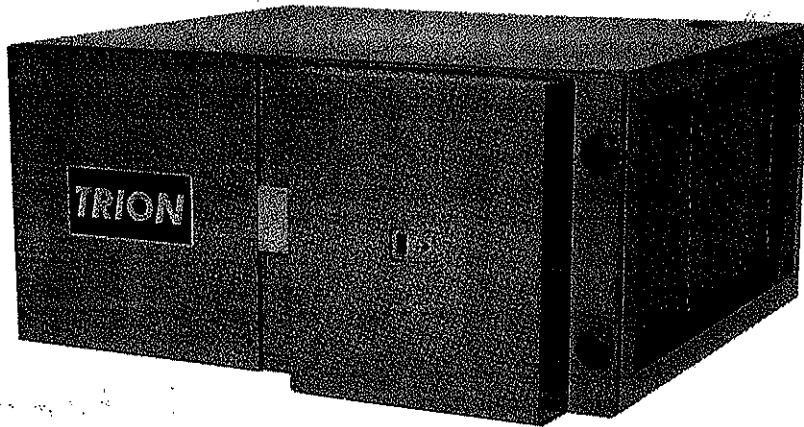


1st UNI CELL

22 PAGES

MODEL SERIES
T1300, T2600,
T1001 MODULE, T2002 MODULE



Manual for:

Installation • Operation • Maintenance

TRION®

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I. SPECIFICATIONS

Power Requirements:

MODEL	VOLTAGE	HORSE POWER	AMPS (MAX.)
T1001 Module	120V, 60 HZ, 1 PH.	-	.4
T1001 Module	230V, 50 HZ, 1 PH.	-	.2
T1001 Module	230V, 60 HZ, 1 PH.	-	.2
T1001 Module	230V, 60 HZ, 3 PH.	-	.2
T1001 Module	460V, 60 HZ, 3 PH.	-	.1
T2002 Module	120V, 60 HZ, 1 PH.	-	.5
T2002 Module	230V, 50 HZ, 1 PH.	-	.3
T2002 Module	230V, 60 HZ, 1 PH.	-	.3
T2002 Module	230V, 60 HZ, 3 PH.	-	.3
T2002 Module	460V, 60 HZ, 3 PH.	-	.2
T1300	120V, 60 HZ, 1 PH.	3/4	11.2
T13100A	230V, 60 HZ, 1 PH.	3/4	5.6
T1300B	230V, 60 HZ, 3 PH.	1	3.6
T1300C	460V, 60 HZ, 3 PH.	1	1.8
T1300D	575V, 60 HZ, 3 PH.	1	1.6
T1300E	230V, 50 HZ, 1 PH.	3/4	5.9
T1300N	208V, 60 HZ, 3 PH.	1	3.6
T2600	120V, 60 HZ, 1 PH.	3/4	11.3
T2600A	230V, 60HZ, 1 PH.	3/4	5.7
T2600B	230V, 60 HZ, 3 PH.	1	3.7
T2600B	230V, 60 HZ, 3 PH.	2	6.5
T2600C	460V, 60 HZ, 3 PH.	1	1.9
T2600C	460V, 60 HZ, 3 PH.	2	3.3
T2600D	575V, 60 HZ, 3 PH.	1	1.7
T2600E	230V, 50 HZ, 1 PH.	3/4	6.0
T2600N	208V, 60 HZ, 3 PH.	1	3.7
T2600N	208V, 60 HZ, 3 PH.	2	6.5

Collector Voltage: 6KV

Ionizer Voltage: 12 KV

Motor (where applicable): Ball bearing, Totally enclosed, Fan cooled

II. PREPARATION FOR INSTALLATION

This manual should be carefully read before starting the preparation and installation of the air cleaner.

The installation should conform to all local ordinances associated with building codes and electrical codes required for the unit. Authorities having jurisdiction should be consulted before installation is made. If there are no local codes, the installation should conform to the National Electrical Code.

The 575V, 3 Phase unit does not have internal motor overload protection. The installer must provide overload protection in accordance with National Electrical Code, Canadian Electrical Code, part 1 or other applicable electrical codes.

For maximum air cleaning efficiency, your air cleaner should be located as specified by your TRION Distributor.

The unit can be either wall-mounted or chain-hung. Eyebolts can be supplied by the TRION Distributor.

NEW UNIT INSPECTION

Immediately, upon receiving the unit, carefully examine the package for damage during transit. If unit is damaged, contact the last carrier for filing claim and contact your TRION Distributor.

While unpackaging the unit, look for concealed shipping damage. If there is damage it should be reported to the last carrier for filing claim and contact your TRION Distributor.

WHAT IS YOUR ELECTRONIC AIR CLEANER?

Your air cleaner is a high efficiency contaminant collector designed to remove up to 95%* of the dust, smoke, liquid aerosol and other pollutants from all the air passing through it.

* Determined by the National Bureau of Standards DOP Test Method with addition of artificial dust or other contaminants.

HOW IT OPERATES

Polluted air is drawn into the unit by the belt driven blower (A) on a T1300 or T2600. The T1001 and T2002 Modules require an external air mover. After passing through a pre-filter (B), the particles in the air are given an electrical charge supplied by the power supply (C). Entering the collector cells (D), these charged particles are attracted to and collected on grounded collecting plates.

OPERATION

Control Switch (A): The control switch is located on the cell access door. It controls the operation of the power pack (and the belt driven blower on T1300 and T2600). The control switch should be in the "OFF" position when the cell access door is open for maintenance of the unit.

Indicating Light (B): The light located adjacent to the control switch is an indicator of the performance of your electronic air cleaner. When the control switch is "ON", the blower should operate on the T1300 and T2600, and the indicator light should glow. If the light does not glow or if it continually flickers and is accompanied with a continual snapping or arcing noise, the air cleaner requires attention.

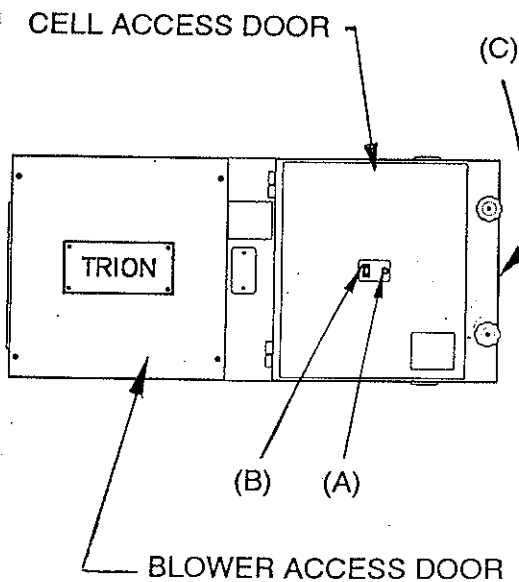
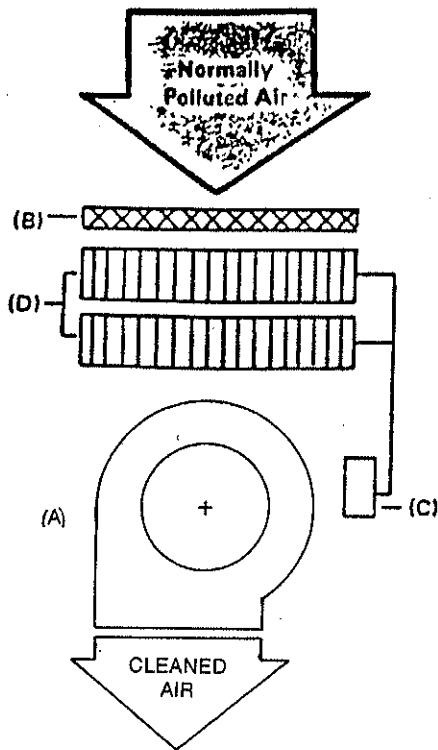
Cell Access Door Knobs (C): The cell access door knobs are located on the door near the intake end of the unit. To open the cell access door, turn the door knobs counter clockwise.

Arcing (snapping or cracking noise): An occasional arcing noise may be emitted from the air cleaner. This is a normal reaction being caused by an exceptionally large piece of dirt, etc., entering the collecting elements. Also, an arcing noise accompanied by a flickering of the indicating light may also be noted after washing. Should this happen, allow more drying time. Also, see "Troubleshooting Chart" for additional causes of arcing.

The louvers on the grills are adjustable so direction of air flow can be controlled as desired.

NOTE: The unit is equipped with an interlock switch for your safety. The unit will not operate if the cell access door is not closed securely.

NOTE: The blower access door on the T1300 and T2600 is not protected by an interlock switch. Do not attempt to operate the unit unless the door is fastened securely.



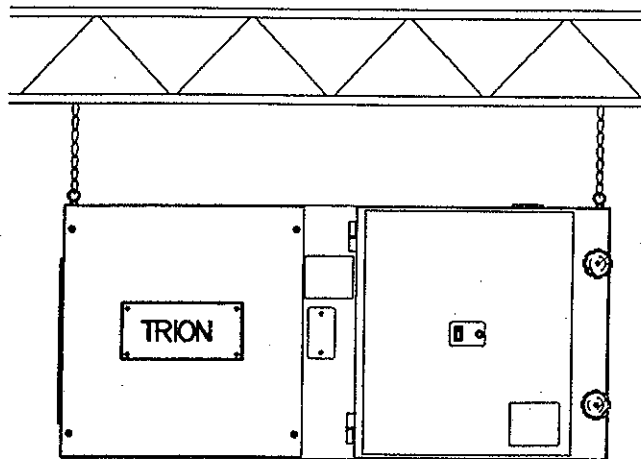
DUCTING APPLICATION

The T1300 and T2600 air cleaner are designed for free hanging applications or for limited duct system applications. The duct systems must be carefully designed to keep the external static pressure to a minimum while still moving the required amount of air. Some added static pressure can be overcome by adjusting the blower drive pulleys or using a more powerful motor. Capture hoods and duct design information may be obtained from the Industrial Ventilation Handbook.

THE FOLLOWING PROCEDURES ARE FOR QUALIFIED PERSONS ONLY AS HAZARDOUS LIVE AND MOVING PARTS MAY BE EXPOSED.

III. INSTALLATION — READ THOROUGHLY

1. Carefully unpack unit from shipping crate or carton and examine for damage in shipment.
2. Remove ionizer/collector cell(s), pre-filters and after-filters.
3. Attach 500 pound test chain to the ceiling joist using:
 - (a) Wood joist - 3/8" eye bolts
 - (b) Metal joist - wrap chain around joist at least twice and secure with 500 pound test connecting link
4. Chain should be cut to allow the unit to hang from a predetermined height from the floor. (Usually 10 - 12 feet).
5. The unit is equipped with a locator dimple in each corner on the top and bottom. Using the dimple as a guide, drill (4) 13/32 dia. holes that will be required for mounting the eye bolts that will be attached to the suspension chain.
6. Position a 3/8" diameter eye bolt (or larger) in each hole and secure with a washer and appropriate nuts. **NOTE:** Be sure to double nut these eye bolts. Failure to do so may cause the nuts to loosen causing the unit to fall.
7. Using 3/8" connecting links, attach unit to chain. Use turnbuckles on diagonally opposite chains. **NOTE:** Foul threads on turnbuckles after leveling unit to insure that the turnbuckle does not "back off" and cause the unit to fall.
8. The units can be suspended with the direction of air flow from right to left. If a left to right air flow is desired, the unit may be rotated 180 degrees on its axis and the eye hooks installed in what was originally the bottom.

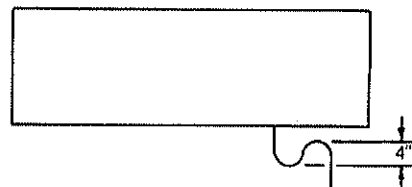


Typical Chain Supported Installation

LIQUID AEROSOL APPLICATION INSTALLATION

The unit is equipped with a sump, drain hole sized to accept a 1/2" NPT fitting. For the collection of liquid contaminant:

1. Install drain fitting to allow for attachment of liquid collection cup or drain hose. A drain fitting is available from your distributor. An "S" trap is required in the drain hose to ensure proper drainage of collected liquid.
2. Raise the front corner of the unit 1/2" to enable the collected liquid to flow to the drain sump.



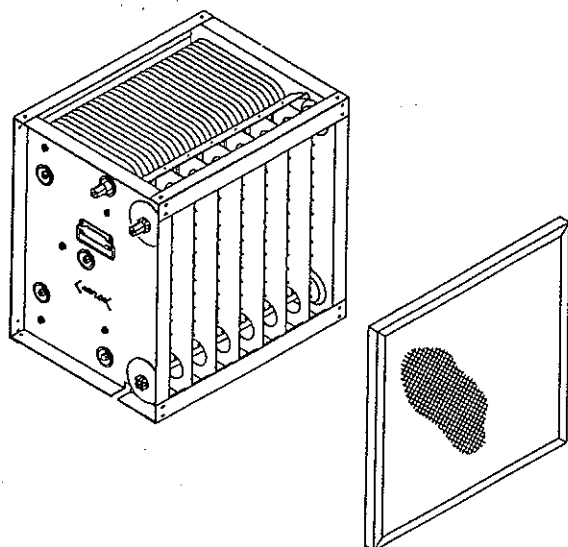
ELECTRICAL INSTALLATION

All units must be wired directly in the junction box on the access door side of the unit. Use NEC Class I wiring methods. Size branch circuit protection in accordance with NEC. Refer to appropriate enclosed wiring diagram.

IV. MAINTENANCE

The following instructions are for use by qualified personnel.

WARNING:
THE FOLLOWING PROCEDURES WILL EXPOSE HAZARDOUS LIVE PARTS. DISCONNECT POWER BEFORE PROCEEDING.



CLEANING

The PRE-FILTERS, IONIZER/COLLECTOR CELL(S) should be removed from the unit periodically and soaked in a solution of hot water and a commercial detergent for 2 to 4 hours. Your Trion Distributor has a detergent called Tridex specifically formulated for cleaning collector cells. The frequency of cleaning is dependent on the contaminant being collected. Liquid aerosol is virtually self cleaning while welding smoke may require accumulation being blown or rapped off every few days. Unit should be kept clean for maximum efficiency.

Wash Dirt Collecting Elements

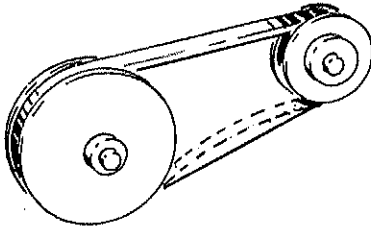
1. Turn the control switch OFF and disconnect power to the unit.
2. Open the cell access door.
3. Remove ionizer/collector cells and wash in hot detergent water. If the collected contaminant is of an extremely dry nature, it can be blown from the collecting cells with a pressure hose or removed by gently tapping the end plate of the cell. When blowing or tapping cell clean, carry cell outdoors.
4. Remove the mechanical pre-filter. Remove collected dust or lint by vacuuming or brushing. Wash with warm, soapy water.
5. Rinse all components thoroughly in warm, clear water and permit them to DRIP DRY THOROUGHLY.
6. Replace pre-filter and ionizer/collector cells. BE SURE AIR FLOW ARROW POINTS IN DIRECTION OF AIR FLOW (TOWARDS BLOWER).
7. Close access door, reconnect power to the unit.
8. Turn control switch to "ON". If arcing occurs or the indicating light flickers, the components may still be damp. Simply shut unit off and allow more drying time.

CAUTION: Do not run any object, such as a bottle brush, between the plates of the cell. This might change the plate spacing or damage the ionizer plates.

INSPECTIONS

The motors and blowers on Trion T1300 and T2600 Industrial Air Cleaners have sealed ball bearings and never need lubricating.

Belt tension should be checked periodically. When a moderate force is applied to the belt midway between the pulleys, the belt should deflect approximately 1/2".



CAUTION: Having too much tension on the belt will shorten belt life and place undue stress on the motor bearings and blower bearings.

V. REPLACEMENT PARTS ORDERING INFORMATION

The following pages contain exploded views and Bill of Material for TRION Air Cleaners. Use these pages to determine the part numbers of items which are needed.

To order repair parts, contact your local TRION Distributor.

The following information will be required for prompt delivery of repair parts.

1. Unit model number
2. Unit serial number
3. Part number and description

LOCATED

Data label near junction box
Data label near junction box
Exploded views

VI. WARRANTY

All TRION Electronic Air Cleaners are warranted for 3 Year Limited Warranty on units and 1 Year Limited Warranty on replacement parts. Do not return defective parts without prior permission from the factory.

VII. TROUBLESHOOTING GUIDE

T1001 / T2002

Problems and Possible Causes:

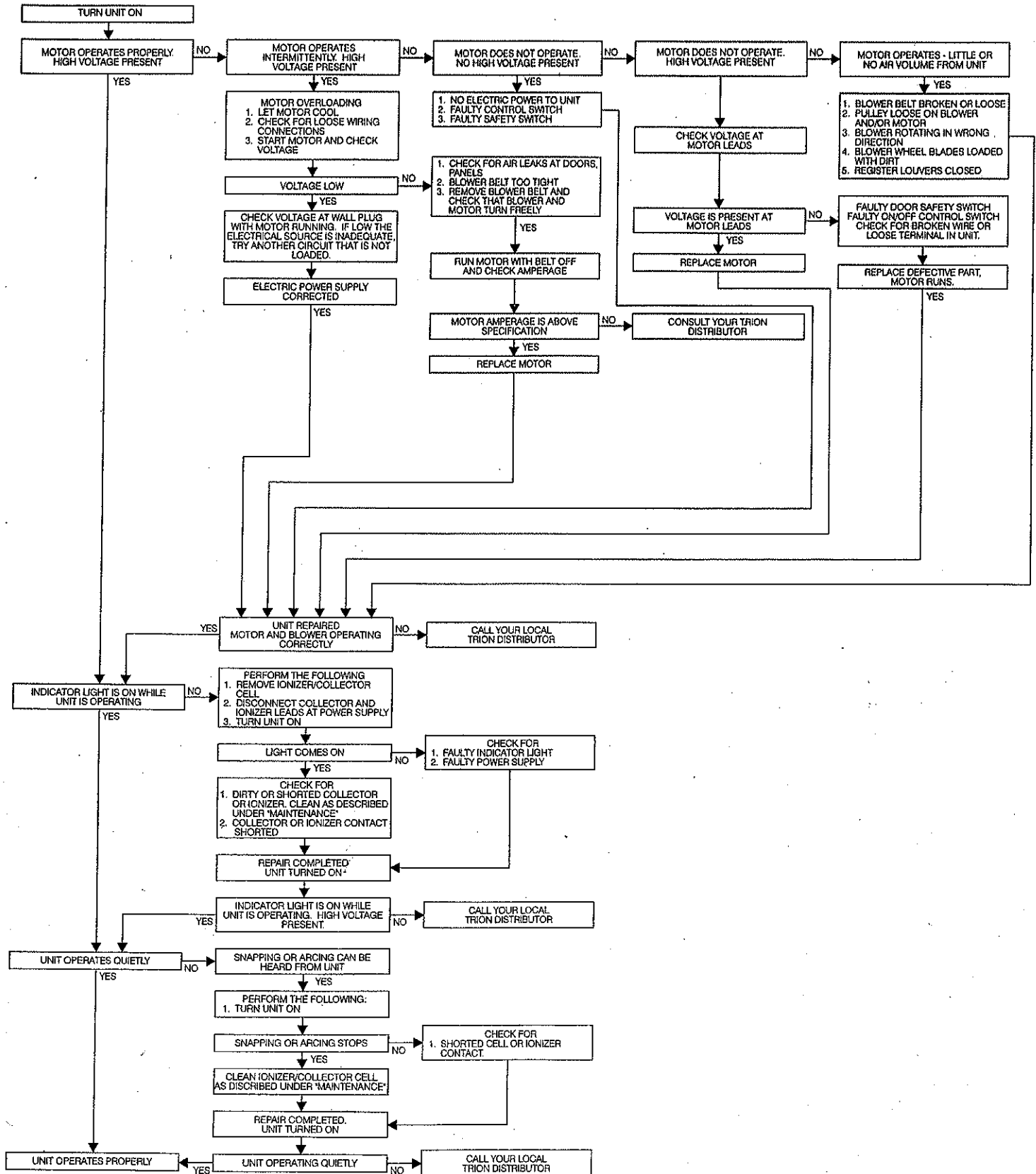
1. Indicating light out
 - A. Unit not plugged in
 - B. Control switch "OFF"
 - C. Cell access panel not fully closed
 - D. Broken cell insulator
 - E. Extremely dirty cells
 - F. Service panel not securely in place
2. Heavy arcing noise after washing
 - A. Collector elements still wet. Allow more drying time.
 - B. See "continuous arcing noise" below
3. Continuous arcing noise and flickering indicating light
 - A. Extremely dirty collector elements
 - B. Bent collector plates
 - C. Large piece or foreign material lodged
4. Contaminant by pass
 - A. Velocity too great through unit
 - B. Collector elements not grounded (tracks that elements rest on may become insulated).
 - C. Collector element contacts not making connection

IF PROBLEM CANNOT BE DETERMINED OR CORRECTED — CALL YOUR LOCAL TRION DISTRIBUTOR.

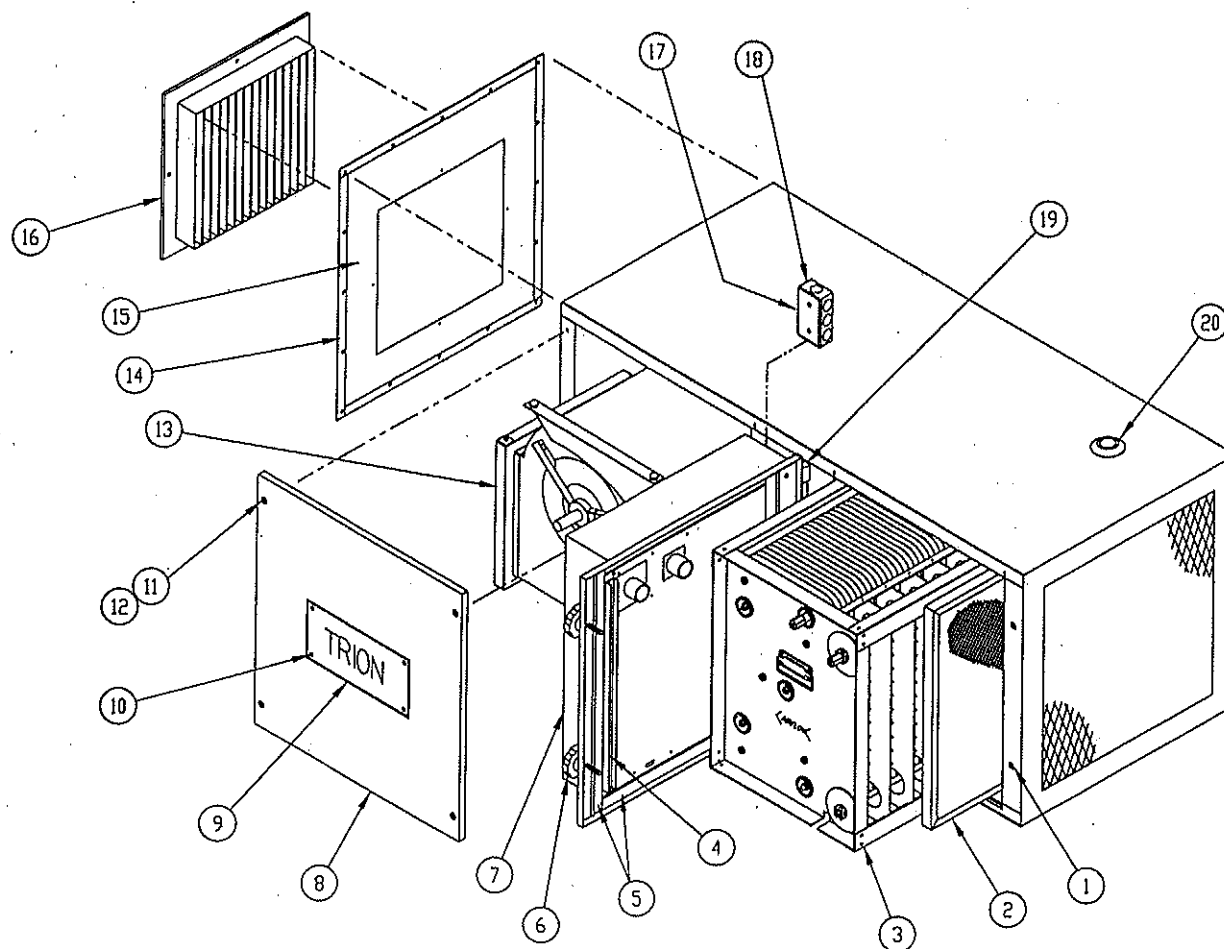
VII. T1300 / T2600 TROUBLESHOOTING GUIDE

The troubleshooting chart will enable the user to pinpoint the cause of most problems. Refer to the Ordering Information section for replacement parts. Before doing any troubleshooting, measure the input line voltage.

WARNING: HIGH VOLTAGE IS PRESENT INSIDE CABINET. DO NOT DEFEAT DOOR INTERLOCK SWITCH. ALWAYS UNPLUG UNIT WHILE PERFORMING SERVICE WITHIN THE CABINET.

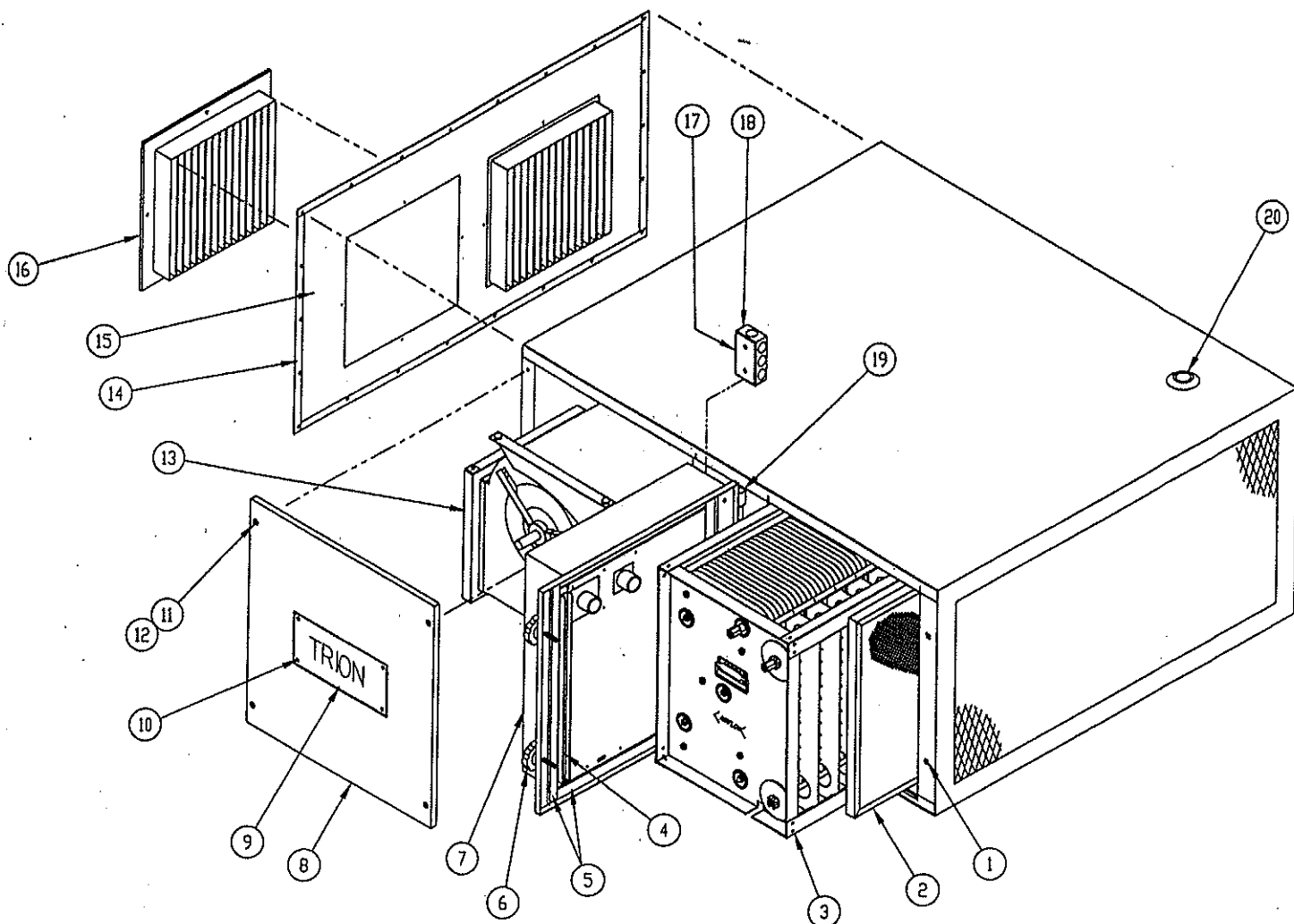


T1300 UNIT ASSEMBLY



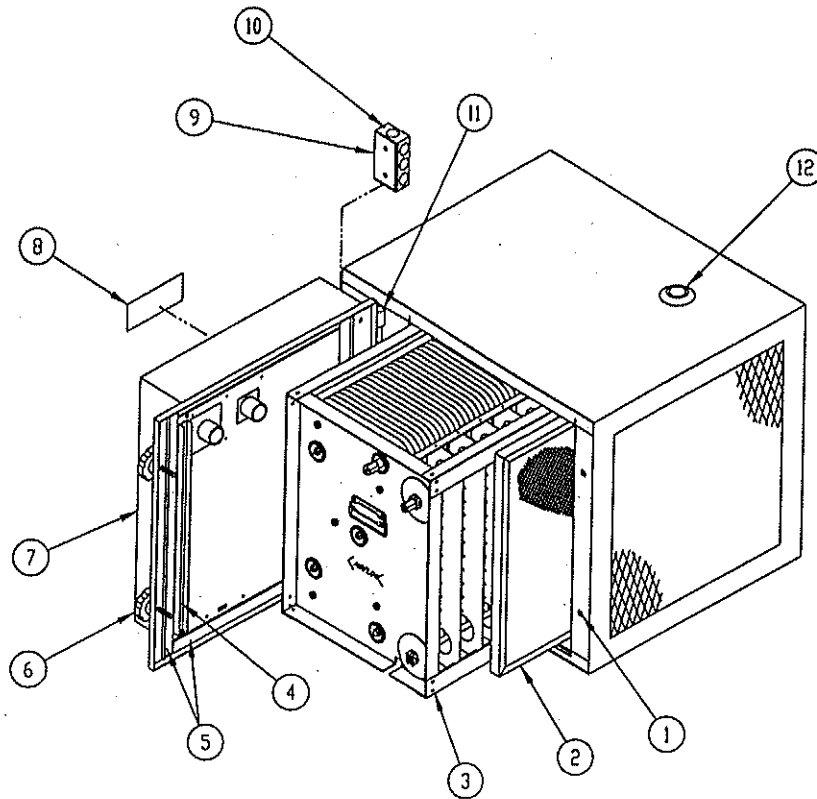
ITEM	TRION PART NO.	DESCRIPTION	QTY.
1	237911-006	Self Retaining Nut (1/4" - 20)	2
2	224451-006	Aluminum Mesh Prefilter	1
3	448104-001	Ionizer Collector Cell	1
4	224779-028	Gasket, Adhesive Back (3/4" X 11/16")	61"
5	224779-015	Gasket, Adhesive Back (1" X 1/4")	122"
6	248956-003	Clamping Knob	2
7	348667-001	Control Enclosure Assembly	1
8	448647-001	Blower Access Door Assembly	1
9	236936-001	Nameplate	1
10	137389-203	Pan Head Machine Screw (#8 - 32 X 1/2")	4
11	148088-001	Push-On Retainer	4
12	142696-055	Hex. Washer Head Screw	4
13	337861-001	Blower Assembly	1
14	224779-026	Gasket, Adhesive Back (1/2" X 1/16")	80"
15	348642-001	Outlet Panel	1
16	69000-0002-05	Grille Assembly	1
17	121106-001	Outlet Box Cover	1
18	221105-006	Outlet Box	1
19	146442-002	Hinge	2
20	247962-002	Cap Plug	2

T2600 UNIT ASSEMBLY



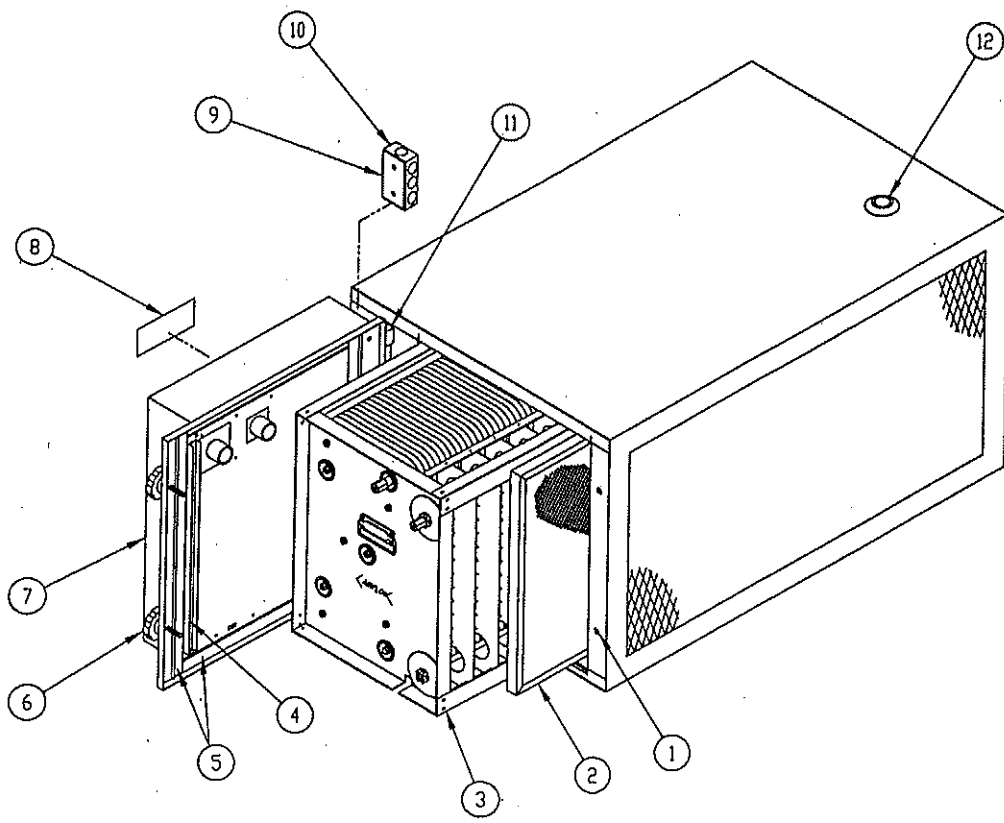
ITEM	TRION PART NO.	DESCRIPTION	QTY.
1	237911-006	Self Retaining Nut (1/4" - 20)	2
2	224451-006	Aluminum Mesh Prefilter	2
3	448104-001	Ionizer Collector Cell	2
4	224779-028	Gasket, Adhesive Back (3/4" X 11/16")	61"
5	224779-015	Gasket, Adhesive Back (1" X 1/4")	122"
6	248956-003	Clamping Knob	2
7	348667-001	Control Enclosure Assembly	1
8	448647-001	Blower Access Door Assembly	1
9	236936-001	Nameplate	1
10	137389-203	Pan Head Machine Screw (#8 - 32 X 1/2")	4
11	148088-001	Push-On Retainer	4
12	142696-055	Hex. Washer Head Screw	4
13	337861-001	Blower Assembly	1
14	224779-026	Gasket, Adhesive Back (1/2" X 1/16")	80"
15	337944-002	Outlet Panel	1
16	69000-0002-05	Grille Assembly	2
17	121106-001	Outlet Box Cover	1
18	221105-006	Outlet Box	1
19	146442-002	Hinge	2
20	247962-002	Cap Plug	2

T1001 MODULE ASSEMBLY



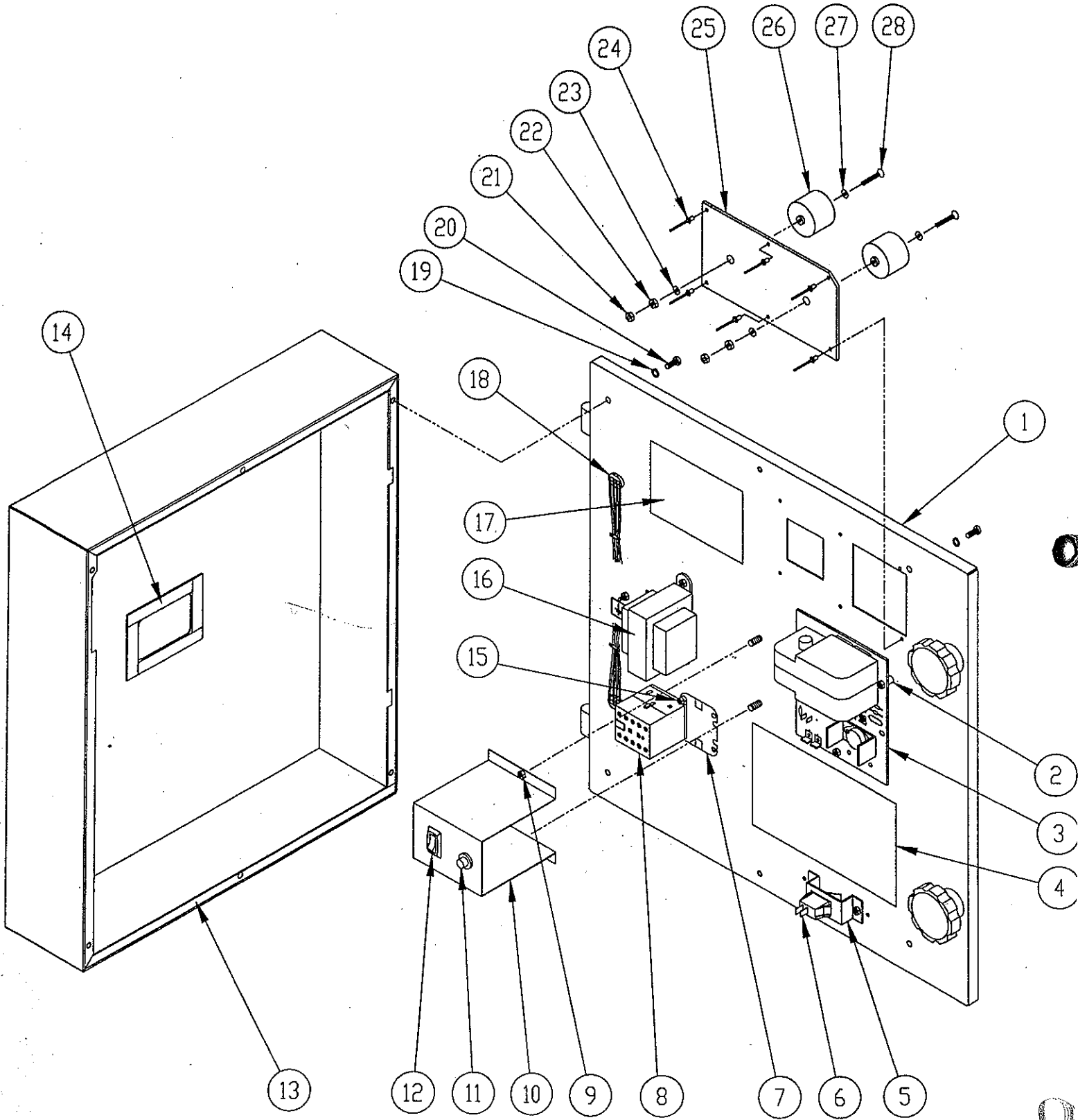
ITEM	TRION PART NO.	DESCRIPTION	QTY.
1	237911-006	Self Retaining Nut (1/4" - 20)	2
2	224451-006	Aluminum Mesh Prefilter	1
3	448104-001	Ionizer Collector Cell	1
4	224779-028	Gasket, Adhesive Back (3/4" X 11/16")	19"
5	224779-015	Gasket, Adhesive Back (1" X 1/4")	86"
6	248956-003	Clamping Knob	2
7	348667-001	Control Enclosure Assembly	1
8	236938-001	Nameplate, Adhesive Back	1
9	121106-001	Outlet Box Cover	1
10	221105-006	Outlet Box	1
11	146442-002	Hinge	2
12	247962-002	Cap Plug	2

T2002 MODULE ASSEMBLY



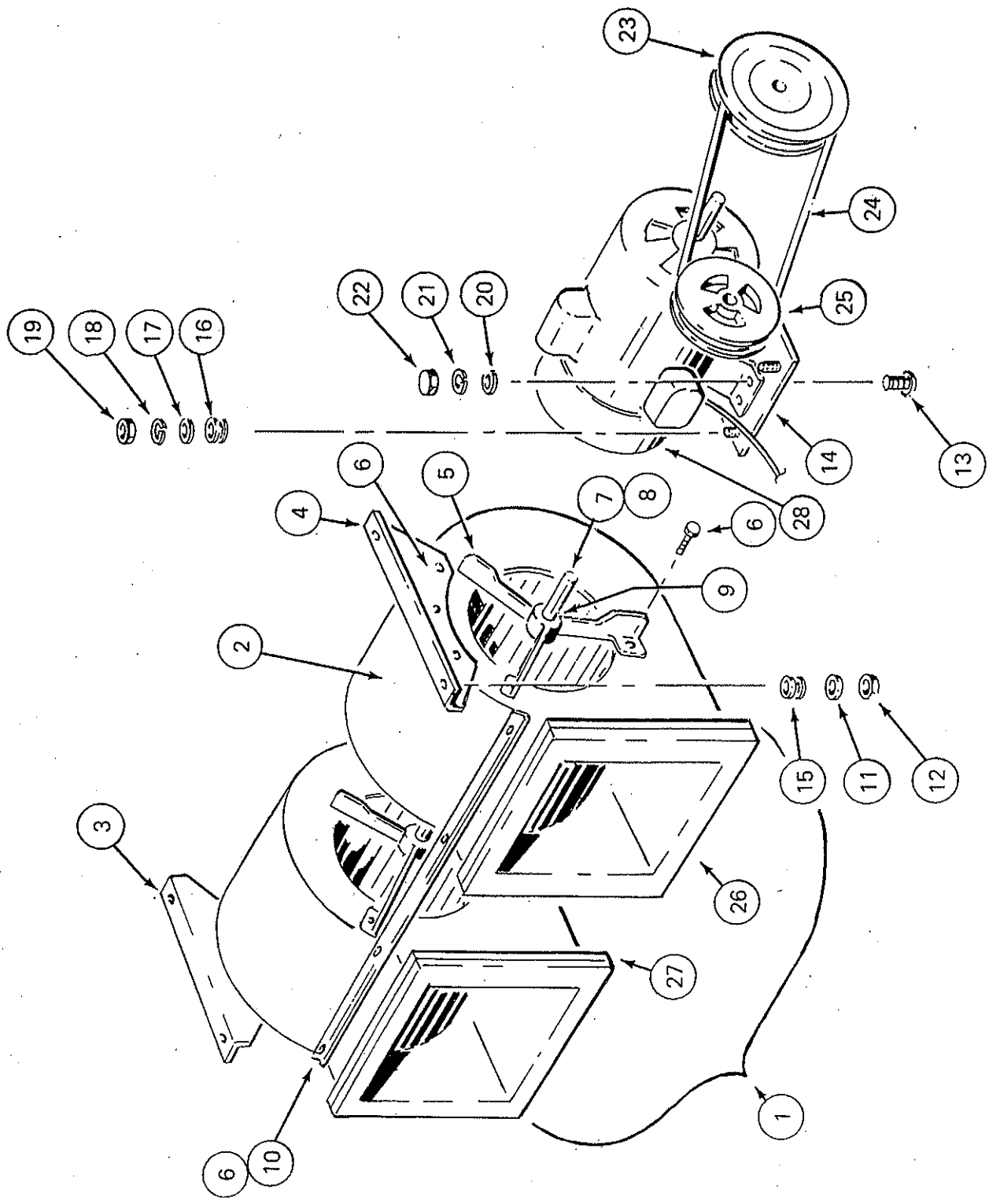
ITEM	TRION PART NO.	DESCRIPTION	QTY.
1	237911-006	Self Retaining Nut (1/4" - 20)	2
2	224451-006	Aluminum Mesh Prefilter	1
3	448104-001	Ionizer Collector Cell	1
4	224779-028	Gasket, Adhesive Back (3/4" X 11/16")	19"
5	224779-015	Gasket, Adhesive Back (1" X 1/4")	86"
6	248956-003	Clamping Knob	2
7	348667-001	Control Enclosure Assembly	1
8	236938-001	Nameplate, Adhesive Back	1
9	121106-001	Outlet Box Cover	1
10	221105-006	Outlet Box	1
11	146442-002	Hinge	2
12	247962-002	Cap Plug	2

ENCLOSURE ASSEMBLY
T1300 — T2600 — T1001 — T2002



**ENCLOSURE ASSEMBLY
T1300 — T2600 — 1001 — 2002**

ITEM	TRION PART NO.	DESCRIPTION	QTY.
1	448648-001	Cell Door Assembly	1
2	220107-075	Spacer	3
3	347891-013	High Frequency Power Supply (T1300 & 1001)	1
	347891-026	High Frequency Power Supply (T2600 & 2002)	1
4	249042-001	Wiring Label 575V/60HZ/3 PH (T1300 & T2600)	1
	249043-001	Wiring Label 240V/50-60HZ/1 PH (T1300 & T2600)	
	249044-001	Wiring Label 120V/60HZ/1 PH (1001 & 2002)	
	249045-001	Wiring Label 208,230,460V/60HZ/3 PH (1001 & 2002)	
	249046-001	Wiring Label 240V/50HZ/1 PH (1001 & 2002)	
	248751-001	Wiring Label 208,230,460V/60HZ/3 PH (T1300 & T2600)	
	248752-001	Wiring Label 120V/60HZ/1 PH (T1300 & T2600)	
5	248604-001	Interlock Switch Bracket	1
6	244833-001	Interlock Switch	1
7	249005-001	Contactor, 2 Pole (Single Phase Units Only)	1
8	247292-001	Contactor, (3 Phase Units Only)	1
9	121800-004	Nut - Lockwasher (#8 - 32)	13
10	348605-001	Light Switch Bracket	1
11	241101-009	Indicator Light	1
12	138586-001	Switch - Off/On	1
13	224779-012	Gasket, Adhesive Back (1/4" X 1/8")	75"
14	224779-014	Gasket, Adhesive Back (1/2" X 3/16")	12"
15	121800-003	Nut - Lockwasher (#6 - 32)	2
16	248655-001 ⁵	Transformer (120V - 24)	1
	248655-004	Transformer (480V - 24)	
	248655-005 ⁵	Transformer (208/240V - 24)	
	248655-007	Transformer (575V - 24)	
17	121390-001	Warning Label, High Voltage	1
18	143817-001	Strain Relief Bushing	2
19	120033-007	Spring Lockwasher (#10)	4
20	120034-306	Pan Head Machine Screw (#10 - 24 X 1/2")	4
21	121800-005	Nut - Lockwasher (#10 - 24)	2
22	120036-006	Hex Nut (#10 - 24)	2
23	120456-001	Nylon Flat Washer	2
24	123327-003	Pop - Rivet (1/8" dia.)	6
25	248638-001	Contact Board	1
26	148939-001	Insulator Cup	2
27	120608-011	Flat Washer (Stainless Steel)	2
28	122884-074	Flat Head Machine Screw (#10 - 24 X 7/8" S/Steel)	2



BLOWER / MOTOR
T1300 & T2600

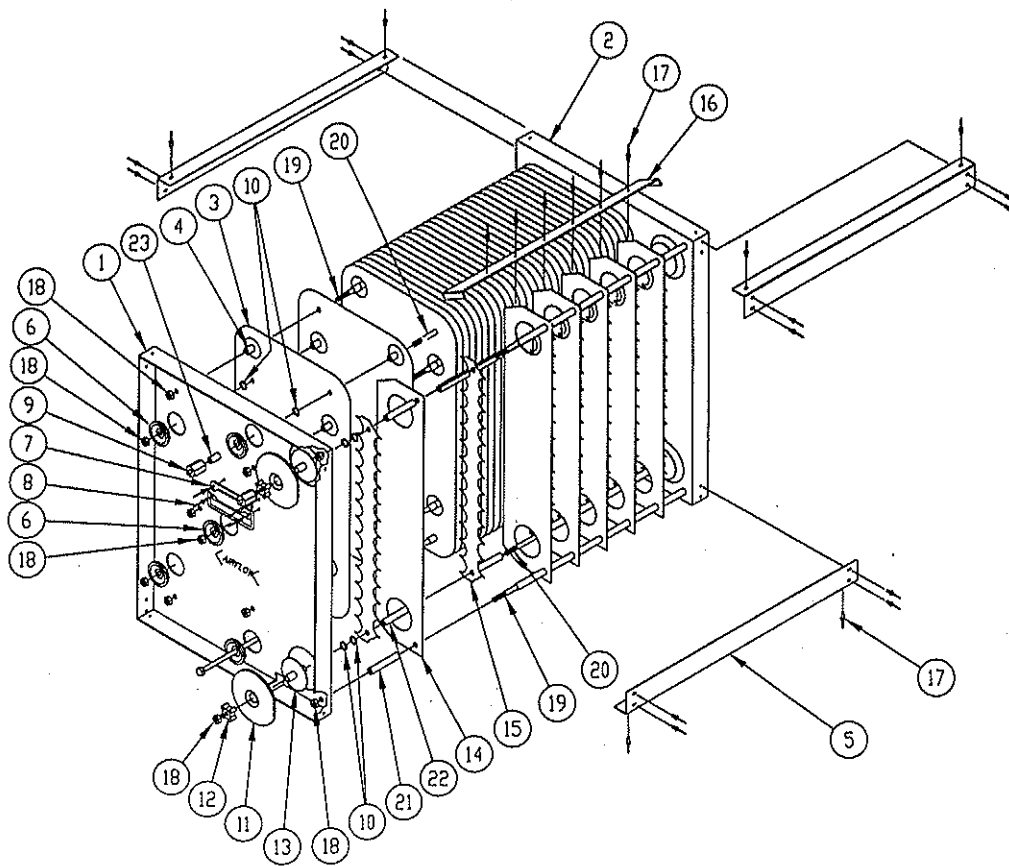
**BLOWER / MOTOR
T1300 & T2600**

ITEM	TRION PART NO.	DESCRIPTION	1300	2600
1	437945-001	DBL. Blower Assy. - Less Motor		X
1A	337894-001	Blower Assy. - Less Motor	X	
2	337923-100	Blower Housing & Fan <i>USE P/N 444348-001</i>	X	X <i>444348-001</i>
3	337923-104	Blower Foot R.H.	X	X
4	337923-105	Blower Foot L.H.	X	X
5	337923-103	Bearing Frame	X	X
6	137343-402	Screw, Self Tap	X	X
7	237787-001	Shaft, Blower		X
7A	237959-001	Shaft, Blower	X	
8	1250-1200007	Key, Shaft	X	X
9	62000-0003-01	Bearing, Ball	X	X
10	337958-001	Spreader Bar		X
11	120608-012	Washer, Flat	X	X
12	123149-004	Nut, Lock	X	X
13	120635-017	Bolt, Carriage	X	X
14	343636-001	Motor Mounting Plate	X	X
15	425541-114	Grommet	X	X
16	425541-114	Grommet	X	X
17	120608-012	Washer, Flat	X	X
18	120033-010	Washer, Lock	X	X
19	123149-004	Nut, Lock	X	X
20	120608-012	Washer, Flat	X	X
21	120033-010	Washer, Lock	X	X
22	123149-004	Nut, Lock	X	X
23	125699-002	Sheave or Pulley (motor)	X	X
23A	125699-011	Sheave or Pulley (motor) 2 H.P.		X
24	220926-027	Belt 4L 410	X	X
24A	220926-031	Belt 4L 440, 2 H.P.		X
25	124053-014	Pulley Blower	X	X
26	224779-028	Gasket, (3/4" X 11/16" X 4') per blower	X	X
27	337849-001	Blower Gasket Flange	X	X
28	141434-001	Motor 120 - 240V/60HZ/1 PH/3/4 HP	X	X
28A	140197-001	Motor 240V/50HZ/1 PH/3/4 HP	X	X
28B	137128-001	Motor 208 - 240 - 480V/60HZ/3 PH/1 HP	X	X
28C	148958-001	Motor 208 - 240 - 480V/60HZ/3 PH/2 HP		X

IONIZER / COLLECTOR CELL

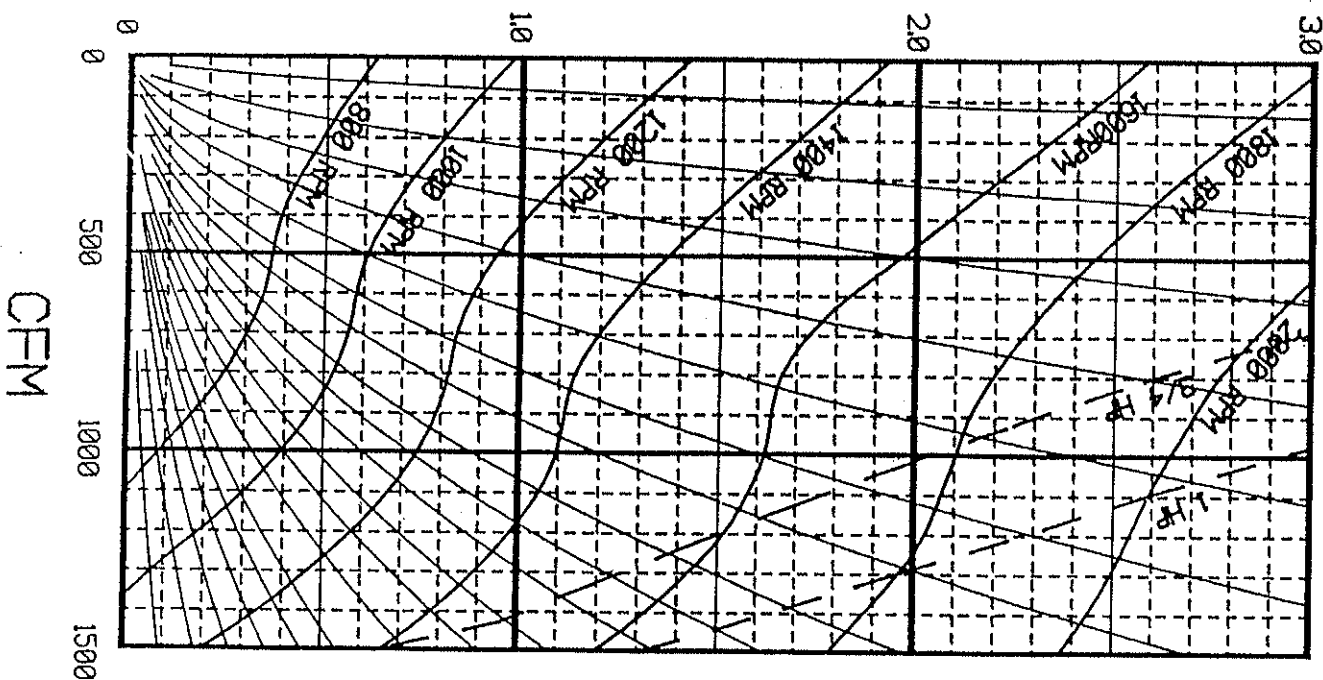
— Part Number —

448104-001



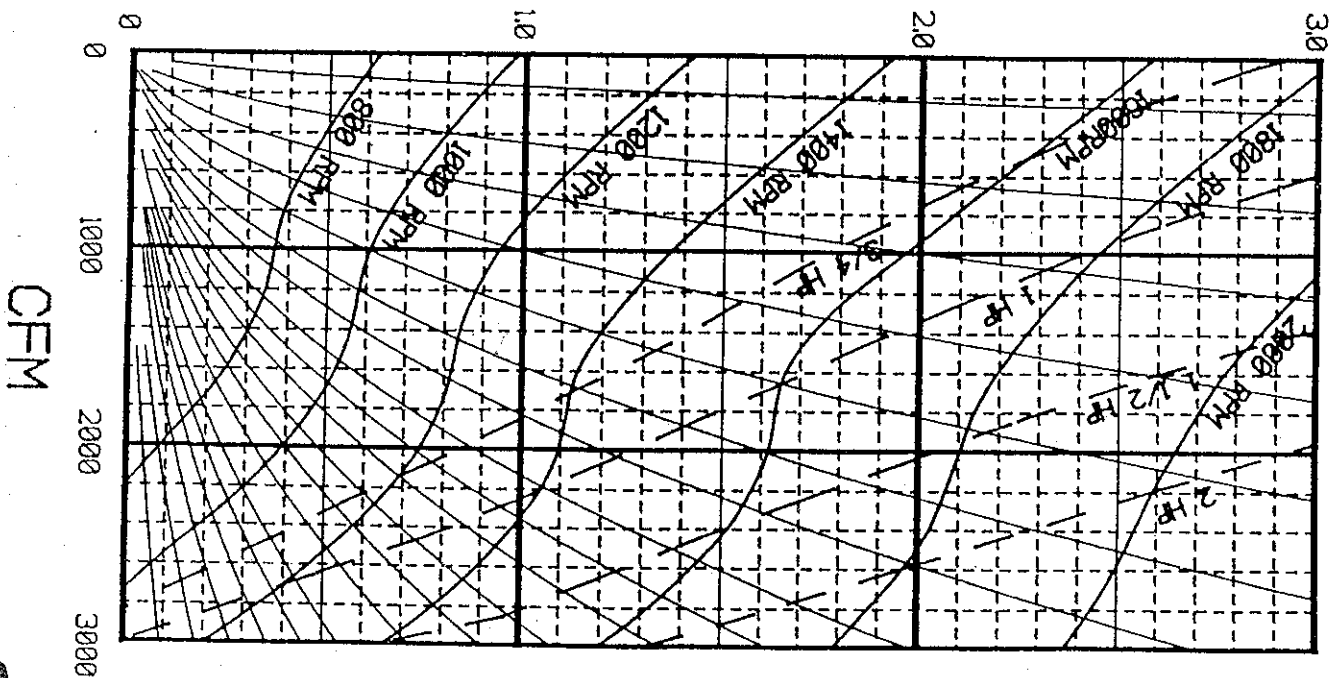
ITEM	TRION PART NO.	DESCRIPTION
1	447781-001	End Plate
2	447781-002	End Plate
3	226555-001	High Voltage & Ground Plate
4	220107-070	Spacer
5	247924-001	Cell Brace
6	246533-001	Insulator
7	124537-001	Handle
8	220976-044	Rivet
9	147704-002	Contact
10	120456-001	Washer, Nylon
11	243805-002	Insulator, Venturi
12	143589-001	Spacer, Venturi
13	244287-002	Air Stream Deflector
14	247782-001	Ionizer Ground Plate
15	347892-001	Spiked Ionizer Blade
16	247799-001	Brace
17	120591-002	Rivet
18	123149-001	Nut, Elastic Stop
19	143340-006	Tie Rod
20	143340-007	Tie Rod
21	220107-119	Spacer
22	220107-120	Spacer
23	144015-001	Spacer, Plastic

ADDED STATIC PRESSURE (H₂O)



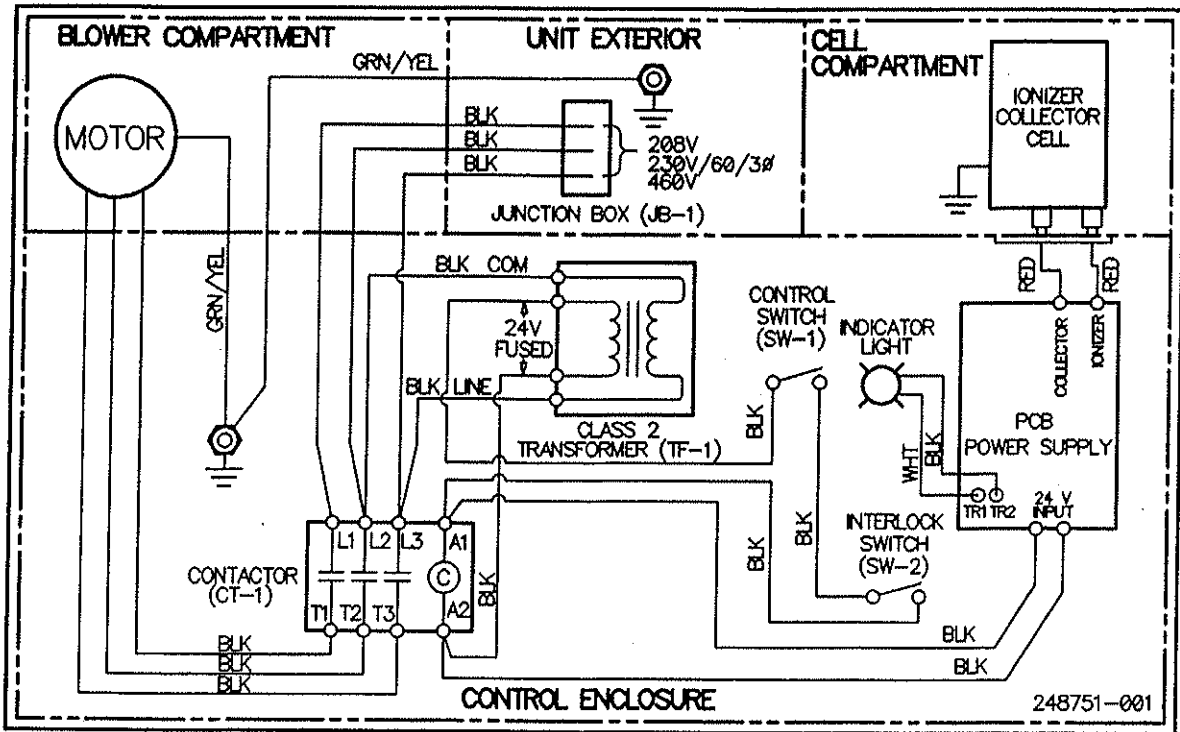
T-1300

ADDED STATIC PRESSURE (H₂O)

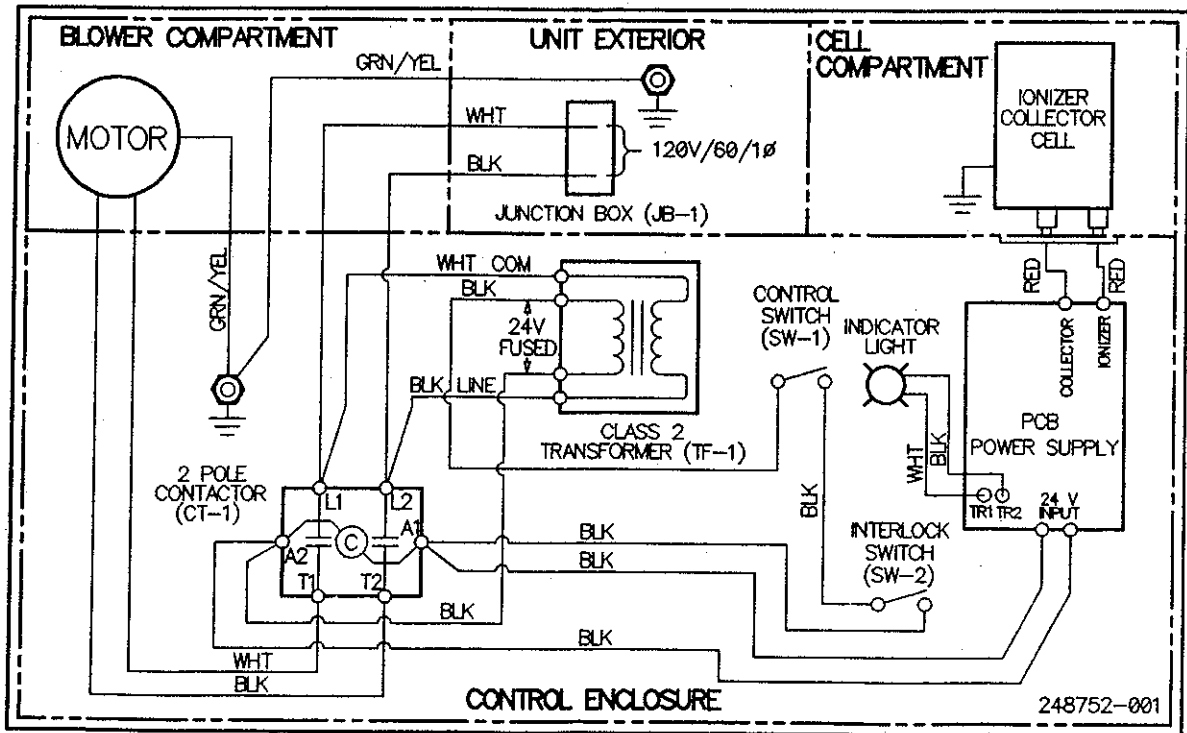


T-2600

WIRING DIAGRAMS

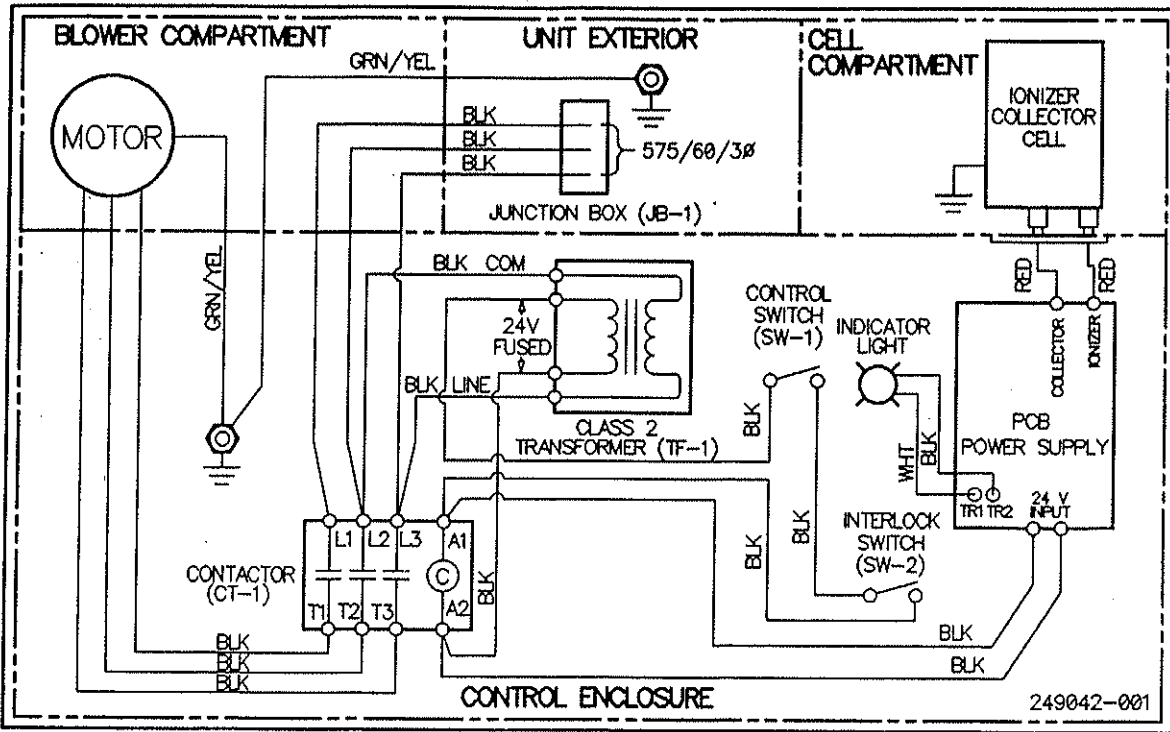


T1300 or T2600 (1HP or 2 HP)
 208V/60HZ/3 PH — 230V/60 HZ/3 PH — 460V/60 HZ/3 PH

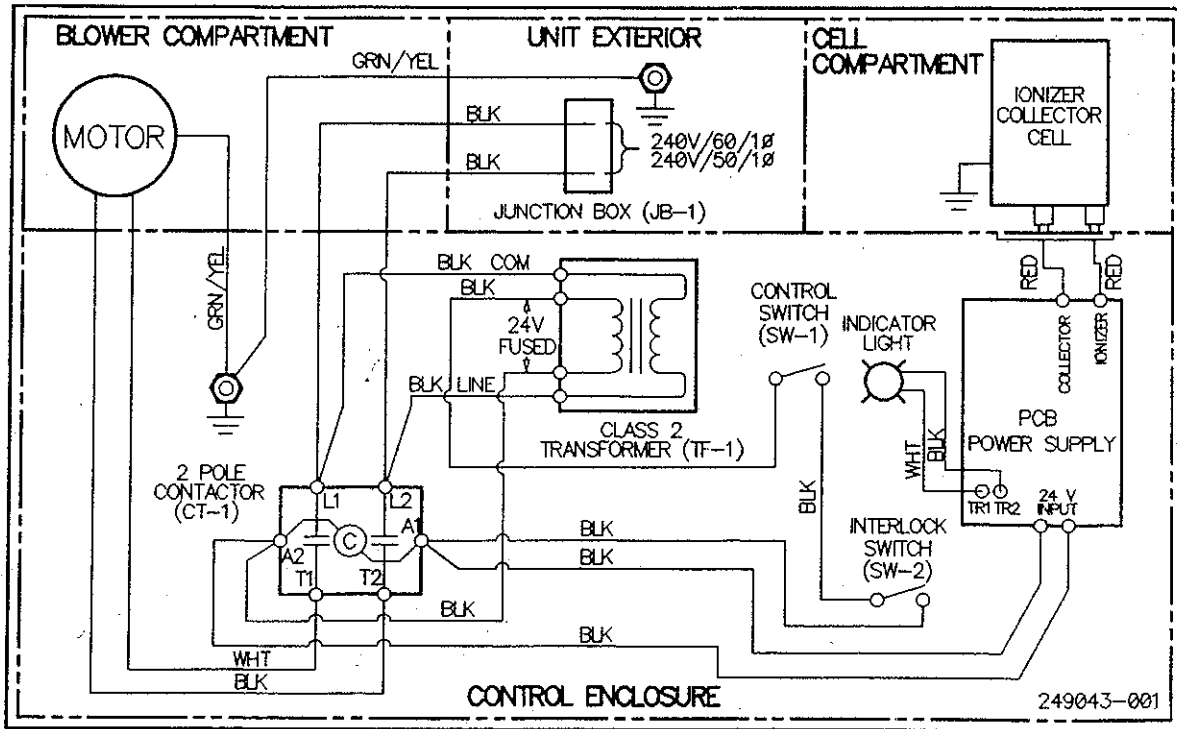


T1300 or T2600 (3/4 HP)
 120V/60HZ/1 PH

WIRING DIAGRAMS

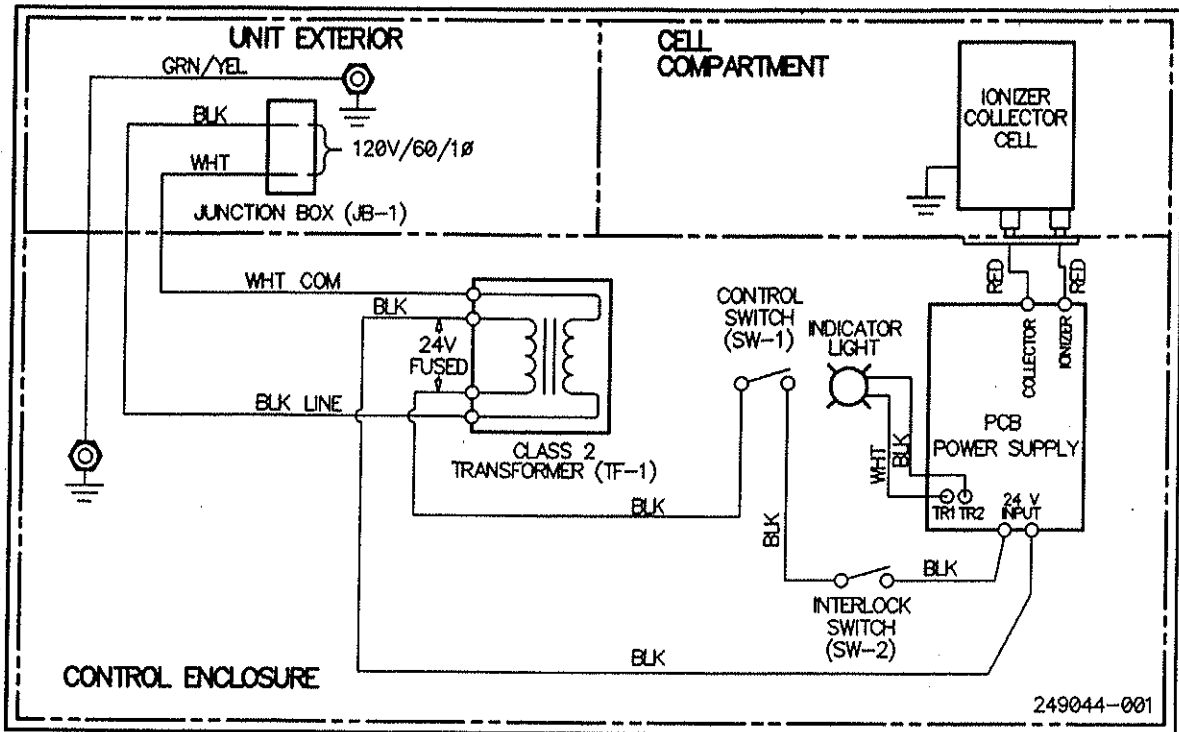


T1300 or T2600 (1HP)
575V/60HZ/3 PH

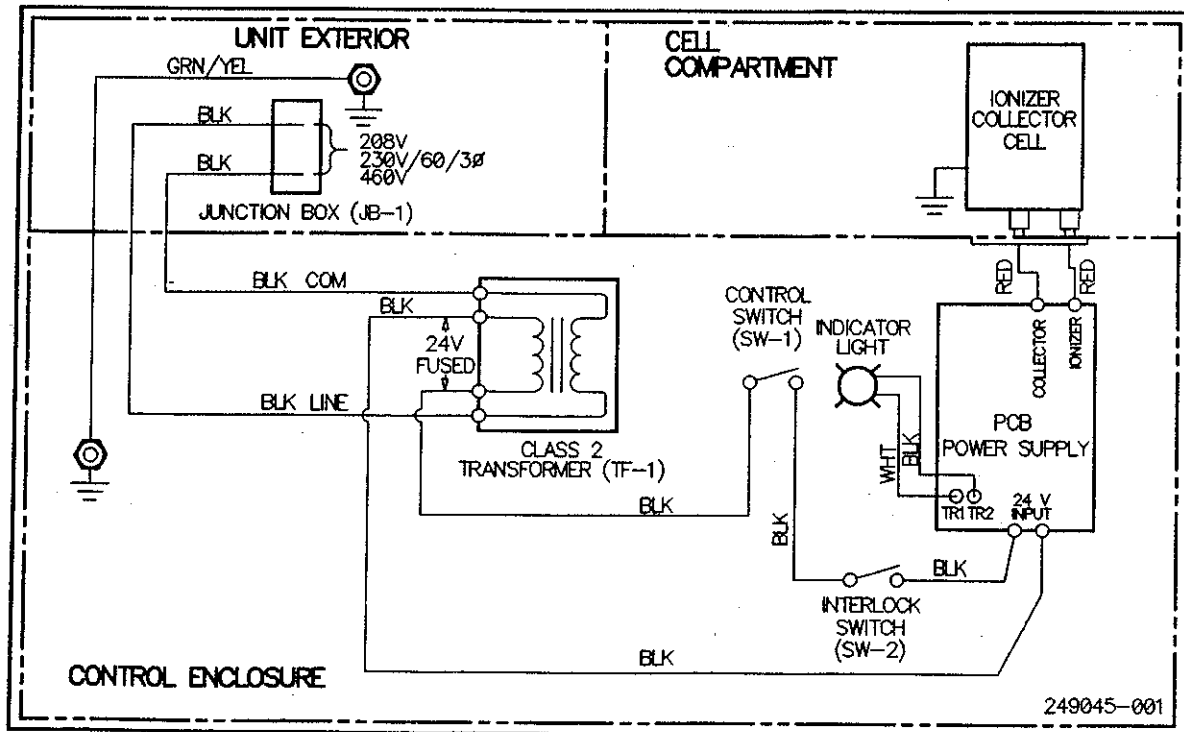


T1300 or T2600 (3/4 HP)
240V/60HZ/1 PH — 240V/50/1 PH

WIRING DIAGRAMS

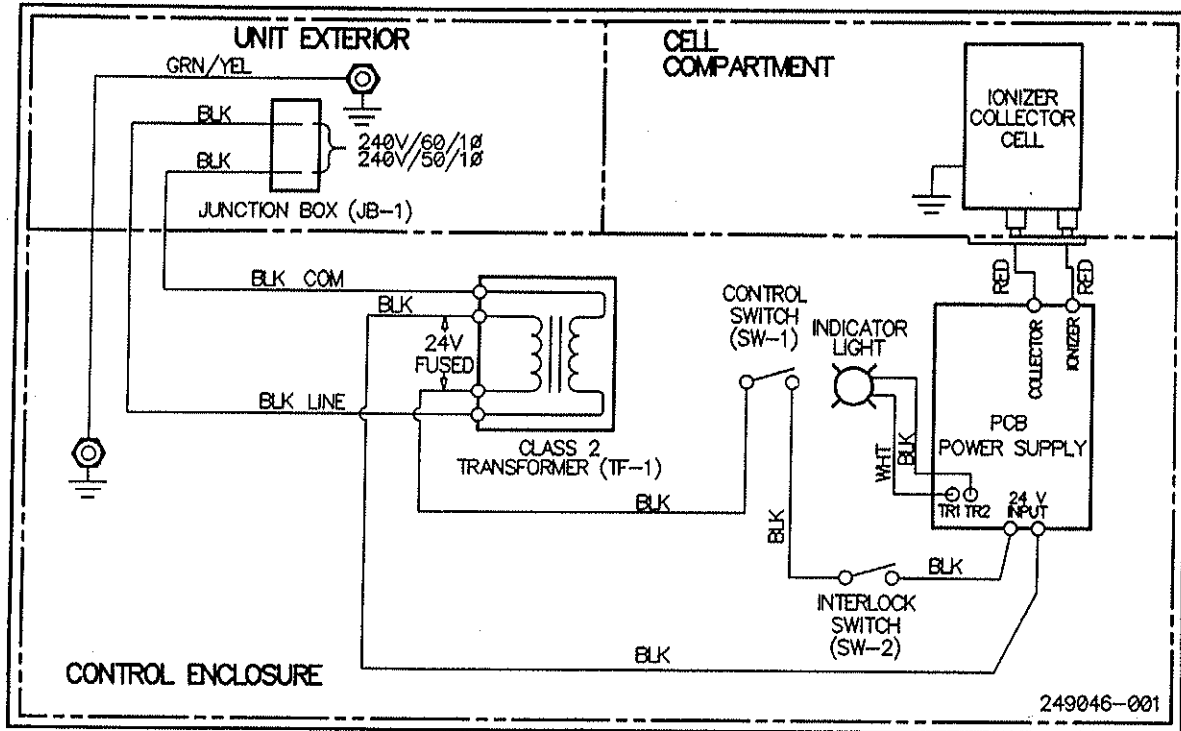


1001 & 2002 Module
120V/60HZ/1PH



1001 & 2002 Module
280V/60HZ/3 PH — 230V/60HZ/3 PH — 460V/60HZ/3 PH

WIRING DIAGRAMS



1001 & 2002 Module
 240V/60HZ/1 PH — 240V/50HZ/1 PH