

930 Hand Crank Adjustable Bench



REV. (042318P65)

## IAC INDUSTRIES

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## 930 HAND CRANK ADJ. HI Assembly Instructions

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## ATTENTION NOTES:

IAC Industries takes great care in the packing of its products, however damage can occur during shipment. Check all packages and parts for any signs of damage. If damage is evident STOP and contact the carrier that delivered your order. Request a freight claim inspector to document the damage and begin the freight claim process.

Tools required to assemble your products are:

**7/16" and 1/2" wrench or socket with ratchet. Phillips screwdriver 8" long.  
Utility knife. Safety glasses and light duty protective gloves.**

**Power tools are NOT recommended unless they are equipped with a torque-limiting device which can limit the torque to 10-foot lbs maximum.**

**Unpack your order and separate like parts. Be careful not to damage parts as they are being moved into position. Also be sure all parts are removed from the packing materials before these materials are thrown away.**

**Locate the hardware kits and keep them in a central area. If the assembly is going to take more than one day, all individual hardware pieces should be returned to a central location.  
Attention Notes (cont)**

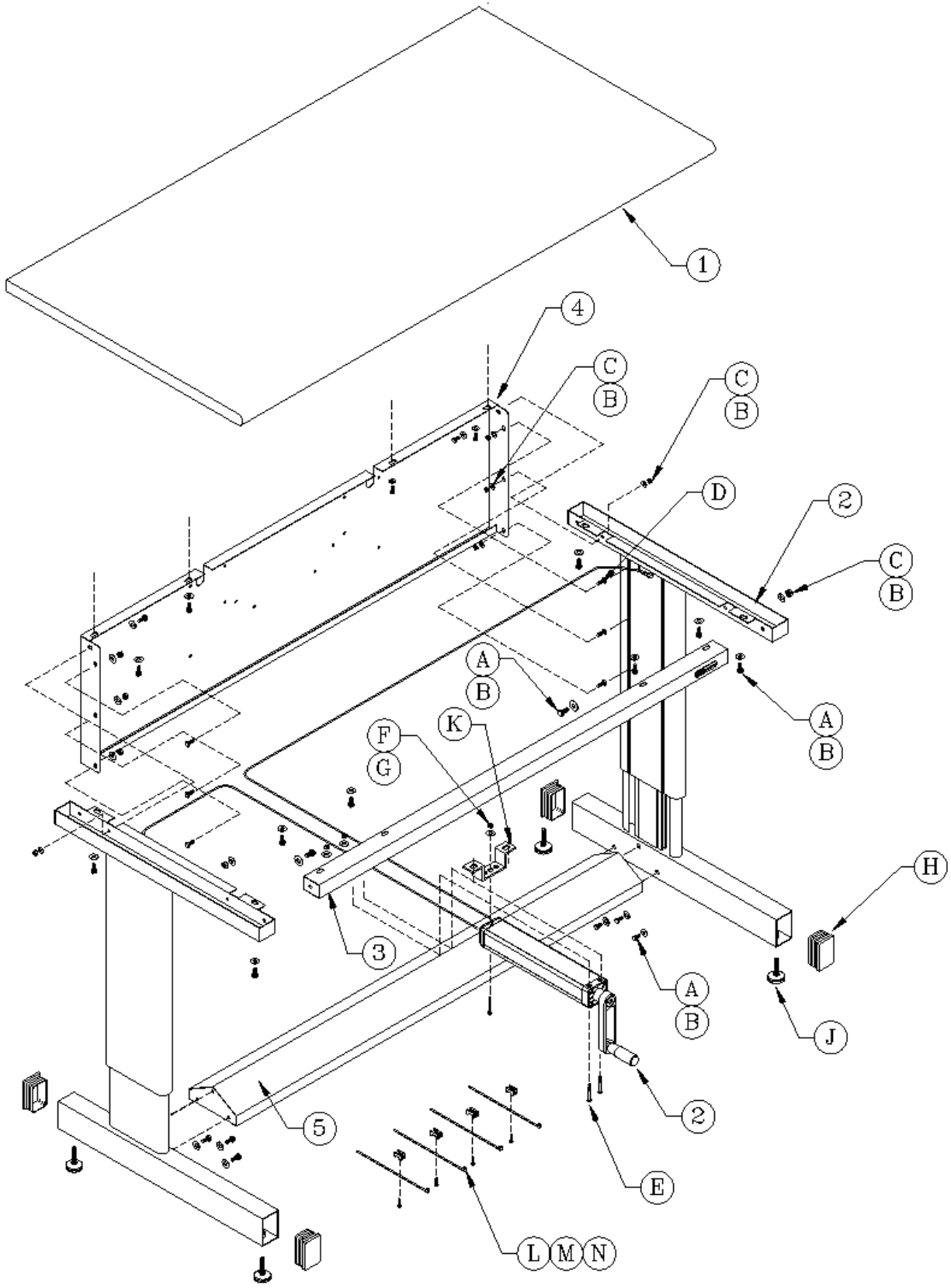
**Check all parts and hardware kits against the itemized packing list found with the assembly instructions. If you believe there are parts missing from your order please contact IAC Industries customer service at 800-989-1422.**



### **WARNING:**

**ALL PARTICLE BOARD USED IN IAC INDUSTRIES PRODUCTS ARE SOURCED ONLY FROM VENDORS THAT ARE CARB ATCM PHASE 2 AND TSCA TITLE VI COMPLIANT WITH VALID CERTIFICATES.** Drilling, Sawing, Sanding or Machining Wood products can expose you to wood dust, a substance known to the state of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask to other safeguards for personal protection. This product can expose you to chemicals, including formaldehyde, which is known to the state of California to cause cancer, and methanol, which is known to the state of California to cause birth defects or other reproductive harm. For more information please visit, [www.P65WARNINGS.CA.GOV/WOOD](http://www.P65WARNINGS.CA.GOV/WOOD). COPY OF VENDOR CERTIFICATE AVAILABLE UPON REQUEST.

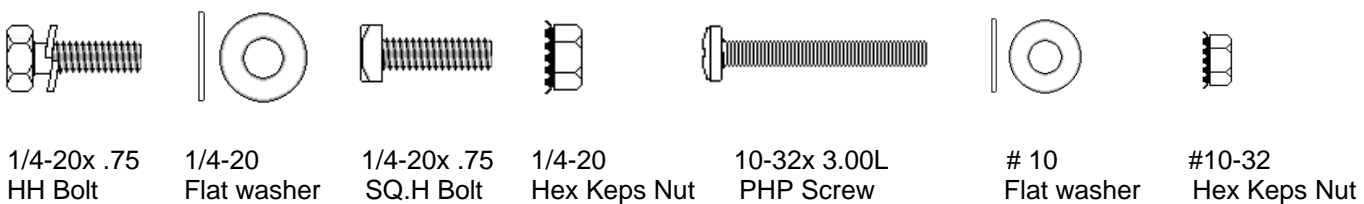
# 930 Bench Assembly Drawing (Figure 1)



# Parts List: 930 Hand Crank Adjustable Bench

(Ref. Figure 1) Hardware Kit – HWR461\*

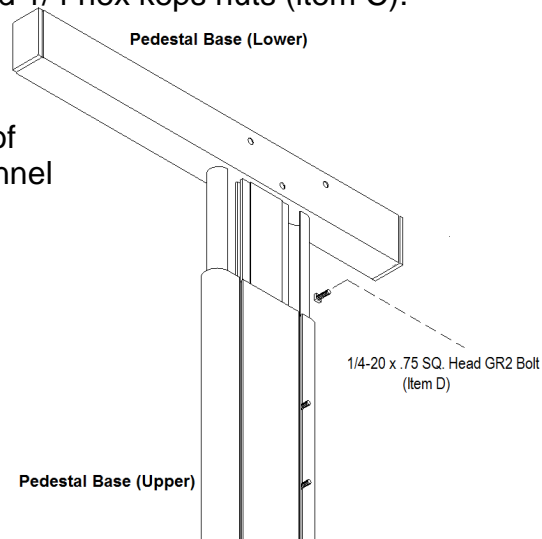
Item	Description	Qty.	Item	Description	Qty.
1	Worksurface	1	E	Screw, 10-32x 3.00L PHP	3 *
2	930 Leg Sub-Assy-Rt & Lt	1ea	F	Washer, # 10 Flat Zinc	3 *
3	Front Support Beam 1.5H	1	G	Nut, #10-32 Hex Keps	3 *
4	930 Modesty Panel	1	H	Cap, 2.00" x 3.00" 10-14 Ga	4*
5	930/940 Stiffener Beam	1	J	Floor Glide 5/16-18 x 1.75 x 1.625Dia	4*
A	Hex Head Bolt 1/4-20x.75	26 *	K	Bracket, 950/950-QS Hand Crank 1.50H	1*
B	Washer, 1/4 Flat	34*	L	Screw, #6 x .500 PPH SMS Zinc	4*
C	Nut, 1/4-20 Hex Keps	8*	M	Cable Tie, Mount Plastic (#6)	4*
D	Bolt, 1/4-20 x .75 SQ. Head GR2	6 *	N	Cable Tie, #8	4*



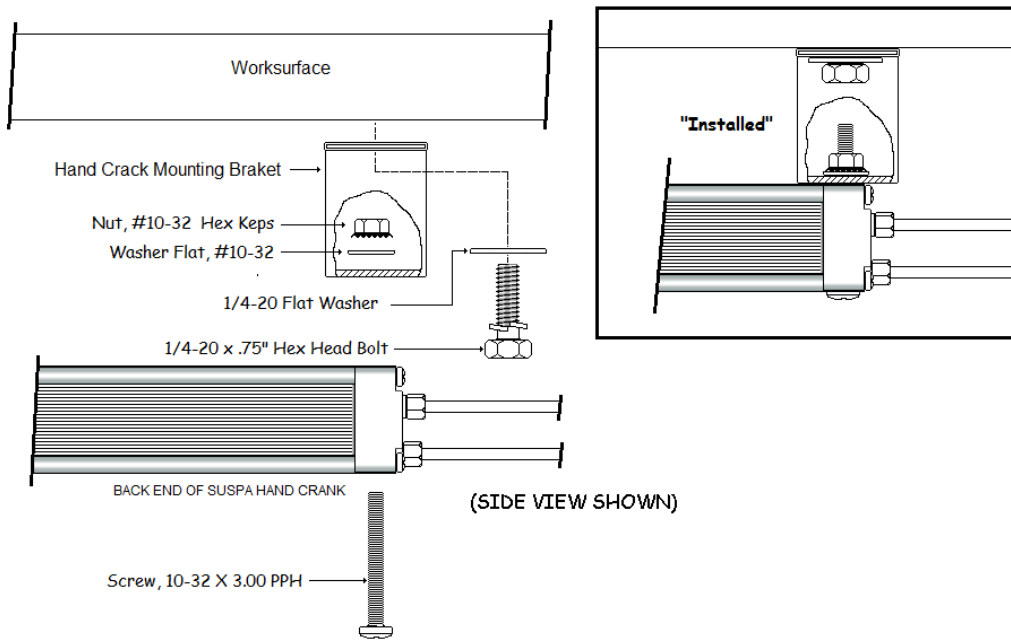
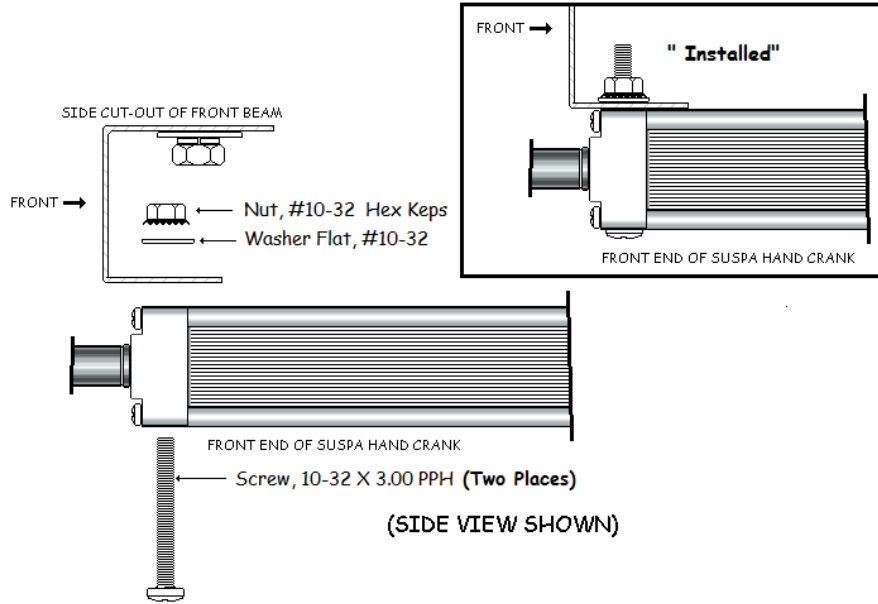
**CAUTION: Do not operate hand crank cylinders without the weight of the worksurface on the frame. To do so may cause a vacuum in the lines and possible damage to the system. Be cautious to hold the leg assemblies together when turning workbench over after assembly making sure they do not separate.**

## Reference Assembly Drawing Above (This will require no less than two persons)

- Place worksurface (item 1) on clean surface underside facing up.
- Loosely install the front beam (items 3) and leg assemblies (item #2) to the worksurface using 1/4-20x.75 hex head bolts (item A) and 1/4 flat washers (item B).  
**Note:** Before installing leg assemblies (item #2) to the worksurface attach pedestal end caps (item H) and floor glides (item J) at this time.
- Loosely attach the front beam (items 3) to the leg assemblies (item #2) using 1/4-20x.75 hex head bolts (item A), 1/4 flat washers (item B) and 1/4 hex keps nuts (item C).
- Install part of the modesty panel (item 5) hardware 1/4-20 x .75 SQ. Head GR2 Bolt (item D) to each leg assemblies (item 2) by sliding the head of the three bolts (item D) on each pedestal upper channel as shown.



5. Loosely attach one end of the modesty panel (item 4) to one end of the leg assemblies (item 2) by aligning up the three 1/4-20 x .75 SQ. Head GR2 Bolt (item D) into the modesty panel (item 4) holes and attaching that end using the a 1/4 flat washers (item B) and a 1/4-20 Hex Keps nut (item C) for each of the three bolts. Leave hardware loose.
6. Install the other end of the modesty panel (item 4) to the other end of the leg assemblies (item 2) by aligning up the three 1/4-20 x .75 SQ. Head GR2 Bolt (item D) into the modesty panel (item 4) holes and attaching that end using the a 1/4 flat washers (item B) and a 1/4-20 Hex Keps nut (item C) for each of the three bolts. Leave hardware loose.
7. Slide down the modesty panel (item 4) until it makes contact with the worksurface (item 1). Install both the hardware for the modesty panel (item 4) to the leg assemblies (item #2) and the hardware for the modesty panel (item 4) to the worksurface (item 1) by using 1/4-20x.75 hex head bolts (item A) and 1/4 flat washers (item B) Leave hardware loose.
8. With the bench assembly still in the upside down position, install the Stiffener Beam (item 5) to each end of the leg assemblies (item #2) using 1/4-20x.75 hex head bolts (item A) and 1/4 flat washers (item B) Leave hardware loose.
9. Square the frame as much as possible and tighten the bench frame bolt first. Then tighten the bolts connecting the frame to the worksurface being careful not to over tighten.
10. Loosely attach hand crank rear mounting bracket (item K) to the rear of pump system using 10-32 x 3.00 phillips screw (item E), #10 flat washer (item F) and #10-32 hex kept nut (item G) as shown in Figure 2 below.
11. While the bench is upside-down raise the leg assemblies to their highest point by turning the hand crank clockwise. Secure hand crank pump hydraulic lines to underside of worksurface using cable mounts (items M), cable ties (items N) and #6 x .50 phillips screws (items L) being sure not to kink or damage the lines in anyway.
12. Lower the leg assemblies SLOWLEY by turning the hand crank counter clockwise. If the leg assemblies do not lower apply pressure to them by pushing down on each leg. Once the leg assemblies are at their lowest level check to make sure the hydraulic lines are not kinked or pinched by the frame in anyway. Align the mounting slots in hand crank bracket with inserts in worksurface and attach using 1/4-20 x .75 hex head bolts (item A) and 1/4 flat washers (item B) as shown in Figure 2 below.
13. Secure the front end of pump system to front beam using 10-32 x 3.00 phillips screws (item E) and #10-32 hex kept nut (item G) Figure 2. Tighten bolts and screws.
14. When turning bench assembly right side up be sure the leg assemblies DO NOT separate as this may cause damage to the hydraulic system. It may take as many as 4 people to turn bench over.
15. When moving bench into place be sure to lift it by the bottom of the leg assemblies only. DO NOT lift it by the worksurface as this can cause damage to the hydraulic system.

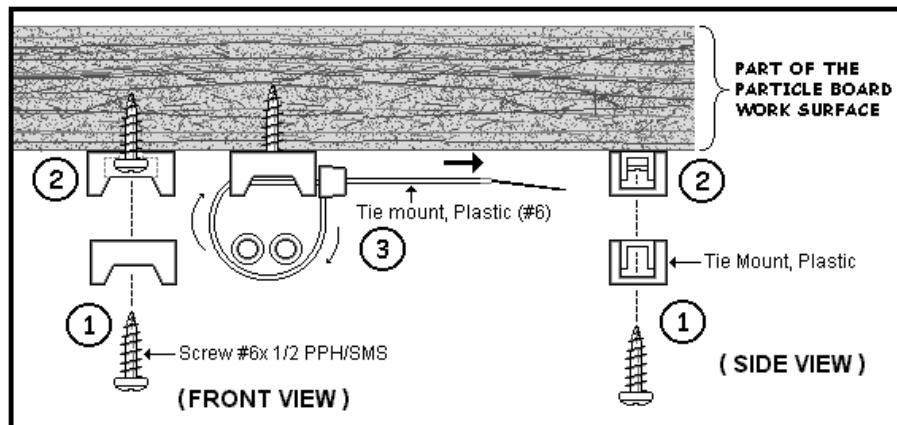
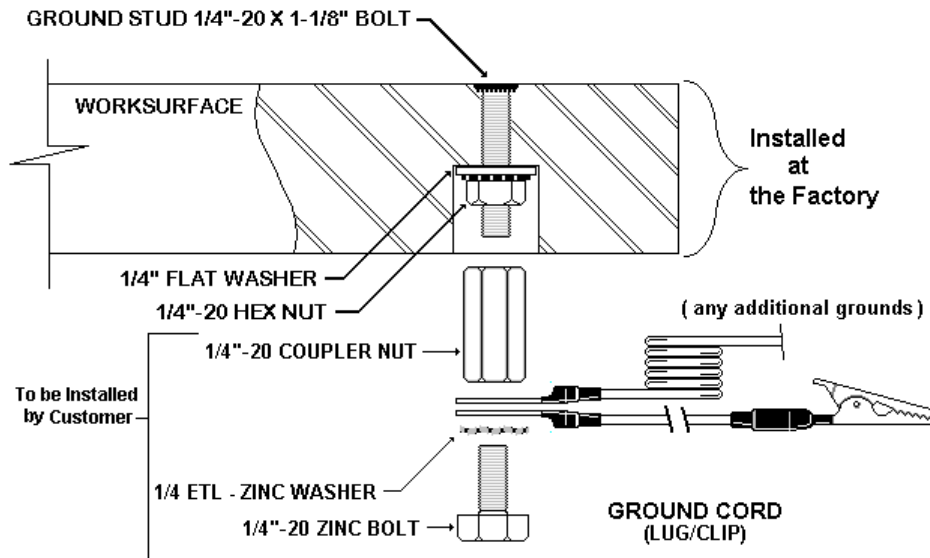


**Figure 2**

## ESD GROUNDING:

### HWR-014 ESD Hardware Kit

ESD refers to the OPTIONAL static dissipative laminate used on the bench. The laminate has a conductive under layer that comes in contact with the factory installed grounding bolts in the worksurface. The ESD grounding kit, including the 10 ft. grounding wire must be attached and the bench must be properly grounded to your facility earth ground. **(See below for grounding cautions!)** The eyelet slips over the bolt end and the alligator clip attaches to ground. When tested with a megohmmeter the ground bolts should test at  $1 (1 \times 10^6)$  to  $1000 (1 \times 10^9)$  in accordance with EOS/ESD standards prescribed in EOS/ESD document S4.1-1990 Worksurfaces-Resistive Characterization. For specific details on grounding the bench consult EOS/ESD document S6.1-1991 Grounding - Recommended Practice.



## GROUNDING CAUTIONS:

- 1.) Ground each bench individually to ground, **NEVER** to each other in a continuous daisy chain.
- 2.) ISOLATED ground receptacles should not be used to derive an ESD ground.
- 3.) The green wire in a standard wall duplex can be used as a ground if it has been absolutely determined that the green wire is attached to earth ground in your facility, thereby providing a real earth ground.
- 4.) Each component of an ESD station should be connected to the same common ground point. In other words, use only ONE of the ground bolts as a path to ground. There are 2 installed for convenience only, or in the event you purchase a continuous resistance monitor.

## **Grounding Cautions (Continued) .....**

5.) **DON'T use power tools** to install the nuts for the grounding kit. **HAND TIGHTEN ONLY.** If you attempt to 'spin' the ground bolt, the serrated teeth under the head of the bolt might strip the thin conductive layer.

**NOTE:** If benches are moved to another location, the ground bolts in the worksurfaces should be re-tested. Refer to EOS/ESD document S4.1-1990 Worksurfaces-Resistive Characterization for proper testing methods. If ground has been disturbed between the bolt and the static dissipative laminate, **DO NOT OVER TIGHTEN** ground bolts to achieve proper ground. If ground cannot be re-established, loosen nuts underneath bolt and remove ground bolt from hole. It may be necessary to hold the threads of the bolt with a small screwdriver in order to stabilize it to remove the nuts.

Paint a thin layer of **CONDUCTIVE ADHESIVE** or **CONDUCTIVE PAINT** on the small "ledge" of conductive laminate where the bolt head rests and underneath **THE HEAD** of the ground bolt. Set bolt back into the hole while liquid is still wet and test ground immediately. At the point ground is reestablished, let the liquid dry before reattaching the ground wire.

## **CLEANING:**

Hard surface laminate is designed to resist abrasion, scuffing, scorching, hot solder, flux and most solvents. Intense exposure, such as from a hot soldering iron is not recommended. The surface cleans easily with a damp cloth and soapy water. A mild chemical cleaner with no abrasive can be used for stubborn spots. Remove glue and grease with a non flammable adhesive solvent such as 3M Scotch-Grip Solvent No. 4-F. Stains can be removed with a two minute exposure to a 5% hypo chloride bleach solution, followed by a clean water rinse. Never wax surface, as waxes may insulate.