

PREVOST

Instruction Sheet


IS-18025

H3 SERIES I-BEAM FRONT AXLE LEVEL SENSOR REPLACEMENT

Description:

This instruction sheet shows how to replace kneeling level sensor #21643575 by sensor #22194741.

APPLICATION

Model	VIN	
H3-45 coaches Model Year : 2012 - 2014	From 2PCH33499 <u>CC712007</u> up to 2PCH33498 <u>EC712504</u> incl.	

MATERIAL

Order kit # 132117 that contains the following parts:

Part No.	Description	Qty
22194741	SENSOR	1
132123	C-SHAPE ADAPTOR	1
132121	SENSOR ARM ASSEMBLY	1
5001745	SCR CAP HEX N500 M8X25 G8.8	4
502851	NUT HEX N500 M8-1.25	5
500321	WSH BEL SPR N500 .331X.827X.098(M8,5/16)	5
5001736	WSH FL N500 8.4X18X2 (M8,5/16)	2
IS-18025	INSTRUCTION SHEET	1
FI-18025	FEUILLE D'INSTRUCTIONS	1

NOTE

Material can be obtained through regular channels.

PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop the engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

EXISTING ARM AND LEVEL SENSOR REMOVAL

1. Raise the vehicle with safe lifting equipment and procedures.
2. Remove cable ties that support the sensor wiring.
3. Unscrew the sensor connector cap and disconnect the wiring.



FIGURE 1

4. Disconnect the top of the valve connecting rod with the valve lever.
5. Keep fasteners for reinstallation.

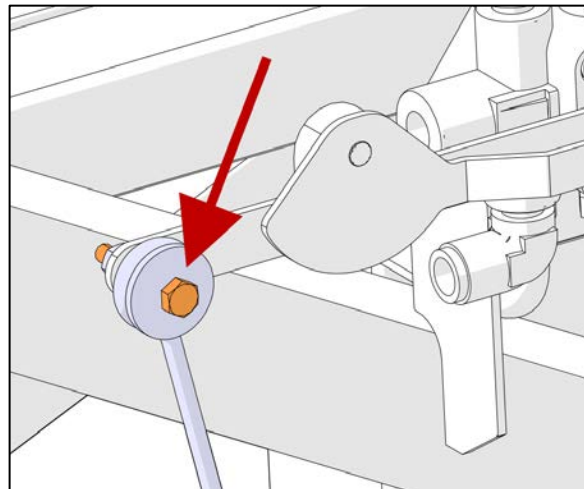


FIGURE 2

6. Dismount the existing sensor arm from the existing sensor and from the valve lever.
7. Discard the arm and the fasteners.

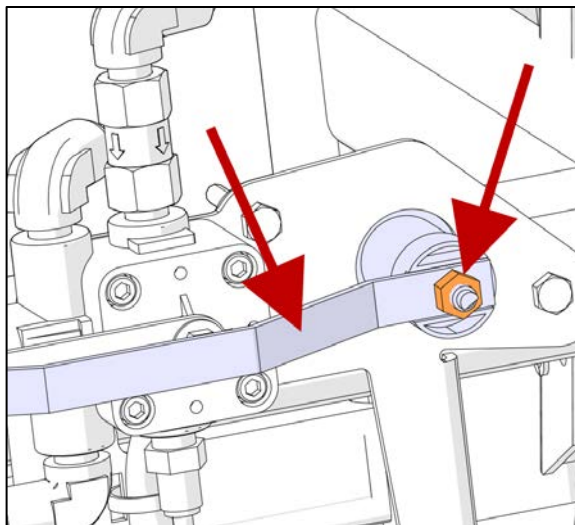


FIGURE 3

8. Dismount sensor (2 screws).
9. Discard sensor and fasteners.

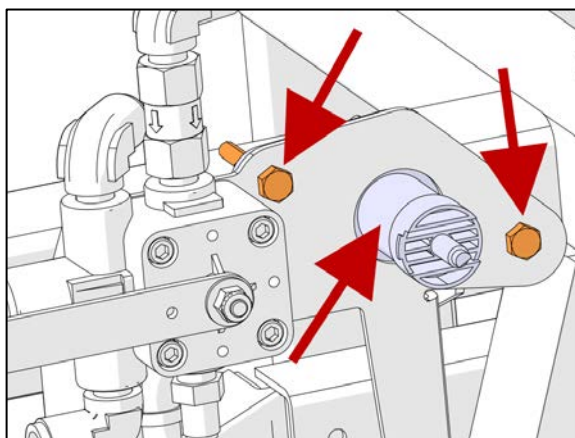


FIGURE 4

10. Remove rust on the valve lever, clean it and apply liquid lubricant. Do these operations on four faces and only half of the lever (connecting rod side).

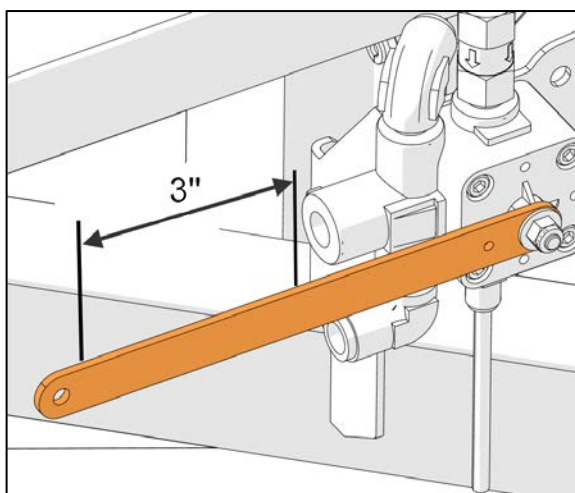


FIGURE 5

11. Remove rust on the sensor bracket mounting faces and clean it.

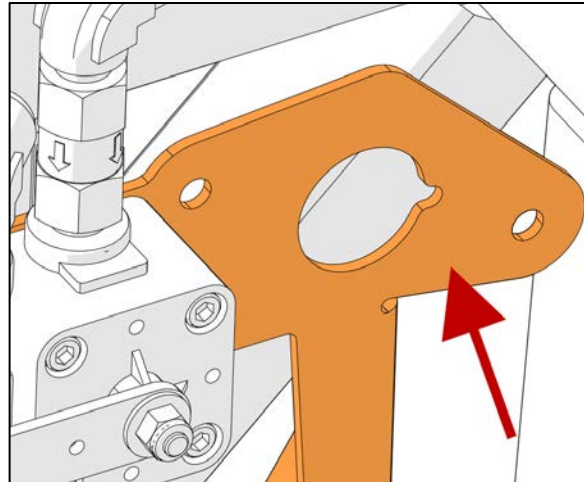


FIGURE 6

NEW ARM AND LEVEL SENSOR INSTALLATION

12. Assemble the sensor with the "C-shape" support.

NOTE

Never alter the sensor for any reason.

Make sure the flat on the sensor rotor is orientated as shown in Figure 7.

NOTE

Screw head must be inside the "C-shape" support.

Install flat washers with the screw head side and Belleville washers on the nut side.

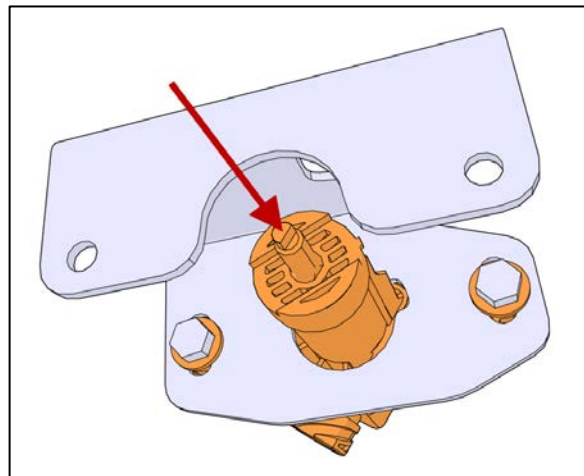


FIGURE 7

13. The "C-shape" support has arced slots to allow angle adjustment of the sensor. Orientate the sensor with the screws in the middle of the arced slots and tighten.

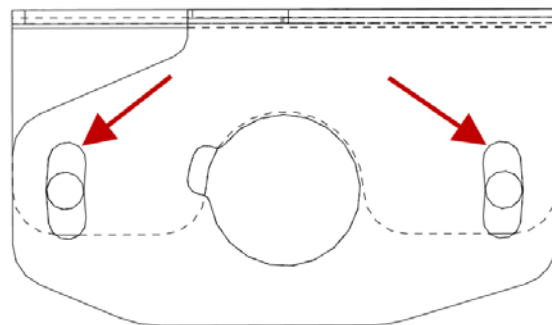


FIGURE 8

14. Install the "C-shape" support with the sensor on the vehicle structural bracket.
15. Tighten the nuts.

NOTE

Screw head must be inside the "C-shape" support.

Install Belleville washers on the nut side.

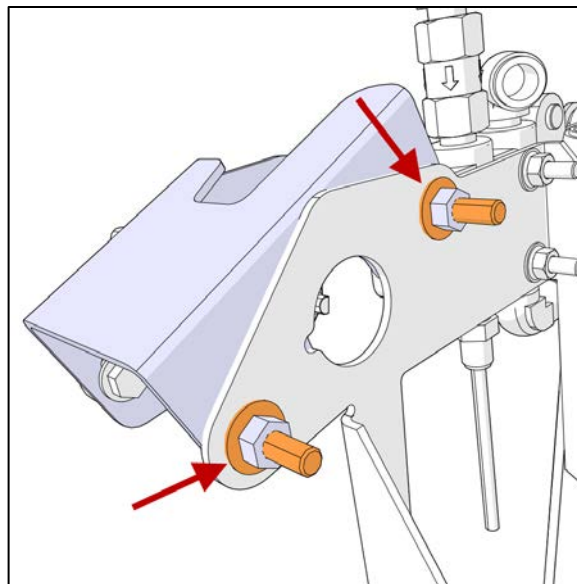


FIGURE 9

16. Install the sensor arm slider on the valve lever.
17. Reinstall the connecting rod on the valve lever.

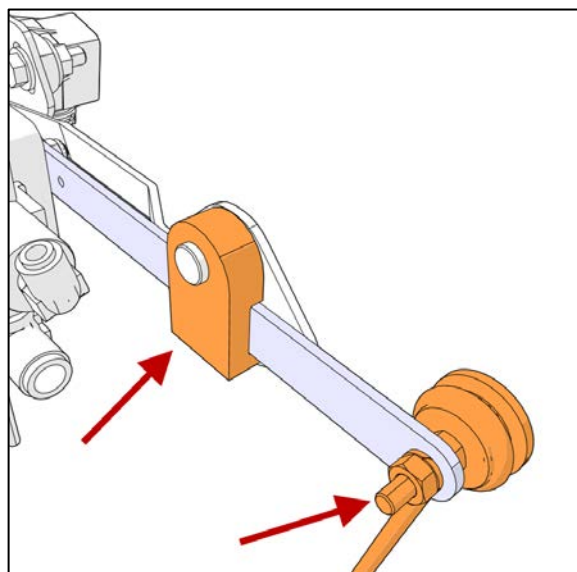


FIGURE 10

18. Install new arm on the sensor. Use Belleville washer and tighten the nut.

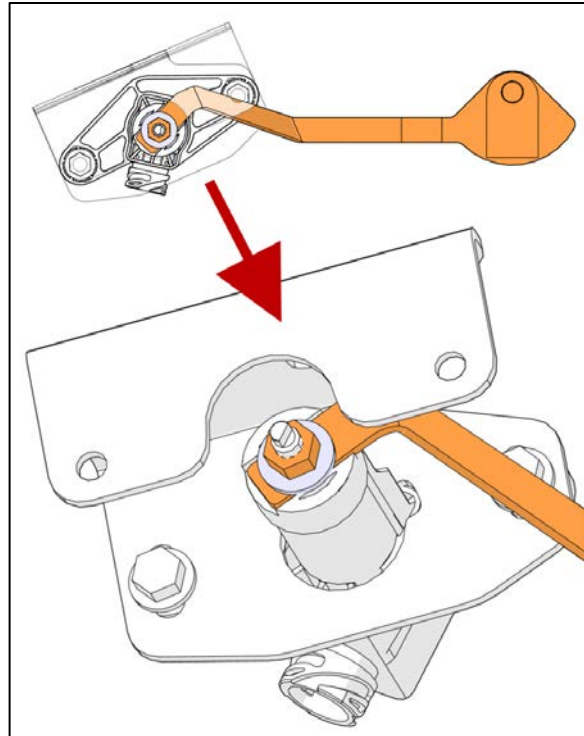


FIGURE 11

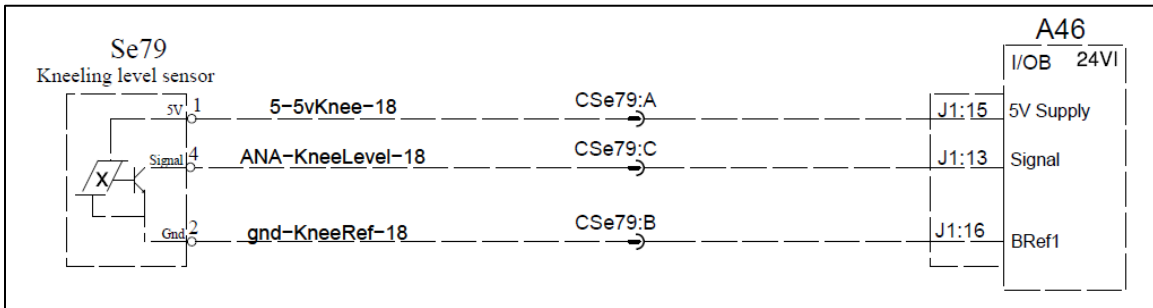
19. Connect existing wiring to sensor and screw the sensor connector cap.

20. Secure the wiring with cable ties.



FIGURE 12

LEVEL SENSOR ANGLE ADJUSTMENT



SEE ELECTRICAL DIAGRAM D061140 PAGE 32.1 FOR WIRING.

21. Run the vehicle 5 minutes to fill the pneumatic system with air pressure.
22. Adjust the height of the vehicle to get the clearance shown in Figure 13 at a value of $12 \pm \frac{1}{4}$ " (305 ± 6 mm).

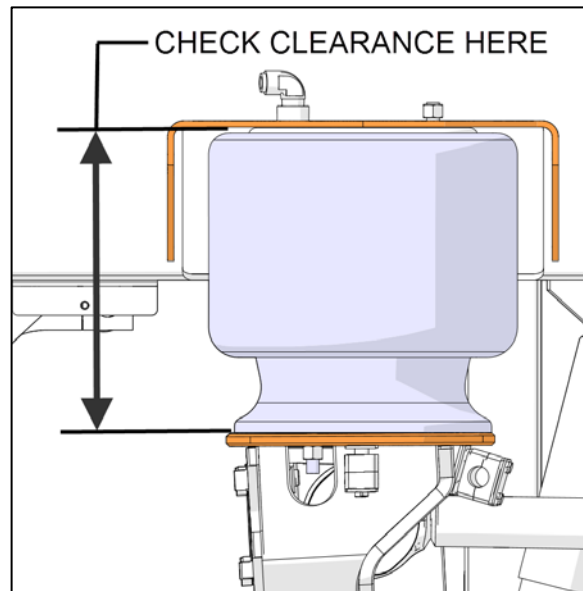


FIGURE 13

23. Locate A46 module into the front service compartment.



FIGURE 14

24. Locate pin 13 on connector A46-J1 (the wire color is white and the wire ID is "KneelLevel").

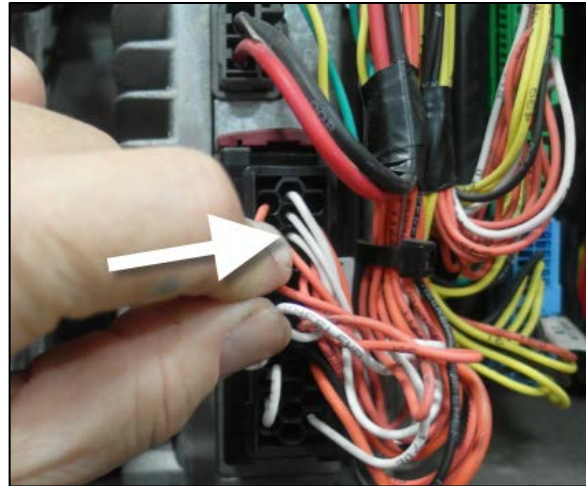


FIGURE 15

25. With a voltmeter, back probe pin 13 of connector A46-J1. The voltage should be around 2.5 volts with a clearance of $12 \pm \frac{1}{4}$ " (305 ± 6 mm).



FIGURE 16

26. If the voltage is higher or lower than 2.5 volts, loosen the nuts that fix the sensor to the "C-shape" support and apply a slight rotation.
27. Tighten the nuts, check the suspension below clearance and the voltage.
28. Repeat previous steps until you reach 2.5 volts with a clearance of $12 \pm \frac{1}{4}$ " (305 ± 6 mm).

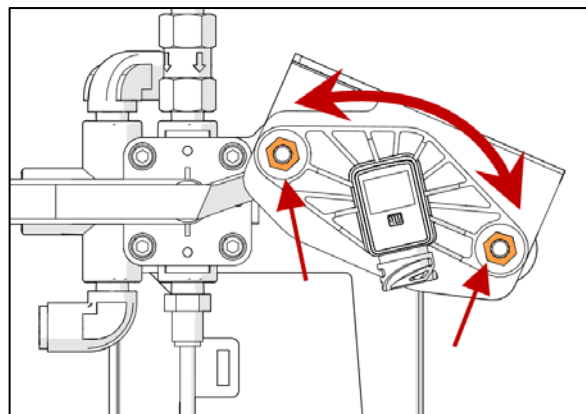


FIGURE 17

29. Using the kneeling dash switch, adjust the vehicle at its maximum height by pressing and maintaining the upper part of the switch. Check the voltage. It should be around 3.5 volts.
30. Using the kneeling dash switch, adjust the vehicle at its minimum height. Check the voltage. It should be around 1.8 volts.
31. Bulletin is complete.

The time to perform all steps is 1 hour.

PARTS / WASTE DISPOSAL

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)