How Dan Built His Snow Plow

To begin with you will need a reliable tractor. I selected the Ford 9N for it's excellent reputation, good looks and it's user friendliness. The 3-point bale spear works nicely for both transporting hay to my horses and adding weight for plowing when needed.

The plow blade and base are first laid on a flat surface (barn floor). I then used two 10' sections of 2" heavy wall pipe threaded on one end. Mark the blade base in 2" for the end and 8" from the end. Drill for ½" bolts. Mark both pipe ends (not threaded end) in the same manor. Use ½" grade 8 bolts with washers and locking nuts to attach pipe to outer side of base. Leave this connection loose for now, as it will have to be able to move.
The rear mounts get tricky. Using 4" x ¼" angle iron make a "U" that is 3" wide on the inside (cut and weld two pieces together) and 6" long. Measure in and up 2" and drill for 5/8" grade 8 bolt. Use a 2" pipe coupling measure in 2" and center. Then drill for 5/8" bolt. Thread the coupling onto the end of your 10' pipe. Check for fit in rear mount. Use a large "C" clamp to hold mount onto bottom of rear fender mount. Center the mount on the fender mounting block and center punch the rear hole. Drill this mark for ½" grade 8 bolt. Once both sides are drilled, attach mount to bottom of fender mount with one ½" bolt, attach rear/threaded end of pipe to coupling, attach coupling to rear mount using 5/8" bolt, attach front of pipe to plow base with two 5/8" bolts. Tighten all bolts. Note: rear of pipe needs to move freely in rear mount. When all bolts are tight you will notice the rear mount is no longer center on fender mounting block, move it some more to ensure it is in a straight line with pipe. Center punch now for front bolt. Take the rear mount off and drill your mark for ½" grade 8 bolt. I would recommend using self locking nuts, flat washers and anti-seize on all bolts.

The winch mounts. For the winch I used a Larin WIN-1, it has a 1,500lbs pull capacity (in case I get stuck and need it for that), power in and power out with dynamic brake. You can use a different winch if you like but need the same capabilities. Cut two pieces of angle iron (I used old bed rails as their tempered steel) that will fit your brush guard from top to bottom. Mark for bolt holes that will keep the winch as close to the bumper as possible. Bolt the winch to the angle iron. Have your buddy hold this centered on your brush guard while you weld the angle iron to the brush guard. I took the guard off, blocked it up on the barn floor and welded it with a mig welder. You will need to weld a brace from the top/back corner of your brush guard to the rear of bumper (see picture).
Weld in a good solid point for the cable to hook to. Don't make it permanent, as you may need to unhook this cable to use winch for other purposes. I used angle iron to run across the base then added a Reese hitch for the hole. If I raise the cable too far it will twist or flex before it breaks anything. YES THIS WINCH IS STRONG ENOUGH TO PEEL THE BRUSH GUARD AND BUMPER OFF YOUR TRACTOR! Weld stops to the pipe so that when fully raised they will hit the edge of bumper (not the axle) cut one 2" shorter than the other. When raising the blade you will see it tip when the first stop hits that's when you stop raising it.

You will need to make a front axle brace to keep the plow frame straight. Using 4”x1/4” angle iron. Measure down 2” past the lowest point of pipe this is your length. Attach at two points on the axle. You may need to weld a tab to the angle iron and you bolt holes will differ from mine. All depends on what plow base you get but you should be able to hold the brace in place and see what you need to add and where to drill. Leave ½” of clearance from pipe to brace so it can have some breathing room when it's working.
You may also need to cut the bottom corner of your brush guard (as I did) to add clearance room for pipe. Again all depends on how wide your plow base is.

If you have any questions or need advice you can reach me through the N Tractor Club Web site (I’m Farmer Dan) or my website at http://patchofheaven.8m.com or email me dhowe@thesoftwareworks.com.

Hope this helps.
Dan Howe