

Mecca Engine Hoist Description

By Dick Morland

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This is a photo essay describing the construction of the Mecca Hoist.

The bill of materials is on page 17

Mecca Hoist in Action starts on page 18

This entire assembly is clearly shown in pictures 26 & 27.



Photo 26

This entire assembly is clearly shown in pictures 26 & 27.



Photo 27
This entire assembly is clearly shown in pictures 26 & 27.

The angle iron feet & rectangular tubing uprights are clearly shown in pictures 18, 19, 23, & 24.



Photo 18

The angle iron feet & rectangular tubing uprights are clearly shown in pictures 18, 19, 23, & 24.



Photo 19

The angle iron feet & rectangular tubing uprights are clearly shown in pictures 18, 19, 23, & 24.



Photo 23

The angle iron feet & rectangular tubing uprights are clearly shown in pictures 18, 19, 23, & 24.



Photo 24

The angle iron feet & rectangular tubing uprights are clearly shown in pictures 18, 19, 23, & 24.

The horizontal crossbeam assembly is clearly shown in pictures 20, 21, 22, & 25.



Photo 20

The channel iron end pieces that insert into the uprights are clearly seen in pictures 20, 21, & 22.

The horizontal crossbeam assembly is clearly shown in pictures 20, 21, 22, & 25.

The trolley is clearly seen in pictures 20, 22, 25, & 28.

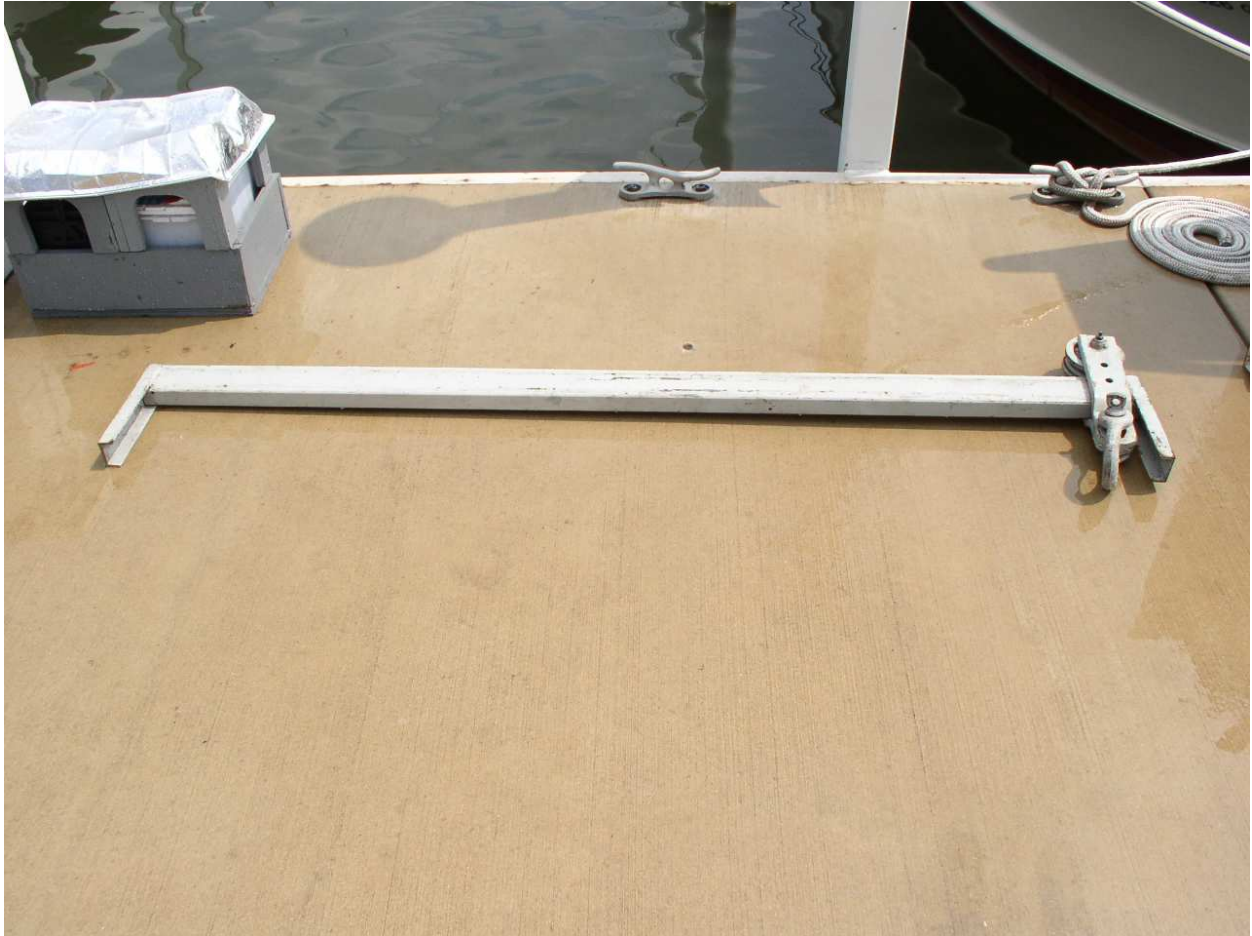


Photo 21

The channel iron end pieces that insert into the uprights are clearly seen in pictures 20, 21, & 22. The horizontal crossbeam assembly is clearly shown in pictures 20, 21, 22, & 25.



Photo 22

The channel iron end pieces that insert into the uprights are clearly seen in pictures 20, 21, & 22. The horizontal crossbeam assembly is clearly shown in pictures 20, 21, 22, & 25. The trolley is clearly seen in pictures 20, 22, 25, & 28.



Photo 25

The horizontal crossbeam assembly is clearly shown in pictures 20, 21, 22, & 25.

The trolley is clearly seen in pictures 20, 22, 25, & 28.

The 7/8" diameter heavy wall steel tubing that reinforces the horizontal crossbeam and also serves to track the trolley is seen in pictures 22, 25, & 28.



Photo 22

The trolley is clearly seen in pictures 20, 22, 25, & 28.

The 7/8" diameter heavy wall steel tubing that reinforces the horizontal crossbeam and also serves to track the trolley is seen in pictures 22, 25, & 28.



Photo 25

The trolley is clearly seen in pictures 20, 22, 25, & 28.

The 7/8" diameter heavy wall steel tubing that reinforces the horizontal crossbeam and also serves to track the trolley is seen in pictures 22, 25, & 28.



Photo 28

The trolley is clearly seen in pictures 20, 22, 25, & 28.

The 7/8" diameter heavy wall steel tubing that reinforces the horizontal crossbeam and also serves to track the trolley as seen in pictures 22, 25, & 28.

A safety chain during usage is seen in picture 14.



Photo 14
A safety chain during usage is seen in picture 14.

Seen in pictures 12 & 16 is a screwdriver wedged under the trolley to prevent rollback of the hoisted engine & transmission. I plan on tapping the lower holes on each side of the trolley so we can use a bolt as a brake.



Photo 12

Seen in pictures 12 & 16 is a screwdriver wedged under the trolley to prevent rollback of the hoisted engine & transmission. I plan on tapping the lower holes on each side of the trolley so we can use a bolt as a brake.



Photo 16

Seen in pictures 12 & 16 is a screwdriver wedged under the trolley to prevent rollback of the hoisted engine & transmission. I plan on tapping the lower holes on each side of the trolley so we can use a bolt as a brake.

Design of the trolley is optional, but to ensure you can clear the boat deck with the load, both the trolley extension below the crossbar and the closed length of the hoist should be kept to a minimum. Always check to make sure you can lift high enough before starting an engine / transmission lift.

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Mecca Engine Hoist, Bill of Materials

Feet (2), 3" x 3" x 3/16" angle iron, 48" long each

Vertical uprights (2), 2 1/2" x 1 1/2" x 3/16" wall rectangular tubing, 60" long each

Horizontal Crossbeam (1) Same rectangular tubing as above, 68" long

Channel Iron ends for above (2), 2" x 1" x 3/16", 9" long each

Trolley Tubing (1), 7/8" OD thickwall tubing, 68" long

Note:

The 48" length of the two angle iron feet is calculated for a 38' Commander. Smaller boats might require shortening one side of the foot to center the crossbeam over the center of the engine on a twin engine boat smaller than 38'. We recently had to shorten one end of one foot 3" to fit a 31 Commander Express.

THE MECCA HOIST IN ACTION



Photo 1



Photo 1A



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7

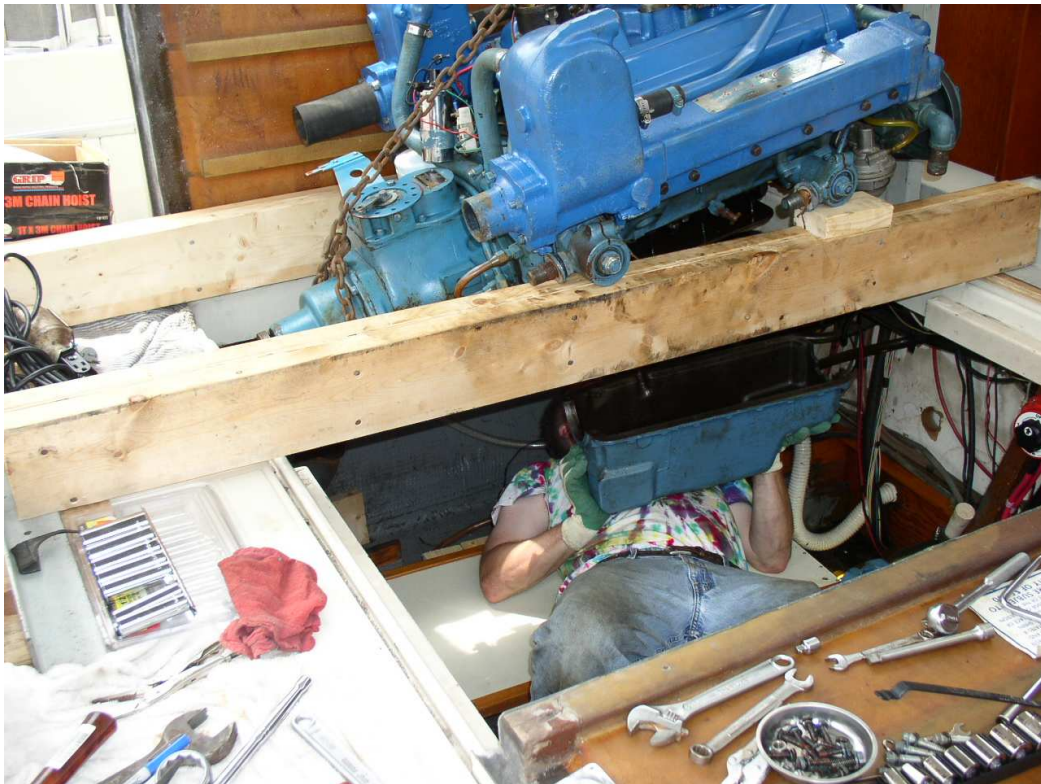


Photo 8



Photo 9



Photo 10



Photo 11



Photo 11A

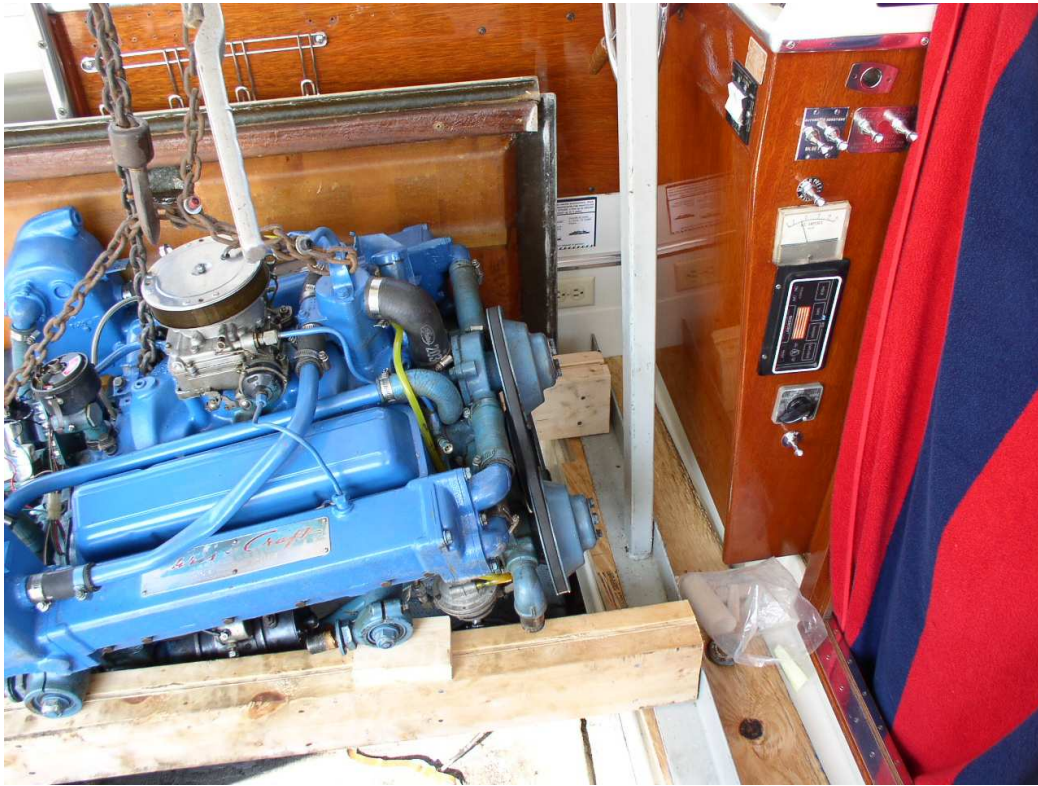


Photo 13

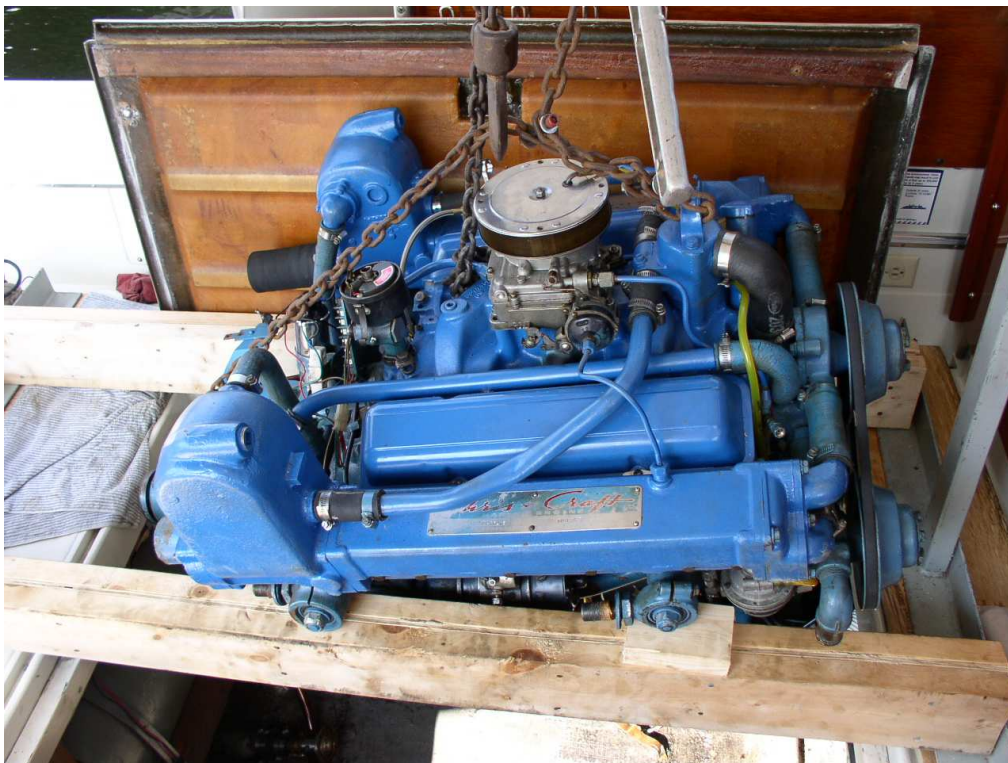


Photo 15



Photo 17