

# Encore<sup>®</sup> Manual Powder Spray Gun Trigger Switch Replacement

## Introduction

The Encore trigger switch has been redesigned to eliminate the notches on the side of the switch body. The new switch has a white identifying dot on the switch header where it plugs into the display module, so it can be identified without removing the switch from the gun handle (See Figure 1).

## Preparation

1. Remove the nozzle nut, nozzle, and electrode assembly.
2. Disconnect the powder feed hose adapter, purge air tubing, and air wash tubing from the gun handle.
3. Disconnect the gun cable from the controller interface module.

## Gun Disassembly

1. See Figure 1. Unscrew the top (M3 x 30) screw (11) holding the hook (10) and display module (9) onto the gun body.
2. Slide the hook off the display module (9).
3. Unscrew the bottom (M3 x 20) screw (12) (display module to gun).
4. Carefully pull the display module away from the gun.
5. Disconnect the display module ground connector (A). This ground cable is connected to the barbed fitting in the handle base. Older units do not have a separate ground cable.
6. Disconnect the gun cable/display module connectors (J3).
7. Carefully remove the clear adhesive support pad and the trigger switch header from the display module.

**NOTE:** The trigger switch kit includes a new adhesive support pad.

8. On the display module, carefully clean the switch header mounting surface and surrounding area with isopropyl alcohol. Allow the surface to dry completely before connecting the new switch header.

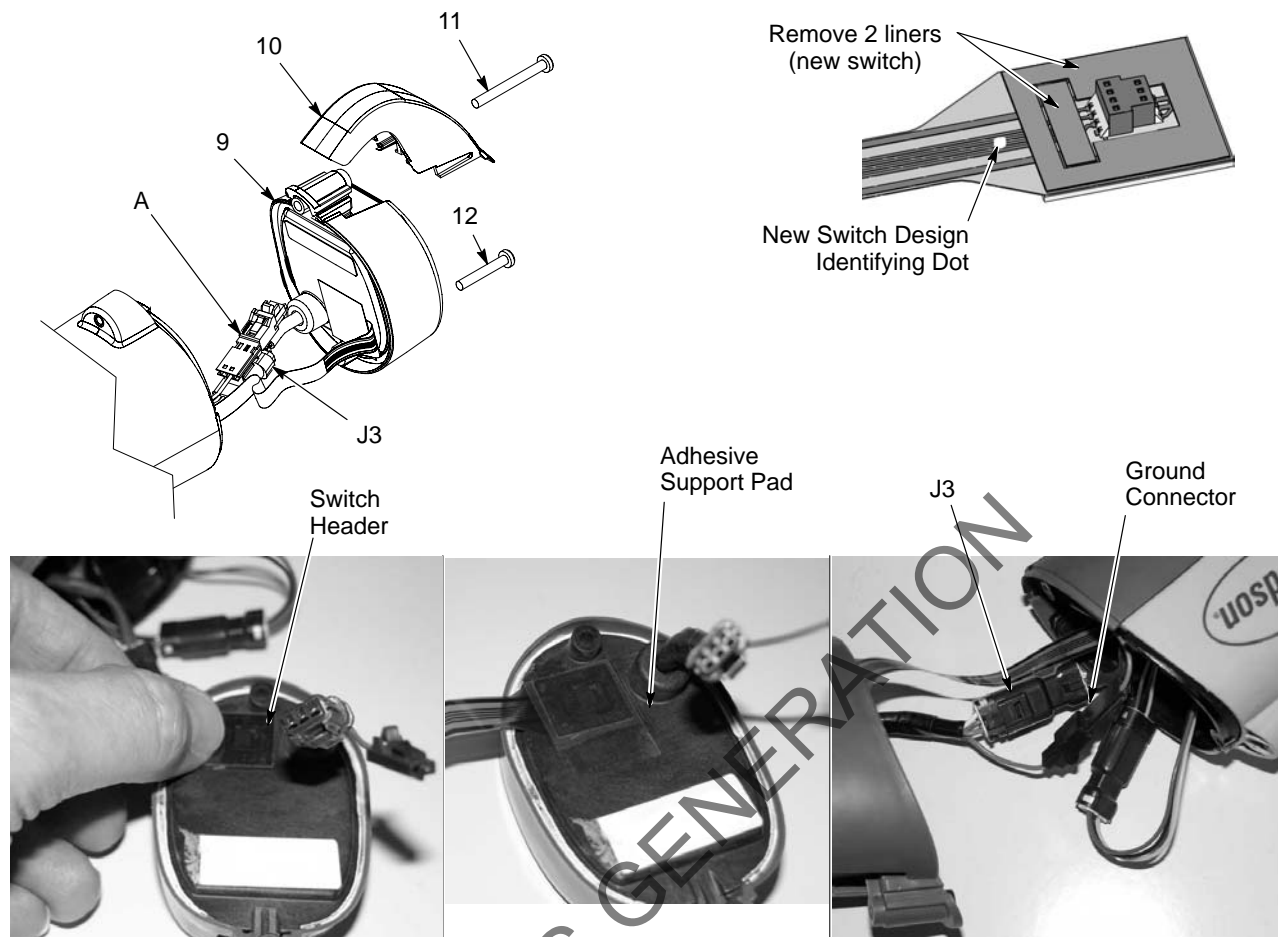


Figure 1 Display Module Removal/Installation

- 9. Display module
- 10. Hook

- 11. M3 x 30 screw
- 12. M3 x 20 screw

- A. Ground wire connector

9. See Figure 2. Insert a small screwdriver into the recess in the J2 gun cable/power supply connectors to release the catch and disconnect the connectors.
10. Pull on the top of the bulkhead (8) to remove it from the gun.
11. Slide the power supply (6) out of the gun body and pull the power supply leads and connector out of the bulkhead.
12. Check the gasket on the bulkhead and replace it if it is damaged.

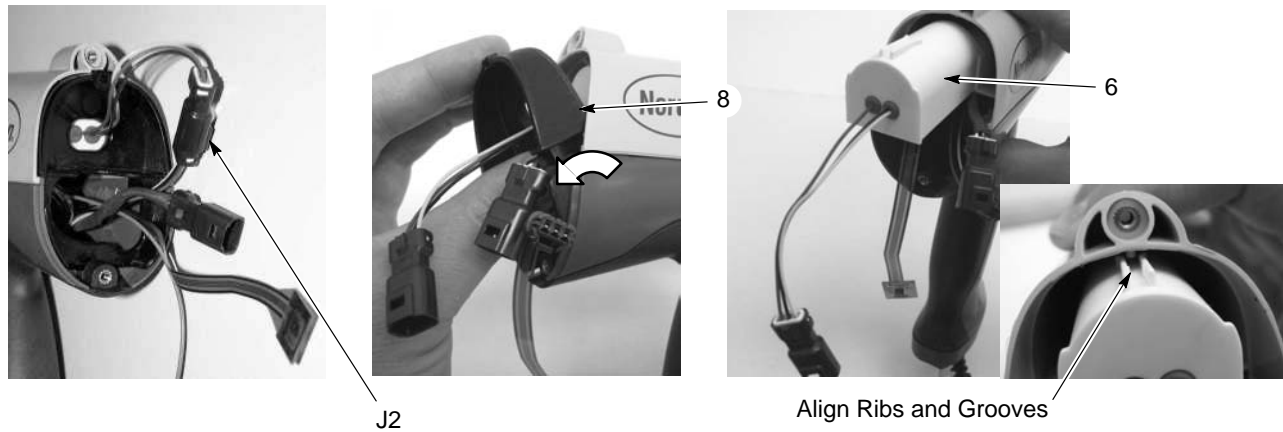


Figure 2 Removing Bulkhead and Power Supply

6. Power supply

8. Bulkhead

13. Remove the M5 x 10 nylon screw (24) from the gun body.

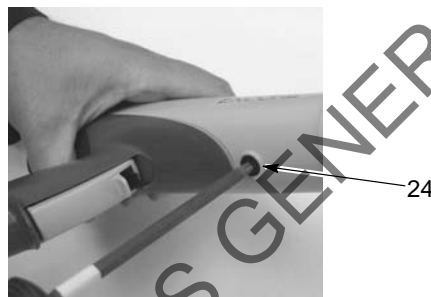


Figure 3 Removing Gun Body Screw

14. See Figure 4. Grasp the handle in one hand and the gun body in the other. Press the thumbs of each hand together while pulling in opposite directions to separate the gun body from the handle.

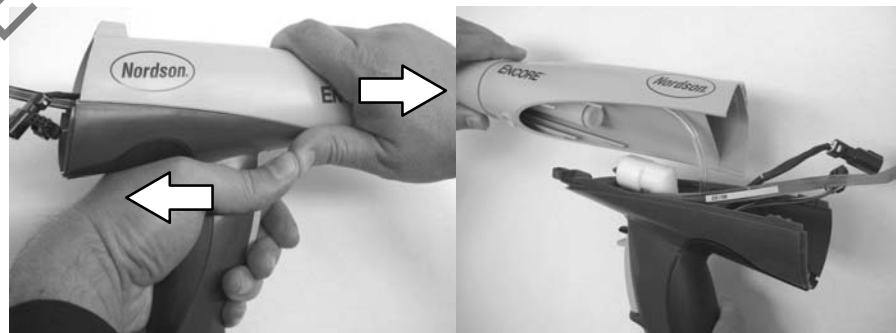


Figure 4 Separating Handle and Gun Body

15. See Figure 5. Remove the elbow (13) from the inlet tube (23).

16. Remove the two M3 x 20 screws (12) securing the handle base (22) to the handle assembly.

17. Pull the base away from the handle assembly about 25–50 mm (1–2 in.).
18. Pull the clear 4-mm tubing (4A, part of filter assembly) off the barbed fitting (20).

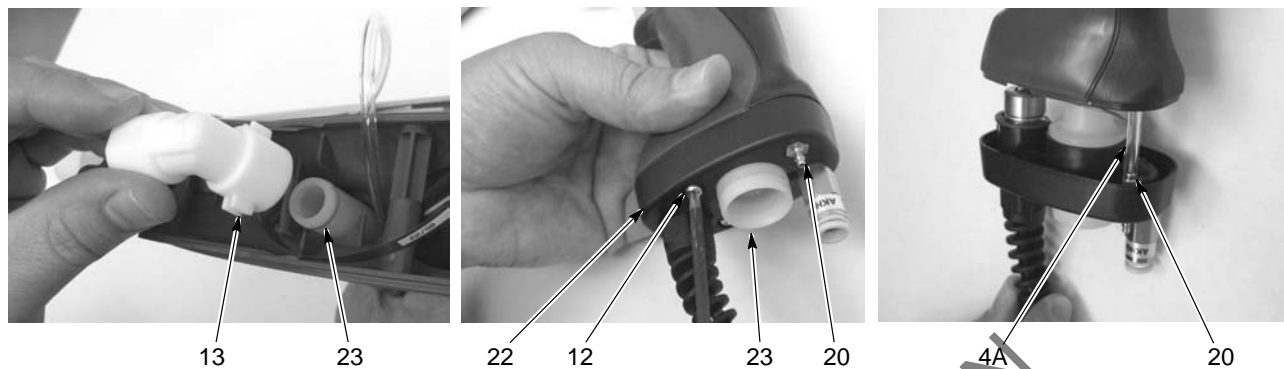


Figure 5 Removing the Elbow and Separating the Base from the Handle

4A. Clear 4-mm tubing  
12. M3 x 20 screws

13. Elbow  
20. Dual barbed fitting

22. Handle base  
23. Inlet tube

19. See Figure 6. Gently pull the ground pad (27) away from the handle, starting with the bottom and rotating it up and away.



Figure 6 Removing the Ground Pad

20. See Figure 7. Separate the right and left handles (25, 26).
21. Remove the main trigger, settings trigger, and trigger actuator (16, 17, 18) from the right handle half.
22. Remove the trigger switch (15) from the right handle half.
23. Carefully clean the switch mounting surface with isopropyl alcohol. Allow the surface to dry completely before installing the new switch.

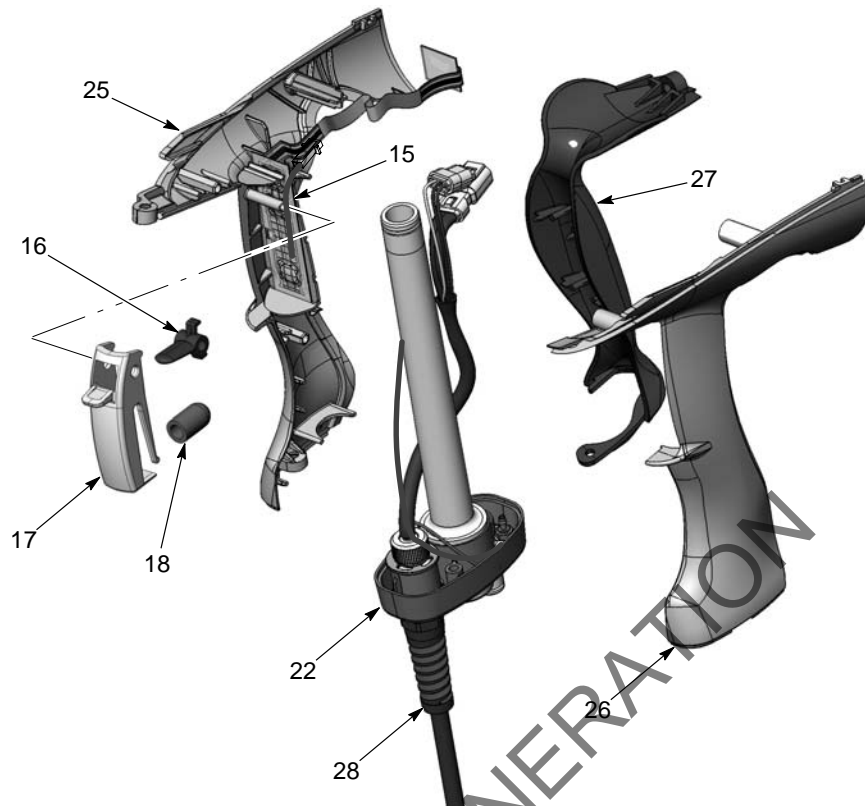


Figure 7 Separating Handles and Removing Trigger Switch

- |                      |                         |                          |
|----------------------|-------------------------|--------------------------|
| 15. Trigger switch   | 20. Dual barbed fitting | 26. Left handle          |
| 16. Settings trigger | 22. Handle base         | 27. Ground pad           |
| 17. Main trigger     | 23. Inlet tube          | 28. Gun cable            |
| 18. Actuator         | 25. Right handle        | 28A. Ground terminal     |
| 19. Retaining ring   |                         | B. Display module ground |

## Gun Assembly

### New Trigger Switch Installation

1. Remove the adhesive liner from the new trigger switch. New switches do not have notches in their sides.
2. See Figure 8. Install the trigger switch (15) on the mounting flat of the right handle (25), up against the tabs on the side and the bottom flat. Press firmly on the switch to secure it in place.
3. Install the actuator (18) and settings trigger on the main trigger (17), with the settings trigger (16) gusset up. Slide the triggers over the trigger pivot pin on the right handle half.

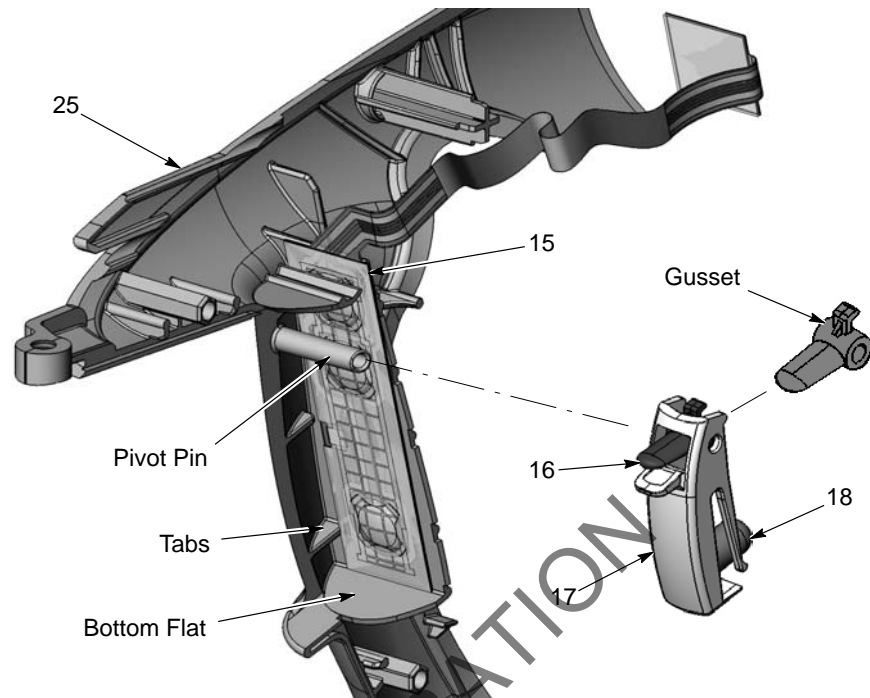


Figure 8 Trigger Switch Installation Steps 1-3

## Gun Assembly

1. Align the right and left handle hex pins with their mating sockets and press the handles together.
2. See Figure 9. Feed the cable (28) connectors into the bottom front of the handle, then slide the inlet tube (23) through the tube guides while routing the cable (28) out the top of the handle. Leave the base about 1.5-2 inches from the bottom of the handle.
3. Route the 4-mm clear tubing from the gun body through the handle and connect it to the barbed fitting (20) in the base, if previously disconnected.

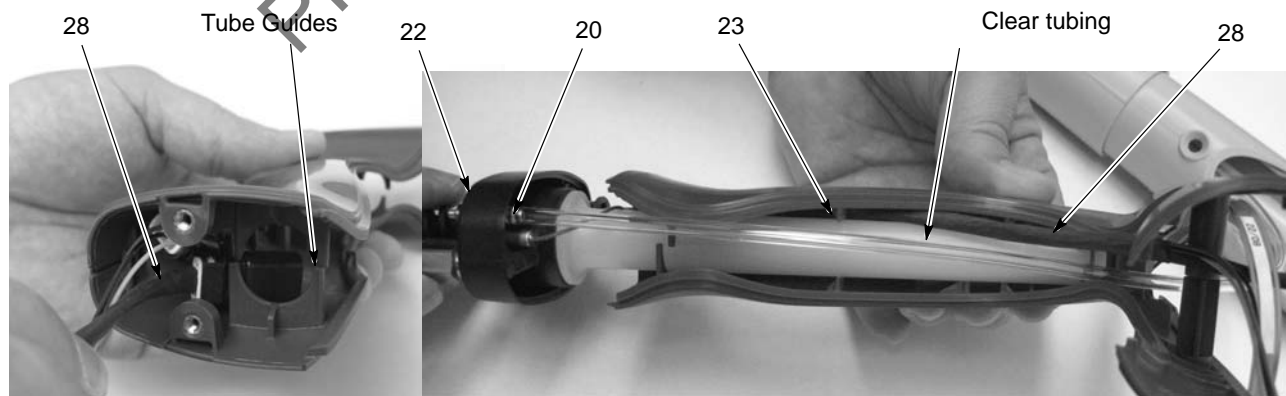


Figure 9 Handle Assembly

4. See Figure 10. Hook the ground pad (27) behind the locator tabs and rotate the ground pad into position against the handles.
5. Attach the base (22) to the handles with the two M3 x 20 screws (12). Hand tighten the screws only.



Figure 10 Installing Ground Pad and Base

6. See Figure 11. Slide the power supply into the upper cavity of the gun body, guiding the guide ribs inside the gun body between the mating grooves on the power supply.



Figure 11 Power Supply Installation

7. Press on the end of the power supply to ensure that the contact tip at the end of the gun body is firmly seated against the brass contact inside the end of the power supply.
8. See Figure 12. Position the lower edge of the bulkhead behind the screw boss in the rear of the handle assembly and rotate the top of the bulkhead forward until it snaps into place on the handle and gun body.
9. Feed the power supply connector through the top opening in the bulkhead.
10. Route the trigger switch header, gun cable connectors, and display module ground connector through the bottom opening in the bulkhead.

## Gun Assembly (contd)

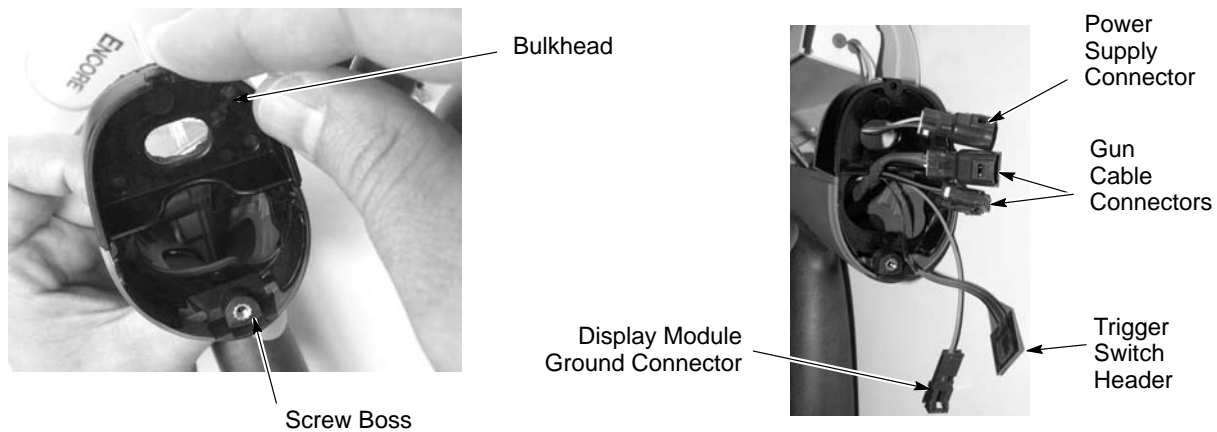


Figure 12 Assembling Bulkhead and Routing Cables

11. See Figure 13. Insert the outlet tube (14) with O-rings installed through the front of the gun body until the end is even with the end of the gun body.
12. Make sure the O-ring is installed in the groove on the inlet powder tube. Install the elbow (13) onto the end of the inlet tube.
13. Align the gun body assembly with the handle and slide them together, engaging the internal ribs of the gun body with the tabs in the handle.

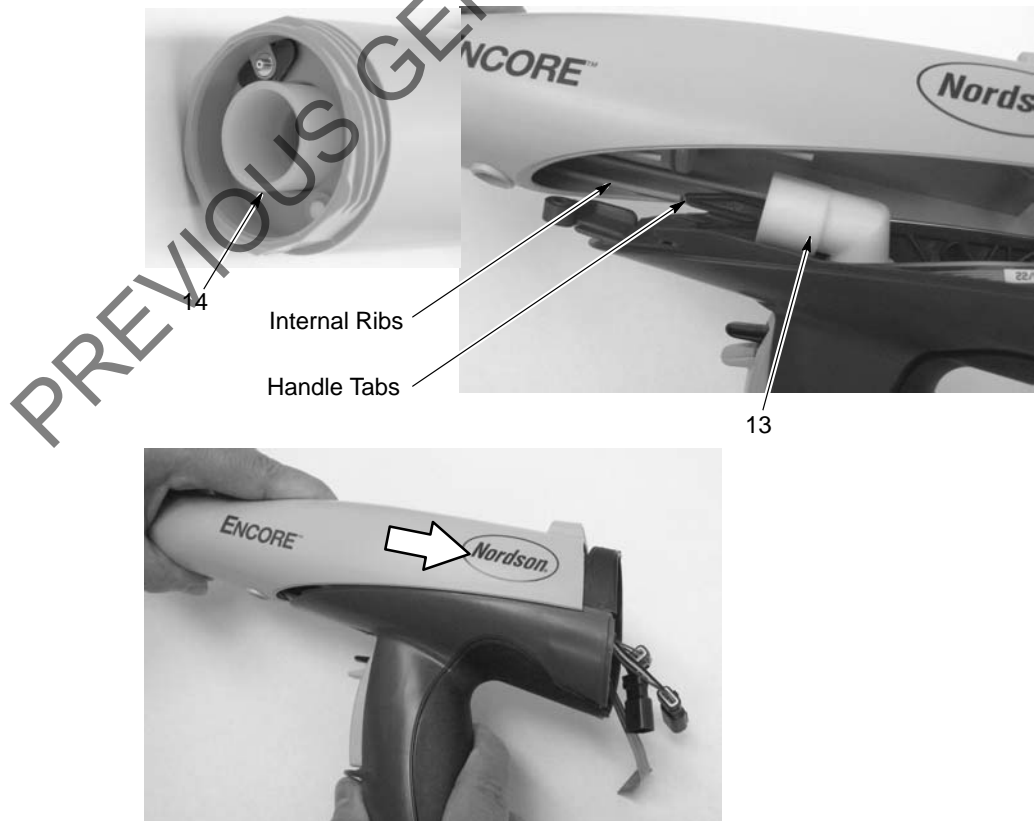


Figure 13 Outlet Powder Tube, Elbow, and Gun Body Installation

13. Elbow

14. Outlet powder tube



14. See Figure 3. Install the M5 x 10 flat head nylon screw into the gun body to secure it to the handle.
15. See Figure 13. Use your finger or a wooden dowel to align the inside end of the powder tube with the elbow then push on the tube to seat it in the elbow.
16. Connect the cable connector to the power supply connector.
17. See Figure 14. Install the display module as follows:
  - a. Make sure the display module switch mounting surface is clean and dry. Clean old adhesive off with isopropyl alcohol and dry before connecting the new switch.
  - b. Remove the two adhesive liners from the connector side of the trigger switch header.
  - c. Align the trigger switch header with the display module receptacle and push on the header to connect it. Apply even pressure on the header to seal it tightly against the display module.
  - d. Remove the liner from the new adhesive support pad and install it over the trigger switch header. Apply even pressure on the support pad to secure and seal it to the display module.
  - e. Connect the display module and gun cable J3 connectors together.
  - f. Gently fold the trigger switch ribbon cable and display module cable into the gun, and install the display module onto the gun.
  - g. Secure the module with the bottom (M3 x 20) screw (12).
  - h. Slide the hook (10) onto the display module and secure it with the top (M3 x 30) screw (11).

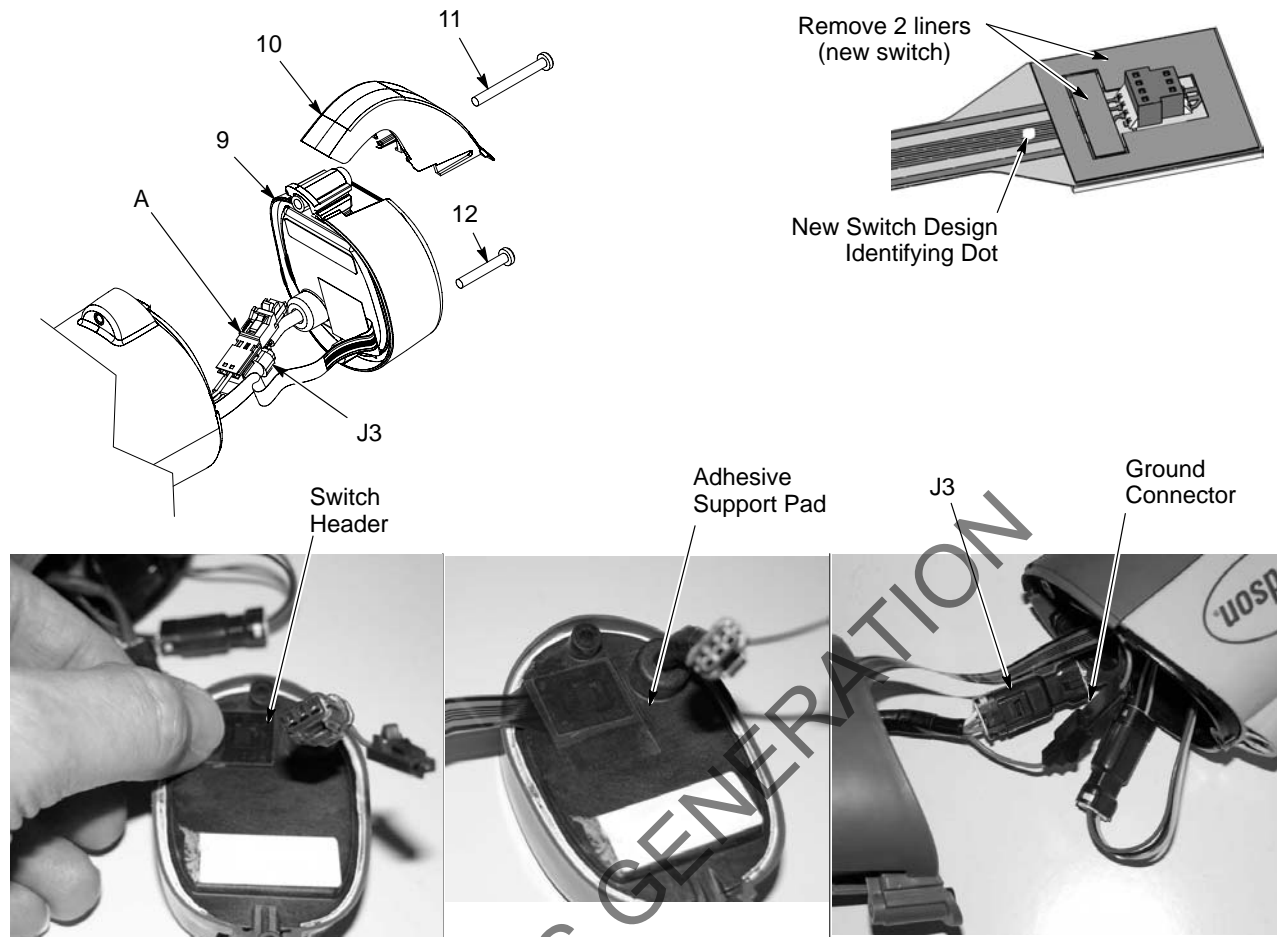


Figure 14 Display Module Replacement

- 9. Display module
- 10. Hook

- 11. M3 x 30 screw
- 12. M3 x 20 screw

- A. Ground wire connector

18. Install the electrode assembly, nozzle, and nozzle nut.

19. Connect the purge air tubing, air wash tubing, and powder feed hose adapter and hose to the gun.

20. Connect the gun cable to the controller interface module.

21. Turn on the interface and check the gun functions.

## Trigger Switch Kit

Part	Description	Note
1101872	KIT, trigger switch, Encore	A
NOTE A: Kit includes new adhesive support pad.		

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