100 PLUS® Series II Electrostatic Cable Assembly Resistor Replacement Kit

Introduction

Electrostatic cable assemblies for the 100 PLUS series II guns are shipped with resistor assemblies installed. This kit makes it possible to replace the resistor assembly without having to purchase a complete new cable assembly.

NOTE: Check the cable assembly resistance with a megohm meter before putting the cable back into service.

For additional information, refer to the *100 PLUS Series II Powder Spray Gun* manual.

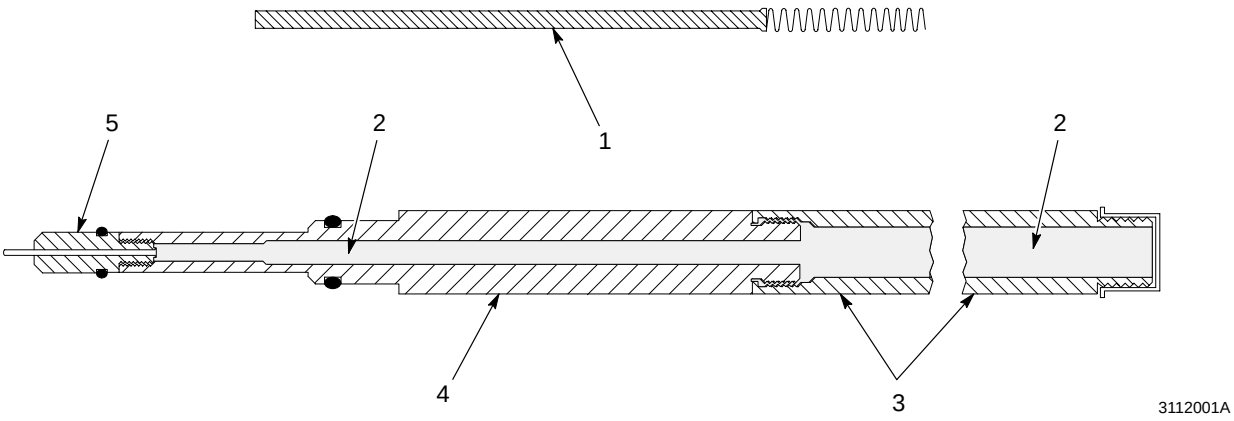

Figure 1 Resistor Replacement Kit

1. Resistor
2. Dielectric grease
3. Cable well
4. Resistor holder
5. Contact

Replacement Procedure

Use these procedures to replace the cable assembly resistor.

WARNING: Before attempting any of the following procedures, shut off all electrical power ahead of the electrostatic power unit or master control unit. Ground the electrode before removing the gun from the mounting bar.

Removal

1. Unscrew the electrostatic cable assembly from the gun body.
   - If you are using a conical nozzle, remove the deflector and sleeve before pulling the cable assembly out of the gun.
   - If you are using a flat spray nozzle, remove the nozzle adapter assembly and sleeve.
2. See Figure 2. Place a wrench on the flats of the spring cover (6) and another on the flats of the cable adapter (4). Unscrew the cable adapter from the spring cover.

   NOTE: Loctite adhesive is applied to the cable adapter threads during assembly. If necessary, place the adapter flats in a soft-jawed vise before unscrewing the spring cover.
3. Remove the cable adapter (4) from the cable end (3).
4. Place the coupling (5) in a soft-jawed vise with the contact upwards and unscrew the cable well (8) from the coupling.
5. Discard the cable well, resistor (1), resistor holder (2), and contact (10).

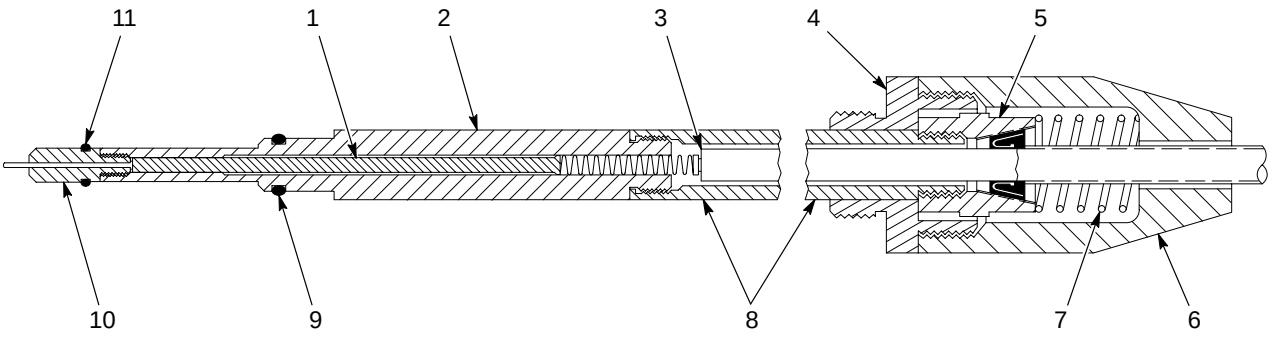

Figure 2 Resistor Assembly Replacement

1. Resistor
2. Resistor holder
3. Cable end
4. Cable adapter
5. Coupling
6. Spring cover
7. Spring
8. Cable well
9. O-ring
10. Contact
11. O-ring

Installation

1. See Figure 2. Remove the plastic shipping cap from both ends of the resistor kit.
2. Unscrew the resistor holder (2) from the cable well (8). Make sure the O-ring (9) is installed on the resistor holder.

WARNING: All air must be displaced by dielectric grease in the cable well, resistor holder, and contact when the replacement resistor kit is installed. Air pockets in these areas allow internal arcing and carbon tracking, leading to degrading performance and increased fire hazard.

3. Make sure the cable end (3) is clean and dry. Insert the cable end into the cable well (8) and slide the cable well partially onto the cable.
4. Place your thumb over the cable well and continue to slide the cable well over the cable until it bottoms out on the coupling (5). This forces grease back around the cable, eliminating all air pockets around the cable end.
5. Thread the cable well into the coupling until it is finger-tight.
6. Thread the new resistor holder (2) back into the cable well. Wipe off any excess grease.
7. Slide the spring (7) and spring cover (6) up over the coupling. Apply one to two drops of thread-locking compound to the metal adapter threads. Thread the cable adapter (4) into the spring cover until it bottoms out.
8. Install the cable assembly in the gun. Thread the cable adapter into the gun body and hand-tighten.
9. If you are using a conical nozzle, install the sleeve and deflector over the resistor. If you are using a flat spray nozzle, slide the sleeve over the resistor, install the adapter assembly on the end of the gun, and install the nozzle over the adapter.

Contact Replacement

If you need to replace the contact on the end of the resistor assembly:

1. See Figure 1. Unscrew the damaged contact (5) from the resistor holder (4) and fill the threaded bore with dielectric grease.
2. Thread the new contact into the resistor holder. Make sure the O-ring (Figure 2, item11) is in place.

If the contact does not thread into the resistor holder:

1. Unscrew the resistor holder (4) from the cable well (8) about 3 mm ($^1/_8$ in.).
2. Thread the contact (5) completely into the resistor holder, then retighten the resistor holder.

Cable Assembly Resistance Check

Follow these steps to check the cable assembly resistance.

1. Remove the cable assembly from the power unit multiplier well.
2. Check the cable resistance from the electrode to the ball contact with a 500 volt megohm meter. Eight-, 12-, and 16-meter cable assemblies should read 332 MΩ. Four-meter cable should read 243 MΩ to 321 MΩ.

NOTE: Make sure the multiplier well is filled with insulating oil before installing the cable assembly.

3. Install the cable assembly in the multiplier well. Refer to the power unit manual for complete instructions.

Parts

Item	Part	Description	Quantity	Note
—	112843	Kit, cable well, resistor	1	
1	- - - - -	• Resistor, cable series	1	
2	- - - - -	• Resistor, holder	1	
8	- - - - -	• Cable, well	1	
9	940117	• O-ring, silicone, 0.312 x 0.438 x 0.063	1	
10	1053112	• Contact, cable	1	
11	940066	• • O-ring, silicone, 0.125 x 0.250 x 0.036	1	
NS	- - - - -	• Grease, dielectric	AR	

AR: As Required
NS: Not Shown

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