

Product Information Packet

Model LHP-800CP

Solid State Liquid Cooled Cold Plate

without Temperature Control

Part #3-5099-0-000

Thank you for your purchase. Information has been enclosed regarding the installation, specifications, and wiring of your solid-state assembly. Please read and follow all instructions carefully before installation. Only qualified technicians should install this equipment.

If you have any questions regarding your equipment, please do not hesitate to call us at 773-342-4900, and we will be happy to assist you. We are open from 8:30 am-5:00 pm Central Time.

Included in this packet you will find:

Product Literature and Specifications

Assembly Drawing #LHP800-B-A17

Wiring Drawing #LHP300-B-E5

Installation Drawing #LHP800-B-F8

Warranty Information

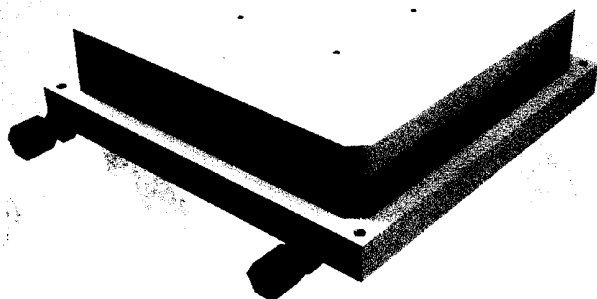


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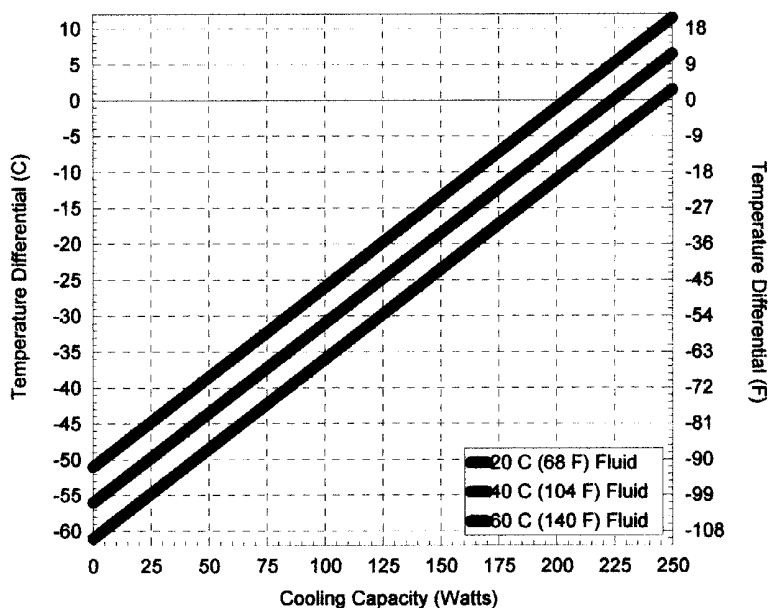
LHP-800CP

700-830 Btu/Hr

Liquid Cooled Cold Plate



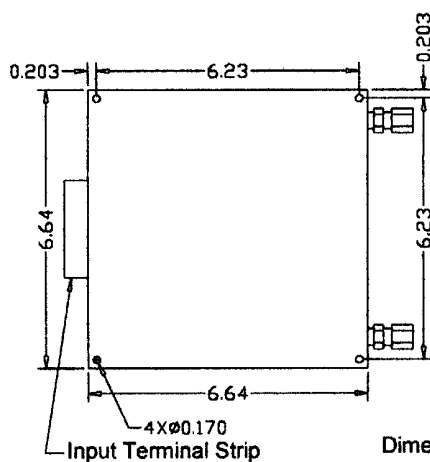
Performance:



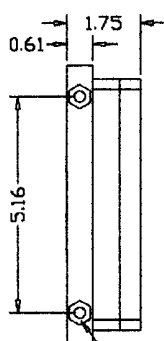
Specifications

Fluid Temp.	20°C	40°C	60°C
Cold Plate	$y = .25x - 51$	$y = .25x - 56$	$y = .25x - 61$
$y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			

Model	Part Number	Notes	Performance Rating (BTU/hr)	Voltage (VDC)	Current (Amps)	Heat Voltage	Weight Lbs. (Kg)	Minimum Flow (GPM)	Operating Range (°C)
LHP-800CP	3-5099-0-000	Cool only, no temperature control	700-830	30	10	N/A	5.2 (2.3)	0.3	0/+70
LHP-800CPHC	3-5099-1-000	Heat/Cool, no temperature control, 200 Watts Heat	700-830	30	10	120 VAC	5.2 (2.3)	0.3	0/+70
LHP-810CP	3-509A-1-000	Cool only, no temperature control	700-830	120	3.5	N/A	5.2 (2.3)	0.3	0/+70

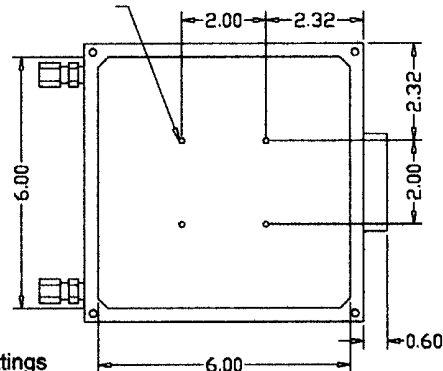


Dimensions are in inches.



Stainless Steel Liquid Fittings

(4) 6-32 x .25 DP Accessory Holes

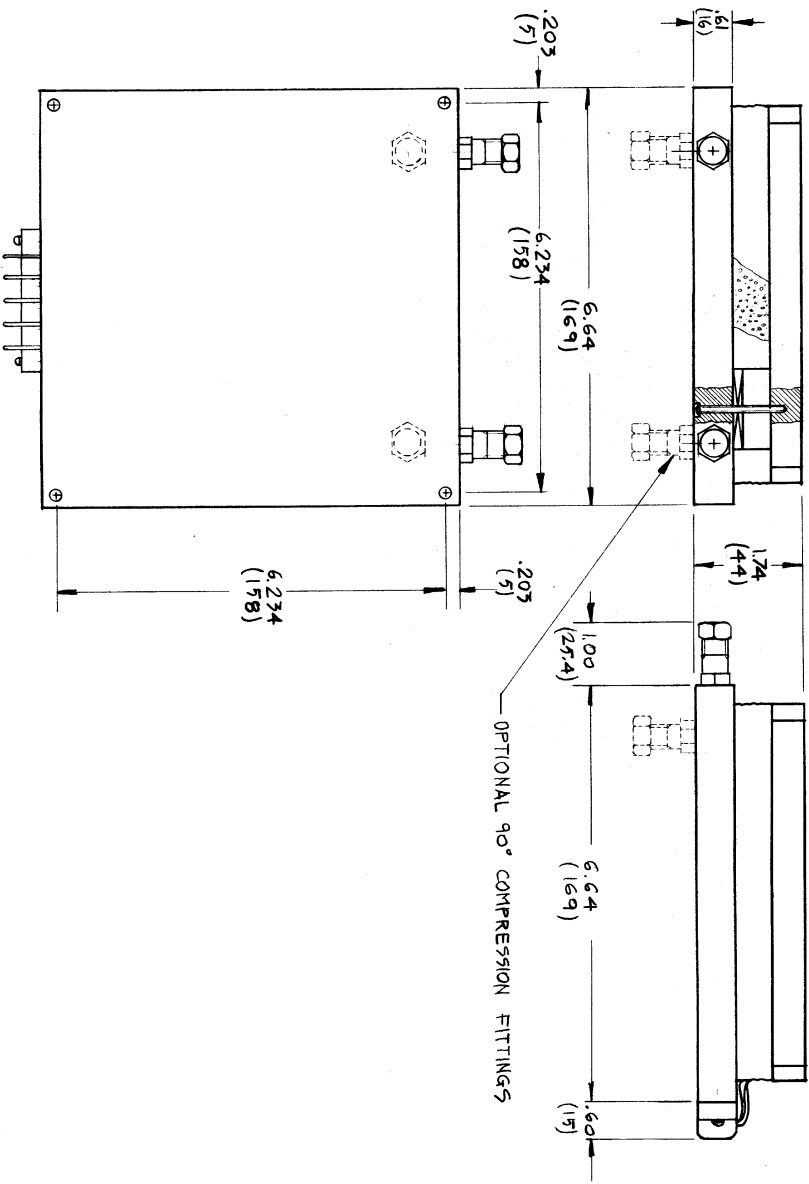


teca

Call us toll free at 888-TECA-USA (832-2872)

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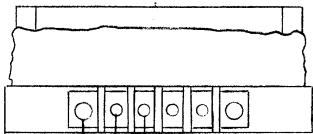
LTR	DESCRIPTION	DATE	APPROVED



NOTE: DIMENSIONS IN INCHES
(MILLIMETERS)

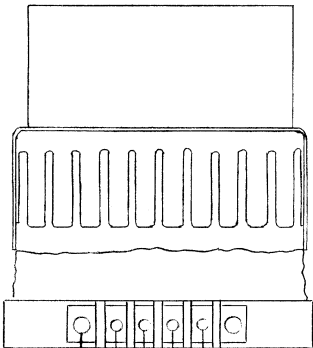
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES .XX ± .005 .XXX ± .010 .XXX ± .015		loca ThermoElectric Cooling America Corp.	
MATERIAL FINISH		LHP 800 CP ASSEMBLY	
APPROVALS DRAWN IN CHECKED	DATE 05.21.90	SIZE B	DRAWING NO. LHP 800-B-A17
SCALE 1/2		DO465	SHEET OF

APPLICATION		REVISION		
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE
		A	CHGD WIRE COLOR	07.30.90
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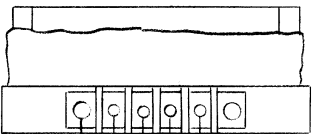
POSITIVE D.C. LEAD TO T.E. (RED)
 NEGATIVE D.C. LEAD TO T.E. (BLACK)
 SYSTEM GROUND (GREEN)

LHP-300CP
 LHP-800CP



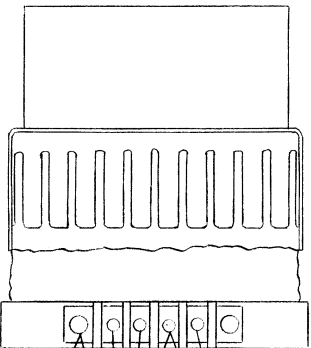
110V.A.C. HI TO FAN (BK/W)
 110V.A.C. LO TO FAN (WHITE)
 POSITIVE D.C. LEAD TO T.E. (RED)
 NEGATIVE D.C. LEAD TO T.E. (BLACK)
 SYSTEM GROUND

LHP-300FF
 LHP-800FF



110V.A.C. LO TO HEATER (WHITE)
 110V.A.C. HI TO HEATER (BLUE)
 POSITIVE D.C. LEAD TO T.E. (RED)
 NEGATIVE D.C. LEAD TO T.E. (BLACK)
 SYSTEM GROUND (GREEN)

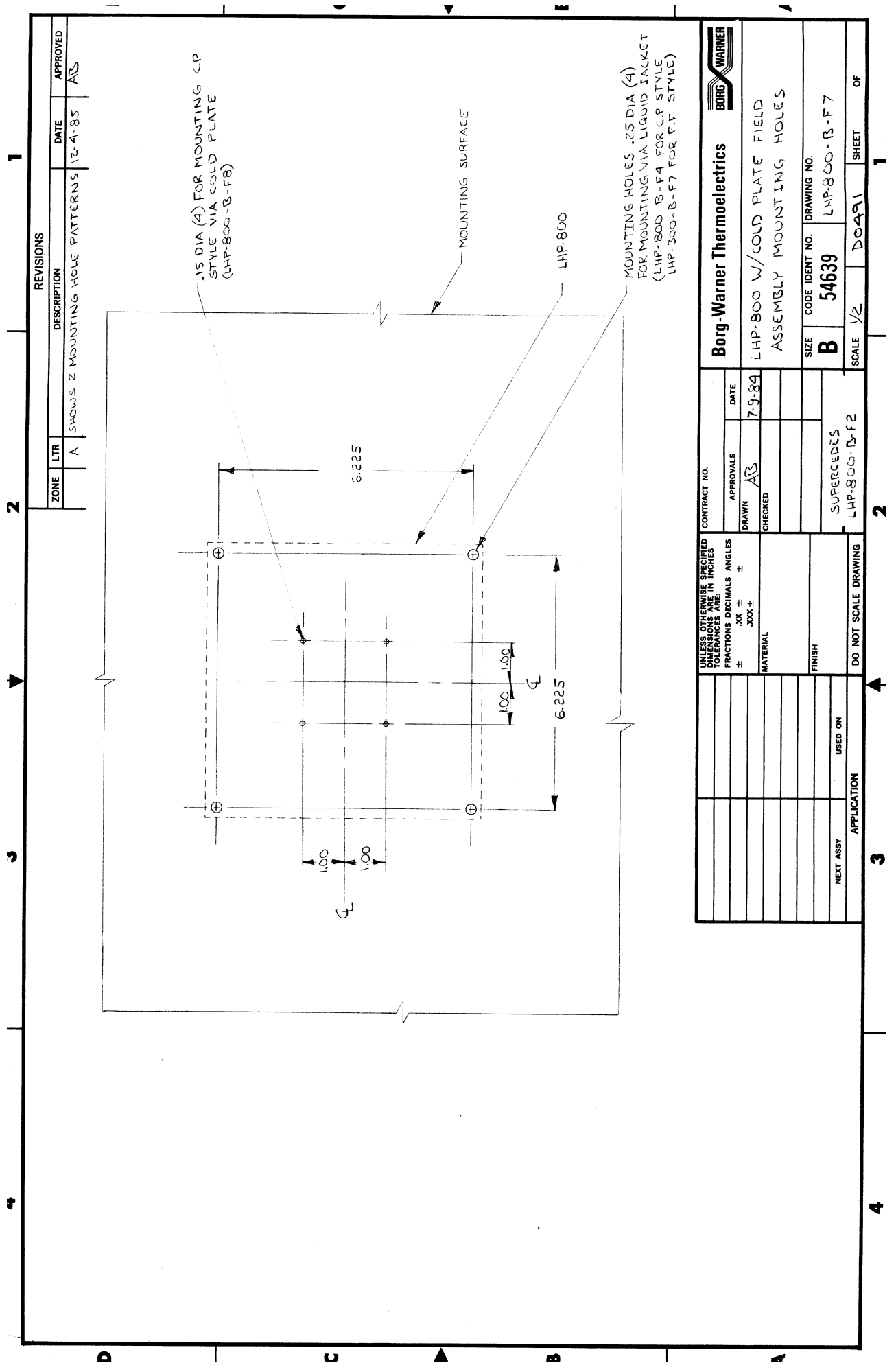
LHP-300CPHC
 LHP-800CPHC



110V.A.C. HI (BK/W) TO FAN
 110V.A.C. LO (WHITE) TO FAN
 110V.A.C. HI (BLUE SWITCHED) TO HEATER
 POSITIVE D.C. LEAD TO T.E. (RED)
 NEGATIVE D.C. LEAD TO T.E. (BLACK)
 SYSTEM GROUND (GREEN)

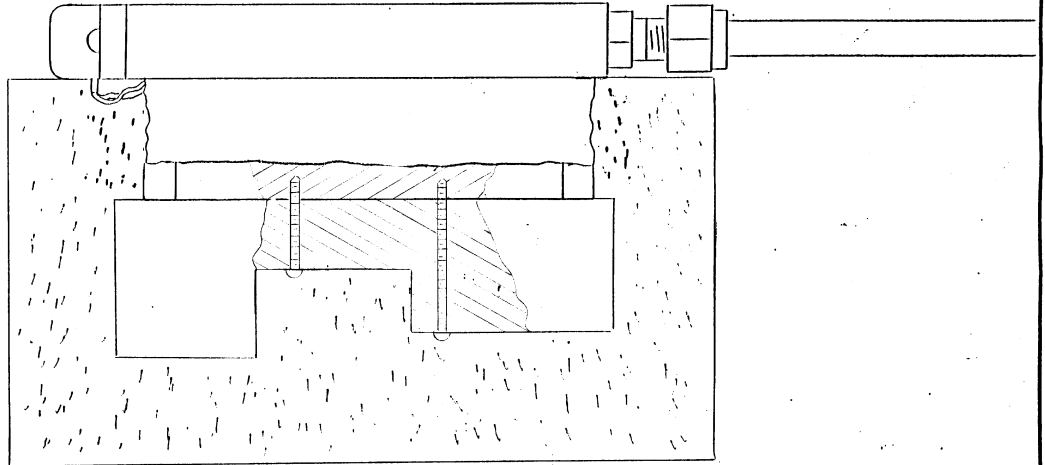
LHP-300FFHC
 LHP-800FFHC

THESE DIMENSIONS SPECIFIED TOLERANCES ARE IN INCHES FRACTIONS DECIMALS ANGLES ± .XX ± ± ± MATERIAL XXX ±		CONTRACT NO. APPROVALS DATE 12-9-55 DRAWN AS CHECKED		BORG WARNER ThermoElectrics TERMINAL WIRING FOR ALL VERSIONS OF LHP-300 AND LHP-800	
FINISH DO NOT SCALE DRAWING		SIZE B		DRAWING NO. LHP-300-B-ES	
SCALE		10:1		SHEET 1 OF 1	



REVISIONS			
ZONE	LTR	DESCRIPTION	DATE
A		SHOWS 2 MOUNTING HOLE PATTERNS	12-4-85
			APPROVED
			AS

Borg-Warner Thermoelectrics 		CONTRACT NO. LHP-800-B-F2	
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES FRACTIONS DECIMALS ANGLES ± .XX ± ± ± .XXX ± ±	APPROVALS DRAWN AB CHECKED	DATE 7-9-84	DRAWING NO. LHP-800-B-F7
MATERIAL LHP-800-B-F2		FINISH	
DO NOT SCALE DRAWING		SCALE 1/2	
APPLICATION LHP-800-B-F2		SHEET 1 OF 1	



INSTALLATION INSTRUCTIONS

1. Cut and drill mounting holes as per appropriate field assembly mounting drawing.
2. Insure clean, flat mounting surface.
3. Spread evenly 10 mil coating of thermal grease (Dow type 340 or equivalent) on both thermal contact surfaces with speedball rubber roller.
4. Install unit without sliding against mating surface using Stainless Steel screws if available and lock washers. Torque screws until snug. Do not over tighten.
5. Connect 1/8" water lines.
6. Inspect for water leaks.
7. Fit 1" insulation around margin of frame and exposed area of cooled surface.
8. Caulk insulation to seal and secure insulation.
9. Inspect for leaks and alignment.
10. Connect power.
 - (1) Black is -DC for T.E.
 - (2) Red is +DC for T.E.
 - (3) Blue is 110 VAC (LHP-800HC only)
 - (4) White is 110 VAC (LHP-800HC only)
11. Caution: Do not operate unit without water flow.

APPLICATION			REVISION		
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± ± ± .XXX ± ±	CONTRACT NO.		 ThermoElectrics	
	DRAWN	APPROVALS	DATE	INSTALLATION INSTRUCTIONS FOR LHP-800 (VIA GOLD PLATE)
	CHECKED			
MATERIAL			SIZE	DRAWING NO. LHP-800-B-F8
FINISH			B	
DO NOT SCALE DRAWING			SCALE	SHEET OF DC-192

LIMITED WARRANTY

In the event a defect in material or workmanship is discovered in any of TECA's products within one year after the date they are delivered to Buyer, and if: (a) TECA is notified of the defect in writing by certified mail within 14 days of the date of discovery; (b) TECA may then either, at its sole discretion, inspect the product at Buyer's location, or require that the product be made available at Buyer's expense at TECA's premises for TECA's inspection within 14 days of the date of notification; and (c) the products are defective and the defects result from faulty materials and/or workmanship and not in any way from accident, misuse, misapplication, mishandling, modification, or alteration by the Buyer or the shipper, then TECA shall, at its sole option, repair or exchange defective products free of charge to Buyer, or credit to buyer the price of the defective products. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE EXCLUDED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL TECA BE LIABLE FOR ANY CLAIM BASED UPON BREACH OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER DAMAGES WHETHER SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOST PROFITS, BUSINESS INTERRUPTION, OR LOSS OF BUSINESS OR CUSTOMER RELATIONSHIPS.

RETURNED GOODS, RESTOCKING CHARGES

In order to return merchandise for any reason (repair, replacement, or credit) a return authorization number must be issued by TECA. New merchandise may not be returned for credit beyond 60 days from shipment. Charges for incidental or other damages may also be made. All returned goods must be sent freight prepaid. A restocking charge of 15% will apply. On special equipment and custom modified equipment orders, additional incremental cancellation charges may be made.