May 15, 2021 Lit. No. 87009, Rev. 00





### Mid-Duty IMPACT™ UTV Straight Blade Manual Angle Winch Lift Snowplow

Owner's Manual Original Instructions

### **A** CAUTION

Read this document before operating or servicing snowplow.

This manual supersedes all editions with an earlier date.

### **OWNER INFORMATION**

# Register your snowplow online at www.westernplows.com Owner Name: Date Purchased: Dealer Name: Phone: Dealer Address: Vehicle Model/Year: Snowplow Model/Year: Snowplow Type/Size: Weight: Ib/kg Ballast: No\_\_\_ Yes\_\_\_ Amount: \_\_\_\_\_lb/kg

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### **PREFACE**

This manual has been prepared to acquaint you with the safety information, operation, and maintenance of your new snowplow. Please read this manual carefully and follow all recommendations.

Before installing a snowplow, make sure your vehicle is equipped with our recommended options for plowing snow. This will help ensure trouble-free operation of your snowplow. Keep this manual accessible. It is a handy reference in case minor service is required.

When service is necessary, bring your snowplow to your local outlet. They know your snowplow best and are interested in your complete satisfaction.

The illustrations found in this manual represent typical components. They may not match your exact installation.

### **SAFETY DEFINITIONS**

### **A** WARNING

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

### **A** 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.

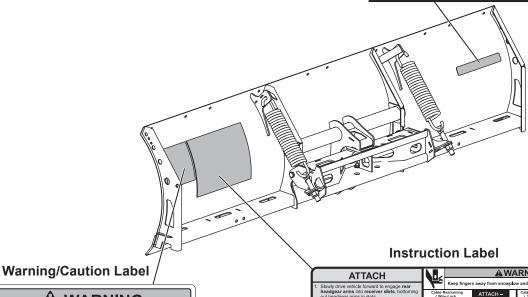
### WARNING/CAUTION & INSTRUCTION LABELS FOR UTV STRAIGHT BLADE

Become familiar with and inform users about the warning/caution, serial number, and instruction labels on the back of the blade.

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



Serial No. Code	Definition
YY	2-Digit Year
MM	2-Digit Month
DD	2-Digit Day
LL	2-Digit Location Code
XXXX	4-Digit Sequential Number
ZZZZZZ	5- to 7-Digit Blade Assembly PN



## Blade could drop unexpectedly, crushing or trapping limbs. Lower blade when vehicle is parked. Overloading could negatively affect vehicle handling. To avoid serious injury or death, do not exceed maximum vehicle load capacity, including blade and ballast. A CAUTION Read Owner's Manual before operating or servicing snowplow. Transport speed should not exceed 20 mph (32 km/lh). Further reduce speed under adverse travel conditions. Plowing speed should not exceed

| Slowly thins which forward to arrange rear has given a service of the state of th

See your sales outlet/website for specific vehicle application recommendations.

WWW.

### SAFETY PRECAUTIONS

Follow all safety and operating instructions in your UTV owner's manual.

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

### **A WARNING**

Lower the blade when the vehicle is parked. Winch rope could fail, causing the blade to drop unexpectedly. Failure to do this could result in serious personal injury.

### **A** WARNING

The driver shall keep bystanders clear of the blade when it is being raised or lowered. 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.

### **A WARNING**

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

### **A** WARNING



Do not exceed GVWR, GAWR, or maximum vehicle load capacity, including the blade and ballast.

### **A WARNING**

To prevent accidental movement of the blade, always unplug the winch control whenever the snowplow is not in use.

### **A** WARNING

Remove blade assembly before placing vehicle on hoist.

### **A WARNING**

Vehicle mount reduces ground clearance. Use additional caution when driving vehicle with mount installed. Remove vehicle mount to restore original vehicle ground clearance at the end of the plowing season.

### PERSONAL SAFETY

- Remove the ignition key and put the vehicle in PARK and set the brake 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.
- Wear hearing protection such as earmuffs or earplugs as appropriate or required.
- 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.

### FIRE AND EXPLOSION

### **A** 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 surroundings. Wait until it is safe to operate mobile communication equipment such as cell phones, text messaging devices, pagers, or two-way radios.

### **VENTILATION**

### **A** 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**

### **A** 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.

### NOISE

Airborne noise emission during use is below 95 dB(A) for the snowplow operator.

### **VIBRATION**

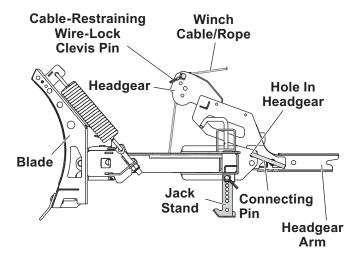
Operating snowplow vibration does not exceed 2.5 m/s<sup>2</sup> to the hand-arm or 0.5 m/s<sup>2</sup> to the whole body.

### **SNOWPLOW WEIGHT**

Size	Blade Assembly	Wt (lb)	Wt (kg)
5'6"	UTV Straight Blade Snowplow	175	79.3
6'	UTV Straight Blade Snowplow	180	81.6

### **SNOWPLOW COMPONENTS**

A snowplow consists of all the components that are readily removable from the vehicle as a unit. This includes the blade, sway frame, and headgear. The snowplow is ready and easy to mount when you need to plow snow. When plowing is completed, remove the snowplow.



### **VEHICLE MOUNT KIT**

### **A** WARNING

Vehicle mount reduces ground clearance. Use additional caution when driving vehicle with mount installed. Remove vehicle mount to restore original vehicle ground clearance at the end of the plowing season.

Mount kits have been designed for many UTVs. Due to the differences among vehicle models, the kits are not interchangeable.

The vehicle mount assembly is bolted to the underside of the vehicle frame. It is engineered to provide the primary connecting points between the snowplow assembly and the vehicle. The weight of the snowplow system is distributed to the frame of your vehicle by the mount assembly.

### **WINCH CAPACITY**

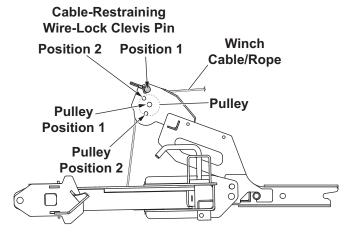
This snowplow has been designed for use with a winch rated 2,500 lb to 5,000 lb.

NOTE: Continuing to press the cable retract button on the winch control after the blade is fully raised could damage the winch, winch cable, plow headgear, and/or drain the vehicle battery.

### **PULLEY HEIGHT ADJUSTMENT**

To reduce the chance of premature wear of the winch cable or rope, the cable or rope should leave the winch and fairlead assembly as horizontally as possible. The pulley on the headgear can be adjusted vertically to one of two positions to minimize the angle of the cable or rope as it leaves the fairlead. Place the pulley in the position that results in the most horizontal direction.

Adjust the cable restraining wire-lock clevis pin to the corresponding hole on the lift frame based on the pulley position chosen. The cable restraining pin should allow the cable to pass freely over the pulley but will prevent excess slack from de-routing the cable over the pulley during winch operation or while plowing.



When the plow is fully raised there should be no contact between the cable ferrule or hook and the headgear pulley. If contact occurs, the winch hook should be removed and the cable loop should be directly connected to the lift pin on the sway frame.

### MOUNTING SNOWPLOW TO VEHICLE

### ATTACHING THE SNOWPLOW

### **A** WARNING

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

### **A WARNING**

Inspect snowplow components and fasteners for wear or damage whenever attaching or detaching the snowplow. Worn or damaged components could allow the snowplow to drop unexpectedly.

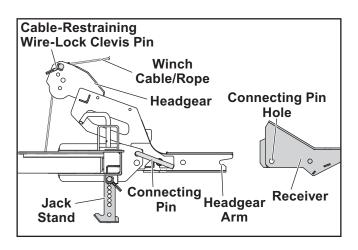
### **A** WARNING

Keep fingers away from snowplow and UTV attachment points.

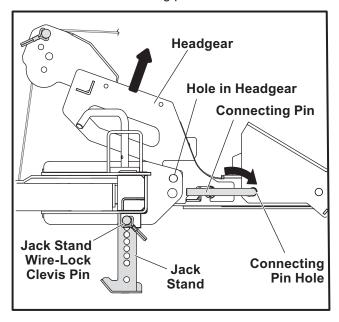
NOTE: Use dielectric grease to prevent corrosion on all connections.

NOTE: Use lubricant on connecting pins to ensure ease of attach/detach.

1. Slowly drive vehicle forward to engage rear headgear arms into receiver slots, bottoming out headgear arms in slots.



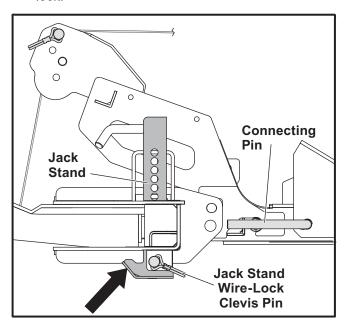
 On driver's side, pull up on headgear to relieve pressure on connecting pins while pulling driver's side connecting pin out. Rotate pin toward mount; insert it into connecting pin hole.



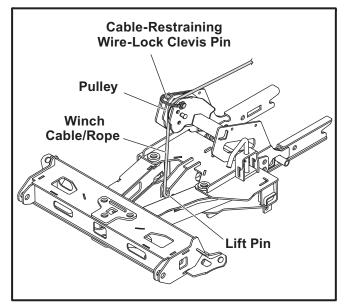
- 3. Verify that connecting pin is engaged in mount (through outside and inside plates) and extends approximately 1/8" through the plate.
- 4. Repeat on passenger's side.

### ATTACHING YOUR SNOWPLOW

5. Remove jack stand wire-lock clevis pin. Fully raise jack stand up. Insert pin in hole and engage wire lock.



Remove cable-restraining wire-lock clevis pin.
Route winch cable/rope around pulley and secure
to lift pin. Re-insert clevis pin and engage wire
lock.



7. Apply the supplied manual angle winch lift blade attach/detach instruction label directly over the current attach/detach label located on the back of the blade. If the blade has no current label, place the supplied label on the back of the blade in an area that is visible during the attach and detach procedure.

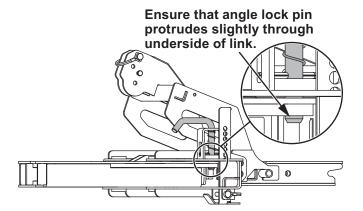
Thoroughly clean and dry the existing label or blade surface area before applying the new label.

### HAND-HELD CONTROL

### **A** WARNING

To prevent accidental movement of the blade, always unplug the control whenever the snowplow is not in use.

Function	Description of Operation
RAISE	Press the cable retract switch on the winch control until blade is at the desired height or against the headgear stops.  NOTE: Continuing to press the cable retract button on the winch control after the blade is fully raised could damage the winch, winch cable, plow headgear, and/or drain the vehicle battery.
LOWER	Press the cable extend switch on the winch control until blade contacts the ground then extend out an additional 3" to 4" of cable to allow for blade float while plowing.
	Pull UP on the angle lock pin to release the blade. Rotate the angle lock pin handle counter clockwise to latch it in the unlocked (UP) position using the detent incorporated into the angle pin holder on the sway frame.
ANGLE	Move to the side of the blade. Position the blade in the approximate desired angled position by pushing or pulling the end of the blade toward or away from the vehicle. Rotate the angle lock pin clockwise slightly to unlatch it from the detent. The angle lock pin is now spring-biased downward to lock the blade angle once it aligns with one of the five angle position holes.
	If the pin does not fully engage the drive link, adjust the blade angle position slightly until the pin drops into the closest angle position holes. Ensure that the angle lock pin is completely engaged into the drive link and protruding slightly through the underside of the link before plowing.

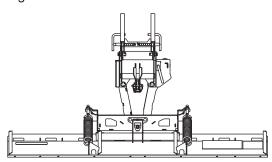


### BLADE POSITIONS: STRAIGHT BLADE SNOWPLOW

The UTV straight blade snowplow can be used in these plowing positions.

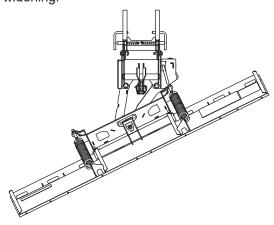
### **Straight Blade**

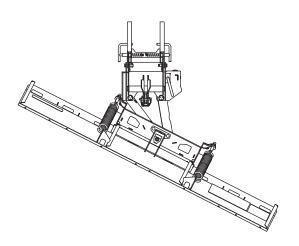
Use straight blade for wide-path plowing or stacking snow.



### **Angled Blade**

Move the blade in either direction for general plowing and widening.





### TRANSPORTING THE SNOWPLOW

### **A WARNING**

Position the blade so that it does not block the vehicle headlamp beams.

Do not change blade position while traveling. You could suddenly lower the blade accidentally.

- 1. Completely raise the blade.
- 2. Adjust the blade height for maximum vehicle headlamp illumination.
- 3. Adjust the blade to the straight position.

NOTE: Overheating is unlikely under normal driving conditions, but occasionally the snowplow may be positioned so that it deflects air away from the radiator. If this occurs, stop the vehicle and raise, lower, or angle the snowplow slightly to correct overheating.

NOTE: Only the driver should be in the vehicle when the snowplow is attached.

### DRIVING AND PLOWING ON SNOW AND ICE

### **A WARNING**

Drinking then driving or plowing is very dangerous. Your reflexes, perceptions, attentiveness, and judgment can be affected by even a small amount of alcohol. You can have a serious or even fatal collision if you drive after drinking. Please do not drink and then drive or plow.

Refer to the vehicle owner's manual instructions for driving in snow and ice conditions. Remember, when you drive on snow or ice, your wheels will not get good traction. You cannot accelerate as quickly, turning is more difficult, and you will need longer braking distance.

Wet and hard-packed snow or ice offers the worst tire traction. It is very easy to lose control. You will have difficulty accelerating. If you do get moving, you may have poor steering and difficult braking, which can cause you to slide out of control.

Here are some tips for driving in these conditions:

- Drive defensively.
- Do not drink, and then drive or plow snow.
- Plow or drive only when you have good visibility for operating a vehicle.
- If you cannot see well due to snow or icy conditions, you will need to slow down.
- · If you are tired, move indoors and rest.
- Keep your windshield and all glass on your vehicle clean to see around you.
- Dress properly for the weather. Wear layers of clothing. As you get warm, you can take off layers.

### OPERATING YOUR SNOWPLOW

### **PLOWING SNOW**

### **A** WARNING

Never plow snow with head outside of the vehicle window or rollover protection system. Sudden stops or protruding objects could cause personal injury.

### **A** CAUTION

Wear a seat belt when plowing snow. Hidden obstructions could cause the vehicle to stop suddenly, resulting in personal injury.

### **A** CAUTION

Flag any obstructions that are hard to locate under snow, to prevent damage to product or property.

### **A** CAUTION

Never stack snow with the blade angled. This could damage the snowplow or the vehicle bumper.

### **A** CAUTION

Plowing speed should not exceed 10 mph (16 km/h).

NOTE: Only the driver should be in the vehicle when the snowplow is attached.

### **General Instructions**

- Before plowing, make sure you know of any obstructions hidden beneath the snow, such as curbs, sidewalk, shrubs, fences, or pipes sticking up from the ground. If you are unfamiliar with the area to be plowed, have someone familiar with the area point out obstacles.
- 2. If possible, and when you have good visibility, plow during the storm rather than letting snow accumulate.
- Do not exceed 10 mph (16 km/h) when plowing snow.
- 4. When you are stacking snow, begin raising the blade as you come close to the stack. This will let the blade ride up the stack.
- 5. It is recommended to start backing away slightly from plowed snow after each pass before starting to raise the blade. This will decrease the tension in the winch cable/rope and reduce the electrical draw on the UTV's charging system and battery, resulting in increased cable/rope and battery life.

### Hard-Packed Snow

- 1. On blades equipped with a shoe kit, raise the anti-wear shoes so that the cutting edge comes into direct contact with the pavement.
- 2. Use lowest gear to place maximum power behind the cutting edge.
- 3. An angled blade is more effective for removing hard-packed snow.

### **OPERATING YOUR SNOWPLOW**

### **Deep Snow**

- 1. Shear off top layers by plowing with the blade raised 3 to 4 inches for the initial pass.
- Bite into the edges using only partial blade width until the job is cut down to size for full-blade plowing.

Rule of thumb:

3" of snow — plow with entire blade width

6" of snow — plow with 3/4 blade width

9" of snow — plow with 1/2 blade width

Experience and "feel" are the best guides.

- 3. When plowing deep snow, be sure to keep the vehicle moving.
- Ballast is suggested for maximum traction. Secure ballast behind the rear wheels. Do not exceed the vehicle's GVWR and GAWR.
- 5. For increased traction, use tire chains where legal.

### **Clearing Driveways**

- Head into the driveway with the blade angled and plow the snow away from any buildings. Widen the driveway by rolling the snow away from buildings.
- 2. If a building is at the end of the driveway, plow to within a vehicle length of the building. Push as much snow as possible off the driveway.
- With a raised blade, drive through the remaining snow to the building. Drop the blade and back drag snow away from the building at least one vehicle length. Repeat if necessary.
- 4. Back the vehicle to the building and plow forward, removing the remaining snow. Check municipal ordinances for proper disposal of snow.

### **OPERATING YOUR SNOWPLOW**

### PARKING WITH SNOWPLOW ATTACHED

### **A** WARNING

Lower the blade when the vehicle is parked. Keep 8' clear of the blade. Winch rope could fail, causing the blade to drop unexpectedly. Failure to do this can result in serious personal injury.

Whenever you park your vehicle, completely lower the blade to the ground.

### **TOWING DISABLED OR STUCK VEHICLES**

Do not use any snowplow components as an attachment point when retrieving, towing, or winching a disabled or stuck vehicle.

### DETACHING SNOWPLOW FROM VEHICLE

### **DETACHING THE SNOWPLOW**

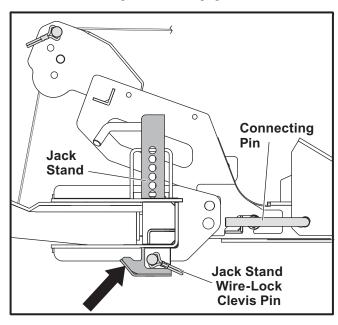
### **A** WARNING

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

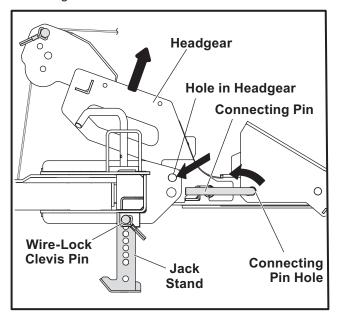
### **A WARNING**

Inspect snowplow components and bolts for wear or damage whenever attaching or detaching the snowplow. Worn or damaged components could allow the snowplow to drop unexpectedly.

- With blade straight, lower snowplow to the ground. Let out approximately 2" more cable after blade contacts the ground.
- 2. Remove jack stand wire-lock clevis pin. Fully lower jack stand. Insert pin in jack stand hole that aligns with hole in angle frame. Engage the wire lock.



 On driver's side, pull up slightly on headgear to relieve pressure on connecting pin while removing the pin. Rotate pin and insert into hole in headgear.



- 4. Repeat on passenger's side.
- Remove cable restraining wire-lock clevis pin.
  Remove winch cable/rope from lift pin and pulley.
  Reinsert clevis pin and wire lock. Retract cable
  fully onto winch.
- Back vehicle away to disconnect headgear from receivers.

### **MAINTENANCE**

### **VEHICLE**

The snowplow operating vehicle shall be maintained according to manufacturer's recommendations. Tire pressure shall be maintained according to manufacturer's recommendation.

### **RECYCLE**

When your snowplow has performed its useful life, the majority of its components can be recycled as steel or aluminum. The balance of parts made from plastic shall be disposed of in the customary manner.

### **EMERGENCY PARTS/TOOLS**

- 10" adjustable wrench
- · Medium screwdriver
- Pliers
- 12V DC test light
- Flashlight



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CE

This product conforms to EU Machinery Directive 2006/42/EC and Directive 2011/65/EC (RoHS2).

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