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Rev 1

3M™ Versaflo™ TR-342 and TR-642 Charger Troubleshooting

Identifying Causes and Corrective Actions

Use this table to help identify possible causes and corrective actions for problems you may experience. Contact 3M Technical Service to help identify possible causes and corrective actions for any other problems.

IMPORTANT NOTE

There are no user serviceable parts inside the chargers. Do not attempt to open.

Problem	Probable Cause	Corrective Action
Power LED not lit	1. Power cord not connected to wall outlet. 2. Power cord not connected to charger. 3. Blown fuse.	1. Check all power supply connections. 2. Check all power supply connections. 3. In multi-station configuration, the charger directly before the charger(s) with unlit LED(s) has a blown fuse. Replace this charger and ensure not more than 10 chargers are connected.
Battery will not go into charge mode	1. Battery not seated properly in cradle. 2. Battery or charger contacts are dirty. 3. Damaged or degraded battery. 4. Damaged charger, such as stuck pins.	1. Remove battery and reseat in cradle . 2. Clean by gently wiping with dry cloth. If still not resolved, consider gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before re-attaching battery. 3. Replace battery. 4. Replace charger.
Charger indicates complete charge, but battery pack on-board charge status gauge shows less than 5 bars	Battery pack has reduced capacity due to aging, environment or general wear which can be accelerated by storage/use outside of recommended conditions	Battery is still functional with decreased capacity. User may choose to replace the battery if run time does not meet required use time.

Charger Display

The charger display will communicate certain error codes when a battery or charger error occurs.

Figure 1: Battery outside of temperature range

Troubleshooting battery outside of temperature range:

Wait for battery to cool/warm as appropriate.

Ensure battery/charger are charging in environment with appropriate temperature.

Charging will resume if/when conditions allow.

Figure 2: Charger over-temperature

Troubleshooting charger over temperature:

Verify environment is cool enough for charging. If not, move charger(s) to cooler location.

Ensure not more than 10 chargers are connected together. Disconnect extra chargers.

Error may continue until charger temperature lowers. Charging will resume if/when conditions allow.

Figure 3: Poor electrical contact

During charging, will switch between error code and charge status. Only able to charge battery at reduced rate due to poor contact.

Troubleshooting poor electrical contact:

Consider swapping batteries on the charger to isolate the affected part and/or test battery on a blower.

Inspect charger electrical contacts to ensure they are clean and in good condition. If dirty, clean by gently wiping with dry cloth. If still not resolved, consider gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before re-attaching battery.

Inspect battery electrical contacts to ensure they are in clean and good condition. If dirty, clean by gently wiping with dry cloth. If still not resolved, clean contacts by gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before charging.

Charging may continue, but at a reduced rate.

Figure 4: No electrical contact

Unable to charge battery due to no contact.

Troubleshooting no electrical contact:

Consider swapping batteries on the charger to isolate the affected part and/or test on a blower.

Inspect charger electrical contacts to ensure they are clean and in good condition. If dirty, clean by gently wiping with dry cloth. If still not resolved, consider gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before re-attaching battery.

Inspect battery electrical contacts to ensure they are in clean and good condition. If dirty, clean by gently wiping with dry cloth. If still not resolved, clean contacts by gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before charging.

Figure 5: Communication fail

Charger unable to communicate with battery.

Consider swapping batteries on the charger to isolate the affected part and/or test on a blower.

Inspect charger electrical contacts to ensure they are clean and in good condition. If dirty, clean by gently wiping with dry cloth. If still not resolved, consider gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before re-attaching battery.

Inspect battery electrical contacts to ensure they are in clean and good condition. If dirty, clean by gently wiping with dry cloth. If still not resolved, clean contacts by gently wiping with cloth dampened with IPA. IPA may only be used for troubleshooting. Allow to dry before charging.

For all other error codes, contact 3M for guidance.

Product Identification

The product serial number is located both in the charger cup and on the label on the back of the charger. The serial number is in format LLL#-##### and is meant for 3M internal tracking purposes. Example: SN AMX1-00300.

The firmware revision and manufacture date code is located in the charger cup. The firmware revision will be represented by a letter. Example: Rev: B

The date code is in format YYMMDD, where YY is year, MM is month and DD is day. Example: 241015 indicates a manufacture date of October 15, 2024.

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3M PSD products are occupational use only.

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