November 1, 2020 Lit. No. 30079, Rev. 00



5'6" UTV Straight Blade Snowplow

Installation Instructions

A CAUTION

Read this document before installing the snowplow.

A CAUTION

See your WESTERN® outlet/website for specific vehicle application recommendations before installation. The Quick Match selection system has specific vehicle and snowplow requirements.

SAFETY DEFINITIONS

A WARNING

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

A CAUTION

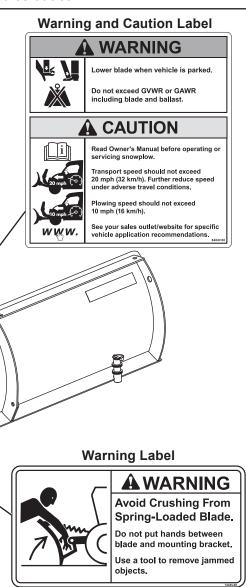
Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

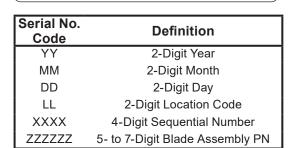
NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

WARNING/CAUTION AND INSTRUCTION LABELS

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

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





YYMMDDLLXXXXZZZZZ

Serial Number Label

ZZZZZ

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.

A WARNING

Lower the 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.

A WARNING

The driver shall keep bystanders clear of the blade when it is being raised, lowered, or angled. Do not stand between vehicle and 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 frame when mounting or removing the snowplow. Moving or falling assemblies could cause personal injury.

A WARNING

Do not exceed GVWR or GAWR including blade and ballast.

A WARNING

To prevent accidental movement of the blade, always turn the control OFF whenever the snowplow is not in use. The power indicator light will turn OFF.

A WARNING

Remove blade assembly before placing vehicle on hoist.

A CAUTION

Assembling a hose to the incorrect wing ram port can result in permanent damage to the ram.

A CAUTION

Refer to the current Quick Match selection system for minimum vehicle recommendations and ballast requirements.

HYDRAULIC SAFETY

A 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.

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.

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 road. 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 70 dB(A) for the snowplow operator.

VIBRATION

Operating snowplow vibration does not exceed 2.5 m/s² to the hand-arm or 0.5 m/s² to the whole body.

TORQUE CHART

A CAUTION

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

Recommended Fastener Torque Chart								
Inch Fasteners Grade 5 and Grade 8								
Size	Torque (ft-lb)			Torque (ft-lb)				
	Grade 5	Grade 8	Size	Grade 5	Grade 8			
1/4-20	8.4	11.9	9/16-12	109	154			
1/4-28	9.7	13.7	9/16-18	121	171			
5/16-18	17.4	24.6	5/8-11	150	212			
5/16-24	19.2	27.3	5/8-18	170	240			
3/8-16	30.8	43.6	3/4-10	269	376			
3/8-24	35.0	49.4	3/4-16	297	420			
7/16-14	49.4	69.8	7/8-9	429	606			
7/16-20	55.2	77.9	7/8-14	474	669			
1/2-13	75.3	106.4	1-8	644	909			
1/2-20	85.0	120.0	1-12	704	995			
Metric Fasteners Class 8.8 and 10.9								
	Torque (ft-lb)			Torque (ft-lb)				
Size	Class	Class	Size	Class	Class			

Size	Torque (ft-lb)			Torque (ft-lb)			
	Class 8.8	Class 10.9	Size	Class 8.8	Class 10.9		
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450		
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613		
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778		
M12 x 1.75	67	93	M27 x 3.00	796	1139		
M14 x 2.00	107	148	M30 x 3.50	1117	1545		
M16 x 2.00	167	231	M33 x 3.50	1468	2101		
M18 x 2.50	222	318	M36 x 4.00	1952	2701		
T							

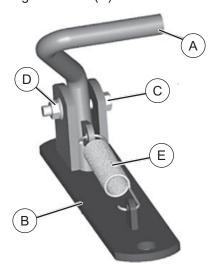
These torque values apply to fasteners except those noted in the instructions.

INSTALL PIVOT ASSEMBLY TO LIFT FRAME

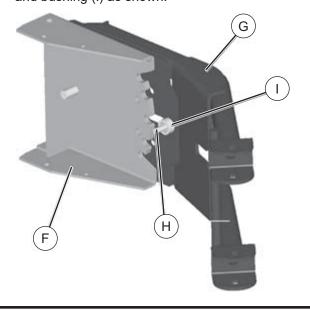
A CAUTION

Blade and frame components are heavy. Use a safe lifting device or get an assistant to help lift, install, or remove the component.

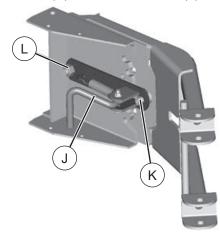
1. Install the position lever (A) to the position lever bracket (B) with a 5/16" x 1-3/4" cap screw (C) and 5/16" flanged locknut (D).



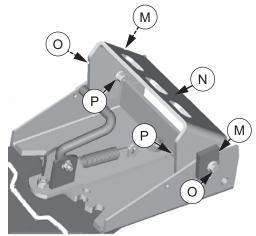
- 2. Install the position lever spring (E) to the lever and bracket.
- 3. Position the pivot assembly (F) against the lift frame (G). Position an 3/8" x 1-1/2" cap screw (H) and bushing (I) as shown.



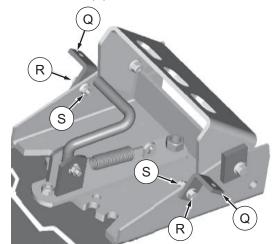
4. Install the position lever assembly (J) using a 3/8" locknut (K) and a 3/8" locknut (L).



5. Loosely install the blade stops (M) and the blade rope bracket (N) using 3/8" x 1" cap screws (O) and 3/8" flanged nuts (P).

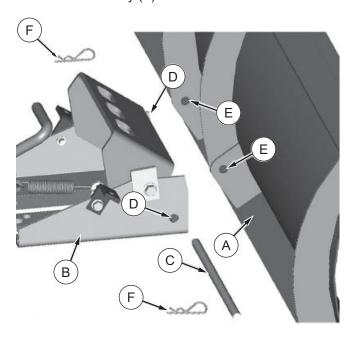


6. Loosely install the spring attaching brackets (Q) using 5/16" x 1" cap screws (R) and 5/16" locknuts (S).



ATTACH BLADE TO LIFT FRAME

1. Center the back side of the blade (A) with the frame assembly (B).

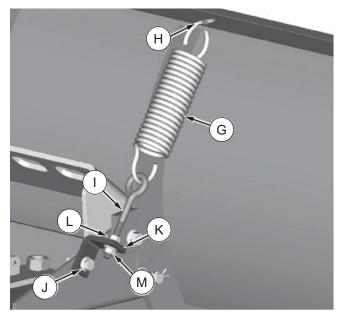


- 2. Attach the blade to the frame on each side with a mounting pin (C) through the frame holes (D) and the blade holes (E).
- 3. Install the hairpin cotters (F).

A CAUTION

Springs are under high tension and must be installed with hooked ends facing vehicle to prevent accidental detachment if blade trips.

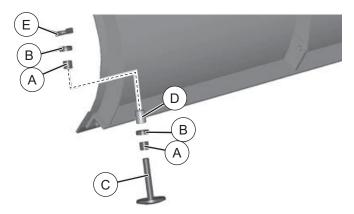
4. Install the springs (G) to the blade with the hooked ends (H) toward the vehicle. Install the other end of the springs onto the eyebolts (I).



- 5. Loosen cap screw (J) to allow the bracket (K) to rotate freely. Repeat on the opposite side.
- Install one 5/16" flanged locknut (L) onto the eyebolt (I), and install the eyebolt through the hole in the bracket (K). Loosely install a second 5/16" flanged locknut (M) onto the eyebolt but do not tighten completely. Repeat on the opposite side.
- 7. Tighten the lower flanged locknuts (M) on the eyebolts, leave 9/16" (15 mm) of thread exposed. Tighten the top flanged locknuts (L).
- Adjust the trip spring, blade tilt, and skid shoes before use.

INSTALLING SKID SHOES

1. Install a spacer (A) and four washers (B) onto the skid shoe (C).



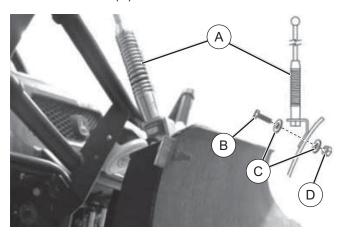
- 2. Insert the skid shoe up through the shoe mount (D). Install a spacer (A) and four washers (B) on the top side of the shoe mount.
- 3. Insert a linchpin (E) through the hole in the skid shoe post to secure it to the blade. Repeat for the other side.

NOTE: Blade should be on firm and level ground when leveling.

- 4. Level the blade by placing shims under the wear bar of the blade at both sides so that the bottom blade edge is slightly off the ground.
- 5. If necessary, a minor height adjustment can be made by moving the washers (B) to the top or bottom side of the shoe mount (D).
- 6. Repeat Steps 1–5 for the other side.

INSTALLING BLADE GUIDES

 Install a marker (A) to the blade with one 5/16" x 1" cap screw (B), two washers (C), and one 5/16" locknut (D).



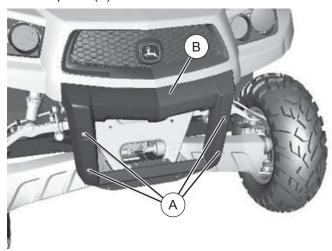
2. Repeat Step 1 to install the second blade guide on the opposite side of the blade.

INSTALL VEHICLE MOUNTING BRACKET (XUV550, XUV550 S4)

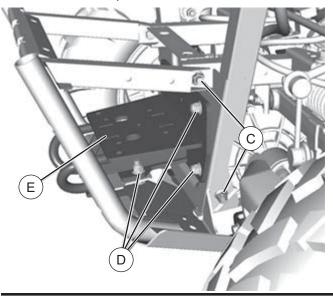
NOTE: For easier assembly and installation, vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

NOTE: If vehicle is equipped with a front receiver hitch and/or winch, they should be removed before installing the blade.

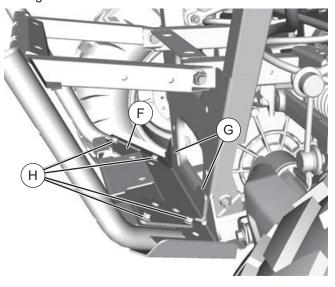
- 1. Park the vehicle safely. Turn the key to the "OFF" position and remove it from the ignition.
- 2. Remove the four screws (A) and the front bumper trim panel (B) from the vehicle.



3. Loosen the two cap screws and nuts (C) on each side of the bumper.



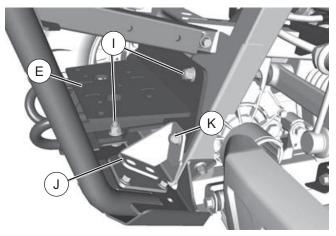
- 4. If the front receiver hitch is installed, remove the three cap screws and locknuts (D) from each side of the hitch bracket (E) and remove the hitch from the vehicle.
- 5. Position the support backing plate (F) in the lower bumper assembly with the rear flange (G) tight against the vehicle frame.



6. Install four M8 x 25 self-tapping screws (H).

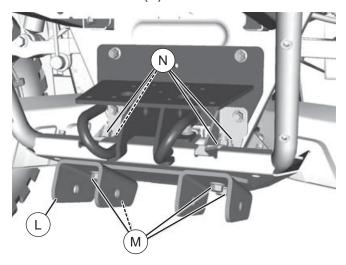
NOTE: If front receiver hitch bracket was not previously installed, or was removed earlier, a front hitch kit must be installed now.

7. Position the hitch bracket (E) in the bumper and loosely install the original hardware in two locations (I) on each side.

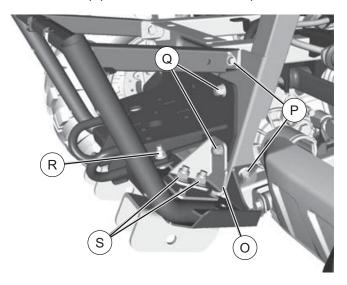


8. Position the left gusset (J) in the bumper and loosely secure it with one M10 x 35 cap screw and M10 locknut (K). Repeat for the right gusset.

9. Position the pivot frame (L) under the bumper and loosely install it with four M12 x 80 cap screws (M) and M12 locknuts (N).



 Ensure that the rear flange of the support backing plate contacts the frame (O) on each side of the vehicle. Tighten the two cap screws and locknuts (P) on each side of the bumper.

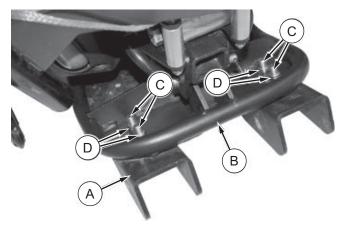


- 11. Tighten the two cap screws and locknuts (Q) on each side of the hitch.
- 12. Tighten one cap screw and locknut (R) on each side of the hitch.
- 13. Tighten two cap screws and locknuts (S) on each side of the pivot frame.
- 14. Install the front bumper trim panel on the vehicle with four screws.

INSTALL VEHICLE MOUNTING BRACKET (RSX/850i)

NOTE: For easier assembly and installation, vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

1. Park the vehicle safely. Turn the key to the "OFF" position and remove it from the ignition.



- Position the pivot frame (A) under the front of the undercarriage (B). Install the four M12 x 80 cap screws (C) and M12 locknuts (D).
- 3. Tighten the two cap screws and locknuts on each side of the pivot frame.

INSTALLING THE BLADE

A WARNING

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

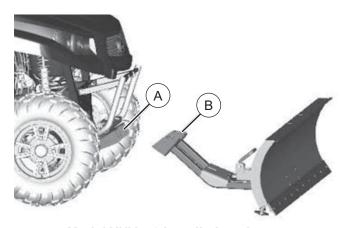
A WARNING

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

NOTE: For easier assembly and installation, vehicle and all snowplow components should be on a smooth, level, hard surface, such as concrete.

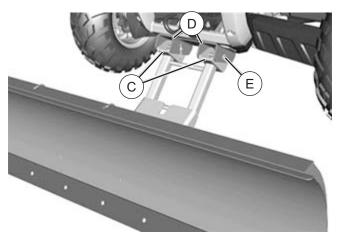
NOTE: To prevent corrosion on all connections, use dielectric grease.

1. Move the vehicle behind the blade and align the push frame (A) with the lift frame (B).



Model XUV550 installation shown.

2. Slowly move the vehicle forward until the lift frame (C) engages the push frame (D).

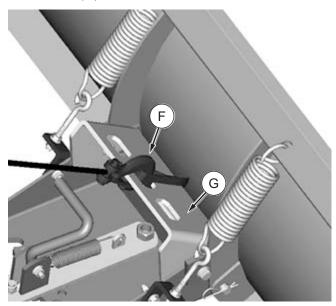


Model XUV550 installation shown.

A CAUTION

Blade and frame components are heavy. Use a safe lifting device or get an assistant to help lift, install, or remove the component.

- 3. Using a safe lifting device, align the holes in the lift and push frames. Install a clevis pin (E) through each hole and install the hairpin cotters.
- 4. Install the winch rope hook (F) on the blade rope bracket (G).



OPERATIONAL TEST AND FINAL ADJUSTMENTS

FINAL INSPECTION AND ADJUSTMENT

A WARNING

Keep 8' clear of the blade when it is being raised, lowered, or angled. 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.

- 1. Fully angle the blade in both directions in raised and lowered positions.
- 2. Add grease to the two hitch pins.

OWNER'S MANUAL PACKET

If the completed snowplow will be delivered immediately, the Owner's Manual should be reviewed with and given to the purchaser according to the snowplow checklist.

If the snowplow is completed prior to delivery to the purchaser, attach the Owner's Manual packet to the electrical cable of the cab control for safekeeping.



Western Products PO Box 245038 Milwaukee, WI 53224-9538 www.westernplows.com

A DIVISION OF DOUGLAS DYNAMICS, LLC

Western Products reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. Western Products or the vehicle manufacturer may require or recommend optional equipment for snow removal. Do not exceed vehicle ratings with a snowplow. Western Products offers a limited warranty for all snowplows and accessories. See separately printed page for this important information. The following are registered (®) or unregistered (TM) trademarks of Douglas Dynamics, LLC: WESTERN®.