

8-G Resistance Issues

Applies to: 8-G (9-5250 + 9-5270)



Resistance issues on the StairMaster 8G StepMill can include no step movement, steps moving too fast. Other symptoms may be related to resistance not changing at higher levels, lower levels, or with lighter users on the machine. Some resistance-related issues can cause the display console to go directly into pause or make it slow to respond to changes in resistance level. Please see below:

For no step movement, please see page 2.

For resistance not changing or not reaching max level, please see page 4.

For no resistance, please see page 7.

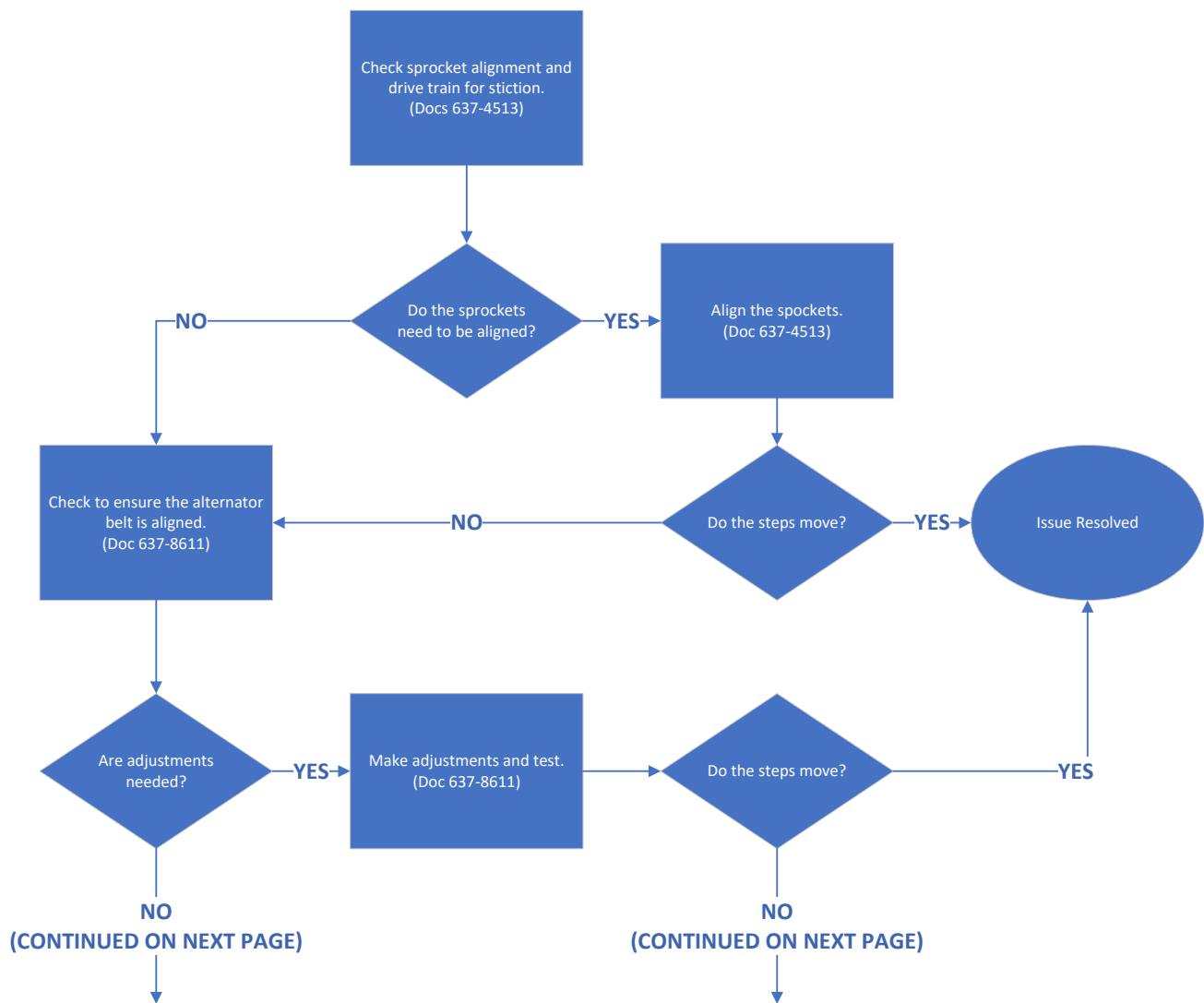


Technical Procedure

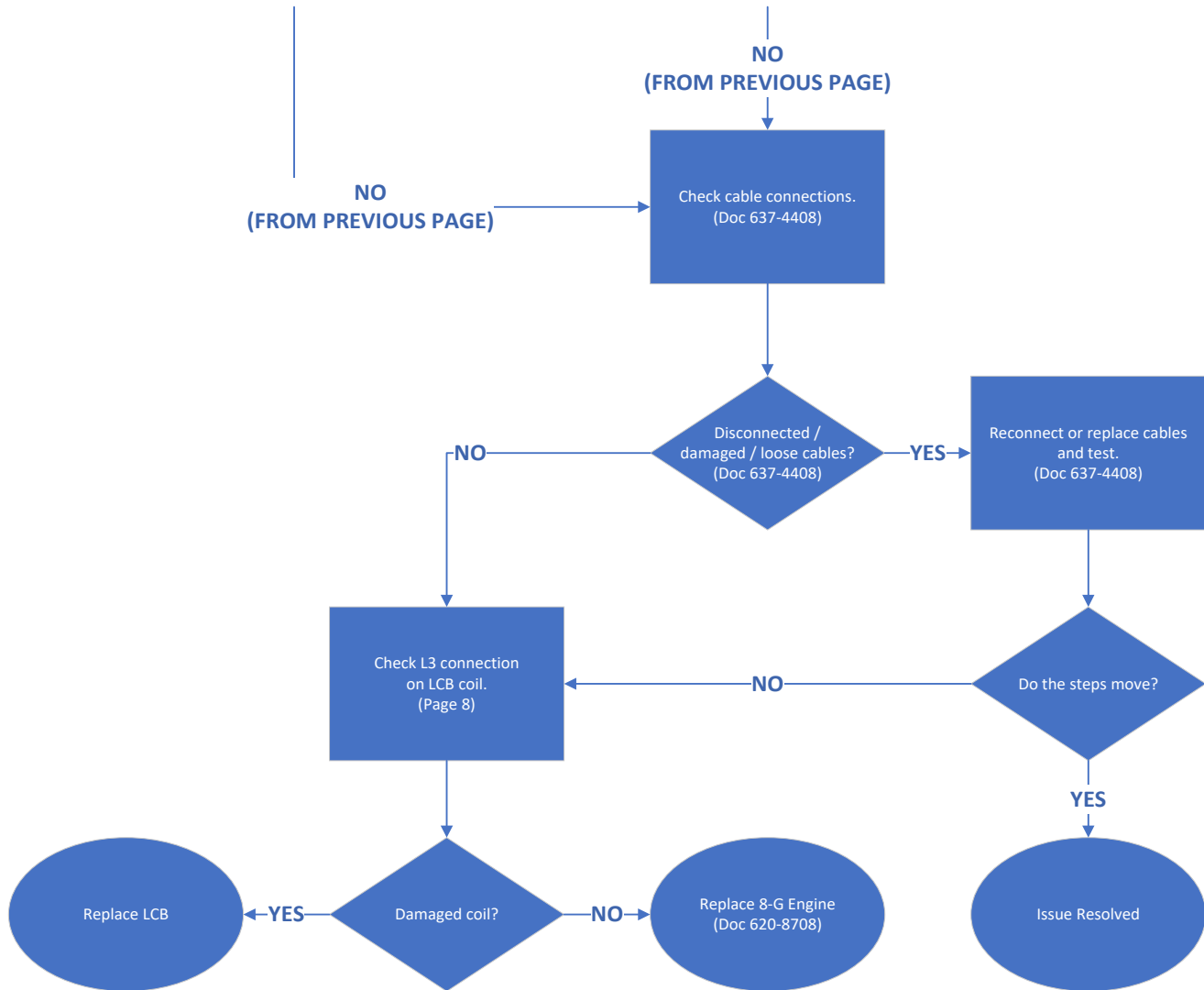
No Step Movement

Symptoms:

- After initiating Quick Start, the steps do not move.
- After initiating Quick Start, the steps move very slowly then the console goes into pause mode.
- After initiating Quick Start, the brake unlocks, there is a small pause, then the brake locks again.



Technical Procedure

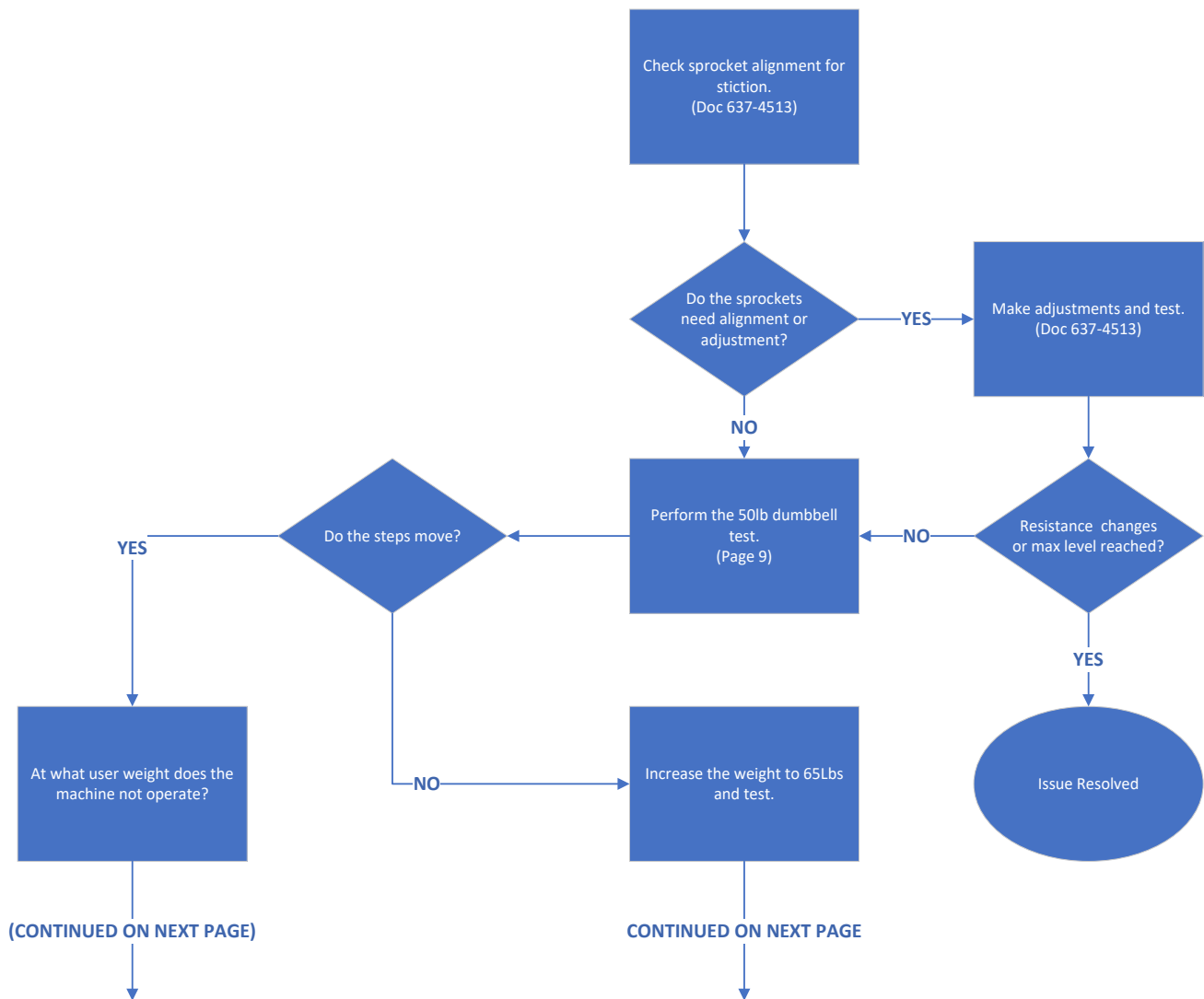


Technical Procedure

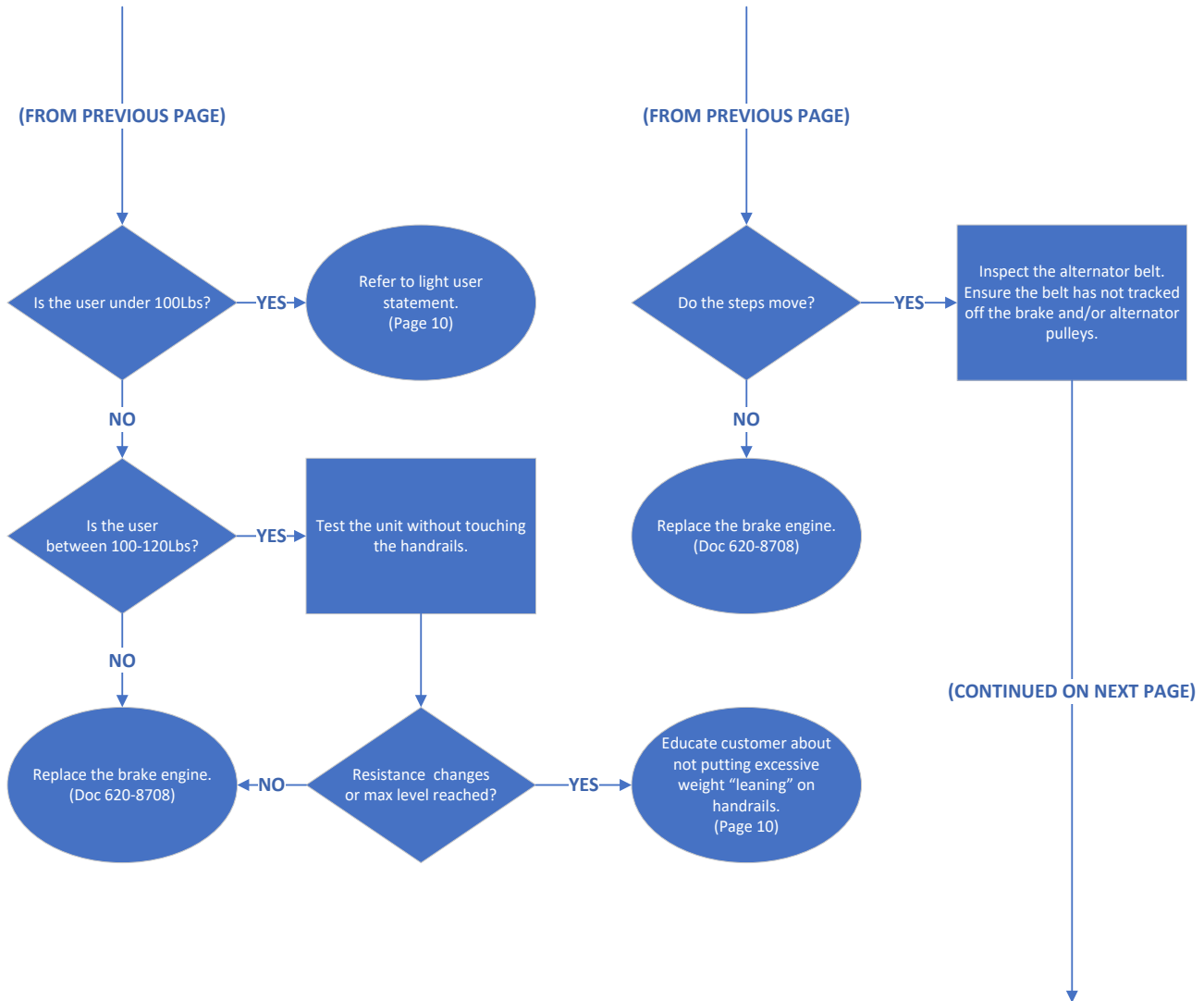
Resistance Not Changing / Won't Reach Max Level

Symptoms:

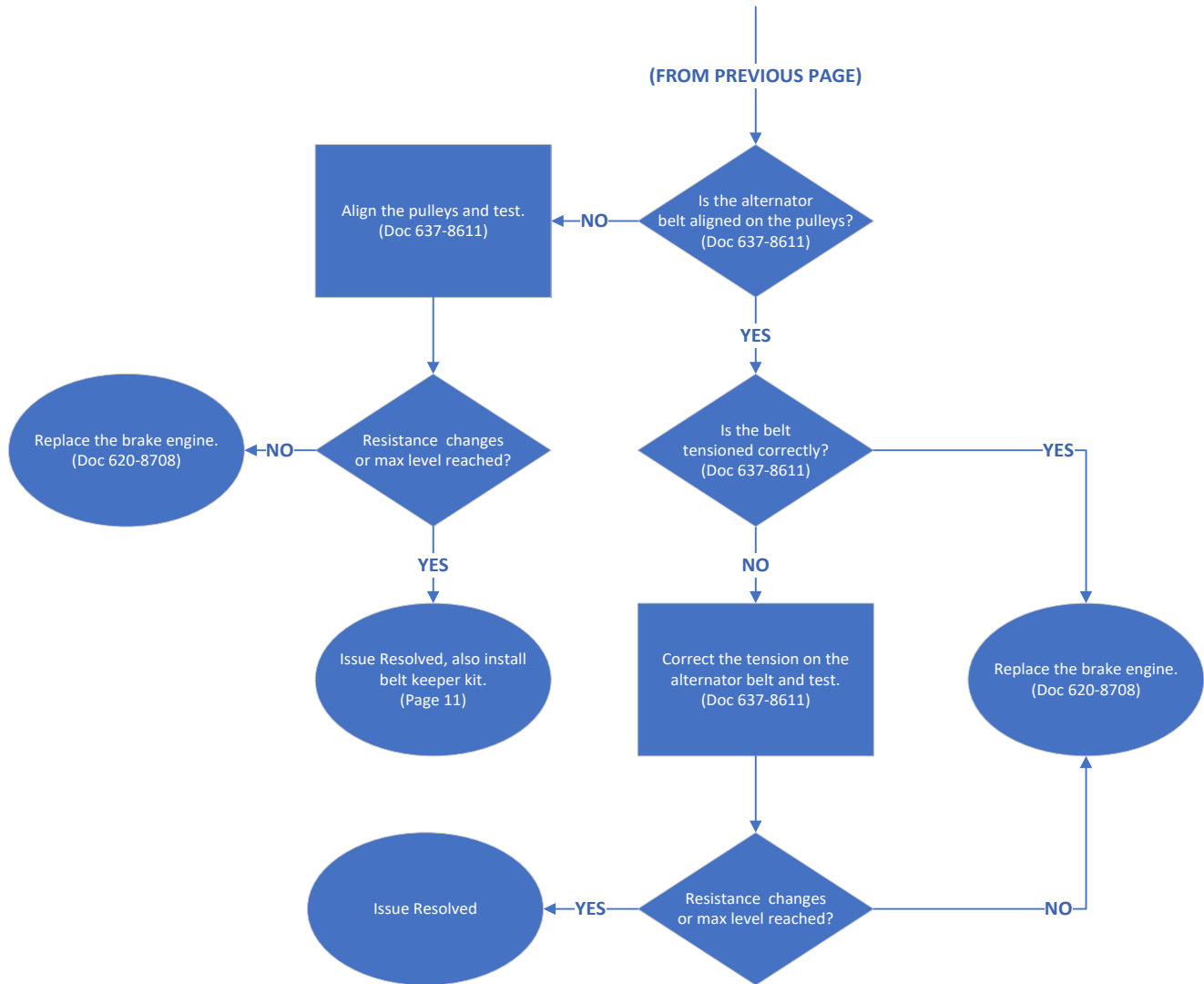
- After initiating Quick Start, the step rate does not increase.
- After initiating Quick Start, the step rate is slow to respond when the level is increased.
- After initiating Quick Start, the user cannot get the console to go past level 10 or 15 and the step rate does not increase.
- The machine operates normally for users 150 Lbs or above but not for users under 150 Lbs.
- The machine will not reach the max level (20).



Technical Procedure



Technical Procedure



Technical Procedure

No Resistance

Symptoms:

- Before selecting a workout the steps have no resistance.
- After selecting a workout and the brake unlocks there is no resistance.
- During a workout, resistance is suddenly lost.

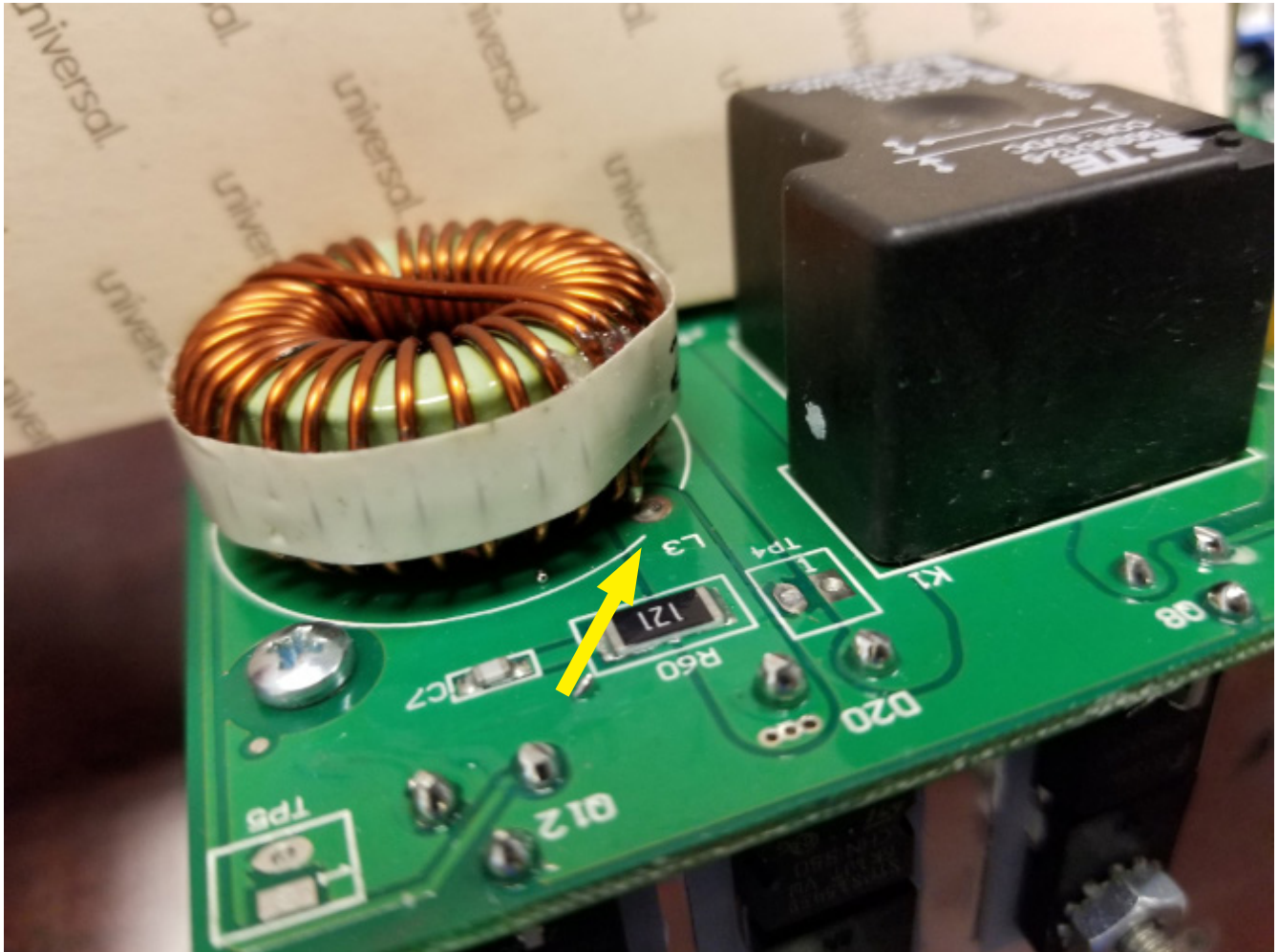
If the machine appears to have no resistance, follow the steps below:

1. Remove the left shroud and check for mechanical failure (drive chain, transmission, brake, etc.)
2. Check to ensure that the alternator belt has not fallen off of the transmission and alternator pulleys. If the belt has fallen off, it will need to be replaced. The belt keeper kit, 711-3705 (Page 11), will also need to be installed..
3. Verify that the pulleys are aligned and align if needed (Doc 637-8611).
4. Perform a power trace to ensure that the proper voltage (12V) is going from the power supply to the LCB.
5. If machine still does not have resistance, refer to document 637-4375 for additional troubleshooting.

Technical Procedure

Lower Control Board (LCB) Coil Loose/Broken L3 Connection

Another issue to check for is a loose/broken L3 connection on the LCB Coil. If this is present, the LCB will need to be replaced.



Technical Procedure

1. Place the 50lb dumbbell gently on the top step

Warning: Do not drop dumbbell on the step to prevent shock loading the brake assembly.



2. Press the Quick Start key.

NOTE: Regardless of console type, the Quick Start button is located in the same location.

A video of the 50 lb dumbbell test can be found [HERE](#)



Technical Procedure

“Lightweight User” Statement:

The 50 lbs weight test is used to determine if the 8G’s drive system is optimized (has the least amount of mechanical resistance). Even if the system is optimized, lighter users (110 lbs/50 kgs or less) may still report resistance issues – this does not mean the machine doesn’t function, but that it may run more slowly than expected. For example, if the expected step rate at level 10 is 89 SPM, a 90lb user may experience SPM = 65. Note, this can also occur if a user leans heavily on the handrails, reducing the amount of weight applied to the steps. For best performance, users should not lean heavily on the rails, they should be used for stability/balance while working out. If the steps move at all with the 50 lb weight, the system is optimized.

Technical Procedure

Belt Keeper Kit 711-3705

Please note that only the Gen. 2 engine with the two-piece transmission pulley can accept the belt keeper kit. If the engine has a one-piece pulley, it **WILL NOT** accept the belt keeper kit and the engine will need to be replaced. Please see below to identify the difference between the one-piece and two-piece pulleys:

One-piece Transmission Pulley

WILL NOT accept belt keeper kit.



Two-piece Transmission Pulley

Transmission pulley re-designed to be a separable 2-piece making belt replacement possible without transmission removal.

