Before using the TR-600 PAPR, all users must read and understand the product User Instructions. Consult the TR-600 User Instructions for general system operation. Consult the TR-600 Charger and Battery Pack User Instructions for additional information. If you have further questions, consult your supervisor or call 3M Technical Service at 1-800-243-4630 (USA) or 1-800-267-4414 (Canada).

Use this TR-600 Trouble Shooting Guide to help identify possible causes and corrective action for problems you may experience with your TR-600 Power Air Purifying Respirator (PAPR). There are no user serviceable parts inside the TR-600 PAPR Assembly. The motor/blower unit should not be opened to attempt repairs. Contact 3M Technical Service to help identify additional possible causes and corrective actions for other problems you may experience.

<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible Cause</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All LEDs flash and alarm</td>
<td>1) System software malfunction</td>
<td>1) To clear the alarm, power down motor/blower unit and remove the battery pack. Allow unit to sit for several minutes before reconnecting battery pack and turning the unit back on. If unit does not reset, contact 3M Warranty and Repair.</td>
</tr>
</tbody>
</table>
| Low airflow alarm (audible, vibratory and/or LED flashing) | 1) Breathing tube is blocked  
2) Filter is blocked  
3) Filter is fully loaded with particles  
4) Outside recommended operating temperature range  
5) Outside of elevation recommendations | 1) Check & remove blockage or obstruction  
2) Check filter & remove obstruction  
3) Change HE filter and prefilter spark arrestor  
4) Move to cooler location. May need to use alternative protection  
5) Move task to adequate elevation. May need to use alternative protection |
| Bottom bar of battery indicator flashes; battery alarm sounds | 1) Low battery voltage  
2) Battery not properly installed.  
3) Battery past service life  
4) Battery temperature too hot (> 60°C)  
5) Contaminant on battery or blower contacts | 1) Recharge the battery pack  
2) Remove and reinstall battery  
3) Install a new, fully-charged TR-600 battery pack  
4) Bring to cool environment, allow battery pack to cool.  
5) Ensure battery contacts are clean and dry |
| Motor/blower will not turn on. No airflow, no alarm(s) | 1) Battery contact on battery pack or blower is damaged  
2) Contaminant on battery or blower contacts  
3) Battery is completely discharged (no charge)  
4) Damaged motor/blower circuit board  
5) Damaged motor  
6) Battery internal safety circuit tripped | 1) Check that the battery contact is not bent or broken  
2) Ensure battery contacts are clean and dry  
3) Fully charge the battery pack  
4) Contact 3M Warranty and Repair  
5) Contact 3M Warranty and Repair  
6) Replace battery. Do not exceed battery immersion guidelines during cleaning |
<p>| Low airflow as                              | 1) Damaged circuit board                                                       | 1) Contact 3M Warranty and Repair                                                 |</p>
<table>
<thead>
<tr>
<th>Indication</th>
<th>Possible Causes</th>
<th>Recommended Actions</th>
</tr>
</thead>
</table>
| Indicated by flow indicator (TR-971) but no alarm(s) | 2) Damaged motor  
3) Faulty alarm  
4) Flow indicator not held in vertical position  
5) Wrong ‘Zone’ selected as reference on flow indicator  
6) Stuck float ball  
7) Extreme weather event causing high or low ambient pressure  
8) Faulty airflow indicator | 2) Contact 3M Warranty and Repair  
3) Contact 3M Warranty and Repair  
4) Ensure flow indicator is held in vertical position during inspection  
5) Refer to the Inspection > Airflow section of the User Instructions to select the correction ‘Zone’  
6) Rinsing with clean water may help free a stuck float ball. Allow tube and ball to dry prior to using  
7) Refer to Tech Data Bulletin #221 Conducting Airflow Check on the 3M™ Versafl™ PAPR TR-600  
8) Recheck with different TR-600 airflow indicator |