Section 11
Electrical System

NOTE: This section applies to applicators with M-style cordsets.

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Introduction

This section describes the electrical system on applicators with ATS/Meltex platinum resistance temperature detector (RTD)-style (hereafter referred to as M-style) cordsets. The applicator’s electrical system includes the following components:

- adhesive manifold cordset(s) with heater(s) and RTD
- heated air manifold cordset(s) with heater(s) and RTD
- thermostats
- splitter and adapter cables (if used)
- extension cables

The hose also has some electrical components, including a cordset that connects it electrically to the melter and an electrical receptacle that connects it electrically to the applicator. In combination, the hose electrical connections, the applicator cordsets, and any cables used serve two purposes: (1) to supply electrical power to the heaters in the applicator adhesive and heated air manifolds and (2) to carry electrical signals from the RTDs in the adhesive and heated air manifolds to a melter control system or to a standalone temperature controller. In addition, M-style adhesive manifold cordsets have two extra wires that may be used to supply power to one or more solenoid valves.

Figure 11-1  Applicator with M-style cordsets

1. Adhesive manifold cordset  2. Heated air manifold cordset
Overview of Electrical Operation

An applicator has two types of heated zone: adhesive manifold and heated air manifold. The adhesive manifold zones heat the adhesive in the applicator, and the heated air manifold zones heat the pattern air. Heating and temperature sensing of the zones is accomplished through cordsets.

Cordsets

Each heated zone has a cordset that is connected to one RTD and one or two heaters inside the applicator. Cordsets are then electrically connected, via a connector plug, to a temperature control channel on a melter control system or on a standalone temperature controller. The control system receives the RTD electrical signal and regulates the electrical power supplied to the heater(s) based on the signal. There are two types of cordset: adhesive manifold and heated air manifold. The applicator has two types of cordset: adhesive manifold and heated air manifold.

Adhesive Manifold Cordset

See Figure 11-2. The adhesive manifold cordset has a square 8-pin male connector that connects to an 8-pin female connector on a hose or an extension, splitter, or adapter cable. The adhesive manifold cordset also has two extra wires that may supply power to one or more solenoid valves.

![M-style adhesive manifold cordset connector](image-url)
**Heated Air Manifold Cordset**

See Figure 11-3. The heated air manifold cordset has a round 7-pin male connector that connects to a 7-pin female connector on an extension, splitter, or adapter cable.

![M-style heated air manifold cordset connector](image)

Figure 11-3  M-style heated air manifold cordset connector

**Heaters and RTDs**

Cordsets are wired to a replaceable cartridge heater (or heaters) housed in a bore inside each adhesive and heated air manifold zone as shown in Figure 11-10 later in this section. When power is supplied to a heater, it heats the adhesive or the pattern air in the applicator manifolds. Two heaters are present when a zone's heating requirements are higher. Typically, the heating requirements of a filtered applicator are greater than those of a non-filtered applicator and the heating requirements of heated air manifold zones are greater than the heating requirements of adhesive manifold zones.

Cordsets are also wired to a 100-ohm platinum RTD housed in a bore in each adhesive and heated air manifold zone. An RTD is an electronic temperature control device in which the electrical resistance changes predictably as its temperature changes (the higher the temperature, the higher the resistance). The RTD relays the temperature of the manifold to a melter control system or to a temperature controller, which in turn adjusts the power supplied to the manifold heaters accordingly.

**NOTE:** On some applicators, the RTD is an integral part of the cordset wiring (in which case no wire nut or connector is used).
Thermostats

Each adhesive manifold on the applicator has a thermostat that is connected in series with the heater(s) as shown in Figure 11-10 later in this section. Thermostats provide additional overtemperature protection. Normally, the control system maintains the temperature in a heated zone based on the resistance of the RTD. However, if the RTD fails, the thermostat acts as a backup, preventing the temperature in that heated zone from rising above its setpoint.

During normal operation, when the applicator temperature is below its setpoint, the thermostat should be closed, allowing power to reach the heaters. If the applicator does not heat properly and the applicator temperature has not been above the setpoint temperature, a thermostat may have failed.

If the applicator temperature rises above the thermostat setpoint, the thermostat has failed. The system should be shut down and the thermostat checked and replaced as necessary. The setpoint temperature for the thermostat is 260 °C (500 °F).
Cordset Connection

Cordsets must be properly connected to hoses and/or splitter and extension cables to supply power to the applicator. This part of Section 11 provides cordset connection procedures for an installation in which adhesive manifold cordsets are connected to hose connectors and to extension and adapter cables and in which heated air manifold cordsets are connected to heated air manifold extension and splitter or adapter cables, which is the recommended configuration. If you need assistance with cordset installation, contact your Nordson representative.

NOTE: Normally, the hose, cordset, and cable configuration of your system will have already been determined by you and your Nordson representative. If you need to change the configuration, contact your Nordson representative for assistance. Splitter, adapter, and extension cable part numbers are provided in Parts at the end of this section.

WARNING: Risk of personal injury or death. Allow only qualified personnel to perform electrical installation, troubleshooting, or repair procedures. Before performing any electrical procedure, review Section 1, Safety, and disconnect and lock out electrical power to the system.

Preparing to Connect Cordsets

1. If the system is in operation, relieve system pressure. Refer to Relieving System Pressure in Section 10, Filter.

2. Disconnect and lock out electrical power to the system.
Connecting Adhesive Manifold Cordsets

Connect adhesive manifold cordsets as appropriate for your application. Refer to Table 11-1 and Figure 11-4 for a typical installation configuration.

Table 11-1 Typical Adhesive Manifold Cordset Connections

<table>
<thead>
<tr>
<th>Item in Figure 11-4</th>
<th>Component</th>
<th>Connect to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First adhesive manifold cordset</td>
<td>Extension cable (item 2)</td>
</tr>
<tr>
<td>2</td>
<td>Extension cable</td>
<td>First adhesive manifold cordset (item 1) and to adapter cable (item 3)</td>
</tr>
<tr>
<td>3</td>
<td>Adapter cable</td>
<td>Extension cable (item 2) and to electrical receptacle on melter (item 6)</td>
</tr>
<tr>
<td>4</td>
<td>Second adhesive manifold cordset</td>
<td>Hose connector</td>
</tr>
<tr>
<td>5</td>
<td>Hose cordset</td>
<td>Electrical receptacle on melter (item 6)</td>
</tr>
</tbody>
</table>

Figure 11-4Typical adhesive manifold cordset connections

1. First adhesive manifold cordset 3. Adapter cable 5. Hose cordset
Connecting Heated Air Manifold Cordsets

Connect heated air manifold cordsets as appropriate for your application. Refer to Table 11-2 and Figure 11-5 for a typical installation configuration.

Table 11-2  Typical Heated Air Manifold Cordset Connections

<table>
<thead>
<tr>
<th>Item in Figure 11-5</th>
<th>Component</th>
<th>Connect to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>One air manifold cordset</td>
<td>Extension cable (item 2)</td>
</tr>
<tr>
<td>2</td>
<td>Extension cable</td>
<td>One air manifold cordset (item 1) and adapter cable (item 3)</td>
</tr>
<tr>
<td>3</td>
<td>Adapter cable</td>
<td>Extension cable (item 2) and electrical receptacle on melter (item 7)</td>
</tr>
<tr>
<td>4</td>
<td>Two air manifold cordsets</td>
<td>Extension cables (item 5)</td>
</tr>
<tr>
<td>5</td>
<td>Extension cables</td>
<td>Two air manifold cordsets (item 4) and splitter cable (item 6)</td>
</tr>
<tr>
<td>6</td>
<td>Splitter cable</td>
<td>Extension cables (item 5) and electrical receptacle on melter (item 7)</td>
</tr>
</tbody>
</table>
Figure 11-5  Typical heated air manifold cordset connections

1. One heated air manifold cordset
2. Extension cable
3. Adapter cable
4. Two heated air manifold cordsets
5. Extension cables
6. Splitter cable
7. Melter electrical receptacle
Restoring the System to Normal Operation

Perform whichever of the following steps is appropriate for your installation:

- If the cordsets were connected as part of the initial installation of the applicator, return to the applicator installation procedures in Section 3, Installation, to complete the installation.
- If the cordsets were connected as part of another procedure, return to that procedure.
- If applicable, restore the system to normal operation. Refer to Starting the Applicator in Section 4, Operation, as needed.

Disconnecting Cordsets

Before disconnecting any cordset, relieve system pressure and disconnect and lock out electrical power to the system. Refer to Relieving System Pressure in Section 10, Filter, as needed.
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Cordset Service

This part of Section 11 provides cordset-related service procedures.

WARNING: Risk of personal injury or death. Allow only qualified personnel to perform electrical installation, troubleshooting, or repair procedures. Before performing any electrical procedure, review Section 1, Safety, and disconnect and lock out electrical power to the system.

Checking a Heater

1. Relieve system pressure. Refer to Relieving System Pressure in Section 10, Filter.
2. Disconnect and lock out electrical power to the system.
3. Disconnect the cordset that supplies power to the heater to be checked.
4. See Figure 11-6 or 11-7 as appropriate. Use an ohmmeter to check the heater resistance and continuity at the heater pins on the cordset:
   - If you measure low resistance, the heaters are operating normally. Return to the procedure that referenced this check.
   - If you measure high resistance or if an open circuit is indicated, there may be a broken wire, a loose connection, or a defective heater. Continue to the next step.

Figure 11-6  M-style adhesive manifold cordset connector
5. Remove the appropriate manifold cover and inspect the heater wiring. Make sure there are no broken wires or loose connections and that the heaters are wired correctly. Refer to the cordset wiring diagrams provided in the *Applicator-Specific Reference Drawings* part of Section 8, *Parts*, as needed:

- If any wiring problems are found, correct the problems and restore the system to normal operation.
- If no wiring problems are found, the heater is probably defective. Replace the heater. Refer to *Replacing a Heater* later in this section.
Checking an RTD

**NOTE:** You will need to know the temperature of the RTD to properly perform this check.

1. Relieve system pressure. Refer to *Relieving System Pressure* in Section 10, *Filter*.
2. Disconnect and lock out electrical power to the system.
3. Disconnect the cordset that supplies power to the RTD to be checked.
4. See Figure 11-6 or 11-7 as appropriate. With the RTD at a known temperature, use an ohmmeter to measure the RTD resistance at the RTD pins on the cordset.
5. See Figure 11-8 to determine the correct resistance of the RTD based on its temperature:
   - If the measured resistance is correct, the RTD is operating properly. Return to the procedure that referenced this check.
   - If the measured resistance indicates an open circuit, continue to the next step.
6. Remove the appropriate manifold cover and check for loose RTD wires or wire connections. Tighten any loose connections.
7. Check the RTD resistance again. If the resistance is normal, the RTD is now operating properly. If it is not, continue to the next step.
8. Disconnect the RTD wires, measure the resistance across them, and compare the results to Figure 11-8:
   - If the measured resistance is within the appropriate range, reconnect the RTD wires, reinstall the manifold cover, and return to the procedure that referenced this check.
   - If the measured resistance is not within the appropriate range, replace the RTD. Refer to *Replacing an RTD* later in this section.
Figure 11-8  RTD resistance vs. RTD temperature
Checking a Thermostat

NOTE: Thermostats fail in the open position.

1. Relieve system pressure. Refer to Relieving System Pressure in Section 5, Maintenance.

2. Disconnect and lock out electrical power to the system.

3. Disconnect the cordset that supplies power to the thermostat to be checked.

4. See Figure 11-9. With the applicator at or below the adhesive application temperature, use an ohmmeter to measure the resistance between pins 2 and 3 on the adhesive manifold cordset:
   - If the measured resistance does not indicate an open circuit, the thermostat is operating properly at the normal operating temperature. Return to the procedure that referenced this check.
   - If the measured resistance indicates an open circuit, the thermostat may have failed. Proceed to the next step.

NOTE: When the applicator is at or below the adhesive application temperature, the thermostat should be closed.

5. Remove the adhesive manifold cover and locate the wiring for the thermostat and the heater. Inspect the wiring and wire nuts for loose connections or damage. If loose or damaged connections are found or if damaged wiring is found, tighten the connections or repair the damage.
6. Use an ohmmeter to check the continuity of the thermostat circuit by placing the ohmmeter probes on the thermostat wiring connectors:

- If the measured resistance indicates a short circuit, the thermostat is operating properly. Reinstall the manifold cover, reconnect the cordset, and return to the procedure that referenced this check.
- If the measured resistance indicates an open circuit, the thermostat is open. Proceed to the next step.

7. Attempt to reset the thermostat by pressing the reset button on the thermostat.

8. Check the resistance again:

- If the measured resistance indicates a short circuit, the thermostat is operating properly. Reinstall the manifold cover, reconnect the cordset, and return to the procedure that referenced this check.
- If the measured resistance indicates an open circuit, the thermostat has failed. Replace the thermostat. Refer to *Replacing a Thermostat* later in this section.
Replacing a Heater

You will need the following items:

- appropriate tools
- small rod for loosening the heater (if needed)
- replacement heater
- replacement wire nuts or terminal blocks (if needed)
- heater lubricant

1. Relieve system pressure. Refer to Relieving System Pressure in Section 10, Filter.
2. Disconnect and lock out electrical power to the system.
3. Disconnect the cordset that supplies power to the heater to be replaced.
4. Remove the appropriate manifold cover. Refer to the applicator reference drawing provided in the Applicator-Specific Reference Drawings part of Section 8, Parts, as needed.
5. Disconnect the heater wires from the cordset wires.
6. See Figure 11-10. Remove the heater from the manifold.
   
   **NOTE:** If the heater does not easily slide out of its bore, locate the small access hole at the back of the heater. Insert a small rod in the access hole and gently push or tap on the rod to loosen the heater.

7. Coat a new heater with heater lubricant and insert the heater into the bore in the manifold.
8. Connect the new heater wires to the cordset heater wires. Refer to the cordset wiring diagrams provided in Applicator-Specific Reference Drawings in Section 8, Parts, as needed.
   
   **NOTE:** The heater wires are not polarity-sensitive. Either heater wire can be connected to either cordset wire.

9. Reinstall the manifold cover, reconnect the cordset, and restore the system to normal operation.
Figure 11-10  Typical configuration of heaters and RTD (applicator with vertical filter and two heaters shown)

2. Ground connection  5. Heated air manifold cordset  9. RTD (heated air manifold)
3. Solenoid wires (refer to solenoid valve wiring diagram if applicable)  6. Heater (adhesive manifold)
7. RTD (adhesive manifold)
Replacing an RTD

You will need the following items:

- appropriate tools
- small rod for loosening the RTD (if needed)
- replacement RTD
- wire nuts or terminal blocks (if needed)
- heat-sink compound (if desired)

1. Relieve system pressure. Refer to Relieving System Pressure in Section 10, Filter.

2. Disconnect and lock out electrical power to the system.

3. Disconnect the cordset that supplies power to the RTD to be replaced.

4. Remove the appropriate manifold cover. Refer to the applicator reference drawing provided in the Applicator-Specific Reference Drawings part of Section 8, Parts, as needed.

5. Disconnect the RTD wires from the cordset wires.

   **NOTE:** On some applicators the RTD is an integral part of the cordset (there are no wire nuts or terminal blocks). If this is the case, cut the wires to remove the defective RTD. You will need wire nuts or terminal blocks to connect the new RTD wires to the cordset wires.

6. See Figure 11-10. Remove the RTD from its bore in the manifold.

   **NOTE:** During assembly of the applicator, Nordson applies a heat-sink compound to the RTD to improve its heat-sensing ability. After a period of time, this compound hardens and can cause the RTD to stick in the bore. If the RTD is stuck, use one of the following methods to remove it:

   - If the applicator has an access hole in the manifold body directly behind the RTD, insert a rod into the access hole and gently push or tap the RTD to loosen it.
   - If the applicator does not have an access hole, loosen the RTD by placing a small punch against the center of the RTD and carefully tapping on the punch with a hammer to loosen the seal between the RTD and the manifold body.
7. Insert the new RTD into the bore in the manifold.
   **NOTE:** Applying a heat sink compound to the RTD improves its heat-sensing ability.

8. Connect the new RTD wires to the cordset RTD wires. Refer to the wiring diagrams provided in *Applicator-Specific Reference Drawings* in Section 8, *Parts*, as appropriate.
   **NOTE:** The RTD wires are not polarity-sensitive. Either RTD wire can be connected to either cordset wire.

9. Reinstall the manifold cover, reconnect the cordset, and restore the system to normal operation.

### Replacing a Thermostat

You will need the following items:
- appropriate tools
- replacement thermostat
- replacement wire nuts or terminal blocks (if needed)

1. Relieve system pressure. Refer to *Relieving System Pressure* in Section 5, *Maintenance*.

2. Disconnect and lock out electrical power to the system.

3. Remove the adhesive manifold cover and locate the thermostat and heater wiring. Refer to the applicator reference drawing provided in *Applicator-Specific Reference Drawings* in Section 8, *Parts*, as needed.

4. Loosen the wire nuts that connect the wiring to the thermostat, remove the thermostat screws, and remove the thermostat from the manifold.

5. Place the new thermostat in the mount, secure it with the thermostat screws, and connect the thermostat wiring to the cordset and heater wiring with the wire nuts. Refer to the adhesive manifold cordset wiring diagram in *Applicator-Specific Reference Drawings* in Section 8, *Parts*.

6. Reinstall the adhesive manifold cover, reconnect the cordset, and restore the system to normal operation.
Resetting a Thermostat

When an adhesive manifold thermostat opens because of an overtemperature condition, it must be manually reset before the applicator can be restored to normal operation.

1. Relieve system pressure. Refer to Relieving System Pressure in Section 5, Maintenance.

2. Disconnect and lock out electrical power to the system.

3. Remove the appropriate adhesive manifold cover. Refer to the applicator reference drawing provided in Applicator-Specific Reference Drawings in Section 8, Parts, as needed.

4. See Figure 11-11. Press the reset button on the thermostat.

5. Reinstall the manifold cover and restore the system to normal operation.

6. If the thermostat still does not operate properly, go to Checking a Thermostat earlier in this section.

Figure 11-11 Location of the reset button on a thermostat
**Parts**

This part of Section 11 provides detailed parts lists for the electrical system. For other applicator parts, including a reference drawing and bill of materials specific to your applicator, refer to Section 8, *Parts*. The following chart provides guidance for reading the parts lists.

The number in the *Item* column corresponds to the circled item number in the parts list illustration. A dash in this column indicates that the item is an assembly.

The number in the *Part* column is the Nordson part number you can use to order the part. A series of dashes indicates that the part is not saleable. In this case, you must order either the assembly in which the part is used or a service kit that includes the part.

The *Description* column describes the part and sometimes includes dimensions or specifications.

The *Note* column contains letters that refer to notes at the bottom of the parts list. These notes provide important information about the part.

The *Quantity* column tells you how many of the part is used to manufacture the assembly shown in the parts list illustration. A dash or AR in this column indicates that the amount of the item required in the assembly is not quantifiable.

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<thead>
<tr>
<th>Item</th>
<th>Part</th>
<th>Description</th>
<th>Quantity</th>
<th>Note</th>
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<td>0000000</td>
<td>Assembly A</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1</td>
<td>000000</td>
<td>• Part of assembly A</td>
<td>2</td>
<td>A</td>
</tr>
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<td>2</td>
<td>- - - - -</td>
<td>• • Part of item 1</td>
<td>1</td>
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<tr>
<td>3</td>
<td>0000000</td>
<td>• • • Part of item 2</td>
<td>AR</td>
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<tr>
<td>NS</td>
<td>000000</td>
<td>• • • • Part of item 3</td>
<td>2</td>
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</table>

**NOTE**  A: Important information about item 1
AR: As Required
NS: Not Shown
Adhesive Manifold Cordset

See Figure 11-12.

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<th>Part</th>
<th>Description</th>
<th>Note</th>
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<tr>
<td>162256</td>
<td>Cordset, adhesive manifold, M-style, 100 ohm platinum RTD, 7-wire</td>
<td></td>
</tr>
</tbody>
</table>

Figure 11-12 M-style adhesive manifold cordset
Heated Air Manifold Cordset

See Figure 11-13.

<table>
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<tr>
<th>Part</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>152105</td>
<td>Cordset, heated air manifold, M-style, 100 ohm platinum RTD, 5-wire</td>
<td>REF. ONLY</td>
</tr>
</tbody>
</table>

Figure 11-13 M-style heated air manifold cordset
### Splitter and Adapter Cables

See Figure 11-14. These splitter and adapter cables can be used to connect the cordsets on hoses and applicators to the electrical receptacles on the melter. In most cases, extension cables will be needed.

<table>
<thead>
<tr>
<th>Item</th>
<th>Part</th>
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<th>Note</th>
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<td>2</td>
<td>291215</td>
<td>Splitter cable, M-style, 1 adhesive manifold cordset and 1 heated air manifold cordset, 0.3 m</td>
<td>AR</td>
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<td>3</td>
<td>291217</td>
<td>Splitter cable, M-style, 2 adhesive manifold cordsets, 0.3 m</td>
<td>AR</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>291223</td>
<td>Adapter cable, M-style, 1 heated air manifold cordset, 0.3 m</td>
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<tr>
<td>5</td>
<td>291216</td>
<td>Adapter cable, M-style, 1 adhesive manifold cordset, 0.3 m</td>
<td>AR</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>413913</td>
<td>Splitter cable, M-style, 2 hose cordsets, 0.3 m</td>
<td>AR</td>
<td></td>
</tr>
</tbody>
</table>

AR: As Required

---

**Figure 11-14** M-style splitter and adapter cables
Extension Cables

See Figures 11-15, 11-16, and 11-17. These extension cables can be used to connect adapter and splitter cables and/or hose and applicator cordsets to the electrical receptacles on the melter.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>262 184</td>
<td>Extension cable, M-style, hose cordsets, 4 m (13.1 ft)</td>
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<tr>
<td>267 055</td>
<td>Extension cable, M-style, hose cordsets, 8 m (26.2 ft)</td>
<td></td>
</tr>
<tr>
<td>292 213</td>
<td>Extension cable, M-style, hose cordsets, 10 m (32.8 ft)</td>
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<td>292 212</td>
<td>Extension cable, M-style, hose cordsets, 12 m (39.4 ft)</td>
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<td>291 517</td>
<td>Extension cable, M-style, hose cordsets, 15 m (49.2 ft)</td>
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<td>265 217</td>
<td>Extension cable, M-style, adhesive manifold cordsets, 5 m (16.4 ft)</td>
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<td>261 411</td>
<td>Extension cable, M-style, adhesive manifold cordsets, 7 m (23.0 ft)</td>
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<td>268 242</td>
<td>Extension cable, M-style, adhesive manifold cordsets, 8 m (26.2 ft)</td>
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<td>Extension cable, M-style, adhesive manifold cordsets, 12 m (39.4 ft)</td>
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<td>265 216</td>
<td>Extension cable, M-style, adhesive manifold cordsets, 20 m (65.6 ft)</td>
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<td>257 676</td>
<td>Extension cable, M-style, heated air manifold cordsets, 1 m (3.3 ft)</td>
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<td>264 934</td>
<td>Extension cable, M-style, heated air manifold cordsets, 5 m (16.4 ft)</td>
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<td>257 675</td>
<td>Extension cable, M-style, heated air manifold cordsets, 6 m (19.7 ft)</td>
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<td>267 579</td>
<td>Extension cable, M-style, heated air manifold cordsets, 8 m (26.2 ft)</td>
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<td>256 259</td>
<td>Extension cable, M-style, heated air manifold cordsets, 9 m (29.5 ft)</td>
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<td>261 743</td>
<td>Extension cable, M-style, heated air manifold cordsets, 10 m (32.8 ft)</td>
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<td>267 067</td>
<td>Extension cable, M-style, heated air manifold cordsets, 12 m (39.4 ft)</td>
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<td>283 427</td>
<td>Extension cable, M-style, heated air manifold cordsets, 15 m (49.2 ft)</td>
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<td>267 066</td>
<td>Extension cable, M-style, heated air manifold cordsets, 16 m (52.5 ft)</td>
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<td>292 242</td>
<td>Extension cable, M-style, heated air manifold cordsets, 20 m (65.6 ft)</td>
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<td>317 676</td>
<td>Extension cable, M-style, heated air manifold cordsets, 25 m (82.0 ft)</td>
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</table>
Extension Cables  (contd)

Figure 11-15  M-style hose cordset extension cable

Figure 11-16  M-style adhesive manifold cordset extension cable

Figure 11-17  M-style heated air manifold cordset extension cable
Recommended Spare Parts and Supplies

For a general spare parts and supplies list, refer to *Recommended Spare Parts and Supplies* in Section 8, *Parts*.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>162256</td>
<td>Cordset, adhesive manifold, M-style, 100 ohm platinum RTD, 7-wire</td>
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<tr>
<td>152105</td>
<td>Cordset, heated air manifold, M-style, 100 ohm platinum RTD, 5-wire</td>
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<td>- - - -</td>
<td>Heater, adhesive and heated air manifolds</td>
<td>A</td>
</tr>
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<td>140305</td>
<td>RTD, adhesive and heated air manifolds</td>
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<td>815557</td>
<td>Thermostat, adhesive manifold</td>
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<tr>
<td>939521</td>
<td>Pin, crimp connector, 20–16 gauge, silver (adhesive manifold cordset heater pins)</td>
<td></td>
</tr>
<tr>
<td>939522</td>
<td>Pin, crimp connector, 20–26 gauge, silver (adhesive manifold cordset RTD pins)</td>
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<tr>
<td>276784</td>
<td>Plug, 7-pin, water resistant (heated air manifold cordset connector)</td>
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<td>165415</td>
<td>Lubricant, heater (for the heaters)</td>
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<tr>
<td>900298</td>
<td>Compound, heat-sink, 5 oz tube (for the RTDs)</td>
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</table>

**NOTE A:** Refer to *Applicator-Specific Reference Drawings* in Section 8, *Parts*, for the part numbers of the heaters for your applicator.

**Technical Data**

**Electrical Specifications**

Refer to the identification plate on the applicator for voltage and wattage information. For the location of the identification plate on your applicator, refer to the reference drawing of the applicator in *Applicator-Specific Reference Drawings* in Section 8, *Parts*.

**Wiring Diagrams**

These wiring diagrams are provided for your reference as needed during troubleshooting activities. Refer also to *Applicator-Specific Reference Drawings* in Section 8, *Parts*, for wiring diagrams specific to your applicator.

**NOTE:** The term “sensor” as used in these diagrams refers to the RTD.
**Cordsets**

Figure 11-18 M-style adhesive manifold cordset wiring diagram

Figure 11-19 M-style heated air manifold cordset wiring diagram
**Splitter and Adapter Cables**

Figure 11-20 M-style splitter cable (two heated air manifold cordsets) wiring diagram

Figure 11-21 M-style splitter cable (two adhesive manifold cordsets) wiring diagram
Splitter and Adapter Cables (contd)

Figure 11-22 M-style splitter cable (one adhesive manifold cordset and one heated air manifold cordset) wiring diagram

Figure 11-23 M-style adapter cable (one heated air manifold cordset) wiring diagram
Figure 11-24 M-style adapter cable (one adhesive manifold cordset) wiring diagram
Splitter and Adapter Cables (contd)

Figure 11-25 M-style splitter cable (two hose cordsets) wiring diagram
Extension Cables

Figure 11-26 M-style adhesive manifold cordset extension cable wiring diagram

Figure 11-27 M-style heated air manifold cordset extension cable wiring diagram
Extension Cables (contd)

Figure 11-28 M-style hose cordset extension cable wiring diagram

NOTE: A5, B5, C1, C4, and C5 are not used in some systems (such as ATS systems).