

MANUAL MACHINE

My Design is sized for both 29" wheels or 27.5" wheels. The machine holds the rear wheel at 3 points to help avoid lateral stress on the rear wheel.

Materials

(1) 8' 2x6

(1) 4' 2x6

(2) 8' 2x4

(1) 2'x4' 3/4" Plywood

1 Box 3" Deck screws

1 Box 2" Deck screws

(2) 3" Strap Hinges; screws

(2) 1/4" x 1 1/2" LAG screws

1 8' CAM strap

1 Bungee cord

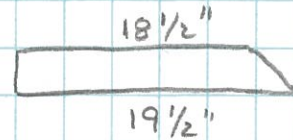
"THE MANUAL MACHINE"

①

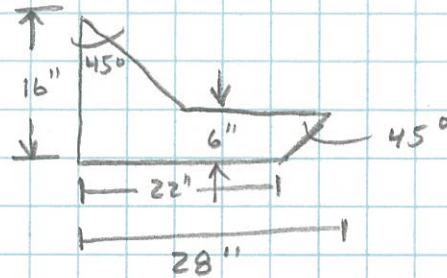
CUT 2 PIECES OF 2X4 20 1/2" LONG

CUT 3 PIECE OF 2X4 5 1/2" LONG

CUT 2 PIECES OF 2X4

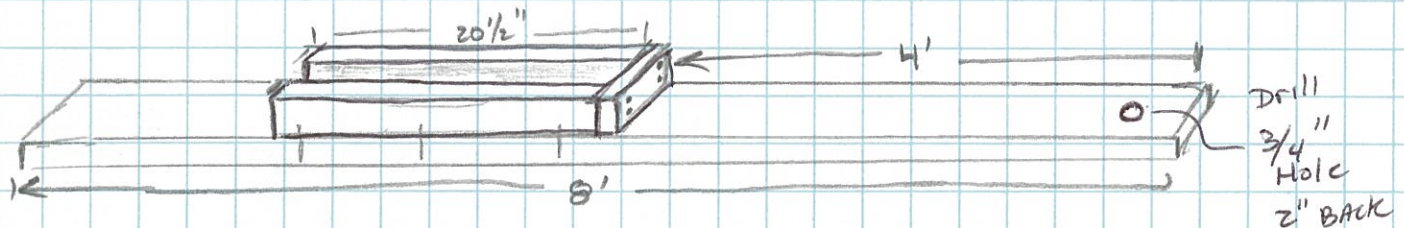


CUT 2 PIECES OF PLYWOOD



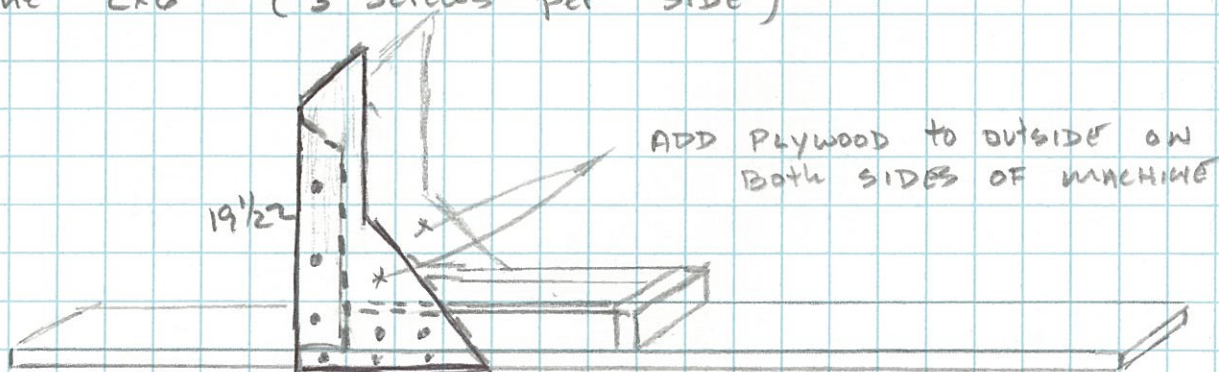
ASSEMBLE BASE USING
2X6-8', 20 1/2" 2X4 1/2 5 1/2" 2X4

ATTACH ENDS OF 20 1/2 2X4 USING the 5 1/2" 2X4 USING 3" SCREWS



Then Mount onto 8' 2X6 WITH the Front OF the 5 1/2" 2X4 being 4' FROM the END OF the 2X6

Attach USING 3" SCREWS FROM the Bottom SIDE OF The 2X6 (3 SCREWS per SIDE)

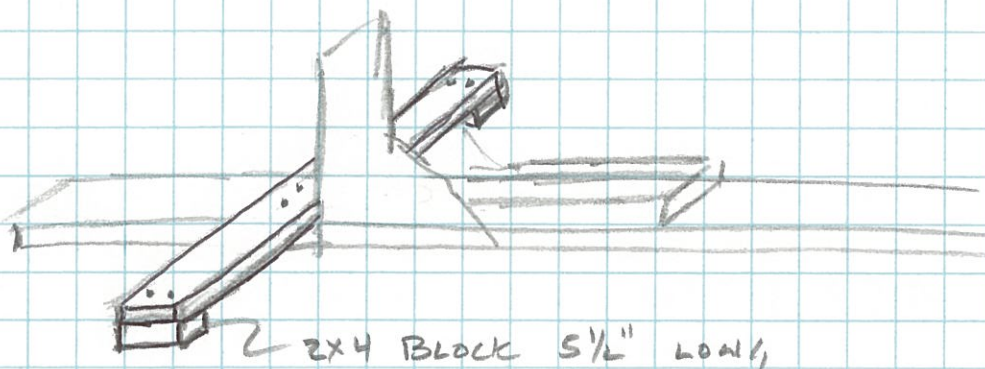


INSTALL 19 1/2" UPRIGHT 2X4S AND ATTACH WITH PLYWOOD 1/2 2" SCREWS

NOTE the LONG EDGE OF UPRIGHT 2X4 GOES TO the BACK
PLYWOOD SCREWS TO EACH 2X4 AND TO the 2X6 BASE USING

CUT A PIECE OF 2X6 $4\frac{1}{2}$ " LONG

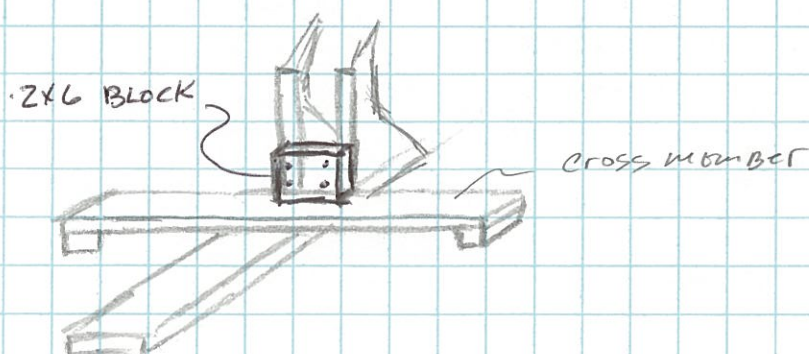
PLACE IT ON THE BASE BEHIND THE UP RIGHT 2X4S
AT A RIGHT ANGLE TO THE BASE TO MAKE
A CROSS OF THE 2X6S



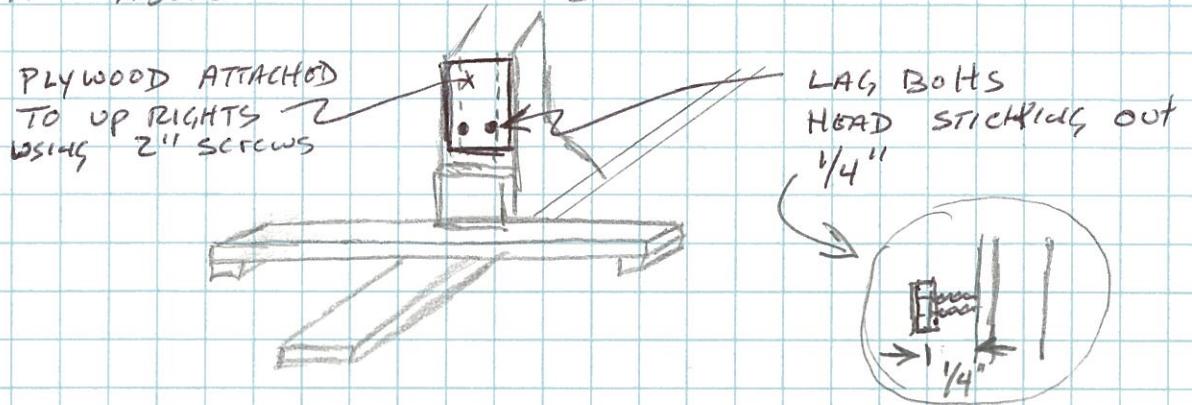
CENTER THE CROSS SIDE TO SIDE
PUSH IT TIGHT AGAINST UP RIGHTS AND ATTACH WITH
3" SCREWS

ATTACH A BLOCK TO EACH END OF CROSS MEMBER AND
ATTACH WITH 3" SCREWS

CUT A PIECE OF 2X6 $5\frac{1}{2}$ " LONG, ATTACH TO THE BACK
OF THE UP RIGHT 2X4S USING 3" SCREWS
THIS BLOCK HELPS HOLD DOWN THE CROSS MEMBER

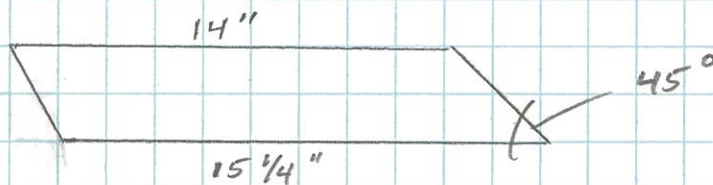


Cut A PIECE OF PLYWOOD $5\frac{1}{2}" \times 14"$
 ATTACH TO THE BACK OF THE UPRIGHT MEMBERS
 USING 2" SCREWS
 PLACE IT ABOVE THE 2X6 BLOCK

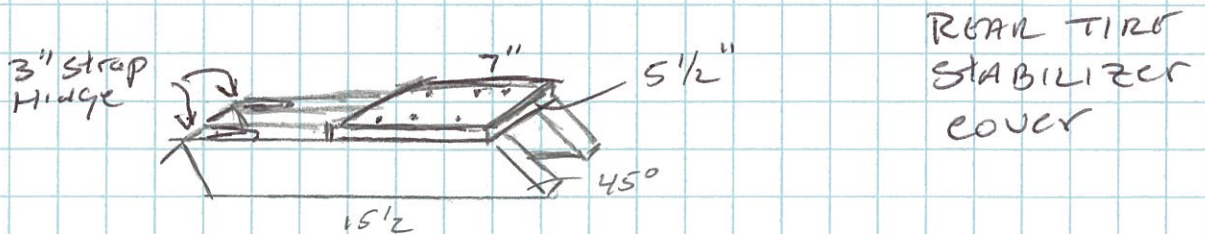


INSTALL 2 LAG BOLTS LEAVING the head sticking out $\frac{1}{4}"$ THIS IS TO CONNECT THE BUNGEE cord to to Hold the Bike in place.

Cut 2 PIECES OF 2X4



Cut A PIECE OF PLYWOOD $7" \times 5\frac{1}{2}"$

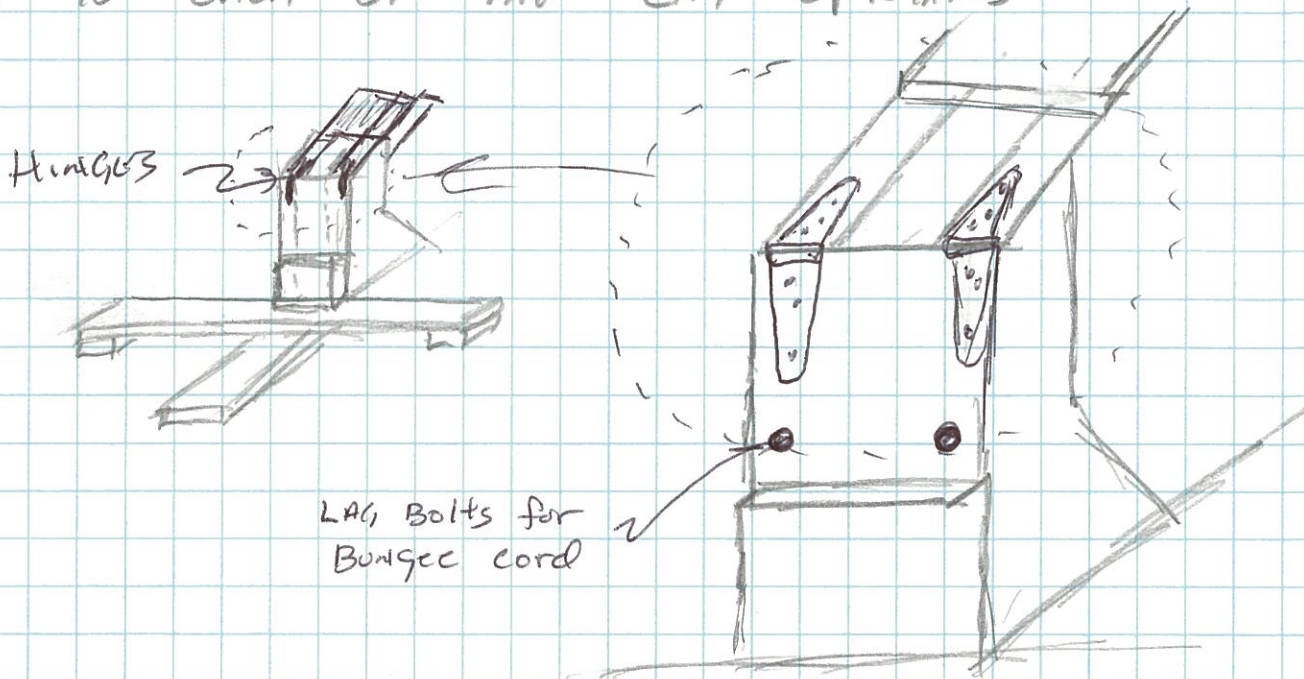


ATTACH THE PLYWOOD TO THE 2X4 ALONG THE $14"$ EDGE
 USING 2" SCREWS THERE SHOULD BE A $2\frac{1}{2}"$ GAP
 BETWEEN THE 2 - 2X4s

ATTACH 3" STRAP HINGE TO OTHER END OF EACH 2X4

INSTALL REAR TIRE STABILIZER COVER

ATTACH THE OTHER ENDS OF THE STRAP
HINGES TO EACH OF THE 2X4 UPRIGHTS



DRILL $\frac{3}{4}$ " HOLE IN BASE 2X6
AS SHOWN ON SHEET 1 HOLE IS 2" FROM THE FRONT
END OF THE BOARD

FEED 8' CAM STRAP THROUGH THE HOLE