

MULTI-TAP AC INPUT VOLTAGE ADJUSTMENT**BACKGROUND**

Some AT30s feature power isolation transformers (T1) with dual-input voltage designs. In these units, the transformer "taps" (T1-H#) can be reconnected in the field to change the input supply voltage accepted by the AT30. Depending on the transformer design, taps can be adjusted to choose, 208/240, 220/240, 380/416, or 550/600 Vac supplies.

To identify the AT30 factory-set ac input voltage, refer to the **CAUTION** tag (JC0011-00) affixed to the ac input circuit breaker (CB1). Once changed, the ac input listings (Vac & Aac) on the silver data nameplate decal need to be altered or replaced.

SAFETY**WARNING**

Before starting work, disconnect and lock out all external ac and dc power sources to the AT30.

**NOTICE**

Turning off (open) the front panel ac input (CB1) and dc output (CB2) circuit breakers does not isolate live voltages inside the AT30 enclosure.

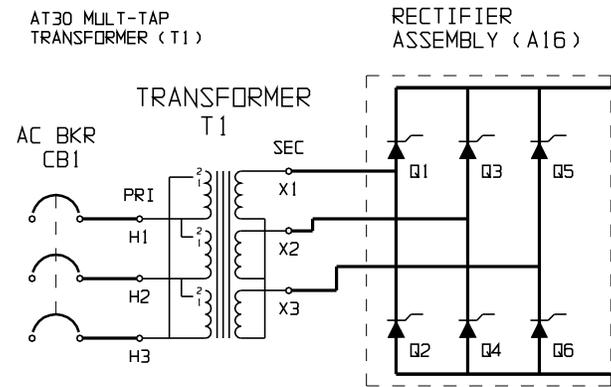
**PROCEDURE**

1. Verify that all power sources to the AT30 are de-energized and  locked out.
2. Open the AT30 ac input (CB1) and dc output (CB2) circuit breakers, accessible from the front door panel windows.
3. Allow dc filter capacitors (C1x/C2x) to fully discharge before proceeding.
4. See Section 3.5 of the *Operating and Service Instructions* for necessary steps to follow when accessing internal components within the AT30.
5. Open the front panel door of the AT30 and remove the Plexiglas safety shield.
6. Verify that no voltages are present inside the AT30, using a voltmeter at the ac input terminals (TB1-L1, TB1-L2 & TB1-L3), the dc output terminals (TB1[+] & TB1[-]), the dc remote sense terminals (+/-), and any external wiring to alarm contacts (TB3/TB4).
7. Identify the power isolation transformer (T1) mounted to the bottom of the enclosure.
8. Refer to the three (3) diagrams on *Sheet 2 of 2* of this instruction.
9. Identify the primary "taps" (T1-H#) located at the front of the transformer.
10. Change the jumpers on each transformer as shown for the newly required setting.
11. Always use all three (3) jumpers on the transformer.
12. Make sure all connections are tight, and check your work before re-energizing the AT30.
13. Reconnect the battery, dc loads, and ac power supply.
14. Re-energize the AT30 by closing the dc output circuit breaker (CB2) *first*, followed by the ac input circuit breaker (CB1) *second*.
15. Modify or replace the silver data nameplate decal for new ac input settings (Vac & Aac).
16. The AT30 ac input voltage adjustment service procedure is now complete.

NOTES:

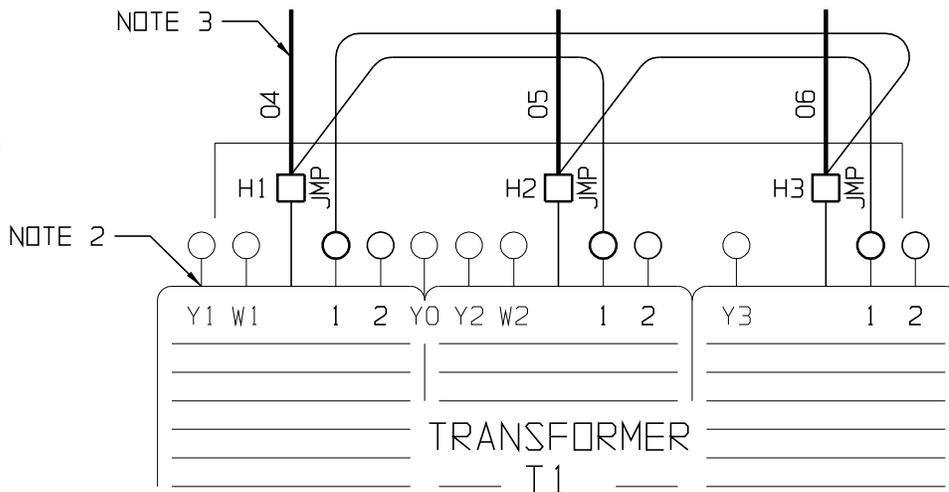
- 1) CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS.
- 2) JUMPABLE TAPS T1-H1, T1-H2, T1-H3, T1-1 ("A" VOLTAGE) & T1-2 ("B" VOLTAGE) ARE NORMALLY ORIENTED LEFT-TO-RIGHT AS SHOWN.
- 3) MAIN POWER WIRES (# 04, 05 & 06) CONNECT POWER ISOLATION TRANSFORMER (T1-H1/H2/H3) TO AC INPUT CIRCUIT BREAKER (CB1), AND ARE NOT ADJUSTED FOR THIS PROCEDURE.
- 4) TRANSFORMER (T1) MUST BE TAPPED FOR EITHER "A" OR "B" VOLTAGE.
 - A) FOR 208, 220, 380, 550 VAC:
 JUMPER T1-H1 TO T1-1, JUMPER T1-H2 TO T1-1,
 JUMPER T1-H3 TO T1-1
 - B) FOR 240, 400-416, 575-600 VAC:
 JUMPER T1-H1 TO T1-2, JUMPER T1-H2 TO T1-2,
 JUMPER T1-H3 TO T1-2

SCHEMATIC :



TAPPED FOR:
"A" VOLTAGE

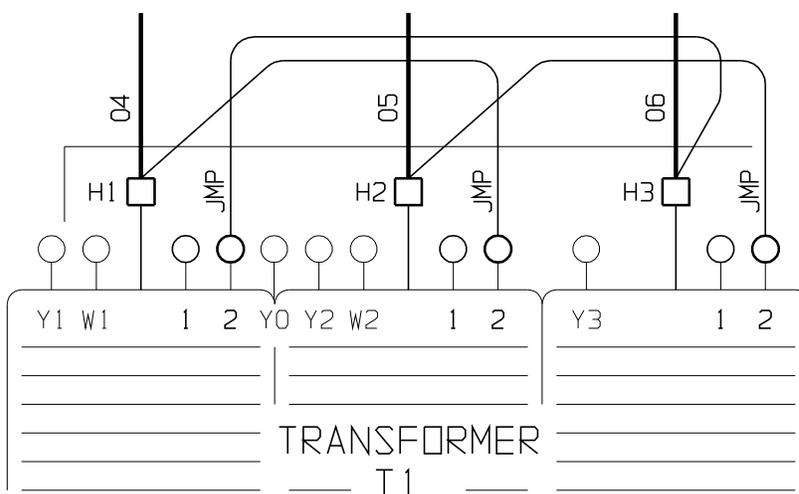
208, 220, 380
or 550 Vac



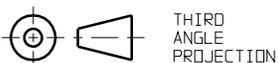
INPUT	XFMR JUMPERS
"A"	H1,H2,H3 TO 1
"B"	H1,H2,H3 TO 2

TAPPED FOR:
"B" VOLTAGE

240, 400-416,
or 575-600 Vac



INPUT	XFMR JUMPERS
"A"	H1,H2,H3 TO 1
"B"	H1,H2,H3 TO 2



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ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

TITLE AT30 SERIES BATT CHGR SERVICE INSTRUCTION: MULT-TAP AC INPUT SUPPLY VOLTAGE CHANGE

DRAWING No JD5026-03

REV 0 **A**

SCALE NTS PART No JD5026-03

SHEET 2 OF 2