

MFH-5057

Ford Small-Block V-8 Fresh Water Cooling Kit Instructions



MONITOR PRODUCTS, INC.

15400 Flight Path Dr
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Tel: 1-800-334-4591 or 352-544-2620

Sales: ext 201

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IMPORTANT

Before you unpack the kit and start installation, make sure you have the right kit for your engine by studying these installation instructions. These installation instructions have been written to cover most sterndrive and inboard installations on Ford based small block V/8 engines 302-351 CID, excluding V-drives. Especially designed for OMC Cobra engines but will fit other Ford conversions provided that space exists on front top of engine.

These instructions cover a normal installation situation. Sometimes problems can occur due to engine variations and boat-builder or owner modifications. If you run into such problems you can call Monitor Products for advice during normal business hours.

If you, by mistake, received the wrong kit for your type of engine or run into other insurmountable installation problems you may return an undamaged kit for exchange or credit. To get return authorization, call Monitor Products with information about the problem and how the kit was purchased.

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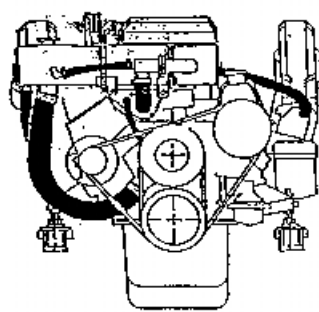
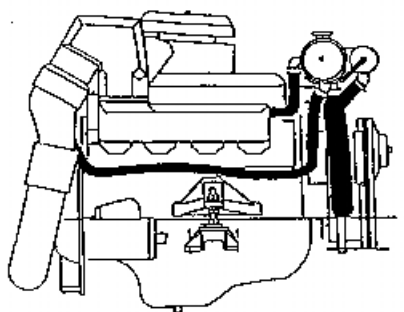
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The installer must make sure that the overall installation is safe and in accordance with Coast Guard and industry standards.

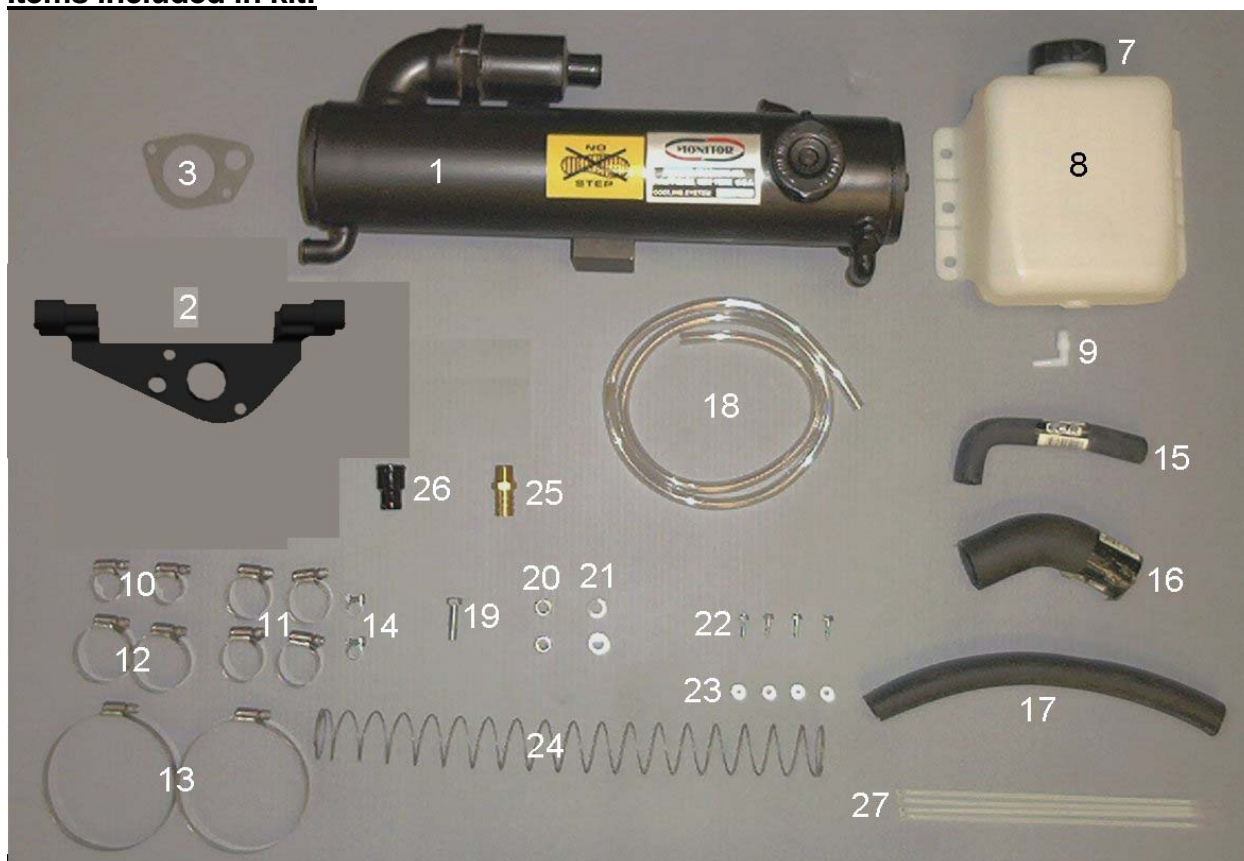


Installation tools & supplies

Flat head screw driver
Phillips head screw driver
11/16" deep socket or box wrench
9/16" socket or box wrench
7/16" socket or box wrench

Hose Cutter or Knife
Gasket scraper
RTV silicone gasket sealer
Antifreeze solution (See flush and fill instructions)

Items included in kit:



Item	Part Number	Qty.	Description
1	M5057-4146	1	HEAT EXCHANGER
Includes	4001-1844	1	Thermostat Housing
Includes	5000-1709	1	Thermostat
Includes	4500-1622	1	Thermostat O-ring Gasket
2	5000-1845	1	Bracket
3	4500-1571	1	Gasket, Thermostat Housing
4	-	-	-
5	-	-	-
6	-	-	-
7	5000-1763	1	Expansion Tank Cap
8	5001-1327	1	Expansion Tank
9	5000-1343	1	Adapter Elbow, Plastic
10	5200-1353	2	Hose Clamp #08
11	5200-1144	4	Hose Clamps #16
12	5200-1143	2	Hose Clamps #24

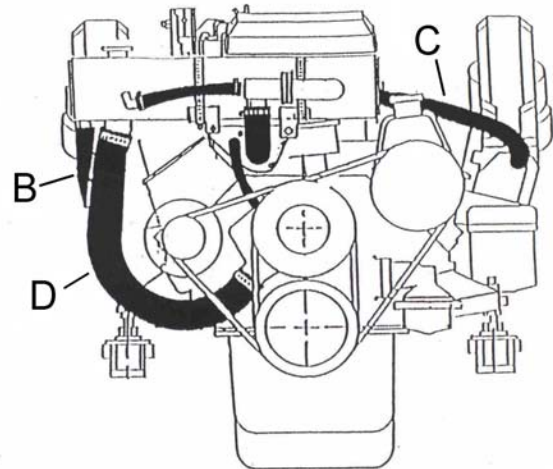
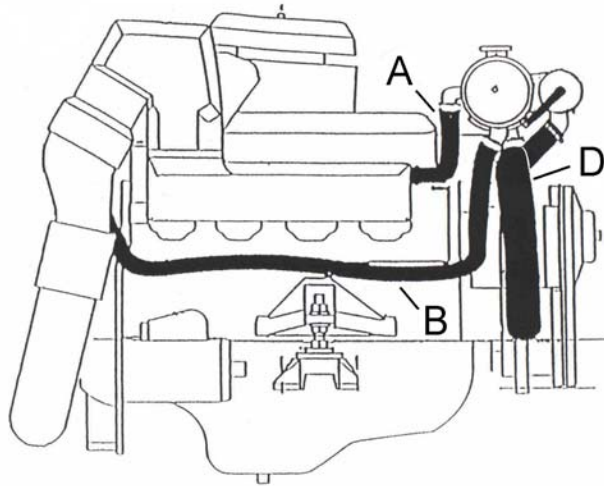
Item	Part Number	Qty.	Description
13	5200-1142	2	Hose Clamps #64
14	5200-1344	2	Hose Clamps, Mini #304
15	5100-1846	1	Bypass Hose, 5/8" ID
16	5101-1995	1	Molded Hose, 1-3/8"ID
17	5105-2126	1	Hose 1" ID x 12"
18	5102-2125	1	Hose, PVC, 5/16 ID x 48"
19	4300-1580	1	Bolt, 5/16-18 x 1-1/4"
20	-	-	-
21	-	-	-
22	4300-2801	4	Screw, #12 x .75" Phillips Flat Head
23	4300-2802	4	Washer, 5/16", Flat, Zinc Plated
24	4000-1673	1	Wire Insert
25	3000-1351	1	Bypass Fitting
26	3200-1858	1	1" x 3/4" Reducer Coupling
27	5000-1154	4	Tie Wraps

Items 4, 5, 6, 20, and 21 were removed with redesign of bracket (Item 2).

Installation Steps

1. Disconnect all hoses from the original thermostat housing. Be sure to save the hose clamps.
2. Remove the original thermostat housing from the vertical flange on the front of the intake manifold, retain original bolts. Clean gasket surface.
3. Remove and discard lifting eye and 2" long bolt. Install 5/16 X 1 1/4" long bolt (item #19).
4. Remove water pump bypass plug and install new bypass fitting (item #25) using Teflon tape.
5. Install bracket (item #2) on vertical flange of intake manifold using original bolts and thermostat housing gasket (item #3) supplied.
6. Install bypass hose (item #15) between new fitting on water pump and small fitting on bracket, using clamps (item #10).
7. Set exchanger in cradles. Secure loosely with large hose clamps (item #13).
8. Install new thermostat hose (item #16) between thermostat housing and bracket. First, place the hose on the bracket and secure with hose clamp (item #12). Next place the hose on the thermostat housing and secure with clamp (item #12).
9. Install 1" ID hose (item #17) between thermostat housing and 90-degree elbow on front of heat exchanger, using clamps (item #11). **Save excess hose to be used in Step 13.**

10. The original hoses leading up to the original thermostat housing will all be cut to size and fitted to different connections on the heat exchanger. The lengths given below are approximate and should be verified by holding the hose against the fitting prior to any hose being trimmed. Please refer to illustrations.



11. Cut hose "A" coming from the left exhaust manifold 7 3/4" from loose end, and attach to elbow on left rear of heat exchanger.
12. Cut hose "B" coming from rear of engine 7" from loose end and attach to fitting on bottom left of heat exchanger. If I.D. of hose is smaller than that of the fitting, use adapter (item #26). Attach to unit with 1" I.D. hose (excess from Step 10) and hose clamps (item #11). Then connect existing hose to adapter.
13. Cut hose "C" coming from right exhaust manifold 4 1/2" from loose end and attach to elbow on right rear of heat exchanger.
14. Cut hose "D" coming from jacket water pump inlet 6" from loose end. Install wire insert (item #24) into this hose making sure it extends fully into the hose. This prevents the hose from collapsing. Connect hose to large elbow on bottom left of heat exchanger.
15. Verify that all hoses line up properly without kinking and tighten all hose clamps.. Tighten hose clamps holding heat exchanger to cradle brackets securely.
16. Tighten all other bolts and clamps securely.
17. Install elbow adapter (item #9) to bottom of expansion tank (item #8) be sure to use thread sealer.

18. Install expansion tank on vertical surface next to heat exchanger using screws and washers (items #28 & 29). The tank should be located where it is easy to see and fill. Keep it as close to the heat exchanger as is practical and level with the top of the heat exchanger. The exact level is not critical. If the tank is located higher than the heat exchanger, it will be necessary to pinch the hose leading to the tank whenever the pressure cap is removed or the system will overflow. If mounted excessively low, it is important that the upper rubber gasket of the pressure cap is sealing perfectly, or the system may draw air instead of coolant back when the system contracts due to cool down.
19. Install PVC Hose (item #18) from heat exchanger to expansion tank and secure with mini hose clamps (item #14). Keep tubing as short and straight as possible. Trim as necessary.
20. Use tie wraps (item #27) to ensure that hoses or other parts are not in contact with critical engine components such as V-belts or fuel lines.
21. Double check total installation and make sure all fasteners, fittings, and hose clamps are tightened properly. See separate Filling and Start-Up Instructions.

Replacement Parts

Part Number	Description
4400-1044	ZINC ANODE
4000-1857	PRESSURE CAP
2001-1200	END COVER
4500-2005	END COVER GASKET
4300-1203	3/8-16 X .75" SS BOLT
4400-1045	DRAIN PLUG