

PURPOSE:

To provide a procedure to test the functionality of an ER2 Mechanical Load Brake.

SCOPE:

This procedure is limited to ER2 Electrical Hoists with a factory installed Mechanical Load Brake, 5 Ton capacities and below.

BACKGROUND:

In some cases it is necessary or desirable to test the functionality of the Mechanical Load Brake in the ER2 Electrical Hoist product line. This EDOC establishes such a procedure.

PROCEDURE:

The following steps configure the hoist with the Electromagnetic Brake for testing the functionality of the Mechanical Load Brake. (Refer to diagram.)

Preparations:

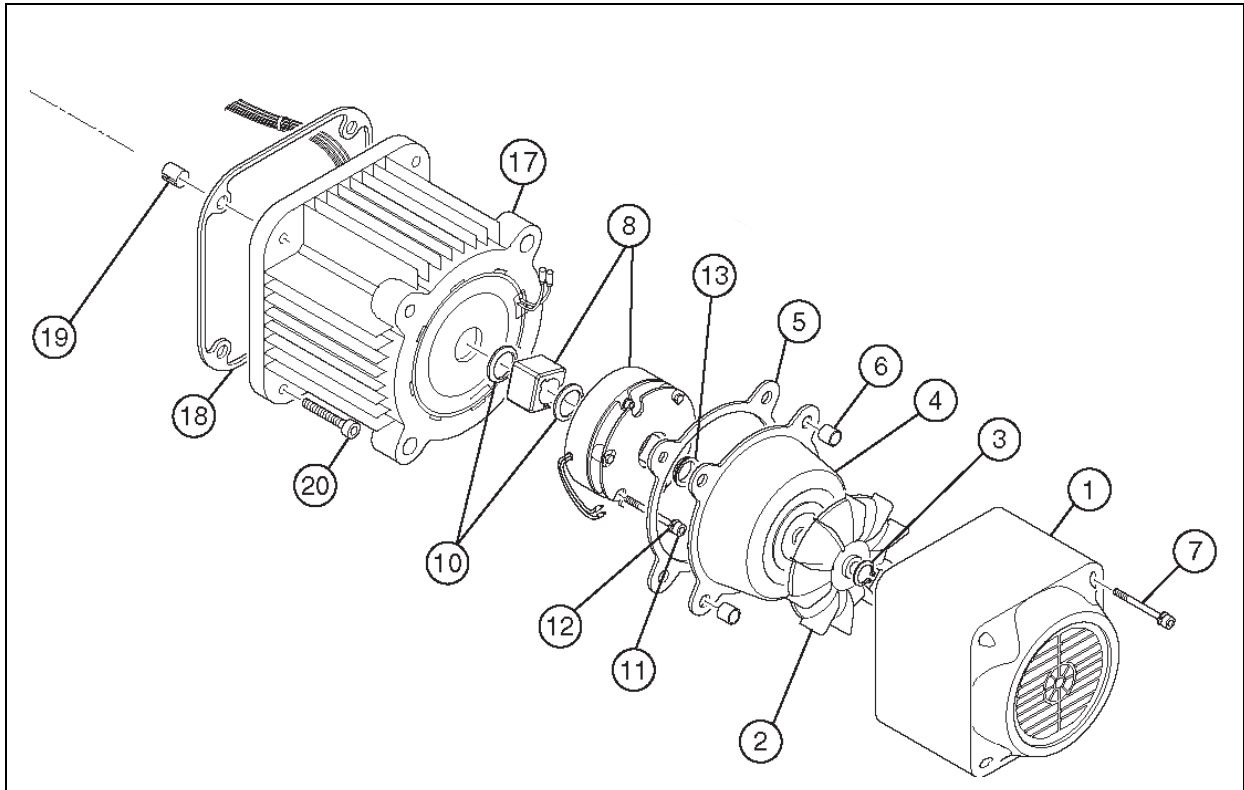
1. Remove the four Socket Bolts (7) and Fan Cover (1).
2. Remove the Snap Ring (3).
3. Remove the Fan (2); use wheel/gear puller if necessary.
4. Remove Brake Cover (4).
5. Remove Packing B (5).
6. Remove the three "recessed" Socket Bolts (11) and Spring Lock Washers (12).
DO NOT remove the three socket bolts that hold the Electromagnetic Brake Assembly together.
7. Remove Electromagnetic Brake Assembly (8) from Motor Stator (17).
8. DO NOT remove Square or Spline Hub (8) or Snap Rings (10). Be careful not to lose the Hub Springs.
9. DO NOT disconnect Electromagnetic Brake wires (bullet connectors).
10. Secure Electromagnetic Brake Assembly onto top of hoist Motor Stator (17).

GENERAL USE

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Rev. 00

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Test:

1. Apply power to the hoist.
2. Operate the hoist UP and DOWN with no load on the hook to verify normal operation.
3. Apply a load of approximately 25% to 50% of the hoist rated capacity on the hoist hook.
4. Criteria for the Mechanical Load Brake function – upon release of pendant button (UP or DOWN) the hoist should stop with minimal drift and hold the load.
5. If Mechanical Load Brake does not function within acceptable criteria, investigate and repair.

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Restore Hoist:

1. Re-install the Electromagnetic Brake Assembly (8) onto Motor Stator (17). Ensure that no Hub Springs were lost.
2. Re-install the three Socket Bolts (11) and Spring Lock Washers (12).
3. Re-install Packing B (5).
4. Re-install Brake Cover (4). Ensure that V Ring (13) is not damaged and lightly lubricated.
5. Re-install the Fan (2).
6. Re-install the Snap Ring (3). Replace as needed.
7. Re-install the Fan Cover (1) and four Socket Bolts (7).
8. Prepare to operate the hoist in accordance with the Owner's Manual – Electric Chain Hoist ER2 and NER2 Series.
9. Perform Load Test in accordance with ASME B30.16.
10. Upon successful completion of the load test, the hoist can be re-commissioned.

END