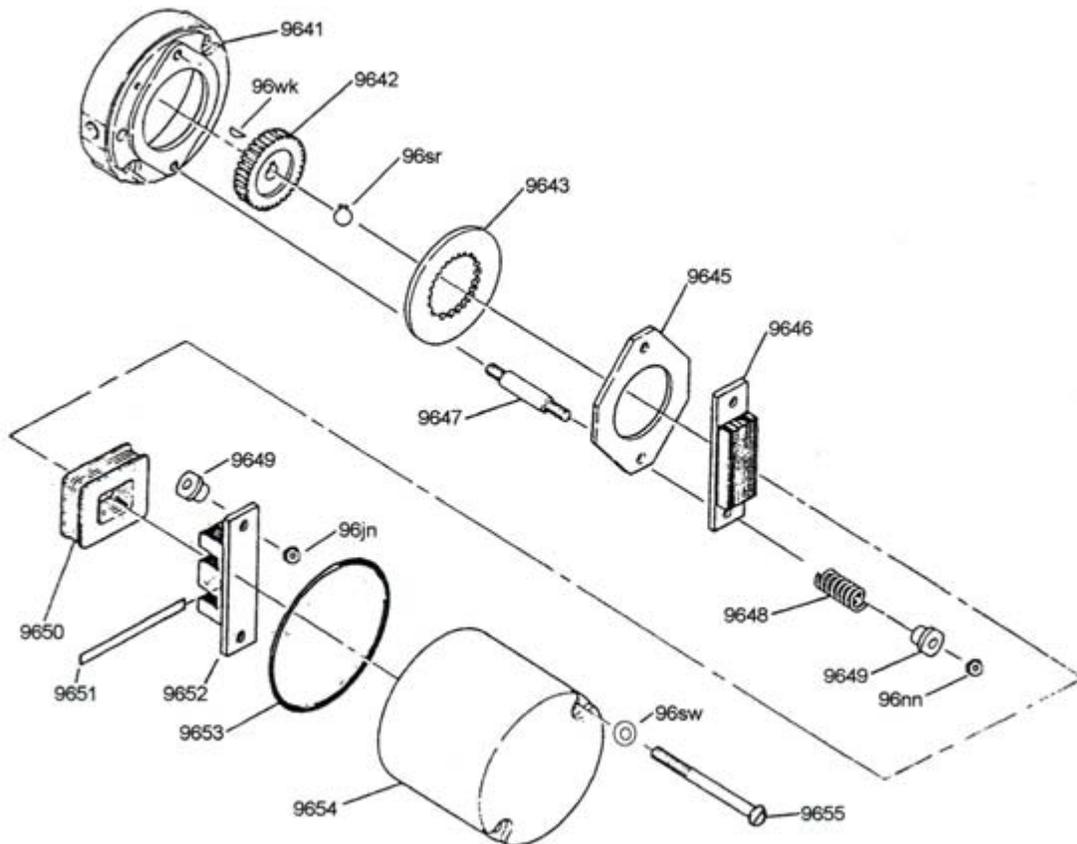


## TECHNICAL TIP – INSTALLATION AND MAINTENANCE OF THE R4A SINGLE DISC TRAVEL MOTOR BRAKE



1. Assemble woodruff key (96wk), brake hub (9642) and snap ring (96sr) to motor shaft.
2. Apply 'Loctite' thread lock (red 271 or blue 272) on the brake stud (9647) end that connects directly to the motor end bell or the brake adapter.
3. Install the brake studs to the motor end bell or the brake adapter and tighten. Remove excess Loctite.
4. Assemble the friction disc (9643) to the hub making sure the friction disc moves freely on the spline.
5. Assemble the intermediate disc (9645), armature plate ("I" frame) (9646), spring (9648), lock nut (9649), and jam nut (96jn) on the brake studs. Adjust the lock

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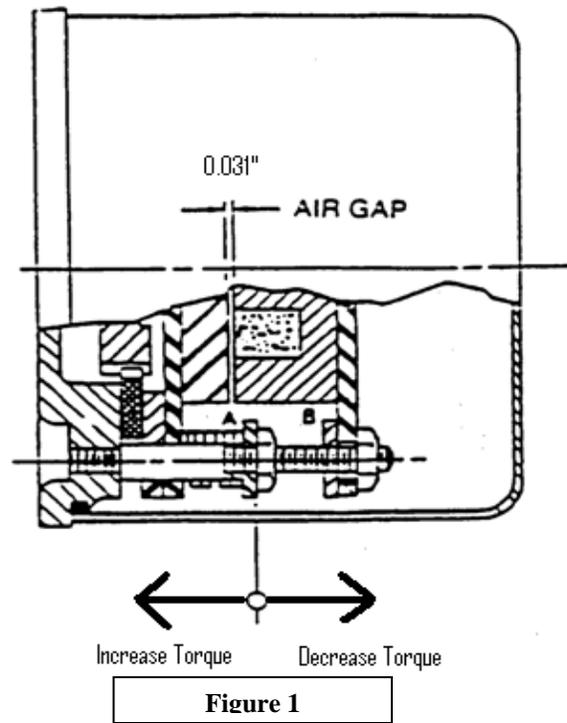
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nut to the desired spring torque for the application, keeping both springs at the same compression measurement.

6. Install the wedge (9651) into the slot in the bottom of the pole plate ("E" frame) (9652) and bend up to the sides of the pole plate.
7. Install the coil (9650) over the wedge in the pole plate and bend the wedge to the outside of the coil to lock the coil in place.
8. Install the lock nut (9649), pole plate, and nylock nut (96jn) on the brake stud and set the air gap at 0.031" (1/32") which is measured between the faces of the armature and pole plates (Figure 1).
9. Install the "O" ring (9653), brake cover (9654), sealing washers (96sw), and brake cover screws (9655).

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The brake torque can be adjusted for the application to achieve the desired stopping distance. To adjust the torque, loosen the jam nuts (A) and adjust the lock nuts in the direction of the preferred arrow above to increase the torque or decrease the torque (Figure 1). Make sure the springs are adjusted evenly to prevent problems. After adjusting, measure both springs to make sure they are even, and then tighten the jam nut against the lock nut.

**⚠ WARNING**

**INCREASED TORQUE CAN CONTRIBUTE TO LOAD SWINGS.**

To prevent brake damage, the air gap cannot exceed at 0.062" (1/16"). To adjust the air gap, loosen the nylock nut and adjust the lock nut (B) until the distance between the armature plate face and pole plate face is 0.031" (1/32") (Figure 1).

A new friction disc thickness is 1/4" and should be replaced when it reaches a thickness of 1/8".

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