

INSTALLATION INSTRUCTIONS






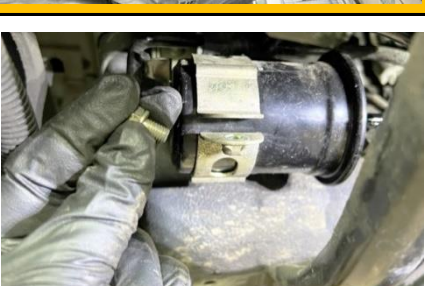
FUEL FILTER KIT




89-05 MAZDA MX-5

Document: 19-0328
Support: info@radiumauto.com






CAUTION
<p>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.</p> <p>Gasoline and other fuels are flammable and can be explosive.</p> <p>Only install in a well-ventilated location to minimize buildup of fuel vapors.</p> <p>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.</p>
WARNING
<p>The fuel system is under pressure! Do not loosen any connections until relieving the fuel system pressure.</p> <p>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.</p>

STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1		<p><i>NOTE: Because this kit is compatible with multiple generations, there will be left over parts that will NOT be used.</i></p> <p>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.</p>	<p>FRONT</p> <p>LH SIDE RH SIDE</p> <p>REAR</p>
2	Pry Tool	<p>The fuel pump assembly is located underneath the rear parcel shelf.</p> <p>As shown, carefully remove the 5 plastic carpet retainers using a pry tool.</p> <p>From the front, lift up and tightly roll the carpet towards the rear to expose the fuel pump access cover.</p>	
3	Screwdriver	Remove the fuel pump access cover.	
4	10mm Socket Wrench	<p>To unplug the fuel pump connector (shown), depress the thumb lock and pull. Start the vehicle and allow the engine to stall. This will depressurize the fuel lines. Reconnect the fuel pump connector.</p> <p>Disconnect the negative battery terminal. Disconnect the battery's negative terminal.</p>	

5	Screwdriver	The OEM fuel filter is located in front of the EVAP charcoal canister in between the drive shaft and the RH rear wheel behind a plastic cover (shown).	
	10mm Socket Wrench		
6	Screwdriver	Remove the 5 plastic clip retainers and pull off the fuel filter cover.	
7	10mm Socket Wrench	To provide extra space to work, remove the nuts that secure the EVAP charcoal canister and allow it to hang.	
8	Pliers	For 89-97 Mazda MX-5 Only Loosen and move the spring clamps off the hose on each side of the fuel filter. Carefully pull each hose off the fuel filter barbs. Have a rag handy.	
	Rag		
9	Rag	For 99-05 Mazda MX-5 Only Push the SAE quick connect fuel line fittings further on, then simultaneously squeeze the 2 outer locks and pull away. Have a rag handy.	
10	10mm Socket Wrench	Remove the fuel filter clamp screw (shown).	

11	Pick	Pull the fuel filter from the OEM clamp and empty into a fuel safe container.	
		NOTE: The 99-05 Mazda MX-5 fuel filter is shown. If the SAE quick connect locks (shown white) are still on the fuel filter, transfer them back to the OEM fuel hoses.	
12		As a reference, the OEM 89-97 Mazda MX-5 fuel filter is shown.	
13	10mm Socket Wrench	Unscrew the 2 bolts that secure the OEM fuel filter clamp.	
14		The OEM fuel filter clamp and mounting bolts will NOT be reused.	
15	5mm Allen Wrench	Install the fuel filter mount to the chassis using the provided M6x1mm socket head screws.	
16	Oil Lubrication	For 89-97 Mazda MX-5 Only	
	4mm Allen Wrench	Secure the 10AN ORB to barb banjo fitting to the fuel filter inlet port.	

17	Oil Lubrication	For 99-05 Mazda MX-5 Only	
	1" Wrench	Secure the 10AN ORB to SAE quick disconnect fitting to the fuel filter inlet port.	
18	Oil Lubrication	For 89-97 Mazda MX-5 Only	
	4mm Allen Wrench	Secure the 10AN ORB to 6AN male banjo fitting to the fuel filter outlet port.	
19	Oil Lubrication	For 99-05 Mazda MX-5 Only	
	4mm Allen Wrench	Secure the 10AN ORB to 6AN male banjo fitting to the fuel filter outlet port.	
20	Vise	For 89-97 Mazda MX-5 Only	
	11/16" Wrench	Secure the 90 degree 6AN female coupler to the barb fitting.	
21	Vise	For 99-05 Mazda MX-5 Only	
	11/16" Wrench	Secure the 90 degree 6AN female coupler to the SAE quick connect fitting.	
22	11/16" Wrench	For 89-97 Mazda MX-5 Only	
		Secure the 90 degree 6AN female coupler to the 6AN banjo fitting on the fuel filter outlet port.	

23	11/16" Wrench	For 99-05 Mazda MX-5 Only	
		Secure the 90 degree 6AN female coupler to the 6AN banjo fitting on the fuel filter outlet port.	
24	4mm Allen Wrench	Place the fuel filter into the mount with the outlet side towards the center and the inlet side towards the outside of the vehicle.	
		Install the fuel filter clamp using the 2 provided M5x0.8mm socket head screws.	
25	Screwdriver	For 89-97 Mazda MX-5 Only	
		Included in the kit are two EFI hose clamps (shown).	
		Place 1 of the EFI hose clamps over the OEM fuel hose (that comes from the fuel pump above). Next, insert the hose over the fuel filter inlet fitting. Secure the EFI hose clamp.	
25	Oil Lubrication	For 99-05 Mazda MX-5 Only	
		Push the OEM SAE quick connector (that comes from the fuel pump above) onto the fuel filter inlet fitting. To test, pull the SAE quick connector to confirm it has locked into place.	
26	Oil Lubrication	For 89-97 Mazda MX-5, install the other fuel hose to the fuel filter outlet fitting and secure with the other EFI hose clamp.	
	Screwdriver	For 99-05 Mazda MX-5, push the other OEM SAE quick connector onto the fuel filter outlet fitting, as shown. To test, pull the SAE quick connector to confirm it has locked into place.	
27	10mm Socket Wrench	Reconnect the battery. Switch the ignition to the ON position without starting the engine to pressurize the system. Check for leaks. Start and idle the engine. Recheck for leaks. INSTALLATION COMPLETE	
		<i>NOTE: Service at normal OEM specified fuel filter intervals. Replacement Radium Engineering fuel filter elements are available at www.radiumauto.com.</i>	