INSTRUCTIONS FOR FIELD INSTALLATION AND/OR REPLACEMENT OF CR1 POLARITY DIODE AND/OR CR2 BLOCKING DIODE.

THESE INSTRUCTIONS ARE APPLICABLE FOR INSTALLATION OR REPLACEMENT OF THE CR1 AND/OR CR2 DIODES ASSEMBLIES FOR ANY AT10.1 GROUP I (6-25 Adc) BATTERY CHARGER, WITH THE DC FILTER OPTION (EJ1072-##).

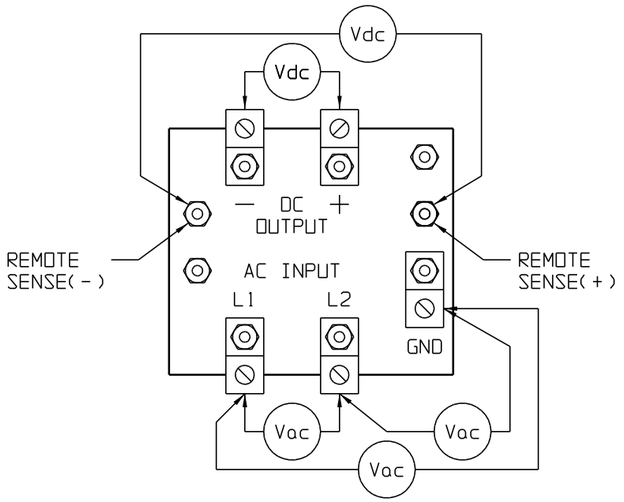
WARNING

DISCONNECT AND LOCK OUT ALL POWER TO THE AT10.1 BEFORE STARTING ANY MAINTENANCE PROCEDURES. TURN THE AC POWER OFF AT THE DISTRIBUTION PANEL UPSTREAM FROM THE CHARGER. DISCONNECT THE BATTERY FROM THE CHARGER OUTPUT TERMINALS. THIS INCLUDES REMOTE SENSE WIRES IF THEY WERE INSTALLED.

STEP 1) UPON OPENING THE PACKAGE, PLEASE INSPECT AND CHECK FOR THE FOLLOWING ITEMS:

- ☐ PE0005-08 LARGE FLAT WASHER 0.25in ID, (1) / ASSY
- ☐ PE0009-08 BELLEVILLE WASHER 0.25in ID, (1) / ASSY
- ☐ PE0015-12 DIODE JAM NUT, (1) / ASSY
- ☐ EJ1243-XX CR1 AND/OR CR2 DIODE ASSEMBLY

STEP 2) READ "WARNING" ABOVE. PERFORM ALL INSTRUCTIONS AS DESCRIBED. REMOVE PLEXIGLAS SAFETY COVER. USING A VOLTMETER, VERIFY THAT ALL POTENTIAL VOLTAGES ON THE I/O PANEL ARE AT ZERO.

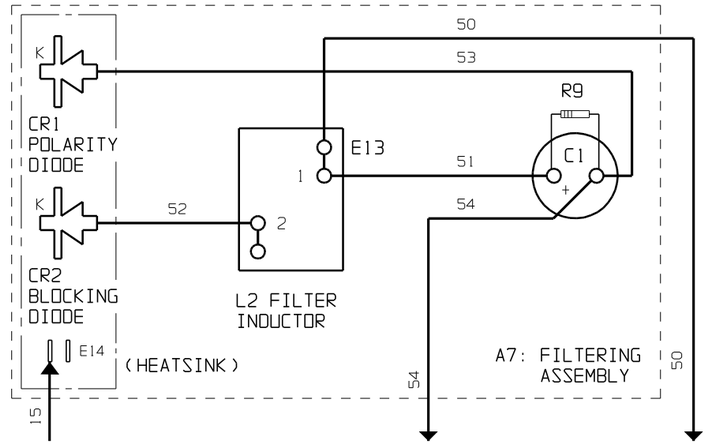


STEP 3) REMOVE THE DC FILTER ASSEMBLY (A7) FROM THE AT10.1 BY:

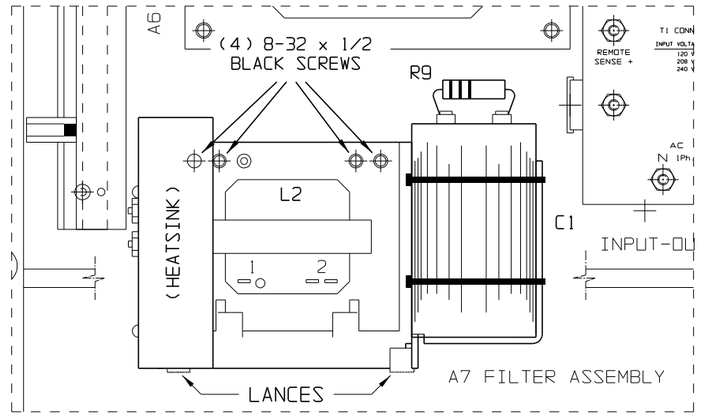
A) DISCONNECT WIRES #15 FROM E14 (HEATSINK), WIRE #50 FROM L1-2 (L1 INDUCTOR) AND WIRE #54 FROM A3-E7 (RECTIFIER).

B) REMOVE FOUR (4) 8-32 x .5 BLACK SCREWS FROM FILTER ASSY.

C) REMOVE FILTER ASSEMBLY BY LIFTING IT OUT OF THE METAL LANCES ON THE CHASSIS, ROTATE COUNTER-CLOCKWISE AND REMOVE IT FROM THE UNIT SO THE HEATSINK COMES OUT FIRST.



▲ THIS SYMBOL INDICATE DISCONNECTION POINT



STEP 4) SET FILTER ASSY ON A FLAT WORK AREA. DISCONNECT WIRE #53 FROM C1(-), IF REPLACING CR1 ONLY. DISCONNECT WIRE #52 FROM L2-2, IF REPLACING CR2 ONLY. USING TWO (2) OPEN-END WRENCHES, CAREFULLY REMOVE THE DEFECTIVE DIODE(S).

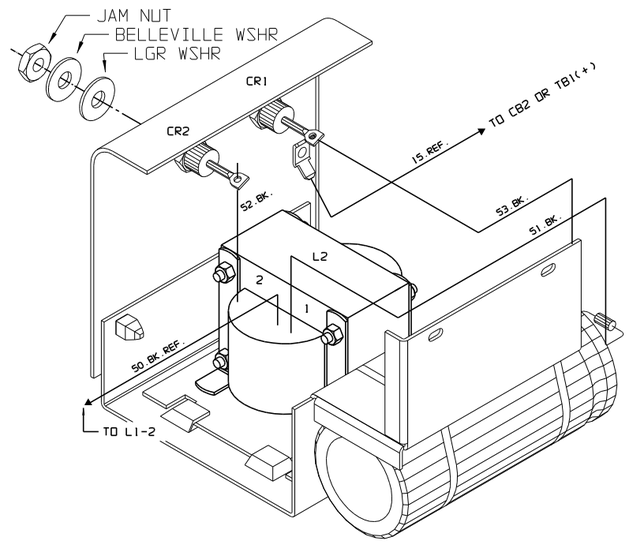
INSTALL REPLACEMENT DIODE(S), CR1 AND/OR CR2 IN A SIMILAR MANNER. NOTICE THE MOUNTING ORIENTATION. DO NOT OVER-TIGHTEN DIODES. CONNECT WIRE #53 TO C1(-), (IF INSTALLING CR1 ONLY. CONNECT WIRE #52 TO L2-2, IF INSTALLING CR2 ONLY.

STEP 5) RE-INSTALL DC FILTER ASSEMBLY INTO AT10.1. ONCE IN POSITION, SLIP THE TWO LOWER CORNERS OF FILTER ASSY. UNDERNEATH THE LANCES INTO THE CHASSIS. ALIGN THE FOUR (4) HOLES IN THE CHASSIS. INSERT FOUR (4) 8-32 x 0.5 BLACK SCREWS IN THESE HOLES, AND TIGHTEN TO 10-15in-lbs OF TORQUE.

STEP 6) RECONNECT WIRE #15 TO E14 (HEATSINK). RECONNECT WIRE #50 TO L1-2 INDUCTOR. RECONNECT WIRE #54 TO A3-E7 RECTIFIER ASSY.

SAFETY NOTE !!! - CHECK YOUR WORK !!!

MAKE SURE NO OTHER WIRES WERE DISCONNECTED ACCIDENTLY. REFER TO WIRING DIAGRAM IN APPENDIX C OF USER'S MANUAL.



STEP 7) REPLACE PLEXIGLAS SAFETY SHIELD. CLOSE THE INSTRUMENT PANEL DOOR AND RE-ENERGIZE THE AT10.1 PER START-UP INSTRUCTIONS LISTED IN THE USER'S MANUAL.

STEP 8) TO VERIFY PROPER OPERATION OF AT10.1 BATTERY ELIMINATOR OPTION, TEST AS FOLLOWS:

A) ENERGIZE THE AT10.1 WITH A NOMINAL RESISTIVE LOAD OF ROUGHLY 50% RATED OUTPUT CURRENT. NOTE! - DO NOT HAVE A BATTERY CONNECTED AT THIS TIME.
B) CONNECT AN AC RMS-RESPONDING VOLTMETER, SET ON AC MILLIVOLTS SCALE ACROSS THE OUTPUT OF THE AT10.1.

CAUTION !!!! BE CAREFUL OF ELECTRICAL SHOCK !!!

C) MAXIMUM AC RIPPLE SHOULD NOT EXCEED 30 nV rms FOR 12/24/48 Vdc OUTPUT, AND 100 nV rms FOR 130 Vdc OUTPUT. THESE ARE STANDARDS SET BY NEMA PE5-1996. IF AC RIPPLE MEASURED IS MORE THAN SPECIFIED LEVELS, RE-CHECK YOUR WORK. IF THE PROBLEM PERSISTS, CONTACT THE FACTORY FOR ASSISTANCE.

REV	ECN No	DATE	APP
1	21611	040909	ND
0	13058	050296	DAC

THIRD ANGLE PROJECTION

DRAWN BY 050296
APPROVED DAC 050396

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

TITLE AT10.1 SERIES G1 DIODES (CR1 AND/OR CR2) FIELD INSTALLATION / REPLACEMENT

DRAWING No JA0115-00 REV 1 B

SCALE NTS PART No JA0115-00 SHEET 1 OF 1

FILENAME [JA0115-00.PRT]