

## TERMS OF LIMITED WARRANTY

### Warranty:

Products manufactured by Five Star Manufacturing are warranted for one year from date of sale to the original consumer against defects in workmanship and materials providing the installation and use of these products are in accordance with the manufacturer's instructions and applications. The manufacturer's only obligation shall be to repair or replace at manufacturer's option the product provided it is returned transportation prepaid to the factory within one year from date of sale to original consumer. Defects or failures due to normal wear, incorrect installation, improper voltage, improper usage, improper alterations, or handling, accident, misuse, abuse, neglect, mishandling, misapplication, improper or extraordinary use, inconsistent use with any instruction or recommendation issued by the manufacturer or by any other condition beyond our control, as to any and all of which the manufacturer will be the sole judge, are specifically excluded from this warranty. This may also have implied warranty rights which vary from state to state. No other liability of any kind, arising from the use of the product, whether defective or not, is assumed.

The foregoing limited warranty is exclusive and in lieu of all other warranties, whether written or oral, expressed, implied, or statutory.

No implied warranty of merchantability or fitness for a particular purpose shall apply. The limited warranty contained herein does not extend to incidental or consequential damages resulting from the use of this product, or arising out of a breach of this warranty.

### Replacement and Repair Policy

- 1) In returning heater for replacement or repair, include all the information possible as to what may have caused the trouble. Check the extension cord. In some cases it has been faulty. All returned heaters must be labeled and identified with warranty tags
- 2) Service charges will be made on units which:
  - A) Were burned in air (operated without heating element being immersed in water or coolant).
  - B) Failed due to restricted circulation, improper installation, air pockets in hose lines, or dirty cooling system.
  - C) Are damaged through no fault of the manufacturer.
  - D) Failed due to installation on other than recommended vehicles.
  - E) Are not defective.
- 3) Five Star Manufacturing cannot and does not refund labor
- 4) Before returning any item to Five Star, obtain RGA # from the company.

### ⚠ Important...Caution

To obtain satisfactory results from your external type engine heater, please read the following information carefully.

Do not use a Kat's engine heater when using a 100% solution of anti-freeze.

After the heater has been installed according to instructions, have your service station or garage check your anti-freeze solution. On permanent type ante-freeze, a solution too strong as well as too weak will freeze. If your coolant freezes or congeals, it will stop the flow of liquid through the heater housing and hoses and cause the heater to burn out. Our heater guarantee is void when this happens or when there is evidence of inadequate coolant.

To obtain maximum protection from freezing, consult your antifreeze manufacturer's recommendations.

Five Star manufacturing reserves the right to make any changes to the design or appearance it deems necessary to any of its products at anytime without notification, and these changes will not obligate Five Star to replace or change any previously manufactured products.

## INSTALLATION INSTRUCTIONS PUSH BUTTON SERIES

### ⚠ Warning

Ether is highly flammable. Make sure that all connections are secure before using unit.

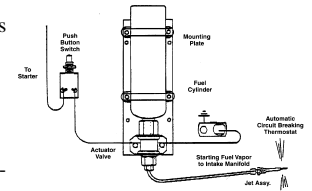
### ⚠ Caution

Disposal of empty cylinder: **These cylinders may not be reused.** Dispose of empty container in accordance with local regulatory agencies.

Disconnect glow plugs if present.

### Installation Procedures

- 1) Install mounting plate with actuator valve assembly in approximately vertical position near engine, away from block heater, using hole spacing and bolts provided, or by drilling bolt holes in plate as desired.
- 2) For most effective and smoothest start of diesel engine, install jet assembly in air filter, blower box or air inlet pipe common to all cylinders. For engines equipped with grid heaters, install jet nozzle downstream from grid heater location. For gasoline engine, injection into filter, air inlet pipe, or just below carburetor base is satisfactory. Install so orifices are perpendicular to manifold length. Orifice position is indicated by spot punch on fitting. Cut tubing to length, connect jet assembly and actuator valve, taking care to support as necessary. If installation is on turbo-charged engine, place jet assembly near turbo-charger discharge. If jet assembly is installed in air inlet pipe, locate orifices in relation perpendicular to pipe.
- 3) Mount thermostat on engine to pick up running temperature away from block heater. Make sure that mounting surface is flat and is chassis ground. Connect the wire from the actuator valve to the thermostat wire with a permanent connector.
- 4) Install fuel injector pushbutton switch in convenient place on dash. Use 5/8" drill. Install pressure sensitive instruction plate above switch.
- 5) Connect one (1) terminal of push button switch to 12 VCD, power source. Connect other terminal of button switch to remaining wire on the actuator valve.
- 6) Remove cap from cylinder threads. Screw in cylinder until moderately hand tight (take care to avoid cross threading). **DO NOT TIGHTEN EXCESSIVELY.** Secure with clamps and bolts provided, as shown in schematic. Tighten securely those bolts and the bolts that hold the actuator valve assembly to mounting plate.



### Operation Instructions

- 1) Apply 12 VDC, power source. Press button switch and hold momentarily. Release button switch and start engine.
- 2) Additional injections can be made as necessary by pressing button switch.
- 3) For V cylinder engines, make two injections prior to starting.

### Installation instructions for Replacement cylinder

- 1) Loosen clamps holding cylinder.
- 2) Turn cylinder counter-clockwise until threads disengage from start valve assembly. Lift up and out.
- 3) Screw in cylinder until moderately hand tight (take care to avoid cross-threading). **DO NOT TIGHTEN EXCESSIVELY.**
- 4) NEVER remove empty cylinder until ready to replace it with cap plug or new cylinder.
- 5) Disposal of empty cylinder: **These cylinders may not be used.** Dispose of empty container in accordance with local regulatory agencies.

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