



Biomek® FX

User's Manual

Beckman Coulter PN 719448
SAGIAN Control Number 100-00-00388
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23.7 Grippers

The Multichannel pod incorporates a gripper tool (grippers) (Figure 23-8) that grasps and moves labware from one location on the Biomek FX deck to another.

Grippers can:

- Move labware no taller than 2.35 inches in height.
- Move stacks of standard height labware no more than four plates high (Maximum 2.35 inches).
- Place lids on and remove lids from labware.
- Remove lids from tip boxes. (Grippers do not place lids on tip boxes.)

Note: Grippers stack and unstack groups of labware from the bottom. If a stack containing four pieces of labware is being unstacked, the grippers grasp the top three and move them to a new position. Then, the grippers grasp the top two of that stack and move them; finally, the grippers grasp the top piece of labware in that stack and move it to a new location.

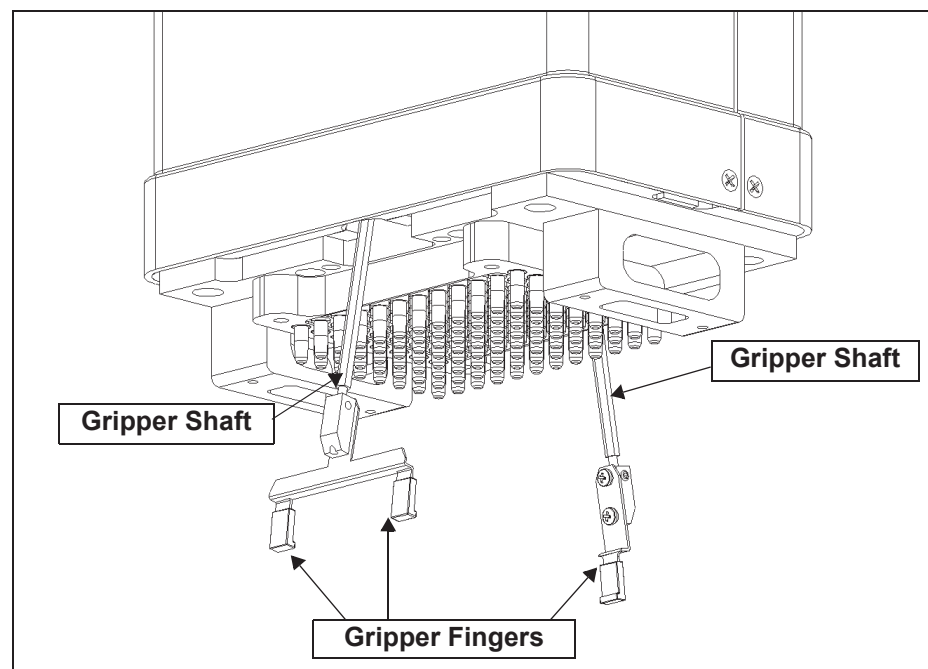


Figure 23-8 Grippers

The grippers contain two fingers:

- A double gripper located to the front of the instrument
- A single gripper located to the back of the instrument.

23.7.1 Framing Grippers



WARNING: Grippers may bend if not taugth properly with AccuFrame. If grippers bend, do not remove gripper assembly from the pod. Contact a Beckman Coulter Service Engineer for assistance.

Grippers are framed during installation by a Beckman Coulter Service Engineer. Should grippers need to be framed, refer to Appendix B:, *Framing Instructions*.

23.7.2 Troubleshooting

Table 23-4 Gripper Troubleshooting

If	Then
Gripper shaft is bent.	Contact a Beckman Coulter Service Engineer for repair.
Gripper Pads look worn.	Remove gripper fingers and replace pads using Beckman Coulter Part Number 609088 (Gripper Pad Kit). Follow the instructions contained in the kit, omitting step one.

23.7.2.1 Removing Gripper Fingers

To replace the gripper pads, remove the gripper fingers from the gripper shaft.



CAUTION: Be careful not to bend the gripper shaft when removing the gripper fingers. If the shaft becomes bent, contact a Beckman Coulter Service Engineer for assistance.

To remove gripper fingers:

1. Extend the grippers using manual control in the software (refer to Chapter 14, *Modifying Pod, Gripper, and Tip Settings*).
2. Unscrew the fingers from the gripper shaft (Figure 23-9).

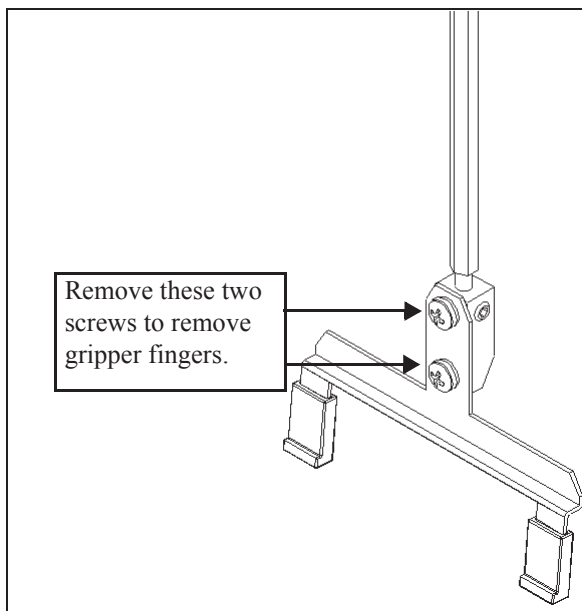


Figure 23-9 Screws to remove when replacing gripper pads

3. Replace the gripper pads using the directions provided in the gripper kit.
4. Replace the fingers on the shaft.