

715-3571

MCB

715-3572

Motor Control Board

ATTENTION!

The Motor Control Board referenced in this manual will operate in several different models.

You **MUST** configure the jumpers correctly **BEFORE** installing the MCB into any treadmill system.

CAUTION:

Improper jumper configuration may cause damage to the MCB or other components.

NOTICE:

Damage to the MCB and/or any other components **WILL NOT BE COVERED UNDER WARRANTY.**

Please read this documentation carefully. If you are unsure about what system you have or if you have any questions at all, contact Product Support immediately **BEFORE** connecting the MCB.

Calibration

After installing an MCB into any treadmill, the unit will need to be calibrated. Calibration should be done anytime parts are swapped or replaced. It is also recommended that all treadmills should be re-calibrated at least every 6 months.

Calibration procedures are as follows:

Pro Tread – Pro • Pro S • Pro IR • Elite

Enter the Maintenance Mode by pressing and holding '0', '2' and 'START' keys. While holding all 3 keys, release the '2' key only.

The unit will display "Maintenance Settings" then display "Units: English" or "Units: Metric".

Press the '8' key to enter the Motor Test Mode.

The display will read " 240 3 .0 "

Press the 'FOREST' key to start the auto-calibration. After 2-3 minutes the running belt and the numbers on the display will stop.

Press the 'STOP' key twice to exit calibration.

TR4500 • 4200 Sport • TR4000

Enter the Maintenance Mode by pressing and holding '0', '2' and 'START' keys. While holding all 3 keys, release the '2' key only.

The unit will display "Maintenance Settings" then display "Units: English" or "Units: Metric".

Press the '8' key to enter the Motor Test Mode.

The display will read " 240 3 .0 "

Press the 'HEART' key to start the auto-calibration. After 2-3 minutes the running belt and the numbers on the display will stop.

Press the 'STOP' key twice to exit calibration.

TR1800s • TR1800HRP

With the power switch turned Off, press and hold the 'Scan/Lock' key while the power switch is turned On.

As soon as the unit is On and beeps, release the 'Scan/Lock' key.

The display will read " 240 (or210) 3 .0 "

Press the 'COOL DOWN' key to start the auto-calibration.

After 2-3 minutes the running belt and the numbers on the display will stop.

Press the 'STOP' key twice to exit calibration.

TR3900 • TR3500

With the power switch turned Off, press and hold the 'Display/Scroll' key while the power switch is turned On. As soon as the unit is On and beeps, release the 'Display/Scroll' key.

The display will read " t E S t " and will scroll through a few sets of numbers.

When the display reads " t E S t " again, press the 'START' key to start the auto-calibration.

After 2-3 minutes the running belt will begin to slow and the elevation system will incline up a few degrees, then decline back down to 0%.

Press the 'STOP' key twice to exit calibration.

Troubleshooting

Symptom: Treadmill does not calibrate (Runs to around 9 mph and holds)

Symptom: After pressing 'START' the unit gives a display code

Symptom: Auto-transformer smoked with J8 in place (See Figure 2)

Action: Verify jumper settings

Action: Troubleshoot code
<http://support.startrac.com>

Action: Replace part.



READ THIS PAGE BEFORE YOU CONTINUE

The MCB 715-3571 will now be used to replace the 800-3016, while the 715-3572 will be used to replace the 715-3132 (made by Pulse/Sabina) and the previous replacement 715-3463 (made by DCI).

The 715-3571 and 715-3572 will look similar, and may have most of the same components, but are still different than each other. Please make sure you are using the correct part number for the correct voltage of treadmill. There is a large orange sticker to identify voltages of either 110V or 220V.

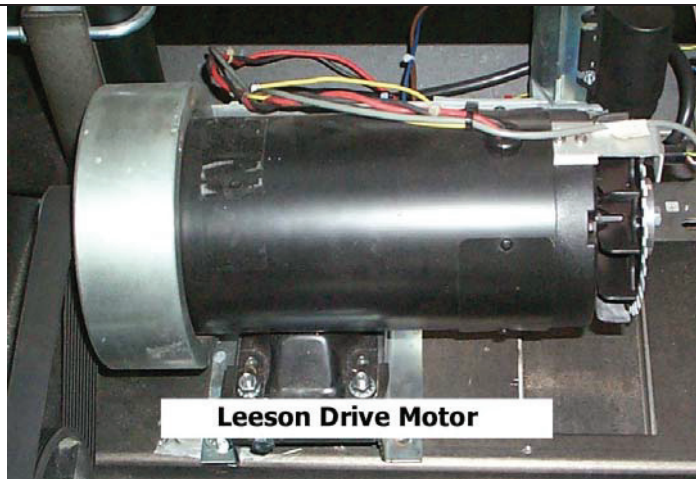
We can use either one of the MCB's for 2 different drive motor configurations. Units manufactured in and up to April 2004 will have either a black/grey Magnetek* or blue PacSci motor.

Note: PacSci and Magnetek drive motors require a Filter Network to be installed in line between the power outputs of the MCB and the drive motor itself, where the Leeson motors do not require a Filter Network.



Above is a picture of a Magnetek motor

Units manufactured in and before April 2004 should have this type motor, unless it has the older version of blue motor made by Pacific Scientific (PacSci).



Above is a picture of a Leeson motor

Units manufactured in and after April 2004 should have this type motor, made by Leeson. The Leeson motor is a 3.0 h.p. motor.

We cannot express enough of how important it is that the enclosed directions are followed exactly as documented. When swapping the new style MCB between units, the proper jumper configurations must be in place.

*Note about Magnetek: Magnetek motors are manufactured by a company named A.O. Smith. Literature from Star Trac will begin coming out referring to the company name of A.O. Smith in regards to motors.

110 Volt Configuration with a Filter Network

Black or Grey Magnetec Motor or a Blue Pac Sci (Pacific Scientific) Motor

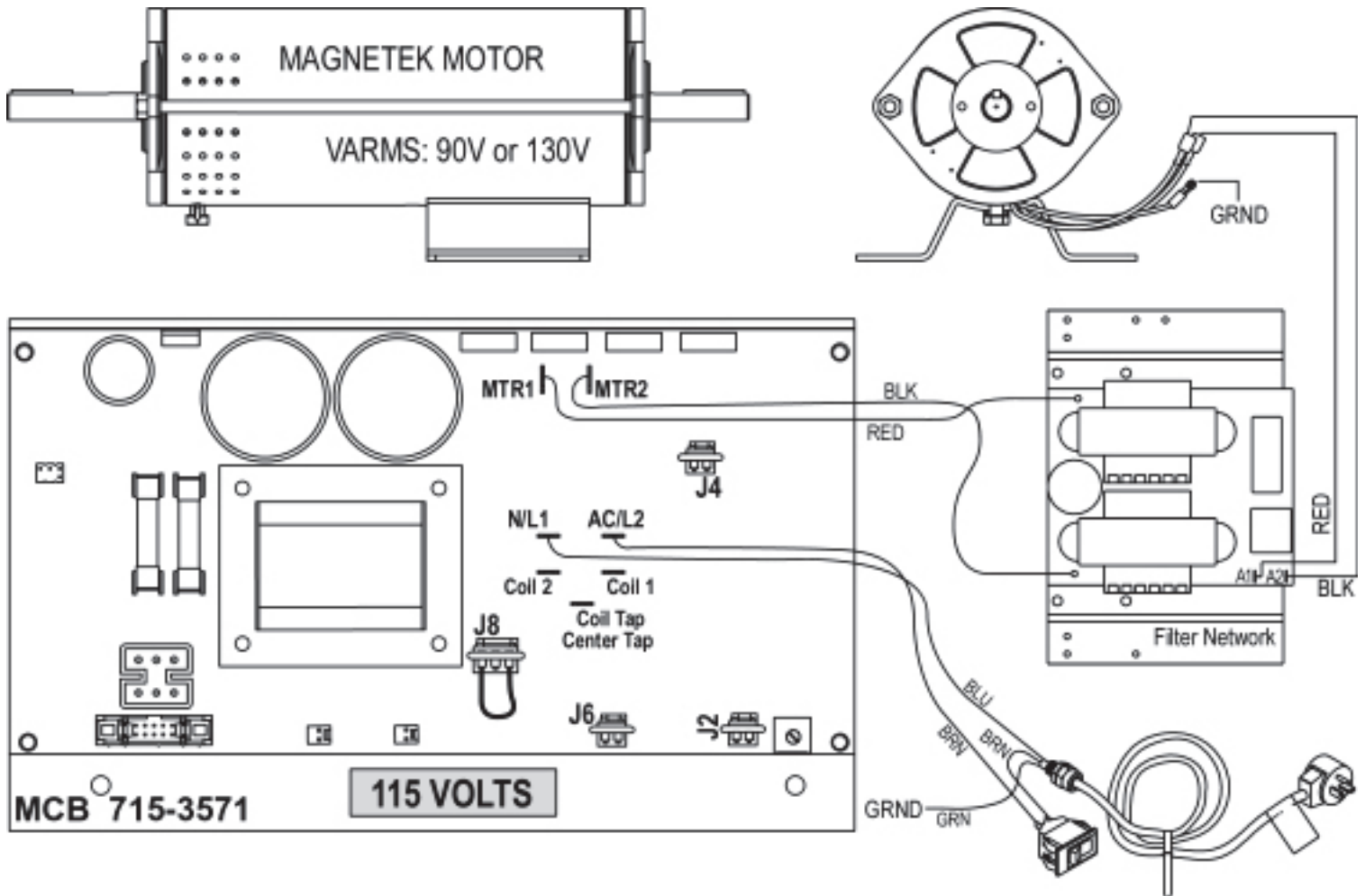


Figure 1: 715-3571 MCB WIRING DIAGRAM WITH 110 VOLT MAGNETEK MOTOR 260-0904

Note: Units that still have the Blue Pac Sci motors will use this configuration.

Key Configuration Points

- **Remove** the jumpers from **J2**, **J4** and **J6**.
- **Leave** the orange jumper on **J8**.
- Even though there are terminals for an autotransformer (Coil 1, Coil 2, Coil Center Tap), they will not be used on this configuration.

A new MCB 715-3571 will come with jumpers pre-installed on J2, J4, J6 and J8.

220 Volt Configuration with a Filter Network

Black or Grey Magnetec Motor or a Blue Pac Sci (Pacific Scientific) Motor

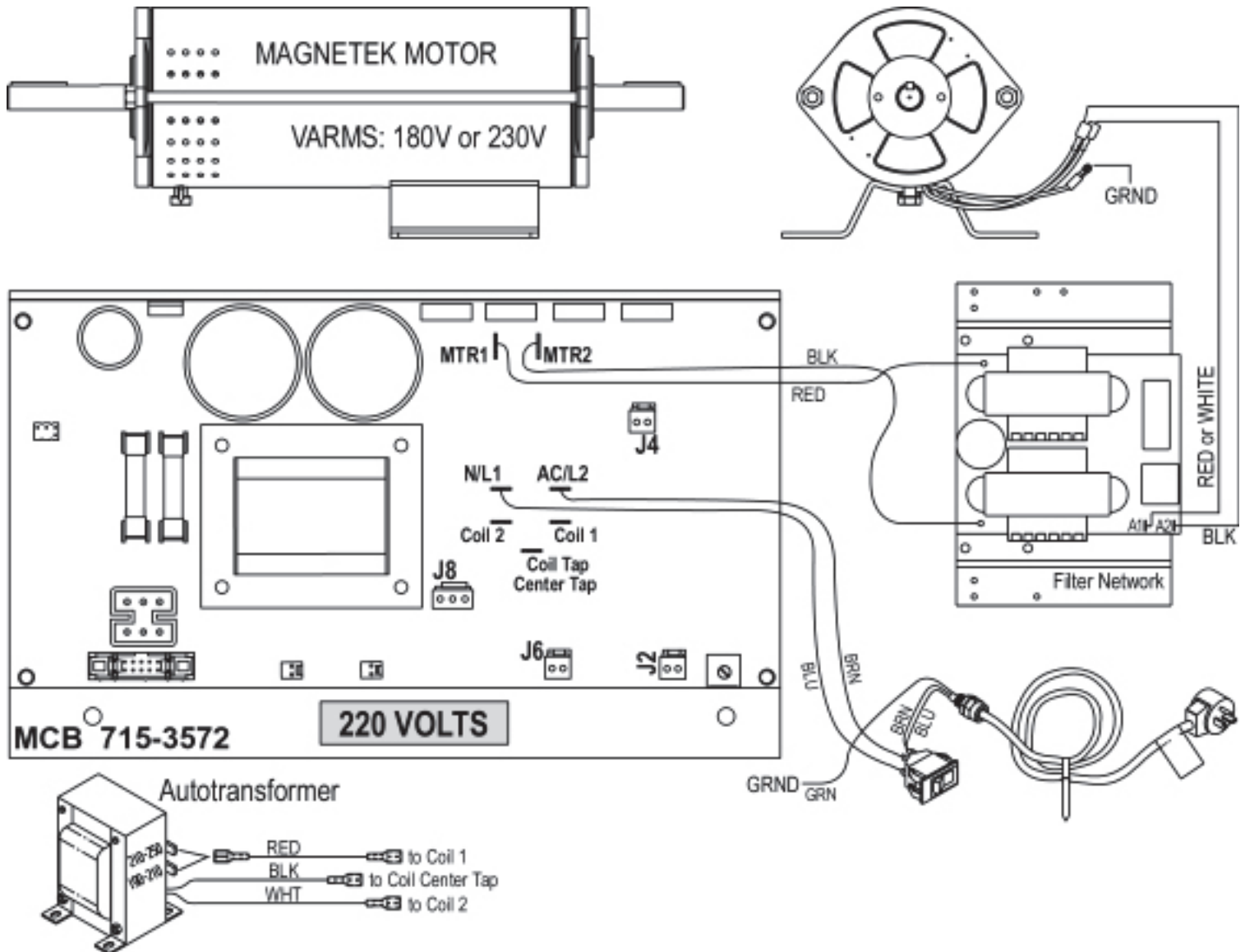


Figure 2: 715-3572 MCB WIRING DIAGRAM WITH 220 VOLT MAGNETEK MOTOR 260-0905

Note: Units that still have the Blue Pac Sci motors will use this configuration.

Key Configuration Points

- **Remove** the jumpers from **J2**, **J4** and **J6**.
- **Remove** the orange jumper from **J8**.
- Install the autotransformer wires
 - **RED** wire onto **COIL 1**
 - **WHT** wire onto **COIL 2**
 - **BLK** wire onto **COIL CENTER TAP**.

A new MCB 715-3572 will come with jumpers pre-installed on J2, J4, J6 and J8.

110 Volt Configuration without Filter Network

Black Leeson Motor Only

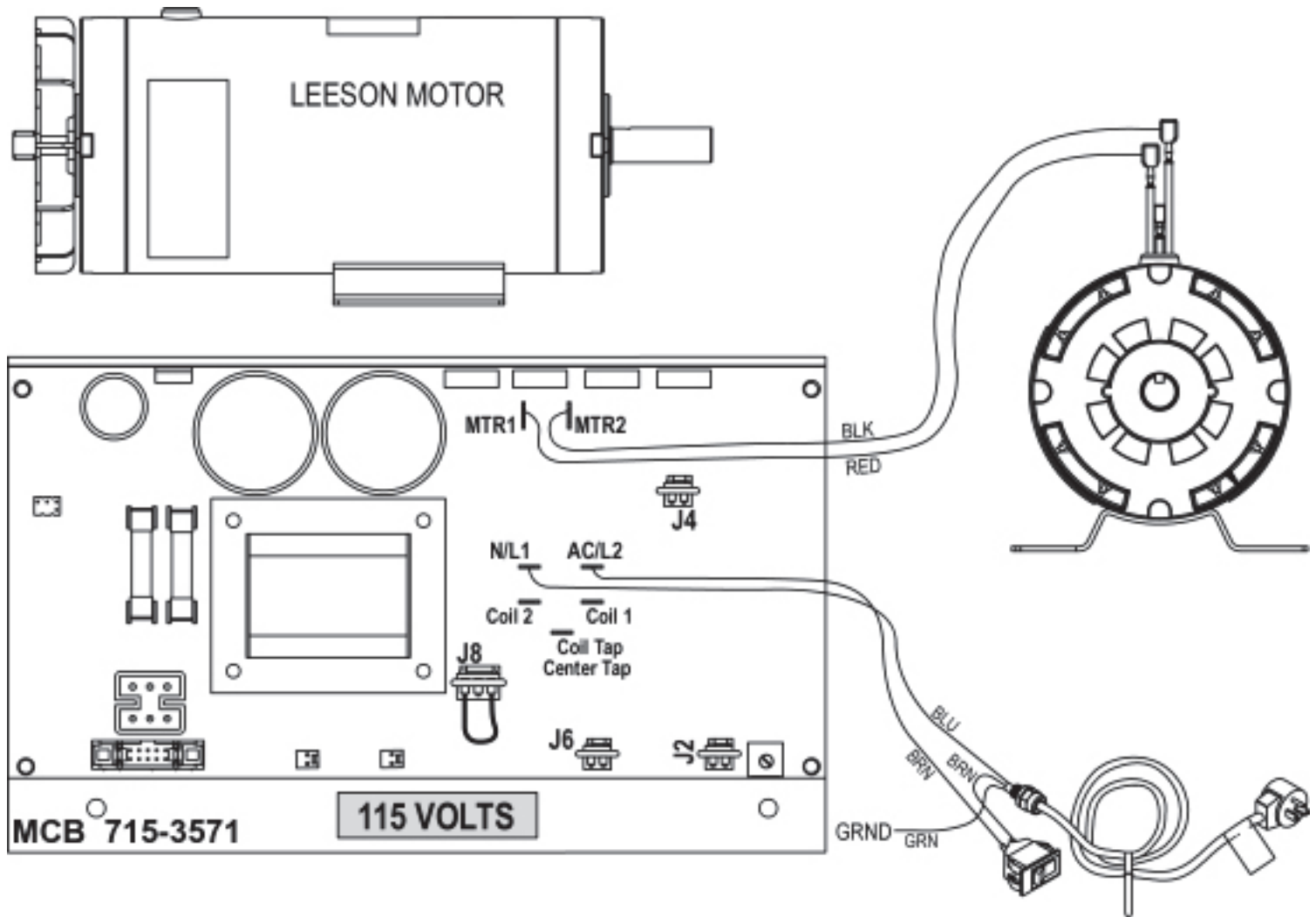


Figure 3: 715-3571 MCB WIRING DIAGRAM WITH 110 VOLT LEESON MOTOR 260-0926

Key Configuration Points

- **Leave** the jumpers on **J2**, **J4** and **J6**.
- **Leave** the orange jumper on **J8**.
- Even though there are terminals for an autotransformer (Coil 1, Coil 2, Coil Center Tap), they will not be used on this configuration.

A new MCB 715-3571 will come with jumpers pre-installed on J2, J4, J6 and J8.

220 Volt Configuration without Filter Network

Black Leeson Motor Only

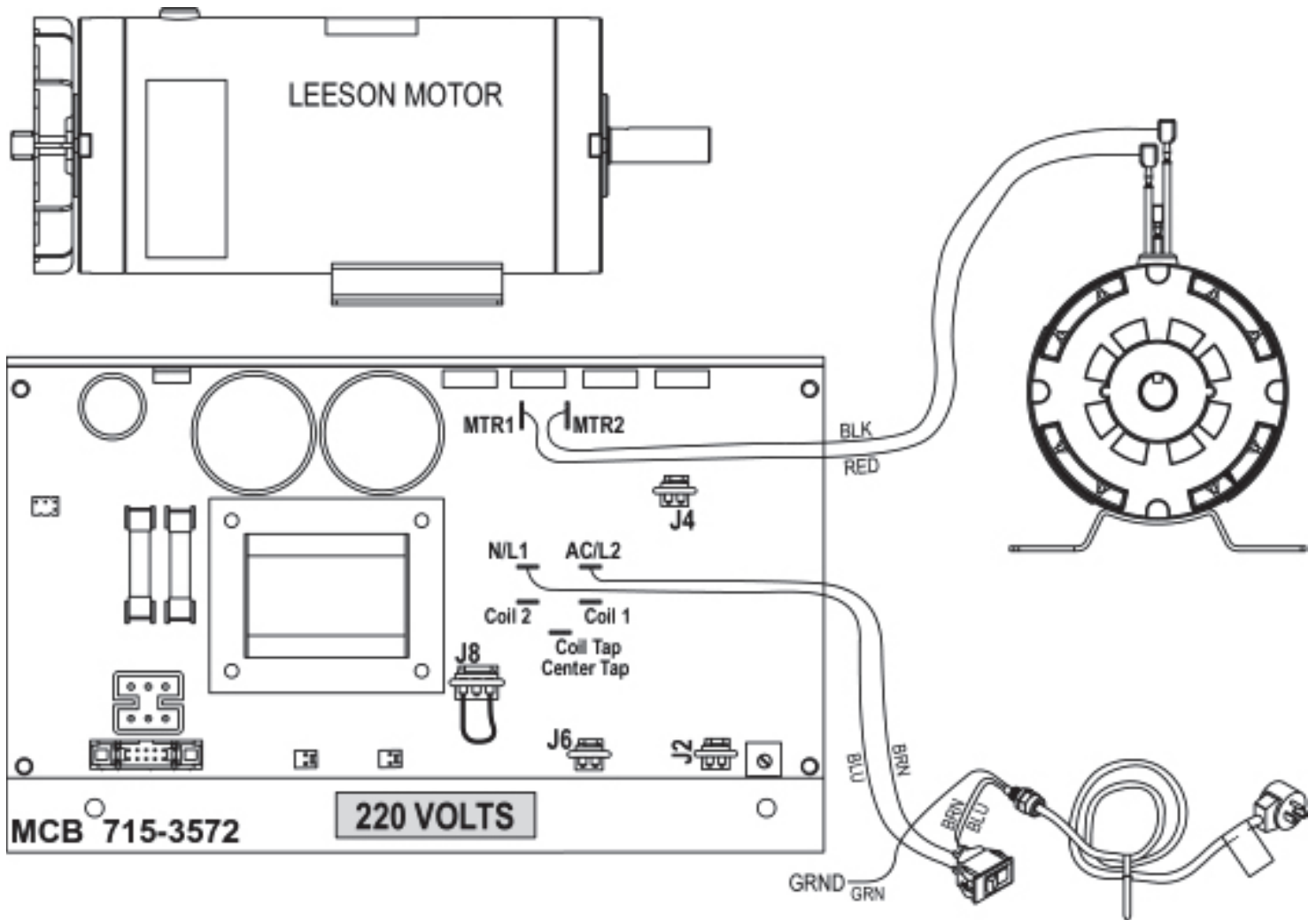


Figure 4: 715-3572 MCB WIRING DIAGRAM WITH 220 VOLT LEESON MOTOR 260-0927

Key Configuration Points

- **Leave** the jumpers on **J2**, **J4** and **J6**.
- **Leave** the orange jumper on **J8**.
- Even though there are terminals for an autotransformer (Coil 1, Coil 2, Coil Center Tap), they will not be used on this configuration.

A new MCB 715-3572 will come with jumpers pre-installed on J2, J4, J6 and J8.

New MCB Installation Instructions – 635-4074 Rev: A



Star Trac Product Support

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