# **Hydraulic and Mechanical Pullers**

Enerpac offers a complete line of pullers with the widest range of sizes, capacities and styles. Whether your application requires mechanical, hydraulic or the patented Posi Lock<sup>®</sup> system, Enerpac can satisfy your requirements.

Made of high strength steel alloys, you can depend on Enerpac pullers to provide years of trouble-free operation, even in the harshest environments.



## **Hydraulic Pullers**

These hydraulic pullers eliminate time-consuming and unsafe hammering, heating or prying. Damage to parts is minimized through the use of controlled hydraulic power.



## Posi Lock<sup>®</sup> Pullers

The puller that meets the safety challenge. A control cage holds the pulling jaws securely in working position. This patented feature reduces the possibility of the puller jaws slipping off the

work surface thereby increasing productivity and tool life while reducing dangerous situations for the user. The Posi Lock<sup>®</sup> feature is available in mechanical or hydraulic versions.



WARNING Do not exceed 50% of the rated puller capacity when

using a double crosshead (2 jaws) or when using puller legs in combination with bearing puller attachment.



Not all puller components and configurations are rated at the set capacity. Please contact Enerpac for specific details.

Always wear Safety Goggles and Gloves while using pullers.

# **Puller Section Overview**

When selecting a puller it is important to consider three basic specifications:

## 1. Capacity:

The amount of force the puller is capable of producing.

Typically, the capacity required for a job can be determined by using the shaft diameter of the part being pulled.

For manual pullers, the center bolt diameter of the puller should be at least half the diameter of the shaft being pulled from.

For hydraulic pullers, the capacity in tons should be 7 to 10 times the shaft diameter. Use the following chart:

Sha Dia	aft meter	Puller Capacity
0"	to 1"	14 ton
1"	to 2"	24 ton
2"	to 3.5"	36 ton
3.5	" to 5.5"	50 ton

## 2. Reach:

The distance between the bottom of the base and the jaw flats. The puller's reach must equal or exceed the same distance of the part being pulled.

## 3. Spread:

The distance between the jaws. The puller's spread needs to be greater than the width of the part being pulled.

Puller Function	Capacity (tons)	Puller Type	Series		Page
	14-50	<b>Master Puller Sets</b> Max. Reach: 27.56 in. Spread Range: 43.30 in.	BHP	The second second	164 🕨
	14-50	<b>Grip Puller Sets</b> Max. Reach: 27.56 in. Spread Range: 43.30 in.	BHP		165 🕨
	7-24	<b>Cross-Bearing</b> <b>Puller Sets</b> Max. Reach: 34.00 in. Spread Range: 22.44 in.	BHP	H	166 ► 173
<b>L</b> II	7-25	<b>Bearing Cup Pullers</b> Max. Reach: 5.71 in. Spread Range 14.17 in.	BHP	+	167 🕨
	7-25	<b>Bearing Separator</b> Max. Spread: 9.65 in. Max. Width 11.50 in.	BHP	the second	167 🕨
	1-20	Mechanical Sync Grip Puller Max. Reach: 23.62 Spread Range: 26.77	SGM	1	168 🕨
	14-50	Hydraulic Sync Grip Puller Max. Reach: 27.56 in. Spread Range: 38.58 in.	SGH MPS GPS	A	168 ► 171 ► 172 ►
	2-40	Posi Lock <sup>®</sup> Mechanical Pullers Max. Reach: 14.00 in. Spread Range: 25.00 in.	ep, Epp, EppMI, Epx		174 🕨
	10-50	Posi Lock <sup>®</sup> Hydraulic Pullers Max. Reach: 14.00 in. Spread Range: 25.00 in.	EPH, EPHR, EPHS		178 🕨
	100	Posi Lock <sup>®</sup> Hydraulic Pullers Max. Reach: 48.0 in. Spread Range: 70.0 in.	EPH EPHT	-	181 🕨

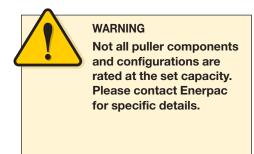
# **BHP-Series, Master Puller Sets**

▼ Shown: Master Puller Set BHP-3751G



- Supplied with a full hydraulic set including pump, hose, cylinder, gauge and gauge adaptor in a storage case
- High quality, forged steel components provide superior reliability and service
- Sets include speed crank and adjusting screw for fast contact to work before hydraulics are applied
- All Master Puller Sets include a Grip Puller, a Cross Bearing Puller, a Bearing Cup Puller and a Bearing Separator which can be ordered separately. See items 10, 20, 30 and 40

# Multi-Purpose Puller Set



 Maintenance engineers throughout the industry greatly appreciate Enerpac Master Puller sets.



Master Puller Set Capacity	14 ton	24 ton	36 ton	50 ton*	Page Number
Model Number 🕨	BHP-1752 <sup>1)</sup>	BHP-2751G	BHP-3751G	BHP-5751G	
Included Hydraulics: Set Weight ►	82 lbs	198 lbs	380 lbs	657 lbs	
Hand Pump	P-142	P-392	P-392	P-80	70 🕨
Cylinder	RWH-121	RCH-202	RCH-302	RCH-603	26 🕨
Saddle	-	HP-2015	HP-3015	HP-5016	27 🕨
Hose	HB-7206QB	HC-7206	HC-7206	HC-7206	133 🕨
Gauge	GF-120P	GF-813P	GF-813P	GF-813P	139 🕨
Gauge Adaptor	GA-4	GA-3	GA-3	GA-3	145 🕨
Included Pullers:					
10 Grip Puller	BHP-1762	BHP-252	BHP-352	BHP-552	165 🕨
20 Cross Bearing Puller	BHP-1772	BHP-262	BHP-362	BHP-562	166 🕨
30 Bearing Cup Puller	BHP-180	BHP-280	BHP-380	BHP-580	167 🕨
40 Bearing Separator	BHP-181	BHP-282	BHP-382	BHP-582	167 🕨
Storage Case	CM-6	CW-166	CW-550	CW-750	

#### ▼ SELECTION CHART

<sup>1)</sup> Includes FZ-1630 Adaptor.

\* Puller capacity at 7,850 psi

# **Grip Puller Sets**

Shown: Grip Puller Set BHP-351G



- Precise hydraulic control allows fast, efficient and safe pulling
- High quality, forged steel components provide superior reliability and service
- Available with and without full hydraulic set

## **BHP** Series

Series

Capacity: 14, 24, 36 and 50 tons

Maximum Reach:

## 9.92-27.56 inches

Spread Range: 9.84-43.30 inches

Maximum Operating Pressure: **10,000 psi** 

WARNING



## Not all puller components and configurations are rated at the set capacity. Please contact Enerpac for specific details.

## **Ordering Example**

## Model Number BHP-251G:

Includes Grip Puller BHP-252 and a full hydraulic set. (Hand pump, cylinder, saddle, hose, gauge and gauge adaptor.)

## Model Number BHP-252:

Includes Grip Puller mechanical parts **only**, for use with your existing hydraulics.

## ▼ SELECTION CHART

Grip Puller Set Capacity		14 ton	24 ton	36 ton	50 ton**
Model Number	Included	BHP-152 <sup>1)</sup>	BHP-251G	BHP-351G	BHP-551G
Hydraulics:	set weight 🕨	48 lbs	123 lbs	200 lbs	353 lbs
Hand Pump		P-142	P-392	P-392	P-80
Cylinder		RWH-121	RCH-202	RCH-302	RCH-603
Saddle		-	HP-2015	HP-3015	HP-5016
Hose		HB-7206QB	HC-7206	HC-7206	HC-7206
Gauge		GF-120P	GF-813P	GF-813P	GF-813P
Gauge Adaptor		GA-4	GA-3	GA-3	GA-3
Grip Puller *	Model Number 🕨	BHP-1762*	BHP-252*	BHP-352*	BHP-552*
Spread Range (in)	2-jaw	9.84	15.75	23.38	35.43
	3-jaw	9.84	19.68	31.50	43.30
Maximum Reach (in)	2-jaw	9.92	11.81	15.25	27.56
	3-jaw	9.92	11.81	15.25	27.56
Jaw (in)	Thickness	0.59	0.79	0.98	1.18
	Width	0.94	1.10	1.50	1.57
Adjusting Screw (in)	Thread	3⁄4" <b>-16</b> UNF	1"-8 UNC	11⁄4"-7 UNC	15⁄8"-5.5 ∪N
	Length	15.75	26.38	31.16	38.39
Case		CW-166	CW-166	CW-350	CW-750

<sup>1)</sup> Includes FZ-1630 Adaptor.

\* Grip Puller model number without hydraulics.

\*\* Puller capacity at 7,850 psi

## **ENERPAC**. **1**65

# **BHP-Series, Cross-Bearing Puller Sets**

# POWERFUL SOLUTIONS. GLOBAL FORCE.

V Shown: Cross-Bearing Puller Set BHP-361G



- Precise hydraulic control allows fast, efficient and safe pulling
- High quality, forged steel components provide superior reliability and service
- The Cross-Bearing Puller without hydraulics, Bearing Cup Puller and Bearing Puller may be ordered separately. See items 20, 30 and 40
- ▼ SELECTION CHART Each set includes all items in columns\*

## BHP Series

Capacity:

7, 12, 18 and 25 tons Maximum Reach: 14.06-34.00 inches Maximum Spread Range: 10.24-22.83 inches

Maximum Operating Pressure: **5000 psi** 



WARNING!

Not all puller components and configurations are rated at the set capacity. Please contact Enerpac for specific details.

Cross-Bearing Puller Set Capacity		7 ton	12 ton	18 ton	25 ton
* SE	T Model Number 🕨	BHP-162 <sup>1)</sup>	BHP-261G	BHP-361G	BHP-561G
Included Hydraulics:	set weight 🕨	57 lbs	137 lbs	267 lbs	408 lbs
Hand Pump		P-142	P-392	P-392	P-80
Cylinder		RWH-121	RCH-202	RCH-302	RCH-603
Saddle		-	HP-2015	HP-3015	HP-5016
Hose		HB-7206QB	HC-7206	HC-7206	HC-7206
Gauge		GF-120P	GF-813P	GF-813P	GF-813P
Gauge Adaptor		GA-4	GA-3	GA-3	GA-3
0 SET includes Cross-Bearing Puller	Model Number 🕨	BHP-1772	BHP-262	BHP-362	BHP-562
Spread (in)	Maximum	10.24	13.58	17.32	22.83
	Minimum	4.53	5.51	7.09	8.66
Reach (in)	Maximum	14.06	22.44	27.95	34.00
Adjusting Screw (in)	Diameter	¾ <b>"-16</b> ∪nf	1"-8 UNC	11⁄4"-7 UNC	15%"-5.50 UNS
	Length	15.75	26.38	31.10	38.39
Leg (in)	Length	4.17	4.53	8.07	23.98
	Length	14.06	9.45	18.11	34.02
	Length	-	16.54	27.95	-
	Length	-	22.44	-	_
Upper Leg Ends (in)	Thread	<sup>3</sup> ∕4" <b>-16</b> ∪nf	¾ <b>"-16</b> ∪NF	1"-14 UNS	11⁄4"-12 UNF
Lower Leg Ends (in)	Thread	5∕8" <b>-18</b> UNF	5∕8" <b>-18</b> UNF	1"-14 uns	1¼"-12 UNF
0 SET includes Bearing Cup Puller	Model Number 🕨	BHP-180	BHP-280	BHP-380	BHP-580
0 SET includes Bearing Separator	Model Number 🕨	BHP-181	BHP-282	BHP-382	BHP-582
SET includes Wooden Case	Model Number 🕨	CW-166	CW-166	CW-550	CW-750

<sup>1)</sup> Includes FZ-1630 Adaptor.

\* Each set includes Cross-Bearing Puller, Bearing Cup Puller, Bearing Separator and Case

# **Bearing Cup Pullers and Bearing Separators**

### Shown: BHP-180



## **Bearing Cup Puller**

- Made of high strength steel alloy
- Easily adapted to Cross **Bearing Pullers for fast and** efficient removal of the most difficult parts
- Adjustable to fit a variety of bearings and seals

# BHP

Series

Capacity:

7, 12, 18 and 25 tons

Maximum Reach: 4.53-5.91 inches

Maximum Spread Range: 5.71-9.45 inches

Maximum Operating Pressure: 5000 psi

## SELECTION CHART

Capacity*		7 ton	12 ton	18 ton	25 ton
30 Bearing Cup I	Puller				
Model N	umber 🕨	BHP-180	BHP-280	BHP-380	BHP-580
Spread (in)	Max.	5.71	6.30	9.45	9.45
	Min.	1.57	1.26	2.36	2.36
Reach (in)	Max.	4.53	5.51	5.91	5.91
Center Screw	Thread	<sup>3</sup> ⁄4 <b>"-16</b> UNF	1"-8 UNC	1¼"-7 UNC	15⁄8"-5.50 ∪NS

\* Bearing cup puller rated at 50% of puller capacity.



## WARNING!

Do not exceed 50% of the rated puller capacity when using a double crosshead (2 grip arms) or when using puller legs in combination with bearing

puller attachment.

## Shown: BHP-181



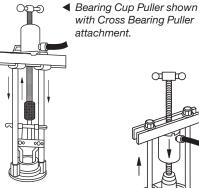
## **Bearing Separator**

- Made of high strength steel alloy
- Wedge-shaped edges allow removal of the most hard-to-grip components
- Easily adapted to Cross **Bearing Pullers for fast and** efficient removal of the most difficult parts

## ▼ SELECTION CHART

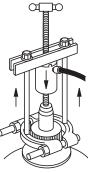
Capacity**		7 ton	12 ton	18 ton	25 ton
40 Bearing Se	eparator				
Mod	lel Number 🕨	BHP-181	BHP-282	BHP-382	BHP-582
Spread (in)	Max.	4.33	5.28	9.84	9.84
	Min.	0.39	0.47	0.67	0.67
Width (in)		4.33	6.10	10.24	10.24
Thread		5∕8" <b>-18</b> UNF	5∕8 <b>"-18</b> UNF	1"-14 UNS	11/4"-12 UNF

\* Bearing separator rated at 50% of puller capacity.



with Cross Bearing Puller attachment. വ് ЪС

Bearing Separator shown



with Cross Bearing Puller attachment.



## **Bearing Separator**

Bearing Separator has wedge shaped edges for placing puller behind hard to reach bearings, gears, etc., where clearance prevents direct

application of grip puller arms.

The Bearing Separator should be used with the Cross Bearing Puller.



# **Sync Grip Pullers**

Overview and Dimension Guide

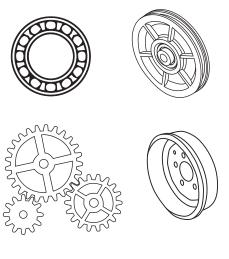
## **OVERVIEW**

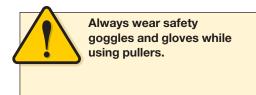
The Enerpac Sync Grip multi-purpose puller range is designed to make your jobs easier and safer to accomplish.

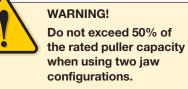
Remove bearings, bushings, gears, sleeves, wheels and flywheels, sprockets and other shaft mounted items simply and effectively.

Mechanical and hydraulic configurations are available with a variety of optional accessories that expand application range and increase utility.

Hydraulic models are available in standard sets which include detachable hydraulic cylinders and a choice of pump options, along with a gauge assembly and hose for safe monitoring of applied pulling forces.







## ▼ DIMENSIONAL DATA

Puller Capacity	Puller Model No.		Sync Grip Pullers Dimensions (in)										
		Standard Optional Extended Jaw Tip Jaw H						Jaw Hole Spacing					
(ton)	A B A B D E F												
Mechanica	I Pullers												
1	SGM01*	4.13	4.13 4.33 — — 0.31 0.28 0.30 0.75										
4	SGM04*	7.28	6.89		—	0.30	0.31	0.83	2.01	4.4			
7	SGM07*	8.86	9.45		—	0.39	0.31	0.98	1.75	14.3			
10	SGM10*	16.14	13.78	19.29	15.94	0.49	0.59	0.98	3.27	32.0			
20	SGM20	23.62	26.77	25.20	28.35	0.87	0.94	1.61	4.92	122.3			
Hydraulic P	Pullers												
14	SGH14*	12.60	13.78	15.75	15.94	0.49	0.59	0.98	3.27	55.1			
24	SGH24	12.60	18.90	17.13	21.26	0.61	0.69	1.22	4.53	108.0			
36	SGH36	16.14	25.59	20.67	28.35	0.87	0.94	1.61	4.92	165.3			
50**	SGH64	27.56	38.58	33.46	42.52	1.18	1.06	1.97	5.91	363.7			

\* Puller can be set up as a 2 or 3 jaw configuration.

\*\* Puller capacity at 7,850 psi, maximum cylinder capacity @ 10,000 psi is 64.6 tons. \*\*\* With standard legs and cylinder for hydraulic models

# **Sync Grip Pullers**



Sync Grip Pullers: available in both mechanical or hydraulic versions. Some models can be configured as a two jaw puller, however, three jaws are recommended for most even distribution of pulling forces.

Cross Puller: hydraulically powered via detachable cylinder and choice of pump. The Cross Puller can be used individually as a 'push' puller or in conjunction with the Bearing Separator or Bearing Cup Puller.

Bearing Separator: use where access is restricted. The Bearing Separator is used in conjunction with the Cross Puller.

Bearing Cup Puller: specifically designed for cup style bearing and other applications requiring an internal style puller.

Detachable Hollow Cylinder: provided with all hydraulic puller models including both the standard Sync Grip and Cross Puller.



In Sync Grip, Cross Bearing and Master Puller Sets a hose and gauge are provided as standard along with your choice of pump including manual hand operated, cordless battery powered, electric or air powered. In each case the pump selection has been optimized for compatibility with the pullers.



## Simple, Safe, Productive

All three jaws close simultaneously making the puller easier and safer to operate.

The synchronous feature of the SGM and SGH-Series Pullers makes positioning the puller simple and helps prevent misalignment.

## ▼ DIMENSIONAL DATA

Cross Pul	ler Dimer	<b>isions</b> (in)	Wt.**	I	Bearing S	eparator	Dims. (in)	Wt.			Bearing (	Cup Dimer	<b>isions</b> (in)			Wt.	
		A															
Standard	Long	Maximum		Dia.	Spread	l Range	Thread Size			Spread	Range			Jaw Tip			
Leg Height	Leg Height	Spread			Min. Spread	Max. Spread			Height	Height	Min. Spread	Max. Spread	Height	Width	Thickness		
А	А	В	(lbs)	Α	В	В	С	(lbs)	А	В	С	С	D	Е	F	(lbs)	
Mechani	cal Pulle	rs		Mecha	anical Pu	illers			Mechai	nical Pulle	ers						
—	—	_	—	—	—	—	—	—	—		_	—	_	—	—	-	
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—	—	—	—	—	—	_	—	—	—		_	_	—	—	—	—	
Hydrauli	c Pullers			Hydra	ulic Pulle	ers			Hydrau	lic Pullers	6						
4.17	14.06	10.24	40.77	4.33	0.39	4.33	5/8"- 18 UNF	6.0	4.53	9.33	1.57	5.71	0.20	0.18	1.22	4.41	
4.53	22.44	13.58	76.04	6.10	0.47	5.28	5/8"- 18 UNF	12.6	5.51	10.47	1.26	6.30	0.18	0.18	0.98	5.29	
8.07	27.95	17.32	123.42	10.24	0.67	9.84	1" - 14 UNS	62.8	5.91	12.20	2.36	9.45	0.31	0.43	2.17	13.22	
23.97	34.01	22.83	250.15	10.24	0.67	9.84	1-1/4"- 12 UNF	62.8	5.91	12.20	2.36	9.45	0.31	0.43	2.17	14.11	
** With cylir	nder and s	standard le	egs														

## **ENERPAC 2** 169

# **Mechanical Sync Grip Pullers**

## ENERPAC, 2 POWERFUL SOLUTIONS. GLOBAL FORCE.

SGM Series

Puller Capacity: **1-20 tons** Maximum Reach:

Maximum Spread:

4.1-23.6 inches

4.3-26.8 inches

Shown: SGM10 with three jaws



- Sync Grip mechanism synchronizes movement of all jaws for simultaneous engagement, helping to prevent misalignment for safe and easy use
- Threaded spindle and jaw indexes provide adjustable reach
- Three-jaw configuration for even load distribution
- Two-jaw configuration for confined access applications available on all pullers 10 ton and below (not available on SGM20)
- · High-strength forged jaws for superior reliability
- Suitable for a variety of applications including bearings, bushings, wheels, gears and pulleys

# Dimensions Dimensional information for all puller models is included in the dimensional overview table: Page: 168 WARNING! Do not exceed 50% of the rated puller capacity when using two jaw configurations.

#### ▼ SGM10 with two jaws.



## ▼ DIMENSIONAL DATA

Puller	Puller Medel No	Dimens	ions (in)	Weight	Long Jaw Sets	Dimens	ions (in)
Capacity (ton)	Model No.	Max. Reach A	Max. Spread B	(lbs)	Model No.*	Max. Reach A	Max. Spread B
1	SGM01	4.13	4.33	1.8			
4	SGM04	7.28	6.89	4.4	_		
7	SGM07	8.86	9.45	14.3	-	—	—
10	SGM10	16.14	13.78	32.0	SG1002K	19.29	15.94
20	SGM20	23.62	26.77	122.3	SG3002K	25.20	28.35

\* Jaw sets include three jaws.

## www.enerpac.com

# Hydraulic Sync Grip Master Puller Sets

#### Shown: MPS14H



- Sync Grip mechanism synchronizes movement of all jaws for simultaneous engagement
- Hydraulically applied pulling force increases pulling capacity reducing operator fatigue
- Standard jaws adjust to accommodate different reach requirements. Optional long jaw sets available for additional reach requirements
- Designed for applications including pulling, pushing and dismounting gears, bearings, bushings, etc.

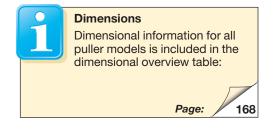
## MPS Series

Puller Capacity: 14-50 tons

Maximum Reach: 12.6-27.6 inches

Maximum Spread: 13.8-38.6 inches

Maximum Operating Pressure: 10,000 psi





<sup>1)</sup> Choose pump options below.

## ▼ DIMENSIONAL DATA

Puller Capacity	Model No. (Puller and	Stroke	Dimens	ions (in)	Wt.		H	ydraulic Pull	er Sets		Long Jaw Sets Model	Dimens	ions (in)
	Cylinder)		Max. Reach	Max. Spread		17	E			302	No.***	Max. Reach	Max. Spread
(ton)		(in)	А	B	(lbs)	Hand Pump	Air Pump	Electric Pump	Cordless Pump	All Sets Include:		А	В
14	SGH14	1.0	12.60	13.78	55.1	MPS14H	MPS14A	MPS14E	MPS14C	*	SG1002K	15.75	15.94
24	SGH24	2.0	12.60	18.90	108.0	MPS24H	MPS24A	MPS24E	MPS24C	GA45GC	SG2002K	17.13	21.26
36	SGH36	2.5	16.14	25.59	165.3	MPS36H	MPS36A	MPS36E	MPS36C	&	SG3002K	20.67	28.35
50**	SGH64	3.0	27.56	38.58	363.7	MPS64H	MPS64A	MPS64E	MPS64C	HC7206C	SG6002K	33.46	42.52
* 14-ton s	sets include an	AR-630 fer	nale couple	r. GA45 dau	ide adapt	tor, and G253	5L gauge.	For 115 V app	lication add				

\* 14-ton sets include an AR-630 female coupler, GA45 gauge adaptor, and G2535L gau

\*\* Puller capacity at 7,850 psi, maximum cylinder capacity @ 10,000 psi is 64.6 tons.

\*\*\* Jaw sets include three jaws.

For 115 V application add "B" suffix For 230 V application add "E" suffix

## **ENERPAC**. **2** 171

# Hydraulic Sync Grip Puller Sets

## ENERPAC, 2 POWERFUL SOLUTIONS. GLOBAL FORCE.

## ▼ Shown: GPS14H



- Sync Grip mechanism synchronizes movement of all jaws for simultaneous engagement
- Hydraulically applied pulling force increases pulling capacity and reduces operator fatigue
- Threaded spindle and jaw indexes provide adjustable reach
- Three-jaw configuration for even load distribution
- High-strength forged jaws for superior reliability
- The versatile puller set facilitates safe and easy dismounting in a variety of applications

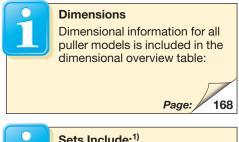
## GPS Series

Puller Capacity: 14-50 tons

Maximum Reach: 12.6-27.6 inches

Maximum Spread: 13.8-38.6 inches

Maximum Operating Pressure: **10,000 psi** 





<sup>1)</sup> Choose pump options below.

Puller	Model No.	Stroke	Dimens	ions (in)	Wt.		-	Hydraulic P	uller Sets		Long Jaw	Dimensi	ions (in)
Capacity	(Puller and Cylinder)					>	-14	1E	1. T	0	Sets Model No.***		
(ton)			Max. Reach	Max. Spread			P	-	and the second s	200		Max. Reach	Max. Spread
		(in)	A	B	(lbs)	Hand Pump	Air Pump	Electric Pump	Cordless Pump	All Sets Include:		A	B
14	SGH14	1.0	12.60	13.78	55.1	GPS14H	GPS14A	GPS14E	GPS14C	*	SG1002K	15.75	15.94
24	SGH24	2.0	12.60	18.90	108.0	GPS24H	GPS24A	GPS24E	GPS24C	GA45GC	SG2002K	17.13	21.26
36	SGH36	2.5	16.14	25.59	165.3	GPS36H	GPS36A	GPS36E	GPS36C	&	SG3002K	20.67	28.35
50**	SGH64	3.0	27.56	38.58	363.7	GPS64H	GPS64A	GPS64E	GPS64C	HC7206C	SG6002K	33.46	42.52
* 14-ton s ** Puller c Jaw set	sets include an apacity at 7,850 s include three	AR-630 fe ) psi, maxi jaws.	male couple mum cylind	er, GA45 ga er capacity	uge adap @ 10,000	otor, and G25 ) psi is 64.6 to	35L gauge. ons.	For 115 V app "B" suffix For 230 V app					

"E" suffix

## ▼ DIMENSIONAL DATA

# **Cross-Bearing Puller Sets**

#### Shown: Cross-Bearing Puller Set BHP361G



- · Precise hydraulic control allows fast, efficient and safe pulling
- High-quality forged components provide superior reliability and service
- Quick set-up to tackle a variety of jobs

BHP Series

Puller Capacity: 7-25 tons

Maximum Reach: 14.1-34 inches

Maximum Spread: 10.2-22.8 inches

Maximum Operating Pressure: 10,000 psi



WARNING!

Enerpac cylinder and pump can be operated to 10,150 psi, but should not be operated past 5,075 psi when using

the cross bearing puller set tools.



**Dimensions** 

Dimensional information for all puller models is included in the dimensional overview table:





<sup>1)</sup> Choose pump options below.

#### ▼ DIMENSIONAL DATA

Puller	Cross-Bearing Only	Stroke	Dimensions (in)		Cross Bearing Puller Sets				
Capacity*	Model No.		Maximum Reach	Maximum Spread	1	1			
(ton)		(in)	А	В	Hand Pump	Air Pump	Electric Pump	Cordless Pump	
7	BHP1772	1.0	14.06	10.24	BHP162	BHP162A	BHP162E	BHP162C	
12	BHP262	2.0	22.44	13.58	BHP261G	BHP261GA	BHP261GE	BHP261GC	
18	BHP362	2.5	27.95	17.32	BHP361G	BHP361GA	BHP361GE	BHP361GC	
25	BHP562	3.0	34.01	22.83	BHP561G	BHP561GA	BHP561GE	BHP561GC	

\* Cross Puller, Bearing Cup Puller and Bearing Separator rated at 50% of Grip Puller capacity.

For 115 V application add "B" suffix For 230 V application add "E" suffix



# EP-Series, Posi Lock<sup>®</sup> Mechanical Grip Pullers

POWERFUL SOLUTIONS. GLOBAL FORCE.

#### ▼ Shown from left to right: EP-206, EP-108



- Patented "Safety Cage" jaw retention system
- Roll threaded shafts for less effort when applying high torque
- Slim tapered jaws for improved gripping in tight spots
- Available in 2 and 3 jaw design and inside and outside pulling configuration
- More efficient pulling, as one man can do the job where manual pullers often require two operators

## For Safer and Faster Pulling



## Long Jaws

Long Jaws are used to increase the reach and spread of manual pullers. They maintain the same

pulling capacity as the standard jaws, but reduces clamping force by 25%.



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## Shaft Attachments

Shaft protectors and extenders are live centers that fit over the standard puller shaft for tip protection and additional reach.



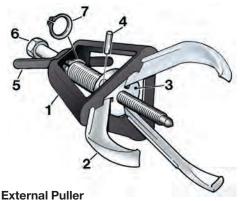
## **Application Tip**

Because of the unique Safety Cage design, Posi Lock<sup>®</sup> pullers will grip on surfaces where normal pullers would slip off; e.g. tapered bearings.



Positioning an EP-104, 3-jaw puller on the drive pulley of an electric motor.

# Posi Lock<sup>®</sup> Mechanical Grip Pullers



- 1 Patented "Safety Cage" guides jaws, holding them securely onto the part.
- 2 Durable forged jaws provide positive grip.
- **3** Jaw head provides pivot and reaction point for jaws.
- 4 Pin, for easy jaw removal and replacement.
- **5** T-handle provides control of the puller jaws.
- 6 Drive bolt with rolled threads for increased force with reduced input torque.
- 7 Snap-ring retains cage to drive bolt and provides quick removal for easy service.



Capacity: 2-40 tons

4.00-14.00 inches

0.50-25.00 inches

Maximum Reach:

Spread Range:

## ▼ QUICK SELECTION CHART EXTERNAL PULLERS

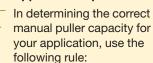
For full technical information see next page.

Number of Jaws	Maximum Reach	Spread Range	Capacity Model Number		Center Bolt Diameter	Weight
	(in)	(in)	(tons)		(in)	(lbs)
2	4.00	.5-5	2	EP-204	.56	3
3	4.00	.5-5	5	EP-104	.56	4
2	6.00	.5-7.0	6	EP-206	.66	7
3	6.00	.5-7.0	10	EP-106	.66	8
2	8.00	.75-12	12	EP-208	.79	12
3	8.00	.75-12	17	EP-108	.79	14
2	9.67	1.0-15	14	EP-210	.79	13
3	9.67	1.0-15	20	EP-110	.79	16
2	12.00	2.5-18	25	EP-213	1.17	38
3	12.00	2.5-18	30	EP-113	1.17	44
2	14.00	3.0-25	35	EP-216	1.23	57
3	14.00	3.0-25	40	EP-116	1.23	68

## Application Tip

using pullers.

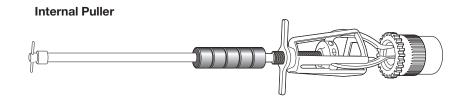
Always wear Safety Goggles and Gloves while



The center bolt diameter of the puller should be at least 1/2 the diameter of the shaft being pulled on.

## Example:

A part being pulled from a shaft with a diameter of 1.5" would require a puller with a center bolt diameter of at least .75".

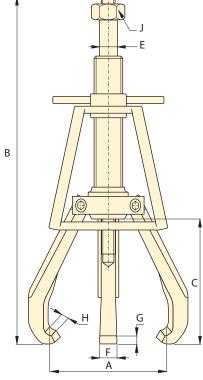


## ▼ QUICK SELECTION CHART INTERNAL PULLERS For full technical information see next page.

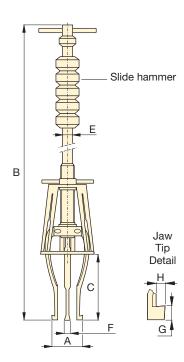
Number of Jaws	Maximum Reach	Spread Range	Jaw Style	Model Number	Jaw Length	Weight
	(in)	(in)			(in)	(lbs)
3	5.87	.56-4.00	Standard	EPPMI-6	6.62	8.6
5	7.70	1.0-5.25	Long	EFFIVII-0	8.62	8.6

# EP-Series, Posi Lock<sup>®</sup> Mechanical Grip Pullers

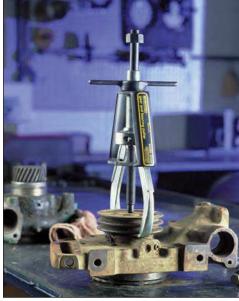
# POWERFUL SOLUTIONS. GLOBAL FORCE.



2- and 3-Jaw External Puller EP-Series



Internal Puller EPPMI-Series



▲ EP-204 2-jaw puller positioned to pull a water pump drive pulley.

## ▼ SELECTION CHART EXTERNAL PULLERS

Number of Jaws	Maximum Reach	Spread Range	Capacity	Model Number	Center Bolt Diameter	Maximum Torque	
	(in)	(in)	(tons)		(in)	(ft.lb)	
2	4.00	.5-5.0	2	EP-204	.56	20	
3	4.00	.5-5.0	5	EP-104	.56	40	
2	6.00	.5-7.0	6	EP-206	.66	75	
3	6.00	.5-7.0	10	EP-106	.66	130	
2	8.00	.75-12.0	12	EP-208	.79	150	
3	8.00	.75-12.0	17	EP-108	.79	220	
2	9.67	1.0-15.0	14	EP-210	.79	175	
3	9.67	1.0-15.0	20	EP-110	.79	275	
2	12.00	2.5-18.0	25	EP-213	1.17	475	
3	12.00	2.5-18.0	30	EP-113	1.17	600	
2	14.00	3.0-25.0	35	EP-216	1.23	800	
3	14.00	3.0-25.0	40	EP-116	1.23	850	

## ▼ SELECTION CHART INTERNAL PULLERS

Number of Jaws	Maximum Reach	Spread Range	Jaw Style	Model Number	Jaw Length	Slide- hammer Weight	
	(in)	(in)			(in)	(lbs)	
0	5.87	.56-4.00	Standard	EPPMI-6	6.62	2.5	
3	7.70	1.00-5.25	Long	EPPIVII-0	8.62	2.5	

## www.enerpac.com

# **Posi Lock® Mechanical Grip Pullers**



Diameter

(in)

0.75

0.75

Length

(in)

1.00

1.97

and Extenders Shaft Protectors and Extenders are live centers that fit over the puller end for tip protection and

Order:

Model

Number

EPP-4

EPX-4

added reach.

Increases

**Center Bolt** 

Length

(in)

0.38

1.50

**Shaft Protectors** 



#### Long Jaws

Long Jaws are used to increase the reach and spread of manual pullers. They maintain the same pulling capacity as the standard jaws, but reduces clamping force by 25%.

Spread (in)	Reach (in)	Order: Model Number
1.5-15	9.67	EP-11054
1.5-22	15.78	EP-11054L
1.5-30	20	EP-11354L
1.0-5.26	8.62	EP-10554L*
* EPPMI-6	only	

EP EPP Series



## Capacity: 2-40 tons Maximum Reach:

# 4.00-14.00 inches

Spread Range: 0.50-25.00 inches

1.22	0.87	0.50	EPP-6
1.97	0.87	1.50	EPX-6
1.22	1.00	0.50	EPP-10
1.97	1.00	1.50	EPX-10
2.00	1.38	0.83	EPP-1316

Note: See the chart below to reference matching pullers for these accessories.

									V Optional A	Accessories	
		Di	mensions					Model Number			1
Spread Range	Overall Length	Maximum Reach	Center Bolt Diameter	Jaw Width	Tip Clearance	Tip Depth	Hex Socket Size				C
									Shaft	Extenders	Long Jaws
 Α	В	С	E	F	G	н	J		Protectors		
.5-5.0	9.68-12.75	4.00	.56	.54	.16	.18	7⁄8	EP-204	EPP-4	EPX-4	-
.5-5.0	9.68-12.75	4.00	.56	.54	.16	.18	7⁄8	EP-104	EPP-4	EPX-4	-
.5-7.0	12.75-18.75	6.00	.66	.75	.32	.24	<b>1</b> ½16	EP-206	EPP-6	EPX-6	-
.5-7.0	12.75-18.75	6.00	.66	.75	.32	.24	<b>1</b> <sup>1</sup> ⁄16	EP-106	EPP-6	EPX-6	-
.75-12.0	16.25-24.25	8.00	.79	.77	.25	.36	11⁄4	EP-208	EPP-10	EPX-10	EP-11054
 .75-12.0	16.25-24.25	8.00	.79	.77	.25	.36	<b>1</b> 1⁄4	EP-108	EPP-10	EPX-10	EP-11054
1.0-15.0	19.25-29.00	9.67	.79	.77	.25	.36	11⁄4	EP-210	EPP-10	EPX-10	EP-11054L
1.0-15.0	19.25-29.00	9.67	.79	.77	.25	.36	11⁄4	EP-110	EPP-10	EPX-10	EP-11054L
2.5-18.0	26.00-38.00	12.00	1.17	1.25	.50	.38	<b>1</b> <sup>11</sup> /16	EP-213	EPP-1316	-	EP-11354L
 2.5-18.0	26.00-38.00	12.00	1.17	1.25	.50	.38	<b>1</b> <sup>11</sup> /16	EP-113	EPP-1316	-	EP-11354L
3.0-25.0	31.50-45.50	14.00	1.23	1.44	.53	.46	<b>1</b> <sup>13</sup> ⁄16	EP-216	EPP-1316	-	-
 3.0-25.0	31.50-45.50	14.00	1.23	1.44	.53	.46	<b>1</b> <sup>13</sup> ⁄16	EP-116	EPP-1316	-	-

Note: Overall length (B) is dependent on position of center bolt.

	Dimensions (in)							
Spread Range	Overall Length	Maximum Reach	Slide Rod Diameter	Jaw Width	Tip Clearance	Tip Depth		
A	В	С	E	F	G	н		
.56-4.00	29.00	5.87	.52	.33	.12	.06	EPPMI-6	
1.00-5.25	31.00	7.70	.52	.33	.30	.18		



ENERPAC, 2

#### V Shown: EPHR-110



- Patented "Safety Cage" jaw retention system
- High force hydraulic system for effortless pulling of large components
- Slim tapered jaws for better gripping in tight spots
- Available in 2 and 3 jaw design
- More efficient pulling, as one man can do the job where normal pullers often require two operators

# **High-Tech Pulling**



#### **Transport and Store**

Conveniently store and transport hydraulic pullers and accessories. Order the **EPT-2550** Storage Cart and make your job easier to do!



Long Jaws Long Jaws are used to increase the reach and spread of hydraulic pullers. They maintain the same

pulling capacity as the standard jaws, but reduces clamping force by 25%.

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## Application Tip

Because of the unique safety cage design, Posi Lock<sup>®</sup> pullers will grip on surfaces where normal pullers would slip off; e.g. tapered bearings.

▼ An EPH –113 hydraulic Posi Lock<sup>®</sup> puller easily removes machined parts from a heavy-production press.



#### Basic Pullers only, cylinder not included

Number of Jaws	Maximum Spread	Spread Range	Capacity	Model Number*	
	(in)	(in)	(ton)		
2	12.00	.75-12.0	10	EPH-208	
3	12.00	.75-12.0	10	EPH-108	
2	15.00	1.0-15.0	15	EPH-210	
3	15.00	1.0-15.0	15	EPH-110	
2	18.00	2.5-18.0	25	EPH-213	
3	18.00	2.5-18.0	20	EPH-113	
2	25.00	3.0-25.0	50	EPH-216	
3	25.00	3.0-25.0	50	EPH-116	

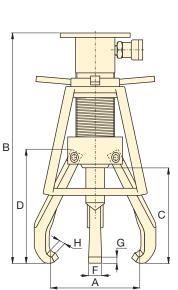
\*Cylinder is not included.

## www.enerpac.com

# Posi Lock<sup>®</sup> Hydraulic Grip Pullers

## ▼ SETS SELECTION CHART

Style	Capa- city (ton)	Basic Puller	Cylinder	Stroke	Pump Set	Set Model Number	Weight (lbs)
	. ,			. ,			
	10	EPH-208	RC-106	6	-	EPHR208	24
	10	EPH-208	RC-106	6	EP-1	EPHS208	60
2	15	EPH-210	RC-1510	10	-	EPHR210	49
Jaw	15	EPH-210	RC-1510	10	EP-1	EPHS210	85
Puller	25	EPH-213	RC-2514	14.25	-	EPHR213	98
	25	EPH-213	RC-2514	14.25	EP-1	EPHS213	118
	50	EPH-216	RC-5013	13.25	-	EPHR216	192
	50	EPH-216	RC-5013	13.25	EP-2	EPHS216	212
	10	EPH-108	RC-106	6	-	EPHR108	26
	10	EPH-108	RC-106	6	EP-1	EPHS108	62
3 Jaw	15	EPH-110	RC-1510	10	-	EPHR110	52
Puller	15	EPH-110	RC-1510	10	EP-1	EPHS110	88
	25	EPH-113	RC-2514	14.25	-	EPHR113	106
	25	EPH-113	RC-2514	14.25	EP-1	EPHS113	126
	50	EPH-116	RC-5013	13.25	-	EPHR116	202
	50	EPH-116	RC-5013	13.25	EP-2	EPHS116	222







#### Pump Sets

All Posi Lock Hydraulic Puller Sets that include 115 VAC pumps will feature the following components:

	EP-1 Pump Set	EP-2 Pump Set
Pump	PUJ-1200B	ZE3208MB
Hose	HC-9210	HC-9210
Gauge	G-2535L	G-2535L
Adapter	N/A	GA-3

Components for 230 VAC pumps are available on request.

										▼ *Optional Accessory	
Dimensions (in)							Weight	Model Number	() III	-	0
Spread Range	Overall Length	Max. Reach	Jaw Length	Jaw Width	Tip Clearance	Tip Depth			34	O	L
А	в	с	D	F	G	н	(lbs)		Ram Point Sets	Lift Plates	*Long Jaws
		-	_				. ,				50 44054
.75-12.0	19.61	8.00	9.34	.88	.29	.27	14	EPH-208	EPH-155	EPH-11052	EP-11054
.75-12.0	19.61	8.00	9.34	.88	.29	.27	16	EPH-108	EPH-155	EPH-11052	EP-11054
1.0-15.0	26.19	10.00	10.64	1.00	.441	.36	22	EPH-210	EPH-155	EPH-11052	EPH-11054L
1.0-15.0	26.19	10.00	10.64	1.00	.441	.36	25	EPH-110	EPH-155	EPH-11052	EPH-11054L
2.5-18.0	33.31	12.00	13.72	1.25	.508	.38	47	EPH-213	EPH-257	EPH-11352	EPH-11354L
2.5-18.0	33.31	12.00	13.72	1.25	.508	.38	55	EPH-113	EPH-257	EPH-11352	EPH-11354L
3.0-25.0	36.19	14.00	16.29	1.44	.598	.46	90	EPH-216	EPH-508	EPH-11652	_
3.0-25.0	36.19	14.00	16.29	1.44	.598	.46	100	EPH-116	EPH-508	EPH-11652	—

For full details on puller accessories see page 170.

\* Long Jaws are available as optional accessories.

# **Posi Lock® Hydraulic Puller Accessories**

# ENERPAC, 2

EPH Series

## ▼ RAM POINT SETS SELECTION CHART

Fits Model Number	EPH-208 EPH-108 EPH-210 EPH-110	EPH-213 EPH-113	EPH-216 EPH-116	
	ļļ	Q.	Q.A.	
Set Number	EPH-155	EPH-257	EPH-508	
Set Includes	Dia. x Length (in)	Dia. x Length (in)	Dia. x Length (in)	
	1 x 1	1.5 x 2.25	2 x 3	
Flat Ram Point	1 x 3	2 x 2.25	2.75 x 3	
	_	2 x 4	2.75 x 5	
	1 x 1.5	1.5 x 2.5	2 x 3.75	
Tapered Ram Point	1 x 3.5	2 x 2.5	2 x 3.75	
	-	2 x 4.5	2.75 x 5.5	
Ram Point Adaptor	_	_	2.75 x 2.25	



## ▼ LIFT PLATE SELECTION CHART

Fits Puller Set Model Number	Model Number *	Thickness	Diameter				
		(in)	(in)				
EPH-208	EPH-11052	.25	6				
EPH-108	EPH-11052	.25	6				
EPH-210	EPH-11052	.25	6	(1, 2)			
EPH-110	EPH-11052	.25	6				
EPH-213	EPH-11352	.38	8				
EPH-113	EPH-11352	.38	8	22			
EPH-216	EPH-11652	.38	10				
EPH-116	EPH-11652	.38	10				

\* Mounting screws included. Lifting plates are standard included with EPH-Series Pullers.

## ▼ LONG JAW SELECTION CHART

Fits Puller Set Model Number	Model Number	No. of Jaws Required	Spread Range	Max. Reach	Wt. (each)			
			(in)	(in)	(lbs)	(*)		
EPH-208	EP-11054	2	2.25 - 15.0	9.7	2.5			
EPH-108	EF-11034	3	2.23 - 13.0					
EPH-210	EPH-11054L	2	1.5 - 22.0	15.8	3 5.5			
EPH-110	EPH-11034L	3	1.5 - 22.0	15.0	5.5			
EPH-213	EPH-11354L	2	1.5 - 30.0	20.0	10.5			
EPH-113	EFH-11334L	3	1.5 - 30.0	20.0	10.5			

#### EPH-11054L

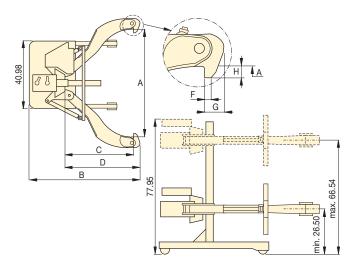
Long Jaws are used to increase the reach and spread of hydraulic pullers. They maintain the same pulling capacity as the standard jaws, but reduces clamping force by 25%.

# **Posi Lock® 100-Ton Hydraulic Grip Pullers**

### **VEPH-1003**



- Roller cart with power lift
- Adjustable jaw tips
- Puller easily detaches from cart
- Self-contained unit
- Puller height range 26.5" to 66.5"



# EPH

Series

Capacity: 100 tons

Maximum Reach: 48 inches

Spread Range: 7.5 - 70 inches

Maximum Operating Pressure: 10,000 psi



#### Pushing Adaptors

All Posi Lock 100 Ton Hydraulic Pullers include (3) pushing adaptors.

Diameter (in)	Overall Length (in)	Model Number		
3.5	29	EPHT-1162		
3.5	19	EPHT-1163		
3.5	9	EPHT-1164		



▲ The EPH-1002 quickly and easily removes this drive coupler from its shaft.

Number of	Max. Spread	Capacity	Model Number		Dimensions (in)						
Jaws				Spread Range	Overall Length	Reach (max.)	Jaw Length	Jaw Width	Tip Clearance	Tip Depth	
	(in)	(tons)		A	В	с	D	F	G	н	(lbs)
2	70.00	100	EPH-1002	7.5-70.0	77.00	48.00	53.00	1.25	3.5	3.5	1700
3	70.00		EPH-1003	7.5-70.0	77.00	48.00	53.00	1.25	3.5	3.5	1950

## **ENERPAC**. **2** 181