

INSTALLATION INSTRUCTIONS

ROTAX 900 ACE FUEL RAIL

P/N: 20-1131

Document: 19-0431

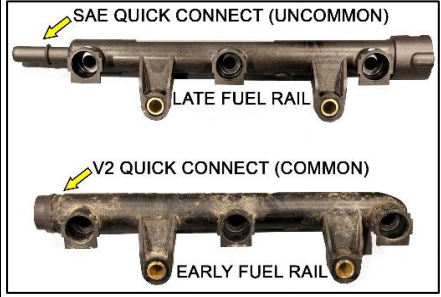
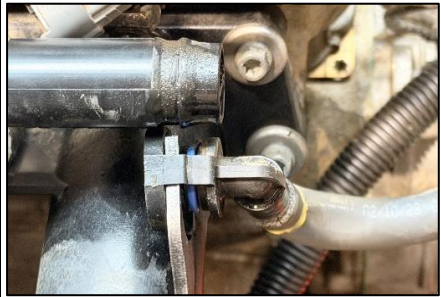
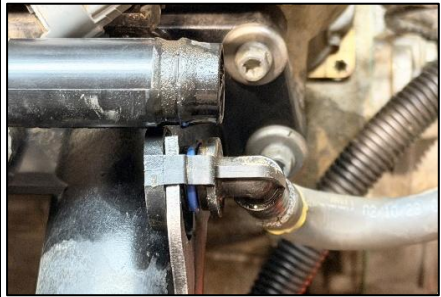
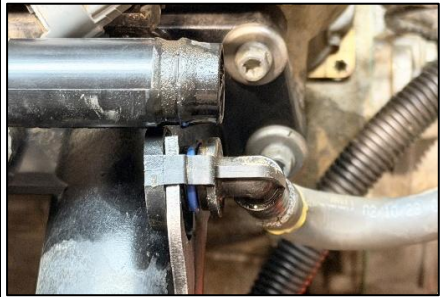
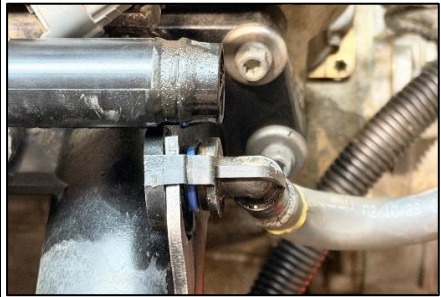
Support: info@radiumauto.com

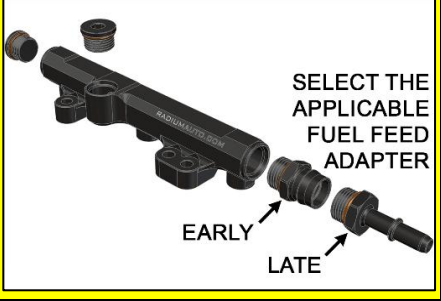
CAUTION

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 Socket Wrench	Because of the various compatible vehicles (Can-Am Maverick X3, Can-Am Ryker 900, Sea Doo Spark, Ski Doo models, etc.) removal of the fuel lines, fuel rail, and fuel injectors will not be covered specifically.	
2		It is recommended to have a factory workshop service manual to depressurize the fuel system properly. Be sure to turn OFF the ignition and disconnect the battery (shown).	
3		To unplug the 3 fuel injector connectors, depress the locking thumb tabs and pull to release.	
4		There are 2 different OEM fuel rail connections on the Rotax 900 ACE.	
	Rag	The most common fuel rail will have a V2 quick connector. Newer fuel rails will have an SAE quick connector, as shown.	
		For both connections squeeze the locks and pull to remove.	
		Be ready as fuel will leak from this connection.	

5		When unbolting the fuel rail, note that some engines use a simple 8mm hex screw, some use a T30 Torx screw, and some use both.	
6	8mm Socket Wrench	The OEM mounting screws (shown) will be reused.	
	T30 Torx		
	Rag		
7	Rag	Carefully pull the fuel rail and injectors from the intake manifold in 1 piece. Bring the assembly to a clean work bench. Pry the fuel injector clips from the fuel rail. Carefully pull each injector from the fuel rail. Have a rag handy.	
8		Adapter fittings are NOT included with the fuel rail. As shown, the optional 20-1131-PK FUEL RAIL PLUMBING KIT, ROTAX 900 ACE includes all the necessary adapter fittings to reuse the OEM fuel line. For custom plumbing installations, the fuel rail has three 3/4"-16 (8AN ORB) end ports. Go to www.radiumauto.com to find an array of compatible adapter fittings, regulators, pulse dampers, etc.	
9	Oil Lubrication	<u>20-1131-PK FUEL RAIL PLUMBING KIT, ROTAX 900 ACE</u> Lubricate all O-rings and install the provided fittings as shown. NOTE: Depending on the vehicle, either the SAE quick connector or the V2 quick connector will NOT be used.	 SELECT THE APPLICABLE FUEL FEED ADAPTER EARLY LATE
	7/8" Wrench		
	5/16" Allen Wrench		
10		This fuel rail is compatible with factory fuel injectors. Luckily, these physical OEM dimensions are equivalent to popular aftermarket Bosch EV14 fuel injectors.	

11	Oil Lubrication	Lubricate the 3 fuel rail injector bores and the upper injector O-rings and push them together.	
		As shown, properly orient the connectors and slide the injector clips in place.	
12	Oil Lubrication	Lubricate the lower injector O-rings and the corresponding intake manifold seats.	
	T30 Torx		
	8mm Socket Wrench	Lineup the fuel rail assembly to the intake manifold ports and press downward to fully seat. Secure the rail using the OEM screws. Do not overtorque.	
		NOTE: Optional 20-0776 fuel pulse damper shown in the center port.	
13		Plug in the fuel injector connectors until they click in place.	
14		20-1131-PK FUEL RAIL PLUMBING KIT, ROTAX 900 ACE	
		Inspect the condition of the OEM fuel feed line. Clean any debris and replace any parts that may be permanently damaged.	
		Push the OEM feed line onto the fuel rail inlet port until it clicks in place. Gently give the line a tug to confirm the connection has been made.	
15	10mm Wrench	After all the necessary fuel rail plumbing is installed, 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 system. Check for leaks.	
		Start the engine and confirm again while the engine is running.	
		INSTALLATION COMPLETE	