



**18025/18026 Stealth Fuel Cell Module
INSTALLATION INSTRUCTIONS**

WARNING!

The fuel system is under pressure. Do not open the fuel system until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

To use this stealth fuel cell in your vehicle's fuel system, you must do the following:

- **A by-pass style fuel pressure regulator must be used in the system.**
- **Utilize high pressure fuel lines, fittings and o-rings for all connections from the fuel tank to the fuel pressure regulator.**
- **For long term driving applications where continuous run times exceed 30 minutes Aeromotive recommends maintaining at least a half-full tank of fuel.**

Failure to follow the above may result in fuel leakage, bursting of the fuel lines, poor vehicle performance and/or decreased fuel pump life! Improper installation will void all warranties for this product!

Aeromotive system components are not legal for sale or use on emission controlled motor vehicles

CAUTION:

Installation of this product requires detailed knowledge of automotive systems and repair procedures. We recommend that this installation be carried out by a qualified automotive technician.

Installation of this product requires handling of gasoline. Gasoline vapors are highly flammable. Ensure you are working in a well-ventilated area with an approved fire extinguisher nearby. Extinguish all open flames, prohibit smoking, and eliminate all sources of ignition in the area of the vehicle before proceeding with the installation.

WARNING!

The controller used in this product has a fixed polarity. **ENSURE THAT THE POLARITY IS CORRECT ON CONNECTION** (red wire to battery red wire, black wire to battery black wire)! Reversing the polarity will render the controller inoperable. **IMPROPER INSTALLATION WILL VOID ALL WARRANTIES FOR THIS PRODUCT!**

The enclosed Aeromotive fuel pump utilizes a AN-10 ORB (O-ring Boss Ports) style outlet port; these ports are **NOT PIPE THREAD** and utilize **NO THREAD SEALANT**.

Maximum continuous operating pressure should not exceed 90 psi.

Compatible Fuels:

Pump Gas
Race Gas
E85

AEROMOTIVE, INC.

7805 Barton Street, Lenexa, KS 66214

913-647-7300 fax 913-647-7207

www.aeromotiveinc.com

Parts Included:

1ea Aeromotive BLDC 3.4 GPM Spur Gear Pump Module (18025)

-OR-

1ea Aeromotive BLDC 4.6 GPM Spur Gear Pump Module (18026)

COMMON

1ea Aeromotive Fuel Pickup Assembly, AN-12

1ea Pump Retaining Ring

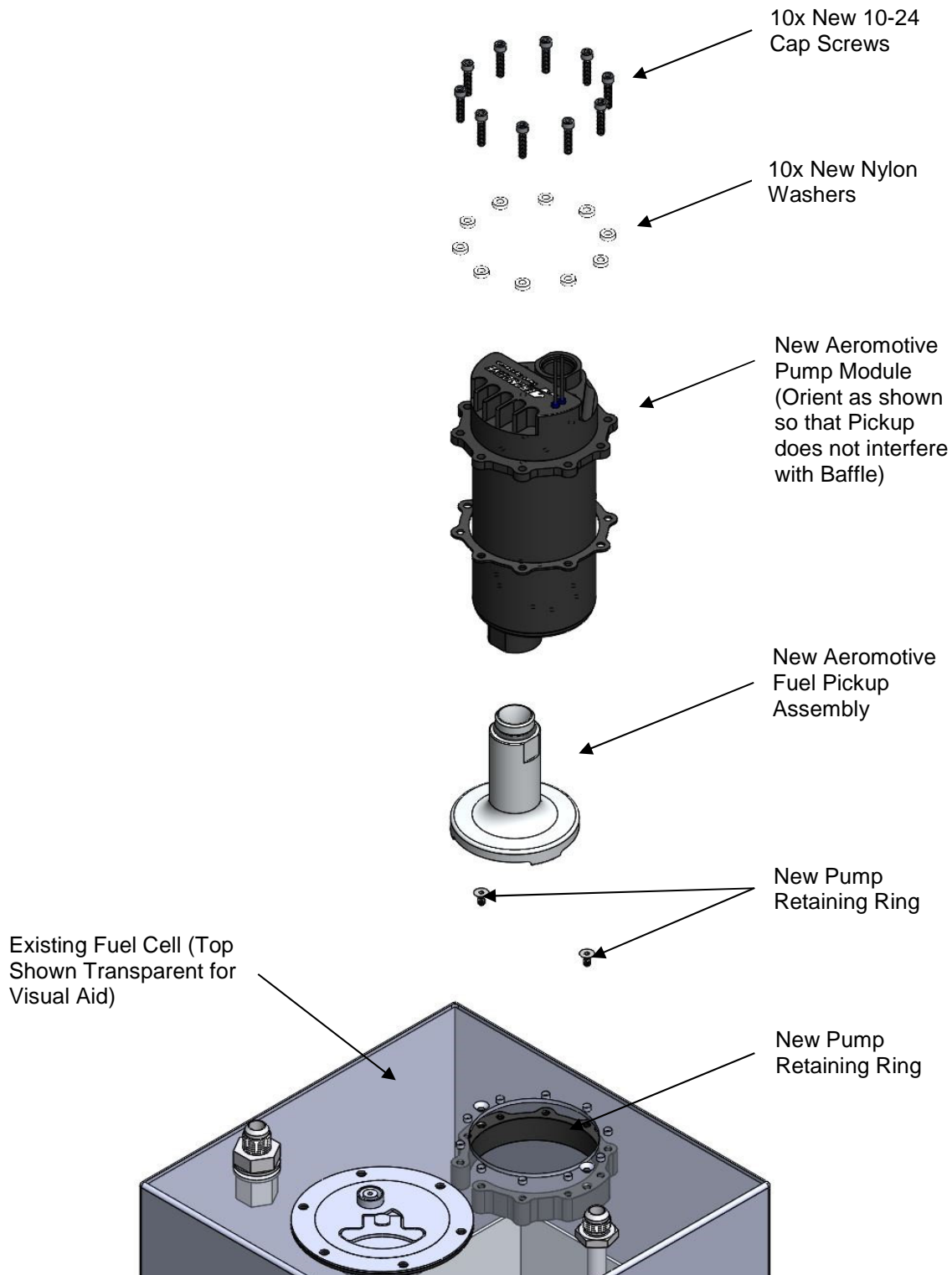
1ea Flange Gasket

10ea 10-24 Cap Screws

10ea #10 Nylon Washer

2ea 10-24 Flat Head Screws

QUICK START REFERENCE GUIDE



This product is intended to be installed and utilized for pump module replacement or upgrade of existing Aeromotive fuel pumps mounted on fuel cells which have already been plumbed and wired. If you are trying to install a pump module into a new cell or are replacing a non-Aeromotive pump, please contact the Aeromotive Tech Department for assistance with installation.

The following steps are typical of most installations:

1. Disconnect the power to the pump.
2. Disconnect the line from the pump outlet and remove the ORB-10 outlet fitting. No other lines need to be disconnected to complete the replacement.

CAUTION: Ensure that any spilled fuel and any fuel soaked shop towels are cleaned up and removed from the vicinity of the vehicle before proceeding.

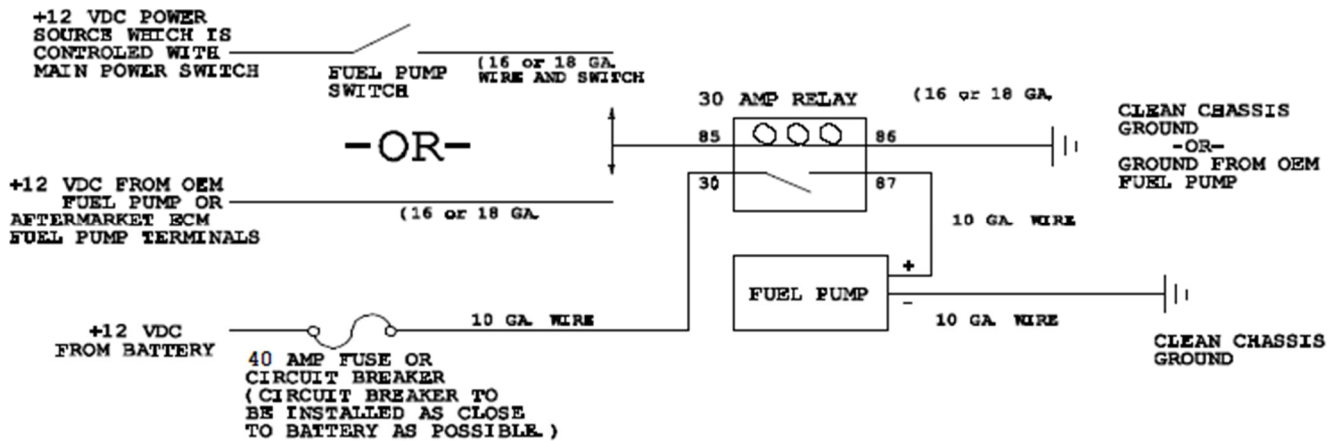
3. Remove the ten #10-24 mounting screws retaining the pump and remove the existing fuel pump module and pickup assembly. Discard the screws. Remove and discard the ten nylon washers and flange gasket.
4. Remove and discard the two flat head screws holding the retaining ring (recommended). Remove and discard the retaining ring (recommended).
5. Apply Loctite 515 to the provided, new two flat head 10-24 screws. Insert the new "C"-shaped pump retaining ring into the fuel cell and attach using the two flat head 10-24 screws as shown in the Quick Reference Guide, above.
6. Apply o-ring lubricant to the o-ring at the base of the threads on the new fuel pickup assembly and assemble the fuel pickup assembly to the new Aeromotive fuel pump module.
7. Place the provided, new gasket between the top of the fuel cell and the new Aeromotive pump assembly and place the new pump assembly into the cell. Using the provided, new ten nylon washers and 10-24 cap screws, attach the pump assembly to the fuel cell and retaining ring assembly.
8. Replace the ORB-10 outlet fitting removed in Step 2 and reconnect the line to the new pump outlet.

CAUTION: Ensure that any spilled fuel and any fuel soaked shop towels are cleaned up and removed from the vicinity of the vehicle before proceeding.

CAUTION: Ensure that the existing wiring is capable of handling the higher current requirements of the new pump. Route any new (or existing) electrical wires clear of any moving suspension or drivetrain components and any exhaust components! Protect wires from abrasion and road obstructions or debris.

9. Make sure you use stranded, insulated copper wire, in the sizes shown, with matching crimp-type connectors for all connections.
10. Attach the OEM fuel pump wires, the aftermarket ECM fuel pump wires or your fuel pump switch wires as shown in the following diagram, +12VDC from the battery to the red lead on the controller, Ground to the black lead.

CAUTION: DO NOT REVERSE THE POLARITY-CONNECT AS ABOVE. Reversing the polarity will render the controller inoperable and will void all warranties for this product!



- Attach a suitable fuel pressure gauge to the fuel system schrader valve, fuel rail or fuel pressure regulator.

Examples:

Aeromotive P/N 15632 0-15 PSI (1 ½") Fuel Pressure Gauge

Aeromotive P/N 15633 0-100 PSI (1 ½") Fuel Pressure Gauge

Ensure that any spilled fuel and any fuel soaked shop towels are cleaned up and removed from the vicinity of the vehicle.

CAUTION: While performing the following steps, if any fuel leaks are detected, immediately turn the ignition to OFF, remove any spilled fuel and repair the leak(s) before proceeding!

- Turn the ignition to ON **without starting the engine**, allow the pump to run for several seconds and check the fuel pressure. If there is no pressure, turn the ignition to OFF, wait one minute, then turn the ignition to ON and recheck the pressure. Repeat this ignition OFF and ON procedure until the gauge registers pressure or you detect a fuel leak. If no pressure is registered on the gauge after running the pump for several seconds and you have found no leaks, check all fuel and electrical connections to determine the cause.
- Once the fuel pressure gauge registers pressure, start the engine. If you have installed an adjustable fuel pressure regulator, adjust it to the desired setting.
- Shut the engine off. Using suitable clips and other mounting hardware, secure the newly installed fuel lines and electrical wires by attaching them to the vehicle chassis.

Test-drive the vehicle to insure proper operation and re-check the fuel system for leaks. **If any leaks are found, immediately discontinue use of the vehicle and repair the leak(s)!**



WARNING: This product can expose you to chemicals, including chromium, which is known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, visit: www.p65Warnings.ca.gov

AEROMOTIVE, INC. LIMITED WARRANTY

This Aeromotive Product, with proof of purchase dated on or after January 1, 2003, is warranted to be free from defects in materials and workmanship for a period of one year from the original date of purchase. No warranty claim will be valid without authentic, dated proof of purchase.

This warranty is to the original retail purchaser and none other and is available directly from Aeromotive and not through any point of distribution or purchase.

If a defect is suspected, the retail purchaser must contact Aeromotive directly to discuss the problem, possible solutions and obtain a Return Goods Authorization (RGA), if deemed necessary by the company. Please call 913-647-7300 and dial option 3 for the technical service dept. All returns must be shipped freight pre-paid to the company and with valid RGA before they will be processed.

Aeromotive will examine any product returned with the proper authorization to determine if the failure resulted from a defect or from abuse, improper installation, misapplication or alteration. Aeromotive will then, at it's sole discretion, return, repair or replace the product.

If any Aeromotive product is determined defective, buyer's exclusive remedy is limited in value to the sale price of the good. In no event shall Aeromotive be liable for incidental or consequential damages.

Aeromotive expressly retains the right to make changes and improvements in any product it manufactures and sells at any time. These changes and improvements may be made without notice at any time and without any obligation to change the catalogs or printed materials.

Aeromotive expressly retains the right to discontinue at any time and without notice any Aeromotive product that it manufactures or sells.

This warranty is limited and expressly limits any implied warranty to one year from the date of the original retail purchase on all Aeromotive products.

No person, party or corporate entity other than Aeromotive shall have the right to: determine whether or not this Limited Warranty is applicable to any Aeromotive product, authorize any action whatsoever under the terms and conditions of this Limited Warranty, assume any obligation or liability of any nature whatsoever on behalf of Aeromotive under the terms and conditions of this Limited Warranty.

This Limited Warranty covers only the product itself and not the cost of installation or removal.

This Limited Warranty is in lieu of and expressly excludes any and all other warranties, expressed or implied. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.