B

B

PPB55-04
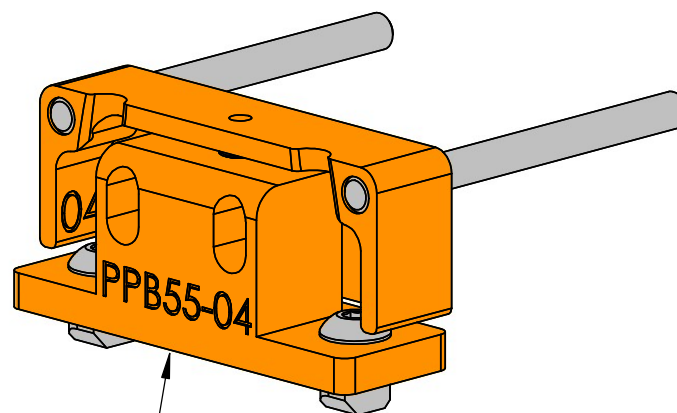
Your part numbers may vary, depending on the tool.
Make sure that the dowel pin center-to-center
identification match, though!

Example:
PPB55-04
TH55-04

Both have the same width value: 55mm.

A

A

13 Adjustable Parking Post Assembly

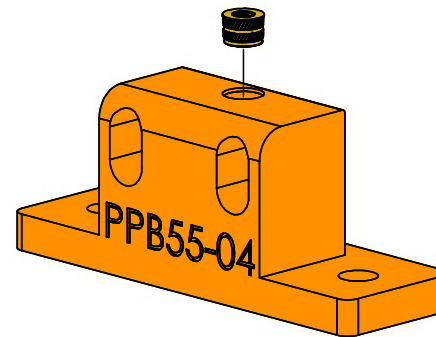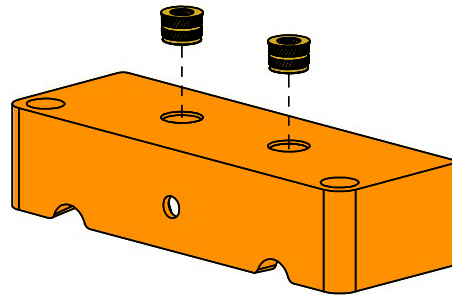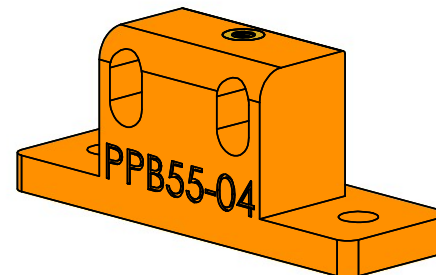| Created by:	last edited:
Joshua Vasquez	8/1/2020
SCALE: 1:1	SHEET 1 OF 6

B

Install the following three M3 Heat Set Inserts in their respective locations using the Plate Press technique.

PPB55-04

Exploded View

PPB55-04

Assembled View

B

A

ITEM NO.	DESCRIPTION	QTY.
1	M3 Tapered Heat Set Insert	3
2		1
3	47mm Parking Post Base	1

Heat Set Insert Installation

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last edited:
8/1/2020

SCALE: 1:1   SHEET 2 OF 6
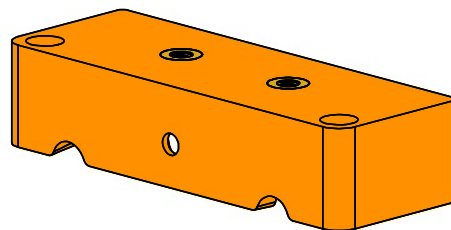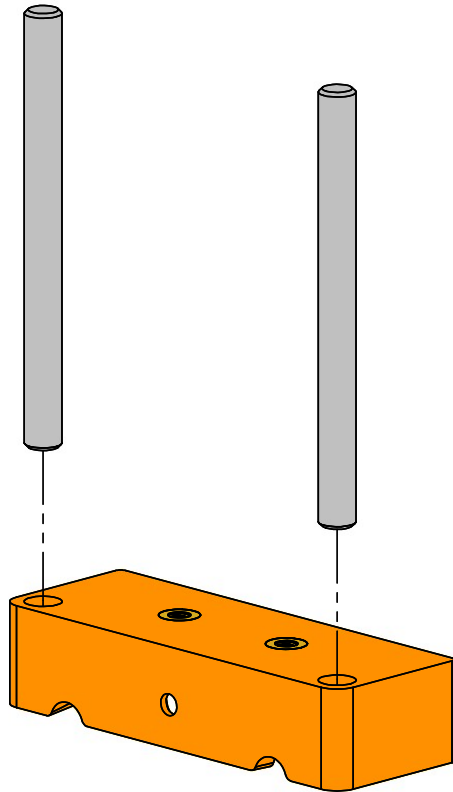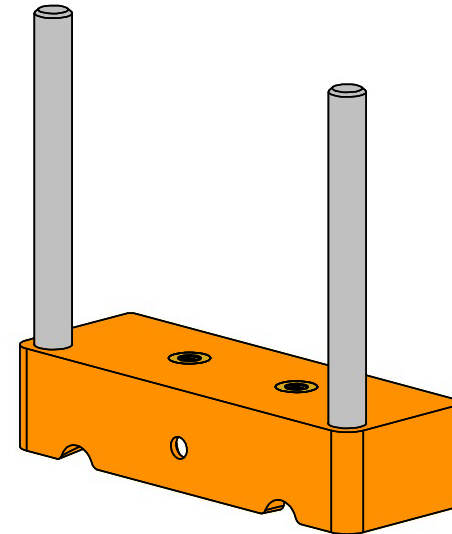
A

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Note: if your holes are not between 4.96mm and 5.01mm, you may need to drill out these holes with a drill press to insert the dowel pins. Otherwise, the part may crack during insertion.

Carefully press fit the two dowel pins into the Tool Holder (with an arbor press) until they are flush with the bottom of the part.

Exploded View

Assembled View

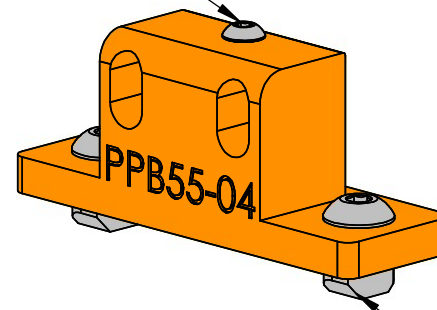| ITEM NO.	DESCRIPTION	QTY.
1	M5 Dowel Pin, 60mm len	2
2	Tool Holder with Inserts	1

B

B
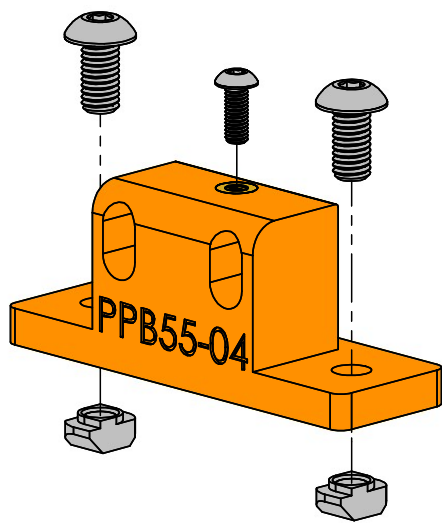
Install this screw all the way,
but do not tighten it.

Exploded View

Assembled View

Keep these nuts loose (about 2-3 turns).

A

A

ITEM NO.	DESCRIPTION	QTY.
1	Parking Post Base with Inserts	1
2	M5 Buttonhead Screw, 10mm long	2
3	M5 Drop-In T-Nut for 20x20 Extrusion	2
4	M3 Buttonhead Screw, 8mm long	1

Parking Post Base Screw Prep

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SCALE: 1:1	SHEET 4 OF 6

B

PPB55-04
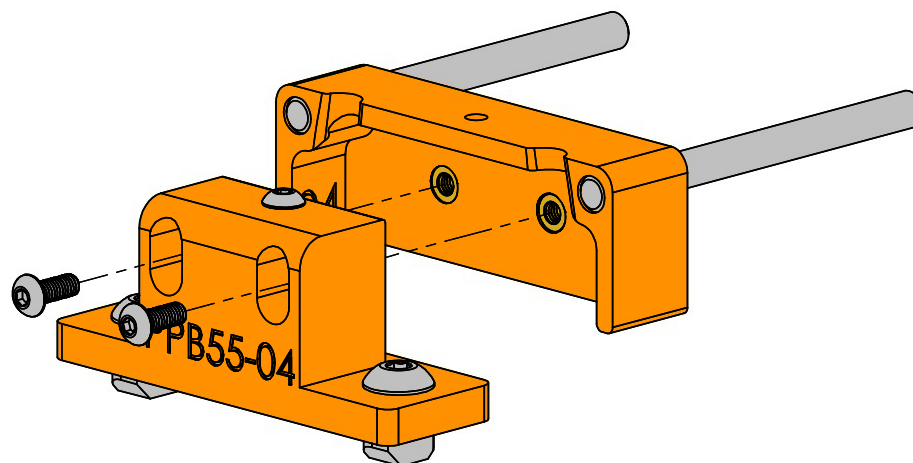
Exploded View

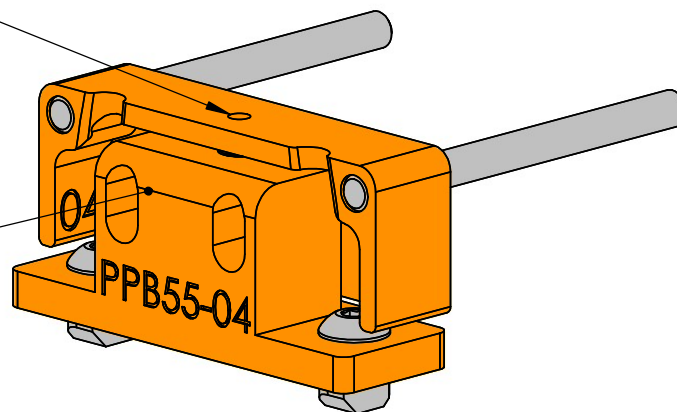When the post is installed on the machine, use the top screw to fine-tune the height at the parking location.

Use the two screws in the pockets to set the parking position.

PPB55-04

Assembled View

ITEM NO.	DESCRIPTION	QTY.
1	Parking Post Base Subassembly	1
2	Tool Holder Subassembly	1
3	M3 Buttonhead Screw, 8mm long	2

Final Assembly

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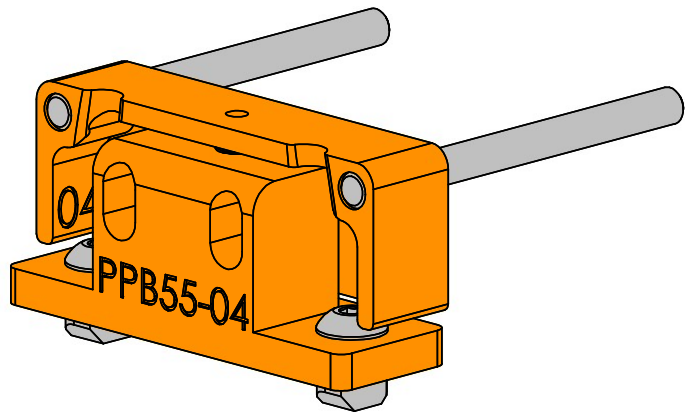Joshua Vasquez

last edited:
8/1/2020

SCALE: 1:1   SHEET 5 OF 6

Machine Installation Overview:

1. Install the parking post on the frame in approximately the right position. Loosen both the two M5 screws and the back two M3 screws such that the parking post can wiggle up-and-down and slide left-and-right.

2. Release any active tools. Move the carriage away from the tool rack and load the corresponding tool into the carriage by hand. Lock the tool with the tool-change macro. (Doing so manually will not apply that tool's offsets, which will throw off the parking post location setting.)

Warning: the next steps involve moving the carriage with the tool on it.

3. Gradually step the carriage (with the tool loaded) into the parking post at the pre-defined "tool release" position defined in the macro file for that tool. Move the parking post location by hand such that the tool slides smoothly onto the guide pins. (The middle M3 screw can help fine-adjust the parking post height.)

4. With the location set, fully tighten all screws (except the middle M3 screw). Invoke the tool-change unlock macro to release the tooli into the post. Then back the carriage out of the tool.

5. Run a test tool change cycle. Note: when the tool is picked up and dropped off, the tool should **not** noticably jiggle in and out of the parking post.

Final Assembly(2)		
Created by: Joshua Vasquez	last edited: 8/1/2020	
SCALE: 1:1	SHEET 6 OF 6	