

9-xxx-7020

DeatschWerks 1989-1993 Nissan Silvia/240SX/180SX Fuel Pump Hanger Installation Guide



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Included Parts:

- Aluminum and Stainless S13 Hanger
- Deatschwerks Fuel Pump*
- 10" Pump Electrical Connector*
- Rubber Fuel Hose 4"x 5/16"
- Convuluted Tube 8"x 5/16"
- Fuel Sock Pump Pre-Filter
- 5/16" Pinch Hose Clamp
- 5/16" Adjustable Hose Clamps (x2)
- 12-10awg #10 Ring Terminals (x3)
- 14-16awg #10 Ring Terminals (x4)
- 18-22awg #10 Ring Terminals (x2)
- 6AN to 5/16" Hose Barb Bulkhead Fittings (x2)
- 6AN ORB O-Rings (x2)
- M5 Stainless Electrical Terminals (x4)
- 6AN to 5/16" Hose Barb Adapters (x2)
- 2.25" Adjustable Hose Clamp
- 8" Zip-Tie (x2)

OEM Parts Reused:

- Fuel Level Sensor and Wire
- Low Fuel Light Sensor and Wire
- Tank Mounting Gasket

**9-000-7020 Part number does not include pump or pump install kit*



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PLEASE READ: This guide is intended to aid in the installation of our products. It is recommended that factory manuals or instructions are followed to remove the fuel pump assembly from the vehicle. Instructions in this guide are generic and are intended to aid in the installation of DW X1 pump hanger. The factory manual should supersede any contradiction.

Important Notes: The DW Nissan S13 X1 Hanger is designed to use standard DW100, 200, 300 or 400 fuel pumps. Modifications may be required to use other manufacture fuel pumps. The DW X1 hanger is designed to reuse OEM wiring and OEM fuel lines for an OE replacement fitment. If using higher flow fuel pumps, it may be necessary to upgrade the OE wiring and fuel lines to accommodate the added flow and amperage.

Below is a picture of some suggested tools that will make the installation process easier.

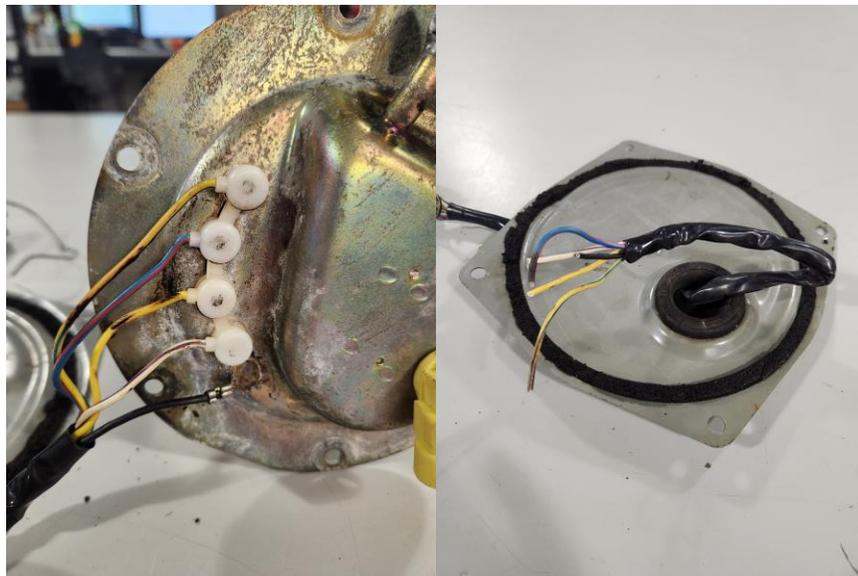


Disassembly of the OE Hanger

1 – You will be reusing the OEM fuel level sensor and the low fuel light sensor from your OE hanger. Remove the OE Philips screw that retains the level sensor and slide it off the OE bracket, the screw will not be reused if you damage it on removal. The low fuel level sensor may be clipped in or soldered in depending on the year of your hanger. If the sensor is soldered in, use a Dremel or file to cut the solder along the edge of the bracket, or unclip the sensor if able. Cut the wiring for each of these sensors at the tophat, you will need the maximum length wiring possible.

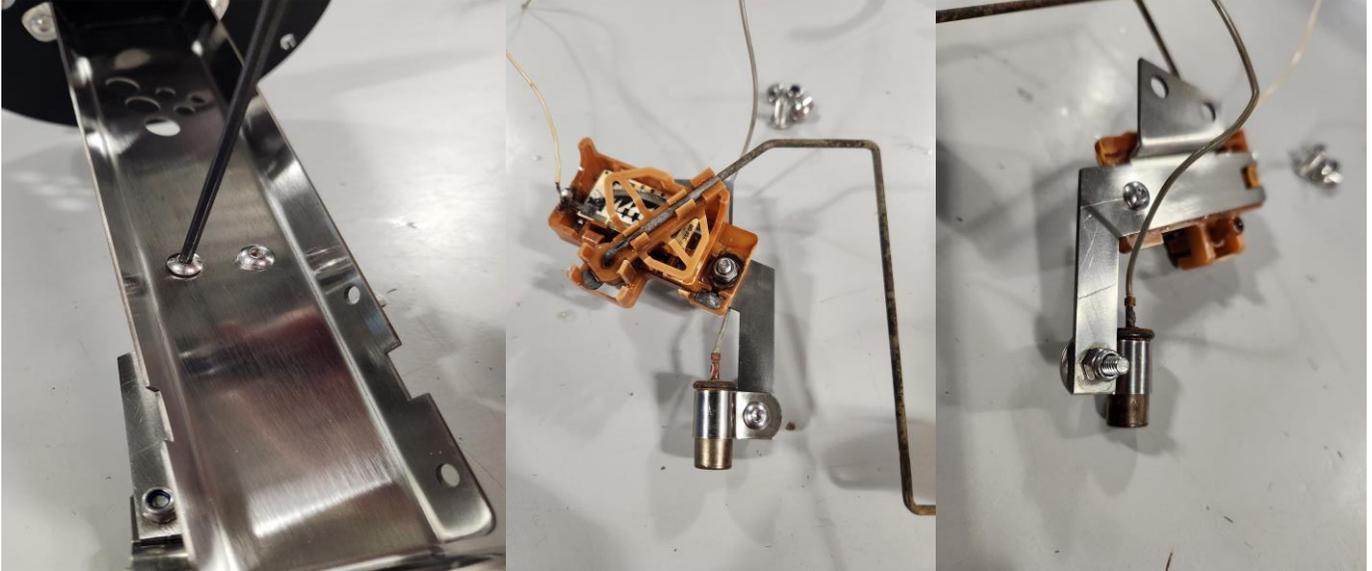


2 – You will also be reusing the OEM wiring harness for the level sensor, low fuel light and ground, as well as the fuel pump (if low amperage). Take a picture for future reference of the color and placement of the OEM wiring, then remove the OE wiring. The wiring color changes depending on year make and model.

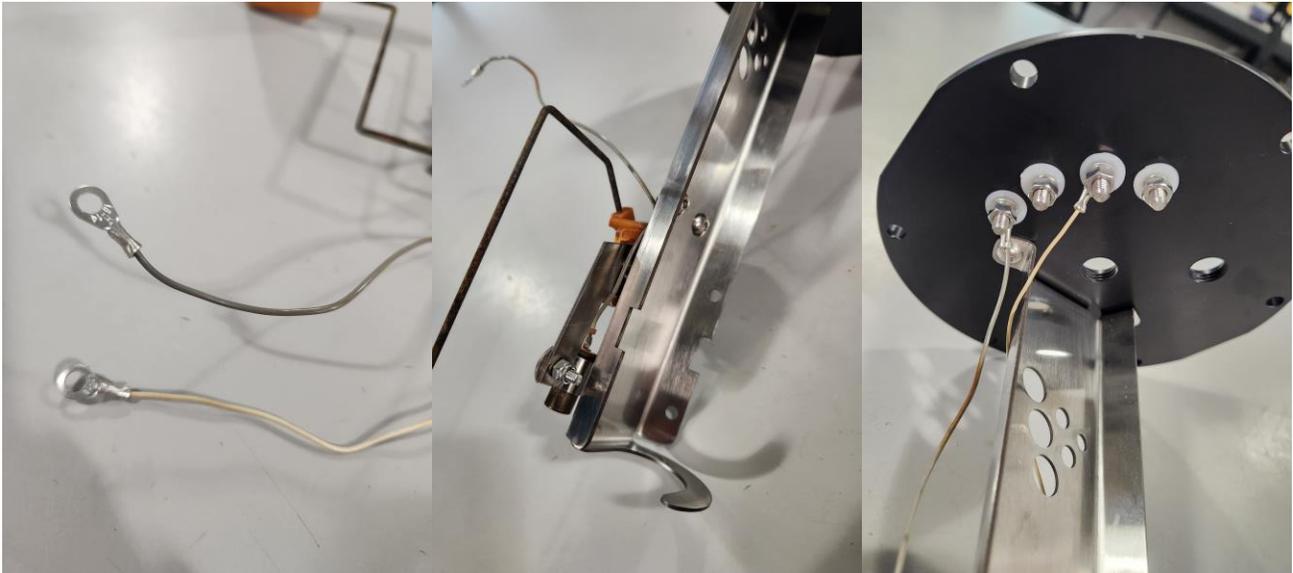


Assembly of the DW X1 Hanger

3 – Remove the fuel level sensor bracket from the DW X1 Hanger. Install the fuel level sensor and low fuel light sensor into their respective brackets, tighten the M5 screws to hold the level sensor and low-level light sensor in place. The level sensor installs just like OE by slipping into the groove then being retained with the M5 bolt and nyloc nut, the nut must be on the outside of the sensor for clearance to the main hanger bracket (see photo). The low-level light sensor is held by the stainless loop clamp.



4 –Strip the ends of both wires carefully and crimp on the supplied 18-22awg ring terminals. Bolt the fuel level sensor assembly back to the main hanger bracket, it may be necessary to leave some bolts loose and re-tighten once everything is assembled. You can now attach the ring terminals to their respective terminals. The small metal canister wire should go to “Light+” and the level float sensor goes to “Level+”, both sensors are grounded through the body of the hanger assembly.



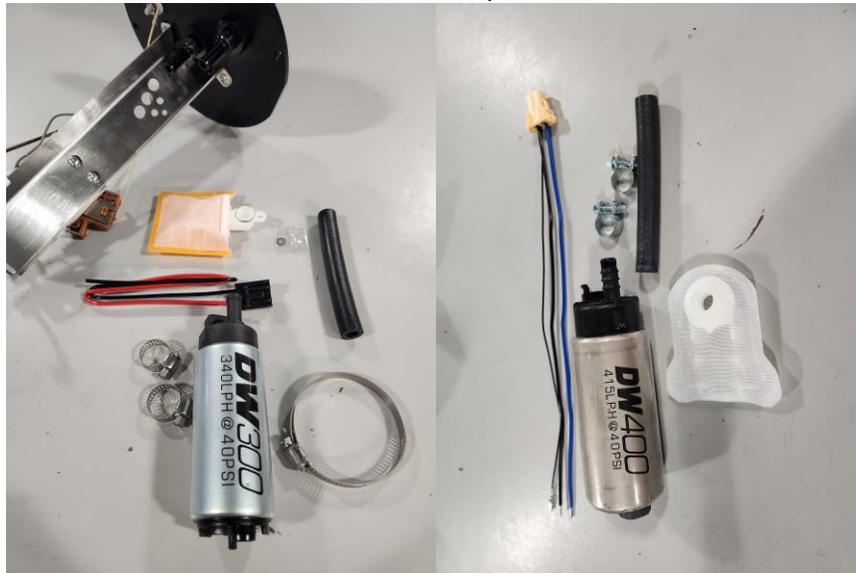
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5 – Locate the two 90-degree bulkhead fittings (PN# 6-02-0712) and the 6AN O-rings, remove the nuts and install the O-rings into the groove as show below. Lubricate the O-rings and thread the fittings into the top hat of the X1 hanger, you will need to install the return fitting first, and angle it to clear the feed fitting, once both O-rings are hidden and sealed, angle the fittings as needed. Install and tighten the bulkhead nuts on the bottom side of the hanger to keep the fittings aligned.



Fuel Pump Install

6 – Locate your DeatschWerks fuel pump and install kit. If you are using a DW100, 200 or 300 fuel pump you will need the fuel pump, wiring harness, and filter sock from the install kit. If you are using a DW400 you will need the pump, and wiring harness, you can set aside the remaining parts, the X1 Hanger install kit includes the correct DW400 filter sock. You will need all 3 hose clamps, and the rubber hose from the X1 install kit also.

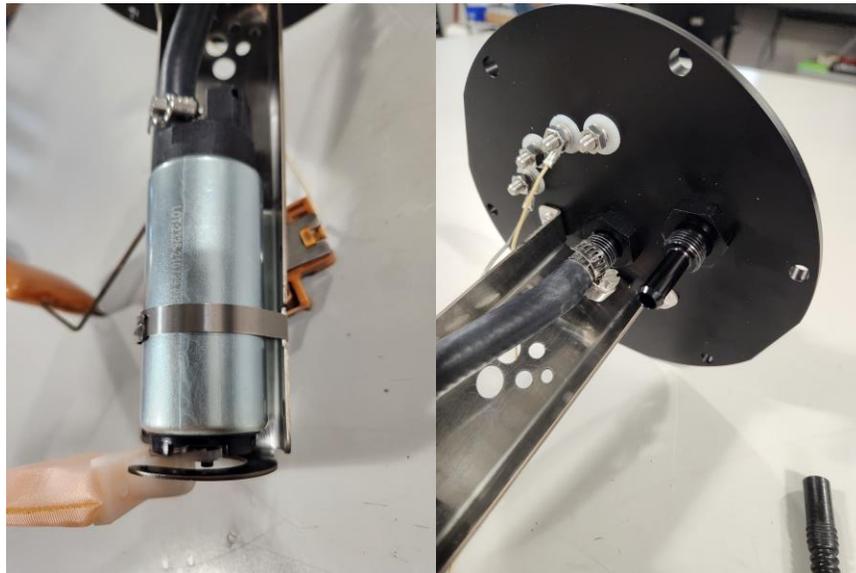


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7 – Install the filter sock, hose and clamps into the fuel pump. The DW400 filter sock is a press fit and requires some force to install. The rubber hose is also tight on the barbs of the DW400. Secure the hoses with the supplied clamps in the X1 Hanger install kit.

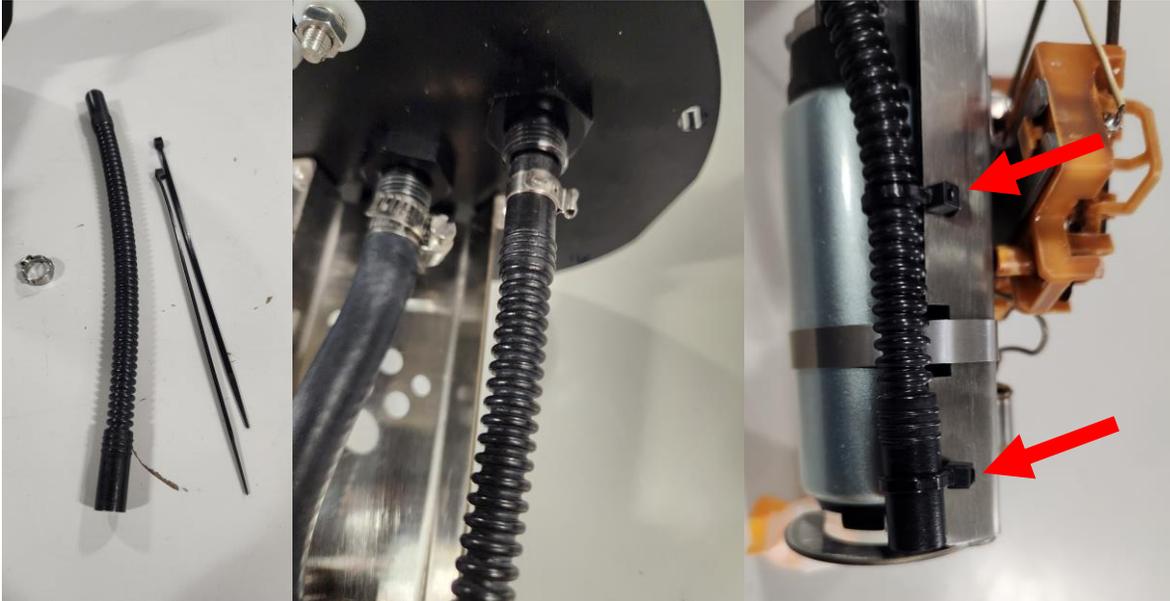


8 – Install the pumps into the hanger assembly, the filter sock will point the same direction as the fuel level float arm, this is important for fitment into the fuel tank. The pump is secured to the hanger assembly with the large 2-1/4" hose clamp, there are notches in the hanger to locate the clamp. Tighten the larger and small hose clamps.



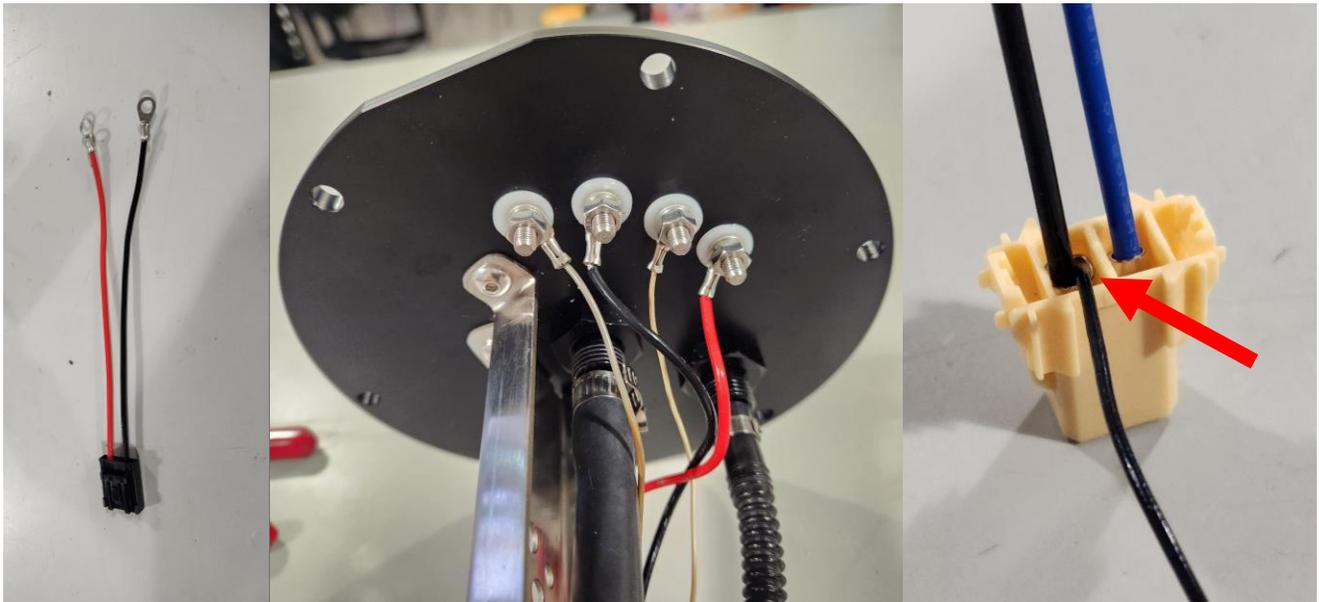
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9 – Using the supplied 5/16" convoluted tube and pinch clamp, install onto the return hose barb. Use the 2 included zip ties to secure the hose to the hanger next to the fuel pump.



Pump and Hanger Wiring

10 – Shorten the included pump wiring pigtail to approximately 6" inches (150mm). Strip and crimp on the supplied 14-16awg ring terminals. Attach the Red or Blue wire to the "Pump+" terminal and the Black wire to the "Pump-" terminal. The DW400 pigtail comes with a smaller black wire, this may be removed.



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11 – If you are using the OEM rubber fuel lines you can install the supplied adapters (PN# 6-02-0520) onto the 6AN outlets. You will need to identify which fuel line is feed and return as their positions may have moved during install.



12 – For wiring please refer to your OEM wiring, these terminals are in the same order as factory (Use the ground for reference). Depending on your application and year the wiring colors may change. If you are using a DW400 or DW300 with high boost pressures, you should upgrade the wiring with a hardwire kit (PN# FPHWK or FPHWK-10-HD). Use the 10-12awg terminals for the Pump+, Pump- and Ground terminals to handle the added load of a higher flowing pump. Use the remaining 14-16awg terminals for the Fuel Level and Fuel Light terminals.



For additional technical support please contact us at: TechSupport@Deatschwerks.com or 405.233.3991