



**FAST-500E (ETHANOL COMPATIBLE)
RETURN FUEL SYSTEM**

**INSTALLATION MANUAL FOR:
2009 - 2021 NISSAN 370Z
Compatible w/Infiniti: G37 Coupe /
Sedan & Q60 Coupe (3.7L)**

Version: 06/2021



FAST-500(E) INVENTORY CHECKLIST

- 1- Aeromotive fuel pressure regulator.
 - *2 x (-6) o-ring fittings & vacuum port preinstalled.
- 2- (M5-1 x 8mm) bolts
- 2- (M5-1) Nylock Nuts
- 1- Fast Intentions fuel rail adapter block.
 - *2 (-6) o-ring fittings & OEM O-ring preinstalled.
- 2- (M6-1 x 35mm) stainless steel socket cap bolts.
- 2- (M6-1) stainless steel flat washers
- 1- (-6) Black Teflon coated fuel line (Feed Line 51") 00*-00*
- 1- (-6) Black Teflon coated fuel line (Feed Line 80") 120*-00* (74-1/2" for Flex Fuel)
- 1- (-6) Black Teflon coated fuel line (Return Line 15-1/2") 00*-00*
- 1- (-6) Black Teflon coated fuel line (Return Line 9") 45*-00*
 - *Black fire-retardant sleeve 6-1/4" pre-installed.
 - *Black aluminum AN to Dorman fitting pre-installed.
- 3- (#80) Adel clamp
- 3- Tech Screws
- 1- Velcro heat sleeve 4"
- 1- (-6) to 3/8" Barb fitting w/5-1/4" black OEM Nissan fuel hose pre-assembled with 5/16" hose clamp.
- 1- (-6 to -6) 90* Bulkhead w/jam nut.
- 2- (-6) Dowty seals
- 1- CNC Machined in tank regulator delete w/stainless steel hardware.
- 2- 5/16" Hose Clamp
- 1- Black (-6) OEM Nissan fuel hose 7" (Return Line)
- 1- Aeromotive steel 40 Micron fuel filter 2- (-6) Aeromotive fitting w/O-rings preinstalled. (1 fitting for Flex Fuel)
- 1- 2.5" Adel Clamp
- 1- FI stainless steel mounting tab
- 1- (M6-1 x 20mm) bolt
- 1- (M6-1) flange nut
- 1- (12") piece of 1/8" Black silicone vacuum line
- 2- 8" Zip Ties
- 2- 4" Zip Ties

ADDITIONAL UPGRADES (OPTIONAL)

- 1- Autometer (0-100psi) Fuel pressure gauge
- 1- Pipe 90* Elbow Male/Female

For installation on the Infiniti Series Cars: G37 Coupe / Sedan & Q60 Coupe (3.7L), some images may not visually match those applications and some steps may have a minor variation to them.

Infiniti G37 ONLY

If your Infiniti G37 has a production date prior to 9/2009, and/or your fuel canister is part no: 170 JL60A, you will need to upgrade to one of the two fuel pump canister assemblies:

Part No: 17040 1NC0C

Part No: 17040 1NC0A

G37 WARNING: You will need to verify that you have one of these two part numbers (updated fuel canister), before proceeding with the FAST-500 Return Fuel System installation.

FAST-500(E) INSTALLATION (PAGE 1)

WARNING: When replacing fuel components, work in a ventilated area. Make sure there are no sparks or open flames in the area. Have a CO2 fire extinguisher on hand.

- 1) Open both doors and disconnect the negative terminal on the battery (10mm).
- 2) Remove the auxiliary compartment door. (Image 1)
- 3) Remove the rear parcel shelf cover. (Image 2)



- 4) Remove the sound insulating mat. (Image 3)
- 5) Remove the fuel tank access door 4 x 10mm nuts and rubber grommet. (Image 4)



- 6) Disconnect the (gray) fuel pump electrical plug. (Image 5)

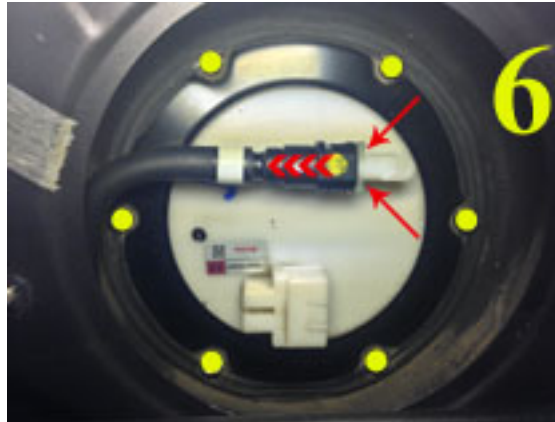


FAST-500(E) INSTALLATION (PAGE 2)

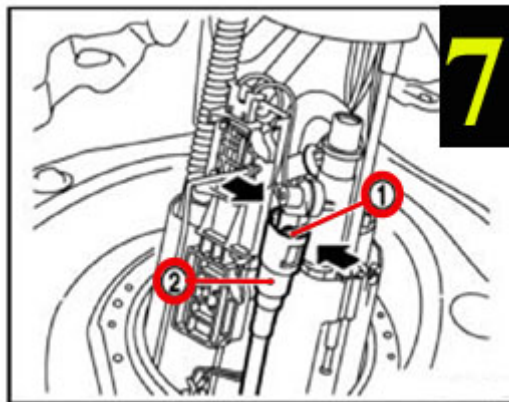
7) Disconnect the "quick connector" and hose from the fitting on top of the fuel pump assembly lid. Squeeze in the (2) tabs (red arrows) and pull the hose away (red chevrons). (Image 6)

8) Remove the (6) 8mm bolts securing the black retainer cover down. (Image 6) The fuel pump assembly lid is spring loaded and has tension on it. Remove the 6 bolts evenly to properly relieve the tension.

NOTE: Cover the hose end with a plastic bag to keep debris out.



9) Lift the fuel pump assembly housing about halfway up. Disconnect the "quick disconnect" crossover hose from the fuel pump assembly. (Image 7) Squeeze in the (2) tabs and pull the hose away.



NOTE: Remember the rotation of the fuel pump assembly because it will be reinstalled in the same orientation.

10) Very carefully lift the fuel pump assembly out of the fuel tank making sure the "float" does not get bent or damaged during removal.

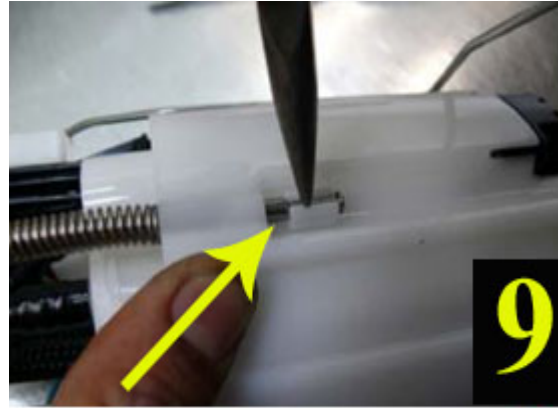
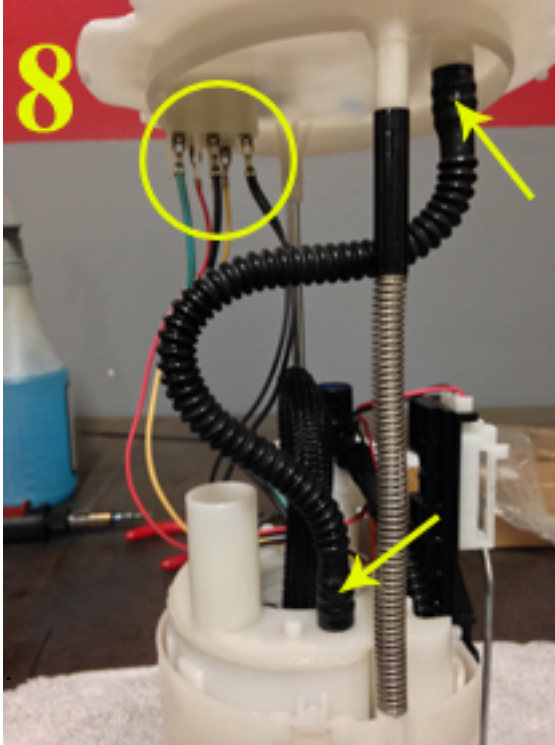
11) Once the canister is removed, turn the fuel pump assembly upside down to remove the excess fuel, then set aside.

12) Remove the "blue" O ring and wash under warm water immediately, dry off and set aside. **NOTE:** This is performed to help prevent the O-ring from swelling in size.

FAST-500(E) INSTALLATION (PAGE 3)

13) (Yellow circle) Take note of the location of each wire. Remove the wires one by one by gently releasing the tab located on each connector. (Image 8)

14) (Yellow arrows) Cut the convoluted line on both ends with a razor blade. This will allow the upper hat to separate from the inner canister in a later step. (Image 8)

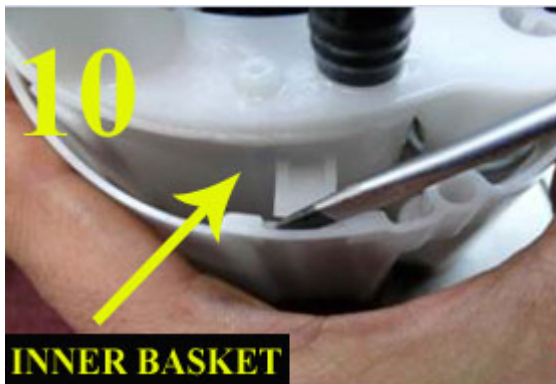


15) Push down on the lid of the fuel pump assembly, putting tension on the spring. Unclip the white “C” clip. (Image 9) The lid will push up and all the tension will be relieved.

16) Lift the lid off and set the lid, clip, black spacer, and spring aside.

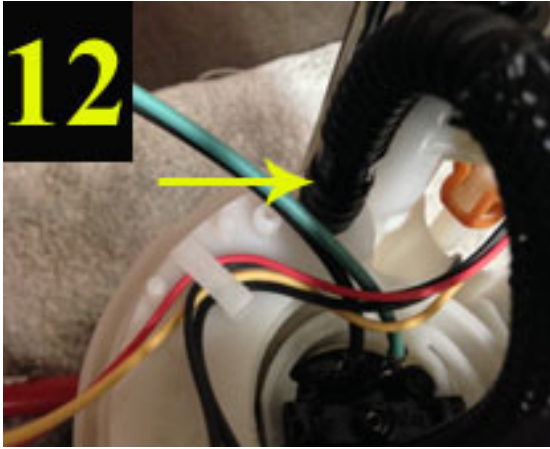
NOTE: When reinstalling the lid, the black spacer installs between the spring and lid. (Image 8)

17) Separate the fuel pump inner basket from the outer basket. (Images 10 and 11)



FAST-500(E) INSTALLATION (PAGE 4)

18) Cut the convoluted line with a razor blade so it and the stock fuel pump can be removed from the inner fuel basket cover. (Image 12)

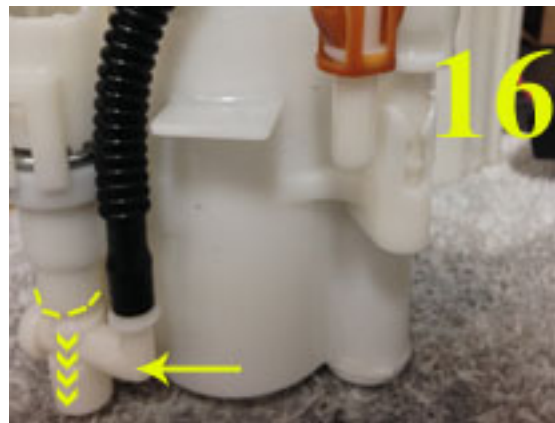


19) Press the tabs in that secure the fuel pump. Turn the pump counterclockwise and it should come out through the bottom of the basket. Remove the pre pump filter from the fuel pump and discard. You will not reuse. (Image 13) Disconnect the black and blue leads from the fuel pump. (Discard the fuel pump-you will not reuse)

20) Cut the tabs out of the inner fuel basket. (Images 14 and 15) show a before and after.

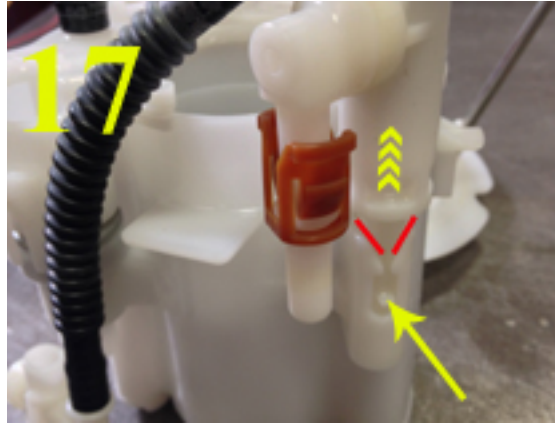


21) Remove siphon regulator tube cover. (Image 16)



FAST-500(E) INSTALLATION (PAGE 5)

22) Remove siphon regulator tube. (Image 17) As shown with the red lines, gently pry them apart and put up on the siphon tube.

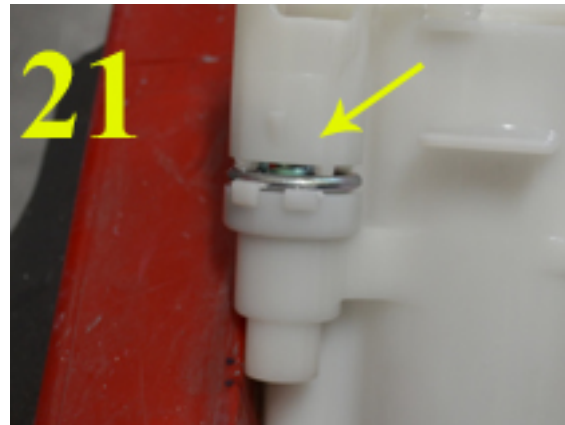
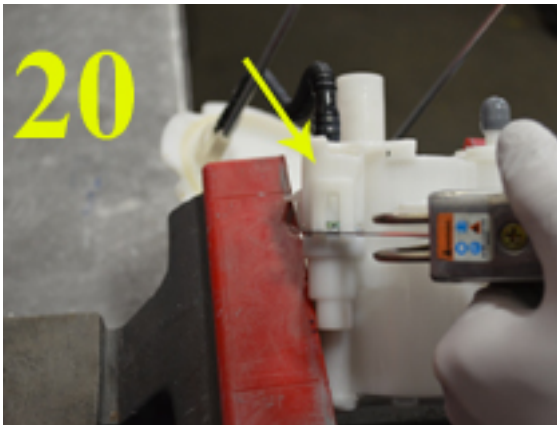


23) Using rubber caps, plug the openings as shown in (Images 18 and 19).

WARNING: Failure to cap these openings will allow debris to enter the fuel system.



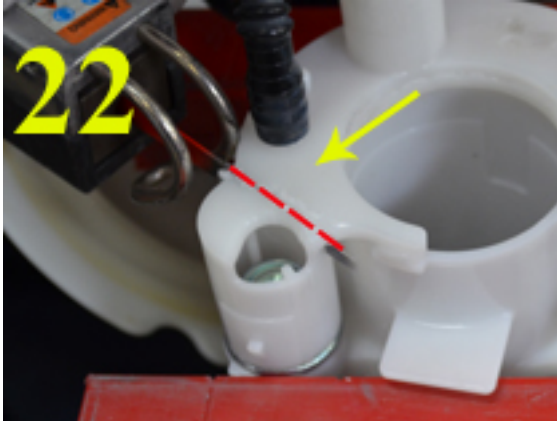
24) Cut off the regulator locking tab. (Image 20) DO NOT cut through the regulator. After the cut, it should appear as it does in (Image 21.)



FAST-500(E) INSTALLATION (PAGE 6)

25) Cut through the regulator housing. (Image 22)

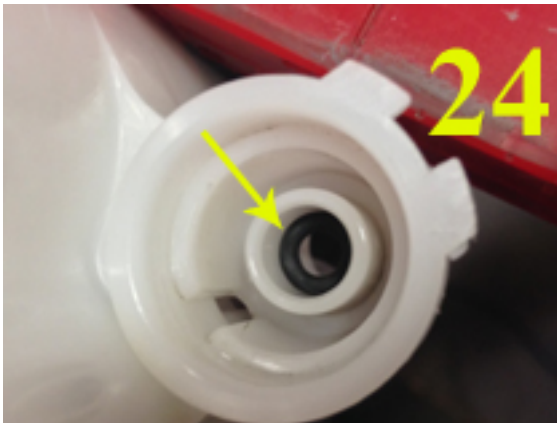
WARNING: DO NOT "breach" or "cut through" the fuel pump canister housing. There is a sealed area containing a paper fuel filter. If this area is breached the fuel system will not hold adequate fuel pressure. If you cut too deep and breach the fuel pump canister, you will need to purchase a new fuel pump canister from Nissan and start over!



26) Once the regulator housing is cut off and removed, it should look like (Image 23.) Take the regulator out and discard.

NOTE: When removing the OEM regulator, there will be a "white" shim ring along with black O-ring. (Remove and discard both-you will not reuse)

27) Remove the OEM O-ring. (Image 24)



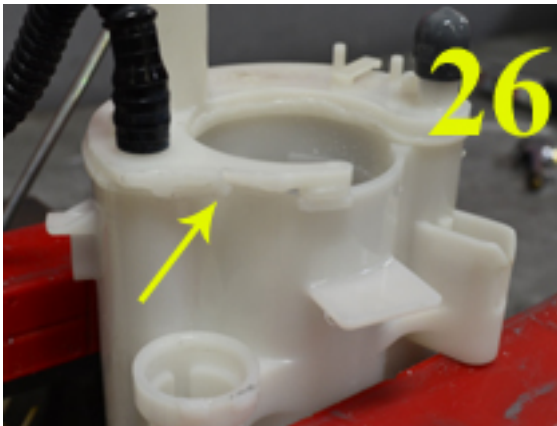
28) Grind excess plastic off the fuel pump canister housing. (Image 25)

WARNING: DO NOT "breach" or "grind through" the fuel pump canister housing. There is a sealed area containing a paper fuel filter. If this area is breached the fuel system will not hold adequate fuel pressure. If you grind too deep and breach the fuel pump canister, you will need to purchase a new fuel pump canister from Nissan and start over!

FAST-500(E) INSTALLATION (PAGE 7)

29) Once step 28 is completed, the canister should appear as it does in (Image 26).

NOTE: Wash out the canister and lightly blow off with compressed air. Ensure that all the loose debris from cutting and grinding has been cleaned off and/or removed.



30) Some of the following steps will require a "light lubrication" to O Rings prior to installation. We recommend using 3M Silicone Paste as shown in (Image 27).

NOTE: Image 28 has been removed.



31) The "Black" CNC regulator delete is a 2-piece part. Remove the 2 x stainless steel bolts holding it together and it will separate. Once properly taken apart, it should appear as it does in (Image 29).

NOTE: Image 30 has been removed.

NOTE: Images 31 and 32 visually show an earlier generation regulator delete.

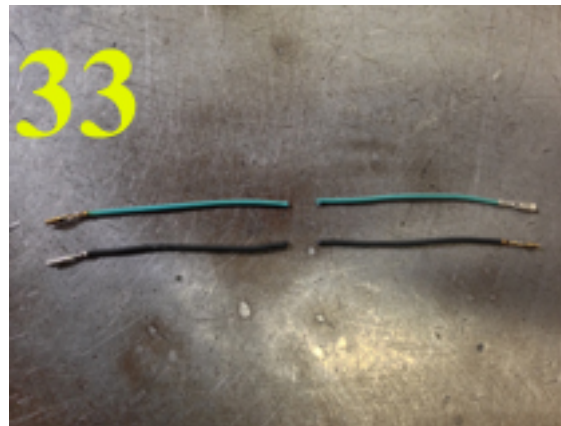
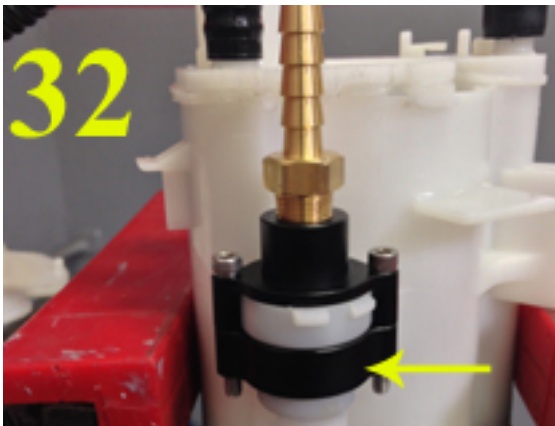
FAST-500(E) INSTALLATION (PAGE 8)



34) Install the regulator delete into the fuel pump canister. (Image 31)

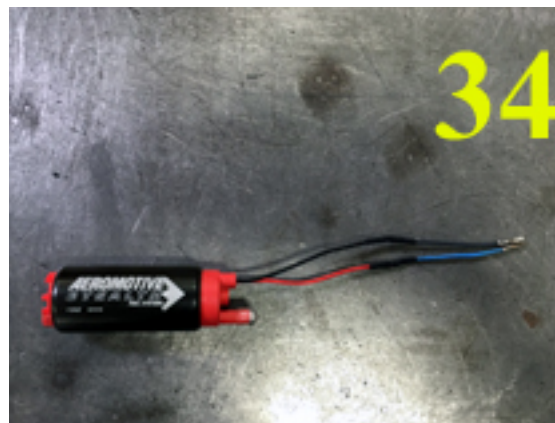
WARNING: Make sure that the O-rings properly seat as you push the regulator delete down into the fuel pump housing and they do not get pinched.

35) Install the regulator delete clamp and hardware and tighten down. (Image 32)



36) The black and blue leads previously removed from the stock fuel pump need to be cut in half. (Image 33)

37) Strip the ends of the black and blue wires as well as the red and black wire on the supplied Aeromotive 340 (E85) fuel pump. Solder the black wire to black wire and the blue wire to the red wire. Once completed, install the supplied heat shrink tubing. (Image 34) **NOTE:** We no longer use/sell the Aeromotive 340LPH fuel pump.



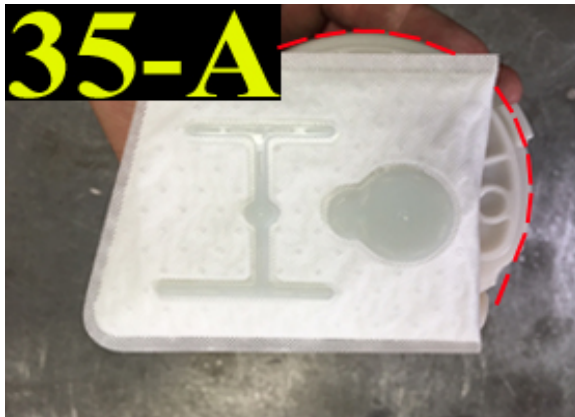
FAST-500(E) INSTALLATION (PAGE 9)

38) Attach the new white pre pump filter to the bottom of the Areomotive 340 LPH fuel pump.

NOTE: Align the notch in the center of pre pump filter with the peg coming out of the bottom of the new fuel pump.

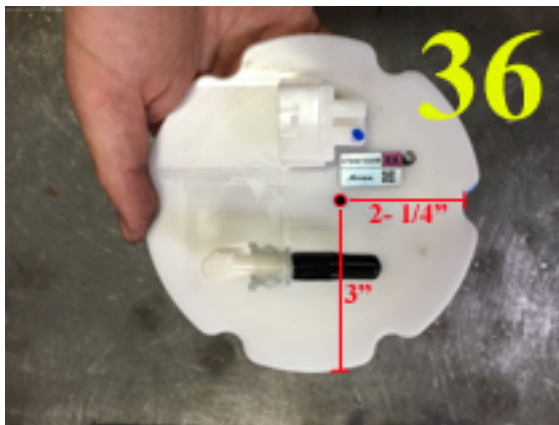
39) Install the fuel pump and pre pump filter as one unit into the inner basket by sliding up from the bottom.

NOTE: Installed in the proper orientation, the pre pump filter will visually appear aligned with the bottom of the inner basket. (Images 35A and B)



40) Locate the fuel pump canister "hat/lid." Mark the center and drill out to 27/64". (Image 36)

NOTE: You may need to file the hole slightly larger to fit the threads of the 90° bulkhead through it. Clean the fuel pump hat and surrounding area to ensure there are no plastic shavings.



41) (Image 37) Install the 90° (-6) bulkhead along with (1) dowty seal from the top side. Install the 1 remaining dowty seal from the bottom side along with the jam nut.

NOTE: Notice the proper rotation of the bulkhead in the image. When tightening the jam nut, use a wrench on the 90° bulkhead from the topside. As you tighten the nut, make sure that the bulkhead stays in the proper orientation.

42) Located in the outer basket, remove the black swirl jet so it can be drilled out. It is located on the bottom of the basket. To remove the swirl jet, push it from the inside of the basket out.

43) Drill out the black swirl jet with a (109 thousandths) or standard equivalent is a 7/64" drill bit.

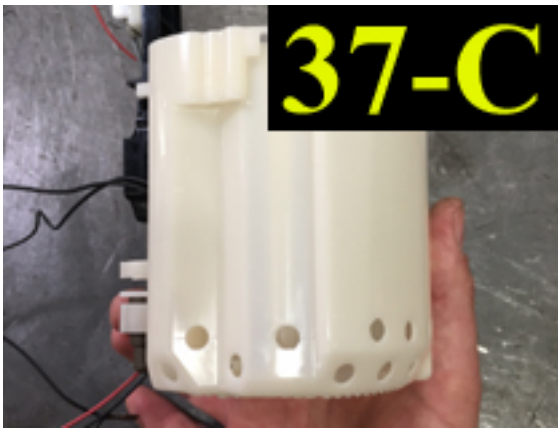
WARNING: The wall thickness of the swirl jet is very shallow. It takes very little pressure to drill out. DO NOT drill too deep.

FAST-500(E) INSTALLATION (PAGE 10)

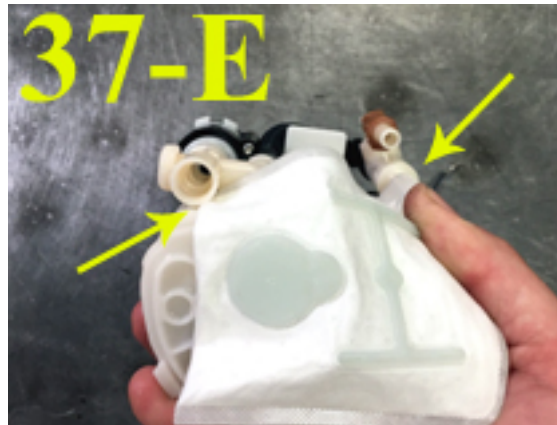
44) Mark 10 places on outer basket as shown in (Image 37-B). Start with a small pilot hole, stepping up to a 1/4" hole when finished. Clean out all slag/plastic shavings inside and out. Blow out with compressed air.

WARNING: Take your time drilling the plastic canister. If you drill too fast, you risk cracking the plastic. Drill the holes in the exact location that is shown in image 37-B. Drilling the holes in an alternate location may create fuel starvation.

NOTE: When finished drilling, your canister should appear like (Images 37-C and 37D).



45) (Image 37-E) Tuck the corner of the pre pump fuel filter behind the siphon pick up. The other end folds over as demonstrated with the thumb in this same image.



46) Reinstall the siphon tube (both ends) that was removed in step 21.

NOTE: Check both ends to ensure the siphon tube is fully seated after reinstallation.

FAST-500(E) INSTALLATION (PAGE 11)

47) Install the inner basket inside of the outer basket. Both tabs might not click in place due to the size of the aftermarket pre pump filter.

NOTE: Make sure the siphon regulator is fully mated in place and the hole is not being obstructed by the pre pump filter. It should look like (Image 37-F).



48) Reinstall the swirl jet into the outer basket. When properly seated, it will lock in place inside the hole of the siphon tube.

NOTE: At this time attempt to lock both tabs in place that hold the inner canister inside of the outer canister. The pre pump filter bag is aftermarket, so it may not sit and lock exactly like OEM.

49) Perform the fuel pump canister final assembly as shown in (Image 38.)

*(Blue Arrow) Attach the FI billet bracket to the post on top of the inner fuel basket.

NOTE: Face the notch down on the billet bracket so it sits higher on the post. Tighten allen bolt in billet bracket.

*(Red Arrows) (-6) to 3/8" barb fitting w/line to fuel pump on bottom and 90° bulkhead on top. Tighten brass fitting and 5/16" hose clamp in billet bracket.

*(Yellow Arrows) Attach (-6) black fuel return line using 2 x 5/16" hose clamps.

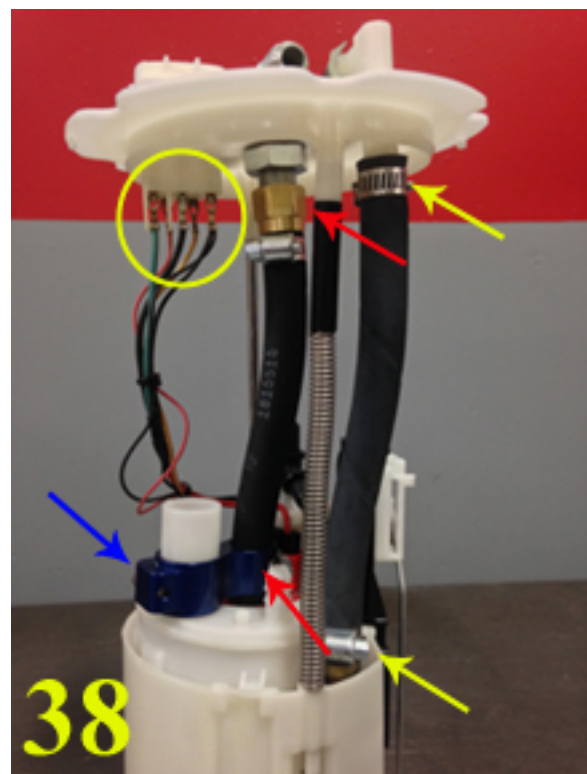
*(Yellow Circle) Route and attach the wires in the exact orientation that they were prior to removal.

*Install the black spacer over the rod that is connected to the lid.

*Install the spring over the rod as it will butt up to the black spacer.

*Install the lid assembly to the fuel pump basket assembly.

*Depress the lid putting tension on the spring allowing the white "C" clip to be reinstalled.



FAST-500(E) INSTALLATION (PAGE 12)

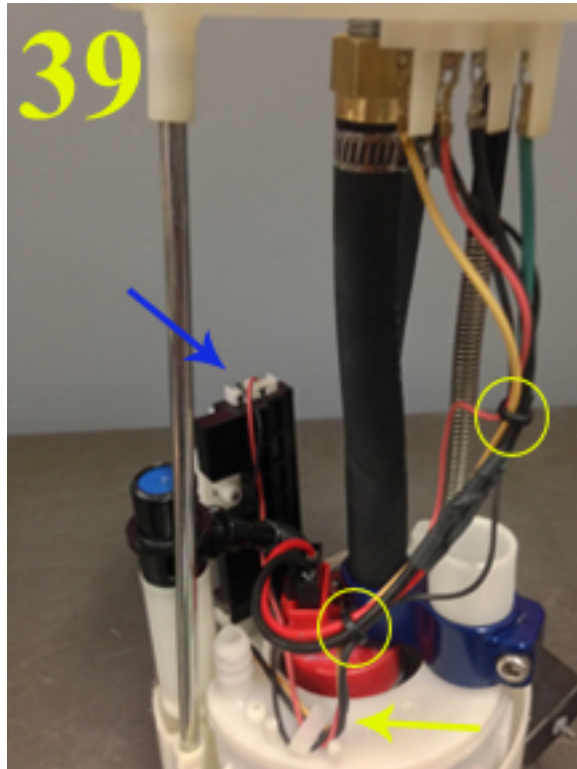
NOTE: Use (Image 39) as a reference as proper wire routing.

*(Yellow Circles) 2 x small zip ties for wiring.

*(Yellow Arrow) Route through factory clip.

*(Blue Arrow) Route thin Red & Black wires from float as shown.

WARNING: When complete, make sure the wiring cannot get tangled in the "float."



50) Remove the (2) rubber caps previously installed in step 23.

51) "Inside vehicle" Seat the "blue" O Ring in place.

52) Reach down in the fuel tank and pull the crossover hose up.

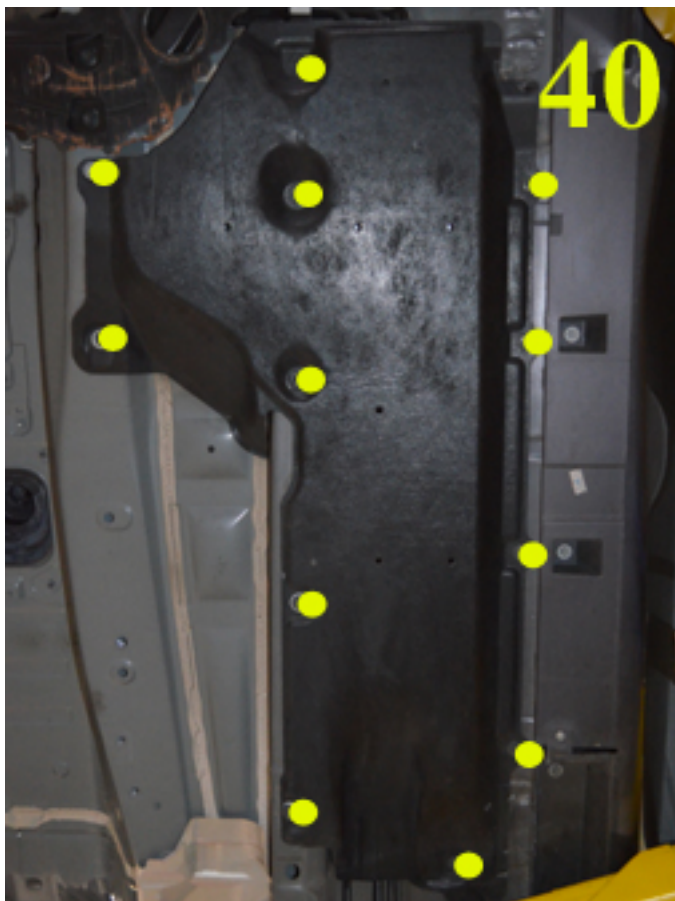
53) Follow the sub steps below for the installation of the fuel pump assembly.

- Carefully feed the float back in the tank first, ensuring it does not get caught on the crossover hose or bent during installation.
- With the fuel pump canister assembly halfway down, install the crossover hose to the siphon regulator tube. When fully seated the quick disconnect fitting will "click" in place indicating it is secure.
- Carefully lower the fuel pump assembly down in place.
- Install the black retainer cover and (6) 8mm bolt. Tighten them in an "X" pattern. **Torque to 20 Inch LBS.**

WARNING: Make sure the fuel pump feed line does not "kink" from the compression as you push down on the lid to secure the canister in place. If the feed line kinks, you could restrict fuel flow to the engine, make the fuel pump work harder and eventually cause the fuel pump to fail.

FAST-500(E) INSTALLATION (PAGE 13)

54) Remove the (passenger side) fuel line under tray. (Image 40)

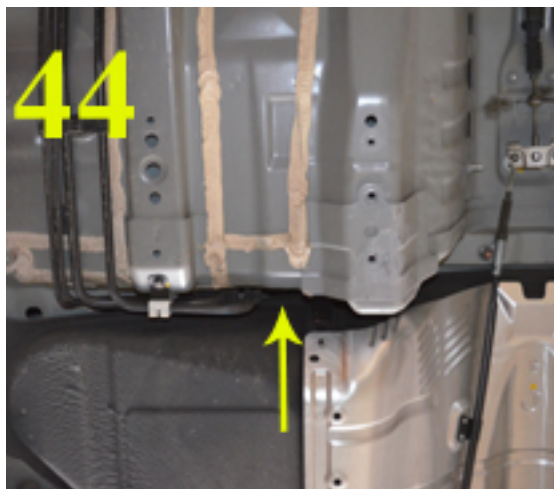


55) Remove the underbracing from the attachment points circled in yellow. (Image 41)



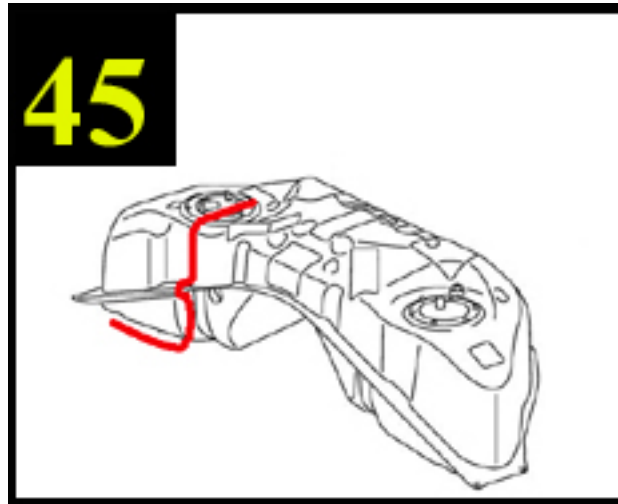
56) Locate the (51"-6 00*-00* Feed) fuel line. Put tape around both ends to keep debris out when routing the line. (Image 42)

57) (Images 43 and 44) show the proper location to feed the "-6 Return" fuel line up into the fuel tank cavity.

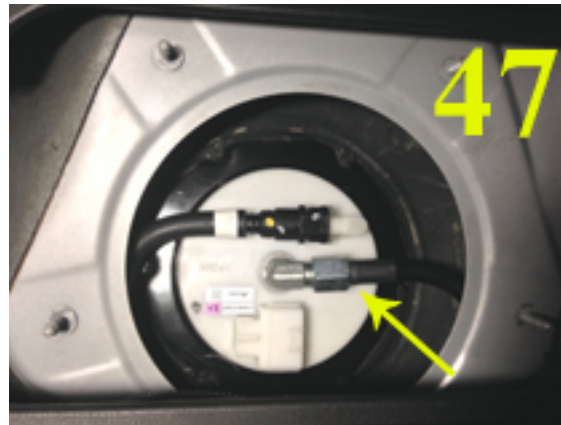
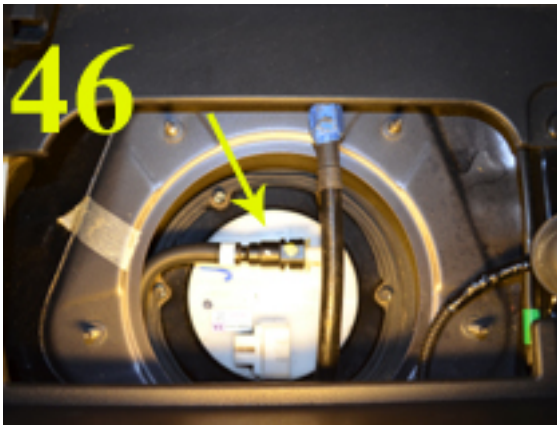


FAST-500(E) INSTALLATION (PAGE 14)

NOTE: (Image 45) is a diagram that shows the fuel tank in an exploded view with the proper routing of the (-6 Feed) fuel line.



58) (Image 46) indicates the length of line pulled up on top of the fuel tank. At this time, you can reinstall the quick connector fitting indicated by the yellow arrow.



59) (Image 47) Connect the (-6) 00* end of the Feed fuel line to the 90* Bulkhead (yellow arrow) and tighten.

WARNING: Make sure that there is no debris in the fuel line. Ensure that the line is not "kinked" as it is tightened. The inner liner is Teflon and can break if kinked.

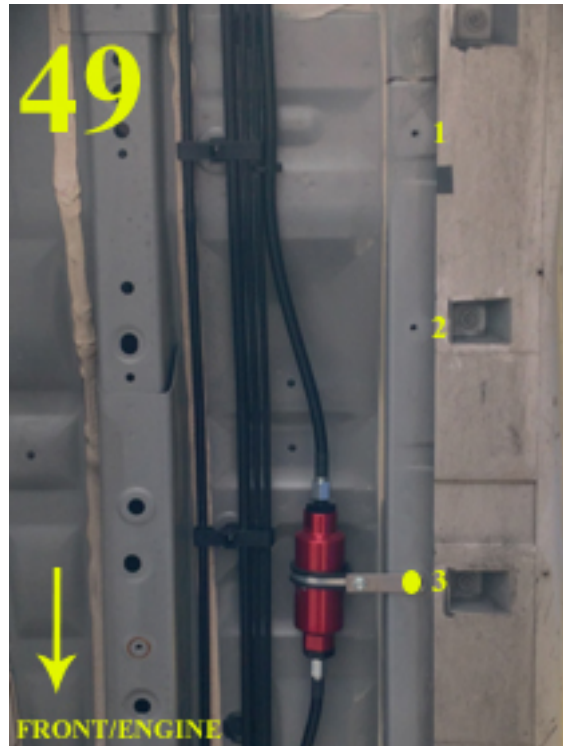
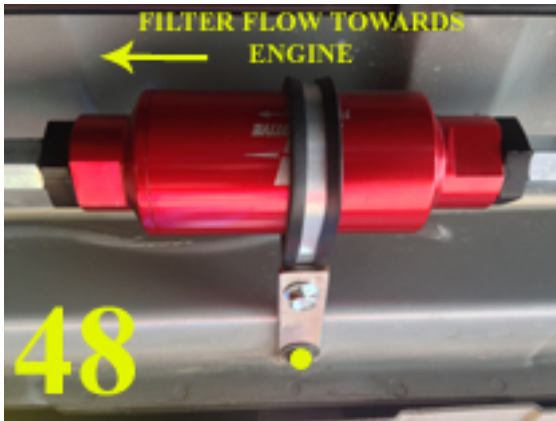
NOTE: At this time, you WILL NOT reinstall the (gray) fuel pump electrical plug, rubber sound insulation mat or the fuel access door.

NOTE: You will now mount the Aeromotive Fuel Filter to the frame using the supplied FI Mounting Tab, 2.5" Adel Clamp, M6-1x20mm Bolt and M6-1 Flange Nut. In step 59 on the next page, you will mount the Aeromotive Fuel Filter in the area located where you removed the fuel line under tray in step 53.

FAST-500(E) INSTALLATION (PAGE 15)

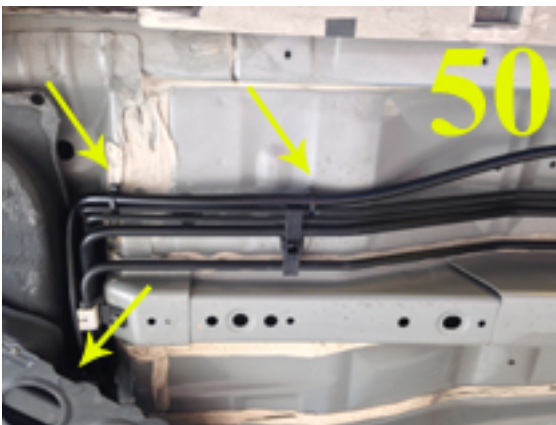
60) (Image 48) shows the proper installation of the Aeromotive Fuel Filter. The (Yellow Dot) indicates using an existing 10mm bolt to hold the FI Mounting Tab to the frame. (Image 49) shows that you will use the 3rd mounting hole from the back for the Mounting Tab location.

WARNING: The "FLOW ARROW" on the Aeromotive Fuel Filter faces towards the engine/front of the vehicle!



61) Route the feed line coming from the fuel tank to the Aeromotive Fuel Filter as shown in (Image(s) 50/51.)

NOTE: In Image 50, the (Yellow Arrows) indicate recommended large zip tie locations.



62) Remove the tape from the -6 fuel line, attach it to the back of the Aeromotive Fuel Filter and tighten.

NOTE: When properly installed, it should appear as it does in (Image 49.)

FAST-500(E) INSTALLATION (PAGE 16)

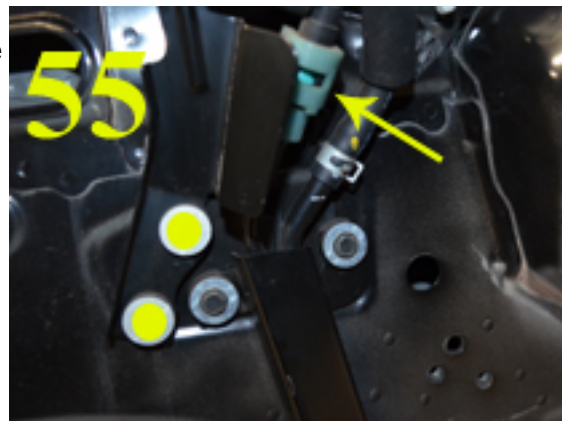
63) Take the metal bracket attached to the back Aeromotive fuel pressure regulator and hold it up to mark the mounting holes as shown in (Image 52.) Inside the engine bay outside of the battery box, you will notice a stamped 17-digit VIN number. The yellow dotted line indicates the top of the numbers. Use the top of the numbers as a reference line up mounting point of the bracket. Measure 2-1/4" in on-center of the bracket from the "crease" as indicated with the red dotted lines in (Image 52.) The blue circles indicate the mounting hardware post installation. Mark, punch and drill the mounting 2 mounting holes for the fuel pressure regulator.



64) Mount the Aeromotive Fuel Pressure Regulator using the supplied 2x (M5-1) bolt and nylox nuts as shown in (Images 53 and 54).



65) "Engine Compartment" Remove the 2 (Yellow Circles) heat shield bolts. Once The heat shield is off, remove the green plastic clip (Yellow Arrow) from the OEM (hard) fuel line. (Image 55)



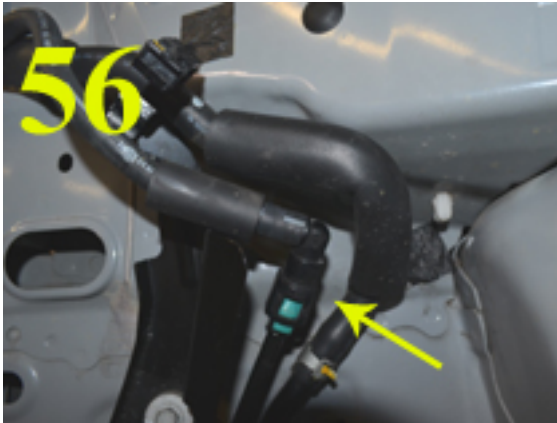
FAST-500(E) INSTALLATION (PAGE 17)

66) Remove the fuel line by depressing the 2 tabs on the green clip and pulling up on the fuel line. (Image 56)

67) After the fuel line is removed, remove the "green" plastic sealing clip. (Image 57)

WARNING: DO NOT scar the edge of the fuel line when removing the green sealing clip.

WARNING: DO NOT knock any debris down the open, exposed fuel line.



NOTE: You will need the supplied FI (-6) Black aluminum to Dorman fitting w/plastic clip for the following step.

68) Remove the "light blue" sealing clip from the inside of the Dorman end of the aluminum fitting.

69) Install the "light blue" sealing clip to the OEM fuel (hard) fuel line. (Image 58).

WARNING: DO NOT scar the edge of the fuel line when installing the light blue sealing clip.

WARNING: DO NOT knock any debris down the open, exposed fuel line.



70) (Image 58-1) Install the black aluminum fitting over the "light blue" sealing clip.

NOTE: Apply a thin film of oil or 3M lubricating paste to the OEM fuel line where the O ring from the inside of the black aluminum fitting is going to slide over. This will help the fitting properly seat and minimize the chances of tearing the O Ring.

WARNING: DO NOT get any oil or lubricating paste inside the OEM fuel line opening.

FAST-500(E) INSTALLATION (PAGE 18)

69 Follow the sub steps below (in order) and reference (Image 59.)

NOTE: You will use the 9.5" 45* - 00* return line & OEM green outer retaining clip in this step.

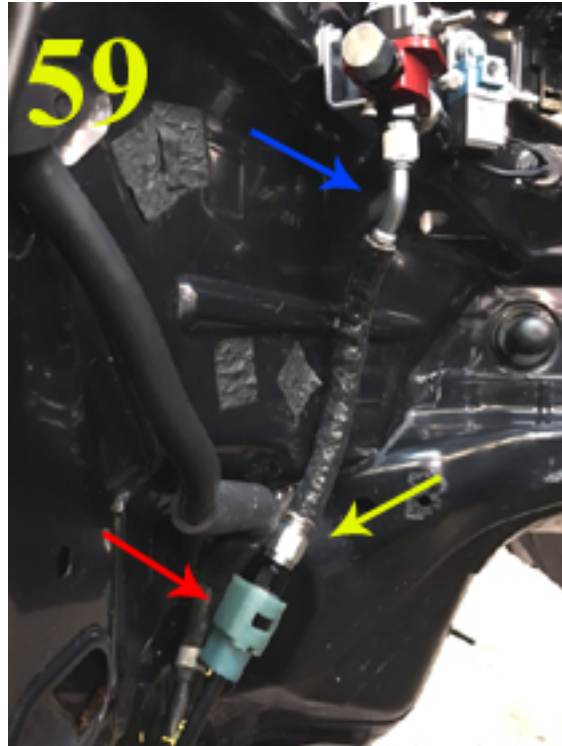
*(**Yellow Arrow**) Connect the (-6 00* end) to the OEM (hard) fuel line. and

*(**Blue Arrow**) Connect the (-6 45* end) to the bottom of the Aeromotive Fuel Pressure Regulator and tighten down both ends.

NOTE: Make sure the 45* fitting is in the same orientation as shown in image 59.

WARNING: DO NOT knock any debris down the open, exposed fuel line.

*(**Red Arrow**) Install "green" plastic clip.

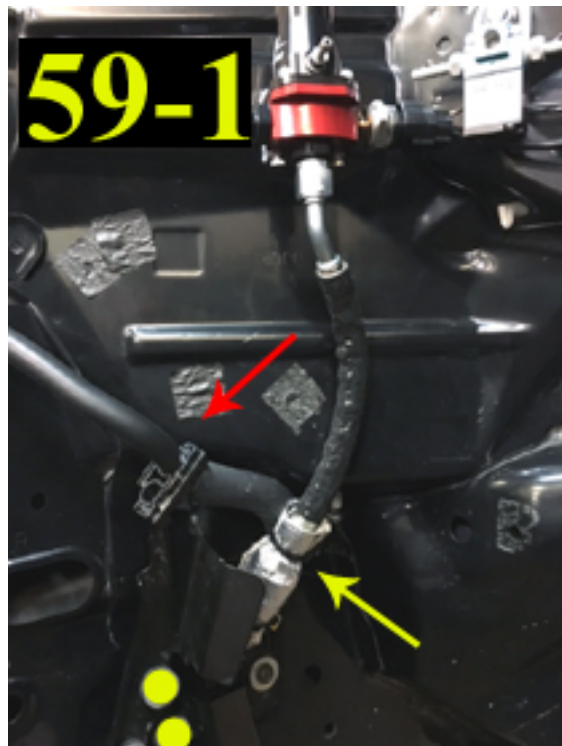


70 Follow the sub steps below (in order) and reference (Image 59-1).

*(**Yellow Arrow**) Install the supplied Velcro heat sleeve 4" with 2 zip ties.

*(**Yellow Dots**) Install the OEM heat shield.

*(**Red Arrow**) Install EVAP line inside of bracket.



FAST-500(E) INSTALLATION (PAGE 19)

71) Install the FI Fuel Adapter block to the OEM Fuel Tube using 2 x (M6-1 x 35mm) stainless steel socket bolt and 2 x (M6-1) SS flat washers as shown in (Image 61.)

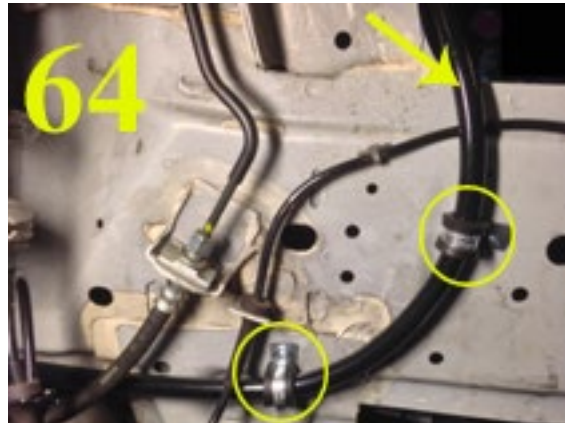
NOTE: Apply a thin film of silicone paste to the O ring and ensure it does not get pinched when installing. **Torque to 74 Inch LBS**



72) Install the 00*-00* (-6) short return line. One side to the Aeromotive Fuel Pressure Regulator and the other side to the back of the FI Fuel Adapter block and tighten down. (Image 62).

73) Install the 120*-00* (-6) 80" feed line to the FI Fuel Adapter block and tighten. (Image 63)

NOTE: Use (Images 63 and 64) as a reference of proper installation orientation (120* fitting) and fuel line routing in front of the engine harness electrical conduit into the passenger wheel well area. (Yellow Arrows) Put tape around the open end of the line to keep debris out when routing.



74) (Image 64) Route the fuel feed line in the passenger side front wheel well as shown above. Take note of the Adel clamp placement.

FAST-500(E) INSTALLATION (PAGE 20)

75) Route the fuel feed line as shown in (Image 65). Take note of the Adel clamp placement.

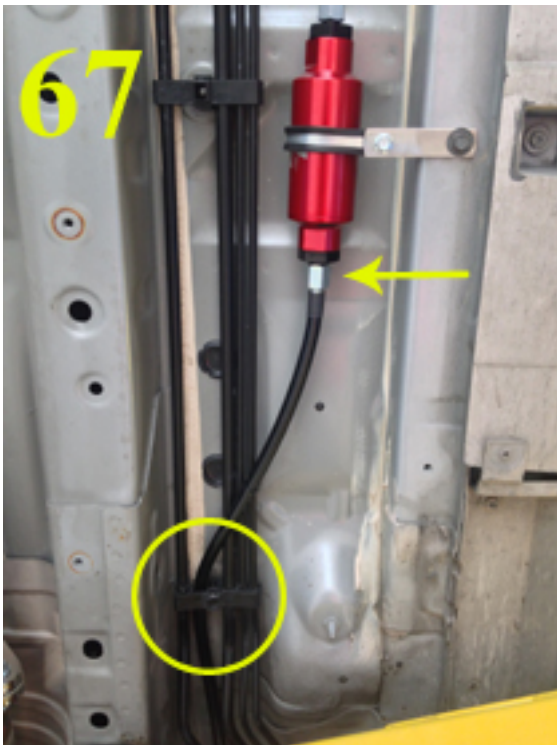
76) (Image 66) Route the fuel feed line towards the Aeromotive fuel filter. You will need to remove the inner fender liner in order to tuck the fuel line underneath it.

WARNING: Make sure the fuel line is tucked up high and zip tied to the hard lines, ensuring it cannot get caught on any road hazards.

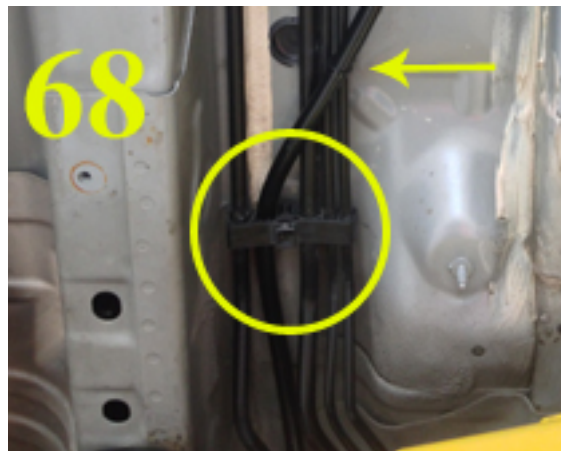


77) Route the fuel line through the OEM "plastic" line holder, (yellow circle) connect to the Aeromotive Fuel Filter (yellow arrow) and tighten. (Image 67)

NOTE: Remove the tape prior to connecting the fuel line to the Aeromotive Fuel Filter.



NOTE: (Image 68) is a "close up" showing the proper routing of the fuel line (yellow circle) and mounting of the 1 remaining large zip tie. (Yellow arrow) proper routing of the fuel line (yellow



FAST-500(E) INSTALLATION (PAGE 21)

78) Install the supplied (12") piece of 1/8" Black silicone vacuum line to the vacuum port on the Aeromotive Fuel Pressure Regulator, as shown in (Image 69.)

WARNING: This is a 1:1 boost reference fuel pressure regulator. For it to work properly, the other end of the black silicone vacuum line needs to be attached to a source, that will see vacuum and boost.



79) Remove the 9/16" set screw and fuel pressure screw with a 3/16" Allen wrench. Using Ultra Gray RTV silicone, coat the lower threads of the fuel pressure screw. Reinstall the fuel pressure screw. Location is referenced in (Image 70).

80) Remove the 1/8" black silicone vacuum line from the Aeromotive Fuel Pressure Regulator vacuum port to set the fuel pressure.

WARNING: Plug the open end of the 1/8" black silicone line to ensure there is no vacuum leak once the car is started to set the fuel pressure.

81) Perform a visual inspection ensuring that there are no leaks, and everything is tightened down.

NOTE: At this time, you will need to install a relay to supply adequate voltage to the fuel pump. We recommend the SPAL relay part# IX-FRH. Our installation guide starts on page 23. Once the relay is installed, refer to step 82 and complete your installation instructions.

82) (Inside car) Connect the gray fuel pump electrical plug that was disconnected in step 6.

83) With both doors open, connect the negative terminal on the battery. (10mm)

84) Turn the key to the ON position and start the car. With the car running, set the fuel pressure to **53 PSI** on the fuel pressure gauge. To set the pressure, turn the fuel pressure screw with a 3/16" Allen wrench. Clockwise will increase fuel pressure and counterclockwise will decrease fuel pressure. Once the optimal 53 PSI is achieved, reinstall the 9/16" set screw and tighten down.

NOTE: With the fuel pressure gauge registering fuel pressure, check for fuel leaks from and around the Aeromotive Fuel Pressure Regulator and all fuel lines and connections throughout the entire FAST-500E fuel system. If any fuel leaks are found, turn the ignition key to the OFF position, remove any spilled fuel and repair the leak before proceeding!

NOTE: Turn the ignition to the OFF position before proceeding to the next step.

FAST-500(E) INSTALLATION (PAGE 22)

- 85)** Reinstall the 1/8" black silicone vacuum line to the Aeromotive Fuel Pressure Regulator vacuum port. Zip tie both ends of the 1/8" black silicone line with the 2 small zip ties provided.
- 86)** Turn the ignition to the ON position and start the car. Visually check that the fuel pressure is registering **42 - 44 PSI** on the fuel pressure gauge.
- 87)** Reinstall the fuel line under tray the was removed in step 54.
- 88)** Reinstall the underbracing that was removed in step 55.
- 89)** Install the fuel tank access door 4 x 10mm nuts and rubber grommet. (Image 4)
- 90)** Install the sound insulating mat. (Image 3)
- 91)** Install the rear parcel shelf cover. (Image 2)
- 92)** Install the auxiliary compartment door. (Image 1)



*******INSTALLATION COMPLETE*******

Congratulations on the successful installation of:
"The FAST-500E (ETHANOL) Return Style Fuel System"
Please enjoy responsibly.



SPAL RELAY INSTALLATION GUIDE

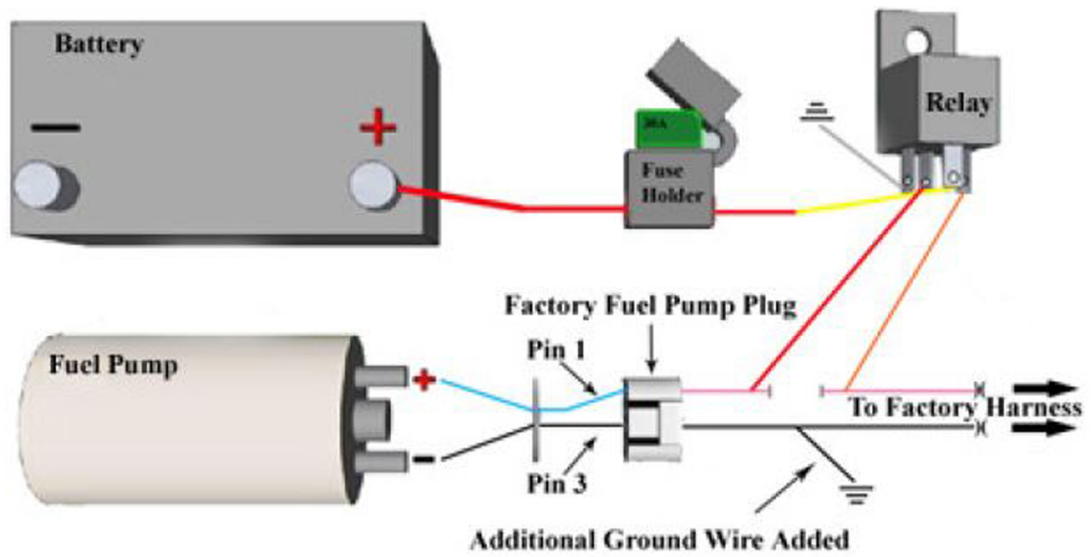
NOTE: If any fuel pump larger than a 255LPH is installed, a relay is required. For the SPAL Relay instructions please refer to this installation guide.

- 1)** Open both doors and disconnect the negative terminal on the battery. (10mm)
- 2)** Find a suitable location for the relay and mount. Often the passenger side kick panel area is a good location.
- 3)** Run main power wire (yellow) on the relay through a grommet in the firewall towards the positive battery terminal.
- 4)** Route the (gray) wire to a good grounding location. Use the supplied ring terminal to ground the connection to a bolt.
- 5)** Cut pin #1 (pink wire 1" from the factory fuel pump plug. Route the (red) wire from the relay and attach it to pin #1 (pink) wire at the plug end.
- 6)** Route the remaining (orange) wire to the other end of pin #1 (pink) wire and attach.
- 7)** Add additional ground wire to pin #3 (black) wire on the main fuel pump plug.

NOTE: Diagram showing exploded view is on the next page.

Quick reference key:

- Yellow: Battery +
- Gray: Ground
- Red: Fuel Pump Pin #1 (Pink)
- Orange: Fuel Pump Pin #1 (Pink)
- Additional ground wire added.



H) Install supplied 30A fuse.