WolfKatz Engineering LLC
WolfKatz MR2 Large Fuel System Installation Instructions
Accompanies Aeromotive A1000 or Eliminator Fuel Pump

Disclaimer:

These parts are for race use only and do not have DOT (Department of Transportation) approval. Any misuse of this product is done so at the buyers own risk.

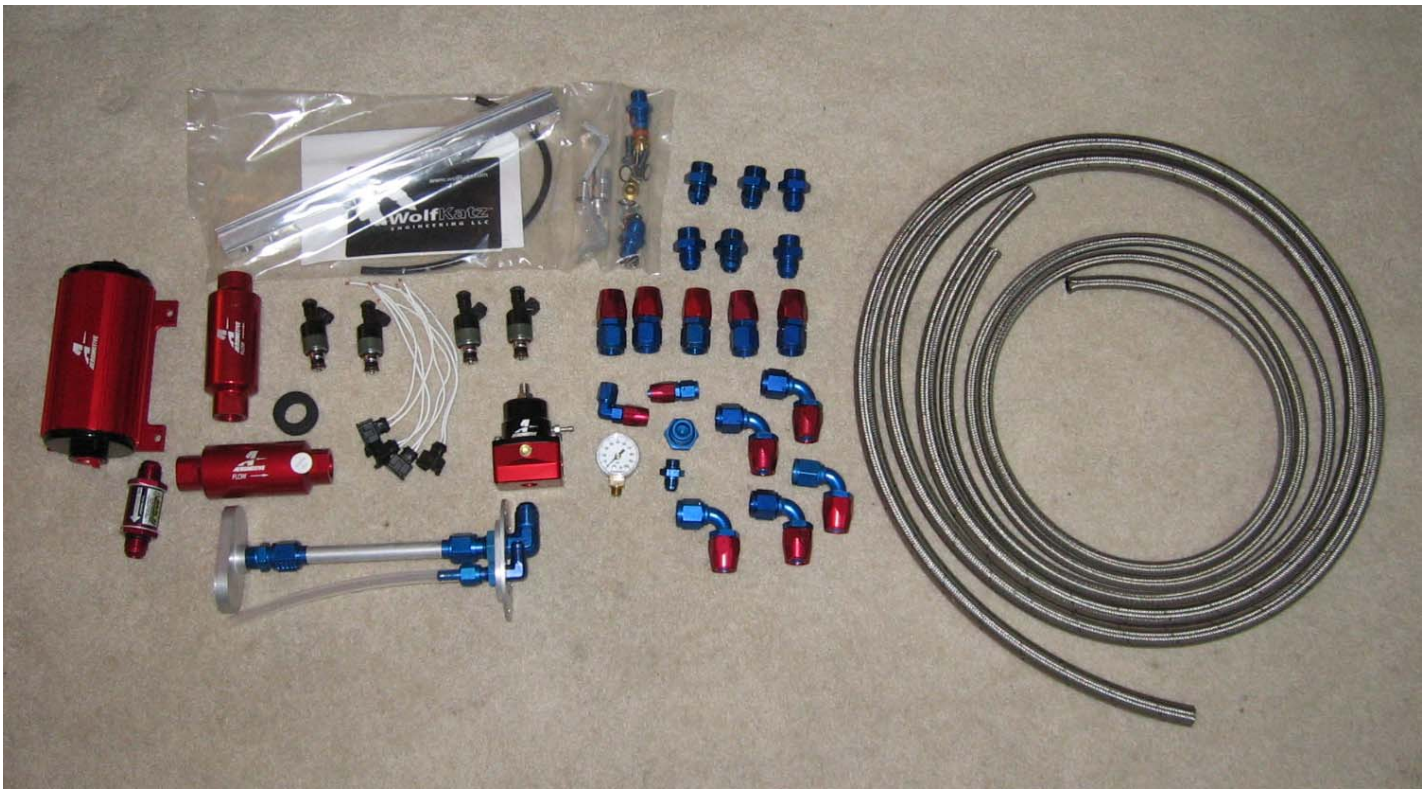
All items are guaranteed against defects in manufacture, and will be repaired/replaced if needed. However, any damage inflicted by the end user of this product is not the responsibility of WolfKatz Engineering LLC. If a part is not what you expected, you are welcome to return it for a refund if it is in resalable condition.

Unless otherwise stated, these parts have been tested on a 1993 Toyota MR2 Turbo. Any known compatibility problems will be noted. However, due to running model changes made by Toyota, there may be unforeseen changes. While WolfKatz can make recommendations, it is ultimately the responsibility of the purchaser to decide if a part is suitable to his/her application.

WARNING: Aeromotive recommends the use of their Fuel Pump Speed Controller (P/N 16302) in street driven vehicles that will see extended run times. This is not included in the standard kit (contact WolfKatz for assistance if you require this part). Without this part, the A1000 or Eliminator pump can overheat your fuel load (especially when the tank is low on fuel) and "vapor lock" your fuel system. Do your best to keep your fuel pump cool.

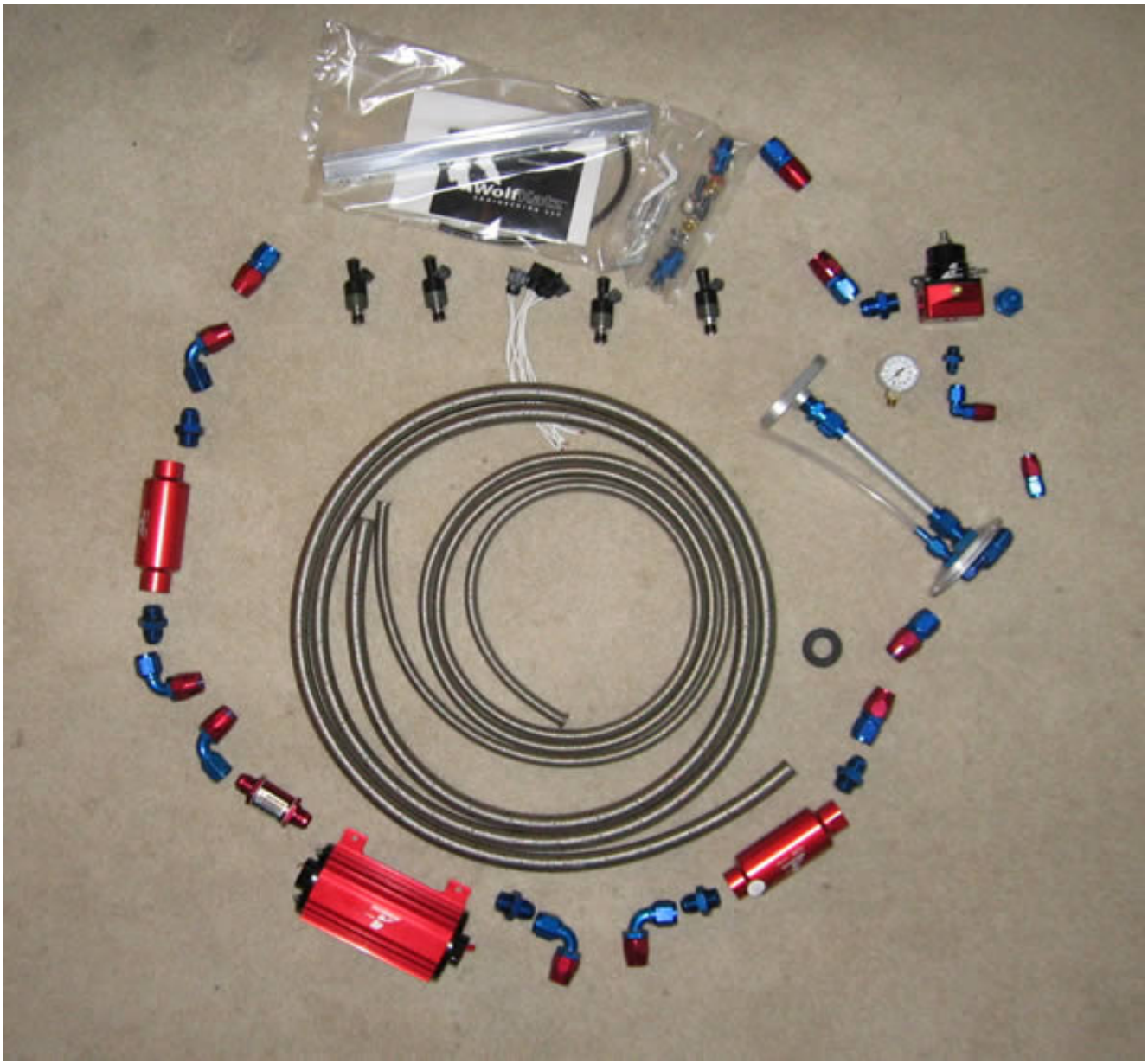
Parts List:

Be sure your kit is complete. There is nothing worse then starting to put a bunch of stuff together, only to be missing something! The easiest way to do this is to make sure the kit matches the hardware shown in the picture below. It is possible your check valve may look different as there are two different brands used (Earls is pictured, but the Aeromotive Black Check valve may be substituted).



Installation:

1) Check that all bolts on the aluminum pickup assembly are tight. You don't want one of the fittings to come loose on this assemble and end up dropping your fuel tank again to fix the problem.
2) Drop your fuel tank and remove the pump. Instructions for dropping the tank are in the online Toyota Shop Manual (BGB), or a good write up is found here: http://www.mrtwo.net/mr2modproject/mr2modproject.htm (printed here with permission from Pat S.)
3) Using the screws that were used to hold in your old fuel pump bracket flange, drop in the new pickup and screw it in.
4) The rest of the instructions will use the picture below as reference (shown with optional WolfKatz Top Feed Rail and Delphi Injectors):



5) The layout of the picture is important as it shows how to hook everything up. **Basically we will be following around the circle of parts shown to figure out what order everything should be hooked up in!**

6) The back page of these instructions contain a "how to work with Earl's fittings" guide that will tell you how to put the braided line and fittings together.

7) Before you put the tank back in, it is best to decide where the parts of the system will live, specifically the fuel pump. The pump should be in a well ventilated area if at all possible. Two -10 grommets should be included with the kit incase you wish to trunk mount the pump. This is a good solution for vehicles with a trunk mount intercooler that allows for good air flow in the trunk.

8) Now decide where the pre-filter (100micron that goes before the pump, go clockwise around the circle shown above) and regulator will live. The reg can be mounted nicely where the fuel pump resistor pack used to be or under the carbon canister using a WolfKatz Mounting Plate. Cut a piece of -10 line to get you from the fuel pickup to the first filter, and -6 line to get you from the regulator return back to the fuel pickup. Now, set up one end of each line with the appropriate fitting shown in the picture. Use straight fittings off the fuel pickup, and 90 degree or straight fittings off the reg or filter. Some 90 degree and straight fittings are included in the kit and can be moved around to help you make everything fit best with your setup. Sometimes the 90 degree won't be needed and the straight will be better or vice versa. Do way makes the most sense to you.

9) Now, starting from the first filter, continue traveling clockwise around the fuel system. Refer to your fuel rail installation instructions to install the rail. The gauge goes in where the brass plug in the regulator is found.

10) Wiring is setup dependent. Be sure to run at least a 30 amp relay to your new pump as these babies can pull a bit of current. There is a good power source in the fuse box in the engine compartment.

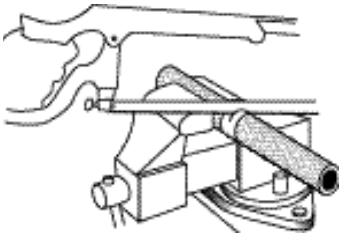
11) If you have any questions, email tech@wolfkatz.com ! Good Luck! Now go shred that tranny…

HOSE ASSEMBLY

SWIVEL-SEAL™ HOSE ENDS WITH PERFORM-O-FLEX™,PRO-LITE 350™ OR AUTO-FLEX™ HOSE

Pressure Test All Hose Assemblies Before Installation!

1



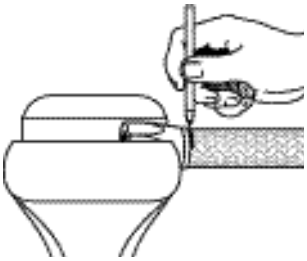
1. *Cut the hose to the required length.*

a. Measure distance between ports or adapter fittings along the path that the hose run will follow —allowing for bend radius, hose end length and offset to obtain length and hose required.

b. Cut the hose square with a radiac wheel or a sharp 32 teeth per inch hacksaw blade. It is necessay to wrap it tightly with electrical or masking tape before cutting and to cut through the tape. This helps to prevent the stainless wire braid from fraying.

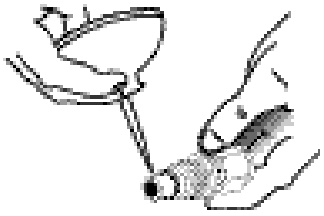
c. Trim any frayed ends of the braid with a sharp pair of metal snips or diagonal cutters and remove the tape.

2



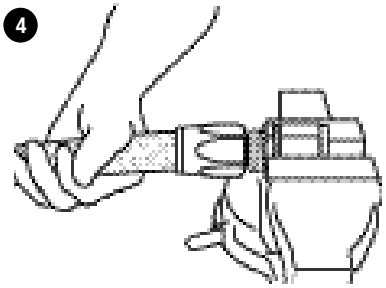
2. *Place the socket in a vise and insert the end of the hose into the socket until the hose butts against the bottom of the threads provided for the cutter. Gently pull the hose back until there is a 1/16" to 1/8" gap between the end of the hose and the bottom of the threads —mark hose at bottom of socket with a felt pen so that you can detect any tendency of the hose to be pushed out as you complete the assembly.*

3



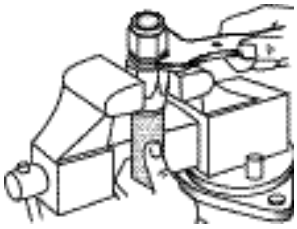
3. *Lubricate the inside of the hose, the cutter threads and the socket threads with Earl's assembly lube or engine oil. Place the nipple in a vise.*

4



4. *Holding the hose and not the socket, push the hose and the socket onto the nipple until the socket threads can be started on the cutter. Holding the hose and not the socket, start the threads and go as far as you can by hand. Depending on the size of the hose, some force may be necessary in this part of the operation.*

5



5. *To complete the assembly it doesn't matter whether the nipple or the socket is held in the vise. Holding one or the other in the vise and using a suitable wrench on the other, tighten the socket onto the cutter threads until the socket is with in .060" of bottoming on the nipple. Do not use an adjustable or over-size wrench or you will damage either the nipple or the socket.*

6. *Check the mark that you made on the hose in Step 2. If the hose has backed more than about 1/16" out of the socket as you assembled it, curse and return to Step 3.*

7. *Clean the hose and the hose ends with CLEAN solvent.*

8. ***Pressue test the assembly before letting it out of your sight. Further check the assembly by running the system at full pressue while you observe the hose, hose ends, and adapters for leaks.***