

# Gen 2 Spring-Set Brake Module EM-50 ERS, EM-180 ERS

Installation Instructions

P-273-11-WE  
819-0533



 **Warner**<sup>®</sup>  
Electric

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.

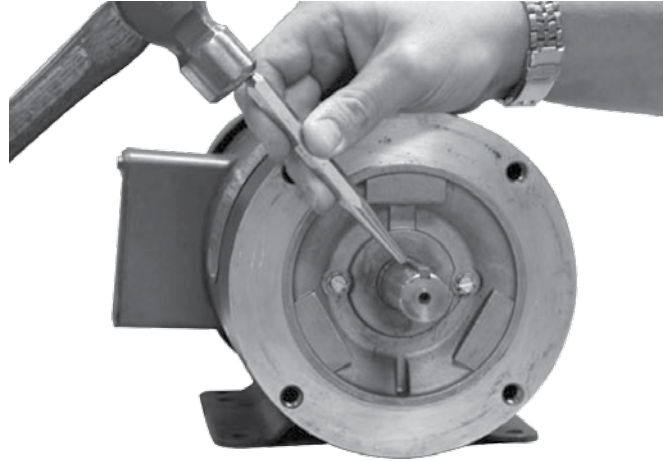


Figure 1

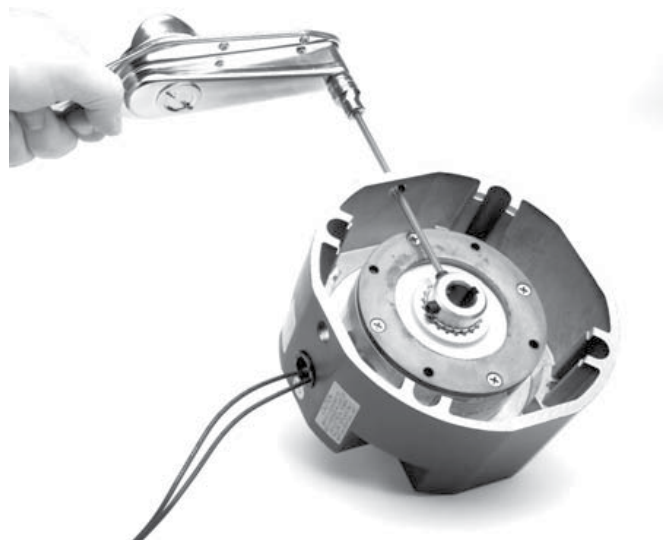


Figure 2

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

Warner Electric LLC warrants that it will repair or replace (whichever it deems advisable) any product manufactured and sold by it which proves to be defective in material or workmanship within a period of one (1) year from the date of original purchase for consumer, commercial or industrial use.

This warranty extends only to the original purchaser and is not transferable or assignable without Warner Electric LLC's prior consent.

Warranty service can be obtained in the U.S.A. by returning any defective product, transportation charges prepaid, to the appropriate Warner Electric LLC factory. Additional warranty information may be obtained by writing the Customer Satisfaction Department, Warner Electric LLC, 449 Gardner Street, South Beloit, Illinois 61080, or by calling 815-389-3771.

A purchase receipt or other proof of original purchase will be required before warranty service is rendered. If found defective under the terms of this warranty, repair or replacement will be made, without charge, together with a refund for transportation costs. If found not to be defective, you will be notified and, with your consent, the item will be repaired or replaced and returned to you at your expense.

This warranty covers normal use and does not cover damage or defect which results from alteration, accident, neglect, or improper installation, operation, or maintenance.

Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Warner Electric LLC's obligation under this warranty is limited to the repair or replacement of the defective product and in no event shall Warner Electric LLC be liable for consequential, indirect, or incidental damages of any kind incurred by reason of the manufacture, sale or use of any defective product. Warner Electric LLC neither assumes nor authorizes any other person to give any other warranty or to assume any other obligation or liability on its behalf.

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Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

### Changes in Dimensions and Specifications

All dimensions and specifications shown in Warner Electric catalogs are subject to change without notice. Weights do not include weight of boxing for shipment. Certified prints will be furnished without charge on request to Warner Electric.



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