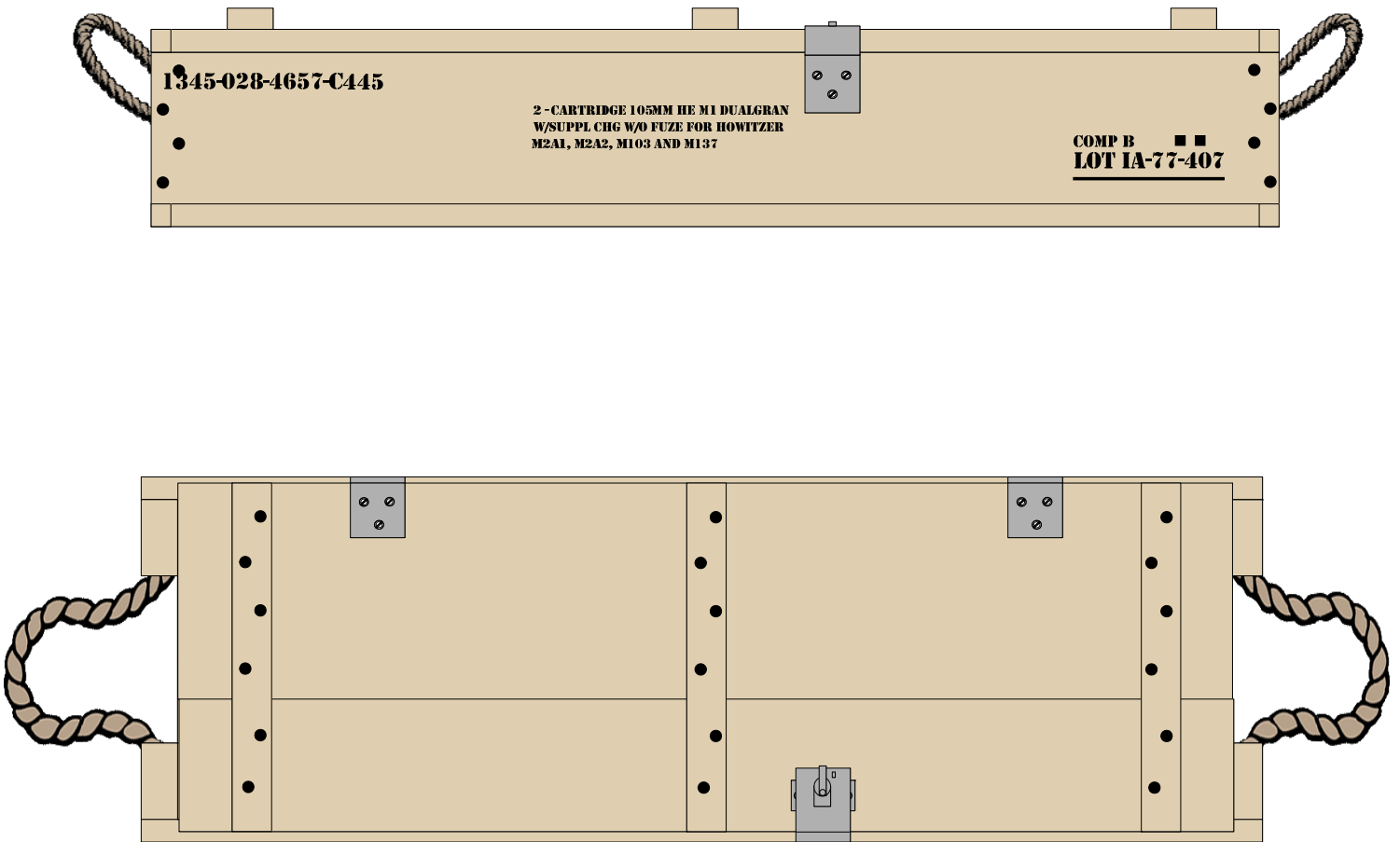


# 105 MM Ammo Crate



J. Gary Oprendeck Copyright 2009

## Parts List

- 2 – 1x6x37”long ripped down to 5” (for front and back)
- 1 – 1x8x34  $\frac{3}{4}$ ” long ripped down to 7  $\frac{3}{8}$ ” (top piece #1)
- 1 – 1x6x34  $\frac{3}{4}$ ” long ripped down to 4  $\frac{3}{8}$ ” (top piece #2)
- 3 – 1X2x11  $\frac{1}{2}$ ” long (top braces)
- 1 – 1x8x35” long (bottom piece #1)
- 1 – 1x6x35” long ripped down to 4  $\frac{1}{2}$ ” (bottom piece #2)
- 4 –  $\frac{5}{4}$ x3x6  $\frac{1}{2}$ ” long (side outside brace)
- 4 – 1x6x5  $\frac{1}{4}$ ”long ripped down to 5” (side center pieces)
- 1 – 1x6X10  $\frac{1}{2}$ ” long ripped down to 5” (side inside pieces)
- 2 hinges
- 1 lock assembly
- 2 pieces of sisal rope  $\frac{1}{2}$ ” thick by 15” long
- Nails
- Glue

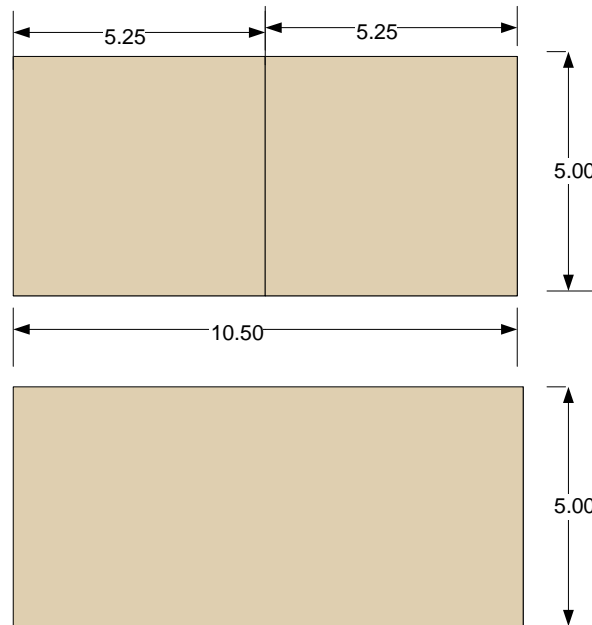
## Wood Shopping List

- 3 – 1x6x6 ft long
- 1 – 1x8x6 ft long
- 1 – 1x2x6 ft long
- 1 –  $\frac{5}{4}$ x3x6 ft long

I made these plans based on a 105mm ammo box lent to me so that I can measure it. This document uses the exact dimensions of that box. But the beauty of it is you can adjust the sizes to fit any equipment you want to store in it. The original crate dimensions require you to rip some of your lumber down to odd sizes. But if you want you can just stick with the stock sizes of your lumber and adjust the measurements to fit it. For the sake of this document I will stick to the original dimensions. Use the supplied picture as reference for where to place nails.

**1. Cut some of the pieces so you can rip them down (make sure you mark your pieces after you cut them so you don't get mixed up).**

- Take a 1x6 and cut a 34  $\frac{3}{4}$ " piece off of it for one of the lid boards. Set your table saw and rip the board down to 4  $\frac{3}{8}$ " wide. Then cut a piece 35" for one of the bottom boards. Set your table saw and rip this one down to 4  $\frac{1}{2}$ " wide.
- Take a 1x6 and cut it into two 37" pieces. These are for the front and back boards. On a table saw rip them to 5" wide.
- Between the leftover pieces and the other 1x6 cut the four 5  $\frac{1}{4}$ " pieces and the two 10  $\frac{1}{2}$ " pieces for the sides. On the table saw rip them down to 5" . Dimensions are shown below:



- Take the 1x8 and cut one piece  $34 \frac{3}{4}$ " long. This is for the other top board. On the table saw rip it down to  $7 \frac{3}{8}$ " wide. Then cut another piece 35" long. This is for the other bottom board. You do not have to rip this one down at all.
- Take the 1x2 and cut three  $11 \frac{1}{2}$ " long pieces. These are for the lid supports.
- Take the  $\frac{5}{4} \times 3$  and cut four  $6 \frac{1}{2}$ " long pieces. These are for the ends.

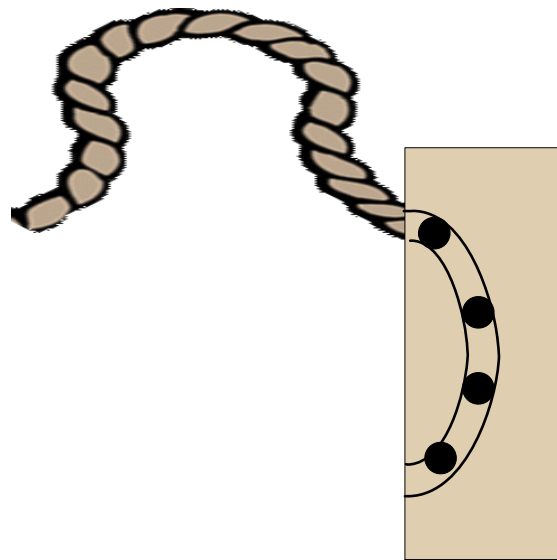
## 2. Cut the grooves to hold the rope handles.

The rope handle go through a groove cut in the end pieces and then they are nailed through. The original way used a curved groove cut in the board with a router. This is a lot of work. The alternative you can do is just cut a groove straight across with your table saw and then throw one nail in it from the front and

then from the back glue and staple or nail. Just make sure they don't poke through the front.

Curved routed groove:

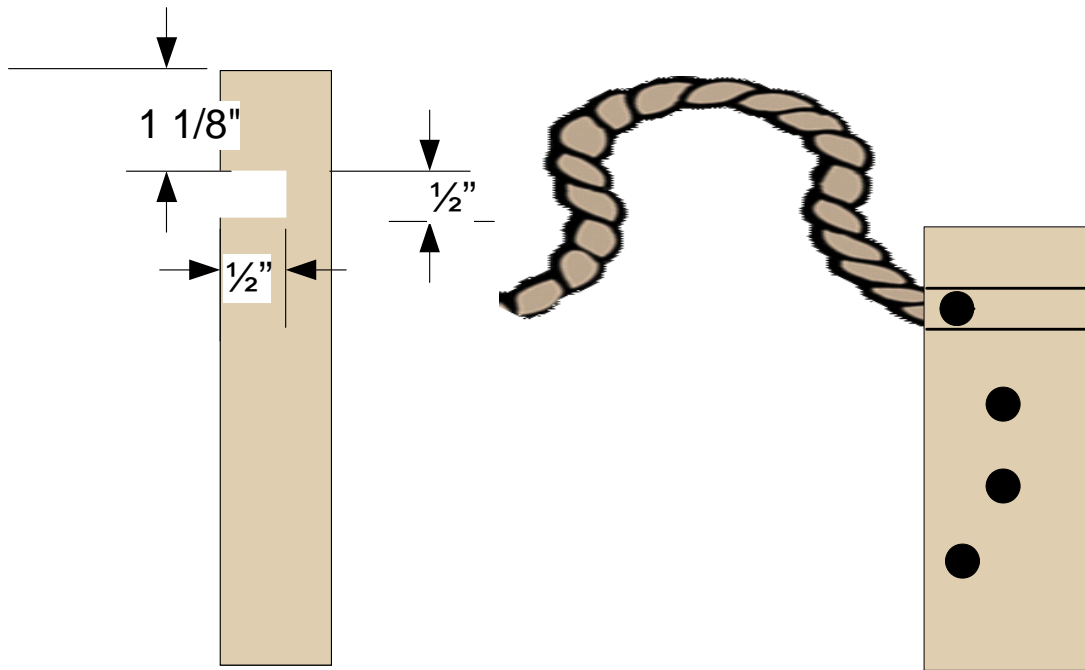
- Take the four 5/4x3x6 1/2" pieces. You have to cut a groove into them to hold the rope handles. The original has a curved groove cut vertically in it and the rope was fitted in there and then nailed through from the front as illustrated below: Using a router with a 1/2" bit route the curved groove into the board as shown in the picture below. Make 2 rights and 2 lefts. The black dots are the nail positions.



Straight groove with a table saw:

- Take the four 5/4x3x6 1/2" pieces. Set your table saw to be 1/2" deep. Run the board over it starting at 1 1/8" down from the top. Keep running it across until the

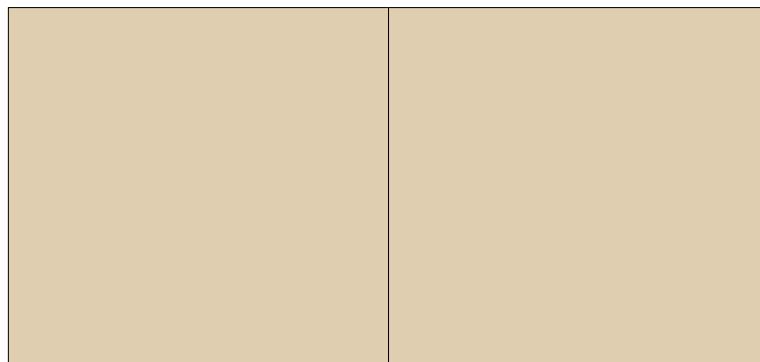
groove is  $\frac{1}{2}$ " wide. The dimensions are below Make 2 rights and 2 lefts. The black dots are the nail positions.



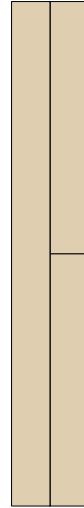
### 3. Assemble the end pieces

- Take two of the  $1 \times 6 \times 5 \frac{1}{4}$ " pieces and one of the  $1 \times 6 \times 10 \frac{1}{2}$ " pieces. Both have been ripped down to 5" deep. Stack them together as shown and nail them together from the  $10 \frac{1}{2}$ " piece side. Take the other pieces and make a total of two of these assemblies

From the front it will look like this:

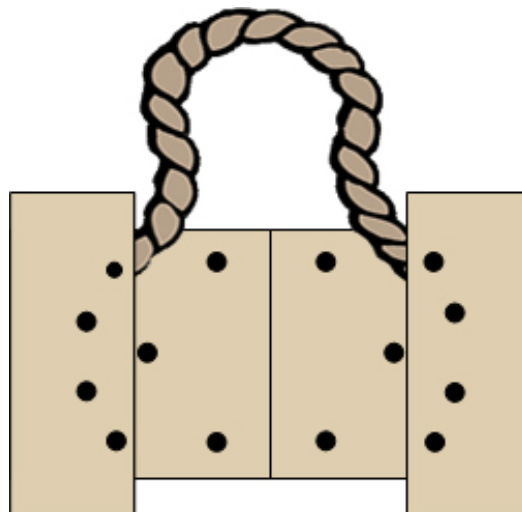


From the top it will look like this

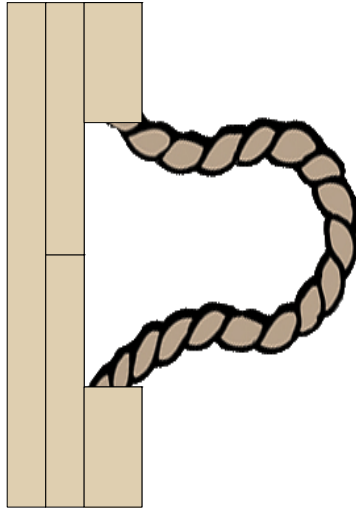


- Take a right and left  $5/4 \times 3/6 \times 1/2$ " pieces and put the rope in with some glue and staples. Make 2 of these assemblies. Then nail them to the front ends of the end piece you just made. The bottom and top will stick over the end piece  $3/4$ ". The easy way to align this is to sit the end piece on a scrap piece of 1x6 and then line up the  $5/4$ " boards with the bottom and even with the sides. Nail in the 4 nail pattern shown below and the 3 inside nails on each side.

From the front:



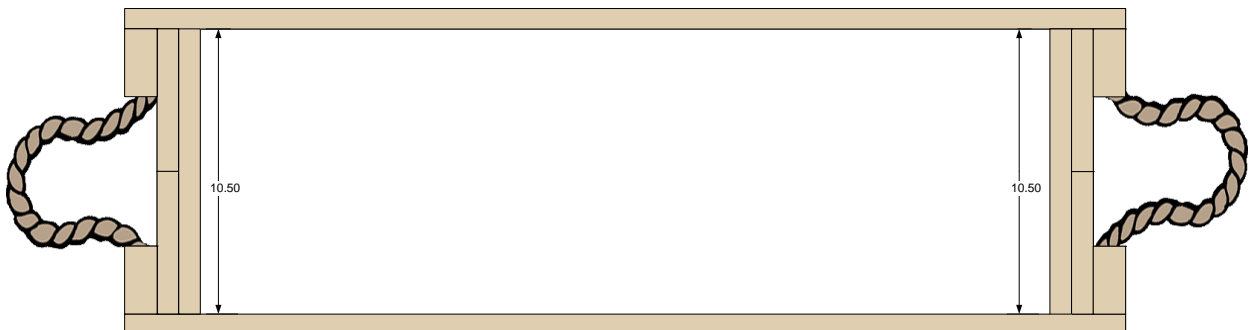
From the top:



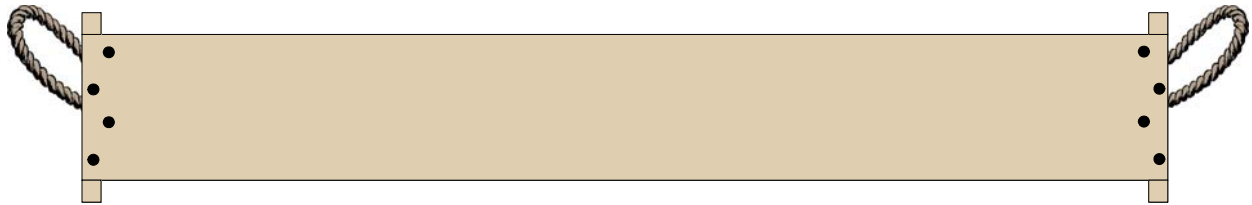
#### 4. Put the box together

- Take the two 1x5x37" boards that you ripped down to 5" and nail them to the end pieces you just made. The boards should be lined up evenly top to bottom with the 1x on the end pieces. There will be nails going into the 5/4 pieces and the 1x pieces. Use pictures below for reference

Top View:

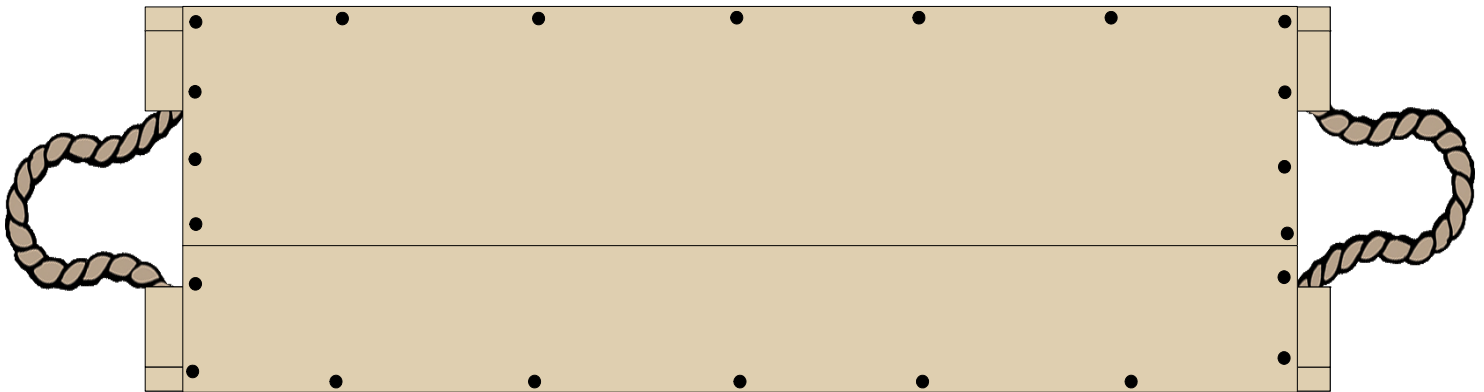


Side View:



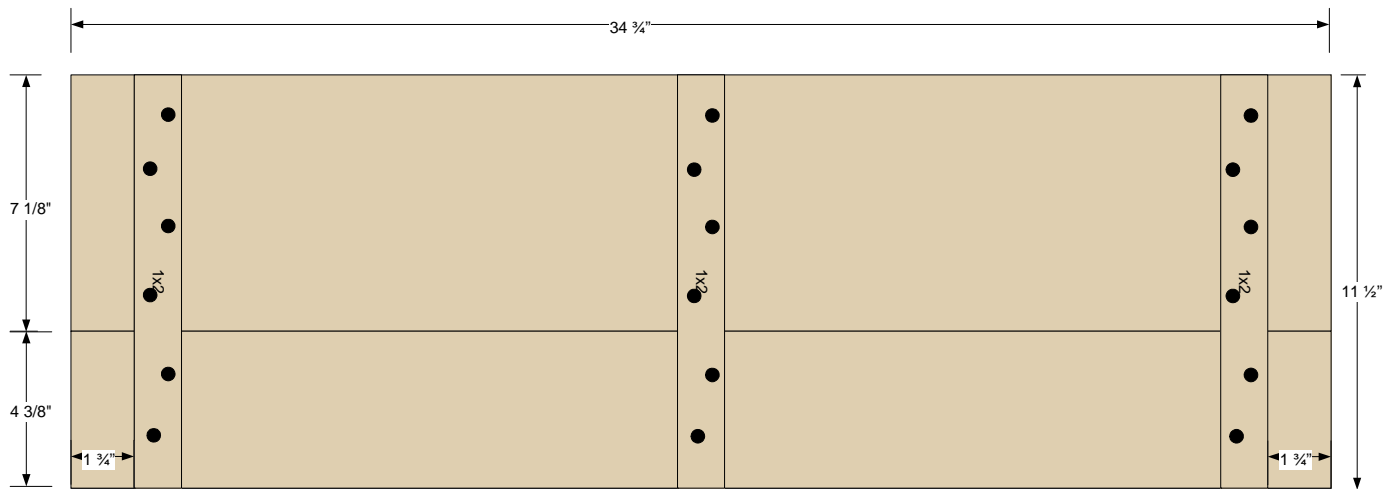
### 5. Nail the bottom boards on.

- Flip the box you just made over so the bottom is facing up
- Lay the 1x8x 35" and the 1x6x 35" boards on the bottom between the 5/4" end boards. Nail them down. Example picture below:



### 6. Make the lid

- Take the two remaining long boards (1x6 and 1x8 34 3/4" long) and butt them together. Then lay the 1x2x11 1/2" long boards on top. One is centered and the others are 1 3/4" in from each end. Nail them down. Here is an example:



## 7. Put the Lid on the box and you are done.

The hinges and locking assembly are hard to find. I have been looking but cant find them. I will leave it up to you to find them or substitute other types of locks and hinges for your crate. Below are complete measuered drawings so you can see the placement of the hinges and locks

- Lay the lid on the box and secure the hinges and locks as shown in the drawings. The lid should fit 1/4" in from the front and back, it is not even with the front and back. There should be about 1/8" space side to side.

