

# 1. General Information

**Boat model:** Lund 1650 Rebel XL SS — a 16-foot aluminum fishing boat with max 60 hp engine capacity. [LUND Boats+1](#)

**Engine model:** Mercury 60 hp outboard (assuming 4-stroke EFI or equivalent) — there is an official Operation, Maintenance & Installation Manual available. [ManualsLib+2Brunswick Marine Download+2](#)

**Owner responsibilities:**

- Ensure vessel and motor are properly maintained, safely operated, and comply with local boating laws. [LUND Boats](#)
  - Read and follow all manufacturer safety warnings.
  - Regularly inspect the boat, motor, hull, fuel systems, and steering.
- 

## 2. Pre-Operation Checklist (Before Launch)

### Boat & Hull

- Check hull for damage, dents, or cracked welds.
- Ensure drain plug is installed and secured.
- Make sure all lockers, storage compartments, and livewell lids close properly.
- Check fuel tank (19 gallon capacity on this model) is secure and fuel lines are sound. [LUND Boats](#)
- Make sure all onboard safety gear is present and in good condition: life jackets, fire extinguisher, horn/hailer, navigation lights, anchor, etc.

### Engine & Fuel System

- Inspect fuel line and connections for leaks or wear.
- Fill with recommended fuel: For Mercury outboards: unleaded gasoline minimum 87 octane (R+M)/2 in USA/Canada. [Defender Marine+1](#)
- Check engine mount bolts, thigh bolts, and transom mount for tightness.
- Check battery is charged, terminals clean, wiring secure.
- Inspect propeller for damage; make sure nuts/locks are secure.
- Check oil level (if required) and engine oil system (if 4-stroke) or fuel/oil mix if 2-stroke (depending on model).

### Safety & Controls

- Check throttle and shift controls operate smoothly.
- If tiller model: ensure tiller handle is clear and free-moving.
- Check steering system (if wheel or tiller): look for free play, no binding.
- Ensure kill-switch lanyard is attached to operator or appropriate device.

- Check bilge (if applicable) and ensure it is clean and functional.
- 

### 3. Starting Procedure

1. Place boat securely in the water or prepared for launching (on trailer with engine trimmed for launch).
  2. Lower engine to full down position (trim down).
  3. Ensure gear shift is in neutral.
  4. Prime fuel system if equipped with primer bulb.
  5. Attach kill-switch lanyard.
  6. Turn on battery/master switch.
  7. Open fuel valve (if equipped).
  8. For cold start: Depending on engine, you may use choke or if EFI, just crank.
  9. Start engine, let it idle for 1–2 minutes to warm up.
  10. Check water stream from engine cooling water outlet (if applicable) to ensure circulation.
  11. Shift into gear gently and proceed.
- 

### 4. Normal Operation & Handling

- Operate at slow speed until boat is fully on plane.
  - Trim engine for efficient operation: raise or lower trim as needed while underway.
  - Maintain safe speed according to conditions, weight load, and visibility.
  - Observe load capacity: on this boat, max persons load is 6, and maximum HP is 60.  
[LUND Boats+1](#)
  - Avoid rough water at full throttle and allow boat to gradually accelerate.
  - Use proper propeller pitch to match load and conditions for best performance and fuel economy.
  - Monitor engine gauges (if equipped): oil pressure, temperature, alternator voltage, tachometer, etc.
  - Keep an eye on fuel level and approximate remaining range (fuel tank  $\approx$  19 gal).
  - After use, idle engine for a minute or two to cool before turning off.
- 

### 5. Post-Operation / Shutdown Procedure

1. Shift engine into neutral.
2. Let engine idle a short period to cool and circulate fresh water if salt or dirty water was used.
3. Turn off engine.
4. Close fuel valve (if equipped).

5. Turn off battery/master switch.
  6. Rinse engine (if saltwater use) with fresh water.
  7. Inspect boat and engine for damage, leaks, wear.
  8. Secure boat: tie to dock or trailer properly, cover if stored outdoors.
  9. Record any issues noticed during operation in your log.
- 

## 6. Regular Maintenance Schedule (*General*)

Below is a generic schedule—refer to the official motor manual for exact intervals.

### After Every Use

- Rinse engine with fresh water (especially if in salt or brackish water).
- Check propeller and lower unit for damage or debris.
- Inspect fuel lines, hose clamps, fittings.

### Every 50 Hours / Annually

- Change engine oil and filter (4-stroke).
- Change lower unit gearcase oil.
- Grease all fittings, pivot points, tilt/trim mechanism.
- Replace fuel filter.
- Inspect spark plugs and replace if needed.
- Inspect battery condition and clean terminals.
- Check all electrical connections.

### Seasonal / Storage

- Stabilize fuel in tank, run engine briefly to circulate.
  - Fog engine if stored for long periods.
  - Remove battery or maintain on trickle charger.
  - Clean and wax boat hull; inspect hull and fittings; check and treat rod storage compartments, livewell, seat pedestals. [LUND Boats](#)
- 

## 7. Safety & Best Practices

- Always wear a life jacket or have one for every person onboard.
- Never operate under the influence of alcohol or drugs.
- Ensure passengers are seated properly and weight is balanced.
- Keep a safe distance from swimmers, other boats, obstacles.
- Be aware of local boating regulations, wake zones, and speed limits.

- Use the correct engine HP as per boat rating—using the maximum 60 hp on this boat is acceptable per manufacturer—but don't overload the boat. [LUND Boats](#)
- Make sure the boat's identification, registration, and insurance are current.
- Have emergency equipment onboard: horn, fire extinguisher, first-aid kit, anchor with line, throwable life ring, visual distress signals.

## 8. Troubleshooting – Common Issues

Symptom	Possible Cause	Suggested Action
Engine won't start	Battery low or dead; fuel shutoff; ignition switch off	Check battery, connections, fuel supply
Engine overheats	Insufficient water flow; blocked water intake	Check and clear water intake, ensure trim is down
Poor performance / heavy load	Incorrect prop, excessive load, wrong trim	Change to proper prop, reduce load, adjust trim
Gear slippage in lower unit	Low gear oil; worn gears	Check oil level, replace oil, inspect gears
Excessive vibration	Bent propeller, unbalanced load, engine mount loose	Inspect prop, balance load, check mounts

## 9. Storage & Winterizing

- Drain water from bilge and livewells; dry completely.
- Clean boat thoroughly inside and out; remove any debris.
- In engine, run fogging oil if recommended by engine manual.
- Stabilize fuel or drain tank, run engine dry of fuel if long-term storage.
- Store battery in a dry, cool place; keep it charged.
- Cover boat or store indoors if possible.

## 10. References & Additional Manuals

- Lund Boat Company Owners Manual (general boat info) [LUND Boats](#)
- Mercury Marine Owners/Operation Manual search page: you can locate exact manual for your engine by serial number. [Mercury Marine+1](#)
- Mercury Outboard 40-50-60 4-Stroke manual (for technical service)