

INSTALLATION INSTRUCTIONS

FUEL RAIL: TOYOTA 2GR-FSE

P/N: 20-0899

Document: 19-0301

Support: info@radiumauto.com

CAUTION


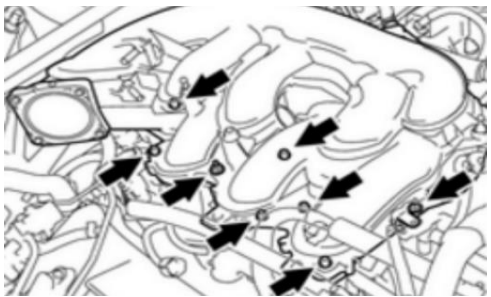
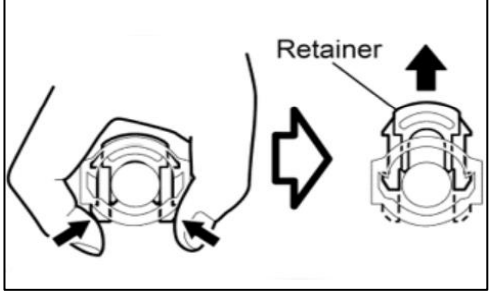
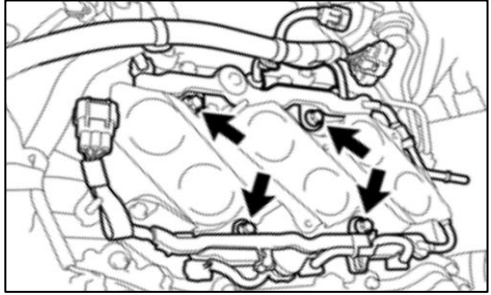
Only a qualified technician following applicable safety procedures should perform the installation of this product. One must have knowledge in repair and modification of fuel systems and general vehicle modifications to install this product.

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	10mm Wrench	It is necessary to have access to a Factory Service Manual. The first step is to relieve fuel pressure.	
		Afterwards, remove the ignition key and disconnect the battery's negative terminal. CAUTION: Disconnecting the battery may cancel the fault memories of some control units.	
2	10mm Socket Wrench	The procedure for removing the OEM intake manifold plenum and associated plumbing will vary from model to model. The following will need to be removed or disconnected: engine cover, air cleaner assembly, vent and vacuum hoses, MAF sensor, wire harness and hose clamps, etc. Reference the Factory Service Manual for specifics. Apply tape to cover the intake ports.	
	8mm Allen Wrench		
	Pliers		
3		Reference the Factory Service Manual for the procedure on disconnecting the OEM fuel line. Do not forcibly bend or twist the nylon tubing and do not use any tools. Be sure to protect the disconnected parts from foreign debris.	
4	12mm Socket Wrench	Reference the Factory Service Manual for removing the OEM fuel rails. There are 4 plastic spacers underneath the fuel rail mounting points. Although they will not be reused, be careful not to lose them.	

5	Oil Lubrication	The 2 Radium Engineering fuel rails are identical. Install 8 AN ORB adapter fittings (not included) into all ports. This will vary from application to application. Visit www.radiumauto.com for a wide variety of fittings. NOTE: O-rings must be lubricated.	
		NOTE: To avoid undue stress, it is recommended that fittings are tightened before mounting to the engine.	
6	4mm Allen Wrench	As shown, secure each fuel rail mount using the provided 8 short M6x1mm bolts.	
7	Oil Lubrication	<i>NOTE: The OEM fuel injectors are not compatible with these Radium Engineering fuel rails. For fuel injector compatibility information, visit the product page at www.radiumauto.com.</i>	
		Lubricate all 6 fuel injector O-rings. Push the upper injector O-rings into the fuel rail ports.	
8	6mm Allen Wrench	Carefully push the fuel injectors into the lower seats.	
		Secure both fuel rails in place using the four provided M8x1.25mm Allen head screws.	
9		As a test, push the fuel injectors downward until they bottom out. Now inspect the injectors' upper O-rings and confirm they are still inserted into the fuel rail injector bores. Do not pressurize the fuel system until the proper height is achieved.	
		Orientate the fuel injectors such that the electrical connectors do not experience any interference with the surrounding area. Plug in each of the injector connectors.	
10	10mm Wrench	Plumbing must be configured by a professional. Visit www.radiumauto.com for a variety of adapters, hoses, etc.	
		After everything is reinstalled, reconnect the battery. Cycle the keyed ignition switch ON/OFF a few times (without starting the engine). This allows the fuel pump to prime the fuel system. Check for leaks. Start the engine and check again while the engine is running. INSTALLATION COMPLETE	