

Spring-Set Brake Module EM-50 ERS, EM-180 ERS

P-273-11
819-0533

Installation Instructions



An Altra Industrial Motion Company

The Warner Electric Spring-Set Brake Module is designed to function as a holding brake for NEMA C-face motors. The brake is self-engaging when the power is turned off or unintentionally interrupted. It is to be mounted between a C-face motor and a C-face gear reducer. Do not apply overhung or side loads to the output shaft of the Spring-Set Brake Module.

⚠ WARNING Failure to follow these instructions may result in product damage, equipment damage, and serious or fatal injury to personnel.

Mounting the Brake to a Motor

1. Inspect the motor shaft and keyway for burrs or damage. Remove all burrs and repair damage so the brake module can freely slide onto the shaft.
2. Insert the provided input key into the motor shaft keyway. If necessary, prick punch the motor shaft keyway to prevent the key from sliding back while installing the brake module. (Figure 1)
3. Remove the two plastic plugs with a screwdriver to gain access to the hub setscrews. Save these plugs to reinstall after assembly is complete. The input hub setscrews and the access holes in the housing must be aligned to provide hex wrench access for tightening to the motor shaft. If they are not already aligned, apply the rated voltage to the brake coil to release the brake, and then rotate the shaft until the setscrews and holes are aligned. (Figure 2)
4. Align the motor shaft and key with the brake module keyway and slide the module onto the motor shaft until the housing is in full contact with the motor face. Do not use excessive force. If the module does not freely slide on, remove it and repair any burrs or damage on the shaft.

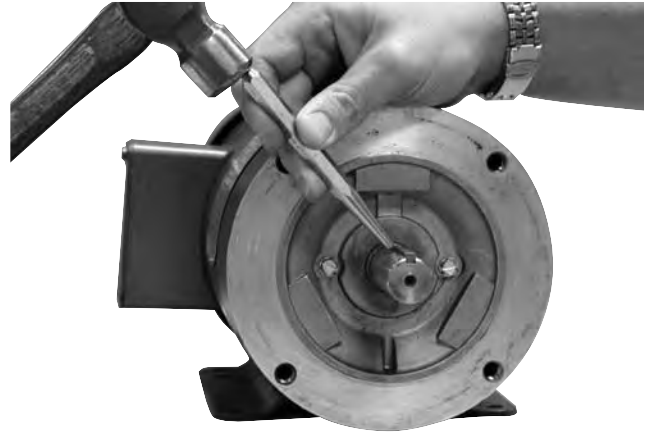


Figure 1



Figure 2

5. Rotate the brake housing to align the four (4) mounting holes with the treaded holes in the motor face. Secure the brake module to the motor C-face with the four (4) mounting tie-bolts alternately to ensure even alignment of the module. Tighten them to 18-22 foot pounds of torque. (Figure 3)
6. Tighten both input hub setscrews using a torque wrench and long 5/32" Allen socket. Tighten the two (2) setscrews to 80-85 inch pounds of torque. Then replace the plugs removed earlier. (Figure 4)

Mounting to a Gear Reducer

1. Warner Electric ERS modules are furnished with a hardened key premounted on the output shaft.
2. Align the module output shaft and key with the reducer bore and keyway. Slide the assembly together until the module and reducer faces are in full contact. **Do not use excessive force.**
3. Secure the module to the gear reducer flange using four (4) 3/8-16, UNC-2A bolts (typically furnished with the reducer.) Tighten to 18-22 foot pounds of torque.

Electrical Connections

The brake module housing is threaded for standard conduit connectors. The brake lead wires are fed through this hole and are to be connected to a DC power source with the same voltage as that listed on the brake module label. An optional conduit box kit can be purchased to facilitate this connection (Warner part number 5370-101-042).

If a user provided DC power source is not available, any of Warner Electric's CBC-100, CBC-150, or CBC-801 controls may be used (selection based on user requirements). Refer to the installation sheet included with the control for connection information.



Figure 3



Figure 4

Warranty

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