300 VERADO FOURSTROKE VERADO CLOSED COMPARTMENT TECHNOLOGY (CCT) INSTALLATION AND OWNERS MANUAL SUPPLEMENT

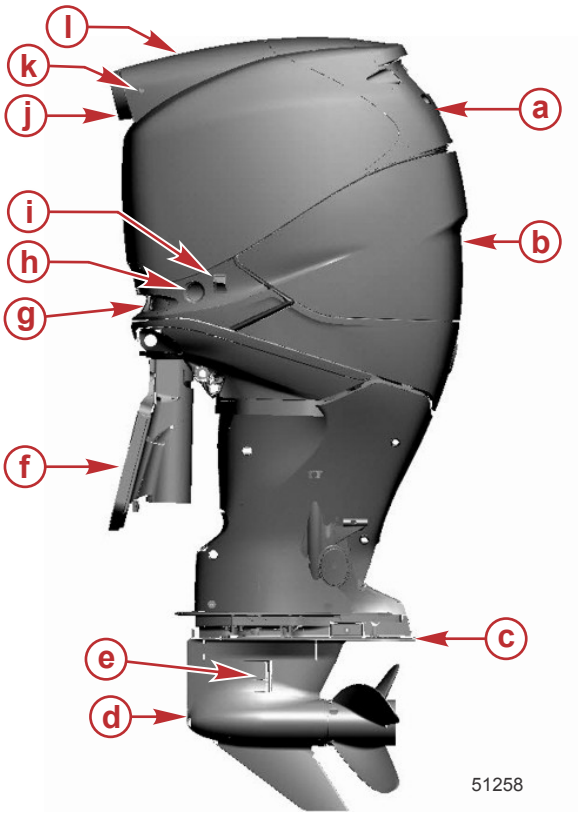
Table of Contents

Lubricants, Sealants, Adhesives

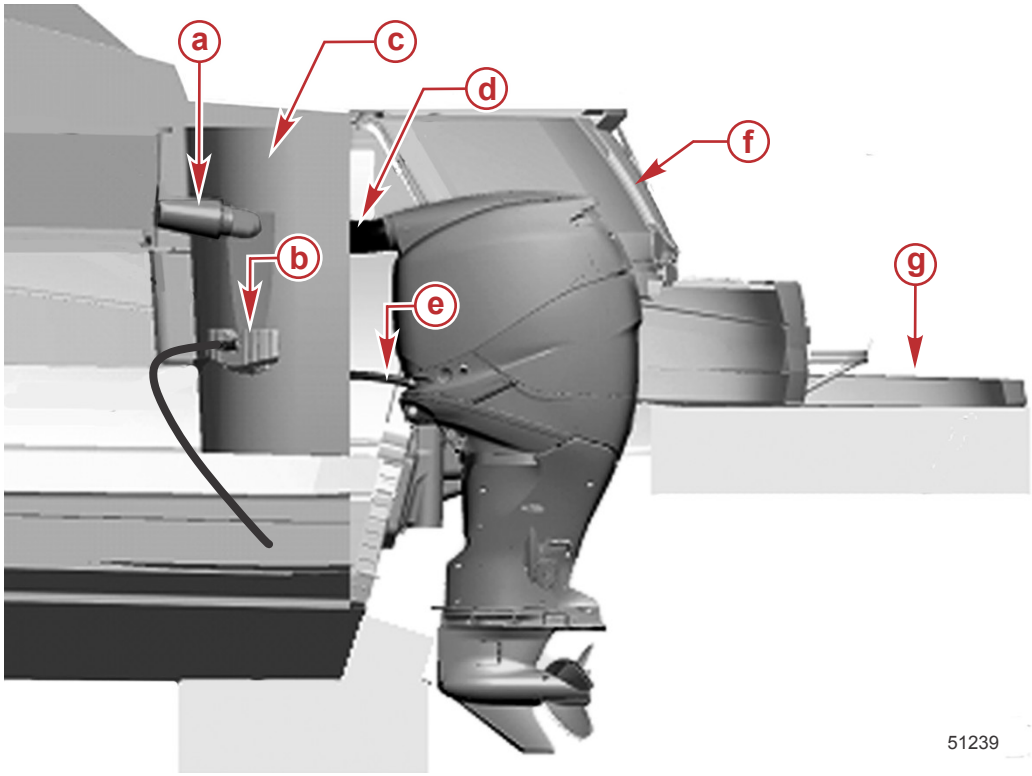
Tube Ref No.	Description	Where Used	Part No.
81	Anti-Seize Compound	Spark plug threads	92-898101385

IMPORTANT: This Closed Compartment Technology Installation/Owners Manual Supplement is intended to be used by the installer and given to the owner for their future use. The information contained in this manual is to be used as a supplement for both the outboard installation manual and the owner's operation and maintenance manual shipped with the standard outboard product.

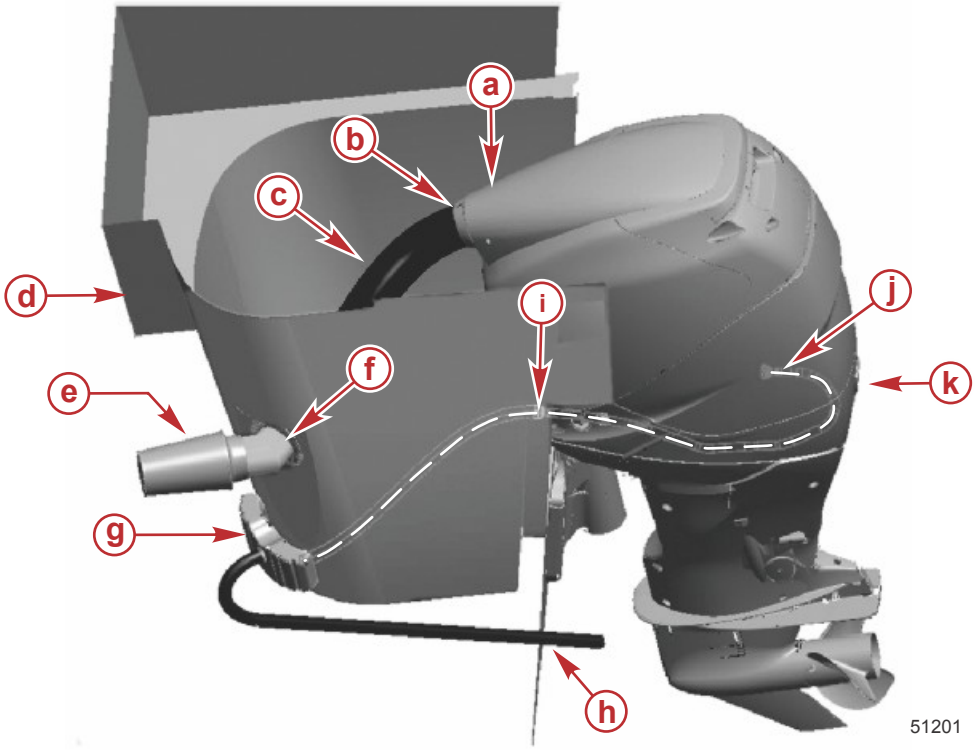
Verado CCT Configuration and Components



- **a -** Top cowl
- **b -** Rear cowl
- **c -** Anti-ventilation plate
- **d -** Gearcase
- **e -** Cooling water intake holes
- **f -** Mount pedestal
- **g -** Idle relief quick-connect fitting
- **h -** Engine flush
- **i -** Auxiliary tilt switch
- **j -** Quick release air hose adapter
- **k -** Release button
- **l -** Air duct top cowl



a - Air filter
b - Idle relief muffler
c - Engine well
d - Engine intake air hose
e - Idle relief hose
f - Engine hatch
g - Swim platform



a - Air duct top cowl
b - Quick release air hose adapter
c - Engine intake air hose
d - Engine well
e - Air filter
f - Elbow
g - Idle relief muffler
h - Idle relief hose
i - Quick-connect coupler
j - Idle relief hose
k - Grommet with plug

Top Cowl - No Step

IMPORTANT: Do not step or place heavy objects on the top cowl.

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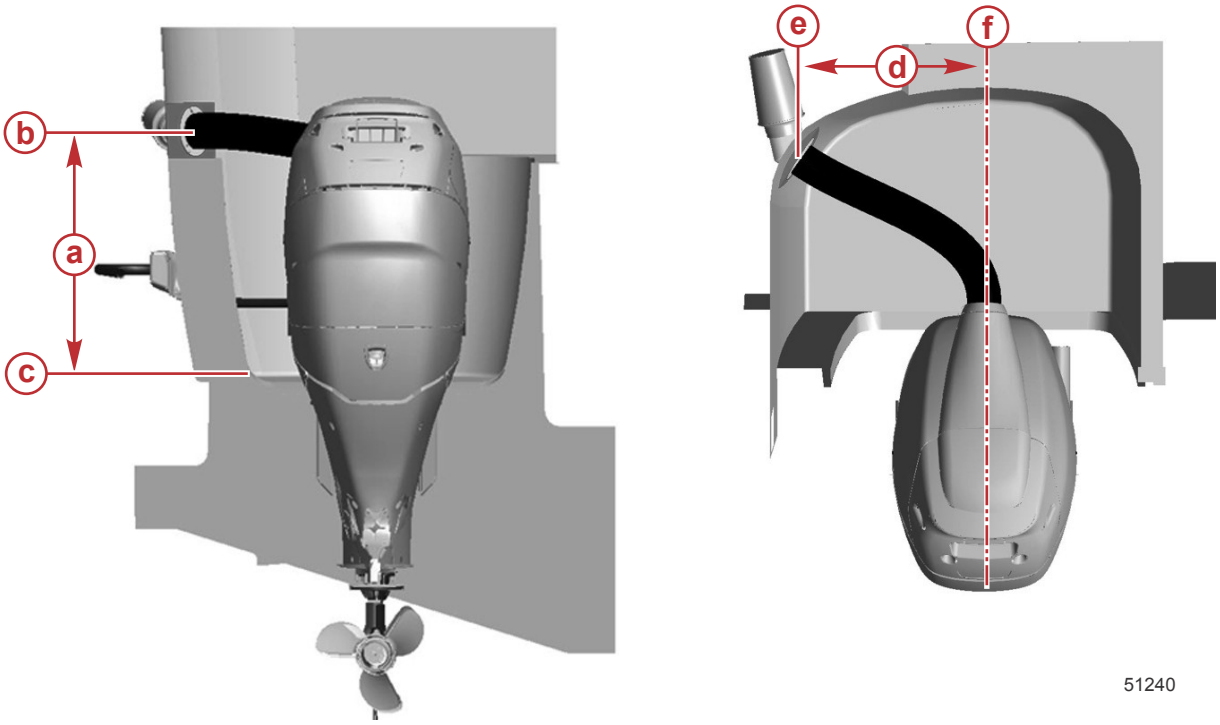
Intake Air Filter Mounting Location

IMPORTANT: If the air intake filter location deviates from the specified location, testing must confirm that the intake air hose is not damaged or stretched while operating within the full steering and tilt range of the outboard.



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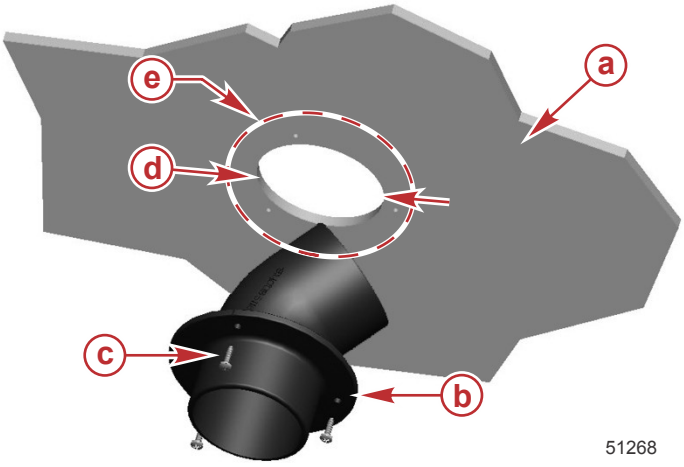
Port outboard shown

- **a -** 86.36 cm ± 5 cm (34 in. ± 2.0 in.)
- **b -** Center of air filter elbow
- **c -** Bottom of engine well
- **d -** 53.34 cm ± 5 cm (21 in. ± 2.0 in.)
- **e -** Center of air filter elbow
- **f -** Centerline of engine

IMPORTANT: The engine well elbow mounting surface must be flat within the area in contact with the elbow flange. The surface must not be concave or convex.



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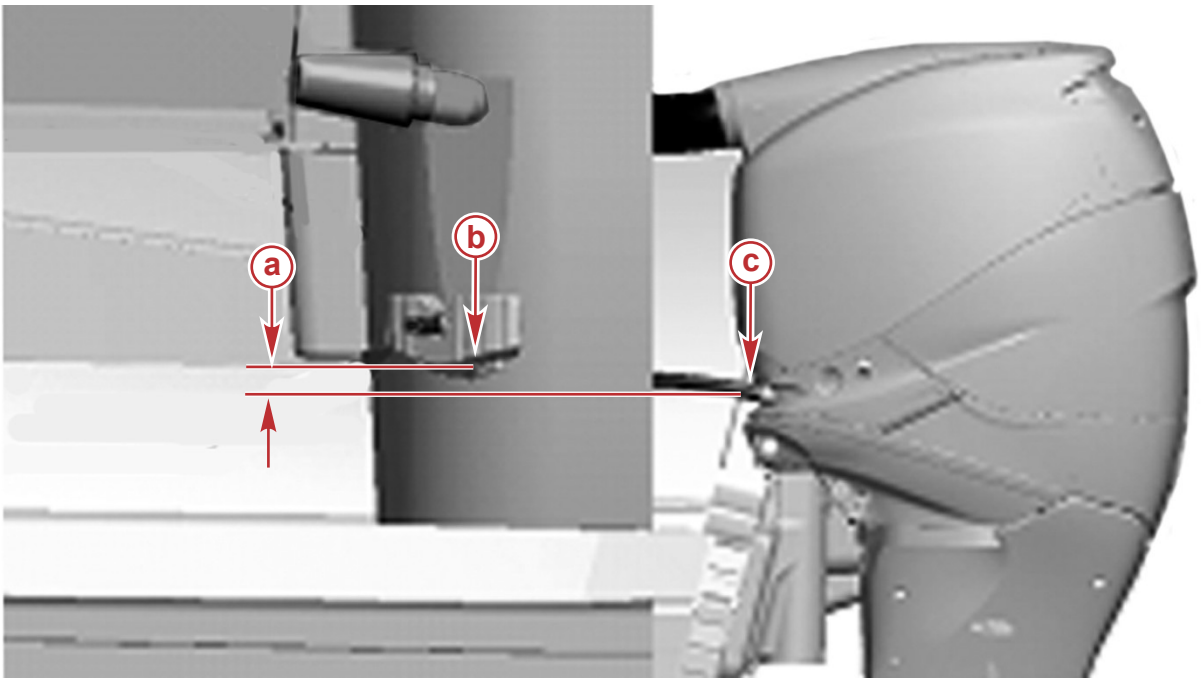
- **a -** Engine well
- **b -** Filter elbow
- **c -** Screw (3)
- **d -** 10.8 cm ± 0.3 cm (4-1/4 in. ± 1/8 in.) hole diameter
- **e -** Elbow flange mounting zone

Exhaust Idle Relief

Muffler Mounting Location



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- **a -** 76.2 mm (3 in.) minimum
- **b -** Exhaust idle relief muffler inlet
- **c -** Exhaust idle relief outlet

Hose Specifications and Routing

- The idle relief hose and connections used at the muffler outlet must conform to ABYC standards.
- The muffler must be the high point of the idle relief system between the engine and muffler.
- The hose between the muffler exit and the boat hull exit point may be routed higher than the muffler.
  NOTE: *Water will drain back through the muffler to the driveshaft housing.*
- The exit point on the boat hull must be above the waterline of a safely loaded boat.

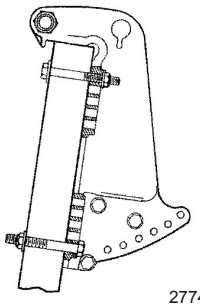
Installing Outboard

⚠ WARNING

Failure to correctly fasten the outboard could result in the outboard propelling off the boat transom resulting in property damage, serious injury, or death. Before operation, the outboard must be correctly installed with the required mounting hardware.

Have your dealer install your outboard and related accessories to ensure proper installation and good performance.

The outboard must be secured to the transom with the four 12.7 mm (1/2 in.) diameter mounting bolts and locknuts provided. Install two bolts through the upper set of holes and two bolts through the lower set of holes.



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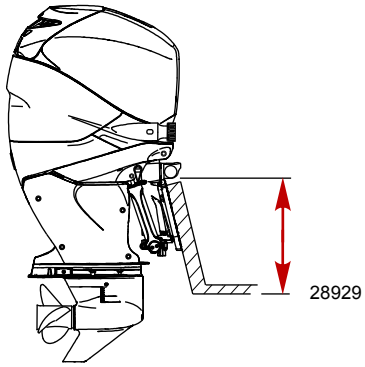
Maximum Outboard Mounting Height

The mounting height of the outboard must not exceed 63.5 cm (25 in.) for L models, 76.2 cm (30 in.) for XL models, and 88.9 cm (35 in.) for XXL models. Mounting the outboard higher may cause damage to the gearcase components.



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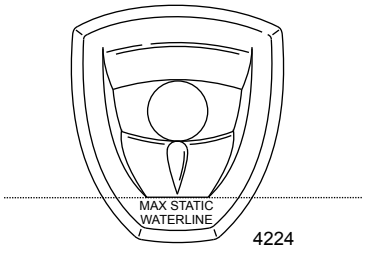
Maximum Static Waterline

The static waterline, with boat at rest, must be below the "MAX STATIC WATERLINE" mark on the idle relief grommet (located at the rear of the outboard) when the outboard is fully tilted in/down. If waterline is above "MAX STATIC WATERLINE" mark, adjust boat load forward or increase (raise) outboard mounting height to correctly place mark above waterline.



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Multiple Engine Steering Requirements

Liquid Tie Bar

This installation requires the use of a liquid tie bar kit (893396A02) for dual engine applications.

Refer to the **Mercury Precision Parts Accessories Guide** and order the hydraulic fittings hydraulic hoses in the required length.

Inspection and Maintenance Schedule

Before Each Use

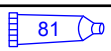
- Check engine oil level.
- Ensure that the lanyard stop switch stops the engine.
- Visually inspect the fuel system for deterioration or leaks.
- Check outboard for tightness on transom.
- Check steering system for binding or loose components.
- Check propeller blades for damage.

After Each Use

- Flush out the outboard cooling system if operating in salt or polluted water. Refer to **Flushing the Cooling System** in the Owner's Manual.
- Wash off all salt deposits and flush out the exhaust outlet of the propeller and gearcase with fresh water if operating in saltwater.

Every 100 Hours of Use or Once Yearly, Whichever Occurs First

- Change the engine oil and replace the oil filter. The oil should be changed more often when the engine is operated under adverse conditions such as extended trolling. Refer to **Changing Engine Oil** in the Owner's Manual.
- Inspect the K & N air filter for debris. Refer to **K & N Air Filter Maintenance**.
- Inspect the thermostat visually for corrosion and/or a broken spring. Make sure the thermostat closes completely at room temperature.[1.]
- Check the engine water separating fuel filter for contaminants. Clean or replace the filter. Refer to **Fuel System** in the Owner's Manual.
- Check the corrosion control anode. Check more frequently when used in saltwater. Refer to **Corrosion Control Anode** in the Owner's Manual.
- Drain and replace the gearcase lubricant. Refer to **Gearcase Lubrication** in the Owner's Manual.
- Check the power steering fluid. Refer to **Checking Power Steering Fluid** in the Owner's Manual.
- Check the power steering connectors and hoses for leaks.
- Inspect the battery. Refer to **Battery Inspection** in the Owner's Manual.
- Check the wiring and connectors.
- Check the tightness of bolts, nuts, and other fasteners.
- Check the engine air intake hose for cracks and connections for tightness.
- Check the idle relief hoses for cracks and connections for tightness.
- Saltwater usage. Remove and inspect the spark plugs for corrosion and replace the spark plugs as necessary. Apply a thin coating of Anti-Seize Compound only on the threads of the spark plugs prior to installation. Refer to **Spark Plug Inspection and Replacement** in the Owner's Manual.

Tube Ref No.	Description	Where Used	Part No.
	Anti-Seize Compound	Spark plug threads	92-898101385

Every 300 Hours of Use or Three Years

IMPORTANT: The engine oil must be drained before removing the gearcase to avoid oil spillage. Perform the scheduled water pump replacement in combination with an engine oil change.

- Replace the water pump impeller. Replace the impeller more often if overheating occurs or if reduced water pressure is noted.[1.]
- Check the power trim fluid. Refer to **Checking Power Trim Fluid** in the Owner's Manual.
- Replace the high-pressure in-line fuel filter.[1.]
- Replace the spark plugs at the first 300 hours or third year. After that, inspect the spark plugs every 300 hours or three years. Replace the spark plugs as needed. Refer to **Spark Plug Inspection and Replacement** in the Owner's Manual.
- Replace the accessory drive belt. Refer to **Accessory Drive Belt Inspection** in the Owner's Manual.[1.]

1. These items should be serviced by an authorized dealer.

Before Periods of Storage

Refer to **Storage Preparation** in the Owner's Manual.

Engine Hatch

Removal

Lift up and secure the engine hatch cover.

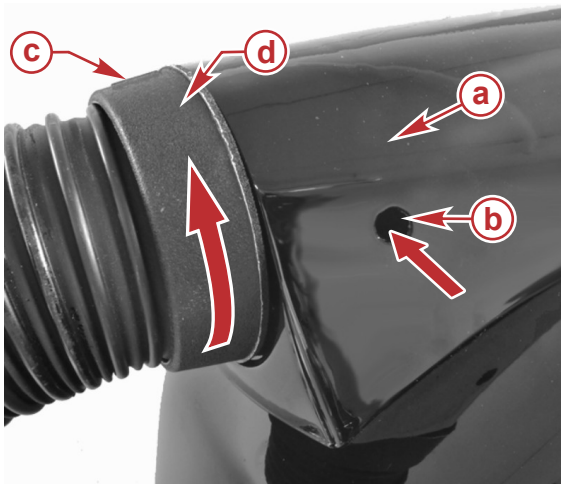
Installation

Close and secure the engine hatch cover.

Cowl Removal and Installation

Air Duct Removal

1. Use a suitable tool to press the release button located on the port side of the air duct top cowl and rotate the quick release air hose adapter counterclockwise.



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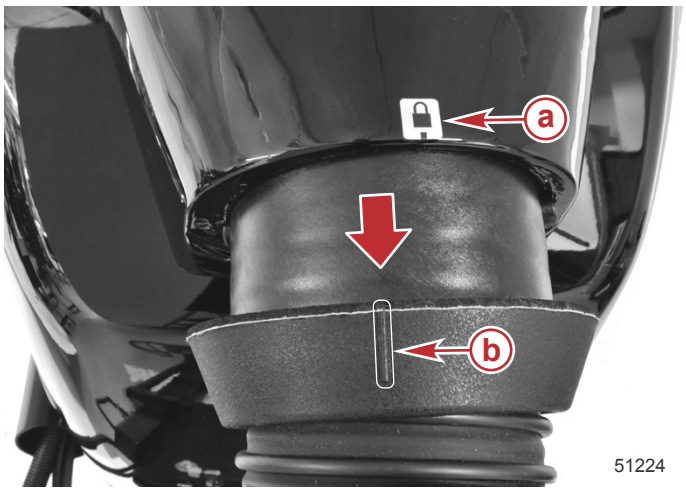
a - Air duct top cowl
b - Release button
c - Alignment mark
d - Quick release air hose adapter

2. Pull the quick release air hose adapter out of the air duct top cowl.



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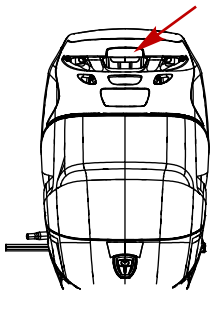
a - Lock position decal
b - Alignment mark

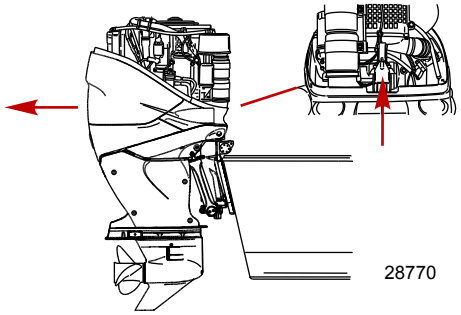
IMPORTANT: Most maintenance points are accessible by removing the top cowl only.

Cowl Removal

1. Pull up on the top cowl lock latch.

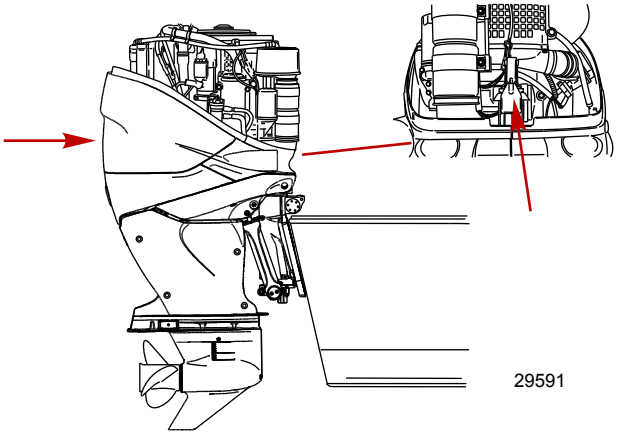


2. Pull top cowl forward and lift off.
3. Pull lower cowl release latch up.
4. Remove rear cowl towards aft of outboard.



Cowl Installation

1. Position lower cowl from aft side of outboard. Make sure it fits properly in the rubber seal.
2. Lock cowl in place by pulling the lower cowl latch down.

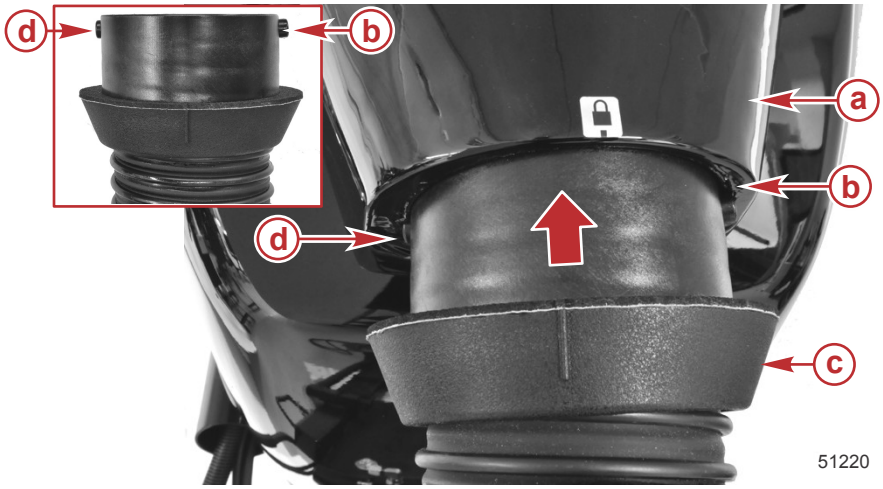


3. Place top cowl into position over engine, front first. Ensure cowl fits properly into the rubber seal.
4. The top cowl will lock into place when downward pressure is applied to the back side of the cowl. Ensure the cowl is securely fastened by pulling up on the back of the cowl.

Air Duct Installation

1. Align the tab and release button on the quick release air hose adapter with the slots in the air duct top cowl.

2. Insert the quick release air hose adapter into the air duct top cowl.



a - Air duct top cowl
b - Release button
c - Quick release air hose adapter
d - Tab

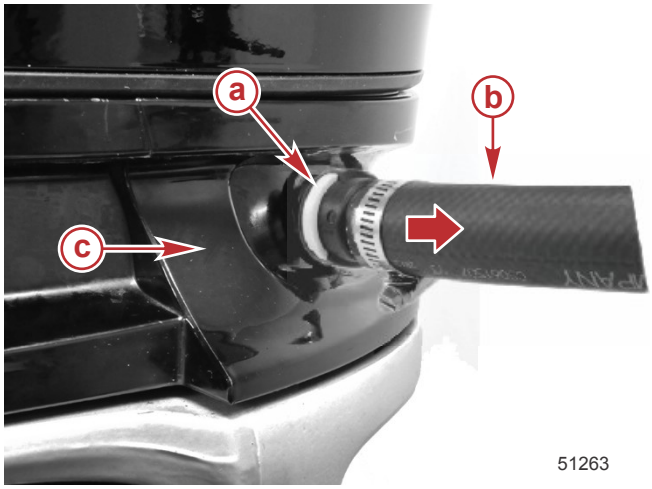
3. Rotate the quick release air hose adapter clockwise until the alignment mark aligns with the lock decal and the release button snaps into the hole in the air duct top cowl.

a - Alignment mark
b - Lock decal
c - Air duct top cowl
d - Release button

Idle Relief Hose Connection

Removal

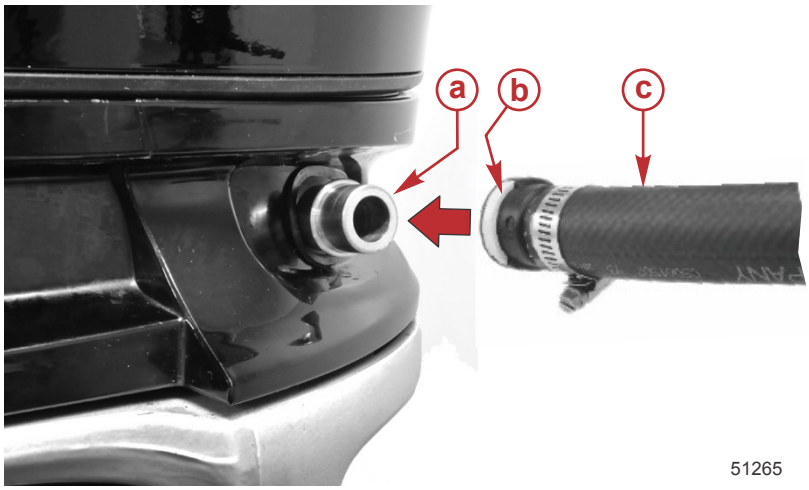
Push the release clip and pull the hose away from the lower cowl.



a - Release clip
b - Idle relief hose
c - Lower cowl

Installation

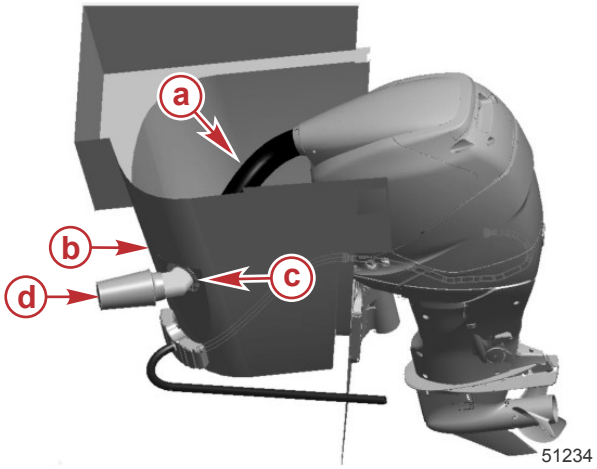
Push the coupler onto the brass fitting. The coupler will lock in place when fully seated.



a - Brass fitting
b - Release clip
c - Idle relief hose

Intake Air Filter

The engine intake air filter is externally mounted.

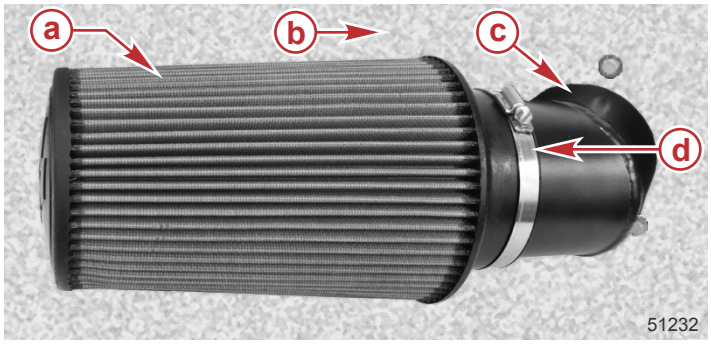


Port engine intake air component routing

a - Air duct
b - Engine well
c - Elbow
d - Filter

Air Filter Removal

1. Loosen the hose clamp securing the filter to the flange elbow.
2. Remove the filter.



a - Filter
b - Engine well
c - Elbow
d - Hose clamp

Air Filter Installation

1. Install the hose clamp onto the air filter inlet base.
2. Install the air filter onto the flange elbow.
3. Tighten the hose clamp.

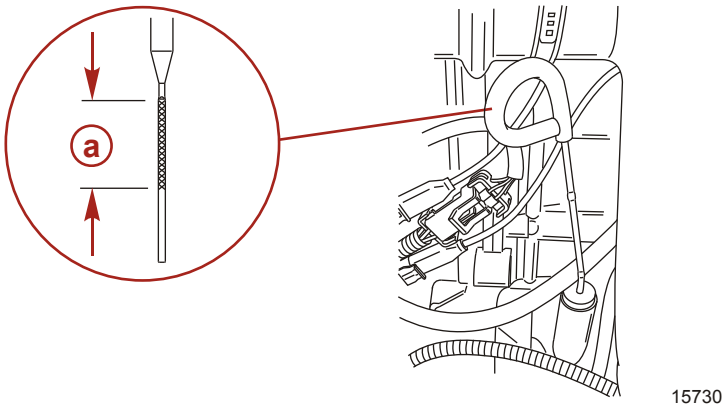
K & N Air Filter Maintenance

Refer to the K & N Filter website for K & N air filter inspection and cleaning instructions.

Checking and Adding Engine Oil

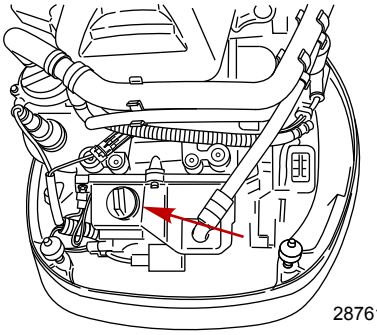
IMPORTANT: Do not overfill. Tilt outboard out/up past vertical for approximately one minute to allow trapped oil to drain back to the oil sump. Tilt outboard to vertical (not tilted) position when checking engine oil. For accurate readings, check oil only when engine is cold or after engine has not run for at least an hour.

1. Before starting (cold engine) tilt outboard out/up past vertical to allow trapped oil to drain back to the oil sump. Allow outboard to remain tilted for approximately one minute.
2. Remove the top cowl. Refer to **Cowl Removal and Installation**.
3. Tilt outboard to vertical operating position.
4. Pull out the dipstick. Wipe the dipstick end with a clean rag or towel and push it back in all the way.
5. Pull the dipstick back out again and observe the oil level. Oil should be in the operating range (cross hatched region). **IMPORTANT: Do not try to fill the oil level to the top of the operating range (cross hatched region). Oil level is correct as long as it appears in the operating range (cross hatched region).**



a - Oil level operating range

6. If the oil level is below the operating range (cross hatched region), remove the oil filler cap and add approximately 500 ml (16 oz) of specified outboard motor oil. Allow a few minutes for the added oil to drain to the oil sump and recheck the dipstick. Repeat the process until oil level is in the operating range (cross hatched region). Do not try to fill to the upper end of the operating range (cross hatched region).



IMPORTANT: Inspect oil for signs of contamination. Oil contaminated with water will have a milky color to it; oil contaminated with fuel will have a strong fuel smell. If contaminated oil is noticed, have the engine checked by your dealer.

7. Push the dipstick back in all the way.
8. Reinstall the oil fill cap hand-tight.
9. Reinstall top cowl.