MEMP USA
MOBILE EMISSIONS & MAINTENANCE PRODUCTS

ECO SYSTEM
Inline Fuel Device (IFD) · U.S. patented · CARB Executive Orders

ECO System Installation Guide

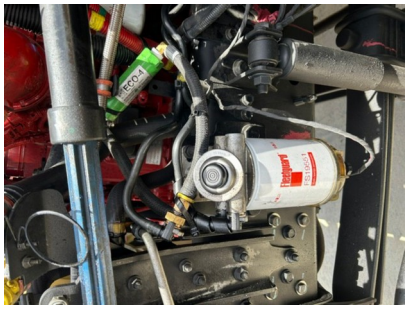
ECO 4 and ECO 5XL · Diesel and gasoline engines

The ECO System is an Inline Fuel Device (IFD) that installs in the fuel supply line, **between the primary and secondary fuel filters**. All units have **½″ NPT** threads on both ends. Most installations take about 30 minutes and require no engine modification. Choose the method that matches the vehicle.

> **Before you start:** Turn the engine **off** and let it cool. Keep absorbent pads at hand for fuel drips and wear eye protection.

Option 1: Direct to the fuel filter (no fuel line changes)

1. Disconnect the outbound fuel line from the primary fuel filter and move it aside.
2. Thread the ECO unit directly onto the primary filter outlet. If the outlet is not ½″ NPT, use the appropriate adapter.
3. Connect the existing fuel line to the other end of the unit with a ½″ NPT male fitting (adapter if needed).
4. Secure the unit to a stable pipe, rail or frame member with zip ties or clamps.



ECO unit installed at the fuel filter

Option 2: In-line on rigid (steel) fuel lines

1. Install ½″ NPT fittings into both ends of the ECO unit.
2. Measure the total length of the unit with fittings attached.
3. Cut and remove that length from the fuel line.
4. Slide compression fittings onto the fuel line ends and tighten.

Most fuel lines are ½″ to ⅝″ on the compression side. The ECO unit is always ½″ NPT.



ECO 4 installed in-line

Option 2A: In-line on flexible (rubber) fuel lines

1. Install ½″ NPT fittings into both ends of the unit, using a 90° elbow where routing requires.
2. Fit the matching barbed fitting (typically ⅜″ or ½″) on each side.
3. Cut the fuel line, push each end onto a barbed fitting and secure with a hose clamp.
4. Secure the unit to a stable mounting point.



ECO 4 installed on flexible fuel lines

After installation

1. Prime the fuel system per the engine manufacturer’s procedure.
2. Start the engine and check every connection for leaks. Tighten as needed.
3. Confirm the unit is secure and clear of hot or moving parts.

Installation materials

Depending on the option used, you may need one or more of the following:

PART	DESCRIPTION	USED FOR
	**½″ NPT male × ½″ or ⅝″ compression fitting**	Option 2: rigid (steel) fuel lines
	**½″ NPT male × ⅜″ or ½″ barbed fitting**	Option 2A: flexible (rubber) fuel lines
	**Standard hose clamp**	Secures flexible line to barbed fitting
	**½″ NPT male × ½″ NPT female adapter**	Option 1: direct to fuel filter, as needed
	**½″ NPT male × ½″ NPT male union**	Option 1: direct to fuel filter, as needed

CARB label

Each ECO unit carries a label showing its CARB Executive Order number, which must remain visible for emissions (smog) inspection. A spare label ships with every unit. If the label on the unit is hard to see, place the spare on a clean, dry surface in the engine compartment where an inspector can see it.

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