** button until wing reaches the desired position.

Note:

A wired controller with similar functionality is provided as a back-up or alternate controller. The wired controller provided connects to a plug-in receptacle located in the hydraulic control box. The wired controller can then be routed to the cab of the truck for continued operation. When reviewing the wireless controller functionality, it is recommended to also review the wired controller for familiarity of the differences.

Plow Components

Electrical Components



INSTALLATION

Installing Wire Harness



CAUTION

Avoid injury! Touching hot surfaces can burn skin. The engine, components, and fluids will be hot if the engine has been running. Allow the engine to cool before installing the wire harness.



DANGER

Disconnect battery before attaching plow. Disconnect the negative terminal first and the positive last. Reconnect positive first and negative last. Failure to do could result in serious injury or death.

NOTE: Apply dielectric grease to all electrical connections to prevent corrosion.

1. Disconnect vehicle Negative (-) wire from the negative terminal on the battery. Then, disconnect the vehicle Red (+) wire from the positive terminal on the battery.
2. Using two (2) self-tapping screws, install the 200 Amp circuit breaker. Place it in desired location under the hood of the vehicle near the battery.
3. Determine the desired route for the wiring and feed the cable along route.
*Note: If mounting the Anderson connector inside the rear bed of the truck is desired, we recommend beginning installation of the wiring from the rear of the truck. 1 3/8" hole is required.
4. Secure power cable in position as routing. Taking care to not damage the protective coating during the process.
5. Attach the heavy power cable to the 200 Amp circuit breaker. Connect the Negative (-) wire to negative terminal on battery or vehicle ground. Connect a Red (+) cable from the 200 Amp circuit breaker to the battery.
6. Reset 200 Amp circuit breaker on the power cable.

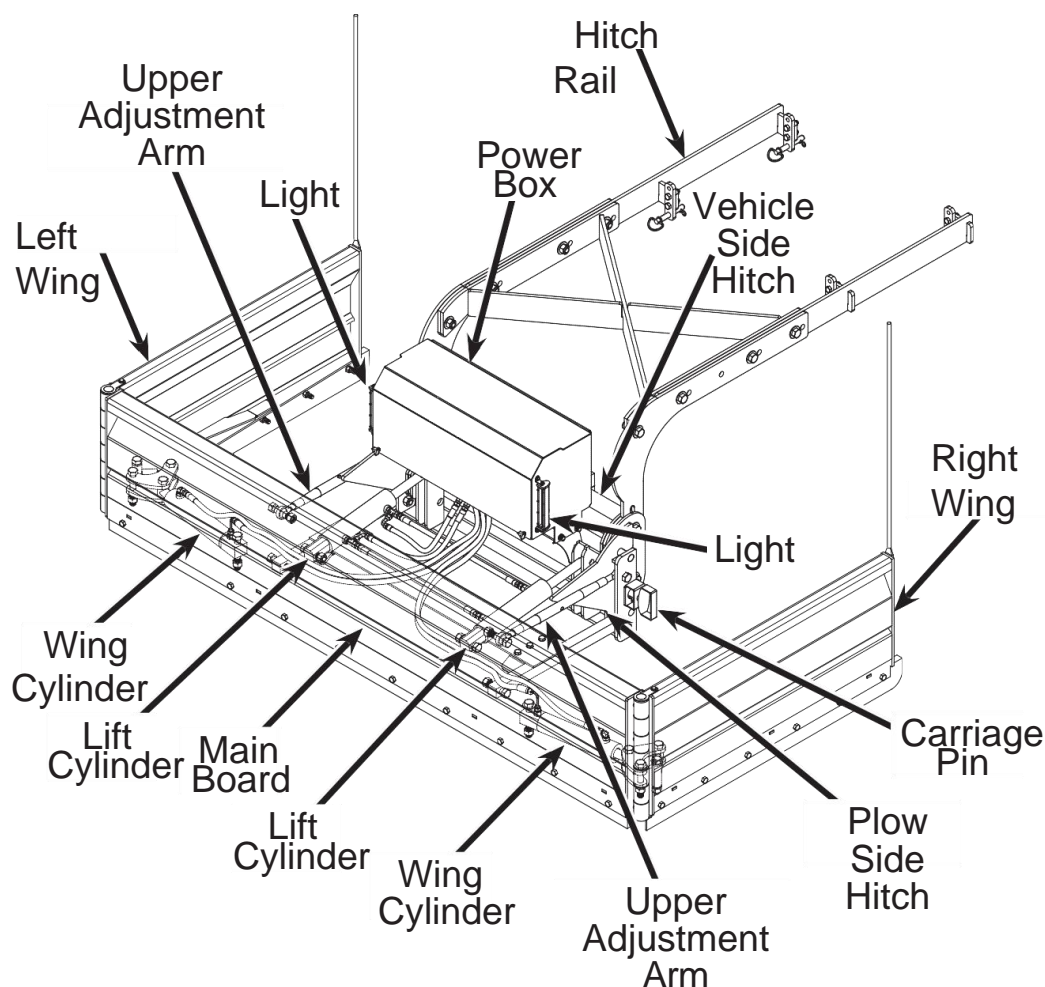
Install Truck Base Mount in Truck Bed

1. Verify fifth wheel rails are installed. (Not included with HW16)
2. Remove and store vehicle tailgate.
3. Install the RIGHT (passenger side) and LEFT (driver side) hitch rails in the outermost fifth wheel rail hole in the rear fifth wheel rail using 1/2" pin. Secure with cotter pin.
4. Position the X Center Cross Member between the now installed hitch rails.
5. Align a 90° Truck Mount on each side beside the hitch rails. Align the rear hole near the curve with rear hole of the X cross member and loosely install a 3/4" bolt, washers, and nylon insert lock nut.
6. Install receiver support into vehicle hitch receiver.
7. Install hitch pin and clip to secure receiver support.
8. RIGHT (passenger side) - LEFT (driver side) Slide the X cross member to visibly align rear slots in the hitch rail in the same plane as the hole in the receiver support block. Install bolts, washers, nuts. Do not tighten.
9. Install Vehicle Side Hitch onto Truck Mounts.
10. When installed, simulate down pressure on the hitch to raise the hitch to align with the receiver support block and secure with 5/8" pin and cotter pin. Release down pressure from hitch.
11. With all pins and bolts loosely in place, measure from the rear bed of the truck to the bolt hole in the curve of the 90° truck mount. Adjust the right and left side to be equal distance.
12. Tighten and secure all bolts on the truck side mount assembly. (not the hitch at this time).
13. Measure from the bolt hole in the 90° truck mount to the top angle iron of the vehicle side hitch. Adjust the right and left side to be equal distance.
14. Tighten and secure all bolts on the truck side hitch assembly.

1 1
1

1

1



1. Perform Adjustment on level ground.
2. With the plow wings in, lower the plow until the main board cutting edge is just resting on the surface (no down pressure).
3. Loosen the jam nut and large nut on the upper adjustment arm on each wing.
4. Adjust the front tip of the left and right wing individually. Do so by turning the upper adjustment arm until there is a 1" clearance between the ground and the most forward bottom of the wing cutting edge.
5. Tighten the nut on the upper adjustment arm.
6. Tighten the jam nut on the upper adjustment arm.

NOTE: To insure even cutting edge wear, periodically measure the main cutting edge and the wing cutting edge. Adjust the wing tip the amount of any uneven wear. After the initial break in period (+/- 10 hours and 2-3 events) the cutting edges should continue to wear evenly given the truck or operator doesn't change.

NOTE: If installing on a vehicle equipped with a front blade, the wing tip adjustment is required after the front plow is installed as that plow redistributes the load on the truck. Adjust with front plow in raised position.

OPERATING

Attach Plow to Hitch System

NOTE: The wings must be in the full IN position when attaching/detaching the snowplow.

WARNING

Keep hands and feet away from the plow and frame when attaching the plow. Accidental movement can cause injury.

NOTE: Use of an assistant is recommended. Assistant must stay clear of plow while attaching plow to the vehicle. Vehicle must be in PARK while inserting top carriage pins.

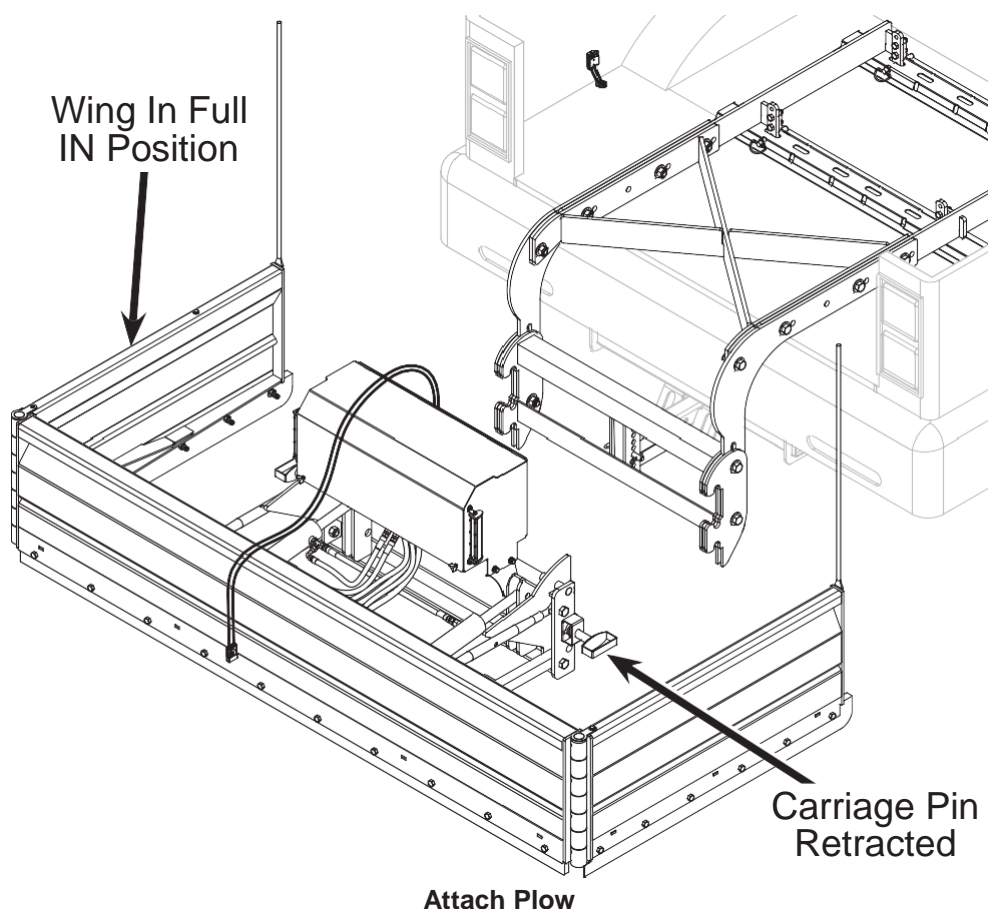
NOTE: Inspect plow components when attaching and detaching the plow. Be sure hardware is tightened securely. Repair or replace damaged, badly worn, or missing parts.

1. Rotate carriage pin so the roll pin lines up with slot and retract carriage pin. Rotate to lock in OUT position.

WARNING

Do not stand between the vehicle and plow or directly in front of plow when it is being raised, lowered or angled. Clearance between vehicle and plow decreases as plow is operated and injury or death can result from blade striking a body or dropping on hands or feet. Keep a distance of at least 8 feet from plow while using operating remote control.

2. Reverse vehicle until the plow contacts the vehicle side hitch.



3. Press the PLOW DOWN button until you feel rear end of truck rise a little.

NOTE: You may have to press PLOW UP or PLOW DOWN buttons to get carriage pins to fully lock in place. The carriage pins are spring loaded to lock in place.

**WARNING**

NEVER insert fingers in mount holes to check alignment. Sudden movement of the plow will severely injure fingers.

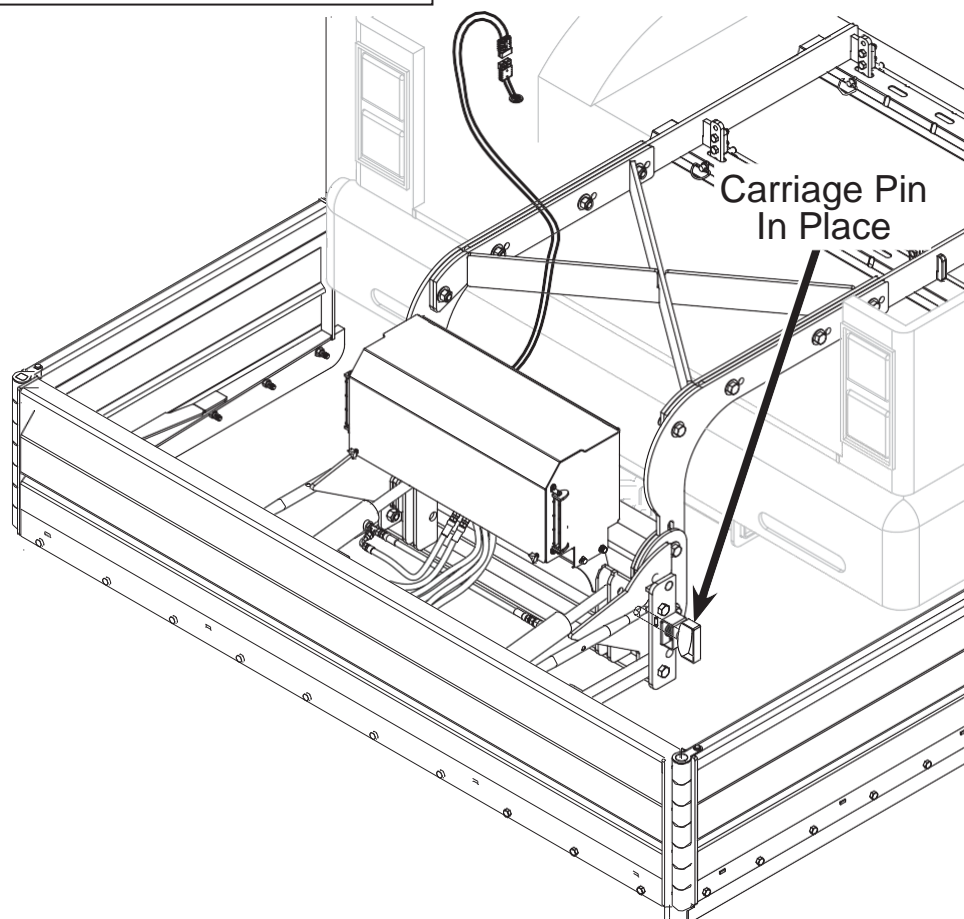
**WARNING**

The lower pins on plow side mount **MUST** be in saddle of vehicle side mount before inserting upper carriage pin. Failure to observe safety instructions could result in serious injury or death.

4. Rotate left and right carriage pins until roll pins line up with slots and slide in, locking plow in place.
5. Route the plow power cable, connect the Anderson plug to the receptacle on the vehicle.
6. Check that the plow is attached and functioning properly before moving vehicle. **DO NOT** operate unless it is functioning properly.

**WARNING**

To avoid sudden plow movement, press the On/Off button to OFF when the plow is not in use. The Power Light will not be illuminated.



Carriage Pin In Place

Detach Plow from Hitch System

NOTE: The wings must be in the full IN position when attaching/detaching plow from vehicle.

**WARNING**

Wings must always be in the IN position when detaching the plow. Failure to comply could result in serious injury or equipment damage.

**WARNING**

Keep hands and feet away from the plow and frame when detaching plow. Accidental movement can cause injury.

NOTE: Use of an assistant is recommended. Assistant must stay clear of plow while detaching plow from the vehicle. Vehicle must be in PARK while inserting top carriage pins.

1. Engage the parking brake, turn vehicle OFF.

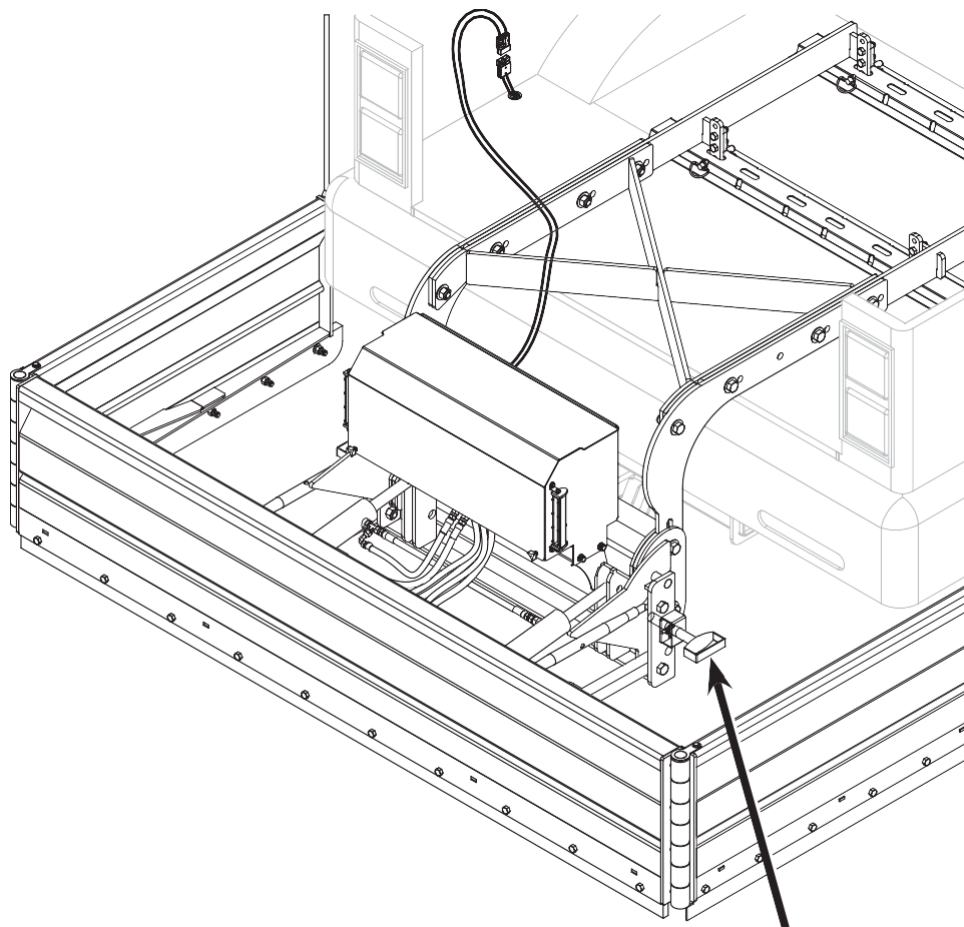
**WARNING**

Do not stand between the vehicle and plow or directly in front of plow when it is being raised, lowered or angled. Clearance between vehicle and plow decreases as plow is operated and injury or death can result from blade striking a body or dropping on hands or feet. Keep a distance of at least 8 feet from plow while using operating remote control.

2. Push PLOW DOWN button until plow touches ground.

NOTE: Inspect plow components when attaching and detaching the plow. Be sure hardware is tightened securely. Repair or replace damaged, badly worn, or missing parts.

3. Rotate carriage pin so the roll pin fits through slots on hitch. Once retracted, rotate pin to lock in full OUT position.
4. Disconnect Anderson plug from vehicle.
5. Push PLOW UP button, the mount will lower. Hold PLOW UP button until top mount pin is free.
6. Plow is now free.
7. Start the vehicle and pull vehicle ahead approximately one foot. Place vehicle in PARK.

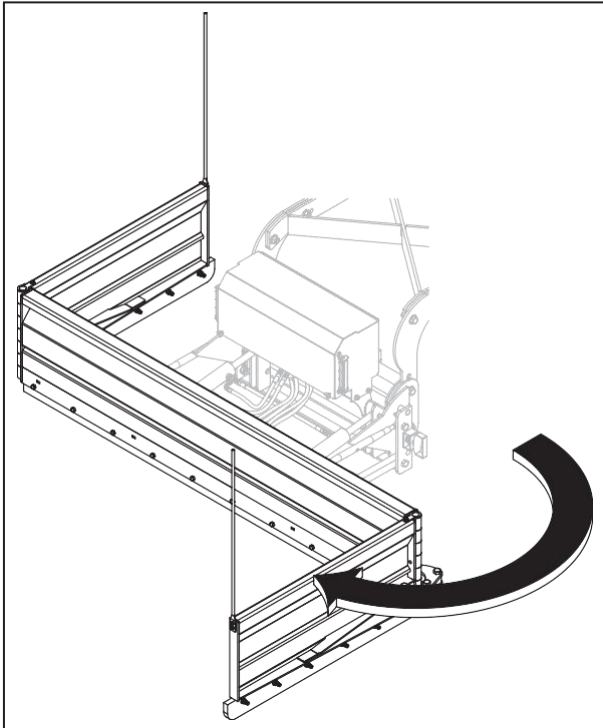


Carriage Pins Rotated and
Locked in the Retracted Position

Remove Carriage Pin

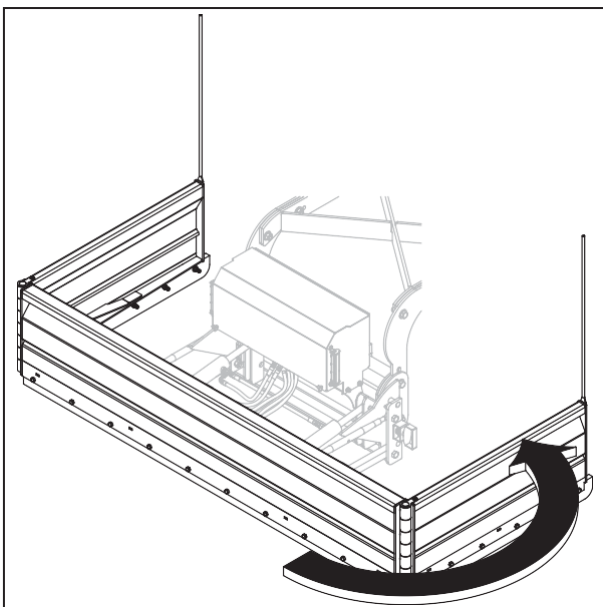
Using Remote Controls

This is the right wing in the out position. Press and hold the RIGHT WING OUT button until wing reaches the desired position.



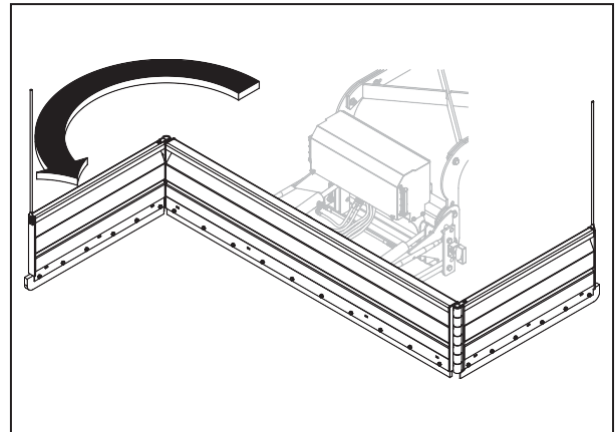
Right Wing Out

This is the right wing in the in position. Press and hold the RIGHT WING IN button until wing reaches the desired position.



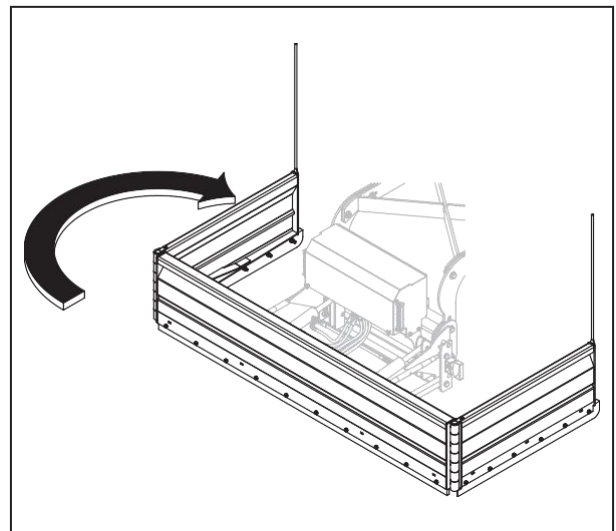
Right Wing In

This is the left wing in the out position. Press and hold the LEFT WING OUT button until wing reaches the desired position.



Left Wing Out

This is the left wing in the in position. Press and hold the LEFT WING IN button until wing reaches the desired position.



Left Wing In

Detach Plow for End-of-Season Storage

NOTE: The wings must be in the full IN position when detaching plow from vehicle.



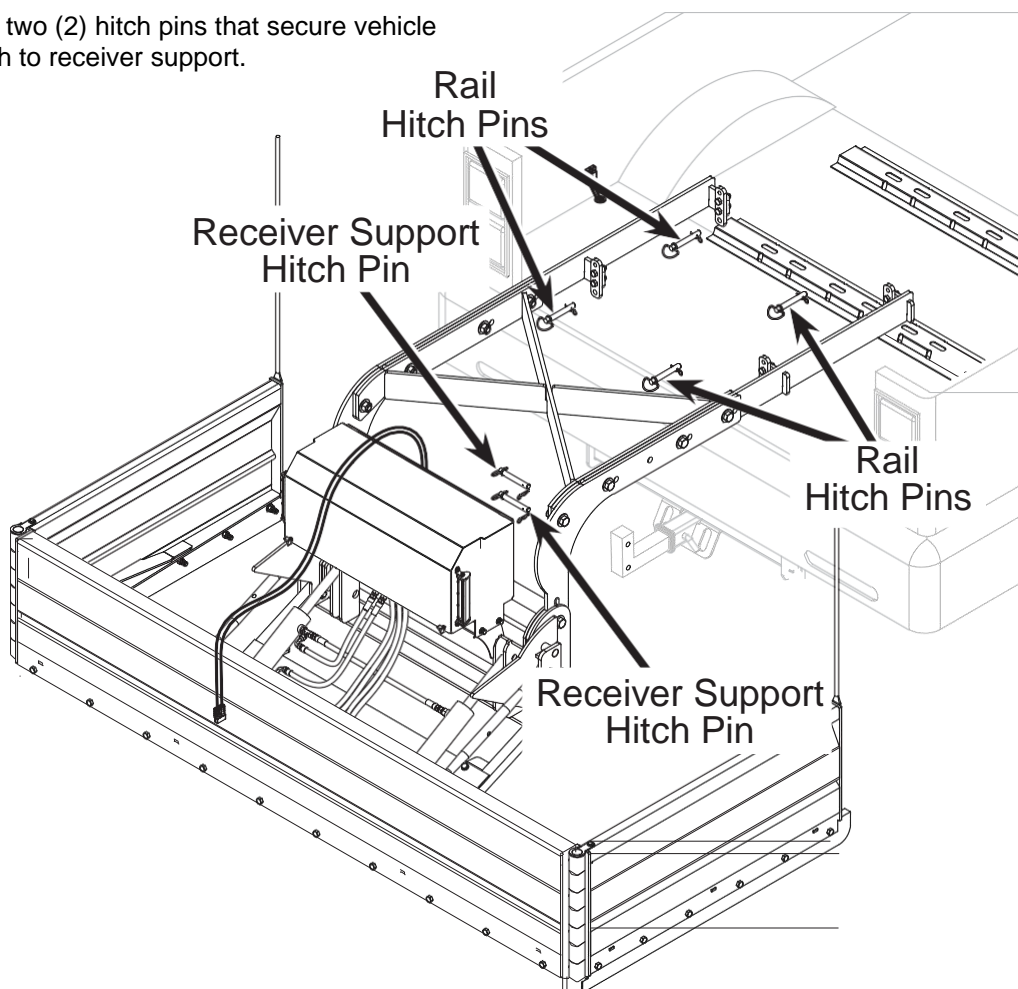
WARNING

Wings must always be in the IN position when detaching the plow. Failure to comply could result in serious injury or equipment damage.

1. Engage the parking brake, turn vehicle OFF.
2. Push PLOW DOWN button until plow touches ground.
3. Remove the four (4) hitch pins that secure the truck base mount to the rails.
4. Remove two (2) hitch pins that secure vehicle side hitch to receiver support.
5. Disconnect Anderson plug from vehicle.
6. Push PLOW DOWN button. The power box, hitch rail assembly and components lift up from fifth wheel rails. Hold PLOW DOWN button until truck base mount is free from the truck bed.
7. Plow and truck base mount are now free from the truck and rails.
8. Start the vehicle and pull vehicle ahead until clear from hitch rail assembly. Place vehicle in PARK.

NOTE: Put a waterproof cover over plow if stored outside.

NOTE: The receiver assembly and control can be removed for off-season storage. The receiver assembly is removed by removing the two pins on each receiver. Disconnect the control connector in the cab and store the control in the glove box of the vehicle. Disconnect the plow battery located in the hydraulic box.



End-of-Season Storage

SERVICE**Service Intervals**

Use the following schedule to perform routine maintenance on your plow.

Service Item	Break-In (After First 10 Hours)	Every 40 Hours	First 75 Hours	Every 100 Hours	Every 400 Hours	Annually
Change hydraulic oil						
Check all fasteners, mounting bolts, hydraulic and electrical connections						
Clean battery						
Test battery						
Check plugs/seals for oil leaks						
Check cutting edge						
Lubricate hinge pin, pivot pins						
Check oil level						
Check hoses, couplers, and rams						
Check main board and wings for wear						
Check hydraulic fluid level						
Visually inspect equipment for leaks, cracks, loose hardware, bent or broken components and proper fluid levels						
Check hydraulic cylinders for damage, pitting or leakage						
Check vehicle controls, lighting and safety equipment						
Check the torque of all fasteners, pins, retainers, nuts, and bolts						

TROUBLESHOOTING

Problem	Category	Solution
No Power to Plow	Electrical	Insure the remote is turned on and the heavy power is connected to the plow.
No Power to Plow	Electrical	Check / reset the 200 Amp breaker under hood.
No Power to Plow	Electrical	Inspect electrical connections in hydraulic control box
Wireless controller doesn't work	Electrical	Plug in auxiliary wired controller directly to the connector provided in the hydraulic control box
No movement of wings or plow up/down	Electrical	Treat as no power to plow – see steps above.
Slow lifting operation	Hydraulic	Check hydraulic fluid levels and inspect connection for leaks / weeping. Add fluid and/or tighten accordingly.
No movement of wings or plow up/down	Hydraulic	Check hydraulic fluid levels and inspect connection for leaks / weeping. Add fluid and/or tighten accordingly.
Uneven cutting-edge wear	Mechanical	Refer to Operator's Manual for adjustment of turnbuckles for leveling of wings and main blade.
Wings "loose" or "sloppy" in closed position	Mechanical	Adjust the tension bolt/nut located at the wing pivot point to tighten the wing while in the closed position.

For any problems/issues please see your local dealer or contact Sno-Power for additional support.

STORAGE

Storing Plow Safety



CAUTION

Avoid injury! Fuel vapors are explosive and flammable. Engine exhaust fumes contain carbon monoxide and can cause serious illness or death.

- Run the engine only long enough to move the plow to or from storage.



WARNING

When the vehicle is parked or stored, lower the plow. Failure to observe safety instructions could result in serious injury.

Preparing Plow for Storage

1. Inspect the plow for any worn or damaged parts. Repair or replace parts if necessary. Tighten loose hardware.
2. Remove debris from plow.
3. Wash the plow.
4. Apply light coat of engine oil to pivot and wear points to prevent rust.
5. Store the plow in a dry, protected place.

NOTE: Put a waterproof cover over plow if stored outside.

NOTE: For storage, disconnect plow battery located in the hydraulic box.

