

Gearbox Mounting Instructions

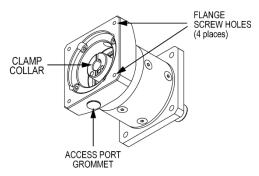
Rev.1.0 7/28/2025

Gearbox Shaft Key Removal (if required):

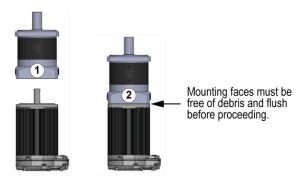
Note: All gearboxes are shipped with a shaft key installed for compatibility with specific unidirectional motion setups. For the majority of applications, especially those involving dynamic bi-directional motion, it is not recommended to use shaft keys, so you'll want to remove the key before installing the gearbox/motor assembly into your machine. For more information on why shaft keys are not recommended, and alternative solutions, see Teknic's motion article: Securing Mechanics to Motor Shafts.

- 1. Clamp the gearbox down so that it is securely fixed in place. Orient the gearbox shaft so the shaft key is facing up.
- Use a pair of diagonal cutting pliers or a parallel key extractor to remove the key. Here's a short video demonstrating how to remove the key using diagonal cutters: https://youtube.com/shorts/L N Bpb185g?feature=share

Gearbox/Motor Mounting Instructions:



- Prior to motor installation, remove the Access Port Grommet on the body of the gearbox and rotate the gearbox Clamp Collar so that the clamping screw aligns with the Access Port. This ensures you'll be able to access and tighten the screw once the motor is mounted.
- 2. If the gearbox includes a bore adapter, loosen the clamp collar screw and orient the bore adapter slit so that it is at a 90 degree angle with the clamp collar slit.
- 3. Orient the motor and gearbox vertically so the motor shaft faces directly up when being inserted into the gearbox input.
- 4. Slide the gearbox clamp collar onto the motor shaft and press the units together until the gearbox and motor flange faces are flush.



- 5. Install the four flange screws and lightly tighten each screw so that the motor and gearbox flanges are aligned. Stop tightening when you start to feel resistance. Note: the screws should not be fully tightened at this step, they should be just barely seated.
- 6. While pressing down on the top of the assembly with approximately 10-20 pounds of force, fully tighten the clamp collar screw through the access port on the side of the gearbox.
- 7. Slowly spin the gearbox output shaft one full revolution to ensure the assembly is centered. If the reduction ratio of the gearbox is such that it doesn't allow rotating the shaft by hand, you can power the motor and jog it slowly using the Motion Generator feature in the ClearPath application software.
- 8. Using a diagonal tightening pattern, fully tighten the four flange screws. Then, repeat this tightening pattern a second time to ensure all screws are fully seated.
- 9. Loosen the gearbox clamp collar screw until the motor shaft releases. You may feel some slight movement from the stress on the bearings being released this is normal.
- 10. Fully re-tighten the clamp coupling screw and replace the Access Port Grommet.