§ 1042.130 Installation instructions for vessel manufacturers.

(a) If you sell an engine for someone else to install in a vessel, give the engine installer instructions for installing it consistent with the requirements of this part. Include all information necessary to ensure that an engine will be installed in its certified configuration.

(b) Make sure these instructions have the following information:

(1) Include the heading: “Emission-related installation instructions”.

(2) State: “Failing to follow these instructions when installing a certified engine in a vessel violates federal law (40 CFR 1068.105(b)), subject to fines or other penalties as described in the Clean Air Act.”.

(3) Describe the instructions needed to properly install the exhaust system and any other components. Include instructions consistent with the requirements of §1042.205(u).

(4) Describe any necessary steps for installing the diagnostic system described in §1042.110.

(5) Describe any limits on the range of applications needed to ensure that the engine operates consistently with your application for certification. For example, if your engines are certified only for constant-speed operation, tell vessel manufacturers not to install the engines in variable-speed applications or modify the governor.

(6) Describe any other instructions to make sure the installed engine will operate according to design specifications in your application for certification. This may include, for example, instructions for installing aftertreatment devices when installing the engines.

(7) State: “If you install the engine in a way that makes the engine’s emission control information label hard to read during normal engine maintenance, you must place a duplicate label on the vessel, as described in 40 CFR 1068.105.”.

(8) Describe any vessel labeling requirements specified in §1042.135.

(c) You do not need installation instructions for engines you install in your own vessels.

(d) Provide instructions in writing or in an equivalent format. For example, you may post instructions on a publicly available Web site for downloading or printing. If you do not provide the instructions in writing, explain in your application for certification how you will ensure that each installer is informed of the installation requirements.

§ 1042.135 Labeling.

(a) Assign each engine a unique identification number and permanently affix, engrave, or stamp it on the engine in a legible way.

(b) At the time of manufacture, affix a permanent and legible label identifying each engine. The label must be—

(1) Attached in one piece so it is not removable without being destroyed or defaced.

(2) Secured to a part of the engine needed for normal operation and not normally requiring replacement.
(3) Durable and readable for the engine's entire life.
(4) Written in English.
(c) The label must—
(1) Include the heading "EMISSION CONTROL INFORMATION".
(2) Include your full corporate name and trademark. You may identify another company and use its trademark instead of yours if you comply with the provisions of §1042.640.
(3) Include EPA's standardized designation for the engine family (and subfamily, where applicable).
(4) Identify all the emission standards that apply to the engine (or FELs, if applicable). If you do not declare an FEL under subpart H of this part, you may alternatively state the engine's category, displacement (in liters or L/cyl), maximum engine power (in kW), and power density (in kW/L) as needed to determine the emission standards for the engine family. You may specify displacement, maximum engine power, or power density as a range consistent with the ranges listed in §1042.101. See §1042.140 for descriptions of how to specify per-cylinder displacement, maximum engine power, and power density.
(5) State the date of manufacture [DAY (optional), MONTH, and YEAR]; however, you may omit this from the label if you stamp, engrave, or otherwise permanently identify it elsewhere on the engine, in which case you must also describe in your application for certification where you will identify the date on the engine.
(6) Identify the application(s) for which the engine family is certified (such as constant-speed auxiliary, variable-speed propulsion engines used with fixed-pitch propellers, etc.). If the engine is certified as a recreational engine, state: "INSTALLING THIS RECREATIONAL ENGINE IN A COMMERCIAL VESSEL OR USING THE VESSEL FOR COMMERCIAL PURPOSES MAY VIOLATE FEDERAL LAW SUBJECT TO CIVIL PENALTY (40 CFR 1042.601)."
(7) For engines requiring ULSD, state: "ULTRA LOW SULFUR DIESEL FUEL ONLY".
(8) State the useful life for your engine family if the applicable useful life is based on the provisions of §1042.101(e)(2) or (3), or §1042.104(d)(2).
(9) Identify the emission control system. Use terms and abbreviations as described in 40 CFR 1068.45. You may omit this information from the label if there is not enough room for it and you put it in the owner's manual instead.
(10) State: "THIS MARINE ENGINE COMPLIES WITH U.S. EPA REGULATIONS FOR [MODEL YEAR]."
(11) For a Category 1 or Category 2 engine that can be modified to operate on residual fuel, but has not been certified to meet the standards on such a fuel, include the statement: "THIS ENGINE IS CERTIFIED FOR OPERATION ONLY WITH DIESEL FUEL. MODIFYING THE ENGINE TO OPERATE ON RESIDUAL OR INTERMEDIATE FUEL MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTIES."
(12) For an engine equipped with on-off emissions controls as allowed by §1042.115, include the statement: "THIS ENGINE IS CERTIFIED WITH ON-OFF EMISSION CONTROLS. OPERATION OF THE ENGINE CONTRARY TO 40 CFR 1042.115(g) IS A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTIES."
(13) For engines intended for installation on domestic or public vessels, include the following statement: "THIS ENGINE DOES NOT COMPLY WITH INTERNATIONAL MARINE REGULATIONS FOR COMMERCIAL VESSELS UNLESS IT IS ALSO COVERED BY AN EIAPP CERTIFICATE."
(d) You may add information to the emission control information label as follows:
(1) You may identify other emission standards that the engine meets or does not meet (such as international standards). You may include this information by adding it to the statement we specify or by including a separate statement.
(2) You may add other information to ensure that the engine will be properly maintained and used.
(3) You may add appropriate features to prevent counterfeit labels. For example, you may include the engine's unique identification number on the label.
(e) For engines requiring ULSD, create a separate label with the statement: “ULTRA LOW SULFUR DIESEL FUEL ONLY”. Permanently attach this label to the vessel near the fuel inlet or, if you do not manufacture the vessel, take one of the following steps to ensure that the vessel will be properly labeled:

(1) Provide the label to each vessel manufacturer and include in the emission-related installation instructions the requirement to place this label near the fuel inlet.

(2) Confirm that the vessel manufacturers install their own complying labels.

(f) You may ask us to approve modified labeling requirements in this part 1042 if you show that it is necessary or appropriate. We will approve your request if your alternate label is consistent with the intent of the labeling requirements of this part.

(g) If you obscure the engine label while installing the engine in the vessel such that the label will be hard to read during normal maintenance, you must place a duplicate label on the vessel. If others install your engine in their vessels in a way that obscures the engine label, we require them to add a duplicate label on the vessel (see 40 CFR 1068.105); in that case, give them the number of duplicate labels they request and keep the following records for at least five years:

(1) Written documentation of the request from the vessel manufacturer.

(2) The number of duplicate labels you send for each family and the date you sent them.

§ 1042.140 Maximum engine power, displacement, power density, and maximum in-use engine speed.

This section describes how to determine the maximum engine power, displacement, and power density of an engine for the purposes of this part. Note that maximum engine power may differ from the definition of “maximum test power” in §1042.901. This section also specifies how to determine maximum in-use engine speed for Category 3 engines.

(a) An engine configuration’s maximum engine power is the maximum brake power point on the nominal power curve for the engine configuration, as defined in this section. Round the power value to the nearest whole kilowatt.

(b) The nominal power curve of an engine configuration is the relationship between maximum available engine brake power and engine speed for an engine, using the mapping procedures of 40 CFR part 1065, based on the manufacturer’s design and production specifications for the engine. This information may also be expressed by a torque curve that relates maximum available engine torque with engine speed.

(c) An engine configuration’s per-cylinder displacement is the intended swept volume of each cylinder. The swept volume of the engine is the product of the internal cross-section area of the cylinders, the stroke length, and the number of cylinders. Calculate the engine’s intended swept volume from the design specifications for the cylinders using enough significant figures to allow determination of the displacement to the nearest 0.02 liters. Determine the final value by truncating digits to establish the per-cylinder displacement to the nearest 0.1 liters. For example, for an engine with circular cylinders having an internal diameter of 13.0 cm and a 15.5 cm stroke length, the rounded displacement would be: 

\[(13.0/2)^2 \times \pi \times (15.5) \div 1000 = 2.0 \text{ liters.}\]

(d) The nominal power curve and intended swept volume must be within the range of the actual power curves and swept volumes of production engines considering normal production variability. If after production begins, it is determined that either your nominal power curve or your intended swept volume does not represent production engines, we may require you to amend your application for certification under §1042.225.

(e) Throughout this part, references to a specific power value for an engine are based on maximum engine power. For example, the group of engines with maximum engine power above 600 kW may be referred to as engines above 600 kW.