

SEACHOICE 50-20331

SEACHOICE Dura-Lift Electronic Fuel Pump (Model 50-20331) Instruction Manual

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your SEACHOICE Dura-Lift Electronic Fuel Pump, Model 50-20331. This pump is engineered with solid-state construction for reliable fuel delivery across various applications, including marine generator sets, refrigeration trucks, diesel filtration systems, and other industrial diesel lift applications. It is compatible with gasoline, diesel, biodiesel, blended alcohol fuels, and fuel additives.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in serious injury, death, or property damage.

- Always disconnect the vehicle's battery before performing any installation or maintenance on the fuel system.
- Work in a well-ventilated area to avoid inhaling fuel vapors.
- Wear appropriate personal protective equipment, including eye protection and fuel-resistant gloves.
- Ensure no open flames, sparks, or other ignition sources are present when working with fuel.
- Clean up any spilled fuel immediately using appropriate absorbents.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

3. PRODUCT OVERVIEW

The SEACHOICE Dura-Lift Electronic Fuel Pump is designed for durability and performance. Key features include:

- Premium solid-state construction for reliable fuel delivery.
- Compatibility with gasoline, diesel, biodiesel, blended alcohol fuels, and fuel additives.
- Self-regulating design with an internal check valve.

- Rated for 120 inches lift, 11.5-9.0 PSI, and 33 GPH.
- Features a 4-hour dry run capability and voltage spike protection.
- Equipped with an 80-micron Stainless Steel filter to prevent impurities.

Included Components:

- 12V Dura-Lift Electronic Fuel Pump



Image 3.1: SEACHOICE Dura-Lift Electronic Fuel Pump. This image shows the overall appearance of the electronic fuel pump unit.

4. SETUP AND INSTALLATION

Proper installation is crucial for the pump's performance and longevity. Refer to the detailed installation manual (PDF) available for specific diagrams and instructions.

4.1 Pre-Installation Checks

- Ensure the vehicle's electrical system is 12V.

- Verify all necessary tools and additional components (fuel lines, clamps, fittings, fuse) are available.
- Confirm the mounting location is secure, dry, and away from excessive heat sources.

4.2 Mounting

Mount the pump securely using appropriate hardware. The pump should be mounted in a position that allows for easy access for maintenance and inspection. Consider a location that minimizes the length of fuel lines and protects the pump from road debris or marine elements.

4.3 Fuel Line Connections

The pump features 1/8 inch x 27 NPT threads for inlet and outlet connections. Use appropriate thread sealant on all fittings to prevent leaks. Ensure fuel lines are securely clamped and routed away from hot or moving parts.

- Connect the fuel supply line to the inlet port.
- Connect the fuel delivery line to the outlet port.

4.4 Electrical Connections

Connect the pump to a switched 12V power source. It is recommended to use an inline fuse (not included) appropriate for the pump's current draw to protect the circuit. Ensure correct polarity.

- Connect the positive (+) wire from the pump to the switched 12V power source.
- Connect the negative (-) wire from the pump to a reliable ground point.

4.5 Priming the System

After installation, it may be necessary to prime the fuel system. Turn the ignition key to the 'ON' position (without starting the engine) for a few seconds to allow the pump to run and fill the fuel lines. Repeat if necessary until fuel flows consistently.

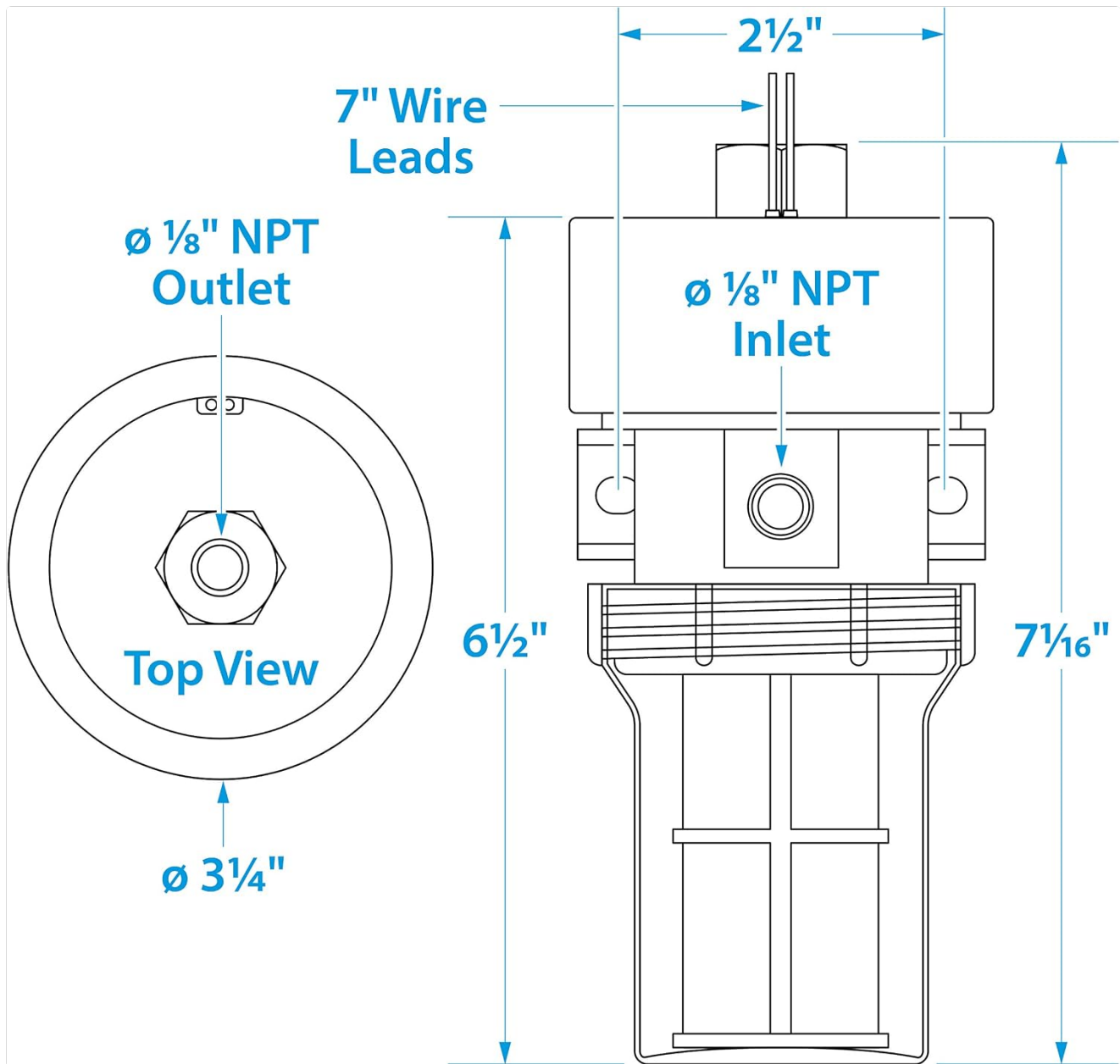


Image 4.1: Dimensions diagram for the SEACHOICE Dura-Lift Electronic Fuel Pump. This diagram provides critical measurements for installation planning, including overall height, width, and inlet/outlet port sizes.

5. OPERATING INSTRUCTIONS

Once properly installed and primed, the SEACHOICE Dura-Lift Electronic Fuel Pump operates automatically when the ignition is on. Its self-regulating design ensures consistent fuel pressure and flow. The internal check valve prevents fuel backflow when the pump is not operating.

- Ensure adequate fuel supply in the tank.
- Turn the ignition key to the 'ON' position to activate the pump.
- The pump will begin to deliver fuel to the engine or system.

6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your fuel pump.

6.1 Fuel Filter Inspection and Replacement

The pump includes an 80-micron Stainless Steel filter designed to prevent impurities from entering the fuel system.

Periodically inspect this filter for signs of clogging or damage. Replace the filter if it appears dirty or restricted.



Image 6.1: The 80-micron Stainless Steel filter included with the fuel pump. Regular inspection and cleaning or replacement of this filter are essential for maintaining fuel system integrity.

6.2 General Cleaning

Keep the exterior of the pump clean and free from dirt, debris, and fuel spills. Avoid using harsh chemicals that could damage the pump's housing or seals.

7. TROUBLESHOOTING

If you experience issues with your fuel pump, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Pump does not run	No power, blown fuse, faulty wiring, poor ground connection	Check electrical connections, replace fuse, verify ground.
Low fuel pressure or inconsistent flow	Clogged fuel filter, restricted fuel line, low fuel level, air leak in suction line	Inspect/replace filter, check fuel lines for kinks/blockages, ensure adequate fuel, check for air leaks.
Fuel leaks	Loose fittings, damaged fuel lines, improper thread sealant	Tighten fittings, replace damaged lines, reapply thread sealant.
Pump is noisy	Air in fuel system, pump cavitation, loose mounting	Bleed air from system, ensure adequate fuel supply, secure pump mounting.

8. SPECIFICATIONS

Detailed technical specifications for the SEACHOICE Dura-Lift Electronic Fuel Pump, Model 50-20331:

- **Brand:** SEACHOICE
- **Model Number:** 50-20331
- **Operation Mode:** Electronic
- **Voltage:** 12V
- **Lift:** 120 inches
- **Pressure:** 11.5-9.0 PSI
- **Flow Rate:** 33 GPH (Gallons Per Hour)
- **Inlet/Outlet Connection Size:** 1/8 inch NPT
- **Filter:** 80-micron Stainless Steel
- **Compatible Fuel Types:** Gasoline, Diesel, Biodiesel, Blended Alcohol Fuels, Fuel Additives
- **Construction:** Solid State
- **Item Dimensions (L x W x H):** 3.75 x 3.75 x 9.5 inches
- **Item Weight:** 1.13 Kilograms
- **OEM Equivalent Part Number:** 50-20331 (Facet 40222)

8.1 OEM Pump Interchange

The following table provides a cross-reference for OEM pump interchangeability:



MADE IN USA BY



OEM Pump Interchange

OEM	SEACHOICE #	Facet #	OEM #
Crusader Inc.	20351	40106	80784
	20301	477060E	700370
Cummins® (Onan Corp.)	20301	476087E	149-0554
	-	477003E	149-0890-01
	20301	40131E	149-1541
	20301	40131E	149-1987
	20301	40133E	149-1919
	-	479729	149-1445
	-	479136	149-1446
	20311	40189	149-1447
	20311	40189	149-1449
	20311	40189	149-1450
	20311	40189	149-2111
	20311	40189	149-2150
	20311	40189	149-2272
	20351	40289	149-2331-02
	20351	40289	149-2331-03
	20321	40185	149-2546
	20351	40289	149-2583
	20351	40289	149-2592
	20341	40288	149-2615
	20351	40289	149-2620
	20321	40185	149-2646
	20351	40289	149-2692
Generac® Corp.	20341	40217	90475
	-	40241	0D7513A
	20341	40254	0E0570A
Kohler®	20301	40002E	277818
	20301	477060E	238953
	20341	40148	249409
	-	40177	2539301
	20341	40178	249862
	20341	40178	278490
	20301	476087E	247076
	-	40277	GM90305-1
	-	40317	GM90305-2
Mercury® Marine	20341	40224	852521P
Seachoice®	20301	40131E	20301
	20311	40176	20311
	20321	40185	20321
	20331	40222	20331
	20341	40288	20341
	20351	40289	20351
	20361	42370	20361
	20371	42764	20371
	20381	FEP43175	20381
	20391	FEP4378	20391
	20401	479735	20401
Westerbeke™	20301	40131E	33630
	20351	40135	34705

20331	40185	39705
20311	40176	39273
20311	40176	39377
20321	40185	39478
-	476459E	301385
20301	477060E	302025

Image 8.1: OEM Pump Interchange Table. This table lists various OEM part numbers that are interchangeable with SEACHOICE Dura-Lift pumps, including the 50-20331 model.

9. WARRANTY INFORMATION

SEACHOICE PRODUCTS (SEACHOICE) warrants the original consumer purchaser that SEACHOICE consumer products will be free from defective materials or workmanship, under normal use and service, for a period of one (1) year from the original purchase date. This Warranty is void if the consumer product warranted has been damaged by accident or unreasonable use, neglect, improper service, unauthorized alterations, or other cause not arising out of defects in material or workmanship. In no event shall SEACHOICE PRODUCTS be liable for loss of use of its consumer product nor other incidental or consequential costs, expenses or damages incurred by any person. During the warranty period, your SEACHOICE product will either be repaired or it will be replaced with a like product (at SEACHOICE option) when returned prepaid and insured, with proof-of-purchase date to SEACHOICE at the address listed below.

10. SUPPORT

For further assistance, technical support, or warranty claims, please contact SEACHOICE customer service. Ensure you have your product model number (50-20331) and proof of purchase available when contacting support. Visit the official SEACHOICE website for contact information and additional resources.