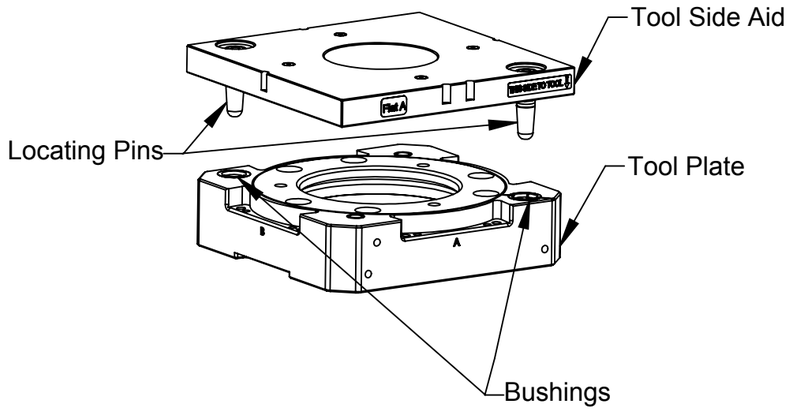
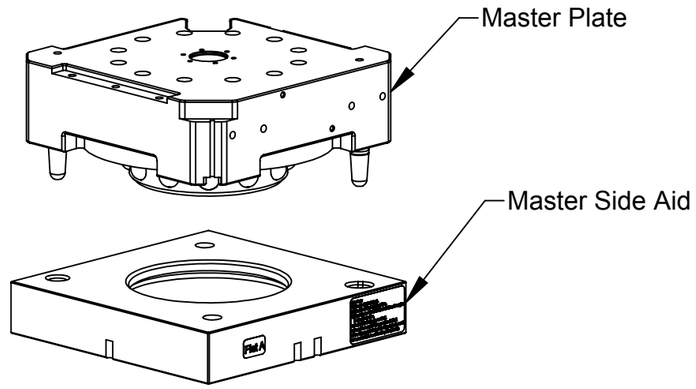
Rev.	Description	Initiator	Date
01	Initial Drawing	RLR	9/12/2014

Step 1:
Place the Tool Plate in the Tool Stand. Programs should be written with the Tool Plate resting in the Tool Stand.

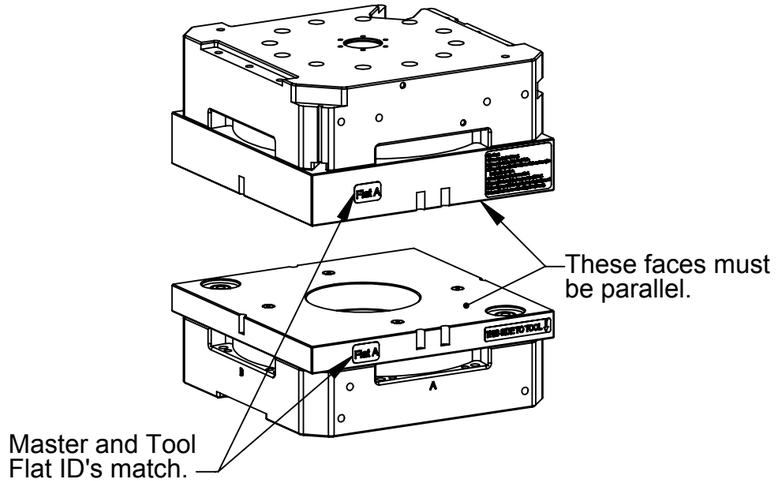
Step 2:
Mount the Tool Side Aid over the Tool Plate by inserting the Locating Pins into the Bushings. Orient the Tool Side Aid such that the 'A' Flat corresponds to the 'A' Flat on the Tool Plate.



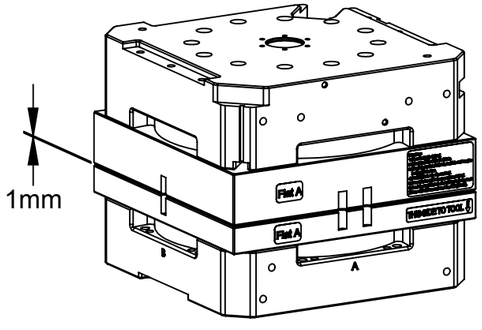
Step 3:
Mount the Master Side Aid to the QC Master Plate ensuring that the Taper Pins enter the corresponding holes in the Master Side Aid. Orient the Master Side Aid such that the 'A' Flat corresponds to the 'A' Flat on the Master Plate. Energize the Locking Mechanism to secure the Master Side Aid in place.



Step 4:
Bring the Master Plate Assembly to a position directly over the Tool Plate Assembly. The Master Plate Assembly Face should be parallel to the Tool Plate Assembly Face. Ensure the orientation of the Master and Tool assemblies is such that the Flat ID's correspond (i.e. 'A' Master to 'A' Tool, etc.).

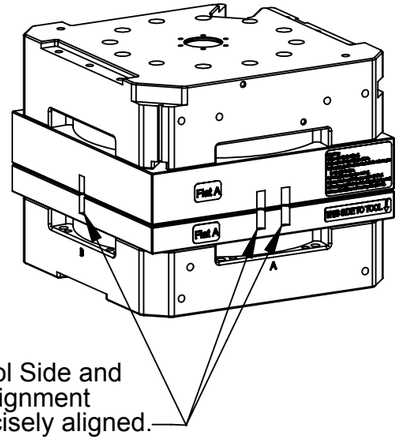


Step 5:
Move the Master Plate Assembly slowly downward until the Master and Tool Side Aids are approximately 1mm apart.



+Z Direction

Step 6:
Adjust the position of the robot to correct for any lateral misalignment. Use the Alignment Marks to align the Tool Side and Master Side Aids.



Step 7:
Record the robot coordinates from Step 6. A correction must now be made to the Z coordinate to account for the thickness of the Master and Tool Side Teaching Aids. Only in this way can the correct "Pick-up" and "Replacement" coordinates be determined. Perform the following calculation to determine the "Pick-up" and "Replacement" locations:

Z "Pick-up" Coordinate = (Z Coordinate from Step 6) - 55mm

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.

3rd ANGLE PROJECTION

ATI INDUSTRIAL AUTOMATION

1031 Goodworth Drive, Apex, NC 27539, USA
Tel: +1.919.772.0115 Email: info@ati-ia.com
Fax: +1.919.772.8259 www.ati-ia.com
ISO 9001 Registered Company

DRAWN BY: R.Raines 9/11/14
CHECKED BY: D.Norton 10/30/14
PROJECT # 140827-2 SHEET 1 OF 1

TITLE: QC-213 Teaching Aid Customer Drawing

SCALE	SIZE	DRAWING NUMBER	REVISION
1:4	B	9230-20-7774	01