

BOSS PRODUCTS A Division of Northern Star Industries, Inc. P.O. Box 787 Iron Mountain MI 49801-0787 www.bossplow.com

V-XT BLADE WING EXTENSION KIT INSTALLATION INSTRUCTIONS

Kit Number: MSC08063

Covering Plow Sizes:

8'2" and 9'2" Steel Power V-XT 8'2" and 9'2" Poly Power V-XT

PUSHING THE EDGE

WARNING

Serious injury or death can result if you do not follow these instructions and procedures which are outlined further within your owner's manual

- ALWAYS detach Blade Wing Extensions before transporting plow.
- Many newer trucks are equipped with air bags. DO NOT under any circumstances disable or remove or relocate any sensors or other components related to the operation of the air bags.
- Always follow the vehicle manufacturer's recommendations relating to snowplow installation. For recommended vehicle models refer to the Boss Snowplow Application Chart and Selection Guide.
- Vehicles equipped with air bags are designed such that the air bags will be activated in a frontal collision equivalent to hitting a solid barrier (such as a wall) at approximately 14 mph or more, or, roughly speaking, a frontal perpendicular collision with a parked car or truck of similar size at approximately 28 mph or more. Careless or high speed driving while plowing snow, which results in vehicle decelerations equivalent to or greater than the air bag deployment threshold described above, would deploy the air bag.
- Read this manual carefully before using Blade Wing Extensions.
- Keep all body parts away from mating areas when attaching and detaching Blade Wing Extensions.
- When transporting, position plow so as not to block vision or plow headlights.
- DO NOT change blade position when traveling.
- DO NOT exceed 40 mph when transporting plow.
- DO NOT exceed 14 mph when plowing.
- Always lower blade when vehicle is not in use.
- Make sure plow is properly attached before moving vehicle.

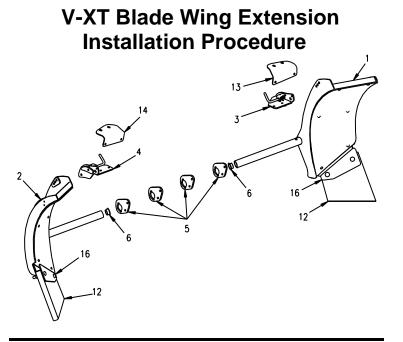


Figure 1. V-XT Blade Wing Extension Parts

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| ITEM # | QTY. | PART # | DESCRIPTION | |
|--------|------|----------|---|--|
| 1 | 1 | BAL08052 | DRIVER SIDE BLADE WING W/ SKIN | |
| 2 | 1 | BAR08062 | PASSENGER SIDE BLADE WING W/ SKIN | |
| 3 | 1 | BAL09900 | DRIVER SIDE SPRING PIN BRACKET | |
| 4 | 1 | BAR09901 | PASSENGER SIDE SPRING PIN BRACKET | |
| 5 | 4 | BAX08035 | PLOW RIB BRACKET | |
| 6 | 2 | MSC08040 | TUBE PLUG | |
| 7 | 14 | HDW01728 | 1⁄2"-13 X 1-1/2" HEX HEAD BOLT | |
| 8 | 14 | HDW01748 | 1/2"-13 NYLON LOCK NUT | |
| 9 | 2 | HDW05576 | 3/8"-16 X 1-1/4" CARRIAGE BOLT | |
| 10 | 4 | HDW01720 | 3/8"-16 NYLON LOCK NUT | |
| 11 | 4 | HDW01733 | 3/8" FLAT WASHER | |
| 12 | 2 | BAX08057 | UNIVERSAL CUTTING EDGE | |
| 13 | 1 | BAL08061 | DRIVER SIDE SPRING PIN BASE PLATE | |
| 14 | 1 | BAR08065 | PASSENGER SIDE SPRING PIN BASE PLATE | |
| 15 | 4 | HDW01729 | 1/2" FLAT WASHER | |
| 16 | 2 | BAX08031 | EDGE MOUNTING PLATE | |
| 17 | 2 | HDW08069 | 3/8"-16 X 1-1/2 BUTTON HEAD BOLT | |

Note: This instruction manual is to be used for the installation of V-XT Blade Wing Extension Kit **MSC08063.** Applications include all XT V-Blades (Steel and Poly).

- 1) Place plow in storage position detached from vehicle with coupler tower rotated forward.
- 2) On Driver Side of plow, measure, mark, and drill two 7/16" diameter holes in Blade Top. See Figure 8.
- **3)** For older applications refer to Figure 7 for drilled rib hole reference measurements.
- 4) Mount Driver Side Spring Bracket (3) to plow using one ½"-13 X 1-1/2" Hex Head Bolt (7), one ½"-13 Nylon Lock Nut (8) and to Spring Bracket Base Plate (13) using two ½"-13 X 1-1/2" Hex Head Bolts (7), two ½" flat washers (15) and two ½"-13 Nylon Lock Nut (8).
- 5) Mount Driver Side Spring Bracket Base Plate (13) to plow using two 3/8"-16 X 1-1/4" Carriage Bolts (9), and two 3/8" -16 Nylon Lock Nuts (10). Do not tighten fasteners.

Note: Use 3/8" Flat Washers (11) to shim between Driver Side Spring Pin Bracket Base Plate (13) and top of blade if necessary.

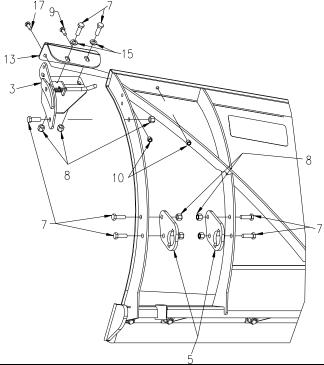


Figure 2. Mount Bracket Locations

- 6) Pull back Spring Pin and rotate upward into lock position.
- Bolt Plow Rib Bracket (5) to inside of Outside Plow Rib. See Figure 2. Do not tighten fasteners.

- 8) Bolt second Plow Rib Bracket (5) to outside of intermediate rib. See Figure 2. Do not tighten fasteners.
- 9) Insert Driver Side Blade Wing (1) into Plow Rib Brackets (5).
- **10)** Slide Driver Side Blade Wing (1) in until Attach Pin passes through first Plow Rib Bracket (5). See Figure 3.
- **11)** Rotate Driver Side Blade Wing (1) until profile lines up with moldboard. Engage Spring Pin through hole corresponding to plow type. See Figure 5. Position Driver Side Blade Wing (1) so it's inside rib is parallel with Outside Plow Rib and Universal Cutting Edge (12) is contacting ground. Tighten all fasteners.
- **12)** Adjust Universal Cutting Edge (12) as necessary. See Figure 6.

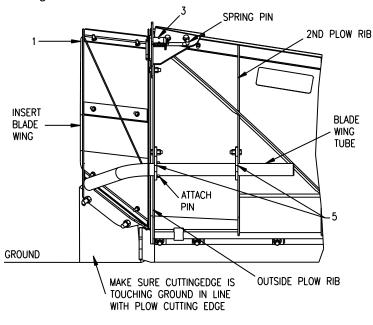


Figure 3. V-XT Blade Wing Extension Assembly G10574

- **13)** Attach and detach Driver Side Blade Wing (1) several times to ensure proper fit. Attach plow to truck and determine if all cutting edges are contacting ground. If not, loosen fasteners, adjust to proper orientation, and re-tighten.
- 14) Make sure all fasteners are tightened. DO NOT OVER TIGHTEN. See guide to recommended assembly torque located in this manual (Figure 10). It is important that all fasteners be properly torqued to assure a safe operating plow. Re-tighten all fasteners after 2 hours of plowing.
- 15) Repeat steps 2-14 for Passenger Side.

16) Attach plow to truck. Make sure plow sits level and all cutting edges are contacting ground.

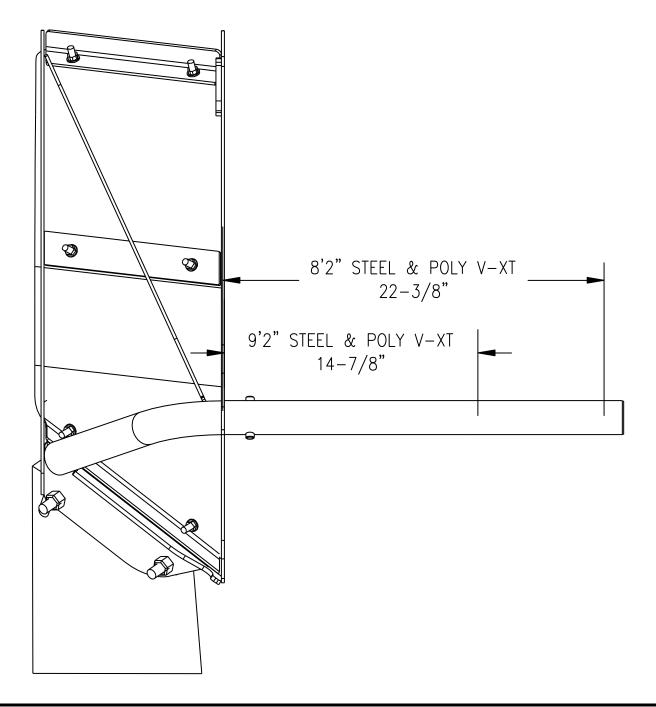
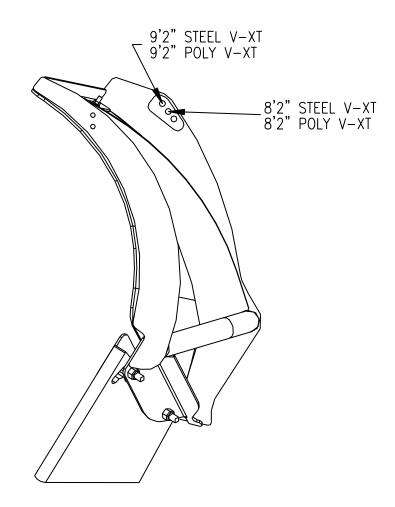


Figure 4. V-XT Blade Wing Tube Cut Locations

17) <u>This step is optional</u>. After installation is complete, Blade Wing Tube can be shortened by marking and cutting end of tube to ½" beyond inside of second Plow Rib Bracket (5). Tube Plug (6) must be inserted in end of Blade Wing Tube following cut to prevent corrosion.



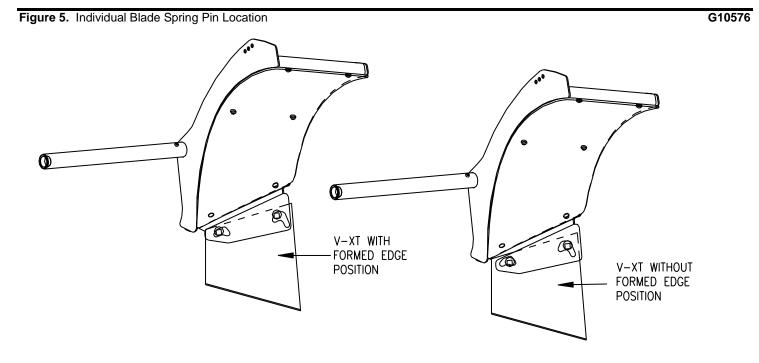
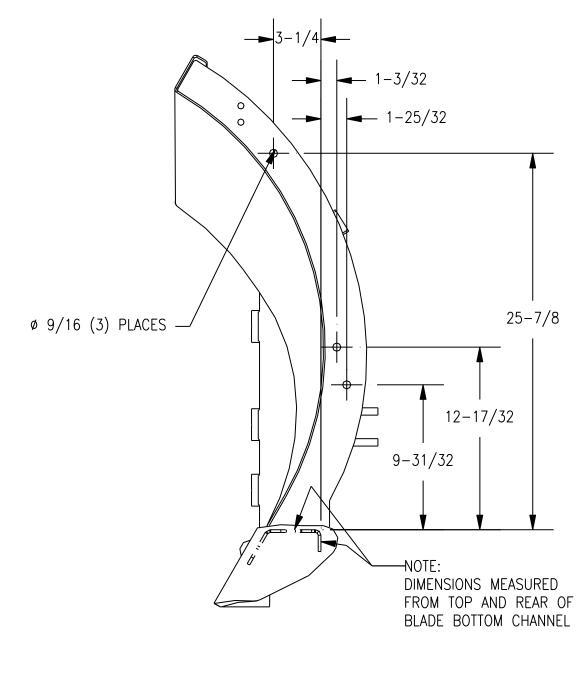


Figure 6. Cutting Edge Adjustment



| PLOW SIZE | ТҮРЕ | | |
|--------------------|---------------------|--|--|
| 8'2" AND 9'2" V-XT | STEEL & POLY V-PLOW | | |

Figure 7. Plow Rib Drilled Hole Reference Measurements

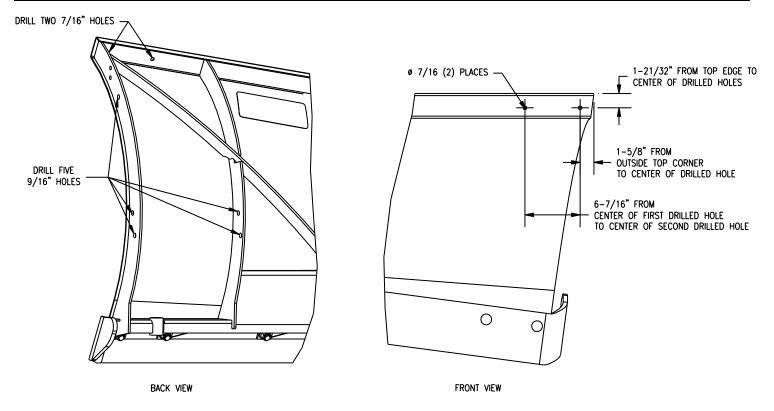


Figure 8. Blade Top Drilled Hole Measurements (INSIDE TOP POLY-V HOLES ARE PRE-CUT)

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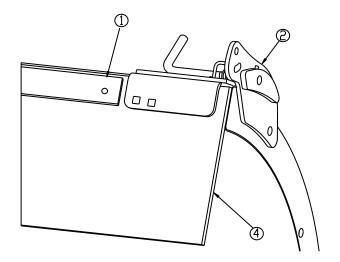


Figure 9. Blade Wing Bracket Installed on Blade

- 18) For plows with deflectors installed: Cut end of Strap (1) off flush with Blade Wing Bracket (2). Drill and replace bolt in end of Strap (1).
- 19) Deflector Belting (4) must be mounted underneath Blade Wing Bracket (2).

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|------------------|-------------------------|--|-----------|------------|
| Diameter / Pitch | GRADE 5 | GRADE 8 | GRADE 8.8 | GRADE 10.9 |
| 1/4-20 | 6 | 9 | | |
| 5/16-18 | 14 | 19 | | |
| 3/8-16 | 23 | 33 | | |
| 7/16-14 | 38 | 53 | | |
| 1/2-13 | 56 | 80 | | |
| 9/16-12 | 82 | 116 | | |
| 5/8-11 | 113 | 159 | | |
| 3/4-10 | 201 | 283 | | |
| M10 X 1.25 | | | 36 | |
| M10 X 1.5 | | | | 49 |
| M12 X 1.75 | | | | 71 |
| M14 X 2.0 | | | | 80 |

GUIDE TO RECOMMENDED ASSEMBLY TORQUE

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ALL TORQUE VALUES ARE IN FOOT-POUNDS (FT.-LB.)

* The torque values listed above are based on dry, coated bolts, variables such as oil, or other lubrications may appreciably alter these values and must be taken into consideration.

NOTE: IT IS IMPORTANT THAT ALL FASTENERS BE PROPERLY TORQUED TO ASSURE A SAFE OPERATING PLOW.

Figure 10. Recommended Assembly Torque