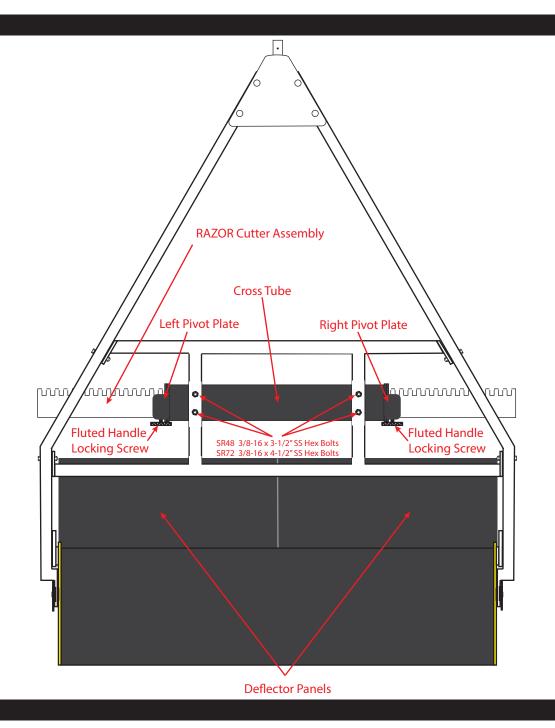


# **SNO-RAZOR** <sup>®</sup> Assembly Instructions



### TOOLS



1/2 (13MM) WRENCH

9/16 (14MM) WRENCH

3/46-POINT WRENCH

1/2 (13MM) SOCKET 9/16 (14MM) SOCKET & RACHET

> PHILLIPS SCREWDRIVER

### PARTS & HARDWARE

#### SNO-RAZOR Assembly

- 1 Cutter Blade Assembly
- 1 Cross Tube
- 2 Pivot Plates (1 Right and 1 Left)
- 2 SNO-RAZOR Legs
- 2 Black ABS Deflector Plates
- 1 Magnetic Base Angle Indicator

**SNO-RAZOR 48** 

1 - Sub-Frame

- 4 3/8-16 x 1-3/4" Stainless Steel Hex Bolts
- 4 3/8-16 Stainless Steel Nylock Nuts
- 12 10-32 x 3/8" Stainless Steel Truss Screws
- 4 3/8-16 x 3-1/2" Stainless Steel Hex Bolts
- 4 3/8-16 Stainless Steel Nylock Nuts
- 4 5/16-18 x 1" Zinc Shear Bolts
- 4 5/16-18 Zinc Nylock Nuts

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- 16 10-32 x 3/8" Stainless Steel Truss Screws
- 4 3/8-16 x 4-1/2" Stainless Steel Hex Bolts
- 4 3/8-16 Stainless Steel Nylock Nuts
- 4 3/8-16 x 1-1/4" Zinc Shear Bolts
- 4 3/8-16 Zinc Nylock Nuts

#### STEP 1: SUB-FRAME

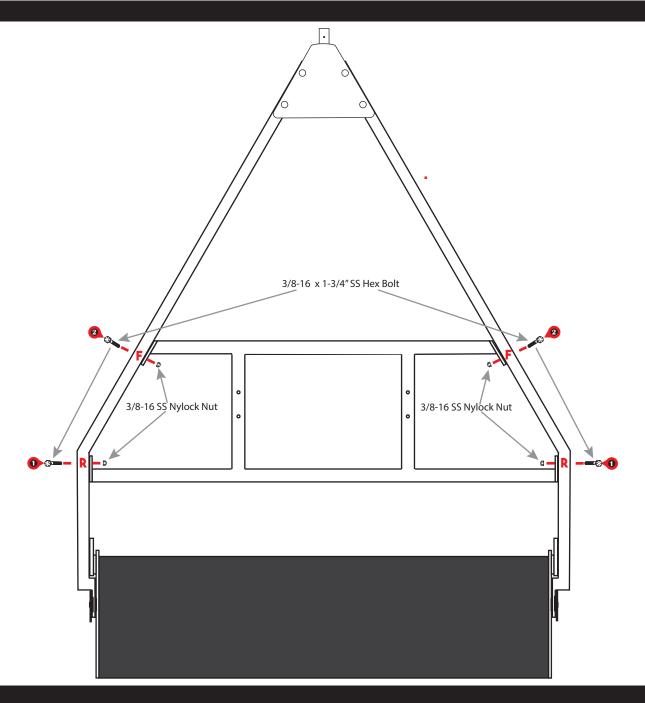
#### \*IF NOT CURRENTLY INSTALLED\*

Loosen the nuts on the Hitch Plate, but do not remove them. Unwrap the Sub-frame and place between the drawbars with the long section closest to the chassis and the Deflector mounting holes facing down or under the Sub-frame.

Insert the Stainless Steel Hex Bolt from outside of the drawbars then through the Drawbar Hole "R" and then through the Rear Drawbar Bracket. Finger tighten the Nylock Nut and proceed to the opposite side and repeat.

With the rear of the Sub-frame secured with the bolts, swing the Sub-frame up to align the Drawbar Holes "F" with the Front Sub-frame Bracket. Insert the Stainless Steel Hex Bolts from the outside of the drawbars, through Drawbar Hole "F" and then through the Front Drawbar Bracket. Finger tighten the Nylock Nut and proceed to the opposite side and repeat. Once all four Sub-frame Bolts are in place, tighten using a 9/16 socket and wrench.

Retighten the Hitch Plate Nuts



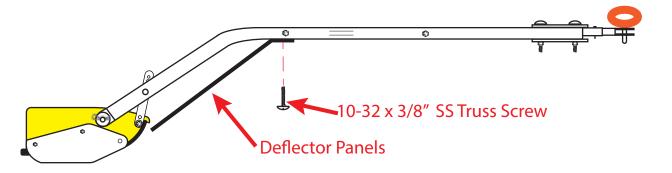
#### **STEP 2: DEFLECTOR PLATES**

Below the Sub-Frame at the rear (toward the Chassis) you will locate the threaded mounting holes for the deflectors.

Using a toothpick, or similar, add a touch on Anti-Seize to each threaded hole.

Line up the deflector plate where the holes are to the far outside edge and the textured side of the plate is facing up. Be sure to place the deflector plate in front of the chassis to properly direct the snow below the chassis.

Insert the #10-32 Truss Screws but do not tighten until all screws are in on both plates. Once all screws are in place, push the plates from the outside edge toward the center to minimize the gap between the plates. Tighten the screws on one plate and then push the opposite side toward the center and tighten the screws.

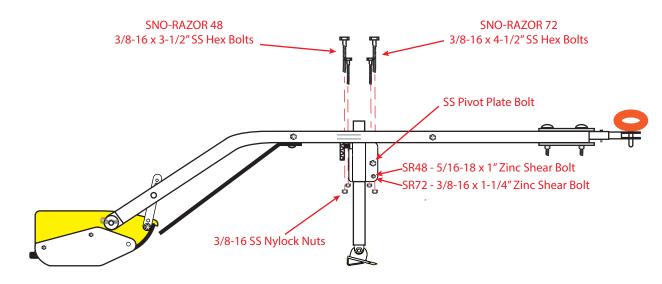


#### STEP 3: SNO-RAZOR ASSEMBLY

Apply Anti-Seize to the threads on both Fluted Handle Locking Screw threads. Insert and tighten the Fluted Handle Locking Screws to hold the legs and razor cutter assembly in place.

Move the assembly below the drawbars and sub-frame with the fluted handle locking screws in the rear and the notched side of the cutter blade facing forward (toward the hitch plate). Align the 4 holes in the sub-frame to the 4 holes in the SNO-RAZOR<sup>®</sup> Cross Tube.

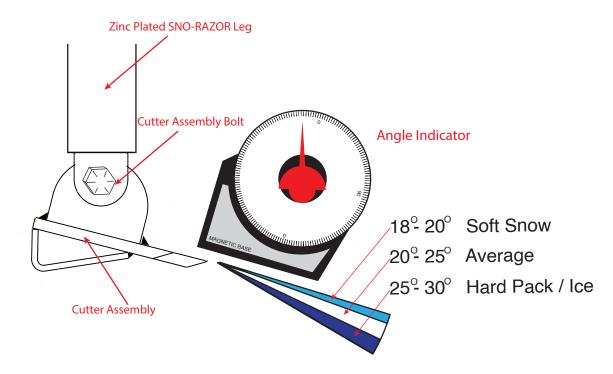
Insert the 4 3/8-16 SS Hex bolts down through the sub-frame, then through the Cross Tube. Loosely tighten the 3/8-16 SS Nylock Nuts on each. Once all four are in place, tighten to approximately 12 ft-lbs.



#### STEP 4: CUTTER BLADE ANGLE

Loosen the two Cutter Assembly Bolts at the bottom of the SNO-RAZOR<sup>®</sup> legs. Place the magnetic base angle indicator in the center of the cutter assembly facing left or right at a 90 degree angle of the cutter assembly.

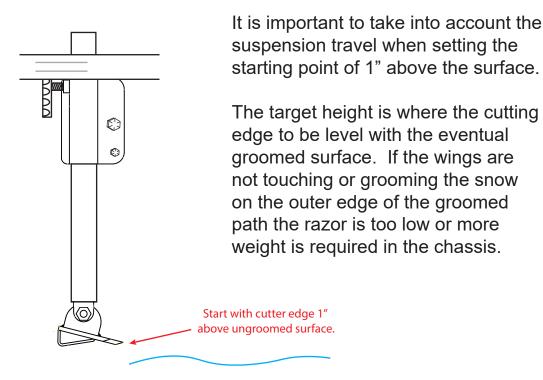
Rotate the Cutter Assembly to an angle appropriate to your snow coniditions. For soft or fresh snow adjust to between 18 and 20 degrees. Increase the angle the more dense or hard packed the snow conditions with a maximum angle being 30 degrees. Retighten the cutter assembly bolts to a torque of 70 ft-lbs.



#### STEP 5: CUTTING EDGE HEIGHT

To raise or lower the cutter assembly, loosen the fluted handle locking screw at the rear of the pivot plates. Raise or lower the cutting assembly where the cutting edge of the blade is approximately 1 inch above the ungroomed surface.

Retighten the Fluted Handle Locking Screws so that vibrations will not allow the assembly to slide up or down. Groom a short distance and adjust as necessary. It is not advised to lower more than 1/2" at a time.



#### STEP 6: MAINTENANCE & STORAGE

This precision SNO-RAZOR<sup>®</sup> will last many years with proper care. It should be cleaned and a light coat of oil applied to all surfaces and stored inside during the off season.

Treat the SNO-RAZOR<sup>®</sup> like a fine knife, a rusty SNO-RAZOR<sup>®</sup> will not perform well. The pivot plate bolts should be snug, but not tight, to allow the SNO-RAZOR<sup>®</sup> to swing up if it hits a hidden obstacle.

Recheck the SNO-RAZOR<sup>®</sup> angle any time you shear a bolt. There are four extra shear bolts in your hardware box. Do not use any bolt harder than a Grade 2, (standard hardware grade) or damage to the SNO-RAZOR<sup>®</sup>, groomer or snowmobile can occur.

Prior to using your groomer each season, remove the Shear Bolts and make sure the SNO-RAZOR<sup>®</sup> swings up freely. Apply a film of grease to the mating surfaces of the pivot plates and replace the Shear Bolts. Remove the breakaway coupler from the Hitchplate receiver and coat the coupler shaft with a film of grease and replace the Shear Pin.

## **SNO-RAZOR**<sup>®</sup>



FROM OUR TEAM TO YOURS, THANK YOU TRUSTING YOUR SNOW GROOMING NEEDS TO US. MANY HOURS HAVE GONE INTO MAKING AND DELIVERING HIGH QUALITY EQUIPMENT THAT IS EXPECTED TO LAST A LIFETIME. WE HOPE YOU ENJOY UTILIZING YOUR SNOW GROOMERS EQUIPMENT AS MUCH AS WE ENJOYED MAKING IT.

> 1180 N Mountain Springs Pkwy Springville, UT 84663 800-430-7120 www.snowgroomers.net

