

INSTRUCTION MANUAL



KEPCO An ISO 9001 Company.

KIT
219-0670

BOP 2KW TERMINATION KIT

1. DESCRIPTION

BOP 2kW Termination KIT allows access to the pins on the Control Module PAR/SER PROT IN Port of a 2kW BOP (Rev 1) needed to use the Fail Safe Interlock feature. The Control Module PAR/SER PROT IN Port pins 6 and 7 are normally occupied by the 195-0117 termination. This KIT provides a termination (P/N 195-0126) that replaces 195-0117 and allows access to the Interlock/Fail Safe signal via a separate 2-pin terminal block that is part of the replacement termination. A mating plug for this terminal block (P/N 142-0655) is also supplied

2. MATERIAL SUPPLIED

Material supplied is listed in Table 1..

TABLE 1. MATERIAL SUPPLIED

MATERIAL	QUANTITY
Termination P/N 195-0126	1
Terminal Block Plug P/N 142-0655	1
Instruction Sheet P/N 228-2009	1

3. TERMINATION REPLACEMENT

1. Refer to Figure 1 and remove five screws securing the rear panel assembly to the chassis.
2. Slowly pull the rear panel assembly away from the chassis, taking care not to disconnect any attached cables.
3. Remove Termination 195-0117 from PAR/SER PROT IN port.
4. Install Termination 195-0126 supplied in this KIT on PAR/SER PROT IN port.
5. Refer to Figure 5 and proceed as follows:
 - a. If the fail safe interlock feature is not to be used, connect a short (#22AWG wire-jumper) across the two pins of mating plug (P/N 142-0655) supplied in kit. and proceed to step 6.
 - b. If the fail safe interlock feature is to be used, remove the short (if installed in step 5a above), then thread Fail safe and Ground (return) wires of the interlock cable and relay circuit (see Figure 5) through the rear panel assembly and attach to mating plug (P/N 142-0655) supplied in kit. Refer to PAR. 4 to enable the fail safe interlock feature. and to PAR. 5 for how to use it.
6. Attach mating plug to terminal block of termination 195-0126, **CAUTION:** If fail safe interlock feature is to be used, ensure the Remote Interlock Circuit is isolated (min 300V a-c) from the chassis and from the BOP output terminals..
7. Reassemble the rear panel assembly to the chassis using five screws removed in step 1.

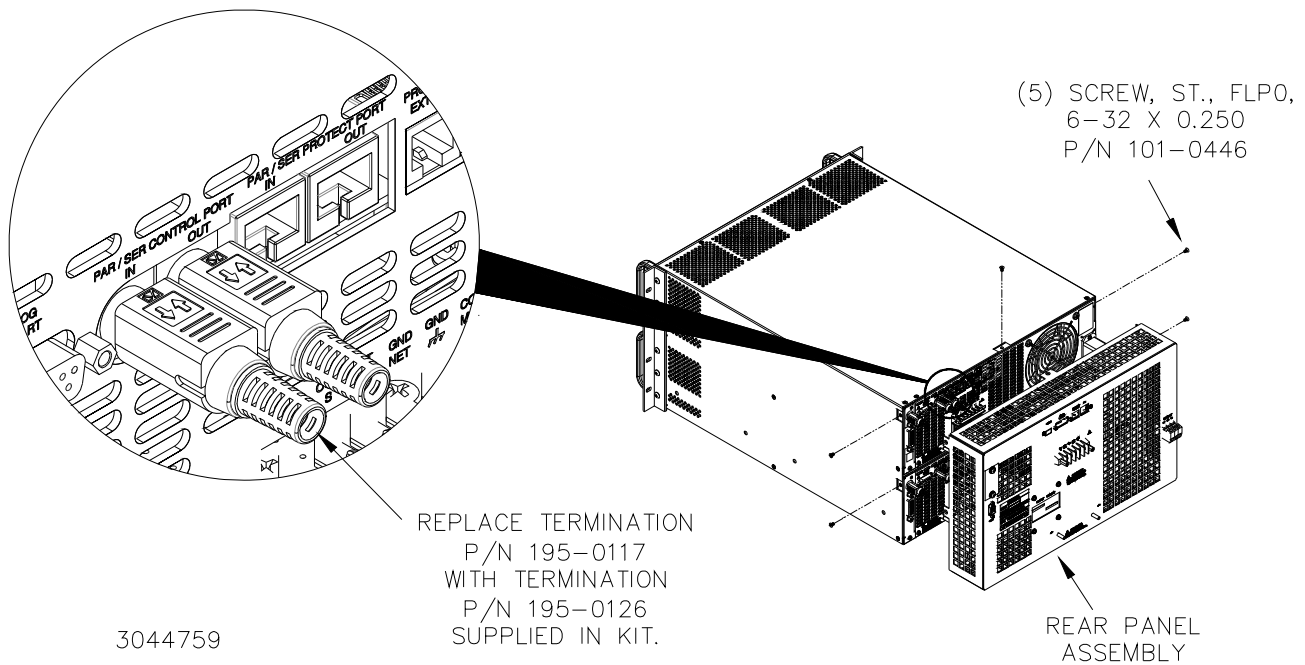


FIGURE 1. TERMINATION 195-0117 REPLACEMENT WITH TERMINATION 195-0126

4. ENABLING FAIL SAFE INTERLOCK



This feature requires disassembly and modification of the unit and implementation is permitted only by authorized service personnel.

To enable the Fail Safe feature it is necessary to cut or unsolder the test loop wire of TP10 on A2A5. Proceed as follows:

1. Remove two ear brackets and two shims from front of chassis by removing 12 screws (see Figure 2).

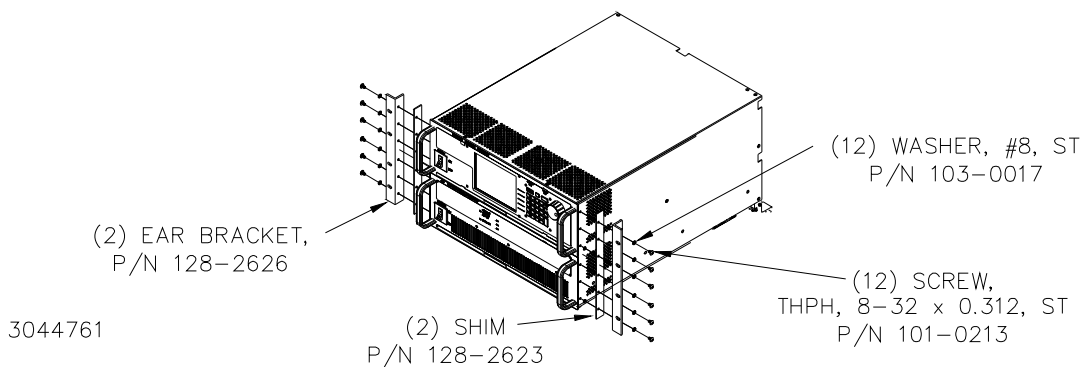


FIGURE 2. EAR BRACKET REMOVAL

- Remove top cover from chassis by removing 15 screws: six screws from each side and three screws at the top (see Figure 3)

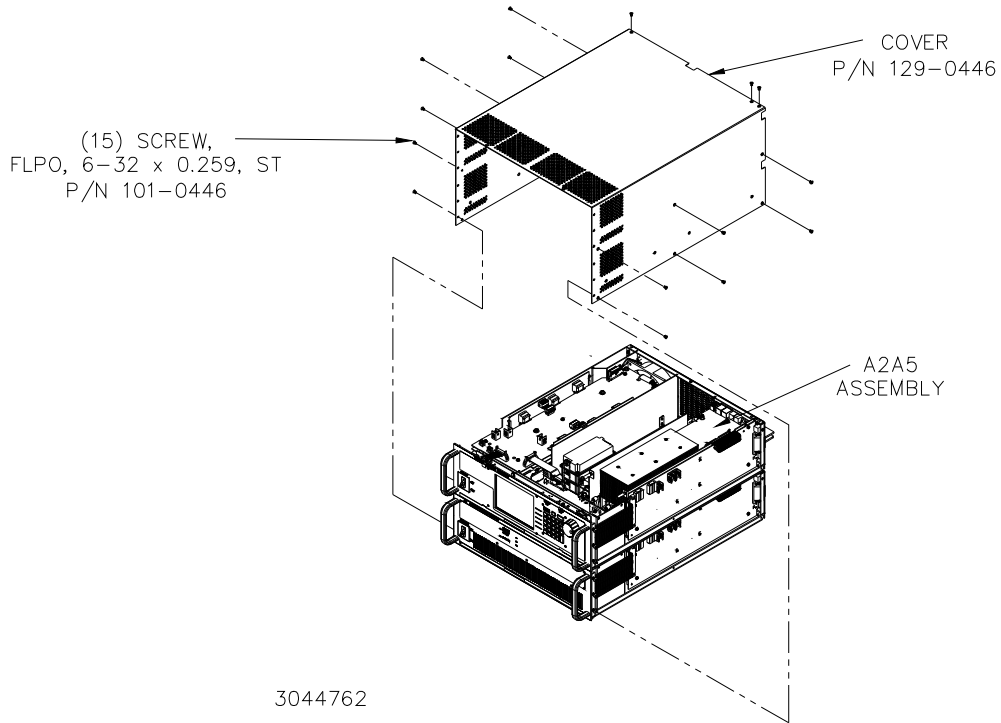


FIGURE 3. COVER REMOVAL AND A2A5 ASSEMBLY LOCATION

- Locate module A2A5 (see Figure 4), then cut or unsolder the test loop wire of TP10 on A2A5.
- Reinstall ear brackets and shims (see Figure 2), then reinstall cover (see Figure 3).

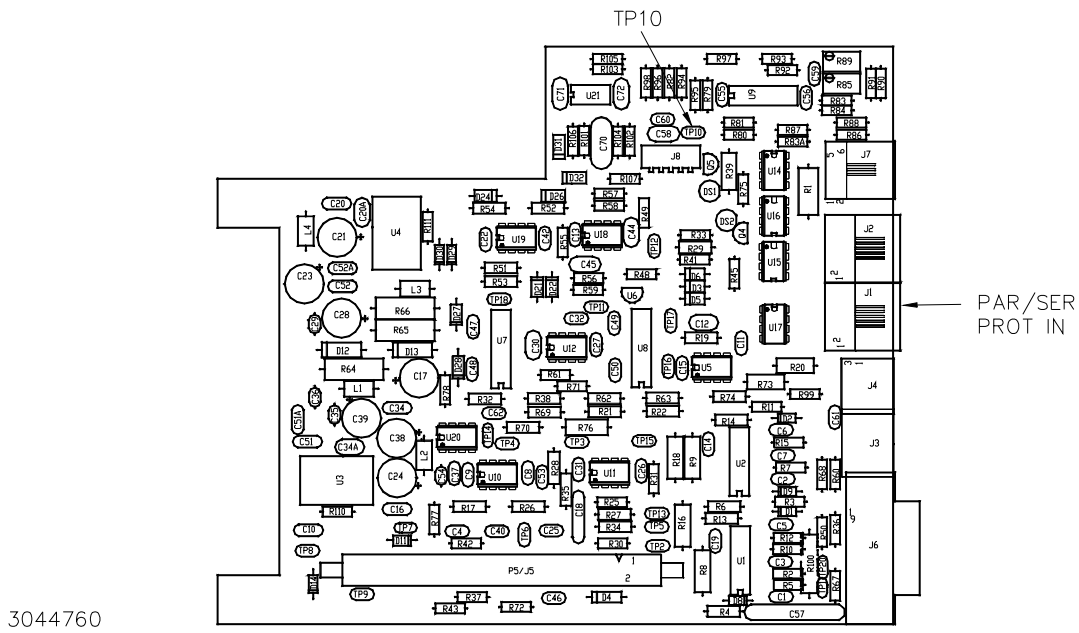


FIGURE 4. ASSEMBLY A2A5 COMPONENT LOCATIONS

5. USING THE FAIL SAFE INTERLOCK FEATURE

Once the feature is enabled, if the interlock feature is not used, a short is required across the terminals of the Termination 195-0126 terminal block for the unit to function (see simplified diagram, Figure 5).

When using the interlock feature, replace the short across the pins of the Termination 195-0126 terminal block with a remote interlock circuit (NC relay contact). Whenever there is an open circuit between the terminal block pins, the BOP unit shuts down with the red FAULT LED lit. The open circuit could be caused by any of the following: a) the application's protection triggers the relay contact to open, b) any wiring interruption of the protection circuit, c) Termination 195-0126 becoming unplugged.

Once the unit shuts down, even though power is applied to the input, no transfer of power to the output will occur. To restart the unit it is necessary to either a) first turn OFF the Control Section (first) and Boost section circuit breakers, then turn ON the Control section (first) and Boost section circuit breakers or b) on units with a front panel keypad, press the RESET key of the Control section

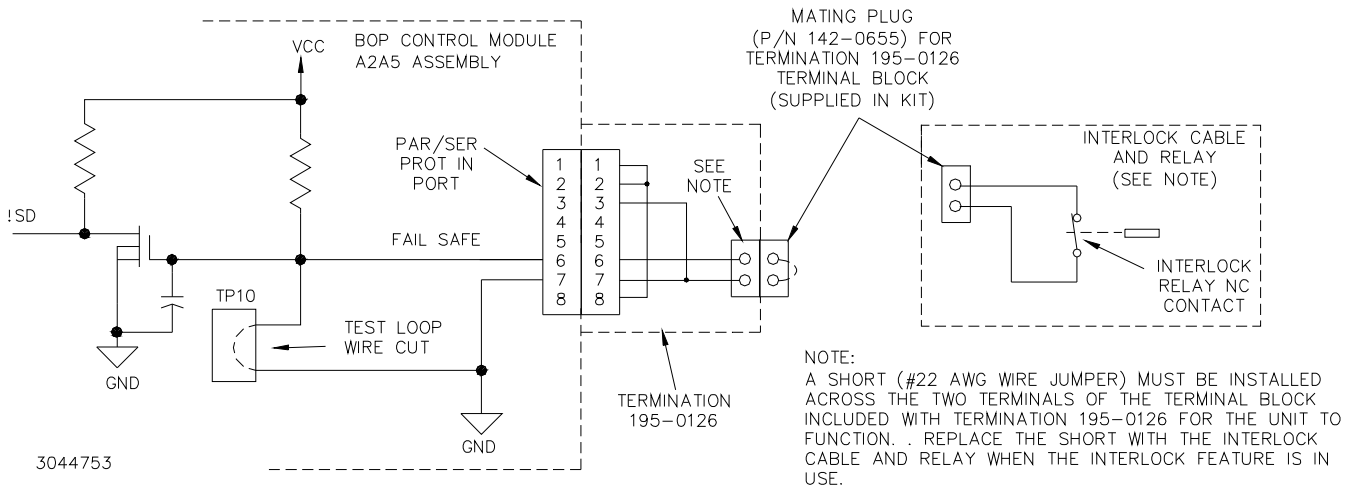


FIGURE 5. FAIL SAFE INTERLOCK FEATURE, SIMPLIFIED SCHEMATIC DIAGRAM