

# PREVOST

## Instruction Sheet

## IS-96144

### REPLACEMENT OF BURKETT VALVES WITH NORGREN VALVES AND TAG AXLE LIFTING SYSTEM LOGIC INVERSION

### H3-41 AND H3-45 COACHES WITH TAG AXLE LIFTING OPTION OR VIP-45 BUS SHELLS

#### MATERIAL

Kit #142019 includes the following parts :

Part No.	Description	Qty
142017	Inversion valve assembly, Lifting system logic	1
171993	Bracket, Inversion valve	1
500923	Screw, Self tapping ¼" - 20 x ¾"	2
131431	Valve, Tag axle lifting	1
131471	Relay Valve, left	1
131536	Relay Valve, right	1
500625	Screw, Self tapping ¼" - 20 x 2"	6
500473	Washer, Lock ¼"	8
641148	Fitting, Bulkhead #4 x #4	1
641371	Fitting, Elbow 90° #4 x ¼" PM	1
641142	Fitting, Straight #6 x ½" PM	1
641037	Sleeve, #4	6
641058	Nut, #4	6
641036	Sleeve, #6	8
641059	Nut, #6	8
503402	Plastic tube, ¼" O.D. Black	35Ft
503463	Plastic tube, 3/8" O.D. Green	6Ft
503471	Plastic tube, 3/8" O.D. Blue	20FT
503404	Plastic tube, 3/8" O.D. Black	6Ft
391890	Label, Self-adhesive	1

562518	Pressure Switch, N.O.	1
064895	Cable assembly, Lifting system logic inversion	1
561707	Relay	1
500952	Screw, Self tapping #8 x 1/2"	1
062490	Heat-shrinkable tubing	1
D140198	Pneumatic diagram, H3-41, H3-45 Coaches	1
D140199	Pneumatic diagram, H3-45 VIP	1
D140253	Pneumatic diagram, Logic inversion installation	1
IS-96144	Instruction Sheet	1
FI-96144	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.

### 1st PART : H3-41 AND H3-45 COACHES OR VIP-45

**Note** : In the case of VIP-45, if you wish not to damage the dashboard or if you do not have access to mounting plate fixing screws, perform steps 4 to 6 instead of 1 to 3.

1. From driver's area, remove fixing screws securing parking brake and tag axle lifting control valve mounting plate, this mounting plate can either be located on the left hand or on the right hand console depending on type of vehicle.
2. Lift mounting plate together with valve assembly in order to reach pressure switch. Separate connecting wires from pressure switch terminals and unscrew pressure switch. Clean pressure switch fitting orifice, apply Teflon sealant onto NPT threads and screw new pressure switch (Prévost #562518) in place (refer to figure 1). Reconnect new pressure switch terminals with connecting wires.
3. Replace and secure mounting plate using fixing screws, go to step 7.

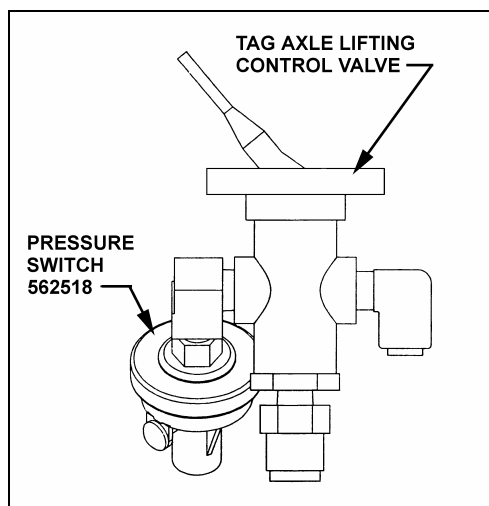


FIGURE 1 : PRESSURE SWITCH C/W VALVE

### 1st PART : VIP-45

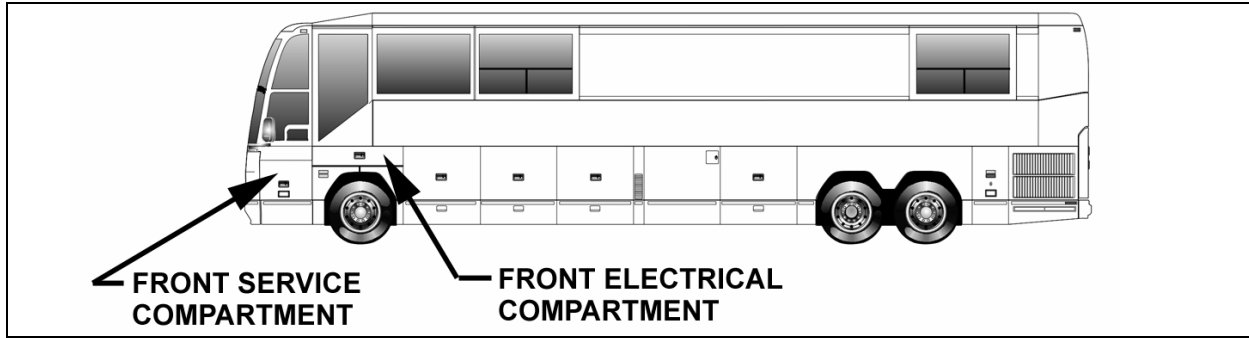


FIGURE 2 : FRONT SERVICE COMPARTMENT AND FRONT ELECTRICAL COMPARTMENT

4. Open front service and front electrical compartment doors. In front service compartment, secure cable assembly (Prévost #064895) relay bracket over the accessories air filter using self tapping screw (Prévost #500952) (refer to figure 3). Connect 85C and 0T wires as per figure 3 and install relay (Prévost #561707) onto its support bracket.

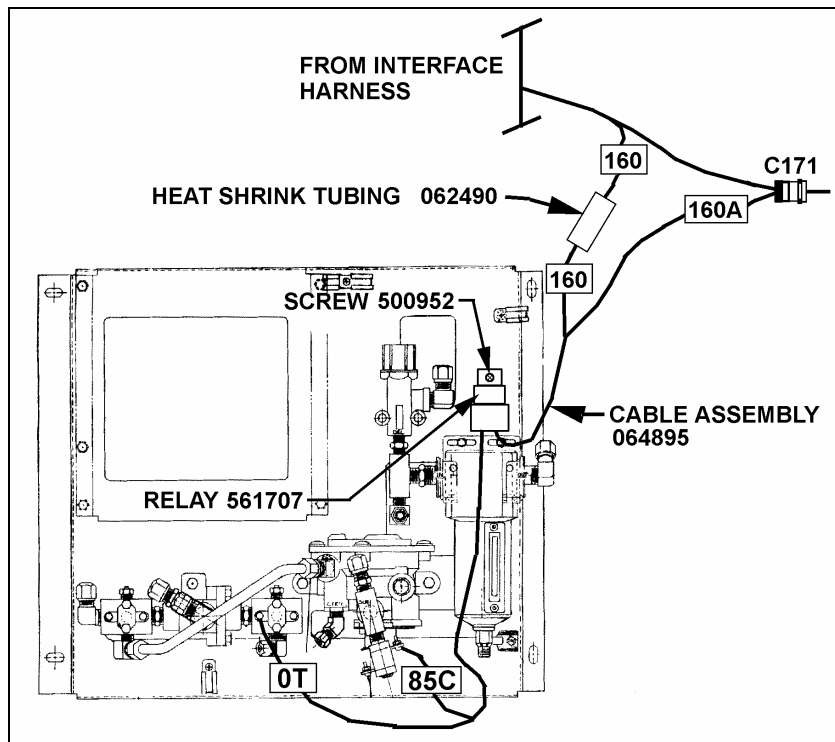


FIGURE 3 : ROUTING OF CABLE ASSEMBLY 064895

5. Locate C171 connector in front junction box or near the alarm junction box. Disconnect wire #160 located in housing #16 of C171 connector, insert wire #160 into heat shrink tubing (Prévost #062490) and connect this wire #160 contact pins with cable assembly #064895 wire #160. Slide heat shrink tubing over contact pins and heat to ensure insulation.
6. Insert cable assembly #064895 wire #160A contact pin into housing #16 of C171 connector. Secure cable assembly using cable ties.
7. In driver's area, change self-adhesive label (Prévost #391890) located on left hand console panel (refer to figure 4).

**Note :** For VIP-45 vehicles, refer to wiring diagram D060883, pages 7 and 8 Rev. 08.

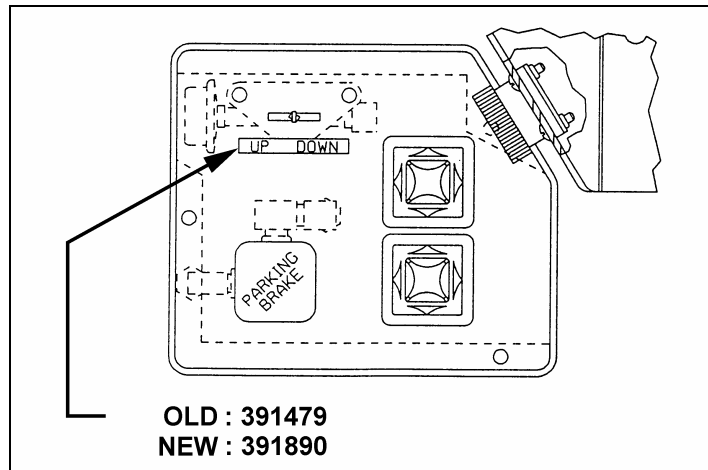


FIGURE 4 : NEW SELF-ADHESIVE LABEL

## 2nd PART : H3-41 AND H3-45 COACHES WITH TAG AXLE LIFTING OPTION OR VIP-45

1. Using the inversion valve bracket (Prévost #171993), two self tapping screws (Prévost #500923) and two lock washers (Prévost #500473), drill two 15/64" (6mm) holes to secure the inversion valve assembly (Prévost #142017) to the diagonal pillar.

**Note :** Use figures 5, 6, 7 and pneumatic diagrams D-140198 p.2, D-140199 p.2 and D-140253 to facilitate location and installation of various parts.

2. Remove plug and screw straight fitting (Prévost #641142) on valve #51, install the 3/8" O.D. green plastic tube (Prévost #503463) between inversion valve and valve #51 (refer to figure 5).

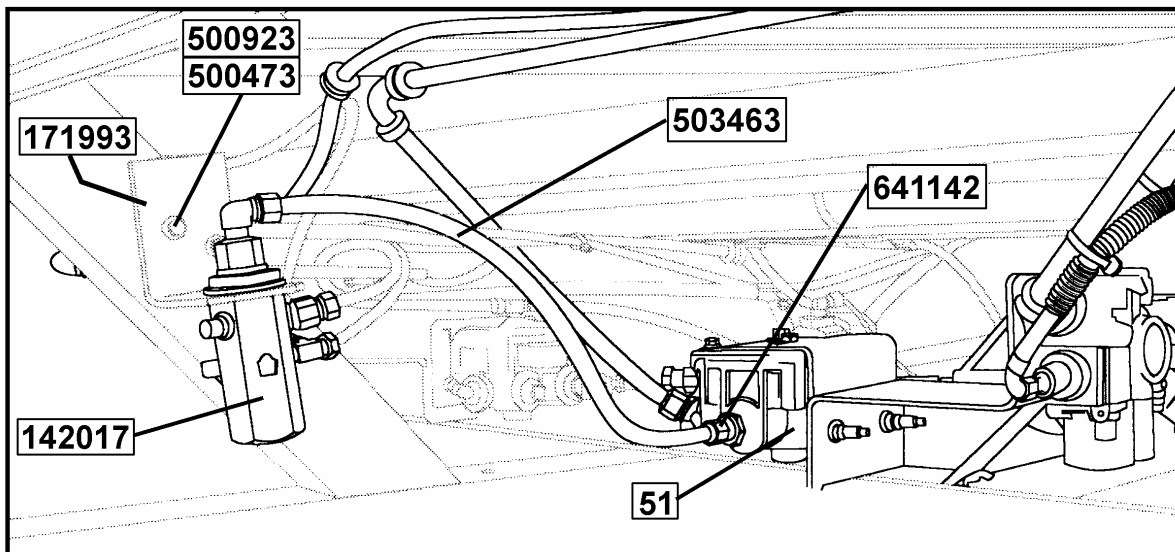


FIGURE 5 : LOCATION OF LIFTING SYSTEM LOGIC INVERSION VALVE

3. Drill two 15/64" (6mm) holes to secure relay valve (Prévost #131536) to the same diagonal pillar. Use two self tapping screws (Prévost #500625) and two lock washers (Prévost #500473) (refer to figure 6).
4. Install a three foot long 1/4" O.D. black plastic tube (Prévost #503402) between the inversion valve and relay valve (Prévost #131536) (refer to figure 6).

5. Drill two 15/64" (6mm) holes to secure tag axle lifting valve (Prévost #131431) to the pillar. Use two self tapping screws (Prévost #500625) and two lock washers (Prévost #500473) (refer to figure 7 for location of holes).

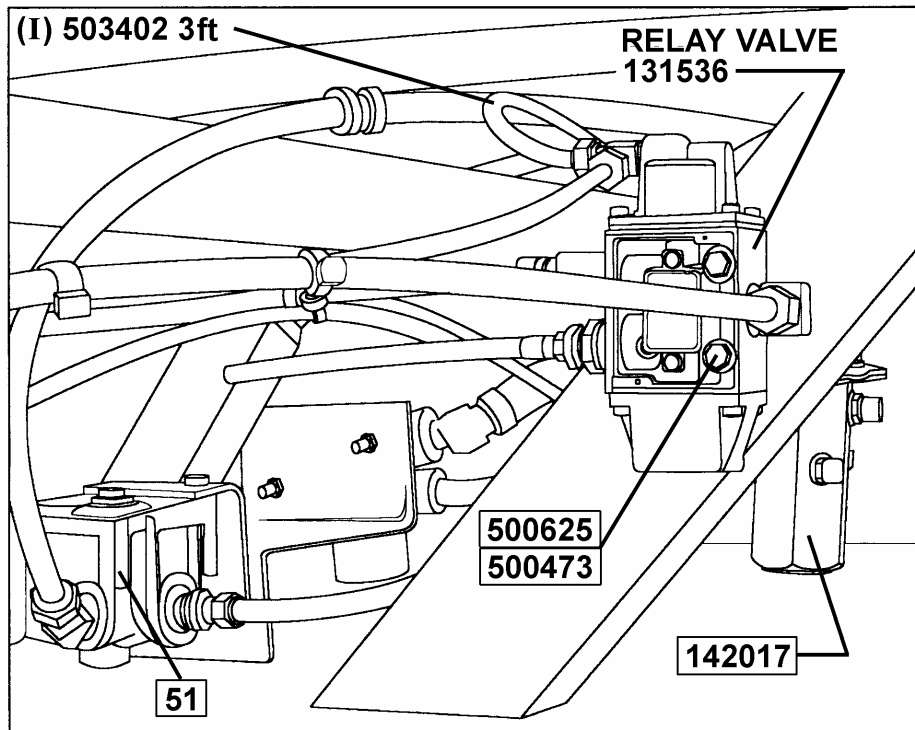


FIGURE 6 : R.H. RELAY VALVE LOCATION

6. Drill two 15/64" (6mm) holes to secure L.H. relay valve (Prévost #131471) to the pillar located on vehicle's L.H. side. Use two self tapping screws (Prévost #500625) and two lock washers (Prévost #500473). Use pneumatic diagrams for location.

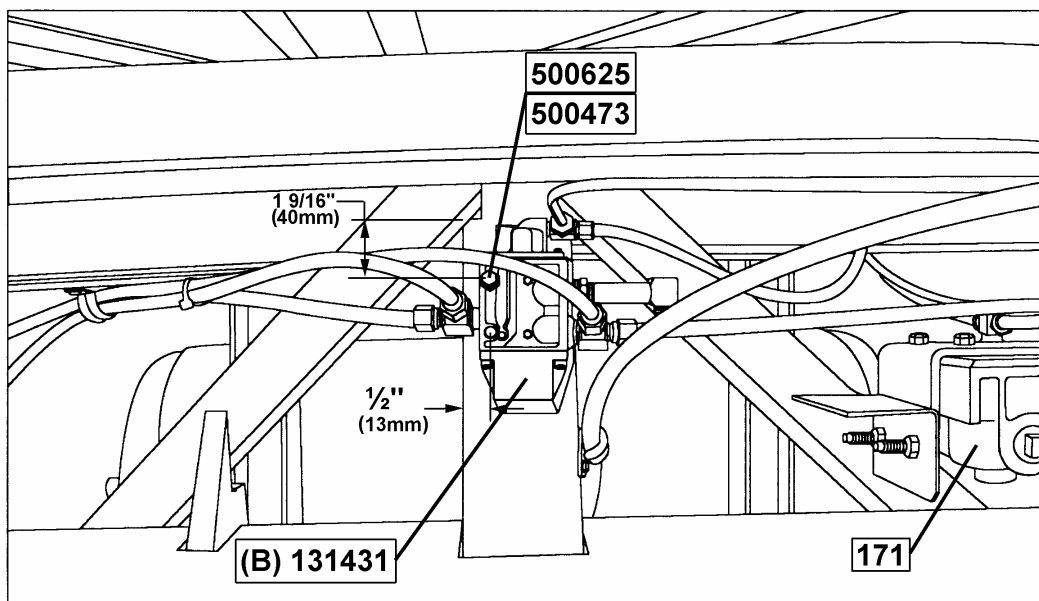


FIGURE 7 : TAG AXLE LIFTING VALVE LOCATION

7. Remove valve #63, valve #35 and valve #166, remove unnecessary fittings as well as flexible tubing (refer to pneumatic diagram D149199 p. 2). Install 1/4" bulkhead fitting (L) (Prévost #641148), install 90°

elbow fitting (Prévost #641371) onto brake cancellation valve (170) and install a six foot long 3/8" O.D. black plastic tube (Prévost #503404) between lifting valve (B) and flexible tubing #106.

8. Take the 20 foot long 3/8" O.D. blue plastic tube and cut in six different lengths in order to connect flexible tubing #15 and #20 to L.H. and R.H. relays.
9. Use 1/4" O.D. black plastic tube and cut in three different lengths in order to connect inversion valve to bulkhead fitting (G) ; lifting valve to R.H. relay valve (H) and lifting valve to L.H. relay valve (J).

### **H3-41 AND H3-45 COACHES WITHOUT TAG AXLE LIFTING OPTION**

#### **MATERIAL**

Kit #142020 includes the following parts :

<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
142017	Inversion valve assembly, Lifting system logic	1
171993	Bracket, Inversion valve	1
500923	Screw, Self tapping 1/4" - 20 x 3/4"	2
131471	Relay Valve, left	1
131536	Relay Valve, right	1
500625	Screw, Self tapping 1/4" - 20 x 2"	6
500473	Washer, Lock 1/4"	6
641148	Fitting, Bulkhead #4 x #4	1
641371	Fitting, Elbow 90° #4 x 1/4" PM	1
641142	Fitting, Straight #6 x 1/2" PM	1
641037	Sleeve, #4	6
641058	Nut, #4	6
641036	Sleeve, #6	8
641059	Nut, #6	8
503402	Plastic tube, 1/4" O.D. Black	30Ft
503463	Plastic tube, 3/8" O.D. Green	6Ft
503471	Plastic tube, 3/8" O.D. Blue	20FT
562518	Pressure Switch, N.O.	1
D140198	Pneumatic diagram, H3-41, H3-45 Coaches	1
D140253	Pneumatic diagram, Logic inversion installation	1
IS-96144	Instruction Sheet	1
FI-96144	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.

### 1st PART : H3-41 AND H3-45 COACHES

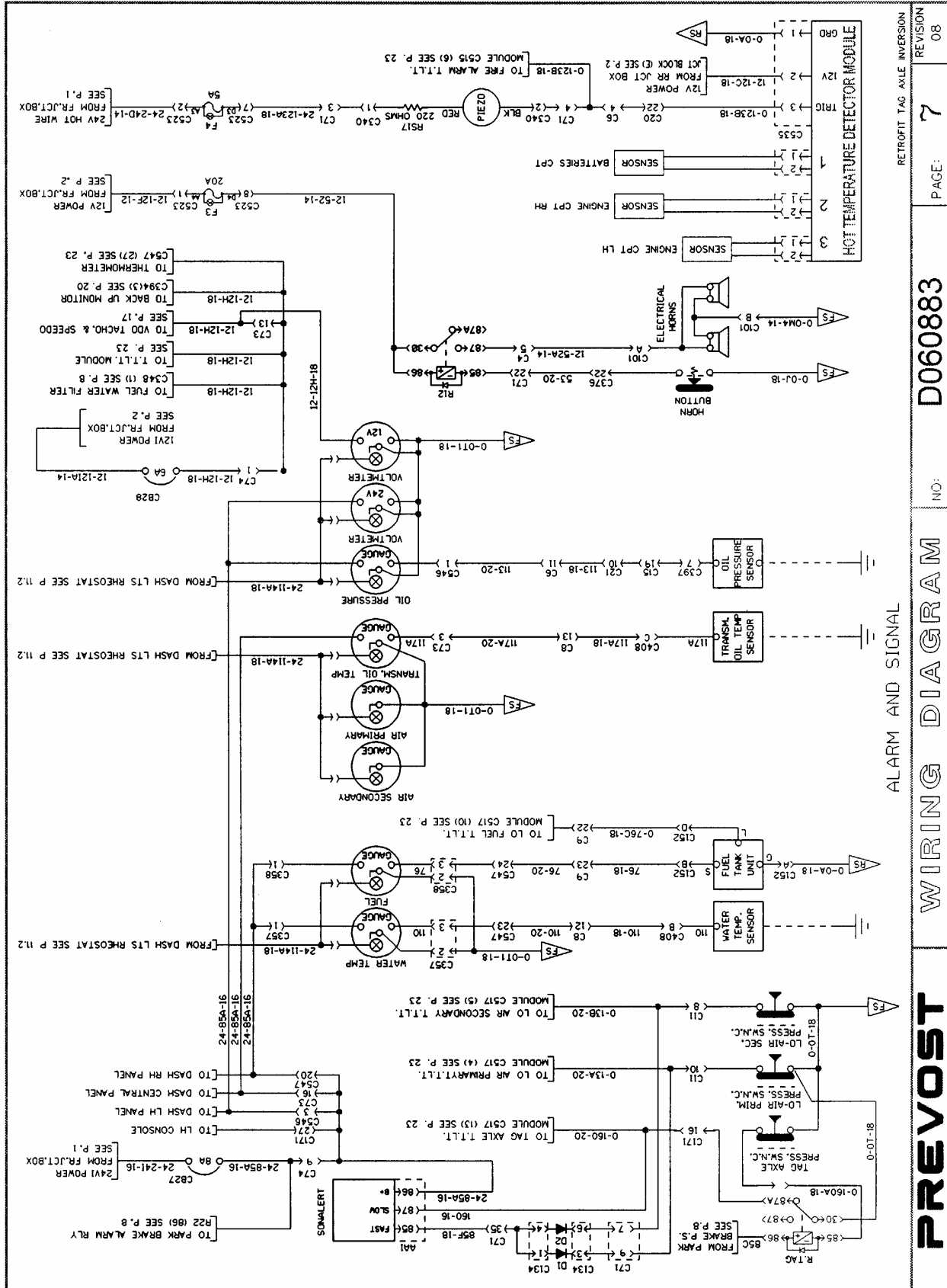
1. From driver's area, remove fixing screws securing parking brake and tag axle lifting control valve mounting plate, this mounting plate can either be located on the left hand or on the right hand console depending on type of vehicle.
2. Lift mounting plate together with valve assembly in order to reach pressure switch. Separate connecting wires from pressure switch terminals and unscrew pressure switch. Clean pressure switch fitting orifice, apply Teflon sealant onto NPT threads and screw new pressure switch (Prévost #562518) in place (refer to figure 1). Reconnect new pressure switch terminals with connecting wires.
3. Replace mounting plate using fixing screws.

### 2nd PART : H3-41 AND H3-45 COACHES WITHOUT TAG AXLE LIFTING OPTION

1. Using the inversion valve bracket (Prévost #171993), two self tapping screws (Prévost #500923) and two lock washers (Prévost #500473), drill two 15/64" (6mm) holes to secure the inversion valve assembly (Prévost #142017) to the diagonal pillar.

**Note** : Use figures 5 and 6 and pneumatic diagrams D-140198 p.3 and D-140253 to facilitate location and installation of various parts.

2. Remove plug and screw straight fitting (Prévost #641142) on valve #51, install the 3/8" O.D. green plastic tube (Prévost #503463) between inversion valve and valve #51 (refer to figure 5).
3. Drill two 15/64" (6mm) holes to secure relay valve (Prévost #131536) to the same diagonal pillar. Use two self tapping screws (Prévost #500625) and two lock washers (Prévost #500473) (refer to figure 6).
4. Install a three foot long 1/4" O.D. black plastic tube (Prévost #503402) between the inversion valve and relay valve (Prévost #131536) (refer to figure 6).
5. Drill two 15/64" (6mm) holes to secure L.H. relay valve (Prévost #131471) to the pillar located on vehicle's L.H. side. Use two self tapping screws (Prévost #500625) and two lock washers (Prévost #500473). Use pneumatic diagrams for location.
6. Remove valve #63 and valve #35, remove unnecessary fittings as well as flexible tubing (refer to pneumatic diagram D-149198 p. 3). Install 1/4" bulkhead fitting (F) (Prévost #641148) and install 90° elbow fitting (Prévost #641371) onto brake cancellation valve (182).
7. Take the 20 foot long 3/8" O.D. blue plastic tube and cut in six different lengths in order to connect flexible tubing #15 and #20 to L.H. and R.H. relays.
8. Use 1/4" O.D. black plastic tube and cut in two different lengths in order to connect inversion valve to bulkhead fitting (G) and R.H. relay valve to L.H. relay valve (H).



**PREVOST**



