

PREVOST

Instruction Sheet

IS-07020

“E-RIDE” VALVES REPLACEMENT

MATERIAL

Kit #131870 includes the following parts:

Part No.	Description	Qty
641385	Connector	2
640988	Connector, Straight	1
641002	Connector, “T”	1
561256	Wire, orange #18awg	10 Feet
561261	Wire, black #18 noir	10 Feet
560784	Shrink, Heat Tubing .25 - .08ID black	1 foot
562228	Splice, Butt 16-14	4
560083	Terminal, Ring	1
562387	Sheathing, Convolutated	2 Feet
562771	Pin JAE 22-18	1
562482	Pin, Deutsch	2
562286	Pin	2
562169	Diode	1
173478	Plate, Mounting	1
503402	Tubing, flexible ¼ “ black	25.5 Feet
503471	Tubing, flexible 3/8 “ blue	6.5 Feet
131860P	Valve, relay L.H.	1
131861P	Valve, relay R.H.	1
131862P	Valve, Unloading	1
131863P	Valve, Unloading	1
5001251	Nut, hexagonal, SS. ¼-20	3
500411	Washer, Flat SS .260 x .697 x .05	3
500473	Washer, Split Lock ZP .262 x .489 x .062	6
500994	Bolt, Hex. Head ZP ¼-20 x 1.75 G5PT	8
955513	Bolt, Hex. Head. ¼-20 x .75 G5	1

504637	Ty-rap	20
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PROCEDURE



DANGER

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



WARNING

Raise the vehicle using recommended jacking points.

PART 1: PNEUMATIC

NOTE

Open the drain cock located inside the engine compartment, near the engine compartment rear doors bottom hinge. Also open (and leave open) the 4 air expansion tanks drain cock.

1. Find the 2 existing "E-RIDE" valves, installed on each side of the vehicle. They are located in front of the tag axle, on the rear underframe. These valves are identified: "MASTER TAG CONTROLLER VALVE" and "SLAVE CONTROLLER VALVE".
2. Remove 3 air lines and purge line, also disconnect electrical connector then take 2 valves down.
3. Temporarily install on the R. H. side the mounting plate onto the support in order to drill a 3rd hole.
4. Install 3 new valves; (131860) on the L. H. side of the vehicle and (131861 + 131862) on the R. H. side using the mounting plate (173478).

NOTE

Valve 131860 must be installed backwards for proper connectors positioning (Refer to Fig. 1).

5. Valve 131537 is already installed on the vehicle (Refer to fig. 1), replace connector where the existing line is connected with a "T" connector (641002).
6. Install new solenoid valve (131863) above the preheater (if equipped) onto the front wall, in the section located on the R. H. side of the engine. To do so, drill the rear wheelhousing wall, apply sealant underneath the washers on the wheelhousing side.
7. Locate the manifold located on the structure near the starter and the solenoid valve. Remove a pipe thread plug from the manifold and install a connector (640988) then route one air line between the manifold and the solenoid valve.
8. Route one air line between each valve 131861, 131862 and solenoid valve located in the engine compartment (refer to figure 4).
9. Connect lines to the new valves while referring to figure 4.

PART 2: ELECTRICAL

1. Remove fuse F90 located in the upper R. H. side of VECR, 2nd position.

NOTE

There may be a diode in place of the fuse in this location, if this is the case remove the diode.

2. Apply electrical tape onto the connector on the L. H. side of the vehicle and secure it in a safe place using nylon locking ties (ty-rap).
3. Identify R. H. side connector A30, cut and isolate the following circuits using heat shrink tubing:
 - 900 – Pin 9
 - 901 – Pin 14
 - J1939H – Pin 3
 - J1939L – Pin 8



CAUTION

It is important to install heat shrink tubing onto these wires to prevent future problems.

4. Locate 2 spare wires identified SP51 and SP52 into cable VIH going to the ECM. The wires come out of the cable about 2.5 feet upstream from ECM connector C398.
5. Make the 2 wires 800 mm longer using butt splices and orange and black wires. Cover the 2 butt splices with heat shrink tubing and protect the 2-wire cable using the convoluted sheathing.
6. Use the orange wire for SP51 (#29) and connect it into pin housing 2 of solenoid connector. Install a diode (562169) by connecting the cathode (grey line) into pin housing 2.
7. Use the black wire for SP52 (0FB3) and connect it into pin housing 1 of solenoid connector, connect the anode into pin housing 1.
8. Open last baggage compartment (super bay) to access the rear electrical compartment then remove the plastic access cover.
9. Locate SP51 near connector C397 and connect an orange wire between SP51 and module A49J1-30.
10. Route a black wire between SP52 and a ground stud (2nd position from the left).
11. Install program 06100006P07.
12. Perform a functionality test by turning the steering wheel one end to the other, the valve should activate.

COMPONENT	DESTINATION OR DESCRIPTION (REFER TO FIGURE 1)
1	TOWARDS TAG AXLE EXPANSION TANK
2	TOWARDS DRIVE AXLE EXPANSION TANK
3	TOWARDS HEIGHT CONTROL VALVE
4	TOWARDS MANIFOLD NEAR STARTER
5	TOWARDS DRIVE AXLE EXPANSION TANK
6	TOWARDS HEIGHT CONTROL VALVE

7	TOWARDS TAG AXLE EXPANSION TANK
8	503402 TUBING, FLEXIBLE BLACK 1/4 IN
9	503471 TUBING, FLEXIBLE BLUE 3/8 IN

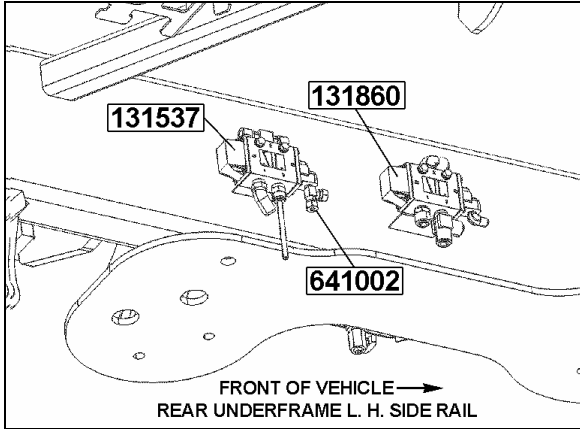


FIGURE 1

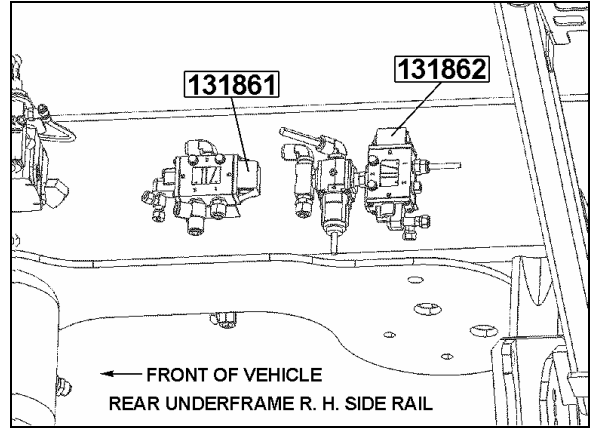


FIGURE 2

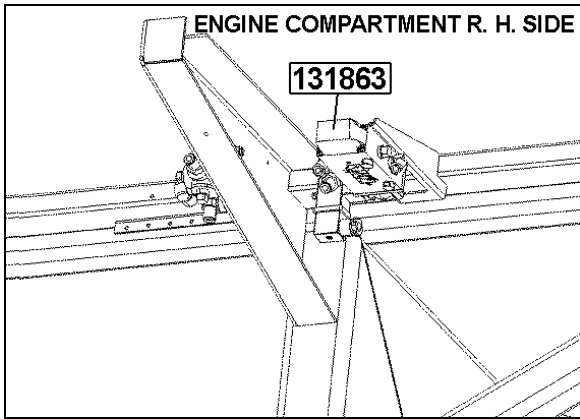


FIGURE 3

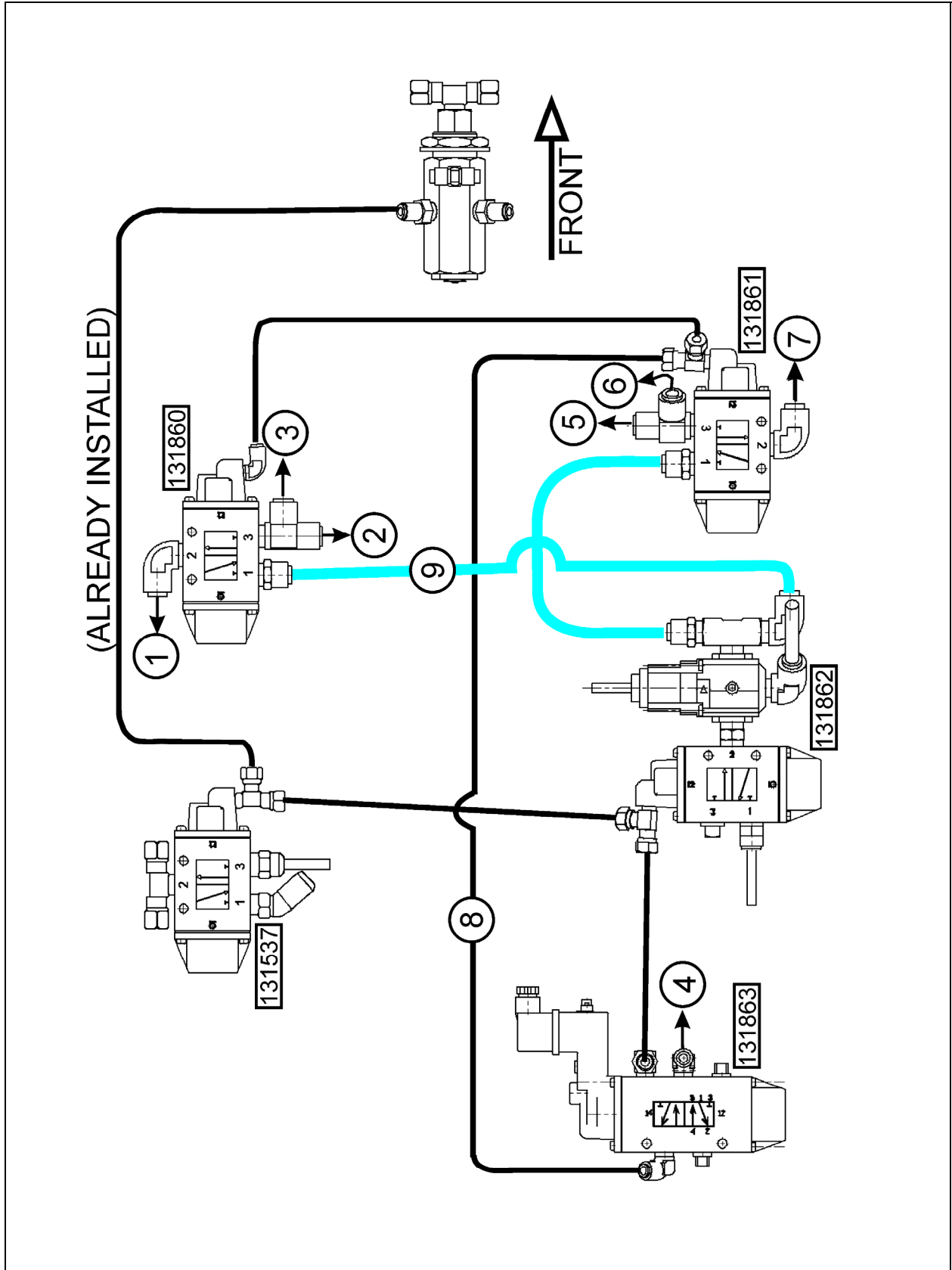


FIGURE 1: LINES CONNECTION