

940 Motorized Adjustable Bench



**REV.** (042318P65)

# IAC INDUSTRIES

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940 MOTORIZED 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.

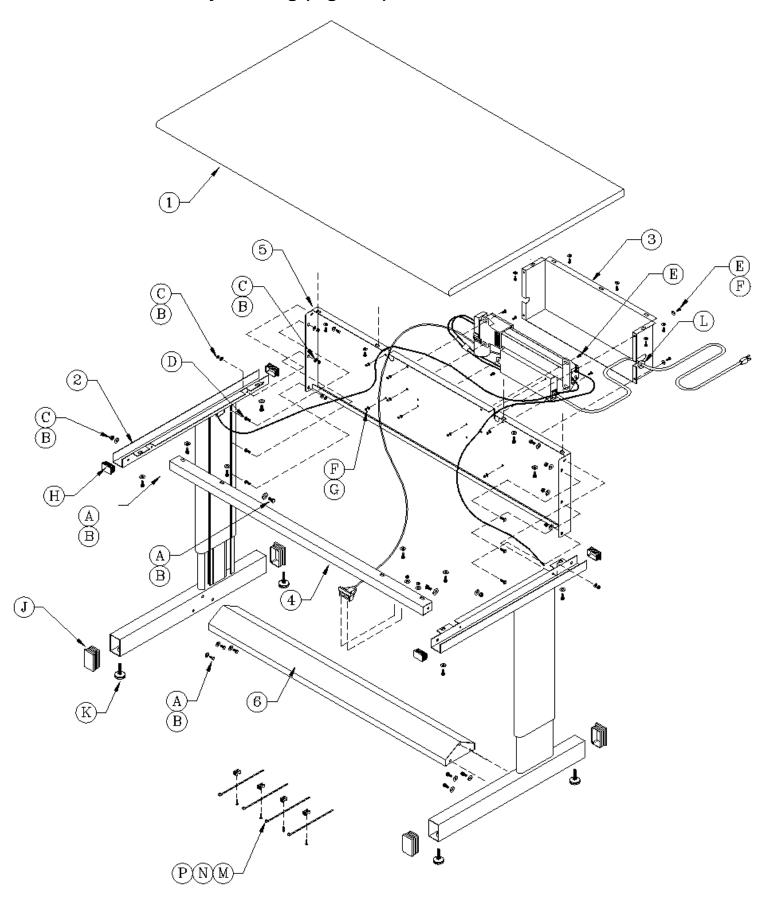
Locate the hardware kits and keep them in a central area. If the assembly is going to take more than one day, all individual hardware pieces should be returned to a central location.

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.



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# 940 Bench Assembly Drawing (Figure 1)



## Parts List: 940 Motorized Adjustable Bench

(Ref. Figure 1) Hardware Kit - HWR462\*

Item	Desc	cription		Qty.	Item	Description			Qty.
1	Work	surface	1	E	Screw	10-32x 0.75L PP	Н	10 *	_
2	940 Leg Sub-Assy-Rt. & Lt.			1ea	F	Washer, # 10 Flat Zinc			14 *
3	940 Motor Cover			1	G	Nut, #10-32 Hex Keps			10 *
4	Front Support Beam 1.5H			1	Н	Cap, 1.50" x 2.00" 10-14 Ga			4*
5	940 Modesty Panel			1	J	Cap, 2.00" x 3.00" 10-14 Ga			4*
6	930/940 Stiffener Beam			1	K	Floor Glide 5/16-18 x 1.75 x 1.625Dia			4*
Α	Hex Head Bolt 1/4-20x.75			32 *	L	Strain Relief, .87	1*		
В	Washer, 1/4 Flat			40*	M	Screw, #6 x .500 PPH SMS Zinc			4*
С	C Nut, 1/4-20 Hex Keps			8*	N	Cable Tie, Mount Plastic (#6)			4*
D	Bolt, 1/4-20 x .75 SQ. Head GR2			6 *	Р	Cable Tie, #8			4*
1/4-20x HH Bol		1/4-20 Flat washer	1/4-20x .75 SQ.H Bolt	1/4-20 Hex Keps I		)-32x 0.75L PH Screw	# 10 Flat washer	#10-3 Hex	32 Keps Nut

#### PLEASE NOTE: Motor Cover and Pump System are mounted in the factory.

CAUTION: Do not operate Motor 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.

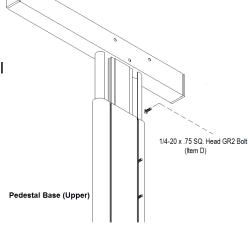
#### Reference Assembly Drawing Above (This will require no less than two persons)

- 1. Place worksurface (item 1) on clean surface underside facing up.
- 2. Loosely install the front beam (items 4) 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).
- 3. 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).

  Note: Before installing leg assemblies (item #2) to the worksurface attach pedestal caps (item H & J) and floor glides (item K) at this time.

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4. 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.



Pedestal Base (Lower)

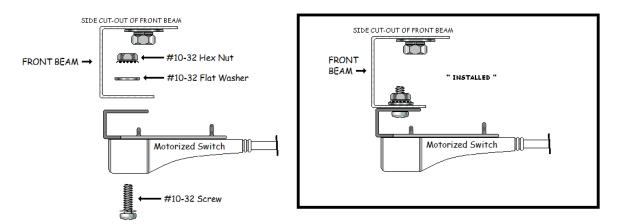
- 5. Loosely attach one end of the modesty panel (item 5) to one end of the leg assemblies (item 2) by aligning up the three 1/4-20 x .75 SQ. Head GR2 Bolts (item D) into the modesty panel (item 5) holes and attaching that end using the a 1/4 flat washers (item B) and a 1/4-20 Hex Keps nut (item C) for each of the three bolts. Leave hardware loose.
- 6. Install the other end of the modesty panel (item 5) 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 5) 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 5) until it makes contact with the worksurface (item 1).

<u>Note1:</u> Make sure before lowering modesty panel (item 5) that the Motor Assy and its hoses as well as the up and down switch are feed through the cut outs in the modesty panel (item 5) as shown in Figure #1.

Note 2: (This will require at least than two persons) At this time remove the loose hardware used to hold the front beam and leg assemblies to the worksurface. This will be needed to slide the loose frame enough so to clean the underside of each end of the leg assemblies, so that at the top of each end of the modesty panel is another slot that aligns with a hole in the leg assembly worksurface support at the top of each leg (item 2) Using two 1/4-20 hex head bolts, four 1/4 flat washers and two 1/4 hex nuts (items A,B and C) attach these points. Slide the loose frame and align it back on to the worksurface. Install the hardware removed earlier using 1/4-20x.75 hex head bolts (item A) and 1/4 flat washers (item B). Install the hardware for the modesty panel (item 5) 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 6) 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 bolts first. Then tighten the bolts connecting the frame to the worksurface being careful not to over tighten.
- 10. Install the Motor Assembly and the Controller Box to the modesty panel (item 5) using the 1/4-20 x .75 hex head bolts (item A) and 1/4 flat washers (item B) as shown in Figure 1
- 11. While the bench is upside-down raise the leg assemblies to their highest point by pushing the UP/DOWN Switch so the leg assemblies raise up. Secure motorized pump hydraulic lines to underside of worksurface using cable mounts (items N), cable ties (items P) and #6 x .50 phillips screws (items M) being sure not to kink or damage the lines in anyway.
- 12. Lower the leg assemblies SLOWLY by pushing the UP/DOWN Switch so the leg assemblies move down. If the leg assemblies do not lower apply pressure to both of them by pushing down on each leg at the sometime. 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.

- 13. Secure the UP/DOWN Switch bracket (item P) to either end of the front beam using the #10-32 screws, washers, and nuts (items E, F, and G). Tighten hardware. (Figure 2)
- 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 make sure to lift it by the bottom part of the leg assemblies only. DO NOT lift it by the work surface or top part of leg assemblies as this can cause damage to the hydraulic system.



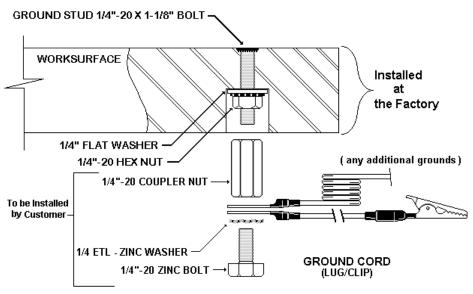
" SIDE VIEW SHOWN "

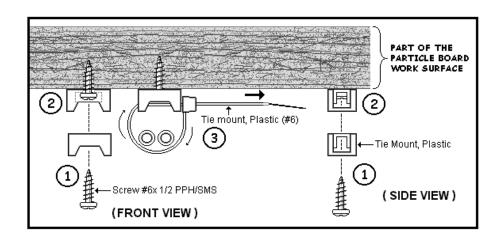
FIGURE 2 (Switch Mounting Detail)

### **ESD GROUNDING:**

HWR014 FSD 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 (1x10<sup>6</sup>) to 1000 (1x10<sup>9</sup>) 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.
- 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.