

# Dialing In Your Trawler

Suggestions on how to track and monitor the gear and systems on your boat. Tips and Ideas to make boating more fun and enjoyable

Trawler  Fest.

BOAT SHOW - EDUCATIONAL EXPERIENCE - RENDEZVOUS

by Jeff Merrill, CPYB  
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Racing sailboats led to this course

**Trawlerfest**

BOATSHOW • EDUCATION • RENDEZVOUS

**Tuesday May 17, 2022**



# Pilothouse – Gauge Reference

## My first power boat "AHA"

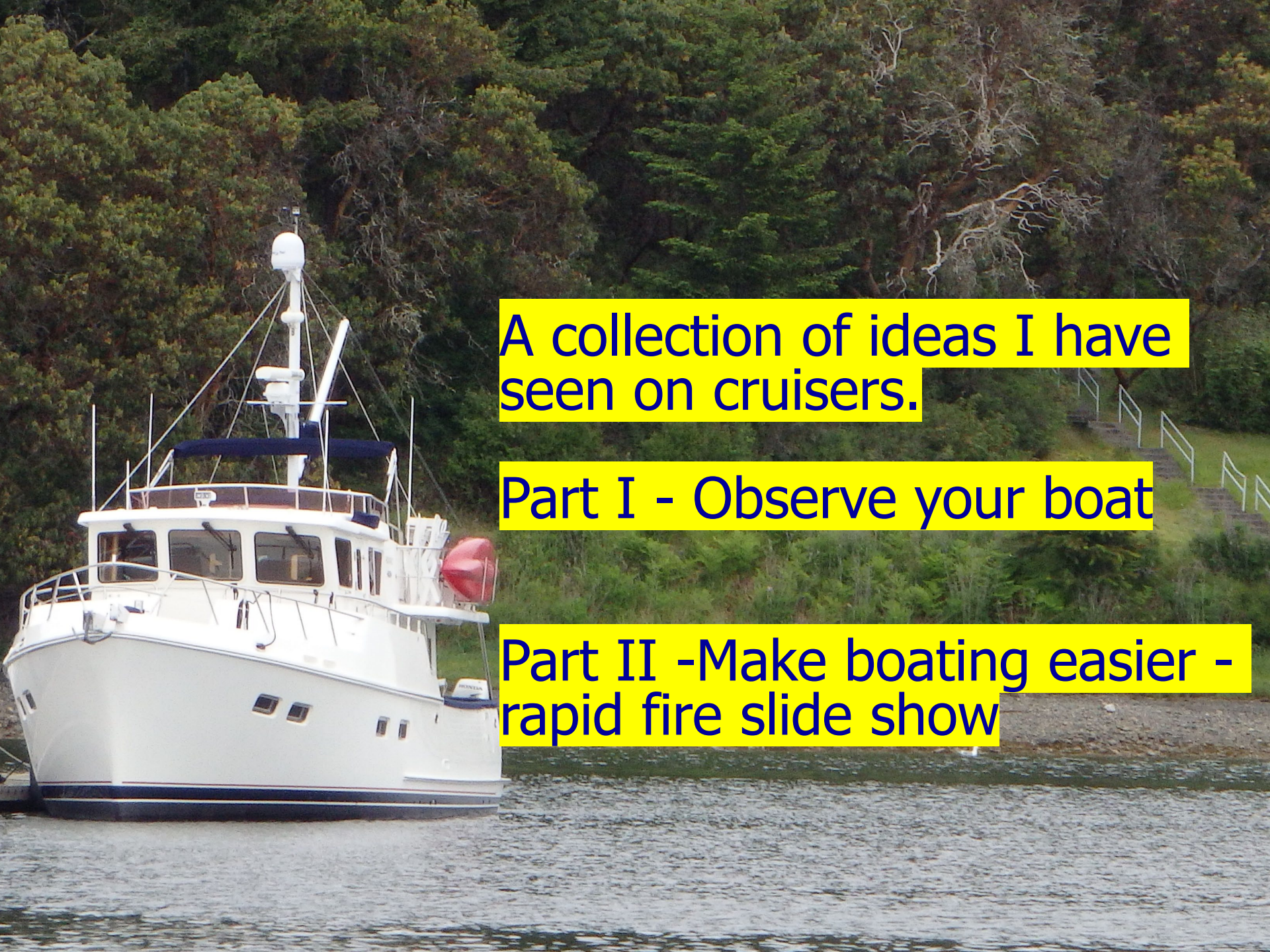






About me...30+ years of selling new and used cruising sailboats and trawlers and training owners. I've been on hundreds of boats and found some great ideas.





A collection of ideas I have seen on cruisers.

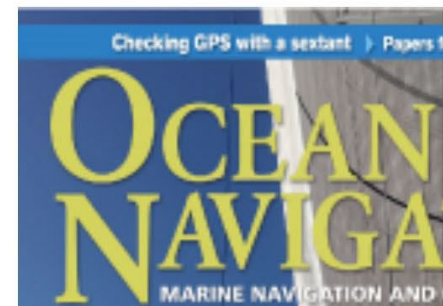
Part I - Observe your boat

Part II - Make boating easier - rapid fire slide show





...ialing-In-Your-Trawler articles Jeff Merrill has written are available



**Handout\*** A list of the articles I have written for Ocean Navigator magazine



Of course, a compass

Mar/Apr 2020

Enabling your boat to talk

Nov/Dec 2019

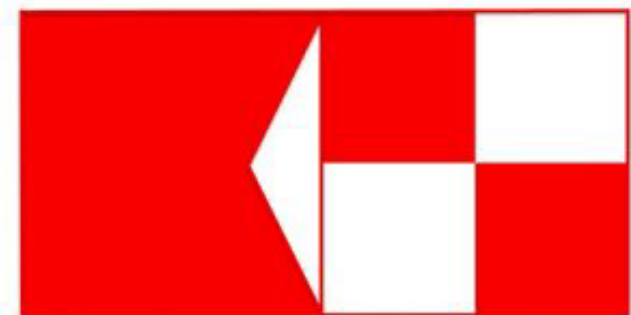
Ship's Papers

Jul/Aug 2019

# Expert Instruction From The Brands You Trust.

## Offshore Cruising: Preparing Craft & Crew

Preparation is key to successful cruising. Regardless of the size, make or model of your boat, understanding its critical systems and having a plan is crucial to keep your craft performing efficiently and safely. Join yacht broker, boatbuilder and TrawlerFest instructor Jeff Merrill in this exclusive online course designed to help you prepare yourself, your boat and your crew to get the most out of your offshore boating adventures.



**Boaters University**



YouTube videos



SKILL

TIP #2





# Learn something from every boat

Every vessel has a  
number of components  
that require attention and  
observation, we are all  
“in the same boat”

Noticing details will help you monitor your systems and better understand your boat.

I will post this PowerPoint as a PDF and include the handouts on [www.JMYS.com](http://www.JMYS.com) within a week.

Please interrupt with questions

Sign up list for email notification.



# HANDOUTS

- Summary Dialing in Your Trawler articles
- USCG inspection Vessel Safety Check
- Maintenance Log - Main Engine
- SDMC / JMYS Maintenance Guideline
- Ocean Navigator Articles



As a yacht broker I know that eventually you will sell your boat. You want a reliable vessel, and Buyers want maintenance records



Do you keep your maintenance log up to date?

Your Boat is "alive"

Like your body, it make senses that regular  
"CHECK-UPS" will keep your boat healthier





Unlike annual human medical exams, a trawler should have many inspections (hourly at first) to check systems







Be observant and pay attention

What can you do to keep track of things and make boating easier?



# BASELINES

To track your boat you first have to establish baselines, and these initial impressions need to be cataloged so you can learn what the NORM is.



Boat "SENSES" – You are a diagnostic tool

Imprinting is developed through your senses.

Senses provide "First alert" warning signals...





A photograph of a boat on a body of water during sunset. The sky is filled with clouds, and the sun is low on the horizon, casting a warm glow. The boat is moving away from the viewer, leaving a wake. The text 'Sight/Vision' is overlaid in a yellow box at the top. A list of two bullet points is overlaid in yellow boxes on the right side of the image.

# Sight/Vision

- Keen an eye on things...
- Visual observation is the most common way to notice if something is amiss.



# Hearing/Sound

New noises to identify:

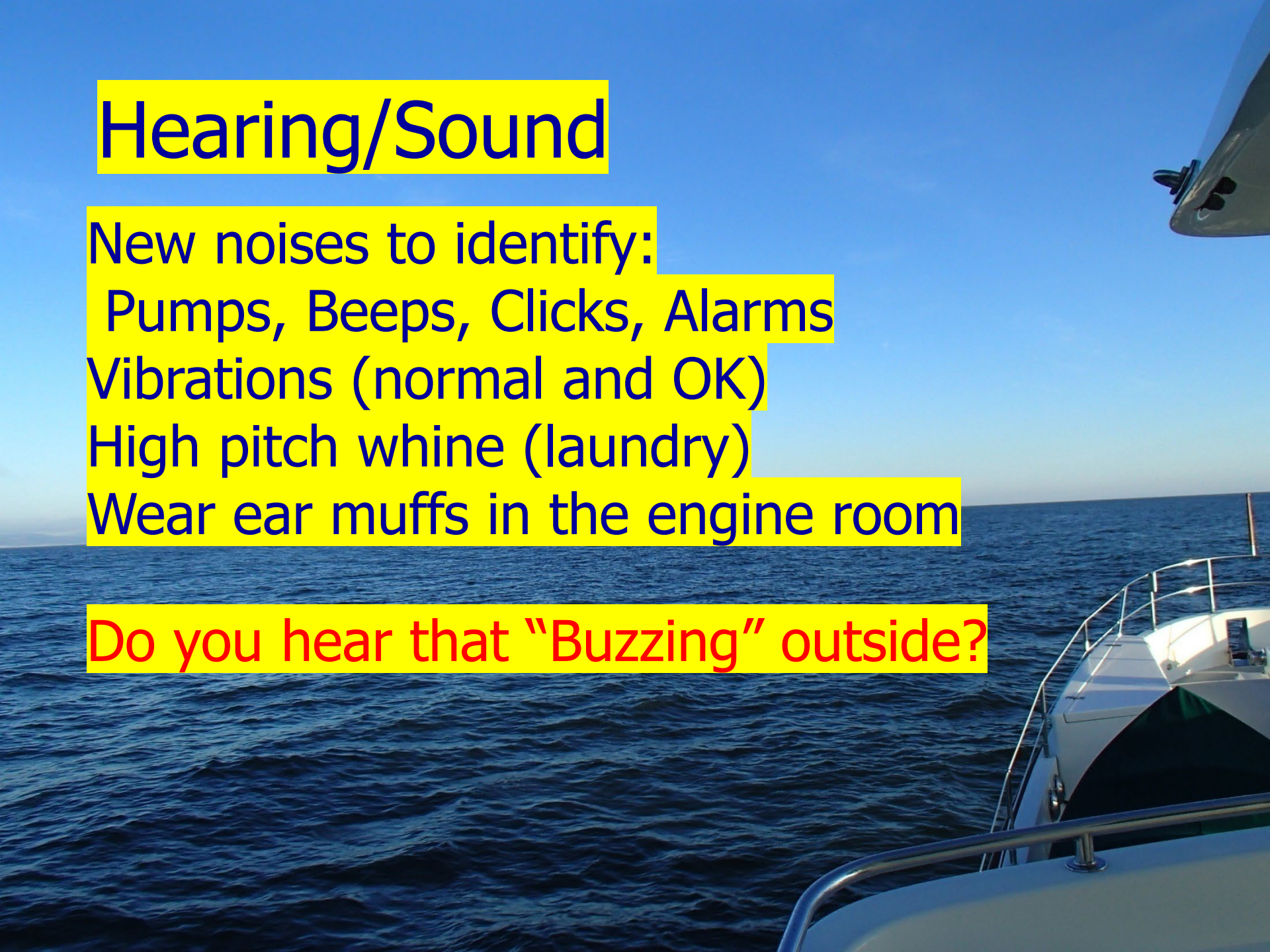
Pumps, Beeps, Clicks, Alarms

Vibrations (normal and OK)

High pitch whine (laundry)

Wear ear muffs in the engine room

Do you hear that "Buzzing" outside?



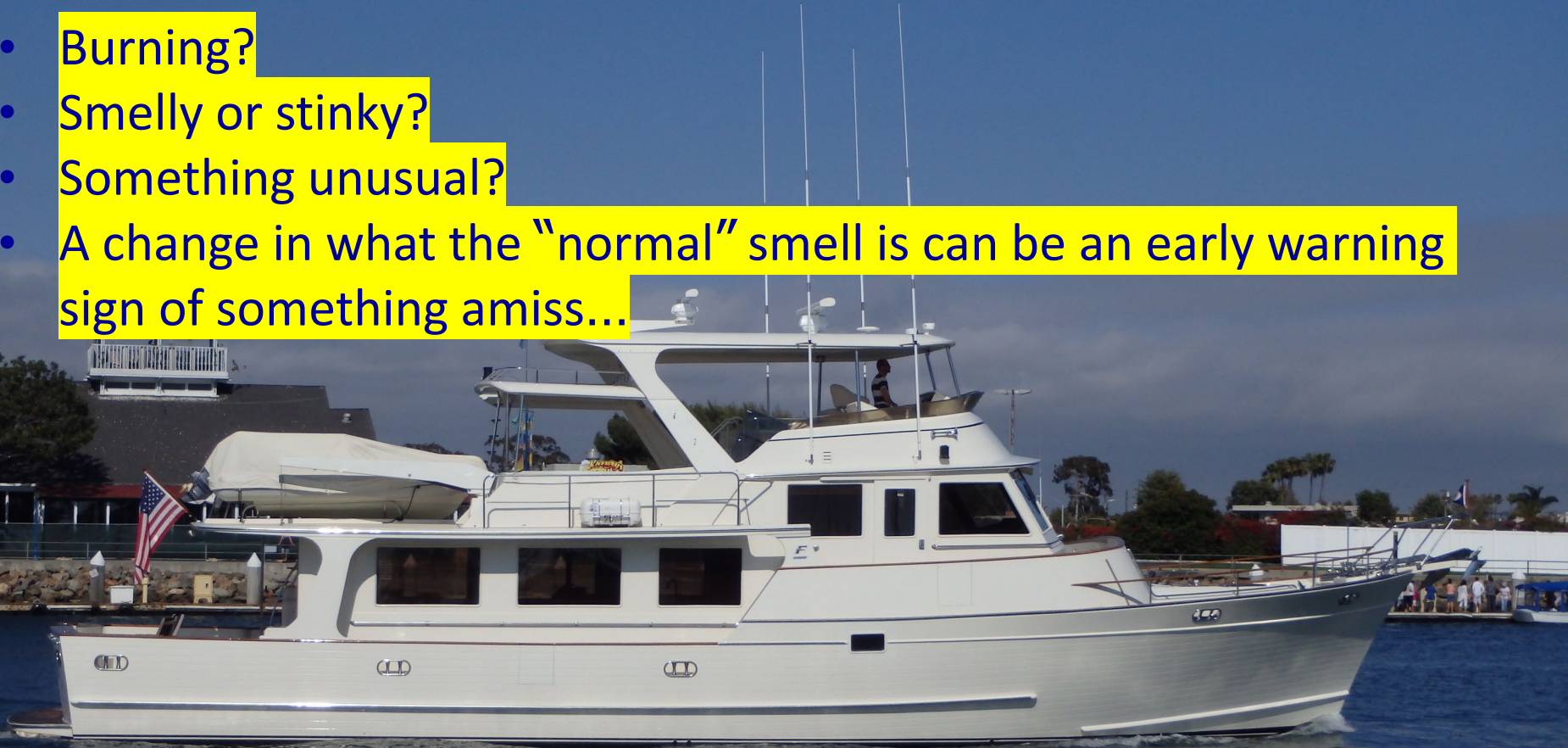






# Smell

- Burning?
- Smelly or stinky?
- Something unusual?
- A change in what the “normal” smell is can be an early warning sign of something amiss...





# Touch (and what not to touch)

Machinery hot parts – be careful of burns

Gloves – anchoring and handling dock lines  
(wood dock splinters)

Shoes on deck: hatch dogs, sure footing,  
around windlass, anchor and chain



Taste (let's call this "non-sense")

Don't use this sense except for food consumption.

Story: Surveyor who dipped finger in bilge and became ill.







## Common Sense

- You typically have time to think through a good solution, don't rush to judgement



5-year expiration...



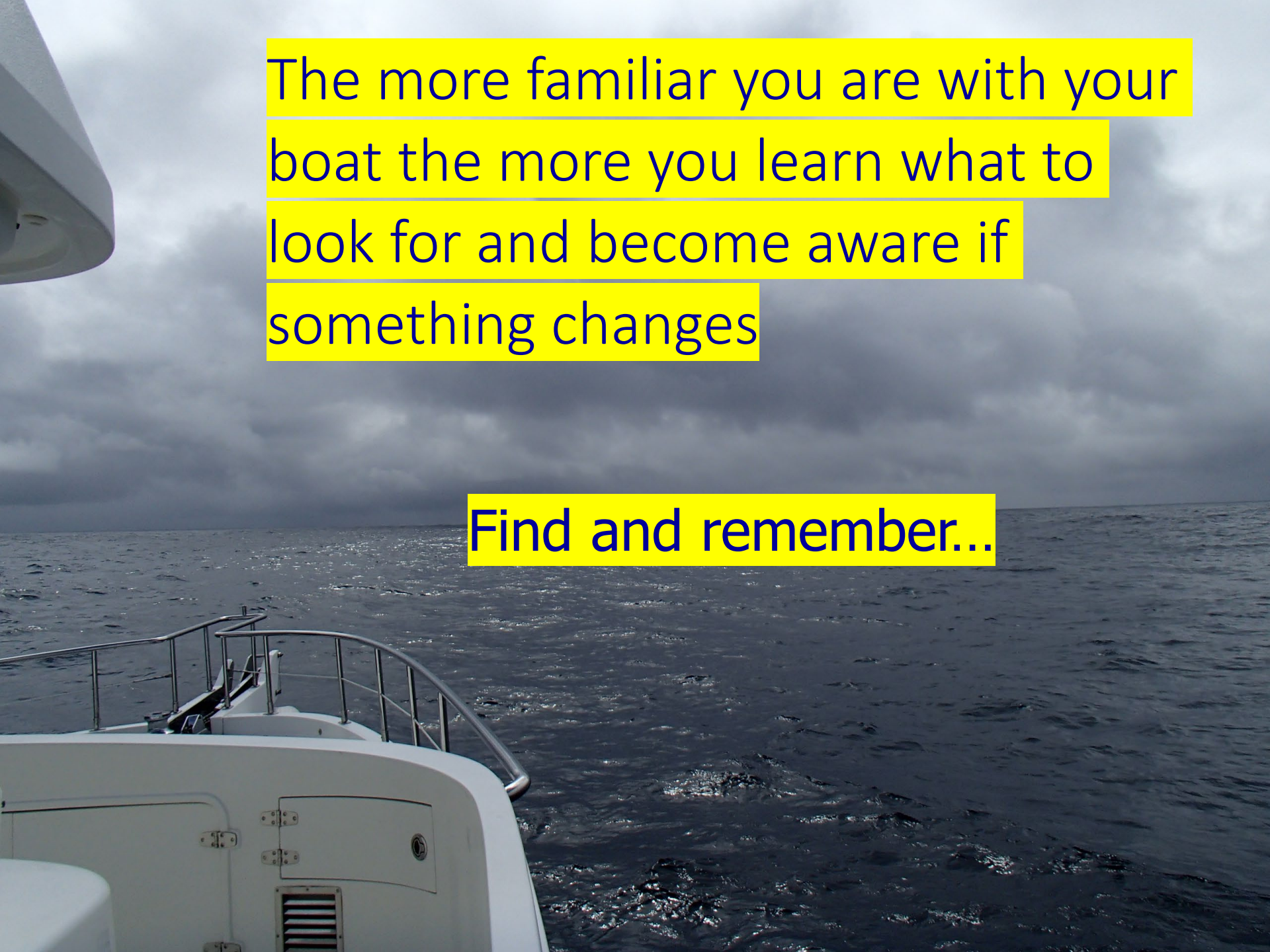
## GET YOUR BOAT ON TRACK

Let's see what other boat owners do to stay on top of things.

Machinery with temperatures to monitor and many reminders or quick reference ideas.





A white boat is shown from a rear-quarter perspective, moving across a dark, choppy sea. The sky is filled with heavy, grey clouds. The boat's white hull and stainless steel railings are visible in the lower-left foreground. The water is dark with whitecaps, and the horizon is visible in the distance.

The more familiar you are with your  
boat the more you learn what to  
look for and become aware if  
something changes

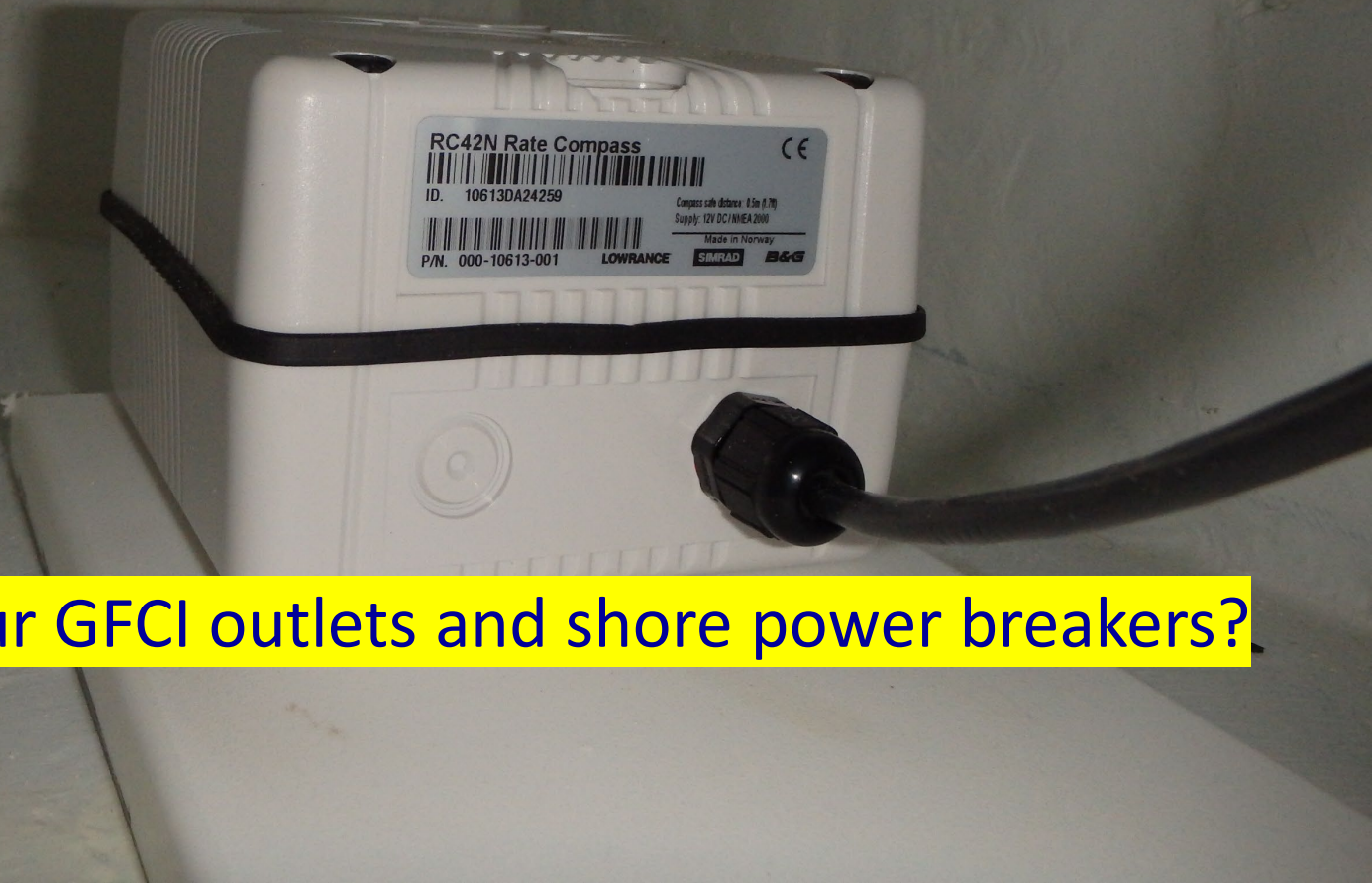
Find and remember...



Locate where things are installed

Anti siphon vents?

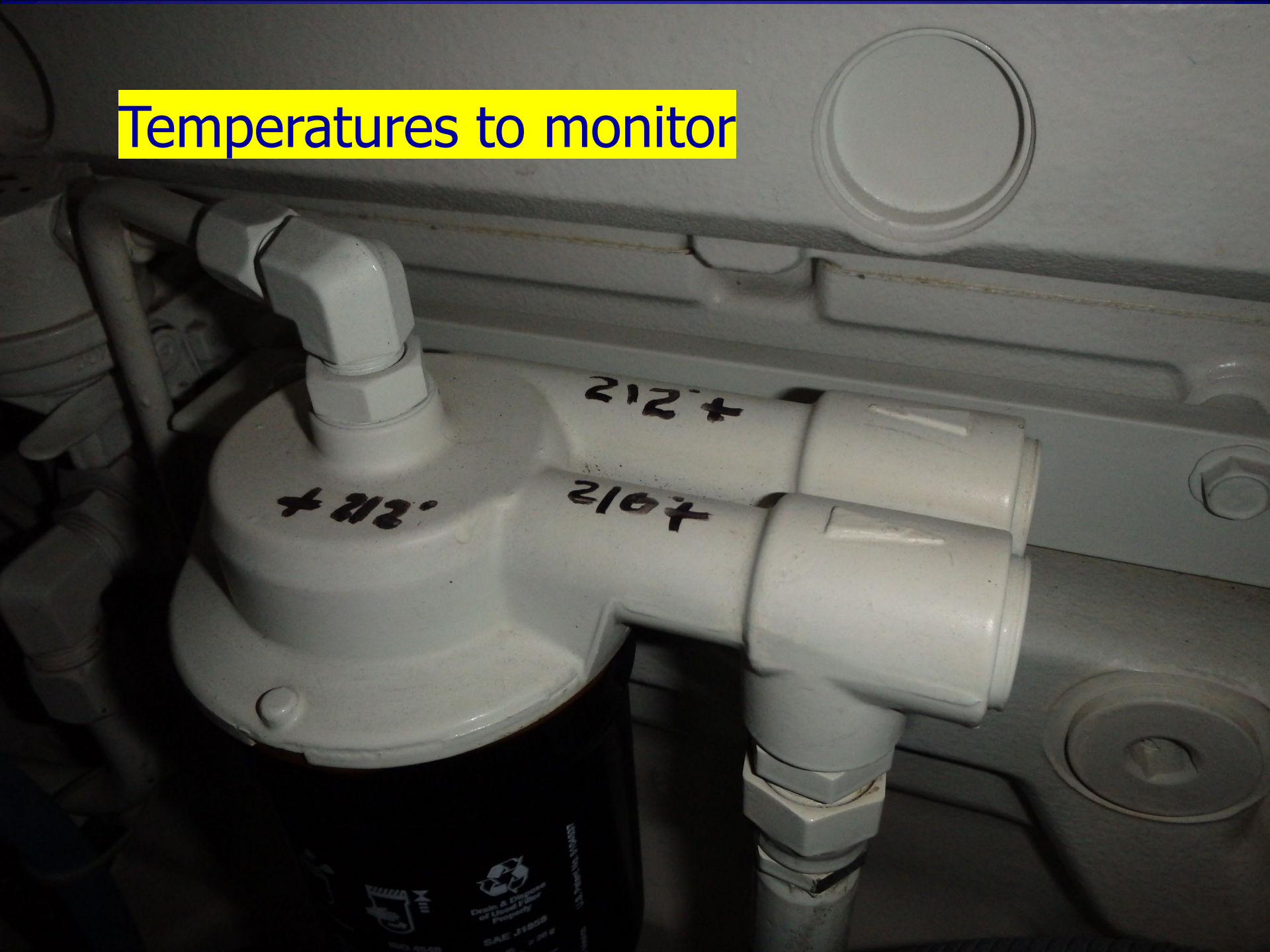
Where is your autopilot rate gain compass?



How about your GFCI outlets and shore power breakers?



# Temperatures to monitor





# What other temperatures should you record?

- Stuffing box
- Engine coolant
- ER forward and aft bulkhead





Analog "needle marks"





Mark normal needle position.

Do you have a bicycle pump?



MODEL No's. R-06, R-07, R-12

Use Aircraft Steering Fluid (HA5430) or a light viscosity hydraulic fluid spec. MIL H-5606C, such as Shell Aero Fluid #41, Esso Univas N15, Chevron Aviation Aero HFA. Heavier Fluids such as automatic transmission oil, may be added but will cause harder steering.

MAXIMUM RESERVOIR LEVEL

PRESSURE: 11



# Example of "tide mark" level





# Learn the "INS"...

OLD

↑ ↑ ↑ IN ↑ ↑ ↑ ↑

# 10  
STBD  
MAIN  
ENG

RETURN FROM MOTORS

# 12  
PORT  
MAIN  
ENG

RETURN FROM TRANSFER PUMP

# 29  
FUEL

# 30  
20KW  
GEN





and OUTS...

To and From, Supply and Return





Get a Label Maker and use it!





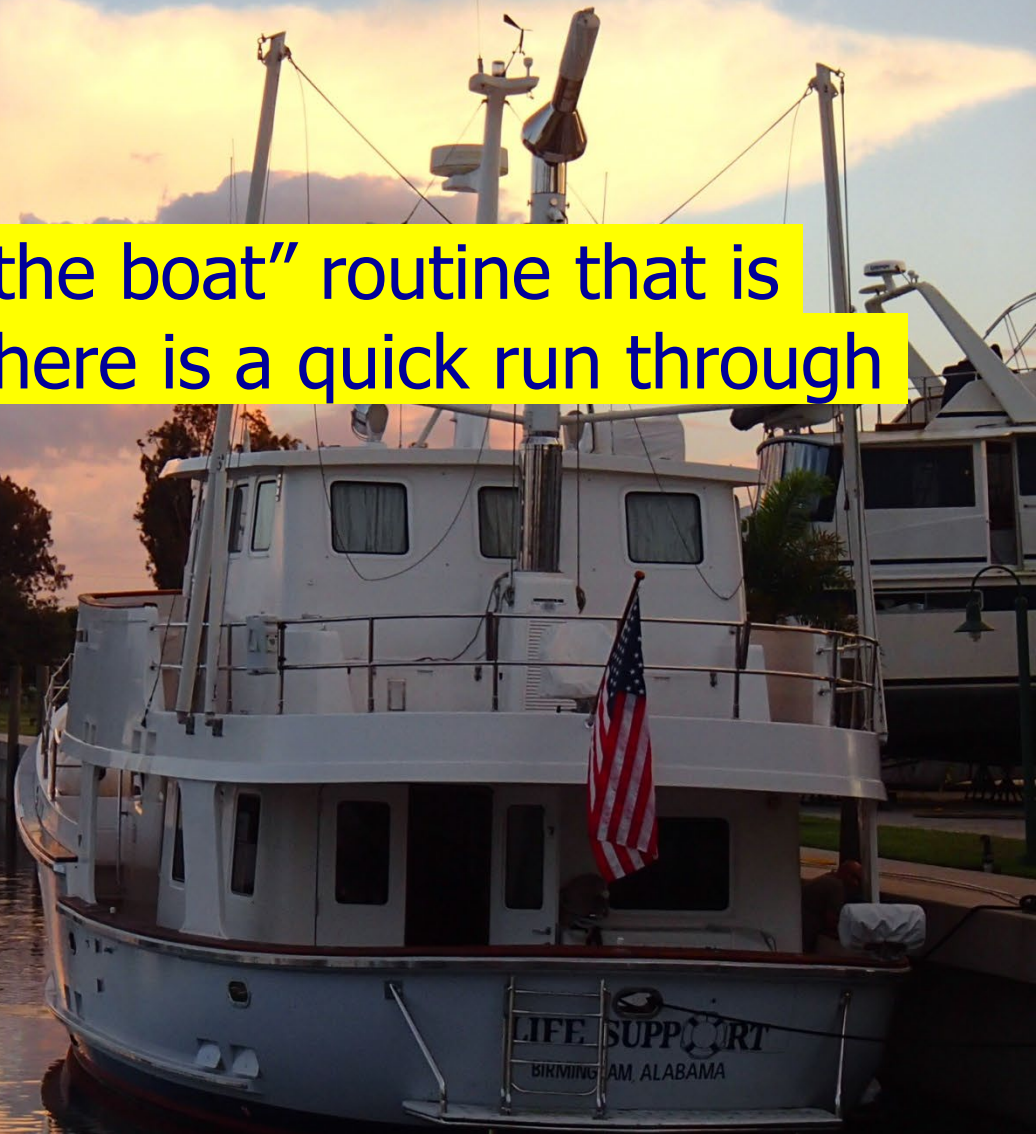
# Bow Thruster ON/OFF





# Routines

Develop a “return to the boat” routine that is the same each time, here is a quick run through of what I do.





# At The Dock

Let's start by approaching your boat tied up at the dock. What should you look for?

Shore tower breaker still **ON**?  
Shore power cord plugged **IN**? In the water?  
Dock lines secure? Any chafing on lines?  
Fenders properly positioned?



# On Board

Can you be contacted  
in an emergency?

Do you have a key for  
access to the boat?





# Emergency Contact Information

**M/V Convexity**

USCG #1186437

IN CASE OF EMERGENCY  
CALL OR TEXT **415-420-8800**



Is your lazarette hatch lockable?





Combination lock box for key





Shoes off basket





# Inside- My First Two Priorities

**Electrical** – Do I have shore power coming in and are my batteries charged?

**Bilge** – How much water do I have in the bilge?





AC IN = Good!





# Ship Shape

Keeping things clean and tidy makes it easier to notice when something goes wrong



# USCG Vessel Safety Check

**Handout\*** This is a great way to make sure you are in compliance





There are several areas where you can  
"Dial In"



# Anchoring Ideas





# Anchoring

Chain marking (HundRED)

Bitter end – line, cut away on deck





# Hund-RED's

NORDHAVN N5725  
ANCHOR CHAIN  
COLOR KEY

WHITE	=	50 FT
RED	=	100 FT
RW	=	150 FT
RR	=	200 FT
RRW	=	250 FT
RRR	=	300 FT
RRRW	=	350 FT
RRRR	=	400 FT



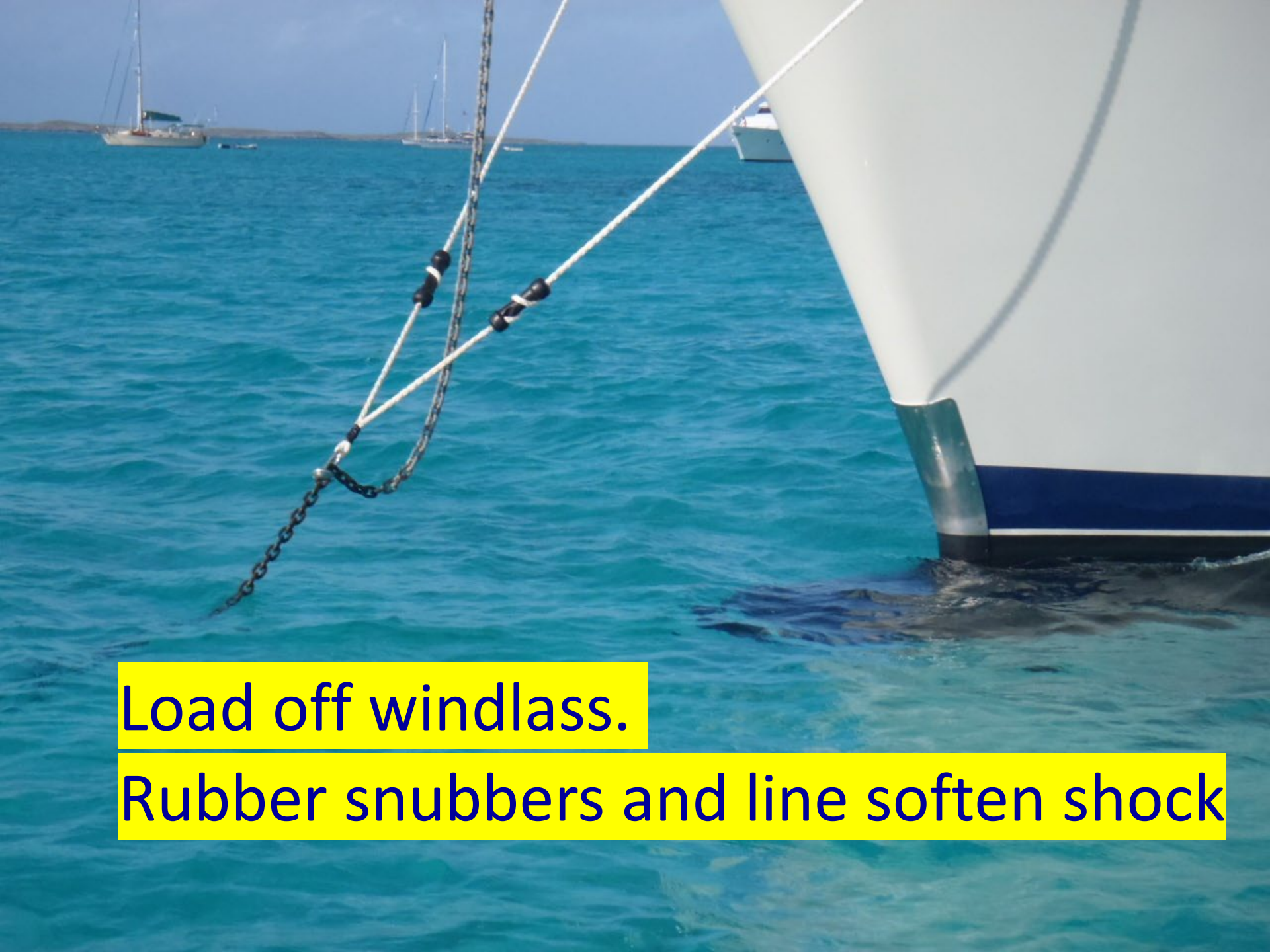
Color code summary right by windlass

WHITE	50'
RED	100'
WHITE	150'
GREEN	200'
WHITE	250'
RED	300'

# Anchor Bridle







Load off windlass.

Rubber snubbers and line soften shock



Stop Slop



Chain tensioner, snug anchor on roller

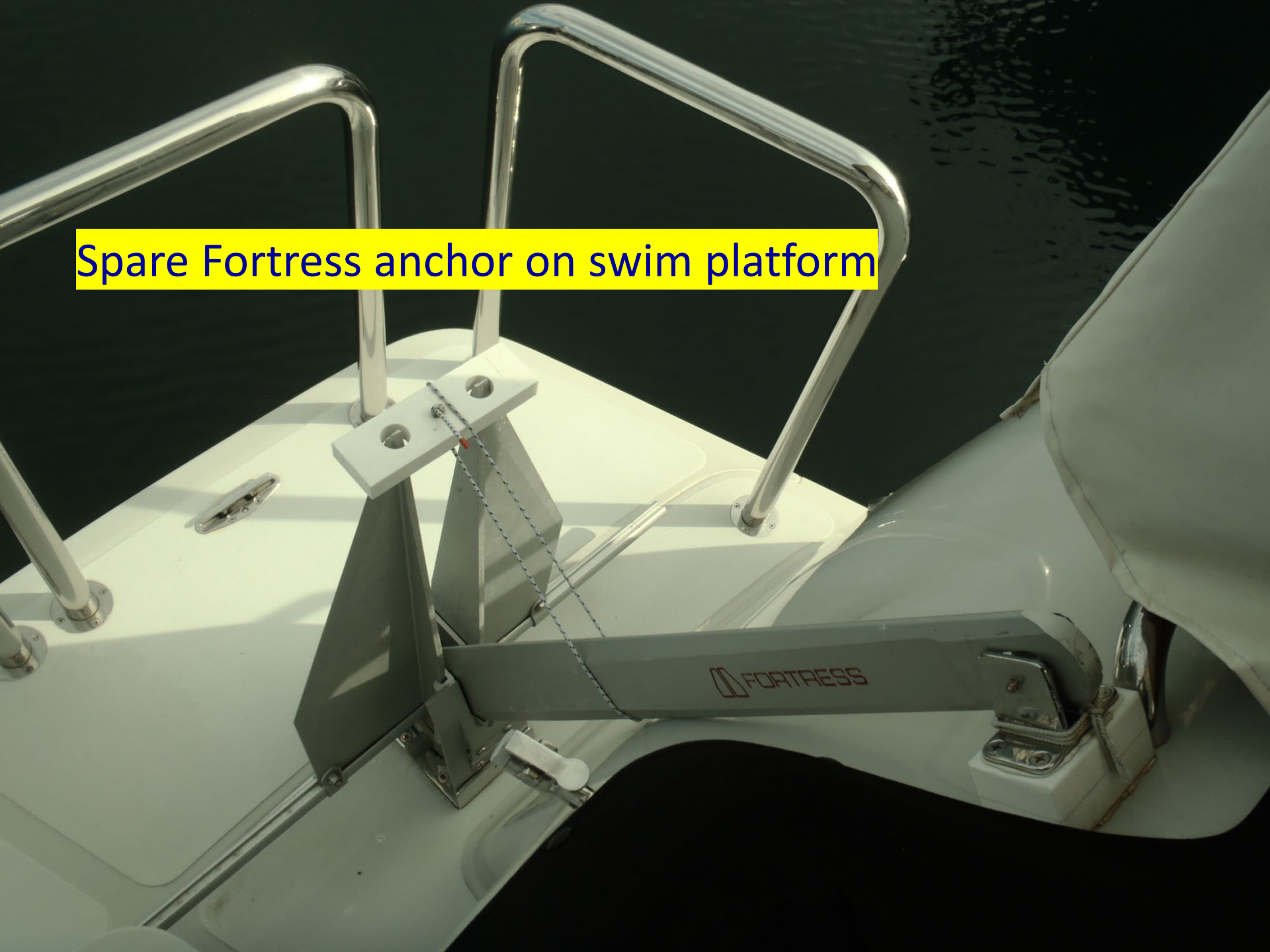




Spare Fortress anchor on foredeck



Spare Fortress anchor on swim platform



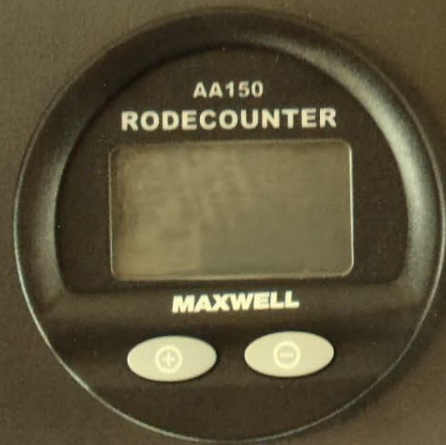
Chain color coding by windlass control





Last 50' feet or anchor at waterline.

Can you disconnect from bitter end?



**ANCHOR CHAIN**  
1st WHITE AT 40'  
WHITE MARK EVERY 50'  
LAST 50' PAINTED RED



Folding pad eye for clipping on fenders





Mark your fins for haul out



# Deck and Dinghy Tips





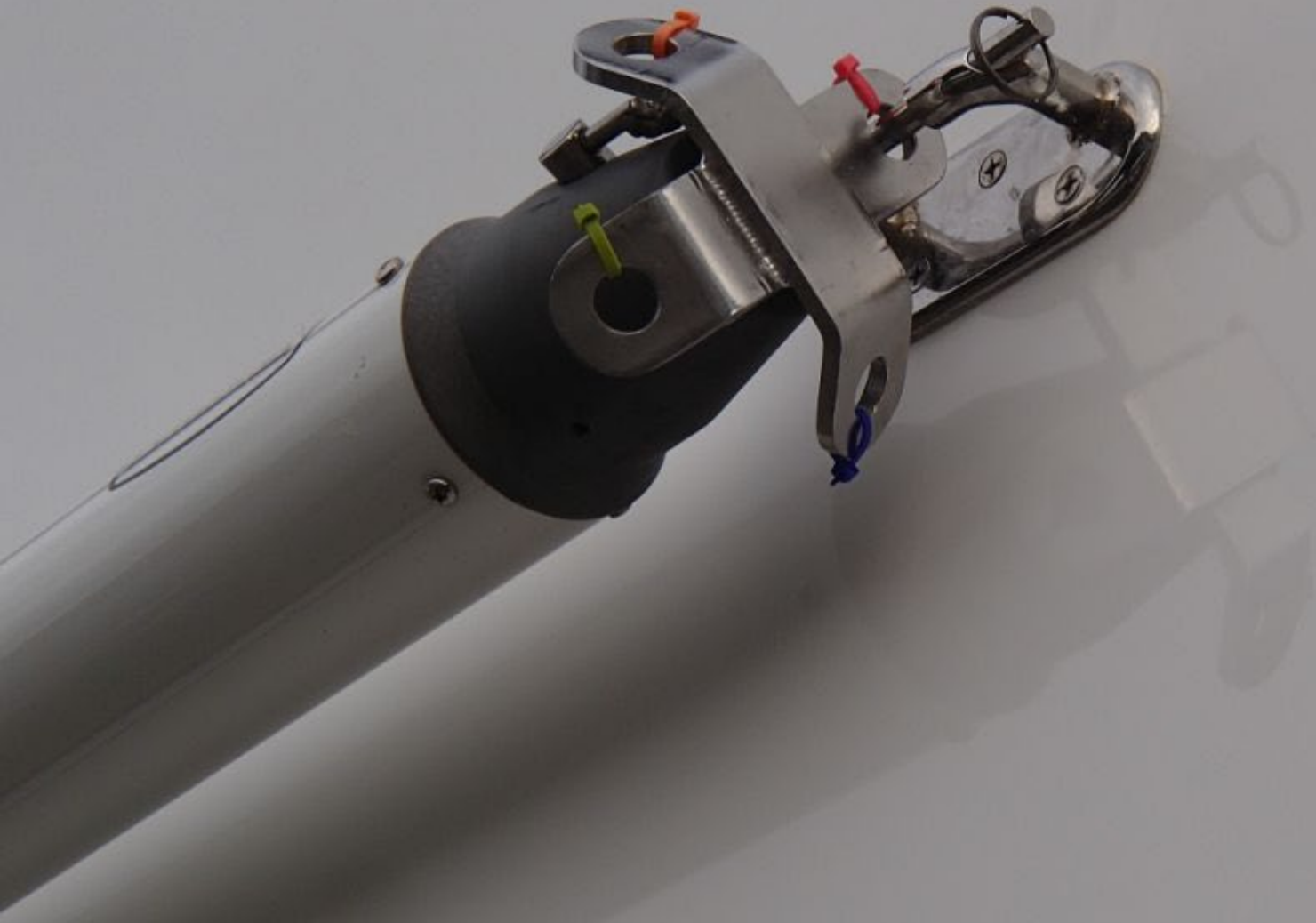
Secure outside deck lockers







# Flopper stopper – color code line attachments





Reflective tape on flopper pole



Dinghy launch with crane – level gauge



A white crane is mounted on a grey deck with white painted lines. The crane has a cylindrical base with two black vertical marks. In the background, a white cabin structure is visible with a steering wheel and other equipment. A yellow text box is overlaid on the image.

Mark crane pick up to simplify line-up at return



Boom winch lines can be marked with a Sharpie –  
Amsteel or Dyneema





Outboard skid plate



# Docking Tips

- Dock lines – color code red/green
- Extra lines and chafe protection
- Surge areas – chain on cleats
- Fenders – clips on hull, fender boards
- Inflatable fenders (need air pressure)
- Fender hooks
- Shore power connections – secure?

# Color markings or numbering of dock lines

**Dock Lines**  
**Short – White whipping**  
**Medium – Red whipping**  
**Long – Black whipping**



# Fender Boards



Boat Hook Ready!





# Shore Water: Filter Before Adding To Tanks



Hardware store cartridges  
sediment removal, charcoal –  
remove impurities





Water  
softener



The background of the slide is a photograph of a boat's deck at sunset. The sky is a gradient of blue and orange, with the sun low on the horizon. The water is dark with some ripples. In the foreground, there is a metal railing and some equipment on the deck.

# Main Engine Maintenance Log **Handout** - Nordhavn 55\*

This example is for a main engine. I recommend you create an individual log for all major components: Transmissions, Generator, Windlass, Crane, Watermaker, Stabilizers, etc.

# Maintenance Log - Records

Note all purchases and upgrades

Keep receipts

Track oil changes and all service repairs

This collected information is an important record and doubles as a sales tool when you are ready to sell your boat



**Handout\***

**Steve D'Antonio and  
Jeff Merrill Maintenance List**



# PART TWO

IDEAS THAT YOU CAN USE ON YOUR BOAT



by Jeff Merrill, CPYB  
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A photograph taken from the deck of a boat, looking out over a body of water towards a suspension bridge at sunset. The sun is low on the horizon, creating a golden glow and reflecting on the water. The sky is filled with scattered clouds. The boat's railing and part of its structure are visible in the foreground on the left. Two yellow text boxes with blue text are overlaid on the image.

I hope you will say...

That's a good idea!



Clear plastic protects wood surfaces





# Refrigerator organization – bars and tubs



# Thermometer and baking soda in refrigerator



Story - leave boat, ice cube test...



Shelf levels create more storage space





A metal wire rack is shown with several black plates and bowls. Each item is protected by a white, soft rubber mesh mat. The mesh mats are draped over the items, with some hanging over the edges of the rack. The rack is made of silver-colored metal. The background is a plain, light-colored wall.

Soft rubber mesh protects





Peg system for plates and bowls



Kadey-Krogen peg system for  
pots and pans









Organized home style drawer caddy





# Clear tubs for storage





# Storage bins "Lock and Lock"

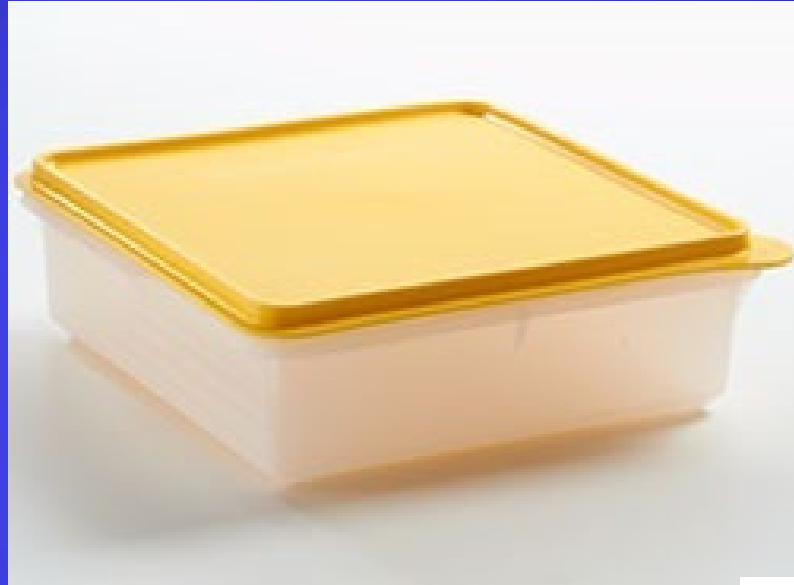




# Really Useful Boxes



# Loose Parts Bin (you'll identify where it goes later)







Dust buster small vacuum

(Kelp flies story)

Swiffer Sweeper Vacs are great for wood floors





# Squeegee and Shower Spray



# Suction cup caddy

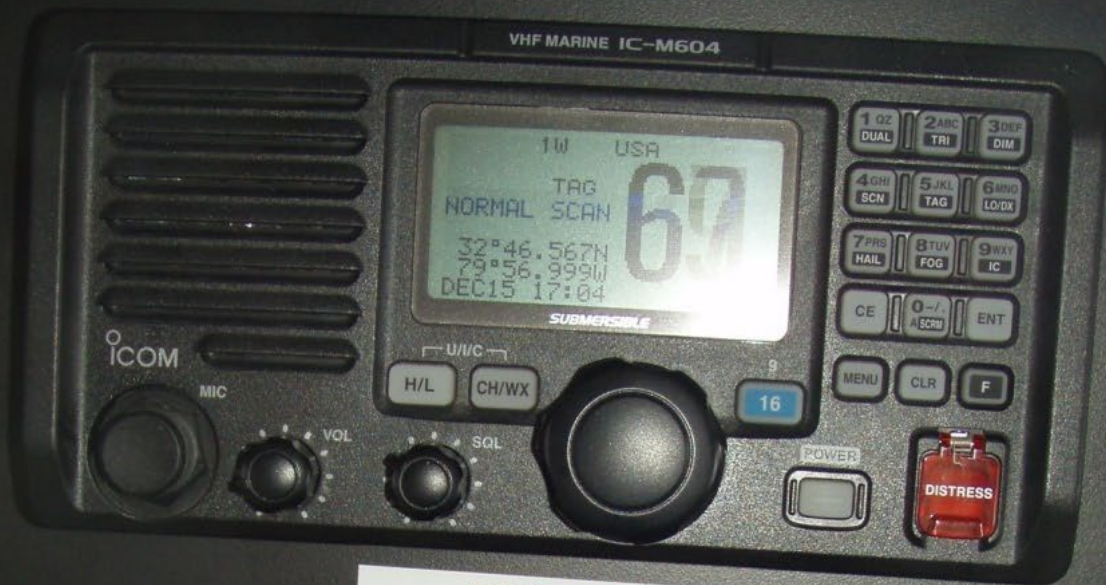




# Helm area suggestions







WDE 4988

VHF call sign label





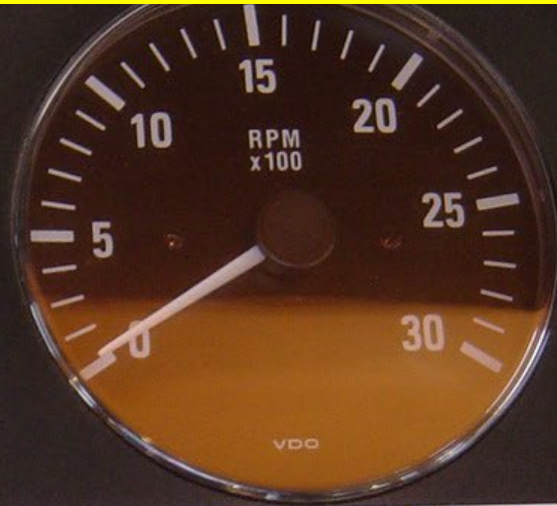


Keep your display screens clean



- SET 2200 RPM ON WING ENGINE
- PRESS "START" (GREEN) ON BOW THRUSTER KEYPAD; pump will whine and discharge stb'd. side, aft
- PRESS "STOP" (RED) ON KEYPAD WHEN BILGE IS EMPTY; Repeat as necessary while locating water entry.

**Quick reference "norms"**



**WAGER** **MAIN**





LOA 61 FT  
BEAM 17 FT  
DRAFT 6 FT  
HEIGHT 24 FT  
ANCHOR MARKS 25 FT

LOA, Beam, Draft, Bridge clearance

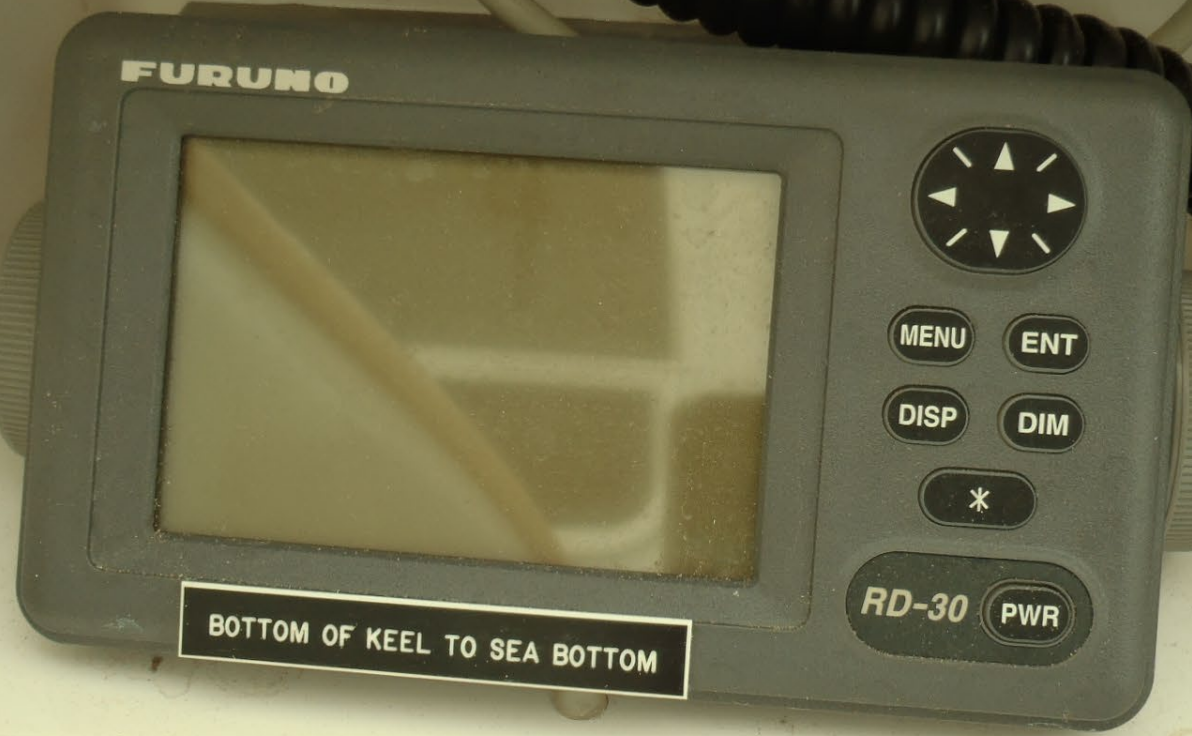


# M.V. JODA

DRAFT	5.0'	1.525 m
LOA	48.5'	14.75 m
BEAM	16.75'	5.10 m
DISPL.	56,200 lbs	
WATER	540 USG	2,044 L
FUEL	1,038 USG	3,945 L
MAST	30' 4"	9.2 m



What depth are you reading?



BOTTOM OF KEEL TO SEA BOTTOM

# Inland, River reminders

1 WHISTLE

HEAD ON PORT TO PORT

OVERTAKING BOAT PUTTING SLOWER BOAT TO PORT

2 WHISTLES

HEAD ON STBD TO STBD

OVERTAKING BOAT PUTTING SLOWER BOAT TO STBD



# Detail tape to segment electrical panel





Color code dots – ON/OFF – Day/Night



DEPTH SO



WIND SPEED



WEATHER FAX



HOLDING TANK PUMP



GRAY WATER PUMP

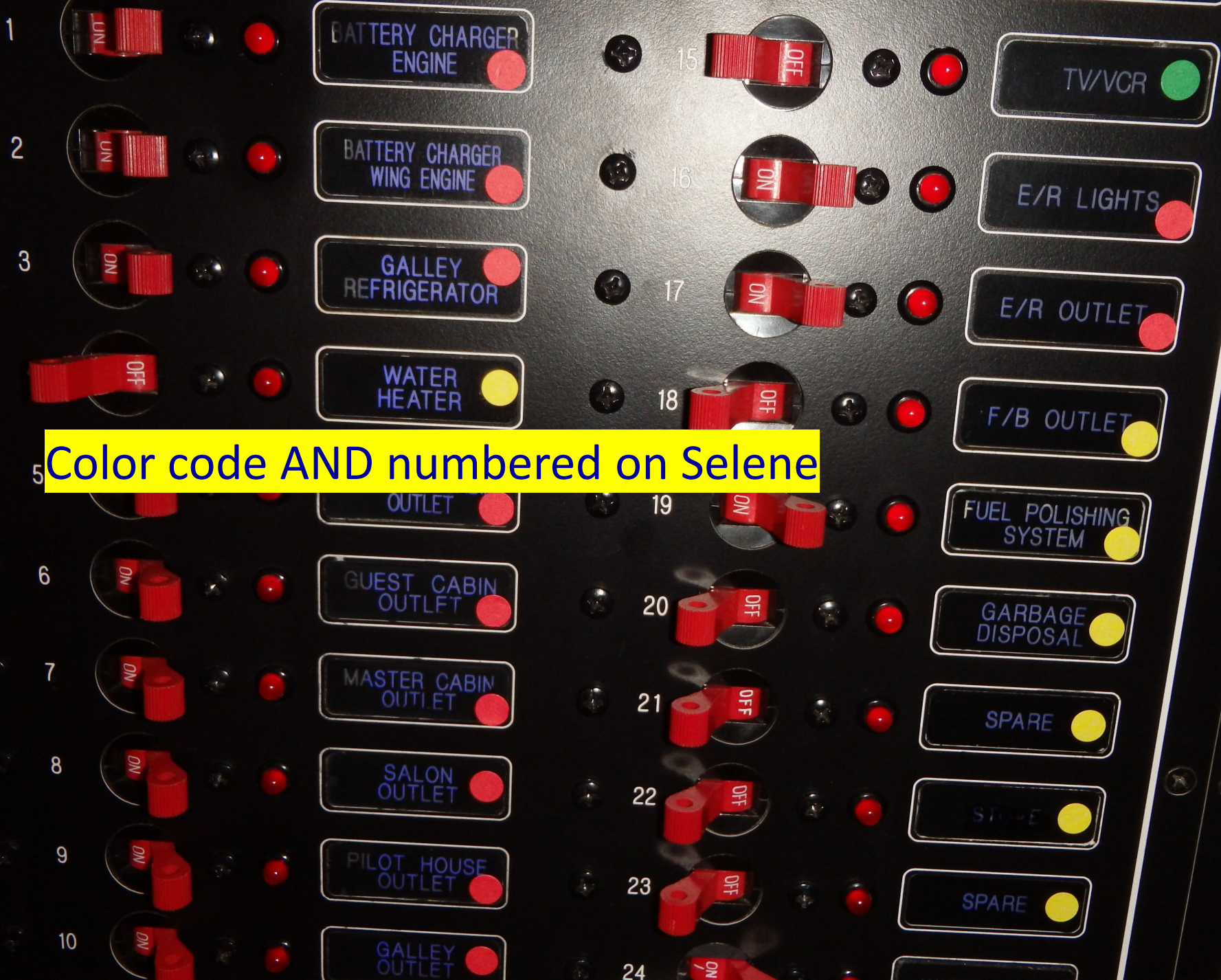
BILGE PUMP

AUTO/MANUAL

HOLDING TANK

1/4





Color code AND numbered on Selene



# Toggle guards on "permanent" breakers

INVERTER

FWD

AMIDSHIPS

TS AFT

ETS PILOT HOUSE

NE ROOM LIGHTS

/STEREO

4V CHARGER



GALLEY FRIDGE/FREEZE

EXHAUST STACK COOLING

P/H CHEST FREEZER

WASH COMPACTOR

MICROWAVE / SALON TV

STOVE TOP IGNITER

GARBAGE DISPOSAL

WATERMAKER

E / ROOM BLOWERS







Binocular rack



Drink holders







Portable caddy for important “stuff”

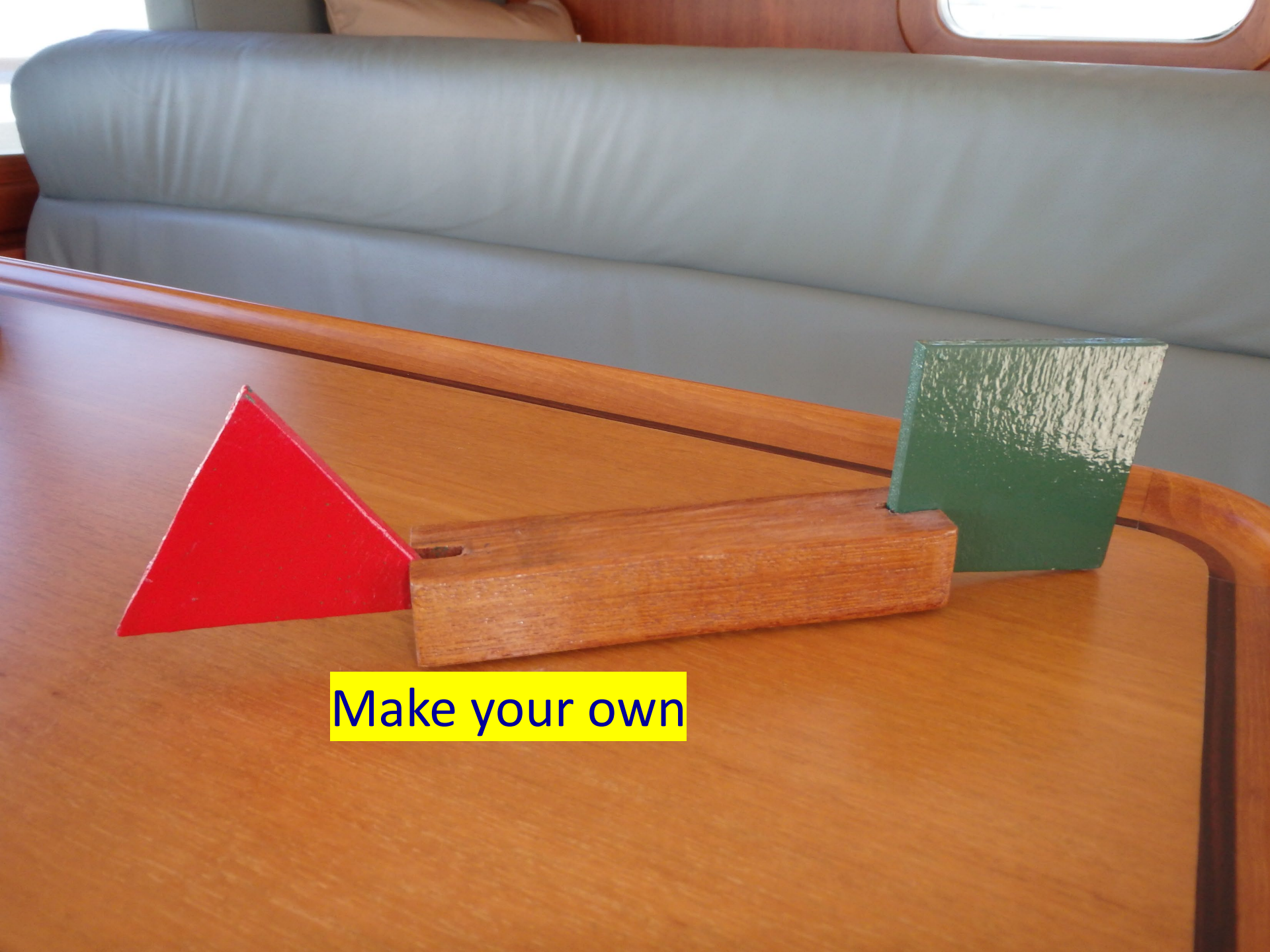


Channel buoy reminder

Easily reversible!







Make your own



When you depart,

leave yourself a reminder...

Three Hull Closed !!

Gen

Wing

Water Maker

Start Charger - OFF



A man wearing a blue short-sleeved shirt with a white floral pattern, khaki shorts, and red earplugs is inspecting a white engine in an engine room. He is leaning over a stainless steel railing, holding a white cloth and a black tool. The engine is a large, white, industrial-looking unit with various pipes and hoses. The background shows more of the engine room, including a green container and a white sink.

Engine Room Inspection Tips

# Infrared Temperature Gun







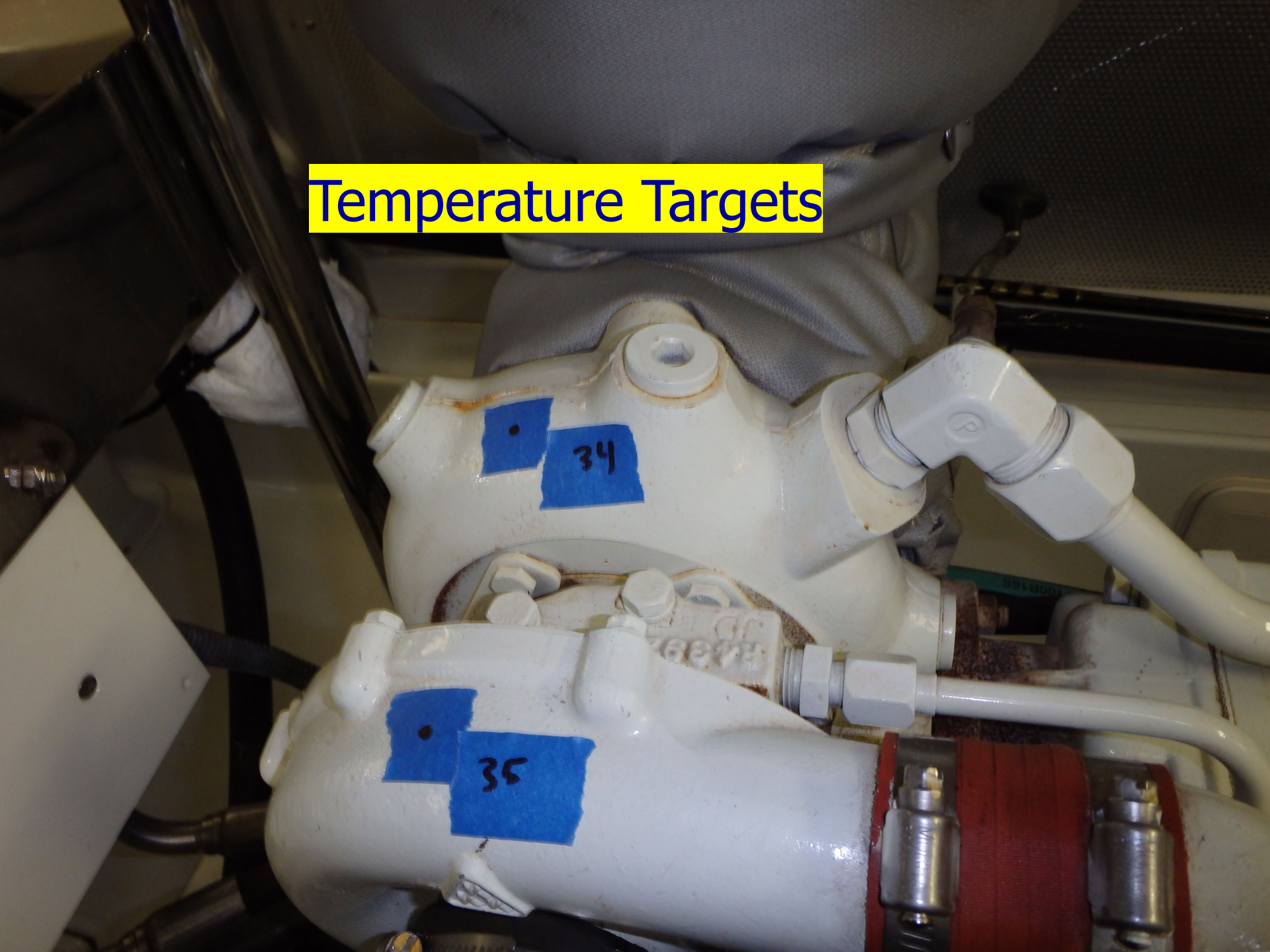


Mark single point to shoot



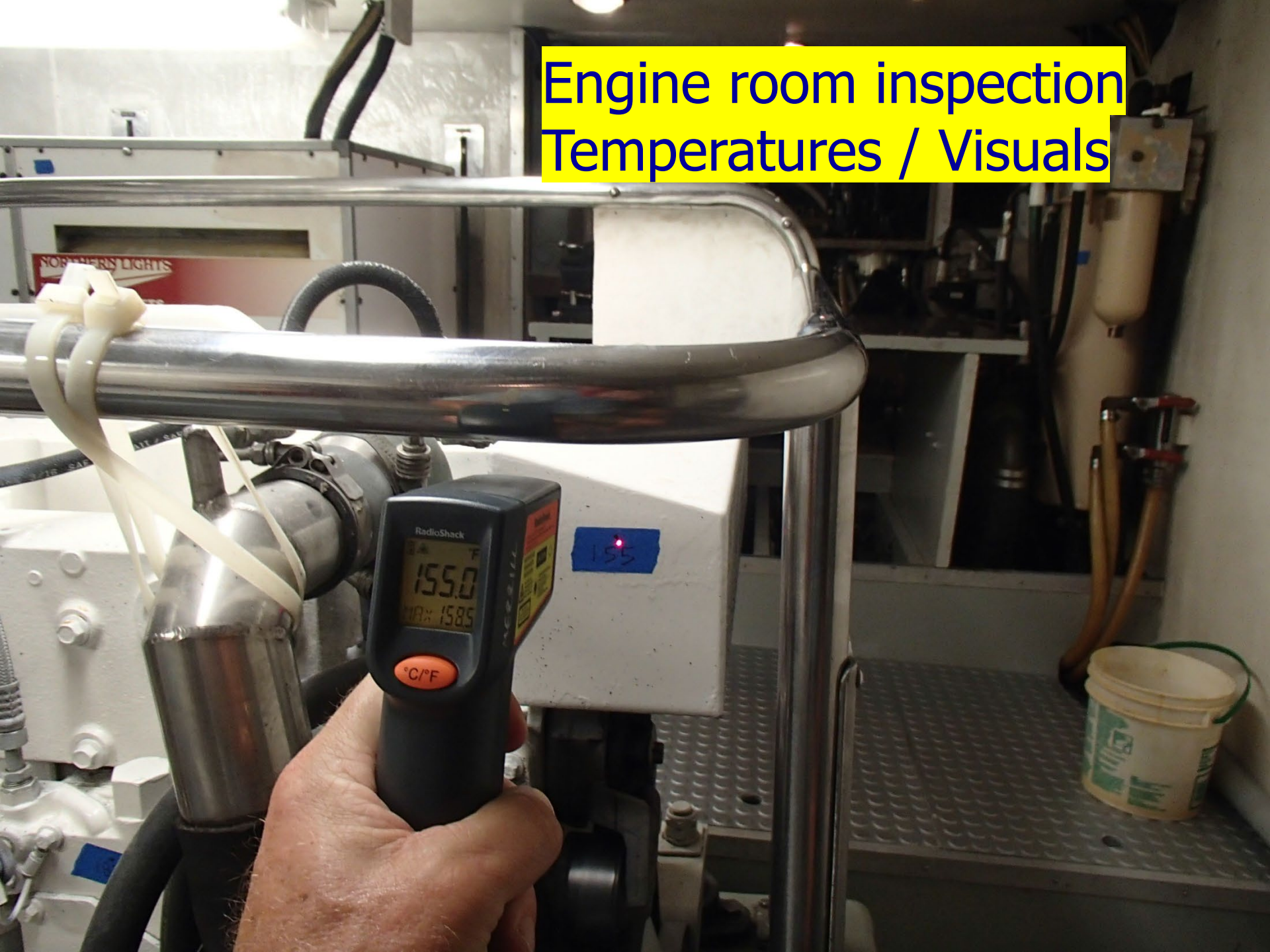


# Temperature Targets





# Engine room inspection Temperatures / Visuals



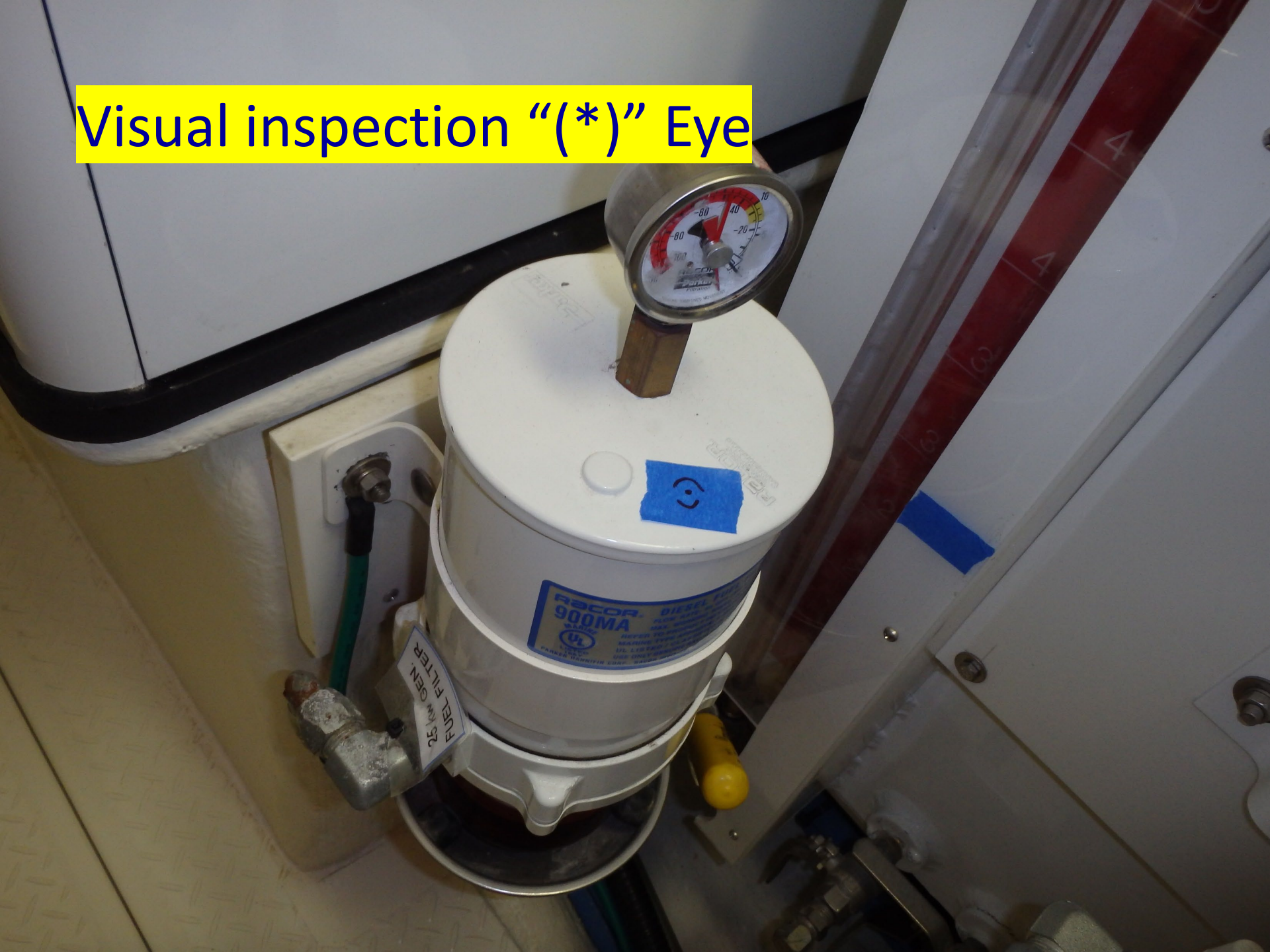


Hold Gun 2 – 6" away

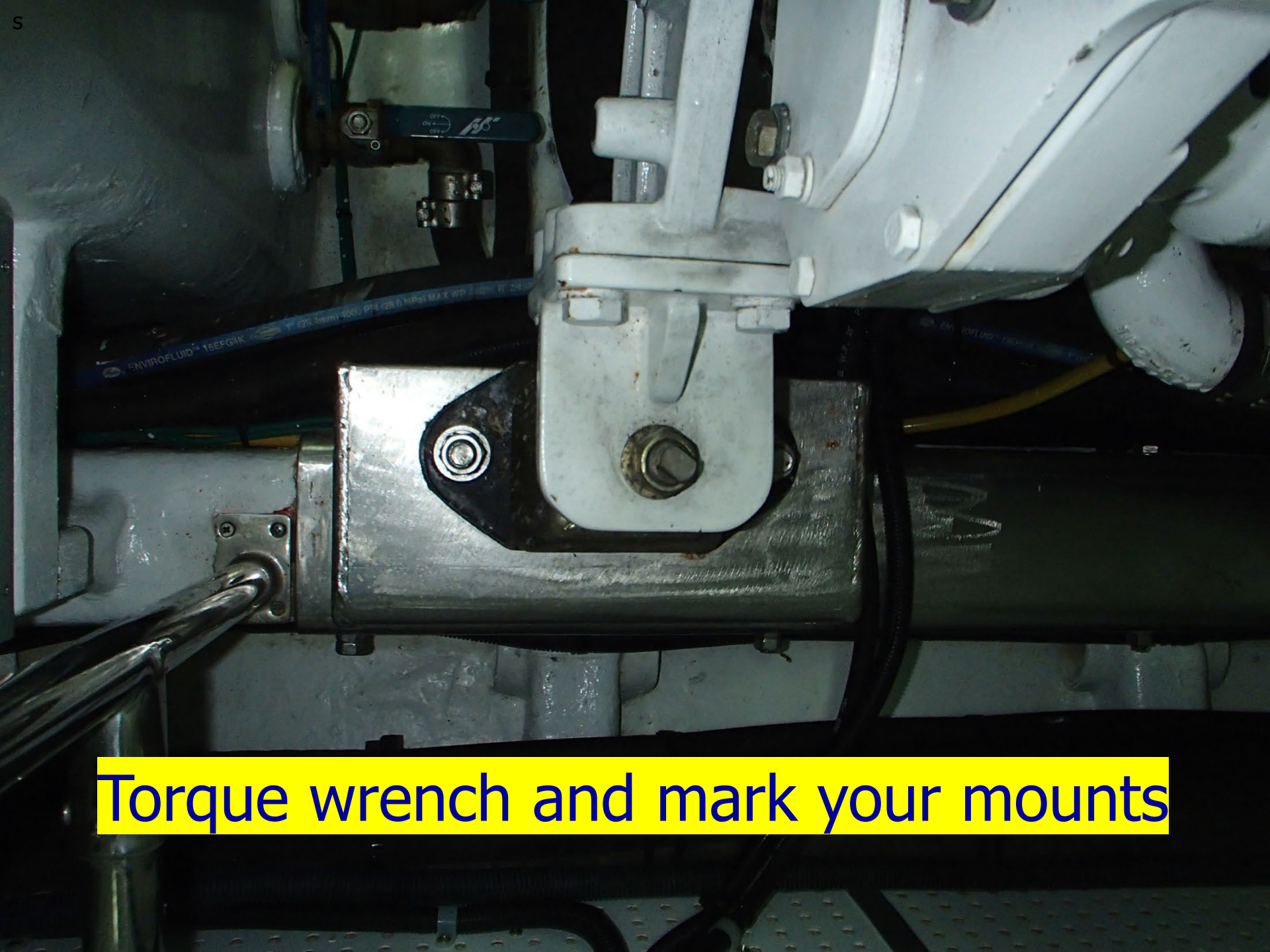




# Visual inspection “(\*)” Eye







Torque wrench and mark your mounts



engine  
13  
mounts



Bilge  
16  
Level



PROUDLY

CLARK

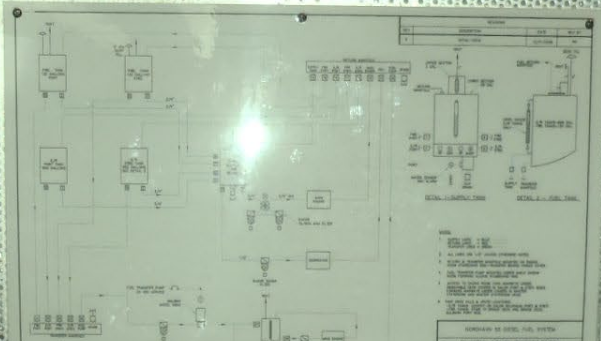
SNUGGED DOWN  
ALL ENGINE MOUNT.  
13 SEPT 13

3/4" WRENCH.



STBD

Laminated fuel diagram by manifold

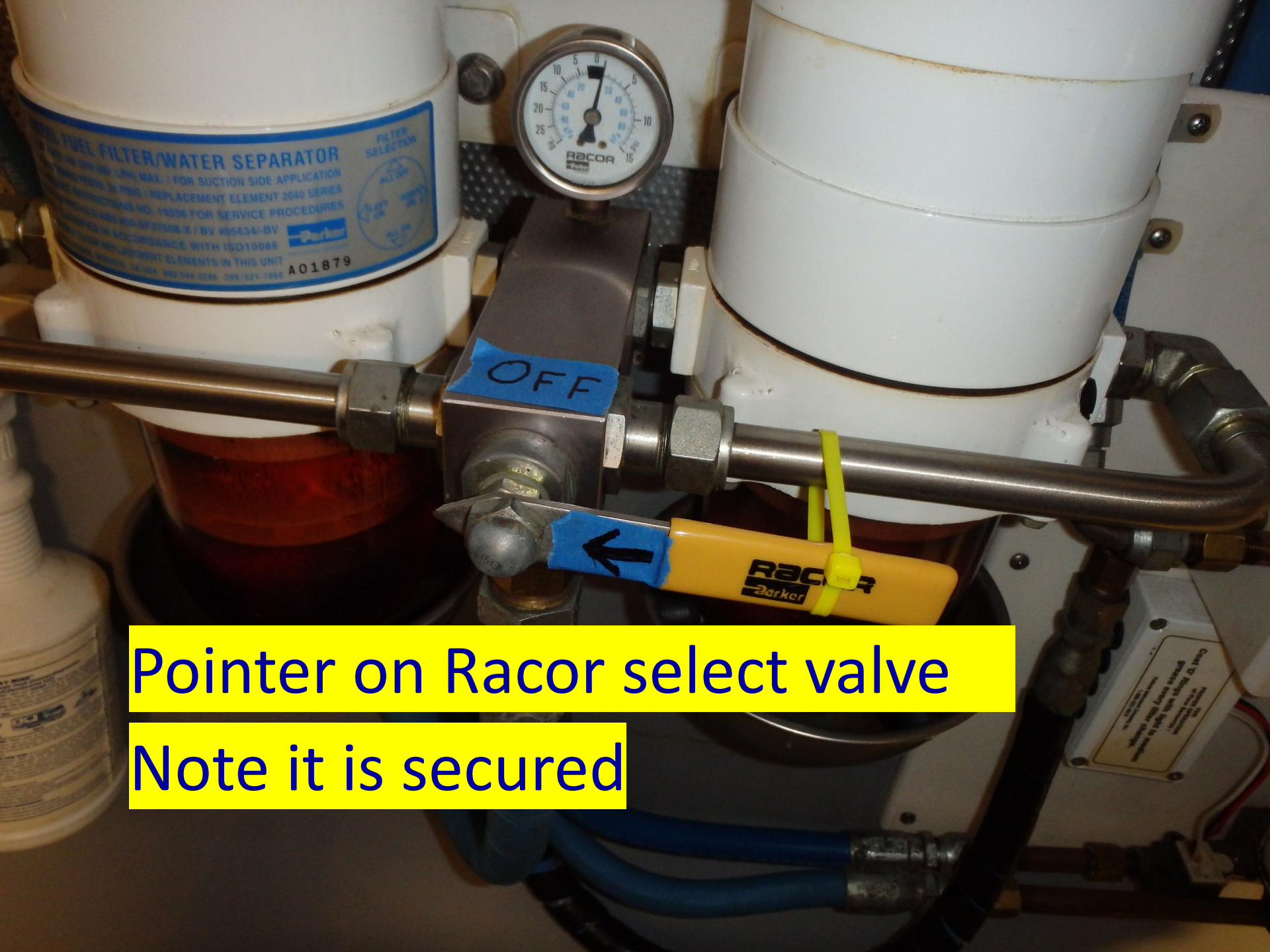






The sharp end points to desired bowl





Pointer on Racor select valve

Note it is secured



Velcro straps so valve handle isn't bumped





# Replacement sizes and hours noted

**RACOR 500MA**  
FOR SUEZION SIDE AND REFER TO PRODUCT FOR MARINE TYPE APPROVALS  
UL LISTED CLASSIFICATION: 100V, 15A, 1-1/2" (38mm)  
PARKER HANNIFIN CORP. RACOR

**6 KW**  
**10 Micron**  
782 Hrs



MARINE WET EXHAUST & WATER HOSE • 250°F (120°C) MAX.  
SAE J2006 • LLOYDS APPROVED CERT. 02/69802 2904  
#250-1120  
1-1/2" (38mm)

**TRIDENT-FLEX**

**RACOR 500MA**  
FOR SUEZION SIDE AND REFER TO PRODUCT FOR MARINE TYPE APPROVALS  
UL LISTED CLASSIFICATION: 100V, 15A, 1-1/2" (38mm)  
PARKER HANNIFIN CORP. RACOR

**12 KW**  
**10 Micron**  
187 Hrs



MARINE WET EXHAUST & WATER HOSE • 250°F (120°C) MAX.  
SAE J2006 • LLOYDS APPROVED CERT. 02/69802 2904  
#250-1120  
1-1/2" (38mm)

**TRIDENT-FLEX**



# Color code multiple tank valves



Nail polish or red Sharpie to mark Zincs







Mark fuel filter for bleeding

WARNING  
ON ANY ENGINE WITH AN  
CONTROLLED FUEL SYSTEM

FUEL FILTER  
SEPARATOR  
51005

NORTHERN

JG

FILTER @ 1700 HRS  
14 APRIL 2015

LUGGE  
NORTHERN



A close-up photograph of a white ceramic toilet flush valve assembly. The central component is a vertical ceramic stem with a red primer lever attached to its side. The lever is a curved, teardrop-shaped piece of red plastic. The stem is mounted on a white ceramic base. To the right, a white ceramic flush valve handle is visible. The background shows the white ceramic bowl of the toilet. The text "And primer lever" is overlaid in a yellow box at the bottom of the image.

And primer lever



Potential trouble, will your muffler drain?

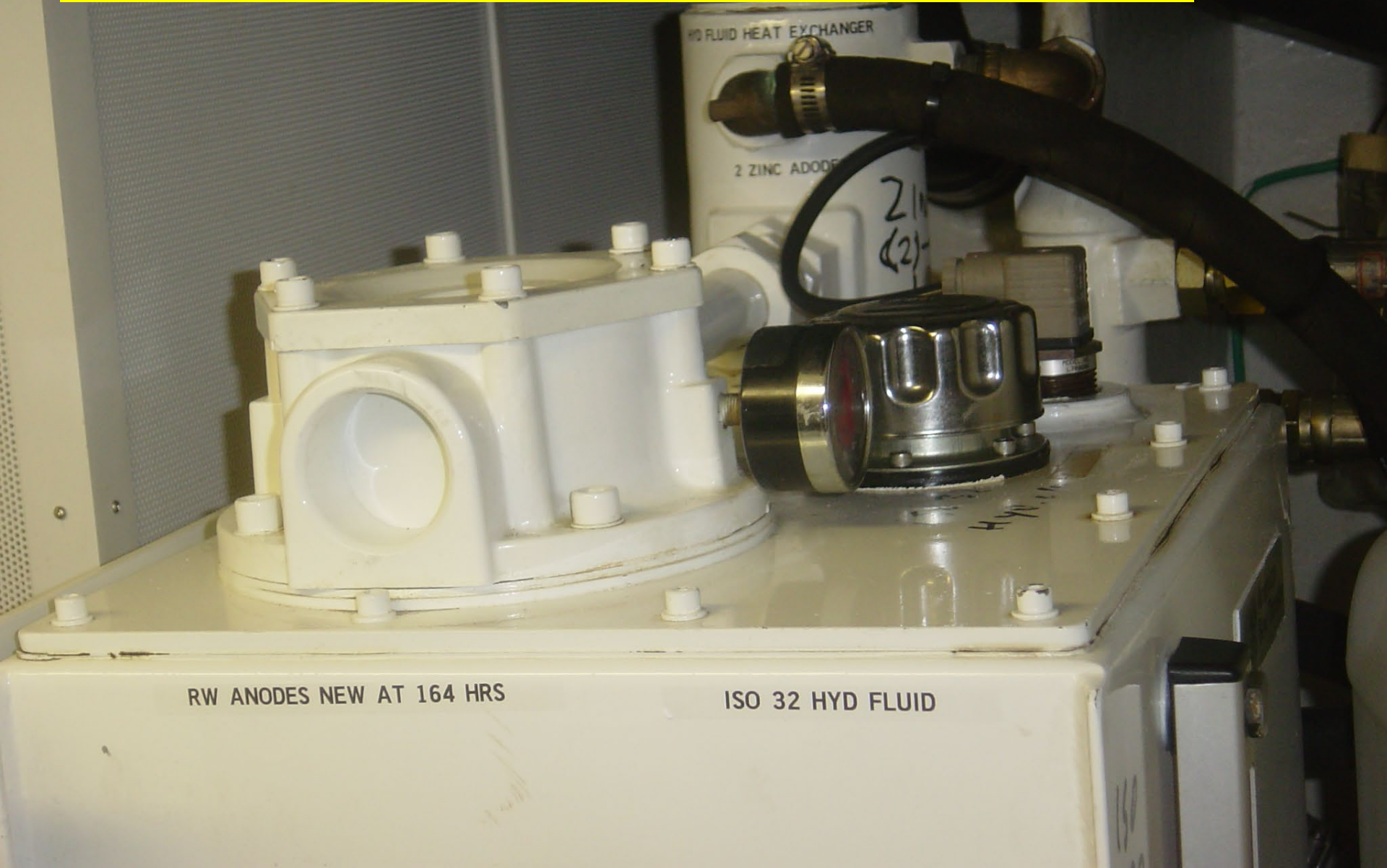


Install a drain valve





# Anodes (pencil zincs) and hydraulic oil weight







Coolant over flow catcher





DELO 400 15W-40

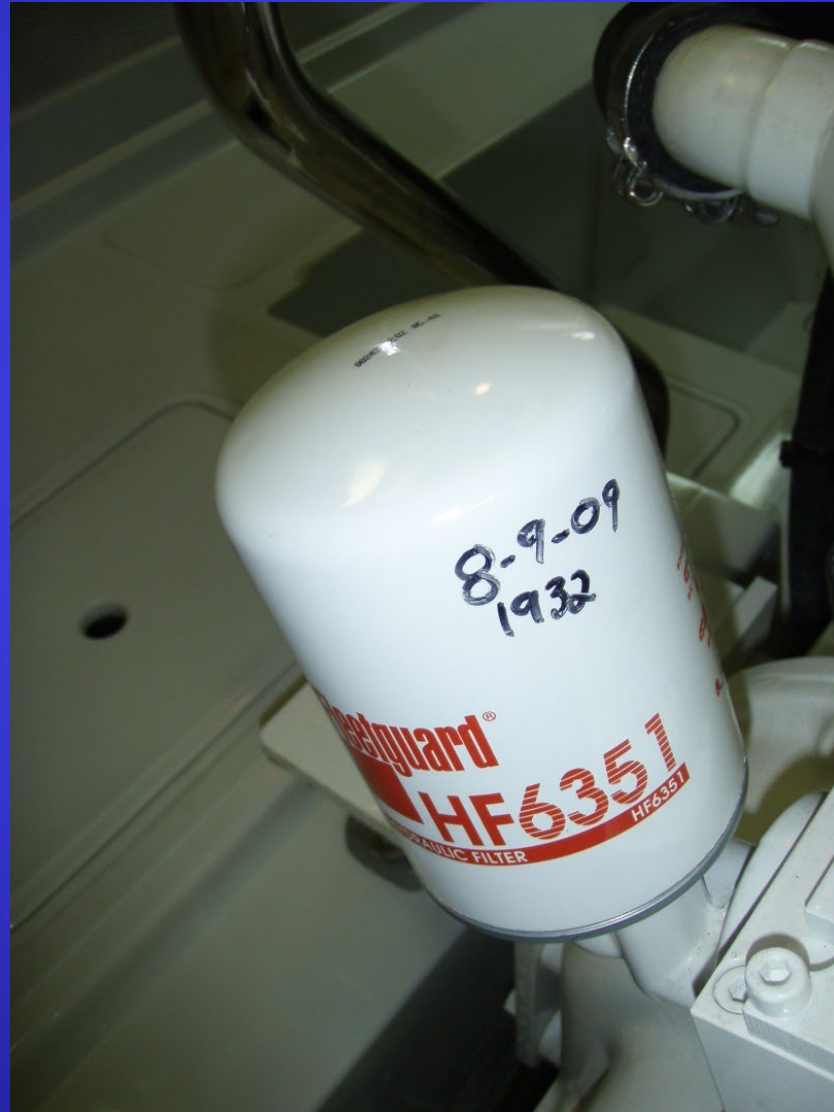
4 GALLONS

Brand of oil, viscosity weight and quantity.

Make it easy!

ATTENTION  
SEE OWNERS MANUAL

# Label filters to track changes





BILGE PUMP  
POWER SOURCE  
(50A FUSE)

FROM STBD. ENG.  
ISOLATOR TO  
CHARGE HOUSE  
BANK (60A FUSE)

FROM PORT ENG.  
ISOLATOR TO  
CHARGE HOUSE  
BANK (60A FUSE)

Identify fuses, carry spares

POR



**Secure spare fuse near active one**





Replacement at location



HOUSE BATTERY FUSE





Stuffing box wrench caddy







Cleaning  
spray  
bottles  
ready



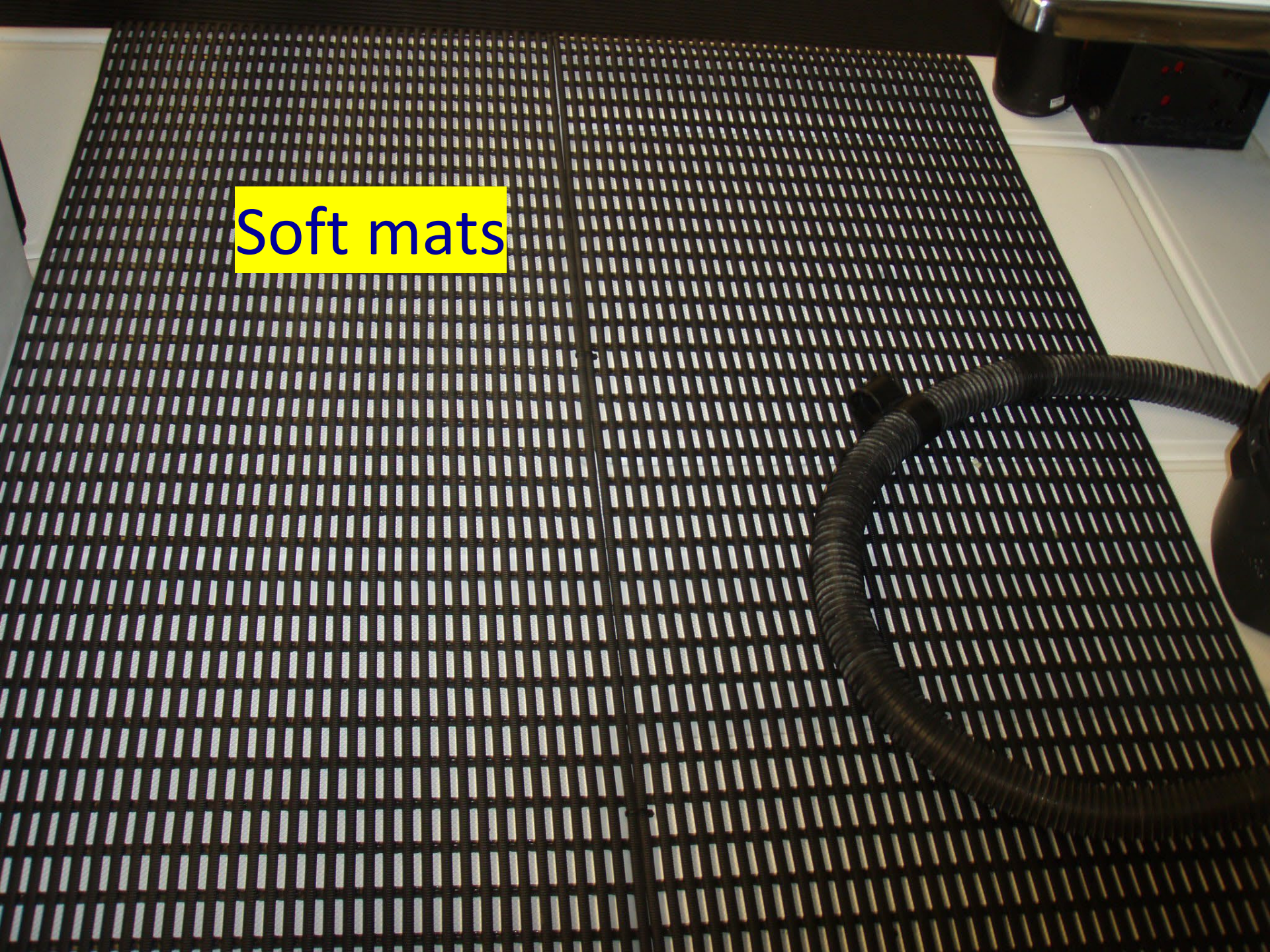




Fresh water tap and bucket

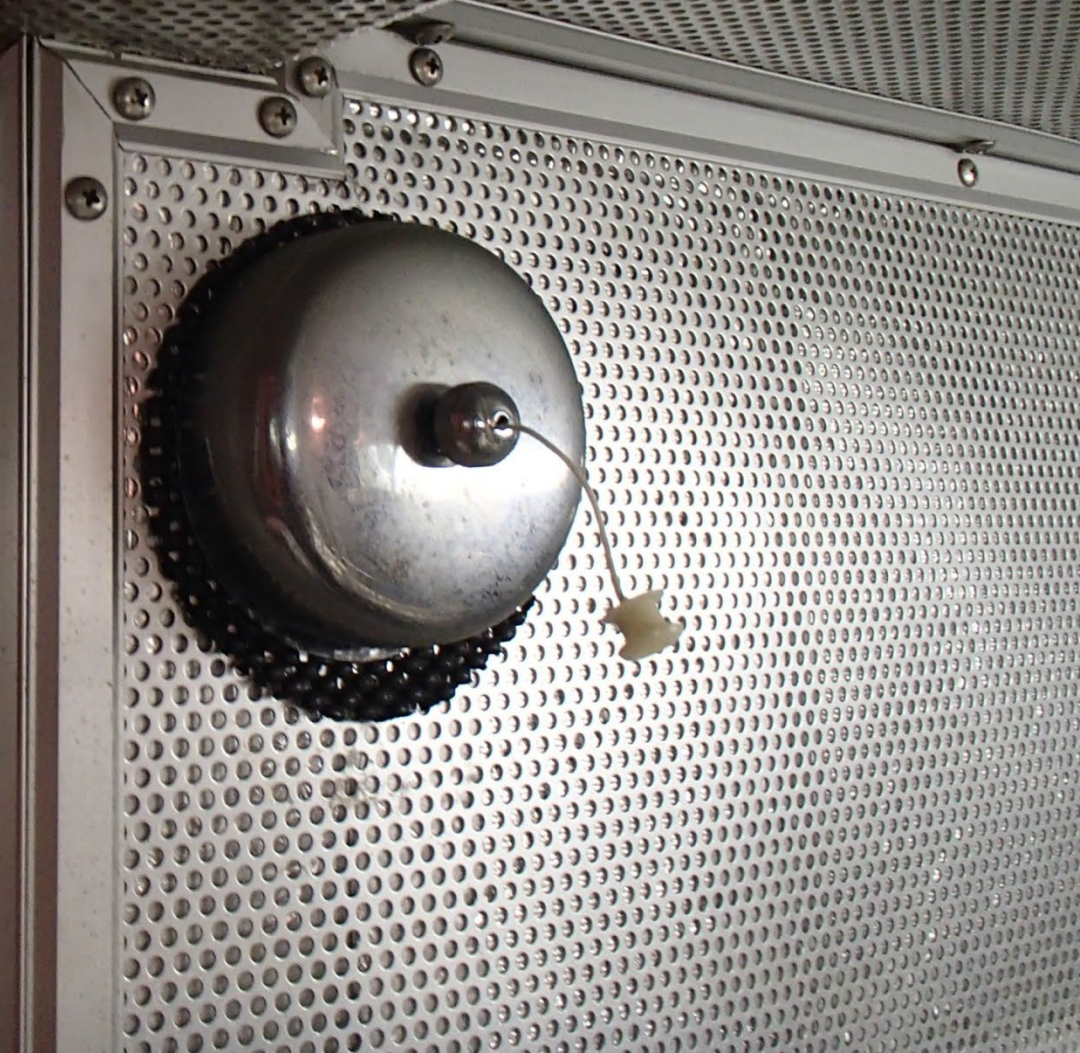
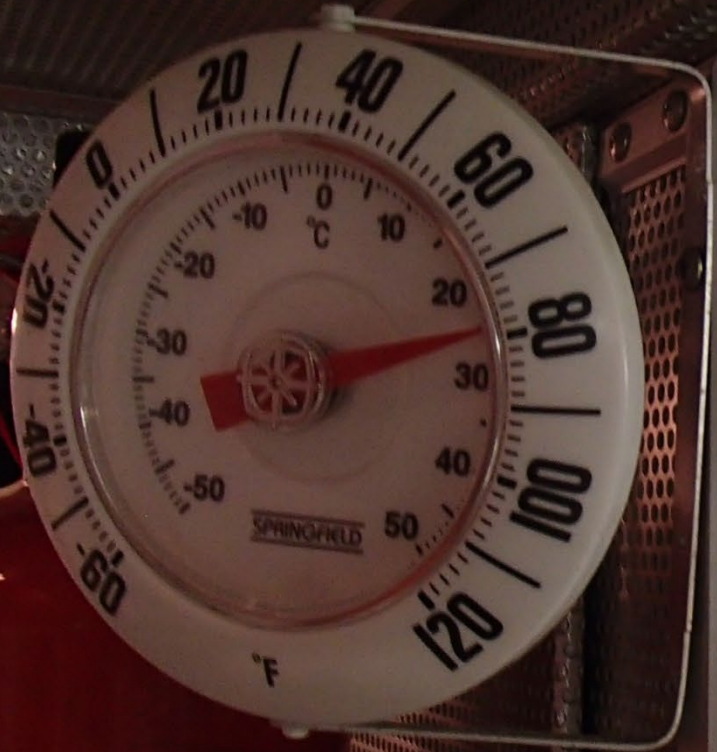


Soft mats





Engine room temp and clothes line







Cleaning product shelf





Storage hammock

STORAGE USE ONLY  
Date of use: 02/20/2019  
Box: 000001  
Priority: 000  
Phone Number: 00 00 0000  
Room No: 00 00  
Box No: 0001  
Date of use: 02/20/2019  
Box: 000001  
Priority: 000  
Phone Number: 00 00 0000  
Room No: 00 00  
Box No: 0001  
Date of use: 02/20/2019  
Box: 000001  
Priority: 000  
Phone Number: 00 00 0000  
Room No: 00 00  
Box No: 0001



A blue, woven mesh bag is shown, designed for use with through hull bungs. The bag is rectangular and has a central opening at the top. A black plastic bung is inserted into this opening. The bag is made of a fine, blue mesh material. The background is a light-colored, possibly white, surface.

Suction mesh bag for through hull bungs



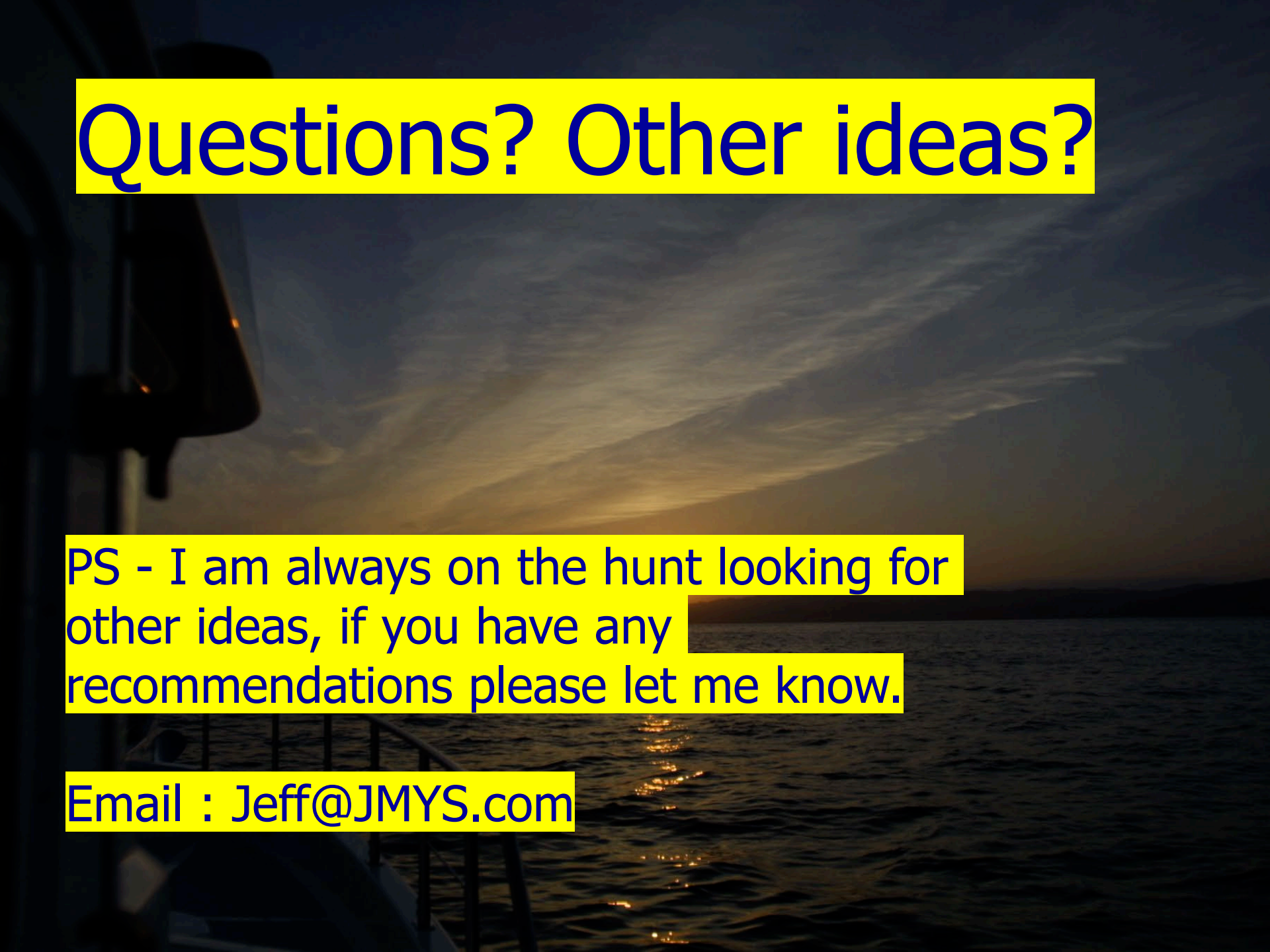


Zippered pillow bag for engine diapers



Get out there and have fun!



A sunset over a body of water with a boat's railing in the foreground. The sun is low on the horizon, creating a golden glow and reflecting on the water. The sky is a mix of orange, yellow, and blue. The boat's railing is visible in the lower left corner.

# Questions? Other ideas?

PS - I am always on the hunt looking for other ideas, if you have any recommendations please let me know.

Email : [Jeff@JMYS.com](mailto:Jeff@JMYS.com)



A vibrant sunset over the ocean. The sun is low on the horizon, casting a golden glow across the sky and reflecting on the water. The sky is filled with large, dark clouds that are illuminated from below, creating a dramatic and colorful scene. The water in the foreground is dark with small waves.

Thank you!

See you at the Baltimore TrawlerFest in September 2022

Dial-In-Your-Trawler series PDF on [www.JMYS.com](http://www.JMYS.com)