



GRAY MANUFACTURING
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WPLS-160 Hydraulic Handle Retrofit Instructions

The following instructions describe the procedure to retrofit a WPLS-160 from the existing mechanical handle to a hydraulic handle. Please follow the steps outlined to properly install the handle. If you have any questions during this process, please contact Gray Customer Service immediately.



WARNING

The mechanical handle on the WPLS-160 is under spring pressure. Failure to follow the provided handle removal instructions can cause the handle spring to release suddenly resulting in property damage and/or personal injury.

Check that all of the following items are included in your kit prior to proceeding:

Item	Qty	Part Number	Description
1	1	918-02045	Handle Bracket Weldment
2	1	936-01008	Hydraulic Handle Assembly
3	2	202-01235	Capscrew, Hex Hd, Fl Lock, 3/8-16 UNC, Gr. 5, 3/4" Long
4	1	200-31607	Capscrew, Hex Hd, 5/8-11 UNC, Gr.5, 1 1/4" Long
5	1	204-01614	Washer, Plain, 5/8, Type B, 1 1/4 OD, Narrow Rim
6	3	200-31408	Capscrew, Hex Hd, 1/2-13 UNC, Gr. 5, 1 1/2" Long
7	3	203-01400	Nut, Hex, 1/2-13 UNC
8	1	591-00051	Cable Tie, .300" Wide X 30.50" Long, Black

Removal of Mechanical Handle

1. The mechanical handle should be in the upright position with the base of the lift sitting on the ground prior to removing the handle. The lift carriage should be in the fully lowered position with no load throughout the handle retrofit process.
2. Loosen the three jam nuts shown in Figure 1 using a 9/16" wrench or socket. Then, back out the three set screws using a 3/16" allen wrench. The set screws should be completely removed from the handle. **WARNING!** All three set screws must be removed before proceeding. Failure to remove all three set screws prior to proceeding will result in the handle spring pressure releasing suddenly causing property damage and/or personal injury.

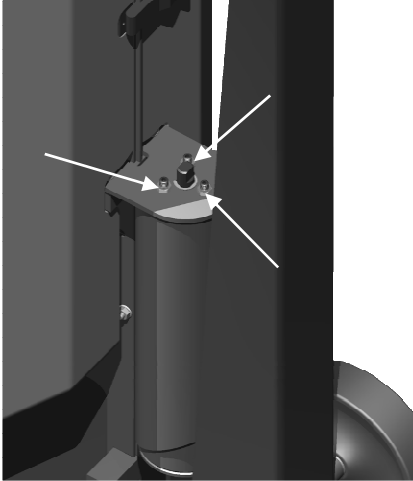


Figure 1

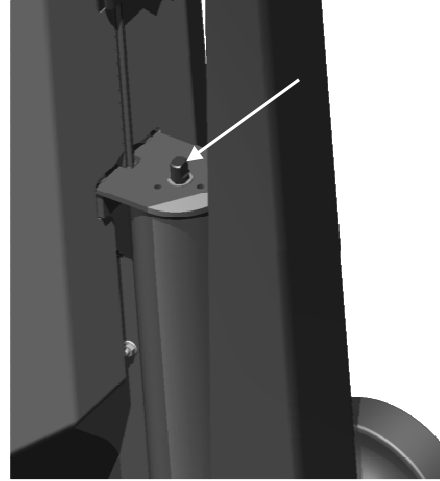


Figure 2

3. Completely remove the handle pivot pin shown in Figure 2 by using a 1/2" wrench. The "E" retaining ring on the handle pivot pin does not need to be removed.
4. Open the left and right outer covers by releasing the latches holding the covers closed. Remove the bolts shown in Figure 3 using a 1/2" wrench and/or socket. The hose clamp secured by bolt A can be discarded.

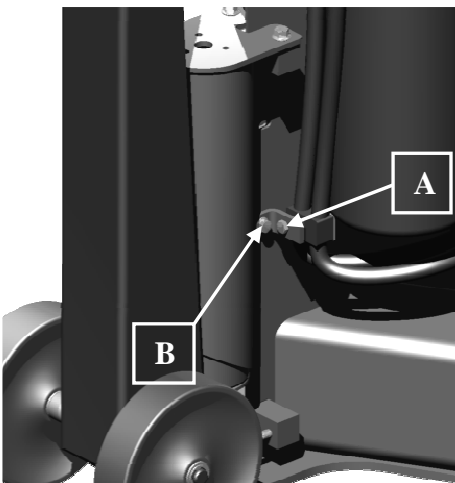


Figure 3

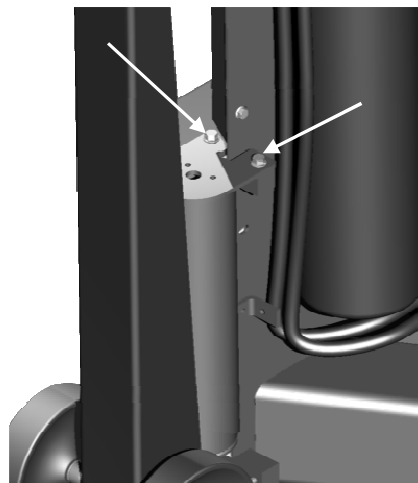


Figure 4

5. Remove the two bolts shown in Figure 4 using a 9/16" wrench or socket. After these bolts are removed the mechanical handle is free from the lift and can be removed.

6. Remove the two carriage bolts shown in Figure 5 by first loosening the jam nuts using a 9/16" wrench.

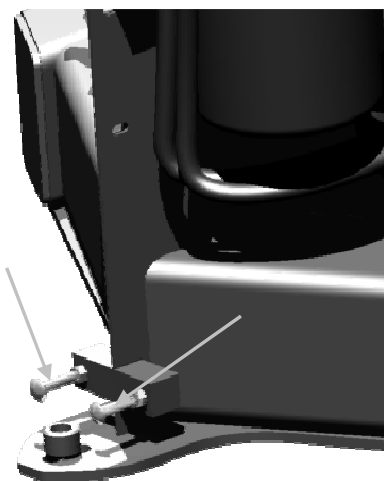


Figure 5

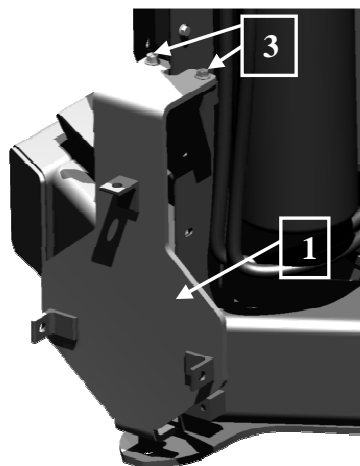


Figure 6

Hydraulic Handle Installation

7. Place the Handle Bracket Weldment [Item #1] as shown in Figure 6 and secure at the top using the two 3/8-16 X 3/4" bolts [Item #3] provided in this kit. Do not tighten the bolts yet.

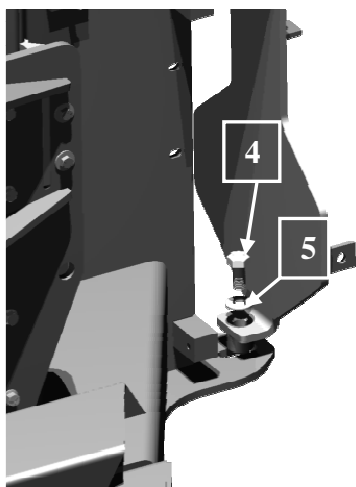
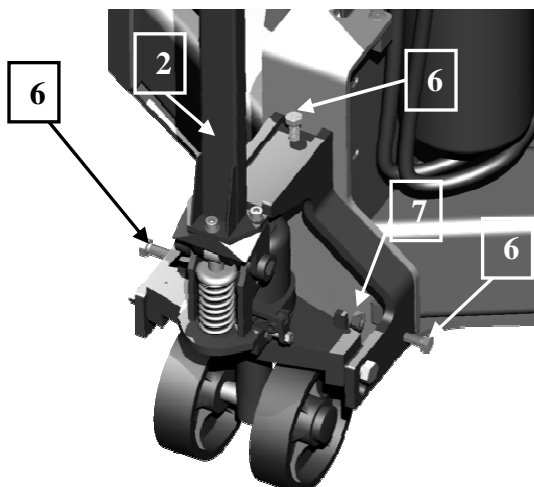


Figure 7



8. Secure the bottom of Item #1 as shown in Figure 7 using the 5/8-11 X 1 1/4" bolt [Item #4] and 5/8" washer [Item #5] provided. Tighten the bolts installed in Steps 7 and 8.
9. Attach the Hydraulic Handle Assembly [Item #2] to Item #1 using the three 1/2-13 X 1 1/2" bolts [Item #6] and three 1/2-13 nuts [Item #7] provided. See Figure 8. The hydraulic handle is now installed and ready to use.
10. Use the cable tie [Item #8] included in this kit to secure the hydraulic hoses (released from the clamp in Step 4 above) to the hydraulic reservoir. Wrap the cable tie around the reservoir and both hoses, pull down tight, and cut the cable tie.