

# FORCED FLOW CIRCULATION HEATER

**Zero**start<sup>®</sup>  
**Temro**<sup>®</sup>

The Forced Flow Circulation Heater circulates warm coolant throughout the engine to provide even heat distribution.

## BENEFITS

### Heat Performance and Distribution:

- Uniform heat distribution
  - Reduces wear from cold spots
  - Improves startability
- Ensures generator is at optimal starting temperature and ready to accept load
- Durable pump with non-magnetic impeller that does not attract metal debris
- Robust die cast aluminum housing improves sealing of the hoses, eliminates leaking and breakage
- Corrosion resistant steel brackets for superior strength and durability
- Reduces thermal stress on coolant hoses
- Element designed for long life with maximum heat transfer
- IP44 Ingress Protection Rating
- No evaporation of coolant from hoses
- Reduces low coolant level alarms because coolant does not boil

2700W, 240V



1500W, 120V



## FEATURES

- Die cast aluminum housing
- Nonmagnetic impeller
- Corrosion resistant steel brackets
- Heater is designed with connections for 5/8" heater hoses

- Thermostatically controlled and protected
- Safety shut-off provides overheating protection

## WHERE TO USE

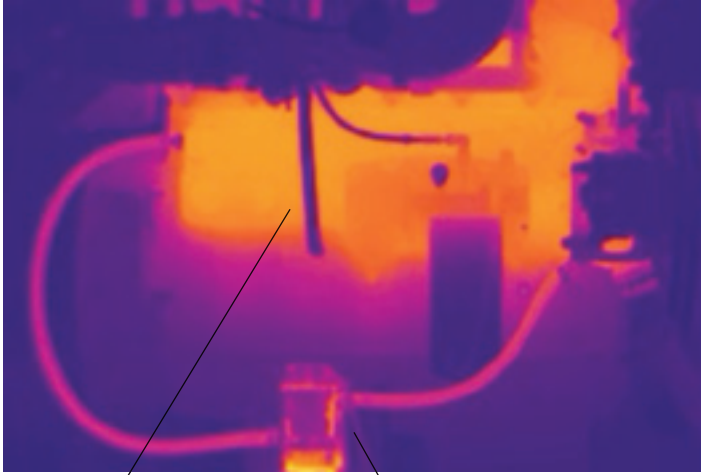
Diesel or natural gaseous genset application

**PHILLIPS & TEMRO**  
*industries*<sup>®</sup>

[www.phillipsandtemro.com](http://www.phillipsandtemro.com)

# FORCED FLOW CIRCULATION HEATER

## WHY IS THE FORCED FLOW CIRCULATION HEATER PREFERRED?



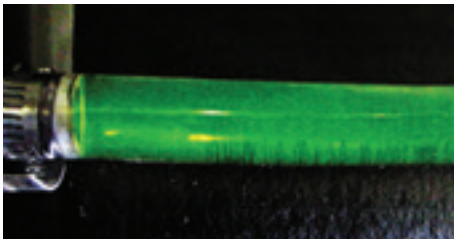
Engine Block

Forced Flow  
Circulation heater

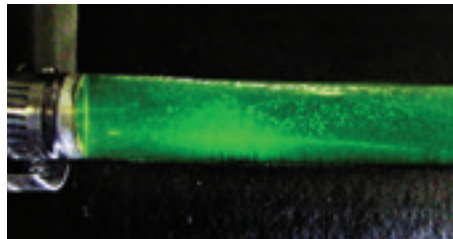
- Provides significant heat distribution in half the time
- Achieves even heat distribution throughout the engine block reducing cold spots and extending the life of coolant hoses
- Eliminates coolant boiling

**Note:** 9L engine, 1500W heater, 120V, 32°F



### Forced Flow Circulation Heater



### Other Coolant Heater



### PLUG CONFIGURATIONS

(B)	(C)
240 Volt 15 Amp	125 Volt 20 Amp
	

In a comparison test at 72°F for 10 minutes, the forced flow circulation heater did not produce air bubbles due to coolant boiling.

Part No.	Outlet Location	Watts	Volts	Amps	Length	Width	Height	Heater Hose Connections	Service Kit	Plug Type
3309020	Right	1500	120	12.5	8-1/2" (22cm)	4-13/16" (12.2cm)	10' (25.4cm)	5/8" (16mm)	3309026	C
3309021	Left	1500	120	12.5	8-1/2"(22cm)	4-13/16" (12.2cm)	10' (25.4cm)	5/8" (16mm)	3309027	C
3309024	Right	2700	240	11.25	8-1/2" (22cm)	4-13/16" (12.2cm)	10' (25.4cm)	5/8" (16mm)	3309029	B
3309025	Left	2700	240	11.25	8-1/2" (22cm)	4-13/16" (12.2cm)	10' (25.4cm)	5/8" (16mm)	3309029	B

#LIT0089P ©2017 PHILLIPS & TEMRO INDUSTRIES

**PHILLIPS & TEMRO**  
industries®

www.phillipsandtemro.com