

# MOVES<sup>®</sup> SLC<sup>™</sup>

## DEPOT MAINTENANCE AND REPAIR TRAINING GUIDE



### **Learning Objectives**

This training guide familiarizes maintainers with the requirements needed for maintenance and repair of the MOVES® SLC™ device.

### **Overview**

This Depot Maintenance and Repair Training Guide is a reference tool with a knowledge checklist for maintaining and repairing your MOVES® SLC™ device when it has been returned to a depot.

The following topics are covered in this training guide:

**SECTION ONE: User Maintenance**

**SECTION TWO: Repair Procedures**

**SECTION THREE: Removal and Reinstallation of Subsystems**

**SECTION FOUR: Periodic Maintenance at Service Depot Procedures**

**SECTION FIVE: Diagnostics Software and Calibration Procedures**

**SECTION SIX: Service Testing**

**SECTION SEVEN: Troubleshooting Guide**

### Getting Started

1. To work through this Maintenance Training Guide you will need to download the following:



[MOVES® SLC™ Training Video](https://www.youtube.com/watch?v=ZM2nONFKR8)  
[Full Version 30 mins](https://www.youtube.com/watch?v=ZM2nONFKR8)

<https://www.youtube.com/watch?v=ZM2nONFKR8>



[MOVES® SLC™](https://www.youtube.com/watch?v=Cyp0w-PtCGA&t=15s)  
[Maintenance Video](https://www.youtube.com/watch?v=Cyp0w-PtCGA&t=15s)

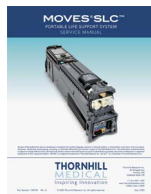
<https://www.youtube.com/watch?v=Cyp0w-PtCGA&t=15s>



[MOVES® SLC™ Technical](https://www.youtube.com/playlist?list=PLHJFEajoyED7fuehkh1bFEpamgrBsprs4)  
[Maintenance / Repair videos](https://www.youtube.com/playlist?list=PLHJFEajoyED7fuehkh1bFEpamgrBsprs4)

<https://www.youtube.com/playlist?list=PLHJFEajoyED7fuehkh1bFEpamgrBsprs4>

2. A copy of the MOVES® SLC™ Service Manual is also required and can be requested on the Customer Care web page:



[MOVES® SLC™](http://www.thornhillmedical.com/customercare)  
[Service Manual](http://www.thornhillmedical.com/customercare)

[www.thornhillmedical.com/customercare](http://www.thornhillmedical.com/customercare)

The checklist overleaf will guide you through the relevant maintenance and system test areas of the MOVES® SLC™ device. Once you have reviewed the relevant sections, mark each as complete on the checklist. Review each section as frequently as needed to ensure you are comfortable with the process steps required for each knowledge area.

**You're Ready to Go!**

# MOVES<sup>®</sup> SLC<sup>™</sup>

## KNOWLEDGE CHECKLIST

MOVES <sup>®</sup> SLC <sup>™</sup> KNOWLEDGE CHECKLIST			
Trainee Name:		Date:	
<b>Section One</b>			
<b>Periodic Maintenance</b>			
	See Service Manual Section	View 30 min Training Video	Complete
Periodic Maintenance Schedule	5.2	N/A	
Replacing the Ventilator Filter	7.1	@ [22:46]	
Replacing the Hydrocarbon Filter	7.2	@ [17:53]	
Replace the Ventilator Cartridge Liner	7.3	@ [23:26]	
	See Service Manual Section	View Maintenance Video	Complete
System Cleaning	5.1	@ [0:22]	
Exercising the Oxygen Concentrator	5.3	@ [3:17]	
Charging the Battery	5.4	@ [4:38]	
<b>Section Two</b>			
<b>Repair Procedures</b>			
	See Service Manual Section		Complete
Tool Kit	6.2		
Surplus Supplies	6.3		
Electrostatic Discharge Requirements	6.4		
Removing & Securing Connectors with Silicone	6.5		
Maintenance Procedure Sections	6.6		
<b>Section Three</b>			
<b>Removal and Reinstallation of Subsystems</b>			
	See Service Manual Section	View Training Video	Complete
Ventilator	8.1	Ventilator Subassembly	
Patient Monitoring Drawer	8.2	Patient Monitoring Drawer Subassembly	
User Interface	8.3	User Interface Subassembly	
Oxygen Concentrator	8.4	O <sub>2</sub> Concentrator Subassembly	
ATF Module	Appendix C	ATF Module	

# MOVES® SLC™

## KNOWLEDGE CHECKLIST

Section Four		
Periodic Maintenance at Service Depot Procedures		
	See Service Manual Section	Complete
Cooling Fan Air Filter	9.1	
Ventilator Bag	9.2	
Oxigraf Calibration and Patient Gas Sampling Filters	9.3	
Sampling Pump, Internal Nafion Tube, and Patient Gas Sampling Filters	9.4	
Suction Filter	9.5	
Cooling Fan	9.6	
Battery Door	9.7	
Ventilator Port Covers	9.8	
Section Five		
Diagnostics Software and Calibration Procedures		
	See Service Manual Section	Complete
Purpose	10.1	
System Requirements	10.2	
Service Support Kit	10.3	
Installing the Diagnostics Program	10.4	
Connecting to the MOVES® SLC™	10.5	
Beginning Diagnostic Procedures	10.6	
Performing a Calibration - Overview	10.7	
Sample Pump Speed Calibration	10.8	
Sample Pump Flow Rate Calibration	10.9	
Oxigraf Cell Pressure Calibration	10.10	
Sample Line Pressure Calibration	10.11	
Patient Temperature Calibration	10.12	
Log Screen	10.13	
Install Software Screen	10.14	

# MOVES<sup>®</sup>SLC<sup>™</sup>

## KNOWLEDGE CHECKLIST

Section Six		
Service Testing		
	See Service Manual Section	Complete
Service Testing	13.0	
Electrical Isolation	13.1	
System Startup Tests	13.2	
Power Management	13.3	
Ventilator/Airway High Pressure Relief "Pop-Off" Safety Valves	13.4	
Oxygen Concentrator Output	13.5.1	
Hydrocarbon Filter Pressure Transducer	13.5.2	
Suction	13.6	
NIBP	13.7.1	
SpO <sub>2</sub>	13.7.2	
ECG	13.7.3	
Patient Temperature 1 and 2	13.7.4	
Invasive Pressure 1, 2 and 3	13.7.5	
Service Testing Checklist	13.8	
Section Seven		
Troubleshooting Guide		
	See Service Manual Section	Complete
Tools	14.1	
UI Screen Flashing	14.2	
Startup Test Failures	14.3	
Alarms	14.4	
Service Screens	14.5	
Service Admin Screen	14.5.1	
Service Diagnostic Screen	14.5.2	
Wiring Diagram	Appendix A	
Pneumatic Diagram	Appendix B	

### We're Here to Help

Stay connected to MOVES® SLC™ and the Thornhill Medical Team.

#### Customer Care is one click away.

Access our Customer Care portal to find important device resources and access the Thornhill Medical team – we're here to help.

<https://thornhillmedical.com/customercare/>



#### Training and Information in the Palm of your Hand

Download the MOVES® SLC™ training app and have quick access to everything you need, exactly when you need it, no matter where you are.

<https://thornhillmedical.com/resources/moves-slc/videos/>



**THORNHILL  
MEDICAL**  
Inspiring Innovation

## DEPOT MAINTENANCE AND REPAIR TRAINING GUIDE

[illegible]