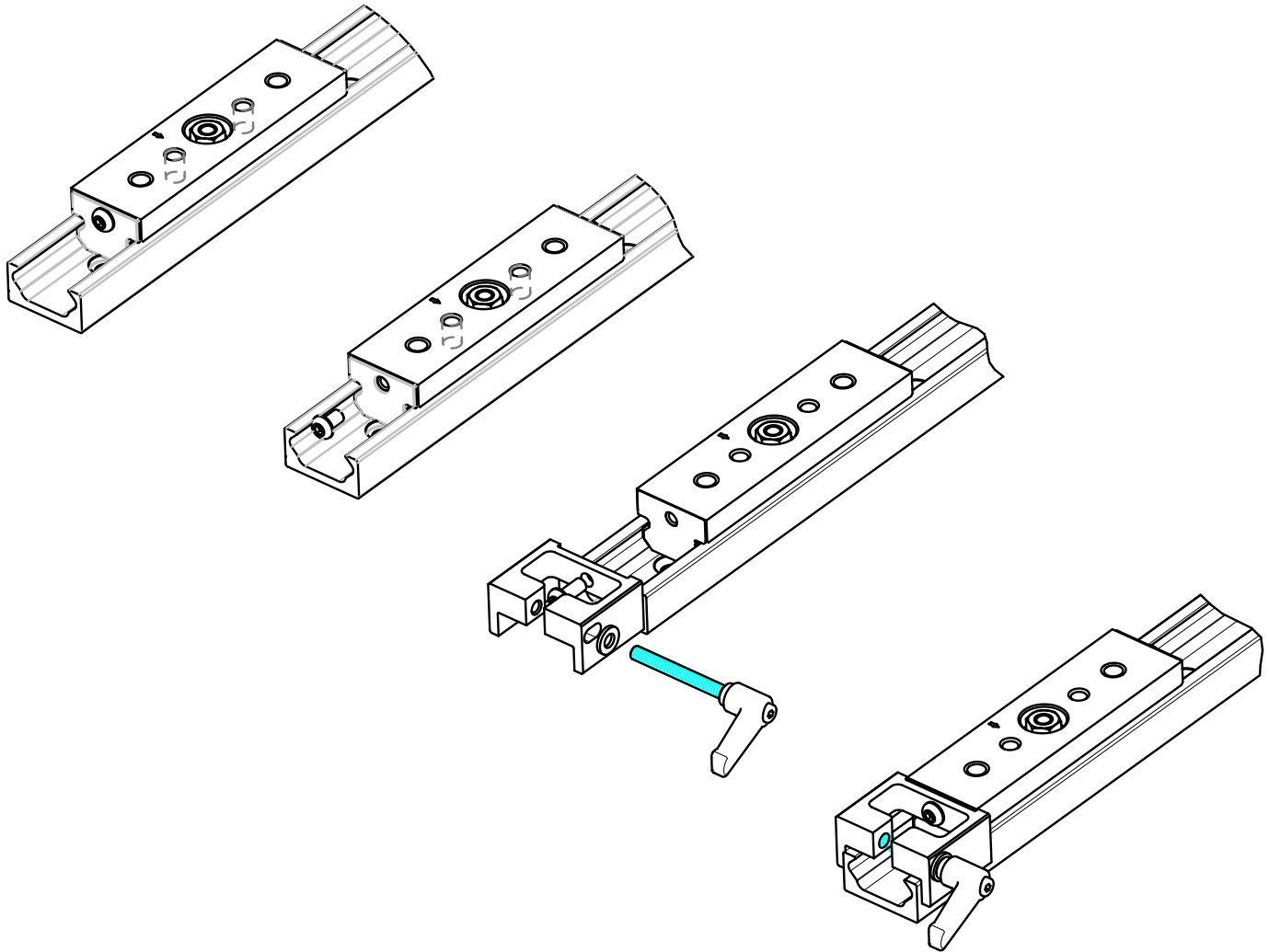


UtiliTrak Brake System Assembly Instructions

1. Assemble the UtiliTrak carriage on the UtiliTrak rail.
2. Remove the lubricator end cap mounting screw from the end of the carriage that the brake system is to be mounted on. Leave the lubricator end cap in the rail and positioned against the end of the carriage.
3. Place the brake block over the rail and in front of the carriage end it is intended to be mounted on. The brake arms should face away from the carriage.
4. Insert the brake system mounting screw through the central mounting hole in the brake block, with the screw head oriented away from the carriage.
5. Insert and hold the tip of an appropriate size hex key in the mounting screw's hex socket to keep the screw in the brake block. Hold the carriage with one hand and with the other, use the wrench to push the screw and brake block toward the carriage. Insert the screw through the mounting hole in the lubricator end cap and thread it into the carriage's mounting hole.
6. Tighten the mounting screw until the brake block no longer rotates freely but can still be hand-turned with respect to the carriage's axis of travel. Make sure the lubricator end cap and the outside corners of the carriage plate are captured by the alignment tabs on the carriage side of the brake block's base wall.
7. Manually rotate the brake block with respect to the carriage's axis of travel until the clearances between each brake arm and the corresponding side of the rail appear the same. Hold the brake block in this position with one hand and fully tighten the brake block mounting screw with the other hand.
8. Remove the hex key and slide the carriage back and forth along the rail to ensure the brake arms do not drag on the rail. If there is drag, loosen the mounting screw and repeat step 7.
9. Place the brake system washer on the stud of the threaded stud handle, insert the stud through the brake block's slotted hole, and then thread the stud into the threaded hole in the opposite brake arm.
10. Tighten the handle until the handle arm shoulder presses against the brake block and the handle can no longer rotate freely. Slide the carriage back and forth along the rail to ensure the brake arms do not drag on the rail. If there is drag, loosen the handle slightly and try again.
11. Pull handle arm outward in the stud's axial direction to disengage it from the stud and rotate it into a desired fixed position, if necessary. Let go of the handle and it should spring back into engagement. If the handle does not spring back all the way, rotated the handle in either direction slightly to fully engage the handle.



Brake Engagement Instructions

To engage the brake, rotate the handle clockwise until a significant turning resistance is felt. Check the braking force by trying to slide the carriage. If the braking force is insufficient, tighten the handle further. Once the brake has been sufficiently tightened, disengage and rotate the handle arm to a desired final position, if necessary.

Brake Disengagement Instructions

To disengage the brake, turn the handle clockwise until no significant turning resistance can be felt but the handle arm cannot rotate freely. Slide the carriage back and forth along the rail to check for brake drag. If there is drag, loosen the handle slightly and try again. Once the brake has been sufficiently loosened, disengage and rotate the handle arm to a desired final position, if necessary.

Additional Usage Notes

1. The UtiliTrak brake system is intended to be engaged or disengaged only when the carriage is stationary. It is not recommended for use as a dynamic brake.
2. Due to normal variations in dimensions in UtiliTrak components and the fact that the tightening torque on the threaded stud handle cannot be measured or controlled, specific axial holding force ratings cannot be provided for the brake system. The amount of axial holding force will depend on how hard the threaded stud handle is tightened and the actual clearances between the brake arms and the rail side walls.
3. Do not apply any torque to the screw head at the base of the handle arm on the threaded stud handle. The screw only functions as an axial stop for the handle arm when it is pulled out for position adjustment and cannot be used for turning the main threaded stud itself.
4. The UtiliTrak brake system relies on friction between the brake arms and the sides of the rail to create an axial holding force. Therefore, it is normal for abrasion to appear on the contacting surfaces on the brake arm and rail after the brake has been engaged. The abrasion will increase in size and severity with continued use, but it will not significantly affect the brake system's holding ability.
5. If the threaded stud handle is tightened too hard, the brake arms can permanently deform, resulting in reduced brake arm-rail side wall clearances when the brake is disengaged. Tightening the threaded stud handle too hard can also damage the threads on the stud and in the brake block mounting hole.
6. When a single brake system is used on a carriage, it is recommended that it be mounted on the end of the carriage such that the external carriage force it is intended to brake against causes the carriage to "pull" rather than "push" the brake block. The brake system provides more consistent holding forces and the contacting surfaces on the brake arm and rail side walls experience less wear when the brake is "pulled" by the carriage.
7. To obtain the best braking characteristics, it is recommended that the contacting surfaces of the brake block and the rail side walls be kept as free of debris and lubricant as possible.
8. Do not use the carriage's original lubricator end cap mounting screw to mount the brake block. The original lubricator end cap mounting screw does not provide sufficient thread engagement in the carriage mounting hole to properly mount the brake block.
9. Usage of the threaded stud handle without the washer will cause the brake block to wear out faster and reduce the possible clamping force between the brake arms and the rail side walls, thereby reducing the brake system's possible axial holding force.
10. If the lubricator end cap and/or carriage end surface are not captured between the brake block's alignment tabs and instead are pressed directly against the top of the tabs, the brake system and end cap will not function properly and some components may break.
11. Mounting the brake block in a position where the brake and rail contacting surfaces are not parallel or where there is significantly more clearance between the brake arm and rail side wall on one side than on the other will reduce the brake system's possible holding force.