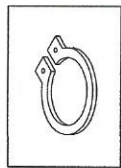
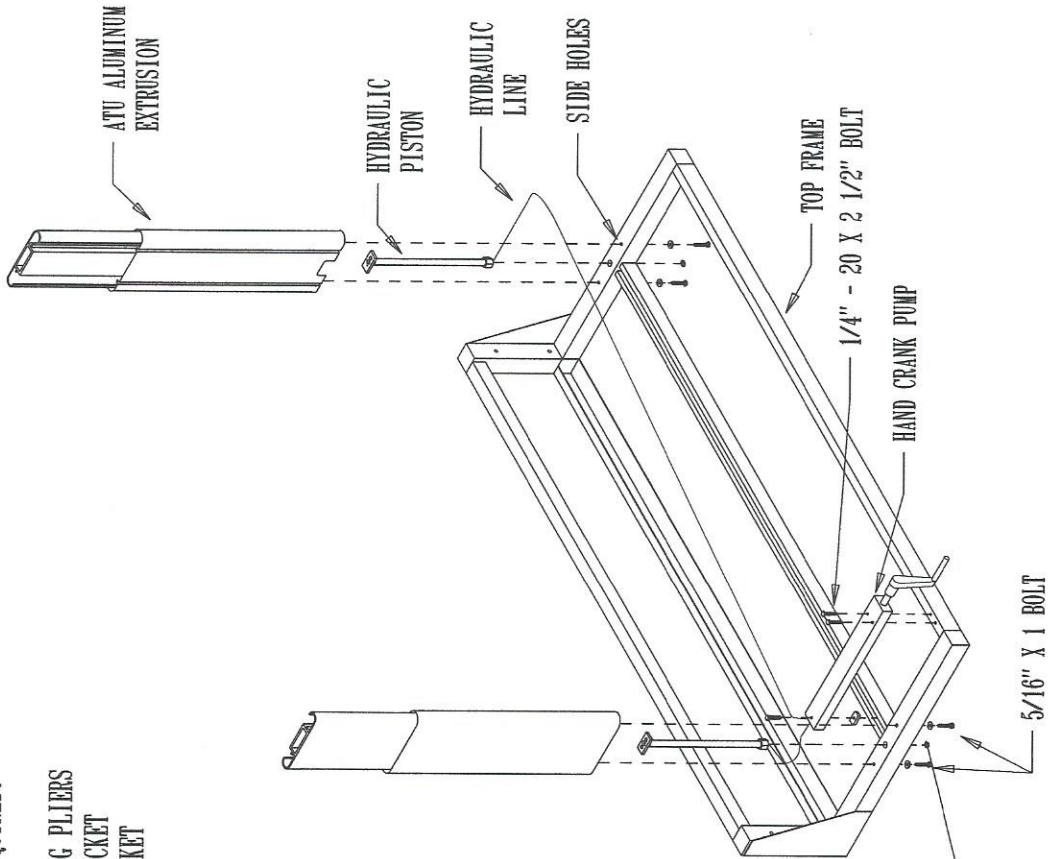


TOOLS REQUIRED:

SNAP RING PLIERS  
7/16" SOCKET  
1/2" SOCKET  
RATCHET



SNAP RING



- 1) LAY TOP FRAME UPSIDE DOWN ON FLAT SURFACE
- 2) MOUNT HAND CRANK PUMP SYSTEM INTO PLACE USING  
(2) 1/4" - 20 X 2 1/2" HEX HEAD BOLTS AND KEP NUTS  
ON FRONT OF CRANK AND (1) 1/4" - 20 X 2 1/2" HEX  
HEAD BOLT 1/4" STRUT NUT IN BACK
- 3) INSTALL HYDRAULIC PISTONS INTO SIDE HOLES  
AND FASTEN WITH SNAP RINGS, WITH WHITE NYLON  
RECTANGLE FACING UPWARD
- 4) INSTALL ATU EXTRUSION UNITS OVER HYDRAULIC  
PISTON AND FASTEN USING 5/16" - 18 X 1" HEX  
HEAD BOLTS AND FLAT WASHERS (DO NOT TIGHTEN !!)

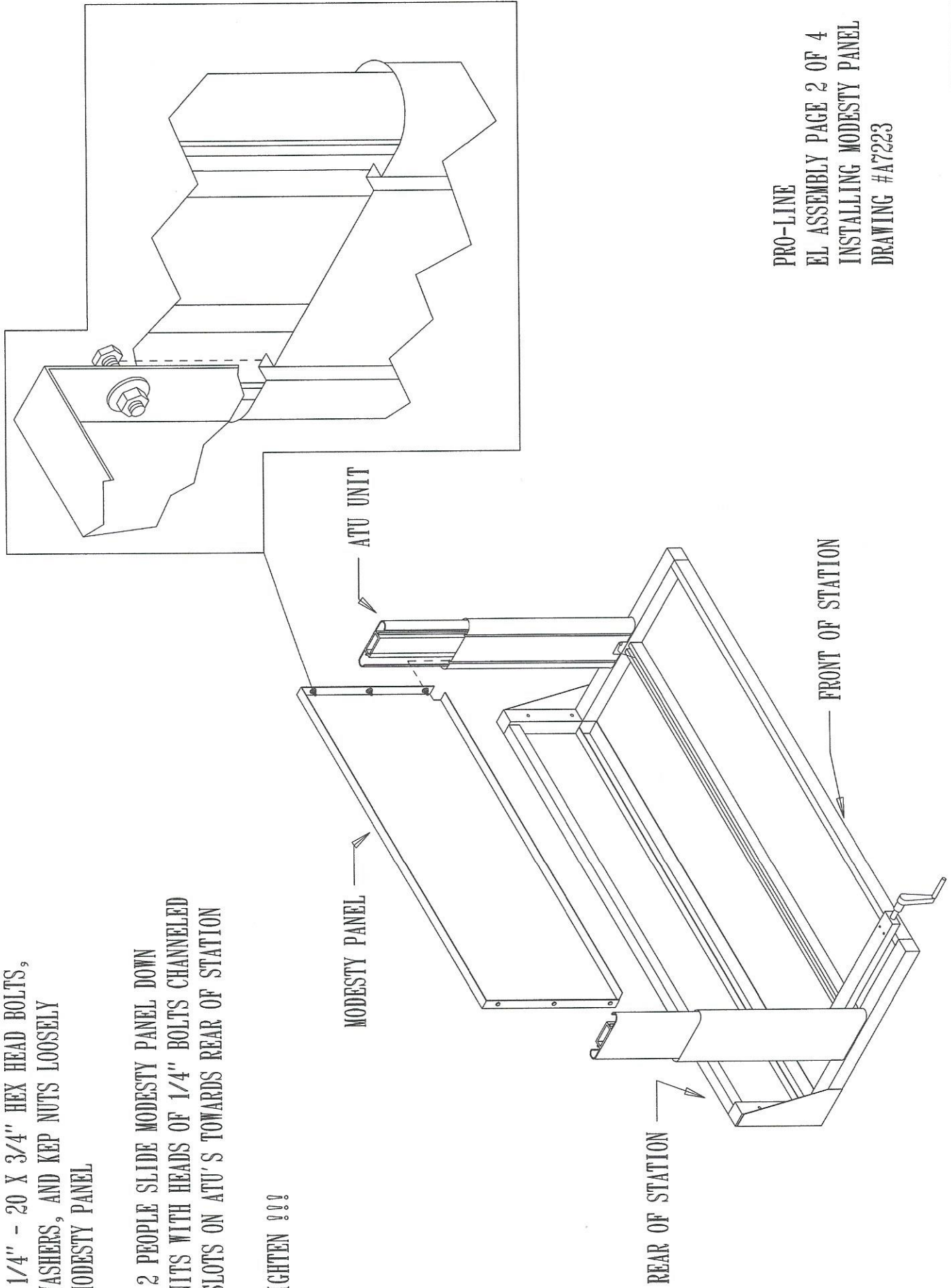
NOTE: BE SURE NOT TO PINCH HYDRAULIC LINES

PRO-LINE  
EL BENCH ASSEMBLY PAGE 1 OF 4  
INSTALLING PUMP, PISTONS AND  
VERTICAL LEGS  
DRAWING #A7222

1) MOUNT 1/4" - 20 X 3/4" HEX HEAD BOLTS,  
FLAT WASHERS, AND KEP NUTS LOOSELY  
INTO MODESTY PANEL

2) USING 2 PEOPLE SLIDE MODESTY PANEL DOWN  
ATU UNITS WITH HEADS OF 1/4" BOLTS CHanneLED  
INTO SLOTS ON ATU'S TOWARDS REAR OF STATION

DO NOT TIGHTEN !!!



PRO-LINE  
EL ASSEMBLY PAGE 2 OF 4  
INSTALLING MODESTY PANEL  
DRAWING #A7223

5/16" - 18 X 3" BOLT

BASE LEG

CROSS BRACE

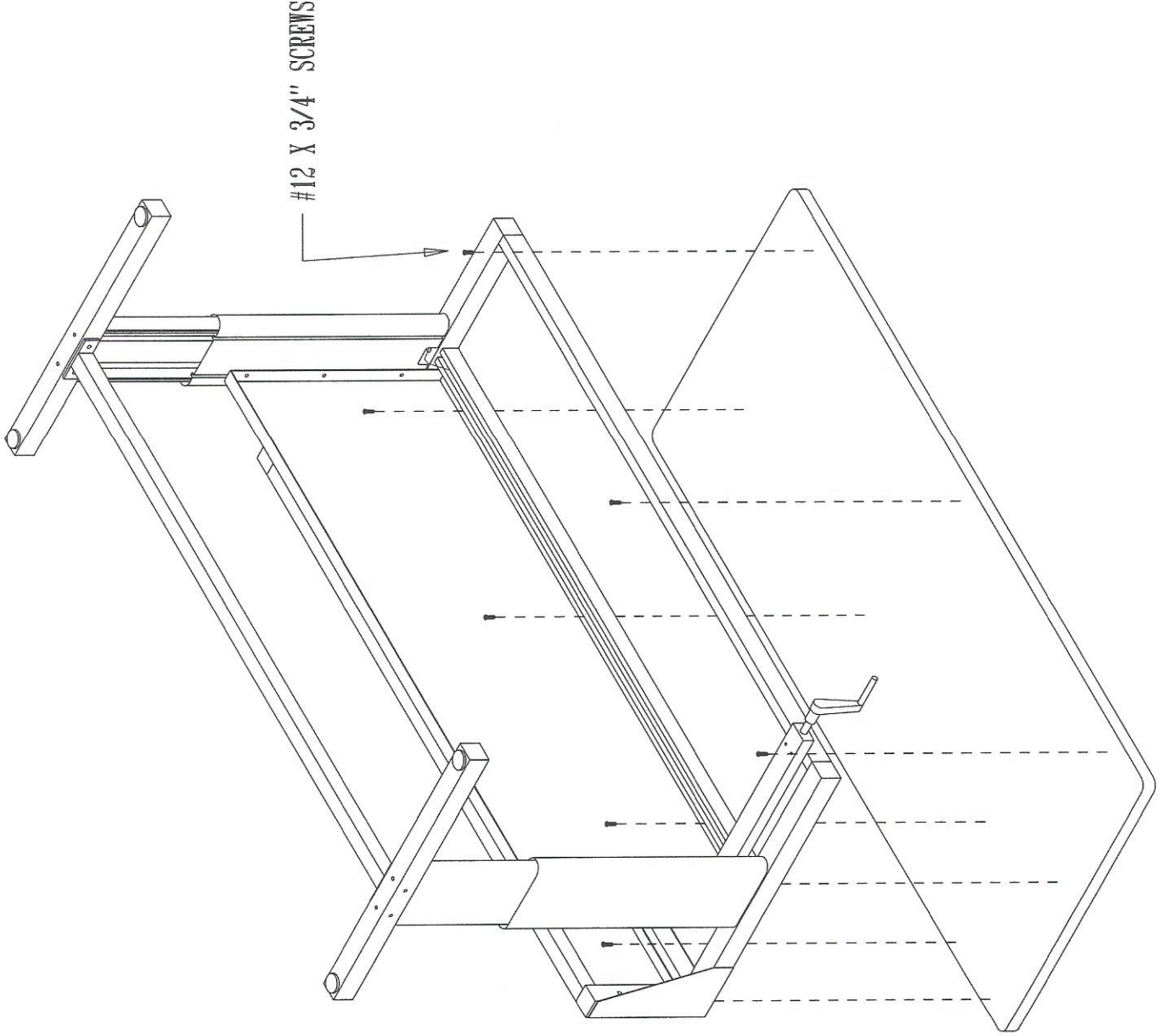
GLIDE

CAP

CAP

- 1) MOUNT BASE LEGS TO ALUMINUM EXTRUSIONS USING 5/16" - 18 X 3" HEX HEAD BOLTS AND 5/16" WASHERS (DO NOT TIGHTEN)
- 2) MOUNT CROSS BRACE BETWEEN LEGS USING 5/16" - 18 X 3" HEX HEAD BOLTS 5/16" FLAT WASHER AND KEPNUTS AS SHOWN
- 3) AT THIS TIME TIGHTEN CROSS BRACE, BASE LEGS, MODESTY PANEL AND ATU EXTRUSIONS TO TOP FRAME (REFERENCE PAGES 1 AND 2)
- 4) LOOP AND TUCK EXCESS HYDRAULIC LINE INTO CROSS CHANNEL
- 5) INSTALL GLIDES 4 PLACES
- 6) INSTALL 2" SQUARE CAP PLUGS 8 PLACES

PRO-LINE  
 EL ASSEMBLY PAGE 3 OF 4  
 INSTALLING HORIZONTAL LEGS AND CROSS BRACE  
 DRAWING #A7224



1) LAY ENTIRE FRAME UPSIDE DOWN ON WORK SURFACE SO THAT THE BACK OF THE FRAME IS COMPLETELY FLUSH WITH THE BACK OF THE WORKSURFACE

(SEAM OF EDGING TO BACK).

USE #28 DRILL BIT AND PRE-DRILL HOLES

1/2" DEEP AND SCREW #12 X 3/4" SCREWS IN TO SECURE FRAME TO TOP

NOTE: OVERHANG OF THE TOP SHOULD BE 2 1/2" IN THE FRONT AND THE SIDES (FLUSH WITH BACK)

WHEN ASSEMBLING A QUANTITY OF BENCHES AN ELECTRIC SCREW GUN IS RECOMMENDED.

PRO-LINE  
 EL ASSEMBLY PAGE 4 OF 4  
 INSTALLING WORKSURFACE  
 DRAWING #A7225

1) DRILL 3/8" HOLE IN WORKSURFACE PER MEASUREMENTS IN THE TOP VIEW (IF NOT ALREADY PREDRILLED)

2) INSTALL 5/16" X 2 1/2" HEX HEAD BOLT, RING TERMINAL, AND SERATED WASHER THROUGH WORKSURFACE. ON UNDERSIDE OF WORKSURFACE INSTALL WASHER, RING TERMINAL, WASHER, RING TERMINAL, WASHER, AND NUT IN THIS ORDER AND TIGHTEN

3) MEASURING APPROX. 8" IN FROM OUTSIDE OF OF LEG AND 1" DOWN FROM TOP OF WORKSURFACE (SEE FRONT VIEW)

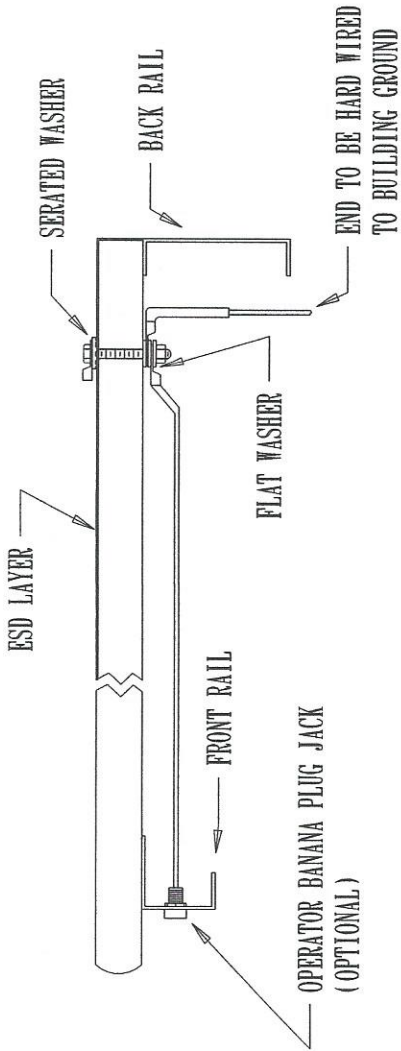
DRILL FRONT RAIL WITH 5/16" DIA. DRILL BIT

4) MOUNT JACKS INTO FRONT RAIL USING NUTS PROVIDED

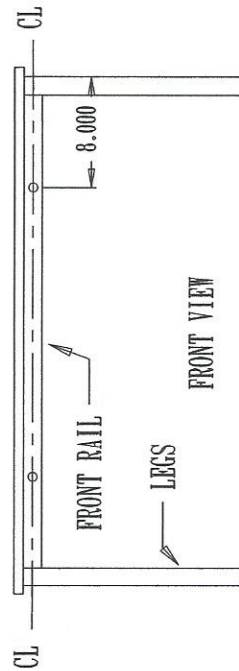
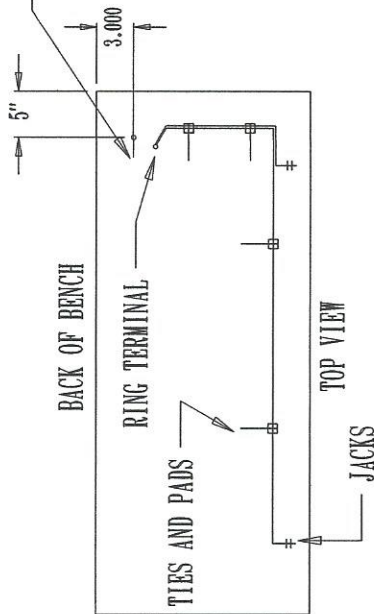
5) RUN WIRES IN MANNER SHOWN IN TOP VIEW

USING WIRE TIES AND SELF STICK PADS (4 TO 6 PER BENCH)  
NOTE : PADS STICK BETTER TO METAL SURFACES

6) CUT WIRES TO APPROPRIATE LENGTH BY PULLING WIRES (TO REMOVE EXCESS SLACK) TOWARDS THE HOLE IN THE WORKSURFACE AND ADDING 1" TO THAT. STRIP WIRES BACK 1/4" AND INSTALL THE RING TERMINAL BY CRIMPING IT TO BOTH EXPOSED WIRES AT THE SAME TIME

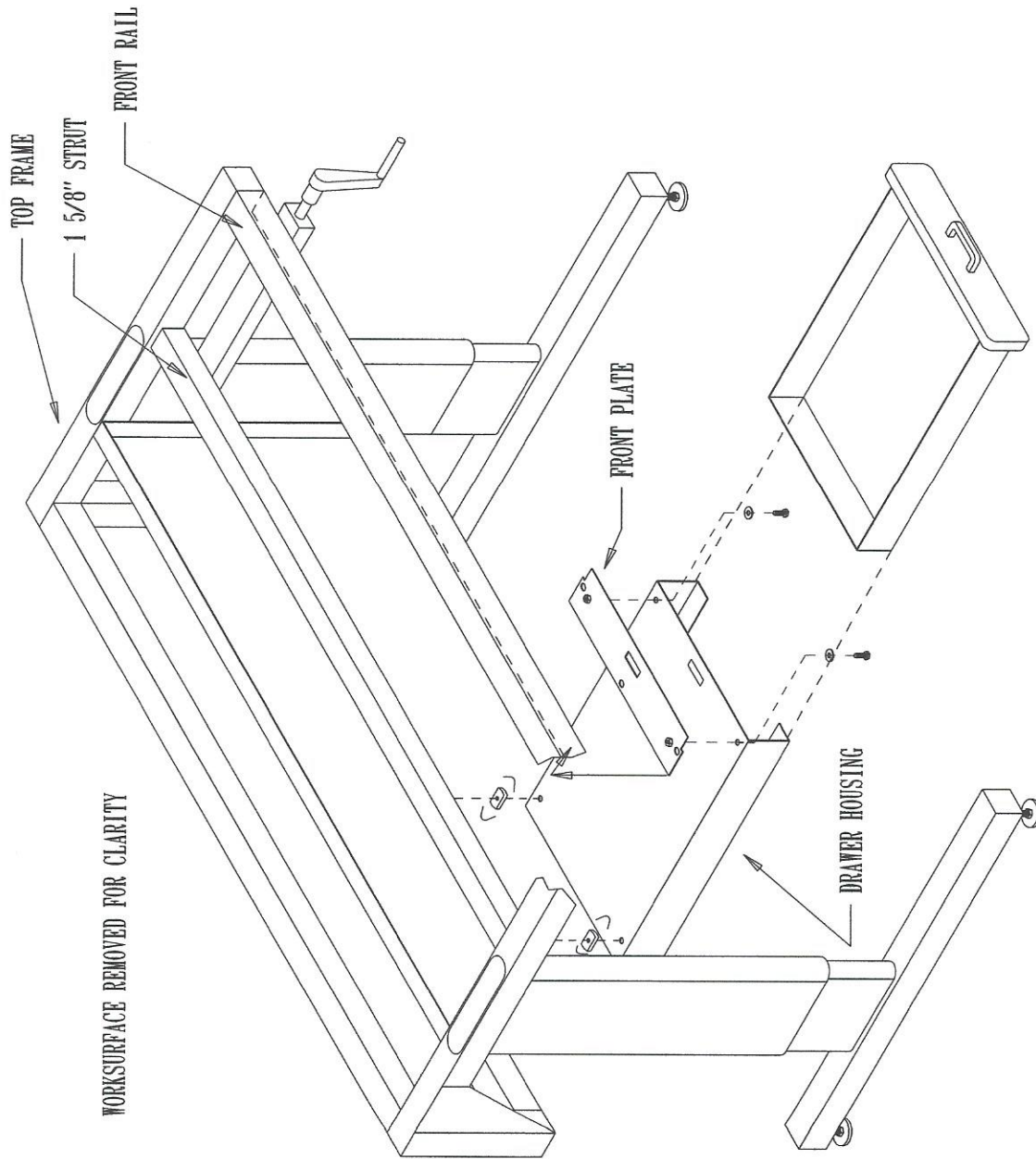


DRILL 3/8" HOLE (IF NOT ALREADY PREDRILLED) THRU AND INSTALL GROUND BOLT



GRAINGER PART NUMBER

PROLINE  
SGK - J2 GROUND JACK (FIELD ASSEMBLY)  
DRAWING # A7217



1) REMOVE DRAWER FROM HOUSING

2) MOUNT FRONT PLATE TO DRAWER USING  
1/4" - 20 x 3/4" HEX HEAD BOLTS AND WASHERS  
AS SHOWN  
(LEAVE BOLTS ON FRONT PLATE LOOSE)

3) INSTALL 1/4" - 20 x 3/4" BOLTS AND STRUT NUTS INTO  
HOLES IN THE REAR OF THE DRAWER HOUSING

4) SLIDE FRONT PLATE OVER FRONT RAIL OF  
BENCH SANDWICHING FRONT RAIL BETWEEN  
HOUSING AND PLATE

5) PUSH BOLT ASSEMBLY INTO 1 5/8" STRUT  
AND TIGHTEN

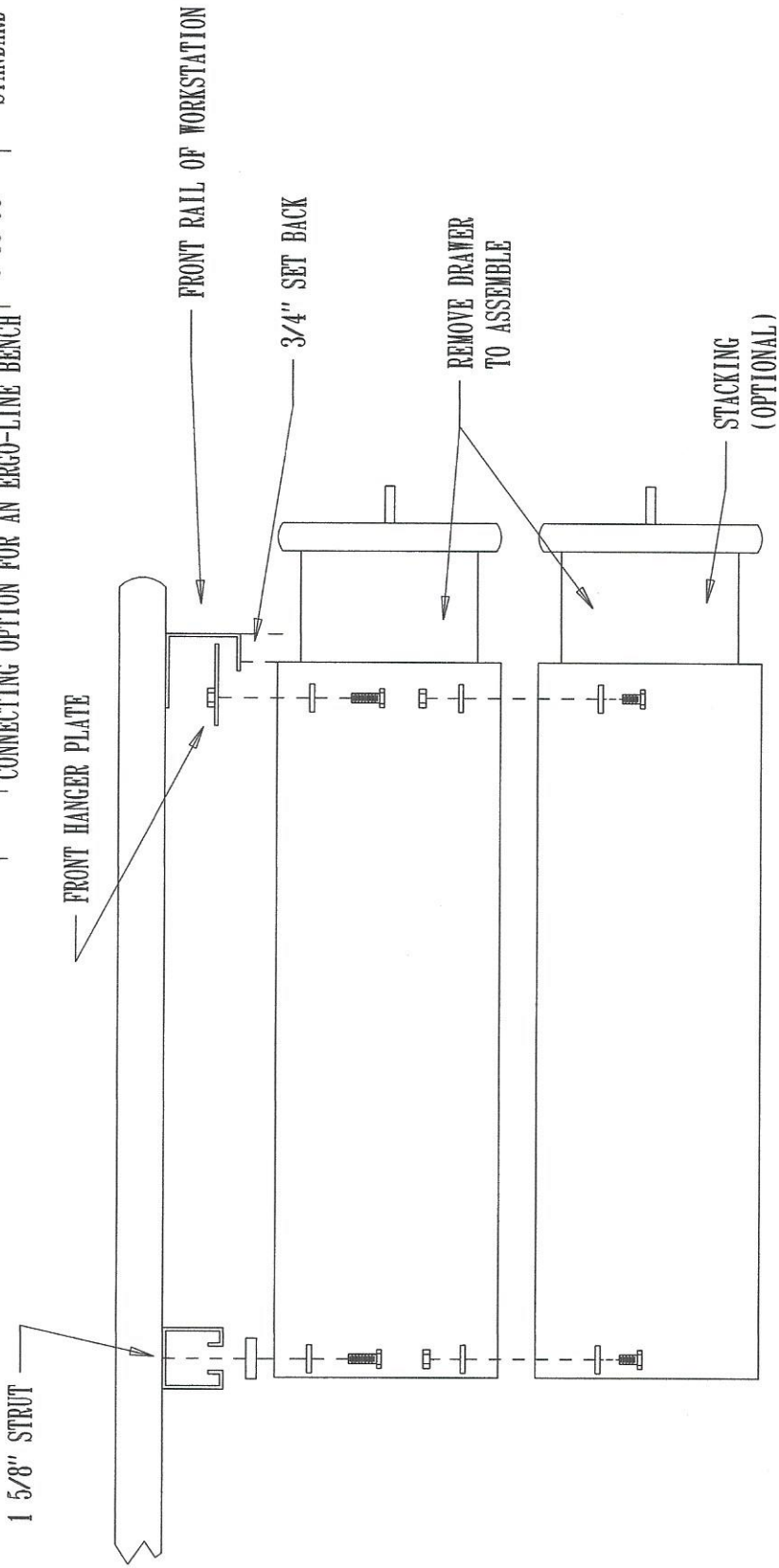
6) TIGHTEN BOLTS SECURING FRONT HANGING  
PLATE

7) RE-INSTALL DRAWER  
\*\* NOTE \*\* DRAWERS ARE MORE EASILY  
MOUNTED WHEN BENCH IS FLIPPED UPSIDE DOWN

PRO-LINE  
EL OR BASICS DRAWER  
MOUNTING ASSEMBLY  
DRAWING #A7211

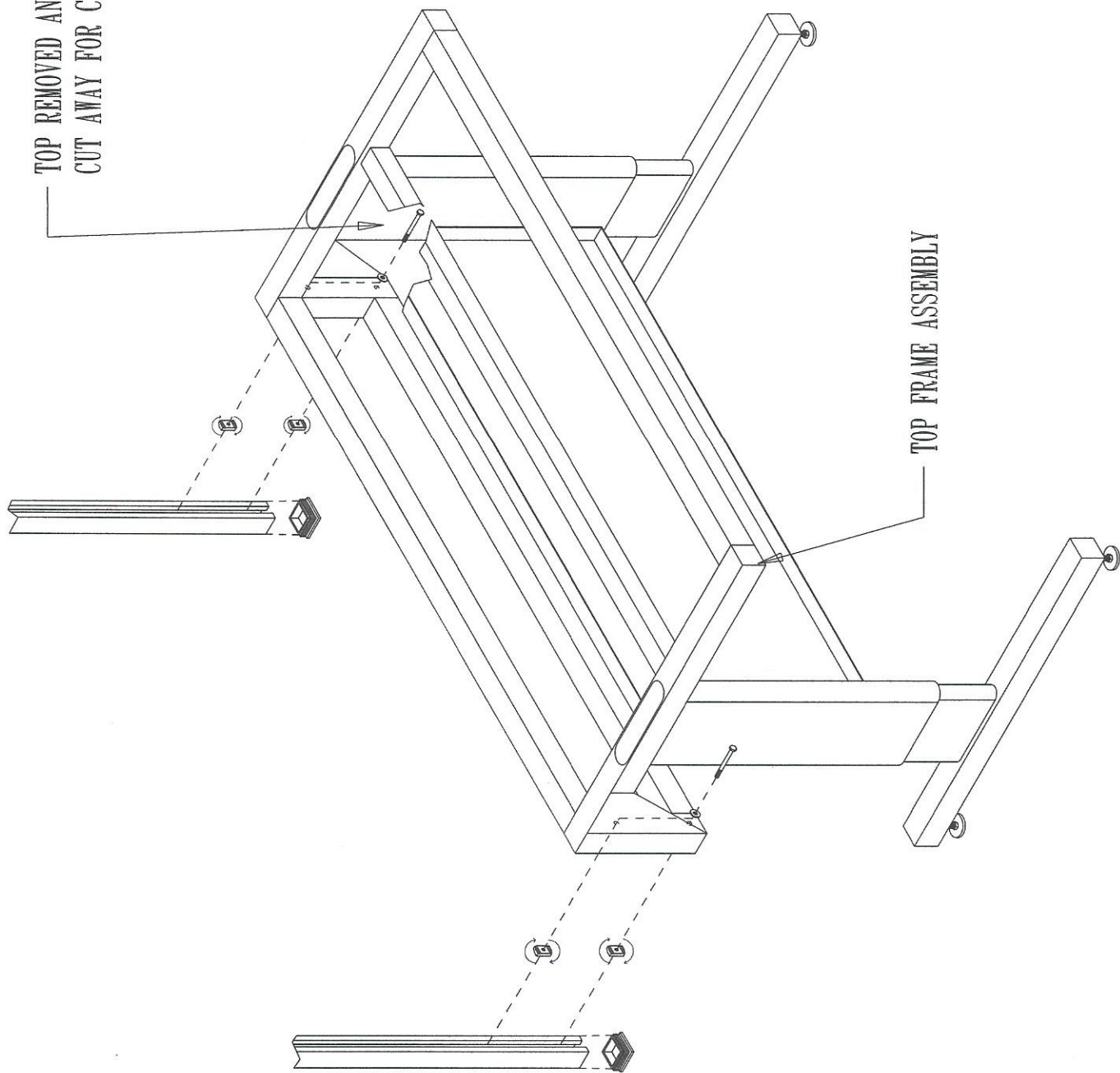
REVISIONS

REV	DESCRIPTION	DATE	APPROVED
	MDS (MODULAR DRAWER ASSEMBLY) WITH CONNECTING OPTION FOR AN ERGO-LINE BENCH	6-13-98	STANDARD



MICHAEL SUPLINSKAS	
PRO-LINE	
SIZE	FSCM NO.
SCALE	DWG NO. A7073-EL
	REV
	SHEET

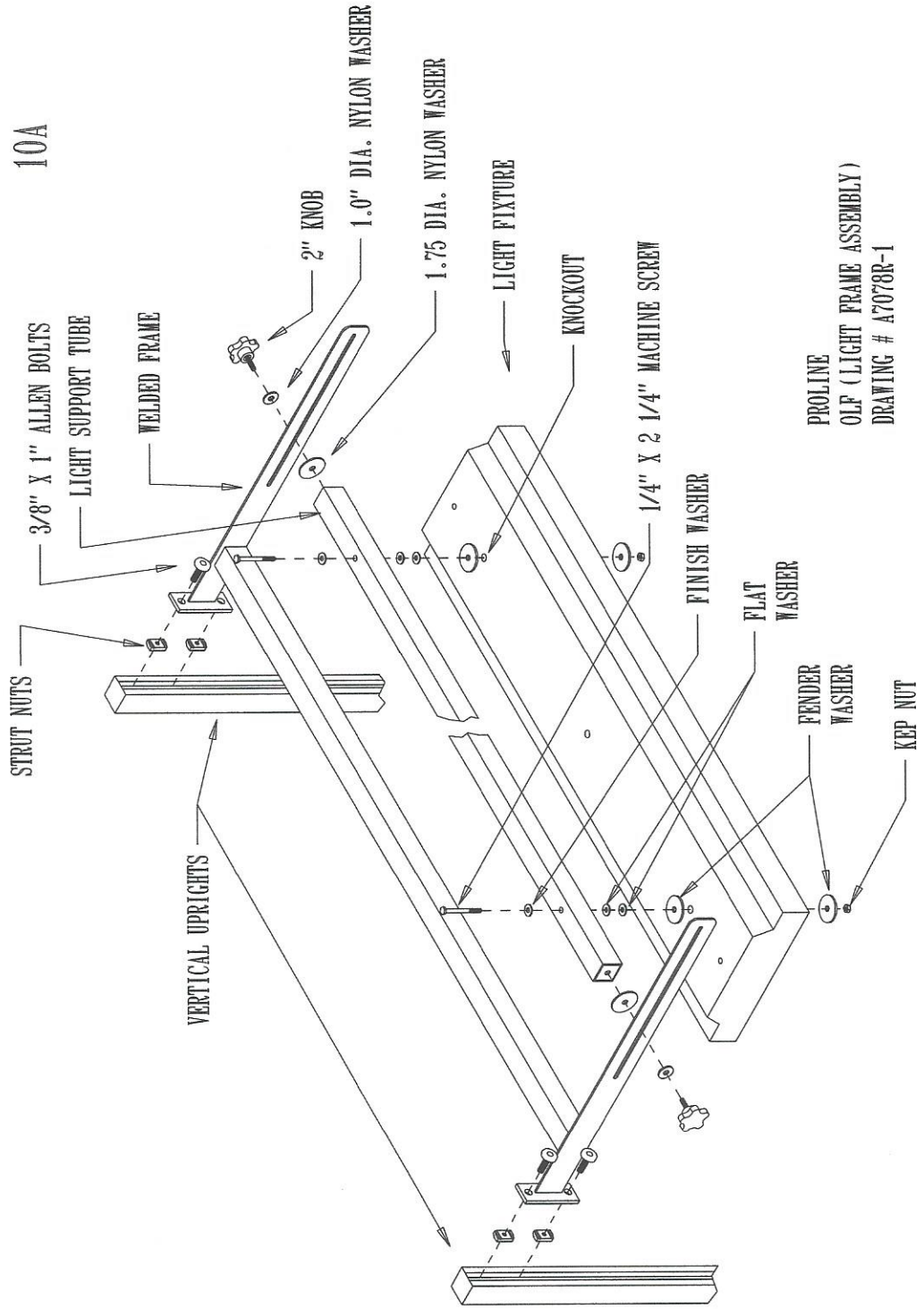
TOP REMOVED AND AREA  
CUT AWAY FOR CLARITY



- 1) MOUNT 1/4" X 2 3/4" HEX HEAD BOLTS THROUGH TOP FRAME ASSEMBLY AS SHOWN
- 2) TURN 1/4" STRUT NUTS ON APPROXIMATELY TWO (2) THREADS
- 3) HOLD UPRIGHTS AGAINST BACK OF REAR LEGS
- 4) PUSH BOLT ASSEMBLY INTO UPRIGHTS AND TURN CLOCKWISE TO TIGHTEN

PRO-LINE  
ERGO-LINE UPRIGHT ASSEMBLY  
DRAWING #A7210

10A



PROLINE  
 OLF (LIGHT FRAME ASSEMBLY)  
 DRAWING # A7078R-1

- 1) LOCATE AND REMOVE THE KNOCKOUTS THAT ARE CLOSEST TO THE ENDS OF THE LIGHT FIXTURE
- 2) FASTEN LIGHT FIXTURE TO LIGHT SUPPORT TUBE AS SHOWN WITH 1/4" X 2 1/4" MACHINE SCREW, FINISH WASHER, (2) FLAT WASHERS, (2) FENDER WASHERS AND A KEP NUT.
- 3) ATTACH THE LIGHT FRAME TO VERTICAL UPRIGHTS USING 3/8" X 1" ALLEN HEAD BOLTS AND STRUT NUTS.
- 4) ASSEMBLE THE 2" KNOBS THROUGH WELDED FRAME AND INTO THREADED INSERTS IN TUBE ENDS. (USE WASHERS AS SHOWN).

NOTE: IT IS SUGGESTED THAT 2 PEOPLE PERFORM THE OPERATION OF MOUNTING LIGHT TUBE TO FRAME.

BULB REQUIREMENTS

- 48" FIXTURES F32 T8
- 36" FIXTURES F30 T8  
F25 T8

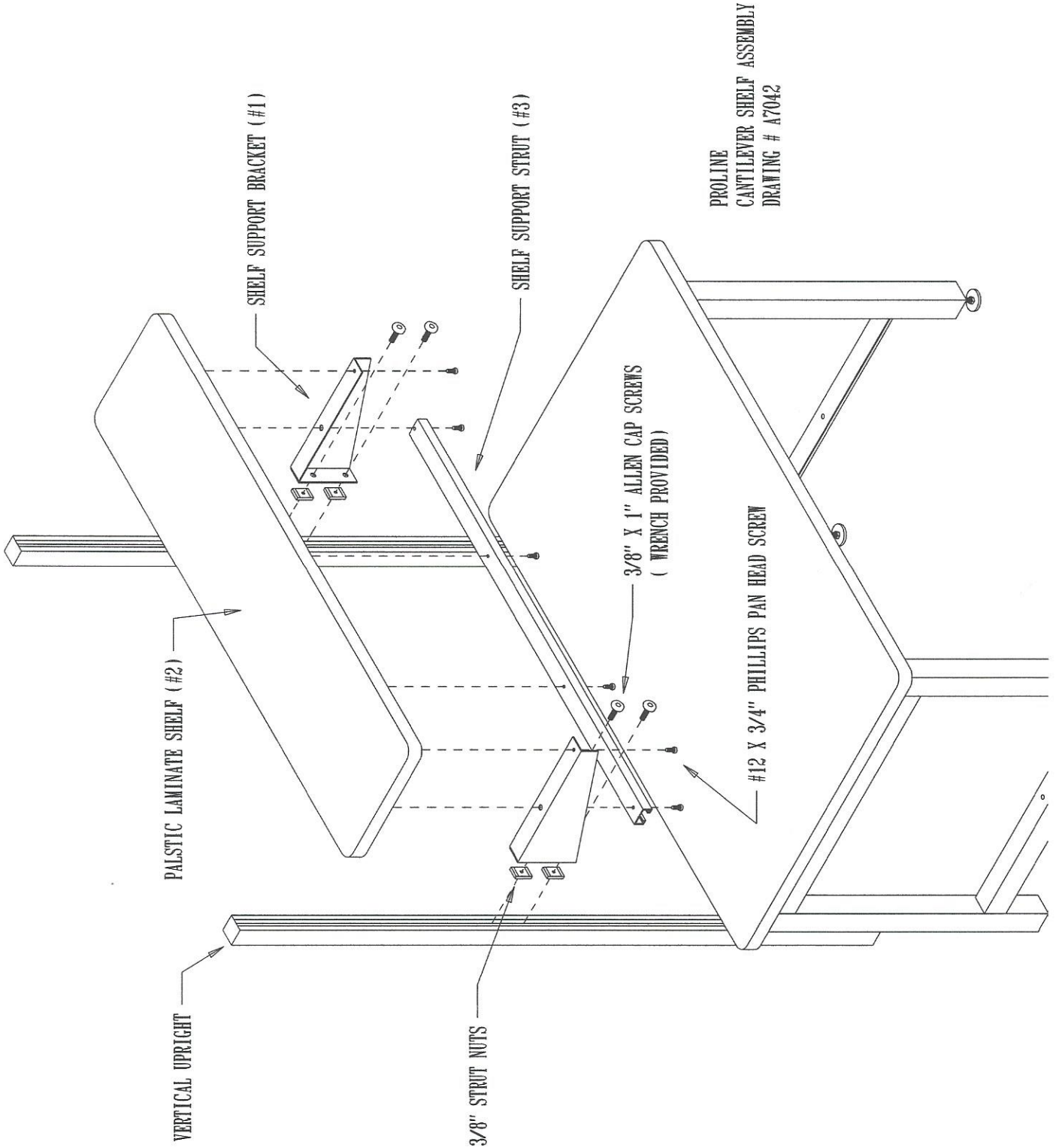
TOOLS REQUIRED:

- 1 SCREW GUN WITH #3 PHILLIPS HEAD TIP
- 7/32" WRENCH

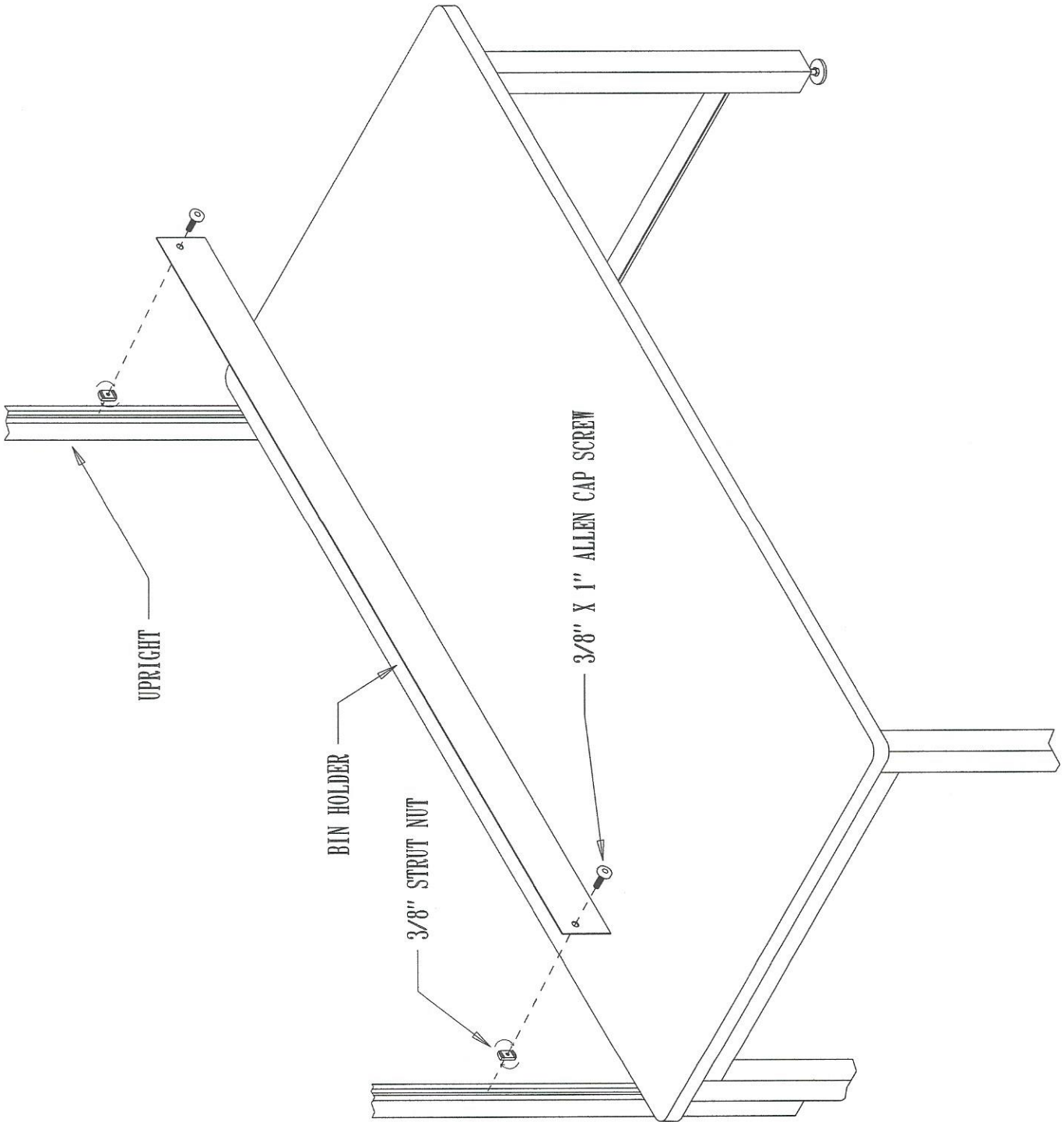
1) CHOOSE DESIRED HEIGHT ON UPRIGHTS AND MOUNT SHELF BRACKETS TO THE UPRIGHTS WITH 3/8" X 1" ALLEN CAP BOLTS AND STRUT NUTS PROVIDED

2) LAY PLASTIC LAMINATED SHELF ACROSS SHELF SUPPORT BRACKETS WITH EQUAL OVERHANG ON LEFT AND RIGHT SIDES

3) WITH 2 PEOPLE (ONE ON EACH SIDE OF SHELF), HOLD SHELF SUPPORT STRUT AGAINST SHELF SUPPORT BRACKETS AND INSTALL #12 X 3/4" PHILLIPS PAN HEAD SCREWS IN EACH END. THEN PROCEED TO INSTALL THE REMAINDER OF THE PAN HEAD SCREWS



PROLINE  
CANTILEVER SHELF ASSEMBLY  
DRAWING # A7042

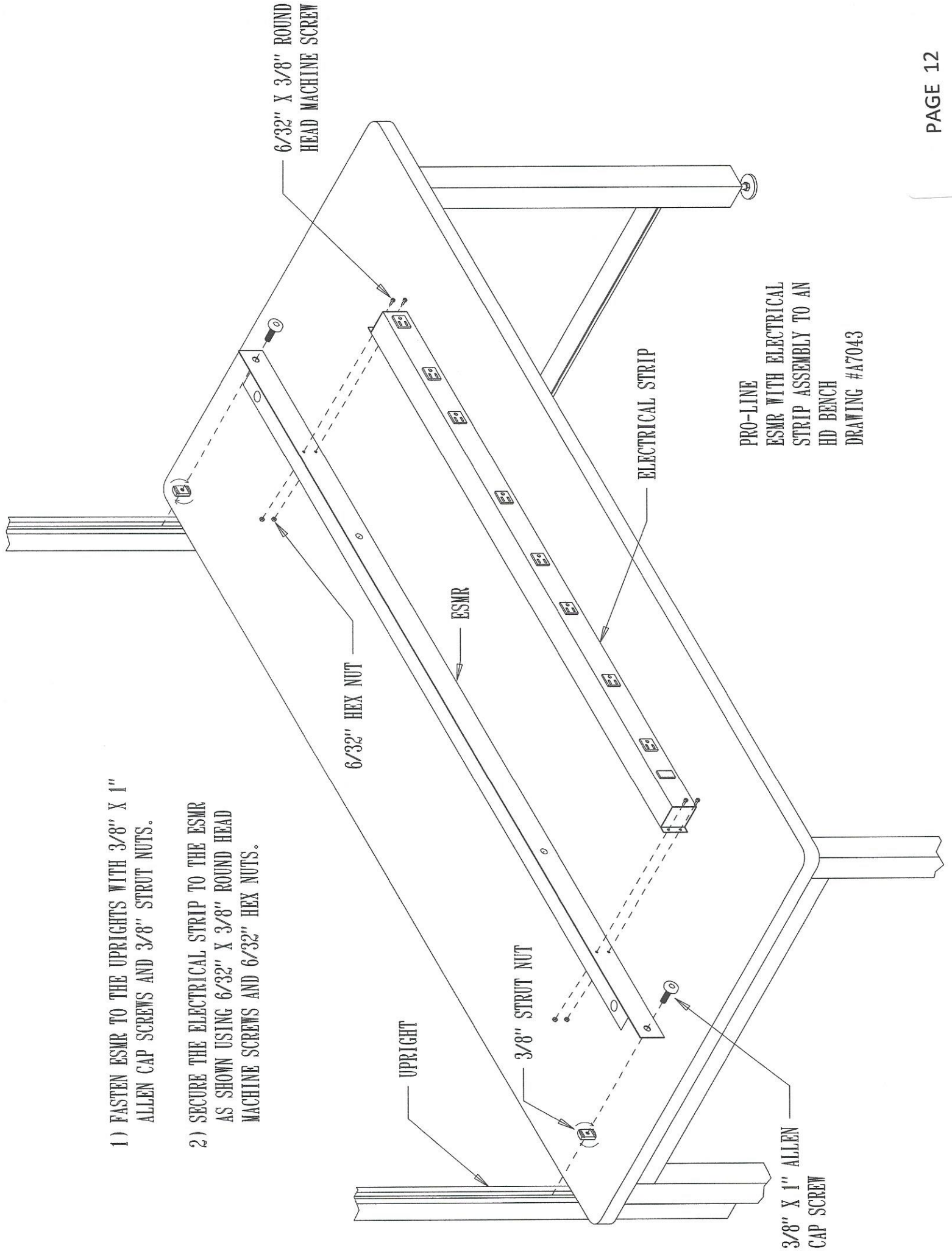


1) FASTEN BIN HOLDER TO UPRIGHTS AT DESIRED HEIGHT USING 3/8" X 1" ALLEN CAP SCREWS AND 3/8" STRUT NUTS

PRO-LINE  
BIN HOLDER ASSEMBLY  
TO AN HD BENCH  
DRAWING #A7449

1) FASTEN ESMR TO THE UPRIGHTS WITH 3/8" X 1" ALLEN CAP SCREWS AND 3/8" STRUT NUTS.

2) SECURE THE ELECTRICAL STRIP TO THE ESMR AS SHOWN USING 6/32" X 3/8" ROUND HEAD MACHINE SCREWS AND 6/32" HEX NUTS.



PRO-LINE  
ESMR WITH ELECTRICAL  
STRIP ASSEMBLY TO AN  
HD BENCH  
DRAWING #A7043