

# Isocoil™ Assembly for Trilogy® Electrostatic Spray Guns



**WARNING:** Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

## Description

The Isocoil Assembly is an option for Trilogy Electrostatic Air Spray Guns. This item must be ordered separately.

Isocoil Assembly benefits:

- Retrofits easily to existing spray guns
- Sprays conductive coatings (metallics)
- Compact and easy to install
- Light weight to maintain spray gun balance

## Installation

See Figure 2.

1. Remove the existing fluid tube assembly from the spray gun. Refer to the *Trilogy Electrostatic Air Spray Guns* manual for more information.
2. Remove the metal straight fitting (9) from the cable bracket (12).
3. Verify that the top adapter (2) is positioned so that it is flush with the end of the Isocoil tubing (4).
4. Insert the male threaded end of the assembly into the fluid boss on the spray gun extension and hand tighten. Using a customer-supplied wrench, tighten the adapter nut (2) into the fluid boss an additional 1/4 to 1/2 turn.
5. Hand tighten the hose nut (3) into the adapter nut (2). Using a customer-supplied wrench, tighten the adapter nut (3) an additional 1/4 to 1/2 turn.
6. Loosen the cable bracket (12) by removing the two screws (13) at the bottom of the spray gun handle.
7. Install the straight fitting (9) onto the cable bracket (12) with the two screws (10).

**NOTE:** Ensure that the ferrule (8) is installed on the coil tube (4) and positioned inside of the retainer cap (7) prior to installing the Isocoil Assembly.

8. Insert the bottom end of the coiled tube (4) with retainer cap (7) onto the straight fitting (9). Thread the retainer cap onto the fitting while holding the cable bracket (12) from rotating. Thread the cap until almost hand tight.
9. Align the two holes in the cable bracket (12) with the mount holes at the bottom of the spray gun handle. Install two screws (13) and hand tighten them using a customer-supplied screwdriver.
10. Tighten the retainer cap (7) until hand tight. Using a customer-supplied wrench, tighten the retainer cap onto the straight fitting an additional 1/4 to 1/2 turn until one of the flats on the retainer is facing the gun handle. See Figure 1.
11. Using a customer supplied 3/32 in. hex tool, tighten the set screw (11) in the housing retainer (5) until the set screw bottoms flush against the flat of the retainer cap (7). The housing retainer should not twist from the retainer cap. See Figure 1, Detail A.

## Repair

See Figures 1 and 2.

### ***Remove the Coiled Fluid Tube***

1. Loosen the set screw (11) until flush with the outside surface of the retainer housing (5).
2. Loosen the retainer cap (7) at the bottom of the Isocoil Assembly.
3. Remove the two screws (13) from the bottom of the spray gun handle and loosen the cable bracket (12) from the gun.
4. Unscrew the adapter (2) from the fluid boss of the gun.
5. Remove the ferrule (1) and the nut (3) from the top of the assembly.
6. Remove the cap (6) from the top of the housing (5).
7. Remove the ferrule (8) from the bottom end of the coiled tube (4).
8. Pull the coiled tube (4) out of the retainer housing (5).

### ***Install the Coiled Fluid Tube***

**NOTE:** It is recommended that new ferrules be used when installing a new coiled fluid tube.

1. Push the coiled fluid tube (4) into the housing (5) from the top. The housing cap (6) has an exit hole for the tube shifted to one side. Install on top of the housing the cap oriented so that the tube exits the housing shifted toward the spray gun trigger. Align the dimple marks on the edge of the cap and the edge of the housing. See Figure 1.
2. Slide the nut (3) and ferrule (1) on the tube on top of the housing.

3. Thread the adapter (2) onto the nut (3) with the adapter positioned so that it is flush with end of the Isocoil tubing (4).
4. Feed the opposite end of the coiled tube into the tapered end of the retainer cap (7).
5. Slide the bottom ferrule (8) with the tapered end toward the straight fitting (9) onto the bottom end of the Isocoil tube (4).
6. Insert the top end of the Isocoil with the male thread of the adapter nut (2) into the fluid boss on the spray gun and hand tighten. Using a customer-supplied wrench, tighten the adapter nut (2) into the fluid boss an additional 1/4 to 1/2 turn.
7. Hand tighten the hose nut (3) into the adapter nut (2). Using a customer-supplied wrench, tighten the adapter nut (3) an additional 1/4 to 1/2 turn.
8. Insert the bottom end of the Isocoil tube (4) with retainer cap (7) onto the straight fitting (9). Thread the housing retainer cap (6) onto the straight fitting while preventing the cable bracket (12) from rotating. Thread the cap until almost hand tight.
9. Align the two holes in the cable bracket (12) with the mount holes at the bottom of the spray gun handle. Install two screws (13) and hand tighten using a customer-supplied screwdriver.
10. Tighten the retainer cap (7) until hand tight.
11. If the new Isocoil tube (4) extends below the bottom edge of the straight fitting (8), perform the following steps. If the bottom of the Isocoil tube is inside the straight fitting, go to step 12.
  - a. Using a permanent black marker, mark the outer diameter of the tube where it would be flush with bottom of the straight fitting (9).
  - b. Loosen the retainer cap (7) at the bottom of the Isocoil Assembly.
  - c. Remove the two screws (13) at the bottom of the spray gun handle and loosen cable bracket (12).
  - d. Remove the retainer cap (7) and ferrule (8) from the Isocoil Assembly.
  - e. Using the permanent mark made in step a. as a starting point, measure 3/8" toward retainer housing (5) and make a new permanent marker mark on outer diameter of the tubing.
  - f. Using a customer-supplied tubing cutting tool, cut the Isocoil tube at this 3/8 in. mark.
  - g. Feed the end of the coiled tube back into the internal tapered end of the retainer cap (7).
  - h. Slide the bottom ferrule (8) with the tapered end toward the straight fitting (9) onto the bottom end of the Isocoil tube (4).
  - i. Repeat steps 8 through 10.
12. Using a customer-supplied wrench, tighten the retainer cap (7) onto the straight fitting (9) an additional 1/4 to 1/2 turn until one of the flats on the retainer is facing the gun handle. See Figure 1.
13. Check that the bottom of the retainer housing (5) is positioned 1/2 in. or less from the top of the flange on the straight fitting (8). Push to slide the retainer housing toward straight fitting to obtain proper position for set screw.
14. Using a customer-supplied 3/32 in. hex tool, tighten the set screw (11) in the housing retainer (5) until it bottoms flush against flat of the retainer cap (7). The housing retainer should not twist from the retainer cap.

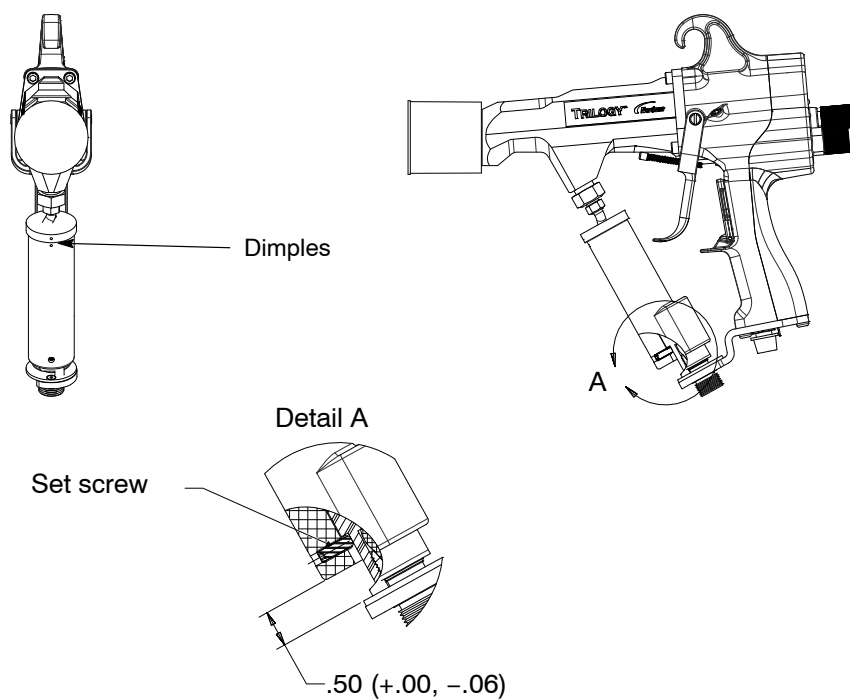


Figure 1 Isocoil Assembly Cutaway View

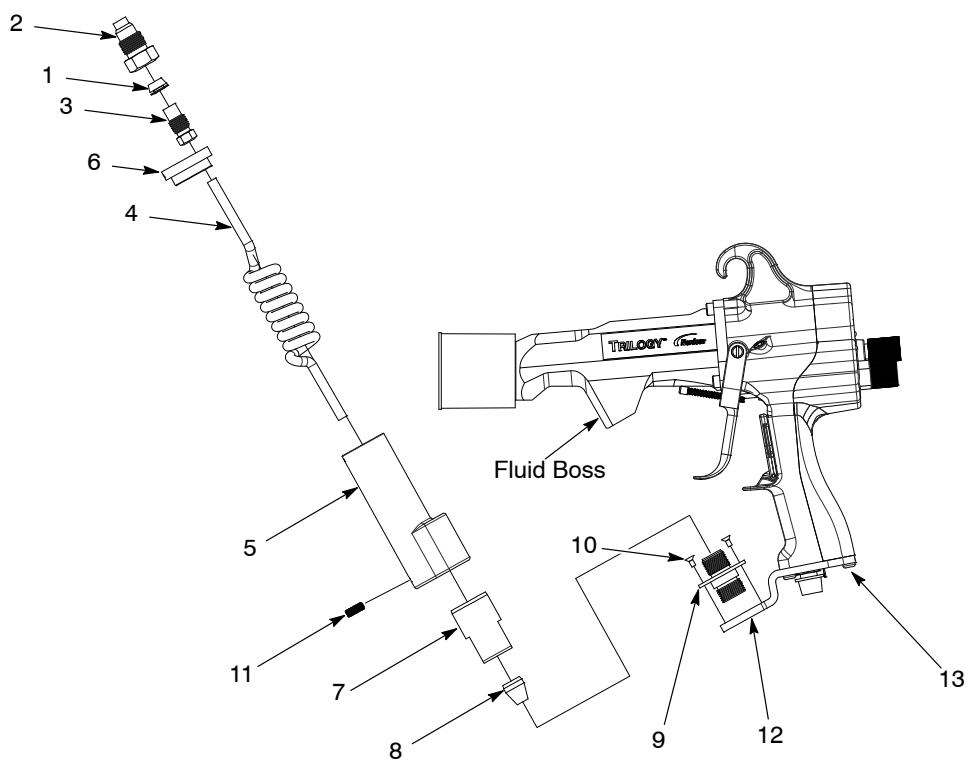


Figure 2 Isocoil Assembly for Trilogy

- |                     |                         |                           |
|---------------------|-------------------------|---------------------------|
| 1. Ferrule          | 5. Housing retainer     | 9. Metal straight fitting |
| 2. Hose adapter nut | 6. Housing retainer cap | 10. Machine screws        |
| 3. Hose nut         | 7. Retainer cap         | 11. Socket set screw      |
| 4. Tube             | 8. Ferrule              | 12. Cable bracket         |
|                     |                         | 13. Screws                |

# Parts

See Figure 2.

Item	Part	Description	Quantity	Note
	1603954	KIT, Isocoil, Trilogy	1	
1	1604007	• FERRULE, set, .250 i.d.	1	B
2	-----	• NUT, hose adapter	1	
3	-----	• NUT, hose, .25		
4	1031046	• TUBE, coiled, .249 o.d. X .093 i.d.	1	B
5	-----	• RETAINER, offset housing, Isocoil	1	
6	-----	• CAP, retainer, offset housing	1	
7	-----	• CAP, retainer, Isocoil	1	
8	1031045	• FERRULE, 1/4" tube, lp hose, es.625lg.	1	B
9	1095735	• FITTING, straight, 3/8 NPSM x 5/8-20 UN-2A	1	A
10	346725	• MACHSCR, flat head recess, 4-40, .250", stainless	2	
11	1605398	• SCR, set, hex, 10-32 x .50 in., nylon	1	
12	-----	• BRACKET, cable	1	A
13	-----	• SCREW, pan, 8-32 x 0.406 in., ss	2	A
NOTE A: Part not included in the Isocoil Assembly Kit.				
B: Recommended spare part.				

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