

Dialing In Your Trawler

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



Online Summit
November 14, 2020
by Jeff Merrill

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Racing sailboats led to this course

TrawlerFest

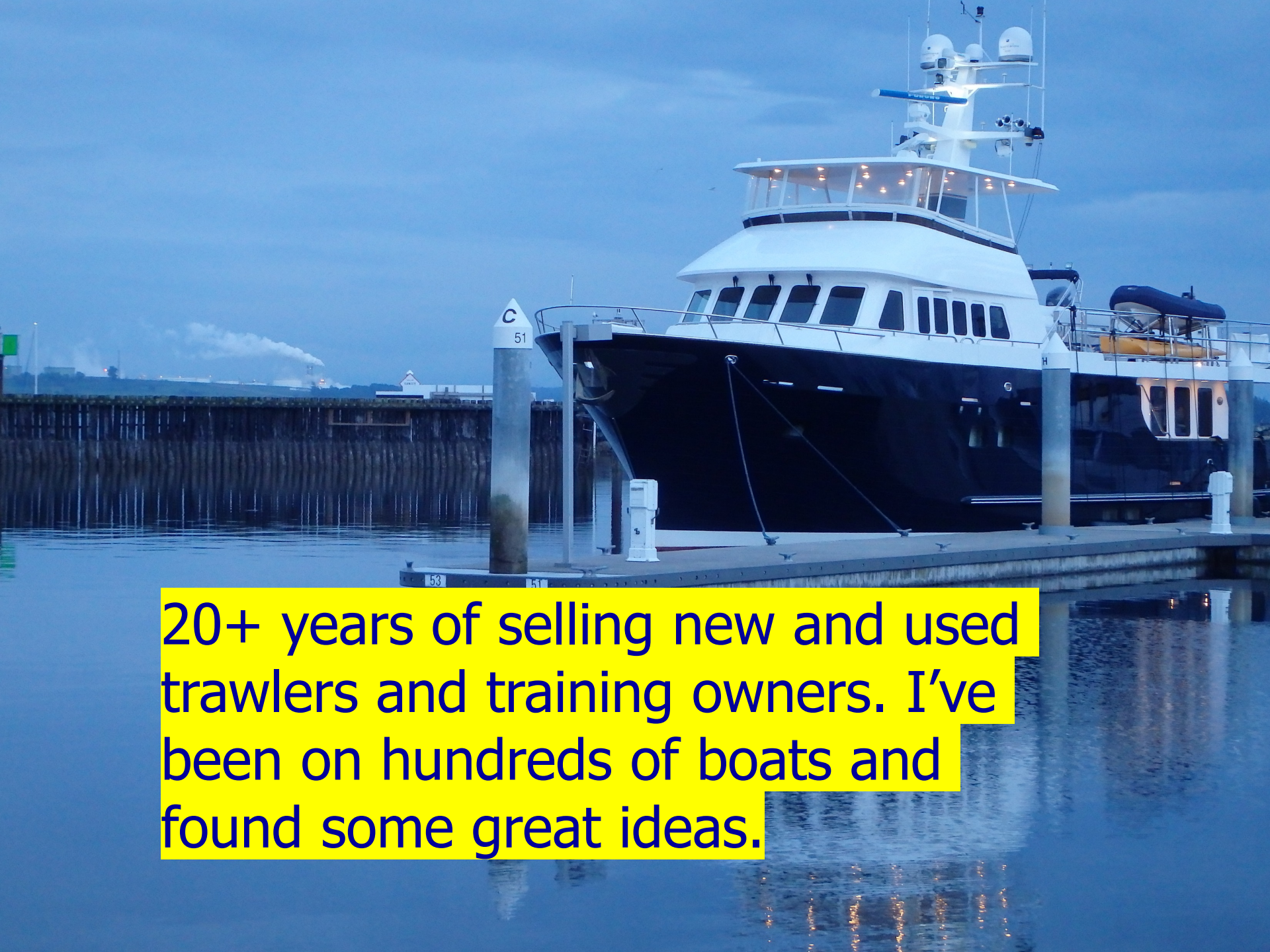
LIVE *ONLINE SUMMIT*

TrawlerFest LIVE Online Summit

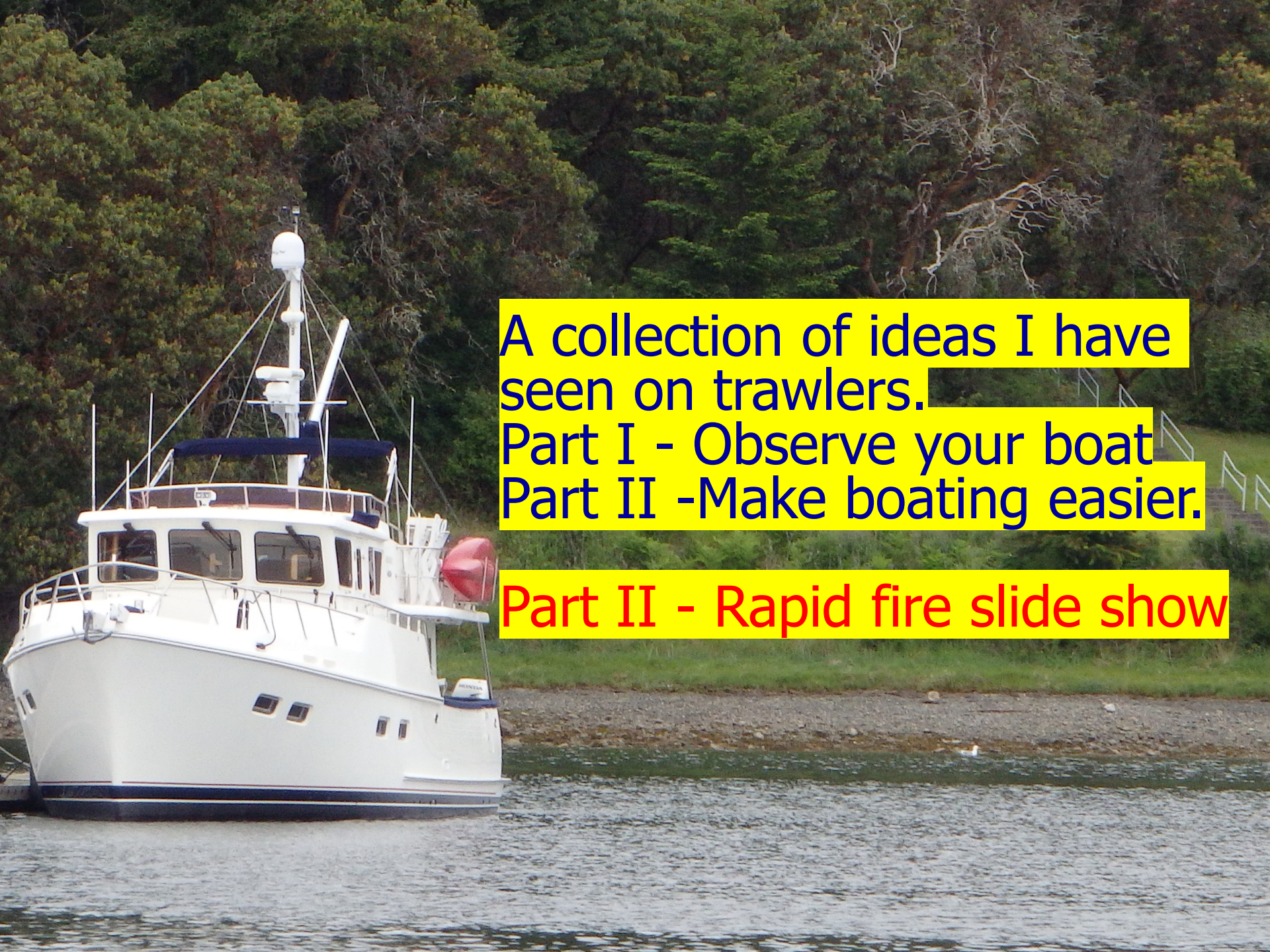
November 12-14, 2020

Pilothouse – Gauge Reference





20+ years of selling new and used trawlers and training owners. I've been on hundreds of boats and found some great ideas.



A collection of ideas I have
seen on trawlers.
Part I - Observe your boat
Part II - Make boating easier.

Part II - Rapid fire slide show



Enabling-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



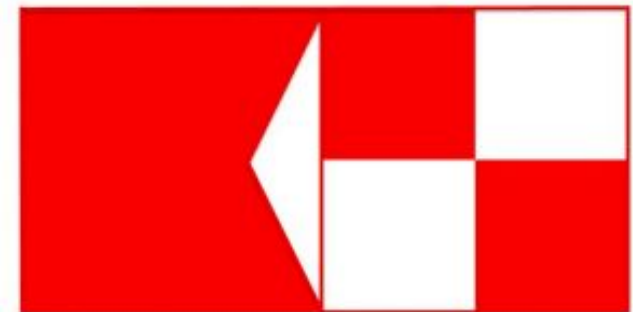
Ship's Papers

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 Trawler 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 within a week.

Please type in your questions in the Q and A section and I will try to answer during this seminar

HANDOUTS

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

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



Do you keep your maintenance log up to date?

Your Trawler 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?

A photograph of a boat's dashboard area. A laptop is open on the dashboard, displaying a dark screen. To the left of the laptop is a white electronic device, possibly a GPS or chart plotter. To the right of the laptop are two large electronic displays, likely for engine monitoring or navigation. Above the dashboard, there are several windows and a black electronic device mounted on the wall. The dashboard itself is black with various buttons and controls. The background shows the interior of the boat with wood paneling and windows looking out onto a marina.

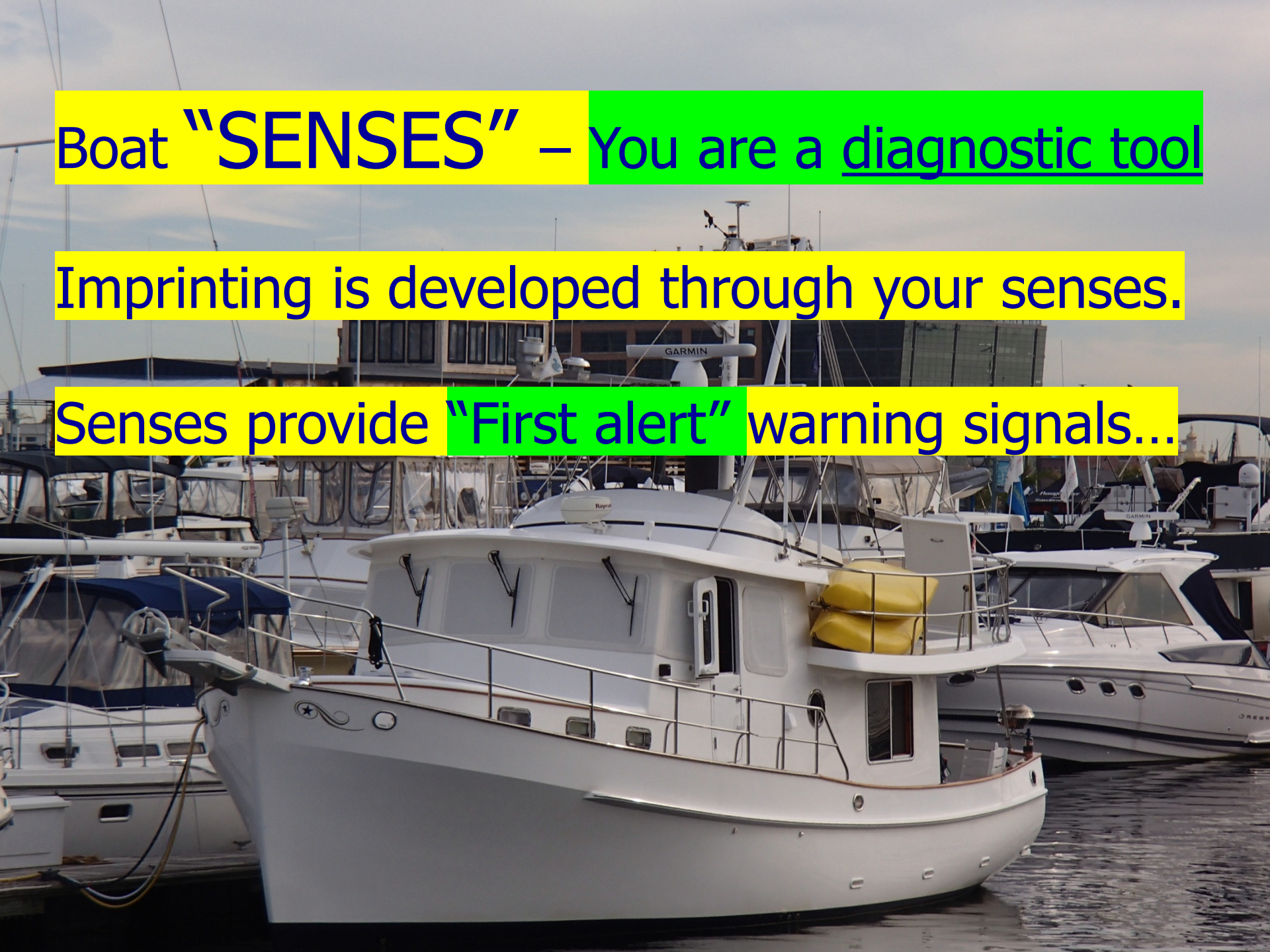
BASELINES

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 sun is low on the horizon, creating a warm orange and yellow glow across the sky and reflecting on the water. The boat is in the lower left, moving away from the viewer. The sky is filled with soft, wispy clouds. The overall scene is calm and scenic.

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:

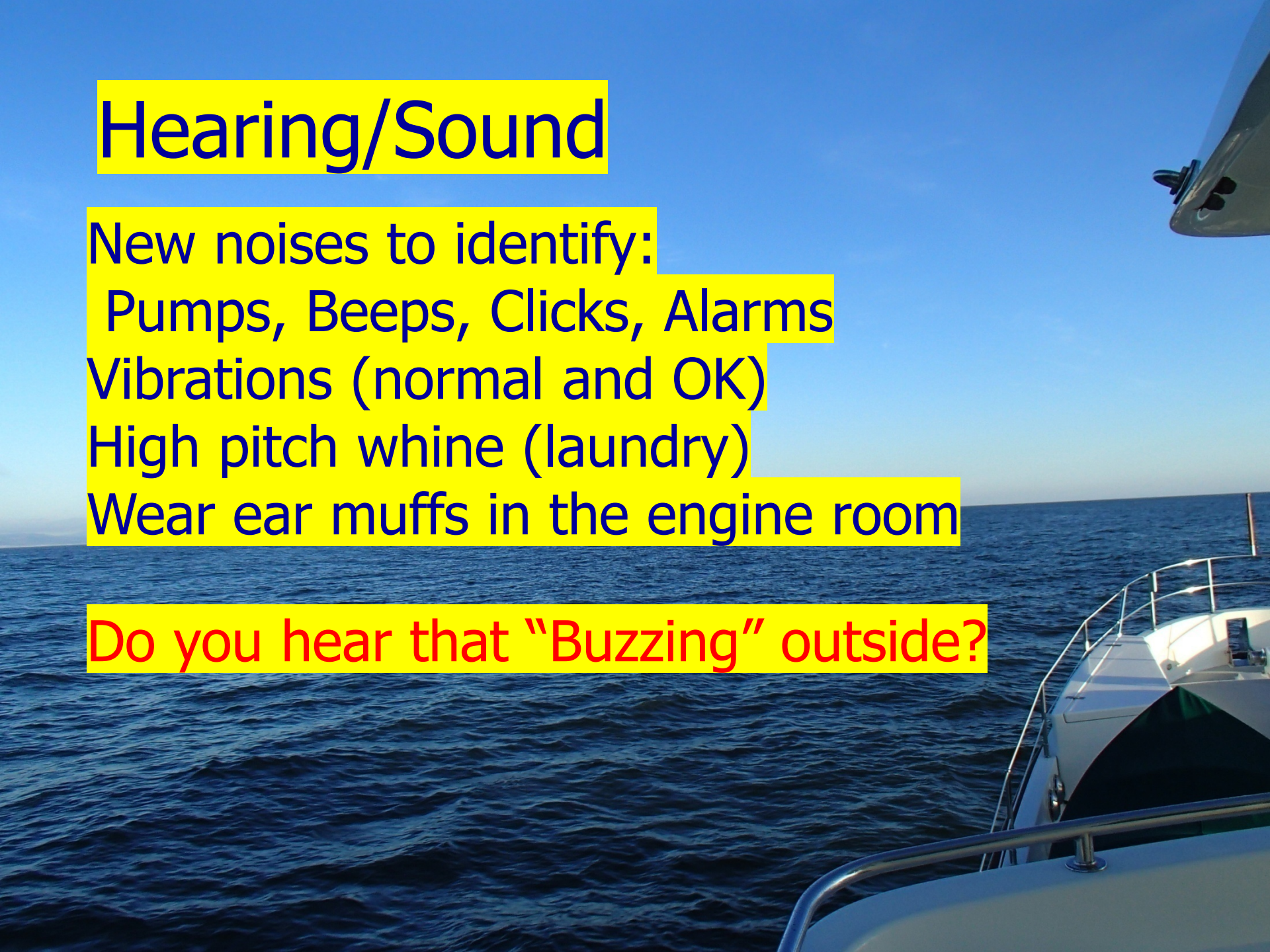
Pumps, Beeps, Clicks, Alarms

Vibrations (normal and OK)

High pitch whine (laundry)

Wear ear muffs in the engine room

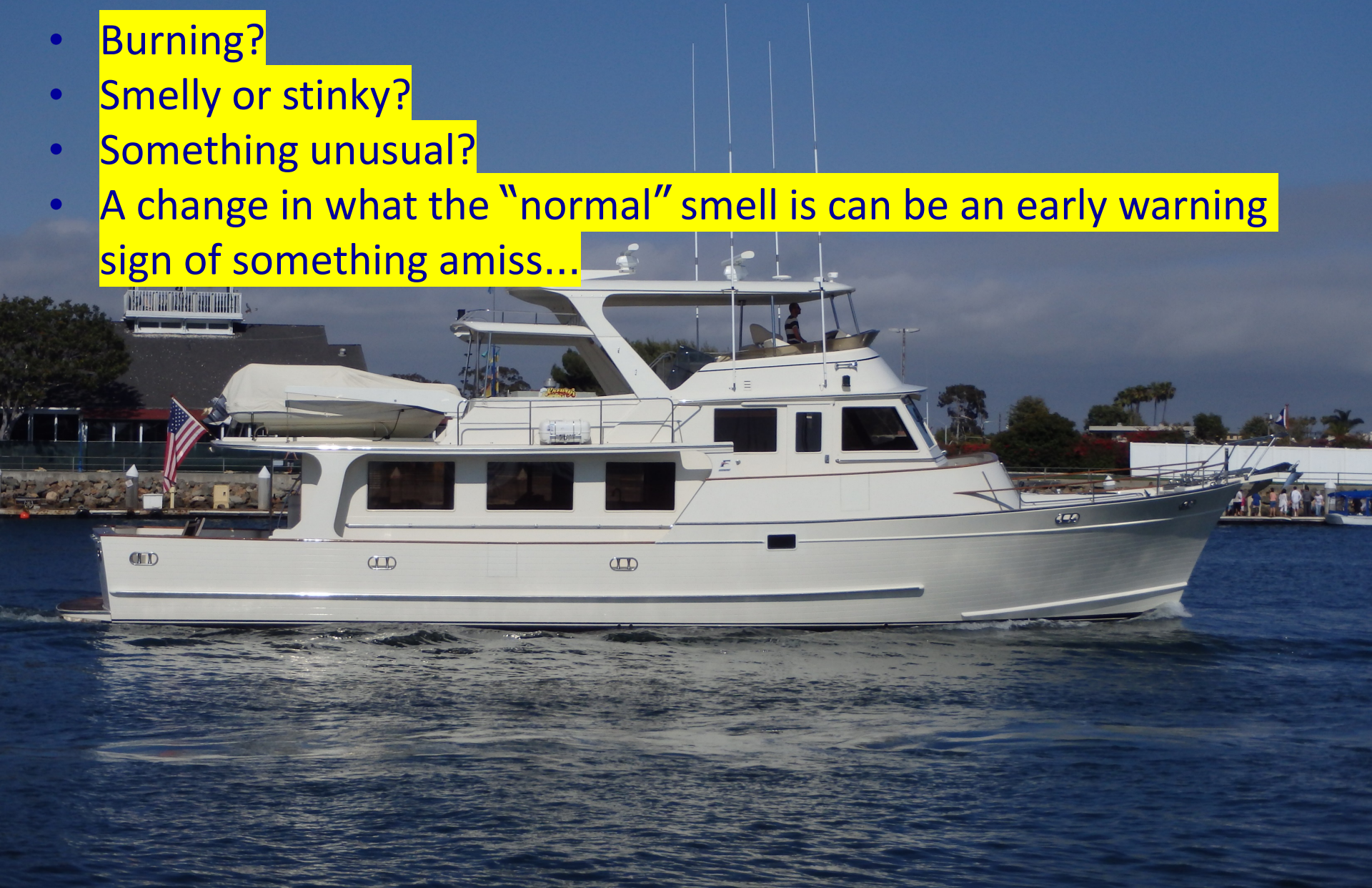
Do you hear that “Buzzing” outside?





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

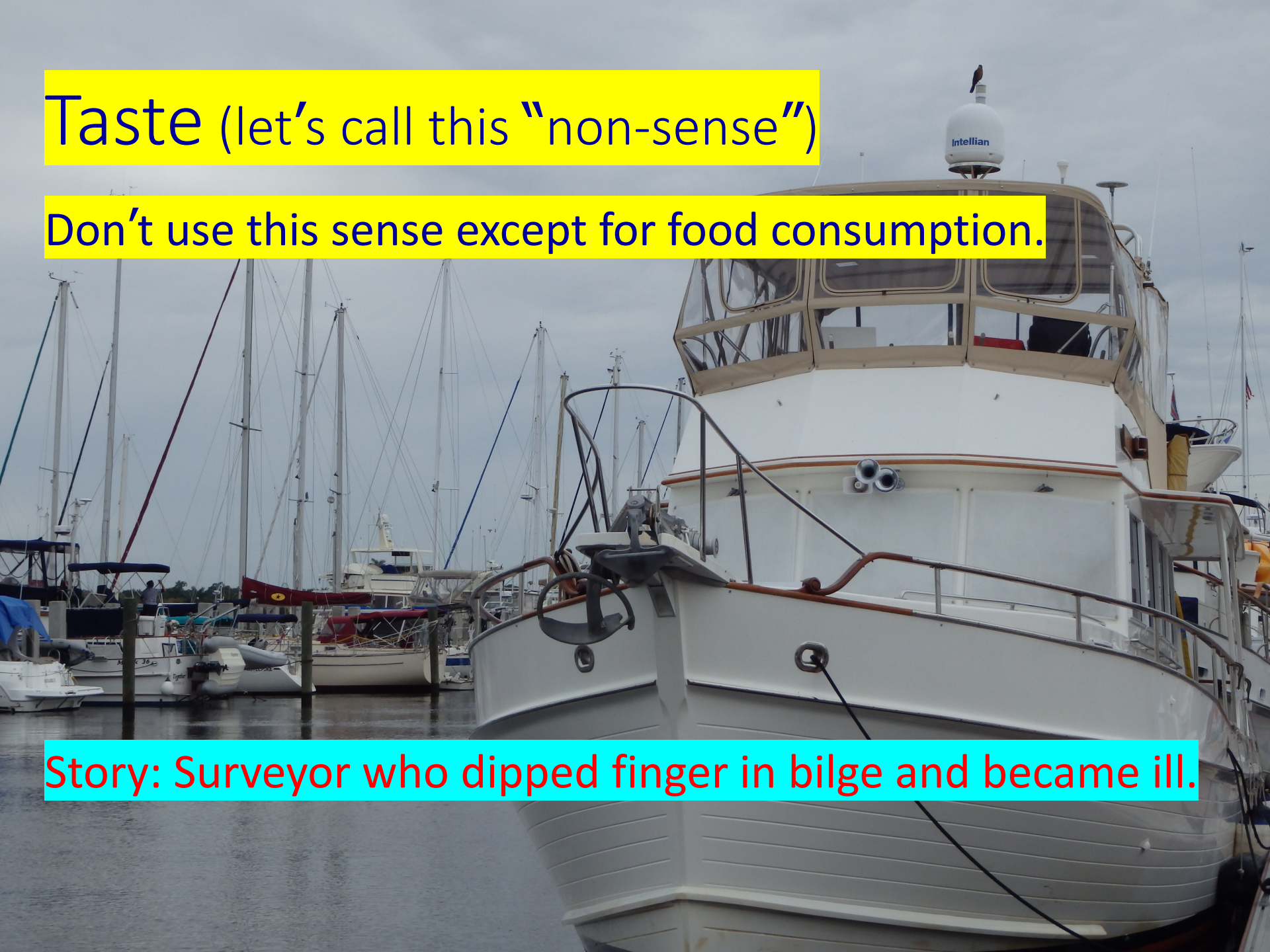
Gloves – anchoring and handling dock lines
(wood dock splinters)

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...

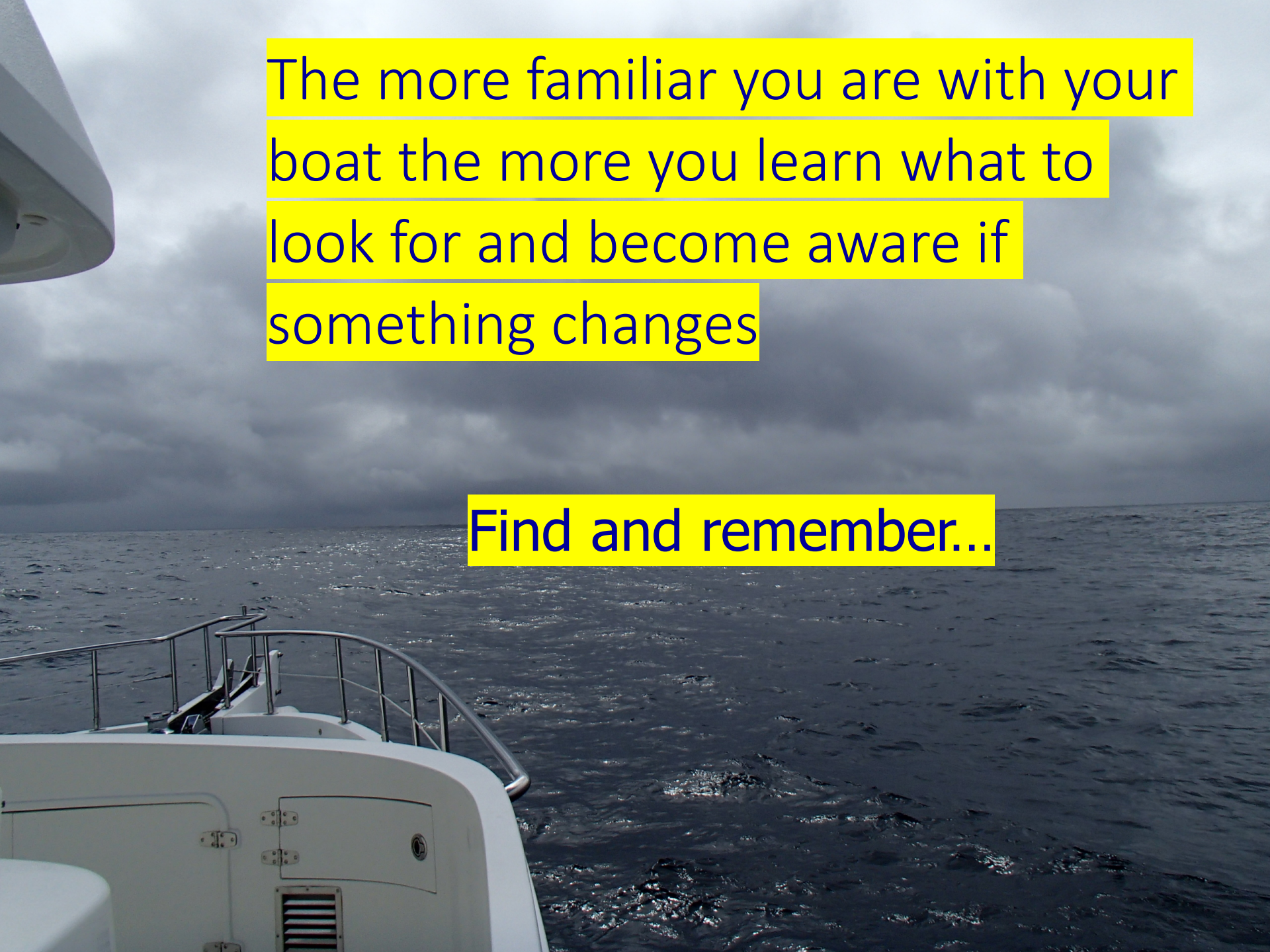


GET YOUR TRAWLER ON TRACK

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

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



A photograph taken from the perspective of someone on a boat, looking out over a dark, choppy sea under a heavy, grey, overcast sky. The boat's white hull and metal railings are visible in the lower-left foreground. The text is overlaid on the upper half of the image, with each line in a separate yellow box.

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

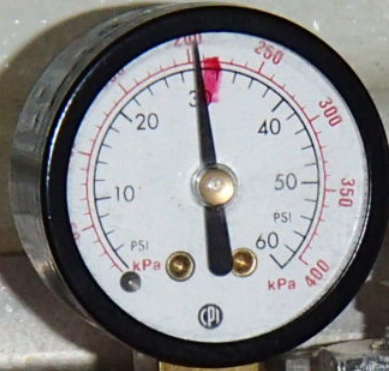


Analog "needle marks"



Mark normal needle position.

Do you have a bicycle pump?



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

Use Castrol Steering Fluid (HA5430) or a light viscosity hydraulic fluid. Do not use aircraft hydraulic fluid spec. MIL H-5606C, such as Shell Aero Fluid #41, Esso Univas N15, Chevron Aviation Hydraulic Fluid HFA. Heavier fluids such as automatic transmission oil (e.g. Dexron III), may be added but will cause harder steering.

MAXIMUM RESERVOIR LEVEL
PRESSURE: 100 PSI

Example of "tide mark" level



Learn the "INS"...

OLD

↑ ↑ ↑ IN ↑ ↑ ↑ ↑

10
STBD
MAIN
ENG

RETURN FROM MOTORS

12
PORT
MAIN
ENG

29

FUEL

RETURN FROM TRANSFER PUMP

#30

20KW
GEN



and OUTS...

To and From, Supply and Return



Get a Label Maker and use it!

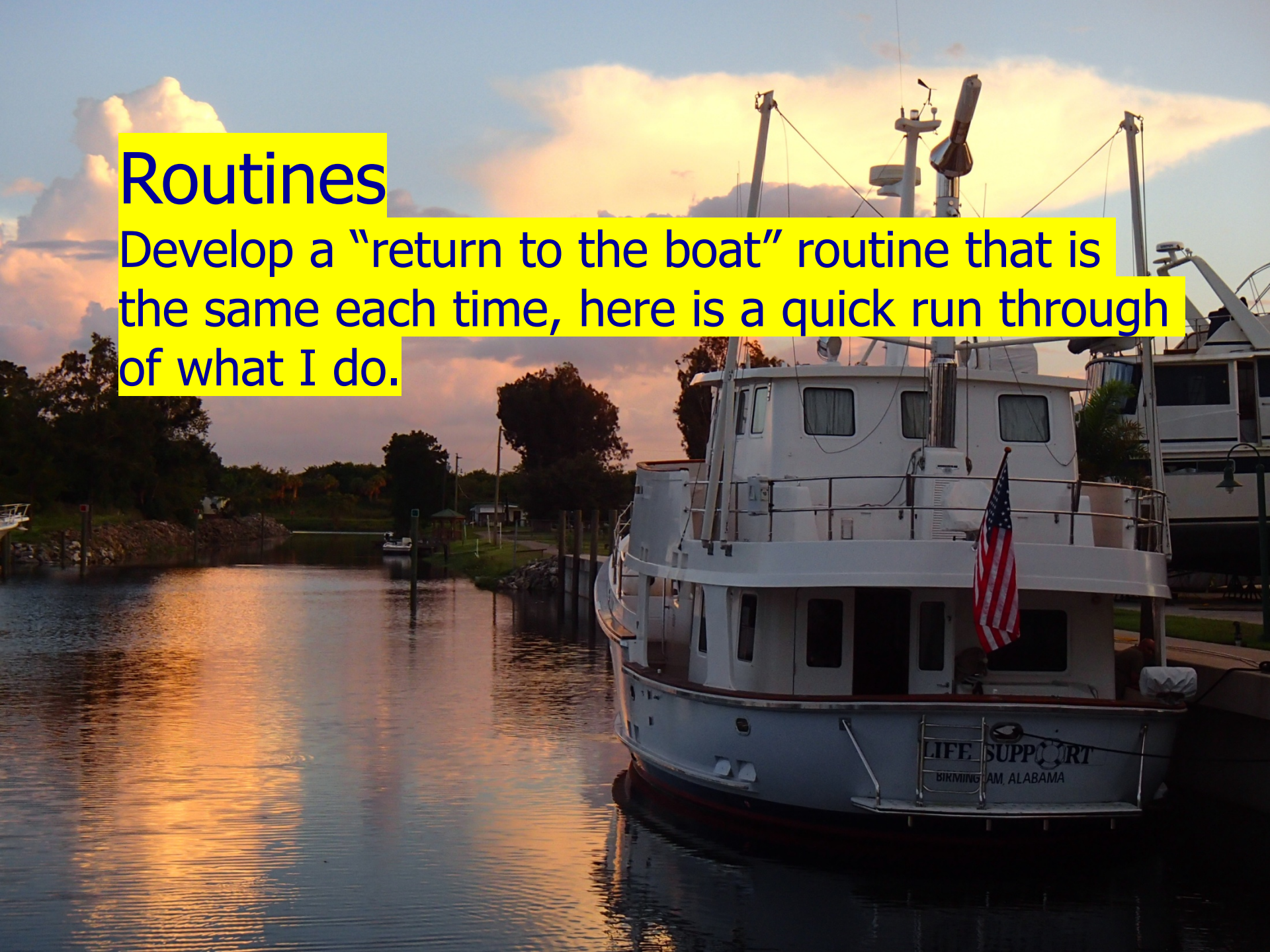


Bow Thruster ON/OFF



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 trawler 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”

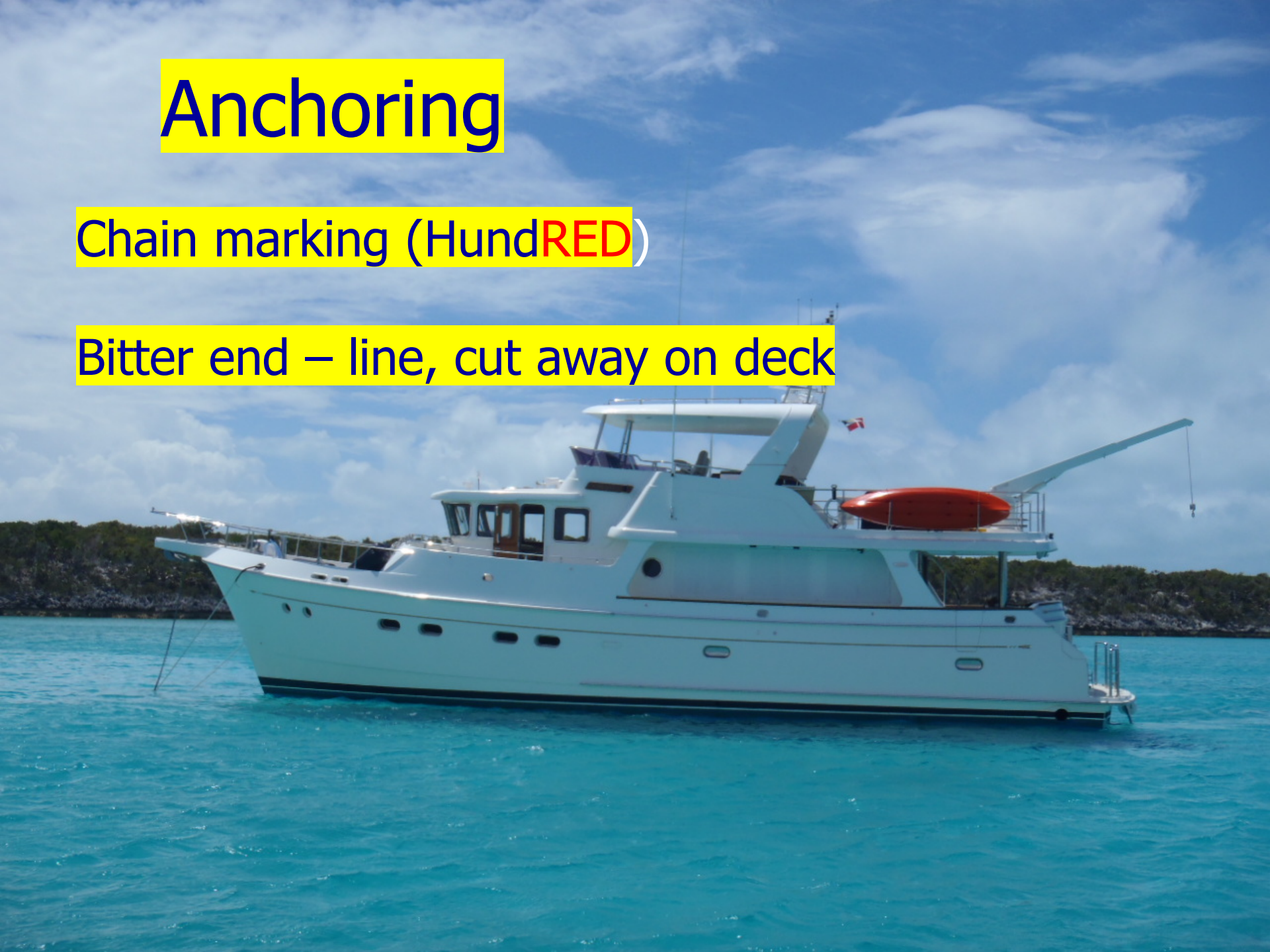
Anchoring Ideas



Anchoring

Chain marking (HundRED)

Bitter end – line, cut away on deck



Hund-RED's

NORDHAVN N5725
ANCHOR CHAIN
COLOR KEY

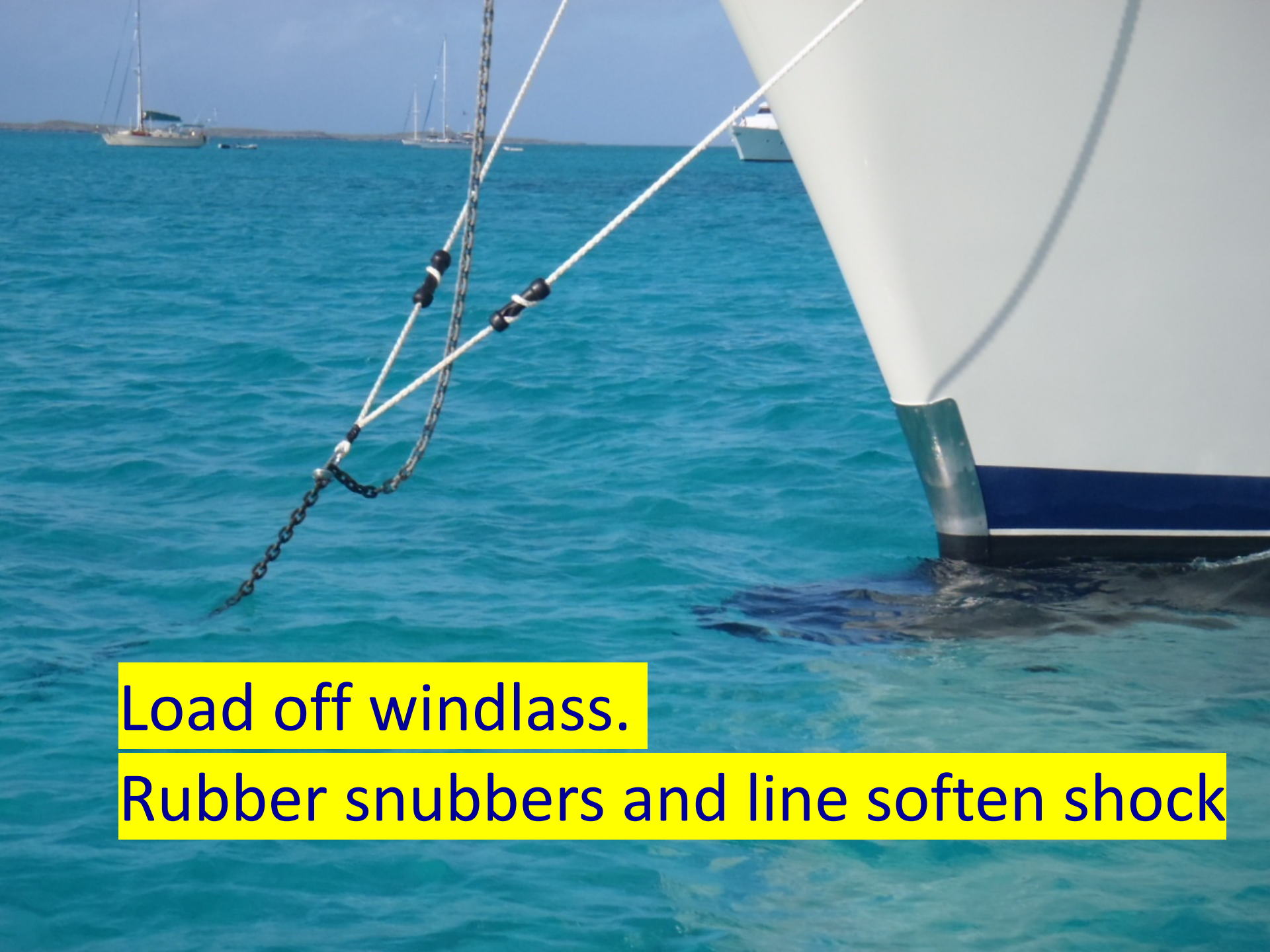
WHITE	=	50 FT
RED	=	100 FT
RW	=	150 FT
RR	=	200 FT
RRW	=	250 FT
RRR	=	300 FT
RRRW	=	350 FT
RRRR	=	400 FT

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

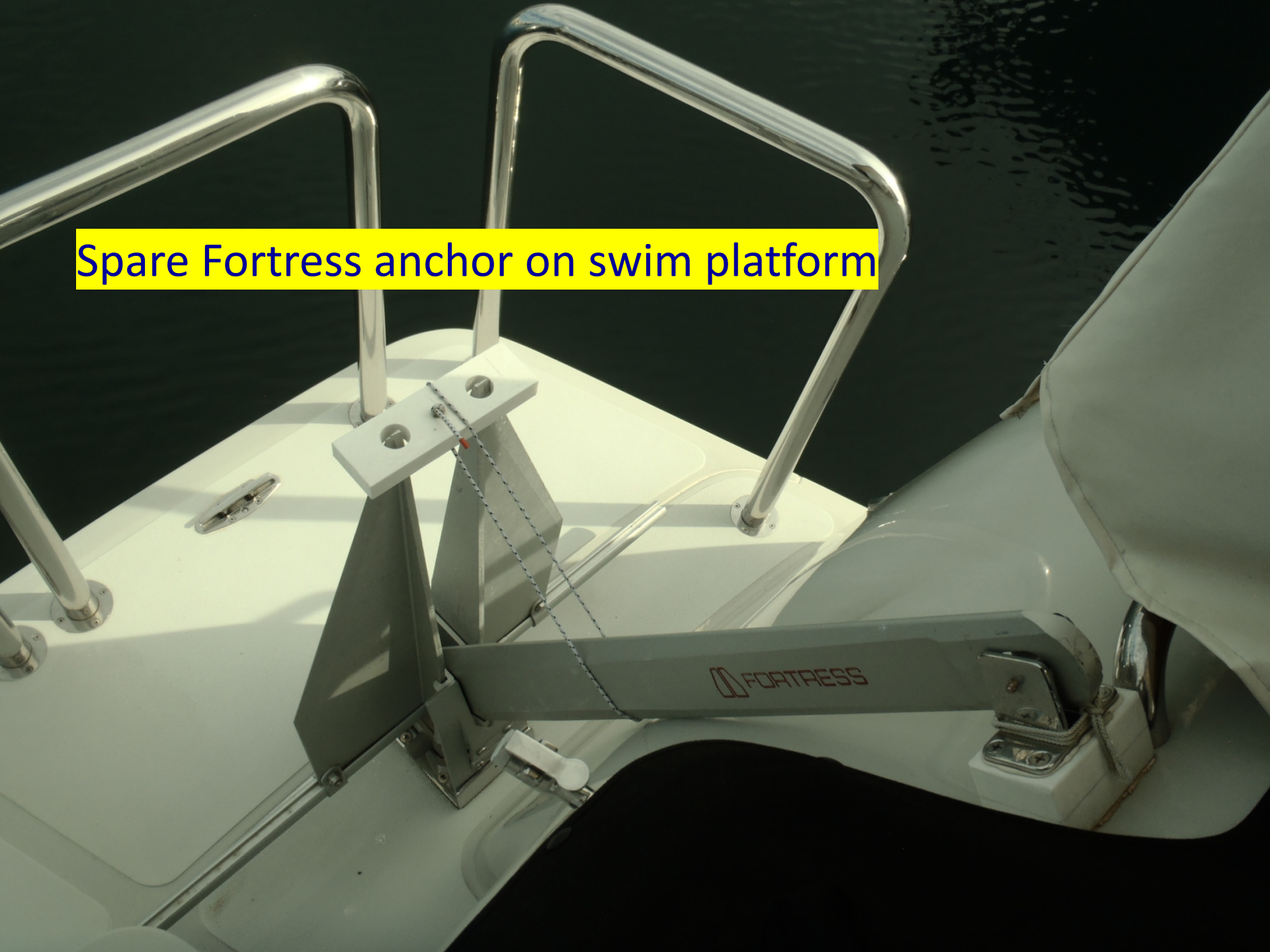
Chain tensioner, snug anchor on roller





Spare Fortress anchor on foredeck

Spare Fortress anchor on swim platform

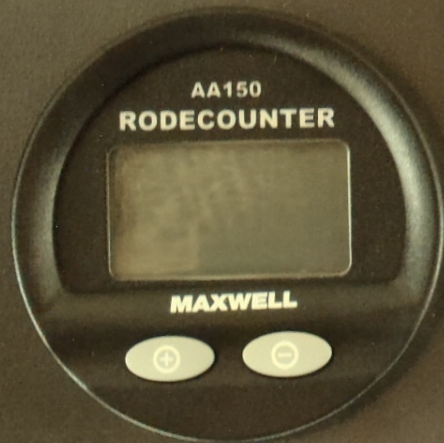


Chain color coding by windlass control



Last 50' feet or anchor at waterline.

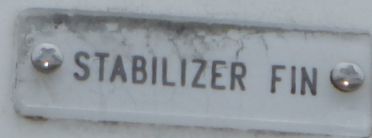
Can you disconnect from bitter end?



Folding pad eye for clipping on fenders



Mark your fins for haul out



Deck and Dinghy Tips



Secure outside deck lockers



Life raft – lock it? Positioning, how launch it?



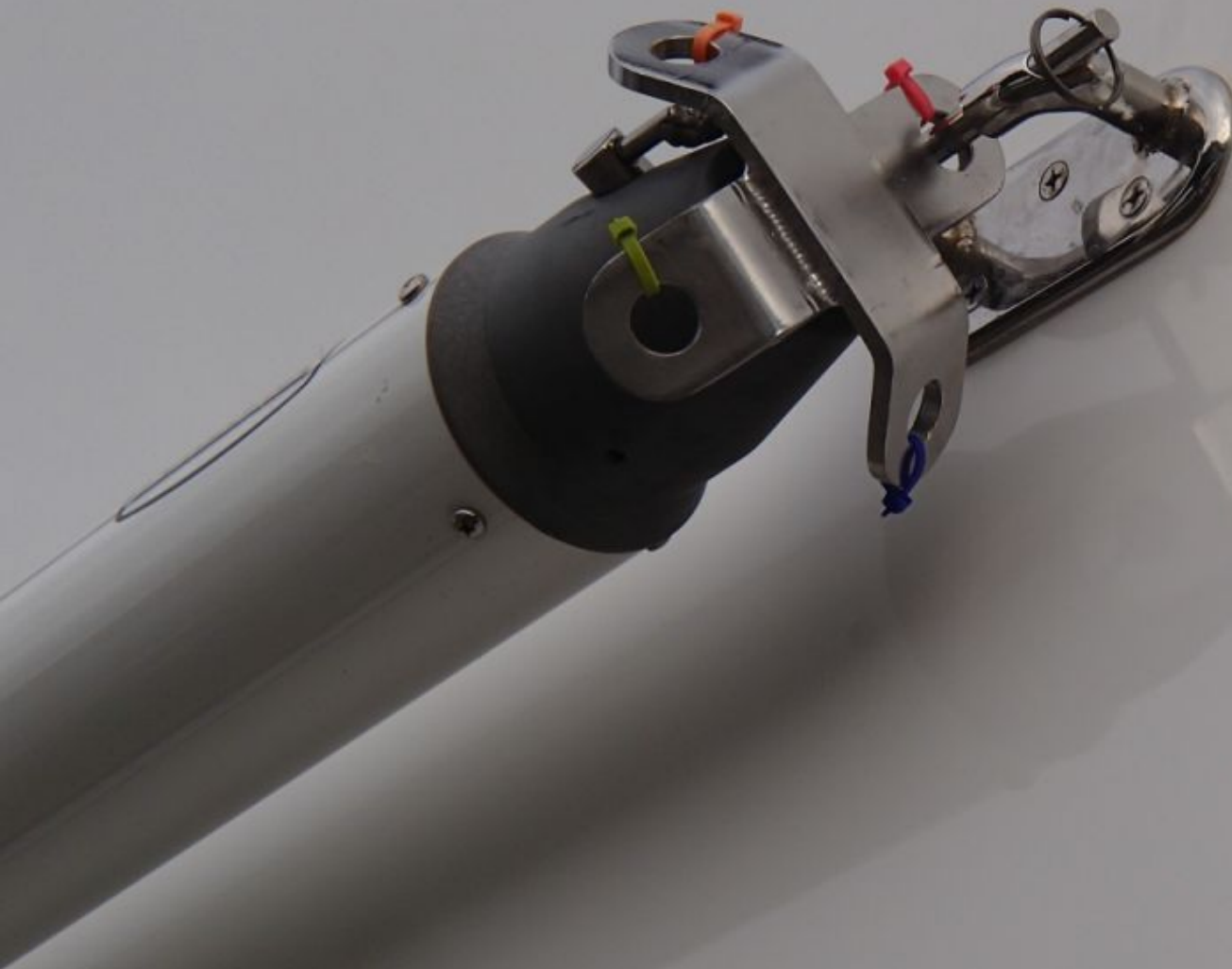
EMERGENCY LIFE RAFT INFLATION PROCEDURE

1. PULL BLACK AND WHITE LANYARD TO RELEASE PAINTER LINE FROM SNAP ON SHACKLE.
2. ATTACH TO NEAREST STRONG POINT ON VESSEL.
3. THROW LIFE RAFT IN CANISTER OVERBOARD.
4. LIFE RAFT WILL INFLATE AFTER 30 FEET OF LINE IS OUT.
5. IF CALM SEA, YANK LINE TO INFLATE.
6. PULL LIFE RAFT ALONGSIDE VESSEL AND BOARD.
7. KEEP LIFE RAFT AWAY FROM SHARP PROTRUSIONS.

WINSLOW LIFERAFT COMPANY
11700 WINSLOW DRIVE LAKE SUZY, FL 34206
(800)838-3012



Flopper stopper – color code line attachments



Reflective tape on flopper pole



Dinghy launch with crane – level gauge



A white robotic crane is positioned on a grey deck. The crane has a cylindrical base with three vertical black alignment marks. White lines are painted on the deck to form a square around the base. In the background, a steering wheel and other ship equipment are visible.

Mark crane pick up to simplify line-up at return

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

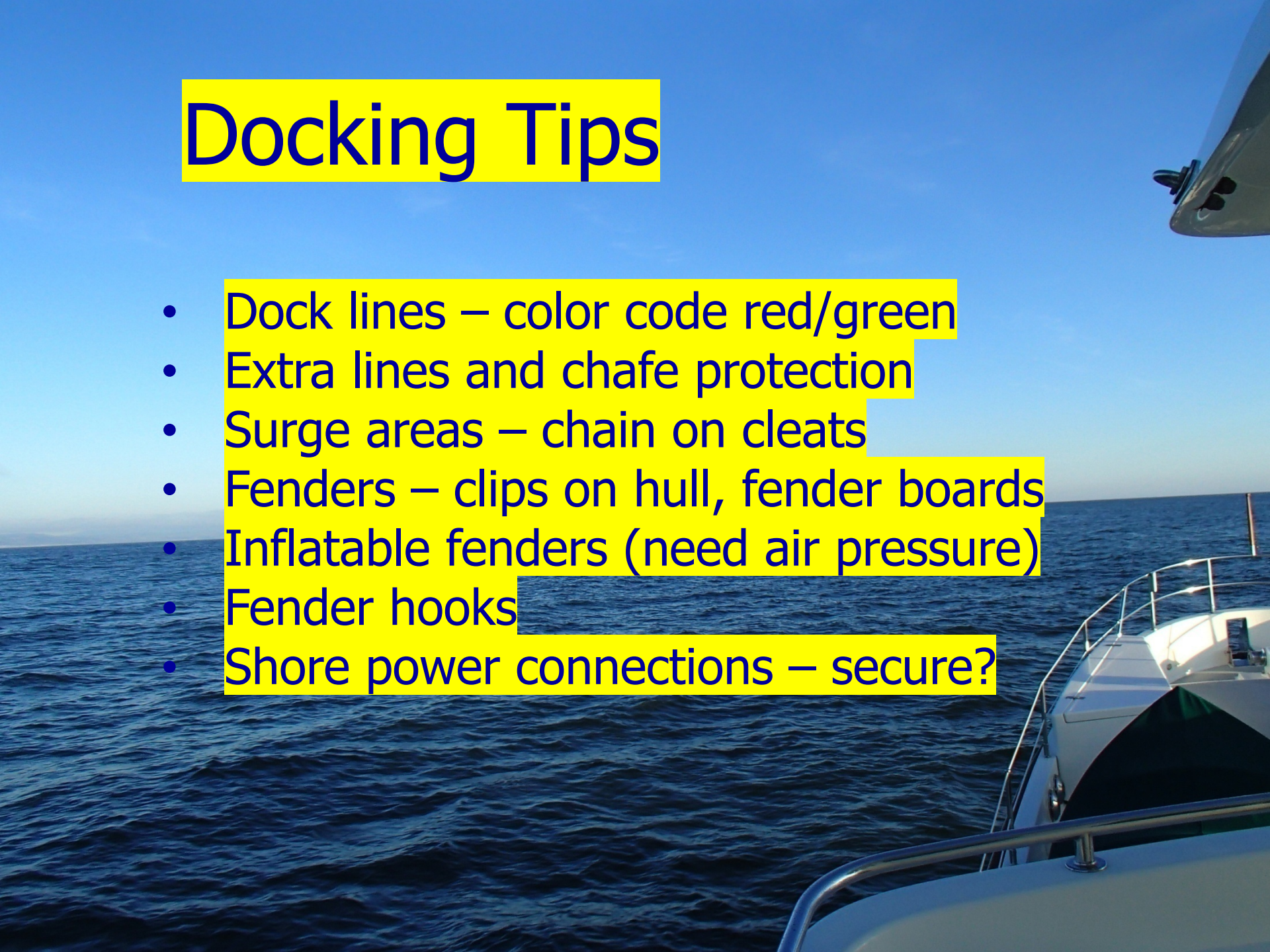




Outboard skid plate

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

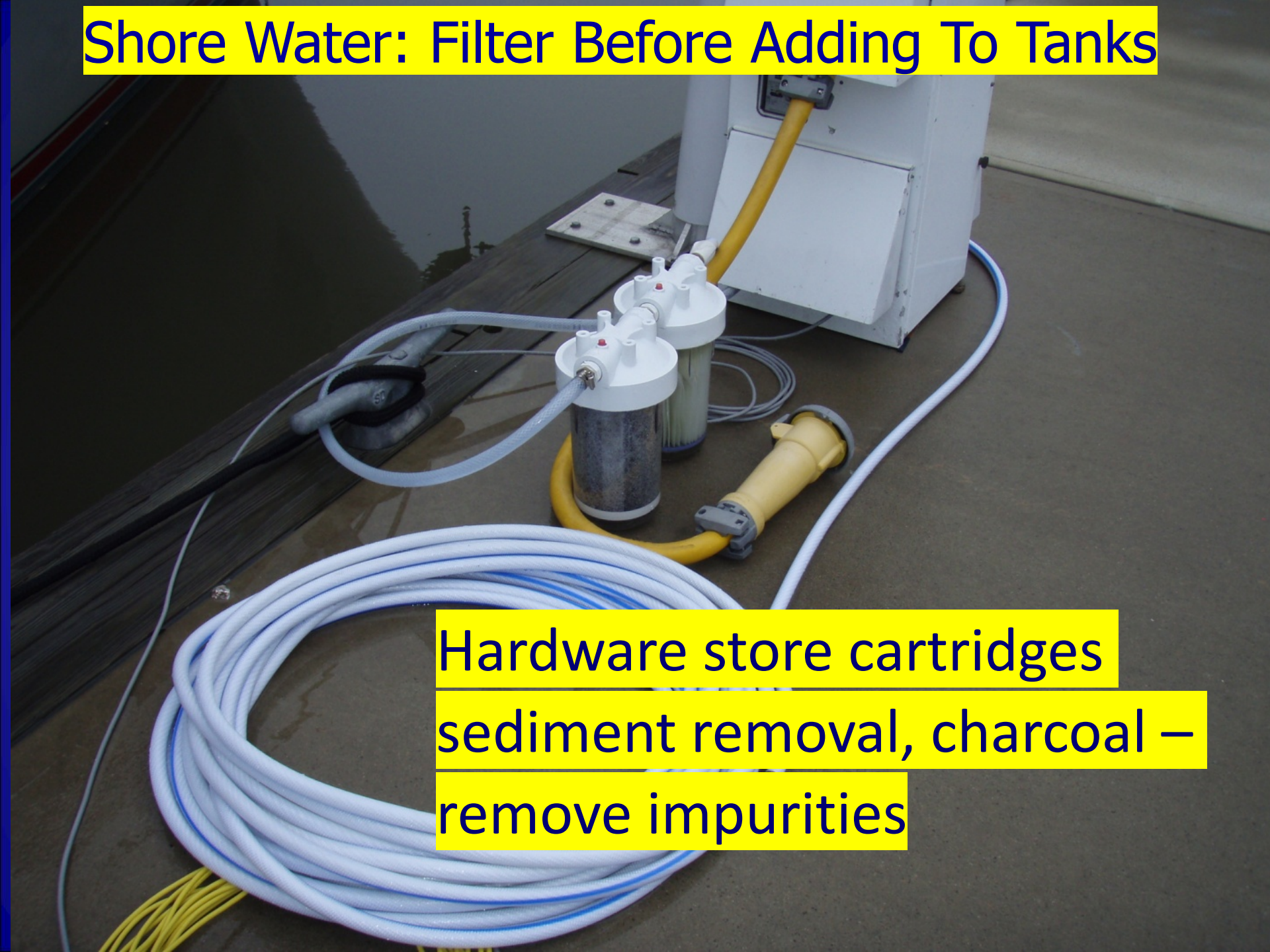
Fender Boards



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 ship's deck at sunset. The sky is a deep blue with a hint of orange near the horizon. The sea is visible in the distance. 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 pieces of machinery: Transmissions, Generator, Windlass, Crane, Watermaker, Stabilizers, etc.

Maintenance Log - Records

Note all purchases and upgrades

Track oil changes and all service repairs

This is an important record and sales tool when you are ready to sell your boat

Handout*

Steve D'Antonio and
Jeff Merrill Maintenance List

PART II

TrawlerFest

LIVE *ONLINE SUMMIT*

TrawlerFest LIVE Online Summit

November 12-14, 2020



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





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

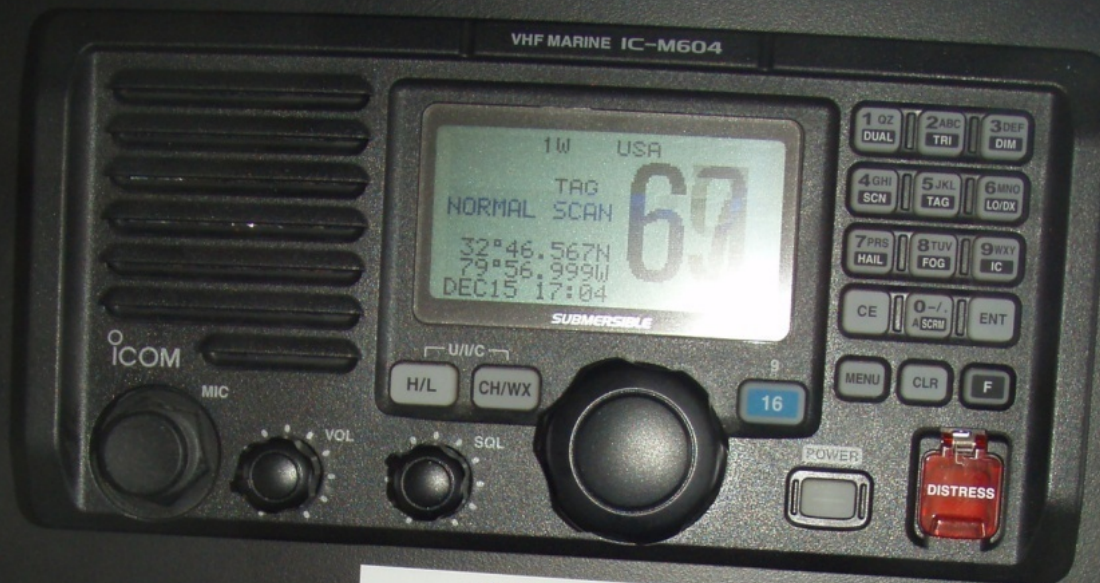


Suction cup caddy



Pilothouse Suggestions





WDE 4988

VHF call sign label



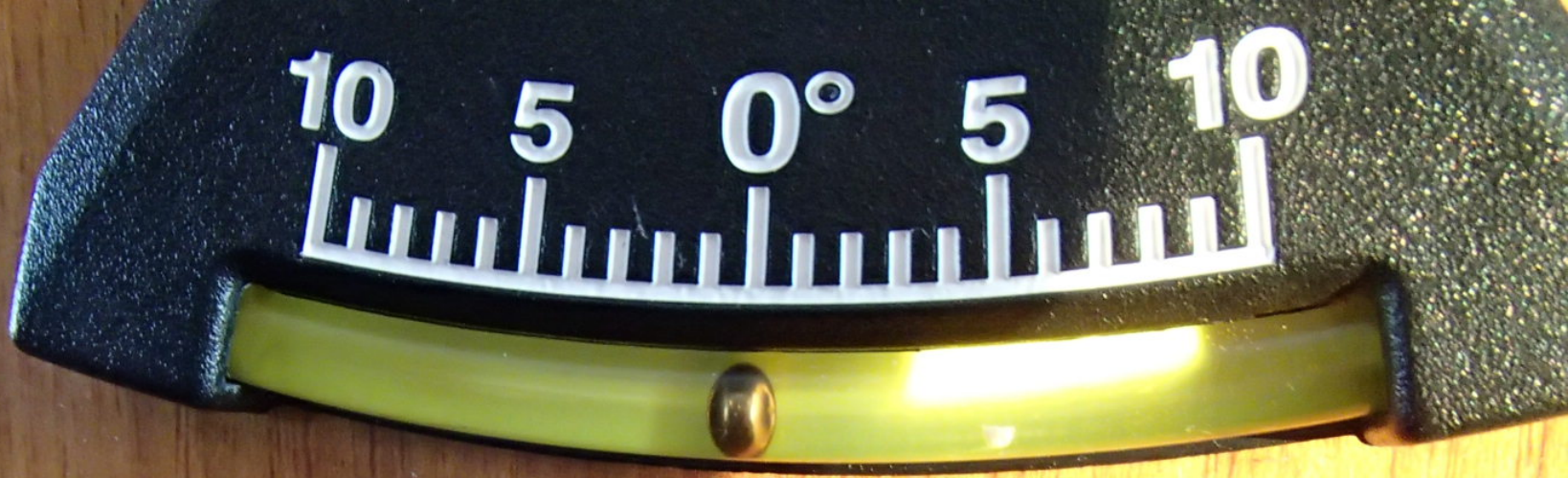


Keep your display screens clean

- above hydraulics breaker, protected switch)
- 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"





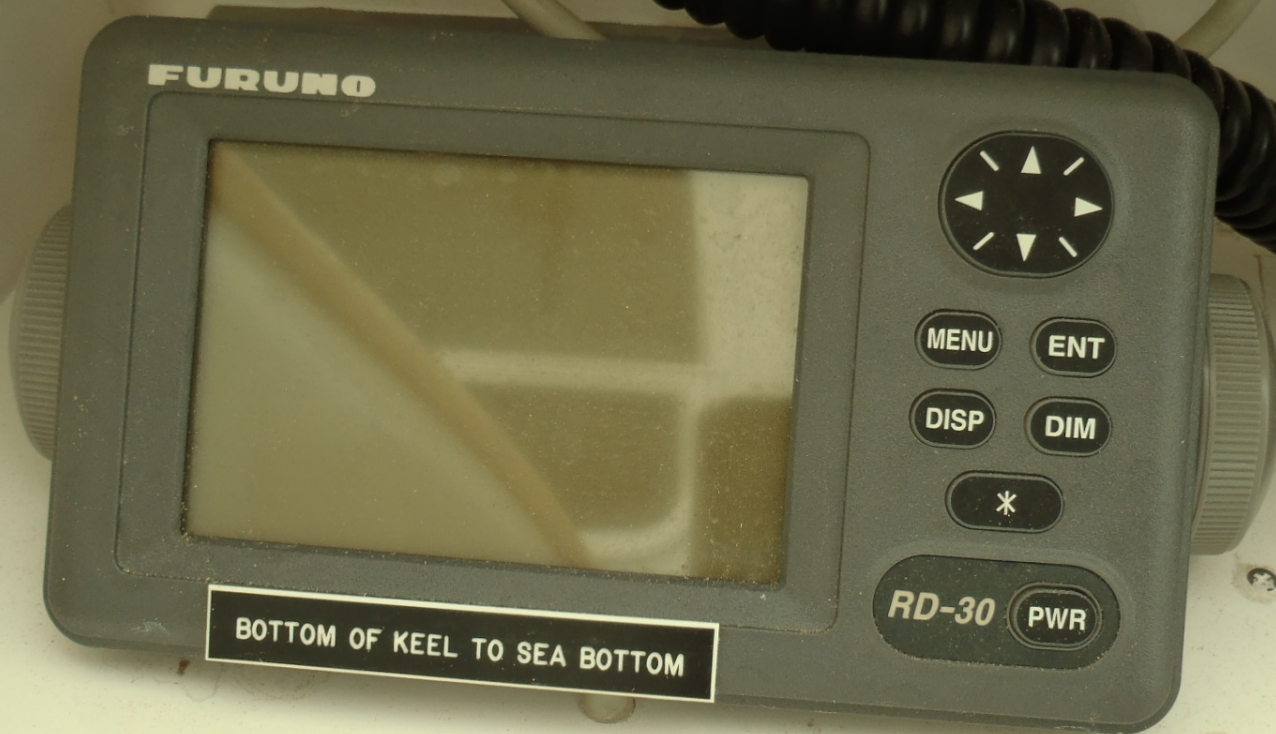
LOA 61 FT
BEAM 17 FT
DRAFT 6 FT
HEIGHT 24 FT
ANCHOR MARKS 25 FT

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?



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

Color code dots – ON/OFF – Day/Night



1 BATTERY CHARGER
ENGINE

2 BATTERY CHARGER
WING ENGINE

3 GALLEY
REFRIGERATOR

4 WATER
HEATER

5 Color code AND numbered on Selene

6 OUTLET

7 GUEST CABIN
OUTLET

8 MASTER CABIN
OUTLET

9 SALON
OUTLET

10 PILOT HOUSE
OUTLET

11 GALLEY
OUTLET

15 TV/VCR

16 E/R LIGHTS

17 E/R OUTLET

18 F/B OUTLET

19 FUEL POLISHING
SYSTEM

20 GARBAGE
DISPOSAL

21 SPARE

22 SPARE

23 SPARE

24

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



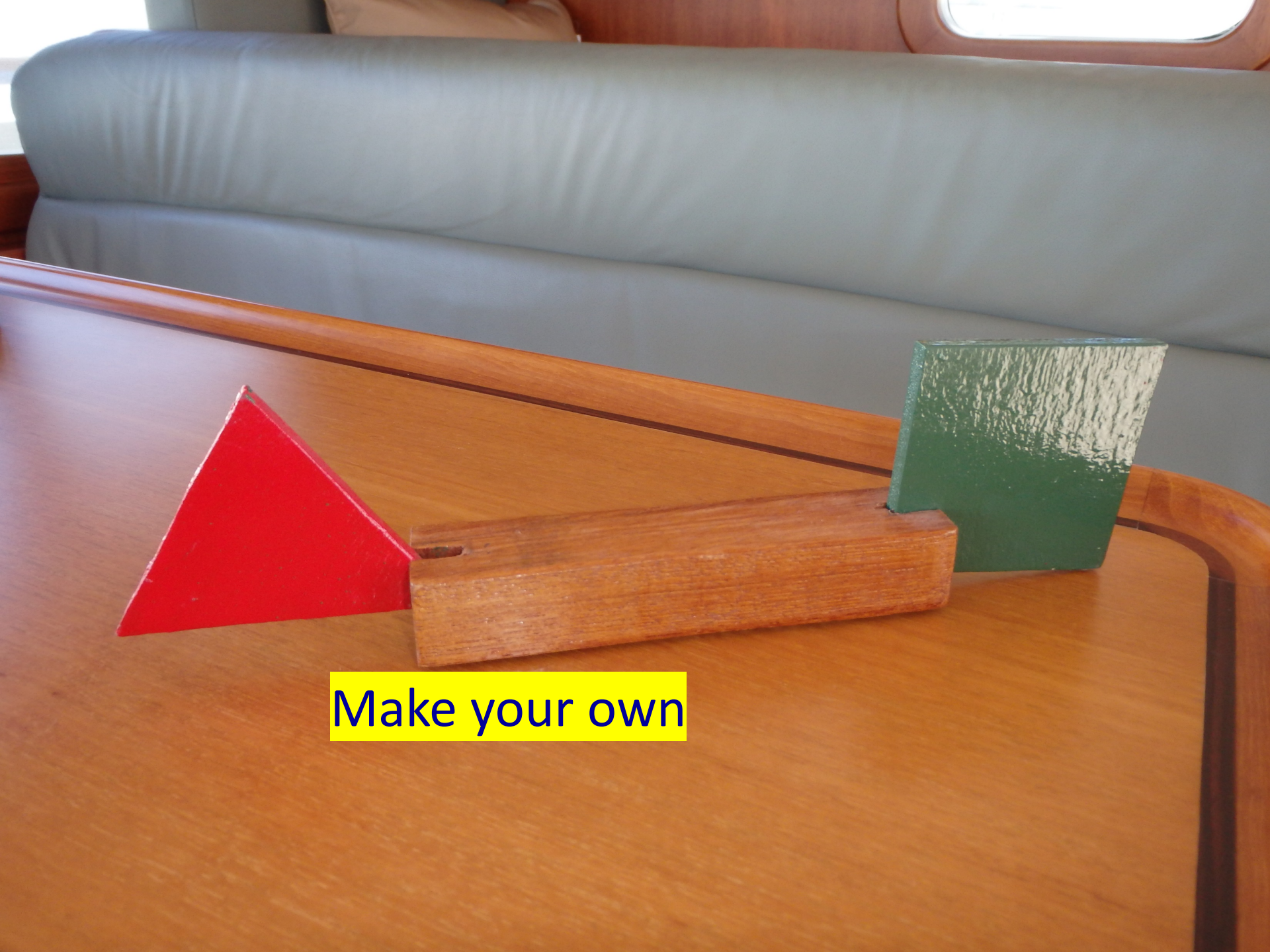


Portable caddy for important “stuff”

Channel buoy reminder

Easily reversible!





Make your own

When you depart,

leave yourself a reminder...

Thru Hull Closed !!

Gen
Viking
Water Maker

Start Charger - Off

A man wearing a blue short-sleeved shirt with a white floral pattern, khaki shorts, and large red earmuffs is working on a white boat engine. He is using a white cloth to wipe a metal rail. The engine is a large, white, industrial-looking unit with various hoses and pipes. The background shows the interior of a boat with white walls and a green storage bin.

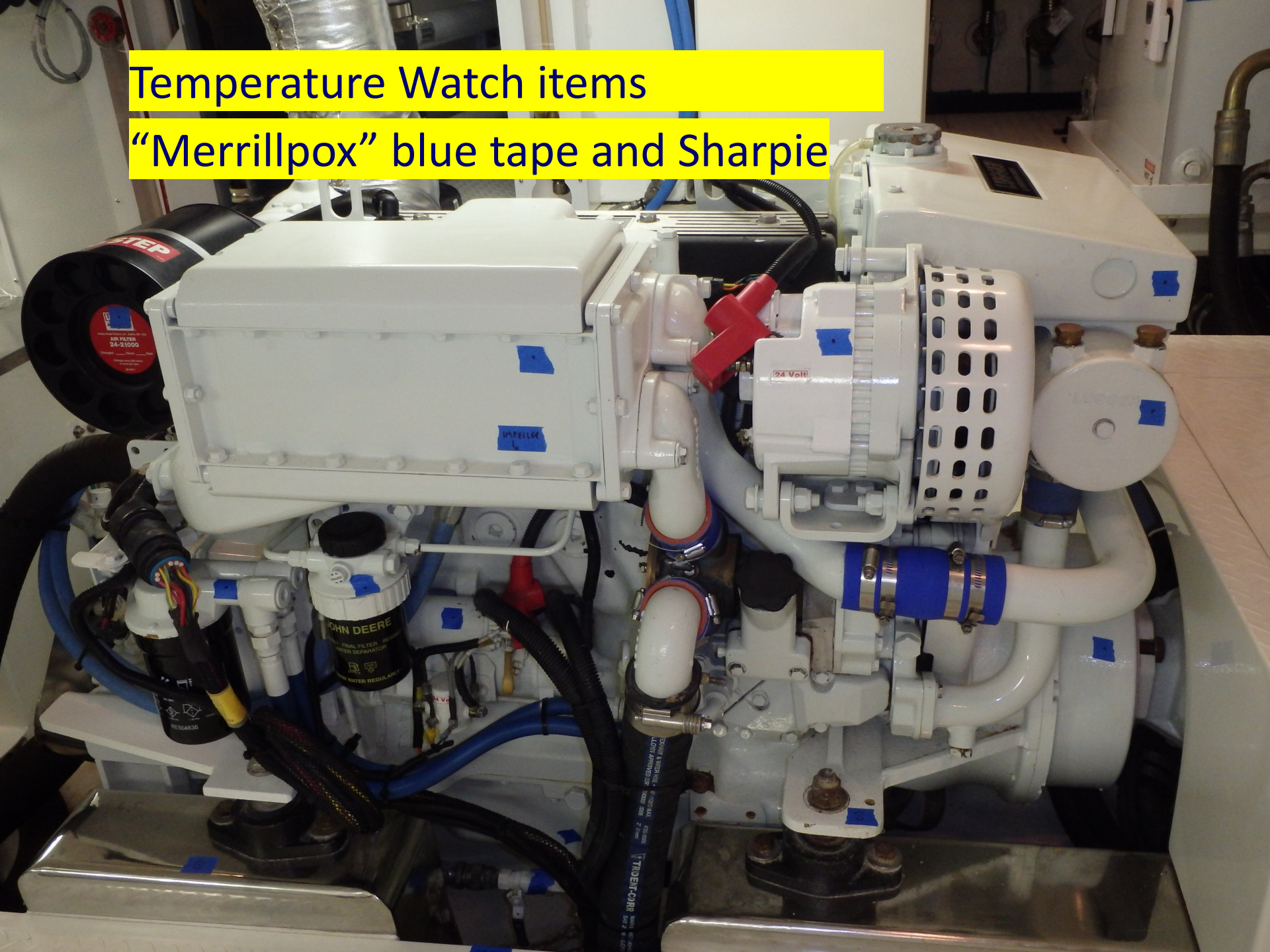
Engine Room Inspection Tips

Infrared Temperature Gun



Temperature Watch items

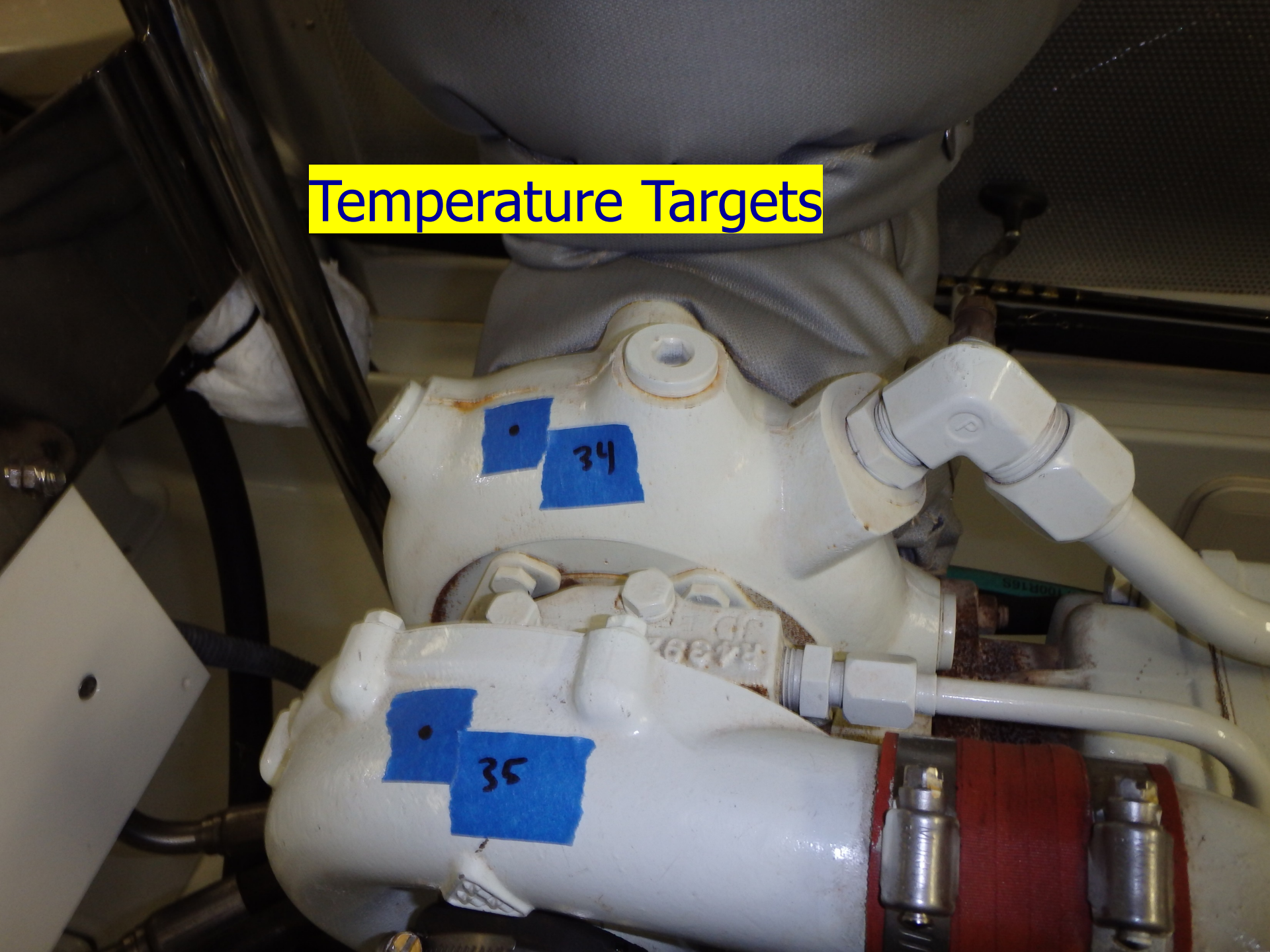
“Merrillpox” blue tape and Sharpie



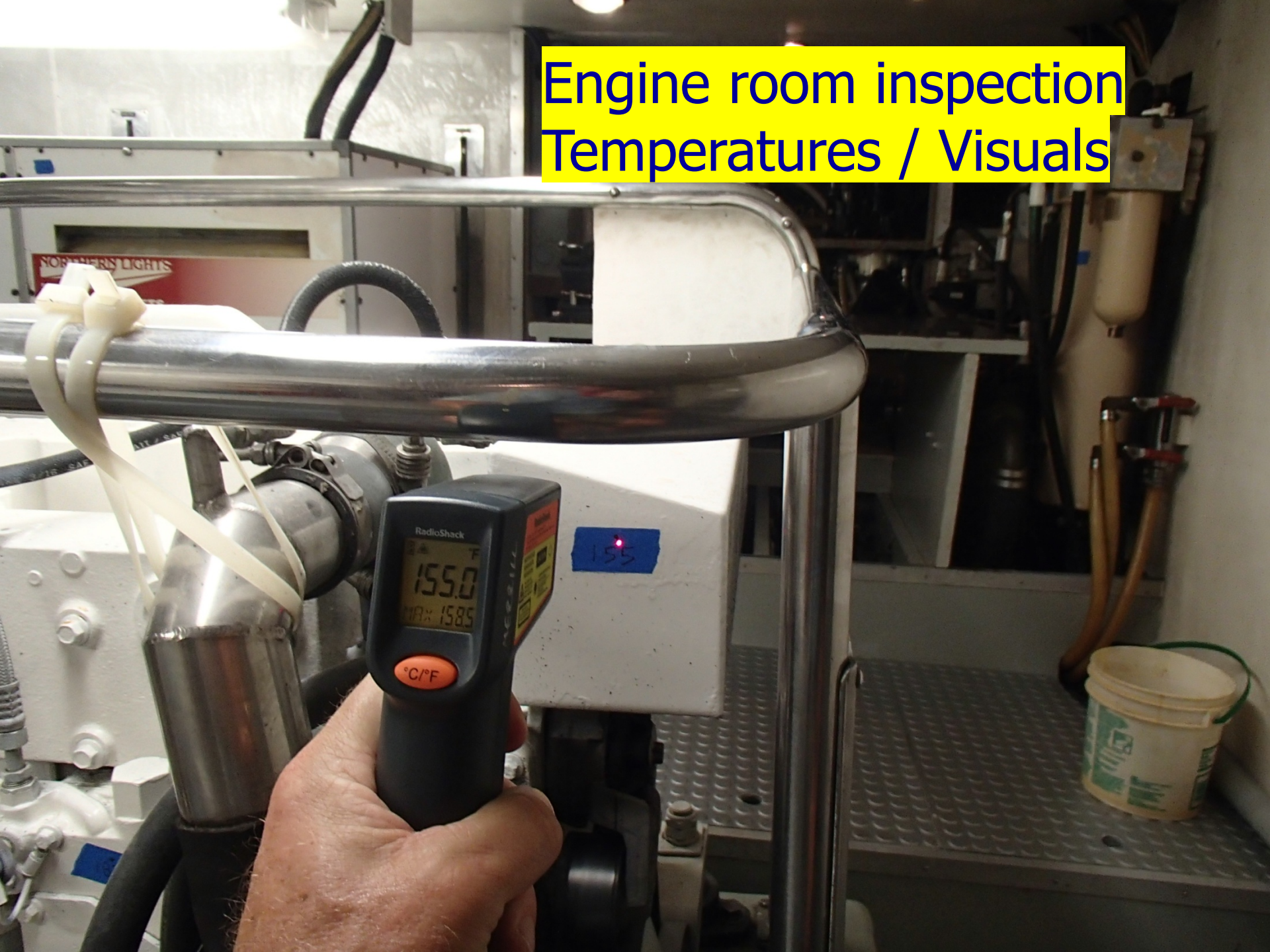
Mark single point to shoot



Temperature Targets



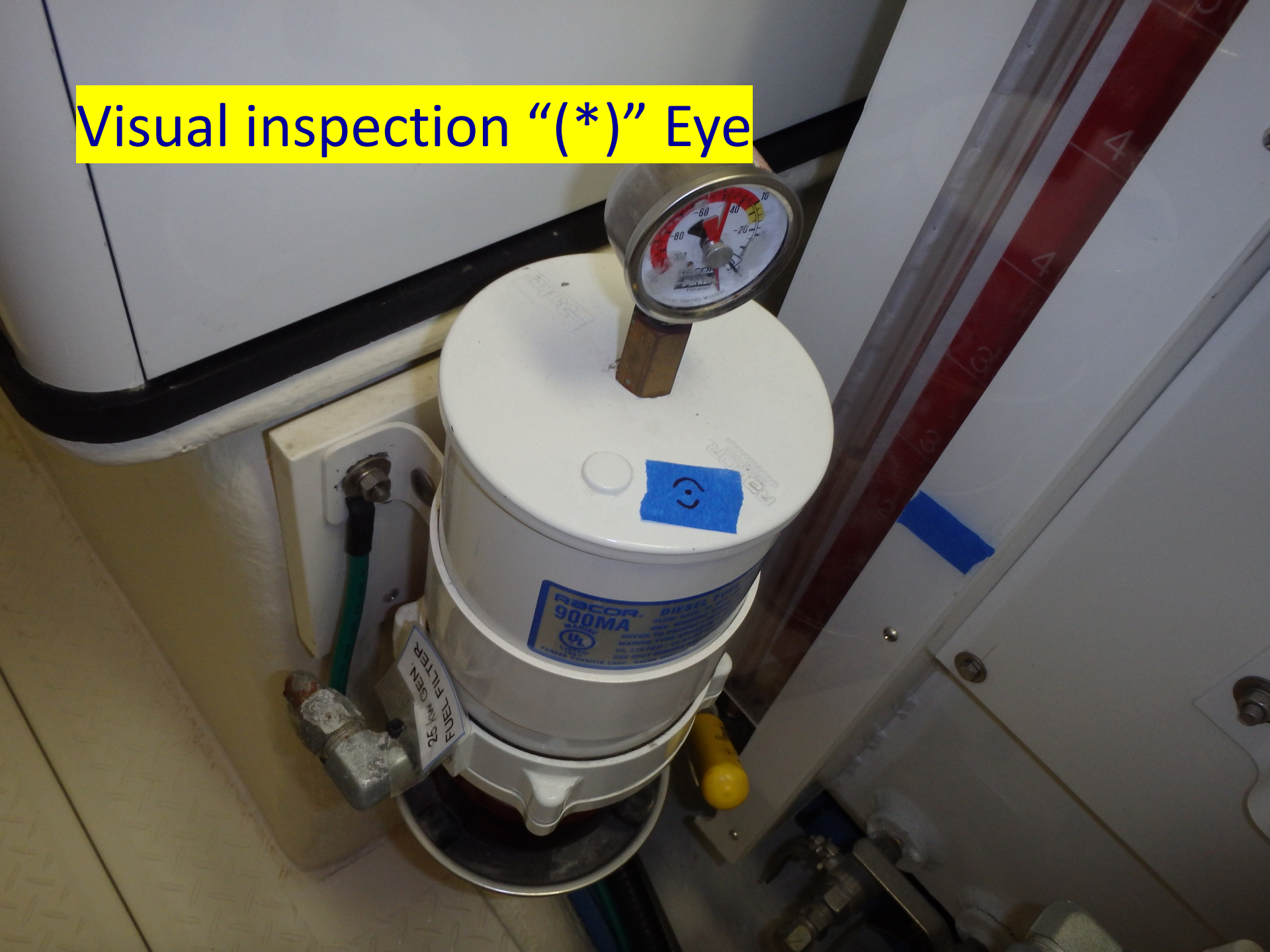
Engine room inspection Temperatures / Visuals

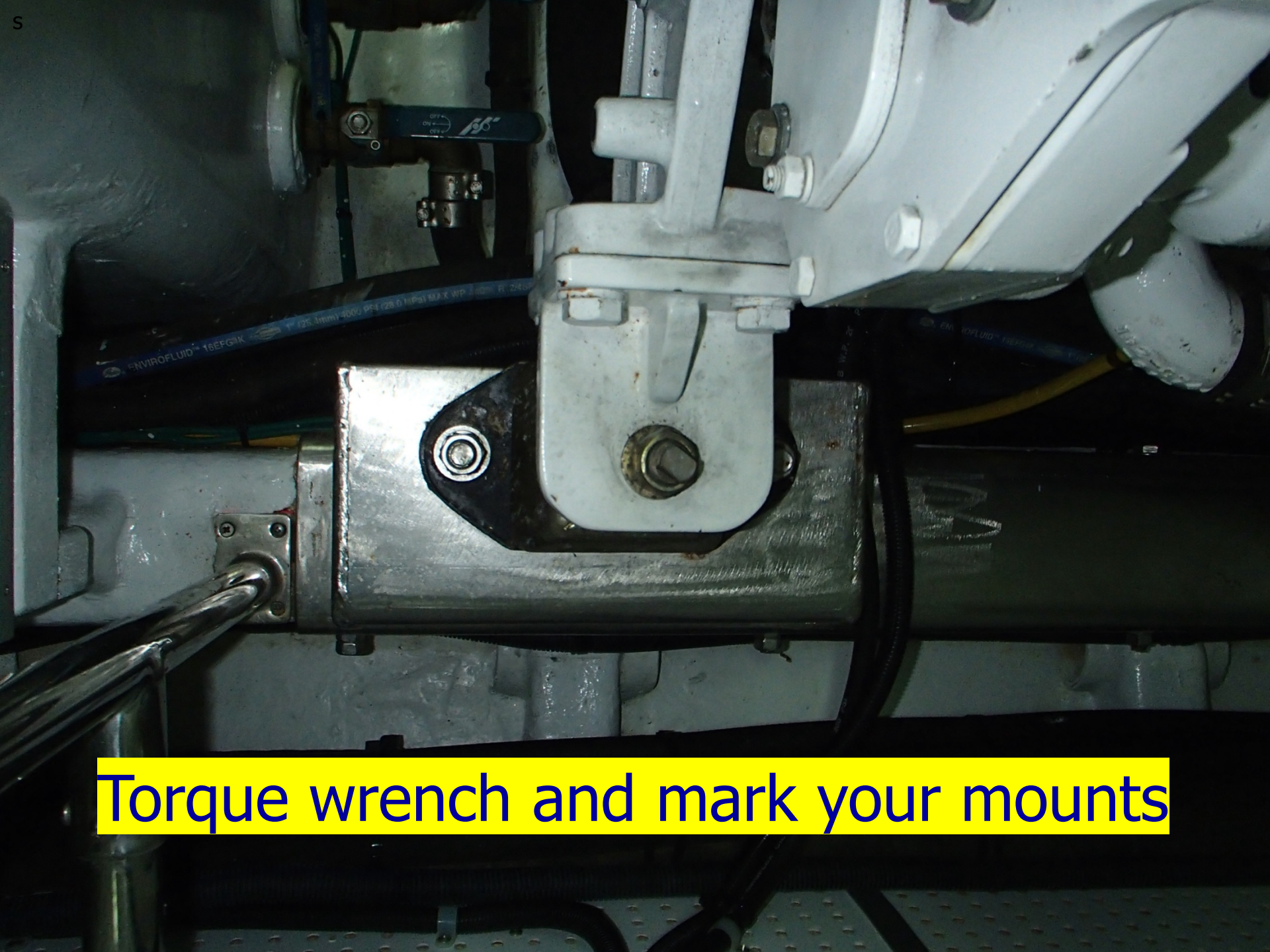


Hold Gun 2 – 6" away



Visual inspection “(*)” Eye





Torque wrench and mark your mounts

engine
13
mounts



Bilge
16
Level

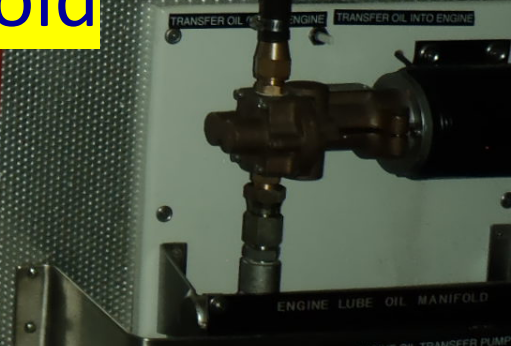
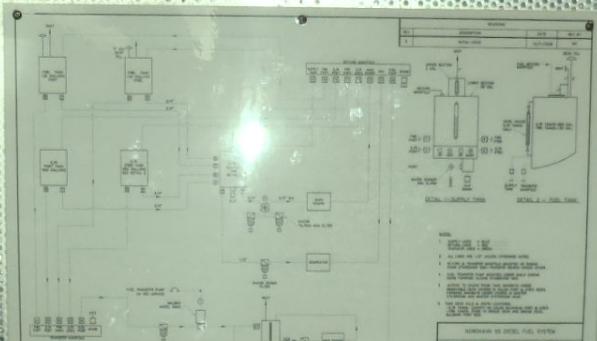
SNUGGED DOWN
ALL ENGINE MOUNT.

13 SEPT 13

3/4" WRENCH.

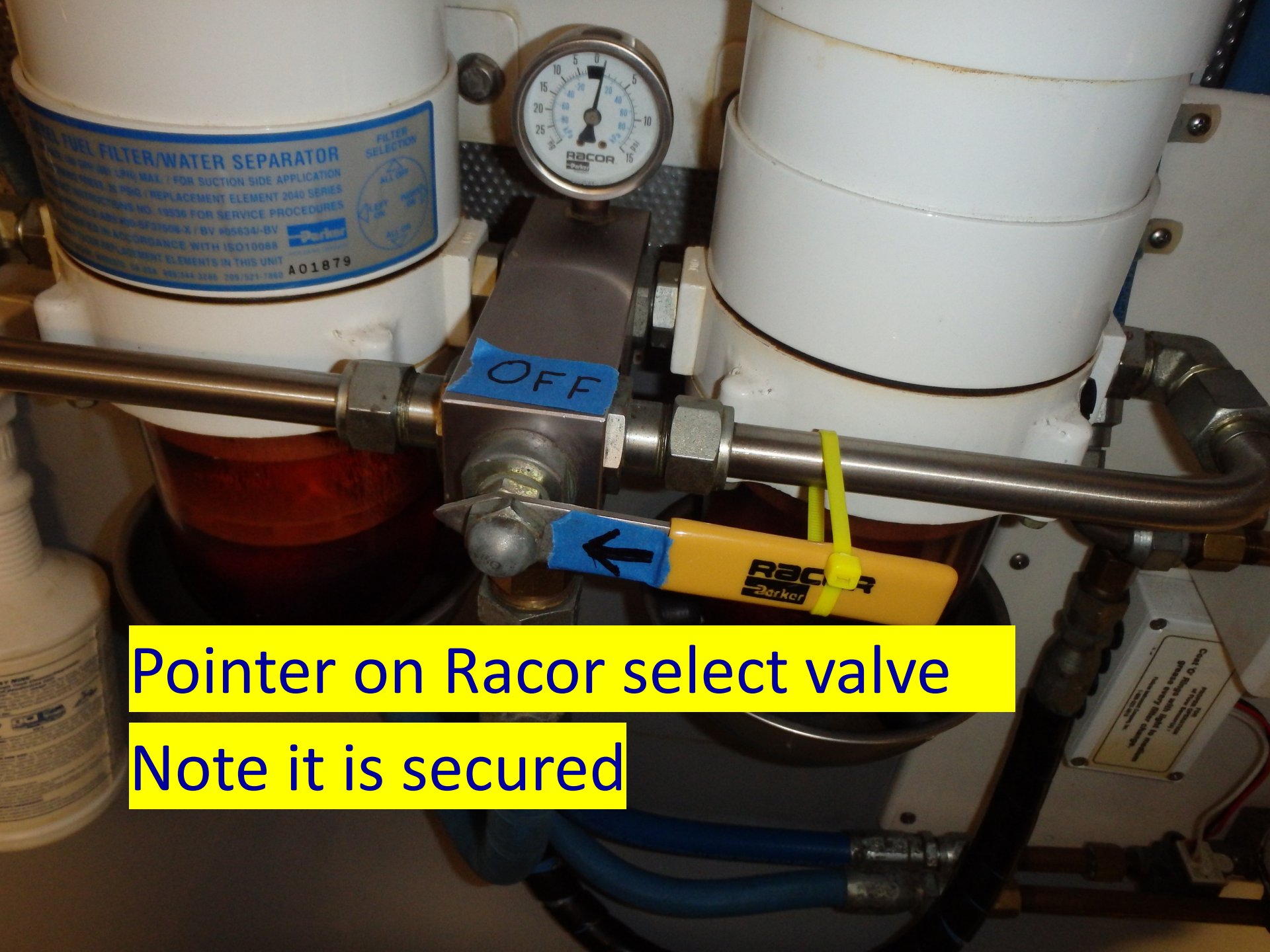
STBD

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



Replacements sized and hours noted



MARINE WET EXHAUST & WATER HOSE • 250°F (120°C) MAX.
SAE J2006 • LLOYDS APPROVED CERT. 02/69002 • 2304

#250-1120
1-1/2" (38mm)



TRIDENT-FLEX



MARINE WET EXHAUST & WATER HOSE • 250°F (120°C) MAX.
SAE J2006 • LLOYDS APPROVED CERT. 02/69002 • 2304

TRIDENT-FLEX

00002-00002

00002-00002

Color code multiple tank valves



Nail polish or red Sharpie to mark Zincs





Mark fuel filter for bleeding

22 •

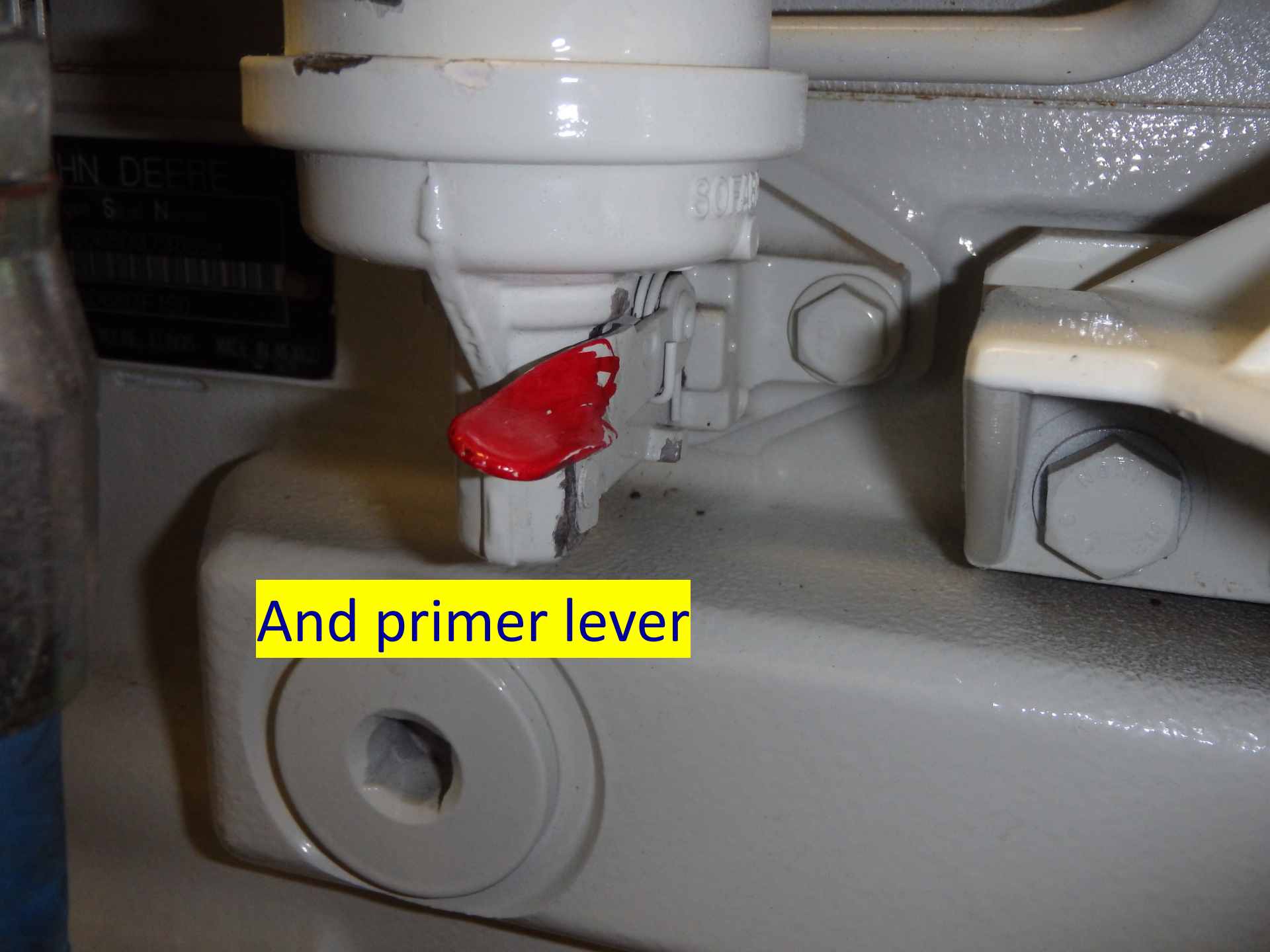
WARNING
ON ANY ENGINE WITH AN
CONTROLLED FUEL SYSTEM

FUEL FILTER
SEPARATOR
A-51005

NORTHERN

FILTER @ 1700 HRS
14 APRIL 2015

LUGGE
NORTHERN LUGGE



And primer lever

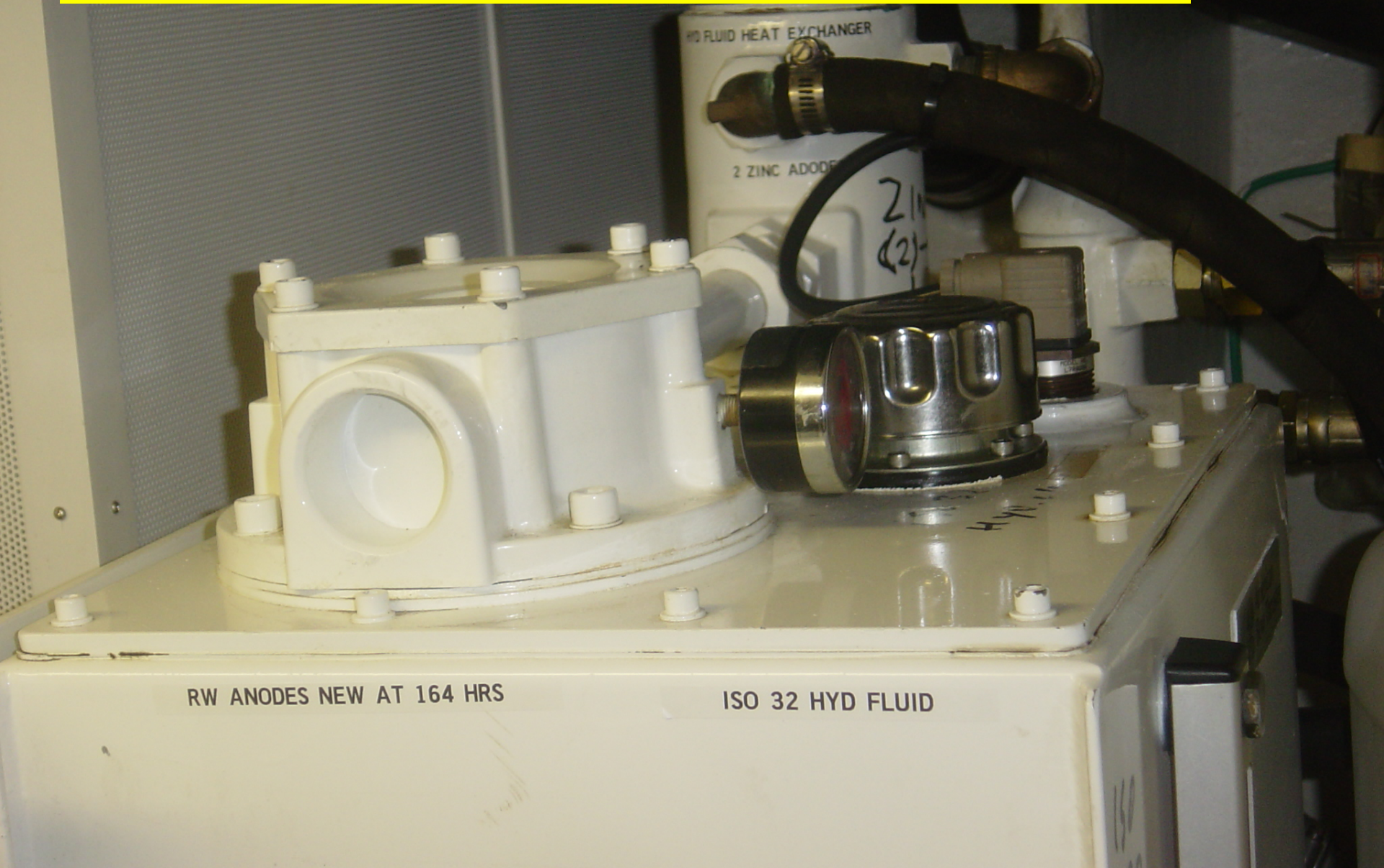
Potential trouble, will yours drain?



Install a drain valve



Anodes (pencil zincs) and hydraulic oil weight





Coolant over flow catcher



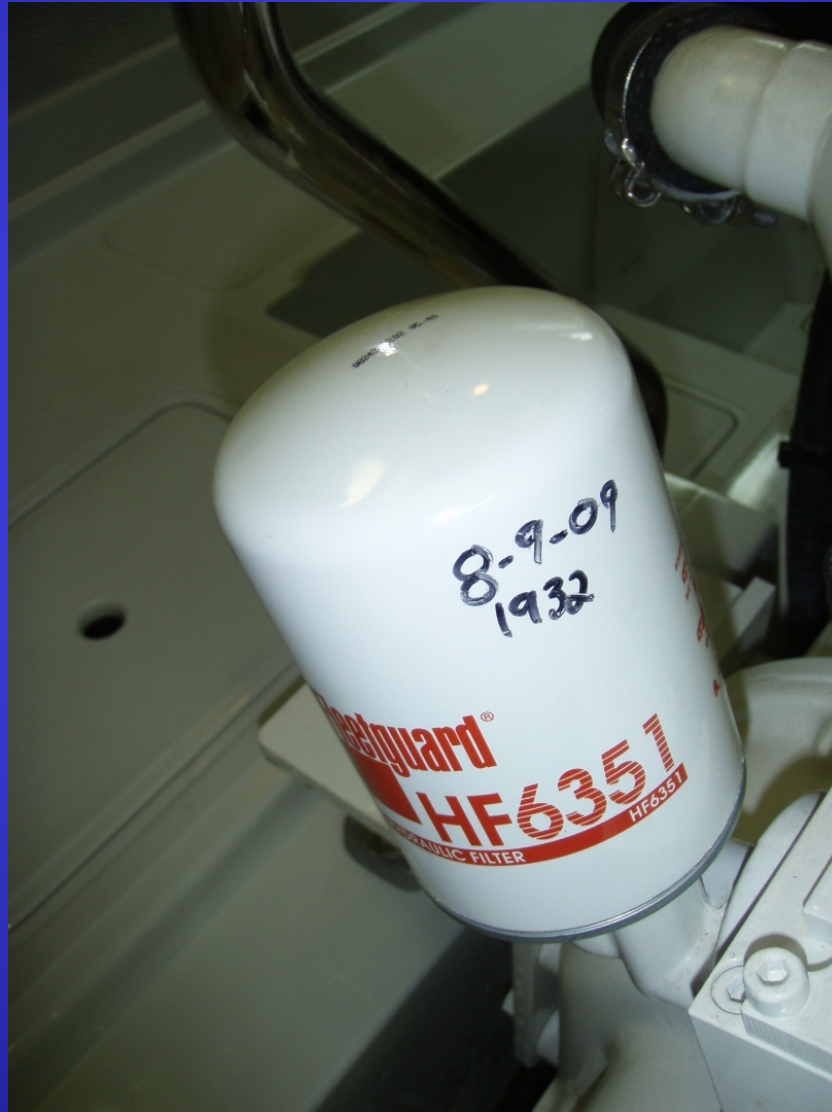
DELO 400 15W-40


4 GALLONS

Brand of oil, viscosity weight and quantity.
Make it easy!



Label filters to track changes





The image shows three fuse blocks mounted on a white panel. Each block has a clear window showing the internal fuse. The left block is labeled 'BILGE PUMP POWER SOURCE (50A FUSE)'. The middle block is labeled 'FROM STBD. ENG. ISOLATOR TO CHARGE HOUSE BANK (60A FUSE)'. The right block is labeled 'FROM PORT ENG. ISOLATOR TO CHARGE HOUSE BANK (60A FUSE)'. A yellow horizontal bar is at the top, and a yellow vertical bar is on the right. A yellow text box at the bottom says 'Identify fuses, carry spares'.

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

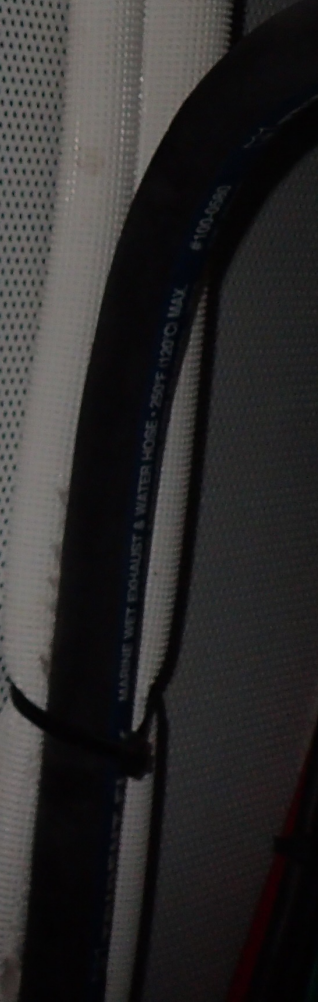
Secure spare fuse near active one





FUSE

HOUSE BATTERY FUSE



Stuffing box wrench caddy





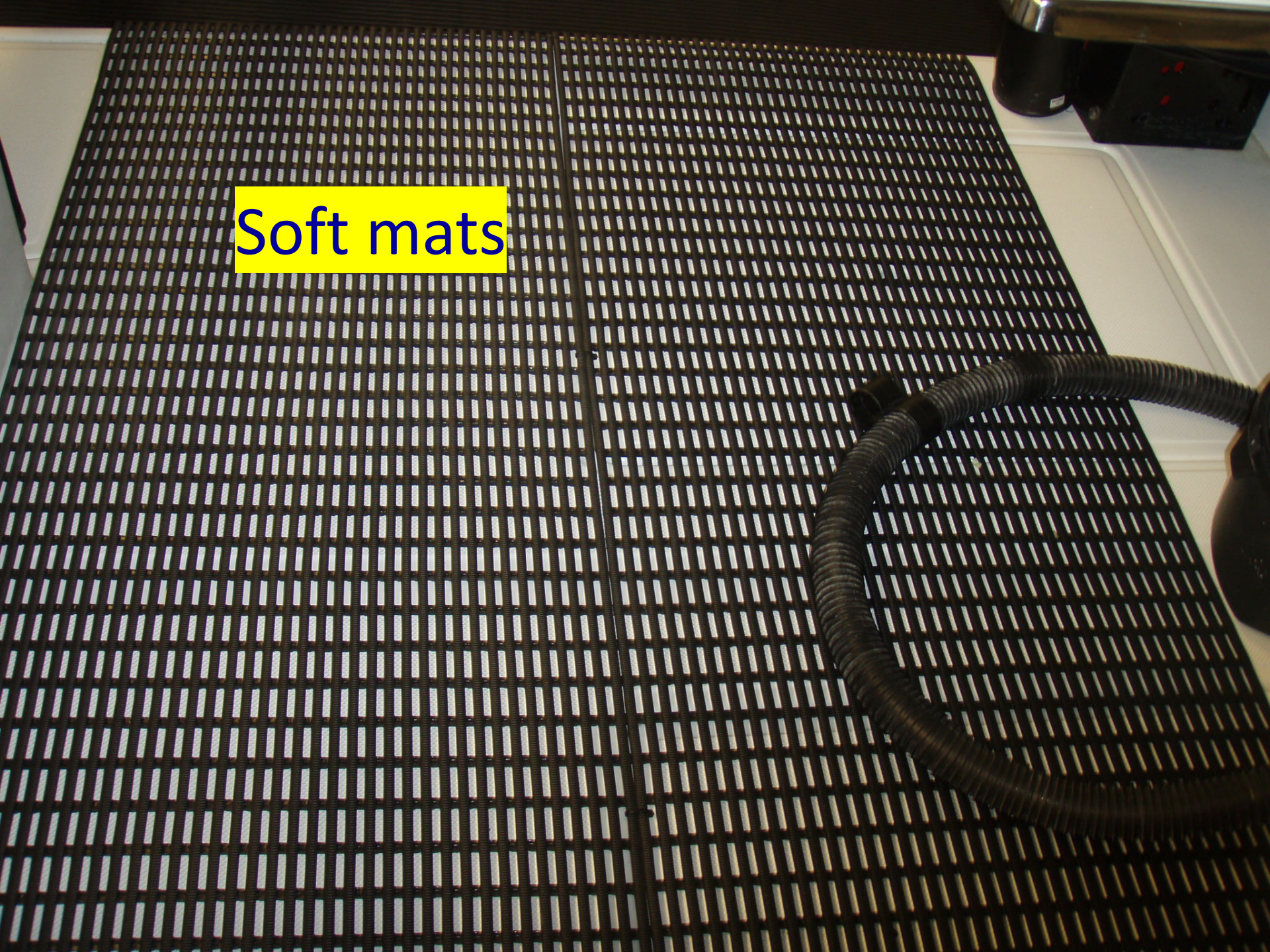
Cleaning
spray
bottles
ready



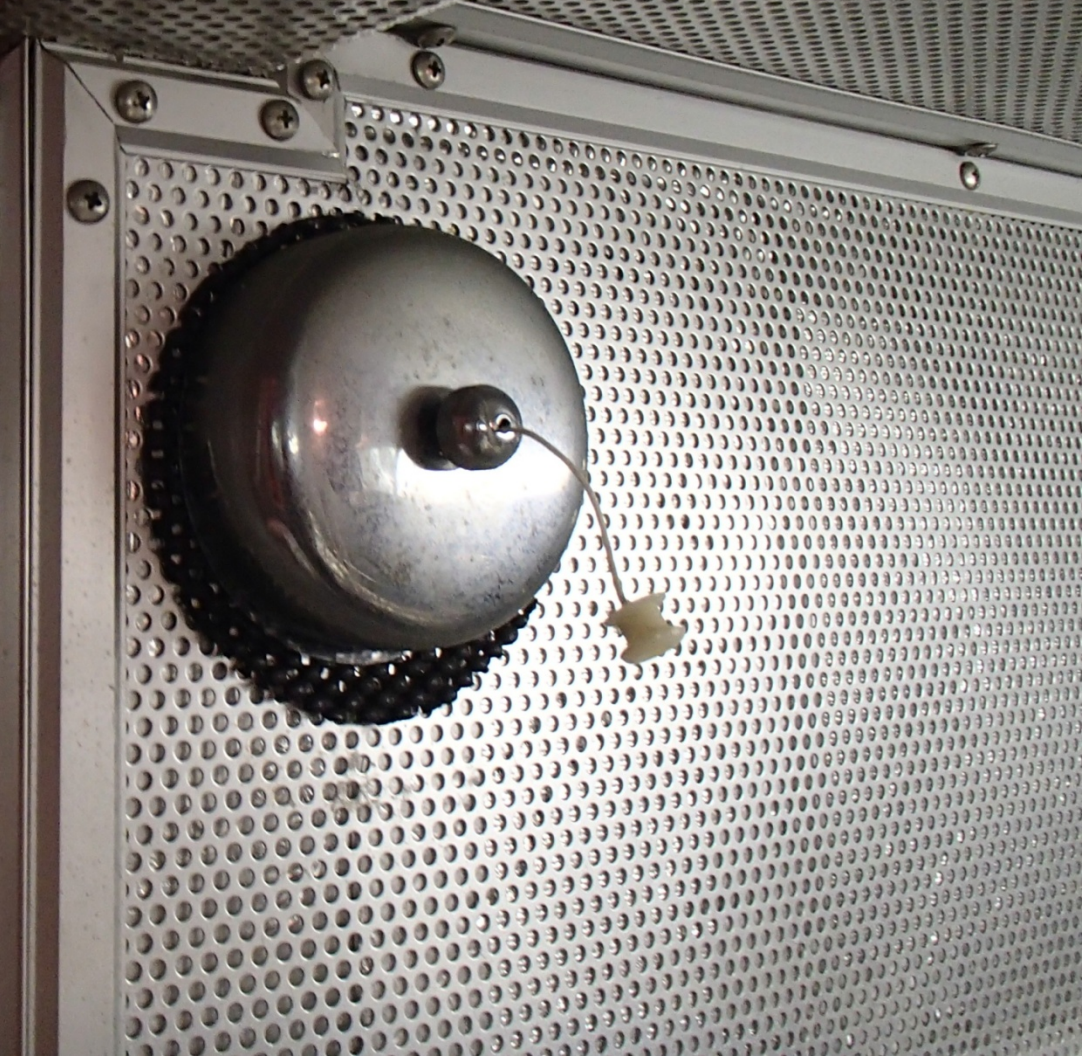


Fresh water tap and bucket

Soft mats



Engine room temp and clothes line





Cleaning product shelf

Storage hammock



A blue mesh suction bag is shown against a white background. The bag has a black button at the top center. The mesh is made of a fine, woven material. The bag is slightly wrinkled and has a small opening at the bottom. The text "Suction mesh bag for through hull bungs" is overlaid on the bag in a yellow box with blue text.

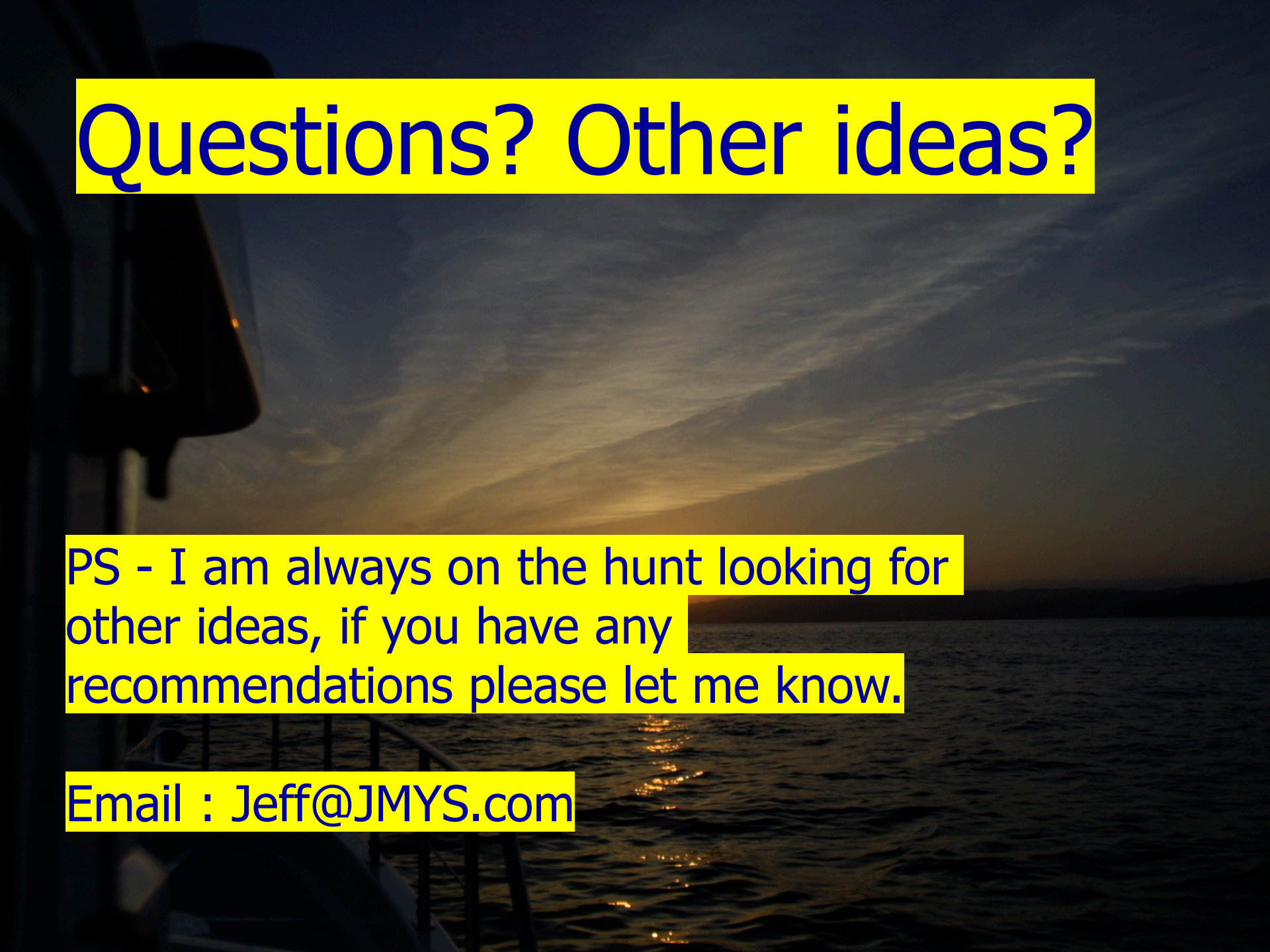
Suction mesh bag for through hull bungs



Zippered pillow bag for engine diapers

Get out there and have fun!



A photograph of a sunset over a body of water. The sun is low on the horizon, creating a golden glow across the sky and reflecting on the water's surface. In the foreground, the dark silhouette of a boat's railing is visible on the left side. The overall mood is calm and serene.

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

A full-page background image of a sunset over the ocean. The sun is a bright, glowing orb on the horizon, casting a shimmering path of light across the dark, choppy water. The sky is filled with large, billowing clouds that are illuminated from below, giving them a warm, orange and yellow glow. The overall scene is serene and majestic.

Thank you!

Stuart, FL TrawlerFest March 2 – 6, 2021

Dial-In-Your-Trawler series PDF on www.JMYS.com