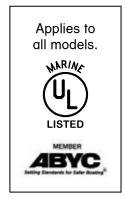
#### Fuel/Air Separators

#### **Eliminate Fuel Vent Line Overflow During Refueling!**

Next time you fill up, watch your fuel vent line. A typical refueling will send up to a half a gallon of fuel spilling overboard. Fuel spillage is not only expensive, it's absolutely deadly to fragile lakes, rivers and waterways. Also, USCG and other regulations prohibit the discharge of oils and violators could face civil and criminal penalties.

Installed in the fuel tank vent line, the Racor Fuel/Air Separator efficiently separates air from fuel forced into the line. Air is vented, and fuel is returned to the tank. The Fuel/Air Separator captures fuel normally discharged due to agitation and thermal expansion (up to 2.4 PSI). It also eliminates damage to expensive striping and labels and protects finishes from fuel stains.







1.6 lb (0.7 kg)

12

Specifications	LG50	LG100	
Application: Gasoline Diesel	Yes No	Yes Yes	Car-In Automotive GmbH Daniel-Fahrenheit-Str. 4 48291 Telgte
Maximum Air Flow Rate	12 CFPM (5.6 LPS)	17 CFPM (8.0 LPS)	Germany
Hose Barb Size	5/8"	5/8"	T: +49(0)2504 / 9 84 99-0
Thermal Expansion	2.4 PSI (0.17 bar)	2.4 PSI (0.17 bar)	www.car-in-automotive.de
Height	6.0 in. (15.2 cm)	9.75 in. (24.8 cm)	
Diameter	1.75 in. (4.5 cm)	4.0 in. (10.2 cm)	

-40° to +255°F (-40° to +121°C)

Notes: 'Flow rates are in cubic feet per minute (CFPM) and liters per second (LPS).



Weight (dry)

Case Quantity

**Operating Temperature** 

Parker Hannifin Corporation
Racor Division, PO Box 3208
Madasta, CA 053511 USA

1.2 lb (0.5 kg)

12

Racor Division, PO Box 320 Modesto, CA 95354 USA Phone: 800.344.3286 Fax: 209.529.3278 E-mail: racor@parker.com www.parker.com/racor



#### Fuel/Air Separators

LG50 How It Works

## Stage One

Venting tank fuel is diffused by the flow diverter and air is allowed to bypass the diverter. Fuel is directed back to the tank.

# Stage

Vapor collects on the interior surfaces and coalesces. The fuel returns downward by gravity and air continues up and out of the unit.

The safety relief valve includes a floating check ball which will not permit a large in-rush of fuel to bypass. In the event of internal pressure reaching 2.4 PSI (0.17 bar), the spring will compress and open the safety seat.



# Troubleshooting

Inspect the fuel system components and overboard vent annually. In the event of severe fuel tank biological or environmental contamination, the unit may be fouled and require inspection or cleaning. Also, flying insects are known to build nest in vent ports which may obstruct the escaping vapors. These situations may be evident by loss of power while underway or premature tripping of the fuel nozzle automatic shut-off during refueling.



356 **Technical Support:** 800.344.3286 ext. 7555 racortech@parker.com



#### Fuel/Air Separators

**Out To Vent** 

LG100 How It Works

## Stage One

Venting tank fuel is deflected by the flow diverter and fuel is directed down to the drain ports. Air is allowed to bypass and continues to travel up and out.

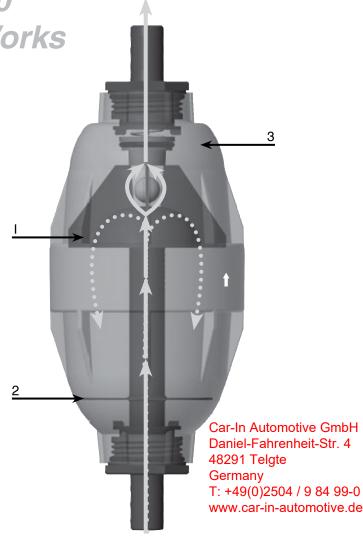
# Stage Two

Fuel defoams through a fine wire mesh screen which filters out large contaminants. Under the screen, the fuel collects temporarily until it can flow back down to the fuel tank.

## Stage Three

Vapor collects on the interior surfaces and coalesces. The fuel returns downward by gravity and air continues up and out of the unit.

The safety relief valve includes a floating check ball which will not permit a large in-rush of fuel to bypass. In the event of internal pressure reaching 2.4 PSI (0.17 bar), the spring will compress and open the safety seat.



# **Troubleshooting**

Inspect the fuel system components and overboard vent annually. In the event of servere fuel tank biological or environmental contamination, the unit may be fouled and require inspection or cleaning. Also, flying insects are known to build nest in vent ports which may obstruct the escaping vapors. These situations may be evident by loss of power while underway or premature tripping of the fuel nozzle automatic shut-off during refueling.



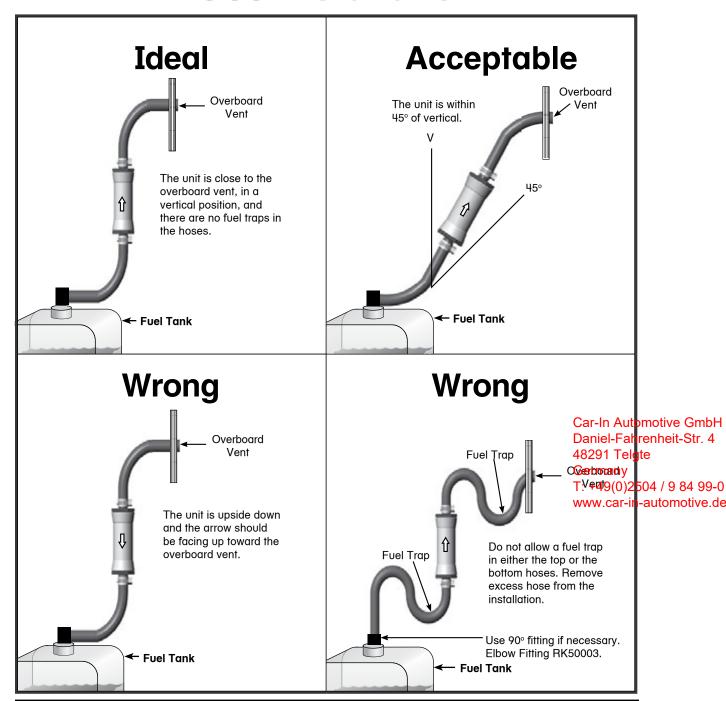


Air In &

Fuel In • • • •

## Fuel/Air Separators

## **LG50 Installation**



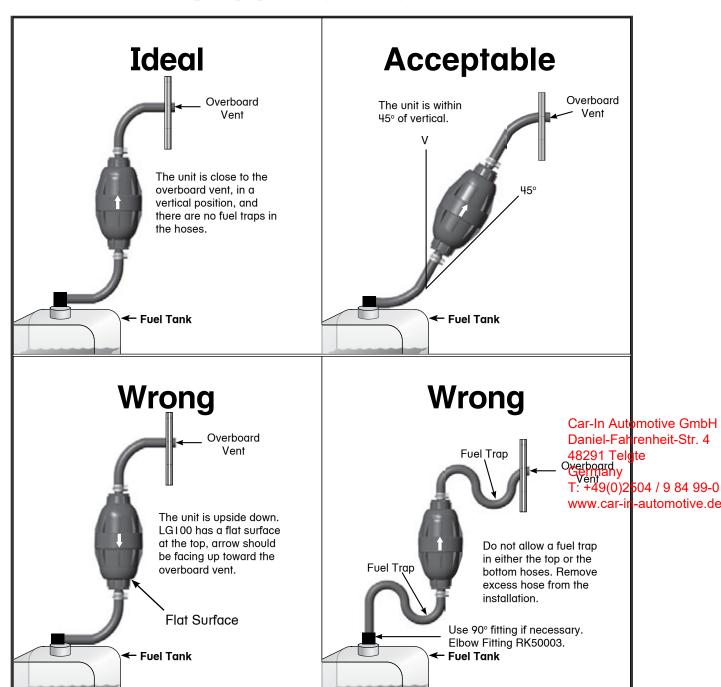


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## Fuel/Air Separators

### LG100 Installation





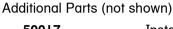


#### Fuel/Air Separators

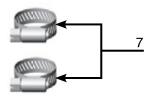
# Replacement Parts

#### **LG50**

	Part Number	<u>Description</u>
١.	RK50007	Spring Kit
2.	RK50021	Check Valve Kit
3.	RK50009	Check Ball Kit
4.	RK50031	Housing Kit
5.	RK50052	Flow Diverter Kit
6.	RK50002	Straight Hose Fitting Kit (5/8" hose barb)
7.	RK50016	Hose Clamp Kit
8.	RK50033	Straight Fitting Kit (female 1/2" NPT threads)
9.	RK50003	Elbow Fitting Kit (5/8" hose barb)

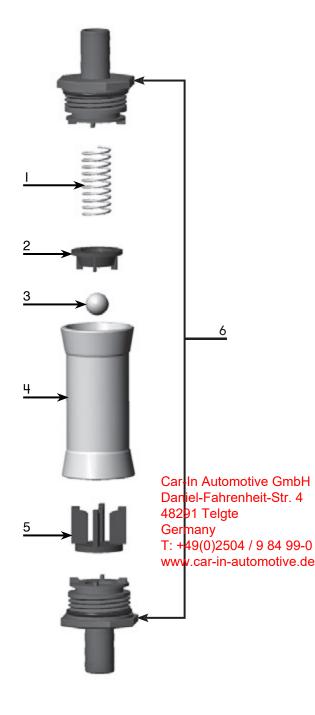


50017 Installation Instructions















#### Fuel/Air Separators

# Replacement Parts

#### LG100

	Part Number	<u>Description</u>
١.	RK50007	Spring

2. RK50021 Check Valve Kit

3. **RK50000** Top Housing Kit (includes #8)

4. RK50009 Check Ball Kit5. RK50004 Flow Diverter Kit

6. RK50006 Inlet Riser Assembly Kit

7. **RK50008** Screen Kit

8. **RK50014** Square Cut Gasket

9. **RK50001** Bottom Housing Kit (includes #8)

10. **RK50002** Straight Hose Fitting Kit

(5/8" hose barb)

II. **RK50016** Hose Clamp Kit

12. **RK50033** Straight Fitting Kit

(female 1/2" NPT threads)

13. **RK50003** Elbow Fitting Kit

(5/8" hose barb)

14. RK50023 Mounting Bracket Kit

(includes 2 brackets)

Additional Parts (not shown)

50017 Installation Instructions





