

### INSTALLATION GUIDE FOR LAVATORY FLUSH PUMP

#### PART A : H3 SERIES COACHES

#### MATERIAL

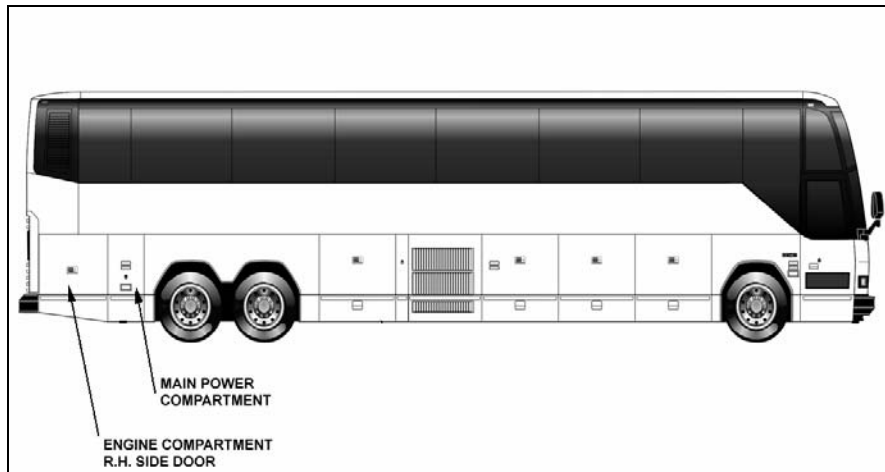
Kit #404917 includes the following parts :

Part No.	Description	Qty
900960	Pump 24 volts	1
5011209	Screw MA PAN PH SS 8-32 X ½"	4
5001480	Nut hex self-locking NYRT SS 8-32	4
502556	Washer flat SS 4.3 X 9 X 0.8	4
504323	Grommet	1
561786	Connector seal	2
561568	Male contact pin	2
561566	Connector housing	1
IS-99029	Instruction Sheet	1
FI-99029	Feuille d'instructions	1

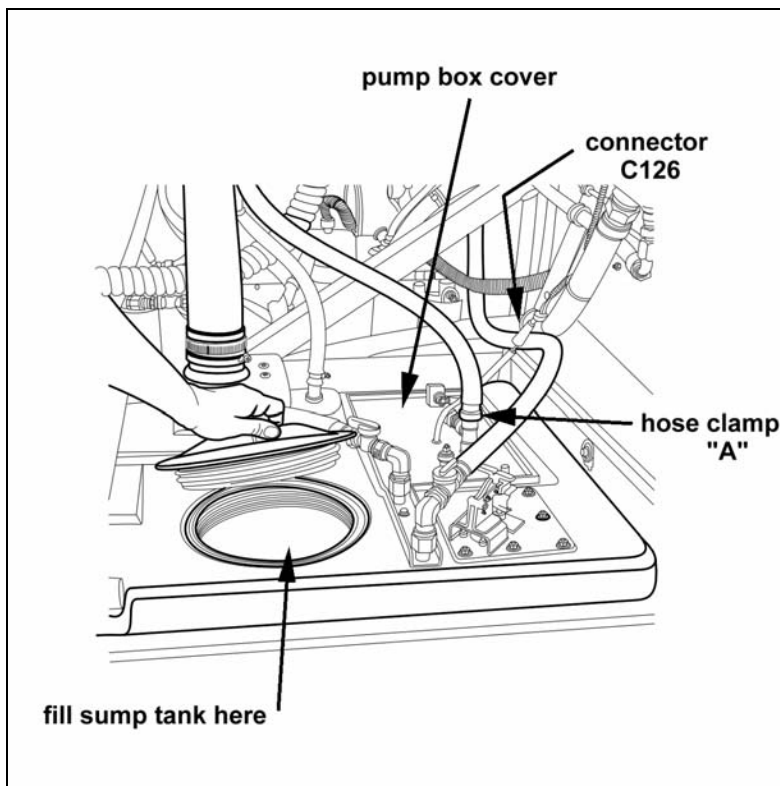
#### PROCEDURE

**Warning :** Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

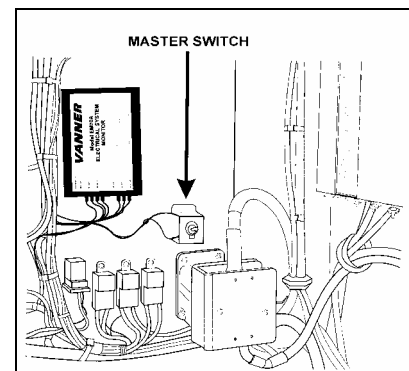
1. Open engine R.H. side door (figure 1).
2. Drain sump tank as per the operator's manual.
3. To properly wash the sump tank, fill with fresh water and use the flush button in the lavatory (figure 2).
4. Drain the sump tank once again.



**FIGURE 1 : ACCESS DOORS AND COMPARTMENTS**



**Figure 2 : SUMP TANK WITH COMPONENTS**



**FIGURE 3 : MAIN POWER SWITCH**

5. Open the main power compartment door (figure 1) and set the battery master switch to the "OFF" position (figure 3).
6. In the engine R.H. side compartment, disconnect the pump connector C126 (figure 2 & 4).
7. Loosen the hose clamp "A" and remove the flexible hose (figure 2).
8. Using a 10mm wrench, unscrew fixing bolts of pump box cover (figure 2).
9. Remove the pump box.

10. Remove the front panel on the pump box (figure 4).
11. Loosen the hose clamp "B" and remove the flexible hose "C" (figure 4).
12. Cut the pump power supply leads (figure 4).
13. Using a flat screwdriver, remove the rubber grommet from the pump box cover (figure 4).
14. Remove the pump box cover (figure 4).
15. Unscrew the 4 retaining nuts on the pump base and remove the pump (figure 4).
16. Loosen the hose clamp "D" at the pump outlet and remove the short flexible hose section (figure 4).

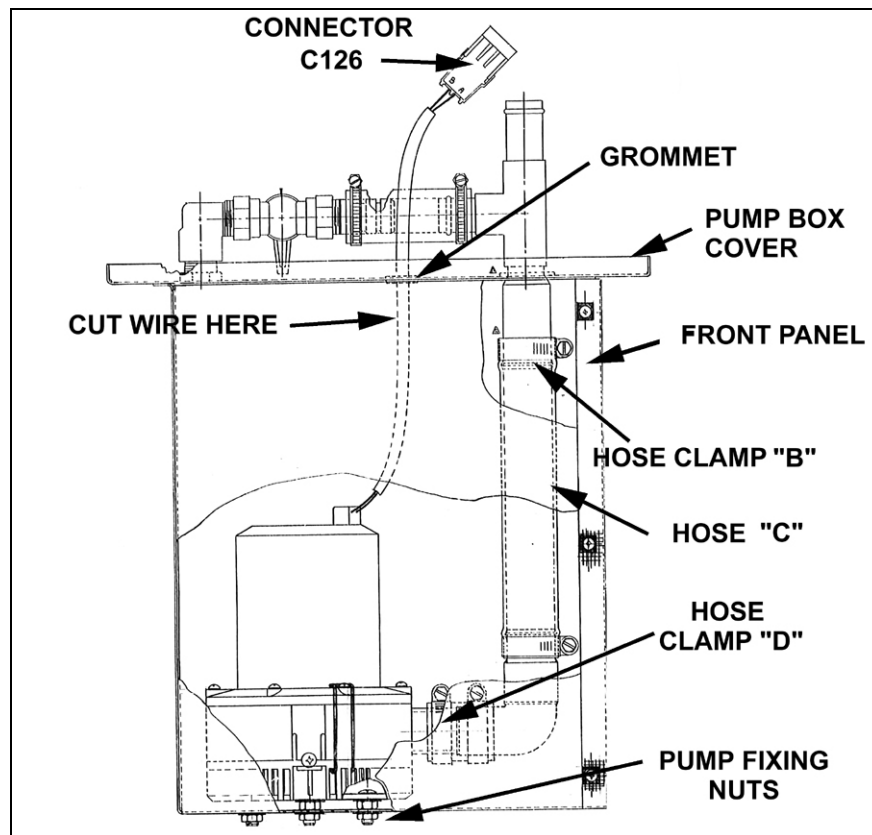
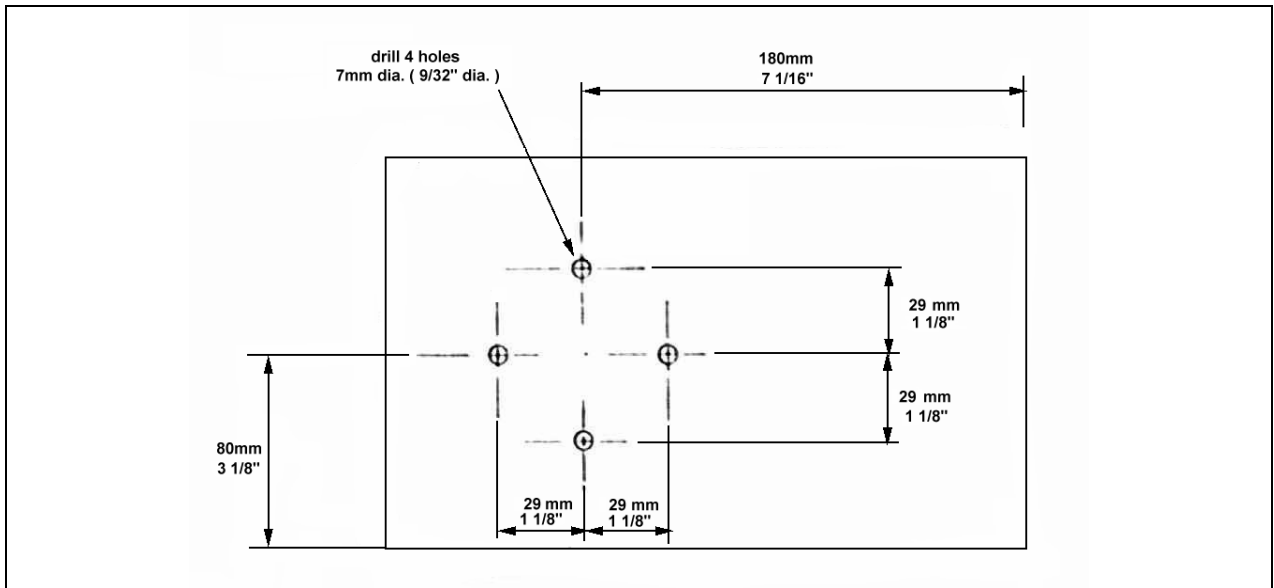


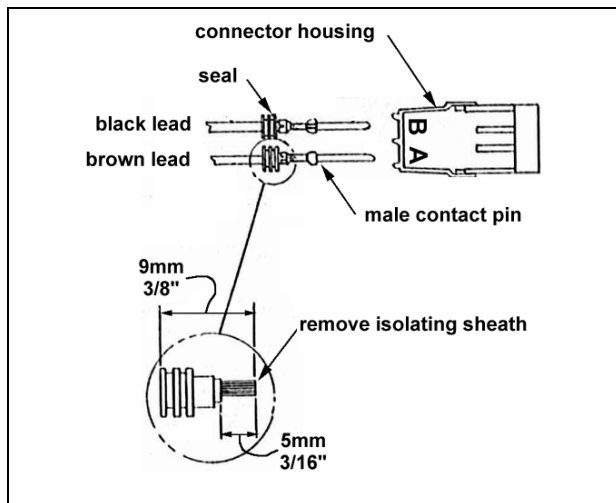
FIGURE 4 : PUMP BOX DETAIL

17. Using the new pump base, mark out the holes on the bottom of the pump box. Drill 4 holes  $\varnothing 7\text{mm}$  ( $9/32''$ ) (figure 5). Make sure to position the pump so that the outlet will be orientated as shown on figure 4.
18. Fix the pump base at the bottom of the box using the screws, the self-locking nuts and the flat washers included in the kit.
19. Connect the flexible hose on the pump outlet and tighten the hose clamp "D".
20. Install the pump on the base.
21. Install the pump box cover.

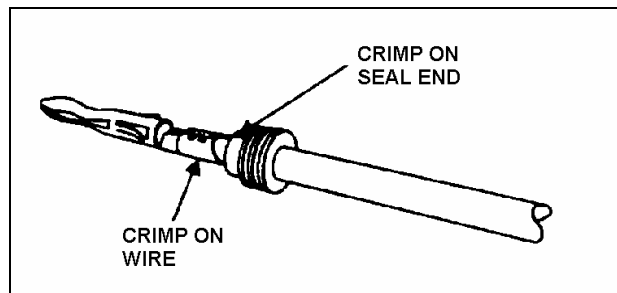


**FIGURE 5 : DRILLING POSITION ON THE PUMP BOX BOTTOM**

22. Install the new grommet on the pump box cover, pass the pump power supply leads through it and apply Sikaflex 221 sealant so that the installation will be watertight (figure 4).
23. Connect the flexible hose "C" and tighten the hose clamp "B".
24. Install the front panel on the pump box.
25. Remove 5mm (3/16") of isolating sheath on the pump brown & black power supply leads (figure 6).
26. Place a connector seal on each lead and crimp a male contact pin on the lead. The contact pin must be crimped on the smooth end of the seal. Insert the male contact pin into the connector housing. Brown lead on **A** side, black lead on **B** side (figure 6 & 7).



**FIGURE 6 : CONNECTOR ASSEMBLY**



**FIGURE 7 : MALE CONTACT PIN & SEAL INSTALLATION**

27. Apply Tremco Butyl on each side of the pump box cover gasket and place it on the sump tank (figure 8).

28. Install the pump box on the sump tank.
29. Connect the flexible hose and tighten the hose clamp "A".
30. Connect the pump power supply connector C126.
31. In the main power compartment, set the battery master switch to the "ON" position.
32. Fill the sump tank as per the operator's manual. The installation is now completed, close all the compartment doors.

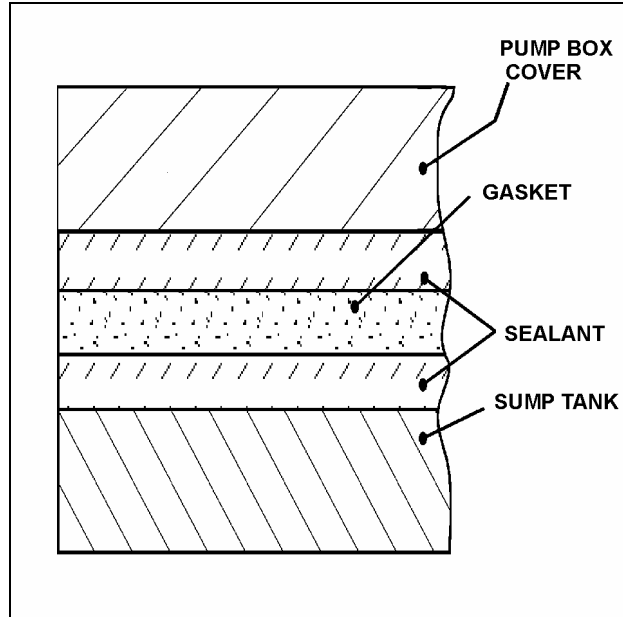


FIGURE 8 : GASKET AND SEALANT UNDER PUMP BOX COVER

## PART B : XL SERIES COACHES

### MATERIAL

Kit #405088 includes the following parts :

Part No.	Description	Qty
900960	Pump 24 volts	1
500952	Self-tapping screw	4
562834	Butt splice	2
560784	Heat shrinkable sleeve .25-.08 ID	6"
IS-99029	Instruction Sheet	1
FI-99029	Feuille d'instructions	1

---

## PROCEDURE

**Warning :** Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1. Open engine R.H. side door (figure 1).
2. Drain main sump tank into auxiliary sump tank as per the operator's manual.
3. To properly wash the main sump tank, fill with fresh water as per the operator's manual.
4. Drain main sump tank into auxiliary sump tank once again.
5. Set the battery master switch to the "OFF" position. The battery master switch is located in the main power compartment (XL-45) or near the rear baggage compartment door (XL-40) (figure 1).

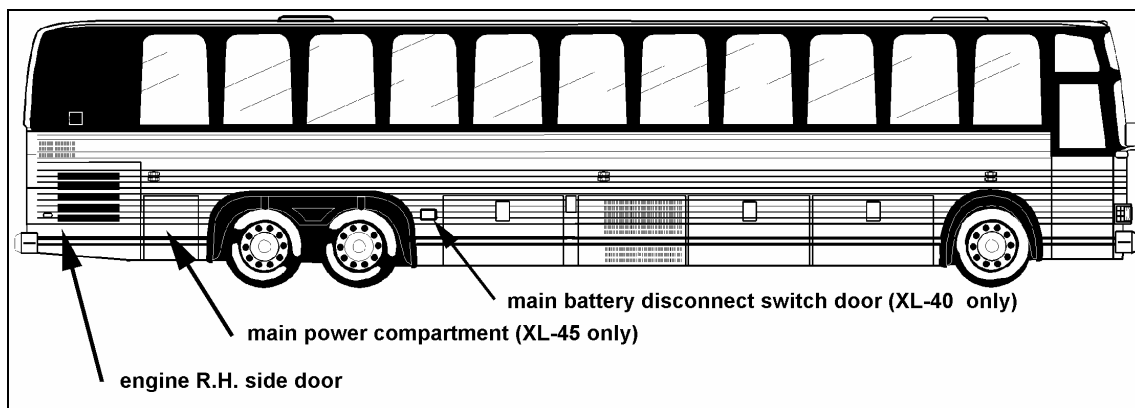


FIGURE 1 : ACCESS DOORS AND COMPARTMENTS

6. In the lavatory, remove the toilet seat (figure 2).
7. Cut the pump power supply leads (brown & black) where they are joining the red and black leads coming from the R.H. side of the main sump tank.
8. Remove the pump box cover (figure 2).
9. Loosen the hose clamp and remove the hose from the pump outlet (figure 2).
10. Remove the pump from its base.
11. Unscrew the pump base and remove the pump box. The pump box is held in place with Tremco Butyl.
12. Using the new pump base and figure 3, mark out the holes on the bottom of the pump box. Drill 4 holes  $\varnothing 6\text{mm}$  (1/4"). Make sure to place the pump so that the outlet will be orientated as shown on figure 3.
13. Fix the pump box on the bottom of the sump tank with Tremco Butyl.
14. Screw the pump base in place using the 4 screws #500952.
15. Install the pump on its base, connect the flexible hose and tighten the hose clamp.

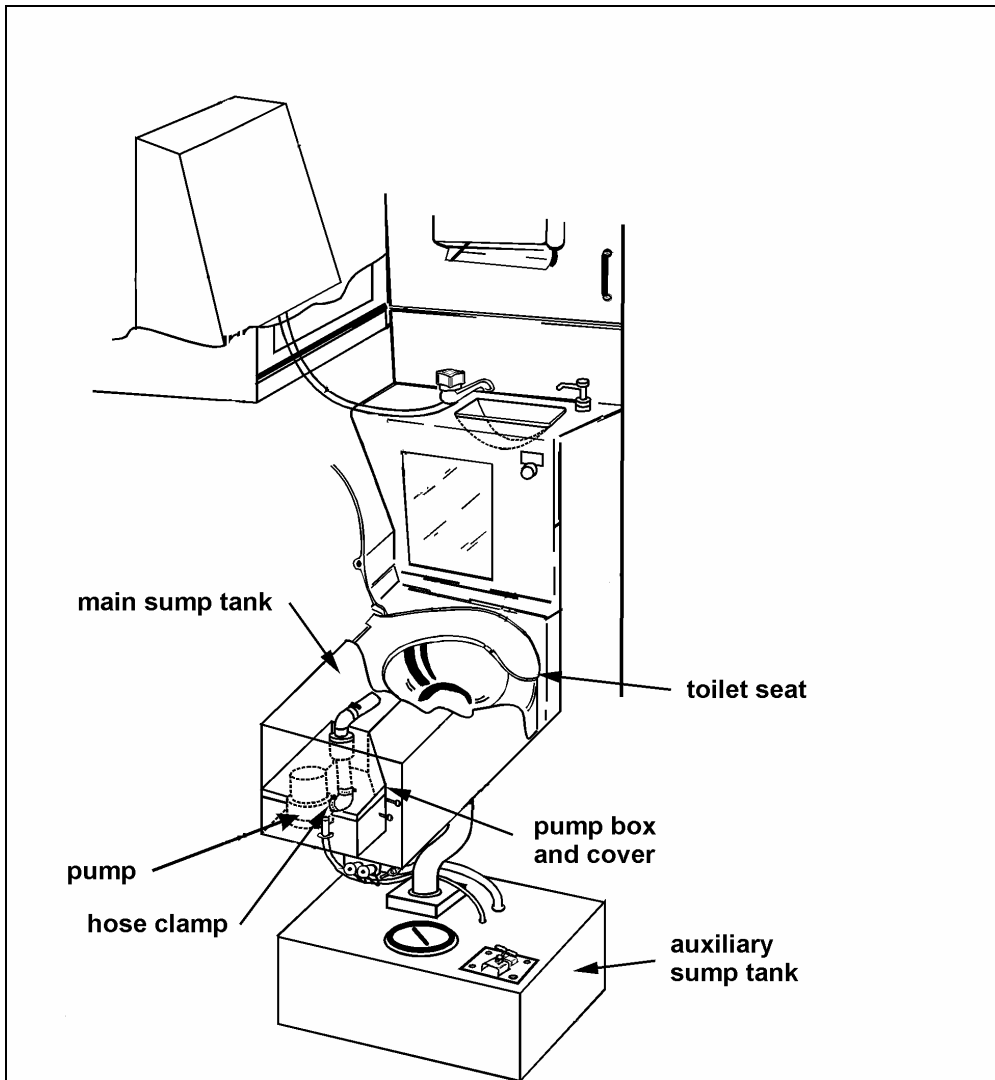
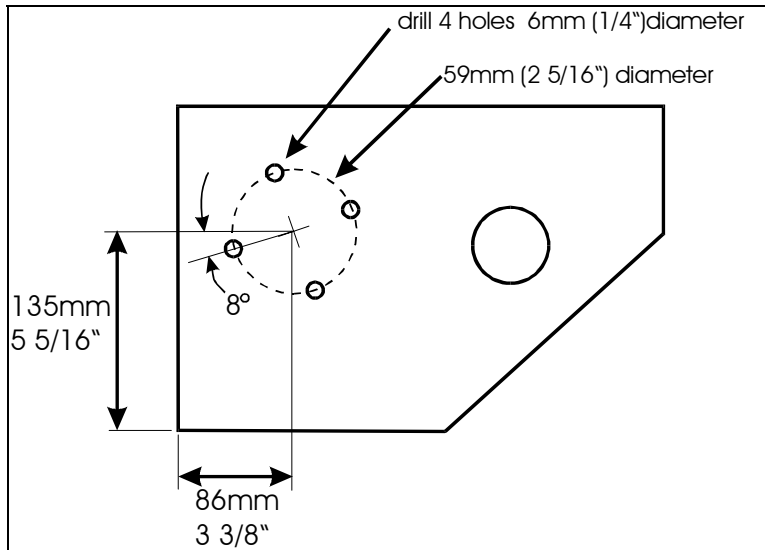


FIGURE 2 : LAVATORY



**FIGURE 3 : DRILLING POSITION**

16. Pass the power supply leads through the opening in the pump box cover and fix the cover to the pump box.
17. Slide a heat shrinkable sleeve on each of the pump power supply leads and reconnect them using the butt splice #562834. Connect the black lead to the black lead and the brown lead to the red lead. Heat the shrinkable sleeves.
18. Reinstall the toilet seat.
19. Set the battery master switch to the "ON" position.
20. Fill the main sump tank as per the operator's manual. The installation is now completed, close all the compartment doors