

1987 MK 1 Catalina 34 Ready Filter Storage

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Jump to: [navigation](#), [search](#)

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NOTE - Before doing any projects, I highly recommend that you first go through the “Critical Upgrades” list and verify that your boat has all of the applicable items addressed. There is a link on the Message Board (copied here) entitled [“CRITICAL UPGRADES – DO THESE OR ELSE!!!”](#) that will take you to them. A good way to both learn your boat and make sure it is safe.

Contents

[\[hide\]](#)

[1 Storage](#)

[2 Materials Used](#)

[3 Making The Ready Filter Storage Shelf](#)

[4 Test Fit](#)

[5 Finished Ready Filter Storage Shelf](#)

[6 PDF of This Write-Up](#)

Storage

I purchased my 1987 MK 1 Catalina 34, hull #493 in April 2015. A great boat, but usable storage from the factory is limited. Something I noticed in watching the many sailing videos I subscribe to, that when a fuel filter clogs while cruising, everyone seems to tear their boat apart looking for a spare Racor filter element and the tools needed to change the filter. This project is my attempt to solve that problem. The plan is to have 3 spare Racor filter elements, one spare spin on engine fuel filter, a spare spin on engine oil filter, a spare raw water gasket/o-ring and impeller, plus one to two spare engine drive belts stored close to the filter housing and M25XP engine.

The spot I chose is in the head locker under the sink and along the bulkhead in the head where the shower sump pump on/off switch is mounted. Access under the head sink is reasonable, it's close to the engine and Racor filter housing, and something attached to the bulkhead won't interfere with access to anything else under there.

Materials Used

1/4" Plywood sanded both sides, 16 1/2" x 4 1/2".
1/2" Plywood sanded both sides, 16 1/2" x 11 1/2".
1x5" Pine boards.
12 x #8 x 1" long SST flat head screws.
12 x #8 x 3/4" long SST flat head screws.
2 x #10-24 Truss head SST screws.
2 x #10-24 Nyloc SST nuts.
2 x #10 SST Flat Washers.
1 x 3/8" dowel rod cut to length.
White KILZ primer sealant paint.
White Interior/Exterior Semi-Gloss paint.
1 x

Making the "Ready Filter" Storage Shelf

I decided the design for the locker would be similar to a spice rack. It would hold 3 Racor Series 215R 10 micron R15T filter elements, 1 on engine spin on fuel filter, one on engine spin on oil filter, and a rectangular plastic container with a snap on lid for the spare raw water impellers, gaskets, and o-rings. Along the top I will store 2-3 engine drive belts.

The length and width dimension of the locker is 16 1/2" length, 5" wide, and 11 1/2" tall. I left about 3/4-1" between each filter so there is enough wood for strength, plus room to get my fingers around the filter to get it out. The vertical spacing between the two shelves is determined by the clearance needed to remove the filters. The filters will be recessed into their respective shelf about half their height to hold them in place. Don't want filters jumping out of the storage shelf and getting jammed into the seacock handles. The sides, shelves, ends, and spacers for the recess in each shelf are made from the 1x5" pine boards. The back is made from the 1/2" plywood, and the bottom of each shelf uses the 1/4" plywood. See Photos (1) and (2) for views of the empty storage shelf before painting.



(1)



(2)

Photo (3) shows the storage shelf with one Racor filter element in the top row, one NAPA spin on oil filter, one Universal spin on fuel filter, and the container for the raw water parts installed.



(3)

Photo (4) shows another angle view for reference.



(4)

Test Fit

Mounting the storage shelf was relatively straight forward. The top surface of the shelf is about ¼” below the shower sump pump switch body. The inboard/outboard location was determined by the lip of the door opening into the locker. The upside down “L” shaped piece of wood attached to the end of the shelf was added to loop engine drive belts around. I installed two 3/8” dowels in the top surface to hold the drive belts at the other end,. See Photo (5).



(5)

A lot of hoses in this area so needed to check several times to make sure there wasn't any interferences, and that I could unscrew the toilet cleaning solution cap (the white “T” shaped piece with the screw on top). I've never used this, but I wanted access to it in case I decide to in the future. See Photo (6).



(6)

Here you can also see the shower drain anti-siphon valve, the two mounting screws holding the shelf to the bulkhead, and one of the dowels for the engine drive belts. See Photos (7).



(7)

Finished “Ready Filter” Storage Shelf

With the test fit complete and adjustments made, I put a top coat of exterior gloss enamel white paint and reinstalled the shelf. The spare engine drive belts are the two black bands you see on the upside down “L” shaped piece of wood. See Photos (8) and (9).



(8)



(9)

Photo (10) shows the final assembly mounted with two Racor filter elements, one NAPA spin on oil filter, one Universal spin on Fuel filter, the plastic container with the raw water impeller/o-ring/gaskets, and two engine drive belts on top. The PO left me a 7405 belt like the one installed on the engine. I bought a 7400 belt to move the alternator away from the inside of the small head engine compartment access door.



(10)

Photo (11) shows the top of the final assembly and how the two engine drive belts are held in place using the upside down “L” piece of wood and the two dowels. The reason one dowel is shorter than the other is to clear the exhaust water hose from the Aqualift muffler.



(11)

PDF of This Write-Up

I've attached a copy of this complete write-up in a PDF format for reference. All links have been removed from the PDF.

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