### PREVOST

## Instruction Sheet

IS-96192B

# Replacement of Neway height control valve with Barksdale height control valve

Revision B: Turn valve lever three times in each direction to settle it. Avoid overtorquing couplings, handtighten only then rotate 1 ½ turn then position coupling to the required angle.

#### **MATERIAL**

Kit #131455 includes the following parts.

Part No.	Description	Qty
630156	Height Control Valve (Leveling Valve)	1
131452	Bracket	1
502582	Lock-Washer	2
500769	Nut 1/4" - 20	2
631332	Coupling	1
640135	Check Valve	1
503402	Flexible Hose	1
502716	Nut	1
500441	Washer	1
630137	Bolt	1
630117	Rubber Bushing	1
504014	Clamps	2
131308	Rod	1
630133	Rubber Bushing	1
5001188	Nut M8-1.25	2
5001161	Lock-Washer	2
5002780	Hex Head Screw M8	2
IS-96192	Instruction Sheet	1
FI-96192	Feuille d'instructions	1

#### Front valve replacement.

**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. Safely support the vehicle at the axle jacking points.
- 2. Jack vehicle until the tires clear the ground, and place safety supports underneath body.

**Warning:** Only the recommended jacking points must be used as outlined in Section 18 of Maintenance Manual: "Body" or in Operator's Manual.

- Exhaust air from air system by opening the drain cock on accessory air tank. Close air tank drain cock. Height control valve is located in front subframe while drain cock is located in front service compartment.
- 4. Disconnect lower rubber bushing from link and pull down lever to exhaust remaining air from air springs. Disconnect air supply and delivery lines from the height control valve. Cover ends of the lines with tape.
- 5. Remove the two nuts and bolts securing the height control valve to the mounting bracket, then remove the valve assembly.
- 6. Dismantle the valve, discard Neway valve but retain the couplings. Remove the restrictions from inside the couplings, discard restrictions. Clean the couplings and apply Teflon sealant paste over the threads. Install a check valve (Prévost #640135) on the inlet coupling of the valve. Do not use a vise to secure the valve body when reinstalling the couplings, mount nuts on the studs and clamp the nuts in the vise. Avoid overtorquing couplings, handtighten only then rotate 1 ½ turn then position coupling to the required angle. Turn valve lever three times in each direction to settle it. Install coupling (Prévost #631332) with the flexible hose (Prévost #503402) on the exhaust port and connect the air springs lines to couplings C1 and C2. (refer to fig. 2).
- 7. Taking the left hole as a reference, drill a 3/8" (9mm) hole on the bracket already installed on vehicle; 2 13/16" (72mm) lower and 1 3/32" (28mm) to the right (refer to fig.1).

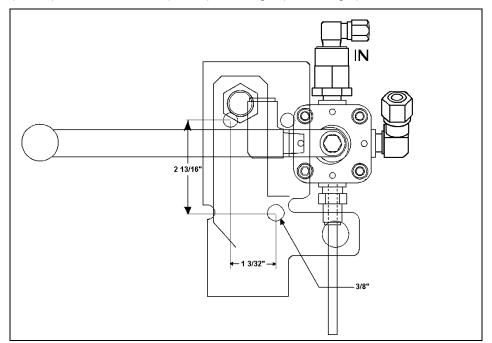


FIGURE 1: DRILLING THE BRACKET

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- 8. Assemble new bracket (Prévost #131452) with valve using lock-washers and nuts then secure assembly on the existing bracket using screws, lock-washers and nuts.
- 9. Install rubber bushing (Prévost #630133) on the existing bent rod, insert new rod (Prévost #131308) in the rubber bushing then install second rubber bushing (Prévost #630117)on the rod. Secure using clamps (Prévost #504014) as shown on fig.2.

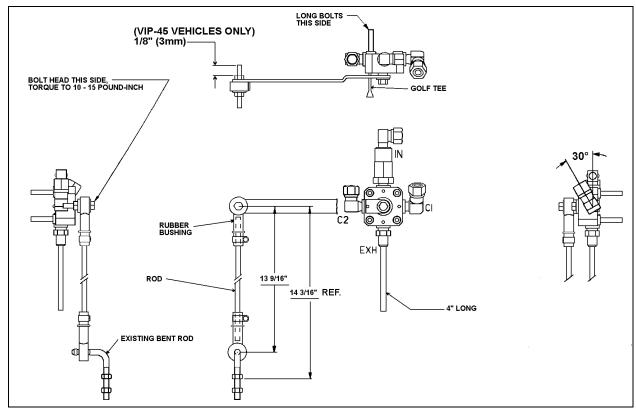
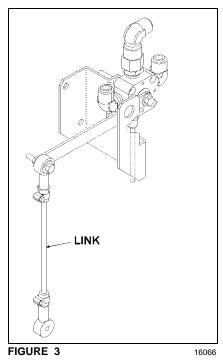


FIGURE 2: INSTALLATION OF BARKSDALE FRONT HEIGHT CONTROL VALVE

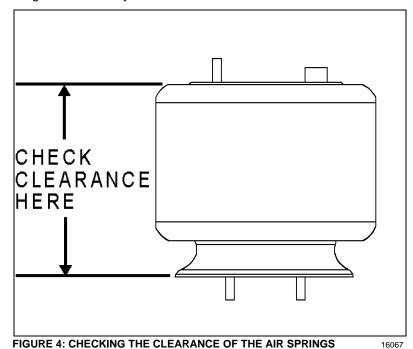
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10. Assemble overtravel lever with link using bolt, washer and nut. For VIP-45 vehicles only, saw the bolt leaving 1/8" (3mm) behind the nut. Insert golf tee in the provided holes located in overtravel lever and valve to lock them together, using the adjusting nuts on the bent rod, try to keep the overtravel lever as horizontal as possible, reconnect the lines. Use the slot on bracket for final adjustment. Refer to figure 3 for a view in perspective of assembly.



**Note:** The distance between overtravel lever and bent rod must be approximately 13 9/16" (344mm).

11. With the vehicle at normal operating pressure, check the appropriate vehicle body height by measuring the clearance of the air springs installed on the front axle, the clearance should be 12 ± 0.25" (305 ± 6mm). Refer to figure 4 to identify the correct location where the measure has to be taken.



**Caution:** Always adjust on "fill cycle". If it is necessary to lower the vehicle height, release sufficient air to be well below height and adjust to height or fill cycle.

12. On vehicle equipped with kneeling option, the proximity switch must be removed from its former location and installed on the new bracket in the provided hole, the play between the valve lever and the proximity switch must be between 1/32" and 3/32" (1 and 3mm). To check the safety clearance, lower front of vehicle and disconnect rubber bushing from bent rod, then raise the link, you should be able to raise the link 1/4" (7mm) minimum before the proximity switch light turns off.

#### H3-41 and H3-45 COACH: Rear left valve replacement.

#### **MATERIAL**

Kit #131454 includes the following parts.

Part No.	Description	Qty
630156	Height Control Valve (Leveling Valve)	1
131453	Bracket	1
502582	Lock-Washer	2
500769	Nut 1/4" - 20	2
641332	Coupling	1
640135	Check Valve	1

503402	Flexible Hose	1
502716	Nut	1
500441	Washer	1
630137	Bolt	1
630117	Rubber Bushing	1
504014	Clamps	2
131447	Rod	1
630133	Rubber Bushing	1
5001188	Nut M8-1.25	2
5001161	Lock-Washer	2
5002780	Hex Head Screw M8	2
IS-96192	Instruction Sheet	1
FI-96192	Feuille d'instructions	1

**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. Safely support the vehicle at the axle jacking points.
- 2. Jack vehicle until the tires clear the ground, and place safety supports underneath body.

**Warning:** Only the recommended jacking points must be used as outlined in Section 18 of Maintenance Manual: "Body" or in Operator's Manual.

- Exhaust air from air system by opening the drain cock on accessory air tank. Close air tank drain cock. Drain cock is located in front service compartment. Height control valve is located in left drive axle wheelhousing.
- 4. Disconnect lower rubber bushing from link and pull down lever to exhaust remaining air from air springs. Disconnect air supply and delivery lines from the height control valve. Cover ends of the lines with tape.
- 5. Remove the two nuts and bolts securing the height control valve to the mounting bracket, then remove the valve assembly.
- 6. Dismantle the valve, discard Neway valve but retain the couplings. Remove the restrictions from inside the couplings, discard restrictions. Clean the couplings and apply Teflon sealant paste over the threads. Install a check valve (Prévost #640135) on the inlet coupling of the valve. Do not use a vise to secure the valve body when reinstalling the couplings, mount nuts on the studs and clamp the nuts in the vise. Avoid overtorquing couplings, handtighten only then rotate 1 ½ turn then position coupling to the required angle. Turn valve lever three times in each direction to settle it. Install coupling (Prévost #641332) with the flexible hose (Prévost #503402) on the exhaust port (refer to fig. 5).
- 7. Assemble new bracket (Prévost #131453) with valve using lock-washers and nuts then secure assembly on the existing bracket using screws, lock-washers and nuts.
- 8. Install rubber bushing (Prévost #630133) on the existing bent rod, insert new rod (Prévost #131447) in the rubber bushing then install second rubber bushing (Prévost #630117) on the rod. Secure using clamps (Prévost #504014) as shown on fig.5.

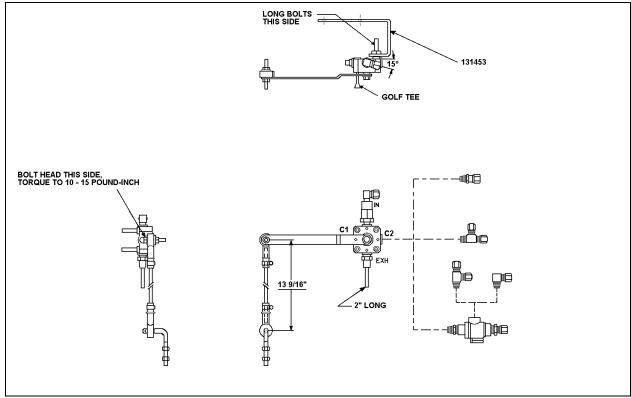


FIGURE 5: INSTALLATION OF BARKSDALE REAR LEFT HEIGHT CONTROL VALVE

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9. Assemble overtravel lever with link using bolt, washer and nut. Insert golf tee in the provided holes located in overtravel lever and valve to lock them together, using the adjusting nuts on the bent rod, try to keep the overtravel lever as horizontal as possible, reconnect the lines. Use the slot on bracket for final adjustment. Refer to figure 6 for a view in perspective of assembly.

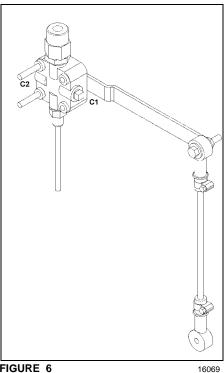


FIGURE 6

**Note:** The distance between overtravel lever and bent rod must be approximately 13 9/16" (344mm).

10. With the vehicle at normal operating pressure, check the appropriate vehicle body height by measuring the clearance of the air springs installed on the drive axle, the clearance should be 11.5 ± 0.25" (292 ± 6mm). Refer to figure 4 to identify the correct location where the measure as to be taken.

**Caution:** Always adjust on "fill cycle". If it is necessary to lower the vehicle height, release sufficient air to be well below height and adjust to height or fill cycle.

#### H3-41 and H3-45 COACH: Rear right valve replacement.

#### **MATERIAL**

Kit #131454 includes the following parts.

Part No.	Description	Qty
630156	Height Control Valve (Leveling Valve)	1
131453	Bracket	1
502582	Lock-Washer	2
500769	Nut 1/4" - 20	2
641332	Coupling	1
640135	Check Valve	1
503402	Flexible Hose	1
502716	Nut	1
500441	Washer	1
630137	Bolt	1
630117	Rubber Bushing	1
504014	Clamps	2
131447	Rod	1
630133	Rubber Bushing	1
5001188	Nut M8-1.25	2
5001161	Lock-Washer	2
5002780	Hex Head Screw M8	2
IS-96192	Instruction Sheet	1
FI-96192	Feuille d'instructions	1

**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. Safely support the vehicle at the axle jacking points.
- 2. Jack vehicle until the tires clear the ground, and place safety supports underneath body.

**Warning:** Only the recommended jacking points must be used as outlined in Section 18 of Maintenance Manual: "Body" or in Operator's Manual.

- 3. Exhaust air from air system by opening the drain cock on accessory air tank. Close air tank drain cock. Drain cock is located in front service compartment. Height control valve is located in right drive axle wheelhousing.
- 4. Disconnect lower rubber bushing from link and pull down lever to exhaust remaining air from air springs. Disconnect air supply and delivery lines from the height control valve. Cover ends of the lines with tape.
- 5. Remove the two nuts and bolts securing the height control valve to the mounting bracket, then remove the valve assembly.
- 6. Dismantle the valve, discard Neway valve but retain the couplings. Remove the restrictions from inside the couplings, discard restrictions. Clean the couplings and apply Teflon sealant paste over the threads. Install a check valve (Prévost #640135) on the inlet coupling of the valve. Do not use a vise to secure the valve body when reinstalling the couplings, mount nuts on the studs and clamp the nuts in the vise. Avoid overtorquing couplings, handtighten only then rotate 1 ½ turn then position coupling to the required angle. Turn valve lever three times in each direction to settle it. Install coupling (Prévost #641332) with the flexible hose (Prévost #503402) on the exhaust port (refer to fig. 7).
- 7. Assemble new bracket (Prévost #131453) with valve using lock-washers and nuts then secure assembly on the existing bracket using screws, lock-washers and nuts.
- 8. Install rubber bushing (Prévost #630133) on the existing bent rod, insert new rod (Prévost #131447) in the rubber bushing then install second rubber bushing (Prévost #630117) on the rod. Secure using clamps (Prévost #504014) as shown on fig.7.

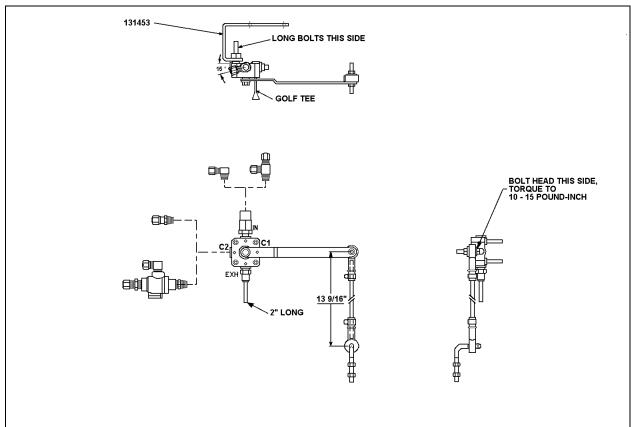
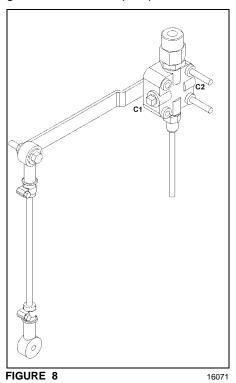


FIGURE 7: INSTALLATION OF BARKSDALE REAR RIGHT HEIGHT CONTROL VALVE

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9. Assemble overtravel lever with link using bolt, washer and nut. Insert golf tee in the provided holes located in overtravel lever and valve to lock them together, using the adjusting nuts on the bent rod, try to keep the overtravel lever as horizontal as possible, reconnect the lines. Use the slot on bracket for final adjustment. Refer to figure 8 for a view in perspective of assembly.



Note: The distance between overtravel lever and bent rod must be approximately 13 9/16" (344mm).

10. With the vehicle at normal operating pressure, check the appropriate vehicle body height by measuring the clearance of the air springs installed on the drive axle, the clearance should be  $11.5 \pm 0.25$ " (292  $\pm$  6mm). Refer to figure 4 to identify the correct location where the measure as to be taken.

**Caution:** Always adjust on "fill cycle". If it is necessary to lower the vehicle height, release sufficient air to be well below height and adjust to height or fill cycle.