

MAINTENANCE BULLETIN

2400 Nelson Miller Parkway Louisville, KY 40223
Phone: 1-(800) 793-7233 or 1-(800) 626-2710 ~ Email: racommunications.mobility@siemens.com

SUBJECT: S-60 Crossing Gate Motor Brake (Hold Clear) Fasteners **NO:** MB 1-20
VER: A
PRODUCT: S-60 Motor Part # 074070-X **DATE:** 3-23-2020

I. BACKGROUND:

Siemens Mobility, Inc. has been made aware of a few instances where one or more of the three screws that secure the brake armature leaf springs to the brake armature housing have become dislodged. If all three of the screws become dislodged, the brake may not release.

Siemens Mobility, Inc. has performed a deep dive of its manufacturing procedures and engaged the supplier of the motor/brake assembly to do likewise. To enhance the existing workmanship instructions, Siemens added clarification to the product's specifications and requirements and has ensured that the motor/brake supplier has implemented the recommended enhancements with the assembly of this product. As a proactive measure, Siemens Mobility, Inc. is issuing this maintenance bulletin so in-service gates can be inspected for this condition during the next routine maintenance cycle.

II. EQUIPMENT AFFECTED:

Gate motor/brake assemblies part numbers:

- NYK:074070-X5 w/o defroster
- NYK:074070-X6 w/ defroster

Manufacturing dates of 05-01-2018 to 03-01-2019. These parts are sold as part of the following assemblies:

- 074007-series S-60 Entrance Gate Mechanisms
- 074008-series S-60 Exit Gate Mechanisms
- 074600-series S-60 Entrance or Exit Gate Assemblies

III. RECOMMENDED MAINTENANCE & INSPECTION:



WARNING

THE RAILROAD PROCEDURES GOVERNING HOW TO TAKE A CROSSING OUT OF SERVICE AND RESTORED TO SERVICE SHALL BE FOLLOWED ALONG WITH ANY APPLICABLE NOTICE AND RECORD REQUIREMENTS. THE INSTRUCTIONS IN THIS BULLETIN MAY BE FOLLOWED ONLY IF ALLOWED BY THE RAILROAD AND/OR AUTHORIZING AGENCY.

Siemens Mobility, Inc. recommends performing the following steps prior to installing a new gate mech and for any currently installed motor/brake assembly in the above affected date range.

- Inspect for the presence of the three screws securing the brake armature leaf springs to the brake armature housing as shown in Figure 1. If the screws are present and visually look properly fastened, no further action is required.

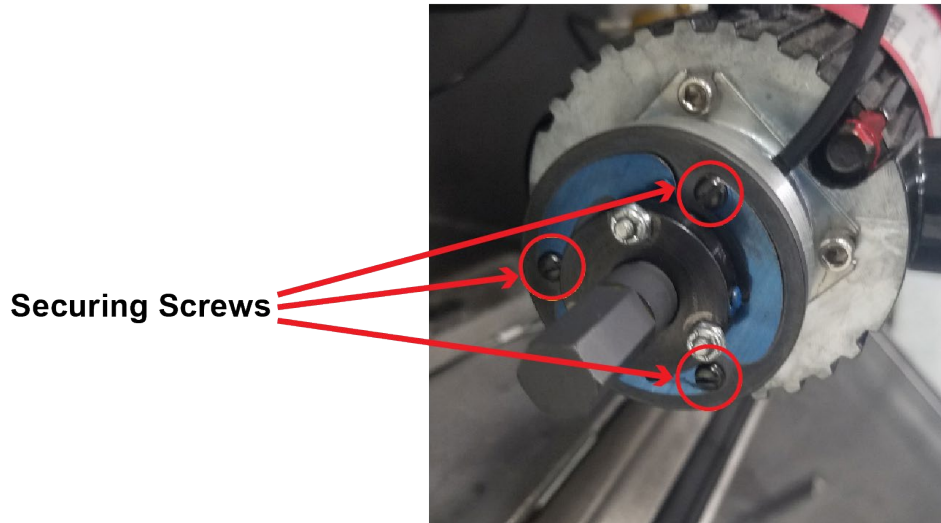


Figure 1 Screw Presence

- If any of the screws are loose or missing, do not attempt to replace or tighten the screws. Proceed to replace the motor/brake assembly following the instructions below in Section IV.

NOTE

NOTE

The screws are not user serviceable items and can be easily damaged or broken if improperly handled. During manufacturing the screws have thread compound applied to keep them secure and twisting the screw head could result in reducing the effectiveness of the compound.

IV. MOTOR/BRAKE ASSEMBLY REPLACEMENT

CAUTION

CAUTION

WHEN THE GATE MOTOR/BRAKE ASSEMBLY IS REMOVED FROM THE GATE MECH, THE LOCKING LEVER CANNOT BE USED. TAKE CARE TO ENSURE THE GATE DOES NOT MOVE SUDDENLY DUE TO GATE ARM BEING STRUCK BY MOTORING PUBLIC OR REMOVE THE GATE ARM PRIOR TO REMOVAL OF THE GATE MOTOR/BRAKE AND ALLOW THE MECH TO REST IN A NEUTRAL POSITION. FOLLOW ALL INDIVIDUAL RAILROAD SAFETY PROCEDURES AND INSTRUCTIONS.

1. Open the gate control gold nut located on the Gate Circuit Board to release braking on motor (Figure 2). Protect gate mech from sudden movement.

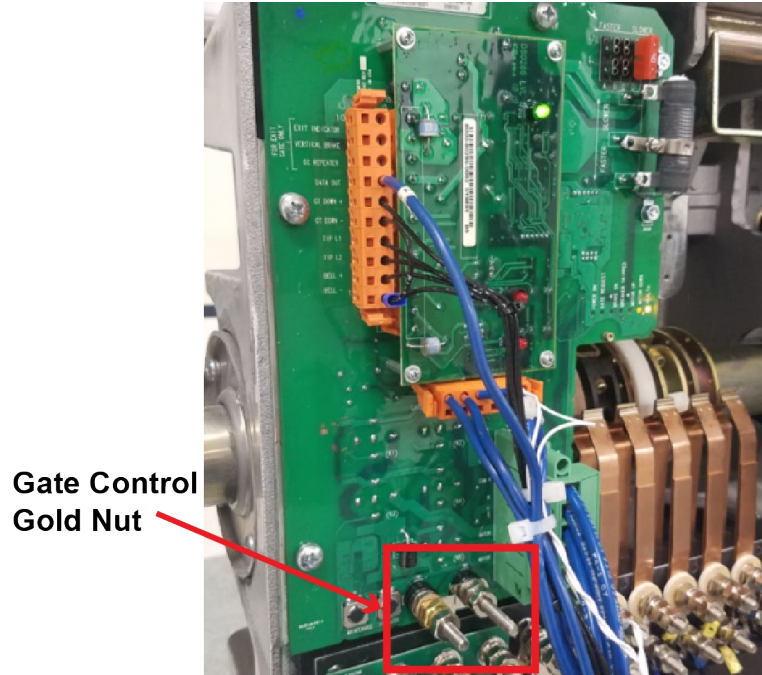


Figure 2 Gate Control Nut

2. Remove the bottom two wires from the Phoenix® connector to remove motor power (Figure 3).



CAUTION
THE MOTOR POWER WIRES ARE POLARITY SENSITIVE, RE-INSTALL BLACK ON BOTTOM WHITE ON TOP.

3. Remove the right two wires from the Wago® connector to remove brake power. (Figure 3)

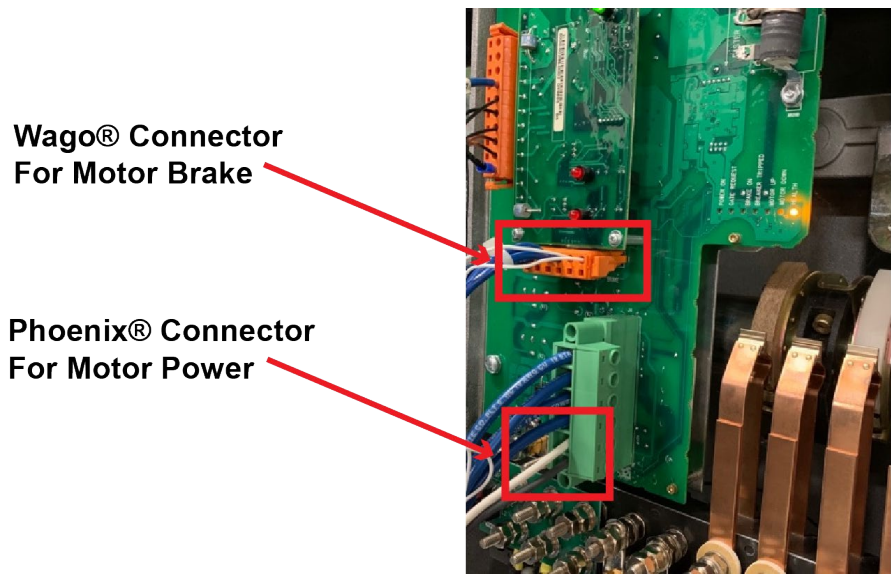


Figure 3 Connectors

4. Remove the gate heater power wires, if equipped. (Figure 4)

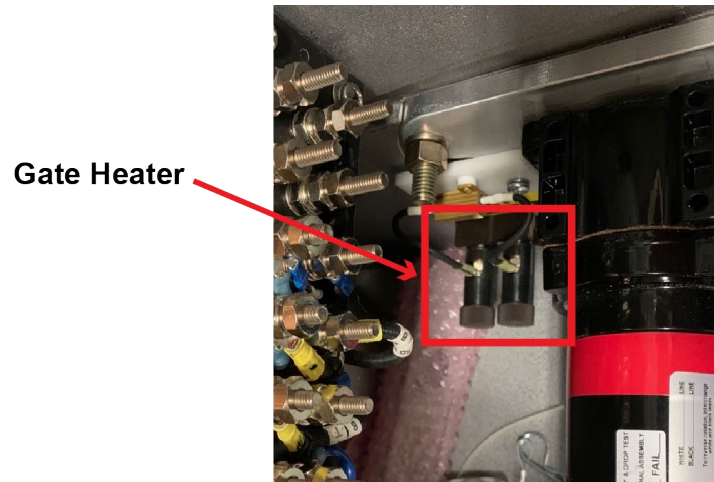


Figure 4 Gate Heater Power Wires

5. Remove the three mounting bolts and slide the motor/brake assembly out of the gate mech (Figure 5)

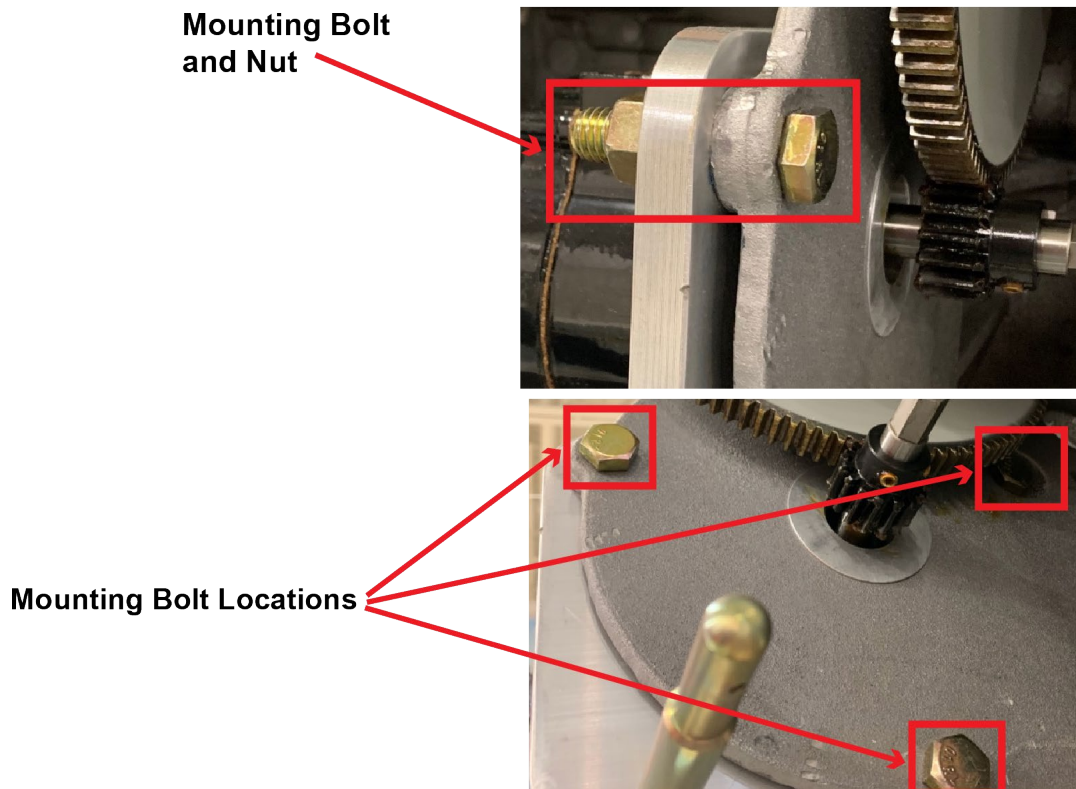


Figure 5 Mounting Bolts

6. Install new motor/brake assembly by reversing the steps above.

NOTE

NOTE

The motor gear includes a keyway that must be used for proper operation.

Call Siemens Customer Service at (800) 793-7233 and reference Maintenance Bulletin MB 1-20 and Siemens part number NYK:074070-X5 for the Motor / Brake Assembly.