

I. PURPOSE

The purpose of this procedure is to document and standardize the process of assemble Stages and Weight sub-assembly 0020-3022

II. SCOPE

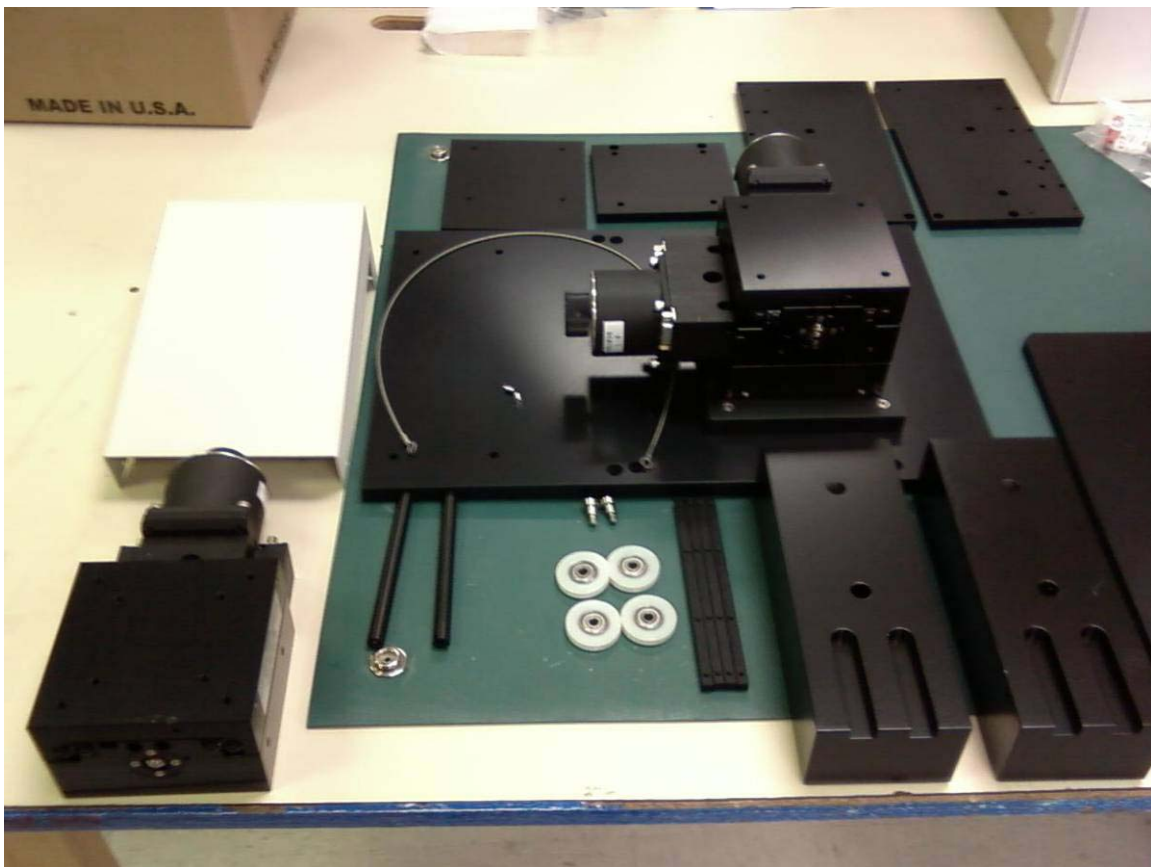
This document applies to MIR 10

III. RESPONSIBILITY

Manufacturing: Assemble the correspondent sub assembly by following this document. Report any discrepancies or issues to Manufacturing Engineering.

Manufacturing Engineer: Update and maintain this procedure

IV. PROCEDURES



Part Break Out

- A 0002-8249 Plate, Back, Gantry Z-Axis
- B 0002-8159 Base Plate, Counter Balance
- C 0002-8162-1 Plate, Counter Balance, L-Side
- D 0002-8163-1 Plate, Counter Balance, R-Side
- E 0002-8340 Cvr, Counterbalance
- F 6000-6002 Lanyard, 24", 2 Ring Term Eyes
- G 2500-9119 Lanyard Sleeves
- H 0002-8248-1 Plate, Base, CO2, Sys(counter-bores up)

ELECTRONICALLY MASTERED DOCUMENT VERIFY REVISION BEFORE USE

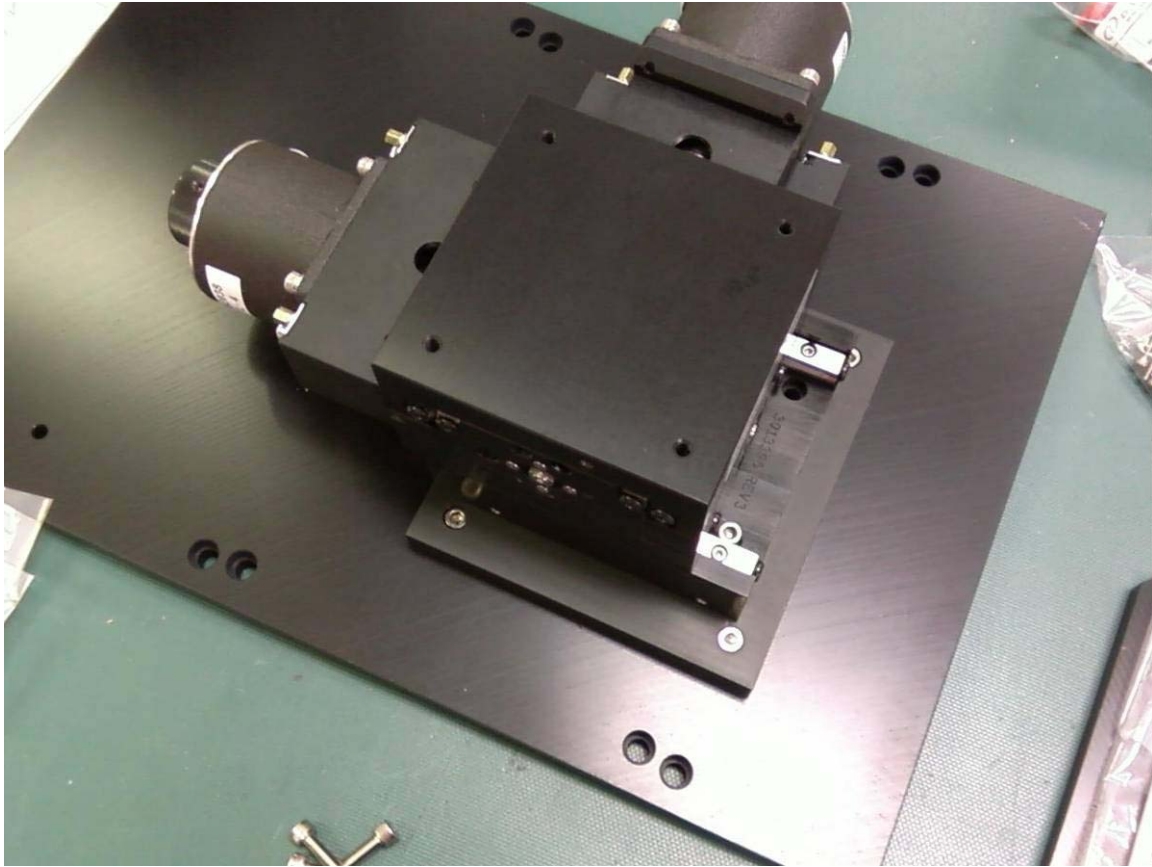
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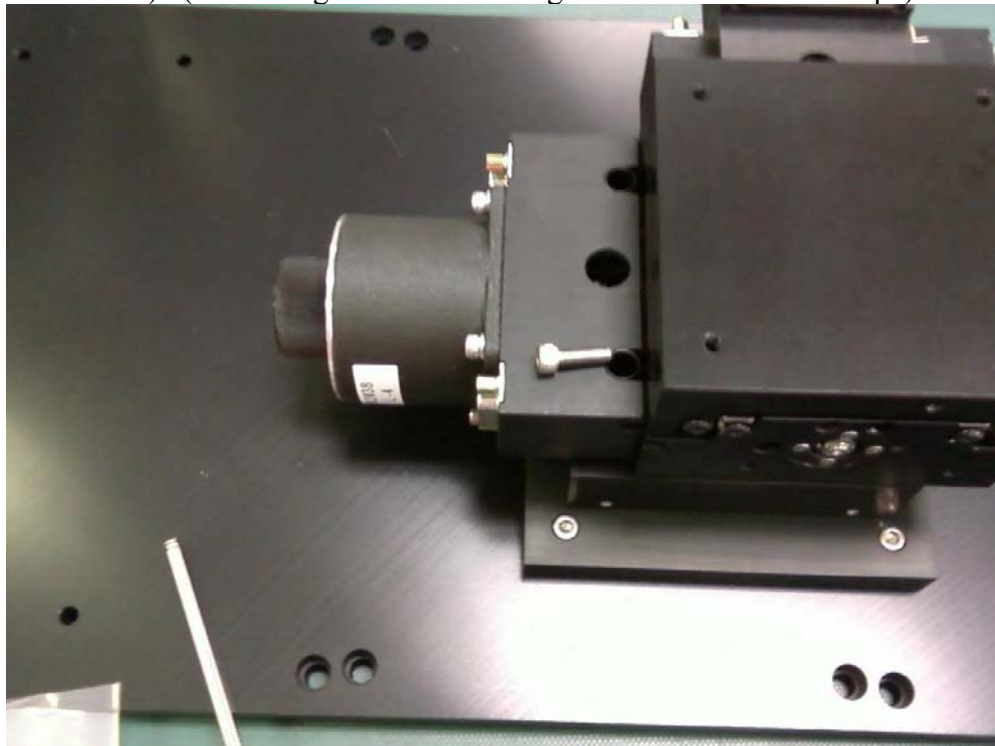
I	0002-8158	Spacer Plate, 1/2"
J	4900-0012	Stage, XY, 2"Travel
K	0003-1260	Weight,Steel,Gantry (x 2)
L	0002-8161	Weight Guide, Gantry (x 4)
M	2825-2603	Shoulder Bolts (x 2)
N	2500-2001	Pulley,Nyl,W/Ball Bearings (x 2 pairs)
O	0002-8167	Dowel, UPR, Counterweight
P	0002-8168	Dowel, LWR, Counterweight
Q	4900-0004	Stage, Z-Axis, Neat, LM-200
S	0002-8339	Cvr, Z-Axis (not shown)



Attach plate (I) to plate (H) by using four 10-32 X 1/2 (PN 2825-6956) SHCS screws.



Remove two Stage Locks and save it in a plastic bag for shipping.
Open Stage (J) to show mounting holes. Attach stage to Plate (I) using 10-32 x 5/8 SHCS (PN 2825-6957). (Cover large holes above stage axis with electrician tape).



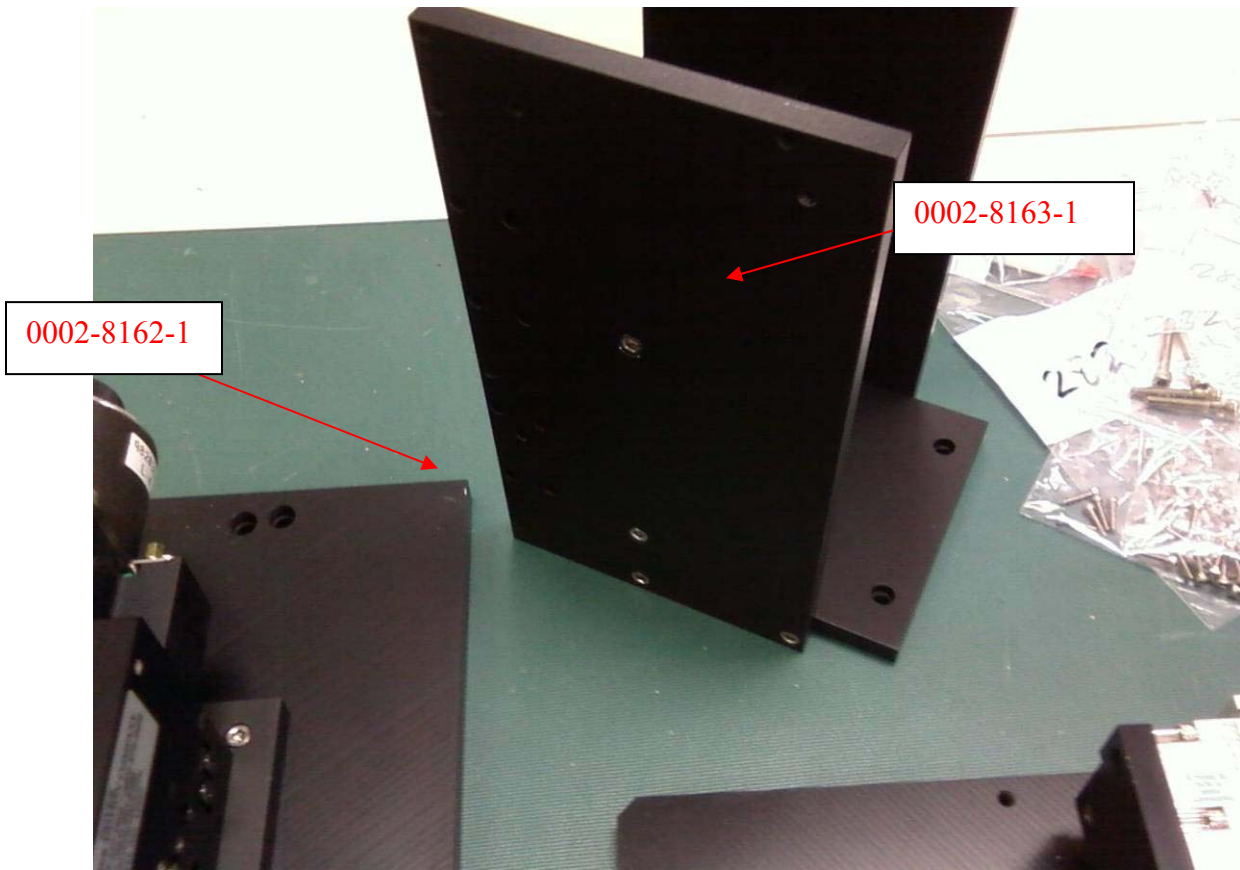
Open Stage's (J) second axis to show mounting holes. Attach stage to Plate (I) using 10-32 x 5/8 SHCS (PN 2825-6957).



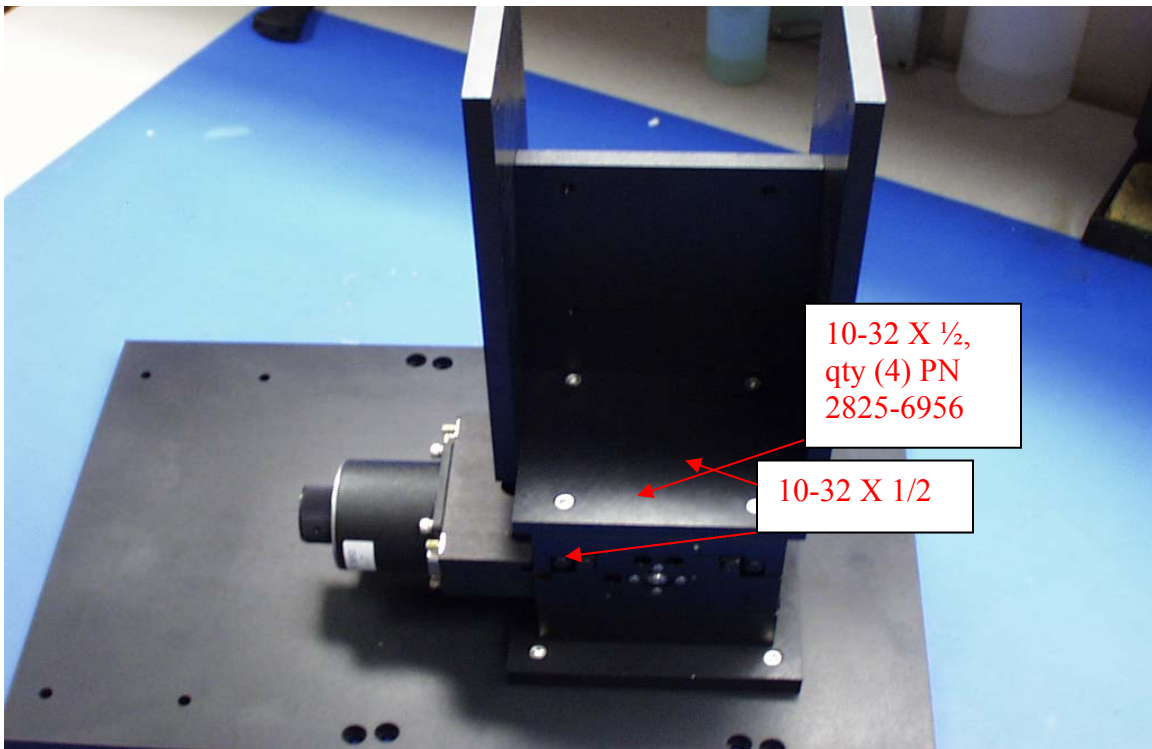
Attach Plates with 2825-6957 SCR,SKT HD,CAP,10-32X5/8,SS
On both sides



Assemble Stage Side plates (C & D) to (A) with six 2825-6957 SCR,SKT HD,CAP,10-32X5/8,SS.



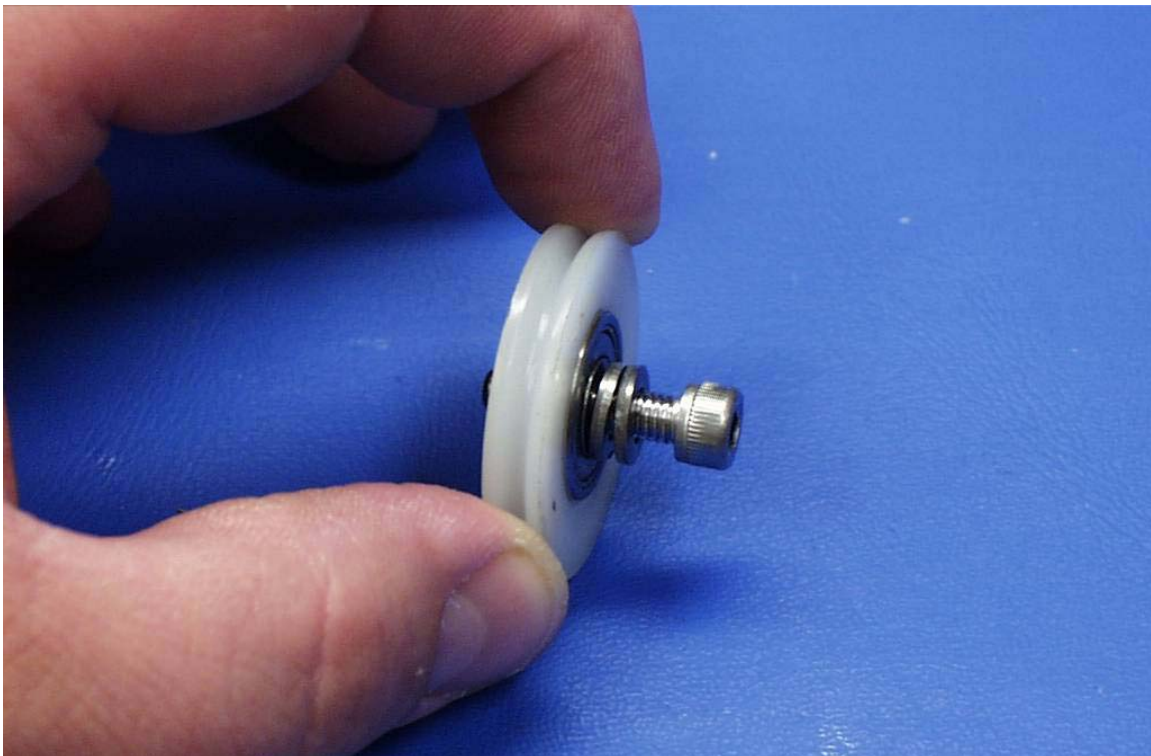
Attach bottom plate 0002-8159 (B) to 0002-8162-1 (C) and 0002-8163-1 (D) mounting point shown above with 10-32 x 1/2 (PN 2825-6956) SHCS.



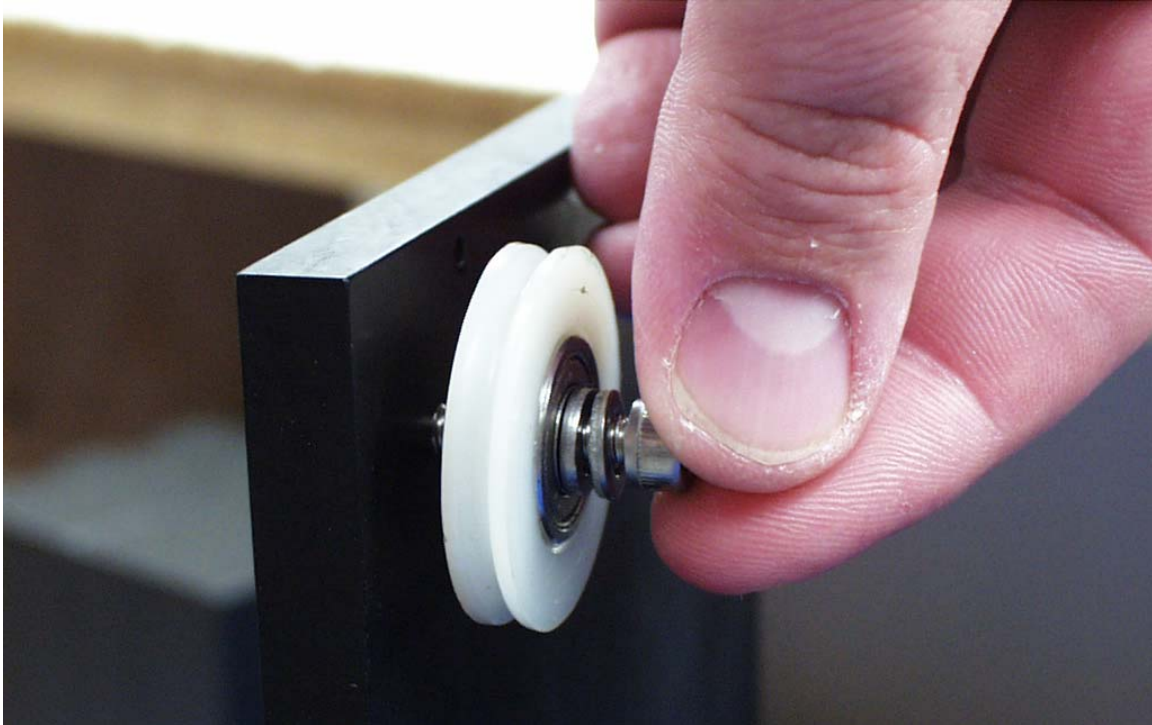
Install Weight Plates assembly onto the stage with 10-32 x 1/2 (PN2825-6956) SHCS.



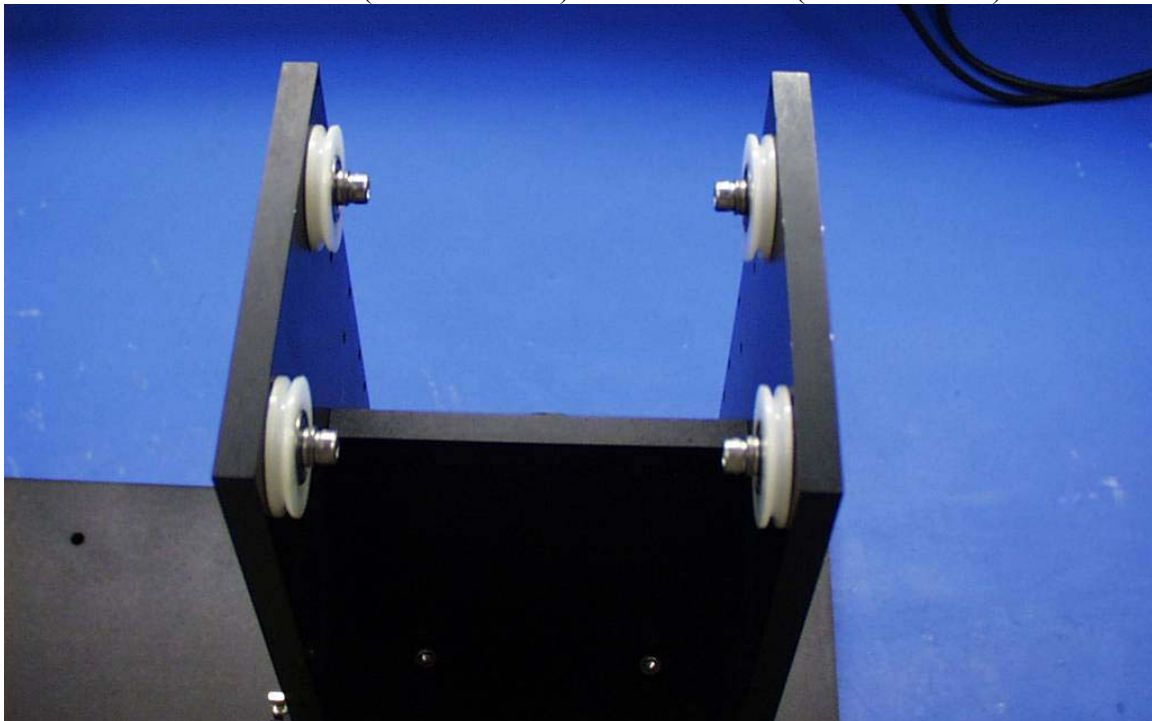
Reduce the threads' outside diameter on (4) of 10-32 x 5/8 (PN 2825-6957) screws so they fit through the holes on the Pullies (N). Use a metal file and sandpaper to accomplish this reduction.



Reduced screw shown with two washers (2825-8455 & 2825-8460) in pulley (N).



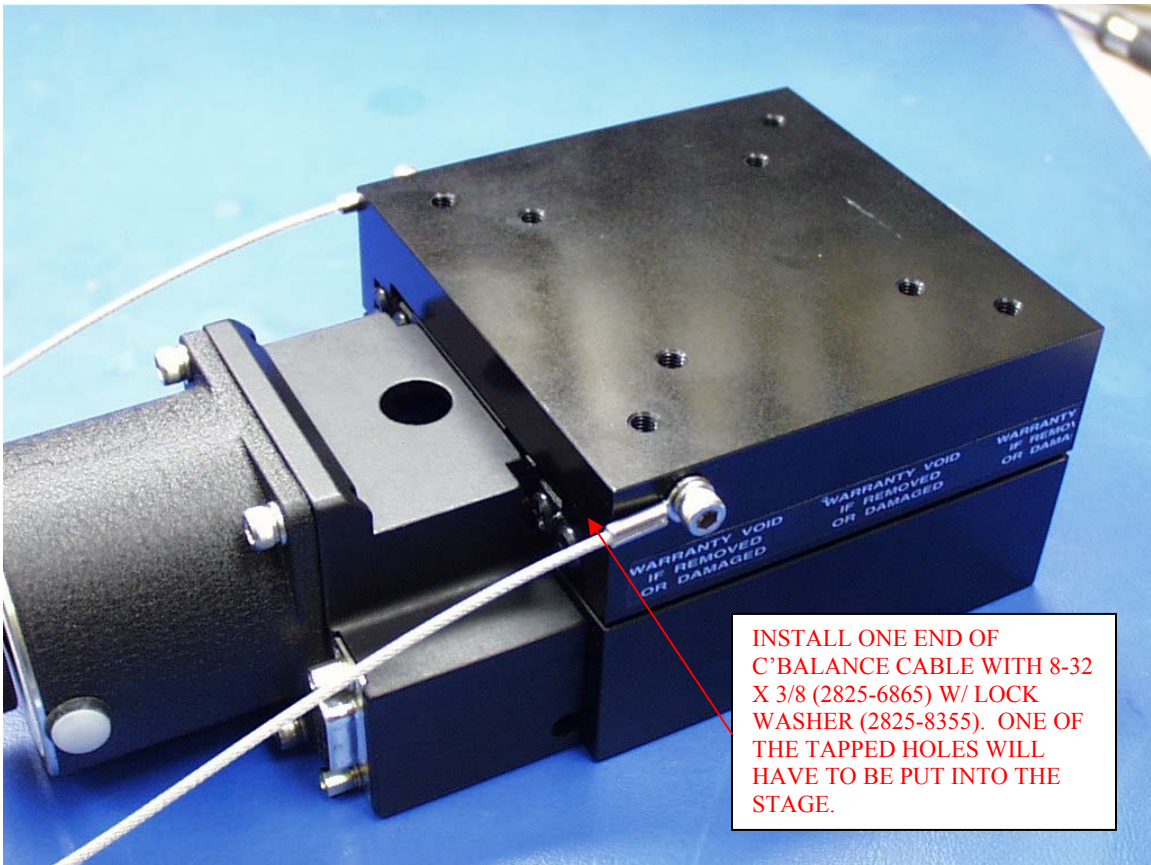
Install pulley into the four locations on the inside of weight plates (C & D) with flat washer (PN 2825-8451) and lock washer (PN 2825-8455).



Pulleys installed.



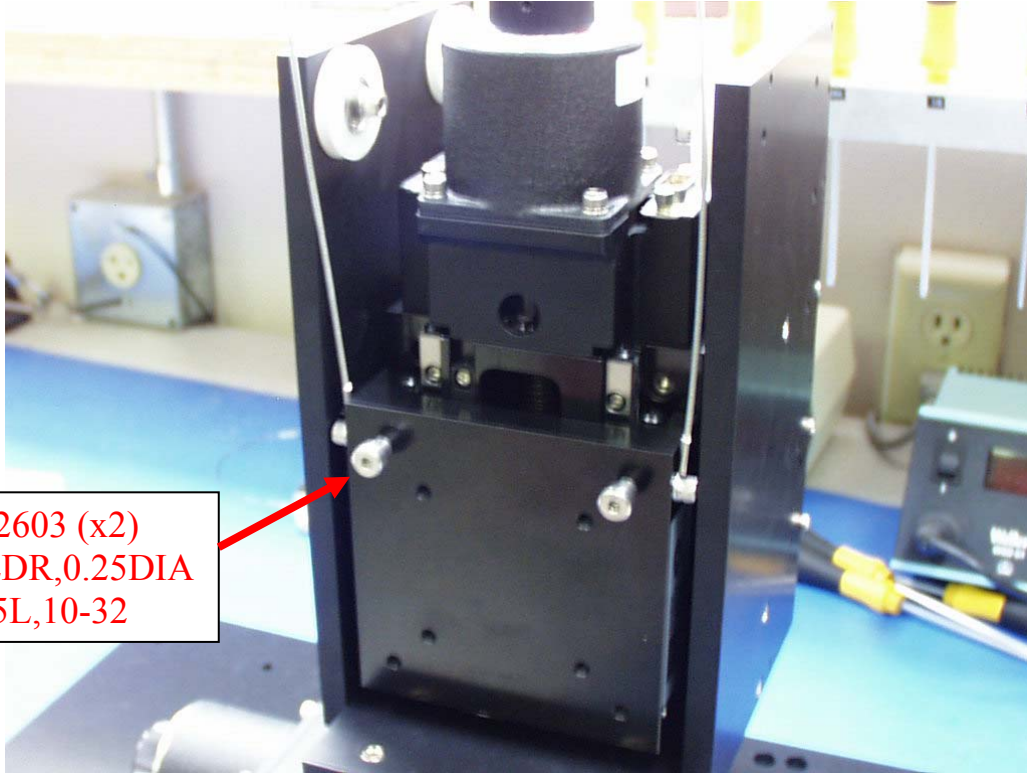
Install (2) Weight Guides (L)–one on each side of C & D–with 4-40 X 1/2 (2825-6736).



INSTALL ONE END OF
C BALANCE CABLE WITH 8-32
X 3/8 (2825-6865) W/ LOCK
WASHER (2825-8355). ONE OF
THE TAPPED HOLES WILL
HAVE TO BE PUT INTO THE
STAGE.

Remove Z-Stage Lock first

The Z-stage 4900-0004 (Q) comes with a tapped hole; however, a second tapped hole must be put in. Tap it at #8-32 on opposite side of stage. The new tap is .500" in from edge of stage and .200" from top edge.



2825-2603 (x2)
SCR,SHLDR,0.25DIA
X0.25L,10-32

Place Z-Stage (Q) on plate with bottom of stage facing out. Install Z-axis stage to stage weight plates by adjusting/moving the stage to show mounting holes. Install, as shown below, with 10-32 x 1 ¼ SHCS (2825-6962-1).



TITLE:

MIR-10 Stage and Weight Assy. Procedure

DOC #:

90-2829

REV.:

A

ECO:

6362





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MIR-10 Stage and Weight Assy. Procedure

DOC #:

90-2829

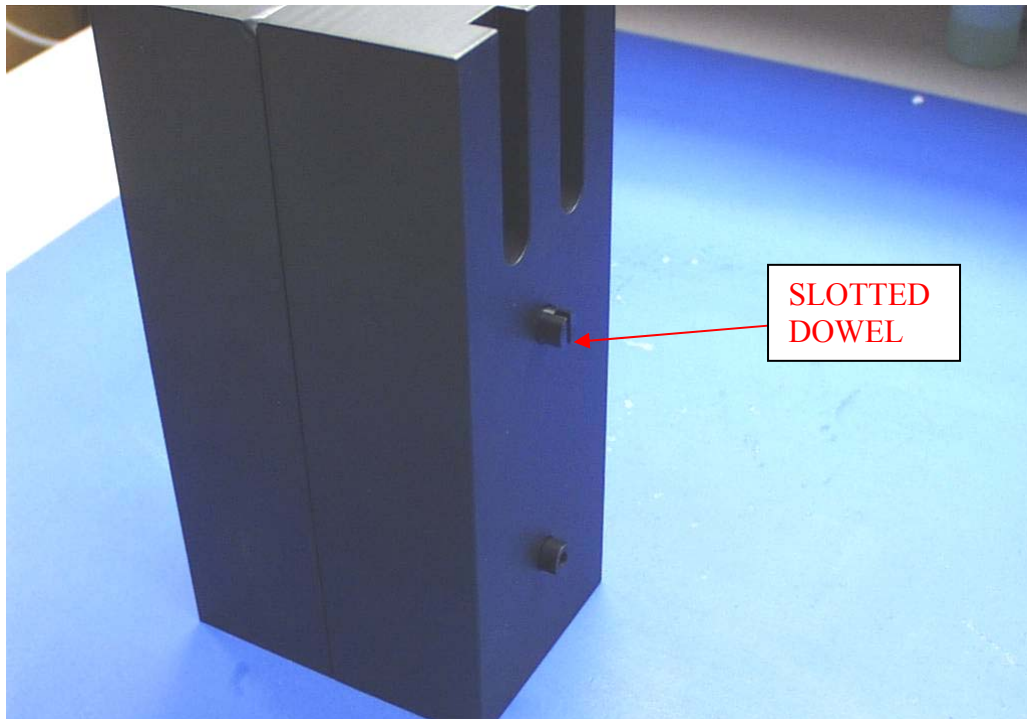
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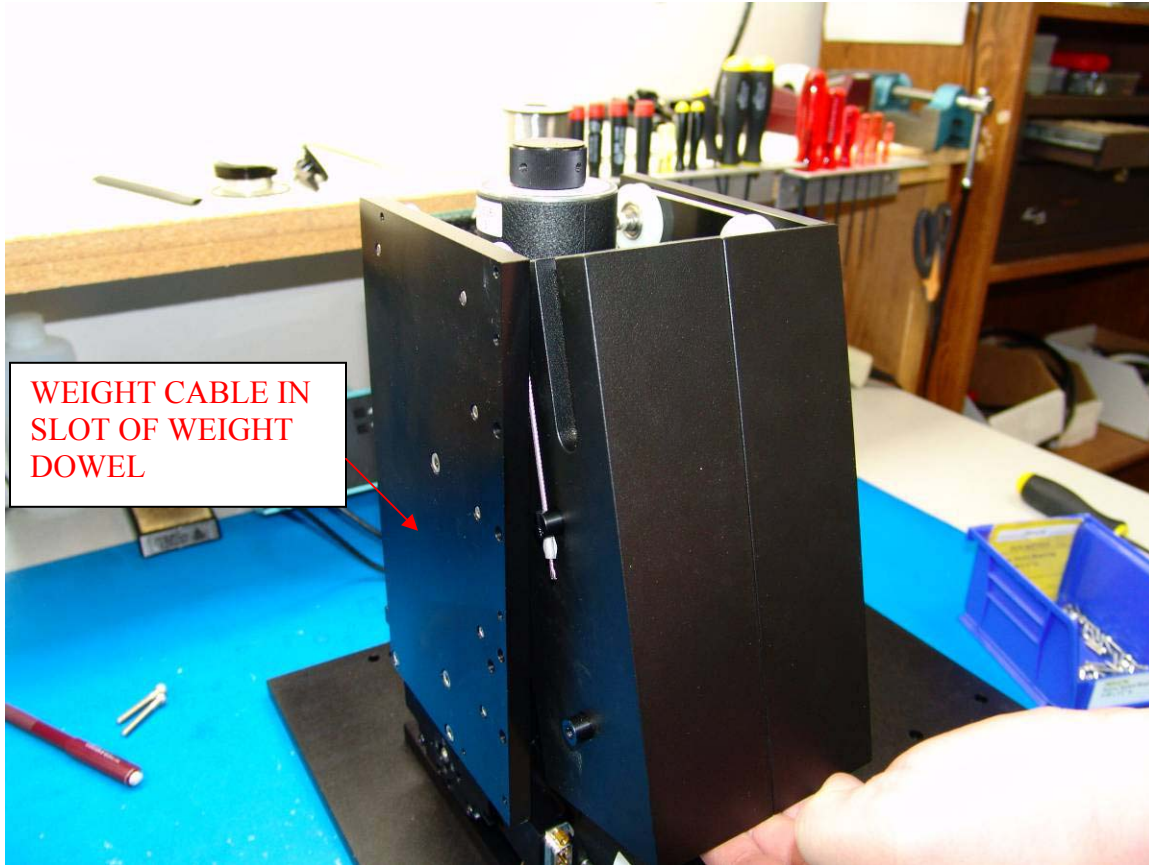
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Place Weights (K) together with notches facing out and toward the top. Insert Slotted Dowel (O) into top hole (as shown). Insert Tapped Dowel (P) into lower hole.



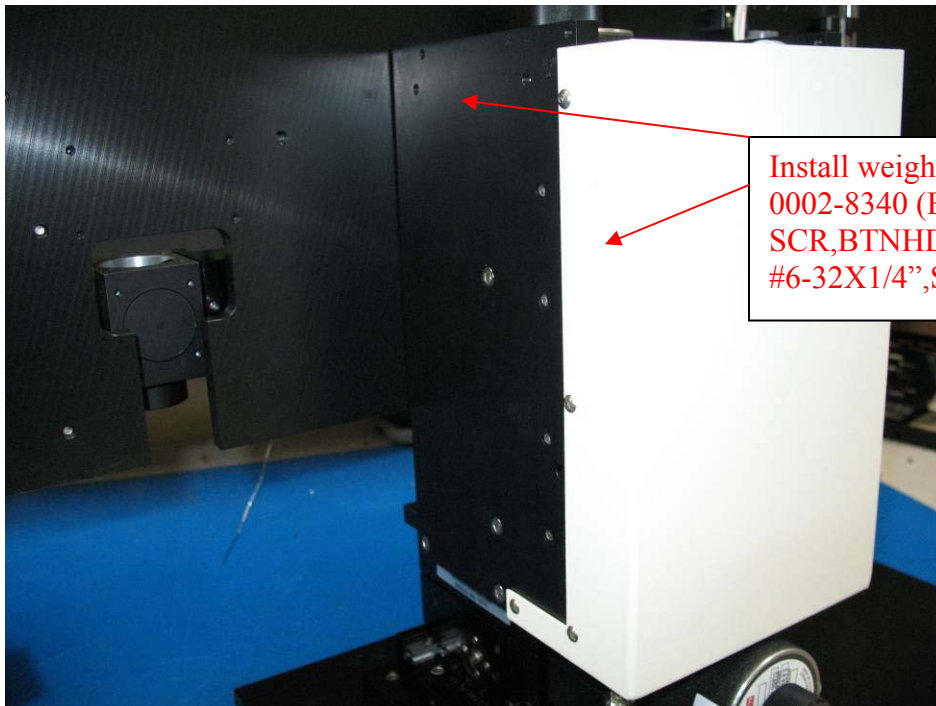
Open Z-Axis stage as far up as possible. Route counter weight cables over pulleys and attach 0003-1260 steel weights by slipping the cable through the slotted dowel so the sleeve is hooked below dowel. Use something to balance weights for safety while attaching cables. After cables are installed, tilt weight assembly, as shown, so the top weight slots slip under the pulley screws heads. The assembly should hang freely now.



Install #10-32 x 1/2" SHCS (2825-6956) to Side Plates

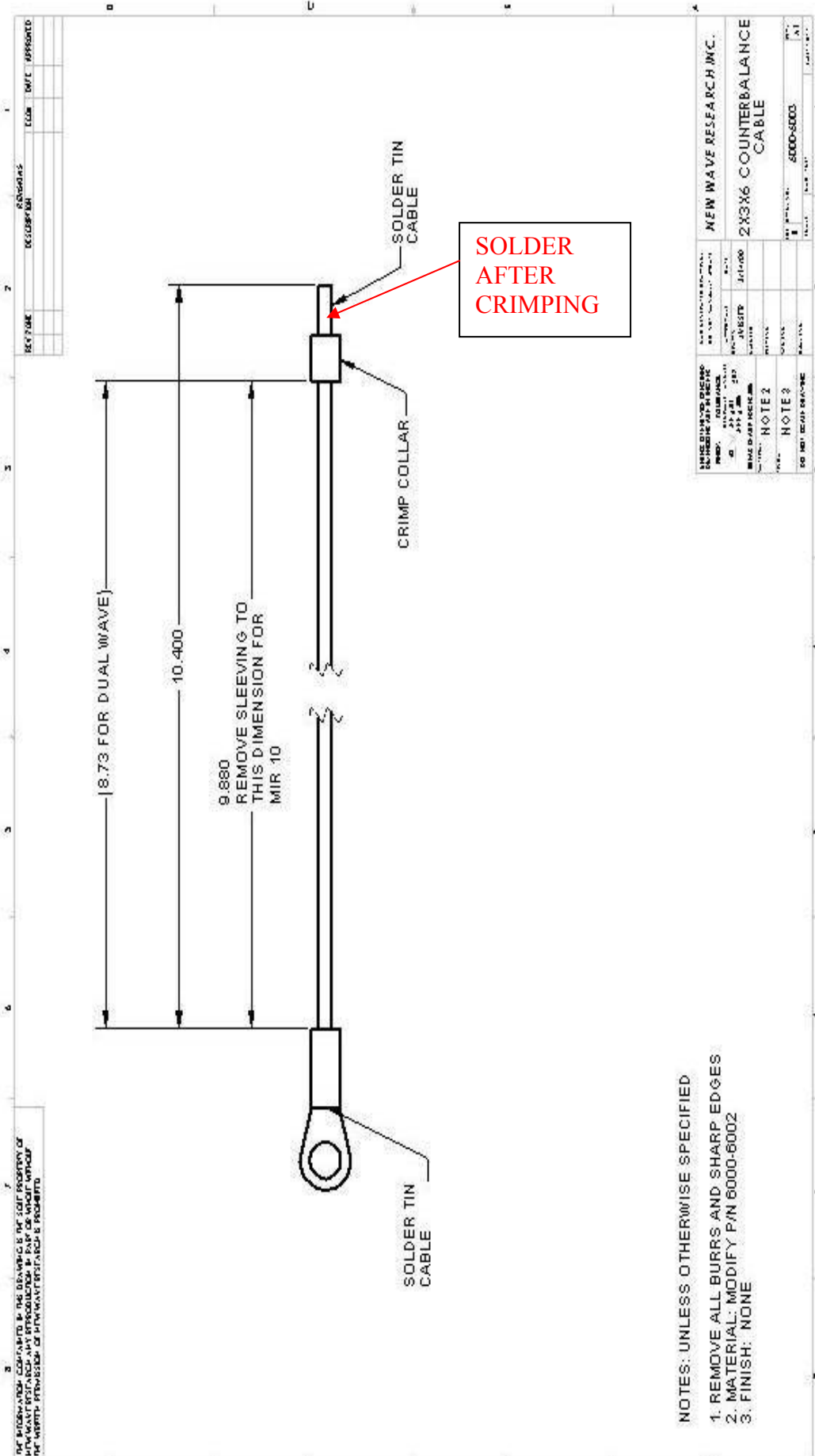
Install final weight guides 0002-8161.

Install #10-32 x 1/2" (2825-6956) screws to side plates. Install the final (2) weight guides (PN 0002-8161).



Install weight cover 0002-8340 (E) with SCR,BTNHD,SKT, #6-32X1/4",SS (x8)

Modify Lanyard cable (F) according to Drawing below.



REV. NO.	DESCRIPTION	DATE	DATE APPROVED

NEW WAVE RESEARCH INC.	
2X3X6 COUNTERBALANCE CABLE	
NOTE 2	
NOTE 3	
6000-6002	

- NOTES: UNLESS OTHERWISE SPECIFIED
1. REMOVE ALL BURRS AND SHARP EDGES
 2. MATERIAL: MODIFY P/N 6000-6002
 3. FINISH: NONE