

INSTALLATION/SOFTWARE/USAGE

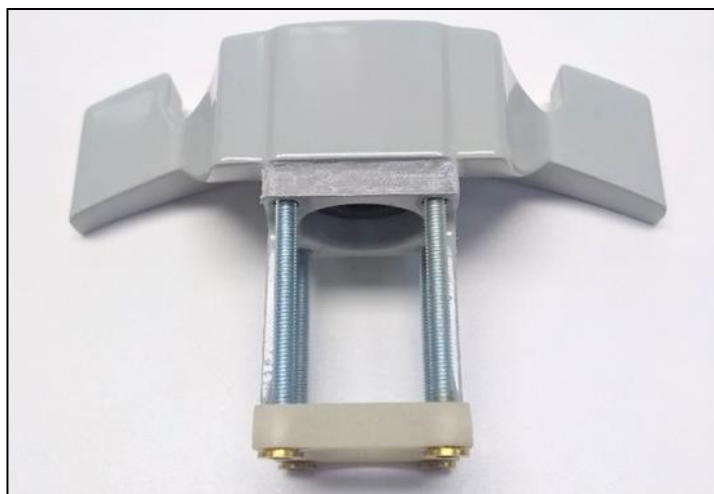
Q: Question

Why does the collar around the force handle increase its gap over time and how can it be fixed?

A: Answer

The force handle sits on a bolt assembly attached to the force transducer inside the door unit. The long bolt assembly uses a bushing to stay centered in the unit and resist any off-axis forces during measurements.

The bushing sits in a collar which is a compression fit inside the force transducer cavity. With an exaggerated/improper measurement technique, this collar can work itself out of the cavity and must be adjusted back down. The collar (left) and collar clamp assembly (right) are shown in the pictures below.



The clamp uses the compression of the collar legs to provide a friction-aided fit into the force transducer cavity. If excessive off-axis motion is applied to the force sensor, especially during Wiggle or static Push measurements, it can work itself out of position. Environmental factors like temperature can make this happen faster.

To adjust, the clamp needs to be loosened slightly, the collar pushed back down, then the clamp retightened. Steps for this procedure are below:

1. Remove the force handle by unscrewing the 4 screws. The bit required is a T10 or Torx 10.



2. Carefully release the rubber pad around the top of the collar. The collar may be glued down with a non-permanent glue and should be peeled up carefully with a plastic prying/scraping tool.
3. Rotate the rubber pad to reveal one of the holes to adjust the collar. The force button assembly may need to be rotated slightly to allow access to the hole.



4. Try pushing the collar back down into place before attempting to loosen any screws. If the collar shifts back into place, then go to Step 6.

Proper collar alignment:



5. If the collar cannot be pushed back down without excessive force or it is not aligning properly, the collar clamp will need to be loosened slightly. **DO NOT** loosen each screw too much as the clamping piece could be lost. Collar screws are Phillips #1 size (PH1).

Loosen a screw 1 turn then move to the next one until all 4 have been loosened then try to move the collar into place. Repeat until the collar is in place.

6. Tighten each screw 1 turn then move to the next screw in the X pattern shown. Collar screws are Phillips #1 size (PH1). The rubber can be rotated to access each screw or lifted out of the way. Screws are tight enough when the tool slips on the head of the screw.

Cross pattern:



7. If a screw will not tighten properly then the clamp could be broken or the screw is not attached to the clamp anymore. Further instructions will be needed to check or return the unit.