

Troubleshooting

If your boat performance is not what you are expecting, try the following troubleshooting guide:

- Improper drive tilt angle or transom height.
- Incorrect propeller selection.
- Improper load distribution.
- Water under cockpit floor.



The following sections concerning troubleshooting are broken into four sections: boat handling, steering, engine performance, and gauges.

Boat Handling

- A. POOR SPEED - LIGHT LOAD
 - 1. Incorrect propeller selection.
 - 2. Load too far forward.
 - 3. Engine malfunction.
 - 4. Motor trim too far in.
 - 5. Marine growth on hull or lower unit.
- B. POOR SPEED - HEAVY LOAD
 - 1. Under powered.
 - 2. Engine malfunction.
 - 3. Incorrect propeller selection.
 - 4. Motor trim too far out.
 - 5. Marine growth on hull or lower unit.
- C. SLOW TO PLANE - HEAVY LOAD
 - 1. Motor trim too far out.
 - 2. Incorrect propeller selection.
 - 3. Too much load in stern.
- D. SPEED LOSS
 - 1. Marine growth on hull or lower unit.
 - 2. Weeds on propeller.
 - 3. Damaged propeller.
- E. HARD RIDE IN ROUGH WATER
 - 1. Too much load in stern.
 - 2. Motor trim too far out.
 - 3. Poor speed management.
- F. RUNS WET IN ROUGH WATER
 - 1. Load too far forward.
 - 2. Motor trim too far in.
 - 3. Overloaded.
- G. LISTS ON STRAIGHT WHEN HEAVILY LOADED
 - 1. Load not evenly distributed.
 - 2. Motor trim too far in.
- H. LISTS OR ROLLS ON STRAIGHT WHEN LIGHTLY LOADED
 - 1. Loose steering.
 - 2. Motor trim too far in.
 - 3. Load too far forward.
- I. NOSE HEAVY - CATCHES ON WAVES AND IN TURNS
 - 1. Motor trim too far in.
 - 2. Too much load in bow.
- J. PORPOISES ON STRAIGHT RUN
 - 1. Motor trim too far out.
 - 2. Too much load in stern.
- K. BANKS TOO MUCH IN TURNS
 - 1. Overloaded, improper weight distribution.
 - 2. Load too far forward.
 - 3. Motor trim too far in.
 - 4. Overpowered.
- L. EXCESSIVE CAVITATION

1. Incorrect propeller selection.
2. Motor too high on transom.
3. Motor trim too far out.
4. Overpowered.
5. Load too far forward.
6. Thru-hull fittings disturb water flow.
7. Weeds on propeller.

Steering

A. STEERING STIFF OR UNUSUALLY HARD OPERATING, JERKY OR ERRATIC.

1. Corrosive deposits at cable output end, either inside cable sleeve or inside motor tilt tube.
2. Crushed or kinked cable conduit.
3. Bent cable ram at output end.
4. Friction device at helm over tightened.
5. Internal corrosion or damage to cable.
6. Engine and boat are not trimmed out properly.
7. Engine trim tab loose, damaged or incorrectly set.
8. Transom bracket improperly mounted, bent or distorted (boat mounted systems only).
9. Bent or distorted engine link may be interfering with engine(motor mounted systems only).

B. STEERING SLOPPY AND HAS EXCESSIVE FREE-STEERING WHEEL MOVEMENT.

1. Cable transom bracket loose or cable and fittings loose or badly worn.
2. Steering wheel loose on helm.
3. Worn or loose fasteners in helm unit or drive unit.
4. Worn push-pull cable.

C. STEERING SYSTEM WILL NOT TURN.

1. Cable transom bracket loose or cable end fittings loose or badly worn.
2. System badly damaged at the helm or cable output end.



WARNING!

If the steering system does not steer easily, STOP! Do not operate boat. Have steering system checked immediately.

Engine and Performance

A. SHIFT AND THROTTLE CONTROL BECOMES STIFF OR UNUSUALLY HARD OPERATING, JERKY OR ERRATIC.

1. Control cable(s) are crushed, kinked or bent too sharply.
2. Cable(s) are corroded at ends or are clogged internally with dirt and grime.
3. Engine shift or throttle linkage not working properly.
4. Remote control mechanism is defective, faulty or has been damaged internally.
5. Foreign objects interfering with throttle or shift mechanism at either control head or engine.

B. THROTTLE AND SHIFT DOES NOT RESPOND PROPERLY TO CONTROL HAND LEVER.

1. Cable ends and connection fittings not properly secured at the engine or control head.
2. Wear in the control mechanism or excessive backlash caused by too many bends in the push-pull cable(s) conduit.
3. Control system not properly installed.
4. Throttle and shift linkage on engine malfunctioning.

WARNING!

Consult your Stingray dealer about repair or replacement of steering system components. Improperly installed components could cause loss of steering, loss of boat control, and an accident or breakdown.

- C. ENGINE STARTER DOES NOT ENGAGE WHEN LEVER IS IN NEUTRAL POSITION.
 - 1. Neutral start switch not properly adjusted.
 - 2. Neutral start switch malfunctioning or stuck.
 - 3. Dead battery, loose or corroded battery terminals.
 - 4. Faulty ignition switch.
 - 5. Loose ground or positive wires.
- D. ENGINE STARTER ENGAGES WHEN REMOTE CONTROL HAND LEVER IS IN FORWARD OR REVERSE.
 - 1. Neutral start switch not properly adjusted.
 - 2. Neutral start switch malfunctioning or stuck in "closed" position.
 - 3. Faulty wiring.
- E. ENGINE WILL NOT START: STARTER ENGAGES.
 - 1. Lack of fuel.
 - 2. Clogged anti-syphon valve or fuel tank pickup.
 - 3. Clogged fuel filter.
 - 4. Plugged fuel line or defective pump.
 - 5. Carburetor float valve stuck.
 - 6. Damp spark plugs, wires, or distributor cap.
 - 7. Loose spark plug or coil wires.
 - 8. Water in fuel supply.
- F. ENGINE RUNS ERRATICALLY
 - 1. Automatic choke out of adjustment.
 - 2. Water and/or dirt in fuel filter.
 - 3. Fuel pump malfunction.
 - 4. Fuel tank vent and line plugged.
- G. ENGINE VIBRATES
 - 1. Damaged propeller or weeds on propeller or gear-case.
 - 2. Carburetor out of adjustment.
 - 3. Spark plug(s) damaged or dirty.
 - 4. Loose or damaged spark plug wires.
 - 5. Incorrect firing order.
 - 6. Engine out of time.
- H. ENGINE RUNS BUT BOAT MAKES LITTLE OR NO PROGRESS.
 - 1. Fouled or damaged propeller.
 - 2. Excessive marine growth on bottom of hull.

Note: Consult your engine manual for specifications and help on troubleshooting and repairs of your engine. Also, consult your Stingray dealer for additional help or information about your boat.

Gauges

Before replacing an instrument on your panel, check the following:

- 1. Make sure all electrical connections are tight and free of corrosion.
- 2. Check to see that the terminal has not pulled off wire, causing loss of continuity.
- 3. Check to see that each instrument and sending unit is properly grounded.
- 4. On the tachometer, check selector switch for proper setting for your engine. If arrow is in between the proper setting, erratic reading will occur. Proper setting for different engines are listed below.
 - a. Outboards: One
 - b. Four Cylinders Engine: Two
 - c. Six Cylinder Engines: Three
 - d. Eight Cylinder Engines: Four



Note: Be sure arrow is at indicator mark and not screwdriver slot.

5. Ground the sender wire to get full scale deflection on temperature, trim, fuel, and oil pressure.
6. Moisture buildup on the inside of the gauge is quite common and harmless.