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Thank you for purchasing the MotoAlliance's Denali Series 60", 66" & 72" Snow Plow System by MotoAlliance! Fully engineered in the USA, we've paid attention to all the fine details from added horizontal supports and a 65° attack angle, to a kick pedal locking mechanism and weld nuts under the pushtube for easy install. We believe you now have a plow that will last for years to come. Please feel free to contact us with any questions.

Warning And User Caution

- Never allow passengers to ride on the blade while plowing
- Stay clear of bystanders while plowing
- Do not exceed 10 MPH with blade installed
- Always wear safety gear (helmet, glasses, etc) when plowing
- Always put your vehicle in Park before changing the angle of the plow blade
- Use extreme caution when plowing and riding on sloped surfaces
- Avoid all fixed objects and always wear a seatbelt
- Be cautious of the blade when lowering it from an upright position
- Always store your blade resting on the ground



Plow Blade Assembly Instructions

Upon opening your Denali Plow Blade box, verify that all the components shown in (Figure 1) are included in your package.

ITEM NO.	Part Description	Quantity
1	Denali Snow Plow Blade	1
2	Wear Bar	1
3	3/8"-16 x 1" Carriage Bolt	8
4	3/8"-16 Nylock Nut	12
5	3/8" Flat Washer	4
6	3/8"-16 x 1" Hex Head Bolt	4
7	5/8" Flat Washer	8
8	Skid Feet Bracket	2
9	Skid Feet	2
10	Snap Ring	2
11	Rubber Bushing	4

Figure 1

Plow Blade Assembly

Remove your blade from the box and verify that the following contents are present:

- a. (1) Blade (#1)
- b. (1) Wear Bar (#2)
- c. (1) Hardware bag (see above item list)
- 2) Install the Wear Bar (#2) to the bottom of the Blade (#1) using the 3/8" Carriage Bolts (#3), Nylock Nuts (#4), and Washers (#5) included in your kit. (Figure 2). The rounded side of the Carriage Bolt should be on the concave side of the blade. The Carriage Bolts may need to be pushed in only part of the way until the Nylock Nut has been started as the bottom horizontal stabilizer bar is in close proximity. You also may need to use an open ended wrench to gain access for tightening. This step of the install takes the most time.





 Attach the Skid Feet Brackets (#8) to the back side of the snow plow blade (#1) using the 3/8" Hex Head Bolts (#6), 3/8" Washers (#5) and 3/8" Nuts (#4). See Figure 3.



4) Install your Skid Feet (#9) using the 5/8" Flat Washers (#12) and the Rubber Bushings (#11) included in your kit (Figure 4). The height of the Skid Feet can be adjusted by adjusting the location of the skid feet and washers from the bottom of the bracket to the top. The Skid Feet are fully extended when the Washers and Bushings all stack against the bottom side of the Skid Feet Bracket as shown in Figure 4. The Skid Feet are fully retracted when all Washer and Bushings are on the top side of the Skid Feet Bracket. Secure the Skid Feet using the included Snap Rings (#10).



5) Your Denali Series Plow Blade setup is now complete. Verify that all the bolts are secure. Proceed to Step 6 for Pushtube assembly and installation.



Denali 60", 66" & 72" Plow Blade & Pushtube Assembly Pushtube Assembly Hardware List

ITEM NO.	Part Description	Quantity
12	1/4"-20 x 1.5" Hex Head Bolt	1
13	1/4"-20 Nylock Nut	1
14	1/4" Flat Washer	2
15	1/4" ID Aluminum Spacer	1
16	3/8"-16 x 1" Hex Head Bolt	11
17	3/8" Flat Washer	17
18	3/8"-16 Nylock Nut	2
19	3/8"-16 Regular Nut	4
20	3/8"-16 x 8" Eye Bolt	2
21	3/8"-16 x 1.5" Grade 8 Hex Head Bolt	2
22	1/2"-13 x 2" Grade 8 Hex Head Bolt	2
23	1/2"-13 Nylock Nut	2
24	1/2" Flat Washer	4
25	5/8"-11 x 2" Grade 8 Hex Head Bolt	1
26	5/8"-11 Nylock Nut	1
27	5/8" Flat Washer	1
28	5/8" ID Step Spacer	1
29	10" Extension Spring	2
30	Lock Lever Spring	1
31	Stop Block	2
32	QR-A1 Quick Release Pin	2
33	Quick Release Pin Washer	2
34	Pivot Lever Support Bracket	1
35	Pivot Lever Riser	2
36	Pivot Lock Lever	1
37	Winch Attachment Bracket	1
38	Quick Release Snap Rina	2

Verify that your Pushtube box includes the following hardware.

Figure 5



6) Connect the Swivel Plate Assembly to the Lift Arm Assembly via the 5/8" Bolt (#25), Washer (#27), Nylock Nut (#26) and Pivot Ring (#28) shown in **(Figure 6).** Tighten the 5/8" hardware securely but do not over tighten such that the swivel plate no longer moves side to side.



Figure 6

7) Attach the Pivot Lever Support Bracket (#34) to the Lift Arm Assembly via the 3/8" Bolts (#16) and Washers (#17) included in your kit (Figure 7).







8) Attach the Pivot Lever Risers (#35) to the Lift Arm Assembly via the 3/8" Bolts (#16) and Washers (#17) included in your kit **(Figure 8).** Do not tighten the 3/8" hardware at this time, it will be tightened after Step 9.



9) Attach the Pivot Lock Lever (#36) to the Pivot Lever Risers (#35) (Attached in Step 8) via the ¼" Bolt (#12), Washer (#14), Nylock Nut (#13) and Aluminum Spacer (#15) included in your kit. (Figure 9). Tighten the ¼" hardware such that the Pivot Lock Lever can still move freely. You can now tighten the 3/8" bolts from the previous step to secure the Pivot Risers. Using needle nose pliers, attach the Lock Lever Spring (#30) to the nose of the Pivot Lock Lever (#36) and the slit in the Pivot Lever Support Bracket (#34). The Pivot Lock Lever should move freely when the handle is depressed and return promptly when released.



Figure 9



10) Install the Winch Attachment Bracket (#37) using the 3/8" Bolts (#16) and Washers (#17). (Figure 10)



Position your blade so that the ends of the Swivel Plate fit between the tabs on the Plow Blade. Attach the blade to the Swivel Plate using the ½" Bolts (#22), Washer (#24) and Nylock Nut (#23) included in your kit (Figure 11). Tighten the bolts securely but <u>do not over tighten</u>.



Figure 11



23001 Industrial Blvd Rogers, MN 55374

12) Install the 10" Extension Springs (#22) using the Eye Bolts (#23) and 3/8" Regular Nuts (#12) included in your kit. Install the Spring Eyelet into the Swivel Plate on one end and into the 6" Eye Bolt on the other end (Figure 12). Tip the blade back and insert the 3/8" Eye Bolts into the top two holes on the blade. Tighten the 3/8" Regular Nuts until the nuts are entirely threaded, but no further at this time. Proceed to Step #13 (Blade Stop Blocks) and then tighten the 3/8" Regular Nuts to tension the springs. If your blade tends to tip forward while plowing you can increase the tension of the springs by tightening the 3/8" nuts.



Figure 12

13) Install the Blade Stop Blocks (#31) using the 3/8" Bolts (#21), Washers (#17), and Nylock Nuts (#18) included in your kit (Figure 13). The Stop Blocks are used to adjust the retracted position of the Plow Blade. The four sides of the blocks are machined to be different thicknesses from the center bolt hole. This allows the retracted position of the blade to be tilted forward or back a couple of degrees. The majority of users setup their stop blocks with the shortest side facing the blade (See Figure13A)



Figure 13





Figure 13a

14) Use the QR-A1 Quick Release Pins (#32), Quick Release Pin Washers (#33) and Snap Ring (#38) to secure the rear tab on the Lift Arm Assembly to the plow mount tabs (Not Shown). Insert the Quick Release Pins as shown in (**Figure 14**).



Figure 14



PLOW OPERATION TIPS

Long Distance Travel

If you plan on driving ¼" mile or more without plowing, we suggest attaching the plow to your UTV frame with a ratchet strap or something similar to minimize the bouncing action on the plow and preserve your UTV suspension system.

Throwing Snow

Fully designed in the USA, your Denali Plow Blade was engineered to have an over-centered blade and 65° attack angle. The over-centered design insures that snow is transitioned up the plow blade and rolled forward. Not only is air removed from the snow during the process but this blade design reduces the chance that snow will back up in front of the blade and build large side walls that fall back onto the plowed path. The 65° attack angle maximizes wear bar life and reduces wear on your plowing surface.

Warranty

Your Plow Blade has a **Three-Year Warranty** against manufacturing defects. This does not cover user error or consumable materials such as the wear bar and paint.

Maintenance

Some degree of paint scratching or chipping will inevitably happen during the plowing season. We recommend purchasing a rust preventing paint at the end of the season to be applied per the manufacturer's recommendation on areas of exposed metal.

Enjoy the plowing season.....you'll be the envy of your neighbors!