

# Encore<sup>®</sup> Manual Spray Gun Upgrade Kit

## Introduction

Use this kit to upgrade older Encore Manual Powder Spray Guns to the latest configuration. The kit provides an improved ground path for the display module to protect it from high voltage electrostatics. The kit includes the following components:

- Ground Pad
- Bulkhead and Gasket
- Bezel
- Cable
- Fasteners

**NOTE:** The installation of this kit provides access to the trigger switch. If you have not already installed trigger switch kit 1101872, you should take this opportunity to do so.

## Installation

### *Removing Old Parts*

1. Purge and clean the gun.
2. Remove the nozzle nut, nozzle, and electrode assembly.
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. See Figure 1. Unscrew the top screw (11) securing the hook (10) and display module (9) to the gun body.
6. Slide the hook off the display module (9).
7. Unscrew the bottom screw (12). Discard the two screws.
8. Carefully pull the display module away from the gun.
9. If the display module has a ground cable connector (A), disconnect it.
10. Insert a small screwdriver into the recesses in the J3 gun cable/display module connector and J2 gun cable/power supply connector and disconnect them. Leave the trigger switch connected to the display module.

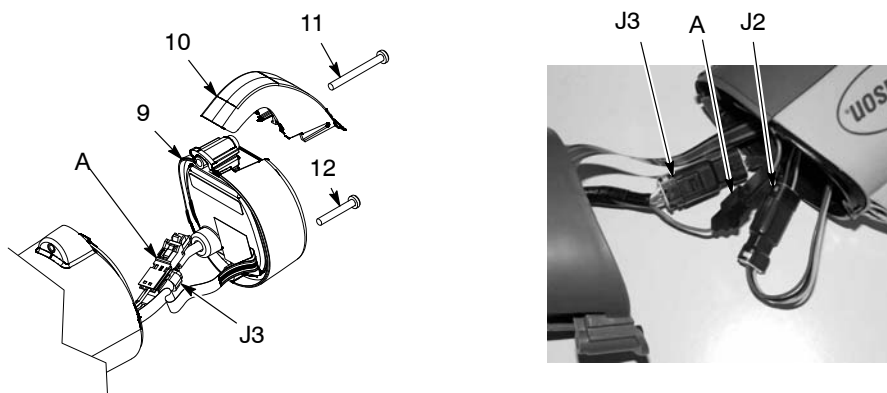


Figure 1 Removing the Display Module

11. See Figure 2. Pull on the top of the bulkhead (8) to remove it from the gun. Leave the power supply in the gun body.
12. Remove the M5 x 10 nylon screw (24) from the gun body.

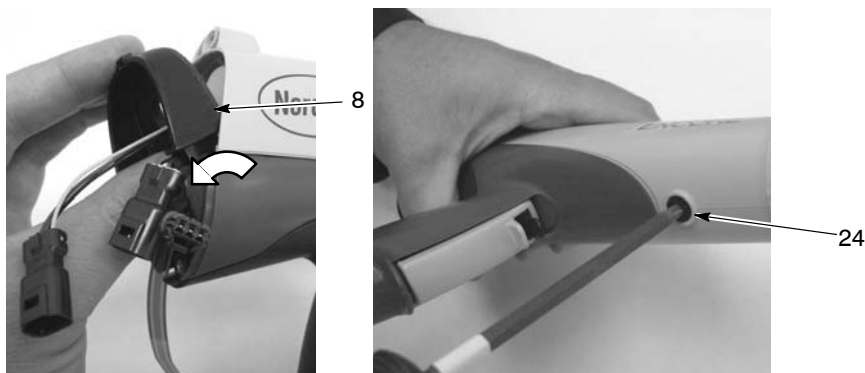


Figure 2 Removing Bulkhead and Body Screw

13. See Figure 3. 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.
14. Remove the elbow (13) from the inlet tube (23).

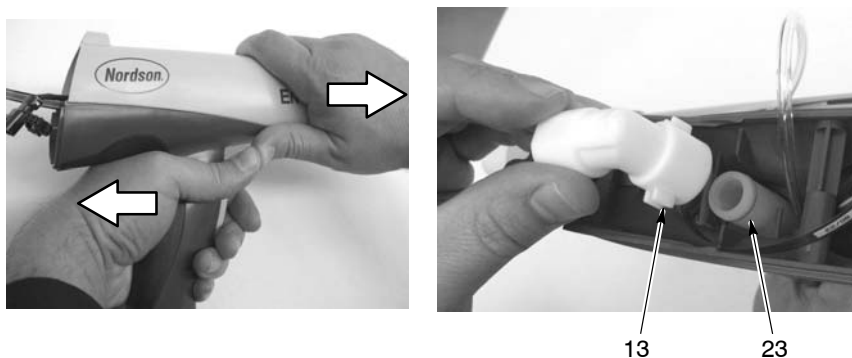


Figure 3 Removing Bulkhead and Body Screw

15. See Figure 4. Remove the two M3 x 20 screws (12) securing the handle base (22) to the handle assembly.
16. Pull the base away from the handle assembly about 25–50 mm (1–2 in.).
17. Pull the clear 4-mm tubing (4A, part of filter assembly) off the barbed fitting (20).

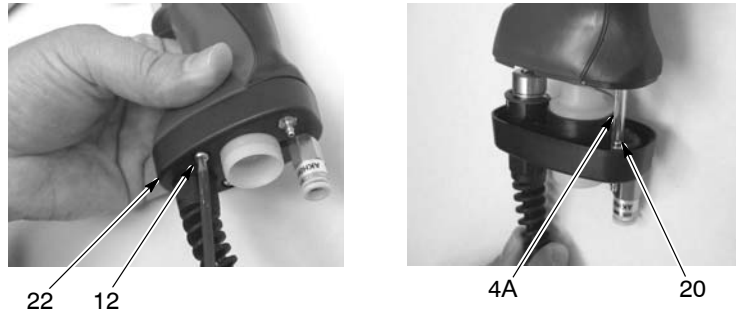


Figure 4 Removing Bulkhead and Body Screw

18. See Figure 5. Gently pull the ground pad (27) away from the handle, starting with the bottom and rotating it up and away.
19. Separate the right and left handle halves. Leave the triggers on the right handle half.
20. 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 (28A) and display module ground wire (B) from the fitting (guns that have not had the display module upgraded previously will not have a display module ground wire). Discard the display module ground wire.
21. Remove the retaining ring (19) from the cable, then remove the cable (28) from the base.

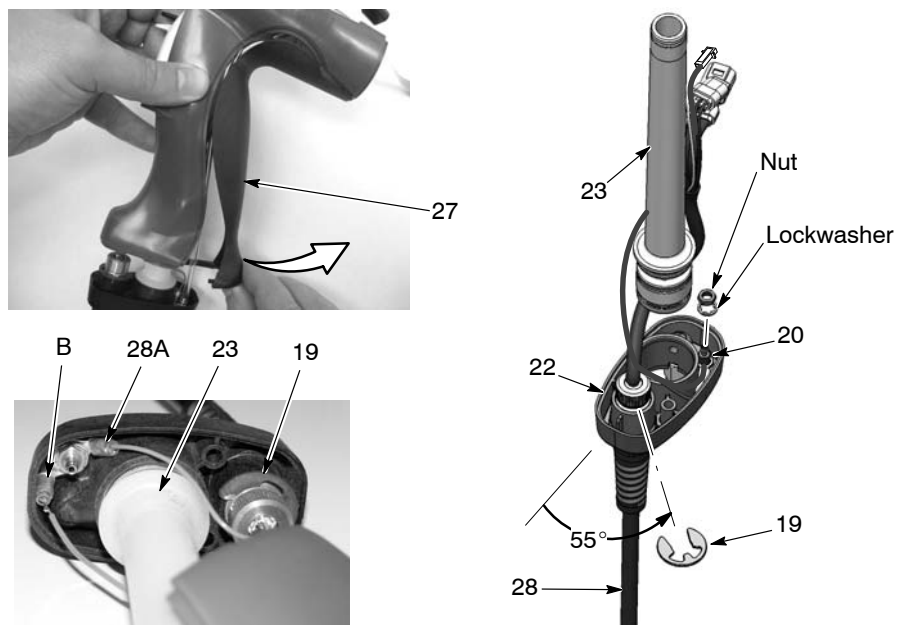


Figure 5 Removing Bulkhead and Body Screw

## Re-assembly with New Parts

1. See Figures 5 and 6. Re-install the lockwasher and nut on the barbed fitting and tighten the nut with a deep  $\frac{1}{4}$ -in. socket.
2. Feed the new cable included with the upgrade kit (28) through the handle base (22) and secure it to the base with the retaining ring (19). Position the retaining ring at the angle shown.
3. Install the inlet tube with O-rings installed (23) into the handle base (22), if removed.
4. Align the right and left handle hex pins with their mating sockets and press the handles together.
5. Feed the cable connectors and ground wire into the front of the handle, then slide the inlet tube through the tube guides into the handle assembly while routing the cable through the handle as shown. Stop when the base is about 1.5–2 inches from the bottom of the handle assembly.
6. Connect the 4-mm clear tubing (part of filter assembly, item 4) to the barbed fitting (20) in the handle base.

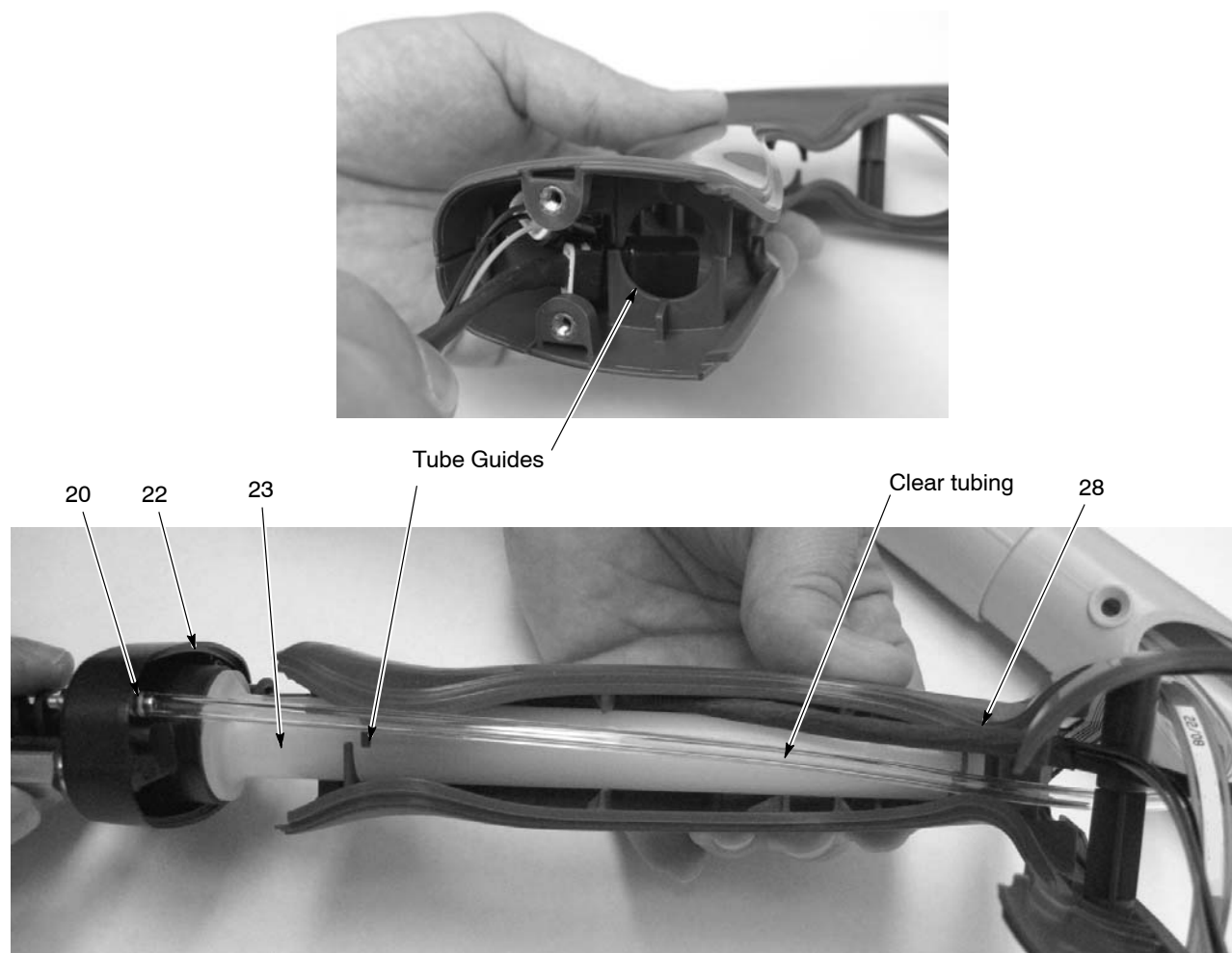


Figure 6 Assembling Handle

7. See Figure 7. Bend the cable ground terminal (28) 90 degrees and connect it to the inside boss of the ground pad (27) with the lockwasher and screw (27A, 27B) included with the upgrade kit.

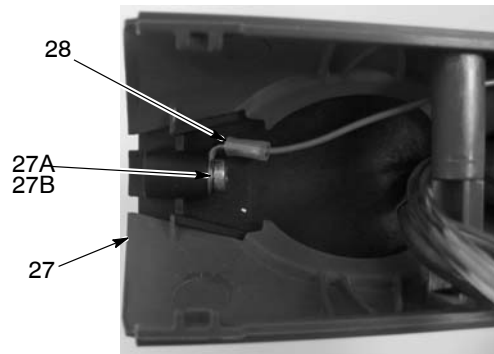


Figure 7 Installing Ground Wire

8. See Figure 8. 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.
9. Push up on the handle base (22) to seat it in the handle, then secure the handle base to the handle assembly with the two M3 x 20 screws (12). Hand tighten the screws only.

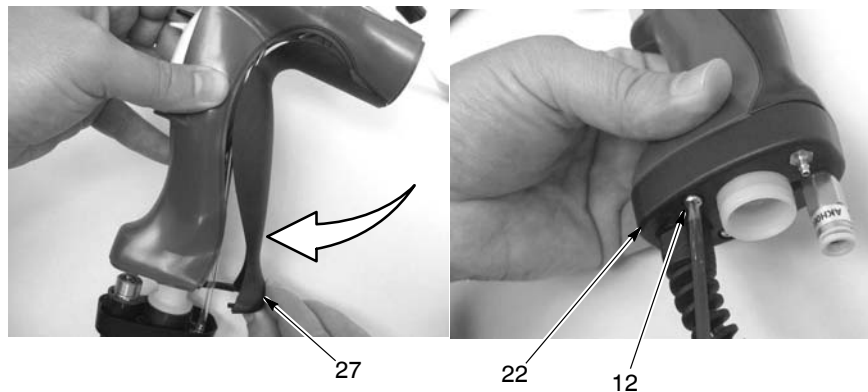


Figure 8 Installing Ground Pad and Handle Base

10. See Figures 9 and 10. Position the bulkhead (8) included with the upgrade kit behind the locator tabs and rotate the top of the bulkhead forward until it snaps into place on the handle and gun body.
11. Route the trigger switch header and the J2 and J3 cable connectors through the bottom opening in the bulkhead.
12. Press on the rear end of the power supply to ensure that the brass contact inside the forward end is seated against the contact tip at the forward end of the gun body.
13. Insert the outlet tube (14) with O-rings installed through the front of the gun body until the tube end is even with the end of the gun body.
14. 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.

15. Feed the power supply J2 connector through the top opening in the bulkhead.
16. Align the gun body assembly with the handle and slide them together, engaging the internal ribs of the gun body with the handle tabs.

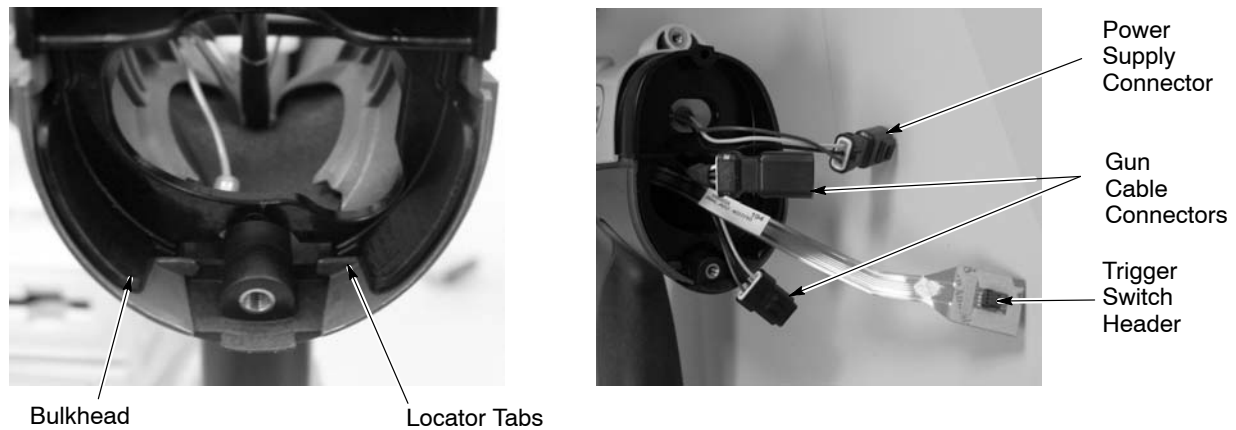


Figure 9 Installing the Bulkhead and Routing Cables and Trigger Switch Header

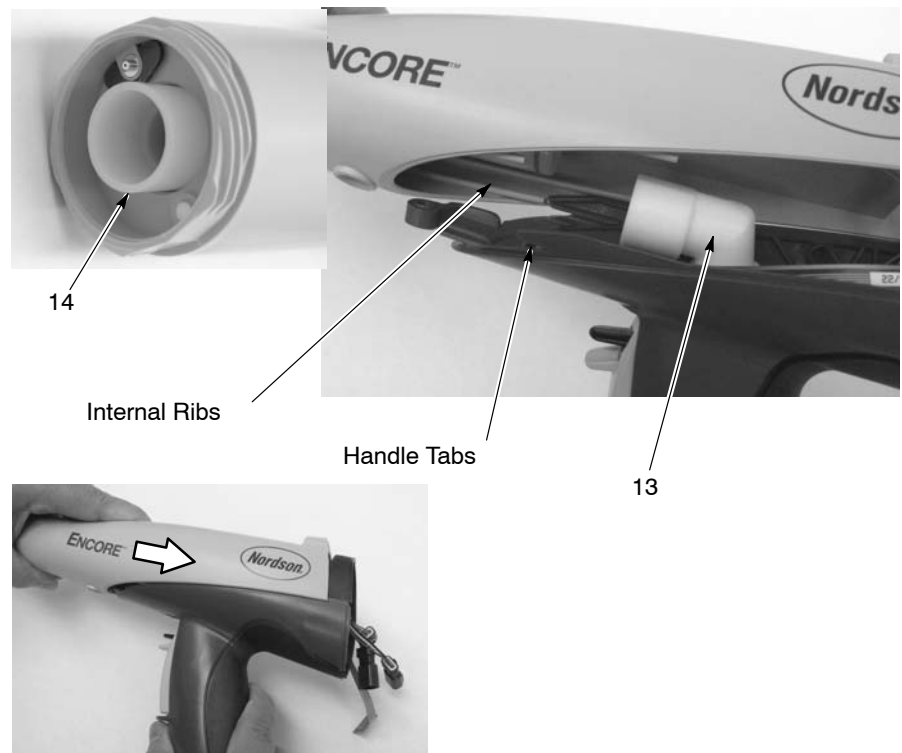


Figure 10 Outlet Tube, Elbow, and Gun Body Installation

17. See Figure 2. Install the M5 x 10 flat head nylon screw into the gun body to secure it to the handle.
18. Connect together the J2 power supply and cable connectors and the J3 display module and cable connectors.

19. Gently fold the trigger switch ribbon cable and other connectors into the gun, and install the display module onto the gun.
20. See Figure 1. Slide the hook (10) onto the display module, then install the bezel (11) included with the upgrade kit.
21. Secure the module with the screws (12) included with the upgrade kit.
22. Align the inside end of the powder tube with the elbow then push on the tube to seat it in the elbow.
23. Install the electrode assembly on the gun, then install the nozzle on the electrode assembly, making sure the keys in the electrode assembly slide into the slots on the nozzle.
24. Install the nozzle nut over the nozzle and rotate clockwise to secure.
25. Connect the 6-mm blue purge air tubing, 4-mm clear electrode air wash tubing, and powder feed hose adapter and hose to the gun.
26. Connect the gun cable to the controller interface module.
27. Turn on the interface and check the gun functions.

## Kit Parts

See Figure 11.

Item	Part	Description	Quantity	Note
–	1102653	KIT, upgrade, handgun, Encore	1	
7	1088502	• GASKET, multiplier cover, handgun	1	
8	1102624	• COVER, bulkhead, multiplier, handgun	1	
11	1102648	• BEZEL, shield, plated	1	
11A	345071	• SCREW, pan head, recessed, M3 x 35, BZN	2	
27	1102621	• HANDLE, ground pad, handgun, Encore	1	
27A	983520	• WASHER, lock, internal, M3, zinc	1	
27B	982427	• MACHINE SCREW, pan head, recessed, M3 x 6, zinc	1	
28	1102625	• CABLE ASSEMBLY, handgun, 6 meter	1	

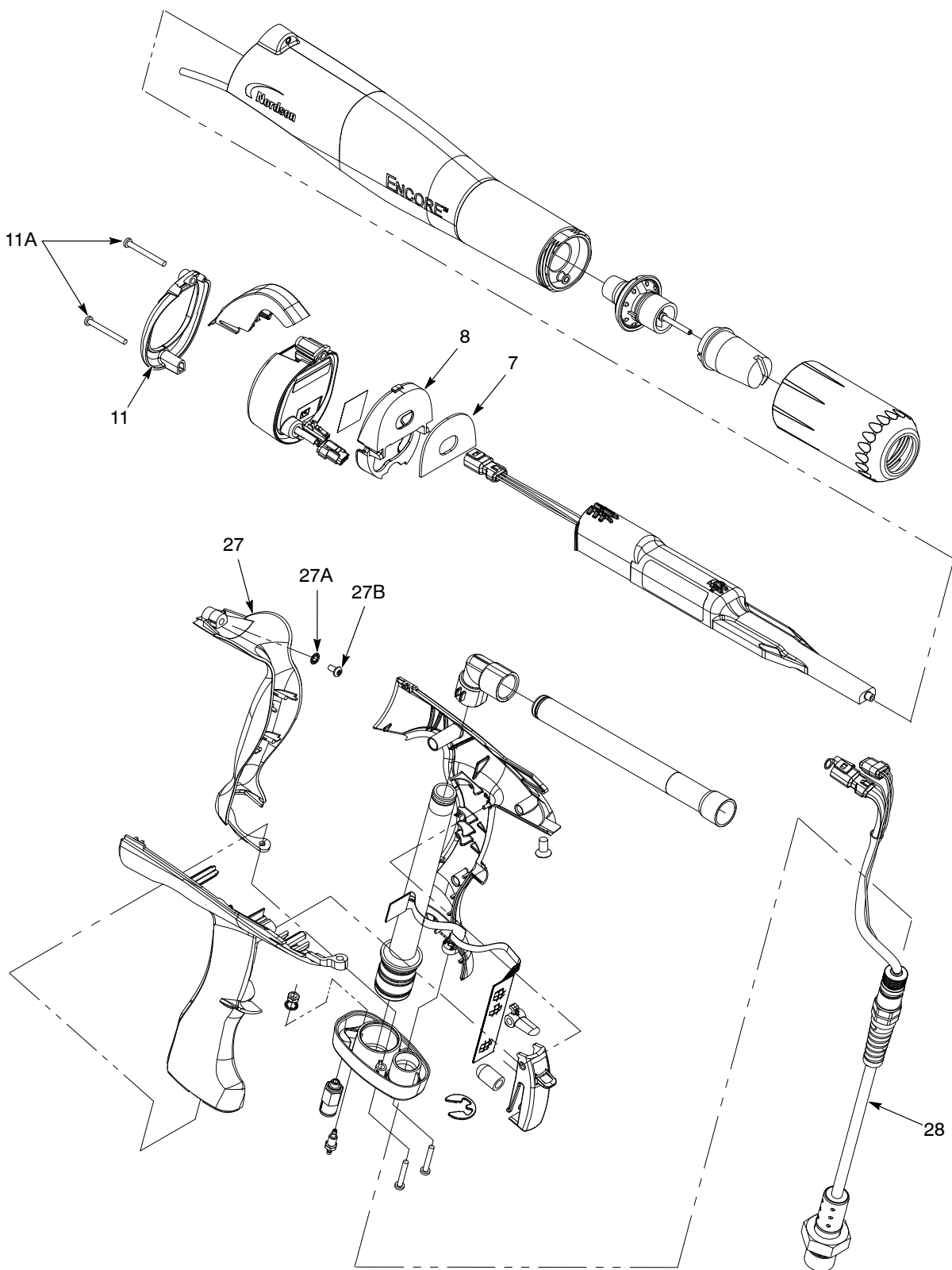


Figure 11 Kit Parts

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