

BID & AH Accumulator Assembly Installation Instructions 197351

WARNING! USE EXTREME CAUTION WHEN WORKING WITH BATTERIES. THE POSSIBILITY OF SHOCK, FIRE AND EXPLOSION EXISTS. BATTERIES PRODUCE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND CIGARETTES AWAY. VENTILATE WHEN WORKING IN AN ENCLOSED AREA. ALWAYS SHIELD EYES WHEN WORKING NEAR BATTERIES. A FACEMASK AND GLOVES ARE RECOMMENDED DURING THE INSTALLATION.

1. Check for all parts as outlined below in Figure 1. Be sure that the BID / Amp Hour Accumulator is sized in accordance with the battery to which it will be attached. The BID will be labeled with its cell size: 197338-001 / 6-18 cells, 197338-002 / 24 cells, 197338-003 / 36 cells, 197338-004 / 40 cells.

<u>Part</u>	<u>Quantity</u>
BID & AH ACC Modules	1
Insert, Press	5
Screw, #6-32 x 1/4". Phillips Pan Head	3
Screw, #6-32 x 3/4". Phillips Pan Head	2
Washer, Flat, #6	5
Cable Tie, Plastic 7.4"	8

FIGURE 1

2. Move the battery to a clean, well lit, and well ventilated area.
3. The battery must be in good condition and free of corrosion for proper operation of the BID & Amp Hour Accumulator.
4. Refer to figure 2 and use a 3/16" a 1/2" deep hole in the following locations:
 - A) The negative side of the most negative cell of the battery. This is typically where the black cable is connected. Remove the cell connector cover and drill into the post.
 - B) In the middle of any cell connector near the center of the battery. Remove the cell connector cover and drill into the lead post. Use the BID module itself as a hole locator. A cell connector near the center of the battery needs to be used so that the temperature sensor reads the warmest part of the battery.
 - C) The positive side of the most positive cell of the battery. The most positive cell will be the sixth cell of a 6 cell battery, the twelfth cell of a 12 cell battery, etc. This is typically where the red cable is connected to the battery. Remove the cell connector cover and drill into the post.
 - D) If the battery has more then 24 cells, at the 24th cell from negative remove the cell connector cover and drill into the post.

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No.	E.C. No.	Date	Title: Instructions, Installation		
A			Index Data: AH Acc & BID Modules		
B			Designed: TMB	Drawn: TMB	Date: 3-07-07
C			Approved:	Records: 3-20-07	Activity:
D				Sheet No 1 of 4	Dwg. No: 197351

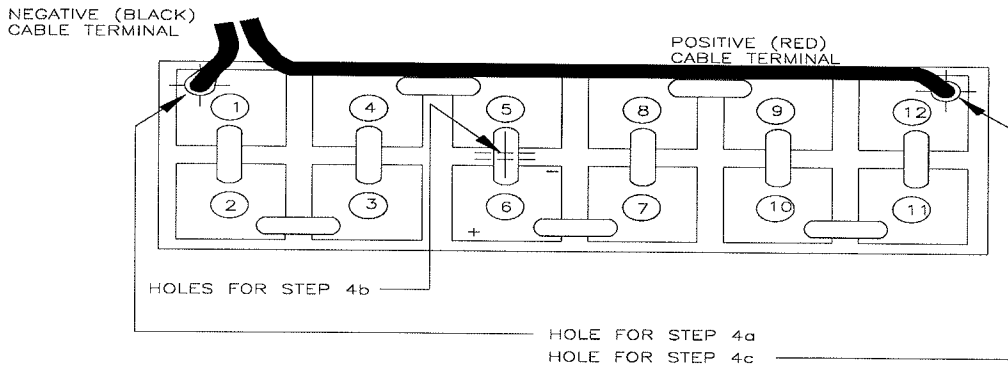


FIGURE 2

- Place an insert above each hole and tap lightly with a wooden or rubber mallet until the insert is flush with the cell. See figure 3.

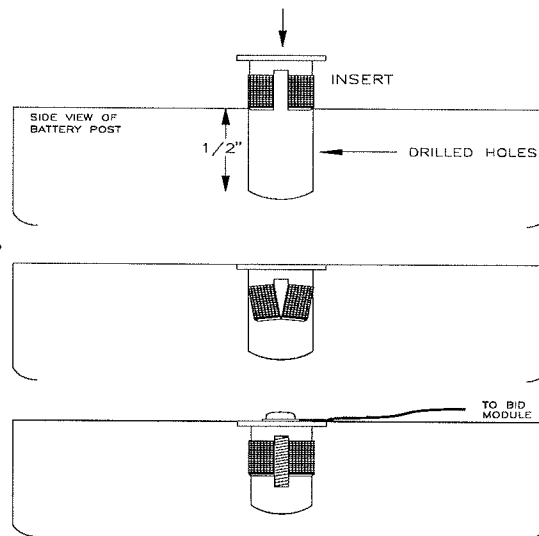


FIGURE 3

WARNING! DO NOT LAY TOOLS ON THE TOP OF THE BATTERY AS THEY MAY BE CONDUCTIVE

- Attach the BID module to the intercell connector using the holes drilled in step 4b. Use the 2 #6-32 x 3/4" screws and 2 #6 flat washers provided. See figure 4.

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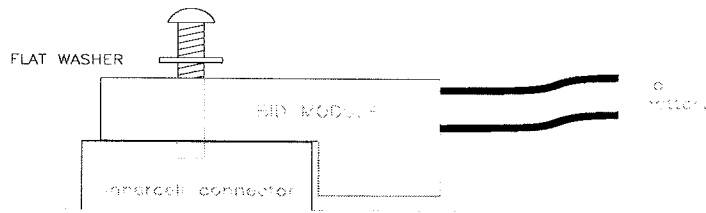


FIGURE 4

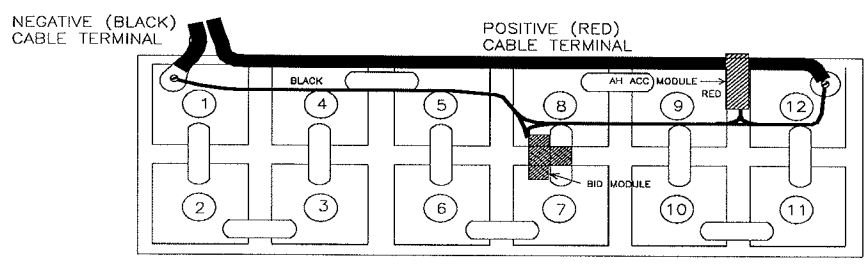


FIGURE 5

- Carefully remove the end of either charging lead from its connector housing.

Warning! *Keep the exposed lug from this cable away from any other connections on the battery.*

Slide the Amp Hour Accumulator over the end of the cable so the discharge current flows through the Accumulator as indicated on the label. If the red cable is used, the end pulled from the connector housing should be inserted through the labeled side first. If the black cable is used, the end pulled from the connector housing should be inserted through the potted side first. Replace the end of the cable into the battery connector. Secure the module so that it is protected from any possible damage. See figure 5.

- Route all the loose wiring now in the most logical manner for the installation.
- Make the power connections the BID and Amp Hour Accumulator module assembly. Using the 6-32 x 1/4" screws and washers provided, connect the 2 black leads of the assembly to the insert at the most negative point of the battery. This would be the hole drilled in step 4a.
- Connect the 2 red leads of the assembly to the insert at the most positive point of the battery. This would be the hole drilled in step 4c. Note: if the battery is greater than 24 cells connect the red lead from the Amp Hour Accumulator to the insert at the 24th cell of the battery. This would be the hole drilled in step 4d.
- Use the 8 wire ties to secure any extra wire lengths, keeping them to where they are least likely to be damaged. Spray all of the battery connections with battery corrosion treatment. (Installation Kit 191897-001). Replace all intercell covers

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D				Sheet No 3 of 4	Dwg. No: 197351

where possible.

Note: Before completely finishing the installation, make that sure that the battery lid will close properly and check the battery cables so that if moved they will not pull on any of the system parts.

12. Upon completion of the installation the assembly should be tested. Check both the BID and Amp Hour modules for a blinking led. The leds may on solid for the first minute after the power connections are made. Connect the battery to a Ametek charger equipped with BID accessibility. After the charger starts and press the manual stop switch. Check that the BID number was read properly.

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D				Sheet No 4 of 4	Dwg. No: 197351