



Model Number 25312
In-Tank Fuel Pump Kit

Operating and Installation Instructions

CAUTION!

This product is to be installed only by persons knowledgeable in the repair and modification of vehicle fuel systems and general vehicle systems modification. Only a qualified technician or mechanic who is aware of applicable safety procedures and fabrication skills should perform the installation of this product.

This fuel pump utilizes an electronic DC motor system that is not typical of conventional fuel pumps, and therefore extra precautions must be adhered to as contained in instructions herein

GASOLINE AND OTHER FUELS ARE FLAMMABLE AND CAN BE EXPLOSIVE!

Perform the installation in a well-ventilated location only to minimize the buildup of fuel vapors. **NO** open flames, smoking or other sources of ignition are to be present during installation, to prevent fire or explosion that can cause serious injury or death. Grinding, cutting, and drilling must be performed with care to prevent ignition. Draining and removal of all fuel and ventilation of vapors in vehicle and fuel system is recommended when performing such procedures. Proper eye and personal protection are always required during installation.

WARNING!

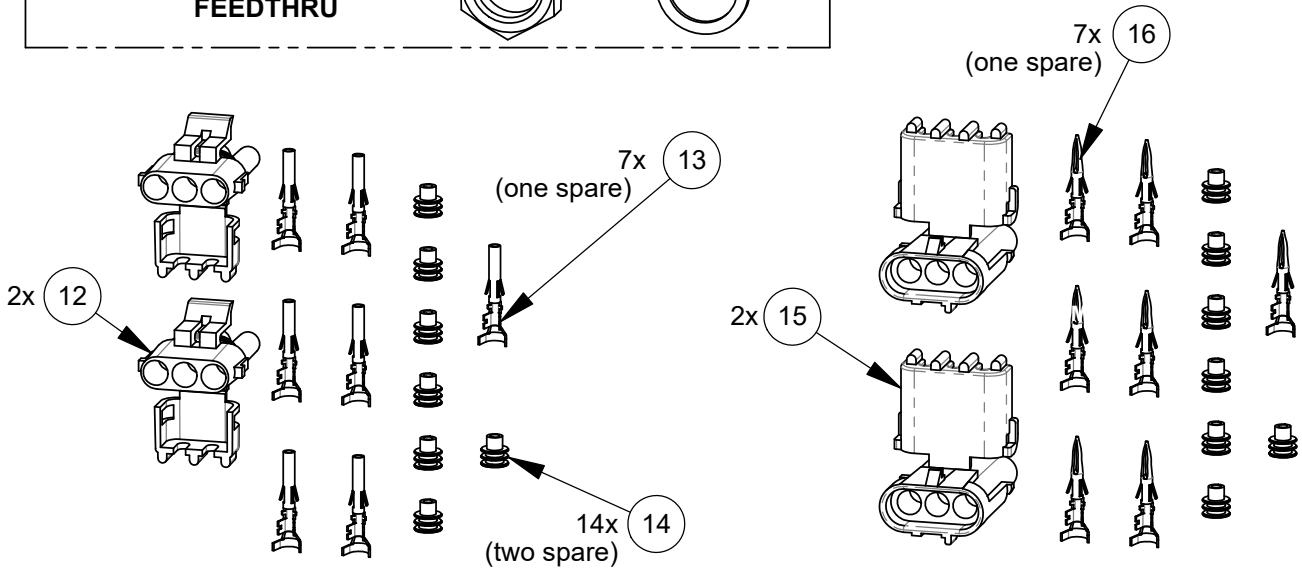
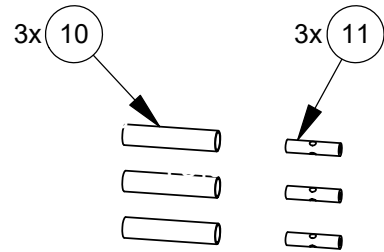
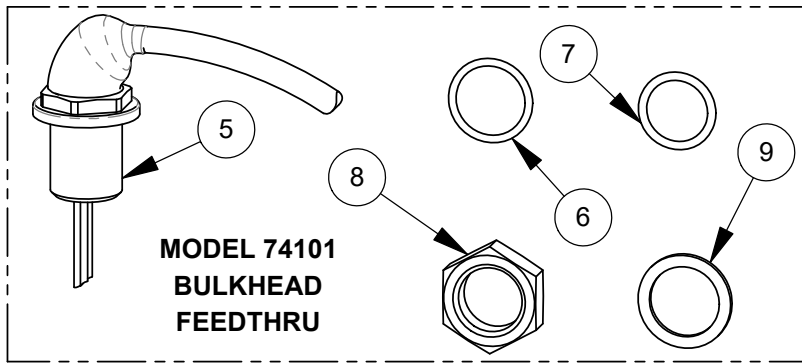
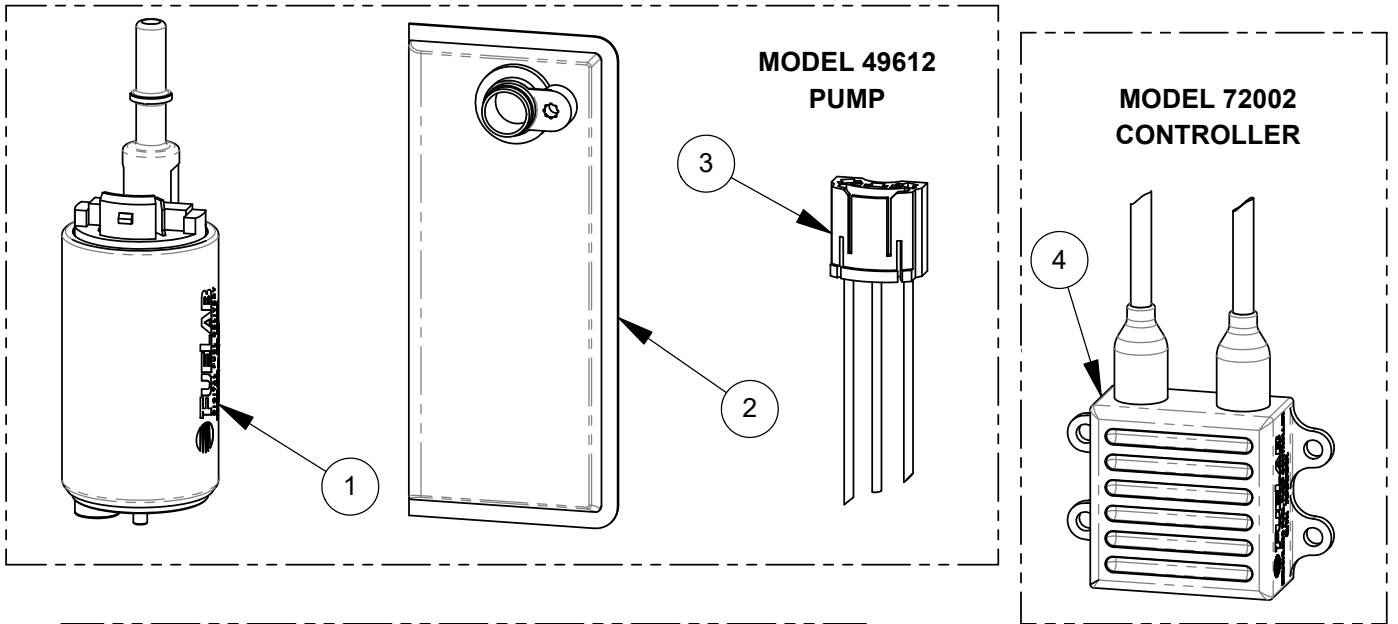
The Vehicle's fuel system may be under pressure! Do not loosen any fuel connections until relieving all fuel system pressure. Consult an applicable service manual for instructions to relieve fuel system pressure safely.

This product is intended for racing, off-road, or marine use only. This fuel system component may not be legal for sale or use on emission-controlled motor vehicles; consult local, state, and national laws.

Product Contents:

Verify the contents of this box, against list of components below and on the next sheet, to ensure that nothing is missing. Contact your Fuelab® distributor immediately for replacement. This kit includes Fuelab® Models 49612 Fuel Pump, 72002 Controller, and 74101 Bulkhead Feedthru. Consult those included instructions for reference during the installation of this kit, including performance features, specifications, and ratings.

ITEM	Description	Qty
1	Model 49612 In-Tank Fuel Pump	1
2	Inlet Straining Filter	1
3	Fuel Pump Electrical Connector	1
4	Model 72002 DC Brushless Fuel Pump Controller with PWM Speed Control	1
5	Bulkhead Feedthru	1
6	Panel Mount O-ring (Size 19mm I.D. x 2mm C.S., Thinner)	1
7	Boss Mount O-ring (Size -908, Thicker)	1
8	Nut	1
9	Flat Washer	1
10	Fuel Resistant Shrink Wrap Segment	3
11	Wire Splice	3
12	Delphi (Aptiv) 3-Conductor Weather Pack Female Connector Shroud	2
13	Female Terminal for Delphi Connector (one is a spare)	7
14	Wire Seal (14 total used for both styles of connectors, two are spares)	14
15	Delphi (Aptiv) 3-Conductor Weather Pack Male Connector Shroud	2
16	Male Terminal for Delphi Connector (one is a spare)	7



Check above diagram and list shown on previous page, to ensure no components are missing or damaged. Contact your Fuelab® distributor immediately for replacement.

FOLLOW ALL INSTRUCTIONS HEREIN. INSTRUCTIONS BOXED WITHIN PUMP, CONTROLLER AND BULKHEAD FEEDTHRU ARE NEEDED TO COMPLETE INSTALLATION. ALL SETS OF INSTRUCTIONS CONTAIN IMPORTANT INFORMATION!

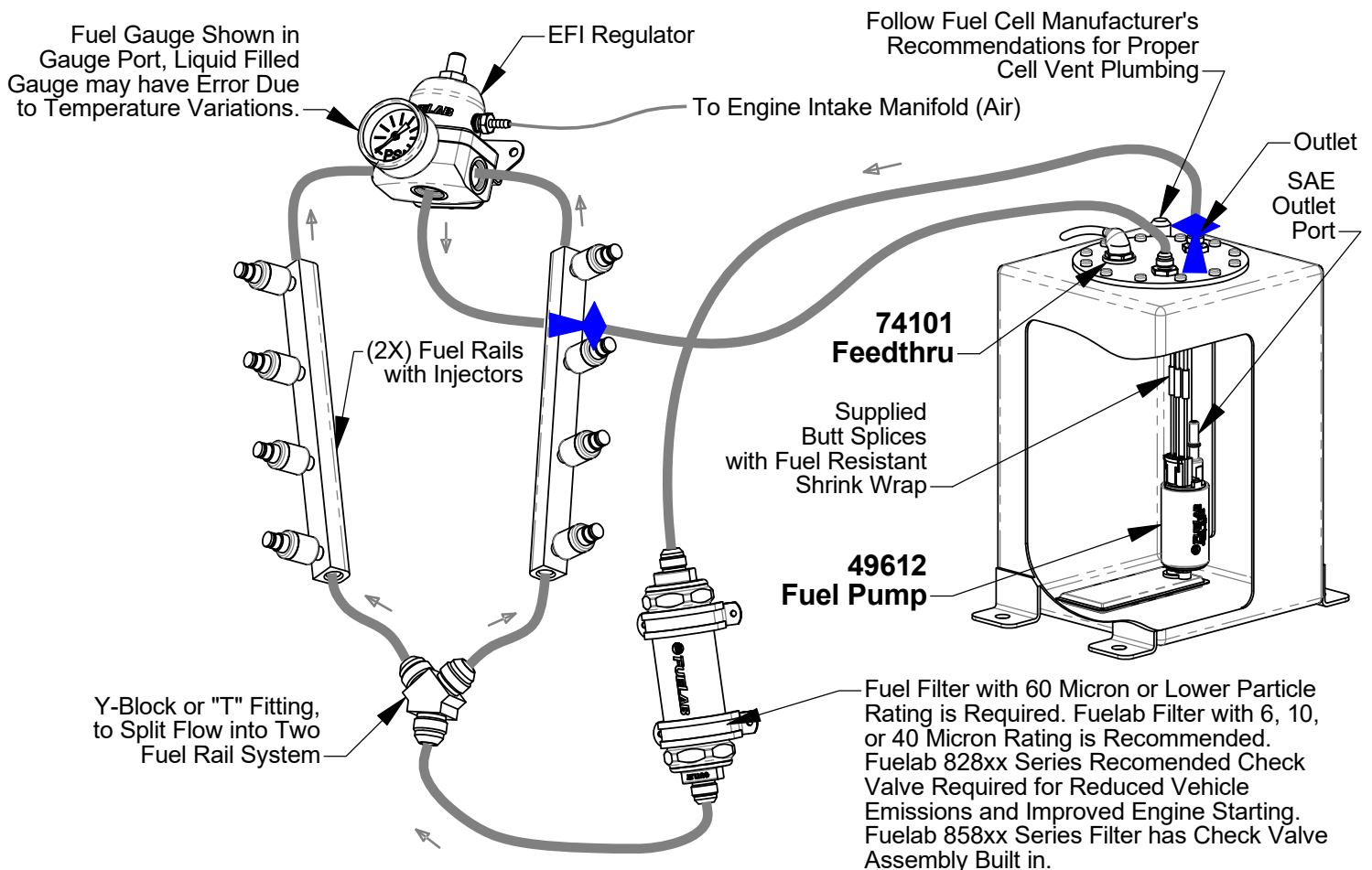
Before Installation, Plan Entire Fuel System:

A complete design plan of entire fuel system must be created for the specific application. These instructions are a guide to help design this plan with respects to integrating this model of fuel pump only. Consult other sources of information and manufacturer's instructions for the various components of the fuel system. These instructions are limited to general topics of fuel pump kit installation and may not include specific information pertaining to your specific application. These instructions are written assuming the use of Multi-Point Electronic Fuel Injection using a standard return (bypass) style fuel pressure regulator. This fuel pump kit may be integrated in some general carbureted systems using a bypass system. Visit our company website (www.fuelab.com) for specific details pertaining to example fuel systems and other solution ideas. Additional information including advanced troubleshooting, any special alerts and FAQ's pertaining to this and other products is also available. A good design plan for the fuel system must contain consideration for: pressure and flow rate through various components, quality of components, operating environment (temperature, vibration, shock, general exposure to elements) and local area laws. Begin installation of fuel pump only after a complete plan is established to help avoid fuel system component failure, costly rework, and excessive installation time.

Plumbing Planning Notes:

Fuel pump is intended to be mounted inside a fuel tank or cell. Adequate structural mounting and support for the fuel pump kit components are the responsibility of the fabricator / installer. While an electrical bulkhead connector is supplied with this kit (Model 74101), outlet flow fittings and tank bulkhead is not provided. The use of fuel line such as PTFE (or Nylon) line and SAE style fitting connection is recommended. The main outlet fuel port (5/16" SAE) uses a push-on or "SAE" style fitting. A fuel filter with a 60 micron or finer particle rating is required to be used upstream of regulator and downstream from fuel pump to protect it and the fuel injectors from foreign object damage. Reference the schematic diagram below for filter location. Use of a liquid filled gauge exposed to engine compartment heat is not recommended as the liquid inside the gauge may exert measurement errors. **DO NOT** plumb to any gauge mounted inside the vehicle or in passenger compartment. A line burst can spill fuel inside passenger compartment and on occupants, possibly causing serious injury or death. An electric gauge or pressure transducer system is recommended for readings in a passenger compartment.

Typical EFI V-8 Fuel System Plumbing Schematic Diagram:



**Special Note: Use in carbureted systems require a bypass return or relief valve.
Do not "Dead Head" Fuel Pump.**