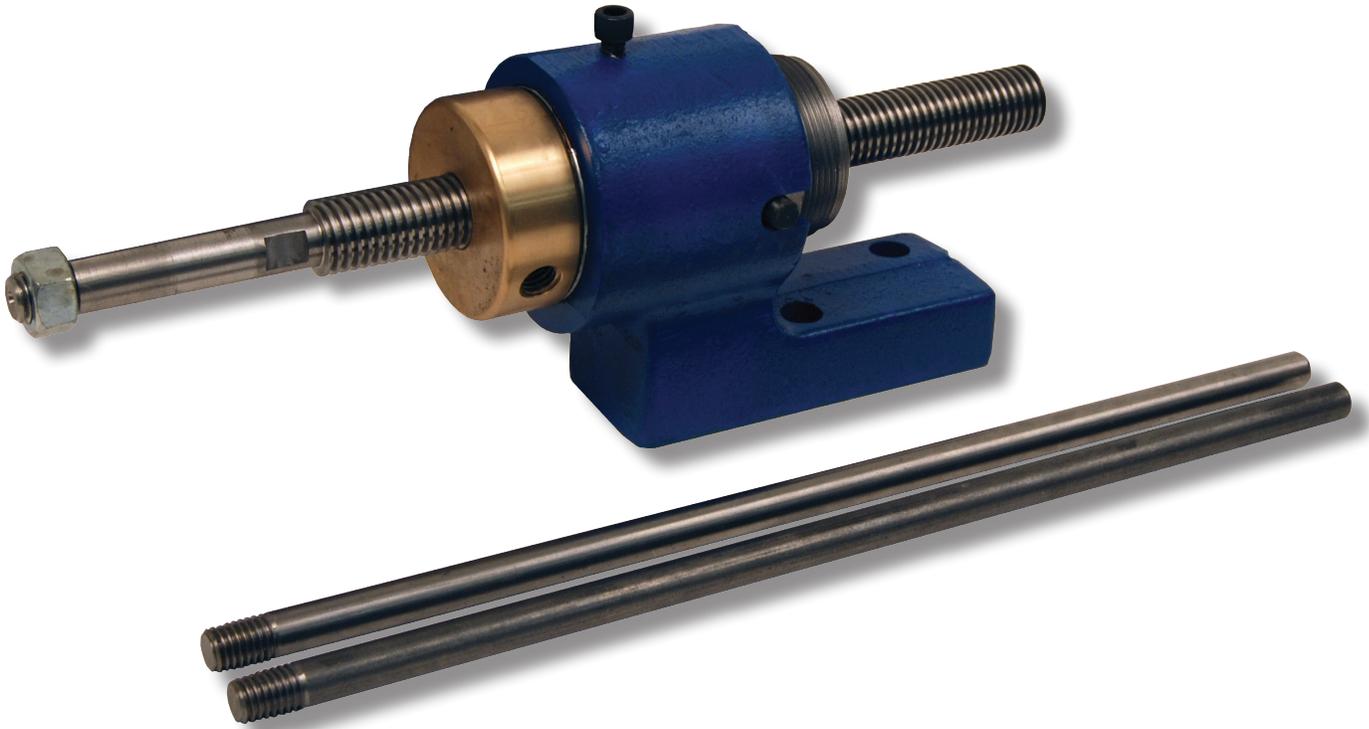




The Right Connection®



HB Coupling Expander Instructions

Vice or Bench Mounted
Hand Operated
Pull Through Type

Used to attach:

All 520-H Series Holedall Petroleum fittings $\frac{3}{4}$ " - 2"
All 570-H & 580-H Series Holedall Petroleum fittings

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 Dixon Holedall Petroleum 570-H and 580-H series (curb pump) couplings and sizes ¾" through 2" of 520-H series (fuel oil) couplings.

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 ½" 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 ½" 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 - Dixon Holedall Petroleum fittings are pre-lubricated).
4. To assemble 520-H series (fuel oil):
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.

OPERATION *(continued)*:

5. To assemble 570-H & 580-H series (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.

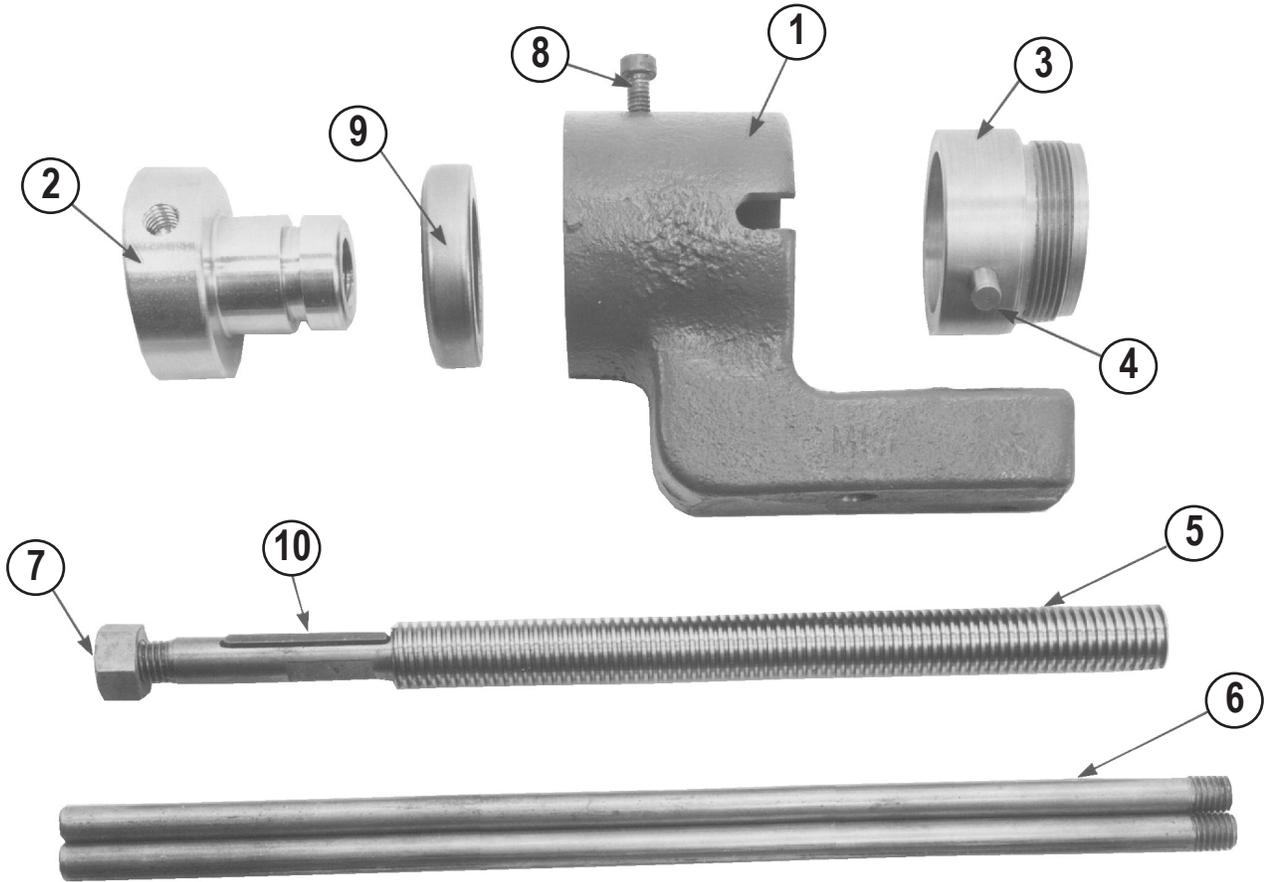
To expand couplings sizes 1¼" through 2":

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 520-H series (fuel oil):
 - 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



<u>PHOTO #</u>	<u>PART NAME</u>	<u>PART #</u>
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	Key	25000HSP15

TOOLING FOR HB EXPANDER

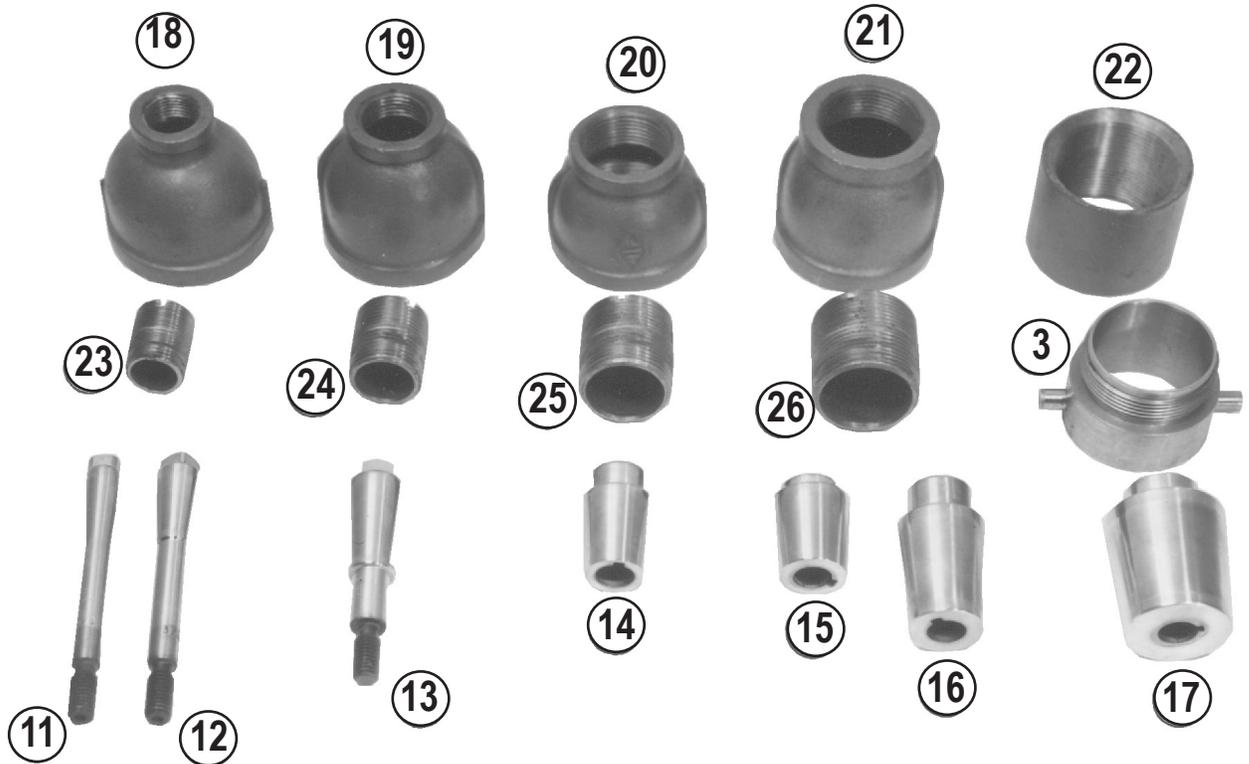


PHOTO #

PART NAME

PART #

11	5/8" Expanding Punch	25000HTL01
12	3/4" Expanding Punch	25000HTL02
13	1" Expanding Punch	25000HTL03
14	1¼" Expanding Punch	25000HTL04
15	1-3/8" Expanding Punch	25000HTL05
16	1½" Expanding Punch	25000HTL06
17	2" Expanding Punch	25000HTL07
18	2" x 3/4" Standard Reducer	2500HBTLO1 (BR2075)
19	2" x 1" Standard Reducer	2500HBTLO2 (BR2010)
20	2" x 1¼" Standard Reducer	2500HBTLO3 (BR2012)
21	2" x 1½" Standard Reducer	2500HBTLO4 (BR2015)
22	2" Standard Coupling	2500HBTLO5 (RHC200)
23	3/4" x 1-3/8" Close Nipple	2500HBTLO6 (CN075)
24	1" x 1½" Close Nipple	2500HBTLO7 (CN100)
25	1¼" x 1-5/8" Close Nipple	2500HBTLO8 (CN125)
26	1½" x 2-3/4" Close Nipple	2500HBTLO9 (CN150)

Price List - EFFECTIVE January 1, 2016

HB Manual Coupling Expanding Machine
 Coupling Types: 520-H, 570-H and 580-H
 Coupling Sizes: 5/8" to 2"

Part Number	Description
2500HB0000	HB Coupling Expanding Machine

HB expander includes the following replaceable parts

Part Number	Description
2500HB0001	HB-201 body
2500HB0002	HB-202 drive screw nut
2500HB0003	HB-204 thrust connector
2500HB0004	HB-203 thrust connector pin (<i>2 required</i>)
2500HB0005	HB-207 drive screw with key
2500HB0006	HB-208 handle (<i>2 required</i>)
2500HB0007	HB-209 lock screw
2500HB0008	HB-101 thrust bearing
25000HSP11	H-213 punch retaining nut
25000HSP15	H-212 key

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 1½".

Part Number	Description
25000HTL01	H-820 5/8" punch
25000HTL02	H-607 3/4" punch
25000HTL03	H-601 1" punch
25000HTL04	H-608 1¼" punch
25000HTL05	H-602 1-3/8" punch
25000HTL06	H-603 1½" punch
25000HTL07	H-604 2" punch
2500HBTL01	HB-106 2" x 3/4" standard reducer (<i>BR2075</i>)
2500HBTL02	HB-105 2" x 1" standard reducer (<i>BR2010</i>)
2500HBTL03	HB-104 2" x 1¼" standard reducer (<i>BR2012</i>)
2500HBTL04	HB-103 2" x 1½" standard reducer (<i>BR2015</i>)
2500HBTL05	HB-102 2" standard coupling (<i>RHC200</i>)
2500HBTL06	HB-110 3/4" x 1-3/8" close nipple (<i>CN075</i>)
2500HBTL07	HB-109 1" x 1½" close nipple (<i>CN100</i>)
2500HBTL08	HB-108 1¼" x 1-5/8" close nipple (<i>CN125</i>)
2500HBTL09	HB-107 1½" x 2-3/4" close nipple (<i>CN150</i>)