Name _____

Lab # 12 -- Sheet Metal Feed Scoop

Description: The feed scoop is a project involving skills in layout, sheet metal construction and wood construction.

Materials:
24-26 ga. galvanized sheet metal
#3 common pine
1" Hardwood dowel
3d Box Nails
#8x1 1/2" pan head screw

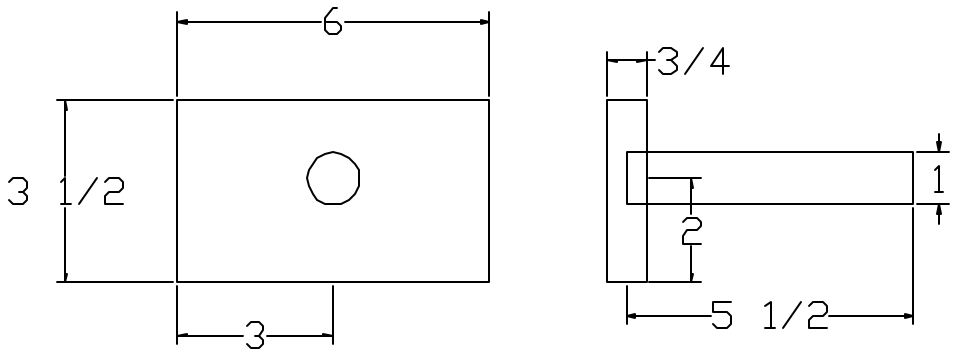
Tools:
Snips
Shear
Sheet Metal Brake
Sheet metal punch
Table Saw/Cut-off Saw
Drill Press
1" Forstner or Spade bit
Combination Square
Dividers
Scribe

Directions:

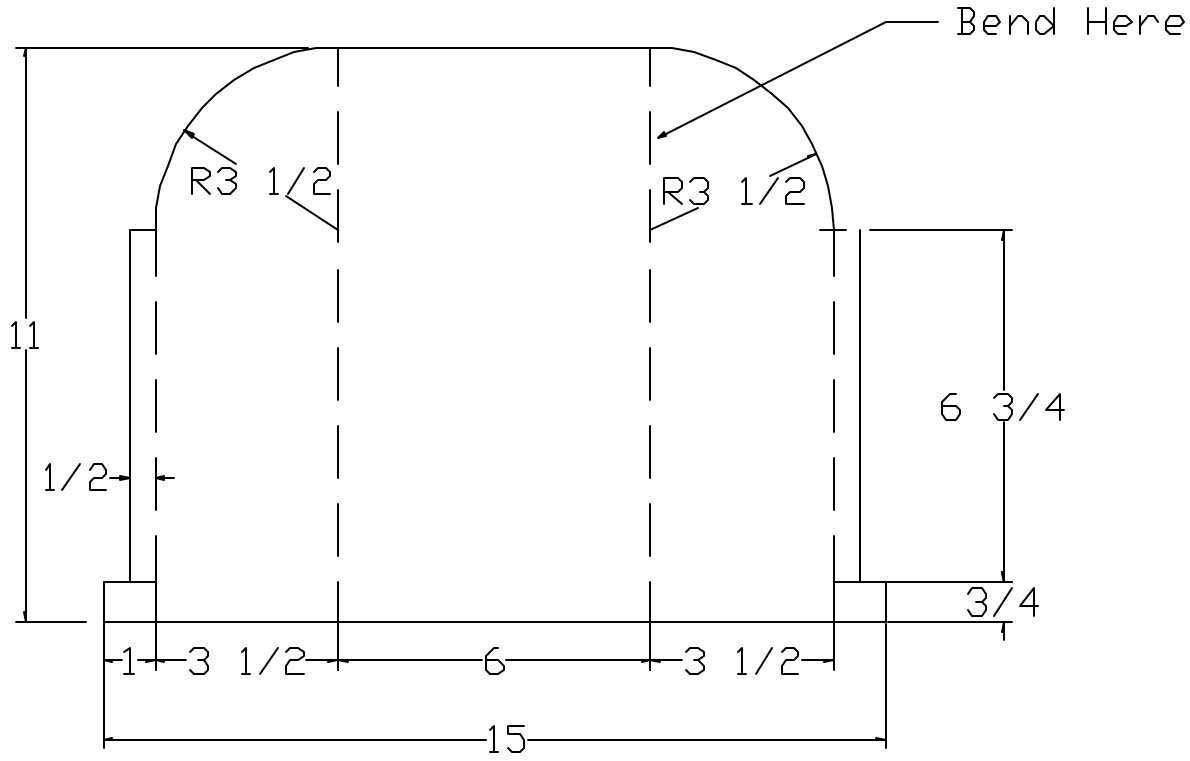
1. Layout the sheet metal scoop as shown in the diagram and cut out.
2. Fold the top edges of the scoop with the brake.
3. Break the "ears" to a 90^{o} angle and then break the main corners.
4. Cut the back of the scoop from the wood provided on the table saw or cut-off saw.
5. Locate the center of the handle and drill the 1" hole for the handle 3/8" deep. Drill a 3/16 hole in the center of the 1" hole, completely through the wood.
6. Cut the 1" dowel to length and bevel one end.
7. Cut a 1" square of sheet metal form scrap. Mark the center of the square. Punch a 3/16" hole in the center.
8. Assemble the handle to the back using glue, the 1" square washer, and a #8x11/2" screw.
9. Assemble the back and body of the scoop. Use the nails to secure the body to the back (Use 2 on the top, 2 on each side, and 3 on the bottom), pre-drill if necessary.

Grading:

Criteria (Tolerance +/- 1/6")	**Possible**	**Score**
Scoop Length	4	
Width	4	
Height	4	
Handle fit and location	4	
Quality of bends	6	
Fit between wood and metal	4	
Workmanship (appearance, nails)	4	
TOTAL	**30**	



Handle Detail
Materials: 3/4" pine, 1" dowel



Feed Scoop Sheetmetal Layout
Materials: 24-26 ga. steel

Feed Scoop
Drawn by: M. Spiess
Date: 09/04/98
Materials: Sheet metal and wood.