

# INSTALLATION INSTRUCTIONS FUEL RAILS AND PLUMBING KIT

NISSAN INFINITI VK56DE

PNs: 20-1056 / 20-1056-PK

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**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.

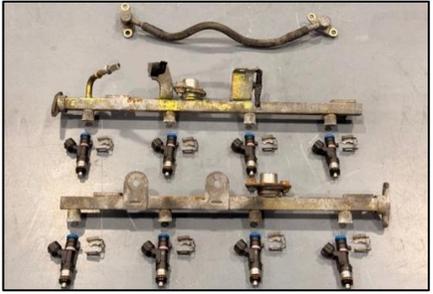
**Gasoline and other fuels are flammable and can be explosive.**

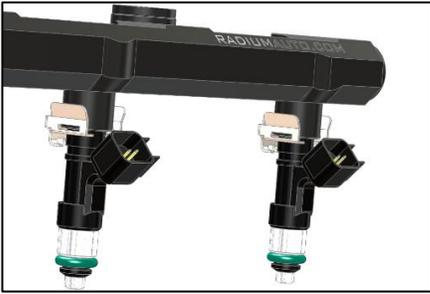
Only install in a well-ventilated location to minimize buildup of fuel vapors. No sparks, open flames, smoking or other ignition sources are to be present. Draining and removal of all fuel from the fuel system is recommended. Proper eye and personal protection is required at all times during installation.

**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		NOTES: a. These rails are compatible with many different models and engines. b. Without the 20-1056-PK Plumbing Kit, the 20-1056 Fuel Rails are not a complete bolt-in (plug and play) affair. c. In depth disassembly instructions are NOT covered. d. A factory Workshop Manual is recommended.	<p style="text-align: center;"><b>MANUALE OFFICINA WORKSHOP MANUAL</b></p>
2		Near the battery in the engine bay, temporarily remove the fuel pump fuse. Nissan Titan fuse box shown.	<p style="text-align: center;"><b>FUEL PUMP FUSE LOCATION</b></p>
		Next, start the vehicle and allow the engine to stall. Reinstall the fuse and remove the key from the ignition switch.	
3	10mm Socket	To disconnect the battery, remove the negative terminal. <b>CAUTION:</b> This may cancel the fault memories of some control units.	
		Getting to the point where the fuel rails can be removed can be tedious. Reference the factory service manual for details.	
		To unplug the 8 fuel injector connectors, press the locking thumb tabs and pull to release.	
4		NOTE: Because the metal tube on the fuel rail feed has an extra bead (shown), the factory fuel line can be difficult to remove.	

5	Cutters	Find the plastic SAE quick connect tool in the kit. As shown, cut the tool in half.	
6	Rag	<p>Push the feed line further onto the metal tube and hold it in place. As shown, fully insert each piece of the disconnect tool around the metal tube and into the female SAE quick connect hose end. Now pull the feed hose to release the connection.</p> <p>Be prepared as fuel will spill from this connection.</p>	
	12mm Socket		
7	10mm Socket	<p>At the front of the fuel rails, remove the 4 screws to separate the crossover hose. Be prepared as fuel will spill.</p> <p>Remove the 4 fuel rail mounting screws. These will NOT be reused. Gently pry both rails upwards to release the lower injector O-rings. Place the fuel rails on a clean workbench.</p> <p>Pry the metal clips off the top of injectors. These will be reused. To release the injectors from the rails, carefully pull away.</p>	
	Rag		
8	10mm Socket	<p><b>20-1056-PK FUEL RAIL PLUMBING KIT ONLY</b></p> <p>Remove the 4 screws that secure the OEM fuel pulse dampers to the fuel rails. Gently pry upwards to release the lower O-rings. Only the fuel pulse dampers and the corresponding O-rings will be reused.</p>	
9	Lubrication	<p><b>20-1056-PK FUEL RAIL PLUMBING KIT ONLY</b></p> <p>Lubricate the fuel pulse damper O-rings.</p> <p>Next, insert and fully seat the OEM fuel pulse dampers into the adapters. Secure the included snap-rings.</p>	
	Snap-Ring Pliers		
10	Oil Lubrication	<p>If just the fuel rails were purchased, adapter fittings will need to be sourced separately. All 10 ports are 3/4"-16 threaded for 8AN ORB fittings. For a plethora of options, go to <a href="http://radiumauto.com">radiumauto.com</a> and click on the 8AN ORB fittings product page.</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>When choosing the adapters fittings for the specific vehicle, reference the following steps for fuel plumbing ideas.</li> <li>Be sure to lubricate the O-rings (shown) prior to installation.</li> </ol>	

11	Oil Lubrication	<b>20-1056-PK FUEL RAIL PLUMBING KIT ONLY</b>	 
	1-1/4" Wrench		
	7/8" Wrench		
	4mm Allen Wrench		
	5/16" Allen Wrench		
		<p>Install the two fuel pulse damper adapters into the center ports.</p> <p>Install the two 8AN male fittings in the front ports.</p> <p>Install the banjo fitting into the upper front LH fuel rail port.</p> <p>Install the 8AN ORB plugs into all remaining ports.</p>	
12	Oil Lubrication	<p>Insert the OEM metal clips into the top groove of the fuel injectors. Be sure the clips are oriented in the direction depicted.</p> <p>For ease of installation, lubricate the injector O-rings, intake manifold injector ports, and the fuel rail injector bores. Fully insert the injectors into the fuel rail bores in the orientation shown.</p> <p>Confirm the OEM metal injector clips locked into place.</p>	
13	5mm Allen Wrench	<p>Push the fuel rails downward to fully seat the injectors into the intake manifold ports.</p> <p>Once everything is positioned correctly, secure each fuel rail using the provided M8x1.25mm flat socket head screws, as shown.</p>	
14		<p>If just the fuel rails were purchased, plumb the fuel rails to the vehicle.</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>To reuse the OEM fuel feed line, 20-1000-08313 is shown (left).</li> <li>To reuse the OEM fuel pulse dampers, 20-1459 is shown (right).</li> </ol>	
15	7/8" Wrench	<b>20-1056-PK FUEL RAIL PLUMBING KIT ONLY</b>	
		<p>Route the 8AN PTFE hose underneath the throttle body. Secure to the front fuel rail ports.</p>	
16	10mm Wrench	<p>Reinstall everything in reverse order. Reconnect the battery.</p> <p>Cycle the keyed ignition switch ON/OFF a few times (without starting the engine). This allows the fuel pump to prime the system. Check for leaks.</p> <p>Start the engine and confirm again while the engine is running.</p> <p><b>INSTALLATION COMPLETE</b></p>	