

The Right Connection®

HB Coupling Expander Instructions

dixonvalve.com

Customer Service 877.963.4966



Vice or Bench Mounted Hand Operated Pull Through Type

Used to attach: All Holedall® Petroleum fittings 3/4" - 2" All Holedall Curb Pump fittings

HB Coupling Expander Instructions

Description

The HB Expander is a hand operated pull through type expander. It is used in a fixed location for small production runs or as a portable repair type expander.

The HB Expander will attach all sizes of Holedall[®] Curb Pump couplings and sizes 3/4" through 2" of Holedall Petroleum couplings.

Features

- Vice or Bench Mounted
- Hand Operated
- Pull Through Type

Used to attach:

- Holedall Petroleum fittings
- Holedall Curb Pump fittings

Installation

The HB Expander is shipped assembled except for attaching the handles and threading the drive screw through the drive screw nut. It can be held in a bench vice or secured to a bench.

Using either method, the expander should be positioned so that the handles overhang sufficiently to give freedom of movement when turning.

Maintenance

- 1. The drive screw No. 5 must be kept well lubricated with graphite grease.
- 2. Oil periodically where indicated on body No. 1.

Operation

To expand couplings sizes through 1"

- 1. Select the proper size reducer (if male coupling), reducer and close nipple (if female coupling). Screw reducer onto thrust connector No. 3 by hand, then screw male coupling into reducer by hand, or if a female coupling, screw onto close nipple until it stops on the washer seat.
- 2. Position drive screw No. 5 (use 1/2" wrench on flats to turn drive screw) so that the end with the tapped hole is approximately flush with the front end (threaded end) of the coupling.
- 3. Select the proper size punch and screw it into drive screw No. 5 using a 1/2" wrench to tighten. Hold drive screw No. 5 from turning and turn the handles clockwise until punch enters coupling under slight pressure. (Lubricating punch is not necessary Holedall Petroleum fittings are pre-lubricated).

HB Coupling Expander Instructions

4. To assemble Holedall® Petroleum:

Place proper size ferrule on the hose so that the end of the hose is flush with the turned over portion of the ferrule (end of hose must be cut square). Keeping the ferrule stationary to the hose, slide the assembly over the punch and onto the shank of the coupling until top of ferrule is 1/8" from coupling face. Holding the hose in place, slide the ferrule flush against the coupling face. This allows the turned over portion of the ferrule to be anchored properly during the expansion process.

5. To assemble Holedall Curb Pump:

Push hose over the punch and into the coupling until hose bottoms out. The easiest way to ensure proper insertion depth is to measure and mark the coupling shank depth on the hose.

- 6. Turn handles clockwise until resistance to turning ceases indicating expansion is complete.
- 7. After expansion has been completed, remove thrust connector No. 3 from expander. Unscrew thrust connector and reducer as a unit from coupling. Replace thrust connector in machine, then remove punch. Machine is now ready for next expansion.

To expand couplings sizes 1-1/4" through 2"

- 1. Drive screw No. 5 must be reversed. Remove drive screw from nut No. 2, reverse drive screw and reassemble with nut No. 2.
- 2. Select proper size reducer or reducer nipple. Screw coupling onto reducer (or reducer nipple).
- 3. Advance drive screw No. 5 through coupling until keyed extension of drive screw projects beyond coupling.
- 4. Slide expanding punch onto keyed extension of drive screw. Screw on lock nut No. 7. Turn handles clockwise until punch enters coupling under slight pressure.
- 5. To assemble Holedall Petroleum:
 - a) Place proper size ferrule on the hose so that the end of the hose is flush with the turned over portion of the ferrule (end of hose must be cut square). Keeping the ferrule stationary to the hose, slide the assembly over the punch and onto the shank of the coupling until top of ferrule is 1/8" from coupling face. Holding the hose in place, slide the ferrule flush against the coupling face. This allows the turned over portion of the ferrule to be anchored properly during the expansion process.
 - b) Turn handles clockwise until resistance to turning ceases indicating expansion is complete.
- 6. After expansion has been completed, remove Thrust connector from machine. Unscrew thrust connector No. 3 and reducer as a unit from coupling. Replace thrust connector in machine. Remove punch, machine is now ready for next expansion.

Caution

After starting the expansion of a coupling, the handles must never be turned counter clockwise. The thrust bearing is a single direction action and reverse operation of the machine will damage the drive screw.

Parts List for HB Expander



| ltem # | Description | Part # |
|--------|-----------------------------------|------------|
| 1 | body | 2500HB0001 |
| 2 | drive screw nut | 2500HB0002 |
| 3 | thrust connector | 2500HB0003 |
| 4 | thrust connector pin (2 required) | 2500HB0004 |
| 5 | drive screw with key | 2500HB0005 |
| 6 | handle (2 required) | 2500HB0006 |
| 7 | punch retaining nut | 25000HSP11 |
| 8 | lock screw | 2500HB0007 |
| 9 | thrust bearing | 2500HB0008 |
| 10 | keyed shaft-key included | 25000HSP10 |

Tooling for HB Expander



| ltem # | Description | Part # |
|--------|------------------------------|------------|
| 11 | 5/8" expanding punch | 25000HTL01 |
| 12 | 3/4" expanding punch | 25000HTL02 |
| 13 | 1" expanding punch | 25000HTL03 |
| 14 | 1-1/4" expanding punch | 25000HTL04 |
| 15 | 1-3/8" expanding punch | 25000HTL05 |
| 16 | 1-1/2" expanding punch | 25000HTL06 |
| 17 | 2" expanding punch | 25000HTL07 |
| 18 | 2" x 3/4" standard reducer | BR2075 |
| 19 | 2" x 1" standard reducer | BR2010 |
| 20 | 2" x 1-1/4" standard reducer | BR2012 |
| 21 | 2" x 1-1/4" standard reducer | BR2015 |
| 22 | 2" standard coupling | RHC200 |
| 23 | 3/4" x 1-3/8" close nipple | CN075 |
| 24 | 1" x 1-1/2" close nipple | CN100 |
| 25 | 1-1/4" x 1-5/8" close nipple | CN125 |
| 26 | 1-1/2" x 2-3/4" close nipple | CN150 |

HB Manual Coupling Expanding Machine

Coupling Types: Holedall[®] Petroleum and Holedall Curb Pump Coupling Sizes: 5/8" to 2"

| Description | Part # |
|-------------------------------|------------|
| HB Coupling Expanding Machine | 2500HB0000 |

HB expander includes the following replaceable parts

| Description | Part # |
|--|------------|
| HB-201 body | 2500HB0001 |
| HB-202 drive screw nut | 2500HB0002 |
| HB-204 thrust connector | 2500HB0003 |
| HB-203 thrust connector pin (2 required) | 2500HB0004 |
| HB-207 drive screw with key | 2500HB0005 |
| HB-208 handle (2 required) | 2500HB0006 |
| HB-209 lock screw | 2500HB0007 |
| HB-101 thrust bearing | 2500HB0008 |
| H-213 punch retaining nut | 25000HSP11 |
| keyed shaft-key included | 25000HSP10 |

Tooling Needed for HB Expander

Punch, reducer and close nipple for each size 2" requires punch and standard coupling ONLY For 1-3/8" fittings, reducers and nipples use 1-1/2"

| Description | Part # |
|-------------------------------------|------------|
| H-820 5/8" punch | 25000HTL01 |
| H-607 3/4" punch | 25000HTL02 |
| H-601 1" punch | 25000HTL03 |
| H-608 1-1/4" punch | 25000HTL04 |
| H-602 1-3/8" punch | 25000HTL05 |
| H-603 1-1/2" punch | 25000HTL06 |
| H-604 2" punch | 25000HTL07 |
| HB-106 2" x 3/4" standard reducer | BR2075 |
| HB-105 2" x 1" standard reducer | BR2010 |
| HB-104 2" x 1-1/4" standard reducer | BR2012 |
| HB-103 2" x 1-1/2" standard reducer | BR2015 |
| HB-102 2" standard coupling | RHC200 |
| HB-110 3/4" x 13/8" close nipple | CN075 |
| HB-109 1" x 1-1/2" close nipple | CN100 |
| HB-108 1-1/4" x 1-5/8" close nipple | CN125 |
| HB-107 1-1/2" x 2-3/4" close nipple | CN150 |

NOTE: Cannot use on NST fittings, a special adapter is required for these fittings

| Notes |
|-------|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |



Dixon

1 Dixon Square Chestertown, MD 21620 Phone: 877.963.4966 Email: sales@dixonvalve.com



Printed in the USA

HBCEI_Manual_623