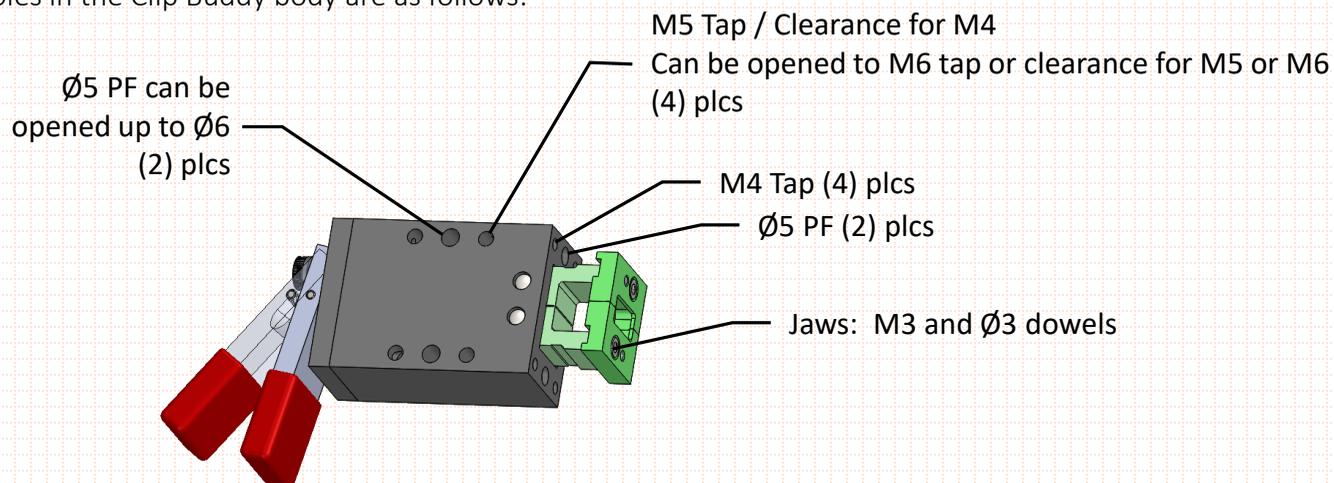


- 1) Cad files are provided for all individual items (CB4B, CB4MF, etc.) which can be assembled in cad as needed.
- 2) Some internal features of the clip buddy assembly (springs, internal components, etc...) are not included in cad for clarity and reduced complexity.
- 3) Cad files include levers and optional mounting brackets in all potential orientations. Unused orientations can be deleted as desired.
- 4) All options and accessories include fasteners to attach the item to the Clip Buddy body. Fasteners for attaching to a fixture are not included. Optional levers and mounting brackets are shipped pre-assembled whenever possible.

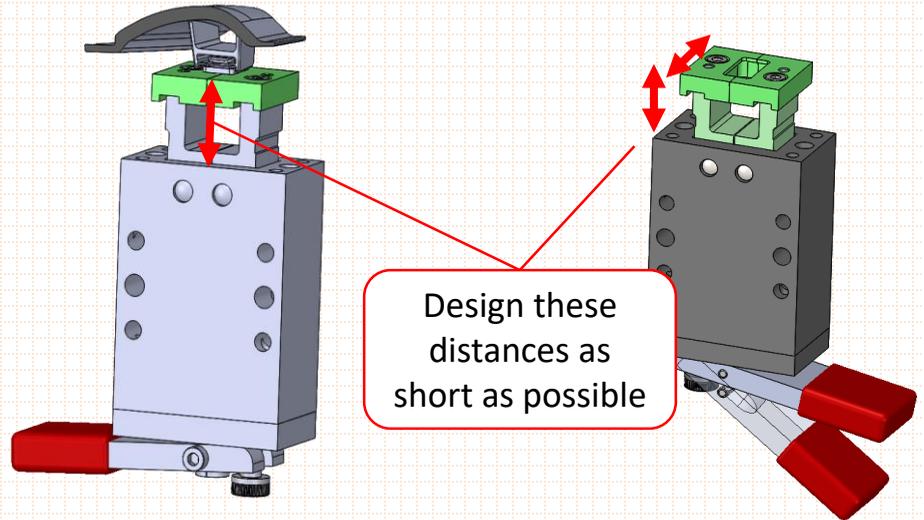
- 5) Holes in the Clip Buddy body are as follows:



- 6) All optional mounting brackets have M5 tapped holes and Ø5 PF dowel holes for mounting to the fixture
- 7) Jaws are constructed from 1045 unhardened steel, as are the main body and internal components. Jaws can be heat treated. Other components are anodized aluminum or die cast metal.
- 8) When using the cable remote actuation option, order one CB4CBL for each Clip Buddy to be cable actuated. The CB4CBL option includes cable adapter items attached to the back end of the Clip Buddy, and a separate 2 meter cable assembly which connects to the CBRA12 actuator box. Also order CBRA12 unit(s) as needed. Each CBRA12 will actuate 1-12 Clip Buddy units which have the CB4CBL option.
- 9) When using the CB4CYL pneumatic option, air pressure can be provided by one of 2 methods. 1) Shop air with a pressure regulator and gage can be used. 2) Pneumatic actuators can be used: CBPA6 for 1-6 units, and CBPA10 for 1-10 units. There are separate information documents for each of these methods.



10) Position the Clip Buddy body as close as possible to the feature mating surfaces to provide the best rigidity.

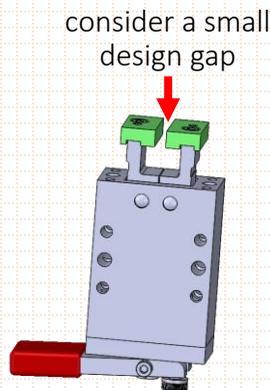


11) In general it is recommended to use Clip Buddy versions with jaw end pieces included (CB3B, CB4A, CB4B, CB5B, CB5C) whenever possible to avoid the need to fabricate, attach, and adjust jaw end pieces.

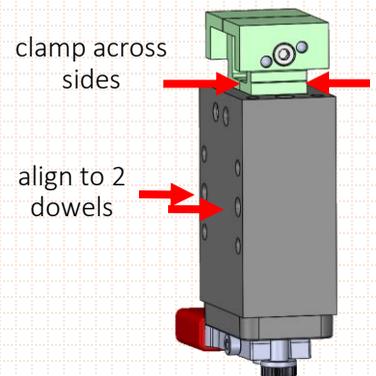
12) For situations where custom jaw end pieces are necessary (CB3L, CB3X, CB4X, CB5L, CB5X), it is recommended to plan for grinding the top faces and possibly the side surfaces of the jaw end pieces after assembly to ensure flatness, squareness, and matched surfaces.

13) When installing custom jaw end pieces that are designed to contact each other, it is critical that the jaw end pieces make contact at the same time that the jaw arms naturally close. If the jaw end pieces prevent the jaw arms from closing to their natural closed position, there may be jaw motion in the closed assembly. (also see no. 14 below)

14) When custom jaws are required, consider using jaw end piece designs wherein the jaws do not contact each other, but have a small gap. This will eliminate the need to fine-tune the closing of the jaw end pieces to match the internal jaw closing positions.



15) For machining assembled units, it is recommended to align to 2 side dowel holes and clamp the jaws across the sides for added rigidity. (for all versions, with or without jaw end pieces)



16) If disassembly is necessary, mark the jaw locations relative to the block. Then carefully punch out (2) dowels $\text{Ø}5$ taking care not to scrape the sides of the holes. Then slide the 2 jaws together with the small spring between them out of the front of the block. To reassemble, reverse the steps making sure to reinstall all components in the original positions and orientations. Hold the lever open for reassembly.

