

# Wood Splitter

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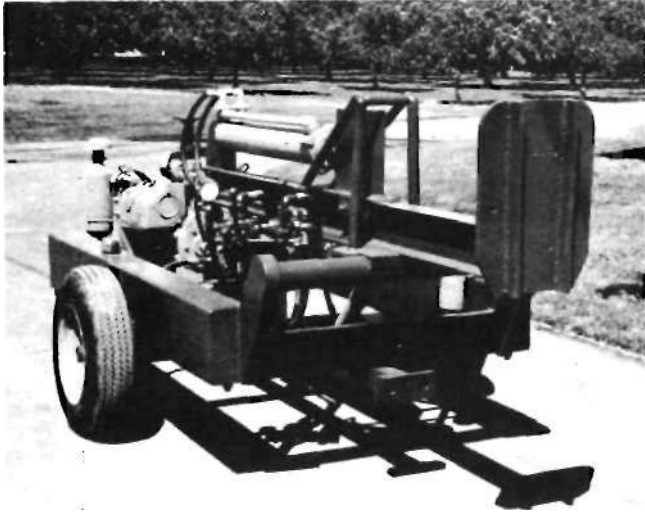
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## Construction of Wedge

A T-Iron is cut to 11  $\frac{1}{2}$ " high. Cut two pieces of  $\frac{1}{2}$ " x 9" x  $\frac{1}{2}$ " WW, butt them to the back of the T-iron and angle them to the front to form a point and weld them solid. Then cut a piece of 1" x 2" x 11  $\frac{1}{2}$ " iron, cut it into a point and grind it smooth. Cut a piece of metal  $\frac{1}{2}$ " x 4" x 15" and make a skid plate; weld a piece of metal  $\frac{1}{2}$ " x 3" x 8" on each side of the skid plate and mount two steel wheels on each plate. Then weld the wedge to the skid plate.

## Construction of Ram Mounting

Cut two pieces of metal  $\frac{3}{4}$ " x  $1\frac{1}{2}$ " x  $8\frac{1}{2}$ " and weld them to the I-beam for the rear ram mounting. For the front ram mounting, two pieces of metal  $\frac{1}{2}$ " x  $\frac{1}{2}$ " x 4" with  $1\frac{1}{2}$ " hole in them are used, the corners are rounded and welded to the back of the wedge for the front ram mounting.

## Construction of Foot Plate

Cut a piece of metal  $\frac{3}{4}$ " x  $14\frac{1}{2}$ " x 21", round the corners, weld to the I-beam. On the back of the foot plate weld two pieces of  $\frac{1}{2}$ " x 2" x 21" for brace on foot plate.

## Construction of Log Bumper Bars

From a  $\frac{1}{2}$ " shaft, cut two pieces  $45\frac{1}{2}$ " long, bend to shape and weld to mounts. Mount them in front on a piece of  $\frac{1}{2}$ " x 6" x 10" metal and on a rear piece of  $\frac{1}{2}$ " x 4" x 8" metal. Weld to I-beam.

## Construction of Axle and Tongue

Cut two pieces of heavy wall tubing, one 2" inside diameter and the other 2 $\frac{1}{2}$ " outside diameter both 56" long. Drill a  $\frac{1}{2}$ " hole 3" deep on each side, center, slip spindle into the tubing, put  $\frac{1}{2}$ " bolt through to lock spindle into position, lay a 3" channel on top of axle and weld to give a flat surface. A 3" box channel is cut in a half moon on one end to fit axle and weld to axle. Two 4" channel iron 48" long is placed on the tongue 30" from the front of axle to the first channel allowing 6" spacing for the second one; place and weld. These two pieces of channel iron makes for the engine mounting and it supports both tanks. Two rectangular 6" x 10" tubing tanks 7' long are placed on top of axle and front engine mount, spaced 36" apart overhanging front engine mount 2W square and weld.

## Construction of Tanks

Rectangular tubing  $\frac{1}{2}$ " x 6" x 10" is cut into two pieces 7' long, close the ends with a  $\frac{1}{2}$ " steel plate. One tank is for gas and the other is for oil. Cut three holes in the oil tank, one for a suction line, one for an oil cap and the third for a return oil filter. Mount a gauge on the inside of both tanks. At the rear of both tanks there is a  $\frac{1}{2}$ " drain plug. For the gas tank cut one hole for the gas cap. Drill and tap one hole for shut-off fuel line. The tanks make part of the frame of the trailer.

### Construction of Pivot Point for I-Beam

Two 2" x 6" box tubing 16" long, cut one end round, cap and weld. Cut the other end at a 62° angle. Mount both pieces at rear of tank, flush with the inside; place and weld. Cut two pieces of 1/2" wall tubing, one, 2 1/2" outside diameter 36" long and the other, 1 1/2" inside diameter 35" long. Slip one over the other allowing 1/4" at each end; place at the rounded end of the box tubing 1W down, center and weld. Take one 4" channel 11" long, place on center of hinging point and weld giving a flat surface for the I-beam.

### Construction of Resting Point and Stopping Point for I-beam

Two 3" channel are cut to 14 1/2" long. Weld together for a box channel, then cut a 1/2" x 3" x 8" piece of metal, drill two holes 5" apart, weld to the box channel. Cut a piece of rubber 1 1/2" x 1 1/2" x 8 1/2" and bolt to the top of the box channel. Weld box channel to the center of axle.

### Stopping point

Make a 3" box channel 39" long, cut a 1/2" x 3" x 8" piece of metal, drill two holes 5" apart weld to the box channel, then cut a piece of rubber 1 1/2" x 3 1/2" x 8 1/2" and bolt to the end of the box channel. Weld the box channel to the back of the tongue and bring it out the rear of the trailer.

### Materials

#### Quantity

- 2 1/2" rectangular tubing 6" x 10" x 7"
- 2 4" channel 48"
- 1 3" channel 48"
- 1 Heavy duty I-beam 314" x 6" x 97"
- 2 IW shaft 45W
- 1 I 1/2" shaft 6"
- 2 1/2" x 1 1/2" x 8 1/2" metal
- 2 14" x 9" x 11 1/4"

- 1 T-iron 3 1/2" x 9" x 11 1/2"
- 1 1/2" x 4 1/2" x 15"
- 2 1/2" x 3" x 8"
- 4 Steel rollers
- 1 3/4" x 14" x 21"
- 1 3/4" x 2" x 21"
- 1 1" x 2" x 11 1/2" metal bar
- 1 3/4" x 6" x 10" metal plate
- 1 1/2" x 4" x 8" metal plate
- 1 2" x 6" x 36" box tubing
- 1 3/8" wall tubing 36" long (2 3/8" I.D. x 3 3/8" O.D.)
- 1 3/8" wall tubing 35" long (2" I.D. x 3/4" O.D.)
- 1 4" channel 11" long
- 1 3/8" wall tubing 56" long (2" I.D. x 2 3/4" O.D.)
- 1 3" box channel 78" long
- 1 3" box channel 39" long
- 1 3" box channel 14" long
- 2 3/4" x 3" x 8" metal
- 2 1 1/2" x 3 1/2" x 8 1/2" rubbers
- 1 VF - 4 Wisconsin
- 2 7-14/5 tires and wheels
- 2 Spindles and hubs - 4 bolt pattern
- 1 12 gallon a minute 3,000 PSI oil pump @2200 RPM
- 2 32" long hydraulic hoses
- 2 44" long hydraulic hoses
- 3 24" long hydraulic hoses
- 1 13 1/2" long hydraulic hose
- 1 9" long hydraulic hose
- 1 Oil gauge
- 1 Fuel gauge
- 2 Filler caps
- 1 4 1/2" x 30" ram with 2 1/2" shaft
- 1 2" x 8" single action ram
- 1 High pressure double action valve
- 1 Single action valve
- 1 3,000 lb. pressure gauge

