

# PREVOST

## Instruction Sheet

## IS-00005A

### MAIN AND AUXILIARY SUMP TANK INSTALLATION ON H3 SERIES COACHES

Revision A :

May 2013 : General revision
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#### MATERIAL

Kit #405205 includes the following parts :

Part No.	Description	Qty
405296	Auxiliary sump tank	1
405297	Main sump tank	1
405050	Hose, 140mm long	1
405049	Hose, 420mm long	1
405107	Main tank support	1
502655	Bolt, hex M10X25 G8.8	2
502616	Washer, split 10.2X18.1X2.2	3
500270	Washer, flat 10.5X30X2.5	3
502567	Nut, hex ss M10-1.5	3
504235	Hose clamp	4
502804	Bolt, hex M10X25 G8.8	1
502622	Screw, cap hex M16X110 G8.8	4
500411	Washer, flat ss .260X.697X.05	4
502570	Washer, lock .317X.586X.078	4
680098	Loctite 567	
IS-00005	Instruction Sheet	1
FI-00005	Feuille d'instructions	1

For vehicles with sump tank heating system option, order the following parts (see part B of this instruction sheet for installation procedure) :

Part No.	Description	Qty
404337	Heating coil	1
404339	Mounting plate	1
404367	Gasket	1
5011028	Ferrule FP #10	2

5011027	Fitting FP nut #10	2
502737	Screw, cap hex ss M6X25 G8.8	2
502564	Washer, lock 6.1X11.8X1.6	2

## PART 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. Drain present sump tank as per operator's manual.
2. Disconnect pump feed connector C126.
3. Close the heating system (option) valves and disconnect the hoses by unfastening the heating coil end fittings.
4. Disconnect all other hoses from sump tank (toilet drain hose, overflow hoses, pump flexible hose).
5. Remove from underneath the vehicle sump tank and support assembly by unscrewing the 6 bolts on the sump tank support.

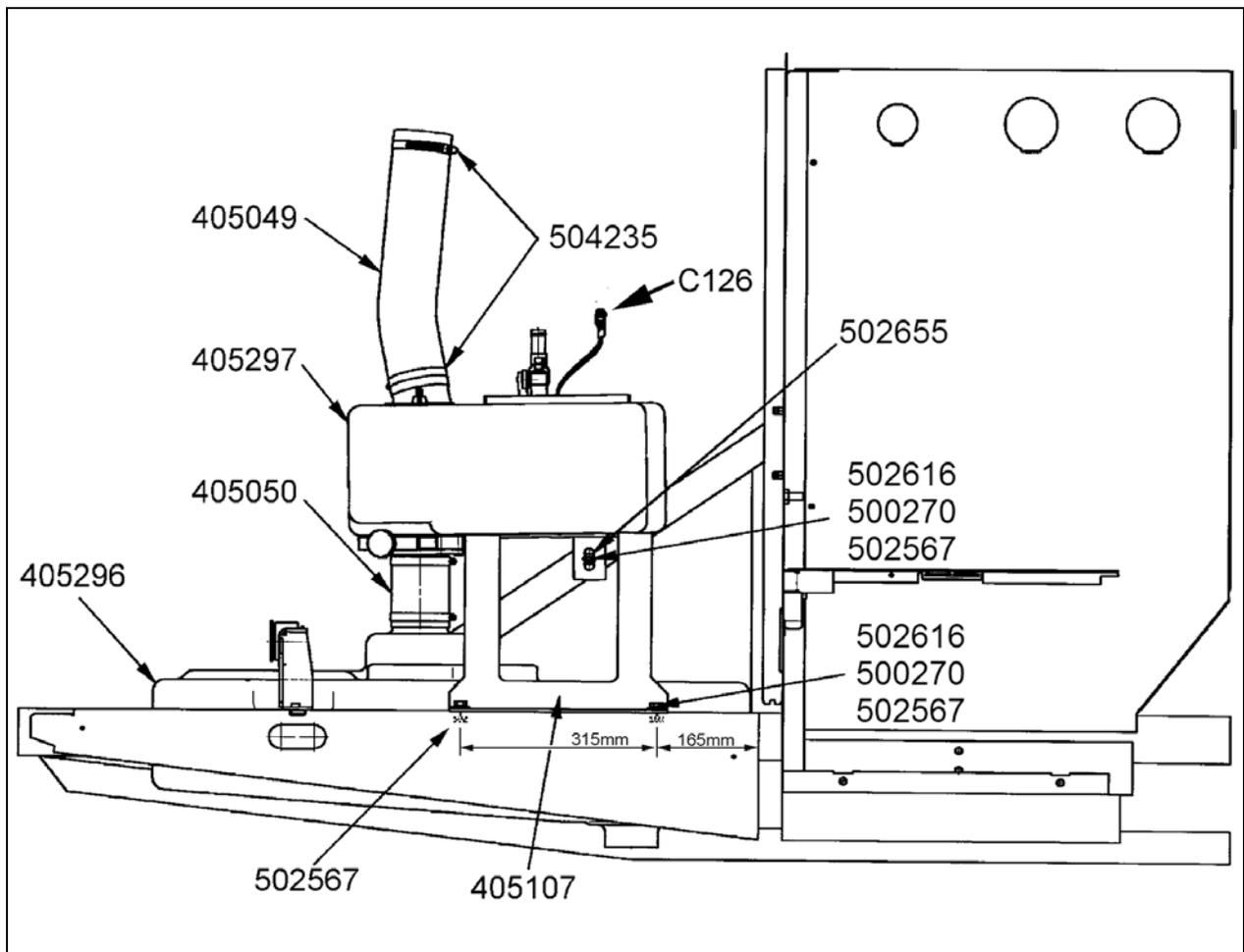


FIGURE 1 : VIEW OF MAIN AND AUXILIARY SUMP TANK KIT ARRANGEMENT

6. Unscrew the fixing bolts on the side of the support then separate sump tank. Install the new auxiliary sump tank #405296.

7. In order to fix the main tank support, weld bolt #502655 head on diagonal square tube at a distance of 260mm (10 1/8") from vertical member (see figure 2).
8. Draw two lines on top of beam, one at 165mm (6 1/2") from the edge of the vertical reinforcement and the second at 315mm (12 3/8") from the first one (see figure 1).

## PRECAUTIONS TO BE OBSERVED BEFORE WELDING

**Caution:** Cut off battery power in main power compartment using battery safety switch.

- (a) Disconnect "Ground" cables from battery terminals.

**Note:** Disconnect "Ground" cables only.

- (b) If welding must be done near the dashboard i.e. steering column, you must disconnect all electronic control modules (radio & control head, HVAC, TTLT cluster Volvo). You must also disconnect alternator module located in rear electrical compartment.
- (c) Disconnect three wiring harness connectors from ECM (Electronic Control Module). The ECM is mounted on the starter side of the engine.
- (d) For vehicles equipped with an Allison automatic transmission, disconnect three wiring harness connectors from ECU (Electronic Control Unit). The ECU is located in rear electrical compartment.
- (e) For vehicles equipped with ABS (Anti-Lock Brake System), disconnect wiring harness connectors from ABS Electronic Control Unit. The ABS Electronic Control Unit is located in the 1<sup>st</sup> baggage compartment.
- (f) Cover electronic control components and wiring to protect from hot sparks, etc.
- (g) Do not connect welding cables to electronic control components.
- (h) Do the appropriate welding on vehicle.

**Caution:** Position welding machine ground clamp as close as possible to the work.

- (i) When welding is complete, reconnect ECM, ECU, ABS electronic control units, etc.
- (j) Terminate by reconnecting "Ground" cables to battery terminals.

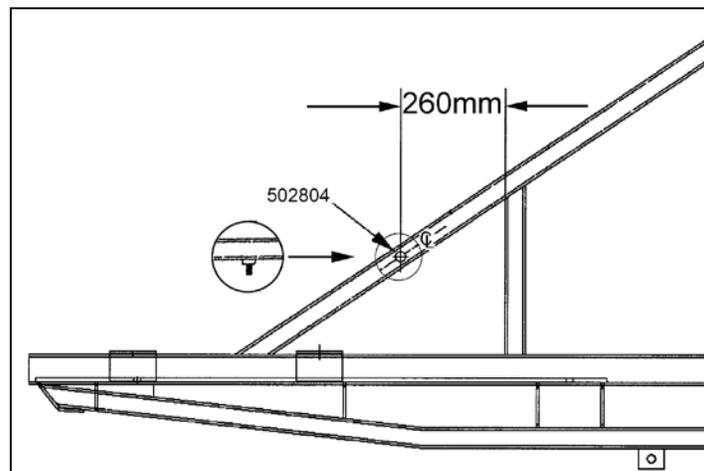


Figure 2 : POSITIONING OF BOLT #502804

9. Temporarily install main tank support. Align holes on the support base with lines traced in step 8 and mark on the positioning of holes.
10. Drill two 11mm (7/16") diameter holes.
11. Secure support in place using included hardware (refer to figure 1).
12. From underneath the vehicle, install the new auxiliary tank.
13. Install hose #405050 on auxiliary tank fitting and fix with a hose clamp. Install with Loctite sealant
14. Install new main sump tank on top of support using included hardware: screw #502622 , flat washer #500411, split lock washer #502570.
15. Complete installation of hose #405050.
16. Install hose #405049 and fix with 2 hose clamps. Install with Loctite sealant
17. Reconnect C126 pump connector.
18. Connect pump flexible hose.
19. Connect the 2 overflow hoses.

## PART 2 : INSTALLATION OF HEATING COIL

### MATERIAL

Part No.	Description	Qty
404337	Heating coil	1
404339	Mounting plate	1
404367	Gasket	1
5011028	Ferrule FP fer #10	2
5011027	Fitting FP nut #10	2
502737	Screw, cap hex ss emm M6X25 G8.8	2
502564	Washer, lock 6.1X11.8X1.6	2

### 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. Drill two 16mm (5/8") diameter holes and two 8mm (5/16") diameter holes on top of tank (refer to figure 3). Use the mounting plate #404339 to mark on the position of holes.
2. Going through access cap, insert heating coil #404337 and gasket #404367 inside the tank.
3. Fix heating coil with mounting plate, using included hardware #502564 and #502737.
4. Fix fitting #5011027 and ferrule #5011028 on heating coil.
5. Connect heating system hoses on fittings.

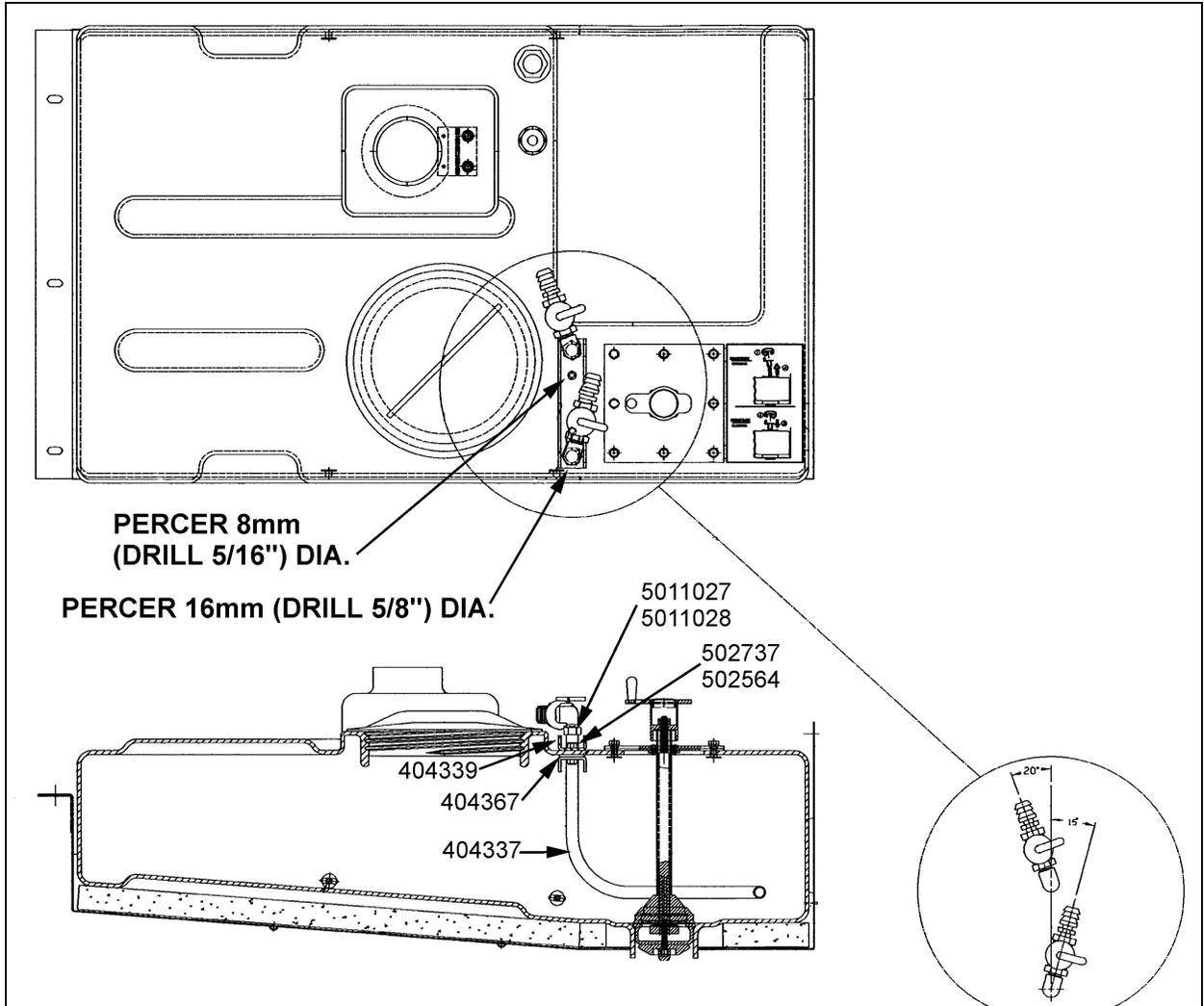


FIGURE 3 : HEATING COIL ARRANGEMENT