



INSTALLATION INSTRUCTIONS

PORT INJECTION KIT PLUMBING

LAMBORGHINI GALLARDO LP

Document: 19-0335

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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		The terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH" areas of the vehicle.	<div>FRONT</div> <div><div>LH</div>SIDE<div>RH</div>SIDE</div> <div>REAR</div>
2	10mm Socket Wrench	Disconnect the negative battery terminal in the front trunk.	
		CAUTION: Disconnecting the battery may cancel fault memories of some control units. Consequently, before disconnecting the battery, always cross examine any fault memories.	
3	Oil Lubrication	Lubricate the O-rings found on the three 6AN ORB to 6AN male fittings.	
	3/4" Wrench	Install the three fittings to the FPR (fuel pressure regulator) in the threaded ports shown.	
4	Oil Lubrication	Lubricate the O-ring found on the 6AN ORB plug. Install the plug to the FPR in the threaded port shown.	
	1/4" Allen Wrench		

5	Oil Lubrication	Lubricate the O-ring found on one of the 10AN ORB to 6AN ORB fittings. Install to the fuel filter inlet cap, as shown.	
	1" Wrench		
6	Oil Lubrication	Find the other 10AN ORB to 6AN male fitting and the loose O-ring provided in the kit.	
		Install the O-ring to the 6AN male side of the fitting, as shown.	
7	Oil Lubrication	Lubricate the O-ring found on the 8AN ORB plug.	
	5/16" Allen Wrench	Find the 4 port manifold provided in the kit. Note that this part is symmetrical.	
	7/8" Wrench		
		Install the plug and the fitting from the previous step to the 4-port manifold as shown.	
8	Oil Lubrication	Find the 8AN ORB to 6AN ORB swivel fitting and the 8AN ORB to 1/8" NPT female fitting provided in the kit. Lubricate the O-rings.	
	8mm Allen Wrench		
	7/8" Wrench	Install the fittings to the 4-port manifold as shown.	
9	Thread Sealing Paste	Apply a sealant on the 1/8" NPT threads found on the fuel pressure gauge.	
10	7/16" Wrench	Hand tighten the fuel pressure gauge to the port shown.	
		Next, add 1.5 to 3 turns with a wrench.	

11	7/8" Wrench	Secure the FPR to the 4 port manifold, as shown.	
12	Oil Lubrication	Lubricate the 10AN ORB O-ring on the 4 port manifold.	
	1-1/4" Wrench	Secure the fuel filter to the 4 port manifold, as shown.	
13	4mm Allen Wrench	As shown, secure the fuel filter mount base to the mounting bracket using the 3 supplied bolts and locking nuts.	
	8mm Wrench		
14	4mm Allen Wrench	Secure the FPR to the mounting bracket using the 2 supplied bolts and flange nuts, as shown.	
	10mm Wrench		
15	4mm Allen Wrench	As shown, secure the billet fuel filter clamp to the fuel filter mount base.	
16	T30 Torx	Open the rear deck lid.	
	Flathead Screwdriver	Remove the plastic LH vanity cover.	
		Remove the three M6x1mm bolts from the frame rail.	
		NOTE: The 3 OEM threaded holes depicted will be used for mounting the Radium Engineering assembly.	

17	T30 Torx	Lineup the assembly to the 3 threaded holes and secure using the OEM bolts.	
18	Oil Lubrication	<p>NOTE: Port injection fuel rails are not provided in this kit. Radium Engineering recommends P/N: 20-0865 PORT INJECTION KIT.</p> <p>Install the provided 8AN ORB plugs to the front fuel rail ports (shown right side) and the 8AN ORB to 6AN male fittings to the rear fuel rail ports (shown left side). Be sure to lubricate the O-rings first.</p>	
	7/8" Wrench		
	5/16" Allen Wrench		
19	11/16" Wrench	<p>NOTE: A port injection specific fuel pump is not provided in this kit. Radium Engineering recommends P/N: 20-086X-XX FUEL HANGER SURGE TANK.</p> <p>Find the provided PTFE hose with a 45 degree and a 90 degree hose end that is 30" (763mm) long. NOTE: There are 2 of these PTFE hoses in the kit. Install the 90 degree hose end to the fuel pump outlet (not included). As shown, route and secure the 45 degree hose end to the fuel filter inlet.</p>	
20	11/16" Wrench	<p>NOTE: A port injection specific fuel pump is not provided in this kit. Radium Engineering recommends P/N: 20-086X-XX FUEL HANGER SURGE TANK.</p> <p>Find the provided PTFE hose with a straight hose end and a 90 degree hose end that is 41" (1041mm) long. Install the 90 degree hose end to the FPR return inlet on the fuel hat (not included). As shown, route and secure the straight hose end to the lower return port on the FPR.</p>	
21	11/16" Wrench	<p>Find the last 2 PTFE hoses provided in the kit. They have identical hose end configurations. However, these PTFE hoses are different lengths. As shown, attach the 45 degree hose ends to the FPR ports.</p> <p>NOTE: For optimal hose routing fitment, install the short hose from the LH fuel rail to the RH (inboard) FPR port. Install the long hose from the RH fuel rail to the LH (outboard) FPR port.</p>	
22	11/16" Wrench	<p>Allow the PTFE hoses to swing around the outer LH side of the engine bay. This hose routing permits engine movement and can also prevent interference with other common upgrades. Example: Dual Radium Engineering catch cans (shown).</p> <p>Secure the 90 degree hose ends to the rear fuel rail ports.</p>	

23		The small vacuum barb on the FPR is for a 1:1 vacuum reference and can be used with a 3/16" rubber vacuum hose. If no pressure reference is needed, install the included screw to plug the hole.	
		Other vacuum fitting adapters are provided and can be used based on vacuum hose type.	
24		The regulator is not pre-set to any particular pressure.	
		Adjust fuel pressure by turning the adjustment knob on top of the regulator while the fuel pump is running.	
		Once proper fuel pressure is achieved, no locking is necessary. Do not attempt to tighten the allen screw on top of the regulator.	
25	10mm Socket Wrench	Reconnect the battery and start the engine. Confirm there are no leaks. Reinstall all other components in reverse order.	
		INSTALLATION COMPLETE	