



# INSTALLATION INSTRUCTIONS

## FUEL HANGER/DUAL PUMP ADD-ON/PLUMBING KIT

### 90-05 ACURA NSX

Document: 19-0348

Support: info@radiumauto.com

#### COLOR LEGEND FOR EACH STEP

**FUEL PUMP HANGER: 20-2790 / 20-2792**

**Follow YELLOW areas ONLY**

**DUAL PUMP ADD-ON: 20-2796 / 20-2797**

**Follow YELLOW and GREEN areas**

**FUEL HANGER PLUMBING KIT: 20-2795**

**Follow ORANGE areas**

#### CAUTION

Only a qualified technician following applicable safety procedures should perform the installation of this product. One must have knowledge in repair and modification of fuel systems and general vehicle modifications to install this product.

**Gasoline and other fuels are flammable and can be explosive.**

Only install in a well-ventilated location to minimize buildup of fuel vapors.

No sparks, open flames, smoking or other ignition sources are to be present. Draining and removal of all fuel from the fuel system is recommended.

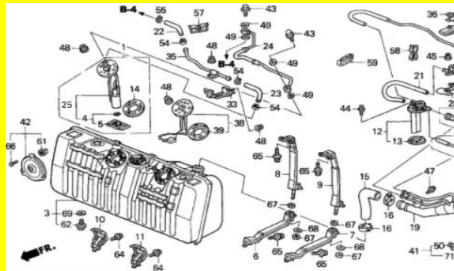
Proper eye and personal protection is required at all times during installation.







#### WARNING


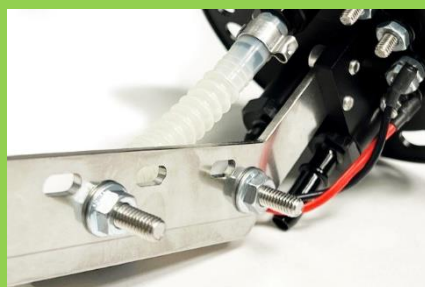


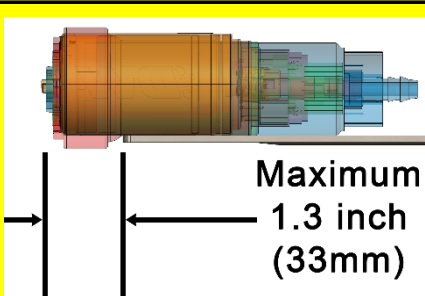
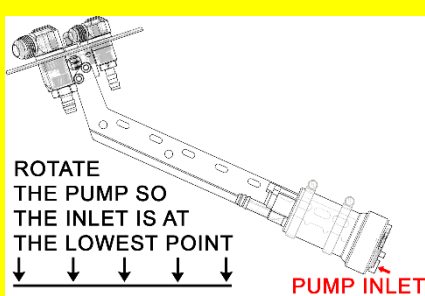
The fuel system is under pressure! Do not loosen any connections until relieving the fuel system pressure.

Consult a service manual for instructions on relieving fuel pressure safely. This product is designed for off-highway and racing use only.

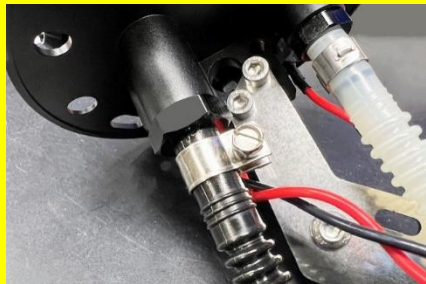
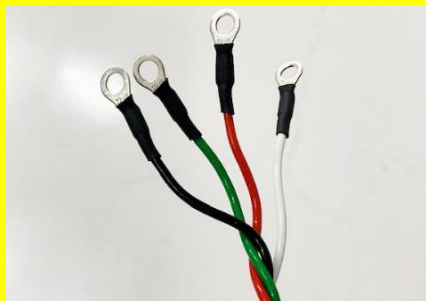
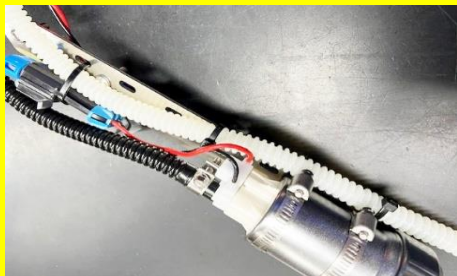



Fuel system components may not be legal for sale or use on emissions controlled motor vehicles. Consult local, state, and federal laws.



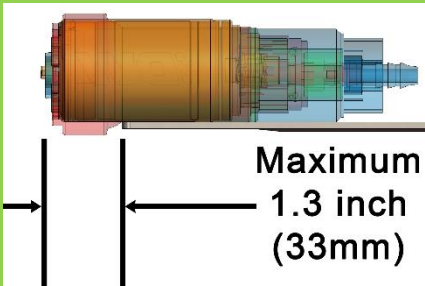
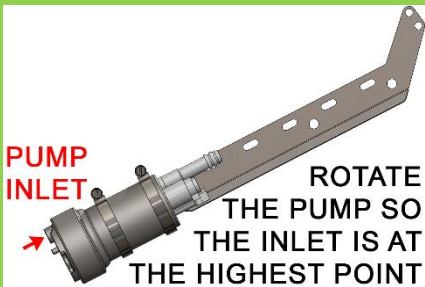
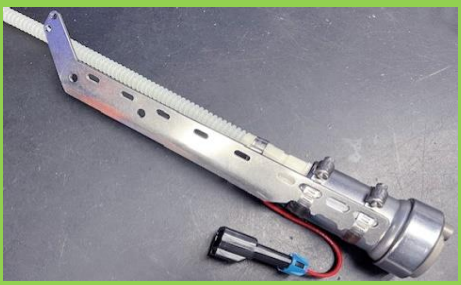

| STEP | TOOLS NEEDED       | INSTRUCTIONS                                                                                                                                                      | PHOTO                                                                                 |
|------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1    | Jack Stands        | Safely lift the vehicle.                                                                                                                                          |   |
|      | Fuel Jug           | Place a large container under the fuel tank.                                                                                                                      |                                                                                       |
|      | 17mm Socket Wrench |                                                                                                                                                                   |                                                                                       |
|      | Torque Wrench      | Remove the plug and drain all the fuel.                                                                                                                           |                                                                                       |
|      |                    | Inspect the crush washer. Replace if necessary. Reinstall and torque the drain plug to 36 lb-ft (50 Nm).                                                          |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
| 2    |                    | To relieve fuel pressure, start the car and allow the engine to stall.                                                                                            |  |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
| 3    | 10mm Socket Wrench | Remove the negative battery terminal.                                                                                                                             |  |
|      |                    | CAUTION: Disconnecting the battery may cancel fault memories of some control units. Consequently, always cross examine any fault memories prior to disconnecting. |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
| 4    | Honda FSM          | There is no fuel pump access cover on the NSX. Reference a factory service manual to disconnect and lower the fuel tank.                                          |  |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |
|      |                    |                                                                                                                                                                   |                                                                                       |

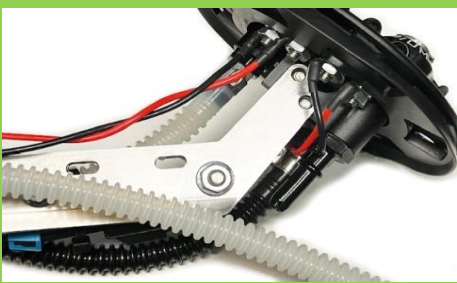
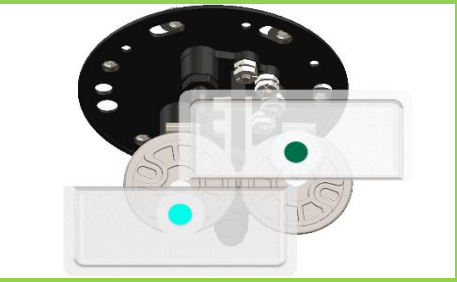
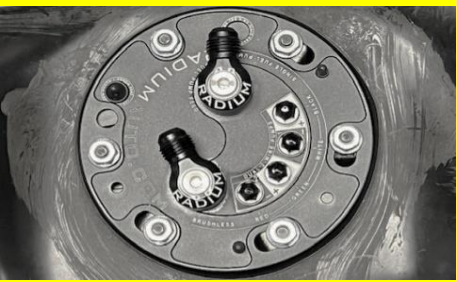



|    |                    |                                                                                                                                               |                                                                                       |
|----|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 5  |                    | Set the fuel tank down on a workbench.                                                                                                        |    |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
| 6  | Rag                | Squeeze the OEM spring clamp and slide it off the OEM return line barb. Carefully pull the rubber hose off.                                   |    |
|    | Pliers             |                                                                                                                                               |                                                                                       |
|    | 17mm Socket Wrench | Remove the banjo fuel feed fitting connection.                                                                                                |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | Catch and properly dispose any spilled fuel.                                                                                                  |                                                                                       |
| 7  | 10mm Socket Wrench | Remove the six M6x1mm perimeter nuts. These flanged nuts will NOT be reused.                                                                  |   |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | CAUTION: For safety, avoid using power tools near fuel.                                                                                       |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
| 8  | Rag                | To remove the OEM fuel pump assembly, first pull up. Next, pivot back and forth to get the fuel pump sock filter out of the tank.             |  |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | Have a rag handy for spills. Place the fuel pump assembly into a bucket and transport to a workbench.                                         |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
| 9  |                    | Carefully pull the large fuel tank gasket from the assembly. Inspect and replace if necessary.                                                |  |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | Genuine Honda P/Ns: 17574-SE0-000 or 17574-SV1-L01                                                                                            |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | No other parts from the OEM fuel pump assembly will be reused.                                                                                |                                                                                       |
| 10 | 1/4" Allen Wrench  | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                             |  |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | All Radium Engineering fuel pump hangers come ready for single pump installation. Follow the areas below in green ONLY if installing 2 pumps. |                                                                                       |
|    |                    |                                                                                                                                               |                                                                                       |
|    |                    | <b>For dual fuel pump applications, remove the 6AN ORB port plug in the second fuel pump port, as shown.</b>                                  |                                                                                       |

|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|----|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 11 | Oil Lubrication     | <b>20-2796 / 20-2797 INSTALLATION ONLY</b><br><br><b>For dual fuel pump applications</b> , install the included SAE quick connect adapter fitting. First, be sure to lubricate the O-ring.                                                                                                                                                                                                                                                                                                                                                   |    |
|    | 5/8" or 16mm Wrench |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
| 12 | 4mm Allen Wrench    | <b>20-2796 / 20-2797 INSTALLATION ONLY</b><br><br><b>For dual fuel pump applications</b> , install the two M6x1x20mm button head Allen head screws into the bracket in the direction shown.<br><br>NOTE: This is NOT required for single pump applications.                                                                                                                                                                                                                                                                                  |    |
|    | 10mm Socket         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
| 13 | 3/8" Wrench         | <b>20-2796 / 20-2797 INSTALLATION ONLY</b><br><br><b>For dual fuel pump applications</b> , find the wire connector in the kit. Connect the red wire to "PUMP2+" and the black wire to "PUMP2-".<br>NOTES:<br>1. As depicted, these wires must be strategically oriented to not interfere with other wires or the fuel tank gasket (when installed).<br>2. Carefully bend the ring terminals, as shown.<br>3. If the provided connector does not work for your pump, install the included ring terminals to the wires provided with the pump. |   |
|    | 3/8" Socket Wrench  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
| 14 | Oil Lubrication     | Lubricate the fuel pump outlet barb and the barb fitting under the fuel hat for "PUMP1". Place 2 EFI clamps over the provided convoluted tubing. Gently apply force until each end is fully seated. NOTE: Some barbs will require low heat to temporarily soften the tubing. In this case, be careful not to over-heat and melt the tubing.<br><br>As shown, secure the convoluted tubing to the pump. However, do not tighten the EFI clamp on the fuel hat barb fitting yet.                                                               |  |
|    | Heat Gun            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    | 9/32" Nut Driver    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
| 15 |                     | Place the fuel pump down at the end of the bracket allowing it to slightly overhang. When securing, do not exceed the dimensions shown.                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
| 16 | Screwdriver         | Use this picture to determine the proper side of the bracket the pump should be located.<br><br>Rotate the fuel pump into the proper position. The fuel pump inlet should be at the lowest point of the hanger, as shown.<br><br>Wrap 2 of the large worm drive clamps through the bracket slots, around the fuel pump, and tighten.                                                                                                                                                                                                         |  |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |
|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |






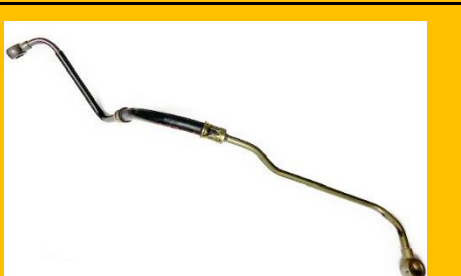




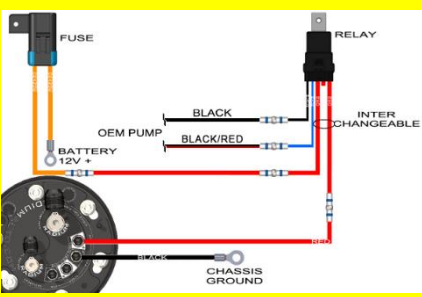



|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|----|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 17 | 9/32" Nut Driver | As shown, the upper EFI clamp can now be tightened.                                                                                                                                                                                                                                   |    |
|    |                  | NOTE: The height of the selected fuel pump will determine how much "play" the convoluted tubing has when installed.                                                                                                                                                                   |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
| 18 | Wire Stripper    | Notes if installing a brushless fuel pump:                                                                                                                                                                                                                                            |    |
|    | Wire Crimper     | 1. Because they use 3-4 wires, only 1 brushless pump can be used.                                                                                                                                                                                                                     |                                                                                       |
|    | Heat Gun         | 2. A flying lead pump harness (not included) is required. This is typically provided by the pump manufacturer.                                                                                                                                                                        |                                                                                       |
|    |                  | 3. Install the included ring terminals and heat shrink as shown.                                                                                                                                                                                                                      |                                                                                       |
|    |                  | 4. When securing to the fuel hat terminals, reference the "RED" "GREEN" "WHITE" "BLACK" fuel hat labeling for "BRUSHLESS SINGLE FUEL PUMP".                                                                                                                                           |                                                                                       |
|    |                  | There is a chance that your brushless fuel pump kit does not use these exact color wires. If so, this should be documented now to reference later.                                                                                                                                    |                                                                                       |
| 19 | Cutter           | Plug in the electrical connector for "PUMP1".                                                                                                                                                                                                                                         |   |
|    |                  | Using the provided cable zip ties, secure the convoluted return tubing to the pump bracket, as shown.                                                                                                                                                                                 |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
| 20 | Cutter           | Cut off the excessive convoluted return tubing, as shown.                                                                                                                                                                                                                             |  |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
| 21 |                  | Install the sock filter onto the fuel pump inlet.                                                                                                                                                                                                                                     |  |
|    |                  | NOTE: Large filter socks, which have a rigid internal "skeleton" insert are not recommended.                                                                                                                                                                                          |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
| 22 |                  | Before installing the fuel tank gasket to the underside of the fuel hat, note that there are 3 rubber indicators. For proper orientation, lineup the largest rubber indicator to the "NSX" label etched into the fuel hat. Push the rubber indicators through the fuel hat, as shown. |  |
|    |                  | Now check if there is sufficient clearance for the installed components under the fuel hat. If needed, readjust any components that could be an issue.                                                                                                                                |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                  |                                                                                                                                                                                                                                                                                       |                                                                                       |

|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|----|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 23 |                 | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                                                                                                     |    |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | <b>For dual fuel pump applications</b> that are installing a Walbro GSS342 pump (or equivalent), find the extension harness and plug it into the second pump, as shown.                                                                                                                                                                                               |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | NOTE: having a harness connector hanging off the fuel pump (like Walbro F90000267 274 285 295 pumps) makes fuel tank assembly installation easier in later steps.                                                                                                                                                                                                     |                                                                                       |
| 24 | Oil Lubrication | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                                                                                                     |    |
|    | Screwdriver     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | <b>For dual fuel pump applications</b> , assemble the provided convoluted tubing to the fuel pump outlet barb and to the female SAE quick connect fitting.                                                                                                                                                                                                            |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | Secure each end using the provided EFI clamps.                                                                                                                                                                                                                                                                                                                        |                                                                                       |
| 25 |                 | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                                                                                                     |   |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | <b>For dual fuel pump applications</b> , lay the second pump onto the provided stainless steel "PUMP2" bracket. When securing, do not exceed the dimensions shown.                                                                                                                                                                                                    |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
| 26 |                 | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                                                                                                     |  |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | <b>For dual fuel pump applications</b> , the orientation of "PUMP2" will be 180 degrees different than "PUMP1". This may seem counterintuitive, but it is based on the irregular internal contours of the NSX fuel tank. This will effectively get the fuel pump inlet at the lowest point in the tank without interference providing the best starvation protection. |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
| 27 | Screwdriver     | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                                                                                                     |  |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | <b>For dual fuel pump applications</b> , use this picture to determine the proper side of the bracket the pump should be located.                                                                                                                                                                                                                                     |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | Wrap 2 of the large worm-drive clamps around "PUMP2". Orient the fuel pump within the bracket exactly as shown. Tighten the worm-drive clamps.                                                                                                                                                                                                                        |                                                                                       |
| 28 |                 | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                                                                                                     |  |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | <b>For dual fuel pump applications</b> , install the sock filter onto the fuel pump inlet.                                                                                                                                                                                                                                                                            |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|    |                 | NOTE: Large filter socks, which have a rigid internal "skeleton" are not recommended.                                                                                                                                                                                                                                                                                 |                                                                                       |


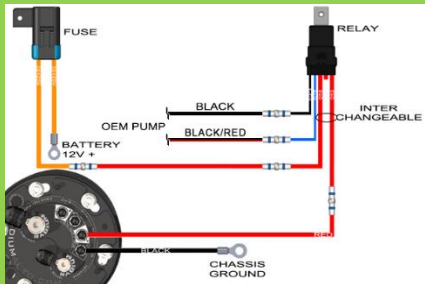




|    |                 |                                                                                                                       |                                                                                       |
|----|-----------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 29 | 10mm Socket     | <b>20-2796 / 20-2797 INSTALLATION ONLY</b>                                                                            |    |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
| 30 | Cutter          | <b>20-2796 / 20-2797 INSTALLATION ONLY</b>                                                                            |    |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
| 31 | 10mm Socket     | Lower the single pump assembly into the fuel tank.                                                                    |   |
|    | Torque Wrench   | As shown, lineup the mounting holes to the 6 fuel tank studs. NOTE: Because of hole spacing, it can only go on 1-way. |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
| 32 |                 | <b>20-2796 / 20-2797 INSTALLATION ONLY</b>                                                                            |  |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
| 33 |                 | <b>20-2796 / 20-2797 INSTALLATION ONLY</b>                                                                            |  |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
| 34 | Oil Lubrication | <b>20-2796 / 20-2797 INSTALLATION ONLY</b>                                                                            |  |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |
|    |                 |                                                                                                                       |                                                                                       |




|    |                      |                                                                                                                                                                                                              |                                                                                       |
|----|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 35 |                      | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                            |    |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | <b>For dual fuel pump applications</b> , carefully push the slack from the convoluted tubing and the fuel pump wiring connector inside the fuel tank, as shown.                                              |                                                                                       |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | Pull both assemblies slightly out of the tank just enough without major interference. Hold them in place.                                                                                                    |                                                                                       |
| 36 | 10mm Socket          | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                            |    |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | <b>For dual fuel pump applications</b> , lineup the pump 2 assembly bracket holes to the 2 studs found on the pump 1 assembly. Secure these assemblies together using 2 of the provided M6x1mm flanged nuts. |                                                                                       |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | NOTE: Because these nuts are steel, a magnet can retrieve them if accidentally dropped.                                                                                                                      |                                                                                       |
| 37 |                      | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                            |   |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | <b>For dual fuel pump applications</b> , drop the entire assembly down into the fuel tank making sure both pumps reside inside the factory collector bowl.                                                   |                                                                                       |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | NOTE: This cutaway picture shows how the assembly would look if it were visible.                                                                                                                             |                                                                                       |
| 38 | 10mm Socket          | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                            |  |
|    | Torque Wrench        |                                                                                                                                                                                                              |                                                                                       |
|    |                      | <b>For dual fuel pump applications</b> , lineup the 6 mounting holes to the 6 fuel tank studs. NOTE: Because of hole spacing, it can only go on 1-way.                                                       |                                                                                       |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | Secure the pump assembly to the fuel tank studs using the provided M6x1mm flanged nuts. Torque to 48 lb-in.                                                                                                  |                                                                                       |
| 39 | 11/16" Wrench        | <b><u>20-2795 INSTALLATION ONLY</u></b>                                                                                                                                                                      |  |
|    | Pliers               |                                                                                                                                                                                                              |                                                                                       |
|    |                      | On the return port, a 6AN male adapter fitting is preinstalled for aftermarket fuel lines.                                                                                                                   |                                                                                       |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | For compatibility with the OEM return hose, install the included barbed fitting, as shown. Next, simply push the OEM return hose onto the new barb fitting and secure using the OEM spring clamp.            |                                                                                       |
| 40 | 11/16" (17mm) Socket | <b><u>20-2795 INSTALLATION ONLY</u></b>                                                                                                                                                                      |  |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | The provided hose, adapter fittings, and hose ends will connect the fuel pump outlet to the fuel filter inlet.                                                                                               |                                                                                       |
|    |                      |                                                                                                                                                                                                              |                                                                                       |
|    |                      | Remove the OEM fuel hose (shown) from the fuel filter. This will NOT be reused.                                                                                                                              |                                                                                       |

|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|----|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 41 | Oil Lubrication | <b>20-2795 INSTALLATION ONLY</b>                                                                                                                                                                                                                                                                 |    |
|    |                 | Lubricate the barbs on one of the provided 90 degree PushLok hose ends. Next, fully seat the fuel hose to the PushLok hose end, as shown.                                                                                                                                                        |                                                                                       |
|    |                 | NOTE: Hose clamps are NOT required for PushLok hose ends.                                                                                                                                                                                                                                        |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
| 42 | 11/16" Wrench   | <b>20-2795 INSTALLATION ONLY</b>                                                                                                                                                                                                                                                                 |    |
|    | Cutter          | Install the hose to the fuel pump feed port fitting, as shown. NOTE: This hose will be cut to length and populated with another PushLok hose end after the fuel tank is reinstalled.                                                                                                             |                                                                                       |
|    |                 | Use the cable zip tie to secure the fuel feed hose in place.                                                                                                                                                                                                                                     |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
| 43 |                 | <b>WARNING:</b> The OEM fuel pump wiring is designed for <15A. Depending on fuel pressure and the fuel pump type used, the factory Honda wiring will likely be vulnerable.                                                                                                                       |   |
|    |                 | Radium Engineering recommends using an independent relay and fuse with larger gauge (AWG) wire to get the most out of the pump. This wiring diagram depicted is using RADIUM P/N: 17-0031 DIY FUEL PUMP WIRING KIT (not included). Wiring a relay and fuse will not be discussed in this manual. |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
| 44 | Cutter          | <b>Low Current Single Fuel Pump Applications ONLY</b>                                                                                                                                                                                                                                            |  |
|    | Wire Stripper   | Cut off the OEM fuel pump connector keeping as much slack as possible. Strip the ends of the wires.                                                                                                                                                                                              |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
| 45 | Cutter          | <b>Low Current Single Fuel Pump Applications ONLY</b>                                                                                                                                                                                                                                            |  |
|    |                 | Find the small heat shrink provided and cut it in half.                                                                                                                                                                                                                                          |                                                                                       |
|    |                 | Slide each small heat shrink tube over each OEM wire, as shown.                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
| 46 | Wire Crimper    | <b>Low Current Single Fuel Pump Applications ONLY</b>                                                                                                                                                                                                                                            |  |
|    | Heat Gun        | Crimp the included small ring terminals on the pump power and ground wires. Apply heat to shrink the tubing.                                                                                                                                                                                     |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |
|    |                 |                                                                                                                                                                                                                                                                                                  |                                                                                       |



|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|----|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 47 | 8mm Socket         | <b>Low Current Single Fuel Pump Applications ONLY</b>                                                                                                                                                                                                                     |    |
|    |                    | Secure the ring terminals with the included acorn nuts.                                                                                                                                                                                                                   |                                                                                       |
|    |                    | OEM Fuel Pump (Red/Black Wire) ----> Pump1 + terminal                                                                                                                                                                                                                     |                                                                                       |
|    |                    | OEM Fuel Pump (Black Wire) -----> Pump1 - terminal                                                                                                                                                                                                                        |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
| 48 |                    | <b><u>20-2796 / 20-2797 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                         |    |
|    |                    | For dual pump applications, an independent relay and fuse MUST be used. This diagram may apply unless the second pump will be staged by an adjustable pressure switch (Radium P/N: 20-0236) or an ECU trigger. Neither scenarios are detailed in this instruction manual. |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
| 49 |                    | Reinstall the fuel tank in reverse order.                                                                                                                                                                                                                                 |   |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
| 50 | 6mm Allen Wrench   | <b><u>20-2795 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                   |  |
|    | Torque Wrench      | Install the M12x1.25mm to 6AN adapter fitting to the OEM fuel filter inlet using the crush washer. Torque: 20lbft (28Nm).                                                                                                                                                 |                                                                                       |
|    |                    | Next, loosely thread on the other 90 degree PushLok hose end temporarily to this fitting.                                                                                                                                                                                 |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
| 51 | Hose Cutter        | <b><u>20-2795 INSTALLATION ONLY</u></b>                                                                                                                                                                                                                                   |  |
|    | Oil Lubrication    | From the fuel hanger, route the feed hose to the PushLok hose end. Cut the hose to length. Remove the hose end.                                                                                                                                                           |                                                                                       |
|    | 11/16" Wrench      | Lubricate the barbs on the hose end. Fully seat the fuel hose to the hose end. NOTE: Hose clamps are NOT required for PushLok hose ends.                                                                                                                                  |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    | Secure the new fuel feed hose to the fuel filter inlet.                                                                                                                                                                                                                   |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
| 52 | 10mm Socket Wrench | Reconnect the battery.                                                                                                                                                                                                                                                    |  |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |
|    |                    |                                                                                                                                                                                                                                                                           |                                                                                       |

|    |  |                                                                                                                                                                                                                                                                    |                                                                                     |
|----|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 53 |  | Turn the key to the ON position. Confirm the new fuel pump(s) prime for a few seconds and check for leaks. If no leaks are found, start the vehicle. The engine may run rough for a few seconds until all the air is bled from the fuel system. Recheck for leaks. |  |
|    |  |                                                                                                                                                                                                                                                                    |                                                                                     |
|    |  |                                                                                                                                                                                                                                                                    |                                                                                     |
|    |  |                                                                                                                                                                                                                                                                    |                                                                                     |
|    |  | <b>INSTALLATION COMPLETE</b>                                                                                                                                                                                                                                       |                                                                                     |
|    |  |                                                                                                                                                                                                                                                                    |                                                                                     |
|    |  | <i>NOTE: There will be unused leftover parts from the kit.</i>                                                                                                                                                                                                     |                                                                                     |
|    |  |                                                                                                                                                                                                                                                                    |                                                                                     |