

Forced Convection Fan for Infrared Heaters

# Stratafan™

## Installation & Operation Instructions



WARNING

**WARNING.** Improper installation, adjustment, alteration, excessive vibration, service or maintenance can cause property damage, injury or death.  
Read the installation, operating and maintenance instructions thoroughly before installation or servicing this equipment.

### Special Notes

The following special notices highlight important information in Section D. Installation, page 3. Each serves a special purpose and is displayed in the format shown:



CAUTION

This symbol indicates a potentially hazardous situation, which, if not avoided, can result in personal injury or damage to the equipment.



CAUTION

This symbol indicates a potentially hazardous situation, which, if not avoided, may be a shock hazard.



WARNING

This symbol indicates an imminently hazardous situation, which, if not avoided, could result in death or serious injury.

# TABLE OF CONTENTS

A. Certification	2	E. Repairs	6
B. Intended Use	2	F. Return Goods Policy	6
C. Operation	2	G. Ordering Information	6
C.1 Startup	2		
C.2 Shutdown	2		
D. Installation	3		
D.1 General Instructions	3		
D.2 Top Installation	3		
D.3 Side Installation Cata-Dyne™ Z Mounting Bracket	3		
D.4 Side Installation Cata-Dyne™ Standard Mounting Bracket	4		
D.5 Bottom Installation	5		

## A. CERTIFICATION

Stratafan™ model SF-1 is certified intrinsically safe by the Canadian Standards Association for use in Class I, Division 1 and 2, Group D; Class I, Zone 1 and 2, Groups IIA hazardous (classified) locations. The unit has a temperature code of T2C at a maximum ambient temperature of 40°C (104°F) and must be used in conjunction with a Cata-Dyne™ WX or MKII catalytic heater.

## B. INTENDED USE

1. The Cata-Dyne™ Stratafan™ can be used in industrial locations to promote higher overall air temperature, lower humidity, reduced condensation and ice build up.

2. The Stratafan™ thermoelectric fan is designed and intended for use only with Cata-Dyne™ WX or MKII catalytic heaters, a product by Thermon.
- Use of the Stratafan™ with any other style of heater will void the product certification and may pose a risk of property damage, injury or death. Under no circumstances should the Stratafan™ be used with any alternative catalytic heater, gas stove, wood stove, etc.

## C. OPERATION

- C.1 Startup

Install the Stratafan™ in the desired location as per Section D. Installation, page 3. The fan will start operation when the unit absorbs sufficient heat from the heater. Under normal operating conditions with the heater at steady-state temperature, the fan should reach continuous operating speed within approximately 5 minutes. The Stratafan™ does not require any assistance for start-up.
- C.2 Shutdown

To stop the fan, the heater must be turned off. The fan will slow to a stop once it cools off.



**CAUTION.** The Stratafan™ includes rotating components and care should be taken around the unit. Do not insert fingers or other objects into the fan while the unit is IN operation. Do not block air flow by placing mitts or other objects on top or in front of the wire grille.



**WARNING.** Placing a hot fan on a surface may result in property damage, fire or injury. Do not touch the Stratafan™ while in operation.

## D. INSTALLATION

### D.1 General Instructions

1. Start your Cata-Dyne™ heater and let reaction fully develop for at least 30 minutes.
2. The Stratafan™ must be installed on a CSA approved WX or MKII model Cata-Dyne™ heater with a maximum input capacity of 5,000 Btu/hr for every square foot of pad area. For example, the Stratafan™ is certified for use on a WX 12x24 heater rated to 10,000 Btu/hr, this WX heater will have two square feet of pad area at 5,000 Btu/hr for every square foot.
3. Determine where you would like to mount the unit on the heater. The ideal mounting position for the Stratafan™ is on the top. If you have a vent-hood, mount the unit on the side or bottom.

### D.2 Top Installation

1. Place on top of the unit with the heat collection plate directly in front of the pad surface.



**CAUTION.** Do not put Stratafan™ over top of the supporting rail.



Figure 1

2. Clamp the Stratafan™ to the heater box by tightening the hex head socket cap screws using a 5/32" allen key.

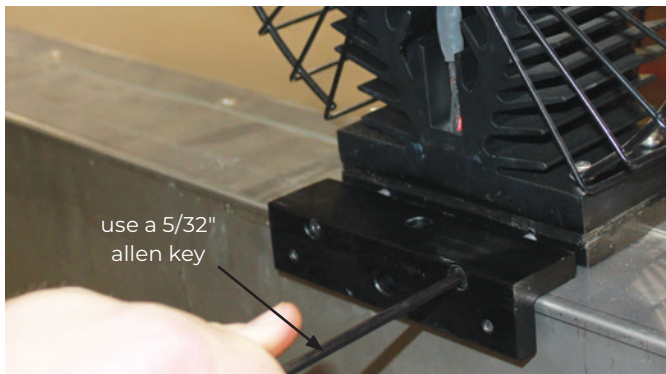


Figure 2

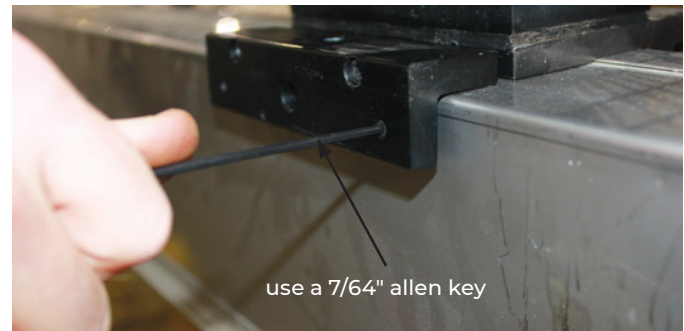


Figure 3

3. Secure the Stratafan™ to the Cata-Dyne™ unit heater by tightening the cone head set screws using a 7/64" allen key.

### D.3 Side Installation Cata-Dyne™ Z Mounting Bracket

1. Remove the 1.5" socket head cap screws from the back of the Stratafan™ using a 5/32" allen key. Flip the rear mounted clamp bracket. Install the included 2.5" long hex head socket cap screws using a 5/32" allen key. This will leave a 1/2" (12.7 mm) gap between the clamp and the Stratafan™ unit.

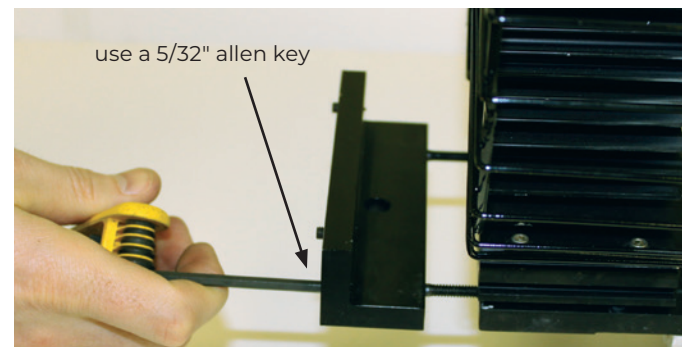


Figure 4

2. Align the hole in rear clamp bracket with any available holes on the Z-bracket. Ensure that the heat collection plate is fully exposed to the front face of the heater. If there is no hole available you may drill out the stainless steel bracket with a 3/8" bit.





Figure 5

3. Hold the Stratafan™ in the desired mounting position and install the 5/16" x 1" hex head bolt through the clamp and the mounting bracket. Secure the Stratafan™ to the heater by tightening the nut and the lock washer to the bolt.

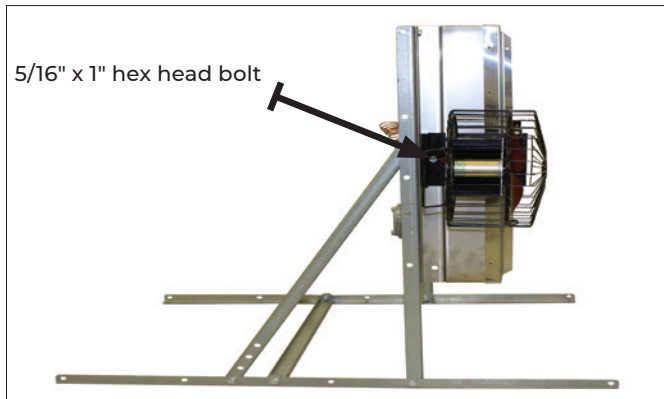


Figure 6

4. Check to see that there is no space between the front clamp and the bezel. If there is too much space remove the Stratafan™ and tighten the hex head socket cap screws, drawing the rear clamp closer to the fan body.

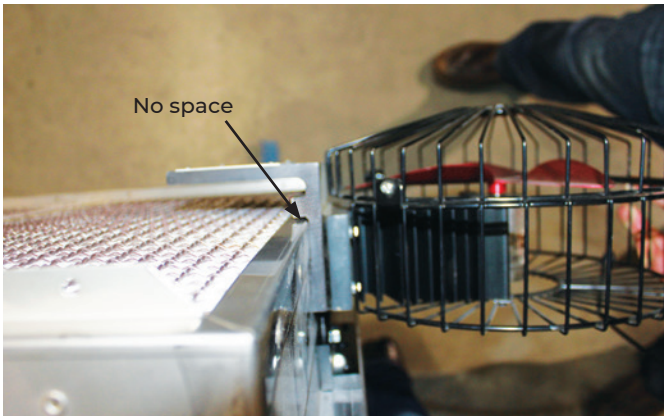


Figure 7

5. Tighten the front mounted set screws through the holes in the front heat collection plate. This should secure the Stratafan™ to the heater itself.



Figure 8

#### D.4 Side Installation Cata-Dyne™ Standard Mounting Bracket

1. Remove the 1.5" hex head cap screws from the back of the Stratafan™ and flip the rear mounted clamp bracket. Install the 2.5" long, 5/32" socket cap screws using a 5/32" allen key. This will leave a 1/2" (12.7 mm) gap between the clamp and the Stratafan™ unit.

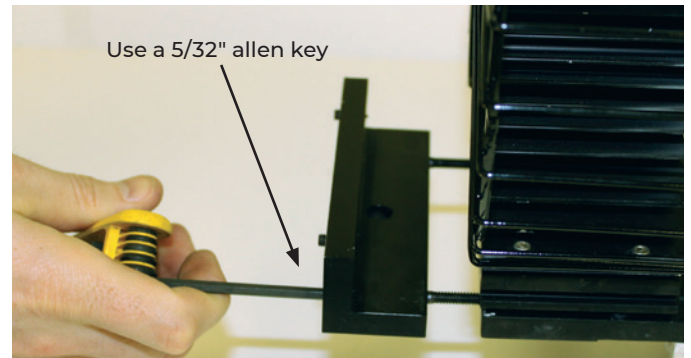


Figure 9

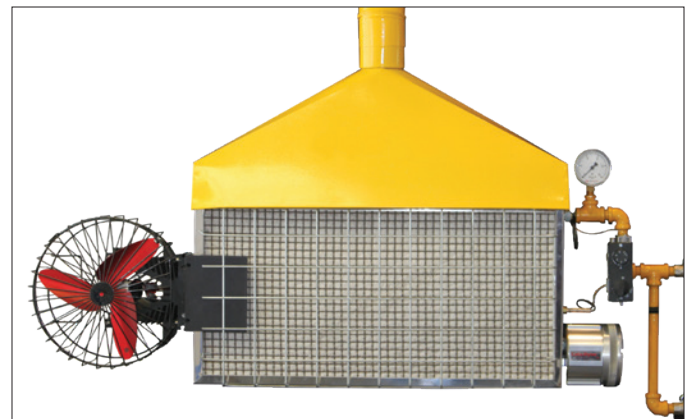


Figure 10

2. Align the hole in the Stratafan™ clamp bracket with any available hole in the Cata-Dyne™ standard mounting bracket. Ensure that the heat collection plate is fully exposed to the front face of the heater.

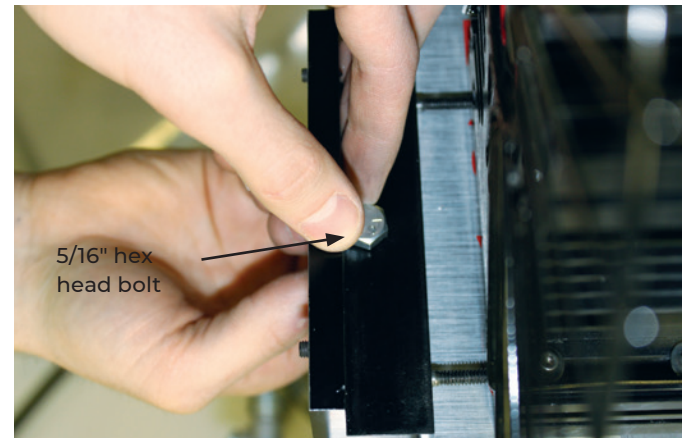


Figure 11

3. Hold the Stratafan™ in the desired mounting position and install the 5/16" x 1" bolt through the Stratafan™ clamp and the mounting bracket. Secure the Stratafan™ to the heater by tightening the nut and the lock washer to the bolt.
4. Check to see that there is no space between the front clamp and the bezel. If there is space, remove the Stratafan™ and tighten the hex head socket cap screws, drawing the rear clamp closer to the fan body.
5. Tighten the front mounted set screws through the holes in the front heat collection plate. This should firmly secure the Stratafan™ to the heater itself.

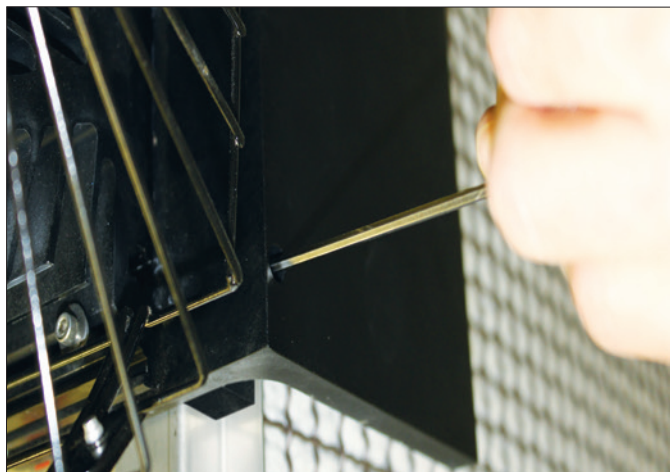


Figure 12

#### D.5 Bottom Installation

1. Place on top of the unit with the heat collection plate directly in front of the pad surface.



**CAUTION.** Do not put Stratafan™ over top of the supporting rail.

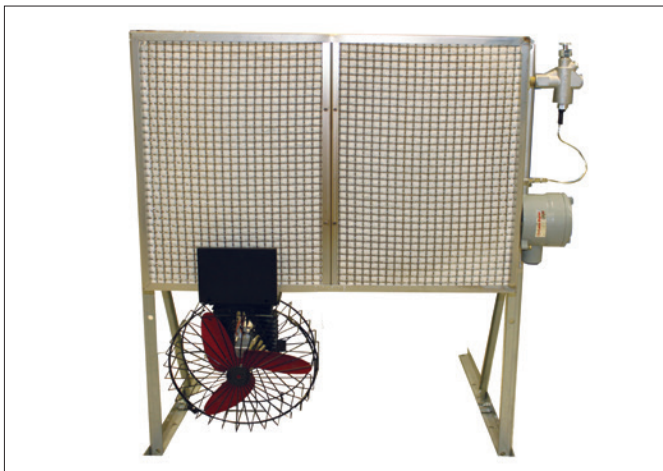


Figure 13

2. Support the unit while tightening the hex head, socket cap screws using a 5/32" allen key. This will clamp the unit to the heater box.



Figure 14

3. Secure the Stratafan™ to the Cata-Dyne™ unit heater by tightening the cone head set screws using a 7/64" allen key.



Figure 15

## E. REPAIRS

---

1. Under no circumstances should users attempt to repair the Stratafan™. User repair will void the product warranty and the CSA Intrinsic Safety Certification.
2. Contact the original sales distributor to arrange for product repair.

## F. RETURN GOODS POLICY

---

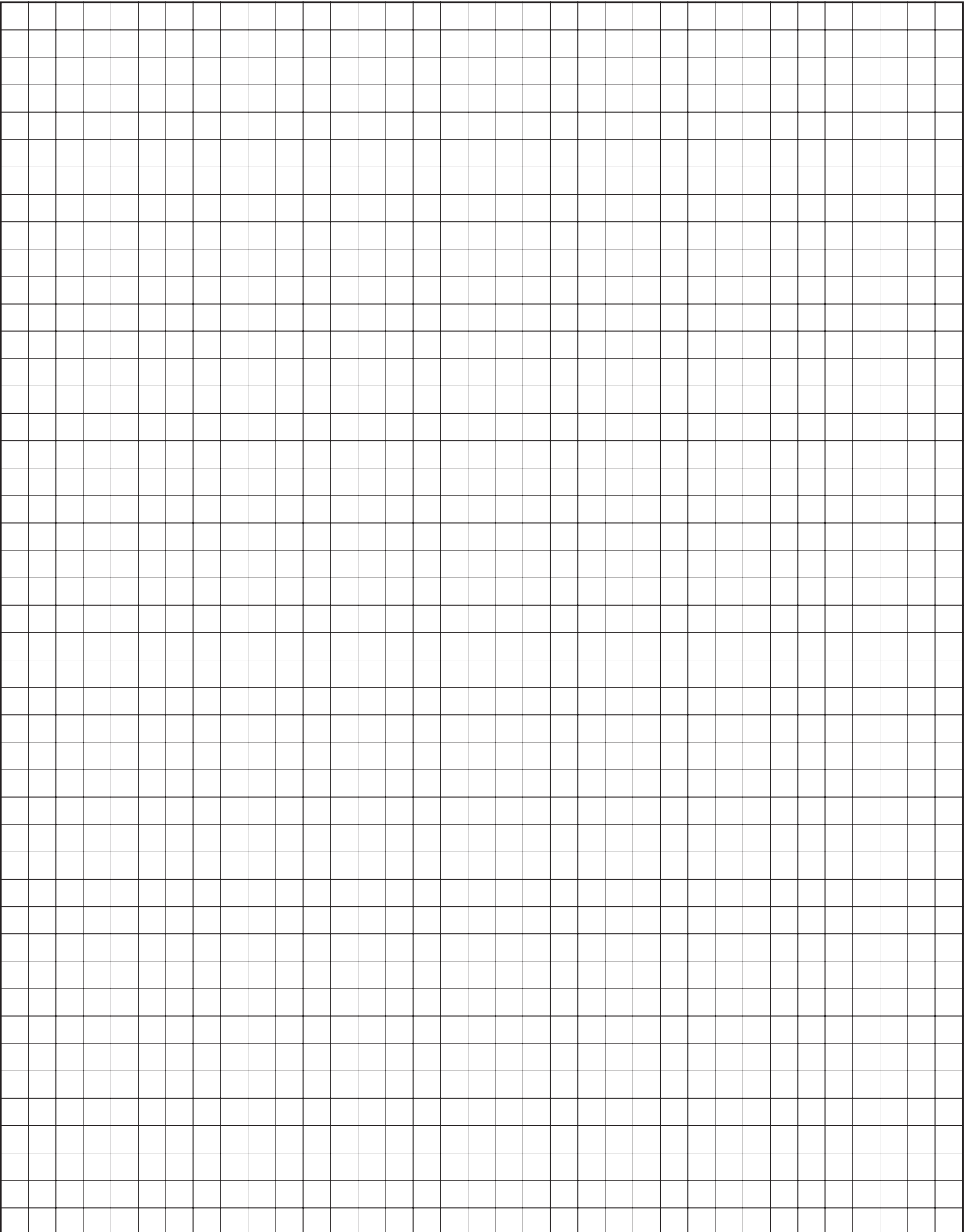
1. All product returns must be sent to the original sales distributor. Prior written approval must be obtained for the return of any Cata-Dyne™ product(s). Final acceptance will be contingent on inspection at the factory.

## G. ORDERING INFORMATION

---

1. Order any of Thermon's products by telephone, fax, email or online at: [www.thermon.com](http://www.thermon.com)

# NOTES





# Cata-Dyne™

## PLEASE ADHERE TO INSTRUCTIONS IN THIS MANUAL

Failure to do so may be dangerous and may void certain provisions of your warranty.

For further assistance, please call 24hr hotline: 1.800.661.8529 (U.S.A. and Canada)

Please have model and serial numbers available before calling.

**WARRANTY:** Under normal use the Company warrants to the purchaser that defects in material or workmanship will be repaired or replaced without charge for a period of 18 months from date of shipment, or 12 months from the start date of operation, whichever expires first. Any claim for warranty must be reported to the sales office where the product was purchased for authorized repair or replacement within the terms of this warranty.

Subject to State or Provincial law to the contrary, the Company will not be responsible for any expense for installation, removal from service, transportation, or damages of any type whatsoever, including damages arising from lack of use, business interruptions, or incidental or consequential damages.

The Company cannot anticipate or control the conditions of product usage and therefore accepts no responsibility for the safe application and suitability of its products when used alone or in combination with other products. Tests for the safe application and suitability of the products are the sole responsibility of the user.

This warranty will be void if, in the judgment of the Company, the damage, failure or defect is the result of:

- Vibration, radiation, erosion, corrosion, process contamination, abnormal process conditions, temperature and pressures, unusual surges or pulsation, fouling, ordinary wear and tear, lack of maintenance, incorrectly applied utilities such as voltage, air, gas, water, and others or any combination of the aforementioned causes not specifically allowed for in the design conditions or,
- Any act or omission by the Purchaser, its agents, servants or independent contractors which for greater certainty, but not so as to limit the generality of the foregoing, includes physical, chemical or mechanical abuse, accident, improper installation of the product, improper storage and handling of the product, improper application or the misalignment of parts.

No warranty applies to paint finishes except for manufacturing defects apparent within 30 days from the date of installation.

The Company neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the product(s).

The Purchaser agrees that all warranty work required after the initial commissioning of the product will be provided only if the Company has been paid by the Purchaser in full accordance with the terms and conditions of the contract.

The Purchaser agrees that the Company makes no warranty or guarantee, express, implied or statutory, (including any warranty of merchantability or warranty of fitness for a particular purpose) written or oral, of the Article or incidental labour, except as is expressed or contained in the agreement herein.

**LIABILITY:** Technical data contained in the catalog or on the website is subject to change without notice. The Company reserves the right to make dimensional and other design changes as required. The Purchaser acknowledges the Company shall not be obligated to modify those articles manufactured before the formulation of the changes in design or improvements of the products by the Company.

The Company shall not be liable to compensate or indemnify the Purchaser, end user or any other party against any actions, claims, liabilities, injury, loss, loss of use, loss of business, damages, indirect or consequential damages, demands, penalties, fines, expenses (including legal expenses), costs, obligations and causes of action of any kind arising wholly or partly from negligence or omission of the user or the misuse, incorrect application, unsafe application, incorrect storage and handling, incorrect installation, lack of maintenance, improper maintenance or improper operation of products furnished by the Company.

### Edmonton

1-800-661-8529  
1-780-466-3178  
F 780-468-5904

### Oakville

1-800-410-3131  
1-905-829-4422  
F 905-829-4430

### Orillia

1-877-325-3473  
1-705-325-3473  
F 705-325-2106

### Houston

1-800-654-2583  
1-713-433-2600  
F 713-433-4541

### Denver

1-855-244-3128  
1-303-979-7339  
F 303-979-7350