

PULLERS

Powerthon
Limited
Lifetime
WARRANTY

ISO 9001 Certified

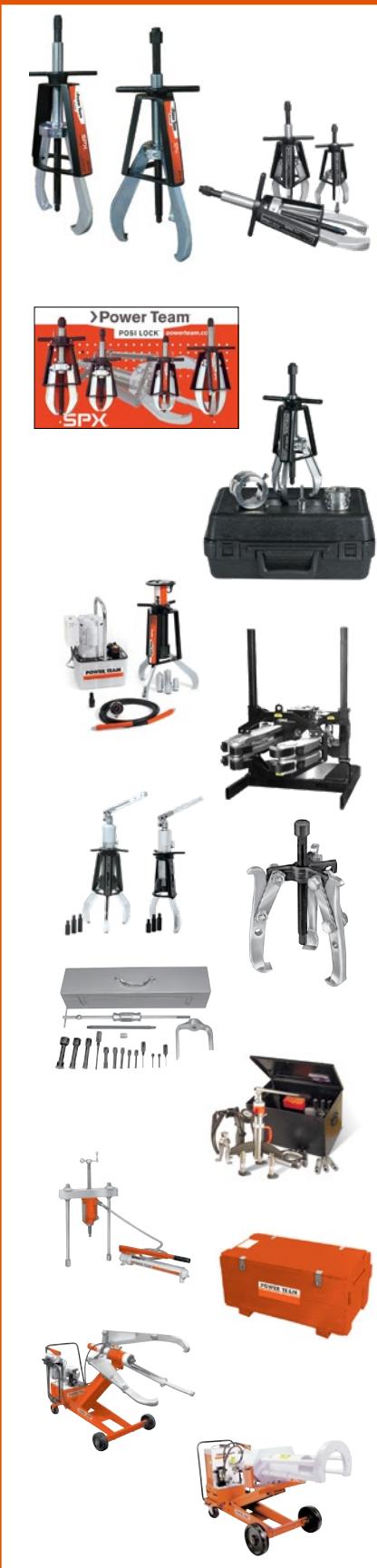
Worry Free
Ownership

With the acquisition of Posi Lock, Power Team now offers a comprehensive line of mechanical and hydraulic pullers. These pullers are available in a two-jaw or three-jaw configuration. Mechanical pullers range from 1-40 ton capacity and hydraulic pullers range from 5-200 ton capacity. Turnkey packages are available to simplify your selection and setup. Additionally, specialty pullers, vises, and alignment tools are now available.

Range includes:

- Mechanical Pullers
- Hydraulic Pullers
- Puller Sets
- Bi-Directional™ Pullers
- High Tonnage Pullers
- Accessories & Adapters





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► Components Requiring Extraction



► Primary Markets / Applications



You need a firm grip, a straight pull and the proper force...



Whether it's a gear, wheel or bearing: If you grip it by its outer edges and apply force to the shaft, you can perform a proper pulling job.

Bearing cups, retainers and seals must be gripped through their inside diameters and pulled straight out to avoid damage.



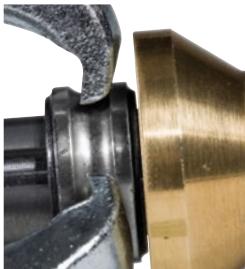
Gripping a shaft and bracing against the housing for the pull offers the best solution to this basic pulling problem.

Puller Selection

Tapered jaw design allows clamping around bearing for a perfect pull.



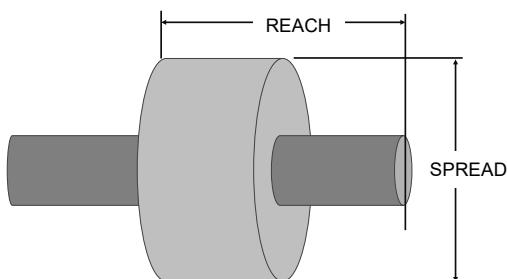
Tapered roller bearing on shaft.



Lock on ball grooves and bearing races.

HOW TO MEASURE "REACH" AND "SPREAD"

"Reach" and "spread" dimensions of the job must first be determined. A typical example - a component to be removed from a shaft - is shown below. The length of the protruding shaft and the thickness of the component determine the "reach" needed. The width of the component determines the spread required.

**HOW TO SELECT THE "RIGHT" PULLER****1. DETERMINE THE TYPE OF PULLER OR PULLER COMBINATION**

Which puller type is best for "getting a grip" on the part, internal or external puller?

2. DETERMINE THE "REACH" NEEDED

The puller you select must have a "reach" equal to, or larger than, the corresponding dimension of the job.

3. DETERMINE THE "SPREAD" NEEDED

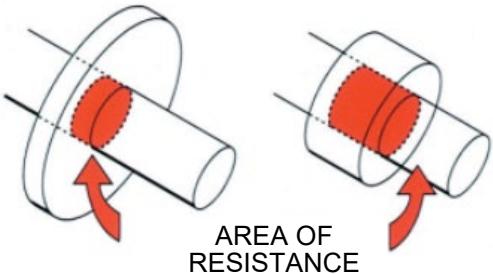
The width of the part to be pulled will determine the "spread" required.

4. ESTIMATE THE FORCE REQUIRED

A puller with the proper "reach" and "spread" will usually have enough power. When in doubt, always use the next larger size... more power may be needed for rusted parts, or when the "area of resistance" is large.

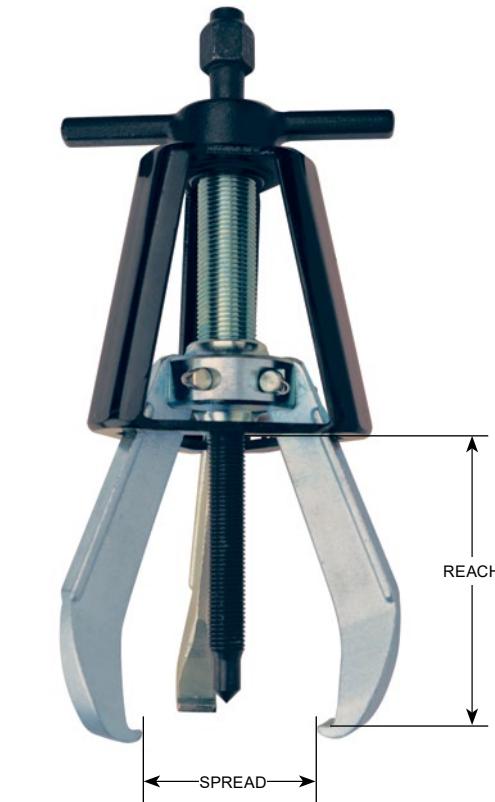
Considerations

The "area of resistance" or "area of press fit" can vary greatly between seemingly similar jobs, such as in the example shown below. Study each pulling job before you select the puller.



For manual, screw-powered pullers: The puller screw must be at least half as large (in diameter) as the shaft of the pulling job.

Hydraulic pullers suggestion for selection: The maximum force exerted in tons should be 7 to 10 times the diameter of the shaft in inches.

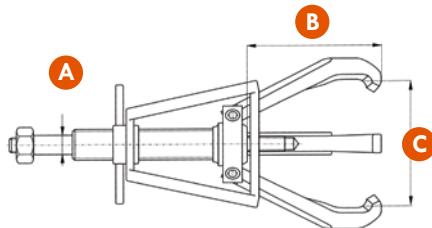


Model Shown:
PT110,
PT216

► Features

PULLING BEARINGS IS A ONE-PERSON OPERATION WHEN USING THE PT SERIES MECHANICAL PULLERS. OPENING, CLOSING, LOCKING, AND ALIGNING OF THE JAWS IS ALL DONE AUTOMATICALLY BY SIMPLY TURNING THE T-HANDLE.

- 1 to 40-ton capacity puller with up to 14" (356 mm) reach and 25" (635 mm) spread for large pulling requirements
- Mechanical pullers use a rolled center bolt thread to reduce effort when applying high torque to extract objects in a controlled manner
- Recessed nut to avoid mushrooming and disfiguring
- Slim tapered heat-treated tips allow for better gripping and easier access in tight spots
- Safety Cage® guides jaws for fast set-up, solid contact and superior safety


► Ordering Information

Order No.	Cap.	Jaws	Bolt Diameter A	Reach B	Spread C	Weight	Long Jaw/ XL Jaw Order No.	Reach	Spread	Order No.	Order No.	Order No.
	Short Tons	Qty.	in. (mm)	in. (mm)	in. (mm)	lbs. (kg)		in. (mm)	in. (mm)			
PT202	1	2	0.31 (7.9)	2.25 (57)	3.25 (82.6)	0.62 (0.28)	—	—	—	—	—	—
PT203	2	2	0.37 (9.4)	3.00 (76.2)	4.50 (127)	1.12 (0.51)	—	—	—	—	—	—
PT204	2	2	0.5 (12.7)	4.00 (102)	5.00 (127)	3 (1.36)	—	—	—	PTP4	PTX4	10454T
PT206	6	2	0.62 (15.8)	6.00 (152)	7.00 (178)	7 (3.18)	—	—	—	PTP6	PTX6	10654T
PT208	12	2	0.75 (19)	8.00 (203)	12.00 (305)	12 (5.44)	PT208L / PT208XL	9.8 (249) / 16.00 (406)	15.8 (401) / 22.00 (559)	PTP10	PTX10	11054T
PT210	14	2	0.75 (19)	9.67 (246)	15.00 (381)	13 (5.9)	PT210L	16.00 (406)	22.00 (559)	PTP10	PTX10	11054T
PT213	25	2	1.12 (28.5)	12.00 (305)	18.00 (457)	38 (17.24)	PT213L	20.00 (508)	30.00 (762)	PTP13/16	—	—
PT216	35	2	1.25 (32)	14.00 (356)	25.00 (635)	57 (25.85)	PT216L	26.00 (660)	38.00 (965)	PTP13/16	—	—
PT102	1	3	0.31 (7.9)	2.25 (57)	3.25 (82.6)	0.68 (0.31)	—	—	—	—	—	—
PT103	2	3	0.37 (9.4)	3.00 (76.2)	4.50 (114.3)	1.3 (0.59)	—	—	—	—	—	—
PT104	5	3	0.5 (12.7)	4.00 (102)	5.00 (127)	4.1 (1.86)	—	—	—	PTP4	PTX4	10454T
PT106	10	3	0.62 (15.8)	6.00 (152)	7.00 (178)	8 (3.63)	—	—	—	PTP6	PTX6	10654T
PT108	17	3	0.75 (19)	8.00 (203)	12.00 (305)	14 (6.35)	PT108L / PT108XL	9.8 (249) / 16.00 (406)	15.8 (401) / 22.00 (559)	PTP10	PTX10	11054T
PT110	20	3	0.75 (19)	9.67 (246)	15.00 (381)	16 (7.26)	PT110L	16.00 (406)	22.00 (559)	PTP10	PTX10	11054T
PT113	30	3	1.12 (28.5)	12.00 (305)	18.00 (457)	44 (19.96)	PT113L	20.00 (508)	30.00 (762)	PTP13/16	—	—
PT116	40	3	1.25 (32)	14.00 (356)	25.00 (635)	68 (30.84)	PT116L	26.00 (660)	38.00 (965)	PTP13/16	—	—

Model Shown:

PTTJ-1,
PTTJ-2,
PTTJ-3

Jaws that clamp in snap-ring grooves as narrow as .070" (1.8 mm)

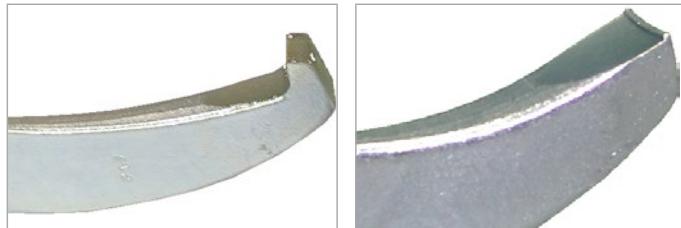


► Features

REMOVAL OF BEARINGS, BUSHINGS, SLEEVES AND OTHER FRICTION-FITTED PARTS CAN EASILY BE ACCOMPLISHED WITH USING THE SERIES PTTJ AUTOMOTIVE TRANSMISSION PULLERS.

- Pullers with up to 9.25" (235 mm) reach and 14.75" (375 mm) spread for large pulling requirements
- Machined jaws that clamp in snap-ring grooves as narrow as .070" (1.8 mm).
- Specially designed for transfer cases on 4-wheel-drive vehicles, output shaft bearings and numerous other applications on any vehicle
- Slim tapered heat-treated tips allow for better gripping and easier access in tight spots

A standard jaw (left) is compared to a specially machined transmission jaw (right).



► Ordering Information

Model	Number of Jaws	Reach in. (mm)	Spread in. (mm)	Weight lbs. (kg)	Tip Protector	Optional Accessories				
						Accessories		Optional Jaws		
						Description	Part #	Jaw Style	Reach in. (mm)	Spread in. (mm)
PTTJ-1	2	9.25 (235)	2.75 to 14.75 (70 to 375)	12 (5.4)	PTP10	Bolt Extender	PTX10	Jaw - 10854	8 (203)	.75 to 12 (19 to 305)
								Long Jaw - 11054	10 (254)	2.25 to 15 (57 to 381)
								Extra Long Jaw - 11054L	16 (406)	1.5 to 22 (38 to 559)
PTTJ-2	3	5.25 (133)	1 to 6.75 (25 to 171)	8 (3.6)	PTP6	Bolt Extender	PTX6	Jaw - 10654	6 (152)	.5 to 7 (13 to 178)
						Slide Rod Adaptor	PT10661			
						Slide Rod	PT10561			
						2.5 lb Slide Hammer	PT10562			
						5.0 lb Slide Hammer	PT10563			
						TJ-3 Bolt Extender	PTX4	Jaw - 10454	4 (102)	.5 to 5 (13 to 127)
PTTJ-3	3	4 (102)	.5 to 5.5 (13 to 140)	4.1 (1.9)	PTP4	Slide Rod	PT10561			
						2.5 lb Slide Hammer	PT10562			
						5.0 lb Slide Hammer	PT10563			

Model Shown:
PTPMI6

► Features

DURABLE SLIDE HAMMER WITH TIGHT GRIPPING JAW DESIGN AND A SAFETY CAGE THAT GUIDES JAWS FOR FAST SET-UP, AND SOLID CONTACT FOR SUPERIOR SAFETY.

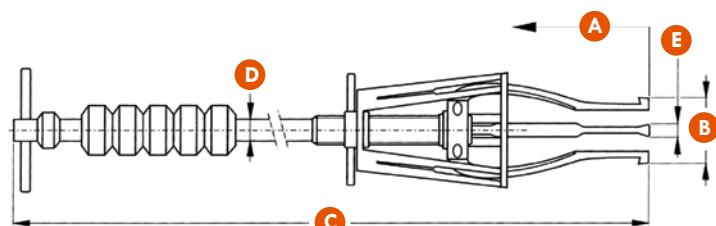
- Long internal jaws with slim tapered heat-treated tips allow for better gripping and easier access in tight spots
- High force 2.5 lb (1.13 kg) slide hammer for an effective use of force (optional ultra high force 5.0 lb (2.27 kg) slide hammer)
- Includes 3-Jaw puller (model no. PT105)
- Includes promotional tool board
- Safety Cage® guides jaws for fast set-up, solid contact and superior safety

► Promotional Goods

Showcase your pullers with a branded, reinforced pegboard display in your showroom or shop.



Pullers



Kit Components	Description	Order No.
PT105	3-Jaw Internal Puller	PTPMI6
PT10561	Slide Rod 24" (609 mm)	1
PT10562	2.5 lb. (1.13 kg) Slide Hammer	1
PT10554L	Long Jaw Set	1
2008508	Tool Board Kit, Posi Lock Tool Sets	1
PT10563	5 lb. (2.27 kg) Slide Hammer	Optional

► Ordering Information

Model	Number of Jaws	Jaw Style	Reach A in. (mm)	Spread Range B in. (mm)	Slide Hammer Weight lbs. (kg)	Dimensions				Optional Accessories
						Overall Length C in. (mm)	Slide Rod Diameter D in. (mm)	Jaw Width E in. (mm)	Jaw Length in. (mm)	
						in. (mm)	in. (mm)	in. (mm)	in. (mm)	
PTPMI6	3	Standard	2.78 (71)	.56-4 (14-102)	2.5 (1.1)	29 (737)	.52 (13)	.33 (8)	6.62 (168)	5 (2.3)
		Long	9 (229)	1-5.25(25-133)	2.5 (1.1)	31 (787)	.52 (13)	.33 (8)	8.62 (219)	5 (2.3)

Model Shown:

PTP



Peg Board with Pullers
Order No. PTPM4L

► Features

SHOWCASE YOUR PULLERS WITH A BRANDED, REINFORCED PEGBOARD DISPLAY IN YOUR SHOWROOM OR SHOP.

- 6 peg board promotional kits that offer many different variations
- Order the peg board separately for even greater flexibility
- Suitable for use behind a counter, parts desk or showroom



Peg Board Only
Order No. 2008508

► Ordering Information

Kit Components	Description	ORDER NUMBER					
		PTPM4	PTPM4L	PTPM4S	PTPM5	PTPM6	PTMPS16
PTP13/16	TIP PROTECTOR for PT113 / PT213 / PT116 / PT216	—	—	—	—	—	4
PTP10	TIP PROTECTOR PT108 / PT208 / PT110 / PT21	1	2	—	1	2	4
PTP6	TIP PROTECTOR for PT106 / PT206	2	2	2	2	2	2
PTP4	TIP PROTECTOR for PT104 / PT204	1	—	2	1	2	2
PT216	PULLER, MANUAL 2 JAW - 35 TON	—	—	—	—	—	1
PT213	PULLER, MANUAL 2 JAW - 25 TON	—	—	—	—	—	1
PT210	PULLER, MANUAL 2 JAW - 14 TON	—	1	—	—	1	1
PT208	PULLER, MANUAL 2 JAW - 12 TON	—	—	—	—	—	1
PT206	PULLER, MANUAL 2 JAW - 6 TON	1	1	1	1	1	1
PT204	PULLER, MANUAL 2 JAW - 2 TON	—	—	1	—	1	1
PT203	PULLER, MANUAL 2 JAW - 2 TON	—	—	—	—	—	1
PT202	PULLER, MANUAL 2 JAW - 1 TON	—	—	—	—	—	1
PT116	PULLER, MANUAL 3 JAW - 40 TON	—	—	—	—	—	1
PT113	PULLER, MANUAL 3 JAW - 30 TON	—	—	—	—	—	1
PT110	PULLER, MANUAL 3 JAW - 20 TON	1	1	—	1	1	1
PT108	PULLER, MANUAL 3 JAW - 17 TON	—	—	—	—	—	1
PT106	PULLER, MANUAL 3 JAW - 10 TON	1	1	1	1	1	1
PT104	PULLER, MANUAL 3 JAW - 5 TON	1	—	1	1	1	1
PT103	PULLER, MANUAL 3 JAW - 2 TON	—	—	—	1	—	1
PT102	PULLER, MANUAL 3 JAW - 1 TON	—	—	—	—	—	1
2008508	TOOL BOARD KIT, POSI LOCK TOOL SETS	1	1	1	1	2	2

Model Shown:

PTPMW-1

1 to 2 Ton Puller Set



Model Shown:

PTTK-107

4-in-1 Puller Set



Model Shown:

PTTB-1045

Internal/External

Slide Hammer Puller Set



► Features

THESE PULLER SETS ARE ESSENTIAL IN REMOVING INTERNAL PILOT BEARINGS, BEARING CUPS, BUSHINGS, SEALS ALONG WITH EXTERNAL BEARINGS, BEARING RACES, PULLEYS, AND MANY OTHER PRESS-FIT ITEMS FROM ONE COMPACT SET.

Description	Qty	Number of Jaws	Capacity Tons (kN)	Reach in. (mm)
PT102 Puller	1	3	1 ton (9 kN)	2.25 (57)
PT202 Puller	1	2	1 ton (9 kN)	2.25 (57)
PT103 Puller	1	3	2 tons (18 kN)	3 (76.2)
PT203 Puller	1	2	2 tons (18 kN)	3 (76.2)
Case	1		12" x 17" x 5" (8 lbs.) 305 x 432 x 127 mm (3.6 kg)	
Optional				
PTPMW			Tool board set 16"x26" (406x660 mm)	

Description	Dimensions	Part #
Manual Puller	—	PT107
Tip Protector	—	PTP4
Internal Puller Jaws	—	PT10554
Slide Rod		PT10561
Slide Hammer	2.5 lb. (1.13 kg)	PT10562
Internal Puller Long Jaw (3)	—	PT10554L
Case	34" x 8.5" x 4.5" (15.8 lbs.) 864 x 216 x 114 mm (7.2 kg)	—
Optional Accessories		
Slide Hammer	5 lb. (2.27 kg)	PT10563
Small Hub Collar	0" to 1.5" (0 to 38 mm)	PTHP-30
Large Hub Collar	0" to 2" (0 to 51 mm)	PTHP-40
Extra Large Hub Collar	0" to 3" (0 to 76 mm)	PTHP-50
Tip Reducer/Extender	—	PTHP-70
Bolt Extender	—	PTX4
Transmission Jaw	—	PT10454T

Description	Dimensions	Part #
Manual Puller	—	PT107
Internal Puller	—	PT105
Tip Protector	—	PTP4
Slide Rod		PT10561
Slide Hammer	2.5 lb. (1.13 kg)	PT10562
Internal Puller Long Jaw (3)	—	PT10554L
Case	24" x 16.5" x 4.5" (18.3 lbs.) 610 x 419 x 114 mm (8.3 kg)	—
Optional Accessories		
Slide Hammer	5 lb. (2.27 kg)	PT10563
Small Hub Collar	0" to 1.5" (0 to 38 mm)	PTHP-30
Large Hub Collar	0" to 2" (0 to 51 mm)	PTHP-40
Extra Large Hub Collar	0" to 3" (0 to 76 mm)	PTHP-50
Tip Reducer/Extender	—	PTHP-70
Bolt Extender	—	PTX4
Transmission Jaw	—	PT10454T

Model Shown:
PTHP-1



Model Shown:
PTHP-2



Model Shown:
PTFR-104K
Fan Removal Adaptor Kit
for Wind Turbines



► Features

SIMPLIFY THE REMOVAL OF MANY INDUSTRIAL AND AUTOMOTIVE FANS AND BLOWER WHEELS BY PROVIDING A SOLID CONNECTION BETWEEN THE PULLER AND FAN HUB.

► Includes

Description	Dimensions	Part #
Small Collar Adaptor	0" to 1.5" (0 to 38 mm)	PTHP-30
Large Collar Adaptor	0" to 2" (0 to 51 mm)	PTHP-40
Tip Reducer/Extender	—	PTHP-70
Square Head Set Screws (4)	—	PTHP-60
Optional Accessories	—	—
Extra Large Hub Collar	0" to 3" (0 to 76 mm)	PTHP-50

► Includes

Description	Dimensions	Part #
Manual Puller	—	PT104
Small Collar Adaptor	0" to 1.5" (0 to 38 mm)	PTHP-30
Large Collar Adaptor	0" to 2" (0 to 51 mm)	PTHP-40
Tip Reducer/Extender	—	PTHP-70
Square Head Set Screws (4)	—	PTHP-60
Case	13" x 9.5" x 5.5" (9 lbs.) 330 x 241 x 140 mm (4.1 kg)	—
Optional Accessories	—	—
Extra Large Hub Collar	0" to 3" (0 to 76 mm)	PTHP-50



► Includes

Description	Part #
Manual Puller	PT104
Fan Removal Adaptor	PTFR104
Fan Puller Tip Reducer	PTX4F
Fan Removal Hub Screws (5)	PTFR-60
Case	—

Model Shown:

PTPHB-116,
PTPHB-110

► Features

KNOWN FOR SAFETY, DURABILITY, AND EASE OF USE, POSI-LOCK PULLERS ARE DESIGNED TO HELP EXTEND BEARING LIFE IN APPLICATIONS THROUGH PROPER INSTALLATION, REMOVAL, AND SERVICE.

- 5 to 50-ton capacity puller with up to 14" (356 mm) reach and 25" (635 mm) spread for large pulling requirements
- 10,000 PSI (690 Bar) single-acting cylinder that allows for high tonnage repeatable execution
- Slim tapered heat-treated tips allow for better gripping and easier access in tight spots



Puller Accessories

Power Team offers accessories to compliment your puller. These accessories conveniently store, transport and position your hydraulic pullers to maximize your productivity.



Order No.	Puller No. *
Storage Transport Cart	
PTPT-2550	PTPHB-213
PTPT-2550	PTPHB-113
PTPT-2550	PTPHB-116



► Ordering Information

2 Jaw	3 Jaw	Cap. Short Tons	Cylinder Included	Reach in. (mm)	Spread in. (mm)	Long Jaw/ XL Jaw Order No.	Long Jaw/ XL Jaw Order No.	Reach In. (mm)	Spread In. (mm)
PTPHB-206	PTPHB-106	5	C55C	6 (152)	.5 to 8 (13 to 203)	---	---	-	-
PTPHB-208	PTPHB-108	10	C106C	8 (203)	.75 to 12 (19 to 305)	PTPHB-208L PTPHB-208XL	PTPHB-108L PTPHB-108XL	9.8 (249) 16 (406)	15.8 (401) 22 (559)
PTPHB-210	PTPHB-110	15	C1510C	9.67 (245)	1 to 15 (25 to 38)	PTPHB-210L	PTPHB-110L	16 (406)	22 (559)
PTPHB-213	PTPHB-113	25	C2514C	12 (305)	2.5 to 18 (64 to 457)	PTPHB-213L	PTPHB-113L	20 (508)	30 (762)
---	PTPHB-116	50	C5513C	14 (356)	3 to 25 (76 to 635)	---	PTPHB-116L	26 (660)	38 (965)

Model Shown:
PTPHC-110



► Features

THESE HYDRAULIC PULLERS DESIGNED TO HANDLE REMOVING JOBS WITH A MINIMAL AMOUNT OF EFFORT FOR THE ULTIMATE EFFICIENT PULLING SOLUTION.

- 5 to 50-ton capacity puller with up to 14" (356 mm) reach and 25" (635 mm) spread for large pulling requirements
- Lightweight, two-speed manually operated 10,000 PSI (690 Bar) hydraulic pump provides high oil volume for fast cylinder piston approach, then the pump automatically shifts to the high-pressure stage to move the load
- 10,000 PSI (690 Bar) single-acting cylinder that allows for high tonnage repeatable execution



Puller Accessories

Power Team offers accessories to compliment your puller. These accessories conveniently store, transport and position your hydraulic pullers to maximize your productivity.



Order No.	Puller No. *
Storage Transport Cart	
PTPT-2550	PTPHC-213
PTPT-2550	PTPHC-113
PTPT-2550	PTPHC-116



Included with the Kits*

- Puller Iron and Ram Point Set
- Hydraulic Cylinder
- Lift and Positioning Plate
- Two Speed Manually operated Pump
- Gauge Adapter, 10,000 PSI (690 Bar) Gauge
- 10' (3.05 m) heavy-duty Hose
- Male Coupler with dust cap

► Ordering Information

2 Jaw	3 Jaw	Cap. Short Tons	Cylinder Included	Pump Included	Reach in. (mm)	Spread in. (mm)	Long Jaw/ XL Jaw Order No.	Long Jaw/ XL Jaw Order No.	Reach In. (mm)	Spread In. (mm)
PTPHC-206	PTPHC-106	5	C55C	P19L	6 (152)	.5 to 8 (13 to 203)	---	---	-	-
PTPHC-208	PTPHC-108	10	C106C	P19L	8 (203)	.75 to 12 (19 to 305)	PTPHC-208L PTPHC-208XL	PTPHC-108L PTPHC-108XL	9.8 (249) 16 (406)	15.8 (401) 22 (559)
PTPHC-210	PTPHC-110	15	C1510C	P59L	9.67 (245)	1 to 15 (25 to 38)	PTPHC-210L	PTPHC-110L	16 (406)	22 (559)
PTPHC-213	PTPHC-113	25	C2514C	P159	12 (305)	2.5 to 18 (64 to 457)	PTPHC-213L	PTPHC-113L	20 (508)	30 (762)
---	PTPHC-116	50	C5513C	P460	14 (356)	3 to 25 (76 to 635)	---	PTPHC-116L	26 (660)	38 (965)



Long Jaw/Extra Long Jaw

Model Shown:

PTPHD-110



► Features

5 TO 50-TON CAPACITY HYDRAULIC PULLERS KITS ARE AVAILABLE IN 2- OR 3-JAW MODELS AND OFFER MANY OPTIONS FOR FLEXIBILITY WITH ANY PROJECT.

- 5 to 50-ton capacity puller with up to 14" (356 mm) reach and 25" (635 mm) spread for large pulling requirements
- PE17 Series lightweight, 10,000 PSI (690 Bar) heavy-duty electric pump for reliable performance use after use
- 10,000 PSI (690 Bar) single-acting cylinder that allows for high tonnage repeatable execution



Puller Accessories

Power Team offers accessories to compliment your puller. These accessories conveniently store, transport and position your hydraulic pullers to maximize your productivity.



Order No.	Puller No. *
Storage Transport Cart	
PTPT-2550	PTPHD-213
PTPT-2550	PTPHD-113
PTPT-2550	PTPHD-116



Included with the Kits*

- Puller Iron and Ram Point Set
- Hydraulic Cylinder
- Lift and Positioning Plate
- 2 Stage Electric Pump
- Gauge Adapter, 10,000 PSI (690 Bar) Gauge
- 10' heavy-duty Hydraulic Hose
- Male Coupler with dust cap

► Ordering Information

2 Jaw	3 Jaw	Cap. Short Tons	Cylinder Included	Pump Included	Reach in. (mm)	Spread in. (mm)	Long Jaw/ XL Jaw Order No.*	Long Jaw/ XL Jaw Order No.*	Dimensions
PTPHD-206	PTPHD-106	5	C55C	PE17	6 (152)	.5 to 8 (13 to 203)	---	---	-
PTPHD-208	PTPHD-108	10	C106C	PE17	8 (203)	.75 to 12 (19 to 305)	PTPHD-208L PTPHD-208XL	PTPHD-108L PTPHD-108XL	9.8 (249) 16 (406)
PTPHD-210	PTPHD-110	15	C1510C	PE17	9.67 (245)	1 to 15 (25 to 38)	PTPHD-210L	PTPHD-110L	16 (406)
PTPHD-213	PTPHD-113	25	C2514C	PE17	12 (305)	2.5 to 18 (64 to 457)	PTPHD-213L	PTPHD-113L	20 (508)
---	PTPHD-116	50	C5513C	PE17	14 (356)	3 to 25 (76 to 635)	---	PTPHD-116L	26 (660)
									38 (965)

*Standard models supplied with 115v 50/60hz pump. For other voltage options, please contact technical support.

Model Shown:

PTPH-50T

Shown with long jaws



► Features

FOR THOSE BIG JOBS, THIS 50-TON PULLER SET IS WHAT YOU NEED. JUST THINK OF THE JOBS YOU CAN DO WITH THIS PULLER WITH THE INCLUDED EASY TO MANEUVER CART THAT RAISES TO A HEIGHT OF 55" (1397 MM).

- 50-ton capacity puller with 14" (356 mm) reach and 25" (635 mm) spread for large pulling requirements
- PE17 Series lightweight, two-stage, 10,000 PSI (690 Bar) heavy-duty electric pump for reliable performance use after use
- Remote jog switch with a 10' (3 m) cords allows for additional worker safety
- 10,000 PSI (690 Bar) single-acting cylinder that allows for high tonnage repeatable execution
- Flexible mounting platform allows puller to swivel 360 degrees for easy accessibility to any project



Included with the 50 Ton Pullers

- 50-ton puller, model PTPH-116
- Standard and long jaw sets
- Ram Point Set
- PTC-50T cart
- 50-Ton Hydraulic cylinder
- 10,000 PSI (690 Bar) electric two-stage pump, remote jog switch on electric pump with 10' cord (3.05 m)
- 10' (3.05 m) hose
- Gauge, coupler
- Lift and Positioning Plate
- 6" (152 mm) and 12" (305 mm) ram extenders



Hydraulic Puller Suggestion For Selection



The maximum force exerted in tons should be 7 to 10 times the diameter of the shaft in inches; for example, a 1.5" (38 mm) diameter shaft would generally require a 15-ton puller.

► Ordering Information

Model Number*	Capacity Tons	Number of Jaws	Reach	Spread	Weight of Set**	Long Jaws		
						Part Number	Reach	Spread
PTPH-50T	50 tons (445 kN)	3	14 in. (356 mm)	3 to 25 in. (76 to 635 mm)	320 lbs (145 kg)	PTPH-11654L	26 in. (660 mm)	2 to 38 in. (51 to 965 mm)

*Standard models supplied with 115v 50/60hz pump. For other voltage options, please contact technical support.

**Weight does not include hydraulic components due to variances in weight.

Model Shown:
PTPH-100T



Vertical 100-Ton Hydraulic Puller | PTPH-102TV

The 100-Ton vertical hydraulic puller was designed for big pulling jobs with limited jaw placement options. This two-jaw vertical puller is available with a single or double acting cylinder. This versatile puller can also be used in a suspended position.

► Features

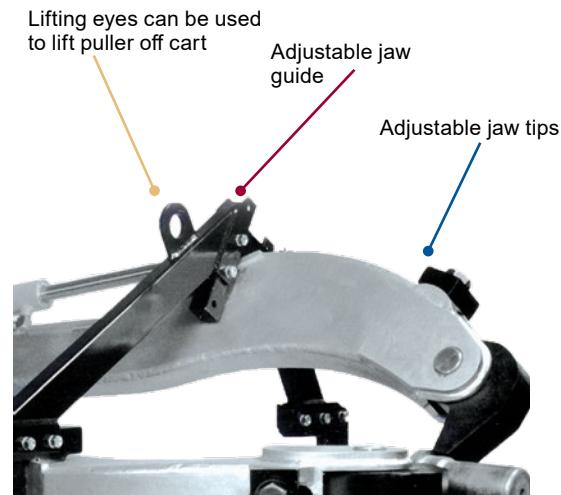
100 HYDRAULIC PULLERS PROVIDE MAXIMUM EXTRACTION FORCE IN APPLICATIONS REQUIRING HIGH FORCE REMOVAL OF LARGE PRESS FIT PARTS.

- 100-ton capacity puller with 50" (1270 mm) reach and 70" (1778 mm) spread for extra-large pulling requirements
- Hydraulic-actuated lift cart extends vertically up to 5' (1.52 m) to align easily with project
- Lifting brackets allow the puller to be removed from the cart and lifted into workplaces
- PE55 Series lightweight, two-stage 10,000 PSI (690 Bar) heavy-duty electric pump for reliable performance use after use
- 10,000 PSI (690 Bar) single-acting 10.25" (260 mm) stroke cylinder with spring return for ease of compression and retraction. (Optional double-acting cylinder available)
- Available in 2-jaw, vertical 2-jaw, 3-jaw, or 2/3-jaw combination to allow a wide range of flexibility with any project

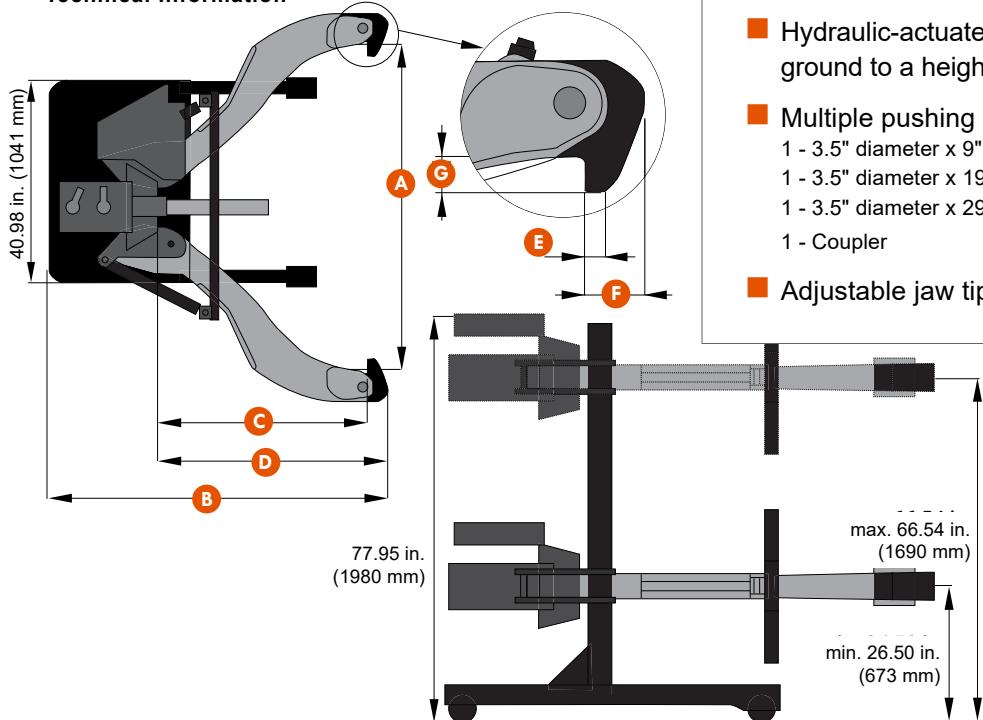


PosiLock Safety Insight

The PTPH-123T combination 100-ton puller transforms from a 2-jaw to a 3-jaw puller in 4 easy steps.



► Technical Information



► Ordering Information

Model Number*	Capacity	Number of Jaws	Dimensions								Weight				
			Spread	Overall Length	Reach	Jaw Length	Jaw Tip Width	Tip Clearance	Tip Depth						
			A	B	C	D	E	F	G						
Tons (kN)															
Single Acting															
PTPH-102T	100 tons (890 kN)	2	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	1700 lbs. (771 kg)					
PTPH-100T	100 tons (890 kN)	3	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	1950 lbs. (885 kg)					
PTPH-123T	100 tons (890 kN)	2/3	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	2000 lbs. (907 kg)					
Single Acting Vertical															
PTPH-102TV	100 tons (890 kN)	2	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	1800 lbs. (816 kg)					
Double Acting															
PTPH-102TDA	100 tons (890 kN)	2	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	1800 lbs. (816 kg)					
PTPH-100TDA	100 tons (890 kN)	3	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	2050 lbs. (930 kg)					
PTPH-123TDA	100 tons (890 kN)	2/3	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	2100 lbs. (953 kg)					
Double Acting Vertical															
PTPH-102DATV	100 tons (890 kN)	2	7.5 to 70 in. (191 to 1778 mm)	77 in. (1956 mm)	50 in. (1270 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	1800 lbs. (816 kg)					

*Standard models supplied with 115v 50/60hz pump. For other voltage options, please contact technical support.

Model Shown:
PTPH-200T



► Features

PROVIDES ULTIMATE HYDRAULIC PULLER MUSCLE FOR THE REMOVAL OF STUBBORN GEARS, BEARINGS, AND WHEELS FROM HEAVY MINING, RAILROAD, AND CONSTRUCTION MACHINERY.

- 200-ton capacity puller with 48" (1219 mm) reach and 70" (1778 mm) spread for extra-large pulling requirements
- PE55 Series lightweight, two-stage 10,000 PSI (690 Bar) heavy-duty electric pump for reliable performance use after use
- 10,000 PSI (690 Bar) double-acting 13.25" (337 mm) stroke cylinder for ease of compression and retraction
- Hydraulic-actuated lift cart extends vertically up to 5' (1.52 m) to align easily with project
- Remote jog switch with a 10' (3m) cords allows for additional worker safety



Hydraulic Puller Suggestion For Selection

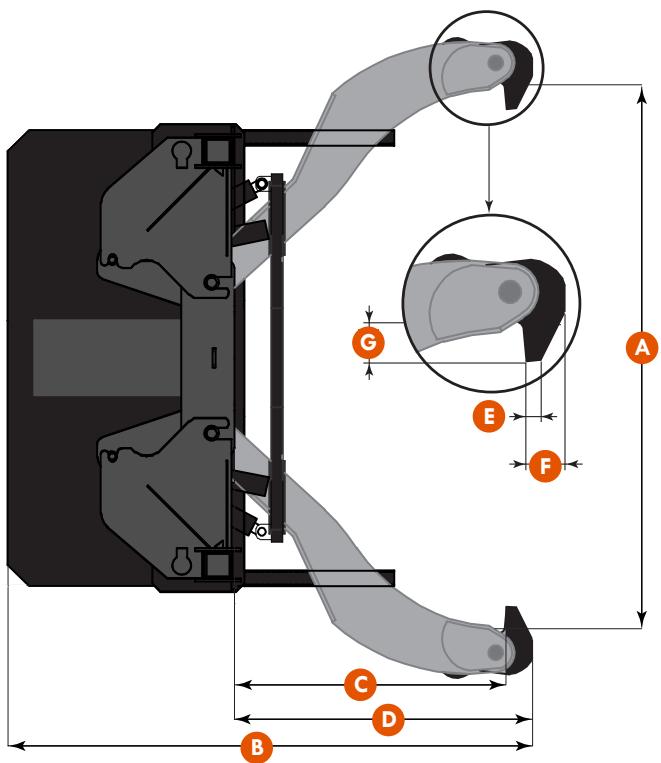
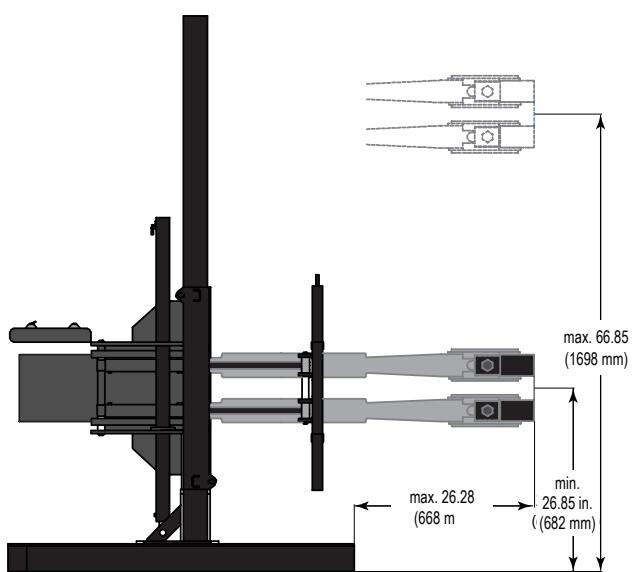


The maximum force exerted in tons should be 7 to 10 times the diameter of the shaft in inches; for example, a 1.5" (38 mm) diameter shaft would generally require a 15-ton puller.

► 200 Ton cylinder used in this pulling application.



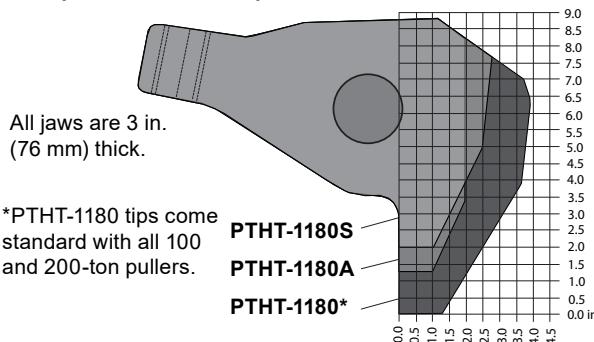
► Technical Information



Included with the 200 Ton Pullers

- PE55 electric two-stage pump, 10,000 PSI (690 Bar)
- 200-ton cylinder 10,000 PSI (690 Bar), double acting 13.25" (337 mm) stroke
- Remote jog switch with 10' cord (3.05 m)
- Hydraulic-actuated lift cart extends puller from ground to a height of 5' (1.52 m)
- Jaws are hydraulically controlled with cylinders
- Multiple pushing adaptors
 - 1 - 4" diameter x 9" (102 x 229 mm)
 - 1 - 4" diameter x 19" (102 x 483 mm)
 - 1 - 4" diameter x 29" (102 x 737 mm)
 - 1 - 4" diameter x 39" (102 x 990 mm)
- Adjustable jaw tips and guides (Custom jaw tips available)

Optional Jaw Tips



► Ordering Information

Model Number*	Capacity	Number of Jaws	Dimensions							Weight
			Spread A	Overall Length B	Reach C	Jaw Length D	Jaw Tip Width E	Tip Clearance F	Tip Depth G	
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
PTPH-200T	200 tons (1779 kN)	4	8 to 70 in. (203 to 1778 mm)	78.5 in. (1994 mm)	48 in. (1219 mm)	53 in. (1346 mm)	1.25 in. (32 mm)	3.5 in. (89 mm)	3.5 in. (89 mm)	4150 lbs. (1882 kg)

*Standard models supplied with 115v 50/60hz pump. For other voltage options, please contact technical support.

Model Shown:
PTPHS-108,
PTPHS-208



► Features

THESE POWERFUL, SELF-CONTAINED PULLING SYSTEMS ARE IDEAL FOR PULLING A WIDE VARIETY OF PRESS-FIT PARTS, INCLUDING BEARINGS, GEARS, BUSHINGS, WHEELS, AND PULLEYS. YOU GET THE EASE OF A MANUAL PULLER WITH THE POWER OF HYDRAULICS.

- 108 or 208 puller assembly with standard length jaws with a reach up to 8" (203 mm) and a 12" (305 mm) spread
- Self-contained pump/cylinder with swiveling adjustable-length pump handle for ease of use at any angle
- Multiple extension rod parts that includes a 1.9" (48 mm) and two 2.9" (74 mm) extension rods with centering tips for versatility with any project
- T-handle facilitates the opening, closing, locking, and aligning of the jaws for easy operation
- Safety cage guides jaws for quick setup, providing a "vise-like" grip reducing slippage



Long Jaws



When ordering optional long jaws, extension rods should also be ordered to extend length of ram.

► Ordering Information

2 Jaw	3 Jaw	Cap. Short Tons	Jaw	Reach in. (mm)	Spread in. (mm)	Long Jaw/ XL Jaw Order No.	Long Jaw/ XL Jaw Order No.	Dimensions	
Standard Jaw Order No.	Standard Jaw Order No.							2 Jaw	3 Jaw
PTPHS-208	PTPHS-108	12	10854	8 (203)	.75 to 12 (19 to 305)	PTPHS-208L PTPHS-208XL	PTPHS-108L PTPHS-108XL	9.8 (249) 16 (406)	15.8 (401) 22 (559)



Model Shown:

PTPH-113IE (Internal/External)



► Features

INTERNAL/EXTERNAL PULLING MADE EASY.
FUNCTIONS WITH A PTPHB, PTPHC, AND PTPHD
HYDRAULIC 5 TO 50-TON CAPACITY PULLERS
TO ALLOW THE FLEXIBILITY OF INTERNAL OR
EXTERNAL PULLING.

- External pulling up to 20" (508 mm) reach and 30" (762 mm) spread for large pulling requirements
- Internal pulling up to 7" (178 mm) reach and 21" (533 mm) spread for an effective range of internal pulling capabilities
- Safety cage houses either the internal or external jaws by simply removing the ball lock pins that allows you to change from internal to external in seconds
- Slim tapered heat-treated tips permit better gripping and easier access in tight spots

► Ordering Information

Order No.	Number of Jaws	Part Number	Jaw Style	Reach in. (mm)	Spread in. (mm)	Overall Length in. (mm)	Jaw Width in. (mm)	Jaw Length in. (mm)
PTPH-113IE	3	11354T	Internal	7 (178)	8 to 21 (203 to 533)	25.75 (654)	1.25 (32)	10.9 (277)
	3	11354	External	12 (305)	2.5 to 18 (64 to 457)	27 (686)	1.25 (32)	13.7 (348)
OPTIONAL	3	11354L	External Long	20 (508)	1.5 to 30 (38 to 762)	36 (914)	1.25 (32)	21.6 (549)

Model Shown:
1024



► Features

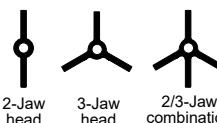
VERSATILE DESIGN OFFER A TIGHT GRIP FOR YOUR PULLING APPLICATIONS.

- Lock-Jaw™ feature on all pullers. The harder the pull, the tighter the grip for removing gears, bearings and countless other press fitted parts.
- 2-way, 3-way and 2/3-way combination pullers make it easy to select a specific puller for your application.
- Forged from high quality steel, heat treated and subjected to rigorous tests which exceed rated puller capacity.
- Forging screw threads are rolled, not cut, creating a smoother and stronger thread.
- Heat treated alloy steel cross bolts for maximum shear strength.
- Machined puller jaw toes produce larger and stronger pulling toes.
- Meets Fed. Spec.: GGG-P-00781-D



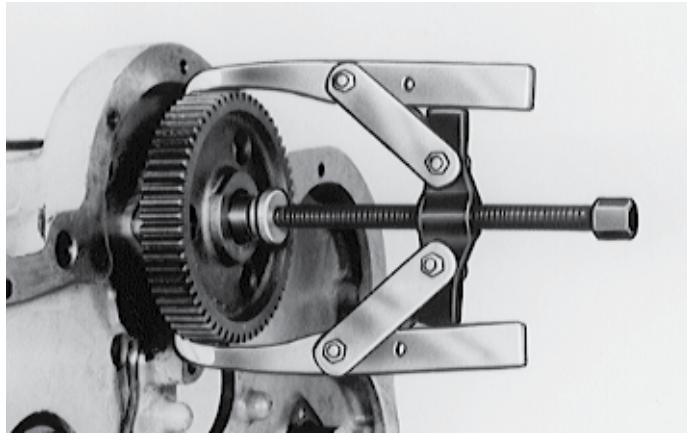
Choosing the right size puller

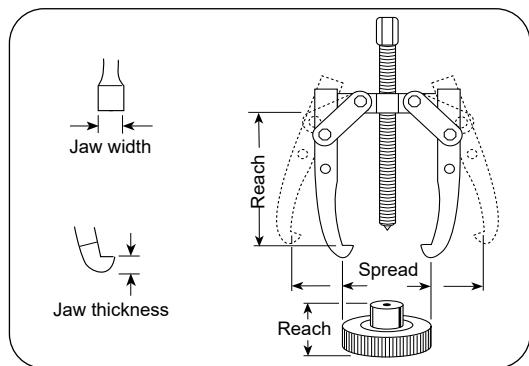
Styles of puller cross heads



Compare the "reach" and "spread" of the pulling job with that of the pullers listed. The puller selected must have dimensions greater than those of the job.

► Two-jaw head puller example.





► Ordering Information

	Order No.	Cap. (tons)	Jaw Type	Max.		Jaw		Screw Size (in.)	Weight (lbs.)	
				Reach (in.)	Spread (in.)	Thickness (in.)	Width (in.)			
1020	1020	1	2-Jaw	2.13	3.25	0.14	0.25	5/16 - 24 x 3.88	0.31	
1021			3-Jaw	2.13	3.25				0.31	
1022	1022	2	2-Jaw *	3.38	4.00	Upper 0.19 Lower 0.13	Upper 0.25 Lower 0.50	3/8 - 24 x 4.88	0.88	
1023			2/3-Jaw *	3.38	4.75				0.88	
1024	1024	5	2/3-Jaw *	3.25	6.00	Upper 0.31 Lower 0.25	Upper 0.38 Lower 0.50	9/16 - 20 x 6.94	0.75	
1026			2/3-Jaw *	3.25	7.00				0.75	
1024	1025	5	Long 2-Jaw *	5.50	6.00	Upper 0.31 Lower 0.25	Upper 0.38 Lower 0.75	9/16 - 20 x 6.94	2.00	
1026			Long 2/3-Jaw *	5.50	7.00				3.63	
1035	1035	7	2-Jaw *	5.00	9.00	Upper 0.31 Lower 0.34	Upper 1.00 Lower 1.00	11/16 - 18 x 9.00	4.50	
1037			2/3-Jaw *	5.00	10.50				6.13	
1036	1036	7	Long 2-Jaw	8.75	9.50	0.34	1.00	11/16 - 18 x 9.00	5.38	
1038			Long 2/3-Jaw	8.75	11.00				8.13	
1039/1040	1039	13	2-Jaw	11.00	12.00	0.56	1.00	13/16 - 16 x 12.00	10.81	
1041/1042			Long 2-Jaw	15.25	15.50				13.00	
1041			2/3-Jaw	11.00	12.00				16.25	
1042			Long 2/3-Jaw	15.25	17.00				18.75	
1043/1044	1043	17.5	Long 2-Jaw	14.50	14.00	0.56	1.00	1 - 14 x 13.50	23.00	
1045/1046			Long 2-Jaw	18.75	16.00				26.00	
1044			3-Jaw	14.50	14.00	0.81	1.28		33.00	
1045			Long 3-Jaw	18.75	16.00				37.00	
1048	1048	25	Long 2-Jaw	22.25	20.00	1.06	1.50	1 1/4 - 12 x 16.63	42.75	
1050			Long 3-Jaw	22.25	20.00				60.00	

* Reversible Jaws

Model Shown:

927,
938,
939

► Features

VERSATILE DESIGN OFFERS A TIGHT GRIP FOR YOUR PULLING APPLICATIONS.

- Can apply a pushing or pulling force, depending on how the puller is set up.
- Optional leg kits adapt your Bi-Directional™ Puller to extra long or extra short reach.
- A wide variety of threaded adapters, bearing pulling attachments and internal pulling attachments can be used in combination with our Bi-Directional™ Puller.
- Meets Fed. Spec.: GGG-P-00781-D



Selection and Capacity Rating

Each Bi-Directional™ Puller specified tonnage “capacity” is determined using its standard legs in tension. Using longer legs, or a setup in which the legs are in compression, will reduce the “capacity.” Always select the largest “capacity” puller and the shortest legs that will fit the job.



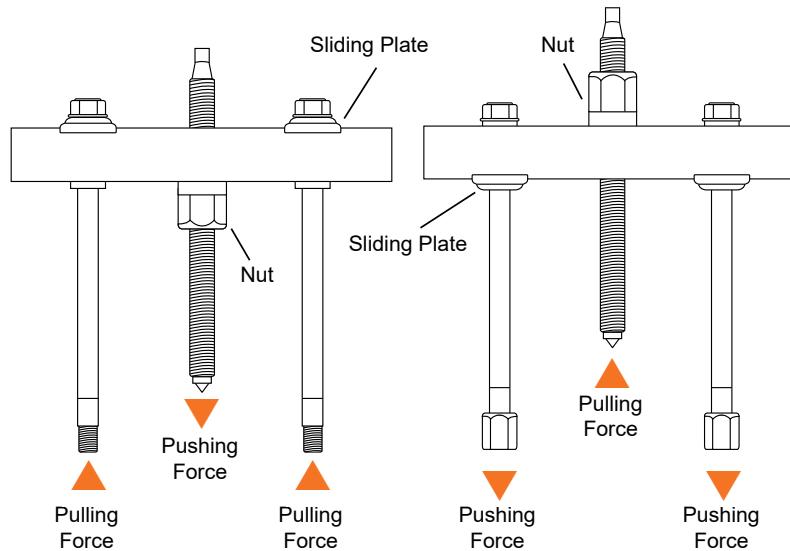
Puller Adapters



For more information, see page 240.

ASSEMBLING THE TOOL TO APPLY PUSHING OR PULLING FORCE:

1. Determine if you want the tool's forcing screw to push or pull.
2. To exert pushing force, the forcing nut is installed beneath the cross block, as shown on left.
3. To cause the forcing screw to pull, the forcing nut is placed on top of the cross block.
4. The sliding plates must always be placed on the opposite side of the cross block from the forcing nut.



► Ordering Information

10 TON MECHANICAL BI-DIRECTIONAL™



10 Ton Capacity can be used with 1123 bearing pulling attachment or 679 pulley pulling attachment. May also be used with 1150, 1151, 1152, or 1153 internal pulling attachments.

Order No.	Max.		Screw Size (in.)	Weight (lbs.)	Notes
	Reach (in.)	Spread (in.)			
927	8.25	2.13 - 7.25	3/4 - 16 x 12.00	7.00	1/2" of forcing screw tip end is threaded 5/8"-18. 1100 legs and 24827 leg ends included.

17.5 TON MECHANICAL BI-DIRECTIONAL™



17.5 Ton Capacity can be used with 1124 and 1130 bearing pulling attachments or 679 and 680 pulley pulling attachments. May also be used with 1150, 1151, 1153, 1165, or 1166 internal pulling attachments.

Order No.	Max.		Screw Size (in.)	Weight (lbs.)	Notes
	Reach (in.)	Spread (in.)			
938	11.13	3.13 - 11.75	1 - 14 x 13.25	20.75	Leg ends threaded 5/8"-18. 1106 legs and 24827 leg ends included.

30 TON MECHANICAL BI-DIRECTIONAL™



30 Ton Capacity can be used with 1126 and 1127 bearing pulling attachments or 680 pulley pulling attachment (two 8012 adapters are required to connect 680 to puller). Can be used with 1165 internal pulling attachment.

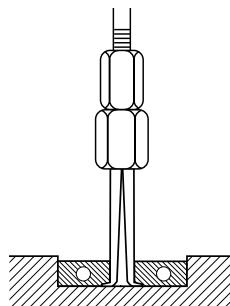
Order No.	Max.		Screw Size (in.)	Weight (lbs.)	Notes
	Reach (in.)	Spread (in.)			
939	10.50	7.00 - 16.25	1 1/2 - 12 x 17.25	44.00	Leg ends threaded 1"-14. 1109 legs and 28390 leg ends included.

ACCESSORIES - PULLER LEGS

	Order No.	Leg Length (in.)	Weight (lbs.)	
927	1103	4.75	1.00	
	1100	6.75	1.50	
	1102	11.75	2.25	
	1101	15.75	3.25	
938	1107	4.50	2.50	
	1106	9.50	4.50	

	Order No.	Leg Length (in.)	Weight (lbs.)	
938	1104	16.50	6.50	
	1105	22.50	9.00	
	1108	30.00	11.50	
939	1109	8.00	8.00	
	1110	18.00	15.00	
	1111	28.00	22.00	

BLIND HOLE PULLER SET



blind hole puller example

Removal of bearings, bushings, sleeves and other friction-fitted parts from blind holes can now be accomplished with ease. Set provides selection of expanding collets 5/16" to 1-3/4" I.D. Collet is placed through bore of part to be removed, then expanded with actuator pin so that lips of collet secure a positive grip for pulling. Pulling force is exerted by means of a forcing screw and bridge assembly or with a slide hammer. Equipped with a plastic case.

Order No.	Description
6981	Blind-hole puller set with slide hammer, forcing screw, bridge, actuator pins, collets, and storage box. Wt., 14.70 lbs.

CONTENTS OF 6981 SET

Order No.	Description	Order No.	Description
24835	Forcing Screw	2009584	Slide Hammer Rod
24836	Forcing Screw Nut	41331	Bridge
22185	Hammer 2.5 lb.	—	Plastic Case - 20" x 15" x 5.5"

Order No.	Description
2009585	Pin 0.140"
2009587	Pin 0.200"
2009589	Pin 0.280"
2009591	Pin 0.400"
2009593	Pin 0.500"

Order No.	Description	Reach
2009586	Collet 0.300" - 0.350"	1.50"
2009588	Collet 0.350" - 0.438"	1.50"
2009590	Collet 0.438" - 0.563"	1.75"
2009592	Collet 0.563" - 0.865"	2.50"
2009594	Collet 0.865" - 1.250"	3.00"

SLIDE HAMMER PULLER SET

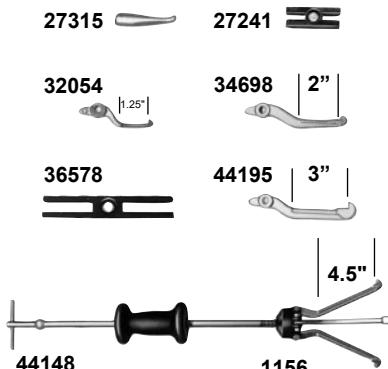


This very handy set is ideal for close-quarters, inside pulling jobs. The slide hammer puller set is very practical for pulling motor, generator, and magneto bearings. It's good for removing small-bore bushings, bearings, and oil seals.

Order No.	Description
SS2	Slide hammer puller set includes both 1172 and 1174. Wt., 5.80 lbs.

Order No.	Inch Range	
	Min. (in.)	Max. (in.)
1172	0.50	2.00
1174	0.50	1.38

SLIDE HAMMER PULLER SET



This useful set contains a reversible-jaw slide hammer puller with a 2.5 lb. sliding hammer plus an assortment of special jaws (3 of each size) and adapters. In this set, you get all the versatility you demand of a slide hammer puller.

Order No.	Description
1178	Slide hammer puller set with 2.5 lb. sliding hammer. Wt., 13.80 lbs.

Jaw Order No.	2-Jaw Spread				3-Jaw Spread			
	Inside		Outside		Inside		Outside	
	Min. (in.)	Max. (in.)	Min. (in.)	Max. (in.)	Min. (in.)	Max. (in.)	Min. (in.)	Max. (in.)
44195	1.50	4.50	0.75	5.00	1.50	4.75	1.00	4.50
32054	0.75	2.38	—	—	1.00	2.75	—	—
44148	2.75	5.50	0.75	7.50	3.25	6.25	1.00	6.50
34698	1.25	3.50	1.00	4.50	1.50	4.25	1.50	4.50

SLIDING HAMMERS ONLY



Order No.	Description
22185	2.5 lb. Sliding Hammer.
34331	5.0 lb. Sliding Hammer.

BEARING CUP REMOVER



The 7136 is perfect for pulling internal bearing cups, seals, bushings, etc. With a jaw spread of 0.94" to 3.25", and reach to 3.50". Use with any slide hammer having 5/8"-18 thread (1155, 1156 or 927 Bi-Directional™).

Order No.	Description
7136	Universal bearing cup remover. Wt., 1.50 lbs.

PILOT BEARING PULLERS



1170

These very versatile pullers are built especially for inside pulling jobs, and particularly for removing flywheel pilot bearings on machines and construction vehicles. Also very practical for pulling motor, generator and magneto bearings.

Special slide hammer puller – Ideal for pulling jobs in very close quarters, as in removal of small-bore bushings, bearings, oil seals, etc. Internal pulling attachment has jaw spread of 0.5" to 1.38". The handle end has a 1/2"-20 thread.

Order No.	Description	Order No.	Reach (in.)	I.D. Spread		Weight (lbs.)
				Min. (in.)	Max. (in.)	
1173	Slide hammer puller. Wt., 3.50 lbs.	1170	0.75	0.50	1.50	4.90
1174	Puller head, less slide hammer. Wt., 0.80 lb.	1171	1.00	0.88	2.13	4.90
		1172	1.75	0.50	2.00	4.90

BASIC SLIDE HAMMER UNITS



1155

Compatible with internal pulling attachment and compatible with threaded adapters. 24" in length, 5/8"-18 threaded end.



1156

Order No.	Description
1155	Basic slide hammer unit with 5.0 lb. hammer. Wt., 7.30 lbs.
1156	Basic slide hammer unit with 2.5 lb. hammer. Wt., 4.80 lbs.

REVERSIBLE-JAW SLIDE HAMMER PULLERS



1176

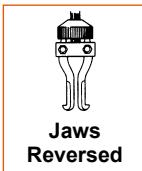
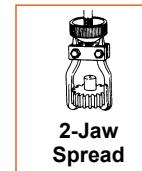
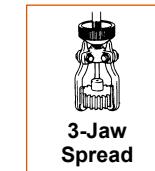
Ideal for pulling gears, bearings, outer races, grease retainers, oil seals, etc. Two or three jaws may be used and positioned for "inside" or "outside" pulling jobs. Both have 5/8"-18 threaded end so attachments and adapters may be used.

Order No.	Description							
1176	Slide hammer puller with 2.5 lbs. hammer, 27241 two-way head and 34698 jaws.							
1177	Slide hammer puller with 5.0 lbs. hammer, 27241 two-way head and 34698 jaws.							



1177

Jaw Order No.	2-Jaw Spread				3-Jaw Spread				Length (in.)	Prod. Wt. (lbs.)
	Inside		Outside		Inside		Outside			
Min. (in.)	Max. (in.)	Min. (in.)	Max. (in.)	Min. (in.)	Max. (in.)	Min. (in.)	Max. (in.)			
1176	1.25	3.50	1.00	4.50	1.50	4.50	1.50	4.50	27.00	8.00
1177	1.25	3.50	1.00	4.50	1.50	4.50	1.50	4.50	27.00	10.50

Jaws
Reversed2-Jaw
Spread3-Jaw
Spread

SLIDE HAMMER PULLERS WITH CUP PULLING ATTACHMENTS



1158

These combine a basic slide hammer with 1152 internal pulling attachment for removing oil seals, outer races, and bearing cups from blind holes.

Order No.	Description	Reach (in.)	Spread		Length (in.)	Prod. Wt. (lbs.)
			Min. (in.)	Max. (in.)		
1157	Slide hammer puller consisting of 1156 slide hammer and 1152 internal pulling attachment.	4.00	1.50	6.00	28.00	9.80
1158	Slide hammer puller consisting of 1155 slide hammer and 1152 internal pulling attachment.	4.00	1.50	6.00	28.00	12.30

Model Shown:

PH303C,
PH63C,
HST11S,
PH82K

PH303C



PH63C



HST11S



PH82K



► **Features**

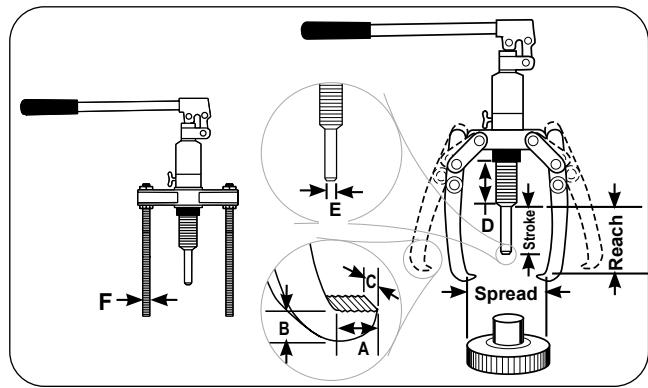
SELF CONTAINED PULLER SYSTEMS ENABLES FAST AND QUICK SETUP

- Power Team pullers are tested for top performance and reliability at maximum capacity and jaw spread.
- Easily metered release valve control knob.
- Spring loaded live centering cone.
- Bladder type oil reservoir.
- Rapid adjustment.
- Use with 2 or 3-jaws.
- Supplied with a sturdy storage/carrying case.
- Features Power Team's exclusive PowerThon™ Limited Lifetime Warranty.

HYDRA LOCK-JAW™ PULLING SYSTEM

These pullers are ideal for pulling a wide variety of press-fitted parts including bushings, bearings, wheels, gears and pulleys. Hydra Lock-Jaw™ pullers have been rigorously tested for top performance and reliability. PH82K is a complete pulling system which includes a hydraulic power module, 2-way puller head, jaws, legs and bearing splitter attachment, all contained in a convenient carrying case.

► **Ordering Information**



Order No.	Cyl. Cap. (ton)	Reach Studs (in.)	Min. Jaws (in.)	Max. Reach (in.)	Spread Studs (in.)	Jaws	Stroke	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Weight (lbs.)
PH63C	6	—	6.00	—	—	7.88	3.13	0.44	0.25	0.88	3.25	0.88	—	10.80
PH83C	8	—	7.50	—	—	9.81	3.13	0.44	0.38	1.00	3.25	1.13	—	14.50
PH113C	15	—	9.00	—	—	11.00	3.13	0.56	0.38	1.13	3.25	1.13	—	17.60
PH303C	30	10.50	14.75	—	—	21.25	3.13	1.06	1.44	0.50	6.69	2.13	5/8-18 UNF	112.00
PH82K	8	10.50	8.16	4.91	11.80	9.91	3.13	0.36	1.00	0.63	3.25	0.88	5/8-18 UNF	35.00
HST11S*	11	—	5.91	—	—	16.13	3.13	—	—	—	3.25	0.88	—	32.00

* Max bar size 2.3622"

LOCK-JAW™ PULLER ACCESSORY KITS FOR THE HYDRA LOCK-JAW™ PULLER NO. PH83C



Order No.	Description
K82	Accessory kit for the Hydra Lock-Jaw™ puller PH83C. Includes 2-way puller head, 2-jaws, 2 threaded legs and sturdy carrying/storage case. Wt. 13.70 lbs.

LOCK-JAW™ PULLER ACCESSORY KITS FOR THE PH83C LOCK-JAW™ HYDRAULIC PULLER



Order No.	Description
K83	Accessory kit for PH83C Hydra Lock-Jaw™ hydraulic puller. Includes 2/3-way puller head, 3-jaws, 3 threaded legs (5/8-18 thread) and sturdy carrying/storage case. Also can be used with 1123, 1124, 1130 pulling attachments. Wt. 23.00 lbs.

PULLER ACCESSORY CONVERTS PH113C INTO A HYDRAULIC STRAIGHTENING TOOL



Shaft adapter included

Good for straightening mechanical shafts, round bars, etc. Simply remove pump and cylinder from puller head and insert them into the straightening tool accessory. This product is widely used in steel mills, wire roll companies, wire extruding companies, textile industry, and any straightening situation where portability and power are required. Contoured heat-treated shaft adapter included.

Order No.	Description
HST11	Spread: 3.50" to 16.13", Reach: 5.91". Wt., 21.00 lbs.

LONG JAW SET FOR PH83C AND PH113C LOCK-JAW™ PULLERS



This long jaw set is the perfect addition to the PH83C or PH113C Lock-Jaw™ hydraulic pullers. The extra long jaws give you the added capability of pulling a wider variety of parts. Jaw capacity is 8 tons when used with the PH83C puller; 15 tons when used with the PH113C puller.

Order No.	Description
1188	Spread: 11.00" to 12.50", Reach: 12.50". Wt. 11.50 lbs.

Model Shown:
PH53CR,
PH172,
PH303

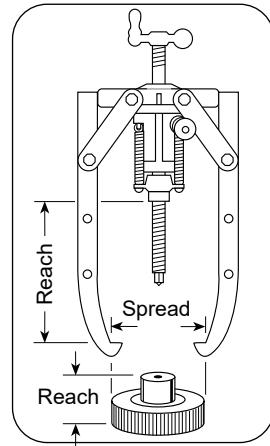


CAUTION: Always use a 3-jaw puller where clearance permits in order to provide a more stable setup and a more even pulling force.

► Features

REMOVE GEARS, BEARINGS, AND OTHER PRESS-FITTED PARTS WITH SPEED AND EASE.

- Broad capacity range of 5, 10, 17.5, 30 and 50 tons.
- 5 and 10 ton sets include: single-acting, spring return hydraulic cylinder, hose, coupler dust cap, single-speed hydraulic hand pump, and puller.
- 17.5, 30 and 50 tons sets include: Power-Twin® single-acting, spring return hydraulic cylinder, hose, coupler dust cap, single-speed hydraulic hand pump puller, adjusting screw and crank.
- Hydraulic cylinder of all models is readily removable from puller for use with pump in other hydraulic applications. You get maximum maintenance versatility for your investment.
- Fed. Spec.: GGG-P-00781-D



► Ordering Information - Puller Only

Order No.	Cap. (ton)	Jaws	Jaw Reach (in.)	Jaw Spread (in.)	Jaw Thickness (in.)	Jaw Width (in.)	Weight (lbs.)
1057	5	2/3	8.75	11.50	0.34	0.98	7.80
1060	10	2/3	15.00	17.00	0.56	0.98	17.00
1064	17.5	2	11.50	16.00	0.81	1.28	22.00
1066	17.5	3	11.50	20.00	0.81	1.28	36.00
1074	30	3	19.44	34.00	1.13	1.63	90.00
1080	50	3	27.88	44.00	1.41	1.88	191.00

5 TON CAPACITY, 2/3-JAW PULLER



Order No.	Description
PH53C	Combination 2-jaw/3-jaw puller set. Includes 1057 5 ton puller, RPS55 hydraulic set (C55C cylinder, P12 hand pump, fittings, coupler, and 6 ft. hose), and 309874 pushing adapter. Wt., 20.00 lbs.
PH53CR	Combination 2-jaw/3-jaw puller set. Includes 1057 5 ton puller, C55C cylinder, and 309874 pushing adapter. Wt., 12.00 lbs.
1057	5 ton cap. 2-jaw/3-jaw puller only. Wt., 7.80 lbs.

AVAILABLE COMPONENTS

Order No.	Description
309874	0.63" diameter pushing adapter. (Included with PH53C and PH53CR hydraulic puller sets). Wt., 0.30 lb.
309875	0.88" diameter pushing adapter. Wt., 0.80 lb.
47997	2-way/3-way puller head. (Can be used to convert 1038 7 ton manual puller into a 5 ton hydraulic puller). Wt., 2.30 lbs.

10 TON CAPACITY, 2/3-JAW PULLER

Order No.	Description
PH103C	Combination 2-jaw/3-jaw puller, 10 ton capacity. Set includes 1060 10 ton puller, RPS1010 cylinder and pump set, and 202179 threaded adapter. Wt., 52.00 lbs.
PH103CR	Combination 2-jaw/3-jaw puller, 10 ton capacity. Set includes 1060 10 ton puller, 202179 threaded adapter, and C1010C cylinder only. (Pump and hose not included). Wt., 32.00 lbs.
1060	Combination 2-jaw/3-jaw puller only. 10 ton capacity. (Cylinder and pump set, hose, coupler, and adapter No. 202179 not included). Wt., 17.00 lbs.

NOTE: This puller may be used with any 10 ton single-acting cylinder having a 2 1/4"-14 straight collar thread.

17.5 TON CAPACITY, 2-JAW PULLER

Order No.	Description
PH172	2-jaw puller with RT172 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 6-ft. hose, hose half coupler, 1"- 8 x 20" long adjusting screw, and adjusting crank. Wt., 61.00 lbs.
1064	Puller only. (Cylinder, pump, hose, coupler, screw, and crank not included). Wt., 22.00 lbs.

17.5 TON CAPACITY, 3-JAW PULLER

Order No.	Description
PH173	3-jaw puller with RT172 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 6-ft. hose, hose half coupler, 1"- 8 x 20" long adjusting screw, and adjusting crank. Wt., 75.00 lbs.
PH173R	3-jaw puller with screw and crank, and RT172 center-hole twin cylinder. Wt., 56.00 lbs.
1066	Puller only. (Cylinder, pump, hose, coupler, screw, and crank not included). Wt., 36.00 lbs.

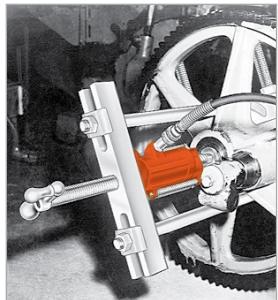
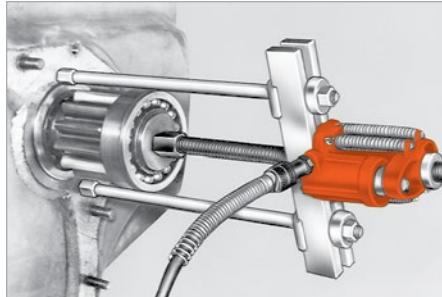
30 TON CAPACITY, 3-JAW PULLER

Order No.	Description
PH303	3-jaw puller with RT302 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 6-ft. hose, hose half coupler, 1 1/4"- 7 x 24" large adjusting screw, and adjusting crank. Wt., 149.00 lbs.
PH303R	3-jaw puller with screw and crank, and RT302 center-hole twin cylinder. Wt., 130.00 lbs.
1074	Puller only. (Cylinder, pump, hose, coupler, screw, and crank not included). Wt., 90.00 lbs.

50 TON CAPACITY, 3-JAW PULLER

Order No.	Description
PH503	3-jaw puller with RT503 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 6-ft. hose, hose half coupler, 1 5/8"- 5 1/2 x 30.38" long adjusting screw, and adjusting crank. Wt., 286.00 lbs.
1080	3-jaw puller only. (Cylinder, pump, hose, coupler, screw, and crank not included). Wt., 191.00 lbs.

Model Shown:
PPH50



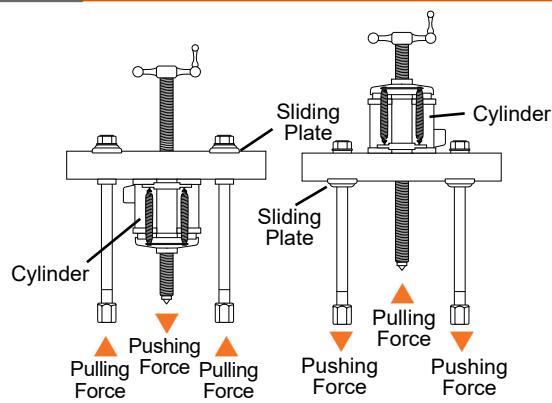
► Features

THE POWER TO MAKE IMPOSSIBLE JOBS BECOME ROUTINE.

- Can apply a hydraulic pushing or pulling force, depending on how the puller is set up.
- Each unit includes perfectly matched hydraulic components that can be detached from the Bi-Directional™ Puller for other tasks requiring dependable power, and assuring maximum return on your investment.
- Optional leg kits adapt your Bi-Directional™ Puller to extra long or extra short reach.
- A wide variety of threaded adapters, bearing pulling attachments and internal pulling attachments can be used in combination with our Bi-Directional™ Pullers.



ASSEMBLING THE TOOL TO APPLY PUSHING OR PULLING FORCE:

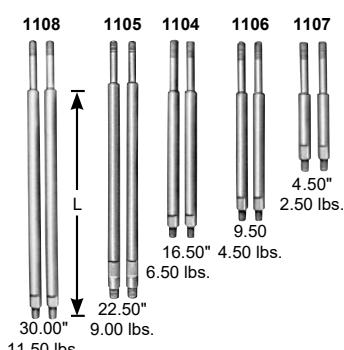
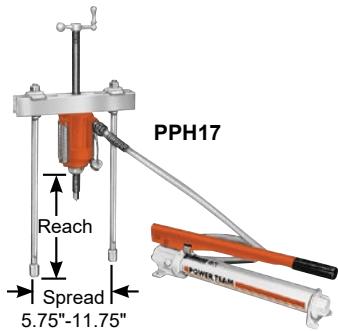


1. Determine if you want the tool's forcing screw to push or pull.
2. To exert pushing force, the forcing nut is installed beneath the cross block, as shown on left.
3. To cause the forcing screw to pull, the forcing nut is placed on top of the cross block.
4. The sliding plates must always be placed on the opposite side of the cross block from the forcing nut.

SELECTION AND CAPACITY RATING – Each Bi-Directional™ Puller's specified tonnage "capacity" is determined using its standard legs in tension. Using longer legs, or a setup in which the legs are in compression, will reduce the "capacity." Always select the largest "capacity" puller and the shortest legs that will fit the job.

POWER-TWIN® CYLINDER – This unique center-hole cylinder powers each Bi-Directional™ Puller screw runs right between the twin spring cylinder. A basic head allows you to change from a tapped hole to a plain hole by merely changing the head insert.

17.5 TON CAPACITY BI-DIRECTIONAL™ PULLER

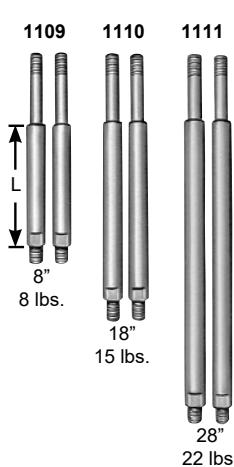
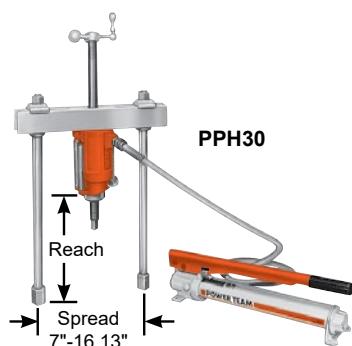


Leg Ends – Upper leg ends are threaded 3/4"-16. Lower leg ends are threaded 5/8"-18.00" long

NOTE: L = leg length: 4.50", 9.50", 16.50", 22.50", 30.00"; subtract 4.88" from leg length to determine reach when using leg end caps.

Order No.	Description
PPH17	Bi-Directional™ Puller with RT172 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 9767 6-ft. hose, 9798 hose half coupler, 16.50" legs, 24827 leg ends, 1"-8 x 20" large adjusting screw and adjusting crank. Wt., 59.00 lbs.
PPH17R	Bi-Directional™ Puller with RT172 center-hole Power-Twin® cylinder, cylinder half coupler, but without P55 pump, 9767 6-ft. hose and 9798 hose half coupler. Wt., 40.00 lbs.
1062	Puller only. (Cylinder, pump, hose, coupler, screw and crank not included). Wt., 20.00 lbs.
	USE WITH:
Bearing pulling attachment:	1124 and 1130.
Pully Pulling attachment:	679.
Internal Pulling attachment:	1154.
Legs:	1104, 1105, 1106, 1107 and 1108 - Pair of legs for 17.5-ton "capacity" Bi-Directional™ Puller.

30 TON CAPACITY BI-DIRECTIONAL™ PULLER



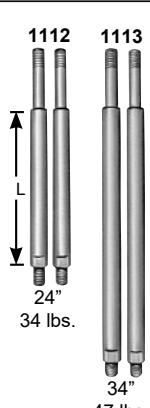
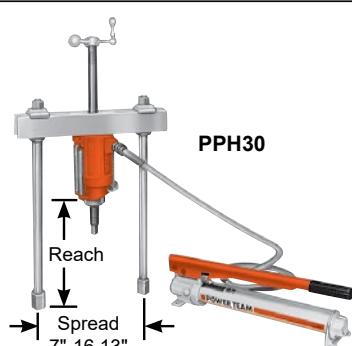
Leg Ends are threaded 1"-14 x 1.25" long

NOTE: L = leg length: 8.00", 18.00", 28.00"; subtract 5.88" from leg length to determine reach when using leg end caps.

Order No.	Description
PPH30	Bi-Directional™ Puller with RT302 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 9767 6-ft. hose, 9798 hose half coupler, 18" legs, 28390 leg ends, 1 1/4"-7 x 24" lg. adjusting screw and adjusting crank. Wt., 102.00 lbs.
PPH30R	Bi-Directional™ Puller with RT302 center-hole Power-Twin® cylinder, cylinder half coupler, but without P55 pump, 9767 6-ft. hose and 9798 hose half coupler. Wt., 82.00 lbs.
1070	Puller only. (Cylinder, pump, hose, coupler, screw and crank not included). Wt., 42.00 lbs.

Order No.	Description
Bearing pulling attachment:	680 (Use two 8012 adapters to connect to puller.)
Pully Pulling attachment:	679.
Internal Pulling attachment:	1166.
Legs:	1109, 1110 and 1111 - Pair of legs for 30 ton "capacity" Bi-Directional™ Puller.

50 TON CAPACITY BI-DIRECTIONAL™ PULLER



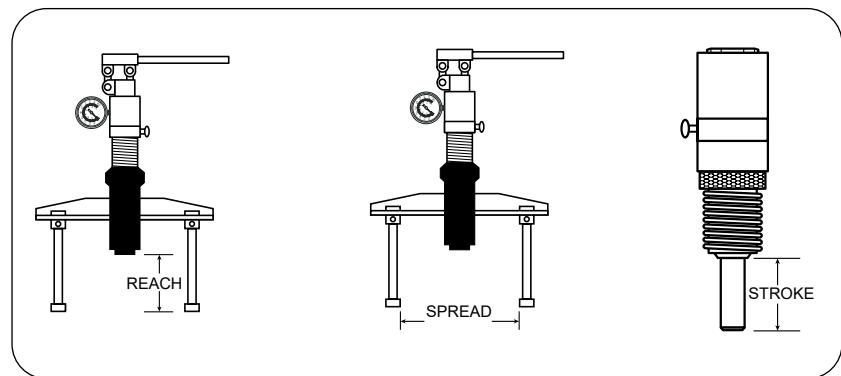
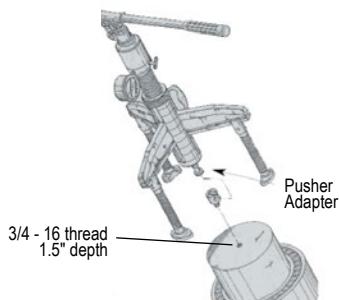
Leg Ends are threaded 1 1/4"-12 x 1.75" long

Order No.	Description
PPH50	Bi-Directional™ Puller with RT503 center-hole Power-Twin® cylinder, cylinder half coupler, P55 pump, 9767 6-ft. hose, 9798 hose half coupler, 24" legs, 1 5/8-5 1/2 x 30.38" lg. adjusting screw and adjusting crank. Wt., 201.00 lbs.
PPH50R	Bi-Directional™ Puller with RT503 center-hole Power-Twin® cylinder, cylinder half coupler, but without P55 pump, 9767 6-ft. hose and 9798 hose half coupler. Wt., 181.00 lbs.
1076	Puller only. (Cylinder, pump, hose, coupler, screw and crank not included). Wt., 106.00 lbs.

Order No.	Description
Bearing pulling attachment:	1128.
Legs:	1112 and 1113 - Pair of legs for 50 ton "capacity" Bi-Directional™ Puller.

Model Shown:

PHP8H,
PHP8R



► **Ordering Information**

Order No.	Description	Cylinder Cap. (ton)	Reach (in.)	Spread (in.)	Stroke (in.)	Weight with Case (lbs.)
PHP8H	Manual-Hydraulic Pusher	8	2.16 - 15.16	2.28 - 10.62	3.23	74.00
PHP8H-1	Manual-Hydraulic	8	2.16 - 15.16	2.28 - 10.62	3.23	117.00

IMPORTANT SAFETY INFORMATION: Power Team recommends the use of protective blankets for all pushing operations. For ease of visual clarity, we have shown the pusher application photos without these safeguards.

MECHANICAL AND HYDRAULIC PULLER RETENTION BLANKET

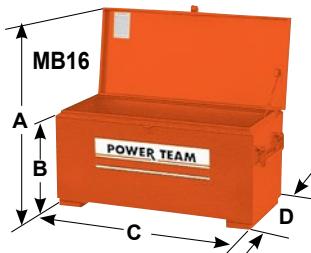


- Made of see-through, high-tensile, tear resistant material.
- The clear retention blankets allow you to visually monitor the job from start to finish.
- Ideal for use with pullers and forcing presses.
- Unlike rigid, fixed guards, these blankets can be wrapped and strapped around a job.
- Offers additional protection for the user during dismounting jobs,
- Suitable for use in combination with many pullers.

Order No.	Size		Number of Straps	Weight	
	in.	mm.		lbs.	kg.
PB1230D	12 x 30	304 x 762	2	2.80	1.27
PB2036D	20 x 36	508 x 914	2	4.20	1.91
PB2860D	28 x 60	711 x 1524	3	9.30	4.22
PB3372D	33 x 72	838 x 1828	3	11.70	5.31
PB44120D	44 x 120	1117 x 3048	4	24.20	10.98
PB51156D	51 x 156	1295 x 3964	4	34.40	15.60

NOTE: Custom sizes are available on a special order basis. Please consult factory.

JOB-SITE AND MAINTENANCE SECURITY CHESTS



Protect your valuable tools and equipment from theft and weather. When the day's work is finished, you want to rest assured that your tools and equipment will be present the next day. These rugged, lockable chests are the answer that many of our customers have been asking for.

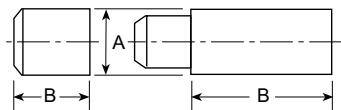
- Rugged, 16 gauge steel construction with fully arc welded seams for extra strength and weather protection.
- Full length piano hinges, mating cover to body, protect against weather and theft.
- Single or double latch security tabs for padlocks.
- Mechanical cover supports, two 2 1/4" high skids.
- Fold-down 3/4" pipe handles on each end of chest.
- Pre-drilled for optional casters, which enhance mobility.
- Durable baked enamel finish.

Order No.	A	B	C	D	Cap.	Storage Wt.	Optional Accessories Caster Wheels
	(in.)	(in.)	(in.)	(in.)	(cu. ft.)	(lbs.)	
MB5	34.75	14.00	32.00	19.00	5.0	66.00	 251646 – Set of four 4" casters (two swivel and two rigid). Furnished with mounting screws. Wt., 12.50 lbs.
MB8	39.75	19.00	42.00	19.00	8.8	90.00	
MB16	49.75	24.00	48.00	24.00	16.0	126.00	

Model Shown:
PH553C



PUSHING ADAPTERS



Order No.	Qty. *	A (in.)	B (in.)
251002	1	2.75	2.75
350593 **	2	2.75	6.00
350594	1	2.75	3.00
350637	1	2.75	10.00

* Number of adapters supplied with each Enforcer.

** Only 1 for units with 13.25" stroke.

IMPORTANT SAFETY INFORMATION: Power Team recommends the use of protective blankets for all pushing operations. For ease of visual clarity, we have shown the pusher application photos without these safeguards.

► Features

ENFORCER 55

- 1 Puller can be assembled in 2 or 3-jaw configurations.
- 2 Hydraulically-actuated jaws allows cylinder to move in or out with a safe, secure grip on workpiece.
- 3 Hydraulic lift system for easy, precise position of puller.
- 4 Unique dual pump arrangement. Low pressure pump positions, holds and opens jaws. The high pressure pump advances and retracts the pushing cylinder without releasing clamped jaws.
- 5 Swivel casters give ease of mobility.
- 6 Large wheels make movement of cart easy.
- 7 Super Lock-Jaw™ feature means the harder the pull, the tighter the puller jaws grip. No chains or cages required to keep puller jaws from slipping or springing off the part being pulled.
- 8 Guards at pinch points protect operator.
- 9 Puller can be mounted on cart 90 degrees to right or left of puller cart centerline, permitting use in tight quarters, such as between machinery.
- 10 Self-centering design puller jaws will automatically grip work evenly.
- 11 Choice of cylinder with a 6.25" or 13.25" stroke.



CONVERSION KIT

Conversion Kit No. 251468. Kit converts PH553C series to PH553CL series. Jaws are 12" longer. Kit contains three jaws and six straps with guards. Wt., 250.00 lbs.



Note: Four cylinder extensions (not pictured) are included. The included lifting eyes (not pictured) permit use of an overhead crane to raise entire assembly.

► Ordering Information

Order No.	Puller Jaw Tip			Min. Spread (in.)	Reach Min. Spread (in.)	Max. Spread (in.)	Reach Max. Spread (in.)	Overall Length * (in.)	Cyl. Stroke (in.)	Power Source Requirements (in.)	Prod. Wt. (lbs.)
	A (in.)	B (in.)	C (in.)								
PH553C	0.88	1.25	1.88	4.00	22.00	48.00	14.00	90.00	6.25	115 V, 60Hz, 25 Amp Cap.	749.00
PH553C13				4.00	15.00	48.00	7.00	90.00	13.25	115V, 60Hz, 25 Amp Cap.	776.00
PH553CL13				2.50	25.63	45.25	22.00	102.00	13.25	115V, 60Hz, 25 Amp Cap.	836.00
PH553C-230				4.00	22.00	48.00	14.00	90.00	6.25	230V, 50/60Hz, 15 Amp Cap.	749.00
PH553C13-230				4.00	15.00	48.00	7.00	90.00	13.25	230V, 50/60Hz, 15 Amp Cap.	776.00
PH553CL-230				2.50	32.63	45.25	29.00	102.00	6.25	230V, 50/60Hz, 15 Amp Cap.	809.00
PH553CL13-230				2.50	25.63	45.25	22.00	102.00	13.25	230V, 50/60Hz, 15 Amp Cap.	836.00

* Cart and Puller (cart width = 32.00")

Model Shown:

PH1002



An ideal puller for steel mills, mines, oil fields, utility projects, paper mills, construction sites, railroads, airline shops, shipyards or anywhere else where large equipment and machinery pose tough maintenance challenges.

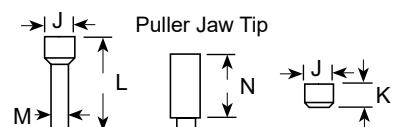
► Features

ENFORCER 100

- 1 Adjustable jaws mean they always pull on a flat surface. Retaining chain holds jaws in place during positioning.
- 2 Lock-Jaw™ feature means jaws grip progressively tighter as more pulling force is applied.
- 3 100 ton hydraulic cylinder is single-acting, spring return type with a maximum working pressure of 10,000 psi.
- 4 Lifting bracket allows puller to be lifted if the workpiece center is more than 36" off the floor.
- 5 Adjusting screw allows operator to move vertical position of the puller.
- 6 Spring loaded feature means Enforcer 100 will align itself on uneven pulls.
- 7 Hydraulic pump is a 2-stage, high pressure unit controlled by remote hand switch with 25 foot cord.
- 8 Tow bar provides puller with plenty of mobility.
- 9 Pushing adapters have a diameter of 4.13" and 2.50".



RAM EXTENSIONS

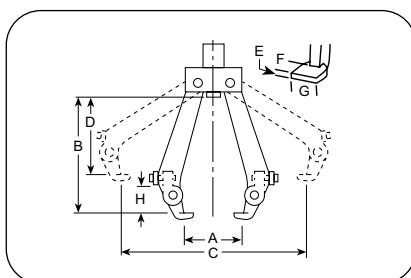


Order No.	Adapter Type	Amount included w/puller	J (in.)	K (in.)	L (in.)	M (in.)	N (in.)
44745	Push	1	4.13	—	13.50	2.50	—
44766	Ext.	4	4.13	—	—	—	8.00
303045	Push	1	4.13	3.50	—	—	—

“ENFORCER 100” UNIVERSAL PULLER

Order No.	Description									
PH1002	100 ton, 2-jaw universal hydraulic puller. Includes: 2-jaw Lock-Jaw™ puller, PE552S 2-speed electric/hydraulic power unit, C10010C 100 ton hydraulic cylinder with 10.25" stroke and six adapters. Wt., 890 lbs.									
PH1002J	100 ton, 2-jaw universal hydraulic puller. Includes: 2-jaw Lock-Jaw™ puller, but without hydraulic power unit., C10010C 100 ton hydraulic cylinder with 10.25" stroke and six adapters. Wt., 825 lbs.									
PE552S	Pump only. 1 1/8 hp, 115VAC, 50/60Hz, single-phase, draws 25 amps at full load. Also available in 220VAC, 50Hz.									

NOTE: For 220VAC, 50 Hz applications, order puller's Part No. PH1002-220



► Ordering Information

Order No.	Min. Spread	Reach Min. Spread	Max. Spread	Reach Max. Spread	Puller Jaw Tip			Max. Thick. Workpiece	Vertical Stroke Adjust.	Overall Length	Max. Thickness Workpiece	Wheel Dia.	Power Source Requirements
	A	B	C	D	E	F	G						
	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)						
PH1002	15.00	42.00	48.00	34.00	1.00	2.25	5.00	10.25	12 - 36	94	12	8	115VAC, 50/60Hz, 25 Amp Cap.
PH1002J													

Model Shown:
PR3100J,
PR3100S



Our roller bearing pullers are ideal for replacing tough, worn-out bearings on RR freight cars.



The photo above shows the Universal Puller in position on the roller bearing assembly, which is ready for removal.

► Features

UNIVERSAL RAILROAD AXLE JOURNAL ROLLER BEARING PULLER/INSTALLER.

- Quickly remove or install tapered roller bearings.
- With both sling and jack models available and two pumps to choose from, you can tailor the unit to match your needs.
- The industry standard in most wheel shops.
- Each unit will service a full line of bearings with rotating end caps, from class B thru GG.
- Designed with the cooperation of major bearing manufacturers.
- Fast, simple, one-person operation with 100-tons of pulling force provided.
- Completely portable for easy, convenient positioning and out-of-the-way storage.
- Each unit complete with a heavy-duty 100-ton hydraulic cylinder, 10,000 PSI pump with remote control solenoid valve, hydraulic pressure gauge (11543), a pulling shoe and installing tube.
- CSA certified (LR19814)

► PROTECTIVE BLANKETS



Power Team has protective blankets available which may afford protection from injury to users and others should part breakage occur.

For more information, see page 242.



► CAUTION

Power Team recommends the use of these blankets for all pushing, pulling, pressing, and lifting applications.

► Ordering Information

Order No.	Model Type	Cylinder Type	Valve Type	H.P.	Pump Information Phase	Voltage
PR2100J †	Jack	Double-Acting	Solenoid	2 **	1	115VAC or 230VAC *
PR3100J †	Jack	Double-Acting	Solenoid	3	3	230VAC or 460VAC *
PR2100S †	Sling	Double-Acting	Solenoid	2	1	115VAC or 230VAC *
PR3100S †	Sling	Double-Acting	Solenoid	3	3	230VAC or 460VAC *

* Prewired at factory for these voltages. Other voltages available upon request.

** The 2 hp, 115VAC requires 30 amp service.

† Equipped with hydraulic pressure gauge 11543.

► Tooling Ordering Information

IMPORTANT: This tooling chart applies only to standard AAR configurations for freight car applications. In order to provide adapters needed to service housing-type locomotive and passenger car bearings, as well as metric bearings, Power Team must be provided with the following information. Bearing manufacturer's name and general arrangement drawing number, size of bearing to be serviced, railroad name and location and part numbers of adapters already in your possession if you currently own a Puller/Installer.

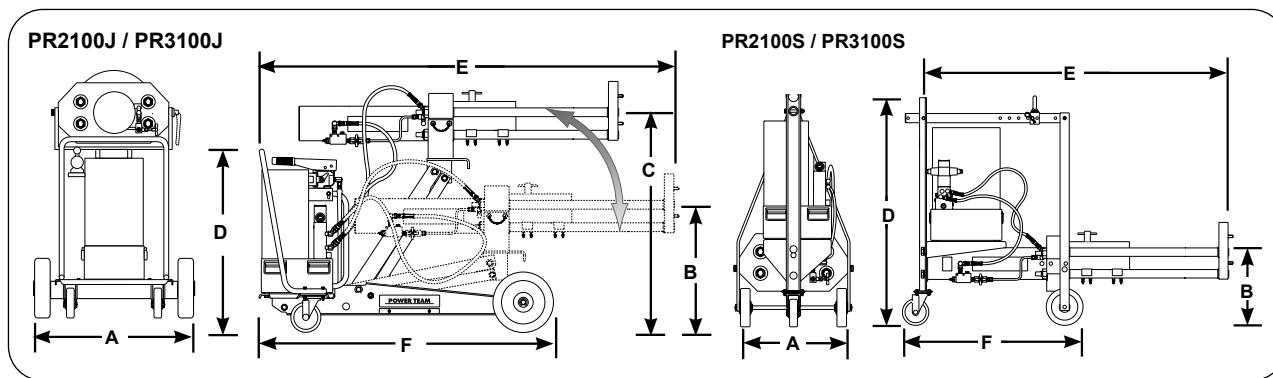
Tool Description	Class and size of bearing assembly - TBU & SP "Metric Tooling"			
	120	130	140	150
Pulling Shoe, Insert Adapter	351830	30512	30521	30520
Guide Tube & Cap Screw Assy.	253341	253342	253343	253344
Cap Screw *	253339	253394	253339	253395
Guide Tube Adapter	212247	21247	21247	21247
Installing Tube Adapter Ring	253335	253336	253337	253338

* Screws are supplied with the guide tube and should be ordered as replacements only.

Tool Description	Class and size of bearing assembly to be serviced									
	Class B 4.25" x 8"	Class C 5" x 9"	Class D 5.50" x 10"	Class E 6" x 11"	Class EE 5.50" Axle	Class EE 6" Axle	Class F 6.50" x 12"	Class G 7" x 12"	Class G 6.50" Axle	Class GG 6.50" Axle
Pulling Shoe	420845 is included as part of basic machine					Do No Order		420846	420846	420846
Pulling Shoe, Insert Adapter	30522	30512	30521	30520	30520	30519	30519	—	—	—
Guide Tube & Cap Screw Assy.	253313	253314	253317	253318	253316	253327	253320	253321	253319	253323
Cap Screw *	253156	253349	253308	253155	253307	253308	253310	253326	253309	253309
Guide Tube, No Adapter	23934	21248	21248	21247	21247	21247	21247	21247	21247	21247
Installing Tube	30416 is included as part of basic machine					Do No Order		30417	30417	30417
Installing Tube Adapter Ring	21242	21258	21256-1	21255-1	21255-1	21257-1	21257-1	30586	30585	30585

* Screws are supplied with the guide tube and should be ordered as replacements only.

NOTE: Adapters listed above are for servicing the following roller bearing assemblies: Bremco "Crown-Taper", New Departure-Hyatt "Hy-Roll Taper", SKF "Expediter" and Timken "AP".



► Technical Dimensions

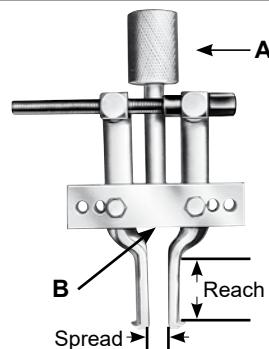
Order No.	A	B	C	D	E	F	Stroke	Capacity		Advance	Speed		Weight
	(in.)	Pull (tons)	Inst. (tons)	(in./min.)	Pull (in./min.)	Inst. (in./min.)	(lbs.)						
PR2100J	32.00	15.06	41.69	36.91	78.00	58.75	4.00	100.00	40.00	14.00	90.00	6.25	749.00
PR3100J	32.00	15.06	41.69	36.91	78.00	58.75	4.00	100.00	40.00	7.00	90.00	13.25	776.00
PR2100S	24.38	11.00	—	50.50	64.25	38.75	2.50	100.00	40.00	22.00	102.00	13.25	836.00
PR3100S	24.38	11.00	—	50.50	64.25	38.75	4.00	100.00	40.00	14.00	90.00	6.25	749.00

Model Shown:
1166

► Features

RECOMMENDED FOR THE REMOVAL OF
BEARINGS, BEARING CUPS, BUSHINGS AND
OIL SEALS.

- Handles internal pulling jobs, such as, bearing/bearing cup removal, bushing removal, oil seals, etc.
- Remove hard to get at parts easily and without damage!
- Use with corresponding Power Team Slide Hammer or Bi-Directional™ Puller
- Adjustable jaws fit various diameters
- Meets Fed. Spec.: GGG-P-00781-D



CAUTION

These attachments may not withstand the full tonnage of the pullers they are used with. The shape and condition of the part being pulled affects the tonnage at which the jaws may slip off. Always select the largest attachment which will fit behind the part being pulled.

► Ordering Information

Order No.	Jaw		A (in.)	B (in.)	Weight (lbs.)	Application
	Spread (in.)	Reach (in.)				
1153	1.50 - 5.00	2.13	1 - 14	5/8 - 18	4.25	Use with 927 and 938 Bi-Directional™ Puller,
1150	1.50 - 6.00	4.00	1 - 14	5/8 - 18	4.25	
1151	1.50 - 7.00	5.25	1 - 14	5/8 - 18	4.50	
1152	1.50 - 6.00	4.00	—	5/8 - 18	3.50	
1154	1.50 - 6.00	4.00	1 - 8	5/8 - 18	4.50	Use with PPH17.
1165	3.00 - 9.00	5.88	1 1/2 - 12	1 - 14	13.50	Use with 939 Bi-Directional™ Puller.
1166	3.00 - 9.00	5.88	1 1/4 - 7	1 - 14	13.50	Use with PPH30.

Order No.	Length (in.)	Puller Screws Threads (in. - thd.)	Weight (lbs.)	Application
24832	13.75" long	5/8 - 18	1 lb.	Use with 1150, 1151, 1152, and 1153. Acts as a regular forcing screw when threaded directly into block of pulling attachment.
24833	5.50" long	5/8 - 18	6 oz.	Use with 1150, 1152, and 1153. Acts as a regular forcing screw when threaded directly into block of pulling attachment.

Model Shown:

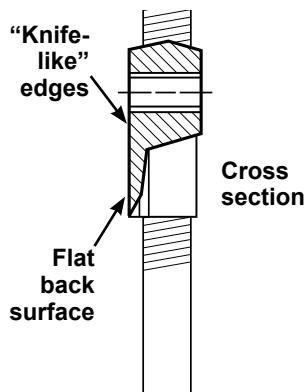
1122



► Features

USED WHERE SPACE DOES NOT PERMIT,
HOOKING PULLER JAWS DIRECTLY ON PART
TO BE PULLED.

- "Knife-like" edges fit behind bearings and other hard-to-grip parts for easy removal, even where clearance is limited.
- Usable with both Lock-Jaw™ pullers and Bi-Directional™.
- All puller blocks are made from forged alloy steel
- Meets Fed. Spec.: GGG-P-00781-D



PULLING ATTACHMENT ACCESSORY

Order No.	Description
1128	"Knife-like" edges of attachment fit behind bearings or other parts for easy removal with "Enforcer 55", even if space does not permit hooking puller jaws directly to part being pulled. Spread: 5.00" to 12.88". Wt., 100 lbs.

► Ordering Information

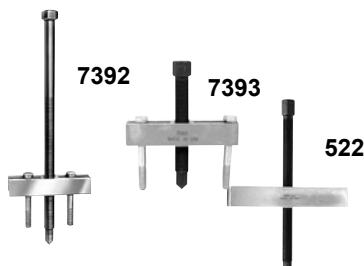
Order No.	Spread		A (in.)	B (in.)	Weight (lbs.)	Application
	Max. (in.)	Min. (in.)				
1121	0.94	0.25	5/16 - 18	1.69	0.75	1020, 1022, and 1023.
1122	2.00	0.13	3/8 - 16	2.44	1.25	1024, 1025, 1026, 1027, 7392 and 7393.
1123	4.63	0.50	5/8 - 18	4.38	5.00	1035, 1036, 1037, 1038, and 927.
1124	5.75	0.50	5/8 - 18	6.00	12.00	1035, 1040, 1041, 1042, PPH17, and 938.
1126	8.00	0.63	1 - 14	7.50	19.75	1043, and 939.
1127	13.38	0.75	1 - 14	10.25	41.75	939, PH302, and PPH30.
1128	12.88	5.00	1 3/4 - 12	13.00	100.00	PH302*, PH502*, PH553C, and PPH50. (When using 1128 with PPH50, two 8024 adapter are required to connect PPH50 to the puller tees).
1130	9.00	0.50	5/8 - 18	6.00	12.56	1035, 1040, 1041, 1042, PH172, PPH17, and 938.

V-BELT PULLEY PULLING ATTACHMENTS

Order No.	Spread		A (in.)	B (in.)	Weight (lbs.)	Application
	Max. (in.)	Min. (in.)				
679	7.88	1.75	5/8 - 18	6.00	4.25	1035, 1036, 1037, 1038, and 927.
680	10.00	1.63	5/8 - 18	10.06	22.25	1039, 1040, 1041, 1042, PH172, PPH30* and 938. (When using 680 with PPH30, two 8012 adapters are required).

* Indicates discontinued puller model.

GEAR AND PULLEY PULLERS



Ideal for pulling many small parts having tapped holes. The 7392 and 7393 may be used with the 1122 pulling attachment to remove bearings, etc. Pullers include two hex head cap screws, 3/8" – 16 NC x 3.00" long. Spread: 1.50" – 4.25". Width of puller block is 4.88". Cap screws are not included with the 522, but any cap screws up to 1/2" diameter may be used. The 522 spread, when used with 1/2" dia. cap screws, is 2"–7 3/4". Width of the 522 puller block is 8.25".

Order No.	Description
7392	Puller with 5/8"-18 x 13.00" long screw. Wt., 2.00 lbs.
7393	Puller with 5/8"-18 x 5.50" long screw. Wt., 1.50 lbs.
522	Puller with 3/4"-16 x 1.63" long screw. Wt., 4.30 lbs.

4-IN-1 PULLER SET



You can quickly assemble a 2 or 3-jaw puller with standard or long reach jaws.

Order No.	Description
PA7	Four-In-One puller set, 7 ton capacity. Standard jaw max. reach is 5.00". Maximum spread is 10.50". Long jaw maximum reach is 8.75". Maximum spread is 11.00". Wt., 10.80 lbs.

FLANGE TYPE PULLER



Slotted holes in puller body permit cap screws to be positioned to handle bolt-circle diameters from 1.50" – 4.63".

Order No.	Description
518	Flange type puller, includes 3 cap screws, 3/8" – 24 NF x 3.00" long and 3 cap screws 3/8" – 16 NC x 3.00" long. Forcing screw is 5/8" - 18 x 5.00" long. Wt., 3.40 lbs.

METRIC ADAPTERS



Add metric capability to the Bi-Directional™ Puller legs or forcing screws! Four separate metric kits available with a variety of sizes for the Bi-Directional™ legs or forcing screws! Each packaged in a convenient plastic organizer case.

Order No.	Description		
8110	Male Metric.	Wt., 3.00 lbs.	
8120	Male Metric.	Wt., 3.00 lbs.	

CONTENTS OF 8110 SET

Order No.	Female End (in.)	Male End (in.)	Length (in.)
8111	5/8" - 18	M6 x 1.00	2.25
8112	5/8" - 18	M8 x 1.00	2.25
8113	5/8" - 18	M8 x 1.25	2.25
8114	5/8" - 18	M10 x 1.25	2.25
8115	5/8" - 18	M10 x 1.50	2.25
8116	5/8" - 18	M12 x 1.25	2.25
8117	5/8" - 18	M12 x 1.75	2.00

CONTENTS OF 8120 SET

Order No.	Female End (in.)	Male End (in.)	Length (in.)
8121	5/8" - 18	M14 x 1.50	2.25
8122	5/8" - 18	M14 x 2.00	2.25
8123	5/8" - 18	M16 x 1.50	2.75
8124	5/8" - 18	M16 x 2.00	2.75
8125	5/8" - 18	M20 x 1.50	2.75
8126	5/8" - 18	M20 x 2.50	2.75

FEMALE THREADED ADAPTERS



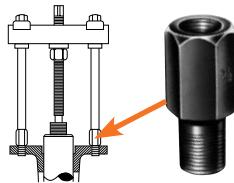
Use these adapters on the ends of Bi-Directional™ Puller forcing screws, legs, or slide hammers in the removal and installation of shafts, axles, and housings.

Order No.	Description				
8044	Set No. 8044 – consists of a set of 6 adapters (8037-8042).				
Order No.	Female End "A" (in.)	Female End "B" (in.)	Order No.	Female End "A" (in.)	Female End "B" (in.)
8035 *	1/2" - 20	5/8" - 18	8040	5/8" - 18	1" x 14
8036 *	1" - 14	1" x 14	8041	5/8" - 18	1 1/8" - 12
8037	5/8" - 18	5/8" - 18	8042	5/8" - 18	1 1/4" - 12
8038	5/8" - 18	3/4" - 16	8043 *	5/8" - 18	1 1/2" - 12
8039	5/8" - 18	7/8" - 14			

* Not included in set No. 8044. Order separately.

NOTE: All adapters available separately.

MALE-FEMALE THREADED ADAPTERS



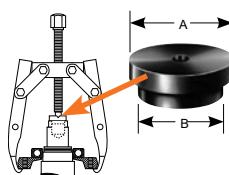
These adapters are used on ends of Bi-Directional™ Puller legs, with forcing screws or slide hammers to assist in pulling shafts, bearing caps, pinions, and many other parts.

Order No.	Female End (in.)	Male End (in.)	Length (in.)
8000	5/8" - 18	1/4" - 20	2.25
8001	5/8" - 18	5/16" - 18	2.25
8002	5/8" - 18	7/16" - 14	2.25
8003	5/8" - 18	7/16" - 20	2.25
8004	5/8" - 18	3/8" - 24	2.25
8005	5/8" - 18	3/8" - 16	2.25
8006	5/8" - 18	1/2" - 20	2.25
8007	5/8" - 18	1/2" - 13	2.25
8008	5/8" - 18	9/16" - 18	2.25
8009	5/8" - 18	9/16" - 12	2.25
8010	5/8" - 18	5/8" - 11	2.25
8011	1" - 14	5/8" - 11	2.50
8012	1" - 14	5/8" - 18	3.19
8013	5/8" - 18	3/4" - 16	2.25
8014	1" - 14	3/4" - 16	2.50

Order No.	Female End (in.)	Male End (in.)	Length (in.)
8015	5/8" - 18	3/4" - 10	2.25
8016	1" - 14	3/4" - 10	2.50
8017	5/8" - 18	7/8" - 14	2.25
8018	5/8" - 18	7/8" - 9	2.25
8019	5/8" - 18	1" - 14	2.25
8020	1" - 8	5/8" - 18	3.00
8021	1" - 8	1" - 4	3.00
8022	5/8" - 18	1/8" pipe	2.25
8023	1 1/4" - 12	1" - 14	4.50
8024	1 1/4" - 12	1 3/4" - 12	4.50
8025	1 1/4" - 7	5/8" - 18	4.00
8027	1 1/4" - 7	1" - 14	4.00
8028	1 5/8" - 5 1/2	1" - 8	4.00
8029	1 5/8" - 5 1/2	1" - 14	4.00

NOTE: Nos. 8000 - 8029 - each sold individually.

STEP PLATE ADAPTER SETS



Power Team step plate adapters are necessary for pulling and installing bearings, gears, or other parts on hollow shafts or housings. Puller screw forces against step plate adapter, as shown at right. May be used with Power Team jaw-type pullers, Bi-Directional™ Pullers and shop presses.

Order No.	Description	
8075	Set of 11 adapters (8057-8067).	
8076	Set of 6 adapters (8068-8073).	

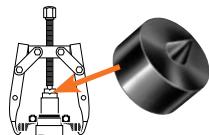
CONTENTS OF 8075 SET

Order No.	Dia. "A" (in.)	Dia. "B" (in.)	Order No.	Dia. "A" (in.)	Dia. "B" (in.)
8057	1.00	0.75	8063	1.88	1.63
8058	1.13	0.88	8064	2.00	1.63
8059	1.25	1.00	8065	2.13	1.75
8060	1.38	1.13	8066	2.38	1.88
8061	1.63	1.25	8067	2.50	2.00
8062	1.75	1.38			

CONTENTS OF 8076 SET

Order No.	Dia. "A" (in.)	Dia. "B" (in.)
8068	2.63	2.13
8069	2.75	2.25
8070	2.88	2.75
8071	3.00	2.50
8072	3.25	2.75
8073	3.50	3.00

SHAFT PROTECTOR SET



Power Team shaft protectors are designed to protect shaft centers from distortion when extreme pressures are applied with jaw-type pullers or Bi-Directional™ Pullers. Shaft protectors are inserted between the end of the puller screw and the shaft.

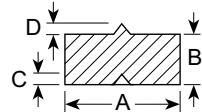
Order No.	Description	
8056	Set of 6 shaft protectors (8050 thru 8055).	

CONTENTS OF 8056 SET

Order No.	Dia. "A" (in.)	Dia. "B" (in.)	"C" (60°) (in.)	"D" (60°) (in.)
8050	1.50	0.75	0.38	0.44
8051	1.25	0.75	0.38	0.38
8052	1.00	0.75	0.38	0.31

CONTENTS OF 8056 SET

Order No.	Dia. "A" (in.)	Dia. "B" (in.)	"C" (60°) (in.)	"D" (60°) (in.)
8053	0.75	0.75	0.25	0.25
8054	0.63	0.63	0.25	0.25
8055	0.63	0.63	0.19	0.19



CAUTION: All the items shown may not withstand the full tonnage of the pullers they may be used with.