REPLACEMENT PART GUIDE – SUMMIT HF GENERATOR

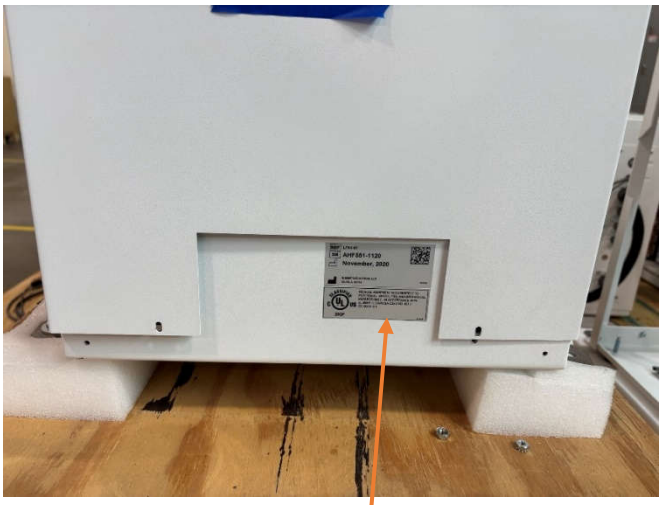
See graphics on the following pages for Summit part numbers and descriptions of service parts.

Valid for product manufactured 07/2002 to present. Major design revision June 2018, differences noted below.

	SHORT POWER MODULE	TALL POWER MODULE
240V 1-PHASE	L741-04 L741-07	L177-09 L177-12 L177-13 L177-14
240V 3-PHASE	L741-05	L177-11 L177-16
480V 3-PHASE	L741-06	L177-10 L177-15

Tall Power Module
Model# Label

Tall Power Module
SN, regulatory labels



Short Power Module
Product labels (SN, model#, regulatory)

5Vdc Power Supply Board
(thru-hole control brds only)

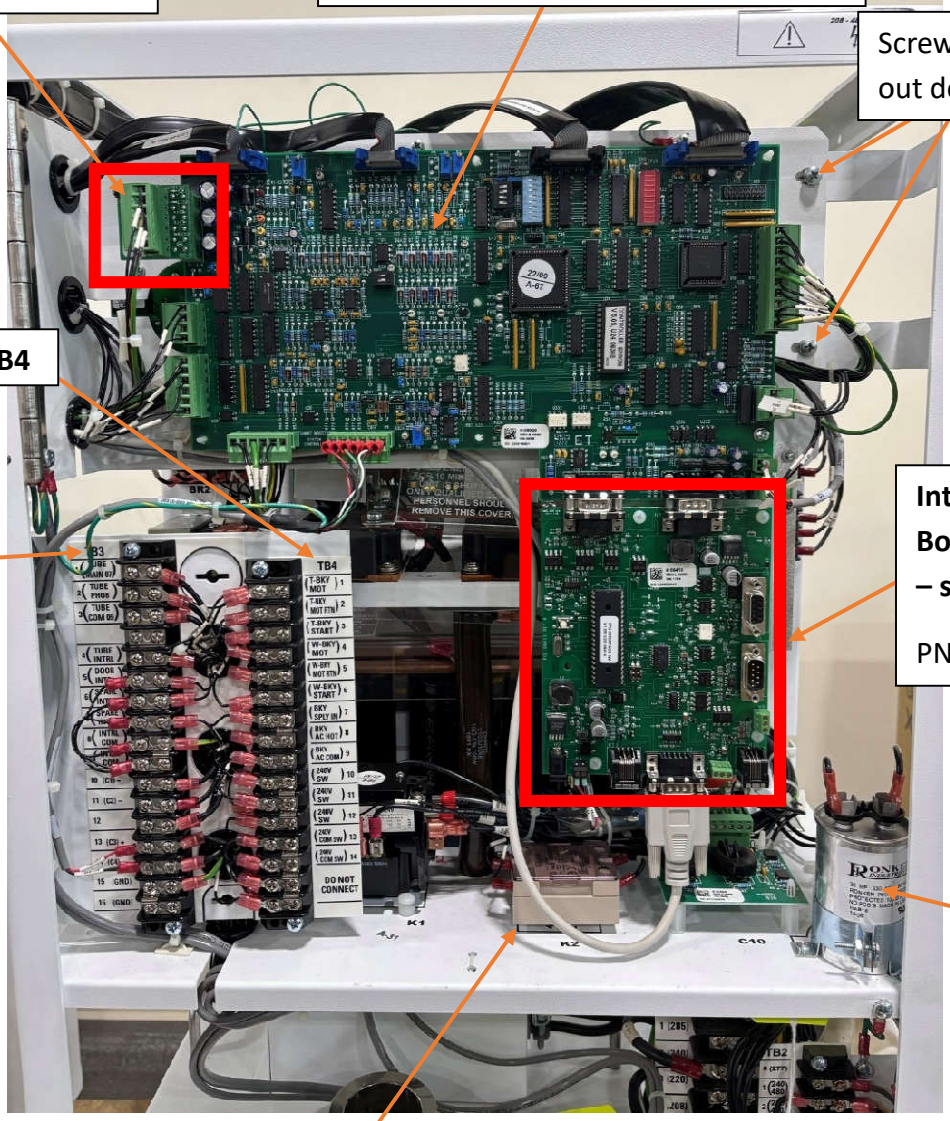
PN: 04264 (Kit)

System Control Board (MFD 7/2002+; See appendix for additional info)

PN for 300mA: 06357-007 (Kit)

PN for 500mA: 06357-008 (Kit)

Screws for swing out door



TB4

TB3

Integration Board (optional – see appendix)

PN: 06751-XXX

C10 Rotor Cap

PN: HAB18

K2 Relay

PN: 01723-000

IGBTs/IPMs

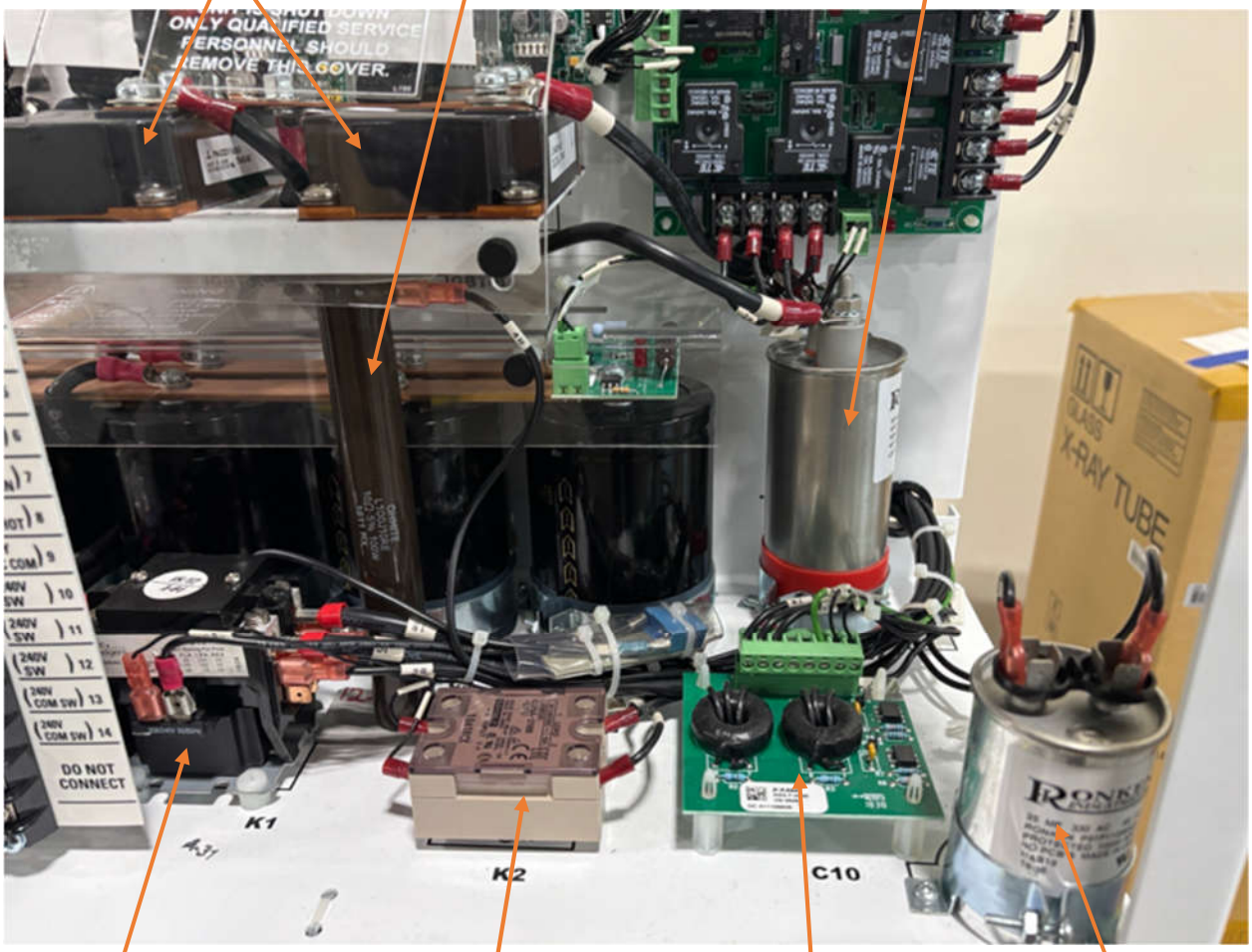
R1 (Soft Charge/damping Resistor) Kit

PN: 02283-000

C7 Tuning Capacitor

PN for 240VAC: L297-00

PN for 480VAC: HAT26



K1 Relay

PN 1PH: 08918-001 (Kit)

PN 3PH: 08918-002 (Kit)

K2 Relay

PN: 01723-000

Rotor Sense Board

PN: K444-00

C10 Rotor Cap

PN: HAB18

Location: Back Side (Inside) of Swing-out Door

AEC/CAEC Board (See appendix for upgrade kit information)

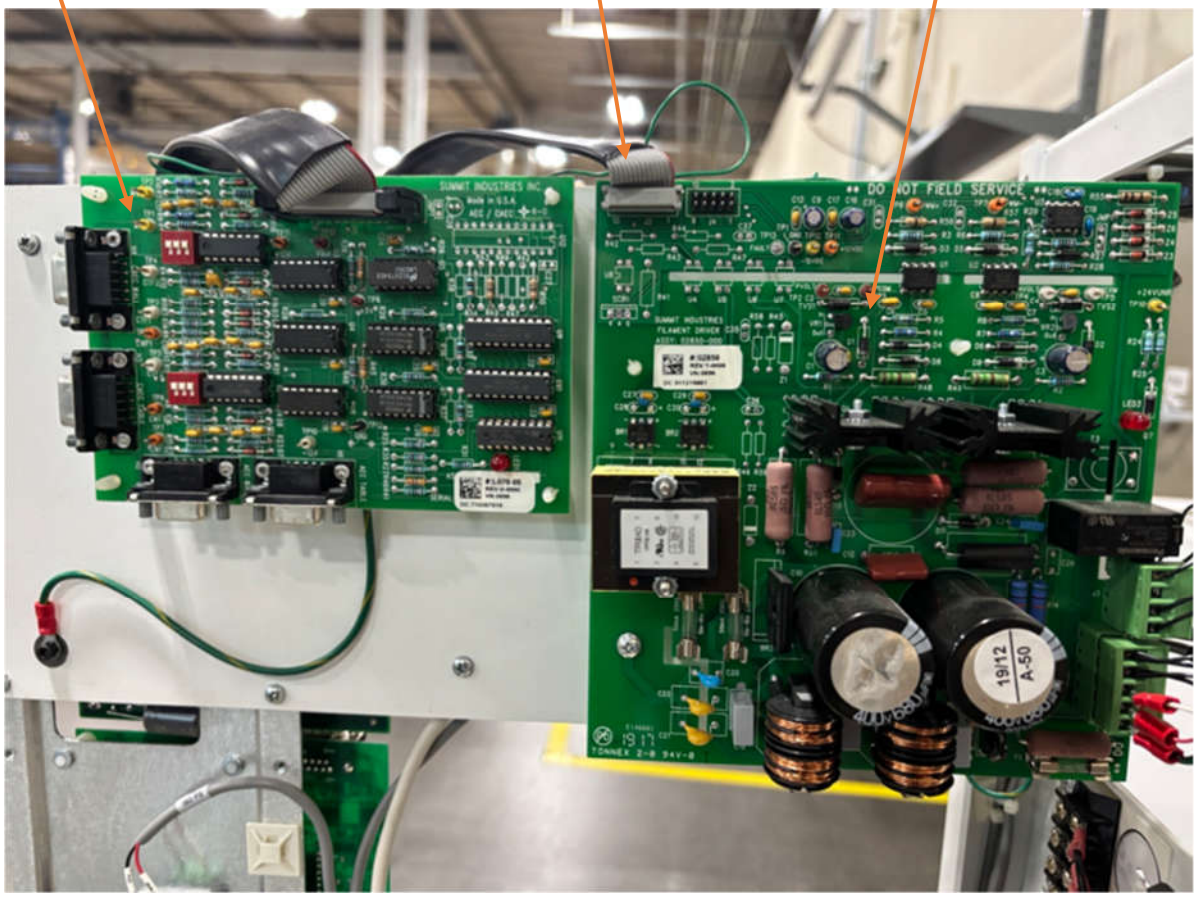
PN: L070-00

Filament Cable Assy

PN: 00890-000

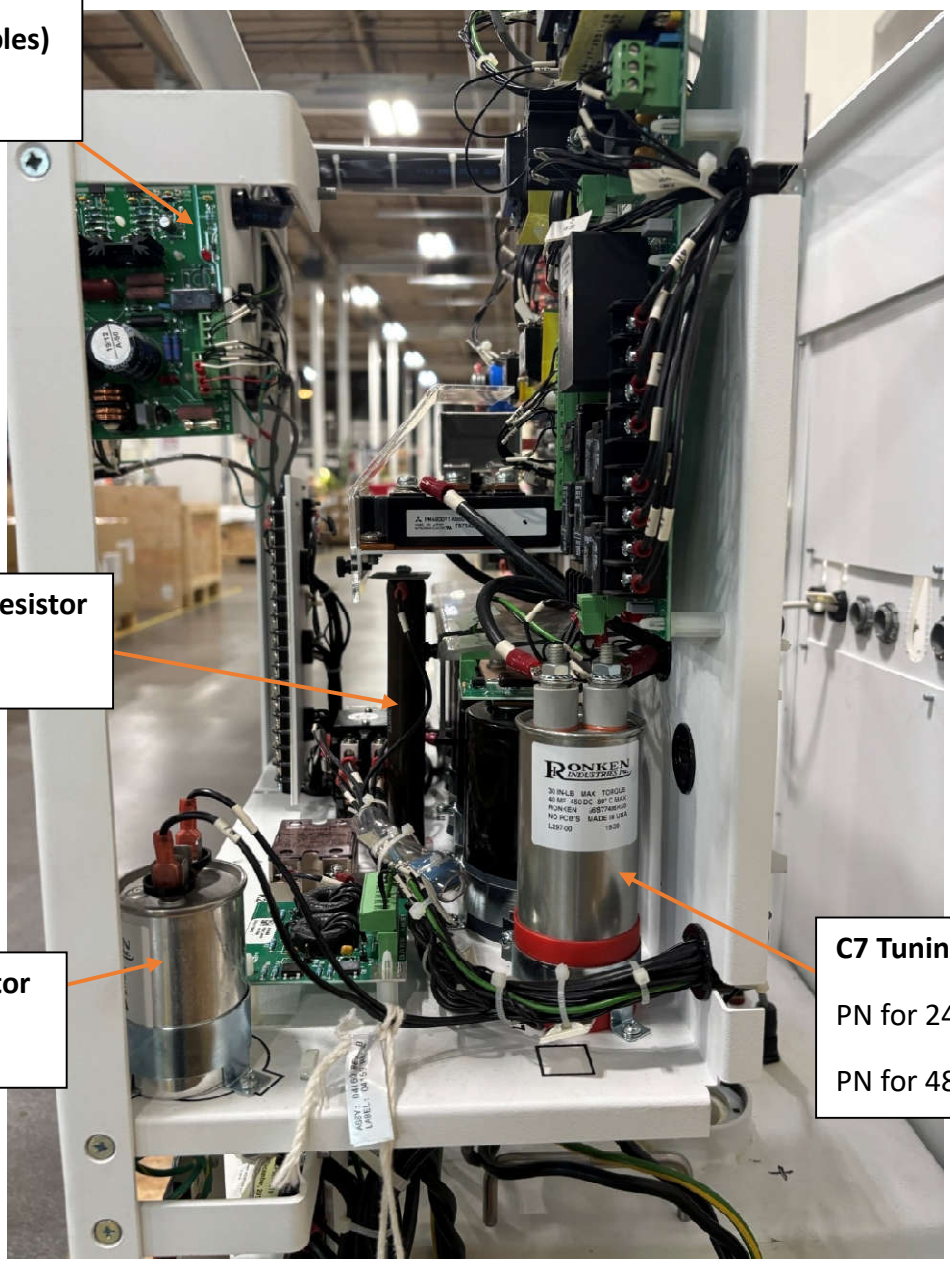
Filament Driver Board (see appendix for kit/additional cables)

PN: 03035-001



Filament Driver Board (see appendix for kit/additional cables)

PN: 03035-001



R1 Soft Charge Resistor

PN: 02283-000

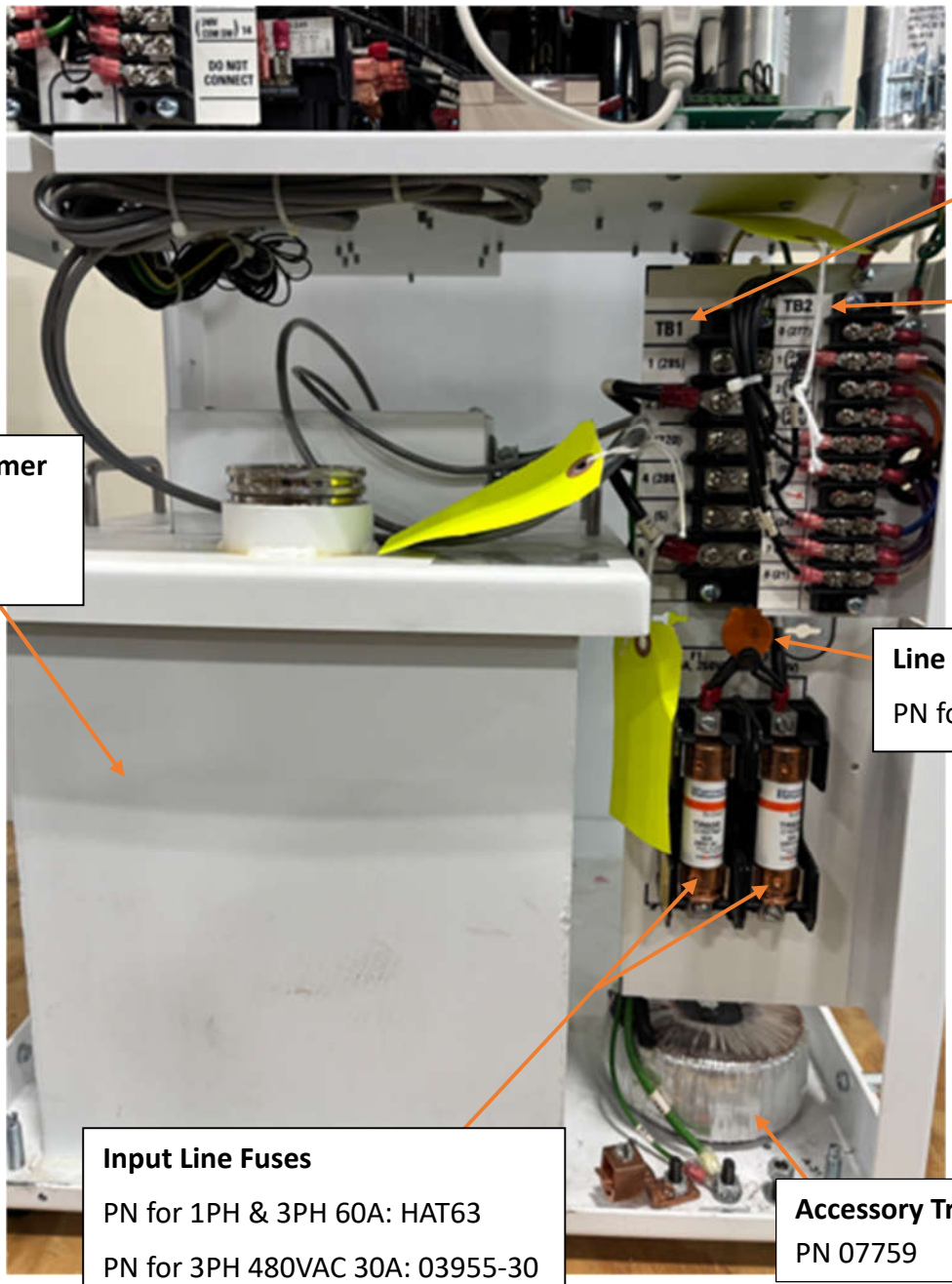
C10 Rotor Capacitor

PN: HAB18

C7 Tuning Capacitor

PN for 240VAC: L297-00

PN for 480VAC: HAT26



TB1

TB2

High Voltage Transformer (HVT, See Appendix)

PN: K904-XX

Line Snubber

PN for 1PH: L264-00

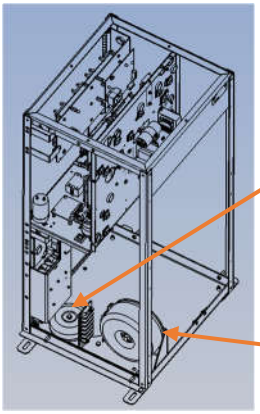
Input Line Fuses

PN for 1PH & 3PH 60A: HAT63

PN for 3PH 480VAC 30A: 03955-30

Accessory Transformer

PN 07759

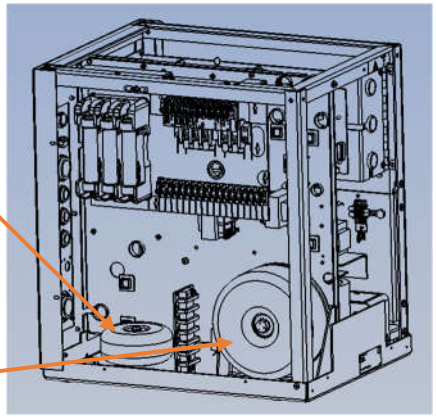


Accessory Transformer

PN 07759

Transformer Assembly, 480V to 240V (for 480V generator ONLY

PN 07808



FB1 (Fuse bank 1)

FB2 (Fuse bank 2)

Power Supply Board

PN: K650-00

MFD BEFORE 10/2009: USE KIT 06336

IPM Driver Boards

PN:01780-000

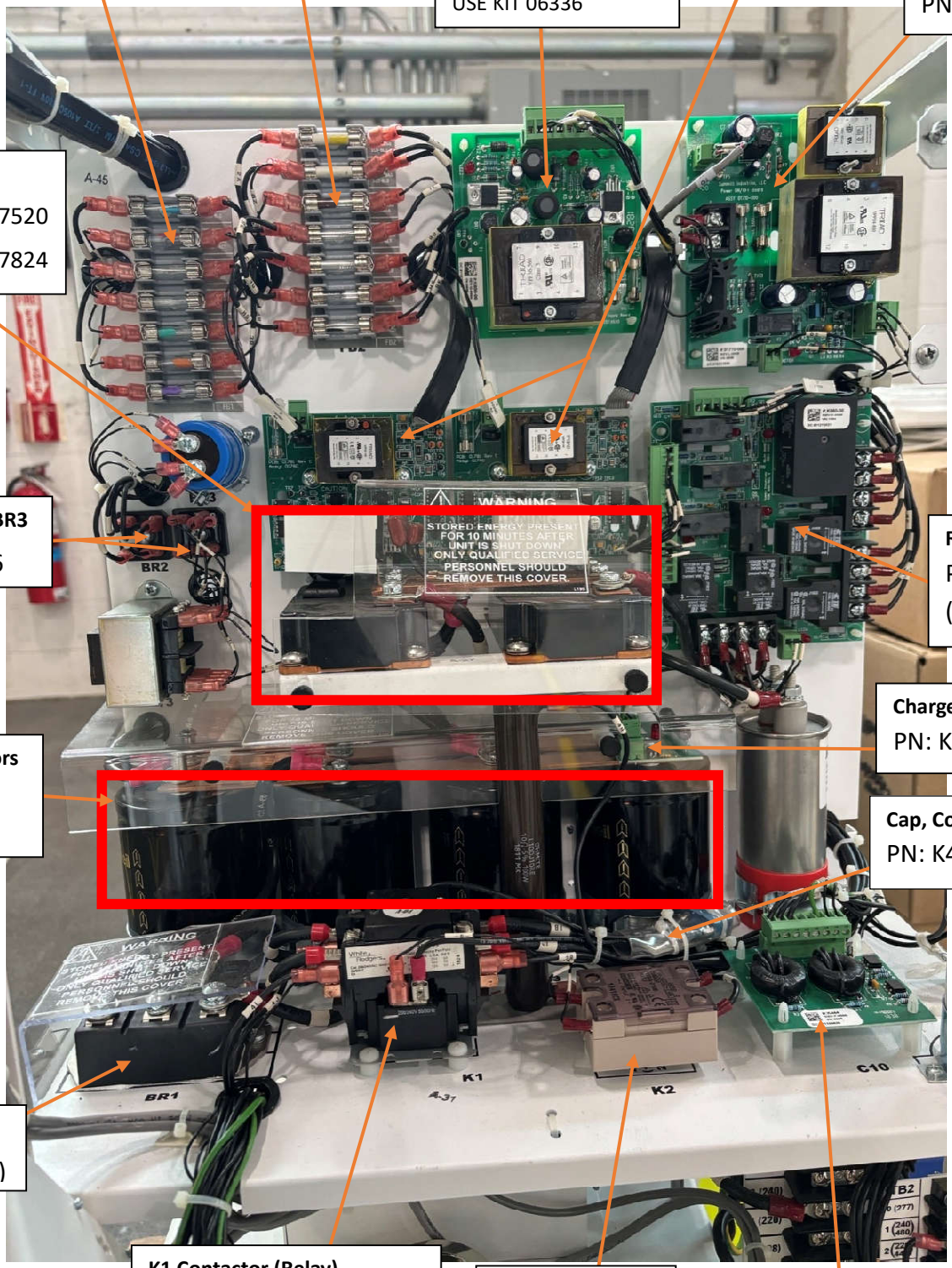
Power On/Off board

PN: 01710-000

IPM Assembly

PN for 240VAC: 07520

PN for 480VAC: 07824



BR2 and BR3

PN: J436

Relay Board

PN: 01985-000 (Kit)

Charge Monitor Board

PN: K445-00

DC Bus Capacitors

PN for C1-C4: K409-00

Cap, Contactor Snubber

PN: K425-00

BR1

PN: 08153 (Kit)

K1 Contactor (Relay)

PN 1PH: 08918-001 (Kit)

PN 3PH: 08918-002 (Kit)

K2 Relay

PN: 01723-000

Rotor Sense Board

PN: K444-00

Location: Backside of Generator

C8 DC Locks cap

PN: HU43

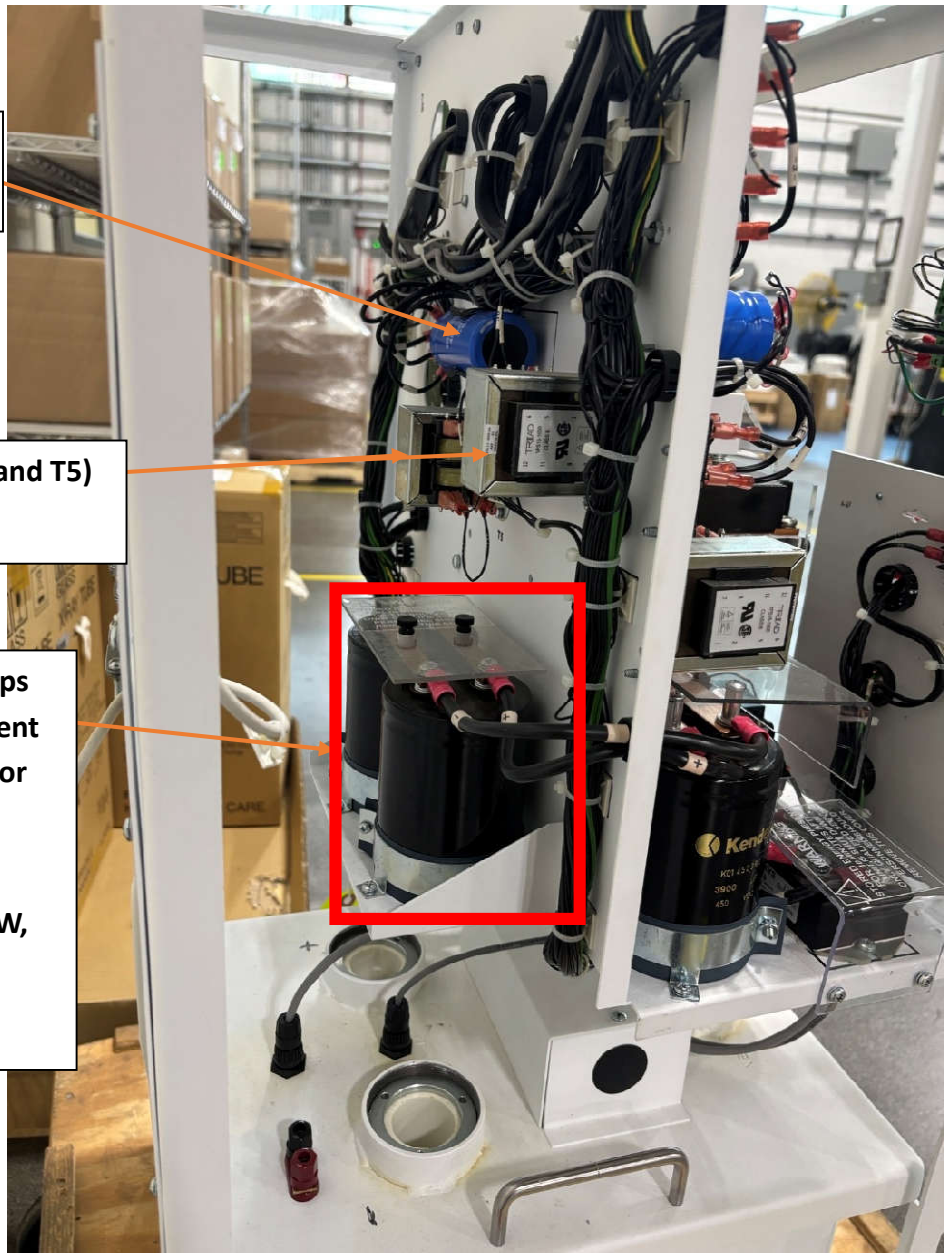
Console Power (T4 and T5)

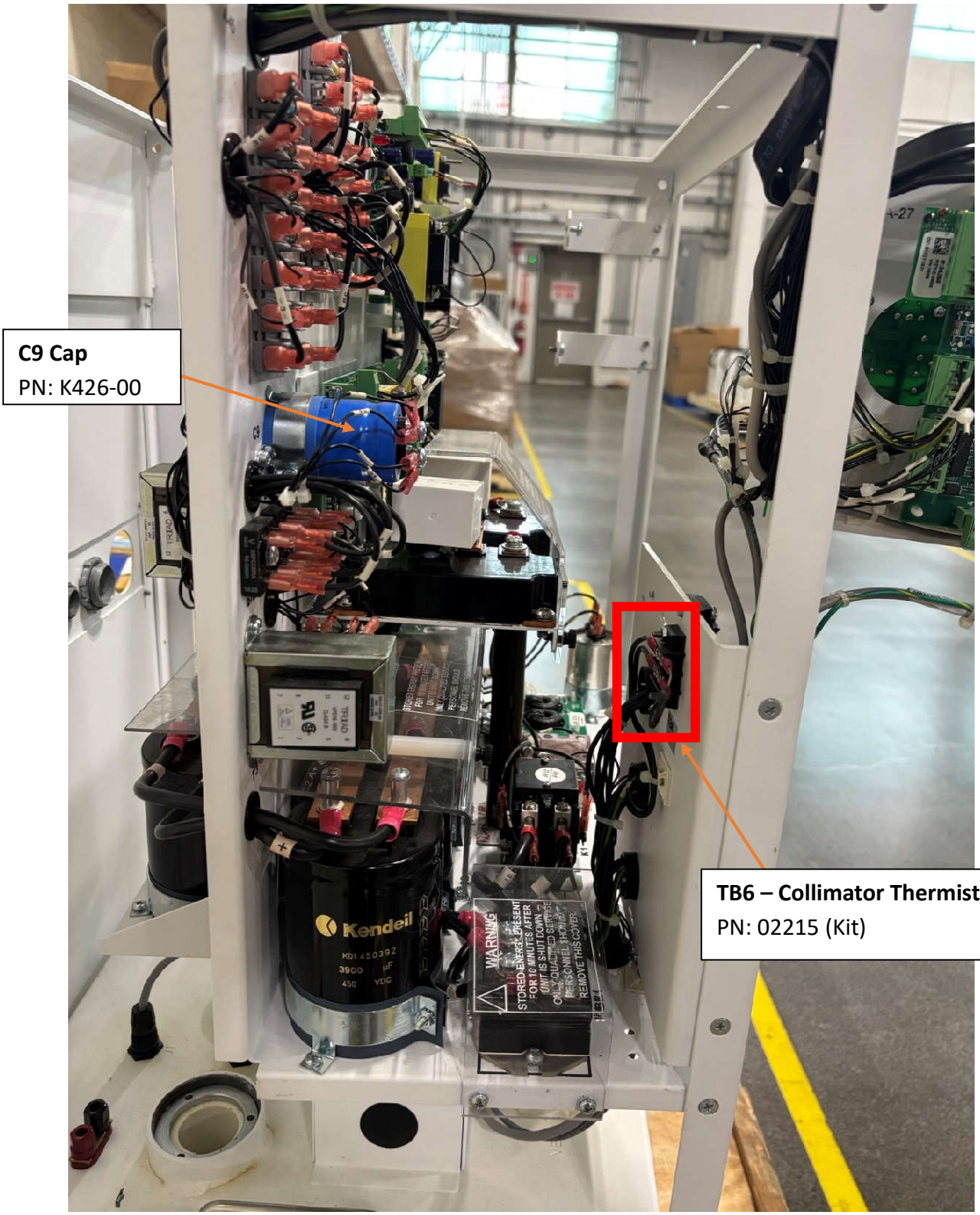
PN: HAB26

Additional Bus caps (May not be present based on generator config)

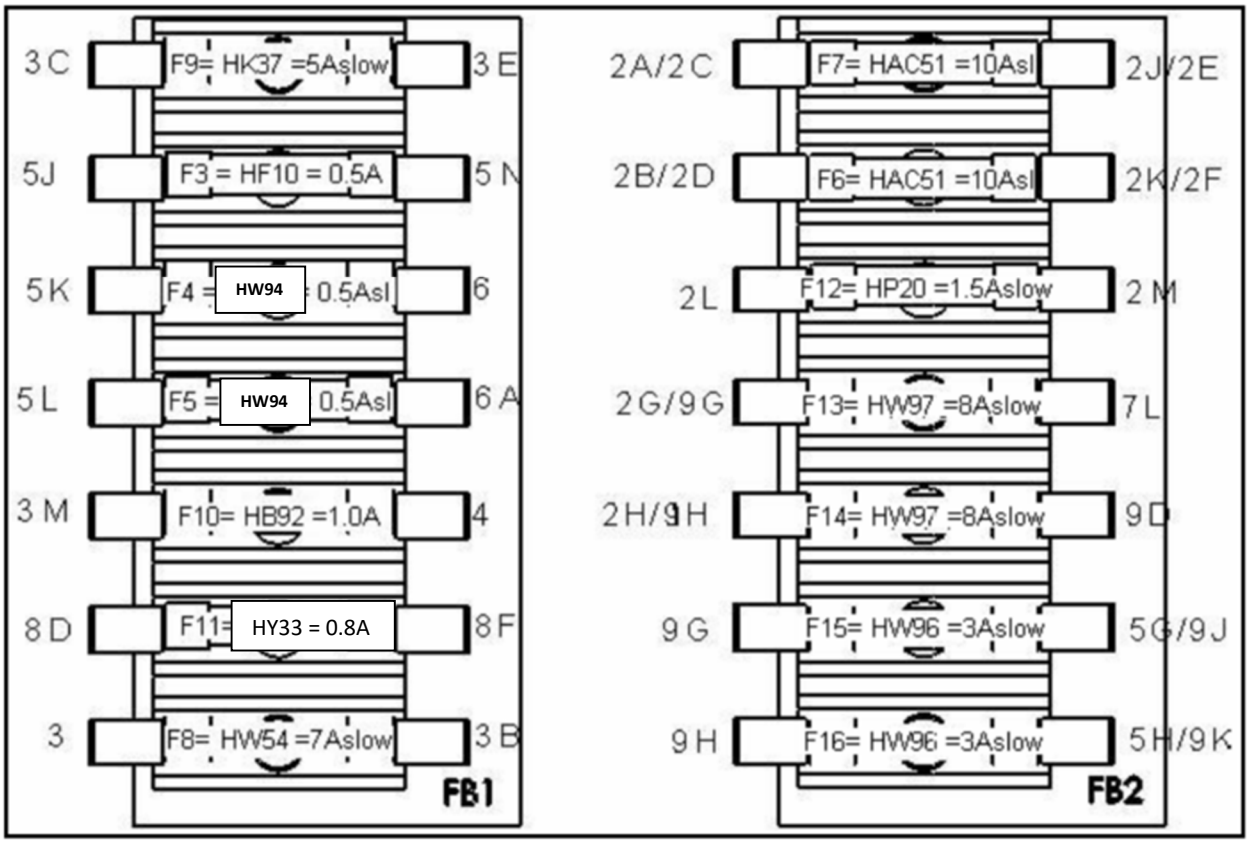
2-Cap Assembly (standard on 42kW, 1-ph only)

PN: 08243 (Kit)




C9 Cap
PN: K426-00
TB6 – Collimator Thermistor
PN: 02215 (Kit)
Kendeil
TRIAD

Fuse Bank Legend

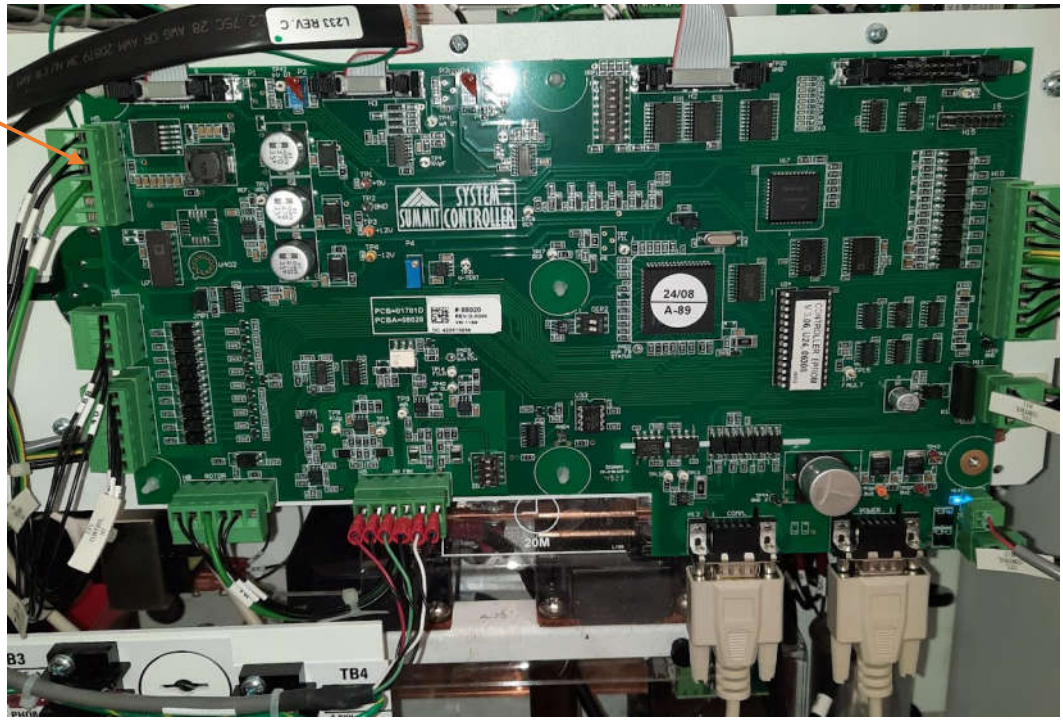


CHASSIS FUSES – Factory All are 3AG / AGC				
Qty	**Part no.**	**Fuse**	**Function**	**Rating / Specs**
2	HAT63	F1, F2	Mains, L1 & L2	60 A Time Delay
1	HF10	F3	+5 VDC (changed Dec2005)	0.50 A Fast
2	HW94	F4, F5	+12 Vdc, -12 Vdc,	0.50 A Slow
2	HAC51	F6, F7	240VAC, Low Current (hot & return)	10 A Slow
1	HW54	F8	24 VAC, Collimator supply T2 Secondary	7 A Slow
1	HK37	F9	24 VDC, Lock Supply, T2 Sec. BR2, C8	5 A Slow
1	HB92	F10	Relay PCBA, T3 secondary, BR3, C9	1.0 A Slow
1	HY33	F11	24VAC Console Supply, T4/T5 Sec.	0.8 A Slow
1	HP20	F12	120VAC Bucky, T2 secondary to TB4-8	1.5 A Slow
2	HW97	F13, F14	240VAC Rotor & Common	8 A Slow
2	HW96	F15, F16	240VAC Sw. Relay Bd. Output	3 A Slow
FUSES ON PRINTED CIRCUIT BOARDS All are Mini 5x20mm GMA				
2	HAR28	F1, F2	Power On Off board, Sw'd 240VAC input.	125 mA Slow 2AG(5mmx20mm)
2	HAR28	F1, F2	Power Supply Board, Sw'd 240VAC input	125 mA Slow 2AG(5mmx20mm)
2	L279	F3, F4	Filament Driver Bd, Sw'd 240VAC input	50 mA Slow 2AG(5mmx20mm)
1	HAE48	F1	Filament Driver Bd, Sw'd 240VAC input	2.0Amp Slow 2AG(5mmx20mm)

Appendix

Control Boards

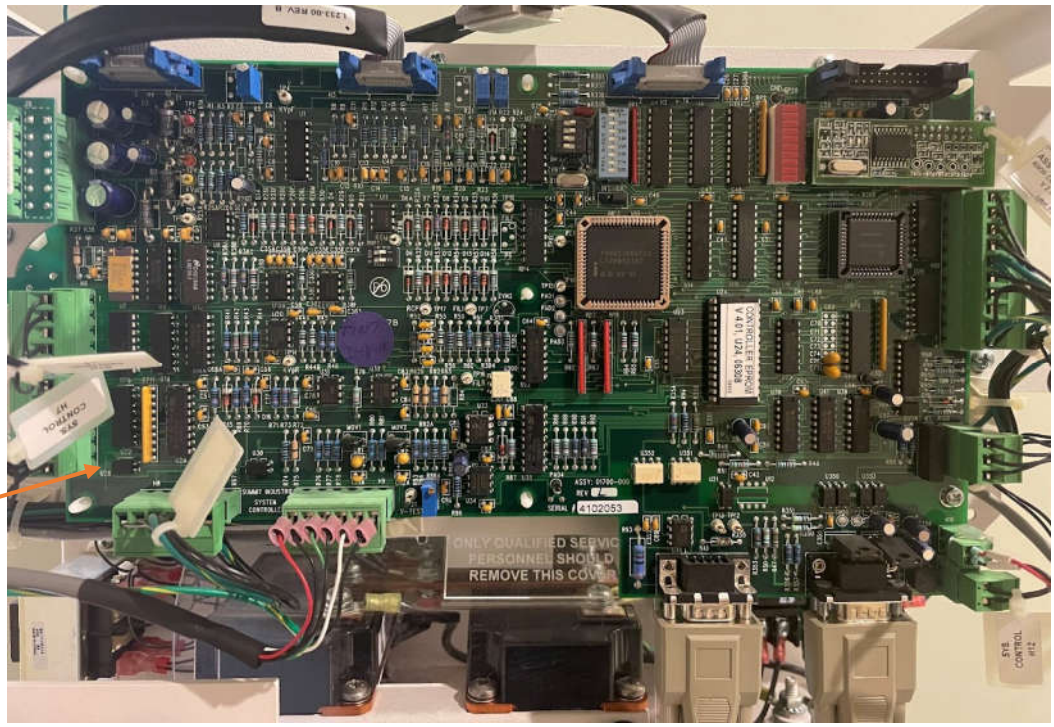
SMT control board
08020



The SMT (Surface Mount Technology) Control Board is our newest version of CB. It is a suitable replacement for the 'older style' CB otherwise known as Thru hole. The 5Vdc PS board (H5) is not needed on the SMT control bd.

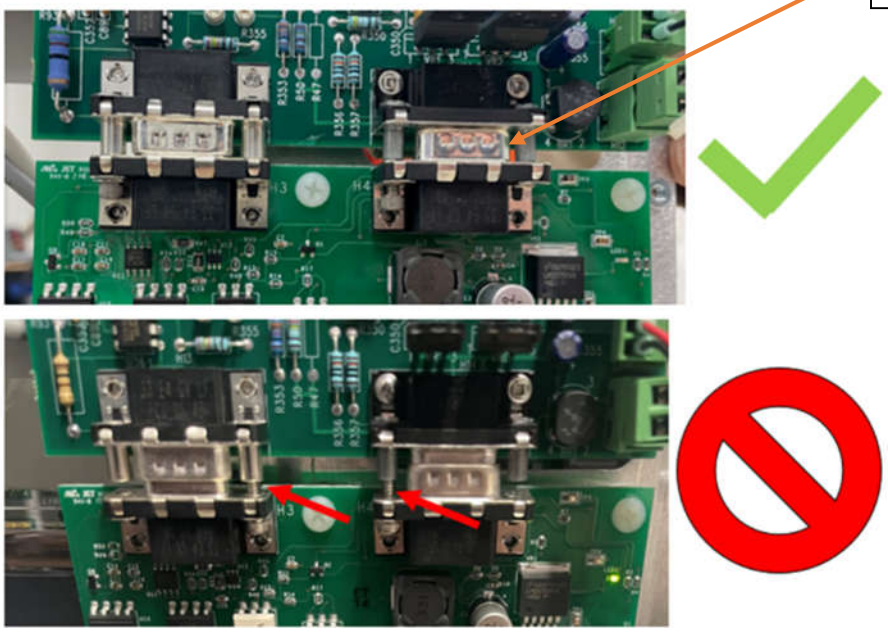
SMT vs Thru hole – is essentially how components are soldered on the PCB, as well as size of components. Thru hole components are inserted through holes on the PCB. SMT components are usually mounted directly on the surface pads of the PCB.

Thru-hole Control Board



Integration Kit Information

- PN: 06751-001 – KIT, PC INTERFACE, GENERIC
- PN: 06751-002 – KIT, PC INTERFACE, WITH HAND SWITCH
- PN: 06751-003 – KIT, PC INTERFACE, FACTORY INSTALL
- PN: 06751-004 – KIT, PC INTERFACE, FTY INST, W/HAND SW
- PN: L166-00 – 25ft serial cable from console to generator
- PN: L166-01 – 10ft serial cable from console to generator



Helpful notes regarding the PC interface (integration) board:

- This board is optional – it is only used with systems that have a DR solution that must integrate with the generator to sync technique factors.
- Supported DR manufacturers: Rayence, LG/Ti-Ba, Radmedix, JPI, IDC, Konica, Vieworks, Sound.
- If LEDs are on – that doesn't necessarily mean that this board is working properly. If you suspect issues with this board, make sure to check F9, your 5VDC and 24VDC.
- When troubleshooting a 'no comm' error. You can remove this board from the generator to eliminate it as a potential source of problems.
- Enabling both workstations within our generator can help avoid problems- if the DR is configured to try and use 'Wallstand' but it isn't enabled in the DR software – it may not reconcile properly.

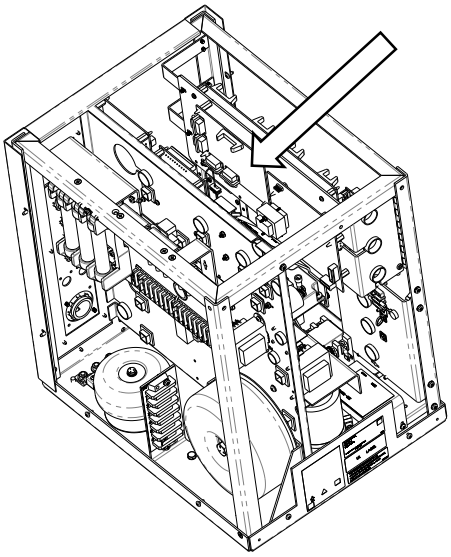
AEC/CAEC Board kits

Kits needed to add AEC to an existing system:

L438-00 – KIT, AEC 2PT UPGRADE

OR

00401-001 – KIT, AEC APR UPGRADE



Filament Driver Board

03035-001 – KIT, FILAMENT DRIVER BRD

00509-000 – ASSY, CABLE, FILAMENT

00510-000 – ASSY, CABLE, HV FEEDBACK

00890-000 – FILAMENT CABLE ASSY, 14 COND., 7” LG

Note:

The difference between part # 00509-000 and 00890-000 is: 00509-000 is the feedback cable from the HVT to the filament driver board, and 00890-000 is the ribbon cable that connects from the filament board to the control board.

High Voltage Tank (Transformer)

There are 3 different versions of High Voltage Tank (HVT):

- **K904-00** – For systems manufactured 07/2002 to 06/2018 with incoming line voltage of 208-240 VAC
- **K904-01** – For systems manufactured 06/2018 to Present with incoming line voltage of 208-277 VAC
- **K904-02** – For systems manufactured 06/2018 to Present with incoming line voltage of 380-480 VAC