

INLET CONNECTION MADE FROM RADIATOR OR BLOCK DRAIN USING HOSE CONNECTOR. OUTLET CONNECTION MADE TO TOP CAB HEATER HOSE AT WATER PUMP USING "Y" CONNECTOR

INSTRUCTIONS FOR INSTALLING AND OPERATING

1. Drain and clean the cooling system. (Recommend that this be done annually for more efficient heater operation.)
2. Mount heater vertically with the heater inlet (cold water line) connected to the engine block drain, radiator drain or lower radiator hose.
3. Heater outlet (hot water line) may be connected to the engine block at several locations.
 - Examples:
 - A. heater hose entering motor block.
 - B. hose line entering water pump.
 - C. engine block drain.
4. Use a 5/8" diameter heater hose for connecting heater inlet and outlet to engine. Use a minimum length of heater hose to prevent formation of air pockets.
5. Refill cooling system.
6. Bleed the air from the hose lines at the highest connection. OPERATE ENGINE FOR 30 MINUTES TO OPEN ENGINE THERMOSTAT BEFORE TESTING HEATER.
7. Place the electric cord from heater through radiator grille or other convenient opening and tape or fasten in position, making sure it is clear of all moving parts (fan blades) and heater parts (manifold).
8. Connect extension cord to the proper voltage outlet. Check the circulation of COOLANT TO MAKE ABSOLUTELY SURE THAT THE HEATED COOLANT CIRCULATES THROUGH THE HEATER HOUSING. If the radiator becomes warm before the engine block, the hot water is possibly being returned to the block too close to the thermostat, thus causing it to open prematurely. Relocate your hot water return line.
9. This heater is equipped with a three prong (grounding) plug and should be connected to a properly grounded circuit.

Heater failure is usually caused by lack of circulation.

Check for the following when this happens:

- (a) Improper installation
- (b) Trapped air, preventing siphoning action
- (c) Water too low in the radiator
- (d) Coolant frozen
- (e) Car heater control closed
- (f) Antifreeze solution too strong

10. If an extension cord is used in conjunction with this heater, be certain that the wire size of the extension cord is of adequate size for the wattage of the heater and distance from the receptacle to the heater. Consult a licensed electrician if further information is required.

1. Equipped with check valve.
 2. A Model Available for all size engines.
- MODEL SPECIFICATIONS AND HEATERS RECOMMENDED FOR VARIOUS SIZE COOLING SYSTEMS

MODELS	VOLTS	WATTS	AMPS	CAPACITY
12050	120	500	4.16	Up to 18 qts.
13080	120	850	7.00	Up to 18 qts.
13100	120	1000	8.3	16 - 25 qts.
13101	240	1000	4.16	16 - 25 qts.
13150	120	1500	12.5	26 - 40 qts.
13151	240	1500	6.25	26 - 40 qts.
13200	120	2000	16.6	41 - 60 qts.*
13201	240	2000	8.3	41 - 60 qts.
13222	120	2000	16.6	41 - 60 qts.**
13251	240	2500	10.4	Over 60 qts.

Short warm-up periods should be avoided when it is extremely cold. It is better to operate the heater all night. This will eliminate frozen water hoses. Our heaters are thermostatically controlled to obtain the most efficient operation.

*with 15 amp plug

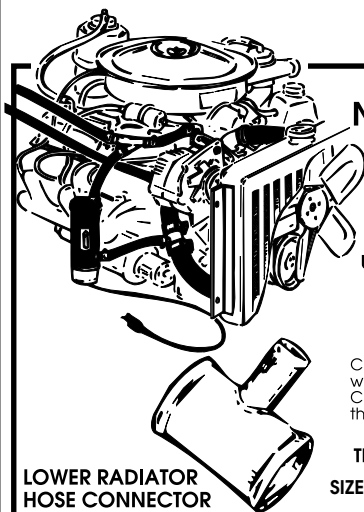
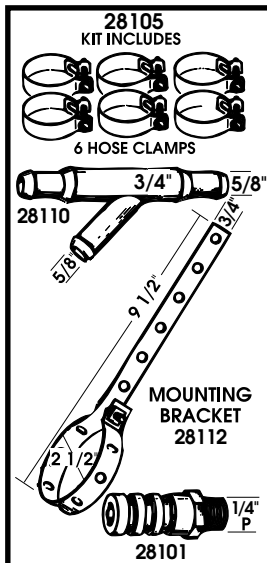
**CSA approved with 20 amp plug

NEW LOWER RADIATOR HOSE CONNECTORS MAKE EXTERNAL HEATER INSTALLATIONS EASIER AND SIMPLER

USE TO SUPPLY THE COOLANT TO THE INLET OF AN EXTERNAL TYPE HEATER. USE WHEN NO BLOCK DRAIN OR RADIATOR DRAIN IS AVAILABLE. DO NOT USE ON FLEXIBLE WIRE REINFORCED RADIATOR HOSE.

Cut and remove a 1" section from the lower (MOLDED) radiator hose at a point that will accept the connector without changing the form of the original radiator hose. Cut and remove two or three inches of the wire coil that reinforces the hose where the connector will be placed.

THESE HOSE CONNECTORS SOLD SEPARATELY. CONSULT YOUR PRICE SHEET. SIZES: 28113=1 IN., 28114=1 1/4 IN., 28115=1 1/2 IN., 28116=1 3/4 IN., 28117=2 IN.





INTRODUCING THE NEW IMPROVED CIRCULATING TANK HEATER





Hardware Kit 28105

- Made of die cast aluminum
 - Corrosion and impact resistant
 - Recyclable
- One piece molding
 - Eliminates possibility of leaks
- Tapered outlet design, pushes coolant more efficiently than other styles
- Available in 850W 1000W 1500W and 2000W 120V and 240V
- Thermostatically controlled 135° - 175°
- 5' HPN 105°C cord
- Uses versatile strap type mounting
- CSA approved

ADDITIONAL ACCESSORIES

 1/4 X 1/8	Part # 28103
 1/4 X 3/8	Part # 28104
 1/2 X 5/8	Part # 28108
 1" X 5/8	Part # 28109

 3/4 5/8 5/8	Part #28110
 5/8 1/2 5/8	Part #28111