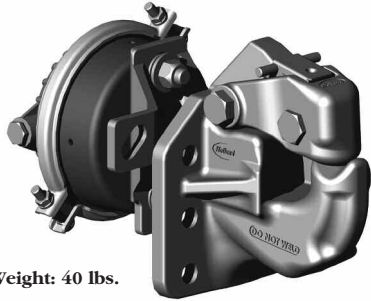




# PH-410 SERIES

## PH-410 SERIES SPECIFICATIONS



Weight: 40 lbs.



**Rigid type pintle hook with air operated plunger, provides a minimum clearance and some shock absorption at the coupling.**

**20,000 lbs. Maximum Vertical Load**  
**100,000 lbs. Maximum Gross Trailer Weight**

### SAE J847 Information:

Type I - not applicable. Type II - 100,000 lbs.

### IMPORTANT SAFETY INFORMATION

Maintain adequate vertical (tongue) load to properly control the trailer (generally 10%) but do not exceed the above rated capacities.

**DO NOT** damage the latch. Be particularly careful with the drawbar when coupling and uncoupling.

Other steps and inspections are also required. Consult OSHA and D.O.T. regulations and American Trucking Association for complete coupling and uncoupling procedures. These cover items such as cargo securement, brakes, lights, safety chains, and other important requirements.

This equipment must not be used or maintained in a careless manner.

### GENERAL INFORMATION

1. Do not modify or add to the product.
2. Wear safety goggles during installation, removal and servicing.
3. Never strike any part of the item with a steel hammer.
4. Do not weld on this product.

This product is covered by Holland's Commercial Products Warranty. Holland reserves the right, without giving prior notice, to change specifications and dimensions as designs are altered or improved.

### TOWING APPLICATIONS

Trailers, full trailers, doubles, and triples operations within the stated capacities. For off-road applications, reduce the above capacities by 25% and use in conjunction with a swivel type drawbar.

### DRAWBAR EYE DIMENSIONS

2.38" to 3" I.D. with 1.25" to 1.63" diameter section.

### MOUNTING

1. Use a mounting structure of sufficient strength to support the rated capacity of the pintle hook. Refer to SAE J847 for structural performance requirements.
2. Use the mounting bolt hole pattern detailed on the back of this page.
3. Install the pintle hook using six (6) new 3/4" diameter Grade 8 bolts. Torque bolts to a minimum of 200 ft.-lbs. Do not exceed manufacturer's recommended torque limit. Note that installation torque requirements can vary widely and are influenced by many parameters. These include, but are not limited to, thread type, thread engagement, coatings, lubrication, mounting structure details and other parameters unique to each specific application.

For reference, Holland conducts proof load tests using dry threads torqued to 200 ft.-lbs. when mounted into solid steel plate at least 1-1/2" thick. This may or may not be adequate for your specific applications. Perform recommended maintenance as stated below.

4. A Holland air chamber is recommended for use with Holland pintle hooks.
5. Mount the air chamber and plunger assembly, making sure that the air chamber and plunger assembly are in line with the pintle body. Adjust as required and tighten the chamber bolts securely.
6. Connect the air supply and check for proper operation.
7. Check the plunger adjustment. When properly adjusted, the plunger should tightly grip a 1.25" round bar (or plunger adjustment tool TF-03147-10) when energized (see Figure 1) and retract far enough when de-energized to allow easy removal of a 1.63" diameter drawbar.
8. Adjustment of Holland's air activated plunger:

Figure 1

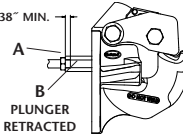
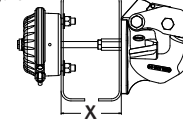


Figure 2



- A. Loosen chamber rod jam nut (A) as shown in Figure 1.

- B. Holland plungers have an adjustment range of approximately 1-1/2". The plunger is pre-set at the factory to provide approximately 1 inch of adjustment out or 1/2" adjustment in. At no time should the chamber rod have less than 3/8" engagement with the plunger.

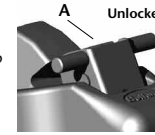
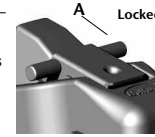
To adjust, loosen jam nut (A) from plunger. Turn plunger rod clockwise for less engagement or counterclockwise for more engagement. After adjusting, retighten jam nut (A) securely against plunger rod.

### MOUNTING STRUCTURE CHART

PINTE ASSEMBLY NUMBER	MOUNTING STRUCTURE WIDTHS "X"	AIR CHAMBER ROD LENGTH	AIR CHAMBER & PLUNGER KIT NUMBER	AIR CHAMBER PART NUMBER
PH-410RA11	0.5" to 2.0"	1.8"	XA-02608	XB-165945
PH-410RC11	6.0" to 8.0"	6.1"	XA-10196	XB-166314
PH-410RD11	8.0" to 9.0"	7.7"	XA-10248	XB-166326
PH-410RE11	9.0" to 11.0"	9.1"	XA-10197	XB-166315
PH-410RF11	12.0" (12.00")	12.0"	XA-10198	XB-166321

### OPERATING INSTRUCTIONS

1. Before operating, inspect for proper operation, worn, damaged or missing parts and a secure mounting. Correct as required before use.
2. Make sure the pintle is in the proper coupling position as shown at right (with the latch on top).
3. Open the latch (XA-10545) by lifting the lock handle (A).
4. Position the drawbar eye over the horn of the pintle and lower into place.
5. Push the latch closed. When locked, the lock handle (A) will rotate and move up until it is flush with the top of the latch (see illustrations at right).

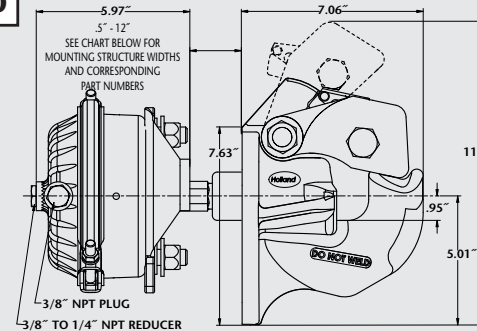


### MAINTENANCE

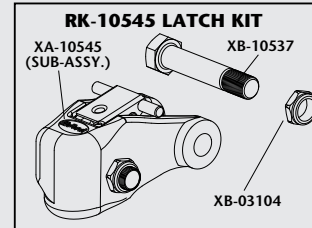
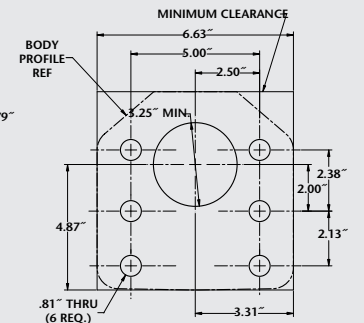
For proper performance, the following maintenance steps should be performed every 30,000 miles or 3 months, whichever comes first.

1. Clean and check for proper operation. Inspect for worn, damaged or missing parts. Replace as required using only Holland parts.
2. Inspect, in particular, the coupling contact area. Replace when wear exceeds 3/16" (0.19") from the original surface profile.
3. Lubricate latch pivots with a light oil lubricant.
4. Check mounting fasteners for proper torque.
5. Check plunger adjustment. See Item 8 of "Mounting Instructions", described previously.
6. With the latch closed, measure the gap between the hook and the latch while lifting up on the latch. Replace the latch (XA-10545 sub-assembly) when gap exceeds 3/8" (0.375").

### PH-410

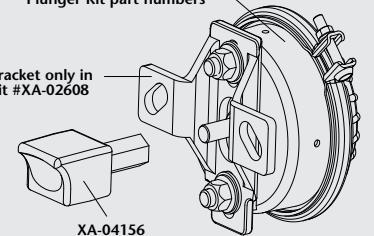


### REQUIRED MOUNTING INTERFACE



See Mounting Structure Chart on page 1 for Air Chamber and Plunger Kit part numbers

Bracket only in Kit #XA-02608



**ALL DIMENSIONS SHOWN ARE NOMINAL**



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