

TECHNICAL SUPPORT - ISSUE: Turntable rotation, film carriage up / down, or pre-stretch (film feed) does not function. SOLUTION: Replace fuse.

Last Updated 04/11/2023 02:44:53 PM

APPLICABLE TO:

- Mach 1 semi-automatic wrappers using the "DIGI-TECH control unit", including the following models:
 - Mach 1 ROCKET LP-HP
 - Mach 1 ROCKET LPX-HPX
 - Mach 1 SONIC LPX-LPS-HPX

ISSUE:

- Turntable rotation, film carriage up / down, or pre-stretch (film feed) does not function.

SOLUTION:

- Fuse replacement.

CONSIDERATIONS

Mach 1 Packaging has given careful consideration to the mechanical and electrical design of these machines, ensuring that the machine will electrically protect itself from severe electrical damage in the case of an electrical overload or short.

It is fortunate that external factors tend to be the cause of drive board issues the majority of the time, and that *correction of most drive issues is the simple replacement of a blown fuse.*

Scope: This document describes the procedure to resolve the most common cause of a drive board issue ... **a blown fuse.** *It is not a comprehensive trouble-shooting guide that deals with other solutions to drive board issues.* See the ADDITIONAL SUPPORT section of this document if fuse replacement does not rectify the issue.

Caution: Take steps to ensure that any potential causes of the issue are rectified before proceeding.

POTENTIAL CAUSES

Blown fuses are the the result of electrical overload conditions that typically occur due to factors external to the machine.

Electrical

The machine is rated to operate at 110/120 VAC, 15 AMPS, 60 Hz.

Potential causes of power supply issues can be:

- electrical interference or current draw from other devices on the same supply circuit
 - under normal operating conditions, at the start of a wrap cycle, the machine can draw close to the 15 AMPS it is rated for
 - we recommend that the wrapper should *NOT SHARE* a circuit with other high current demand devices (eg. air conditioner, space heater, hot plate, etc.)
- improperly sized or damaged power feed wiring
- poor quality power feed wiring
- low power supply voltage
- high power supply voltage
- running the machine on a long or insufficiently rated extension cord

ELECTRICAL TROUBLE-SHOOTING TIPS:

1. *measure the supply voltage at the plug where the machine is connected*
2. *measure the supply voltage both when the machine is at rest, and when it is running a normal wrap cycle with a load on the turntable and the film attached to the load*

Mechanical

Potential causes of mechanical binding or blockage can be:

- the turntable physically contacting or binding on something
 - loading ramp (ensure sufficient clearance between turntable and ramp)
 - poor condition skids over-hanging the turntable and contacting the turntable surround or ramp
 - improperly centered skids/loads contacting the film carriage
 - skids/loads contacting nearby adjacent objects
- excess film caught under the turntable and getting caught in the turntable casters
- starting a wrap cycle without backing the forklift out from the load
- "joy-riding" on the film carriage
- machine film "wrap up" on the pre-stretch rollers

BEFORE STARTING

Determine that the problem could be a blown fuse in one of the drive boards!

At least one of the following conditions will be true:



- the machine display will power up when the machine power is turned on
- manual control [jogging] will function as expected
 - turntable rotation
 - film carriage up and down
 - the film carriage will feed film manually (TIP: after pressing the PAUSE button to enable the pre-stretch)
- the machine will start a wrap cycle, however, one of the above functions (turntable, film carriage up/down, or pre-stretch (film feed)) will not work

FUSE REPLACEMENT PROCEDURE

1. Ensure that the power to the machine is off. Preferably unplug the machine, or turn off the circuit breaker (or remove the fuse) at the panel supplying power to the machine, or ensure the main power switch is off.
2. Remove the control panel access plate that is located at the same height, but at the rear of the tower. Use a hex key to remove the machine screws. (The plate is not otherwise attached to the tower, but sometimes the plate will need to be pried away from the tower with a screw driver.)



3. Once the control panel access plate is off, you will see the three drive boards to the right. Each are three slightly different versions of the same DC drive board. On each, you will see a fuse, the same kind commonly found in vehicles.

4A. The **pre-stretch** (film feed) drive board is the one at the **top**.

4B. The **carriage** (up / down) drive board is the one in the **middle**.

4C. The **turntable** drive board is the one on the **bottom**.

5. A factory supplied spare fuse, in a bag (or attached with silver duct tape), can be found at the bottom of the panel. The same fuse can typically be used in all three of the drive boards.

6. Replace the fuse in the suspect board.

7. Power up the machine and test for functionality.

8. Replace the control panel cover.

FUTURE CONSIDERATIONS

We encourage stocking a small supply of extra fuses to minimize downtime should another blown fuse issue occur.

Fuse details:

- The fuse is MDA-xx-R.
- XX stands for the amperage -> MDA-8-R and MDA-10-R

Please do not use any other value fuses in these machines unless verified with the factory design engineer.

The motor size dictates the fuse size:

- 0.50 HP -> 8 amp
- 0.75 HP -> 10 amp

(The standard motor size in most applications is 0.50 HP.)

ADDITIONAL SUPPORT

Should the above procedure not rectify the issue with the machine, please contact Wrapper Direct, or technical support at the factory for additional assistance.

Mach 1 Packaging

Toll Free: 1-866-662-2220

Local: 514-737-2442

Technical Support Manager: Alex B. (dial zero "0" and ask for Alex), alexb@mach1pack.com

Please Note: *If you do require factory support, the machine serial number will be required. It can be found on the nameplate of the machine.*

The services of a stretch wrapper service technician are often available in major industrial centers, however, installation of parts, trouble-shooting, repair services, and the cost of returning warranty parts to the factory is not covered by the manufacturer's warranty.