

Hollister-Whitney Elevator Corporation

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BRAKE MONITOR UPDATE

REMOVING SETSCREWS - ADDING JAM NUTS - REPLACING CAMS

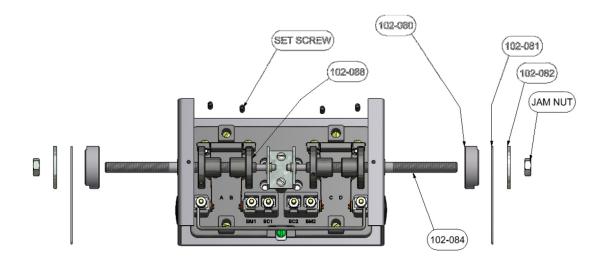
WARNING: IN ORDER TO DETECT A BRAKE FAILURE, THIS BRAKE MONITOR SWITCH MUST BE PROPERLY ADJUSTED & FULLY OPERATIONAL PRIOR TO BEING PLACED INTO SERVICE.

IMPORTANT: READ ENTIRE INSTRUCTIONS BEFORE ATTEMPTING ADJUSTMENT!!!

For Safety when setting the Brake, be sure the car is out of service.

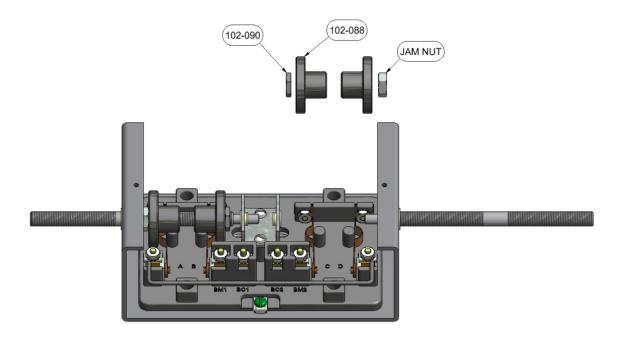
▲WARNING

SHOCK WARNING: A CTIVE ELECTRIC CIRCUITS!!



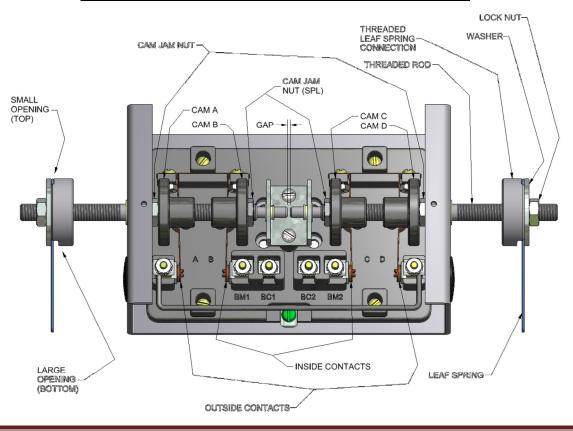
- Remove Brake Monitor Cover
- Remove Leaf Spring Jam Nut, Washer (p/n 102-082), Leaf Spring (p/n 102-081), and Threaded Leaf Spring Connection (p/n 102-080).
- Rotate Monitor Contact Rods (p/n 102-084), to access Set Screw holes in Cams (p/n 102-088) as necessary.
- Remove all Set Screws (may be 2 per cam) from Cams and discard.
- Turn Rods until Cams can be removed. If Cams are being replaced for any reason, discard Old Cams.

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- Thread Standard Jam Nut onto Rod, then both Cams (note Cam orientation), then Special Jam Nut (p/n 102-090) and slip rod into bushing at center of Monitor.
- Re-install Threaded Leaf Spring Connection, Leaf Spring, Washer, and Leaf Spring Jam Nut.
- When both Rods and Monitor have been reassembled, refer to Brake Monitor Switch Adjustments.

BRAKE MONITOR SWITCH ADJUSTMENTS



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When properly adjusted, contacts A & D open when Brake is energized, and all contacts A thru D are made when the Brake is de-energized. **Note:** Check Brake Monitor settings prior to making any adjustments. Prior to adjusting Cams, loosen Cam Jam Nuts

1.) GAP BETWEEN RODS:

When Brake is energized, and without opening contacts A & D, adjust gap between rods to approximately 1/16". Adjust both sides equally. Loosen leaf spring locknuts and turn rods in or out to gain 1/16" gap. Re-tighten Locknuts.

2.) CAM ADJUSTMENTS:

With Brake energized, adjust Outside Cams A & D to open Outside Contacts 3/32". Next deenergize Brake and adjust Inside Cams B & C until they just touch Inside Contacts, then back off Inside Cams by 1-1/2 turns (3/32"). Tighten Jam Nuts against Cams to prevent further movement of Cams. When properly adjusted, contacts A & D open when Brake is energized, with a gap between the rods, and all contacts A thru D are made when the Brake is de-energized.

3.) BRAKE FAILURE: (DO NOT RE-ADJUST THE BRAKE MONITOR SWITCH UNTIL THE BRAKE PROBLEM HAS BEEN CORRECTED AND THE BRAKE RE-ADJUSTED.

- a.) If both contacts A and D fail to open with Brake energized, failure indicates improper pick up which can cause lining wear. Re-check Brake voltages, air gaps, alignment and freedom of arm and plunger movement, etc. To test this failure, place a jumper across terminals BM1 and BM2. The controls should remove the elevator from service in some fashion (See Suggested Operation on Page #9).
- b.) If contact A or D stays opened when Brake drops, failure indicates improper drop out caused by a bind (find bind and correct) or by excessive worm shaft movement (check thrust bearings etc.). To test, hold open contacts A or D, when elevator stops it should not be able to start (See Suggested Operation on Page #9).
- c.) If contacts B or C open when Brake drops, this indicates either worm shaft movement (check thrust bearings, etc.) or brake lining wear. If cause is normal lining wear, re-adjust Brake including spring tension, air gap, and centering screws, then re-adjust Brake Monitor Switch. To test open contacts B or C. Elevator should not be able to start (See Suggested Operation on Page #9).

NOTE: BRAKES MUST BE INSPECTED DURING NORMAL ELEVATOR MAINTENANCE. IF LININGS INDICATE WEAR, THEN SPRINGS, GAPS AND MONITOR SWITCH MUST BE READJUSTED ACCORDINGLY.

FOR EXAMPLE: IF LININGS WEAR 1/32", TURNING THE SPRING HOUSING EYEBOLT OUT ONE-HALF (1/2) TURN AND TIGHTENING THE SPRING HOUSING IN ONE-THIRD (1/3) TURN WILL COMPENSATE. PLUNGERS AND THE BRAKE MONITOR WILL NEED TO BE SLIGHTLY RE-ADJUSTED.

ANY ADJUSTMENT MADE TO THE BRAKE MIGHT AFFECT BRAKE MONITOR ADJUSTMENT.

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