

Encore® Display Module Kit 1100986

Description

Use this instruction sheet to replace the original Encore Manual Gun display module with the new display module kit 1100986. The additional ground cable included with the display module provides additional protection for the electronics inside the display module.

Follow these instructions carefully to ensure that the display module is correctly installed and grounded.

Preparation

1. Turn off the gun.
2. Remove the nozzle nut, nozzle, and electrode assembly from the gun.
3. Disconnect the powder feed hose adapter, black purge air tubing, and clear electrode air wash tubing from the gun handle.
4. Disconnect the gun cable from the controller interface module.
5. Move the gun to a clean workbench.

Display Module Removal

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).
4. Carefully pull the display module away from the gun.
5. Disconnect the gun cable/display module connectors (J3).
6. Carefully remove the adhesive support pad and the trigger switch header from the display module.
7. If the adhesive support pad remains stuck to the trigger switch header, carefully peel the pad off.

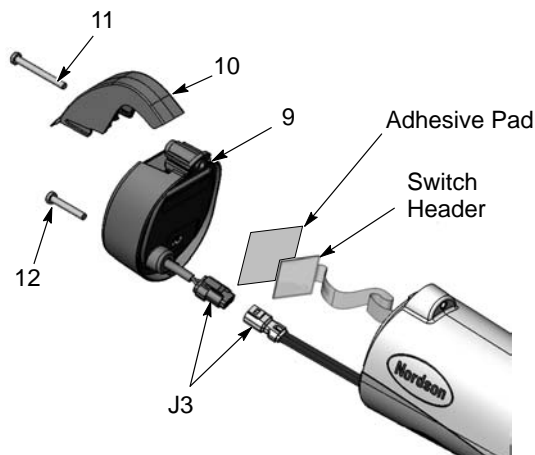


Figure 1 Removing the Display Module

Gun Disassembly

To connect the new display module ground wire to the gun ground, you must disassemble to the gun.

1. Remove the display module as described in *Display Module Replacement*.
2. 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.
3. Pull on the top of the bulkhead (8) to remove it from the gun. Pull the gun cable and power supply connectors and leads out of the bulkhead.
4. Leave the power supply (6) installed in the gun body. If you remove it, make sure to mate up the gun body ribs with the grooves in the power supply when you re-install it.

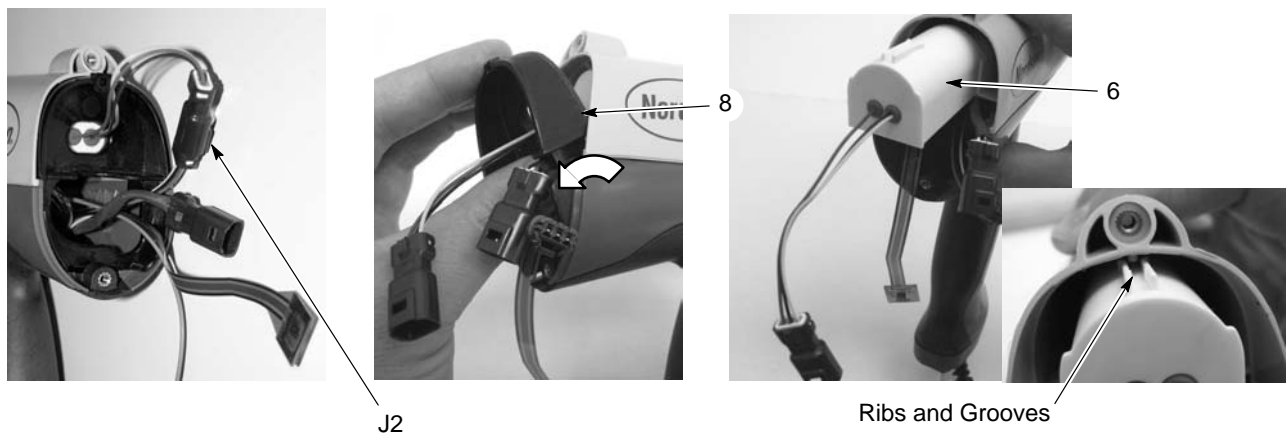


Figure 2 Removing the Bulkhead and Power Supply

5. See Figure 3. Remove the M5 x 10 nylon screw (24) from the gun body.

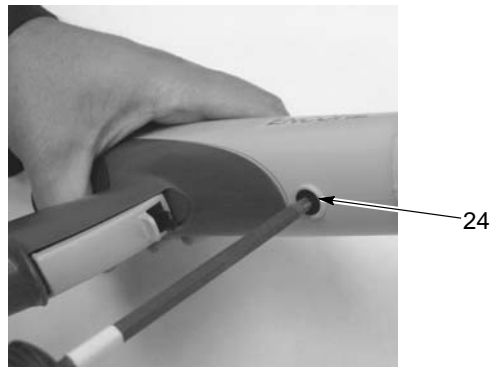


Figure 3 Removing the Display Module

6. 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.

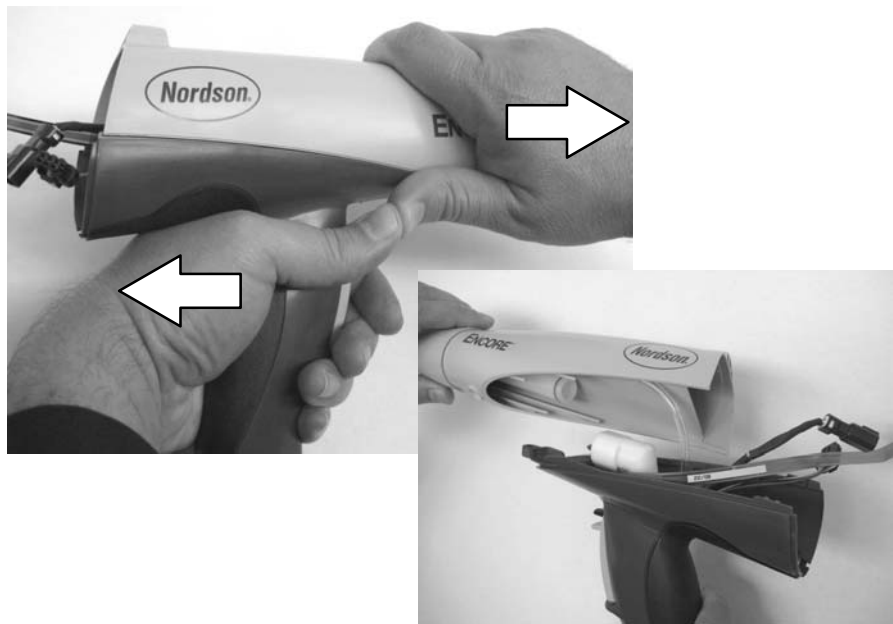


Figure 4 Separating Handle and Gun Body

7. See Figure 5. Remove the elbow (13) from the inlet tube (23).
8. Remove the two M3 x 20 screws (12) securing the handle base (22) to the handle assembly.
9. Pull the base away from the handle assembly about 25-50 mm (1-2 in.).
10. Pull the clear 4-mm tubing (4A, part of filter assembly) off the barbed fitting (20).

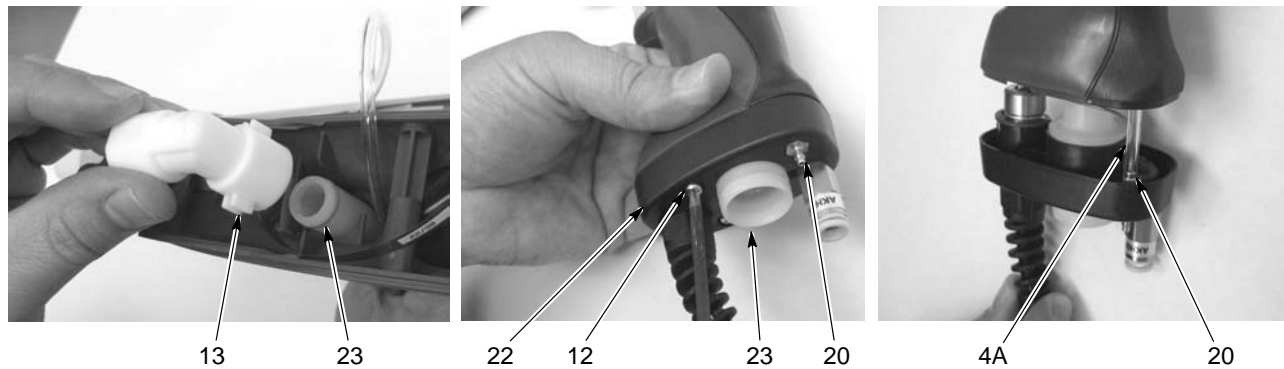


Figure 5 Removing the Elbow and Separating the Base from the Handle

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

13. Elbow
20. Dual barbed fitting

22. Handle base
23. Inlet tube

11. 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

12. See Figure 7. Separate the right and left handles (25, 26).
13. Leave the main trigger, settings trigger, and trigger actuator (16, 17, 18) on the right handle half.
14. Use a deep $\frac{1}{4}$ -in. socket to remove the nut and lockwasher from the barbed fitting (20) and disconnect the gun cable ground wire and display module ring-tong terminals from the fitting.
15. Slip the gun cable and display module ground terminals over the fitting. Install the internal-toothed lockwasher and nut on the fitting and tighten the nut.

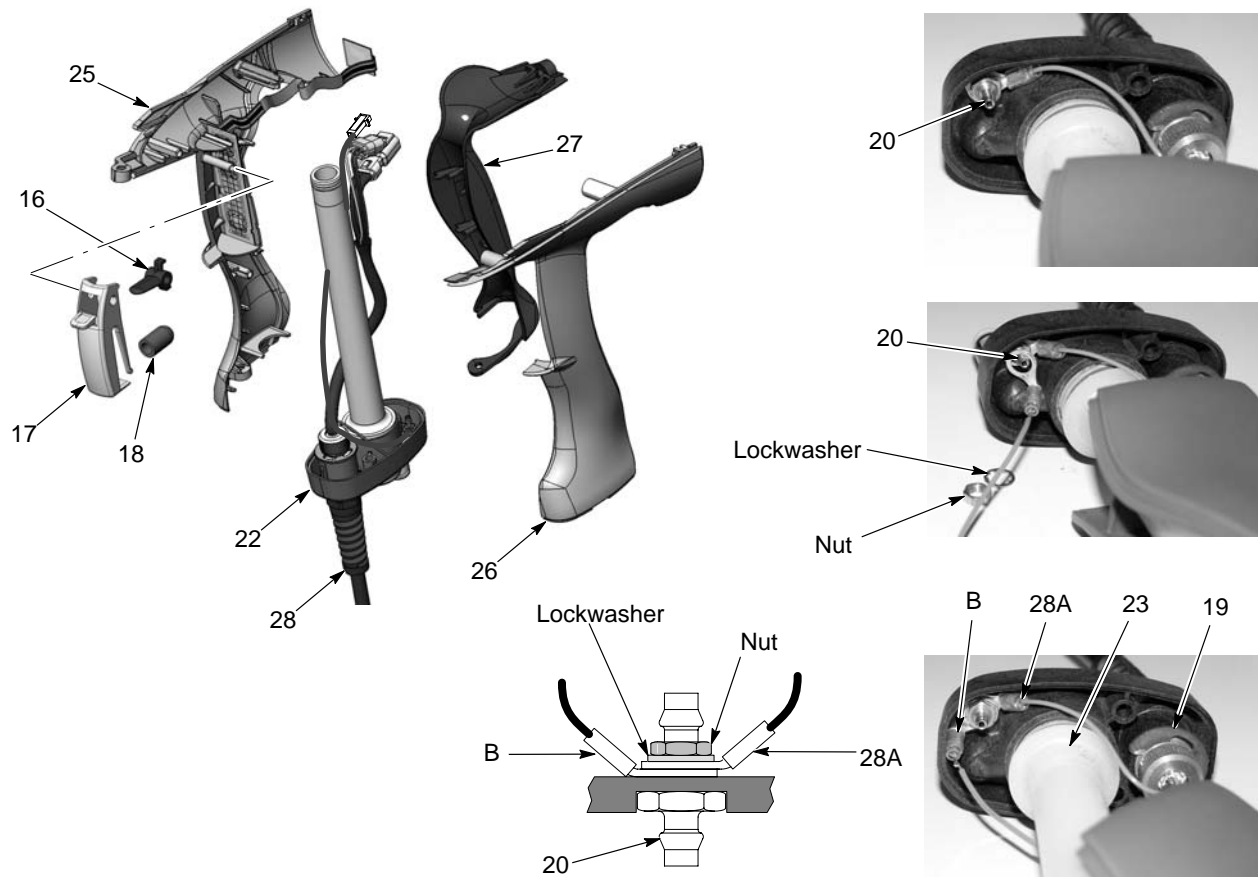


Figure 7 Separating the Handles and Connecting the New Module Ground Wire

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

16. Align the right and left handle hex pins with their mating sockets and press the handles together.
17. See Figure 8. Feed the cable (28) connectors and display module ground wire into the front of the handle, then slide the inlet tube (23) through the tube guides into the handle assembly while routing the cable (28) through the handle as shown. Stop when the base is about 1.5-2 inches from the bottom of the handle assembly.
18. Connect the 4-mm clear tubing (part of filter assembly, item 4) to the barbed fitting (20) in the handle base.

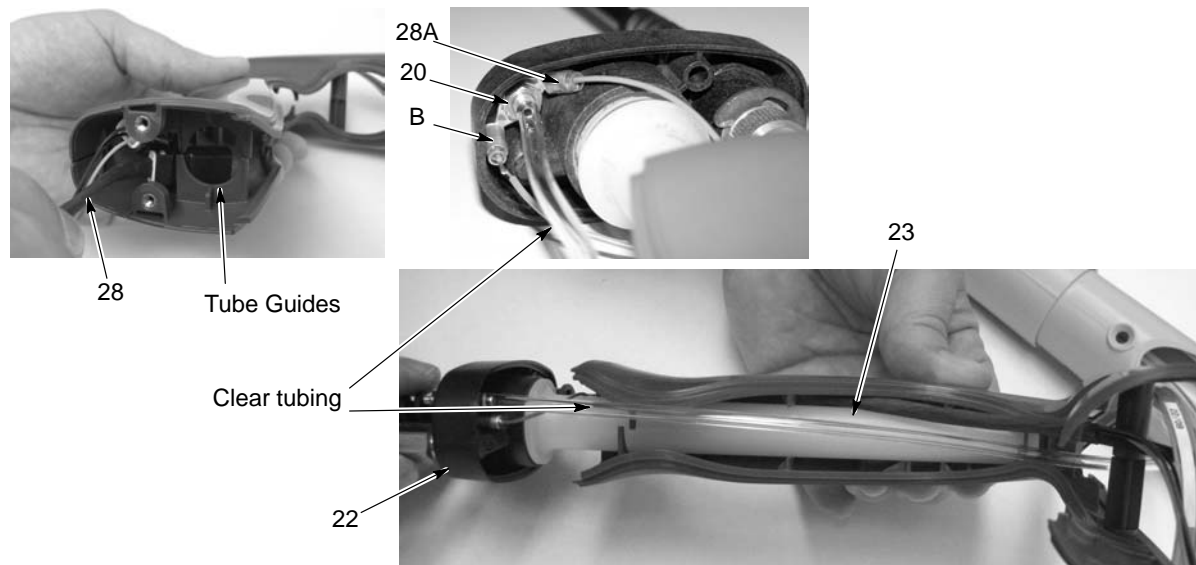


Figure 8 Assembling Handles and Base

- 20. Dual barbed fitting
- 22. Handle base

- 23. Inlet tube
- 28. Cable

- 28A. Cable ground
- B. Display module ground

19. See Figure 7. Hook the ground pad (27) behind the locator tabs on the rear of the handles and rotate the ground pad into position against the handle assembly, making sure the wiring and tubing is not crimped.

20. See Figure 9. Attach the handle base (22) to the handle assembly with the two M3 x 20 screws (12). Hand tighten the screws only.



Figure 9 Assembling Ground Pad and Base to Handles

- 12. M3 x 20 screws

- 22. Handle base

- 27. Ground pad

21. See Figure 10. If you removed the power supply (6), slide it into the upper cavity of the gun body, mating the gun body ribs with the grooves on the top of the power supply.

22. 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.

23. See Figure 11. Position the lower edge of the bulkhead (8) 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.
24. Feed the power supply J2 connector through the top opening in the bulkhead (8).
25. Route the trigger switch header, gun cable connectors, and display module ground connector through the bottom opening in the bulkhead.

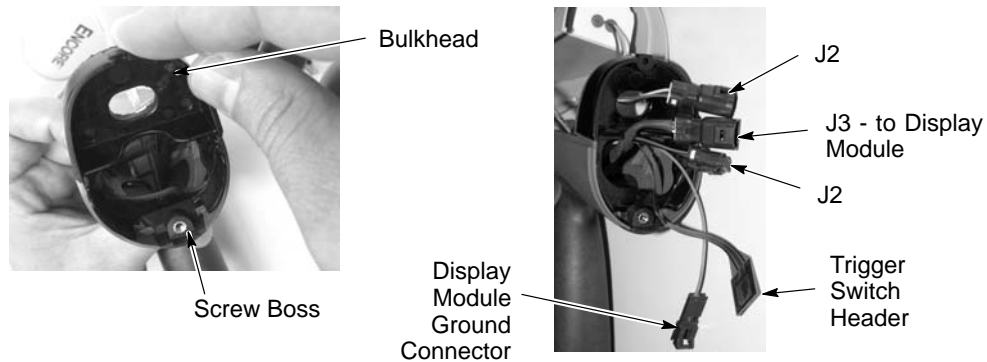


Figure 11 Assembling Bulkhead and Routing Cables

26. See Figure 12. 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.
27. 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.
28. 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.

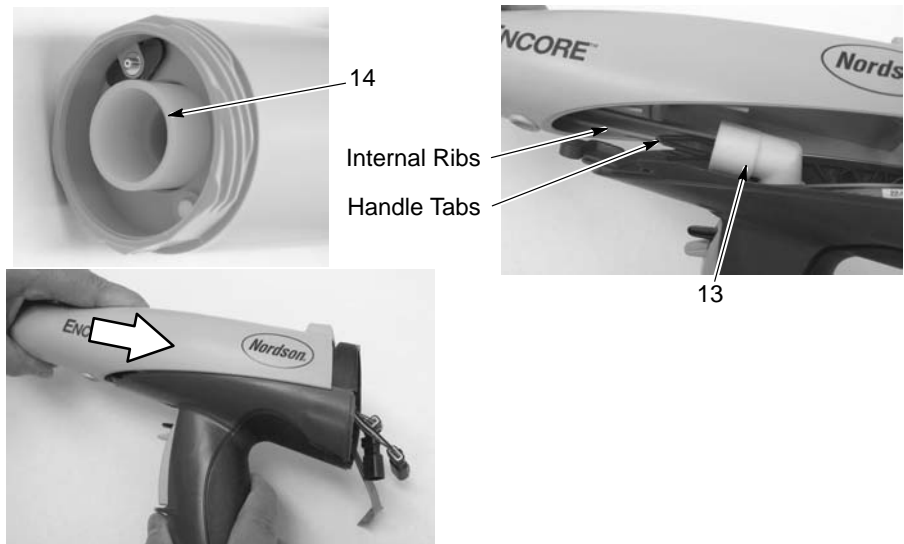


Figure 12 Outlet Powder Tube Installation

13. Elbow

14. Outlet powder tube

29. See Figure 3. Install the M5 x 10 flat head nylon screw into the gun body to secure it to the handle.

30. Align the inside end of the powder tube with the elbow then push on the tube to seat it in the elbow.
31. See Figure 13. Connect the J2 cable connector to the J2 power supply connector.

Display Module Installation

1. 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.
2. Remove the liner from the new adhesive support pad and install it over the trigger switch header. Apply even pressure on the pad to secure the trigger switch header and seal it to the display module.
3. Connect the display module and cable J3 connectors together.
4. Connect the display module ground connectors together.
5. Gently fold the trigger switch ribbon cable and display module cable into the gun, and install the display module onto the gun.
6. Secure the module with the bottom (M3 x 20) screw (12).
7. Slide the hook (10) onto the display module and secure it with the top (M3 x 30) screw (11).

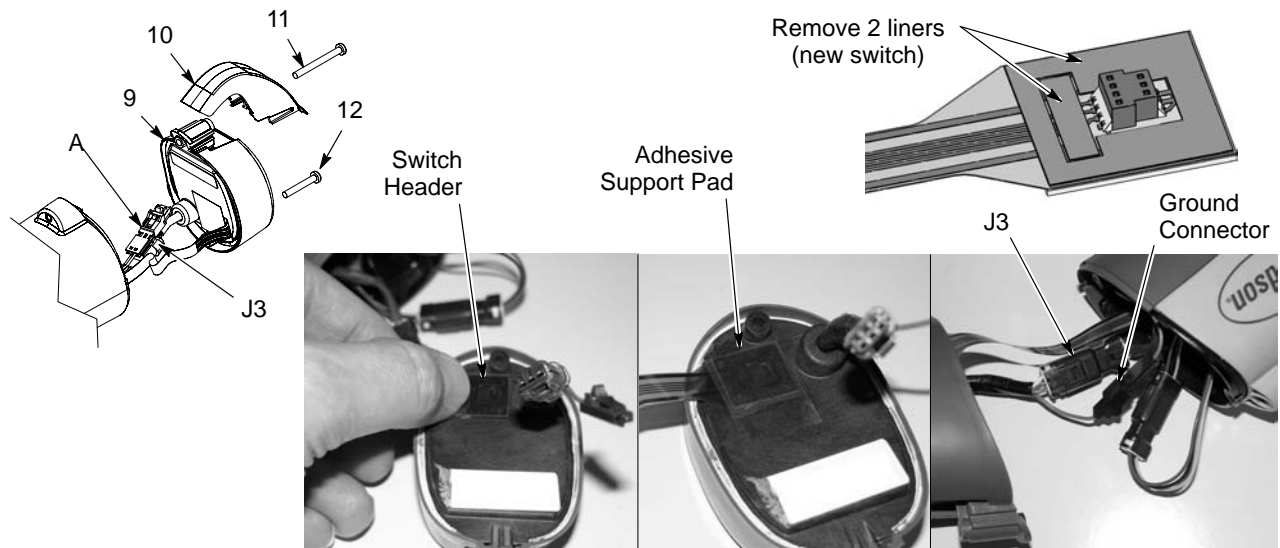


Figure 1 Display Module Replacement

- | | | |
|-------------------|-------------------|--------------------------|
| 9. Display module | 11. M3 x 30 screw | A. Ground wire connector |
| 10. Hook | 12. M3 x 20 screw | |

Install the electrode holder, nozzle and nozzle nut. Reconnect the gun cable, clear air wash tubing, and purge air tubing to the gun handle.

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