

# Overhead Double Implement Hitch

Author: Glen Gibson  
Instructor: Jeff Grote  
School: Lampasas High School  
City & State: Lampasas, TX



## Materials Used:

59/4" 2" pipe (some upset)  
12" 2Vi" pipe  
21" Vs" x 4" angle iron  
25" x 8" 1" steel plate  
22" 1 1/4" steel rod (includes hitch clevis)  
3/8" steel rod  
1/2" steel rod  
Approx. 1/4 of 1 sq. ft. W flat steel  
Approx. 1 Vi sq. ft. 1/2" sheet metal

## Main Frame

Take two pieces of upset tubing 2" x 142" with a curve in one end, lay them parallel touching each other, then arc weld together.

## Front Drop Pipe and Rear Hitch Plate

Cut saddles in the front end of the main frame and weld a piece of 2" tubing 30" long at a right angle to the frame. Next cut the rear pipes at the bottom of the curves at a level angle with the height of the front hitch, and weld a piece of 1" x 25" steel hitch plate to the bottom of the curves.

## Front Hitch

The front hitch is made from a broken 1 1/2" diameter rod and clevis from a railroad car. Cut the hitch an overall length of 22" including clevis. Next cut a slightly larger hole in the drop pipe at 28" from the top. Slip the rod through the holes to the clevis and weld in place.

This leaves 12" of rod to the rear. Heat this and bend to form a hook which will match the clevis ring on the harrow.

## Rear Axle

The rear axle is made from 2" x 68" upset tubing. Two front auto hubs are welded to the pipe at the spindles. After the welding is completed the axle is set under the rear hitch plate at 14" forward from the back hole in the hitch plate. Tack, square with the front hitch hole and weld solid and brace under the hitch plate.

## Bracing

Use two pieces of 2" x 57" pipe for the rear axle braces. Weld to the axle at the spindles and to the main frame at 42" toward the front frame and the rear axle at the center. The front brace is made from the same material as the rear ones and is cut 32" long. Weld to the drop directly above the hitch clevis and to the main frame at 28" toward the rear.

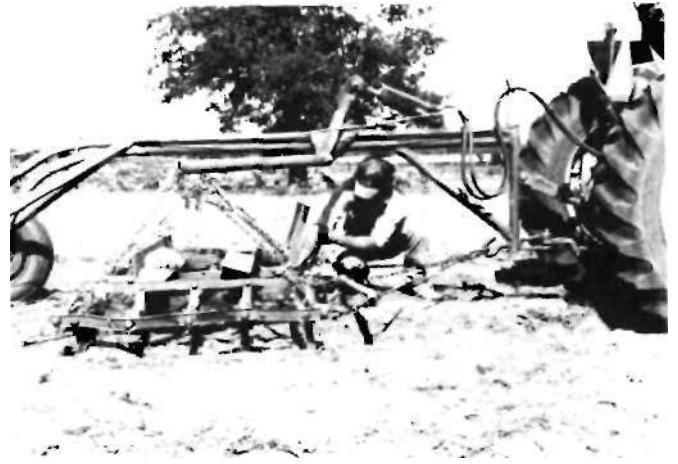
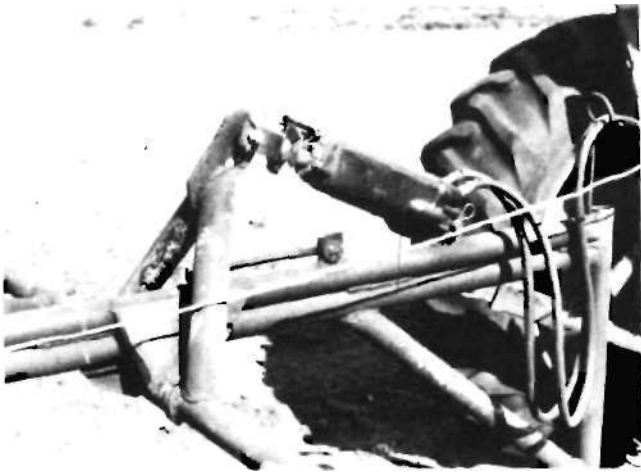
## Hydraulic Lift

### Undercarriage

Take a piece of pipe 2 3/8" inside diameter cut 12" long and weld it to the underside of the main frame 44" from the front. Brace this to the main frame with 1/2" steel on the under side, and VK," sheet metal from the top of the frame.

## Crossbar and Liftarms

Slide a piece of 2" upset tubing 68" long, through a 2 3/8"



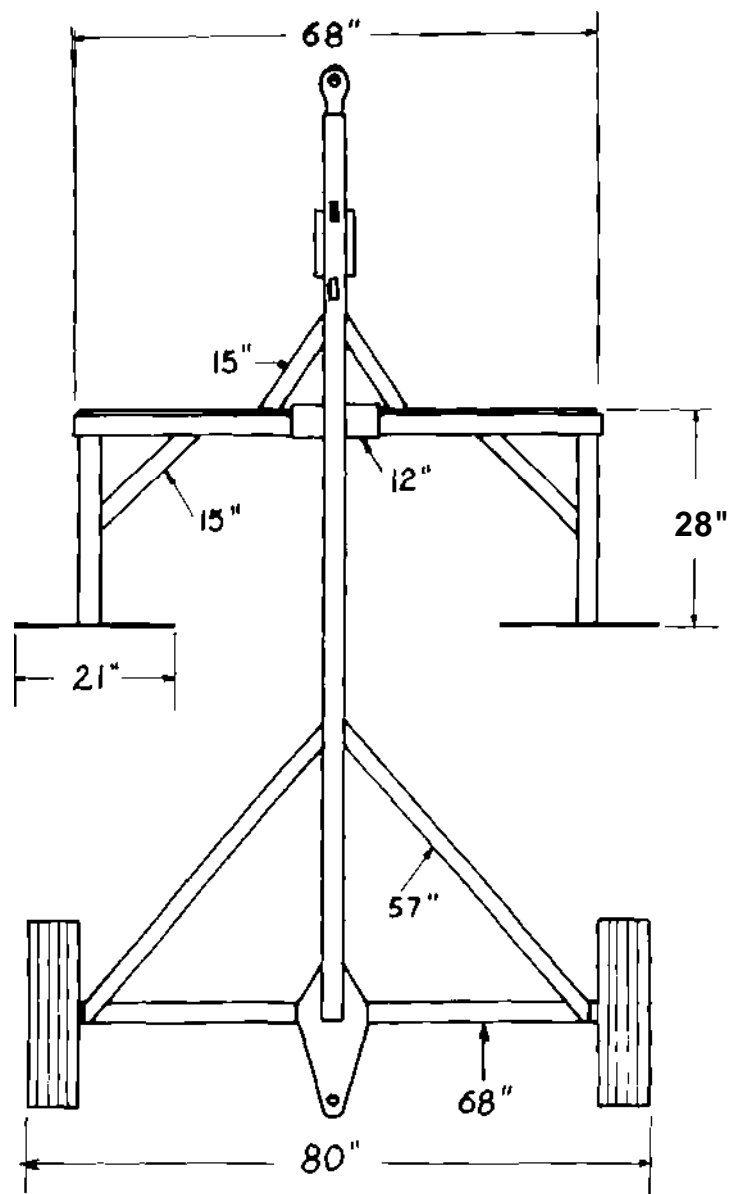
pipe leaving 28" on both sides. Curve and weld two pieces of steel  $1\frac{1}{2}$ " in width to the pipe to keep from sliding from one side to the other. Next weld two pieces of tubing 28" long to the cross pipe at a right angle. Brace these with two pieces of tubing 15" long welded from the cross pipe to the lift arm. Split a piece of  $\frac{3}{8}$ " x 4" angle iron making two pieces of  $\frac{3}{8}$ " flat iron and cut 21" long and weld to the end of the lift arms forming a "T" shaped lift arm. Cut two holes in each end of the flat iron. Slot toward the bottom to form catches for  $\frac{1}{2}$ " chain.

#### Cylinder Arms

Use two pieces of tubing 15" long as risers to the cylinder. Weld them to the crosspipe at the ends of the 2VH" pipe. Weld together at the top to form the shape of a roof of a house. At the top weld a piece of  $\frac{3}{8}$ " steel between the two risers. Cut a hole in the top for the cylinder pin.

#### Cylinder Mounts, Holdup Rod and Hose Supports

Cut the bottom cylinder mount from  $\frac{3}{8}$ " steel 4" x 4" and weld to the top pipe at the main frame 17" from the front and cut a hole in this for the cylinder pin. Next, make a holdup rod from  $\frac{1}{2}$ " x 12" rod with a 1" right angle bend in both ends to hold the lift in position. Weld a piece of  $\frac{1}{2}$ " steel 2" x 2" to the main frame. The same as the bottom cylinder mount a hole was cut in it and one end of the rod was put through it and a washer welded on the end. Next, cut a hole in the top cylinder mount for the rod to go through. Make a  $\frac{1}{4}$ " hole in the end of the rod so when in up position the rod can be placed through the top cylinder mount and pinned with a clickpin. For the hose support on the front weld a piece of  $\frac{3}{8}$ " rod 18" long to the main frame just behind the front drop pipe. Then heat it and make a circle and one half to hold the hoses. On the rear make a ring from  $\frac{1}{2}$ " rod and weld to the main frame.



OVERMEMD VIE ^