

Sea Trial Checklist

Sea Trial Date	Weather Conditions During Sea Trial

Boat Details:

- Boat Make: _____
- Model: _____
- Year: _____
- Size: _____
- Price: _____
- Seller: _____

Before You Leave the Dock

Verify Claims and Paperwork

- ☐ **Registration or USCG Documentation:** Does all the information match the boat?
- ☐ **Engine Hours:** Does the hour meter or logbook match what the seller said?
- ☐ **Maintenance Records:** Check to see what services have been done
- ☐ **Survey Reports:** Ask if you can review previous reports

Notes:

Walk-Around Check

Above Deck

- ☐ **Hull Sides:** Look for obvious cracks, gouges, or impact damage
- ☐ **Transom:** Check that it feels solid
- ☐ **Deck:** Are there any areas that feel soft underfoot?
- ☐ **Hatches:** Do they open and close securely? Make sure there are no broken hinges
- ☐ **Cockpit:** Check for standing water to ensure it drains properly
- ☐ **Stanchions:** Check that they're secure
- ☐ **Lifelines:** Look for any frays or breakage

Notes:

Below Deck

- ☐ **Bilge:** Is there standing water, a fuel smell, or oil sheen on the water when you open it?
- ☐ **Bilge Pump:**
 - ☐ **Manual Switch:** Does the pump run?
 - ☐ **Electrical Float Switch:** Does the pump activate?
- ☐ **Overall Condition:** Do you smell must or fuel? Do you see any staining, mold, or rot?

Notes:

Audit Safety Gear

Note: Not all boats will come with the required safety gear like life jackets and fire extinguishers.

- ☐ **Life Jackets & Personal Flotation Devices:** Are there enough for all passengers and are they accessible?
- ☐ **Throwable Cushions or Ring Buoys:** Does the boat have one and is it accessible?
- ☐ **Fire Extinguishers:** Are they present and charged?
- ☐ **Flares:** Are they present and not expired?
- ☐ **Horn:** Does it work?
- ☐ **Navigation Lights:** Do they work?
- ☐ **Anchor and Rode:** Are they present and accessible?

Notes:

Engine Start

Cold Start

- ☐ Engine starts without excessive cranking — should fire within a few seconds
- ☐ Water flows from exhaust within 30 seconds — raw water cooling is working
- ☐ No sustained black smoke (unburned fuel) or blue smoke (burning oil) after initial startup
- ☐ A brief puff of white smoke on cold startup is normal — sustained white smoke is not
- ☐ Oil pressure gauge rises promptly to normal range — if it takes more than a few seconds, that's a concern

- ☐ Engine settles into a smooth, stable idle — no hunting, surging, or rough running
- ☐ No obvious knocking, rattling, or diesel clatter beyond normal compression sounds
- ☐ No fuel smell in the cockpit or cabin during start

After Idling

- ☐ Coolant temperature gauge rises and stabilizes in the normal range — does not creep toward red
- ☐ Oil pressure remains stable throughout warm-up
- ☐ Voltmeter or charging light shows the alternator is charging (voltage above ~12.8V for 12V system)
- ☐ Raw-water flow from exhaust remains consistent — not intermittent or stopping
- ☐ Shifting into forward and reverse: both gears engage smoothly without a heavy clunk or delay
- ☐ No new warning lights or alarms appear during warm-up

Notes:

Out on the Water

Assess Performance

- ☐ Steering responds immediately — no vagueness, lag, or dead spots
- ☐ Reverse gear: boat moves astern promptly and in a predictable direction
- ☐ Throttle moves smoothly from idle to full without sticking or skipping
- ☐ Bow thruster (if present): push both directions — responds in each?
- ☐ Visibility from the helm is adequate
- ☐ Advance throttle gradually through the full range — engine pulls cleanly at each step
- ☐ No stumbling, hesitation, or surging at any throttle position
- ☐ Note the RPM at wide-open throttle (WOT) — ask seller what the manufacturer's WOT spec is; compare
- ☐ Boat reaches planing speed (if a planing hull) without unusual effort
- ☐ GPS speed at cruise RPM — does it roughly match what the seller or specs claim?
- ☐ No excessive vibration through the helm, deck, or floor — some vibration is normal, shaking is not
- ☐ Wake is symmetrical left and right — asymmetric wake can indicate hull or shaft issues
- ☐ No cavitation sensation (propeller slipping) or vibration at cruise RPM

Notes:

Check How it Handles

- ☐ Boat tracks in a straight line without constant wheel correction
- ☐ Turns predictably in both directions — no pulling or wandering
- ☐ Helm feel is appropriate — not excessively heavy or unnervingly light
- ☐ Autopilot (if fitted): engage it — does it hold a heading? Follow a course?
- ☐ Trim tabs (if fitted): move the boat's attitude as expected — no binding

Notes:

Check Engine Performance

- ☐ Coolant temperature stays stable at cruise RPM — not climbing toward the red
- ☐ Oil pressure remains in normal range at all RPMs — including high RPM
- ☐ Voltage/charging remains consistent underway
- ☐ Exhaust note is consistent — no popping, irregular bursts, or changes in pitch
- ☐ No smoke at cruise RPM
- ☐ No fuel smell, burning smell, or exhaust smell entering the cabin

Testing Multi-Engine Boats

- ☐ Run each engine independently — note if one feels weaker or rougher than the other
- ☐ Both engines synchronize at cruise RPM without one surging

Notes:

Electronics and Navigation

- ☐ Chartplotter: powers on, acquires a GPS fix, and shows the boat's position on a chart
- ☐ Depth sounder: displaying a depth reading — does it match the actual depth?
- ☐ Knotmeter / speed log: showing speed through water underway
- ☐ Wind instruments (sailboats): apparent wind speed and direction displaying
- ☐ VHF radio: powers on, squelch works — try transmitting on a non-emergency channel
- ☐ AIS (if fitted): receiving nearby vessel targets on the chartplotter
- ☐ Radar (if fitted): powers on and shows returns after warm-up

- ☐ Compass: steady and reading — note if it seems wildly off from GPS COG
- ☐ Autopilot: engages and holds a heading underway
- ☐ All instrument displays are readable in daylight

Notes:

Below-Deck Accommodations (If Applicable)

Interior

- ☐ Overhead liners: any water staining that suggests deck leaks?
- ☐ Behind cushions, under mattresses, inside lockers: any dampness, mold, or musty smell?
- ☐ Cabin sole: any soft spots when you walk on it?
- ☐ Grab rails and handholds are secure — give them a firm pull

Notes:

Galley

- ☐ Stove: all burners ignite and produce a flame
- ☐ Oven: heats up
- ☐ Refrigerator: is it cold? Does it run?
- ☐ Sink: water flows from faucet, drains completely
- ☐ No gas smell at the stove area — if there is, do not use the stove

Notes:

Head

- ☐ Marine head pumps through a complete cycle smoothly — no unusual resistance
- ☐ No persistent sewage odor from hoses (can indicate permeated or failing hose)
- ☐ Sink drains
- ☐ Shower drain empties promptly — not pooling

Notes:

Systems

Water

- ☐ Freshwater pump pressurizes the system — pressure builds when you open a faucet
- ☐ Water from taps has no unusual color, odor, or taste
- ☐ Hot water heater produces hot water (may need engine runtime to heat via heat exchanger)

Notes:

Electrical

- ☐ Main panel breakers are labeled — you can identify what each one does
- ☐ Interior lights, fans, and outlets work
- ☐ 12V outlets and USB ports (if present): work
- ☐ No breakers that are tripped or won't reset — note which ones
- ☐ Shore power connection: does everything run on shore power at the dock?

Notes:

Other Equipment (If Applicable)

- ☐ **Windlass:** Does it retrieve and deploy the chain?
- ☐ **Generator:** Does it start, runs, and power AC loads?
- ☐ **Air Conditioning:** Does it produce cold air? Is the raw-water pump running?
- ☐ **Watermaker:** Is it running through a cycle and producing fresh water?
- ☐ **Heating:** Does it ignite and distribute heat?
- ☐ **Dinghy Outboard:** Does it start and run?

Notes:

Final Checks at the Dock

- ☐ Open the bilge again — is there more water now than when you left? Any new fuel smell?
- ☐ Engine area: any new fuel or oil smell after running?

- ☐ Check the engine oil dipstick: still at the same level? Any milky appearance? (milky = water – serious)
- ☐ Raw-water strainer: any unusual debris or signs of blockage?
- ☐ Is the exhaust mixing elbow area (where water enters exhaust) excessively hot to the touch?
- ☐ Prop: look over the transom – any fishing line wrapped around the shaft?
- ☐ How did the boat handle overall – did anything surprise you or feel wrong?

Notes:

Overall Thoughts