

Installation Instructions

PW22 Pro-Wings Snowplow Attachments

Patent No. 4,962,600

Before Installing:

1. Verify that the Pro-Wings are recommended for your plow model.
2. Check to see that all the parts in the bill of materials have been received to prevent any complications during installation.
3. Read and understand all instructions to prevent installation errors.

Applications: Pro-Wings are a one size fits most plow accessory. The fit of the Pro-Wings will vary depending on your plow model. Pro-wings are not recommended for Meyer™ 2 Meter, Western™ 8-1/2', or any brand 9' or 10' plow (except Meyer™ 9'). Pro-Wings are not recommended for use on plows with polymer mold boards.

WARNING

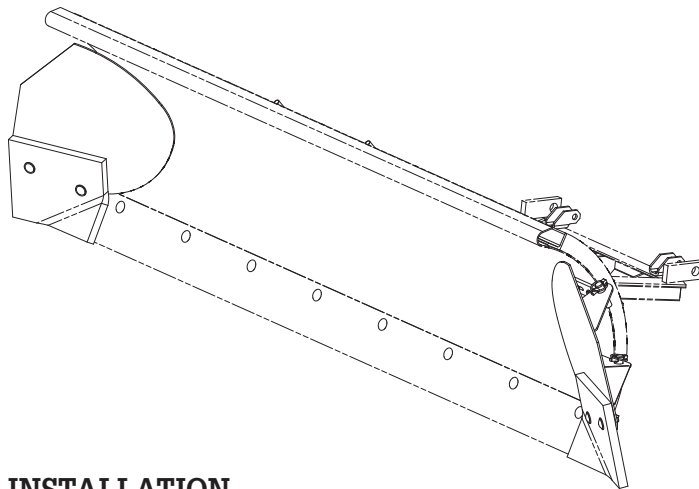
Remove Pro-Wings attachments before traveling on public streets, as the plow blade may be over the legal size with the wings attached.

WARNING

Pro-Wings will not withstand the same degree of abuse as the plow blade. Avoid hitting solid objects. Plow with care.

WARNING

Pro-Wings' attachments add additional weight to your plow blade. Verify your vehicle's suspension can handle the additional weight of Pro-Wings. As well, the lifting ability of your power unit may be diminished and premature failure of your power unit may occur.



INSTALLATION

Note: A new or near new steel, edge punched (not center punched) cutting edge should be installed on the plow blade before installing Pro-Wings.

1. Park the truck on a flat level surface and lower the plow blade to the ground. If the plow is not mounted on a truck, place the plow blade on a flat level surface and lift the plow's a-frame until it is level with the ground (usually about 8-10").
2. Locate the two driver's side pin brackets. With two c-clamps, clamp the pin brackets to the driver's side of the plow as shown in figure 1. Hang the driver's side Pro-Wing on the pin brackets. Adjust the position of the pin brackets until the top and bottom corners of the Pro-Wing are positioned as shown in figure 2.
3. Rotate the Pro-Wing towards the plow's mould board until the Pro-Wing's pin is touching. Mark with a pencil the location of the center & outboard edge of the pin as shown in figure 3.
4. After the pin location has been marked remove the Pro-Wing. Make a mark 9/16" from the pin location (marked in step 3) towards the inside of the plow such that the edge of a 1-1/8" hole will be on the original mark made in step 3 as shown in figure 4. Drill or torch cut a 1-1/8" hole on the new mark.

—continued inside

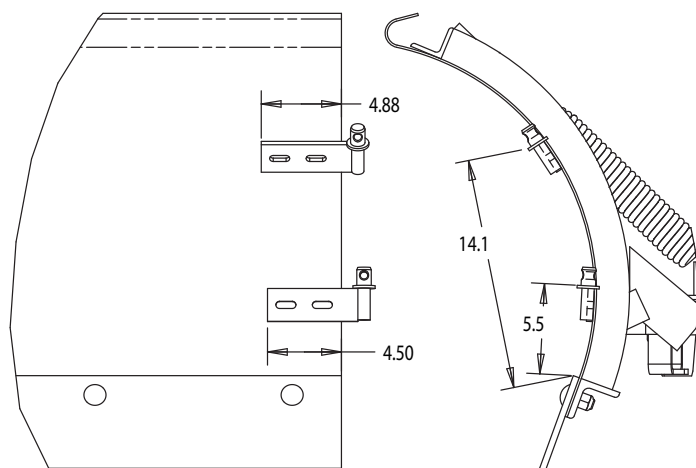


FIGURE 1.
CLAMP PIN BRACKETS AS SHOWN.
APPROXIMATE POSITION,
ADJUSTMENT REQUIRED.

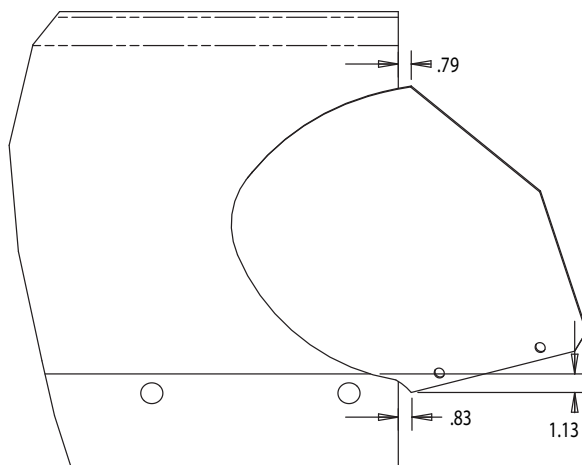


FIGURE 2.
APPROXIMATE LOCATION OF WING AFTER
THE PIN BRACKETS HAVE BEEN ADJUSTED

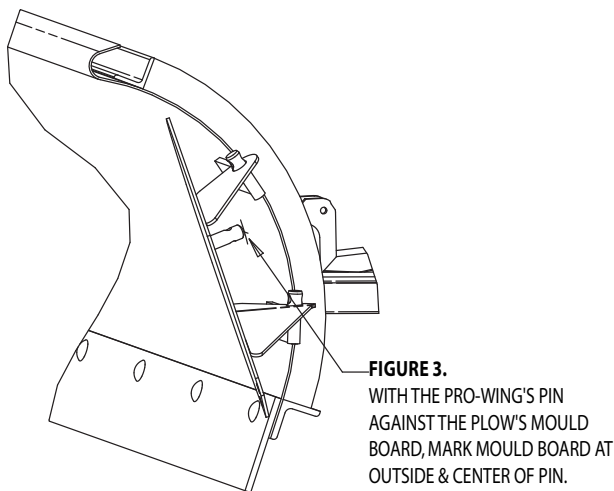


FIGURE 3.
WITH THE PRO-WING'S PIN
AGAINST THE PLOW'S MOULD
BOARD, MARK MOULD BOARD AT
OUTSIDE & CENTER OF PIN.

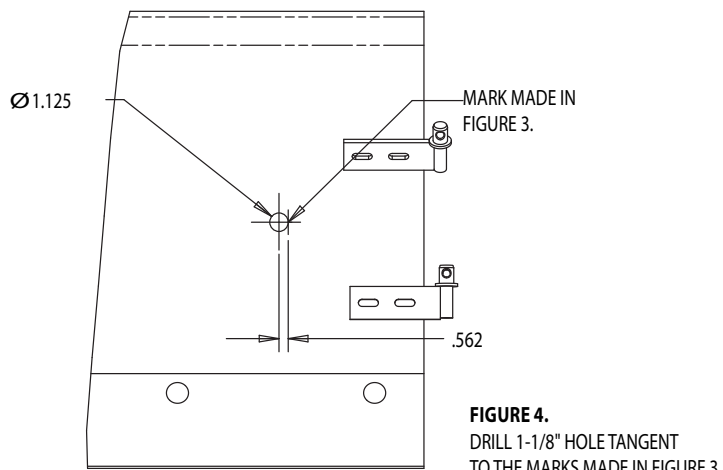


FIGURE 4.
DRILL 1-1/8" HOLE TANGENT
TO THE MARKS MADE IN FIGURE 3.

5. Re-assemble the Pro-Wing and verify the pin will rotate through the hole in the plow. If the pin does not rotate through the hole, re-adjust the pin bracket locations until it will. Mark the position of the pin brackets.

6. The pin brackets may be attached by either welding or bolting. (6a) If the brackets are being welded into position, tack the brackets into position and before welding complete, re-assemble the Pro-Wing to verify the pin still rotates through the 1-1/8" hole. (6b) When bolting the pin brackets into position, mark the slot positions on the plow.

Mark the centers for each of the four bolt holes required. For Meyer™ plows, the outer bolt hole must go through the point of the outside rib. For all other plows, verify that the holes will avoid the ribs on the backside of the plow. Drill four 3/8" holes in the positions marked.

7. Assemble the pin brackets to the plow using the 3/8" x 1" bolts, lock washers, and nuts supplied. For Meyer™ plows, use 2-3/4" long bolts in place of the 1" long bolts to go through the outer rib.

8. Place the Pro-Wing on the pin brackets and

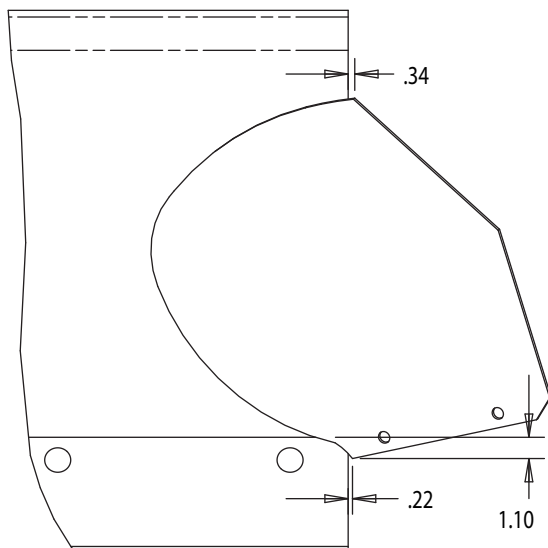


FIGURE 5.
APPROXIMATE LOCATION OF
WING AFTER INSTALLATION.

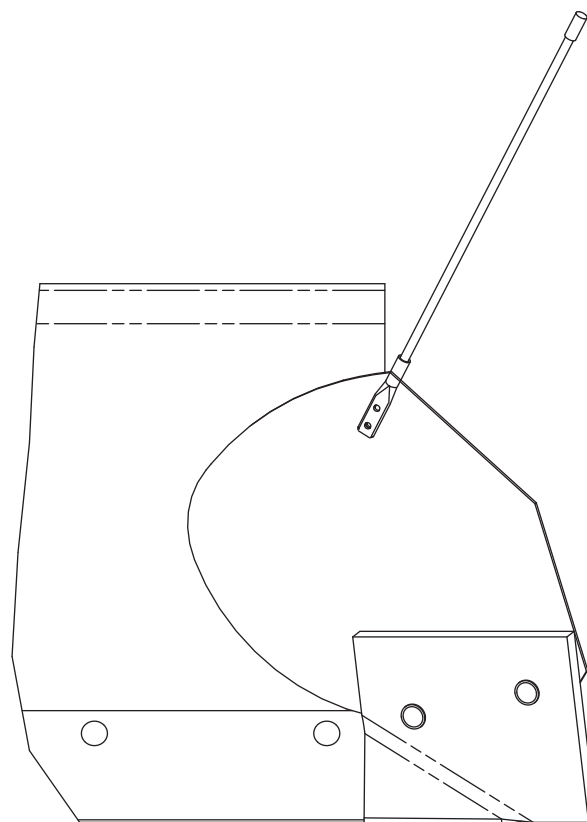


FIGURE 6.
LOCATION OF CUTTING EDGE.
BLADE GUIDE INSTALLATION.

rotate the wing through the plow blade hole. Assemble 5" x 5" washer over the pin and secure the wing to the plow with three of the supplied lynch pins. The 7/8" flat washers supplied are to be used to remove any play between the Pro-Wing pin and the 5" x 5" washer.

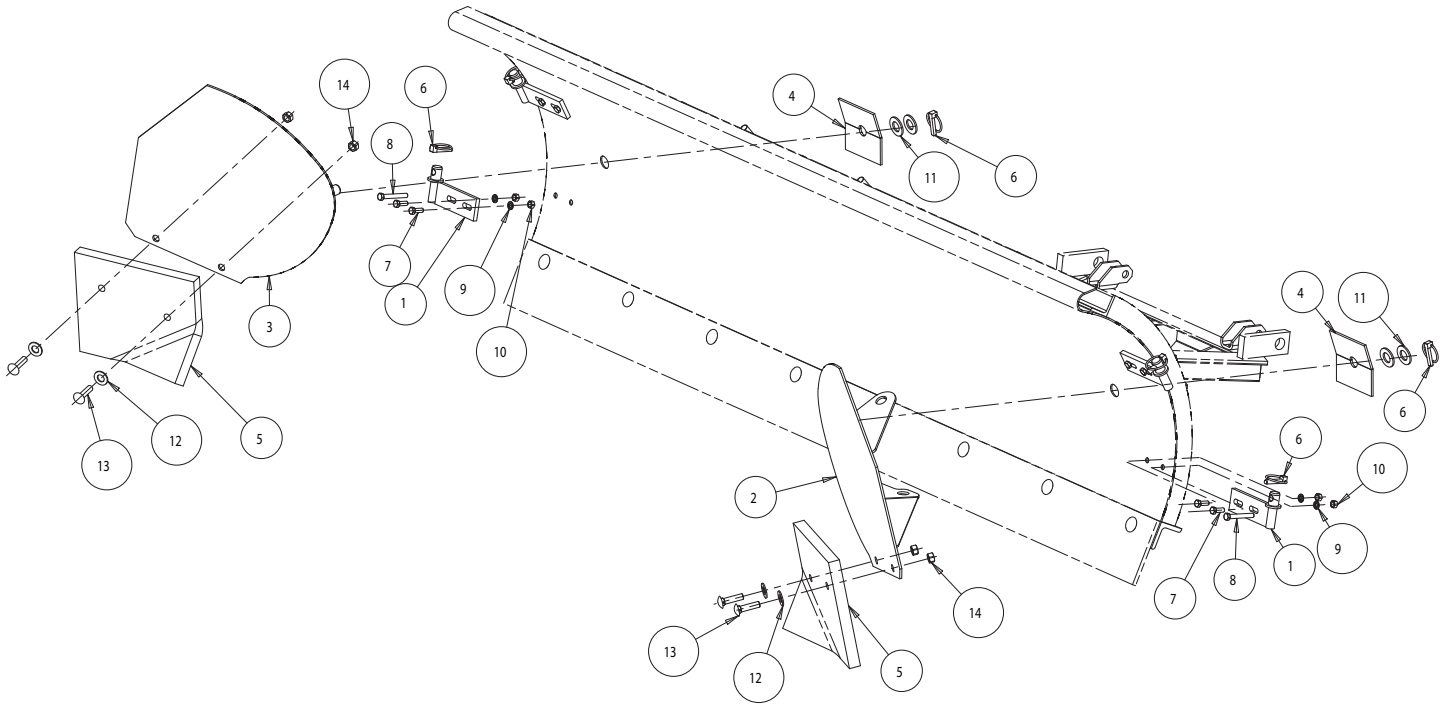
9. Verify the plow's cutting edge on flat ground and the a-frame either mounted to the truck or level with the ground. Hold rubber cutting edge tightly against the ground, the plow's cutting edge and the Pro-Wing as shown in figure 6. Mark the location of the two holes in the bottom of the Pro-

Wing on the rubber cutting edge from the rear. Drill two 3/4" holes through the rubber cutting edge where marked.

10. Remove the wing from the plow and bolt the cutting edge to the wing using the 1/2" carriage bolts, 5/8" flat washers and nuts supplied. Re-assemble the Pro-Wing to the plow.

11. Repeat steps 2 through 10 for the passenger's side Pro-Wing.

12. Blade guides (not included) can be bolted on when desired. See figure 6.



Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3000307	4	Weldment, Pin Bracket Set, (2) DS & (2) PS
2	0020100	1	Wing, Pro-Wings Driver's Side
3	0020200	1	Wing, Welded Pro-Wing CS
4	0020700	2	Washer, Square Pro-Wing
5	0020500	2	Edge, Pro-Wing Rubber
6	0020600	6	Pin, 7/16" x 1-3/4" Lynch Yellow Zn
7	-	8	Screw, HHC 3/8-16 x 1" Gr 5 Zp
8	-	4	Screw, HCS 3/8-15 x 2.75" Zp
9	-	8	Washer, Lock RHS-3/8" Zn
10	-	8	Nut, 3/8-16 Hex Zp
11	-	4	Washer, Fl - 7/8" SAE Zn
12	-	4	Washer, 5/8" SAE Flat Zn
13	-	4	Bolt, 1/2-13 x 2" Carriage Gr 1 Zn
14	-	4	Nut, 1/2-13" Hex Gr 5 Zp

WARRANTY

Buyers Products Co. warrants all truck/trailer hardware manufactured or distributed by it, to be free from defects in material and workmanship for a period of one year from date of shipment. Parts must be properly installed and used under normal conditions. Any product which has been altered, including modification, misuse, accident or lack of maintenance will not be considered under warranty. Normal wear is excluded. The sole responsibility of Buyers Products Co. under this warranty is limited to repairing or replacing any part or parts which are returned, prepaid, and are found to be defective by Buyers Products Co. Authorization from Buyers Products Co. must be obtained before returning any part. No charges for transportation or labor performed on Buyers' products will be allowed under this warranty.