

# GENERAL PURPOSE TOOLS

## Drivers & Filter Wrench

### “Custom-made” Driver Tools

Now you can have the proper-size driver for nearly any automotive seal, bearing, or bushing installation job. These sets include discs and handles, spacers and drivers.

- Discs range from 1/2" to 4-1/2" in diameter, in 1/16" increments.

**No. 27793** – Starter set. Includes a handle and discs (5/8" to 2" diameter) specially selected to provide the driver sizes usually needed in automotive service. Includes plastic storage box. Wt., 4 lbs., 2 oz.

**No. 27794** – Basic set. Includes two handle sizes and 41 discs, ranging from 1/2" to 3" diameter along with plastic storage box and insert. Wt., 22 lbs., 13 oz.

**No. 27795** – Big-job set for servicing large components. Includes a handle and 24 discs, ranging from 3-1/16" to 4-1/2" diameter. Wt., 48 lbs., 3 oz.

**No. 27796** – Intermediate set. Includes a handle and 25 discs, ranging from 2" to 3-1/2" diameter. Wt., 27 lbs., 7 oz.

**No. 27797** – Master set. Includes three handle sizes and 65 discs, ranging from 1/2" to 4-1/2" diameter. Wt., 80 lbs.

**No. 27810** – Tool organizer board for holding all components in No. 27797 master set. Wt., 6 lbs., 13 oz.

No.	Description	No.	Description	No.	Description
10012*	Cap Screw	27507*	Disc, 1-1/2" dia.	27532	Disc, 3-1/16" dia.
10020*	Cap Screw	27508	Disc, 1-9/16" dia.	27533	Disc, 3-1/8" dia.
10854*	Cap Screw	27509*	Disc, 1-5/8" dia.	27534	Disc, 3-3/16" dia.
10855*	Cap Screw	27510	Disc, 1-11/16" dia.	27535	Disc, 3-1/4" dia.
12001*	Cap Screw	27511*	Disc, 1-3/4" dia.	27536	Disc, 3-5/16" dia.
27487*	Small Handle	27512	Disc, 1-13/16" dia.	27537	Disc, 3-3/8" dia.
27488	Medium Handle	27513*	Disc, 1-7/8" dia.	27538	Disc, 3-7/16" dia.
27489	Large Handle	27514	Disc, 1-15/16" dia.	27539	Disc, 3-1/2" dia.
27490	Extension Tube	27515*	Disc, 2" dia.	27540	Disc, 3-9/16" dia.
27491	Disc, 1/2" dia.	27516	Disc, 2-1/16" dia.	27541	Disc, 3-5/8" dia.
27492	Disc, 9/16" dia.	27517	Disc, 2-1/8" dia.	27542	Disc, 3-11/16" dia.
27493*	Disc, 5/8" dia.	27518	Disc, 2-3/16" dia.	27543	Disc, 3-3/4" dia.
27494	Disc, 11/16" dia.	27519	Disc, 2-1/4" dia.	27544	Disc, 3-13/16" dia.
27495*	Disc, 3/4" dia.	27520	Disc, 25/16" dia.	27545	Disc, 3-7/8" dia.
27496	Disc, 13/16" dia.	27521	Disc, 2-3/8" dia.	27546	Disc, 3-15/16" dia.
27497*	Disc, 7/8" dia.	27522	Disc, 2-7/16" dia.	27547	Disc, 4" dia.
27498	Disc, 15/16" dia.	27523	Disc, 2-1/2" dia.	27548	Disc, 4-1/16" dia.
27499*	Disc, 1" dia.	27524	Disc, 2-9/16" dia.	27549	Disc, 4-1/8" dia.
27500	Disc, 1-1/16" dia.	27525	Disc, 2-5/8" dia.	27550	Disc, 4-3/16" dia.
27501*	Disc, 1-1/8" dia.	27526	Disc, 2-11/16" dia.	27551	Disc, 4-1/4" dia.
27502	Disc, 1-3/16" dia.	27527	Disc, 2-3/4" dia.	27552	Disc, 4-5/16" dia.
27503*	Disc, 1-1/4" dia.	27528	Disc, 2-13/16" dia.	27553	Disc, 4-3/8" dia.
27504	Disc, 1-5/16" dia.	27529	Disc, 2-7/8" dia.	27554	Disc, 4-7/16" dia.
27505*	Disc, 1-3/8" dia.	27530	Disc, 2-15/16" dia.	27555	Disc, 4-1/2" dia.
27506	Disc, 1-7/16" dia.	27531	Disc, 3" dia.	7350*	Allen Wrench

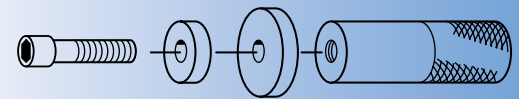
NOTE: All discs are 1/2" thick. \* Included in set No. 27793.



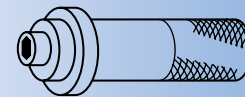
**Starter Set  
No. 27793**

It's this easy...

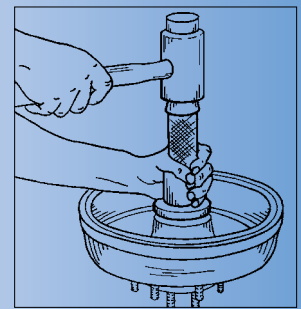
1. Select the proper size components...



2. Assemble your driver tool...



3. Perform the job easily.



### GM Oil Filter Wrench

Applications: 1999–2002 Olds Intrigue and 2001–2002 Olds Aurora with 3.5L V6 engine.

- This is a required tool to remove the oil filter cap from the oil pan to access the filter cartridge.

**No. 6901** – GM oil filter wrench (74mm, 15 flutes). Wt., 9 oz.

Similar to  
Kent-Moore  
No. J-29142.



6901

# GENERAL PURPOSE TOOLS

## Filter Sockets and Wrenches



6903

### Ford/Mazda 2.3L Oil Socket

- Oil socket designed at 76.5 mm to fit new 2.3L 4-cylinder engines.
- Works on Mazda 3, Mazda 5, Mazda 6, Ford Fusion, & Mercury Milan 2.3L 4-cylinder engines.

**No. 6903** – Ford/Mazda 2.3L oil socket. Wt., 4 oz.

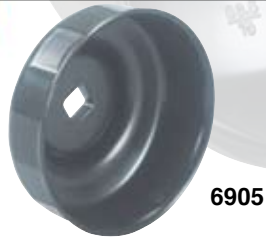


6904

### Hyundai / Kia 3.3L V6 Oil Socket

- Works on 2006 Hyundai Sonata 3.3L V6 engine and soon to be released new models of Hyundai and Kia.
- Oil socket designed at 88.22mm to fit new 3.3L 6-cylinder engines.

**No. 6904** – Hyundai / Kia 3.3L V6 oil socket. Wt., 4 oz.



6905

### Subaru Oil Filter Socket

- Works on 2003–newer Subaru vehicles having the 2.5L, 4-cylinder, turbo engine.
- Socket fits between the exhaust manifold and the oil filter for easy removal and installation of the filter.

**No. 6905** – Subaru oil filter socket. Wt., 4 oz.



6784

### Euro/GM Oil Socket Kit

Popular oil filter wrenches for the GM, BMW, Audi, and VW. High quality, 3/8" drive, forged sockets designed to last a lifetime.

3-piece oil socket kit contains:

- 27 mm socket for the Cadillac STS 3.2L V6 and the Mercedes-Benz 1.8L I4.
- 32 mm socket for the 2.2L GM Ecotec and Saabs.
- 36 mm for the BMW M52, M60, M62, M70, & M73 engines; M-B OM604, 605, & 606 engines; VW/Audi VR6 engine.

**No. 6784** – Euro/GM oil socket kit. Wt., 1 lbs., 5 oz.



4555

### Heavy-Duty Oil Filter Wrenches

- Fit filters ranging from 4-1/8" to 5-21/32" (104 mm to 144 mm) in diameter.
- Feature a 1-1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.
- Use with a 1/2" drive ratchet or breaker bar.

**No. 4555** – Heavy-duty oil filter wrench. Fits filters ranging from 4-1/8" to 4-21/32" (104 mm to 118 mm) in diameter. Wt., 1 lb., 6 oz.

**No. 4556** – Heavy-duty oil filter wrench. Fits filters ranging from 4-21/32" to 5-5/32" (118 mm to 131 mm) in diameter. Wt., 1 lb., 6 oz.

**No. 4557** – Heavy-duty oil filter wrench. Fits filters ranging from 5-5/32" to 5-21/32" (131 mm to 144 mm) in diameter. Wt., 1 lb. 7 oz.



4556



4557

### Swivel Handle Oil Filter Wrenches

- Fit filters ranging from 2-7/8" to 4-3/8" (73 mm to 111 mm) in diameter.
- Feature a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.

**No. 4565** – Swivel handle oil filter wrench. Fits filters ranging from 2-7/8" to 3-3/8" (73 mm to 85 mm) in diameter. Wt., 13 oz.

**No. 4566** – Swivel handle oil filter wrench. Fits filters ranging from 3-3/8" to 3-3/4" (85 mm to 95 mm) in diameter. Wt., 13 oz.

**No. 4567** – Swivel handle oil filter wrench. Fits filters ranging from 3-3/4" to 4-3/8" (95 mm to 111 mm) in diameter. Wt., 13 oz.



### Adjustable Oil Filter Pliers

- Forged jaws with sure-grip teeth grab the filter for easy removal.
- Slip-joint ratchet and lock mechanism allows a secure grip on filter diameters of 2-1/4" to 7" (57 mm to 178 mm).

**No. 4560** – Small adjustable oil filter pliers. Pliers is 13-1/2" long; fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter. Wt., 1 lb., 3 oz.

**No. 4561** – Large adjustable oil filter pliers. Pliers is 18" long; fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter. Wt., 3 lbs., 4 oz.

**No. 4562** – Adjustable oil filter pliers set. Includes small pliers: 13-1/2" long and fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter. Large pliers: 18" long and fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter. Wt., 4 lbs., 7 oz.



### 3-Leg Oil Filter Wrench

- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
- To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
- Knurled legs provide extra gripping power.

**No. 4568** – 3-Leg oil filter wrench. Wt., 1 lb., 6 oz.



### Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. In fact, the more leverage applied, the tighter it grips.

- Accommodates a 3/8" drive ratchet.

**No. 7062A** – Universal filter wrench. Wt., 10 oz.

Similar to Ford  
No. D79L-6731-A





# GENERAL PURPOSE TOOLS

## Strap & Chain Wrenches



### Grooved Pulley Strap Wrench

- Use to hold a grooved pulley when servicing alternators, water pumps, power steering pumps, etc. Also may be used to rotate the camshaft or crankshaft for engine service.
- Holds tighter than a standard strap wrench.

**No. 4475** – Grooved pulley strap wrench. Wt., 10 oz.



### Multipurpose Strap Wrench

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. It's especially useful on small engine pulleys. Special head design self-tightens the strap as force is applied.

- Lightweight, with 12" long handle.

**No. 7206** – Strap wrench. Wt., 1 lb.

**No. 305085** – Replacement strap. Wt., 1 oz.



### Ratcheting Chain Wrench – 12"

- Works on many different-shaped objects, such as square, round, hexagon, oval, etc.
- Handle is 12" long; chain grips objects ranging from 1/2" to 4-1/2" O.D.

**No. 6968** – Ratcheting chain wrench – 12". Wt., 2 lb., 8 oz.

**No. 516941** – Replacement chain for 6968. Wt., 10 oz.



### Ratcheting Chain Wrench – 24"

- Ratcheting action makes it possible to re-grip without removing wrench.
- Handles parts of most any shape... round, square, hexagon, or octagon.
- Handle is 24" long; chain grips objects ranging from 3" to 6-1/2" O.D.

**No. 6969** – Ratcheting chain wrench – 24".

Wt., 4 lb., 8 oz.

**No. 516942** – Replacement chain for 6969. Wt., 13 oz.



### Ratcheting Chain Wrenches

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

**No. 7400** – Chain wrench, 13" handle with capacity from 1/2" to 4-3/4" O.D.

Wt., 2 lbs., 5 oz.

**No. 7401** – Chain wrench, 19" handle with capacity from 3" to 6-3/4" O.D.

Wt., 5 lbs., 3 oz.

**No. 209199** – Replacement chain for 7400.

Wt., 12 oz.

**No. 209200** – Replacement chain for 7401.

Wt., 1 lb., 13 oz.



### Body and Fender Dent Puller

Often, the biggest time-consuming part of dent removal is the removal and installation of interior panels and upholstery. This tool eliminates those steps. Simply drill a hole at the base of the dent and thread in the tool's self-tapping screw. A few sharp blows of the slide hammer will pull the dent out.

- Puller is 17" long with Pyralin handle grip.
- Replaceable self-tapping screw. Instructions included.

**No. 898A** – Body and fender dent puller. Wt., 2 lbs., 8 oz.

**No. 104427** – Replacement screw. Wt., 2 oz.



### Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

**No. 4508** – Professional style seal puller. Wt., 1 lb.

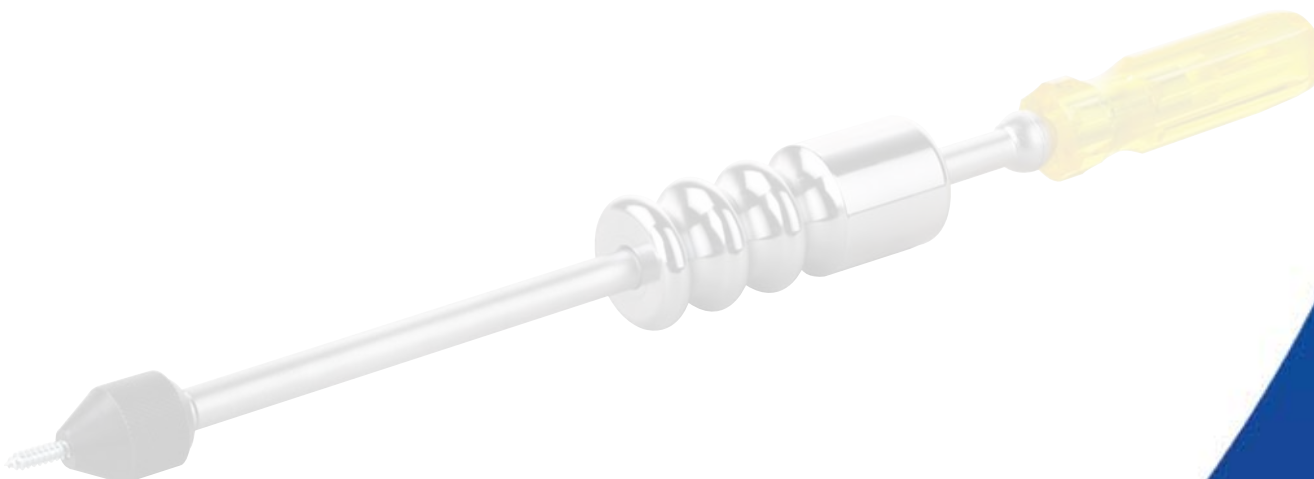
**No. 4508-1** – Replacement blade for 4508. Wt., 4 oz.



### Mechanic's Stethoscope

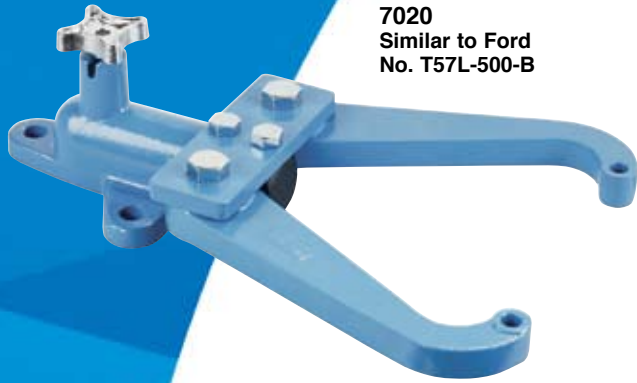
- Quick and accurate way to locate vehicle noise.
- Spring diaphragm on end of hose amplifies noise.
- Includes two hose ends: long rod helps pinpoint noises in hard-to-access areas; short adapter helps locate noise in a broader area of the vehicle.

**No. 4491** – Mechanic's stethoscope. Wt., 8 oz.



# GENERAL PURPOSE TOOLS

## Holding Fixture



**7020**  
Similar to Ford  
No. T57L-500-B

### Bench-Mounted Holding Fixture

Here's a helpful device that enables you to securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

**No. 7020** – Bench fixture.

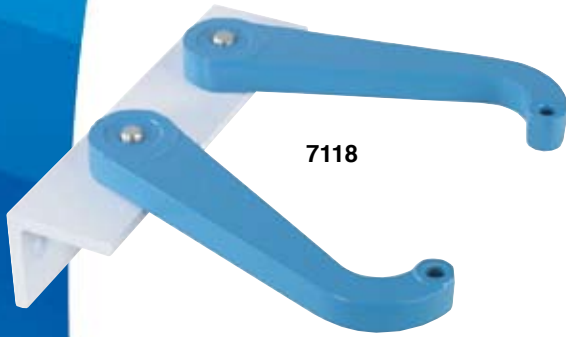
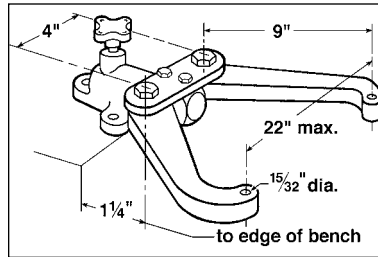
Wt., 10 lbs., 13 oz.

**No. 34607** – Base assembly only.

Wt., 2 lbs., 8 oz.



**34607**  
Similar to Ford  
No. D83L-500-B1



**7118**

### Transmission Adapter Kit

Converts your OTC engine stand into a transmission service stand.

- Kit replaces the adjustable arms of the stand to hold and position the transmission at workbench height for repair.
- The transmission is held with three sides fully exposed for working convenience, and can be rotated a full 360° for complete access to all parts.
- Comes complete with mounting hardware. Adapter is for use on No. 1726 and No. 1735 engine stands.

**No. 7118** – Transmission adapter kit.

Wt., 10 lbs., 5 oz.



### Quick Finder Index...

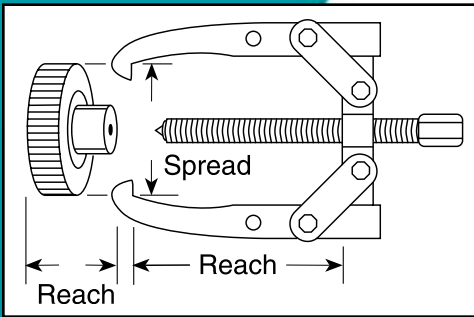
Puller “How-to” Information . . . . .	206–207
Puller Safety Tips . . . . .	207
Protective Blankets . . . . .	207
Mechanical “Grip-O-Matic” Pullers . . . . .	208
Hydraulic “Grip-O-Matic” Pullers . . . . .	209
Mechanical Push-Pullers . . . . .	209
Hydraulic Push-Pullers . . . . .	210
Pulling Attachments . . . . .	211
Puller Adapters . . . . .	211–212
Slide Hammer Pullers . . . . .	213–214
Bearing Pullers . . . . .	214–215
Puller Sets . . . . .	215–222





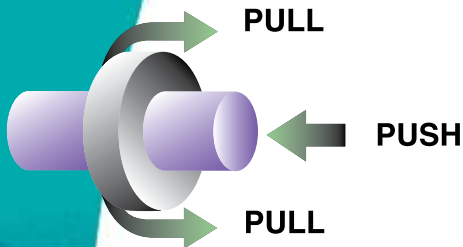
# PULLERS

## Selecting the "Right" Puller



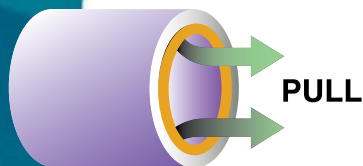
**General Rule of Thumb:** Manual pullers require that the puller screw be at least half as large (in diameter) as the shaft of the pulling job.

Hydraulic pullers need the maximum force exerted in tons to be 7–10 times the diameter of the shaft in inches.



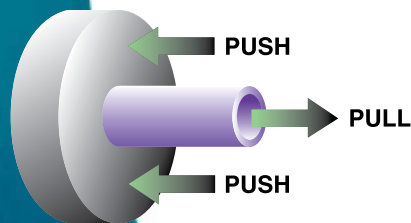
### 1 Pulling something off a shaft.

Removing a gear, bearing, wheel, pulley, etc., to replace it or get at another part.



### 2 Pulling something out of a hole.

Internal bearing cups, retainers, or oil seals are usually press-fitted and are difficult to remove.



### 3 Pulling a shaft out of something.

A transmission shaft or pinion shaft is often hard to remove from a bore or housing. Use a Push-Puller with adapters if you can "get ahold of" the threaded end of the shaft. Sometimes it's possible to push a shaft through a housing, rather than pull it out. In applications of this type, the puller legs must be securely fastened to the housing and the screw may simply bear against the shaft.

## You can solve the 3 basic pulling problems...

The first thing you have to do is identify exactly what your particular pulling problem is. Once you recognize the problem, you can go on to select the right tool to solve it.

## 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? Is a combination of puller types required?

**2: Determine the "REACH" needed.** The puller you select must have a "reach" equal to or larger than the corresponding sizes of the part.

**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 correct "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.

### The tools to use when pulling something off a shaft:

**Jaw-type puller**, either manual or hydraulic. (For extra force and convenience use a hydraulic puller.) Both are available in 2- or 3-jaw versions and are used to grip the outer circumference of an attachment.

**Bearing pulling attachment.** Provides "knife-like" edges to get behind the component, or when there isn't a good gripping area on the part to be pulled.

**Push-Puller®** with attachments. External-internal adapters can thread directly into tapped holes on a component. The splitter gets behind the component to prevent damage to the part.

**Slide hammer** puller with selected attachments for multiple light-duty pulling tasks.

A variety of OTC **adapters** can be used to protect a shaft, bridge a hole, thread into tapped holes, or assist installation.

### The tools to use when pulling something out of a hole:

**Internal pulling attachments** have narrow jaws which extend through the center of the part to be pulled. They provide a straight pull and avoid damage to housings. Designed for use with Push-Pullers or slide hammer pullers.

**Push-Puller** in combination with internal pulling attachment. Both mechanical and hydraulically powered versions are available.

Here a **slide hammer puller** is combined with an internal pulling attachment. Ideal for removing parts from blind holes, especially when there is no housing to brace puller legs against.

When there is a shaft to bear against, a **forcing screw** of the correct size may be used in combination with an internal pulling attachment.

### The tools to use when pulling a shaft out of something:

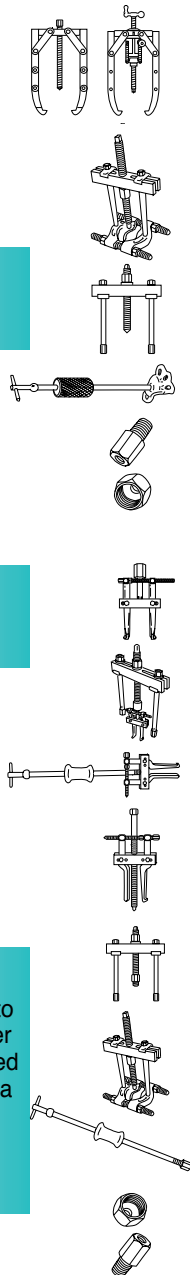
**Push-Puller®** with threaded adapter. Use a mechanical or hydraulic puller, depending on the size of the shaft to be pulled.

When the housing lacks sufficient surface for the puller legs to bear against, a **pulling attachment** may be used to provide support.

**Slide hammer** puller with threaded adapter – either external-internal or internal can be used.

**Internal adapters** are fastened to the external threaded end of the shaft to pull while pushing against the housing.

**External-internal adapters** are threaded into the shaft to pull it while pushing against the housing.



Your pulling system exerts tons of force. You must respect this force, and observe safety precautions at all times.

### **Caution**

It is impossible to predict the exact force required for every pulling job: setup requirements and the size, shape, and condition of the parts being pulled vary a great deal. In addition, the OTC Pulling System is so versatile, it is possible that components in a pulling setup may have different tonnage ratings. The lowest “capacity” component, then, determines the capacity of the setup. For example: When an accessory with a 1-ton capacity is used with a 10-ton capacity puller, the setup can be used only at a force of one ton.

These tools should be used only by trained personnel familiar with them. Always wear eye protection during a job, since work parts, or the pulling tool itself, may break and parts may fly. It is recommended to cover the work with an OTC Protective Blanket or use a shield while force is being applied.

If you are at all unsure which tool or attachment to select, contact Technical Services.

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## A Few Easy Tips to Remember

### **Wear safety glasses at all times!**

You have only one set of eyes, so protect them from possible flying parts.

### **Keep your pulling tools in shape!**

Clean and lubricate the puller’s forcing screw frequently, from threads to tip, to ensure long service life and correct operation.

### **Cover work with a protective blanket!**

With high forces being exerted on the part being pulled, breakage may sometimes result. By covering the work with a protective blanket, the user reduces the danger of flying parts.

### **Apply force gradually!**

The component should give a little at a time. Do not try to speed up removal by using an impact wrench on the puller screw.

### **Use the right size puller!**

If you have applied maximum force and the part has not moved, go to a larger capacity puller. Resist sledging.

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## Protective Blankets

Think of them as “security blankets.” They wrap around pulling, pressing, and other high-force jobs to protect you and your employees from work-related injuries as much as possible. They’re made of high tensile, tear resistant ballistic nylon – similar to military flak jackets – that, when tested, withstood the shattering of a neck-down grade 8 bolt without any visible damage.

**NOTE:** Always reduce the force from the workpiece prior to removing the blanket. Protective blankets may afford protection from injuries to users and others should part breakage occur. Because of the variety of situations that require guarding, it is the user’s responsibility to determine the best method of protection.

**No. 1230PB** – Protective blanket. 12" x 30". Wt., 2 lbs., 3 oz.

**No. 2036PB** – Protective blanket. 20" x 36". Wt., 3 lbs.

**No. 2860PB** – Protective blanket. 28" x 60". Wt., 7 lbs.



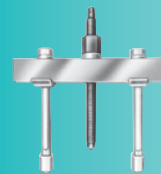
### **Grip-O-Matic pullers**

#### **Align puller legs and jaws.**

Be sure the setup is rigid and the puller is square with the work.

#### **Mount puller so grip is tight!**

Tighten the adjusting strap bolts when using a jaw-type puller.



### **Push-Pullers**

#### **Do not couple puller legs!**

The tonnage capacity of a Push-Puller is reduced when longer-than-standard legs are used, or when legs are in compression. The chance of breaking, bending, or misaligning legs increases. Always use the shortest legs possible to do the job.



### **Bearing pulling attachments**

These attachments may not withstand the full tonnage of the pullers with which they are used. The shape and condition of the part being pulled affects the tonnage at which the puller blocks and/or studs may bend or break. Always select the largest attachment that will fit the part to be pulled.



**1230PB**

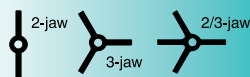
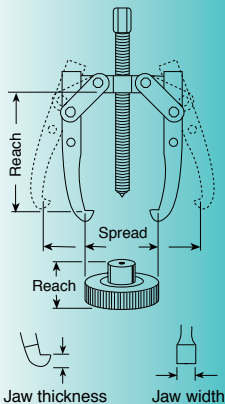
# PULLERS

## Mechanical Grip-O-Matic® Pullers

### Mechanical Grip-O-Matic® Pullers














OTC has developed the most complete line of gear and bearing pullers, enabling you to remove and install parts for fast, effective repairs. The pullers are forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

#### No. 1020–1050



### WARNING

Wear approved eye protection when using pullers. See page 207 for protective blankets for your pulling jobs.

Tool No.	MAX.		Screw Size	JAW		Capacity, Style, and Weight
	Reach	Spread		Thickness	Width	
	2-1/8"	3-1/4"	5/16"-24 x 3-7/8"	9/64"	1/4"	1-Ton, 2-Jaw; 5 oz.
	2-1/8"	3-1/4"	5/16"-24 x 3-7/8"	9/64"	1/4"	1-Ton, 3-Jaw; 8 oz.
	3-1/4"	4"	3/8"-24 x 4-7/8"	Upper 3/16" Lower 1/8"	Upper 1/4" Lower 1/2"	2-ton, 2-Jaw; 14 oz. (Reversible Jaws)
	3-1/4"	4-3/4"	3/8"-24 x 4-7/8"	Upper 3/16" Lower 1/8"	Upper 1/4" Lower 1/2"	2-ton, 2/3-Jaw; 1 lb., 5 oz. (Reversible Jaws)
	3-1/4"	6"	9/16"-20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"	5-Ton, 2-Jaw; 1 lb., 12 oz. (Reversible Jaws)
	3-1/4"	7"	9/16"-20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"	5-Ton, 2/3-Jaw; 2 lbs., 12 oz. (Reversible Jaws)
	5-1/2"	6"	9/16"-20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"	5-Ton, Long 2-Jaw; 2 lbs. (Reversible Jaws)
	5-1/2"	7"	9/16"-20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"	5-Ton, Long 2/3-Jaw; 3 lbs., 10 oz. (Rev. Jaws)
	5"	9"	11/16"-18 x 9"	Upper 5/16" Lower 11/32"	Upper 1" Lower 1"	7-Ton, 2-Jaw; 4 lbs., 8 oz. (Reversible Jaws)
	5"	10-1/2"	11/16"-18 x 9"	Upper 5/16" Lower 11/32"	Upper 1" Lower 1"	7-Ton, 2/3-Jaw; 6 lbs., 2 oz. (Rev. Jaws)
	8-3/4"	9-1/2"	11/16"-18 x 9"	11/32"	1"	7-Ton, Long 2-Jaw; 5 lbs., 6 oz.
	8-3/4"	11"	11/16"-18 x 9"	11/32"	1"	7-Ton, Long 2/3-Jaw; 8 lbs., 2 oz.
	11"	12"	13/16"-16 x 12"	9/16"	1"	13-Ton, 2-Jaw; 10 lbs., 13 oz.
	11"	12"	13/16"-16 x 12"	9/16"	1"	13-Ton, 2/3-Jaw; 16 lbs., 4 oz.
	15-1/4"	15-1/2"	13/16"-16 x 12"	9/16"	1"	13-Ton, Long 2-Jaw; 13 lbs.
	15-1/4"	17"	13/16"-16 x 12"	9/16"	1"	13-Ton, Long 2/3-Jaw; 18 lbs., 12 oz.
	14-1/2"	14"	1"-14 x 13-1/2"	13/16"	1-9/32"	17-1/2-Ton, 2-Jaw; 23 lbs.
	14-1/2"	14"	1"-14 x 13-1/2"	13/16"	1-9/32"	17-1/2-Ton, 3-Jaw; 33 lbs.
	18-3/4"	16"	1"-14 x 13-1/2"	13/16"	1-9/32"	17-1/2-Ton, Long 2-Jaw; 26 lbs.
	18-3/4"	16"	1"-14 x 13-1/2"	13/16"	1-9/32"	17-1/2-Ton, Long 3-Jaw; 37 lbs.
	15-1/2"	18"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"	25-Ton, 2-Jaw; 37 lbs., 8 oz.
	15-1/2"	18"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"	25-Ton, 3-Jaw; 54 lbs.
	22-1/4"	20"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"	25-Ton, Long 2-Jaw; 42 lbs., 12 oz.
	22-1/4"	20"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"	25-Ton, Long 3-Jaw; 60 lbs.



### Hydraulic Grip-O-Matic® Puller

**No. 1065-1080** Available in 17-1/2 to 50-ton capacities. Reliable single-acting Power Twin ram is matched with a versatile 2-jaw or 3-jaw puller. Lightweight ram can be used in other applications. You also get an adjusting screw, speed crank, and coupler where applicable. Hydraulic pump is not included; see index for pump listings.

Tool No.	MAX.		Ram Capacity & Number	JAW		Screw Size & Crank No.	Style and Weight
	Reach	Spread		Thickness	Width		
1065	11-1/2"	16"	17-1/2 Ton, No. 4120	13/16"	1-9/32"	1"-8 x 20" No. 24814	17-1/2 Ton, 2-Jaw; 40 lbs.
1064	11-1/2"	16"	N/A	13/16"	1-9/32"	N/A	17-1/2 Ton, 2-Jaw Puller Only; 24 lbs.
1067	11-1/2"	20"	17-1/2 Ton, No. 4120	13/16"	1-9/32"	1"-8 x 20" No. 24814	17-1/2 Ton, 3-Jaw; 53 lbs.
1066	11-1/2"	20"	N/A	13/16"	1-9/32"	N/A	17-1/2 Ton, 3-Jaw Puller Only; 37 lbs.
1073	19-7/16"	26"	30-Ton, No. 4121	1-1/8"	1-5/8"	1-1/4"-7 x 24" No. 27198	30-Ton, 2-Jaw; 91 lbs.
1072	19-7/16"	26"	N/A	1-1/8"	1-5/8"	N/A	30-Ton, 2-Jaw Puller Only; 59 lbs.
1075	19-7/16"	34"	30-Ton, No. 4121	1-1/8"	1-5/8"	1-1/4"-7 x 24" No. 27198	30-Ton, 3-Jaw; 122 lbs.
1074	19-7/16"	34"	N/A	1-1/8"	1-5/8"	N/A	30-Ton, 3-Jaw
1080	19-7/16"	44"	N/A	1-1/8"	1-5/8"	N/A	50-Ton, 3-Jaw Puller Only; 187 lbs.



#### Puller components

	No.	Description	Capacity in Tons
	24814	Speed Crank	17-1/2
	27198	Speed Crank	30
	29595	Speed Crank	50
	32118	Adjusting Screw	17-1/2
	34758	Adjusting Screw	30
	32698	Adjusting Screw	50
	39448	Lube for pullers	

### Push-Pullers®

**No. 927 – 10-Ton Capacity** Can be used with No. 1123 bearing pulling attachment or No. 679 pulley pulling attachment. May also be used with Nos. 1150, 1151, 1152, or 1153 internal pulling attachments.

**No. 938 – 17-1/2 Ton Capacity** Can be used with Nos. 1124 and 1130 bearing pulling attachments or Nos. 679 and 680 pulley pulling attachments. May also be used with Nos. 1150, 1151, 1153, 1165, or 1166 internal pulling attachments.

**No. 939 – 30-Ton Capacity** Can be used with Nos. 1126 and 1127 bearing pulling attachments or No. 680 pulley pulling attachment (two 8012 adapters are required to connect 680 to puller). Can be used with No. 1165 internal pulling attachment.

Tool No.	MAX.		Screw Size	Notes / Weight
	Reach	Spread		
927	8-1/4"	2-1/8" – 7-1/4"	3/4"-16 x 12"	1/2" of forcing screw tip end is threaded 5/8"-18. No. 1100 legs and No. 24827 leg ends included. Wt., 7 lbs.

Extra Legs (pair) for No. 927 Push-Puller (Reach equals leg length plus 1-1/2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1103	4-3/4" 1 lb.	1102	11-3/4" 2 lbs., 4 oz.
1100	6-3/4" 1 lb., 8 oz.	1101	15-3/4" 3 lbs., 4 oz.

**938** 11-1/2" 3-1/8"-11-3/4" 1"-14 x 13-1/4" Leg ends threaded 5/8"-18. No. 1106 legs and No. 24827 leg ends included. Wt., 20 lbs., 12 oz.

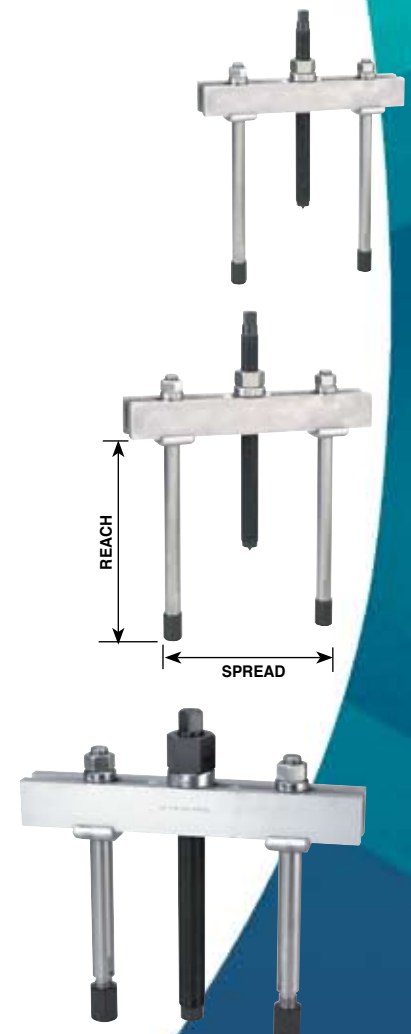
Extra Legs (pair) for No. 938 Push-Puller (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1107	4-1/2" 2 lbs., 8 oz.	1105	22-1/2" 9 lbs.
1106	9-1/2" 4 lbs., 8 oz.	1108	30" 11-1/2" lbs.
1104	16-1/2" 6 lbs., 8 oz.		

**939** 10-1/2" 7"-16-1/4" 1-1/2"-12 x 17-1/4" Leg ends threaded 1"-14. No. 1109 legs and No. 28390 leg ends included. Wt., 44 lbs.

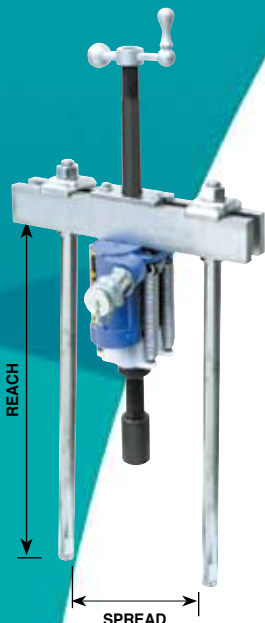
Extra Legs (pair) for No. 939 Push-Puller (Reach equals leg length plus 2-5/8" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1109	8" 8 lbs.	1111	28" 22 lbs.
1110	18" 15 lbs.		



# PULLERS

## Hydraulic Push-Pullers



No. 1062 & 1063  
Usable reach equals leg length minus 4-7/8" when using leg ends.

No. 1070 & 1071  
Usable reach equals leg length minus 5-7/8" when using leg ends.


No. 1076  
Usable reach equals leg length minus 10-5/8".

### Hydraulic Push-Puller

**No. 1062, 1063 – 17-1/2" Ton Capacity** Can be used with Nos. 1124 and 1130 bearing pulling attachments or No. 680 pulley pulling attachment. May also be used with No. 1154 internal pulling attachment. Ends of legs are threaded 5/8"-18. Usable reach: 11-5/8".

Tool No.	MAX.		Screw Size	Notes / Weight
	Reach	Spread		
1063	18-1/2"	5-3/4"-11-3/4"	1"-8 x 20"	Puller with No. 1104 legs, No. 24827 leg ends, No. 4120 hyd. ram, No. 32118 adjusting screw, and No. 24814 adjusting crank. 38 lbs.
1062	18-1/2"	5-3/4"-11-3/4"	1"-8 x 20"	Puller only. 22 lbs.

Extra Legs (pair) for No. 1062, 1063 (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1107	4-1/2" 2 lbs., 8 oz.	1105	22-1/2" 9 lbs.
1106	9-1/2" 4 lbs., 8 oz.	1108	30" 11-1/2 lbs.
1104	16-1/2" 6 lbs., 8 oz.	Note: 3/4"-14 thread on leg upper end. 	

**No. 1070, 1071 – 30-Ton Capacity** Can be used with Nos. 1126 and 1127 bearing pulling attachments or No. 680 pulley pulling attachment (two No. 8012 adapters are required to connect No. 680 to puller). Also may be used with No. 1166 internal pulling attachment. Ends of legs are threaded 1"-14. Usable reach: 12-1/8".

Tool No.	MAX.		Screw Size	Notes / Weight
	Reach	Spread		
1071	20-1/2"	7"-16-1/4"	1-1/4"-7 x 24"	Puller with No. 1110 legs, No. 28390 leg ends, No. 4121 hyd. ram, No. 34758 adjusting screw, and No. 27198 adjusting crank. 90 lbs.
1070	20-1/2"	7"-16-1/4"	1-1/4"-7 x 24"	Puller only. 56 lbs.

Extra Legs (pair) for No. 1070, 1071 (Reach equals leg length plus 2 5/8" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1109	8" 8 lbs.	1111	28" 22 lbs.
1110	18" 15 lbs.	Note: 1"-14 thread on both ends of legs	

**No. 1076 – 50-Ton Capacity** Can be used with Nos. 1128 and 1129 bearing pulling attachments. Ends of legs are threaded 1-1/4"-12. Usable reach: 13-3/8". See pages 211-212 to order threaded adapters for use with these pullers.

Tool No.	MAX.		Screw Size	Notes / Weight
	Reach	Spread		
1076	24"	8-1/2"-20-1/2"	1-5/8"-5-1/2 x 30-3/8"	Puller only. 106 lbs.

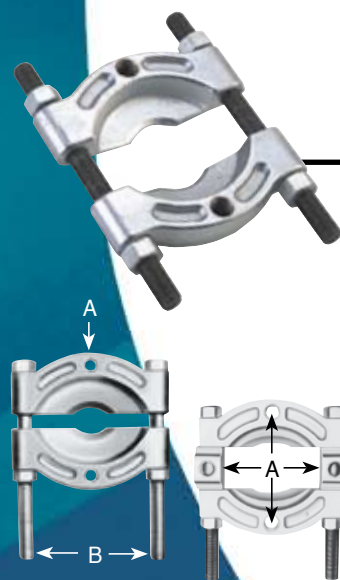
Extra Legs (pair) for No. 1076 (Reach equals leg length.) Note: 1-1/4"-12 thd. on both leg ends.

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1112	24" 34 lbs.	1113	34" 47 lbs.

### Bearing Splitters

**No. 1121-1130** These versatile accessories feature "knife-like" edges which are easily placed behind the part to secure a gripping surface, even when clearances are extremely limited. When used with an OTC Grip-O-Matic® puller, puller jaws grip attachment's outer edge; when used with a Push-Puller, puller legs are threaded into the attachment's two tapped holes.

Tool No.	MAX. Spread	MIN. Spread	A	B	Weight	Application
1121	15/16"	1/4"	15/16"-18	1-11/16"	12 oz.	Use with puller Nos. 1020, 1022, & 1023.
1122	2"	1/8"	3/8"-16	2-7/16"	1 lb., 4 oz.	Use with puller Nos. 1024, 1025, 1026, 1027, 7392, & 7393.
1123	4-5/8"	1/2"	5/8"-18	4-3/8"	5 lbs.	Use with puller Nos. 1035, 1036, 1037, 1038, & 927.
1124	5-3/4"	1/2"	5/8"-18	6"	12 lbs.	Use with puller Nos. 1035, 1040, 1041, 1042, 1065, 1063, & 938.
1130	9"	1/2"	5/8"-18	6"	12 lbs., 9 oz.	Use with puller Nos. 1035, 1040, 1041, 1042, 1065, 1063, & 938.
1126	8"	5/8"	1"-14	7-1/8"	19 lbs., 12 oz.	Use with puller Nos. 1047, 1043, & 939.
1127	13-3/8"	3/4"	1"-14	10-1/4"	41 lbs., 12 oz.	Use with puller Nos. 1047, 1073, & 939.
1128	12-7/8"	5"	1-3/4"-12	13"	100 lbs.	Use with puller Nos. 1073, 1079.

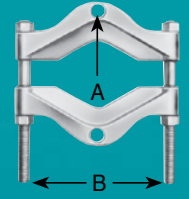
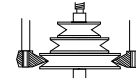


A = Thread of tapped hole in adapter.  
B = Distance between adjusting screws.

### Pulley Pulling Attachments

Attachment clamps down into V-groove to distribute load. Use with Grip-O-Matic® pullers or Push-Pullers.

Tool No.	MAX. Spread	MIN. Spread	A	B	Weight	Application
679	5-7/8"	1-3/4"	5/8"-18	6"	4 lbs., 4 oz.	Use with puller Nos. 1035, 1036, 1037, 1038, and 927.
680	10"	1-5/8"	5/8"-18	10-1/16"	22 lbs., 4 oz.	Use with puller Nos. 1039, 1040, 1041, 1063, 1065, and 938.



**A** = Thread of tapped hole in adapter.  
**B** = Distance between adjusting screws.

### Internal Pulling Attachments

Approved by leading bearing manufacturers, OTC's internal pulling attachments remove bearing cups, oil seals, bushings, and other parts from blind holes quickly and easily. Each attachment is designed for use with a corresponding Push-Puller or slide hammer assembly.

Tool No.	JAW		A	B	Weight	Application
	Spread	Reach				
1153	1-1/2"-5"	2-1/8"	1"-14	5/8"-18	4 lbs., 4 oz.	Use with Nos. 927 and 938 Push-Pullers, 1155 and 1156 slide hammer pullers, or 24832 and 24833 puller screw.
1150	1-1/2"-6"	4"	1"-14	5/8"-18	4 lbs., 4 oz.	
1152	1-1/2"-6"	4"	-	5/8"-18	3 lbs., 8 oz.	
1151	1-1/2"-7"	5-1/4"	1"-14	5/8"-18	4 lbs., 8 oz.	Use with Nos. 927 and 938 Push-Pullers, 1155 and 1156 slide hammer pullers, or 24832 puller screw.
1165	3"-9"	5-7/8"	1-1/2"-12	1"-14	13 lbs., 8 oz.	Use with No. 939 Push-Puller.
1154	1-1/2"-9"	4"	1"-8	5/8"-18	4 lbs., 8 oz.	Use with No. 1063 hyd. Push-Puller.
1166	3"-9"	5-7/8"	1-1/4"-7	1"-14	13 lbs., 8 oz.	Use with No. 1071 hyd. Push-Puller.

#### Puller Screws

24832	13-3/4" long	5/8"-18	1 lb.	Use with Nos. 1150, 1151, 1152, and 1153. Acts as a regular forcing screw when threaded directly into the block of pulling attachment.
24833	5-1/2" long	5/8"-18	6 oz.	Use with Nos. 1150, 1152, and 1153. Acts as a regular forcing screw when threaded directly into the block of pulling attachment.



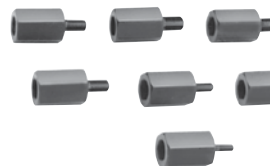
**A** = Thread of tapped hole in adapter.  
**B** = Internal thread of tapped cross block.

### Metric Adapter Sets\*

No. 8110-8140 Add metric capability to your Push-Puller legs or forcing screws! Four different sets to choose from. A storage/organizer case is included with each set.

Tool No.	Internal End	External End	Length
8111	5/8"-18	M6 x 1.0	2-1/4"
8112	5/8"-18	M8 x 1.0	2-1/4"
8113	5/8"-18	M8 x 1.25	2-1/4"
8114	5/8"-18	M10 x 1.25	2-1/4"
8115	5/8"-18	M10 x 1.5	2-1/4"
8116	5/8"-18	M12 x 1.25	2-1/4"
8117	5/8"-18	M12 x 1.75	2-1/4"
8121	5/8"-18	M14 x 1.5	2-1/4"
8122	5/8"-18	M14 x 2.0	2-1/4"
8123	5/8"-18	M16 x 1.5	2-3/4"
8124	5/8"-18	M16 x 2.0	2-3/4"
8125	5/8"-18	M20 x 1.5	2-3/4"
8126	5/8"-18	M20 x 2.5	2-3/4"
Tool No.	Std. End	Metric End	Length
8131	5/8"-18	M6 x 1.0	1-5/8"
8132	5/8"-18	M8 x 1.25	1-5/8"
8133	5/8"-18	M10 x 1.5	1-5/8"
8134	5/8"-18	M12 x 1.75	1-5/8"
8135	5/8"-18	M14 x 2.0	1-5/8"
8136	5/8"-18	M16 x 2.0	1-5/8"
8137	5/8"-18	M20 x 2.5	1-5/8"
Tool No.	Female End	Male End	Length
8141	1"-14	M16 x 1.5	3"
8142	1"-14	M16 x 2.0	3"
8143	1"-14	M18 x 1.5	3"
8144	1"-14	M20 x 1.5	3"
8145	1"-14	M20 x 2.5	3"
8146	1"-14	M22 x 1.5	3"

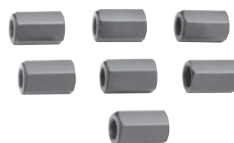
NOTE: The adapters in each of these sets are also available separately.



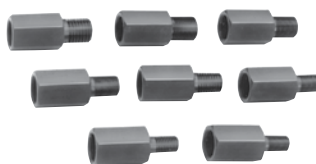
No. 8110 – External/internal metric adapter kit. Wt., 3 lbs.



No. 8120 – External/internal metric adapter kit. Wt., 3 lbs.



No. 8130 – External/internal adapter kit. Wt., 2 lbs., 12 oz.



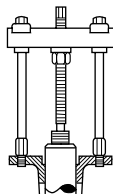
No. 8140 – External/internal metric adapter kit. Wt., 5 lbs., 5 oz.





# PULLERS

## External-Internal Threaded Adapters



### External-Internal Threaded Adapters

For use on the ends of Push-Puller legs or forcing screws when pulling shafts, bearing caps, pinions, etc.

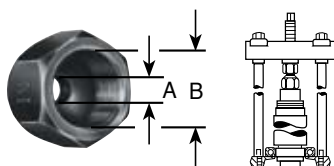
Tool No.	Internal End	External End	Length
206437	1/2"-20	5/8"-18	2-1/4"
8000	5/8"-18	1/4"-20	2-1/4"
8001	5/8"-18	5/16"-18	2-1/4"
8002	5/8"-18	7/16"-14	2-1/4"
8003	5/8"-18	7/16"-20	2-1/4"
8004	5/8"-18	3/8"-24	2-1/4"
8005	5/8"-18	3/8"-16	2-1/4"
8006	5/8"-18	1/2"-20	2-1/4"
8007	5/8"-18	1/2"-13	2-1/4"
8008	5/8"-18	9/16"-18	2-1/4"
8009	5/8"-18	9/16"-12	2-1/4"
8010	5/8"-18	5/8"-11	2-1/4"
8013	5/8"-18	3/4"-16	2-1/4"
8015	5/8"-18	3/4"-10	2-1/4"
8017	5/8"-18	7/8"-14	2-1/4"
8018	5/8"-18	7/8"-9	2-1/4"

Tool No.	Internal End	External End	Length
8019	5/8"-18	1"-14	2-1/4"
8022	5/8"-18	1/8" pipe	2-1/4"
8012	1"-14	5/8"-18	3-3/16"
8011	1"-14	5/8"-11	2-1/2"
8014	1"-14	3/4"-16	2-1/2"
8016	1"-14	3/4"-10	2-1/2"
8020	1"-8	5/8"-18	3"
8021	1"-8	1"-14	3"
8023	1-1/4"-12	1"-14	4-1/2"
8024	1-1/4"-12	1-3/4"-12	4-3/4"
8025	1-1/4"-7	5/8"-18	4"
8027	1-1/4"-7	1"-14	4"
8029	1-5/8"-5/2	1"-14	4"
8028	1-5/8"-5/2	1"-8	4"
8030	3/4"-16	5/8"-18	2-1/4"

### Internal Threaded Adapter Set

For use on the ends of Push-Puller legs or forcing screws to aid in the removal and installation of shafts, axles, and housings.

No. 8044 – Internal adapters. Wt., 3 lbs.



Tool No.	Internal End "A"	Internal End "B"
8035*	1/2"-20	5/8"-18
8036*	1"-14	1"-14
8037	5/8"-18	5/8"-18
8038	5/8"-18	3/4"-16
8039	5/8"-18	7/8"-14

Tool No.	Internal End "A"	Internal End "B"
8040	5/8"-18	1"-14
8041	5/8"-18	1-1/8"-12
8042	5/8"-18	1-1/4"-12
8043*	5/8"-18	1-1/2"-12

\*Not included in set No. 8044. Order separately. All adapters are available separately.

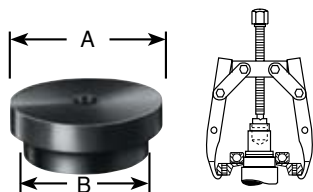
### Step Plate Adapter Sets

Necessary for pulling and installing bearings, gears, or other parts found on hollow shafts or housings. They may be used with Grip-O-Matic® pullers and Push-Pullers®, as well as shop presses. All adapters are available separately.

No. 8074 – Wt., 1 lb., 5 oz.

No. 8075 – Wt., 5 lbs., 5 oz.

No. 8076 – Wt., 10 lbs., 6 oz.



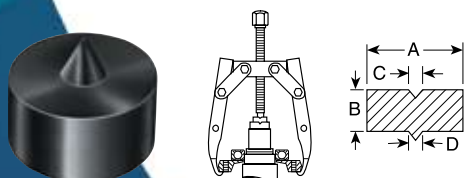
Tool No.	Set No.	Set No.	Set No.	Dia. "A"	Dia. "B"
8057	•	•	•	1"	3/4"
8058	•	•	•	1-1/8"	7/8"
8059	•	•	•	1-1/4"	1"
8060	•	•	•	1-3/8"	1-1/8"
8061	•	•	•	1-5/8"	1-1/4"
8062	•	•	•	1-3/4"	1-3/8"
8063	•	•	•	1-7/8"	1-1/2"
8064	•	•	•	2"	1-5/8"
8065	•	•	•	2-1/8"	1-3/4"

Tool No.	Set No.	Set No.	Set No.	Dia. "A"	Dia. "B"
8066	•	•	•	2-3/8"	1-7/8"
8067	•	•	•	2-1/2"	2"
8068	•	•	•	2-5/8"	2-1/8"
8069	•	•	•	2-3/4"	2-1/4"
8070	•	•	•	2-7/8"	2-3/8"
8071	•	•	•	3"	2-1/2"
8072	•	•	•	3-1/4"	2-3/4"
8073	•	•	•	3-1/2"	3"

### Shaft Protector Set

Designed to protect shaft centers from distortion when extreme pressures are applied with either Grip-O-Matic® pullers or Push-Pullers. Shaft protectors are available separately.

No. 8056 – Shaft protectors. Wt., 1 lb., 2 oz.



Tool No.	"A"	"B"	"C" (60°)	"D" (60°)
8050	1-1/2"	3/4"	3/8"	7/16"
8051	1-1/4"	3/4"	3/8"	1/4"
8052	1"	3/4"	3/8"	5/16"

Tool No.	"A"	"B"	"C" (60°)	"D" (60°)
8053	3/4"	3/4"	1/4"	1/4"
8054	5/8"	5/8"	1/4"	1/4"
8055	5/8"	5/8"	3/16"	3/16"

### Reversible-Jaw Slide Hammer Pullers

Here are two extremely versatile pullers, which will accomplish many pulling jobs involving gears, bearings, outer races, grease retainers, oil seals, etc. Either two or three puller jaws may be used to handle "inside" pulling jobs such as bearing cups and outer races, as well as regular "outside" pulling jobs. The basic slide hammer unit can be removed and used independently. The No. 1177 slide hammer puller has a 5 lb. hammer, and the No. 1176 has a 2-1/2 lb. hammer.

**No. 1176** – Puller with 2-1/2 lb. hammer, 2-way and 3-way head, 27" long. Wt., 8 lbs.

**No. 1177** – Same as 1176, except has a 5 lb. hammer. Wt., 10 lbs., 8 oz.



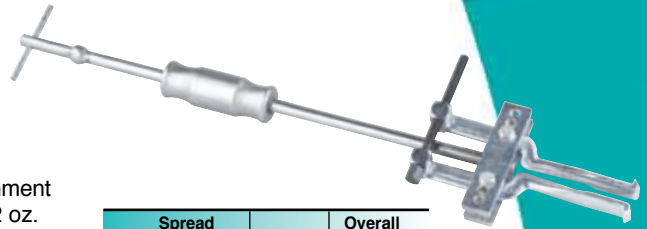
2-Jaw Spread				3-Jaw Spread				Overall Length
Inside Min.	Inside Max.	Outside Min.	Outside Max.	Inside Min.	Inside Max.	Outside Min.	Outside Max.	
1-1/4"	3-1/2"	1"	4-1/2"	1-1/2"	4-1/4"	1-1/2"	4-1/2"	27"

### Slide Hammer Pullers with Cup Pulling Attachments

These pullers combine a basic slide hammer unit with a No. 1152 internal pulling attachment (described on page 211). Ideal for removing bearing cups, outer races, and oil seals from blind holes. Upon removal of the internal pulling attachment, the basic slide hammer unit, which has a 5/8"-18 threaded end, may be used with various adapters for a multitude of pulling jobs.

**No. 1157** – Slide hammer puller, consisting of an 1152 internal pulling attachment and an 1156 basic slide hammer unit with a 2-1/2 lb. hammer. Wt., 9 lbs., 12 oz.

**No. 1158** – Slide hammer puller (not shown), consisting of an 1152 internal pulling attachment and an 1155 basic slide hammer unit with a 5 lb. hammer. Wt., 12 lbs., 4 oz.



Spread		Reach	Overall Length
Min.	Max.		
1-5/8"	6"	4"	28"

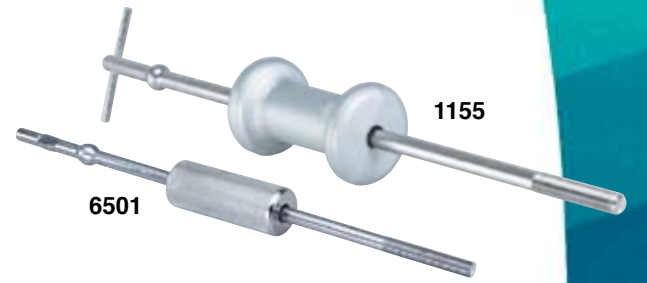
### Basic Slide Hammer Units

May be used with an OTC internal pulling attachment (page 211), or with internal or external-internal threaded adapters (page 212).

**No. 1155** – Basic slide hammer unit is 24" long with a 5 lb. hammer and a 5/8"-18 threaded end. Wt., 7 lbs., 4 oz.

**No. 1156** – Basic slide hammer unit is 24" long with a 2-1/2 lb. hammer and a 5/8"-18 threaded end. Wt., 4 lbs., 12 oz. (not shown)

**No. 6501** – Basic slide hammer unit is 17" long with a 1-3/4 lb. hammer and a 1/2"-20 threaded end. Wt., 3 lbs.



### Pilot Bearing Pullers

These very versatile pullers are built specially for inside pulling jobs, and particularly for removing flywheel pilot bearings on automobiles, trucks, and tractors. Also very practical for pulling motor, generator, and magneto bearings.

Tool No.	Reach	I.D. Spread		Wt. (lbs./oz.)
		Min.	Max.	
1170	3/4"	1/2"	1-1/2"	4 / 14
1171	1"	7/8"	2-1/8"	4 / 14
1172	1-3/4"	1/2"	2"	4 / 14

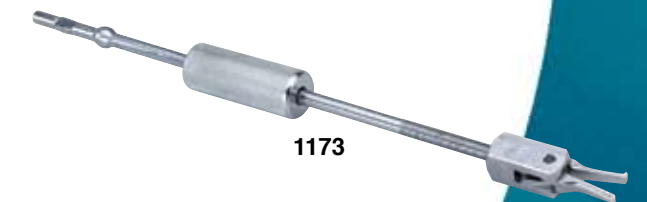


### Special Slide Hammer Puller

Ideal for pulling jobs in very close quarters, as in removal of small-bore bushings, bearings, oil seals, etc. Internal pulling attachment has a jaw spread of 1/2" to 1-3/8", adjusted by turning the slide hammer handle. Handle end has a 1/2"-20 thread.

**No. 1173** – Slide hammer puller with head assembly. Wt., 3 lbs., 8 oz.

**No. 1174** – Head assembly only. Wt., 10 oz.



### Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2"-20 and has a 5/8"-18 threaded adapter included. Works with many OTC pulling attachments.

**No. 5028** – Slide hammer puller. Wt., 2 lbs.



5028

# PULLERS

## Grip Wrench Adapters & Bearing Pullers



7703

### Ten-Pound Slide Hammer Puller

This heavy-duty slide hammer puller gets tough with those really stuck parts. It has all the features of our smaller versions – heat treated, 24" long, and a 5/8"-18 threaded end to adapt to any of OTC's pulling attachments. The difference is the ten-pound hammer that gives you the extra muscle for really stubborn pulling jobs.

**No. 7703** – Ten-pound slide hammer puller. Wt., 12 lbs., 5 oz.



22185

34331

### Sliding Hammers

**No. 22185** – 2-1/2 lb. sliding hammer.

**No. 34331** – 5 lb. sliding hammer.



### Grip Wrench Adapters

For grip wrenches using single- or double-lead thread adjusting screw. Adapter threads onto a slide hammer with a 5/8"-18 thread. Grip wrench threads onto a 7/16"-14 end of adapter for pulling use.

**No. 205378** – Grip wrench adapter with single lead thread. Wt., 4 oz.

**No. 218875** – Grip wrench adapter with double lead thread. Wt., 4 oz.



464

465

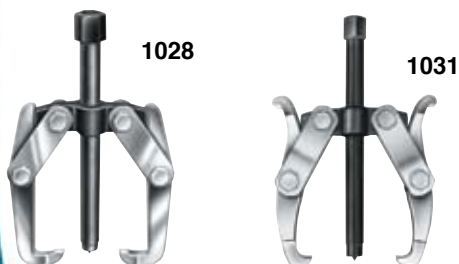
### OTC "GripLock" Pullers

Manufactured to our rigorous specifications to ensure the quality professionals expect from OTC

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- 2 or 3 Jaw application.
- Both External and Internal Pulling Action.
- "Live Center" action forcing screw.
- Professional finished for long lasting durability...

**No. 464** – Puller with a 4" maximum reach, 3" to 4" spread. Wt., 3 lb., 4 oz.

**No. 465** – Puller with a 7" maximum reach, 3" to 7" spread. Wt., 7 lb., 13 oz.



1028

1031

### Differential Bearing Pullers

For removing differential side carrier bearings on a wide variety of passenger cars and light trucks. Use with step plate adapter Nos. 8060, 8061, 8063, and 8064. (Step plate adapters are not included with 1028 or 1031. See page 212.)

**No. 1028** – Puller with a 3-1/2" maximum reach, 1-1/4" to 4-1/2" spread. Primarily for servicing Ford products. Wt., 1 lb., 13 oz.

**No. 1031** – Puller with a 3-1/4" maximum reach, 6" maximum spread. For servicing most General Motors, American Motors, and Chrysler products. Wt., 2 lbs.



4520

### Differential Side Bearing Pullers

- Use to remove differential side carrier bearing. Works on a wide variety of cars and light-duty trucks.
- Includes four step plate adapters to fit carrier bearings.
- Reach: 1-5/8". Spread: 2-5/8" to 3-3/8". Forcing screw is 3/4"-16 mm x 6-11/16" lg.

Set includes:

#### Part No. Description

**4520-1** Forcing Screw / Cross Block Assembly

**4520-2** Puller Jaws / Pins (set of two each)

**4520-3** Puller Jaws Retaining Yoke

**4520-4** Step Plate Adapters (set of four)

15/16" – 1-11/32" diameter

1-1/8" – 1-1/2" diameter

1-1/4" – 1-5/8" diameter

1-1/8" – 1-3/4" diameter

**No. 4520** – Differential side bearing puller. Wt., 4 lbs., 10 oz.

#### Specifications

**Reach:** 1-5/8"

**Spread:** 2-5/8" on inside holes in crossbar  
3-3/8" on outside holes in crossbar

**Forcing screw:** 3/4"-16 mm x 6-11/16" lg.

**Adapter sizes:** 15/16" to 1-3/4" diameter

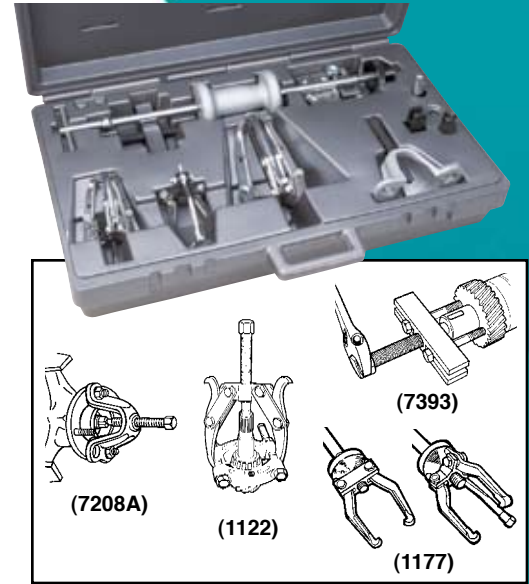


### Multipurpose Puller Set

This assortment of puller tools gives you a wide range of job versatility. You get a 5 lb. slide hammer puller, hub puller, two sizes of OTC Grip-O-Matic® jaw-type pullers, a bearing pulling attachment, plus a cross-bar gear and pulley puller, all contained in a handy plastic storage case.

**No. 1181** – Multi-purpose puller set. Wt., 25 lbs.

Set No. 1181 consists of:	
No.	Description
1177	Slide hammer puller with a 5 lb. hammer, 2-way and 3-way heads. Reversible: either two or three jaws may be used to handle both "inside" and "outside" pulling jobs.
7208A	Front hub puller for servicing front-wheel-drive cars. Includes a spare locknut, which permits use with a No. 1177 slide hammer for rear axle flanges.
1023	2-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 3-3/8" max. reach, 4-3/4" max. spread.
1027	5-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 5-1/2" max. reach, 7" max. spread.
7393	Bar-type gear and pulley puller with a 5-1/2" long screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Spread range: 1-1/2" to 4-1/4".
1122	Bearing pulling attachment for use with No. 1027 and No. 7393 pullers. Has 2" max spread, 1/8" min. spread.



### Cone-type Puller

Reversible jaws permit handling of both internal and external pulling jobs. The 2-way/3-way head permits assembly of puller to suit the job at hand. Turning the cone on the puller head securely locks its jaws on the part to be removed.

**Puller reach:** 2-7/8"

**2-jaw spread:**

Inside: 1-1/2" to 4-1/2"

Outside: 3/4" to 5"

**3-jaw spread:**

Inside: 1-1/2" to 4-3/4"

Outside: 1" to 4-1/2"

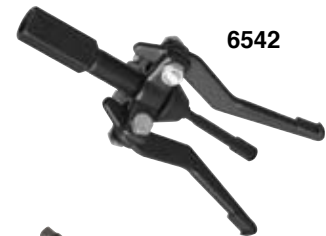
**No. 1184** – Cone-type puller. Wt., 2 lbs., 6 oz.



### Bearing Cup Remover

Ideal for servicing hubs on today's popular front-wheel-drive small cars. The cone holds the jaws in place during pulling. No. 7136 is perfect for pulling internal bearing cups, seals, bushings, etc. Jaw spread: 15/16" to 3-1/4", reach to 3-1/2". Use with any slide hammer having a 5/8"-18 thread (OTC No. 1155 or No. 1156 or the No. 927 Push-Puller).

**No. 6542** – Universal bearing cup remover. Wt., 1 lb., 8 oz.



### Pilot Bearing Pullers

Designed to pull flywheel pilot bearings in close quarters where a slide hammer cannot be used. Operates on many models with engine in chassis.

**No. 7318** – Pilot bearing puller. Capacity: 1/2" to 1-1/2". I.D. reach: 3/4". Wt., 3 lbs., 7 oz.

**No. 7319** – Pilot bearing puller. Capacity: 7/8" to 2". I.D. reach: 1". Wt., 3 lbs., 8 oz.



### "Silver Slapper" 8-Way Slide Hammer Puller Set

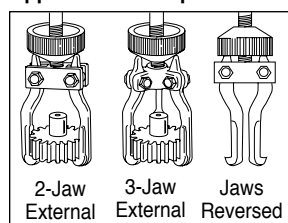
You can pull flange-type rear axles, stubborn oil seals and bearings, and other press-fit parts. Jaws can be set up for 2/3-way internal or external pulling jobs.

**No. 1179** – 8-way slide hammer puller set with a 5 lb. hammer and attachments. Wt., 12 lbs.

Set No. 1179 consists of:

No.	Description
1155	Slide hammer w/5 lb. hammer
7372	Rear axle pulling attachment
24544	3-way cross-head
24545	Cone
27241	2-way cross-block
27315	Puller hook attachment
34698	Pulling jaws (3) for internal or external pulling jobs
205378	Grip wrench adapter w/single lead (wrench not included)
205377	Dent puller attachment

#### Application Examples



1179

# PULLERS

## Slide Hammer Puller Sets



7792

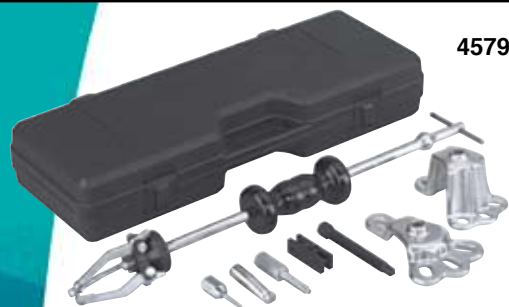
### Rear Axle Puller Set

The tools you need for flange-type rear axle and bearing removal on most late model passenger cars and light trucks. Set includes the No. 7374 rear axle pulling plate and a 5 lb. slide hammer. The axle bearing pullers, used with the slide hammer, make short work of removing semi-floating rear axle bearings.

**No. 7792** – Rear axle puller set. Wt., 11 lbs., 4 oz.

Set No. 7792 consists of:

No.	Description
7374	Rear axle pulling plate with a 5 lb. slide hammer.
7495	Rear axle bearing puller. Fits a min. bearing tube I.D. of 1" and a max. axle tube I.D. of 1-7/8".
7496	Rear axle bearing puller. Fits min. bearing tube I.D. of 5/16" and max. axle tube I.D. of 2-3/8".
7497	Rear axle bearing puller. Fits min. bearing tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".
27315	Puller hook for use with 5 lb. slide hammer in set. Removes oil seals, bearings, etc.



4579

### 9-Way Slide Hammer Puller Set

Pulls flange type rear axles and most front wheel drive hubs.

- Internal and external jaws provide a variety of combinations to pull bearings, gears and seals.
- Two and three way cross blocks and cone provide the perfect jaw configuration for most jobs.
- Set also includes a grip wrench adapter and a dent puller attachment for sheet metal or other unique pulling requirements.

**No. 4579** – 9-Way Slide Hammer Set.



7948

### 8-Way and 10-Way Slide Hammer Puller Sets

Our two most popular slide hammer puller sets—the Silver Slapper and the Silver Slapper Plus—now come packaged in a convenient plastic, blow-molded carrying/storage case. They're the same great sets with the same versatile pullers and attachments, now made even better with the addition of an organizer case. Or, if you already own either our No. 1179 or No. 1189 puller sets, we offer the plastic case separately. The case will hold either set.

**No. 7947** – Eight-way slide hammer puller set. Same contents as No. 1179 Silver Slapper set, but includes plastic carrying/storage case. Wt., 19 lbs.

**No. 7948** – Ten-way slide hammer puller set. Same contents as No. 1189 Silver Slapper Plus set, but includes plastic carrying / storage case. Wt., 25 lbs.

**No. 63106** – Puller storage case. Blow-molded plastic. Wt., 7 lbs.



1178

### Slide Hammer Puller Set

This useful set contains OTC's popular No. 1176 reversible-jaw slide hammer puller, plus an assortment of special jaws and adapters. You get all the versatility of the No. 1176 (described fully on page 213), plus attachments for pulling various size pilot bearings, oil seals, bushings, timing gears, harmonic balancers, and other tightly fitted parts!

**No. 1178** – Slide hammer puller set. Wt., 10 lbs., 3 oz.

No. 1178 set consists of:

No.	Description
1176	Reversible-jaw slide hammer puller with 2-1/2 lb. hammer
44195	Medium jaw (3 incl.)
32054	Pilot bearing jaw (3 incl.)
44148	Long jaw (3 incl.)
27315	Puller hook. Removes oil seals, bearings, etc.
27241	2-way cross head
36578	Cross block. Removes timing gears, harmonic balancers, pulleys, other parts having tapped holes. Uses cap screws up to 3/8" diameter. Spread with 3/8" dia. cap screws: 1-7/8" – 5-5/8".

Tool No.	2-Jaw Spread				Tool No.	3-Jaw Spread			
	Inside Min.	Inside Max.	Outside Min.	Outside Max.		Inside Min.	Inside Max.	Outside Min.	Outside Max.
44195	1-1/2"	4-1/2"	3/4"	5"	44195	1-1/2"	4-3/4"	1"	4-1/2"
32054	3/4"	2-3/8"	–	–	32054	1"	2-3/4"	–	–
44148	2-3/4"	5-1/2"	3/4"	7-1/2"	44148	3-1/4"	6-1/4"	1"	6-1/4"
34698	1-1/4"	3-1/2"	1"	4-1/2"	34698	1-1/2"	4-1/4"	1-1/2"	4-1/2"

### Blind Hole Puller Set

This set provides a complete selection of expanding collets ranging in size from 5/16" to 1-3/4". 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. Force is exerted by means of a forcing screw and a bridge assembly or a slide hammer. Individual pieces can be ordered separately.

**No. 981** – Blind hole puller set. Wt., 21 lbs.



Set No. 981 consists of:

No.	Description
24835	Forcing screw
24836	Forcing screw nut
22185	2-1/2 lb. hammer
208627	Shank and tee bar assembly
28250	Actuator pin, 1/8" dia., for use with collets 33856 & 33857

No.	Description
28253	Actuator pin, 3/16" dia., for use w/collets 33858-33862
28256	Actuator pin, 1/2" dia., for use with collets 33863-33865
28323	Metal box (not shown)
33856	Collet 5/16" to 3/8"

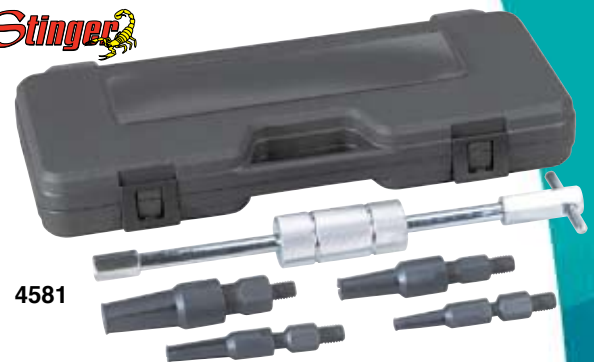
No.	Description
33857	Collet 3/8" to 7/16"
33858	Collet 7/16" to 1/2"
33859	Collet 1/2" to 5/8"
33860	Collet 5/8" to 3/4"
33861	Collet 3/4" to 7/8"

No.	Description
33862	Collet 7/8" to 1"
33863	Collet 1" to 1-1/4"
33864	Collet 1-1/4" to 1-1/2"
33865	Collet 1-1/2" to 1-3/4"
41331	Bridge

### Blind Hole Bearing Puller Set

- For pulling jobs requiring an internal pull.
- Set includes four collets, which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer.
- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", and 1" to 1-1/4".
- Set includes a 2-1/2 lb. slide hammer with a T-handle.
- Housed in a blow-molded plastic storage case.

**No. 4581** – Blind hole bearing puller set. Wt., 7 lbs., 2 oz.



### A/C Clutch Pulley Puller Set

- For removal of stubborn air conditioning clutch pulleys. Also can be used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live center forcing screw, 5-1/2" crossbar with 3 spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes a blow-molded plastic case.

**No. 4536** – A/C clutch pulley puller set. Wt., 4 lbs., 11 oz.



### Multipurpose Bearing and Pulley Puller Set

- For a wide range of pulling jobs, including: bearings, alternators, generators, power steering and crankshaft pulleys, timing gears, and harmonic balancers.
- Set includes drop-forged components, which can be used in a variety of combinations.

Contents of Set:

- 2 – Forcing Screws (live center): 3/4"-16 x 6-11/16" & 3/4"-16 x 5"
- 2 – Cross-bar Yokes: 3 pin-hole @ 3-1/4" to 5-1/2", 2 pin-hole @ 2-3/8" to 3-3/8"
- 2 – Clamp Bolts
- 3 – Pairs of Puller Jaws: 1-3/8" Max, 1-5/8" Max, 1-3/4" Max
- 1 – Pair of Jaw Pins with Ball Spring
- 3 – Pairs of Capped Bolts

- Spread: 3" to 5", Reach: 1" to 2-1/4"
- Housed in a blow-molded plastic storage case.

**No. 4534** – Multipurpose bearing and pulley puller set. Wt., 8 lbs., 2 oz.





# PULLERS

## Puller/Bearing Sets

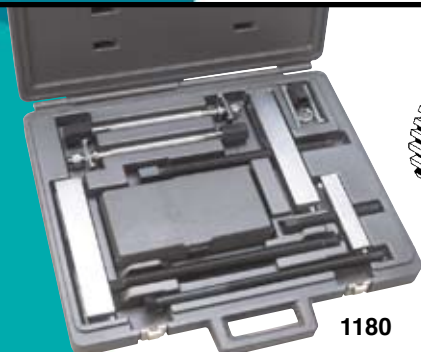


1182

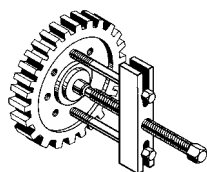
### Lock-on, Jaw-type Puller Set

Components can be assembled to create several versatile puller versions for both internal and external pulling tasks. The puller head is turned to securely lock the jaws onto the part being removed. Both a 2-way and 3-way puller head are included, plus three long-reach and three short-reach puller jaws. Plastic storage box included. Easily removes gears, bearings, timing gears, harmonic balancers, and other press-fitted parts.

**No. 1182** – Jaw-type puller set. Wt., 6 lbs., 10 oz.



1180



### 10-Ton Capacity Push-Puller Set

Contains three popular OTC bar-type pullers in one versatile set, packed in a handy plastic storage case. Tools included permit damage-free pulling of gears, bearings, harmonic balancers, and other parts having tapped holes. Ideal for servicing heavy-duty trucks, off-road construction equipment, and machinery.

**No. 1180** – 10-ton push-puller set, in plastic case. Wt., 25 lbs.

Set No. 1180 consists of:

No.	Description
927	10-ton Push-Puller, 8-3/8" reach, 2-1/8" to 7-1/4" spread. 6-3/4" puller legs. Other leg sizes are available separately. (See pages 209–210.)
522	Gear and pulley puller; spread range when used with 1/2" cap screws: 2" to 7-3/4". Cap screws not included.
7393	Gear and pulley puller with standard 5-1/2" forcing screw, plus special 13" forcing screw. Includes two hex head cap screws, 3/8"–16 x 3" long. Special range: 1-1/2" to 4-1/4".



1183

### Bearing Splitter Combo Set

This combo pack contains four of OTC's most popular bearing splitters, plus a pulley pulling attachment. A rugged organizer case is included, enabling you to keep the tools together for instant use.

Set No. 1183 consists of:

No.	Description
1121	Bearing splitter. Has 15/16" max. spread and 1/4" min. spread.
1122	Bearing splitter. Has 2" max. spread and 1/8" min. spread.
1123	Bearing splitter. Has 4-5/8" max. spread and 1/2" min. spread.
1130	Bearing splitter. Has 9" max. spread and 1/2" min. spread.
679	Pulley pulling attachment with a 5-7/8" max. and 1-3/4" min. spread

**No. 1183** – Bearing splitter combo set. Wt., 30 lbs., 5 oz.

**No. 62885** – Organizer case only (for 1183). Wt. 5 lbs., 5 oz.



4518

### 5-Ton Bar-type Puller/Bearing Separator Set

- This combination set includes our two most popular bearing "splitters" (2" and 3"), four sets of hex push-puller legs, and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw and each of the bearing separators may be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

**No. 4518** – Bearing separator/bar-type puller set. Wt., 10 lbs., 8 oz.

### Flange-Type Puller Combination

Two specialty pullers in one box. You get a flange-type puller for removal of harmonic balancers, timing gears, and other parts with two or three tapped holes. You also get a steering wheel, pulley, and flywheel puller.

**No. 525** – Flange-type puller combination. Includes flange-type puller and steering wheel puller with four sets of cap screws. Wt., 5 lbs., 8 oz.



525

### Flange-Type Puller

Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.

**No. 6930** – Flange-type puller. Wt., 3 lbs., 4 oz.



6930

### 7-Ton Capacity Four-In-One™ Puller Set

With the parts included in the PA7, you can quickly assemble a 2/3-jaw puller with standard or long reach. 7-ton capacity, the max. reach of 8-3/4", and max. spread of 11" make it ideal for hundreds of pulling jobs.

**No. PA7** – Four-in-one puller set, 7-ton cap. Standard jaw max. reach: 5". Max. spread: 10-1/2". Long jaw max. reach: 8-3/4". Max. spread: 11". Wt., 12 lbs.



PA7

### Flange-Type Puller Set

Covers almost every car, pick-up, SUV, and small engine. Capable of handling almost every two- or three-way bolt pull possible. For use on a variety of jobs: harmonic balancers, steering wheels, crankshaft pulleys, and gears. Storage tray and detailed application chart included. Slotted holes in puller flange permit cap screws to be positioned to handle bolt circles from 1-1/2" to 4-1/4".

Includes three each of the following washer head bolts (Grade 8):

M8 x 1.25 x 90 mm	3/8-16 UNF x 3"	M8 x 1.25 x 90 mm
1/4-28 UNF x 3"	M10 x 1.5 x 35 mm	M8 x 1.25 x 60 mm
5/16-24 UNF x 3"	5/16-18 UNF x 3.5"	3/8-16 UNF x 4.5"
3/8-24 UNF x 1.5"	3/8-16 UNF x 2"	

Special Stepped Bolts – 1990 & newer GM 3300–3800 V-6 crankshaft pulleys

**No. 6294** – Flange-type puller set. Wt., 7 lbs., 4 oz.



6294

# PULLERS

## Puller Sets

### 17-1/2 Ton Capacity Puller Set

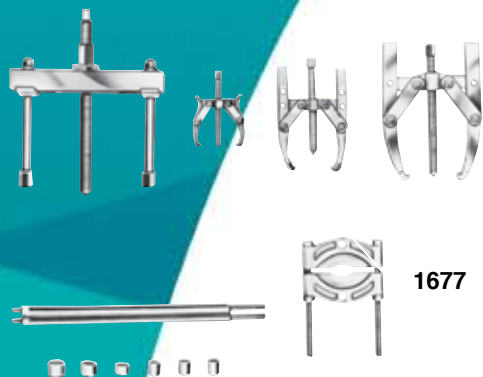
This puller set gives you the versatility you want and the tonnage capacity you need to tackle parts removal and installation on many models of cars, trucks, tractors, power shovels, road building machinery, etc. Maintenance operations involving the removal and replacement of gears, bearings, wheels, and other press-fit parts can be done with ease.

**No. 1677** – 17-1/2 ton capacity puller set. Wt., 65 lbs.

**No. 1621** – Board (3' x 4') for storing No. 1677 set (not included with set). Wt., 37 lbs.

No.	Description
938	Push-Puller w/ 9-1/2" legs
1104	16-1/2" legs for 938 (pr.)
1024	2-jaw puller
1036	2-jaw puller
1039	2-jaw puller
1130	Bearing splitter

No.	Description
	Internal threaded adapters
8037	5/8"-18 x 5/8"-18
8038	5/8"-18 x 3/4"-16 (2)
8039	5/8"-18 x 7/8"-14
8040	5/8"-18 x 1"-14
8041	5/8"-18 x 1-1/8"-12
8043	5/8"-18 x 1-1/2"-12



### 13-Ton Capacity Puller Set

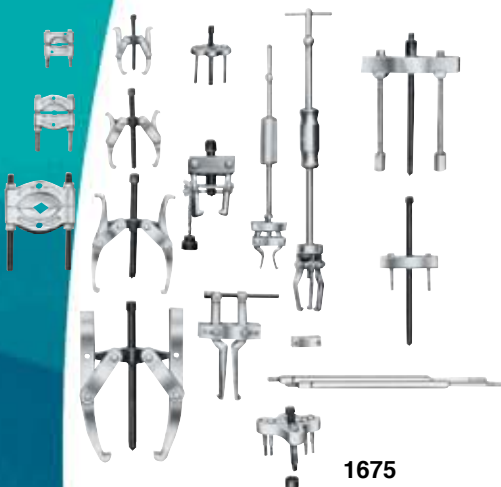
This versatile 13-ton capacity puller set removes gears, bearings, shafts, pinions, bearing outer races, and other tightly fitted parts. The set includes a Push-Puller, Grip-O-Matic® pullers, bearing pulling attachments, specialized pullers, and many accessories. You can work on all makes and models of cars and light trucks with this set.

**No. 1675** – 13-ton capacity puller set. Wt., 74 lbs.

**No. 1620** – Board (3' x 4') for storing No. 1675 set (not included with set). Wt., 40 lbs.

No.	Description
927	Push-Puller w/ 6-3/4" legs
1101	15-3/4" legs for 927 (pr.)
1022	2-jaw puller
1024	2-jaw puller
1035	2-jaw puller
1039	2-jaw puller
7392	Gear and pulley puller
518	Flange-type puller
7403	Steering wheel puller
1170	Pilot bearing puller

No.	Description
1176	Slide hammer puller
7310A	Pitman arm puller
8075	Step plate adapter set
8035	Internal threaded adapter: 1/2" -20 x 5/8" -18 (2)
8044	Internal threaded adapter set
1152	Bearing cup pulling attach.
1121	Bearing splitter
1122	Bearing splitter
1123	Bearing splitter



### Strong Box Puller Set

Here's a set of pullers that gives you almost unheard of versatility. You get eight pullers, five attachments, and extra puller jaws. They enable you to pull gears, bearings, pulleys, wheels, and more on cars and light trucks. All these tools are contained in a rugged, lockable metal storage cabinet you can either mount on a wall or stand on a work bench, so they are handy when you need them. Just imagine the jobs you can do with this set!

**No. 1676** – Strong box puller set. Wt., 85 lbs.

**No. 18886** – Storage box only. 29-1/2" wide x 25-3/4" high x 10" deep. Wt., 47 lbs.

No.	Description
1026	2/3-jaw puller
1037	2/3-jaw puller
7393	Gear and pulley puller
518	Flange-type puller
7403	Steering wheel puller
1170	Pilot bearing puller
1177	Slide hammer puller

No.	Description
7311A	Pitman arm puller
1122	Bearing splitter
1123	Bearing splitter
7372	Rear axle pulling adapter
43888	Long jaws for No. 1026 (3)
43892	Long jaws for No. 1037 (3)
18886	Metal storage box



1676



### Hydraulic Puller Sets

**17-1/2, 30-, and 50-Ton Capacity** – Individual items in the sets are fully described elsewhere in this catalog. . . consult index.

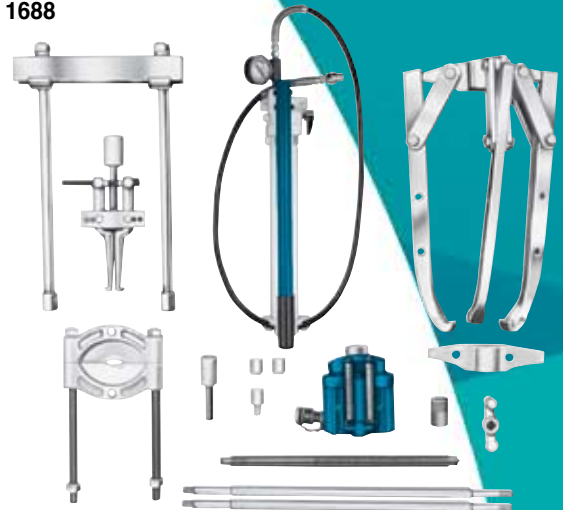
**No. 1688** – 17-1/2 ton capacity hydraulic puller set. Wt., 139 lbs.

**No. 1689** – 30-ton capacity hydraulic puller set. Wt., 330 lbs.

**No. 1690** – 50-ton capacity hydraulic puller set. Wt., 576 lbs.

No.	Description	Set 1688	Set 1689	Set 1690
<b>HYDRAULICS</b>				
4002	Single stage hydraulic hand pump assy.	•	•	•
4120	17-1/2 ton ram with threaded insert	•		
4121	30-ton ram with threaded insert		•	
4122	50-ton ram with threaded insert			•
24815	Tee adapter	•	•	•
9650	Pressure gauge	•	•	•
9767	Hydraulic hose – 6 foot	•	•	•
9798	Hose half coupler with dust cap	•	•	•
<b>PULLERS</b>				
1062	17-1/2 ton Push-Puller with 16-1/2" legs	•		
1066	17-1/2 ton 3-jaw hydraulic puller	•		
1070	30-ton hydraulic Push-Puller with 18" legs		•	
1074	30-ton 3-jaw hydraulic puller		•	
1076	50-ton hydraulic Push-Puller with 24" legs			•
1080	50-ton 3-jaw hydraulic puller			•
<b>ACCESSORIES</b>				
1105	Puller leg – 22-1/2"	•		
1111	28" legs for No. 1070		•	
1113	34" legs for No. 1076			•
1127	Bearing pulling attachment		•	•
1130	Bearing pulling attachment	•		
1154	Bearing cup pulling attachment	•		
1166	Bearing cup pulling attachment		•	
201454	Pushing adapter	•		
24814	Speed crank	•		
27198	Speed crank		•	
28228	Pushing adapter	•		
28229	Ram cap		•	
28230	Ram cap for No. 1076			•
29595	Speed crank			•
32118	Ram adjusting screw	•		
32698	Adjusting screw			•
34510	Pushing adapter		•	
34755	Pushing adapter			•
34758	Adjusting screw		•	
41226	2-way head for No. 1074		•	
41224	2-way head for No. 1066	•		
50449	2-way head for No. 1080			•
8020	1"-8 F. x 5/8"-18 M. threaded adpt.	•		
8023	1-1/4"-12 F. x 1"-14 M. threaded adpt. (2)			•
8028	1-5/8"-5-1/2 F. x 1"-8 M. threaded adpt.			•
8029	1-5/8"-5-1/2 F. x 1"-14 M. threaded adpt.			•
8036	Female thd. adpt. 1"-14 x 1"-14 (2)		•	
8038	Female thd. adpt. 5/8"-18 x 3/4"-16 (2)	•		

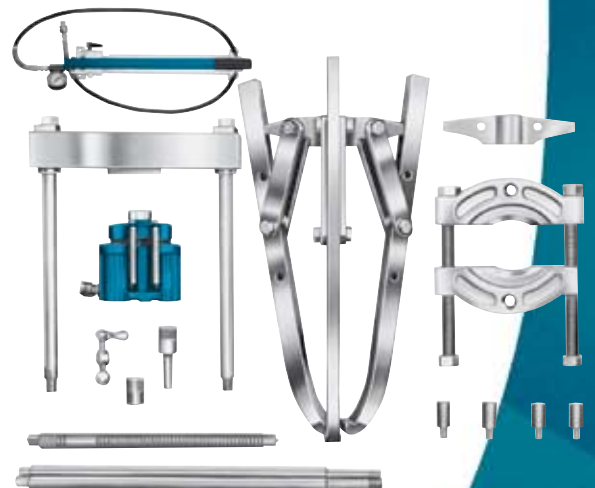
1688



1689

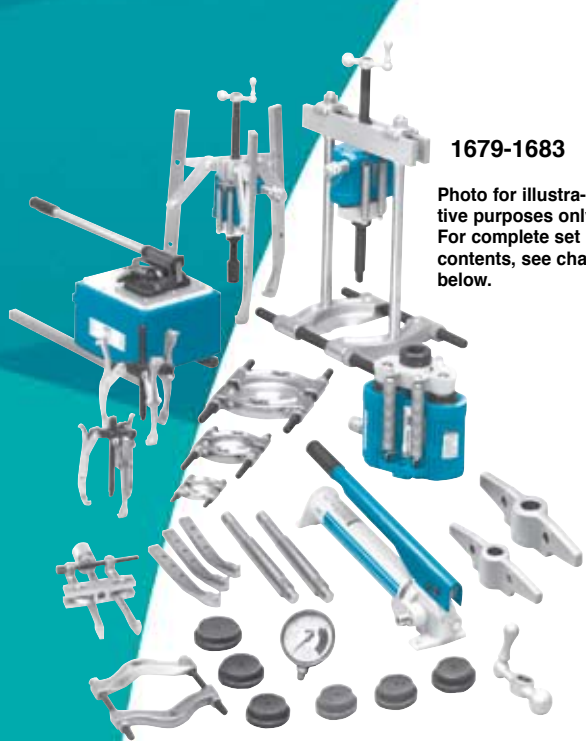


1690



# PULLERS

## Hydraulic Puller Sets



1679-1683

Photo for illustrative purposes only. For complete set contents, see chart below.

Individual items in the sets are fully described elsewhere in this catalog. . . consult index.

Tool No.	Description	Set 1679	Set 1680	Set 1681	Set 1682	Set 1683
<b>HYDRAULICS</b>						
4002	Single-stage hydraulic hand pump assembly	•	•	•	•	•
4008	2-stage hyd. hand pump w/3-way control valve				•	
9650	Pressure gauge	•	•	•	(2)	•
9798	Hose half coupler w/dust cap	•	•	•	(2)	•
9767	Hydraulic hose – 6 ft.	•	•	•	(2)	•
<b>RAMS</b>						
4120	17-1/2 ton ram with threaded insert	•	•	•	•	•
4121	30-ton ram with threaded insert			•	•	
4122	50-ton ram with threaded insert				•	•
<b>PULLERS</b>						
1025	2-jaw puller		•			
1027	5-ton capacity 2/3-jaw puller	•		•	•	•
1035	2-jaw puller		•			
1039	2-jaw puller		•			
1062	17-1/2 ton cap. hyd. Push-Puller w/16-1/2" legs	•	•	•	•	•
1105	22-1/2" legs for No. 1062 (pair)	•	•	•	•	•
1106	9-1/2" legs for No. 1062 (pair)				•	
1107	4-1/2" legs for No. 1062 (pair)				•	
1070	30-ton cap. hyd. Push-Puller w/18" legs			•	•	
1109	8" legs for No. 1070 (pair)				•	
1111	28" legs for No. 1070 (pair)			•	•	
1076	50-ton cap. hyd. Push-Puller w/24" legs				•	•
1113	34" legs for No. 1076 (pair)				•	•
1066	17-1/2 ton 3-jaw Grip-O-Matic® puller	•	•	•	•	•
41224	17-1/2 ton 2-jaw puller head	•	•	•	•	•
1074	30-ton 3-jaw hyd. puller			•	•	
1080	50-ton 3-jaw hyd. puller			•	•	
50449	50-ton 2-jaw puller head			•	•	
1037	Combination 2/3-jaw puller	•		•	•	•

## Hydraulic Puller Sets

- No. 1679 – 17-1/2 ton hydraulic puller set. Wt., 238 lbs.
- No. 1680 – 17-1/2 ton hyd. farm implement service set. Wt., 186 lbs.
- No. 1681 – 17-1/2 ton and 30-ton hydraulic puller set. Wt., 543 lbs.
- No. 1682 – 17-1/2 ton, 30-ton, & 50-ton master puller set. Wt., 1260 lbs.
- No. 1683 – 17-1/2 ton & 50-ton hydraulic construction equipment service set. Wt., 821 lbs.

Tool No.	Description	Set 1679	Set 1680	Set 1681	Set 1682	Set 1683
41226	30-ton 2-jaw puller head			•	•	
43892	Long jaws for No. 1037 (3)			•	•	•
1041	Combination 2/3-jaw puller	•		•	•	•
30902	Long jaws for No. 1041 (3)			•	•	•
1170	Pilot bearing puller		•			
1176	Slide hammer puller		•			
7392	Gear and pulley puller		•			•
24833	Short forcing screw for No. 7392		•			•
<b>ACCESSORIES</b>						
8005	5/8"-18 F x 3/8"-16 M threaded adapter (2)	•	•	•	•	•
8006	5/8"-18 F x 1/2"-20 M threaded adapter (2)	•	•	•	•	•
8007	5/8"-18 F x 1/2"-13 M threaded adapter (2)	•	•	•	•	•
8010	5/8"-18 F x 5/8"-11 M threaded adapter (2)	•	•	•	•	•
8013	5/8"-18 F x 3/4"-16 M threaded adapter (2)	•	•	•	•	•
8015	5/8"-18 F x 3/4"-10 M threaded adapter (2)	•	•	•	•	•
8017	5/8"-18 F x 7/8"-14 M threaded adapter (2)	•	•	•	•	
8018	5/8"-18 F x 7/8"-9 M threaded adapter (2)	•		•	•	
8019	5/8"-18 F x 1"-14 M threaded adapter (2)	•	•	•	•	•
8020	1"-8 F x 5/8"-18 M threaded adapter (1)	•	•	•	•	•
8021	1"-8 F x 1"-14 M threaded adapter (1)	•	•	•	•	•
8012	1"-14 F x 5/8"-18 M threaded adapter (2)			•	•	
8025	1-1/4"-7 F x 5/8"-18 M threaded adapter (2)			•	•	
8027	1-1/4"-7 F x 1"-14 M threaded adapter (2)			•	•	
8023	1-1/4"-12 F x 1"-14 M threaded adapter (2)				•	•
8024	1-1/4"-12 F x 1-3/4"-12 M threaded adapter (2)				•	
8028	1-5/8"-5-1/2 F x 1"-8 M threaded adapter (1)				•	•
8029	1-5/8"-5-1/2 F x 1"-14 M threaded adapter (1)				•	•
8036	1"-14 F x 1"-14 F threaded adapter (2)			•	•	
8038	5/8"-18 F x 3/4"-16 F threaded adapter	(2)	•	(2)	(2)	•
8056	Shaft protector set	•	•	•	•	•
8075	Step plate adapter set	•	•	•	•	•
8076	Step plate adapter set	•	•	•	•	•
679	Pulley pulling attachment	•		•	•	
680	Pulley pulling attachment			•	•	
8044	Internal threaded adapter set	•	•	•	•	•
10215	Hex nut: 3/4"-16 (2)					•
1154	Bearing cup pulling attachment	•	•	•	•	•
32136	Long jaws for No. 1154 (2)			•	•	
1166	Bearing cup pulling attachment			•	•	•
34479	Reducing adapter for use with No. 1166				•	•
1122	Bearing splitter	•	•	•	•	•
1123	Bearing splitter	•	•	•	•	•
1126	Bearing splitter			•	•	•
1127	Bearing splitter			•	•	•
1128	Bearing splitter				•	
1130	Bearing splitter	•	•	•	•	•
24814	Speed crank	•	•	•	•	•
24815	Tee adapter	•	•	•	•	•
24829	Short bolt (2)					•
24832	Special puller forcing screw	•		•	•	
27198	Speed crank			•	•	
29595	Speed crank				•	•
28228	Ram cap	•	•	•	•	•
28229	Ram cap			•	•	
28230	Ram cap				•	•
32118	Ram adjusting screw	•	•	•	•	•
32698	Ram adjusting screw				•	•
34758	Ram adjusting screw				•	•
34510	Pushing adapter			•	•	
34755	Pushing adapter				•	•
201923	Pushing adapter	•	•	•	•	•



- Engineered in the U.S.A.
- Lifetime Marathon Warranty®

Sleeve Pullers & Installers . . . . . **224–225**

Diesel Engine Tools . . . . . **226–230**

Truck Clutch Tools . . . . . **231–232**

U-Joint Tools . . . . . **233**

Wheel Bearing Locknut Sockets . . . . **234–236**

Lug Nut Tools . . . . . **236**

King Pin/Anchor Pin Press . . . . . **237**

Brake & Steering Tools . . . . . **237–241**

Suspension Tools . . . . . **238**

Transmission Tools . . . . . **241–243**

Fuel & Injector Service . . . . . **243–245**

Diesel Injection Nozzle Testers . . . . **246–248**

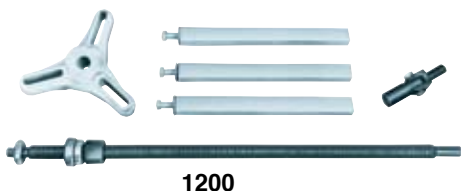
### Heavy-Duty Class 4 – 8 Trucks

Category	Class	GVWR2	Representative Vehicles
Medium	4	62 - 71 kN (14,001 - 16,000 lbs.)	city cargo van, beverage delivery truck, wrecker, school bus
	5	71 - 87 kN (16,001 - 19,500 lbs.)	
	6	87 - 116 kN (19,501 - 26,000 lbs.)	
	7	116 - 147 kN (26,001 - 33,000 lbs.)	
Heavy	8	147 kN and over (33,00 lbs. and over)	truck tractor, concrete mixer, dump truck, fire truck, city transit bus



# HEAVY-DUTY TOOLS

## Sleeve Puller / Installer Sets



1200

### Sleeve Puller / Installer Sets

These sets work on a wide array of truck, bus, and tractor engines, as well as those in other vehicles. They'll handle wet and dry sleeves – and you won't need to remove head studs. Save time, effort, and money.

- Choice of two sets: manual or 17-1/2 ton hydraulic powered.
- Wide range of adapter plates available to fit most engines.

### Manual Sleeve Puller Set

This manually operated, screw-powered device removes cylinder sleeves from most truck, bus, and tractor engines. Adapter plates (not included in the set) accommodate a wide range of bore sizes. See application chart on next page. The puller enables one technician to handle sleeve-pulling tasks.

**Not recommended for Mack engines (use No. 1202 set).**

No.	Description
24824	Thrust washer
37592	Three-way head
27908	13" risers (3 required)
22205	Forcing nut
208675	Swivel assembly
10088	Cap screws, hex hd. (3)
10586	Flat washers (3)
11466	Thrust bearing
32976	Pulling screw

**No. 1200** – Manual sleeve puller set. Wt., 26 lbs.



4180

1201

### Installing Conversion Kit for 1200 Set

Permits the No. 1200 sleeve puller to handle both removing and installing operations. Use plate Nos. 1253–1256 for installing, and plate Nos. 1219–1250 for removing. Plates are not included with kit.

No.	Description
33769	Screw extension
41291	Installing bar
302340	Yoke assembly

**No. 1201** – Installing conversion kit. Includes screw ext., installing bar, and yoke assembly. Wt., 17 lbs., 13 oz.

#### SLEEVE PULLER PLATE APPLICATION CHART

The puller plates listed here work with manual and 17-1/2 ton hydraulic sleeve pullers	Bore Dia.	Plate No.
<b>J.I. CASE</b> – 207 Diesel	4"	1227
<b>CATERPILLAR</b> – 1673C; 1674; 3304; 3306; D330C; D333C; D334	4-3/4"	1240
D326, D337	5-1/8"	1246
<b>CUMMINS</b> – V Series 903 NT855	5-1/2"	1250
H & NH	4-7/8"	1242
<b>GENERAL MOTORS</b> – 53 Series	3-7/8"	1225
71 Series	4-1/4"	1232
<b>INT'L HARVESTER</b> – C-221, C-263	3-9/16"	1221
D-166, D-188, D-236, D-282, C-248, D-248, D-310, D-358, D-155	3-11/16"	1222
D-179, D-206, D-239	3-7/8"	1225
C-281, D-281, D-361	4-1/8"	1230
D-691, D-461	4-3/4"	1240
D-407	4-5/16"	1233
<b>JOHN DEERE</b> – 4-270, 6-404	4-1/4"	1232
6-531	4-3/4"	1240
6-619	5.12"	1246
8-955	5.512"	1250
<b>MACK</b> – END(T) 673, 675, 676	4-7/8"	1243
672	4-7/8"	1242
END (T) 711, 707	5"	1245
<b>PERKINS</b> – AD3.152, AG3.152, AD4.203	3.6"	1219
AG4.212, A4.236, AG4.236, A6.354, A6.3541, ATC6.3541, AT6.354, AT6.3541	3-7/8"	1223
Universal puller for wet-type sleeves, see following page.		

### 17-1/2 Ton Hydraulic Sleeve Puller Set

Removes and installs sleeves of many makes and models of trucks, buses, and tractors. See chart at left and on next page.

#### Contents of Set No. 1202:

No.	Description	No.	Description
37592	Three-way head	27908	13" risers (3 req'd)
33769	Screw extension	41291	Installing bar
302482	Speed nut	10221	Hex safety nut
302340	Yoke assembly	208675	Swivel assembly
10088	Cap screws, hex hd (3)	10586	Flat washers (3)
32976	Pulling screw	21714	Insert
4180	Hyd. ram/pump assy.		

**No. 1202** – 17-1/2 ton hydraulic sleeve puller set. Wt., 86 lbs.

**No. 1203** – Sleeve puller without hydraulic assembly. Wt., 45 lbs., 10 oz.

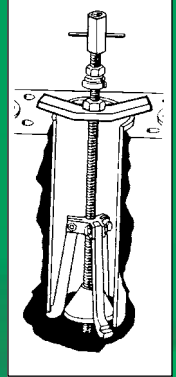
### Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. To aid in breaking "frozen" sleeves loose, adjustable bridge is positioned on the cylinder block and the bearing-mounted forcing nut is tightened. Next, bridge is removed and slide hammer assembly is attached. With a few sharp hammer blows, sleeve is pulled. In most cases, job time will average less than two minutes per cylinder. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.

**No. 1205** – Sleeve puller with 5 lb. slide hammer assembly. Wt., 20 lbs., 10 oz.

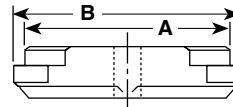
**No. 1204** – Sleeve puller without 5 lb. slide-hammer assembly. Wt., 14 lbs.



Bore Inches	"A" I.D. +.010 -0.000	"B" O.D. +.015 -0.015	OTC Plate Number
3.600"	3.585	3.657	1219
3-9/16"	3.547	3.663	1221
3-11/16"	3.671	3.792	1222
3-7/8"	3.840	4.047	1223
3-7/8"	3.859	4.093	1225
4"	3.984	4.218	1227
4-1/8"	4.109	4.229	1230
4-1/4"	4.235	4.470	1232
4-5/16"	4.302	4.450	1233
4-3/4"	4.734	5.171	1240
4-7/8"	4.860	4.980	1242
4-7/8"	4.860	5.045	1243
5"	4.977	5.120	1245
5-1/8"	5.093	5.593	1246
5-1/2"	5.484	5.718	1250

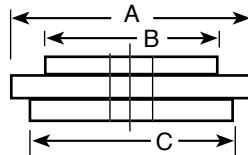
### Sleeve Removal Plates

Designed to work with set Nos. 1200, 1202, and 1203, these removal plates fit the full spectrum of cylinder sleeve sizes. Determine engine bore size ("A" dimension) and O.D. of sleeve to be pulled ("B" dimension). Then consult chart to the right.



### Sleeve Installation Plates

Each of these dry-sleeve installation plates covers a range of bore sizes. Their reversible design makes both sides usable. The plates work with our manual or 17-1/2 ton hydraulic puller/installers (Nos. 1200, 1202, and 1203). Check chart at right to ensure correct sleeve selection.

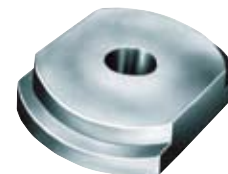
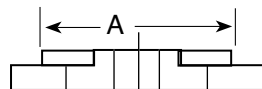


Fits Sleeves From	"A"	"B"	"C"	No.
3-3/16" to 3-7/16"	3-7/8"	3.171"	3.421"	1252
3-9/16" to 3-7/8"	4-1/4"	3.546"	3.859"	1253
4-1/8" to 4-3/8"	4-3/4"	4.109"	4.359"	1254
4-3/8" to 4-3/4"	5-1/4"	4.390"	4.734"	1255
4-13/16" to 5-3/4"	6-3/8"	4.797"	5.734"	1256

### Blank Sleeve Remover Plates

These sleeve puller blanks supplement the sleeve puller plates listed above. Should a standard plate be unavailable, you can machine these blanks to the required bore size.

- Includes instructions.



Machined Bore Dim. "A"	Will Machine to Bore Size Dim. "A"	Blank Number
5.250	4.750	39058
4.750	4.400	39057
4.400	3.812	38722
3.812	3.437	38724
3.437	3.000	38723

### Oil Seal and Wear Ring Installer

This two-piece tool makes the difficult job of correctly installing the rear crankshaft seal and wear ring on most Navistar DT-360 and DT-466 engines thru 1996 an easy task. Bolt the adapter to the crankshaft and wrench the component home.

- Eliminates damage to seals or wear ring that can occur when driving them into place.

**No. 5022** – Oil seal and wear ring installer for 5.0" dia. seals (ZTSE4749 for 6.5" dia.). Wt., 32 lbs.



5022

# HEAVY-DUTY TOOLS

## Glow Plug / Compression Service

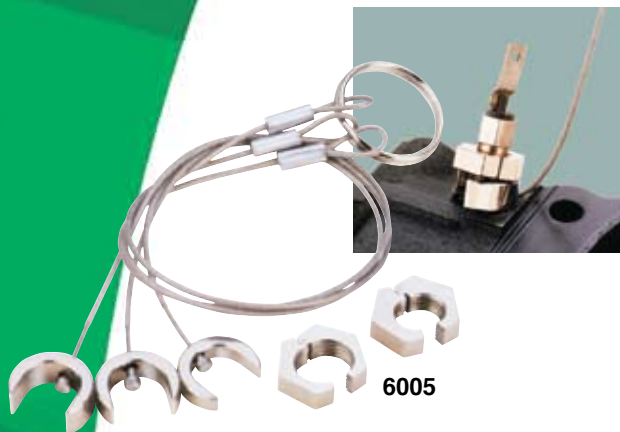


7106

### Cylinder Liner Height Gauge with Hold-Down Bar

This set lets you meet those exacting specifications necessary for optimum diesel engine performance. It accurately measures cylinder bore flatness and depth. The hold-down bar correctly seats the liner for accurate measurement of liner protrusion. The easy-to-read dial is in .001 inch graduations, 1.000" range.

**No. 7106** – Cylinder liner height gauge with hold-down bar, in plastic case. Wt., 7 lbs., 7 oz.



6005

### Diesel Glow Plug Removal Tool

- Removes damaged, stuck-in glow plugs on diesel engines without having to remove cylinder head, saving hours of service time!
- When glow plug tip is melted and plug cannot be removed without breaking it off, this tool is the only answer.
- Tool includes 10 mm and 12 mm split nuts that provide added threads for pulling. One of three furnished spacers is installed under split nut to give a solid base for extraction without breaking glow plug off. Split nut is held with a wrench as the glow plug is unscrewed from the head.
- Services diesels in popular 3/4- and 1-ton pickups. Comes in a plastic storage case.

**No. 6005** – Includes 10 mm x 1.00 mm and 12 mm x 1.25 mm split nuts, three spacers (3/16", 1/4", 5/16"), plastic storage/organizer case, and instructions. Wt., 5 oz.

Services Ford – 1983-87 6.9L, 1988-98 7.3L, GM – 1992-2000 6.5L, 1982-93 6.2L, 1980-85 5.7L, plus many import and ag. diesel engines



5020

Similar to Ford 303-D091 (D93T-6000-A)

### Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

**No. 5020** – Diesel compression tester with adapters. Wt., 7 lbs., 13 oz.

**No. 5021** – Universal diesel engine compression gauge. Wt., 1 lb., 8 oz.

**No. 304802** – Replacement gauge. Wt., 8 oz.

Replacement Adapters (available separately)

**No. 47484** – Hino diesel truck engines with 12 mm x 1.25 thread

**No. 209633** – Ford 6.6L & 7.8L diesels

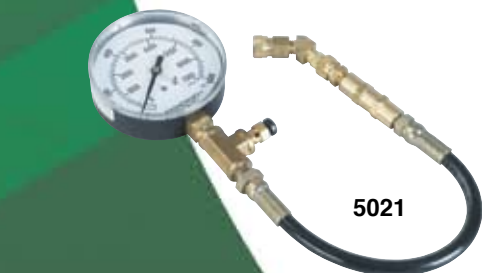
**No. 217791** – Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98

**No. 308472** – Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread

**No. 310810** – Cummins C 8.3L 6 cyl. '88-'96

**No. 310832** – Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread

**No. 310840** – Navistar DT466/DT360



5021

Similar to Ford No. 303-D092 (D93T-6000-B)



### Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Remove glow plug; this adapter is used to connect the No. 5021 gauge to perform a compression test.
- Application: 1994–2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.

**No. 6076** – Ford diesel compression test adapter. Wt., 5 oz.

Similar to  
Ford 303-D103  
(D94T-6600-E)



6076

### Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2006 Ford vans and trucks—with 6.0L diesel engines.

**6660** – Ford diesel compression test adapter. Wt., 7 oz.

Similar to  
Ford 303-757



6660

### Ford 5-pin Connector Harness for Glow Plug Testing

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994-98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engine.
- Use with any standard digital volt ohmmeter to check glow plug resistance.

**No. 6088** – Ford 5-pin connector harness for glow plug testing. Wt., 4 oz.

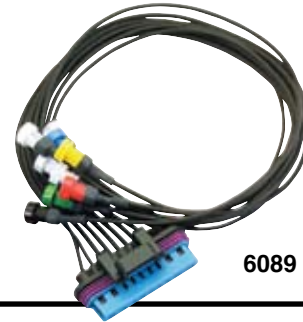


6088

### Ford 9-pin Connector Harness for Glow Plug Testing

- Permits testing glow plug resistance without having to remove the valve cover of 1998-1/2–2003 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Use with any standard digital volt ohmmeter to check glow plug resistance.

**No. 6089** – Ford 9-pin connector harness for glow plug testing. Wt., 8 oz.



6089

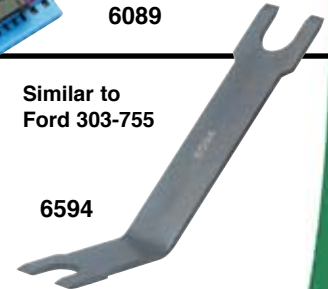
### Ford Oil Line Disconnect Tool

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0L diesel engine found in 2003–'07 F-250, F-350, F-450, and F-550 trucks, and Ford Excursions.

**No. 6594** – Ford oil line disconnect tool. Wt., 5 oz.

Similar to  
Ford 303-755

6594



### High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998 - 2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.

**No. 6595** – High pressure oil line disconnect tool. Wt., 3 oz.

Similar to Ford  
303-625

6595



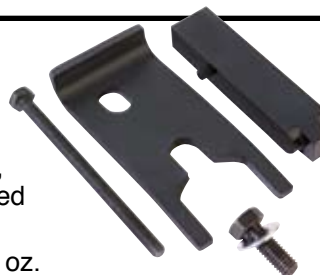
### Ford Injector Remover/Installer Kit

- Removes and installs injectors without damaging the injector or cylinder head.
- Application: 1994–2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.

**No. 6067** – Ford injector remover/installer kit. Wt., 6 oz.

Similar to  
Ford 303-491  
and 303-492

6067





# HEAVY-DUTY TOOLS

## Diesel Injector & Fuel Tools



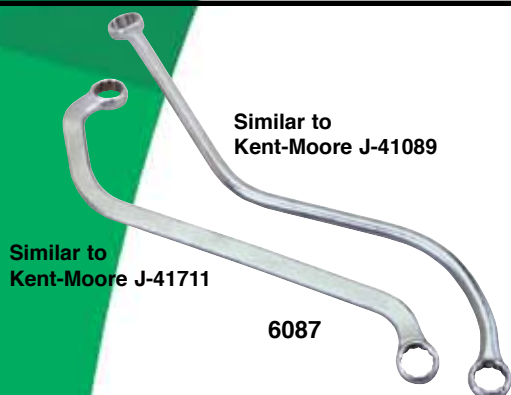
6069

Similar to  
Miller 8318

### Cummins Diesel Fuel Injector Remover Kit

- Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before pulling the injector, or both will be damaged.
- Application: 1998-1/2–2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.

**No. 6069** – Cummins diesel fuel injector remover kit. Wt., 8 oz.



Similar to  
Kent-Moore J-41089

Similar to  
Kent-Moore J-41711

6087

### GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996–2000 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing.
- Wrenches are 15 mm, 12-point, double box-end type.

**No. 6087** – GM injection pump wrench set. Wt., 1 lb.



5060

### Detroit Diesel Injector Socket

Because of their location, some injectors are difficult to remove or install. But with this 30 mm socket, you'll be able to attach a 3/8" square-drive tool or 7/8" wrench. The socket fits injectors snugly to provide a good grip and avoid damage.

- Works on 6.2L and 6.5L engines.

**No. 5060** – Detroit Diesel injector socket. Wt., 8 oz.



6080

### Master Cummins Diesel Fuel Injection Test Kit

- Includes the fittings and gauge needed to check fuel pressure, fuel volume, and fuel restrictions from the delivery pump to the injection pump.

Contents:

**No. 518501** – Special quick-disconnect banjo fitting (M14 x 1.5 external).

**No. 7915** – Two fuel injection quick-coupler adapters.

**No. 7426** – Quick-disconnect banjo fitting (M12 x 1.5 external).

**No. 223336** – Gauge assembly.

**No. 6082** – Fuel volume test adapter.

**No. 6078** – Diesel fuel inlet restriction test adapter.

- Application: 1988–98 Dodge pickups and vans with 5.9L 12-valve, & 1998-1/2–2003 5.9L 24-valve Cummins diesel engines.

**No. 6080** – Master Cummins diesel fuel injection test kit. Wt., 5 lbs.

### Cummins Diesel Fuel Volume Test Adapter

- Use to perform fuel volume test on fuel transfer pump. Fuel volume is as important as fuel pressure. Pump may pass pressure test, but fail volume test. Fitting is threaded into transfer pump, and No. 6082 is attached to the barbed end. The end of the 2 ft. tubing is placed into a container for fuel to be measured.
- Application: 1994–1998-1/2 Dodge pickups and vans with 5.9L 12-valve Cummins diesel engine.

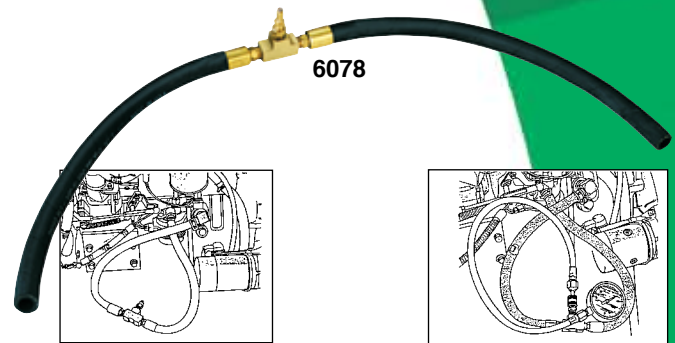
**No. 6082** – Cummins diesel fuel volume test adapter. Wt., 3 oz.



### Cummins Diesel Fuel Inlet Restriction Test Adapter

- Adapter is used to perform a vacuum test on the transfer pump; excessive vacuum reading indicates a fuel inlet restriction.
- Application: 1988–95 Dodge trucks and vans with 5.9L 12-valve Cummins diesel engine. Included in OTC set No. 6080.

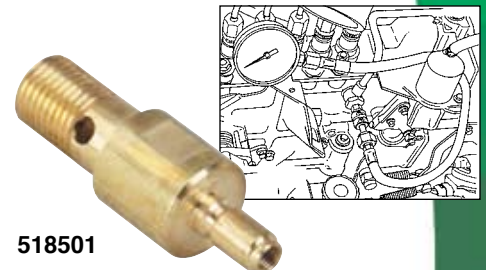
**No. 6078** – Cummins diesel fuel inlet restriction test adapter. Wt., 1 lb., 3 oz.



### Special Quick-Disconnect Banjo Fitting

- Adapter fitting (M14 x 1.5 male) is used to check fuel pressure from the delivery pump to the injection pump. Use with gauge assembly of OTC set No. 6079.
- Has quick-connect Schrader valve on end of fitting for safety and ease of hook-up to gauge. Included in OTC kit No. 6080.
- Application: 1996–1998-1/2 Dodge pickups and vans with 5.9L 12-valve Cummins engine.

**No. 518501** – Special quick-disconnect banjo fitting. Wt., 3 oz.



### Cummins Engine Barring Tool

Need to manually rotate an engine? This tool makes the job easy. Just insert the tool into the flywheel housing until it engages the ring gear. Then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.

- Works on Cummins B and C series diesel engines and 5.9L diesels used in Dodge pickups.

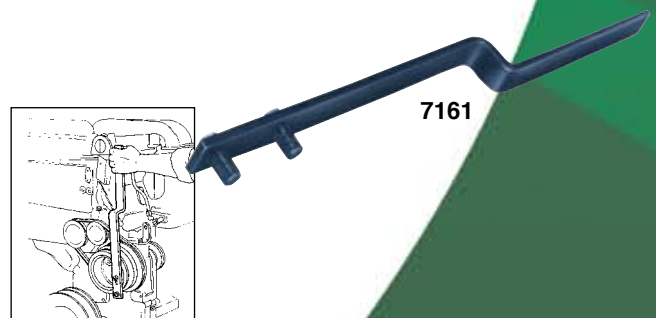
**No. 7471A** – Cummins engine barring tool. Wt., 11 oz.



### Cummins Engine Turning Tool

This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.

**No. 7161** – Cummins engine turning tool. Wt., 4 lbs., 5 oz.



# HEAVY-DUTY TOOLS

## Pullers, Air Cooler Tester



7119

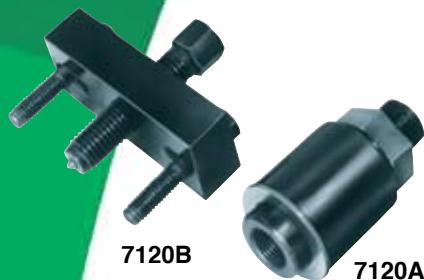
Similar to  
Kent-Moore J-29953-A

### Compressor Drive-Gear Coupling Puller

Here's the solution for removing the coupling from the Cummins Compact and Bendix air compressors found on many Cummins 855 cubic inch engines. The split collet design fits over the coupling, and mechanical force does the work.

- Works on compressors with 1-3/4" O.D. shaft.

**No. 7119** – Compressor drive-gear coupling puller. Wt., 2 lbs., 7 oz.



7120B

7120A

### Cummins Drive-Pulley Tool Set

This two-piece set is designed to remove and install the drive pulley on Cummins NH and NTC 855 cubic inch engines. The 7120B remover simply bolts into the tapped holes for pulling. The 7120A installer threads onto the pulley accessory drive shaft for easy installation.

**No. 7120** – Cummins drive-pulley tool set. Wt., 5 lbs., 5 oz.

**No. 7120A** – Drive-pulley installer. Wt., 2 lbs., 3 oz.

**No. 7120B** – Drive-pulley remover. Wt., 3 lbs.

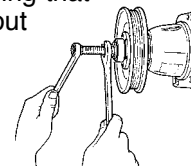


5071

### Cummins Water Pump Pulley Tool

This heavy-duty tool is designed to remove or install water pump pulleys on Cummins L10 and M11 engines, 1991 and newer. The installer has a rugged thrust bearing that allows for friction-free pulley installation without damaging pump components.

**No. 5071** – Cummins water pump pulley tool. Wt., 2 lbs., 4 oz.

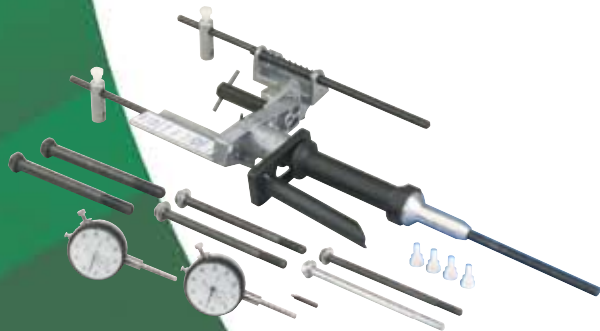


5039

### Charged Air Cooler Tester

This is the easy way to find air leaks in the charged air cooler systems used on class 7 & 8 truck engines. The tester features a large 2-1/2", 0-60 PSI pressure gauge, regulator and relief valve, and two safety cables. It also has quick disconnect air fittings that attach to a 3", 3-1/2", or 4" cooler hose.

**No. 5039** – Charged air cooler tester. Wt., 7 lbs., 6 oz.



7470

### Cummins Diesel Injector Timing Kit

Measures static timing on Cummins J, K, N, NH, V-12, N-14, and L-10 series diesel engines. With this tool you can determine the injector push tube travel in relation to piston travel. Tool is installed with one dial indicator in the injector bore and the other on the injector push tube. Turn the engine over manually to find top dead center. By checking the gauges, you can determine if timing is within factory specifications, then make adjustments to the cam followers.

**No. 7470** – Cummins diesel injector timing kit. Wt., 15 lbs.



### Truck Clutch Alignment Shafts

These 10-spline clutch alignment shafts are available in the three most popular sizes: 1-1/2", 1-3/4", 2" O.D., and are designed for use on heavy-duty single, two-plate, push/pull, manual, and self-adjust clutches. The shafts are constructed of lightweight fiberglass-reinforced nylon that won't hang up in clutch disc splines. Yet, they're rugged and will easily support the weight of heavy pressure plates.

**No. 5070** – Truck clutch alignment shaft. 1-1/2" O.D., 30 mm pilot. Wt., 10 oz.

**No. 7072A** – Truck clutch alignment shaft. 1-1/2" O.D., 1" pilot, 10 splines, 3.25" long. Similar to Ford 308-D001 (D79T-7550-A). Wt., 10 oz.

**No. 7073A** – Truck clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 3.75" long. Similar to Ford 308-D002 (D79T-7550-B). Wt., 11 oz.

**No. 7074A** – Truck clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 3.6" long. Similar to Ford 308-D003 (D79T-7550-C). Wt., 13 oz.

**No. 7480** – Truck clutch alignment shaft. 1-3/4" O.D., 1" pilot. Similar to Ford 308-D010 (D93T-7550-A). Wt., 7 oz.

**No. 5029** – Clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 7.3" long. Similar to Ford 308-D011 (D93T-7550-B). Wt., 1 lb.

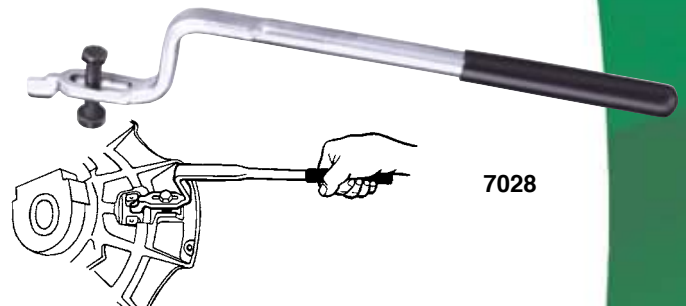
**No. 5030** – Clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 7.375" long. Similar to Ford 308-D012 (D93T-7550-C). Wt., 13 oz.



### Clutch-Adjusting Wrench

This clutch-adjusting wrench will solve the difficult, time-consuming job of internally adjusting heavy-duty Spicer clutches. Using this wrench is much quicker and easier than makeshift methods such as pry bars, which often result in component damage, poor job performance, or extra downtime.

**No. 7028** – Clutch-adjusting wrench. Wt., 1 lb., 8 oz.

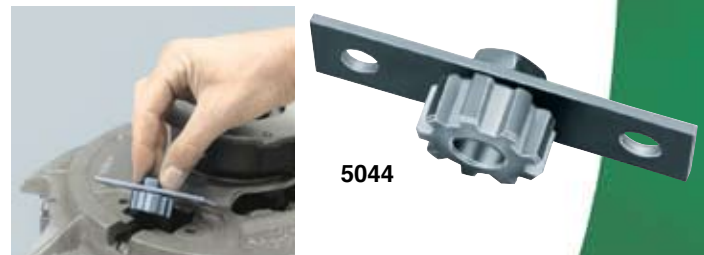


### Self-Adjusting Clutch Rotating Tool

This handy tool replaces the self-adjuster mechanism on Spicer self-adjusting clutches, allowing you to manually adjust them with a wrench or socket.

- 3/4" hex drive.

**No. 5044** – Self-adjusting clutch rotating tool. Wt., 7 oz.



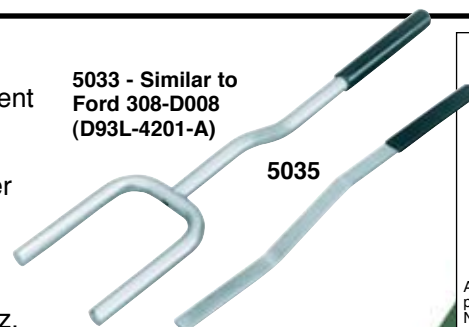
### Truck Clutch Adjustment Set

The gauges in this set enable you to check the adjustment of pull-type, heavy-duty clutches, ensuring their correct operation. One gauge checks the amount of free play between the yoke and the bearing's wear pad. The other gauge lets you determine the amount of travel between the release bearing and transmission bearing cap.

**No. 5035** – Truck clutch adjustment set. Wt., 1 lb., 8 oz.

**No. 5034** – Clutch pedal free play gauge. Wt., 1 lb., 4 oz.

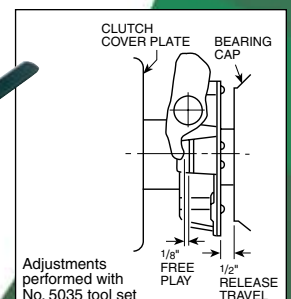
**No. 5033** – Release bearing travel gauge. Wt., 4 oz.



5033 - Similar to Ford 308-D008 (D93L-4201-A)

5035

5034 - Similar to Ford 308-D009 (D93L-7025-A)



Adjustments performed with No. 5035 tool set

# HEAVY-DUTY TOOLS

## Clutch & Flywheel Tools



### Clutch Service Set

Here's an ideal companion set to the No. 5015 clutch handler. Designed for Spicer heavy-duty clutches, the nine tools in this set help with a variety of jobs, from clutch installation and removal to flywheel drive-pin installation to clutch adjustment.

- Includes handy plastic carrying case.

**No. 5043** – Clutch service set.  
Wt., 15 lbs., 13 oz.

OTC No.	Description
5044*	Self-adjust clutch rotating tool. Rotates adjusting ring.
5045*	Flywheel drive pin installing tool. Aligns and installs drive pins in 14" heavy-duty truck pot-type flywheels.
5046*	Clutch release tool. Removes shipping blocks from between clutch housing and release bearing.
7028*	Adjusting wrench. For internal adjustment of multiple lever and angle-spring clutches.
7073A*	Clutch alignment tool. 1-3/4" O.D. Provides perfect fit to spline of clutch disc.
7074A*	Clutch alignment tool. 2" O.D. Provides perfect fit to spline of clutch disc.
213013	Pair of 3/8" flywheel to clutch guide pins.
213014	Pair of 7/16" flywheel to clutch guide pins.
213015	Hex key wrench. Removes/installs flywheel drive pin set screws.

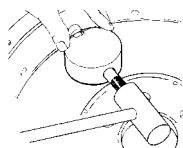
\* Tool is available separately.



### Clutch Release Tool

- Permits removal of the shipping blocks from new clutch assemblies.

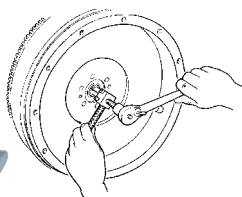
**No. 5046** – Clutch release tool. Wt., 3 lbs., 10 oz.



### Drive Pin Installing Tool

- Enables precise alignment and installation of the spacer plate drive pins on a pot-type 14" flywheel.
- Ensures free action of clutch assembly.

**No. 5045** – Drive pin installing tool. Wt., 3 lbs.

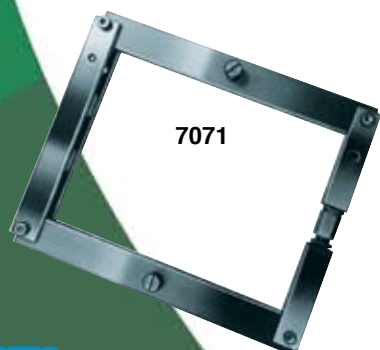


### Pilot Bearing Pullers

These tools make quick work of pulling stubborn, rusted pilot bearings. No. 5048 fits 1-1/4" I.D. bearings, and No. 5049 fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the crankshaft.

**No. 5048** – Pilot bearing puller for 1-1/4" I.D.  
Wt., 1 lb., 3 oz.

**No. 5049** – Pilot bearing puller for 1" I.D.  
Wt., 1 lb., 3 oz.



### Differential Housing Spreader

Removing and installing differential ring gear assemblies is typically a difficult, time-consuming chore – that is, unless you're using this differential housing spreader. This device uses mechanical screw power to spread the housing, allowing easy removal of the differential assembly while eliminating damage often caused by makeshift methods.

- Works on Dana axle models 30 through 70.

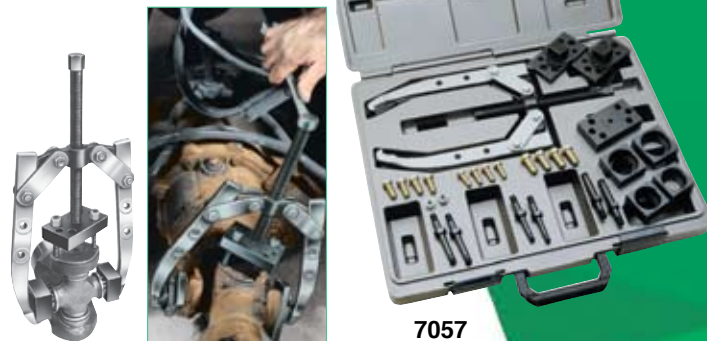
**No. 7071** – Differential housing spreader.  
Wt., 34 lbs.

### U-Joint Puller

This service tool easily removes stubborn, corroded bearings without damaging U-joint components, even in limited space. The tool applies up to 7 tons of force to separate yoke assemblies and remove bearings. Far superior to sledgehammer methods.

- Works on Meritor 16N, 17N, 18N, and 1710 series U-joints and Spicer 1600/1610 to 1880 series U-joints.
- Includes plastic storage box, No. 1036 2-jaw puller, and instructions.

**No. 7057** – U-joint puller. Wt., 16 lbs., 3 oz.

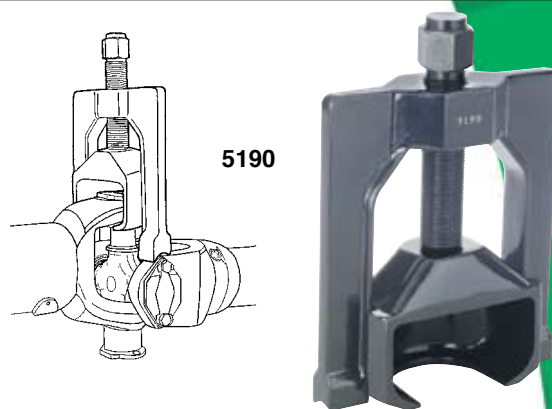


### Heavy-Duty U-Joint Puller

The ideal tool for disassembling drivelines.

- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including:
  - Spicer driveline 1610, 1710, 1760, 1810, 1880
  - Spicer SPL 140, 170, and 250 "Life Series"
  - Meritor (Rockwell) 16N, 17N, 18N, 1710
  - Meritor RPL 20 and 25 "Permalube" Series

**No. 5190** – Heavy-duty universal joint puller. Wt., 11.4 lbs.



### Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on Dana/Spicer SPL "Life Series" quick-disconnect universal joints.

- Three individual adapters press bearings to the manufacturer's recommended depths.
- Adapters fit Spicer SPL 140, 170, and 250 series drivelines.

**No. 5191** – Heavy-duty bearing cup installer. Wt., 18 lbs.



### Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on bolt-retained universal joints. Fits series 1610 to 1880 and nearly all other heavy-duty truck and machine type u-joints with bolt-retained bearing cups.

- Automatically aligns bearing cups during installation.
- Eliminates the possibility of damage to the needle bearing.

**No. 5192** – Heavy-duty bearing cup installer. Wt., 1 lb., 11 oz.



### U-Joint Tool

Designed for a 1/2" impact wrench, this U-joint tool removes even the most stubborn U-joints with ease. It's compact and easily set up, making it ideal for service calls. And it can be used at different angles and in tight places, eliminating those damaging makeshift methods. The puller's legs have holes for bolt storage.

- Bolts included: 5/16"-24 x 1-1/2", 3/8"-24 x 1-1/2", 7/16"-20 x 1-1/2", M8-1.25 mm x 35 mm.
- Works on most Dana Spicer and Meritor U-joints – **except** Spicer's Life series model SPL250X.

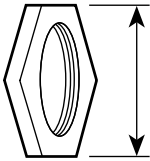
**No. 7490** – U-joint tool. Wt., 10 lbs., 7 oz.



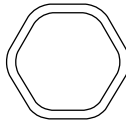


# HEAVY-DUTY TOOLS

## Truck Wheel Bearing Locknut Sockets

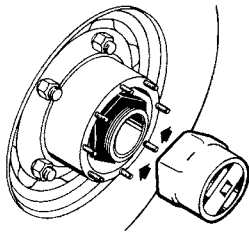


Measure from flat to flat to determine size of locknut, then consult chart to select a socket. **Warranty is void if tool is subjected to impact wrench use.**



\* Fits special "rounded" hex nut found on Dana axles of some Ford trucks.

\* Depth of locknut sockets is 5".



Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.

NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.

**1902** – Similar to Ford No. 205-039 (T70T-4252-B)

**1904** – Similar to Ford No. 205-040 (T70T-4252-D)

**1905** – Similar to Ford No. 205-041 (T70T-4252-E)

**1910** – Similar to Ford No. 205-042 (T70T-4252-K)

**1928** – Similar to Ford No. 205-043 (T70T-4252-W)

Measure from flat to flat to determine size of locknut, then consult chart to find the correct socket.

Socket No.	Opening Size	Socket No.	Opening Size
1901	2-3/32" (6 pt.)	1924	3-3/8" (8 pt.)
1920	2-1/4" (6 pt.)	1910	3-1/2" (6 pt.)
1902	2-3/8" (6 pt.)	1911	3-1/2" (8 pt.)
1936*	2-3/8" (6 pt.)	1925	3-3/4" (8 pt.)
1903	2-3/8" (8 pt.)	1926	3-3/4" (6 pt.)
1921	2-1/2" (6 pt.)	1927	3-13/16" (8 pt.)
1904	2-9/16" (6 pt.)	1912	3-7/8" (6 pt.)
1905	2-9/16" (8 pt.)	1913	3-7/8" (8 pt.)
1928*	2-9/16" (6 pt.)	1914	4" (6 pt.)
1922	2-5/8" (6 pt.)	1915	4-1/8" (6 pt.)
1923	2-3/4" (6 pt.)	1940	4-1/8" (8 pt.)
1937	2-3/4" (8 pt.)	1916	4-3/8" (6 pt.)
1932	2-7/8" (6 pt.)	1917	4-3/8" (8 pt.)
1933	2-7/8" (8 pt.)	1938	4-1/2" (8 pt.)
1906	3" (6 pt.)	1941	4-13/16" (8 pt.)
1907	3" (8 pt.)	1918	4-7/8" (6 pt.)
1934	3-1/8" (6 pt.)	1919	4-7/8" (8 pt.)
1935	3-1/8" (8 pt.)	1939	5-1/4" (6 pt.)
1908	3-1/4" (6 pt.)	7795	2-1/2" (6 pt.)
1909	3-1/4" (8 pt.)	7796	2-3/4" (6 pt.)

## Metric Truck Wheel Bearing Locknut Sockets

Socket No.	Opening Size	Socket No.	Opening Size
1950M	54 mm (6 pt.)	1957M	90 mm (8 pt.)
1951M	55 mm (6 pt.)	1958M	94 mm (8 pt.)
1952M	60 mm (6 pt.)	1962M	100 mm (8 pt.)
1953M	70 mm (6 pt.)	1959M	106 mm (8 pt.)
1954M	71 mm (6 pt.)	1960M	110 mm (8 pt.)
1955M	80 mm (6 pt.)	1961M	120 mm (8 pt.)
1956M	82 mm (8 pt.)		



9850

## Truck Wheel Bearing Locknut Sockets (6-pt.)

**No. 9850** – 21 wheel bearing locknut sockets with tool board.

Wt., 54 lbs., 7 oz.

**No. 62908** – Display board only. Wt., 5 lbs., 7 oz.

No.	Qty.	Description
1901	1	Locknut socket (2-3/32")
1902	1	Locknut socket (2-3/8")
1904	1	Locknut socket (2-9/16")
1906	1	Locknut socket (3")
1908	1	Locknut socket (3-1/4")
1910	1	Locknut socket (3-1/2")
1912	1	Locknut socket (3-7/8")
1914	1	Locknut socket (4")
1915	1	Locknut socket (4-1/8")
1916	1	Locknut socket (4-3/8")
1918	1	Locknut socket (4-7/8")
1920	1	Locknut socket (2-1/4")
1921	1	Locknut socket (2-1/2")
1922	1	Locknut socket (2-5/8")
1923	1	Locknut socket (2-3/4")
1926	1	Locknut socket (3-3/4")
1928	1	Lknt. skt. (2-9/16" rounded)
1932	1	Locknut socket (2-7/8")
1934	1	Locknut socket (3-1/8")
1936	1	Lknt. skt. (2-3/8" rounded)
1939	1	Locknut socket (5-1/4")

### Wheel Bearing Locknut Sockets (8 pt.)

No.	Qty.	Description	No.	Qty.	Description	No.	Qty.	Description
1903	1	Locknut socket (2-3/8")	1917	1	Locknut socket (4-3/8")	1930	1	Locknut socket (2-7/8")
1905	1	Locknut socket (2-9/16")	1919	1	Locknut socket (4-7/8")	1931	1	Locknut socket (3-5/8")
1907	1	Locknut socket (3")	1924	1	Locknut socket (3-3/8")	1933	1	Locknut socket (2-7/8")
1909	1	Locknut socket (3-1/4")	1925	1	Locknut socket (3-3/4")	1935	1	Locknut socket (3-1/8")
1911	1	Locknut socket (3-1/2")	1927	1	Locknut socket (3-13/16")	1937	1	Locknut socket (2-3/4")
1913	1	Locknut socket (3-7/8")	1929	1	Locknut socket (2-5/8")	1938	1	Locknut socket (4-1/2")

**No. 9851** – 18 wheel bearing locknut sockets (8 pt.) with tool board. Wt., 53 lbs., 14 oz.

**No. 62909** – Display board only. Wt., 6 lbs., 11 oz.

### Wheel Bearing Locknut Sockets

- A selection of popular sizes in 6- or 8-point.

**No. 9852** – 12 wheel bearing locknut sockets and tool board. Wt., 34 lbs., 4 oz.

**No. 62910** – Display board only. Wt., 5 lbs., 3 oz.

No.	Qty.	Description	No.	Qty.	Description
1904	1	Locknut skt. (2-9/16" hex)	1921	1	Locknut skt. (2-1/2" hex)
1908	1	Locknut skt. (3-1/4" hex)	1922	1	Locknut skt. (2-5/8" hex)
1909	1	Locknut skt. (3-1/4" 8 pt.)	1923	1	Locknut skt. (2-3/4" hex)
1910	1	Locknut skt. (3-1/2" hex)	1928	1	Locknut socket (2-9/16" hex rounded)
1913	1	Locknut skt. (3-7/8" 8 pt.)	1932	1	Locknut skt. (2-7/8" hex)
1914	1	Locknut socket (4" hex)			
1915	1	Locknut skt. (4-1/8" hex)			



9851



9852

### Tubular Spanner Wrenches

- Six-lug, spanner-type wrenches remove and install rear wheel bearing locknuts. They're built for use with a 3/4" square-drive ratchet or breaker bar.

**No. 1929** – Wrench for servicing Chevrolet and GMC 5,200 and 7,200 lb. axles. Socket O.D. is 2-5/8". Wt., 1 lb., 11 oz.

**No. 1930** – Wrench for servicing Chevrolet and GMC 11,000 to 13,500 lb. axles. Socket O.D. is 2-7/8". Wt., 2 lbs., 5 oz.

**No. 1931** – Wrench for servicing Chevrolet and GMC 15,000 lb. axles; 17,000 lb. 2-spd. axles; 15,000 lb. trailing axles. Socket O.D. is 3-5/8". Wt., 3 lbs., 14 oz.



### Budd Wheel Sockets

- Metric sizes for Isuzu, Hino, Mitsubishi Fuso, and import trucks; fit front and rear axle wheels.
- 1-1/2" hex Budd wheel socket for American-made trucks with dual rear wheels.

These sockets work on the import truck Budd wheels. Their extra deep design lets you remove both nut and stud with just the one socket. Usable with a 1" square drive impact wrench.

**No. 1944** – Consists of 1945A, 1946A, 1947A, 1948A, and 1949A, in a blow molded organizer case.

**No. 1945A** – 35 mm hex socket with 17 mm sq. Wt., 2 lbs.

**No. 1946A** – 38 mm hex socket with 20 mm sq. Wt., 2 lbs., 8 oz.

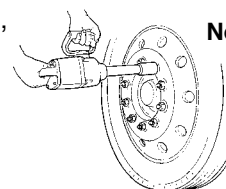
**No. 1947A** – 41 mm hex socket with 21 mm sq. Wt., 2 lbs., 14 oz.

**No. 1948A** – 33 mm hex Budd wheel socket. For Mack Midliners, White Volvo, and other import trucks w/dual rear wheels. Wt., 1 lb., 8 oz.

**No. 1949A** – 1-1/2" hex Budd with 13/16" square wheel socket. For American-made trucks with dual rear wheels. Wt., 2 lbs., 8 oz.



No. 1944



# HEAVY-DUTY TOOLS

## Locknut, Lug, Hubcap Tools



9814

### Truck Pinion Sockets

We've designed and built these sockets to have the correct clearance for yoke and locknut assemblies on a variety of truck transmissions and differentials. The sockets have 3" of usable depth and are 4" long. Using the right tools saves time and effort, eliminating the need to destroy standard sockets by grinding them down to fit tight pinion clearances.

**No. 9814** – Tool board and six sockets, 1975 thru 1980 listed above. Wt., 22 lbs., 6 oz.

**No. 1981\*** – Socket only, not included in set. Wt., 3 lbs., 10 oz.

**No. 62911** – Tool board only. Wt. 2 lbs.

Socket No.	Opening Size
1975	2" (6 pt.)
1976	2-1/8" (6 pt.)
1977	2-1/4" (6 pt.)
1978	2-3/8" (6 pt.)
1979	2-5/8" (6 pt.)
1980	2-3/4" (6 pt.)
1981*	2-1/2" (6 pt.)

**NOTE:** Use sockets with 3/4" square-drive, manually powered handles only. Warranty void if tool is subjected to impact wrench use.



9901

### "Major Persuader" Pry Bar Merchandiser

- Displays five of OTC's biggest pry bars on a bright, eye-level merchandiser.
- Display measures 16"w x 18"d x 64"h.
- Includes 5 pry bars: two 30", two 46", and one 54" in length.

**No. 9901** – Heavy-duty pry bar merchandiser display. Wt., 40 lbs.

Bar No.	Qty.	Desc.
7168	2	30" jimmy bar
7420	2	46" jimmy bar
7421	1	54" jimmy bar



5047

### Lug Nut Cap Remover

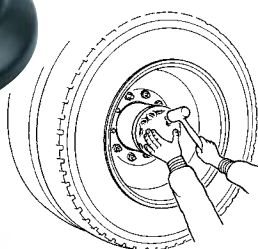
Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.

- Features cushioned handles.

**No. 5047** – Lug nut cap remover. Wt., 13 oz.



5059



### Hubcap Installer

Truckers like chrome, and many of them accent their truck's drive axle with chrome hubcaps designed to snugly fit around the axle-shaft bolts. Unfortunately for service shops, these hubcaps are often tricky to install without causing damage. That's where our hubcap installer comes in handy. Constructed of high-density polyethylene, this tool guides the cap into place over the axle nuts, protecting it from unwanted and costly dents.

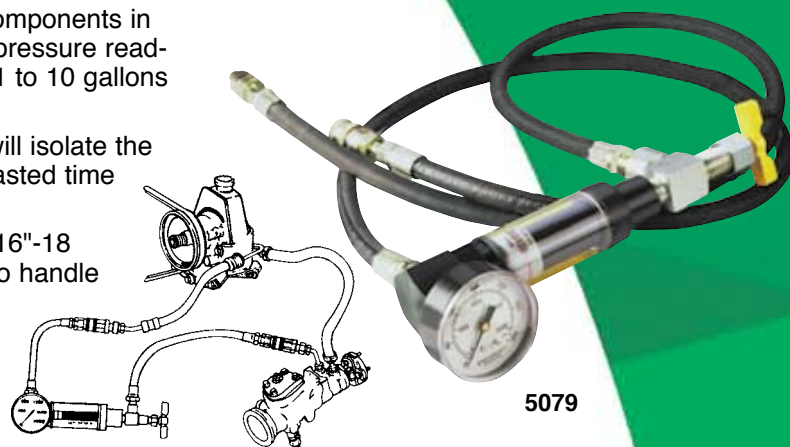
**No. 5059** – Hubcap installer. Wt., 1 lb.



### Heavy-Duty Power Steering Pump Analyzer

- There is only one way to troubleshoot problem components in a heavy-duty power steering system: a flow and pressure reading meter. OTC's new No. 5079 measures both: 1 to 10 gallons oil flow and up to 3,000 psi of pressure.
- When connected in line, this universal analyzer will isolate the failed components in just minutes. There is no wasted time as in trial and error methods.
- The set is complete with high pressure hoses, 9/16"-18 standard fittings, and quick disconnect couplers to handle Eaton/Vickers, TRW, Ross, and Shepard power steering systems.

**No. 5079** – Heavy-duty power steering pump analyzer. Wt., 6 lbs.



### Kingpin & Brake Anchor Pin Pusher

With this pin remover, hydraulic force and precision tooling replace torch-and-hammer methods for getting the job done quickly and easily. Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. A job that could consume the better part of a day is done in minutes. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide. • 30-ton capacity.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.

**No. 4240** – Complete kingpin and anchor pin pusher set with hydraulics. Wt., 114 lbs.

**No. 4241** – King- and anchor-pin pusher with anchor pin adapter without hydraulics. Wt., 59 lbs., 3 oz.

**No. 29424** – Anchor pin adapter only. Wt., 1 lb., 12 oz.



### Mack Kingpin Socket

Here is a socket that makes life a little easier for anyone who works on Mack trucks. Designed for 1/2" square drive ratchet or breaker bar, the socket fits the slotted adjusting screw in tapered kingpins used on most Mack front axles (12,000 to 20,000 lbs.).

**No. 5053** – Mack kingpin socket. Wt., 13 oz.

Socket O.D. 1.8"



### Truck Tie Rod Socket

Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.

**No. 5068** – Truck tie rod socket. Wt., 3 lbs., 4 oz.

Socket I.D. 2-3/4"



# HEAVY-DUTY TOOLS

## Steering, Brake, and Suspension Service



6065

Socket I.D. 2-1/8"

### Tie Rod Socket for Medium-Duty Trucks

- Services GM-, Ford-, and Chrysler-built 1-ton 2WD and 4WD trucks.
- Also works on medium-duty Class 2 through Class 6 trucks.
- Use with a 1/2" drive impact wrench to easily remove the tie rod ends from the tie rod.

**No. 6065** – Tie rod socket for medium-duty trucks.  
Wt., 1 lb., 13 oz.

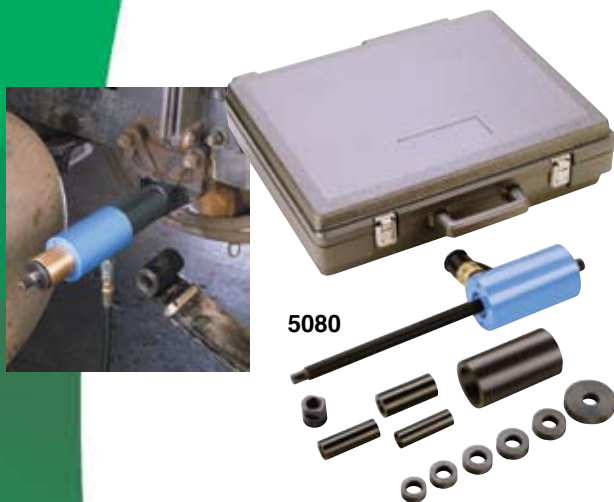


1767

### Hendrickson Primaax Quick Alignment Socket

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.

**No. 1767** – Hendrickson Primaax quick alignment socket.  
Wt., 3 lbs., 8 oz.



5080

### Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump, which must be purchased separately.

**No. 5080** – Truck front leaf spring, pin, & bushing service set.  
Wt., 20 lbs. 8 oz.



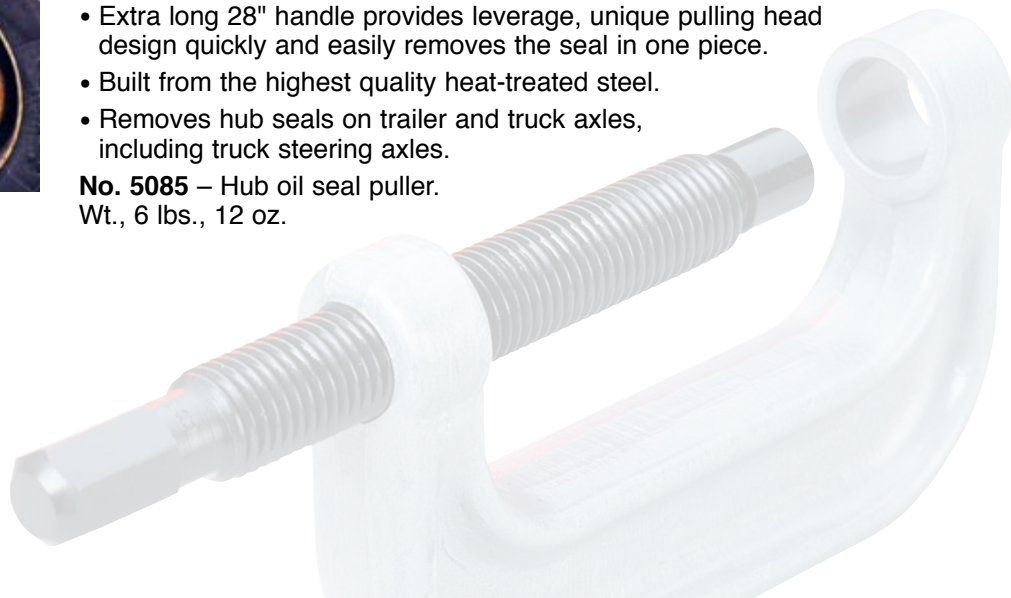
5085



### Hub Oil Seal Puller

- Eliminates bearing and hub damage that can occur when a punch and hammer is used to remove the seal.
- Extra long 28" handle provides leverage, unique pulling head design quickly and easily removes the seal in one piece.
- Built from the highest quality heat-treated steel.
- Removes hub seals on trailer and truck axles, including truck steering axles.

**No. 5085** – Hub oil seal puller.  
Wt., 6 lbs., 12 oz.



### Universal Bearing Cup Installer

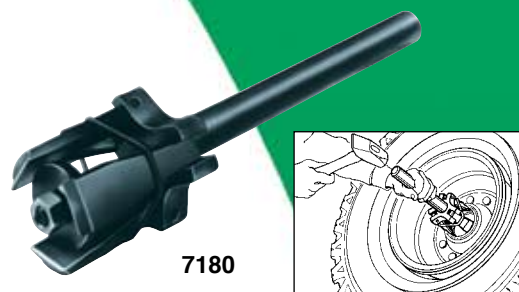
This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer. The tool helps eliminate the damage caused by makeshift methods.

- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

**No. 7180** – Universal bearing cup installer. Wt., 11 lbs.

**No. 52038** – Replacement jaw.

**No. 207561** – Replacement retaining spring.



### Slack Adjuster Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam — and do so in just a fraction of the time needed with “heat and beat” methods. Plus, they won’t damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunite, and Bendix automatic adjusters.

**No. 5055** – Manual slack adjuster puller. Wt., 5 lbs.

**No. 5056** – Automatic slack adjuster puller. Wt., 6 lbs.



### Air Brake Service Kit

This kit has the tools needed to remove slack adjusters and push-rod clevis pins used in the S-cam brake systems of class 7 and 8 vehicles.

- Works on manual or automatic slack adjusters.
- Includes Nos. 5055 and 5056 slack adjuster pullers, 5057 brake clevis pin press, and a plastic storage case.

**No. 5054** – Air brake service kit. Wt., 14 lbs., 10 oz.



### Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber pushrod can be a maddening and time-consuming task — unless you’re using our clevis pin press. This handy screw-operated tool applies the force just where it’s needed. The pin is easily removed from its hole without damaging nearby components.

**No. 5057** – Clevis pin press. Wt., 1 lb., 13 oz.

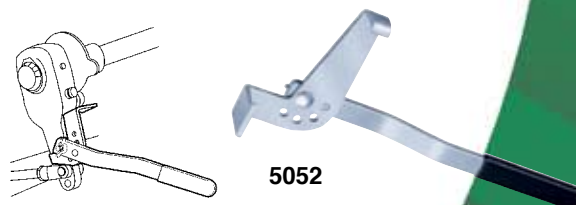


### Slack Check

This tool enables you to quickly check the brake adjustment on class 7 and 8 trucks and trailers having S-cam brakes. It features a sturdy, four-position handle to provide the leverage you need at the proper angle.

- Works on manual or automatic slack adjusters.

**No. 5052** – Slack check. Wt., 1 lb., 3 oz.

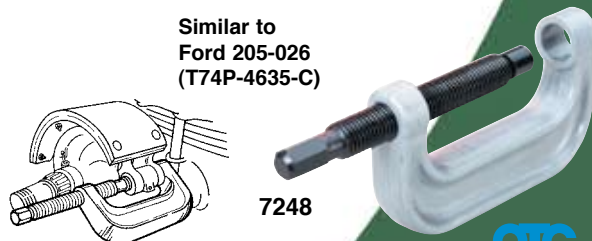


### Heavy-Duty Anchor Pin Press

With this rugged C-frame press, you can easily remove stubborn and rusted brake anchor pins from spyderys on heavy-duty vehicles. Mechanical screw power does the job quickly and efficiently.

- Works on brake pins up to 1-1/4" in diameter.

**No. 7248** – Heavy-duty anchor pin press. Wt., 9 lbs., 6 oz.

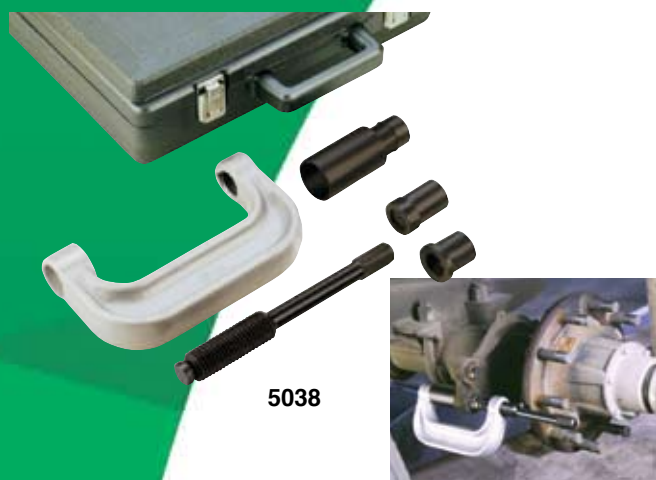


Similar to  
Ford 205-026  
(T74P-4635-C)



# HEAVY-DUTY TOOLS

## Brake Service



### Brake Anchor Pin and Bushing Service Set

With the No. 5038, there's no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.
- Tooling is available separately for the tech who already owns the 7248 C-frame press.

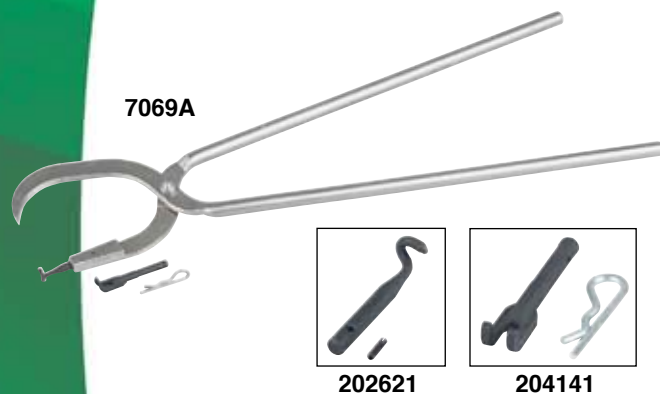
**No. 5038** – Brake anchor pin and bushing service set includes C-frame press and tooling in a plastic storage case. Wt., 13 lbs., 9 oz.



### Axle-Stud Cone Pliers

Now you can easily remove the tapered cone from studs used on the rear axles of medium and heavy-duty trucks. This specially designed tool gives you the leverage needed to expand the cone and remove it from the stud for axle removal.

**No. 7077** – Axle stud cone pliers. Wt., 13 oz.



### Heavy-Duty Brake Spring Pliers

Save time and effort when removing and installing return springs on the brake shoes of heavy-duty vehicles. This specially designed pliers works for hydraulic wedge-type and "S" cam air brakes. Its 26-1/4" length gives you the leverage to do the job more easily, and the huge jaw opening accommodates even the widest brake shoes.

**No. 7069A** – Heavy-duty brake spring pliers with "S" cam and wedge-type replaceable tips. Wt., 4 lbs., 8 oz.

**No. 202621** – Wedge-type replacement tip. Wt., 2 oz.

**No. 204141** – "S" cam replacement tip. Wt., 2 oz.



### Truck Brake Spring Pliers

• Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.

**No. 4592** – Truck Brake Spring Pliers. Wt., 2 lbs., 13 oz.

**No. 4592-1** – Replacement tip.



### S-Cam Air Brake Spring Tool

• Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers.

• Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

**No. 5081** – S cam air brake spring tool. Wt., 1 lb., 6-oz.

**No. 314548** – Replacement hook kit. Wt., .5 lb.

### Hydraulic Brake Spring Tool

Here's a tool to remove and install the return springs in Lucas Girling hydraulic brake systems. The tool's machined tip cradles the return spring securely, and its sliding fulcrum gives you all the leverage needed to do the job. A knurled handle helps prevent slipping.

- Works on 1984 to current Ford F600, F700, and F800 series having Lucas Girling hydraulic brakes.

**No. 7462** – Hydraulic brake spring tool.  
Wt., 10 oz.



### Lucas Rear Brake Adjusting Tool

If you're working on a lot of medium-duty hydraulic brake systems, you need our adjusting tool. It enables you to easily adjust Lucas Girling hydraulic brake systems (popular in Ford F700, F800, and F900 series). The tool's offset design and extra handle length get the job done quickly.

**No. 5072** – Lucas rear brake adjusting tool.  
Wt., 1 lb., 2 oz.

Similar to Ford  
206-D005 (D90T-2588-A)

5072



### Truck Transmission Bearing Service Set

The set is designed to help you remove input shaft bearings and countershaft bearings, in both the main and auxiliary boxes of heavy-duty Fuller transmissions. It will also remove end yokes from 1600/1610–1810 series transmissions. The puller delivers 10 tons of mechanical power— essential force for working on big gearboxes.

- Works on Fuller twin-countershaft transmissions: 125, 600, 660, 900, 9500, 1100, 12500, 12600, 13000, 14600, 15600, and 8600 series, 910–913, 915, and 9513.

**No. 7070A** – Truck transmission bearing service set.  
Wt., 14 lbs., 3 oz.

**No. 7075** – Transmission output shaft end yoke remover only. Wt., 4 lbs., 3 oz.

**No. 7207** – Collet only. Wt., 4 lbs., 13 oz.



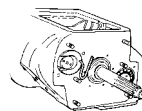
7075

### Transmission Timing Block Sets

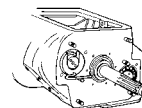
These sets enable one-man installation of front and rear countershaft bearings on Fuller twin-countershaft transmissions. The set positions the upper countershaft, yet lets you slide it aside to insert the main shaft. When the main shaft is in place and timing marks line up, turn the tool vertically to engage and position the countershaft to main shaft.

**No. 7108** – Timing block set for Fuller RTO 610/613 transmissions. Wt., 1 lb., 2 oz.

**No. 7109** – Timing block set for Fuller RT and RTO 910, 915, 9513, 12509, 12510, 12513, and 12515 transmissions. Wt., 1 lb., 12 oz.



Positioned for main shaft timing.



Positioned for bearing installation.



# HEAVY-DUTY TOOLS

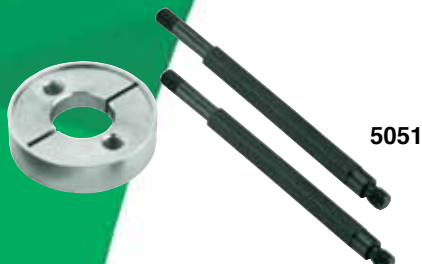
## Transmission Service Tools



### Bearing Puller Set

This puller set, designed for use with our No. 7070A transmission service set (sold separately), is designed to remove front countershaft and input shaft bearings on Fuller RT, RTO 610/613 twin countershaft transmissions.

**No. 205776** – Bearing puller set. Wt., 2 lbs., 10 oz.



### Bearing Puller Set

When teamed with our No. 7070A puller, this puller set will remove front and rear countershaft bearings from the main case of Eaton® Fuller® 2 Series Roadranger® transmissions.

- Includes pulling collet, sleeve, and a pair of puller legs.

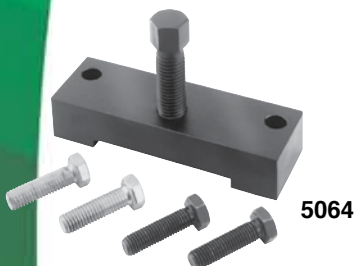
**No. 5051** – Bearing puller set. Wt., 3 lbs., 12 oz.



### Timing Tool

- Designed to support the main-case upper countershaft during transmission assembly and timing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

**No. 5063** – Timing tool. Wt., 2 lbs., 5 oz.



### Countershaft Pushing Tool

Replacing rear countershaft bearing snap rings in Eaton Fuller transmissions? With this tool, you can easily move the countershaft rearward to expose the snap ring.

- Works on Eaton® Fuller® Roadranger® transmissions (series 2, 5, 6, and 7).

**No. 5064** – Countershaft pushing tool. Wt., 4 lbs., 11 oz.



### Countershaft Bearing Driver

- Eases the task of installing a main-case countershaft bearing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

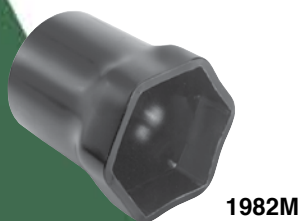
**No. 5065** – Countershaft bearing driver. Wt., 3 lbs., 14 oz.



### Bearing Driver

This tool is designed to install the bearing on 2" diameter input shafts used in Eaton® Fuller® Roadranger® transmissions.

**No. 5066** – Bearing driver. Wt., 5 lbs., 6 oz.



### 70 mm Hex Socket

Attach this heavy-duty socket to your 3/4" drive ratchet or breaker bar, and you'll be able to easily remove the end-yoke locknut on Eaton® Fuller® 2 Series Roadranger® transmissions.

**No. 1982M** – 70 mm hex socket. Wt., 3 lbs., 13 oz.



### Auxiliary Countershaft Shim Tool

When you're working on Eaton® Fuller® 2 Series Roadranger® transmissions, this tool holds the auxiliary countershaft in place while you set the bearing end play.

- Includes a support strap for .100 and .125 shim settings, and metric and standard mounting bolts.

**No. 5062** – Auxiliary countershaft shim tool.  
Wt., 3 lbs., 13 oz.

5062



### Cummins® Injector Puller

This helpful puller will handle a variety of injectors found in Cummins engines: mechanical L-10, PDT, and PTD top-stop 855NH. Its two-jaw design firmly grips the injector while it is being removed by the slide hammer.

- Includes storage case and special adapter for pulling STC injectors.

**No. 5042** – Cummins injector puller.  
Wt., 6 lbs.

5042



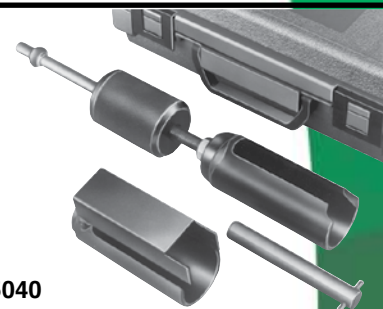
### Cummins® Injector Remover/ Installer

This is our best tool for removing or installing fuel injectors on Cummins L10 and N14 Celect electronically controlled engines. The large slide hammer and pin-type pulling adapter easily—and safely—handle injector jobs.

- Includes storage case.
- Two installing adapters help prevent damage to an injector's electronic solenoid.

**No. 5040** – Cummins injector remover/installer.  
Wt., 7 lbs., 1 oz.

5040



### Cummins® Fuel Injector Puller Adapter

When combined with our No. 5028 injector puller or a slide hammer with a 1/2"-20 threaded shaft, this adapter gives you an easy, damage-free way to remove fuel injectors from Cummins B and C series engines.

**No. 217793** – Cummins fuel injector puller adapter for B and C series engines with 12 mm x 1.5 injector threads. Wt., 5 oz.

**No. 215844** – Cummins fuel injector puller adapter for B and C series engines with 14 mm x 1.5 injector threads. Wt., 5 oz.

217793

215844



### Mack Fuel Injector Nozzle Tool

Here's a handy tool for removing or installing injector nozzles on Mack E-6 4 VH and E-9 4 VH four-valve engines. The puller threads directly into the nozzle holder, and mechanical screw power does the pulling while a cylindrical guide holds the injector steady.

- Includes gauge to ensure correct injector depth during installation.

**No. 7455** – Mack fuel injector nozzle tool.  
Wt., 2 lbs., 2 oz.

7455



# HEAVY-DUTY TOOLS

## Fuel and Injector Tools



7117

### Caterpillar Fuel Injector Nozzle Puller

We've designed this nozzle puller to remove pencil nozzles on Cat engines. The tool applies straight, even pulling power through a bridge assembly and mechanical forcing screw. The job is done quickly— and without damage.

- Works on Caterpillar 1100/3208 diesel engines.

**No. 7117** – Caterpillar fuel injector nozzle puller.  
Wt., 1 lb., 13 oz.



7121

### Fuel Injector Nozzle Puller

We've designed this puller to remove the pencil-type fuel injector nozzles used in many agricultural and construction engines. The slide hammer action gives a straight, even pull without damaging components.

- Works on Case, Caterpillar, GM, John Deere, Waukesha, and White diesel engines.

**No. 7121** – Fuel injector nozzle puller.  
Wt., 2 lbs., 5 oz.



5028

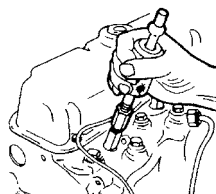
### Slide Hammer Puller

The No. 5028 slide hammer is just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2" –20 and has a 5/8" –18 threaded adapter included. Works with many OTC pulling attachments.

**No. 5028** – Slide hammer puller.  
Wt., 2 lbs.



218163



### Ford Fuel Injector Puller Adapter

Designed to work with the No. 5028 slide-hammer puller, this adapter removes injectors from Ford 6.6L and 7.8L diesel engines without damage.

- Slide-hammer threads are 1/2" x 20. Threaded end for injector is 14 mm x 1.5.

**No. 218163** – Ford fuel injector puller adapter.  
Wt., 3 oz.



7458

### Bosch Nozzle Socket

Here's a helpful multipurpose tool for removing or installing injector nozzles. You use the inner socket to hold the nozzle stationary, and the outer socket to loosen or tighten the nozzle's gland nut.

- Works on Bosch KDEL 21 mm injector nozzles used in John Deere engines.

**No. 7458** – Bosch nozzle socket. Wt., 11 oz.

### Fuel Injector Pump Rotating Tool

Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.

**No. 7461** – Fuel injection pump rotating tool. Wt., 1 lb., 14 oz.

Similar to  
Ford No. 303-228  
(T83T-9000-C)



### Diesel Fuel Line Wrenches

Fuel line nuts are often hard to reach, but these unique 3/8" square-drive tools solve that problem. With them, you can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

**No. 7453A** – Fuel line wrench, 2.6" long. For International DT466 and 9L diesel engines. Fits 19 mm fuel line nuts. Wt., 4 oz.

**No. 7460** – Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut. Wt., 5 oz.

Similar to  
Ford No. 303-230  
(T83T-9396-A)



### Injector Seat Cleaner

Carbon buildup on an injector seat surface prevents proper seating of new injectors. With this tool, you'll be able to clear away carbon deposits and avoid seating problems.

- Works on 6.9L and 7.3L Ford/Navistar diesels.
- Thread size is 24 mm x 2-6g.

**No. 5023** – Injector seat cleaner. Wt., 10 oz.

Similar to  
Ford No. 303-232  
(T83T-9527-A)

5023



### Injector Sleeve Set

Here are the ideal tools for removing and installing the injector sleeves of International DT466 engines. The removing tool threads onto a slide hammer with 5/8" - 18 threads to remove sleeves quickly. The installer seats new sleeves equally fast, without damage.

**No. 5024** – Injector sleeve set. Wt., 1 lb., 8 oz.



### Calibration Fluid

- For use in diesel injection pump testers and injector nozzle testers, such as our Nos. 4200 Nozlrater and No. 4210 Nozlrater II.
- 1 gallon

**No. 208629** – Calibration fluid. Wt., 7 lbs.

208629





# HEAVY-DUTY TOOLS

## Injector Nozzle Tester Tools



4200

Specifications	
Overall width	5-3/4"
Overall length (includes handle)	26"
Overall height	11-1/4"
Weight (empty)	15 lbs., 10 oz.
Max. pressure	5000 PSI (350 bar)
Max. reservoir cap.	.692 gal. of diesel fuel (160 cu. in.)
Usable reservoir cap.	.628 gal. of diesel fuel (145 cu. in.)
Outlet port	For 3/8" tube
Gauge	Calibrated 0-5000 PSI (350 bar) Has 3-1/2" dial face with maximum reading indicator needle.
Gauge connection	1/4" NPT internal
Stroke of 1/2" dia. piston	3/4"
Volume per full stroke	.147 cu. in. (2.4 cc)
Intake filter	2 micron

### Nozlrater Diesel Injector Nozzle Tester

Here is the ultimate tool for diagnosing a number of problems that affect diesel fuel injector nozzles. The Nozlrater tester enables you to check for leakage, pop-off pressure, spray pattern, and chatter. This tool will accommodate a wide range of injectors. We also offer adapters so you can troubleshoot nozzles used in popular automotive, agricultural, and construction engines. Nozlrater features a rugged, lightweight reservoir that holds 7/10 of a gallon of fuel. It is equipped with a replaceable 2-micron filter. The large, dual-scale, high-pressure gauge is protected by a guard and includes an indicator needle to record maximum pressure reached. The tester is light enough to be easily carried for field use. Or you can bench-mount it, using the holes in its base.

- Not designed for Cummins or Detroit injectors.

**No. 4200** – Nozlrater diesel injector nozzle tester. 5000 PSI maximum pressure capacity. Wt., 15 lbs., 10 oz.

**No. 17169** – Replacement filter. Wt., 1 oz.

**No. 11565** – Gauge. Wt., 10 oz.



4202

### Nozzle Tester Manifold/Adapter Sets

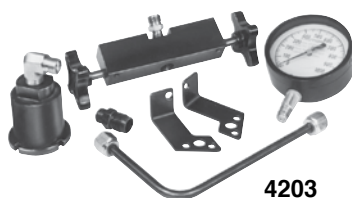
These adapter sets expand our No. 4200 Nozlrater to troubleshoot a wide range of diesel engine injector nozzles.

**No. 4202** – Adapters for servicing Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesel engines. Wt., 2 lbs., 14 oz.

**No. 4203** – Manifold/adapter set. Tests Caterpillar high- and low-pressure, capsule-type nozzles, and high-pressure, pencil-type nozzles on 1100 and 3200 series engines. Complete with Nos. 39870 and 206168 adapters, low-pressure gauge (up to 1,000 PSI), cap plug and mounting brackets. Wt., 6 lbs., 13 oz.

#### No. 4203 optional adapters

No.	Description
209197	Adapter to convert the 4203 for testing other high-pressure, pencil-type nozzles with adapters in the 4201 set.
207036	Straight adapter for pencil-type nozzles on 3300 and 3406-B.



4203

Adapter No.	No. 4202 set includes: Description	Chevy Chevette & GM 1980 & newer C.A.V. nozzles	GM 1979 & newer pencil nozzles	GM 1978 pencil nozzles	Nissan, Toyota, & VW Rabbit Diesels	Audi & Mercedes-Benz
36352	Fuel line assy., 9/16"-18 R.H. thd. with 24° on pipe.	•	•	•	•	•
23617	90° adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 9/16"-18 internal R.H. thd. (Ermeto 24°).	•	•	•	•	•
23621	Straight adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 1/2"-20 external L.H. thd. (60° seat).	•	•		•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"-20 internal L.H. thd.	•			•	•
201917	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.		•	•		
23693	Straight adapter, 1/2"-20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"-18 external R.H. thd. (Ermeto 24°).			•		

### Nozzle-Tester Adapter Set

This is our universal adapter set for testing injection nozzles on the most popular automotive, agricultural, and construction diesel engines. The set has 17 adapters that connect to our No. 4200 Nozlrater testing unit.

- Includes handy metal storage box.
- 23622— used on 1989–95 Cummins 5.9L, 1983–94 Ford 6.9L and 7.3L.
- 23623— used on 1996–2000 Cummins 5.9L and Navistar 6.6L and 7.8L

**No. 4201** – Nozzle-tester adapter set.  
Wt., 4 lbs., 2 oz.



4201

Adapter No.	No. 4201 Application Chart		I.H. Truck	I.H. Farm Construction	John Deere	Oliver & Allis	Waukesha	Case, Ford Tractor, Massey, & Perkins	White	Mack	Caterpillar Pencil Nozzles	Deutz	GM Autos	VW, Audi, & Mercedes Autos	Mercedes & Magaris Truck
	Description														
36352		Fuel line assembly, 9/16"–18 R.H. thd. with 24° on pipe.	•	•	•	•	•	•	•	•	•	•	•	•	•
23622		Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•		•	•	•	•	•			•	•	•	
23623		Adapter nut, 14 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•		•					•
23624		Adapter nut, 18 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.		•		•	•	•							
201917		Adapter nut, 9/16"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•	•				•		
23626		Adapter nut, 5/8"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•		•	•	•							
201912		Adapter nut, 3/4"–16 internal R.H. thd. to 1/2"–20 internal L.H. thd.					•								
201913		Adapter nut, 9/16"–24 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•											
23693		Straight adapter, 1/2"–20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"–18 external R.H. thd. (Ermeto 24°).	•	•	•	•	•	•	•				•		
23692		Straight adapter, 3/8"–24 external R.H. thd. to 9/16"–18 external R.H. thd. (internal Ermeto 24°).	•	•											
23617		90° adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 9/16"–18 internal R.H. thd. (Ermeto 24°).	•	•	•	•		•	•	•		•	•	•	•
23621		Straight adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 1/2"–20 external L.H. thd. (60° seat).	•	•	•			•	•	•		•	•	•	•
208370		Banjo adapter, 9/16"–18 external R.H. thd. (24° seat).		•	•										
201916		Adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd. ferrule.			•										
208369		90° adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd.	•												
38279		Straight adapter, 14 X 1.5 mm external R.H. thd. (Ermeto 60°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).			•										
43468		Straight adapter, 1/2"–20 external R.H. thd. (Ermeto 24°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).							•						
<b>Additional Accessories Available (not included in 4201 Set)</b>															
44026		Straight adapter, 9/16"–18" R.H. thd. (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.									•				
201920		Adapter nut, 14 X 1.5 mm external thd. to o"–18 internal R.H. thread	Connects OTC 4200 Nozlrater to other fittings used in the industry.												
309277		Adapter nut, 14 X 1.5 mm internal thread	For use only on Mack 4-valve diesels. (E6 & E9)												

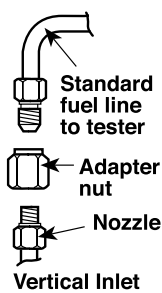
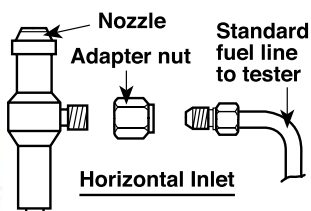
# HEAVY-DUTY TOOLS

## Injector Nozzle Tester Tools



4210

Specifications:	
Overall width	5-3/4"
Overall length (incl. handle)	15"
Overall height	10-3/4"
Weight (empty)	13 lbs., 15 oz.
Maximum pressure	5000 PSI (350 bar)
Max. reservoir capacity	.68 gal. (157 cu. in.)
Usable reservoir capacity	.58 gal. (134 cu. in.)
Outlet port	For 1/4" tube
Gauge	Dual calibrated, 0-5000 PSI, 0-350 bar, 1% accuracy, 2-1/2" dial with dual scale (PSI & bar).
Gauge connection	1/4" NPTF
Stroke of 1/2" dia. piston	5/8"
Volume per full stroke	1 cc
Intake filter	2 micron



### Nozlrater® II Injector Nozzle Tester

The No. 4210 tests the small injector nozzles used in smaller car and light-truck engines. It enables you to diagnose leakage, pop-off pressure, spray pattern, and chatter. It has a .68-gallon reservoir and is equipped with a replaceable 2-micron filter. It delivers 1cc of fuel per stroke and won't flood small nozzles. The unit is light enough to be easily carried for field use, or you can bench-mount it.

- Includes fittings, fuel line, and 5,000 PSI (350 bar) gauge.
- Works on nozzles from Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesels.

**No. 4210** – Nozlrater II injector nozzle tester. Wt. 13 lbs., 15 oz.

**No. 17169** – Replacement filter. Wt., 1 oz.

**No. 303292** – Gauge. Wt., 6 oz.

#### Accessory Fittings (for use with, but not included with, No. 4210 Nozlrater® II)

No.		Description
303570		Fuel line used on nozzles with 90° horizontal inlets. 1/2"-20 internal R.H. thread to 1/2"-20 external L.H. thread (60° seat).
23624		Adapter nut, 18 X 1.5 mm internal R.H. thread to 1/2"-20 internal L.H. thread.
201917		Adapter nut, 9/16"-18 internal R.H. thread to 1/2"-20 L.H. internal thread.
23626		Adapter nut, 5/8"-18 internal R.H. thread to 1/2"-20 internal L.H. thread.
201912		Adapter R.H. thd. to 1/2"-20 internal L.H. thread.
201913		Adapter nut, 9/16"-24 internal R.H. thread to 1/2"-20 internal L.H. thread.
208384		Used to adapt standard fuel lines to the following adapters.
23693		Straight adapter, 1/2"-20 external L.H. thread (Ermeto 24° and 90° seat) to 9/16"-18 external R.H. thread (Ermeto 24°).
201916		Adapter, 9/16"-18" external R.H. thread to 9/16"-18 internal R.H. thread ferrule.
38279		Straight adapter, 14 X 1.5 mm external R.H. thread (external 60° seat) to 9/16"-18 external R.H. thread (internal Ermeto 24°).
43468		Straight adapter, 1/2"-20 external R.H. thread (Ermeto 24°) to 9/16"-18 external R.H. thread (internal Ermeto 24°).
44026		Straight adapter, 9/16"-18 external R.H. thread (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.

Adapter No.	Description	GM 1980 & Newer Poppet Nozzles	GM 6.2L Diesels	Chevy Chevette	Audi & Mercedes-Benz	Datsun, Toyota, & VW Rabbit	1989-95 5.9L Dodge (Cummins)	1996-2000 5.9L Dodge (Cummins)	1983-94 6.9L & 7.3L Ford (with Navistar)	6.6L & 7.8L Ford (with Navistar)
23622	Adapter nut, 12 X 1.5 mm female R.H. thd. to 1/2"-20 internal L.H. thd.	•		•	•	•	•		•	
23623	Adapter nut, 14 X 1.5 mm female R.H. thd. to 1/2"-20 internal L.H. thd.		•					•		•
201917	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.									GM 1979 & Newer Pencil Nozzles (not included with 4210)





- Engineered in the U.S.A.
- Lifetime Marathon Warranty®

*For more than 75 years, automotive service professionals have depended on the quality and durability of OTC's heavy-duty tools and shop equipment.*

OTC's full range of tools and equipment has been designed for the professional service technician and represents the highest standard in quality and reliability. Engineered in the U.S.A. and backed by a Lifetime Marathon Warranty, OTC-branded tools and equipment set the standard by which all other tools and equipment are measured.

Power Train Lifts . . . . .	250
Transmission Jacks / Accessories. . .	251–253
Truck and Trailer Lifts . . . . .	253–254
Truck Ramps . . . . .	255
Air Under-Axle Jacks. . . . .	255–256
Service Jacks & Accessories . . . . .	257–259
Wheel Step . . . . .	258
Jack Stands & Underhoist Stands. . .	259–260
Clutch & Flywheel Handler . . . . .	261
Brake Drum Dolly . . . . .	262
Truck Wheel Dollies & Levers. . . . .	262–263
Blade Buddy®, Fork Lift Jack. . . . .	264
Transfer Tanker . . . . .	264
Oil Filter Crushers . . . . .	265–266
Engine Stands & Holding Fixture . . .	267–269
Engine Support Bar. . . . .	268
Car Dollies. . . . .	270
Floor Cranes & Accessories . . . . .	270–273
Shop Presses & Accessories . . . . .	274–281
Protective Blankets . . . . .	280
Bottle Jacks. . . . .	282
Collision Repair Sets. . . . .	283
Magnetic Induction Heater . . . . .	284–285
Pumps, Rams, Accessories. . . . .	283, 286–300
Bushing Service Tools. . . . .	300–305
Hydraulic Flow Tester . . . . .	305



- Competitively priced
- Two-year limited warranty

*In addition to offering “the right tool for every job,” OTC also offers “the right line of tools for every budget!”*

OTC's **Stinger** line of products is designed for the cost-conscious shop owner who still wants the reliability of an OTC product. Since being introduced in 2000, Stinger products have become recognized for their value and performance. Competitively priced, Stinger products carry a two-year limited warranty.

Stinger Transmission Jacks. . . . .	306–307
Stinger Under-Axle Jack . . . . .	308
Stinger Dual Wheel Dolly . . . . .	308
Stinger Service Jacks . . . . .	309–311
Stinger ATV Lift & Easy Roller . . . . .	312
Stinger Fork Lift Jack . . . . .	312
Stinger Drum Dolly . . . . .	313
Stinger Floor Cranes. . . . .	314
Stinger Engine Stands. . . . .	315
Stinger Stands and Bottle Jacks. . . . .	315–317
Stinger Pumps and Rams . . . . .	318
Stinger Collision Repair Sets . . . . .	319
Stinger Wheel Step . . . . .	319
ANSI/ASME PALD Summary . . . . .	320



# SHOP EQUIPMENT

## Power Train Lifts



ANSI  
PALD



### Power Train Lift – 1,250 lb. Capacity

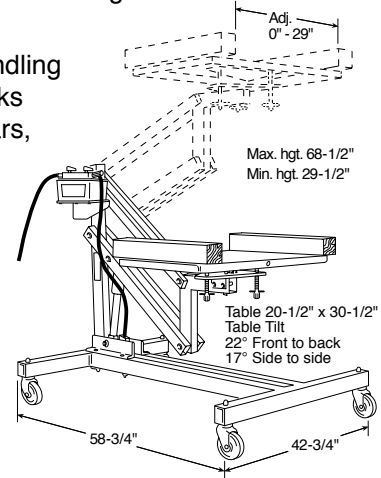
- For easy removal and installation of engine/transaxle assemblies on FWD vehicles. Also handy for pulling rear ends, leaf springs, and more.
- Your shop air supply is the only thing you need to get the precise control offered by this OTC power train lift.
- Width between wooden support blocks is adjustable from 0–29". Load is secured with a tough nylon strap.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1585** – Power train lift with tilting plate. Wt., 303 lbs.

**No. 62338** – Fuel tank handling adapter for No. 1585. Works on domestic and import cars, and light trucks. Includes nylon tie-down straps and safety grounding straps. Wt., 62 lbs., 3 oz.

**No. 215324** – Universal transmission adapter for No. 1585. Wt., 33 lbs.

**No. 61243** – Replacement reservoir.



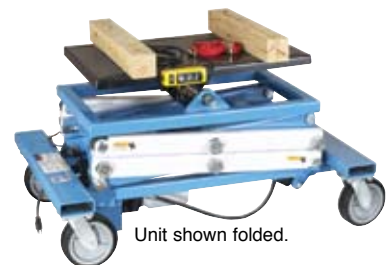
ANSI  
PALD

### 2,500 lb. Capacity Power Train Lift

This lift will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine / transaxle assemblies, electric bus batteries, and more.

- Scissors-type design allows access to all four sides of a component.
- Powered by a quiet, 110V 14 amp. electric/hydraulic pump.
- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- Width between wooden support blocks is adjustable from 0–29". Load is secured with a tough nylon strap.
- Lifting range is from 29" to 80".
- Two, independent, adjusting screws tilt the table  $\pm 15^\circ$  side-to-side, or fore-and-aft, and ensure maximum stability of the table in any position.
- Larger casters accommodate heavy loads.

**No. 1595** – 2,500 lb. capacity power train lift. Wt. 525 lbs.



### 2,200 lb. Capacity Low-Lift Transmission Jack

- The 8-1/4" low height is perfect for aerodynamic trucks with low ground clearance.
- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
- Degree of tilt: 20° back, 15° forward, 12° side-to-side.
- Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.

**No. 5019** – Low-lift transmission jack. Includes No. 220492 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately). Wt., 330 lbs.

Model	Capacity (tons)	Overall Length	Overall Width	Max. Height	Min. Height	Weight
5019	1.1	52"	32-1/2"	36-1/2"	8-1/4"	330 lbs.



### Air-Assisted 2,000 lb. Capacity High-Lift Transmission Jack...for Trucks and Buses

- For shops with in-ground or above-the-floor vehicle hoists. Covered by OTC Lifetime Marathon Warranty®.
- Low height of 41-1/2" allows transmission to be rolled out from under bus or other vehicle's frame; a clearance problem with competitors' jacks.
- Metered, foot-operated air pump allows effortless lifting of the transmission into place, controlling the load precisely during removal and installation.
- Operation is twice as fast as competitive jacks powered by a hand pump, and it costs less!
- A dedicated adapter that fits the popular Allison 500 and 600 series automatic transmissions is included with No. 5078. (Adapter is also available separately as No. 314729.)
- Safety bypass prevents damage caused by a system overload.

**No. 5078** – High-lift transmission jack with air-assist. Wt., 254 lbs.

Model	Max. Load Capacity	Overall Height (low pos.)	Max. Height	Max. Forward Tilt	Max. Backward Tilt	Max. Side Tilt (either side)	Leg Width
5078	2,000 lbs.	41-1/2"	65"	50°	38°	14°	46"



### Accessories for No. 5019 and No. 5078 Jacks

**No. 221790** – Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions. Wt., 20 lbs., 14 oz.

**No. 49611** – Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing. Wt., 11 lbs., 13 oz.

**No. 305811** – AdjustaGrip® mounting arm (one only). Each arm has five points of adjustment, permitting its attachment to the normal mounting holes of the component. Wt., 3 lbs., 11 oz.

**No. 220492** – Eaton® Fuller® Road Ranger® transmission adapter. Wt., 22 lbs.

**No. 528150** – Eaton® "Lightning" adapter. Used with the No. 5019 transmission jack. Wt., 12 lbs.

**No. 314729** – Allison 500/600 series automatic transmission adapter used with No. 5078 transmission jack. Wt., 39 lbs., 4 oz.





# SHOP EQUIPMENT

## Transmission Jacks & Fuel Tank Handler



### Air-Assisted 1,000 lb. Capacity High-Lift Transmission Jack

- Unique foot pedal design gives you complete control over the air-driven first stage to rapidly raise the mounting head to the transmission; second stage is hydraulically actuated — permitting precise operator control during removal and installation.
- Transmission mounting head features four ratcheting brackets that adjust to fit a wide range of transmissions. Four-wheel base with locking swivel casters provides stability and portability.
- Safety bypass prevents damage caused by a system overload.
- Carries OTC Lifetime Marathon Warranty®.

**No. 1728** – 1,000 lb. air/hydraulic transmission jack. Wt. 117 lbs.

**No. 1728-19** – Replacement air valve. Wt., 2 lbs.

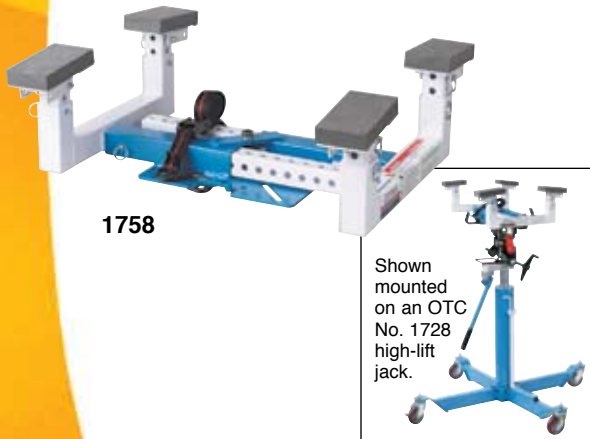
Model	Max. Load Capacity	Overall Height (low pos.)	Max. Height	Max. Forward Tilt	Max. Backward Tilt	Max. Side Tilt (either side)	Leg Width
1728	1,000 lbs.	34-1/2"	75"	50°	20°	10°	41"



### Transmission Jack Mounting Adapter Set

- Used with No. 1728 transmission jack. Ideal for use on larger standard transmissions with irregularly shaped oil pans.
- Four adjustable arms help stabilize transmissions that have rounded bottom surfaces.

**No. 223196** – Mounting adapter set of (4). Wt., 12 lbs., 6 oz.



### Fuel Tank Handler

- Provides safe and efficient handling of fuel tanks. Adjustable from 24" to 38" horizontally, and 7" to 11" vertically, to service tanks up to 40 gallons.
- Universal adapter plate fits all OTC, Stinger, and virtually all competitive transmission jacks in the market.
- Gearing mechanism ensures equal extension of lift arms to ensure load is properly balanced over jack.
- Four adjustable support risers can be individually adjusted to ensure a perfect fit to any fuel tank design.
- Cross-link polyethylene foam pads protect tank from damage.

**No. 1758** – Fuel tank handler. Wt., 32 lbs.

...adapters for earlier model  
**No. 1789 Economy High-Lift Transmission Jack.**

### Transmission Jack Adapters

**No. 310355** – Reducer adapter. Needed when using adapter Nos. 61968, 61516, and 51085. Wt., 2 lbs.

**No. 61968** – Universal transmission adapter. Must be used with reducer adapter No. 310355. Wt., 33 lbs.

**No. 51085** – Transfer case adapter for New Process 4WD transfer cases. Must be used with reducer adapter No. 310355 and universal transmission adapter No. 61968. Wt., 8 lbs., 3 oz.

**No. 61516** – Transmission jack adapter for GM 125/440 and Ford E4OD transmissions. Must be used with reducer adapter No. 310355 and universal transmission adapter No. 61968. Wt., 15 lbs.

### 1,000 lb. Capacity High-Lift Transmission Jack

- Universal mounting head provides wide fore and aft tilt range, making alignment of transmission easier.
- Foot pump and pedal release mechanism of No. 1791 gives precise control when positioning or removing a transmission.
- Adjustable nylon tie-down strap safely secures load.
- Two-stage hydraulic cylinder design speeds lifting of transmission into position for installing.
- Carries OTC's Lifetime Marathon Warranty®.

**No. 1791** – High-lift transmission jack with foot pump. Wt., 118 lbs.

**No. 1792** – Same features and construction as No. 1791, except it has a hand-operated integral hydraulic pump. Handle is conveniently located for precise control when removing or replacing a transmission.

Model	Max. Load Capacity	Overall Height (low pos.)	Max. Height	Max. Forward Tilt	Max. Backward Tilt	Max. Side Tilt (either side)	Leg Width
1791	1,000 lbs.	36"	73-1/2"	50°	38°	14°	40"
1792	1,000 lbs.	36"	73-1/2"	50°	38°	14°	40"



### Mobile Vehicle Lift System

- Mobile, tandem system is air-operated to handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.
- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.
- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1520** – Lifting system. Includes two lifts. Wt., 1,080 lbs.

Specifications	1520
Capacity	10-tons (20,000 lbs.) (pair)
Air pressure	150 PSI
Lifting range	0"-24"
Saddle width	19-1/2"-24" dia. rim sizes
Height	53-1/4"
Width	41-1/2"
Length	39-1/2"



# SHOP EQUIPMENT

## Truck & Trailer Lifts



1590



### 10-Ton Capacity Air Lift Jack for Trucks and Trailers

- Just roll it under a load, adjust the lifting saddles, connect an air line, and actuate. That's all it takes to lift the end of a truck or trailer. Lifting range is 13" to 52" with a 14" reach.
- Develops 10 tons of lift at 200 PSI air pressure. An automatic mechanical safety catch engages in five height positions; it must be manually released to lower the load.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Marathon Lifetime Warranty®.

**No. 1590** – Air lift. Wt., 697 lbs.

Specifications	1590
Capacity	10 tons (at 200 PSI air)
Air pressure	100–200 PSI
Lifting range	13"–52"
Saddle width	29"–41-3/4"
Height	67-1/2"
Width	41"
Length	36"
Distance from lift arm to floor support	12-1/2"



1591A



### 10-Ton Capacity Combination Air Lift Jack and Support Stand

- Commonly used in pairs, these air-operated units are perfect for heavy-duty lifting jobs.
- Remote actuating valve and an 8 ft. air hose give you control from a distance.
- Can be used as a support stand, as well as a lift, thanks to an innovative internal design.
- Wide range of height adjustment and durable, free-rolling wheels make the jack easy to maneuver and position where it's needed.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1591A** – Combination air lift jack and support stand. Wt., 179 lbs.

Specifications	1591A
Capacity	10 tons (at 200 PSI air)
Minimum height (unpinned, no extension)	19-1/2"
Maximum height (pinned in top hole, with extension)	49-1/4"
Stroke	10-7/8"



222338



222337

### Tractor Lift Kits

- When used with an air lift jack, these kits will raise the front end of Freightliner 120 series cab-over and conventional tractors utilizing air dam plastic bumpers and low-profile farings. Applies to 1988 through 2002 class 7 and 8 vehicles.
- Kits include extension tube and frame lifting bracket.

**No. 222337** – Tractor lift kit for No. 1591A air lift jack. Wt., 61 lbs.

**No. 222338** – Tractor lift kit for No. 1590 air lift jack. Wt., 54 lbs.



### 20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Marathon Warranty®.

**No. 5268** – 20-ton truck ramps handle up to 10" tread width. Wt., 230 lbs./pair

**No. 5269** – Wide 20-ton truck ramps handle up to 16" tread width. Wt., 312 lbs./pair

Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
5268	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
5269	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)



5268



5269

### 25-Ton Capacity Under-Axle Jack and Accessories

- Self-retracting, air-driven ram uses standard shop air. Release valve automatically applies air to retract ram.
- Low 8" minimum working height enables jack to get under any truck in the shop.
- Positioning jack is easy, even under vehicles with set-back axles, thanks to a 53" handle that locks into any of three positions, from vertical to horizontal.
- Maximum lift is 21" when used with the 3" lifting extension.
- Covered by the OTC Lifetime Marathon Warranty®. Exceeds ANSI PALD standards.

**No. 5012A** – Under-axle hydraulic jack with a 25-ton capacity, self-retracting ram. Includes No. 220972 – 3" lifting extension. Wt., 117 lbs.

**No. 220972** – Replacement lifting extension for 5012A, 3" long and has a 1" diameter. Wt., 3 lbs., 4 oz.

**No. 215009\*** – In-line oil lubricator. Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting. Wt., 8 oz.

Specifications	5012A
Lifting range, screw retracted	8" min. height 13-1/8" max. height
Lifting range, screw extended	12-7/8" min. height 18" max. height
Cylinder stroke	5-1/8"
Extended screw length	4-7/8"
PSI range	100-200

\*Not included, order separately. Prevents harmful contamination caused by moisture in the air line!



215009



220972

Now includes No. 220972 – 3" lifting extension.

5012A



# SHOP EQUIPMENT

## Under-Axle Jacks

### 3-Stage Under-Axle Jack

Three-stage lift capacity – 71.5-, 38.5-, and 22-tons. Ideal for lifting loaded trailers, buses, and other Class 7 and 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrated to prevent rust and seizing.
- Features a high load-approach speed.
- Self-retracting, air-driven cylinder eliminates manual lowering.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.

**No. 5093A** – 3-stage under-axle jack. Wt., 165 lbs.



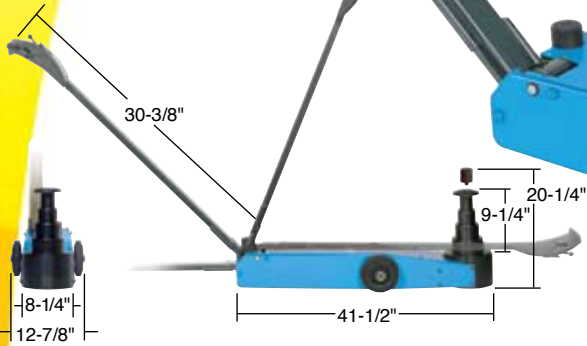
Operate hand lever to move handle to one of four positions: horizontal, 45 degrees, vertical, or collapsed for easier transport.



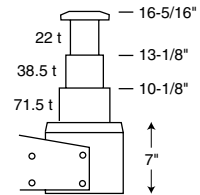
Single control switch, handy and easy to use.



A reduced width for easy access to the lifting point.



**5093A**  
**ANSI**  
**PALD**



### Portable Under-Axle Jack (27.5-/11-Ton)

Ideal for roadside service – ultra low weight and integrated design – no loose tubes, handles, or valves.

- Portable – only 65 lbs.
- User friendly - control valve, steering, and carrying handle integrated into one function.
- Built-in safety valve to prevent overloading.
- Complies with ASME / PALD and CE standards.
- Hard chrome-plated piston rods for long life.
- Manually operated dead man's control.
- Comes with two extensions: 2" and 3-7/8".

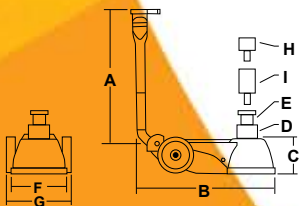
**No. 5225** – Portable under-axle jack. Wt., 65 lbs.



**5225**  
**ANSI**  
**PALD**

#### Specifications: No. 5225

Specifications:	No. 5225
A Handle length	20"
B Frame length	21-1/4"
C Min. height	6-3/8"
D Lifting height/capacity	9-3/16"/27.5-ton
E Lifting height/capacity	12-1/2"/11-ton
F Frame width	8-7/8"
G Frame width incl. wheels	10-11/16"
H Standard extensions	1-15/16"
I Standard extensions	3-15/16"



**No. 539288** – Transit locking device offers an option for safe storage in service trucks or in the workshop.



**No. 539287** – 17-5/8" extension handle.

### 6-Ton and 10-Ton Air/Hydraulic Service Jacks

- Bring the versatility of air-assist operation to your shop's lifting tasks. The 10-ton model can also be operated manually, when shop air is not available.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

**No. 5106** – 6-ton air/hydraulic service jack.  
OTC Lifetime Marathon Warranty®. Wt., 294 lbs.

**No. 5110** – 10-ton air/hydraulic service jack.  
OTC Lifetime Marathon Warranty®. Wt., 410 lbs.

Specifications:	No. 5106	No. 5110
Capacity	6 ton	10 ton
Air pressure	90–175 PSI	90–175 PSI
Lifting range	4-3/4" to 23-1/4"	6-1/2" to 26-5/8"
Saddle dia.	7"	7-3/8"
Overall reach	87"	93"
Frame height	8"	9-3/4"
Handle length	45"	46"



5106, 5110



### 4-Ton, 10-Ton, and 20-Ton Hydraulic Service Jacks

- Built of the highest quality heavy gauge steel, these jacks feature precision hydraulics for a lifetime of hard work.
- Low-profile stance and extended height add to versatility. They lift everything from cars to trucks to heavy-duty commercial vehicles. Huge metal wheels and swivel casters roll effortlessly on internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.
- OTC Lifetime Marathon Warranty®.

**No. 5007** – 4-ton service jack. Wt., 212 lbs.

**No. 5008** – 10-ton service jack. Wt., 356 lbs.

**No. 5009** – 20-ton service jack. Wt., 531 lbs.

Specifications:	No. 5007	No. 5008	No. 5009
Capacity	4 ton	10 ton	20 ton
Lifting range	5-1/2" to 26-1/2"	7" to 25-1/2"	7-1/2" to 26-1/4"
Saddle	7-7/8" dia.	9" dia.	9-1/4" sq.
Overall reach	58"	66"	69"
Frame height	5-1/2"	7"	10-1/4"
Handle length	40"	40"	40"



5007, 5008



5009





# SHOP EQUIPMENT

## Service Jacks, Wheel Step



**NEW**

5202

**ANSI  
PALD**

5203

**ANSI  
PALD**

Model	Capacity (tons)	Overall Length	Overall Width	Min. Height	Max. Height	Weight
5202	2-Ton	34-5/8"	14-3/6"	3"	18-1/4"	71 lbs.
5203	3-Ton	45-3/4"	14-3/6"	5-1/2"	20-3/4"	110 lbs.

### 2- & 3-Ton Service Jacks

Unique, innovative design featuring...

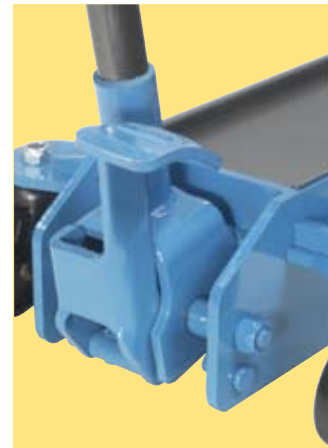
- Ergonomic handle for user comfort and easy mobility.
- CE marked – ASME/PALD tested.
- Minimum clearance of 3" (2-Ton).
- Tensile and virtually indestructible to usual impact, and bending stress.
- Demonstrate exceptional resistance to wear and tear.
- Will not damage garage floors, do not rust, and are quiet in operation.

**No. 5202** – Two-ton service jack. Wt., 71 lbs.

**No. 5203** – Three-ton service jack. Wt., 110 lbs.



Polyamide wheels are superior to cast wheels due to their high mechanical strength and durability.



Foot pedal for quick approach of the lifting saddle to load.



Built-in tray for fasteners and tools.

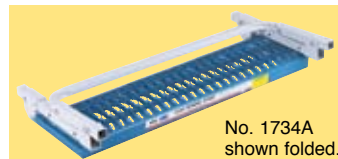


1734A

### Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Installs in seconds; adjusts to fit 22-1/2" to 24" wheel sizes and folds for easy storage.
- 300 pound capacity.
- Non-skid platform surface.

**No. 1734A** – Heavy-duty wheel step. Wt., 14 lbs.



No. 1734A shown folded.

### 2-Ton Service Jack

- The strongest jack frame in its class; features flanged edges, both top and bottom, to resist twisting.
- Sealed cylinder prevents contamination of hydraulic system.
- Conforms to ANSI PALD Part 10. Carries OTC Lifetime Marathon Warranty®.

**No. 1525** – 2-ton service jack. Wt., 105 lbs.

OTC  
**FloorBoss™**



### Nylon Wheel Kit

- Can be used on OTC service jack Nos. 1525, 1717, and 1739.
- Nylon wheels will not damage the epoxy paint coating found on many shop floors.

**No. 530097** – Nylon wheel kit. Wt., 4 lbs.

530097



### Jack Replacement Saddles

- Can be used on OTC service jack Nos. 1525, 1717, and 1739.
- The stem on this saddle will fit jack lift arms measuring 1" diameter. Bushing included will enable this saddle to also be used on jack lift arms of 1-5/32" diameter.
- Form-fitted saddle top is made of rubber to prevent damage to the finish of the undercarriage.

**No. 529219** – Jack replacement saddles. Wt., 5 lbs.

529219



### Aluminum Racing Jack

**Lifts two tons and weighs only 43 lbs.!**

- Five pumps to max. height – 18".
- Low profile – 3-1/2" – makes it perfect for ground hugging, high performance cars.
- Includes side-mounted handles for quick and easy carrying.
- Made from aircraft-grade aluminum.
- Two-piece, 45" long handle snaps together for quick setup.
- Removable, rubber saddle pad protects vehicle and prevents slipping.

**No. 1532** – 2-ton aluminum racing jack. Wt. 43 lbs.



ANSI  
PALD



### Aluminum Jack Stands

- 2-ton capacity. • 10-1/4" min. height.
- 15-1/4" max. height.
- The pair weighs only 11 lbs.!
- Made from aircraft-grade aluminum.

**No. 1582** – A pair of 2-ton aluminum jack stands. Wt. 11 lbs.

### 2-Ton Racing Jack Pack

**No. 1533** – 2-ton racing jack pack. Includes 2-ton aluminum racing jack and a pair of 2-ton aluminum jack stands. Wt. 54 lbs.

Cap. (tons)	Min. Hgt.	Max. Lift Hgt.	Body Lgth.	Handle Lgth.	Saddle Dia.	Rear Wheel	Front Caster	Wt. (lbs.)
2	3-1/2"	18"	25"	45"	4-1/2"	2"	1-3/4"	43

# SHOP EQUIPMENT

## Jack Stands



### 3-Ton and 6-Ton Capacity Ratcheting Jack Stands

- These jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1733** – Pair of 3-ton jack stands. Height range of 12-1/2" to 18-1/2". Wt., 20 lbs., 1 oz.

**No. 1736** – Pair of 6-ton jack stands. Height range of 15-1/2" to 24-1/2". Wt., 44 lbs., 4 oz.



### 12-Ton Capacity Low and High Jack Stands

- Spun steel base won't dig or sink into asphalt or sand. Covered by OTC Lifetime Marathon Warranty®.

**No. 1778A** – 12-ton low jack stand. **One only.** Height range of 19" to 29-1/2". Wt., 32 lbs., 8 oz.

**No. 1779A** – 12-ton high jack stand. **One only.** Height range of 33-3/4" to 44-1/4". Wt., 40 lbs., 8 oz.

**No. 53871** – Extension tube for low jack stand. Wt., 8 lbs., 8 oz.

**No. 53872** – Extension tube for high jack stand. Wt., 16 lbs.



### Heavy-Duty 20-Ton Capacity Adjustable Support

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
- Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1783** – Adjustable support stand. **One only.** Wt., 54 lbs.



### 10-Ton Capacity Ratcheting Jack Stands (pair)

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".

**No. 1774B** – 10-ton capacity ratcheting jack stands (pair) Wt., 82 lbs

### 4,000 lb. Capacity Underhoist Tripod Stand

- Ideal for undercar maintenance. An ACME take-up screw precisely positions and secures the support stand in place.
- Height range of 65-3/4" to 74-5/8".

**No. 1781A** – Tripod stand. Wt., 28 lbs.



### Truck Clutch and Flywheel Handler – Low Clearance

- Open stance for ease of access to the work. Unique, linkage design raises the load from horizontal to vertical as the pump is cycled. This eliminates any lifting of the clutch by the operator.
- Handles 14" and 15-1/2" clutch assemblies weighing up to 250 lbs. Swivel casters provide easy maneuverability. Includes a 2" splined shaft with a 1-1/4" pilot to aid in alignment.
- 360° swivel head.
- Minimum height of 15" allows access below side faring.
- When raised, centerline of clutch will be 38-1/4" off floor.
- Floor space is 32-3/8" long by 24-1/2" at widest point.
- Makes the task an easy, one-person job.

**No. 5018** – Truck clutch handler – low clearance.  
Wt., 125 lbs.

#### Optional Accessories:

**No. 516160** – Flywheel handling attachment for use on No. 5018 only. Wt., 5 lbs., 11 oz.

**No. 515686** – Splined shaft, 1-3/4" dia. with 1-1/4" pilot. Wt., 5 lbs., 7 oz.

**No. 516159** – Splined shaft, 1-3/4" dia. with 1" pilot. Needed for clutch service on some Navistar 466 series engines. Wt., 5 lbs., 7 oz.

**No. 506981** – Replacement handle.



5018



### Truck Clutch and Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs. Lifting range of 9" to 37". Swivel casters provide easy maneuverability. Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.
- Makes the task an easy, one-person job.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 5015A** – Clutch and flywheel handler.  
Wt., 95 lbs., 3 oz.

**No. 218174** – Flywheel handling attachment for use on No. 5015 only. Wt., 5 lbs., 13 oz.

**No. 48625** – Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot. Wt., 5 lbs., 7 oz.

**No. 440533** – Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines. Wt., 5 lbs., 7 oz.

**No. 314386** – Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine. Wt., 2 lbs., 12 oz.

**No. 207050** – Replacement swivel caster wheel.

**No. 310945** – Replacement bottle jack assembly.



5015A

218174

314386

# SHOP EQUIPMENT

## Wheel & Drum Service



5090



Adapter



Adapter Set

### Back Buddy™ II

Takes the strain and pain out of wheel-end work, enabling mechanics to easily—and safely—remove, transport, service, and install heavy truck brake drums and hub assemblies.

- Fast-motion ratcheting jack with a 14" vertical lift.
- Floor space dimensions are 24" by 34" and total height is 49".
- Pneumatic rear tires roll smoothly across any shop floor.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.
- Onboard lube tray and toolbox.
- An array of optional adapter sets capable of grabbing almost any truck hub assembly or brake drum, inboard or outboard.

**No. 513926** – 10 stud inboard hub & drum assemblies – 335 mm.

**No. 513927** – 10 hole outboard drums – 3/4" thick back plates

**No. 5090** – Back Buddy™ II. Wt., 115 lbs.

### Truck Hub / Brake Drum Adapter Sets (sold separately)

**No. 513926** – 10 stud inboard hub & drum assemblies – 335 mm

**No. 513927** – 10 hole outboard drums – 3/4" thick back plates

**No. 513925** – 5 & 6 spoke wheels

**No. 514644** – 8 stud inboard hub & drum assemblies

**No. 514645** – 8 hole outboard drums

**No. 514646** – 6 stud inboard hub & drum assemblies

**No. 514647** – 6 hole outboard drums

**No. 514648** – Humvee/Hummer geared hubs

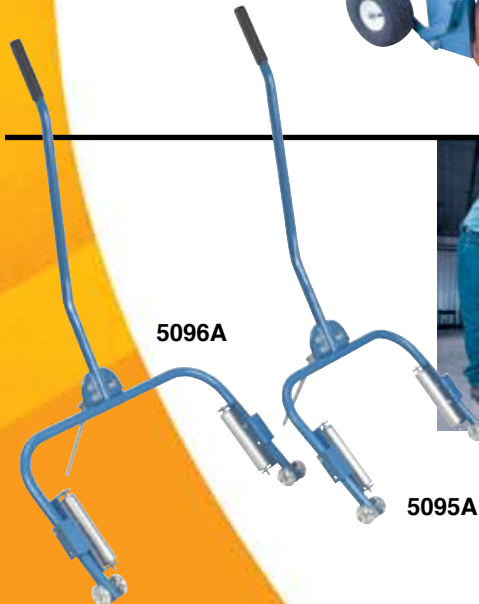


5017

### Brake Drum Dolly

- Removes, installs, and transports truck brake drums without physically lifting them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 5" height adjustment (13" to 18") aids installation.
- Heavy-gauge steel construction, 10" pneumatic tires, and telescoping, adjustable handle, which adjusts from 37" to 55".
- OTC Lifetime Marathon Warranty®.

**No. 5017** – Brake drum dolly. Wt., 52 lbs.



5096A

5095A



### Easy Lever Wheel Dollies

Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.

- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Rugged tubular steel construction.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.

**No. 5095A** – Easy Lever wheel dolly. With a width of 22", this dolly handles tire diameters of 24" to 36". Wt., 20 lbs.

**No. 5096A** – Heavy-duty Easy Lever wheel dolly. With a width of 26", this dolly handles tire diameters of 36" to 48". Wt., 20 lbs.

### Wheel Mate™

Enables truck technicians to easily remove, install, rotate, and transport single tire-wheel assemblies.

- Internal ratcheting jack with 14 inches of vertical travel —almost a foot higher than conventional dollies.
- U-shaped chassis that provides close, unhindered access to work area.
- A design that accommodates—and securely holds—almost any truck wheel, including wide-based singles, without restraining chains.
- Heavy-duty ball-bearing wheels mounted under ball-bearing swivel casters for maximum maneuverability.
- Foot-operated wheel lock.
- Rugged structural steel tubing construction that meets the demands of the toughest shop environments.

**No. 5100** – Wheel Mate™. Wt., 120 lbs.



### Truck Dual Wheel Dolly

- Remove, transport, and replace dual wheel and tire assemblies without strain or struggle. 1,500 lb. capacity and 3-1/2" swivel casters provide easy maneuverability.
- No. 1770A hydraulic jack provides 0 to 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Floor space is 45" by 41".
- Includes a 6' support chain to hold load in place.

**No. 1770A** – Truck dual wheel dolly. Wt., 165 lbs.

1770A



### High-Lift Dual Wheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 1,500 lb. capacity.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.

**No. 5105** – High-lift dual wheel dolly. Wt., 360 lbs.

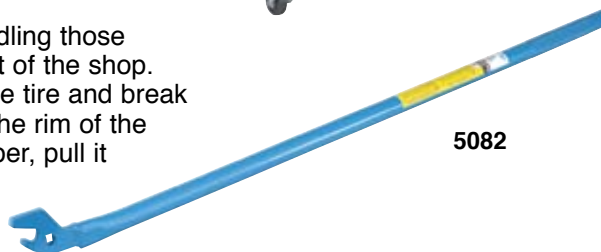


### Wheel Tipper

This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy, in or out of the shop. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. With both hands on the wheel tipper, pull it towards you.

- Designed for both aluminum and steel wheels.
- Reduces back strain when tilting deflated wheel assemblies for maintenance – won't damage wheel rim.

**No. 5082** – Wheel tipper. Wt., 7 lbs.



5082





# SHOP EQUIPMENT

## Blade Buddy, Fork Lift Jack & Transfer Tanker



### Blade Buddy™

Handles cutting edges on plows and motor graders.

- Replacing the cutting edges of front, wing, or underbody plows is now done with speed and ease. Greatly reduces the risk of back injury and the workers' comp claims which can result.
- One person can bring heavy, awkward cutting edges to the plow and raise them into position easily with the built-in, 4-ton capacity hydraulic jack. Handles cutting edges from three to 12 feet in length, weighing as much as 140 lbs.

No. 5083 – Blade Buddy. Wt., 80 lbs.



5083



223171

### Specifications:

No. 5083

Minimum cradle height

5-1/4"

Maximum cradle height

19"

Floor space

24-1/2" x 41"

No. 223171 – Cutting edge extension adapter. This 60" extension bolts onto the Blade Buddy. Accommodates a 10-ft. or 12-ft. long cutting edge and up to three 4-ft. pieces. Wt., 40 lbs.

### 4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-1/4".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4". Maximum high lift: 16".
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.

No. 5014 – 4-ton fork lift jack. Wt., 68 lbs.



ANSI  
PALD

5014

### Transfer Tanker

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tanker on your team.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

No. 5077 – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093). Wt., 49 lbs.

No. 5097 – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966). Wt., 49 lbs.



5097

### 10-Ton Capacity, Air-operated Automotive Oil Filter Crusher

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Marathon Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.

**No. 1821** – Oil filter crusher. Wt., 245 lbs.

### Why crush your used oil filters?

- EPA standards for landfills and hazardous waste are becoming tougher and tougher...crushing filters and collecting the used oil helps your firm comply to avoid a fine and a negative image.
- Crushing eliminates the need for costly TCLP testing of wastes, which may otherwise be necessary for disposal in a landfill.
- Reducing the size of the filter helps reduce your trash removal costs. In some locations, crushed filters can be recycled as scrap metal.



### 25-Ton Capacity Press Accessory Automotive Oil Filter Crusher

- Works with any 25-ton or smaller shop press, removing 95% of the oil from pre-drained filters.
- Crushes most filters to just 1/4 of their original size. Works on most automotive and light truck filters, up to 6" long and 4" in diameter. Covered by OTC Lifetime Marathon Warranty®.

**No. 1874** – Press accessory oil filter crusher. Includes adjustable press plate, shield, and drain hose. Wt., 32 lbs.



### 25-Ton Capacity Automotive Oil Filter Crusher

- Crushes most automotive and light truck filters up to 6" long.
- Automatic cycle feature: load the filter, push a button, and walk away. Includes air/hydraulic pump that works on standard shop air. No electrical components needed.
- Removes 95% of the residual oil from a pre-drained filter, and crushes filter to 1/6 of original size. Covered by OTC Lifetime Marathon Warranty®.

**No. 1875** – Oil filter crusher with air/hydraulic pump. Wt., 104 lbs.

**No. 1876** – Optional floor stand for No. 1875. Wt., 40 lbs.





1877

### 25-Ton Capacity Heavy-Duty Oil Filter Crusher

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1877** – Oil filter crusher with stand. Wt., 242 lbs.



1896

### 25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Marathon Warranty®.

**No. 1896** – Oil filter crusher. **Shipped assembled.** Wt., 363 lbs.



Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.

**Oil Filter Crusher Comparison Chart**

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18 1/2" W x 24" D x 63 1/2" H
1875	25-ton	Air/Hyd.	49 Seconds	95%	4 1/2" Dia. - 6" Long	18 1/2" W x 24" D x 63 1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12 1/2" Long	18 1/2" W x 30" D x 74 1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15 1/4" Long	27" W x 30" D x 78" H

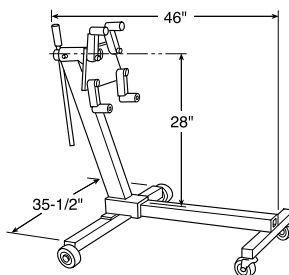


### 1,000 lb. Capacity Engine Stand

- A timesaver for passenger car and light truck engine rebuilding or repair. Four adjustable attachment arms make engine mounting fast and easy.
- Engine can be rotated a full 360° with a turn of the handle; a locking pin secures the work in any of eight positions.
- Two rear wheels lock tightly to anchor the stand in place.
- Easy one-bolt disassembly for transport of stand.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1726** – Engine stand. Wt., 96 lbs.

**No. 60796** – Drip pan (ABS material) for No. 1726. Wt., 3 lbs., 3 oz.



1726



60796



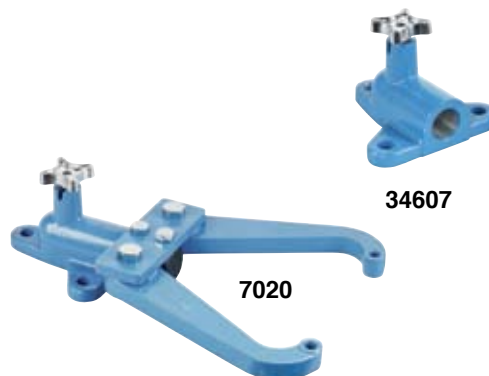
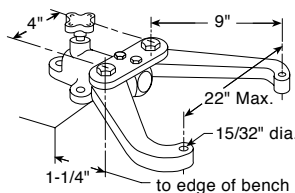
Model	Capacity	Height To Center Line	Length	Width	Wheel Diameter	Front Wheels	Back Wheels	Handle Length
1726	1,000 lbs.	28"	46"	35-1/2"	3-1/2"	Swivel Caster	Fixed	24"

### Bench-Mounted Holding Fixture

Holds and positions small engines, transmissions, rear axle differentials, etc., leaving both hands free for work! With load correctly positioned, any component weighing 250 lbs. or less may be safely rotated 360° with positive stops at 90° increments. Movable arms can be removed when not in use.

**No. 7020** – Bench-mounted holding fixture. Wt., 10 lbs., 13 oz.

**No. 34607** – Base assembly. Wt., 2 lbs., 8 oz.



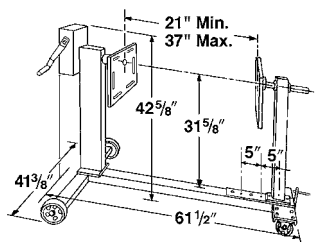
34607

7020

### 2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand

- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- Twin-post design, featuring laterally adjustable, 3-position outboard support; provides an extremely stable work-holding unit.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1735** – Motor-Rotor® repair stand. Wt., 265 lbs.



1735



# SHOP EQUIPMENT

## Engine Support Bar & Stand



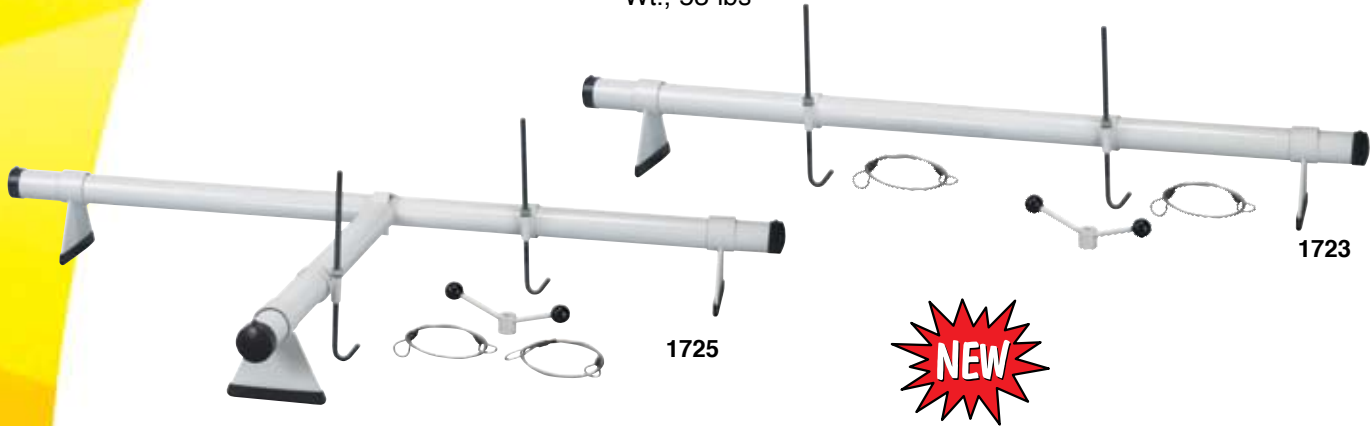
### Engine Support Bars

Unique, innovative design featuring...

- Cutting edge, design self-centers load to prevent tipping on inclined surfaces.
- Smooth sliding legs adjust easily to different vehicle widths.
- PVC-coated support legs don't scratch vehicle surfaces.
- "Quick Connect" third-point bar (No.1725) makes setup a snap.
- Spinner handle enables lightning fast adjustment.

**No. 1723** – Engine support bar (2-Point), 500 lb. capacity.  
Wt., 37 lbs.

**No. 1725** – Engine support bar (3-Point), 700 lb. capacity.  
Wt., 53 lbs



1750A



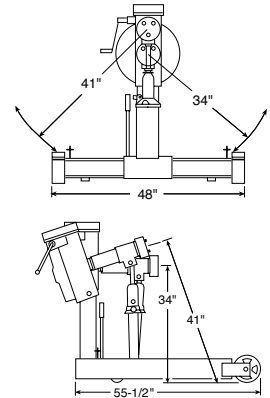
### 6,000 lb. Capacity Revolver® Diesel Engine Stand...handles the Big Ones!

- Rotating even a 6,000 lb. diesel engine is easy; a 96:1 ratio worm and gear set does the job. The crank handle can be locked in any position. Covered by OTC Lifetime Marathon Warranty®.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance. Two front wheels and two rear casters provide mobility.

- Universal adapter assembly permits use with a wide variety of mounting plates for Caterpillar, Cummins, Mack, IH, and Detroit in-line or "V" series diesel engines, as well as Allison transmissions.

**No. 1750A** – Revolver diesel engine stand with No. 205061 universal engine adapter assembly. Wt., 722 lbs.

**No. 1750** – Engine stand without universal engine adapter assembly. Wt., 626 lbs.



### Revolver® Engine Adapter Plates

You can order only those plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.

**No. 205061 – Universal Adapter Plate Assembly.** Included with 1750A engine stand. (Must be used with all plates below.) Wt., 110 lbs.

#### Detroit Diesel

**No. 205058\*** – For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8. Wt., 61 lbs., 8 oz.

**No. 52871\*** – For coach 6V and 8V series 71 Detroit Diesel. Wt., 55 lbs.

**No. 218504\*** – For Detroit series 60 in-line 6-cylinder engines. Wt., 38 lbs.

#### Detroit Allison

**No. 208160\*** – Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730. Wt., 26 lbs., 13 oz.

**No. 61373\*** – Allison transmission adapter plate for transmission series HT-750, CLB, HT-740D, CR/DR, and HT-750CT. Wt., 42 lbs.

#### Cummins

**No. 205059\*** – For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10. Wt., 59 lbs.

**No. 61405\*** – For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete teardown. Wt., 85 lbs.

#### Cummins

**No. 218098\*** – For Cummins "B" series 5.9L in-line 6 cyl. engines. Wt., 15 lbs., 10 oz.

**No. 218099\*** – For Cummins "C" series 8.3L in-line 6 cylinder engines. Wt., 41 lbs.

#### Caterpillar

**No. 205060\*** – For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, 3408 V8 and 3406E. Wt., 72 lbs.

**No. 217687\*** – For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines. Wt., 48 lbs., 3 oz.

#### Mack

**No. 205101\*** – For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl. Wt., 68 lbs.

**No. 206629\*** – For Mack engines: V8 1000, E6, & E7 in-line 6 cyl. Wt., 42 lbs., 13 oz.

**No. 528854\*** – For Mack E3, E5, & Midliner. Wt., 50 lbs.

**No. 528858\*** – For Mack 865, and 868. Wt., 62 lbs.

#### International Harvester

**No. 206386\*** – For International Harvester engines: DT-466, DT-360, DT408, and 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter and T444E V8; and Ford 6.9L, and 7.3L DIT. Wt., 61 lbs., 13 oz.

**No. 528856\*** – For IH300 & 400 Series. Wt., 59 lbs.

**No. 528857\*** – For IH BC144, BD154, C200, D155A, D179, D239, D310, D361. Wt., 41 lbs.

**No. 528867\*** – For International 1313. Wt., 40 lbs.

**No. 528868\*** – For International VT365. Wt., 30 lbs.

#### Ford

**No. 61681\*** – For mounting Ford 6.6L/7.8L engines. Wt., 63 lbs.

**No. 206386\*** – For Ford 7.3 engines. Wt., 60 lbs.

#### Volvo

**No. 528853\*** – For Volvo TD67 and TD71 engines. Wt., 49 lbs.

#### Isuzu

**No. 528855\*** – For Isuzu HE1-TC. Wt., 38 lbs.

#### John Deere

**No. 528859\*** – For JD 400 and 500 engines. Wt., 132 lbs.

**No. 528860\*** – For JD 300 engines. Wt., 39 lbs.

**No. 528861\*** – For JD Powertech 4.5L & 6.8L. Wt., 40 lbs.

**No. 528862\*** – For JD Powertech 2.4L & 3.0L. Wt., 23 lbs.

**No. 528863\*** – For JD 8995 V6, must be used with 528859.

#### Case

**No. 528865\*** – For Case 148 & 207 series & 251 to 504 series.

\*NOTE: Must be used with No. 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.



205061 – Universal Adapter Plate Assembly



205058 Detroit



52871 Detroit



218504 Detroit



208160 Allison



61373 Allison



205059 Cummins



61405 Cummins



218098 Cummins



218099 Cummins



205060 Caterpillar



217687 Caterpillar



205101 Mack



206629 Mack



528853 Volvo



206386 International Harvester, Ford



61681 Ford 303-DO61 (Same as D87T-6000-A)



528855 Isuzu



528854 Mack



528857 IH



528859 John Deere



528861 John Deere



528856 IH



528862 John Deere



528863 John Deere



528867 International



528860 John Deere



528868 IH



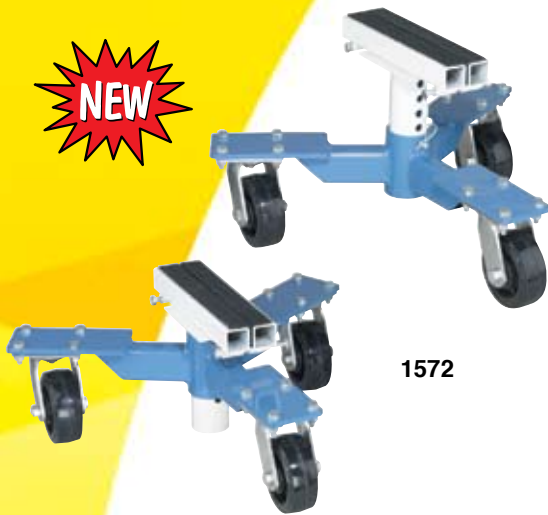
# SHOP EQUIPMENT

## Car Dollies, Floor Cranes

### Car Dolly (pair)

- Innovative design — clamps directly to pinch welds to prevent slippage during use.
- Independent units eliminate the need to adjust dolly width for different vehicle designs.
- Each unit has an independently adjustable threaded lift saddle with rubber pads to protect the vehicle frame.
- Universal design for use on all vehicle types without additional adapters.
- Provides easy movement of FWD vehicle after removal of drive train.
- The material on the 5" casters is polypropene.
- Each unit has 1,800 lbs. capacity (3,600 lbs., pair) with low height of 9" and high of 14".
- May be used with or without tires on vehicle.

**No. 1572** – Car dolly (pair). Wt., 85 lbs.



1572

### 1,000 lb. Capacity Mobile Floor Crane

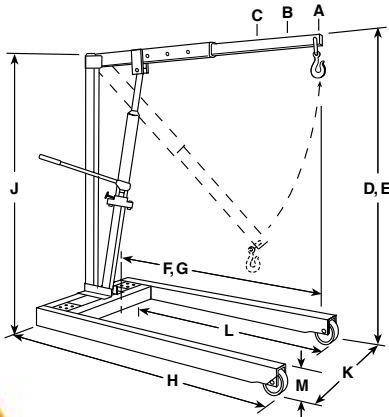
- Innovative “auto-lock” positioning system allows you to raise boom by hand into any position without using the hydraulic pump. Covered by OTC Lifetime Marathon Warranty®.
- Hydraulic jacking power provides fast engine removal and replacement; tele-scopic boom extension reaches even the engines in vehicles with protruding energy-absorbing bumpers.

**No. 1807** – 1,000 lb. capacity fixed-leg crane with hydraulic lifting jack, grab hook and safety eye hook for lifting chain (chain not included). Wt., 194 lbs.



1807

ANSI  
PALD



	Specifications	1807
A	Maximum capacity, boom extended	600 lbs.
B	Max. capacity, boom in center	750 lbs.
C	Maximum capacity, boom retracted	1,000 lbs.
D	Maximum boom height, boom extended	112"
E	Minimum boom height, boom extended	23"
F	Effective boom reach (extended)	51-1/2"
G	Effective boom reach (retracted)	40-1/2"
H	Overall length	65-1/2"
J	Overall height, boom horizontal	64-1/2"
K	Outside leg width (fixed)	32"
L	Inside leg length (fixed)	54-3/4"
M	Leg height	5-3/4"

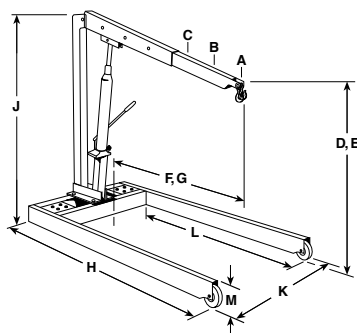
### 2,200 lb. Capacity Mobile Floor Crane

- The "auto-lock" positioning feature allows you to lift the boom into position without using the hydraulic pump. Telescoping boom provides extra reach (65-1/2") and height (127").

Specifications	1815
<b>A</b> Maximum capacity, boom extended	1,300 lbs.
<b>B</b> Maximum capacity, boom in center	1,700 lbs.
<b>C</b> Maximum capacity, boom retracted	2,200 lbs.
<b>D</b> Maximum boom height, boom extended	127"
<b>E</b> Minimum boom height, boom retracted	21"
<b>F</b> Effective boom reach, boom extended	65-1/2"
<b>G</b> Effective boom reach, boom retracted	42-1/2"
<b>H</b> Overall length	83-1/2"
<b>J</b> Overall height, boom horizontal	69"
<b>K</b> Outside leg width	40"
<b>L</b> Inside leg length	67"
<b>M</b> Leg height	6"

- A full "metric ton" of lifting power at a very attractive price.

**No. 1815** – 2,200 lb. capacity fixed-leg crane with hydraulic lifting jack. Lifting chain not included. Wt., 429 lbs.



**1815**  
**ANSI**  
**PALD**



### 2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.

**No. 1819** – 2,200 lb. capacity crane. Has hydraulic hand pump and 16-7/8" lifting chain. Wt., 454 lbs.

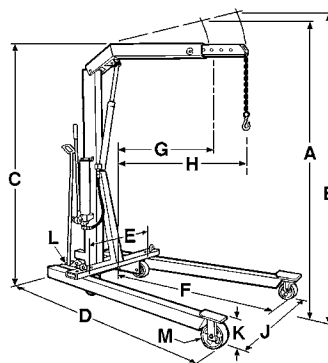
**No. 1820** – 4,400 lb. capacity crane. Has hydraulic hand pump and 18-3/8" lifting chain. Wt., 618 lbs.

Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
<b>A</b> Max. boom height, boom retracted	107"	111"
<b>B</b> Max. boom height, boom extended	117"	122"
<b>C</b> Overall height, boom horizontal	80"	82"
<b>D</b> Overall length	83"	89"
<b>E</b> Minimum throat width	24"	25"
<b>F</b> Inside leg length	54"	57-1/2"
<b>G</b> Effective boom reach (retracted)	33"	35-1/2"
<b>H</b> Effective boom reach (extended)	48"	50-1/2"
<b>J</b> Inside leg width (3-position)	24" 36" 48"	26" 40" 52-1/2"
<b>K</b> Leg height	8"	9-1/2"
<b>L</b> Dolly wheel diameter	5"	5"
<b>M</b> Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	



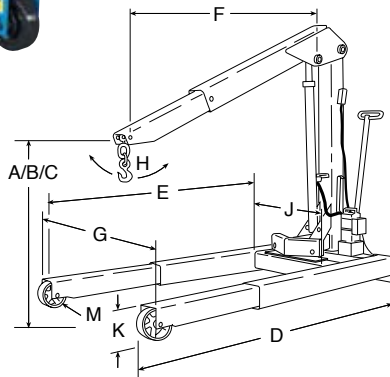
**1819, 1820**

**ANSI**  
**PALD**



# SHOP EQUIPMENT

## Floor Cranes



### 6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

**No. 1814** – 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control. Wt., 1,250 lbs.

**No. 1813** – 6,000 lb. capacity crane with two-speed hydraulic hand pump. Wt., 1,215 lbs.

Boom Capacity (lbs.) Description	Extended 4,000	Centered 5,000	Retracted 6,000
<b>A</b> Maximum boom height	161-7/8"	150-11/16"	139-1/2"
<b>B</b> Minimum boom height	6"	17-3/8"	28-3/4"
<b>C</b> Overall height (boom horizontal)	87"	87"	87"
<b>D</b> Overall length*	129-1/8"	113-7/8"	98-1/4"
<b>E</b> Inside leg length	91-11/16"	76-1/8"	43-1/4"
<b>F</b> Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
<b>G</b> Outside leg width**	59-3/4"	57-3/4"	55-3/4"
<b>H</b> Boom swing	36"	31"	26"
<b>J</b> Inside leg width		35-3/4"	
<b>K</b> Leg height		9-1/16"	
<b>M</b> Wheel diameter		8"	
Dolly wheel diameter		5"	

\* Legs in storage position: 80-7/8"\*\*\* Legs in storage position: 53-1/2"



### Load-Rotor® Positioning Slings

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.

**No. 1805** – 2,000 lb. capacity Load-Rotor®. Has 56-1/2" long chain (1/4") and hook assembly with forged swiveling hook on each end. Pair of special lifting brackets included. Wt., 11 lbs., 13 oz.

**No. 1806** – 4,000 lb. capacity Load-Rotor®. Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included. Wt., 27 lbs.



### Lifting Brackets

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.

**No. 7100** – Pair of lifting brackets, 4,000 lb. capacity. Wt., 3 lbs., 3 oz.

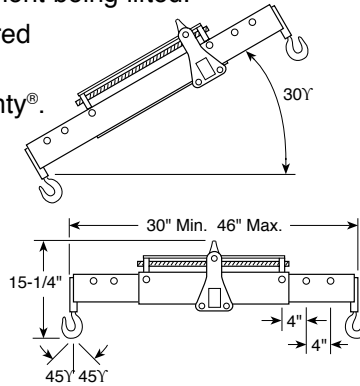


### Load-Rotor® Positioning Sling

- Carriage on main support beam moved by turning lead screw manually or with air-powered tools. This permits fine adjustment of the tilt angle of component being lifted.
- Spreader bar adjustment secured with locking bolts.
- OTC Lifetime Marathon Warranty®.

**No. 1812** – 6,000 lb. capacity Load-Rotor® positioning sling. Distance between hooks is 30" to 46". Chain grade is 80. Wt., 69 lbs.

**No. 1822** – 10,000 lb. capacity Load-Rotor® positioning sling. Distance between hooks is 36" to 56". Chain grade is 80. Wt., 117 lbs.



### Lifting Chains for Floor Cranes

- For use with floor cranes only; not recommended for overhead hoists or lifts.

**No. 38839** – 1/4" steel chain, 56-1/2" long, 2,000 lb. capacity. Has safety hook on both ends. Use with No. 205049. Wt., 4 lbs., 10 oz.

**No. 38840** – 5/16" steel chain, 65-3/4" long, 4,000 lb. capacity. Has safety hook on both ends. Use with No. 205050. Wt., 5 lbs.

**No. 31609** – 1/4" steel chain, 56-1/2" long, 2,000 lb. capacity. With swiveling safety hooks on both ends. Use with No. 1805. Wt., 3 lbs.

**No. 31800** – 5/16" steel chain, 65-3/4" long, 4,000 lb. capacity. With swiveling safety hooks on both ends. Use with No. 1806. Wt., 5 lbs.

### Alloy Chains for Overhead Lifts and Hoists

**No. 302249** – 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end. Wt., 7 lbs.

**No. 302941** – 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812. Wt., 6 lbs.

**No. 533473** – 9/32" grade 80 alloy chain, 60" long, 3,000 lb. capacity. With safety hook on both ends. Wt., 8 lbs., 10 oz.

**No. 533474** – 5/16" grade 80 alloy chain, 71" long, 5,000 lb. capacity. With safety hook on both ends. Wt., 14 lbs.



### Heavy-Duty Adjustable Slings

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

**No. 205049** – 2,000 lb. capacity sling with 1/4" chain, 56" long. Wt., 7 lbs., 3 oz.

**No. 205050** – 4,000 lb. capacity sling with 5/16" chain, 65" long. Wt., 10 lbs., 10 oz.

**No. 38841** – Plate only, use with any 1/4" or 5/16" alloy steel chain. Wt., 2 lbs., 2 oz.



# SHOP EQUIPMENT

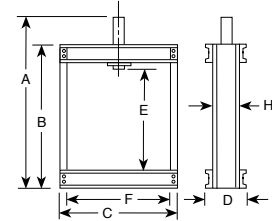
## Bench & Floor Presses



1884

### 10-Ton Capacity Bench Press

- Ideal for hundreds of small pressing jobs, including the repair of electric motors and armatures, and the removal and installation of gears, bearings, and other press-fit parts.
- Provides a 15-3/8" x 22" working area. Hydraulic power is supplied by a No. 4004 two-speed OTC hydraulic hand pump, complete with hose and fittings.
- OTC 10-ton single-acting hydraulic ram has a 10-1/8" stroke.
- Press bench space is 7-1/4" x 25-1/4"; overall height is 33-3/4".



**No. 1884** – Bench press.  
Wt., 91 lbs.

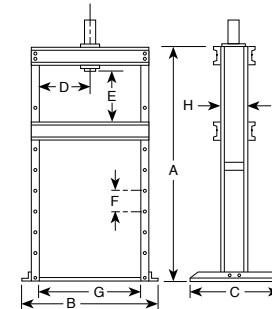
A	B	C	D	E	F	H	Bench Space
33-3/4"	24-3/4"	25-1/4"	7-1/4"	15-3/8"	22"	4"	7-1/4" x 25-1/4"



1887

### 10-Ton Capacity Press

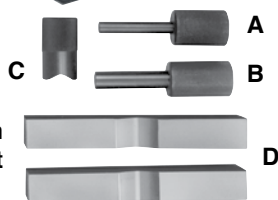
- Adjustable press bed height of 6" to 36" with a width between the uprights of 22" to handle bulky pressing jobs.
- No. 4004 two-speed hydraulic hand pump, complete with hose and fittings.
- OTC 10-ton hydraulic ram has a 10-1/8" stroke.
- Press floor space is 28" x 25-1/4".



**No. 1887** – Floor press.  
Wt., 171 lbs.

A	B	C	D	E	F	G	H	Floor Space
68-1/2"	28"	18"	11"	6"-36"	6"	22"	4"	28" x 25-1/4"

1899 10-Ton  
Press Accessory Set



### 10-Ton Capacity Press Accessory Set

- Adapters and accessories are attached to the ram's forcing screw or used on the press bed to support the work.
- Set includes:
  - (A) No. 201923 ram pushing adapter with a 1/2" dia. shank.
  - (B) No. 201454 ram pushing adapter with a 3/4" dia. shank.
  - (C) No. 34806 V-pushing adapter.
  - (D) No. 1890 V-blocks (pair).

**No. 1899** – Press accessory set. Wt., 15 lbs., 12 oz.

### 16-1/2 Ton Capacity Bench Press

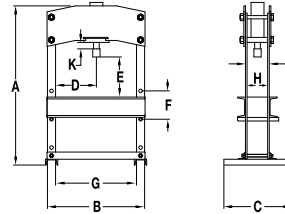
This innovative press integrates all the hydraulic elements within the chassis. The compact and functional design saves workshop space and ensures protection during transport.

- Workbench adjustable for height.
- Automatic spring return piston.
- Pressure gauge with damper to extend its working life—positioned at eye level for easy reading.
- Includes set of two V-blocks and legs with bolt-holes for fixing to bench.

**No. 5230** – 16-1/2 ton capacity bench press.

Wt., 170 lbs.

A	B	C	D	E	F	G	H	J	K
37"	16-1/2"	23-7/8"	9-1/2"	5-7/8" –17-5/8"	6"	19-5/8"	4-3/4"	5-1/2"	3"



5230

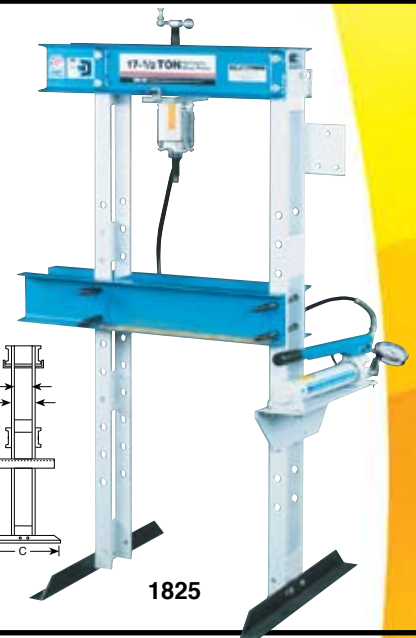
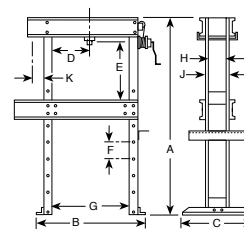
### 17-1/2 Ton Capacity Heavy-Duty “Open Throat” Press

- Ram head moves side to side for off-center pressing; ram-to-work distance is adjusted by a forcing screw that is extended or retracted by a speed crank.
- “Open-throat” frame extensions make handling of bulky jobs possible outside of the press frame.
- This press does not have a lifting mechanism. If a lifting mechanism is needed, order No. 211407.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1825** – 17-1/2 ton press. Has No. 201832 hydraulic ram with 2" stroke, No. 4002 hydraulic hand pump, No. 9650 gauge, No. 9767 hose, adjusting screw, speed crank, ram cap, and pump mounting bracket. Wt., 284 lbs.

**No. 211407** – Lifting mechanism.

A	B	C	D	E	F	G	H	J	K	Bench Space
64"	28"	28"	17/8"	34/8"	3/8"	20"	4/4"	5"	4/8"	28" x 28"

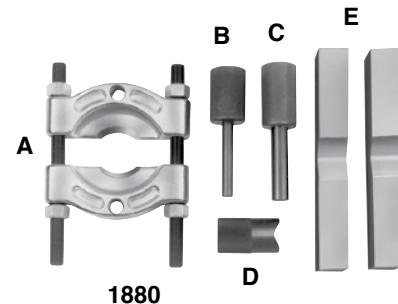


1825

### 17-1/2 Ton Press Accessory Set

- Adapters and accessories attach to ram’s forcing screw or are used on press bed to support work.
- Set includes
  - (A) No. 1123 bearing pulling attachment.
  - (B) No. 201923 ram pushing adapter with a 1/2" dia. shank.
  - (C) No. 201454 ram pushing adapter with a 3/4" dia. shank.
  - (D) No. 34806 V-pushing adapter.
  - (E) No. 1890 V-blocks (pair).

**No. 1880** – Press accessory set. Wt., 21 lbs., 10 oz.



1880

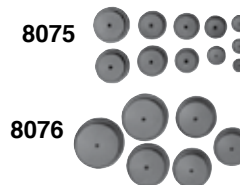
### 17-1/2 Ton Press Accessory Sets

**No. 8075** – Step plate adapter set. Wt., 5 lbs., 5 oz.

**No. 8076** – Step plate adapter set. Wt., 10 lbs., 6 oz.

**No. 1888** – V-throat press plate. Dimensions are 9-1/4" x 10" and 3/4" thick. Wt., 17 lbs.

See page 212 for sizes of step plate adapters in sets.



8075

8076



1888



# SHOP EQUIPMENT

## Shop Presses

### Hydraulic Bottle Jack Presses

- All bottle jacks have an overload valve built into them.

**No. 1823** – 12-ton capacity press with a Stinger bottle jack. Wt., 221 lbs.

**No. 1823A** – 12-ton capacity press with a OTC bottle jack. Wt., 221 lbs.

**No. 1824** – 20-ton capacity press with a Stinger bottle jack. Wt., 357 lbs.

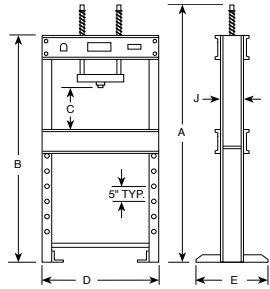
**No. 1824A** – 20-ton capacity press with a OTC bottle jack. Wt., 357 lbs.

#### Press Specifications

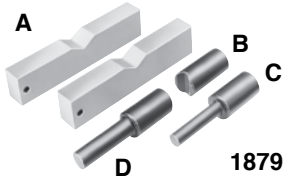
OTC No.	A	B	C	D	E	J
1823 – 1823A	84-1/2"	72"	2" – 42"	28-3/4"	28"	4-3/8"
1824 – 1824A	85-7/8"	72"	2" – 37"	37-1/2"	28"	7-3/8"

#### Bottle Jack Specifications

OTC No.	Stroke	No. of Pump Strokes to Extend Piston 1 inch	Height with Screw Ext.
1823	5-7/8"	17	18-7/8"
1823A	6-1/4"	19	19"
1824	6-5/8"	33	20-3/16"
1824A	7-1/2"	30	20-1/2"



1823A, 1824A



1879

### Accessory Set for Bottle Jack Presses

**No. 1879** – Accessory set for 12-ton and 20-ton bottle jack presses. Includes (A) No. 1890 9" long V-block set; (B) No. 215703 1-1/2" dia. V-pushing adapter; (C) No. 309119 3/4" dia. pushing adapter; (D) No. 309120 1" dia. pushing adapter. Wt., 33 lbs., 8 oz.

### 25-Ton Capacity Shop Presses

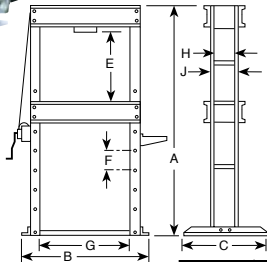
- Tough, economical press is ideal for pressing rear axle bearings, piston pins, and much more.
- Large 30" x 46" work area under ram makes positioning of even bulky work easy. Press bed is easily raised and lowered by a dependable lifting mechanism. Choice of model with hand- or air-driven hydraulic pump.

**No. 1833** – 25-ton press, complete with No. 4002 hydraulic hand pump; No. 9652 gauge; No. 24815 tee; No. 9767 hose (1/4" ID x 6'); hydraulic ram No. 51426 with 6-1/4" stroke; and 42733-WH2 pump mounting bracket. Wt., 464 lbs.

**No. 1834** – 25-ton press, complete with air-driven No. 4020 hydraulic pump; No. 9652 gauge; No. 24815 tee; No. 9768 hose (1/4" ID x 8') and hydraulic ram with 6-1/4" stroke. Wt., 440 lbs.



1833 (shown)



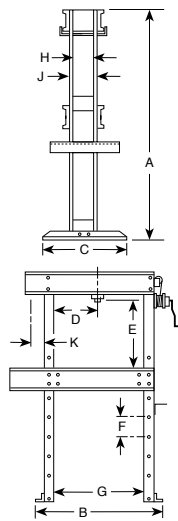
OTC No.	A	B	C	E	F	G	H	J	Floor Space
1833	69-1/2"	40-1/2"	28"	5-3/4" – 46"	4"	30"	5-1/2"	6-1/2"	41-1/2 x 28"
1834	69-1/2"	40-1/2"	28"	5-3/4" – 46"	4"	30"	5-1/2"	6-1/2"	41-1/2 x 28"

### 25-Ton Capacity Heavy-Duty "Open Throat" Press

- "Open throat" feature enables ram to be positioned outside of press frame for fast axle bearing removal and installation, as well as other tasks. Rugged press is covered by OTC Lifetime Marathon Warranty®.
- Press bed is raised or lowered with a hand crank, and a spring-return hydraulic ram is laterally adjustable for off-center work at full capacity.

**No. 1826** – 25-ton press. Includes No. 4016 hydraulic hand pump; No. 52025 hydraulic ram with 14" stroke; No. 9652 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket. Wt., 646 lbs.

**No. 1826A** – 25-ton press. Includes No. 4020 air/hydraulic hand pump; equipped the same as 1826.



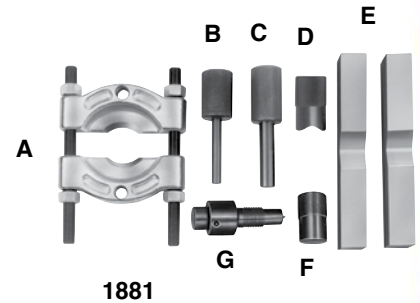
1826

A	B	C	D*	E	F	G	H	J	K	Floor Space
68"	43"	28"	3"-29"	6-7/8"-4-3/8"	4-1/2"	32"	5-1/2"	6-1/2"	7"	28" x 25-1/4"

\*Lateral head movement. Frame shipped assembled.

### Accessory Set for 25-Ton Capacity Presses

- Accessories attach to ram's forcing screw or support work on the press bed.
- Set includes
  - (A) No. 1124 bearing pulling attachment;
  - (B) No. 34510 ram pushing adapter with 3/4" dia. shank;
  - (C) No. 34511 ram pushing adapter with 1" dia. shank;
  - (D) No. 34807 V-pushing adapter;
  - (E) No. 1891 11-1/2" long V-blocks (pr.);
  - (F) No. 28229 ram forcing cap;
  - (G) No. 38953 threaded adapter.



1881

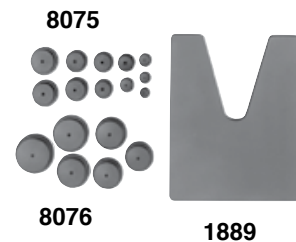
**No. 1881** – Press accessory set. Wt., 43 lbs.

### Accessories for 25-Ton Capacity Presses

**No. 8075** – Step plate adapter set. Set includes No. 8057, No. 8058, No. 8059, No. 8060, No. 8061, No. 8062, No. 8063, No. 8064, No. 8065, No. 8066, and No. 8067. Wt., 5 lbs., 5 oz.

**No. 8076** – Step plate adapter set. Set includes No. 8068, No. 8069, No. 8070, No. 8071, No. 8072, and No. 8073. Wt., 10 lbs., 6 oz.,

**No. 1889** – V-throat press plate. Dimensions are 11-5/8" x 14-1/2" and 3/4" thick. Wt., 50 lbs.



8075

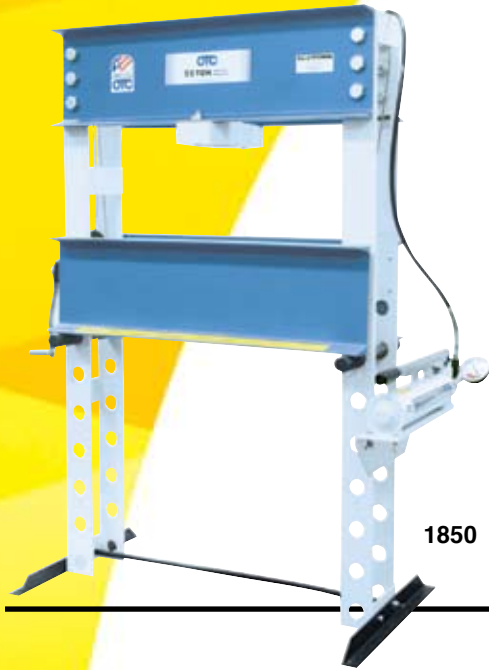
8076

1889

See page 212 for sizes of step plate adapters in sets.

# SHOP EQUIPMENT

## Shop Presses



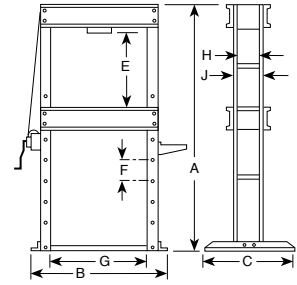
1850

### 55-Ton Capacity Economy Shop Presses

- Durable steel frame resists buckling and bending. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism adjusts lower press bolster.

**No. 1850** – 55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4016 hydraulic hand pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6'); and pump mounting bracket. Wt., 725 lbs.

**No. 1851** – Same as No. 1850 except with No. 4020 air/ hydraulic pump. Wt., 698 lbs.



A	B	C	E	F	G	H	J	Floor Space
70-3/4"	47-1/2"	28"	6-1/8"-41-1/8"	5"	35"	7-1/16"	10"	55-1/2" x 28"



1846A

1845

### 55-Ton Capacity Heavy-Duty Presses

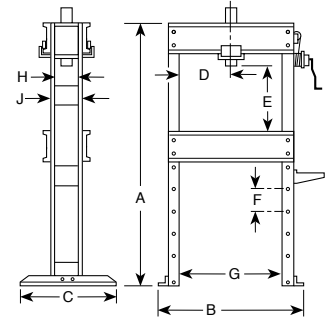
- Side-to-side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending. Covered by OTC Lifetime Marathon Warranty®.
- Hydraulic ram features 13" of stroke. Choice of hydraulic power units.

**No. 1845** – 55-ton press. Includes single-acting ram No. 52380 with 13" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket. Wt., 990 lbs.

**No. 1846A** – Same as No. 1845 except has No. 4016 hydraulic hand pump and single-acting ram No. 65458 with 10-1/8" stroke. Wt., 911 lbs.

**No. 1847** – Same as No. 1845 except has a No. 4022 air/ hydraulic pump and a No. 9781 hose (3/8" ID x 10'). Wt., 893 lbs.

**No. 1872** – 55-ton press. Includes double-acting ram No. 51682 with 13" stroke; No. 4046 electric/hydraulic pump; No. 9651 gauge; No. 36887 hoses; and pump mounting bracket. Wt., 961 lbs.



A	B	C	D*	E	F	G	H	J	Floor Space
72"	48-1/2"	36"	3-1/4"-32-3/4"	6"-42"	6"	36"	6-3/4"	8"	56-1/2" x 36"

\*Lateral head movement.

### Accessories for 55-Ton Capacity Presses

**No. 8075** – Step plate adapter set. Set includes No. 8057, No. 8058, No. 8059, No. 8060, No. 8061, No. 8062, No. 8063, No. 8064, No. 8065, No. 8066, and No. 8067. Wt., 5 lbs., 5 oz.

**No. 8076** – Step plate adapter set. Set includes No. 8068, No. 8069, No. 8070, No. 8071, No. 8072, and No. 8073. Wt., 10 lbs., 6 oz.,



8076

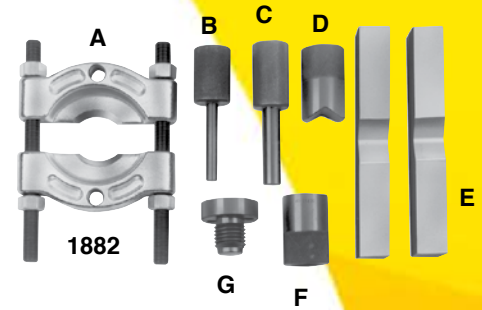
8075

See page 212 for sizes of step plate adapters in sets.



### Accessory Set for 55-Ton Capacity Presses

- Accessories attach to ram's forcing screw or support work on press bed.
- Set Includes
  - (A) No. 1126 bearing pulling attachment;
  - (B) No. 34755 ram pushing adapter with 1" dia. shank;
  - (C) No. 34756 ram pushing adapter with 1-1/4" dia. shank;
  - (D) No. 34808 V-pushing adapter;
  - (E) No. 1892 14" long V-blocks (pr.);
  - (F) No. 28230 ram forcing cap;
  - (G) No. 37368 threaded adapter – for single acting only.
  - (H) No. 38954 For 1872 double acting press.

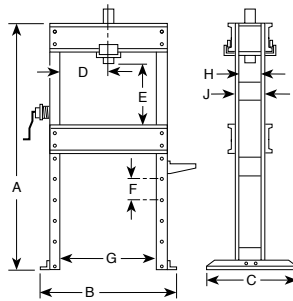


**No. 1882** – Press accessory set. Wt., 94 lbs.

### 100-Ton Capacity Economy Shop Press

- Large 35" opening between press uprights allows easy handling of large gears, shafts, sprockets, and other components serviced in truck, construction, and agricultural equipment shops. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism gives operator precise control in adjustment of lower press bolster to any height.

**No. 1854** – 100-ton press. Includes hydraulic ram No. 52434 with 10" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 9768 hose (1/4" ID x 8'); and pump mounting bracket. Wt., 1,528 lbs.

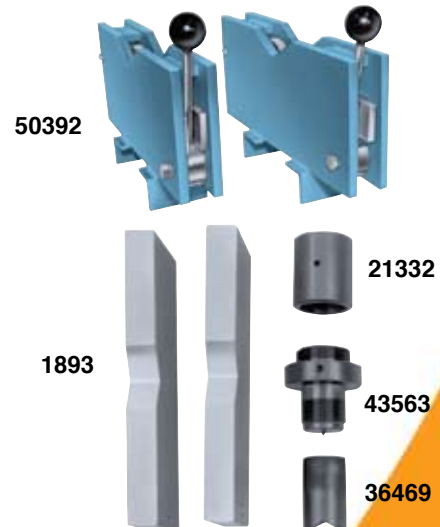


A	B	C	D	E	F	G	H	J	Floor Space
86-5/8"	47-1/2"	28"	17-1/2"	9-5/8"-49-5/8"	8"	35"	6-3/8"	10"	55-1/2" x 28"



### Accessories for 100-Ton Capacity Presses

- No. 50392** – Straightening fixtures (pr.). Wt., 192 lbs.
- No. 1893** – V-blocks, 14" long (pr.). Wt., 58 lbs.
- No. 21332** – Pushing adapter (must be used with reducing adapter). Wt., 4 lbs., 7 oz.
- No. 36469** – V-pushing adapter (must be used with reducing adapter). Wt., 5 lbs., 9 oz.
- No. 43563** – Reducing adapter (for double-acting ram). Wt., 8 lbs., 8 oz.
- No. 43562** – Reducing adapter (for single-acting ram, not pictured). Wt., 3 lbs.

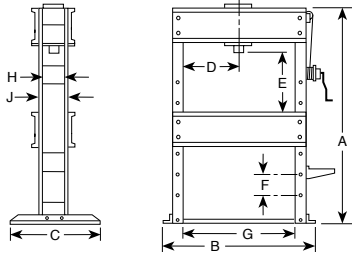


# SHOP EQUIPMENT

## Shop Presses



1857 (shown)



### 100- and 150-Ton Capacity Heavy-Duty Shop Presses

- Wide open uprights allow easy positioning of bars and shafts for straightening or bending.
- Upper bolster can be lowered for convenient positioning during repetitive jobs.
- Ram head glides smoothly on rollers for easy horizontal adjustments; rugged press frame will withstand a full capacity load with the ram head in any position across the upper bolster.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1857** – 100-ton press. Includes single-acting No. 52434 ram with 10" stroke; No. 4008 hydraulic hand pump; No. 9651 gauge; No. 9781 hose (3/8" ID x 10'); and pump mounting bracket. Wt., 1,740 lbs.

**No. 1858** – Same as No. 1857, except has double-acting No. 51683 ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; and two No. 9769 hoses. Wt., 1,822 lbs.

**No. 1858-1P** – Same as No. 1858, except it has a No. 4064 2-stage, 1-phase hydraulic pump.

A	B	C	D*	E	F	G	H	J	Floor Space
77-1/4"	64"	36"	7"-43"	2"-42"	8"	50"	8"	10"	36" x 78-1/4"

\*Lateral head movement. Frame shipped assembled.

**No. 1868** – 150-ton press. Includes double-acting ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; No. 9651 gauge; No. 9769 hoses; and pump mounting bracket. Wt., 2,960 lbs.

A	B	C	D*	E	F	G	H	J	Floor Space
90"	71"	44"	11"-39"	9"-43-1/4"	11"	50"	12-1/2"	15"	44" x 71"

\*Lateral head movement. Frame shipped assembled.



207395



44458

### Accessories for 150-Ton Capacity Shop Presses

**No. 207395** – V-blocks, 14" long, (pr.). Wt., 134 lbs.

**No. 44458** – Pushing adapter with 2-1/4" dia. shank. Wt., 23 lbs., 3 oz.



No. 1230PB

### Protective Blankets

Think of them as "security blankets." They wrap around pulling, pressing, and other high-force jobs to protect you and your employees from work-related injuries as much as possible. They're made of high tensile, tear resistant ballistic nylon – similar to military flak jackets – that, when tested, withstood the shattering of a neck-down grade 8 bolt without any visible damage.

**NOTE:** Always reduce the force from the workpiece prior to removing the blanket. Protective blankets may afford protection from injuries to users and others should part breakage occur. Because of the variety of situations that require guarding, it is the user's responsibility to determine the best method of protection.

**No. 1230PB** – Protective blanket. 12" x 30". Wt., 2 lbs., 3 oz.

**No. 2036PB** – Protective blanket. 20" x 36". Wt., 3 lbs.

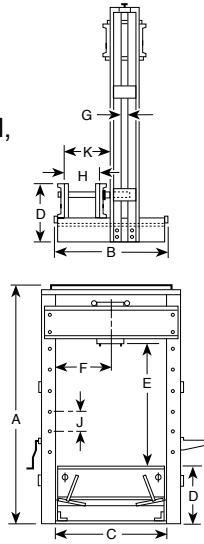
**No. 2860PB** – Protective blanket. 28" x 60". Wt., 7 lbs.

### 100- and 150-Ton Capacity Roll-Bed® Shop Presses

- Lower press bed rolls out smoothly for easy loading and unloading of heavy work using an overhead lifting device.
- Movable ram head and remote pump control, combined with large, open work area, allow operator to easily view work from any side during the pressing operation.
- Heavy-duty, cold-rolled steel construction ensures durability to withstand loads of full-rated capacity.
- Covered by OTC Lifetime Marathon Warranty®.

**No. 1865** – 100-ton press. Includes double-acting ram with 13" stroke; No. 61217 three-phase, 220V, 3450 rpm electric/hydraulic pump; No. 9651 gauge; No. 9669 hoses; and pump mounting bracket. Wt., 2,910 lbs.

**No. 1865P** – Same as No. 1865 except with No. 4064 Vanguard 2-stage hydraulic pump with 3-position/4-way valve and 6 ft. remote motor control (115V). Wt., 2,910 lbs.



1865

A	B	C	D	E	F*	G	H	J	K	Floor Space
112-5/8"	64-1/4"	50-1/2"	27"	12"-60"	14-1/2-36"	3"	4-27-1/2"	8"	36-1/2"	36" x 78-1/4"

\*Lateral head movement. Frame shipped assembled.

**No. 1866** – 150-ton press. Includes double-acting ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; No. 9651 gauge; No. 9770 hoses; and pump mounting bracket. Wt., 4,338 lbs.

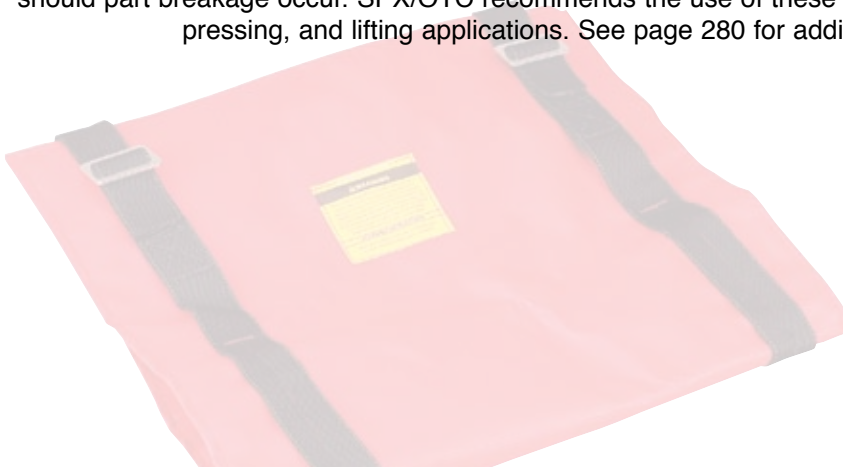
A	B	C	D	E	F*	G	H	J	K	Floor Space
123-1/4"	68-1/4"	51-1/4"	30"	9"-64"	3-7/8-37-3/8"	3"	4-27-1/2"	11"	37-1/4"	36" x 78-1/4"

\*Lateral head movement. Frame shipped assembled.

### IMPORTANT SAFETY INFORMATION

**Certain press applications may require guarding. Because of the multitude of possible press uses, it is impossible to design a guard that will meet every customer need. The end user must provide their own guarding where the situations dictate.**

SPX/OTC has protective blankets available which may afford protection from injury to users and others should part breakage occur. SPX/OTC recommends the use of these blankets for all pushing, pulling, pressing, and lifting applications. See page 280 for additional information.





# SHOP EQUIPMENT

## Bottle Jacks



**ANSI  
PALD**

### Bottle Jacks....All-American Weight Lifters

- OTC's industrial grade bottle jacks carry OTC Lifetime Marathon Warranty®.
- Pressure cylinder, oil reservoir, pump housing, and base are welded as one unit to resist oil leakage. Jacks can be used in vertical or horizontal positions.
- Unique valve seat design provides unequalled reliability.
- Chrome-plated piston rod resists wear and corrosion. Extension screw provides added lifting height. Jacks meet and exceed ANSI PALD standard for overload protection.

Cap. (tons)	Stroke	OTC No.	Retracted Height Min.	Length of Screw Extension	Height with Screw Extended	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
12	3-1/2"	5112*	6-3/4"	2-1/4"	12-1/2"	19	1-3/4"	5-1/2" x 6"	Yes	18 lbs.
12	6-1/4"	5212	9-1/2"	3-1/4"	19"	19	1-3/4"	5-1/2" x 6"	Yes	22 lbs.
20	5"	5120*	8-1/4"	2-1/4"	15-1/2"	30	2-1/4"	6" x 6-3/8"	Yes	26 lbs.
20	7-1/2"	5220	10-3/4"	2-1/4"	20-1/2"	30	2-1/4"	6" x 6-3/8"	Yes	31 lbs.

\*Low profile models



**ANSI  
PALD**



### High Performance Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, and provide more strength and safety to these jacks.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T jack is telescopic, allowing for very low initial height with high lifting.

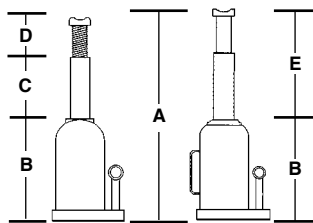
**No. 5213** – 12-ton bottle jack. Wt., 17.6 lbs.

**No. 5221** – 20-ton bottle jack. Wt., 26.6 lbs.

**No. 5213T** – 12-ton telescopic bottle jack. Wt., 37.4 lbs.

#### Bottle Jack Dimensions

Jack	A	B	C	D	E
5213	17-3/4"	8-7/8"	5-7/8"	2-15/16"	
5221	18-1/16"	9-1/4"	5-7/8"	2-15/16"	
5213T	22-1/2"	9-5/8"			12-13/16"



### 10-Ton Collision Repair Set

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.

**No. 5086** – 10-ton collision repair set. Wt., 65 lbs.



### OTC Series 4- and 10-Ton Collision Repair Sets

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading, or pulling force.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**No. 1517A** – 4-ton collision repair set. Has single-speed hydraulic hand pump and ram with 5" stroke. Wt., 40 lbs.

**No. 1519A** – 10-ton collision repair set. Has two-speed hydraulic hand pump and ram with 6-1/8" stroke. Wt., 75 lbs.

**No. 504888** – Replacement quick coupler. Wt., 3 oz.

**No. 504889** – Replacement quick coupler. Wt., 3 oz.

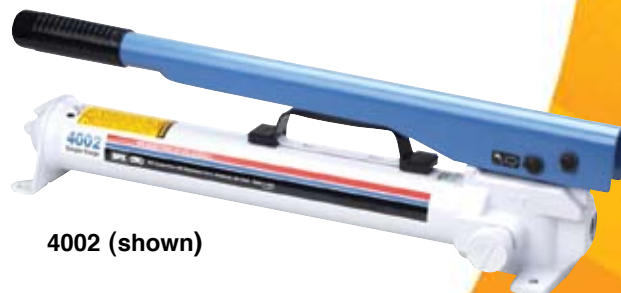


### Single-Speed Hydraulic Hand Pump

This single-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.

**No. 4000** – Hand pump only. Wt., 6 lbs., 13 oz.

**No. 4002** – Hand pump only. Wt., 17 lbs., 3 oz.



Specifications:	4000	4002
Max. operating pressure	10,000 psi	10,000 psi
Volume per stroke	.069 cu. in.	160 cu. in.
Reservoir capacity	12.5 cu. in.	45 cu. in.
Oil port	1/4" NPT	3/8" NPT

4002 (shown)

# SHOP EQUIPMENT

## Magnetic Induction Heater



## Focused and Flameless Heat Make Parts Removal Easy and Fast!

### BOLTS

The bolt inductor produces concentrated heat in a small area for a multitude of applications. It produces temperatures in excess of 1400° F in just seconds. This concentrated heat is ideal for the heating and easy removal of seized fasteners and can also be used to remove caulk and seam sealer.



### GLASS

The glass inductor produces heat in a 1" x 4" area, which is ideal for heating channels behind glass components. This inductor achieves a channel temperature of 350° F in about 30 seconds and easily accesses areas normal glass removal tools can't. Great for encapsulated window adhesive, bonded body panels, spray-in bedliners, the glass inductor can also be used to fully cure high-build primers in just seconds, allowing them to be block-sanded quickly and efficiently, saving both labor time and abrasive costs.



### BODY PANELS

The body inductor produces mild heat in flat or contoured body panels for the removal of moldings, pin stripes and vinyl graphics. The flexible, heat-resistant fiberglass blanket conforms to most body contours and includes a hand-strap for easy manipulation.



### OTC 6650 Magnetic Induction Heater

Every technician knows the hardest and most time consuming job in the repair process is parts removal — especially on vehicles with stubborn rust-caked bolts, fasteners and bonded components. With today's razor-thin margins, inefficient parts removal can seriously erode your profitability. The sooner vehicles can be disassembled and repairs begun, the sooner you start making money.

With the OTC 6650 Magnetic Induction Heater, technicians can quickly and easily perform damage-free parts removal of all metal parts that can't easily be accomplished with flame or other radiant heat sources. With an available power rating of 1500 watts, the OTC 6650 is ideal for mechanical repair, auto body repair and recycling facilities. It produces heat in seconds within metal objects such as body panels, nuts, bolts and pinch weld areas behind glass—without heating or damaging non-metallic objects such as glass, paint or plastic.

- Fast, effortless removal of glass, emblems, bonded body components, rusty bolts and much more.
- Flameless heat reduces the need for torches, solvents and abrasives.
- Less flame and solvents reduce potential safety hazards and insurance rates.
- Only heats metal objects, enabling it to be used in or near heat-sensitive areas.
- Wide range of heating inductors for increased versatility.
- Easy-to-read heat output meter to quickly verify induction heat.
- Output isolation transformer provides the safest possible operation.
- CE and CSA approval with UL compliance offers proof of OTC 6650 quality construction and safety design.



This versatile inductor also removes core support labels and VIN tags without damage.

- The bolt and glass inductors are molded using an impact-resistant, flame-retardant polymer, and molded-in, waterproof cord grip prevents HF cable from being pulled from the heating attachment.
- The body inductor edges are surged and interior is silicone coated to improve water resistance and eliminate fraying.
- Power supply has a remote start/stop input receptacle for connecting foot switch or other alternative devices.
- The OTC 6650 has a durable 8-foot long foot switch constructed from impact-resistant thermal plastic and includes a circular quick disconnect for easy, convenient servicing and storage.



For increased versatility, these other inductors can be purchased and used with the OTC 6650 Magnetic Induction Heater:

- Interior molding removal tools No. 4489
- Hail dent inductor No. 543036
- Bearing heater inductor – Available late in 2007
- Brake inductor – Coming soon!
- Exhaust inductor – Coming soon!



543036 – Hail Dent Inductor

**CONTACT YOUR OTC SUPPLIER TODAY!**

### Specifications

Cabinet Size	9.00" W x 14" L x 8.5" H
Input Voltage	110 Vac: 60 Hz 1 Phase
Input Current	15 Amps
Output	(maximum values to induction coil)
Power	1500 Watts
Voltage	400 Vrms 45-60KHz 1 Phase
Current	50 Amps .14 P.F. Minimum
Cooling	Forced air cooling via internal cooling fans
Operating Temperature	125° F/52° C Max

### Magnetic Induction Heating System

The OTC 6650 package comes with bolt inductor (542936), glass inductor (542937), body inductor (542938), foot switch (543055) and instructional CD. All inductors, with exception of the body inductor, are encapsulated in a flame-retardant polymer which provides protection against impact, abrasion, heat or other accidental damage. All inductors have an electrical interlock and/or molded strain reliefs.

**No. 6650** – Magnetic Induction Heating System. Wt., 25 lbs.



# SHOP EQUIPMENT

## Hydraulic Rams



### Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a life-time warranty, they are ideal replacements for worn-out, leaky rams. They feature a special piston rod that permits their use with the snap-together components of OTC's collision repair sets, or with most similar competitive products.

**No. 4082B** – 4-ton ram with 5" stroke and special piston rod end designed to fit most collision repair set components. Wt., 8 lbs., 13 oz.

**No. 4083B** – 10-ton ram with 6-1/8" stroke and special piston rod end designed to fit most collision repair set components. Wt., 9 lbs., 6 oz.

OTC No.	Cap. in Tons	Stroke	Collapsed Height	Extended Height	Spring Return	Rod End Dia.	Max. Oper. Pressure (PSI)	Oil Cap. (cu. in.)	Oil Port
4082B	4	5"	10-7/8"	15-7/8"	Yes	.874"	8,950	4.97	1/4" NPT
4083B	10	6-1/8"	14-5/8"	20-3/4"	Yes	1.310"	8,950	13.69	3/8" NPT

### Hydraulic Rams

These rams feature the same quality design and construction as the Nos. 4082B and 4083B hydraulic rams listed above, but have threaded ram collars and internal base threads to simplify mounting, as well as threaded piston rod ends. Ideal replacements for worn-out, leaky rams on body and frame equipment.

**No. 4088A** – 10-ton ram with 6-1/8" stroke. Has threaded ram collar, internal base threads, and threaded piston rod end. Wt., 11 lbs., 10 oz.

**No. 4089A** – 10-ton ram with 10-1/8" stroke. Has threaded ram collar, internal base threads, and threaded piston rod end. Wt., 14 lbs., 13 oz.

OTC No.	Cap. in Tons	Stroke "A"	Oil Cap. (cu. in.)	Effective Ram Area (sq. in.)	Tons at 8,950 PSI	Spring Return	Height		Piston Protrusion at Collapsed Height	Diameter		Piston Thread (NPT) "F"	Collar Thread (Straight) "G"	Internal Base Thread (NPSM) "H"
							Collapsed "B"	Extended "C"		"D"	"E"			
4088A	10	6-1/8"	13.9	2.236	10	Yes	11-1/2"	17-5/8"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	1-1/4"-11-1/2
4089A	10	10-1/8"	22.9	2.236	10	Yes	15-1/2"	25-5/8"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	1-1/4"-11-1/2



### Hydraulic Ram, Pump, and Hose Set

This versatile set is usable in a wide variety of hydraulic power applications. Combines our No. 4026 air/hydraulic power unit, hose, and hose half coupler with the No. 4089A 10-ton hydraulic ram with 10-1/8" stroke. Ram has threaded collar, internal base threads, and threaded piston rod end for mounting adaptability.

**No. 4042** – Hydraulic ram, pump, and hose set. Wt., 25 lbs., 2 oz.

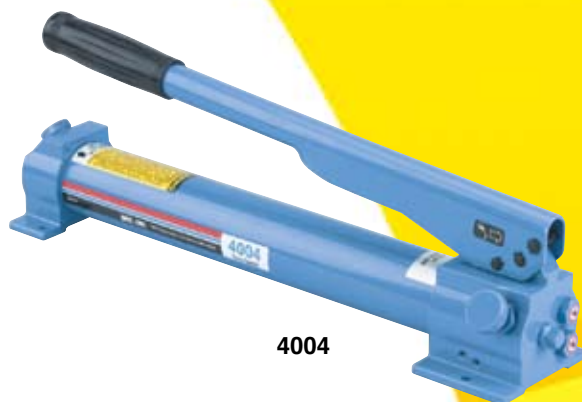
### 2-Speed Hydraulic Hand Pump

Use with single-acting hydraulic rams. Rugged all-metal construction. Maximum handle effort is 90 lbs. Two-speed action provides rapid approach of ram piston to the work. An appropriate and economical power source for applications in which 20 cu. in. of usable oil is adequate.

**No. 4004** – 2-speed hydraulic hand pump. Wt., 6 lbs., 9 oz.

#### Specifications:

Maximum operating pressure	10,000 PSI
Volume per stroke (first stage)	.305 cu. in.
Volume per stroke (second stage)	.091 cu. in.
Reservoir capacity	24.4 cu. in.
Oil port	3/8" NPT



4004

### Air/Hydraulic Power Unit

Features a heavy-duty, one-piece, aluminum body for durability and light weight. A perfect replacement pump for body and frame straightening equipment. Performs in either vertical or horizontal positions. Has a time-tested motor design. All internal moving parts are constructed of metal, not plastic! Unique external relief valve ensures damage-free operation should oil reservoir be overfilled. Internal vent eliminates external oil leakage. Rotary-style pressure release provides superior operator control. Carries OTC's unsurpassed Lifetime Marathon Warranty®.

**No. 4026** – Air/hydraulic power unit. Wt., 13 lbs., 8 oz.

#### Specifications:

Oil delivery	10 cu. in. of oil @ 9,500 PSI
Reservoir capacity	39 cu. in. (34 cu. in. usable)
Internal relief setting	10,000 PSI
Air operating pressure	40-120 PSI
Dimensions	16-15/16" long x 6-3/8" high x 5-5/8" wide



4026

### Hydraulic Spreaders

Included as standard equipment with our collision sets, these versatile hydraulic spreader tools are also available individually. Ideal for removing dents and creases, performing straightening jobs, or for use as a clamp. Makes working in tight spots easy.

- Maximum spread is 3-1/4".

**No. 9101A** – 1/2-ton spreader with 1/4" NPT ram half coupler. Wt., 3 lbs., 11 oz.

**No. 9102** – 1/2-ton spreader with 3/8" NPT ram half coupler. Wt., 3 lbs., 11 oz.





# SHOP EQUIPMENT

## Hydraulic Rams

### Automotive-Style Quick Couplers

Precision designed and built for high pressures. Permits disconnecting hose without loss of oil.

- Ideal for use in body shop equipment applications.
- Works with OTC No. 1515 and 1513 collision repair sets.

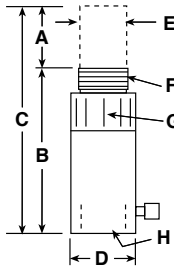
**No. 9195** – Complete quick coupler, 1/4" NPT. Wt., 5 oz.

**No. 9196** – Complete quick coupler, 3/8" NPT. Wt., 10 oz.



### Single-Acting, Spring-Return Rams

Available in capacities of 5 to 100 tons and for maximum working pressures up to 10,000 PSI; 2 to 1 safety factor on material yield; designed and tested to meet ANSI B30.1. Standard stroke lengths of 5/8" to 14-1/4", these compact rams require a minimum of mounting space. Several of the rams feature threaded ram collars and internal base threads to simplify mounting. Also, some of the models have threaded piston rod ends. OTC's design ensures positive, leak-resistant sealing throughout all pressure ranges, yet full piston return characteristics are maintained. Additional bearing surface



has been designed into these units, to effectively resist the punishing stress exerted by off-center loads. Depending on capacity, these rams can handle a variety of bending and straightening jobs, construction maintenance applications, pressing operations, body and frame straightening, and rear housing and axle correction.

OTC No.	Capacity		Oil Cap. (cu. in.)	Effective Ram Area (sq. in.)	Tons at 10,000 PSI	Spring Return	Height		Piston Protrusion at Collapsed Height	Diameter		Piston Thread (N.P.T.) "F"	Collar Thread (Straight) "G"	Internal Base Thread (N.P.S.M.) "H"	Wt. (lbs./oz.)
	in Tons	Stroke "A"					Collapsed "B"	Extended "C"		"D"	"E"				
<b>SINGLE-ACTING, SPRING-RETURN RAMS</b>															
4100	5	3"	3.0	.994	4.97	No	5-11/16"	† 8-11/16"	1/4"	1-1/2"	7/8"	None	None	None	3 / 5
4101	5	5-1/4"	5.2	.994	4.97	Yes	10-1/2"	15-3/4"	1-1/8"	1-1/2"	1-1/16"	3/4"	1-1/2"-16	3/4"-14	5
4108	5	5/8"	.62	.994	4.97	Yes	1-5/8"	2-1/4"	1/8"	2-9/16"x1-5/8"	5/8"	None	None	None	2 / 5
4103	10	2-1/8"	4.8	2.236	11.2	Yes	5-9/16"	7-11/16"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	None	5 / 14
4104	10	6-1/8"	13.9	2.236	11.2	Yes	11-1/2"	17-5/8"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	1-1/4"-11-1/2	11 / 10
4105	10	10-1/8"	22.9	2.236	11.2	Yes	15-1/2"	25-7/8"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	1-1/4"-11-1/2	14 / 13
4106	25	6-1/4"	32.2	5.157	25.8	Yes	13-3/8"	19-5/8"	1-7/8"	3-3/8"	2-3/8"	2"	3-5/16"-12	2"-11-1/2	26
4107	25	14-1/4"	73.5	5.157	25.8	Yes	21-3/8"	35-5/8"	1-7/8"	3-3/8"	2-3/8"	2"	3-5/16"-12	2"-11-1/2	42 / 10
4110	55	6-1/4"	69.0	11.04	55.2	Yes	11-1/8"	17-3/8"	1/8"	5"	3-1/8"	None	None	None	60
4115	100	6-5/8"	137.0	20.62	103.1	Yes	13-1/4"	19-7/8"	1/8"	6-1/4"	4-1/8"	None	None	None	105
<b>ALUMINUM RAMS (See listing on page 290)</b>															
4111	55	6-1/8"	67.6	11.04	55.2	Yes	10-3/4"	16-7/8"	1/4"	5-1/4"	3-1/8"	None	None	None	25 / 10
4116	100	6-1/4"	129.0	20.62	103.1	Yes	11-3/4"	18"	1/8"	7-3/8"	4-1/8"	None	None	None	64

† No. 4100 has a piston "screw-extension" (1-1/2"), which will extend the maximum height to 10".

See ram accessories listed on the next page. These accessories thread onto the ram's piston rod end, collar, or into the ram base. All rams include No. 9796 3/8" NPTF half coupler; oil port threads are 3/8" NPTF.

### Single-Acting Ram Accessories

These versatile attachments let you “harness” OTC hydraulic force and put it to work exactly where it’s needed to handle various maintenance tasks. Accessories thread onto the ram’s piston rod end or into the ram base.

Use with 5-ton hydraulic ram, No. 4101

Item	No.	Description
G	38908	Extension tube

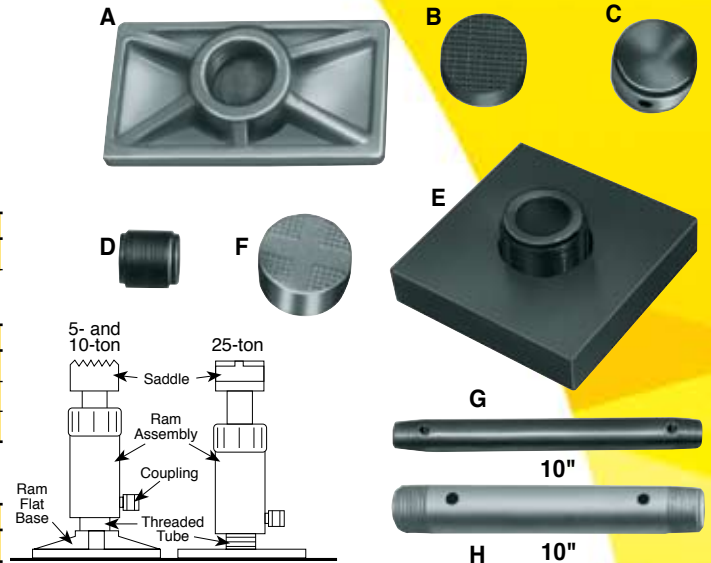
Use with 10-ton hydraulic rams, Nos. 4103, 4104, and 4105

Item	No.	Description	Item	No.	Description
A	32325*	Ram flat base	C	24016	Smooth saddle
B	31772	Serrated saddle	D	25664*	Threaded tube coupling
H	38909	Extension tube			

\* NOTE: 32325 and 25664 cannot be used on No. 4103 hydraulic ram.

Use with 25-ton hydraulic rams, Nos. 4106 and 4107

Item	No.	Description	Item	No.	Description
E	25653	Ram flat base	F	31776	Serrated saddle with coupling



### Spring-Return Hollow Center Hydraulic Rams

Ideal for push/pull applications found in off-highway, construction, mining, and other industries where heavy equipment is maintained. Center hole permits extending screws, cables, etc., straight through the ram for versatility of application. Rams withstand full “dead-end” loads. Chrome-plated piston rods resist wear, and superior packings and seals provide high cycle life without leakage. Piston head inserts are interchangeable for versatility, and tapped base mounting holes provide easy installation in fixed applications.

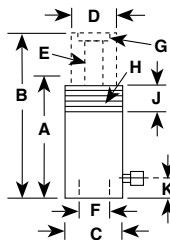
Head Inserts



For Use With	Threaded Insert No.	Inside Dia. of Plain Insert * (in.)
4131	28632 3/4"-16 **	49/64"
4132	28612 1"-8 **	1-3/64"
4139	38904 1-1/4"-7 **	1-19/64"
4140	34251 1-5/8"-5-1/2 **	2-1/8"

\* Plain insert comes standard with rams.

\*\* Internal thread size.



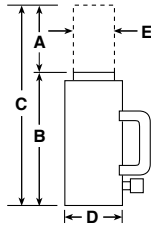
Cylinder Cap. (tons)	Stroke (in.)	Order No.	A Re-tracted Height (in.)	B Ex- tended Height (in.)	C Outside Dia. (in.)	D Piston Rod Dia. (in.)	E Center Hole Dia. (in.)	F Inches Between Base Holes	G Insert Thread Size (in.)	H Collar Thread (in.)	J Thread Length (in.)	Oil Cap. (cu. in.)	Int. Press. at Cap. (PSI)	Tons at 10,000 PSI	Base to Inlet Port (in.)	K Mounting Holes (in.)	Base Cyl. Eff. Area (sq. in.)	Prod. Wt. (lbs.)
10	2-1/2-	4131	5-5/16	7-13/16	3	2-1/16	49/64	2-3/8	1-3/4-12	None	None	5.52	9,054	11	1	1/4-20	2.21	9
20	3	4132	6-1/8	8-1/8	3-7/8	2-1/8	1-5/64	3-1/4	1-9/16-16	None	None	9.45	8,466	23.6	1	3/8-16	4.72	20.0
30	2-1/2	4139	6-1/4	8-3/4	4-3/4	3-1/4	1-19/64	3-5/8	2-3/4-12	4-3/4-12	1-1/2	15.85	9,457	31.7	1-5/32	7/16-20	6.34	25.6
60	6	4140	12-1/4	18-1/4	6-1/4	3-19/32	2-1/8	5-1/8	3-12	6-1/4-12	2-1/2	73.86	9,750	61.6	1	1/2-13	12.31	78

# SHOP EQUIPMENT

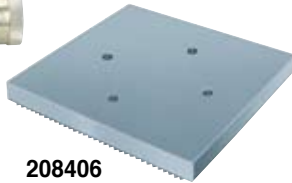
## Hydraulic Rams



4111



NOTE: See chart on page 288 for specifications.



208406

### 55- and 100-Ton Aluminum Rams

Get the strength of a steel ram but about half the weight. Easily carry these single-acting, spring-return rams around the garage, shop, or into the field for on-the-vehicle repairs. They are ideal for truck axle correction, trailer frame straightening, general vehicle maintenance, and heavy-duty lifting.

**No. 4111** – 55-ton aluminum ram. 6-1/8" stroke.

Wt., 25 lbs., 10 oz.

**No. 4116** – 100-ton aluminum ram. 6-1/4" stroke. Wt., 64 lbs.

### Ram Base

**No. 208406** – Ram base. Attaches directly to bottom of ram by means of two 3/8"-16 screws, included. Serrated base provides extra support and stability. 7" square. For use on 55-ton ram only. Wt., 4 lbs., 6 oz.



No. 4121

**Quick change inserts.**  
See accessory chart below.



### Center-Hole, Power Twin® Rams

In capacities of 17-1/2, 30, 50, and 100 tons and for operating pressures up to 10,000 PSI; use these rams on Grip-O-Matic® pullers, Push-Pullers, and shop presses.

OTC's center-hole rams are ideal for jobs that require a great deal of force and a relatively short stroke. Compared to the force it develops, each center-hole Power Twin ram is light-weight, compact, and easy to handle, permitting its use in confined quarters. Center-hole feature permits extending jacking screws, cables, puller screws, etc., straight through the ram.

### Quick change inserts

For added job versatility, Power Twin rams also feature a basic head which allows the operator to change from a tapped hole to a plain hole by merely changing the head insert (held in place by a socket-head set screw). In certain applications, the use of a plain insert is desired, since it permits using a speed nut for necessary readjustment after the ram has been extended, rather than turning the screw with a speed crank.

**No. 4120** – 17-1/2-ton Power Twin single-acting hydraulic ram. Complete with No. 21669 threaded ram head insert, ram attaching screws, and No. 9796 ram half coupler. Wt., 15 lbs., 3 oz.

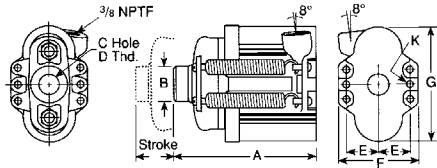
**No. 4121** – 30-ton Power Twin single-acting hydraulic ram. Complete with No. 21873 threaded ram head insert, ram attaching screws, and No. 9796 ram half coupler. Wt., 29 lbs., 3 oz.

**No. 4122** – 50-ton Power Twin single-acting hydraulic ram. Complete with No. 22274 threaded ram head insert, ram attaching screws, and No. 9796 ram half coupler. Wt., 57 lbs.

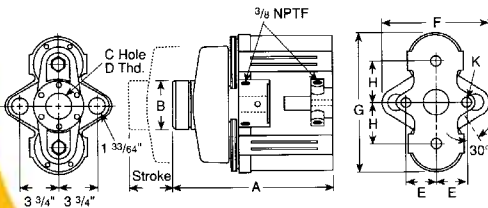
**No. 4130** – 100-ton Power Twin double-acting hydraulic ram. Complete with No. 24197 threaded ram head insert and two No. 9796 ram half couplers. Wt., 181 lbs.

#### DIMENSIONS FOR REFERENCE ONLY

Single-Acting, Spring-Return Rams



Double-Acting Ram



### Specifications

OTC No.	Capacity (tons)		Stroke	Oil Capacity (cu. in.)	Eff. Area (sq. in.)	Internal PSI at Capacity	A	B	C	D	E	F	G	H	J	K
	Push	Pull														
4120	17-1/2	-	2"	7.06	3.53	10,000	6-7/8"	1-3/4"	1-1/16"	1"-8	1-1/2"	3-3/4"	5-3/4"	-	-	11/32"
4121	30	-	2-1/2"	15.7	6.28	10,000	8-7/16"	2-1/4"	1-19/64"	1-1/4"-7	1-13/16"	4-1/2"	7-1/2"	-	-	15/32"
4122	50	-	3"	29.4	9.81	10,000	10-9/16"	2-7/8"	1-43/64"	1-5/8"-5-1/2	2-3/8"	5-7/8"	9-3/8"	-	-	21/32"
4130	100	5	4-7/8"	93.8	19.24*	10,000	15-1/8"	4-3/4"	2-9/16"	2-1/2"-8	2-7/8"	10-1/8"	13-1/4"	4"	3/4"-16	25/32"

\* Push side only.

Passes ANSI B30.1 Static and Dynamic Tests.

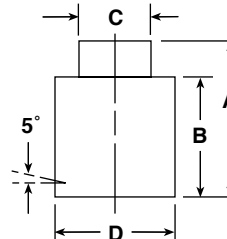


### Power Twin® Ram Accessories

Description	17-1/2 Ton	30-Ton	50-Ton	100-Ton
Speed crank	24814	27198	29595	303785
Speed nut	302482 1"-8 thread	302483 1-1/4"-7 thread	33439 1-5/8"-5-1/2 thread	34136 2-1/2"-8 thread
Adjusting screw	32118 1"-8 thread, 20" long	34758 1-1/4"-7 thread, 24" long	32698 1-5/8"-5-1/2 thread, 30" long	32699 2-1/2"-8 thread, 36" long
Threaded insert	21669 1"-8 thread	21873 1-1/4"-7 thread	22274 1-5/8"-5-1/2 thread	24197 2-1/2"-8 thread
Plain-hole insert	21714 1-1/16" dia. hole	21872 1-5/16" dia. hole	22275 1-11/16" dia. hole	24196 2-9/16" dia. hole
Pushing adapter	201923 1"-8 thread, 1/2" dia. shank	34510 1-1/4"-7 thread, 3/4" dia. shank	34755 1-5/8"-5-1/2 thread, 1" dia. shank	-
Pushing adapter	201454 1"-8 thread, 3/4" dia. shank	34511 1-1/4"-7 thread, 1" dia. shank	34756 1-5/8"-5-1/2 thread, 1-1/4" dia. shank	-
Jack screw	24813 1"-8 thread, 7" long	25931 1-1/4"-7 thread, 9" long	-	-
Ram cap	28228 1"-8 thread, 1-1/2" dia.	28229 1-1/4"-7 thread, 1-3/4" dia.	28230 1-5/8"-5-1/2 thread, 2-1/4" dia.	-

### "Shorty" Rams, Single-Acting, Spring-Return

Forcing a gravity return ram to retract wastes both time and money. This OTC series of single-acting, spring-return rams eliminates that waiting. With their low collapsed height and the stroke you really need, these rams are ideal for a variety of applications. You can choose from capacities of 10 to 100 tons and strokes from 1-1/2" to 2-7/16", with the largest ram being only 7-3/8" high! Bronze-plated piston rods resist scoring, and each ram can be "dead-ended" at full capacity for maximum safety. Each "Shorty" ram has an angled coupler port (5°) for easy hook-up. So, if you're tired of waiting for your rams to retract, these OTC "Shorty" rams are just the answer to your problems!



### Specifications

OTC No.	Capacity (tons)	Stroke (in.)	(A) Extended Height (in.)	(B) Retracted Height (in.)	(C) Piston Rod Dia. (in.)	(D) Outside Dia. (in.)	Cyl. Eff. Area (sq. in.)	Oil Capacity (cu. in.)	Int. Pressure at Capacity (PSI)	Tons at 10,000 PSI	Oil Port NPTF	Type	Piston Return	Wt. (lbs./oz.)
4141	10	1-1/2	5	3-1/2	1-1/2	2-3/4	2.24	3.4	8,943	11.2	3/8"-18	Spring		6
4142	20	1-3/4	5-1/2	3-3/4	2-5/32	3-9/16	4.43	7.7	9,029	22.1	3/8"-18	Spring		9 / 9
4143	30	2-7/16	7-1/16	4-5/8	2-1/2	4	6.49	15.8	9,243	32.5	3/8"-18	Spring		14 / 7
4144	50	2-3/8	7-3/8	5	3-1/8	4-7/8	9.62	22.8	10,393	48.1	3/8"-18	Spring		23 / 2
4145	100	2-1/4	7-3/8	5-1/2	4-3/8	6-5/8	19.63	44.2	10,186	98.2	3/8"-18	Spring		47 / 3

# SHOP EQUIPMENT

## Ram & Pumps



4175

### “Shorty” Ram and Pump Set

Shorty rams provide lifting or pushing force in limited working space. Visual centering of load is simplified by a concentric ring pattern on piston top.

- Single-acting, spring-return.
- Two-speed hand pump gives fast piston approach. (See chart below for specifications.)

**No. 4175** – Set includes 4143 30-ton, 2-7/16" stroke single-acting spring-return hydraulic ram; 4016 pump; 9767 hose; and 9798 hose half coupler. Wt., 52 lbs.

### Air/Hydraulic Ram and Pump Sets

Ideal for applications where an air supply of 40–120 PSI is available. Internal relief valve protects hydraulic system components regardless of air pressure, and two-stage release mechanism allows fast or metered ram return.

- The perfect replacement pump for hand pumps on body and frame straightening equipment.

**No. 4185** – Set includes 4104 10-ton, 6-1/8" stroke single-acting hydraulic ram; 4020 air/hydraulic pump; 9767 hose; and 9798 hose half coupler. Wt., 31 lbs.

**No. 4186** – Set includes 4105 10-ton, 10-1/8" stroke single-acting hydraulic ram; 4020 air/hydraulic pump; 9767 hose; and 9798 hose half coupler. Wt., 33 lbs.

#### Specifications

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Handle Strokes to Obtain Full Ram Stroke	Pump Speed
4175	30	2-7/16"	4-5/8"	55*	Two
4185	10	6-1/8"	11-1/2"	–	Multiple
4186	10	10-1/8"	15-1/4"	–	Multiple

\* Based on 50% of the stroke being made in low-pressure stage, 50% in high-pressure stage.



4186

### Power Twin® Ram and Pump Set

Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.

- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.

**No. 4180** – Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler. Wt., 39 lbs.

#### Specifications

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Handle Strokes to Obtain Full Ram Stroke	Pump Speed
4180	17-1/2	2"	6-7/8"	48	Single



4180

### Hydraulic Push-Type Ram and Pump Sets

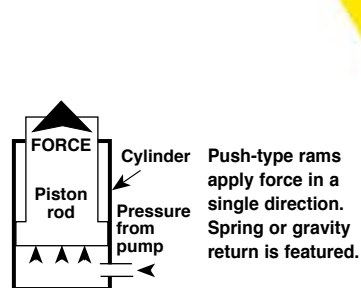
Compact and lightweight, these ram and pump sets are ideal for use in a wide variety of lifting and pushing applications. They feature a single-acting ram with a single-speed hydraulic hand pump. Requiring a minimum of mounting space, their remote operation is facilitated by a 6-foot, high-pressure hose.

**No. 4169** – Set includes 4103 single-acting hydraulic ram, 4002 pump, 9767 hose, and 9798 hose half coupler. Wt., 28 lbs., 3 oz.

**No. 4170** – Set includes 4104 single-acting hydraulic ram, 4002 pump, 9767 hose, and 9798 hose half coupler. Wt., 34 lbs., 6 oz.

OTC Set No.	Capacity (tons)	Cylinder Stroke	Cylinder Collapsed Height	Handle Strokes to Obtain Full Cylinder Stroke	Pump Speed
4169	10	2-1/8"	5-9/16"	32	Single
4170	10	6-1/8"	11-1/2"	93	Single

See page 288 for ram specs., and this page for hand pump specs.



4170

### Single-Stage Hand Operated Pump

Ideal for operating single-acting rams. Use to power gear and bearing pullers, shop forcing presses, and in other hydraulic applications. A single-piston, single-stage type, this pump develops pressures up to 10,000 PSI. Operates horizontally or vertically with the pump head in the "down" position. Fingertip control valve provides instant release or pumping action. Features built-in overload valve. Ideal for use with Power Twin and single-acting rams. Maximum handle effort: 140 lbs.

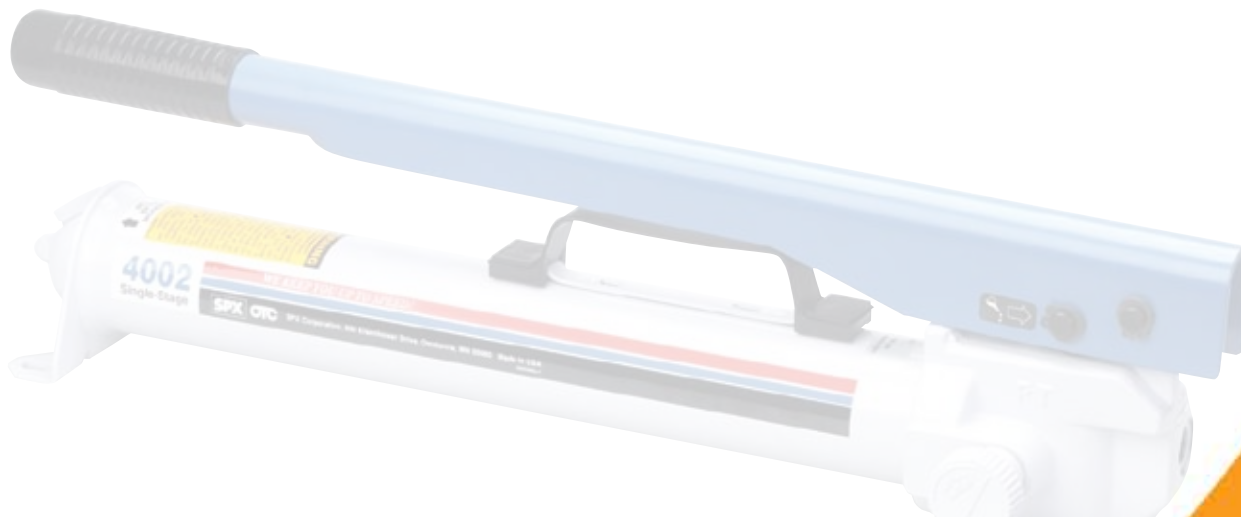
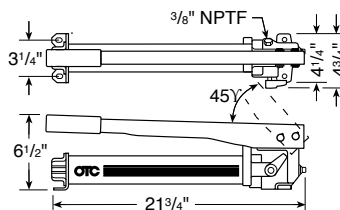
**No. 4002** – Hand pump only. Has 55 cu. in. reservoir. Wt., 17 lbs., 3 oz.

**NOTE:** See pages 299 and 300 for optional hose and hose half couplers.

Pump No.	Maximum Pressure	Volume Per Stroke	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port
4002	10,000 PSI	.160 cu. in.	1/2"	13/16"	55 cu. in. (45 cu. in. usable)	3/8" NPTF



4002





# SHOP EQUIPMENT

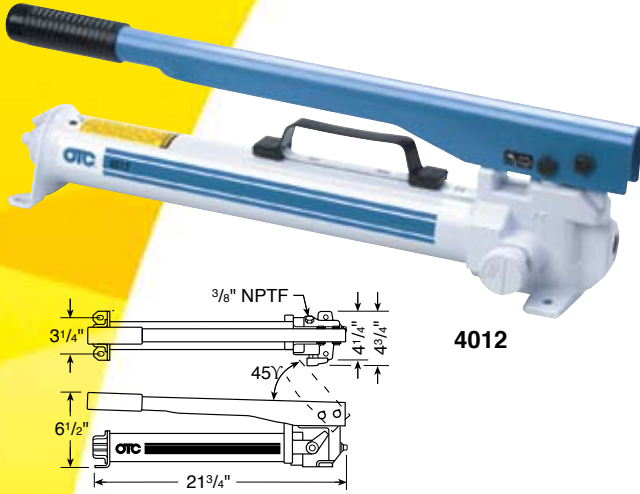
## Hand Hydraulic Pumps

### Two-Speed Hand Pump

The 4012 two-speed hand pump's all-metal construction almost eliminates the chance of leaking, or damage to the pump from regular use or accidents. It's the perfect pump for use with single-acting rams or combinations where 45 cu. in. of usable oil capacity will do the job. Has 2-way valve; welded steel carrying handle; automatic switching from low to high pressure mode; handle effort under 140 lbs. at 10,000 PSI; unique fill cap to prevent over-filling and over-pressurization; non-vented reservoir; fingertip control valve with 180° throw for on/off control. In other words, this pump has it all!

**No. 4012** – Hand pump only. Has 55 cu. in. reservoir. Wt., 18 lbs., 6 oz.

Pump No.	Maximum Pressure	Volume Per Stroke	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port
4012	1st-325 PSI 2nd-10,000 PSI	.662 cu. in. .160 cu. in.	3/8"	13/16"	55 cu. in. (45 cu. in. usable)	3/8" NPTF



4012

### Dualmaster Jr.® Two-Stage Hand Pumps

Here's two-stage flexibility at a popular price! These pumps have extra-large reservoirs (125 cu. in. usable oil) and permit use with large hydraulic rams or in multiple small ram applications. Compact and lightweight, Dualmaster Jr. provides maximum flexibility with minimum effort in a portable pump. The 4016 and 4017 deliver... providing high oil volume (2.6 cu. in. per stroke) for rapid ram approach and return. Then they automatically switch at 300 PSI to the high pressure, low volume stage (.16 cu. in. per stroke) for high force applications. Both have a large, non-vented reservoir with safety relief valve to prevent over-pressurization of the reservoir. Piston stroke is 3/4", maximum handle effort is 130 lbs. at 10,000 PSI. The 4016 is equipped with a 2-way valve for use with single-acting rams. The 4017 has a 4-way valve for use with double-acting rams. Two versatile hydraulic pumps...dependable power for automotive, heavy-duty truck, agricultural, and construction maintenance needs.

**No. 4016** – Pump with a 2-way valve for use with single-acting rams. Delivers 2.6 cu. in. of oil per stroke in low pressure stage. Wt., 29 lbs., 13 oz.

**No. 4017** – Pump with a 4-way valve for use with double-acting rams. Delivers 2.6 cu. in. of oil per stroke in low pressure stage. Wt., 29 lbs.

Pump No.	Maximum Pressure	Volume Per Stroke	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port
* 4016	1st stage 300 PSI 2nd stage 10,000 PSI	2.6 cu. in. .16 cu. in.	2"	3/4" 1/2"	125 cu. in. usable	3/8" NPTF
† 4017	1st stage 300 PSI 2nd stage 10,000 PSI	2.6 cu. in. .16 cu. in.	2"	3/4" 1/2"	125 cu. in. usable	3/8" NPTF

† Has built-in 4-way control valve.



4016

Pump No.	Maximum Pressure	Volume Per Stroke	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port
* 4016	1st stage 300 PSI 2nd stage 10,000 PSI	2.6 cu. in. .16 cu. in.	2"	3/4" 1/2"	125 cu. in. usable	3/8" NPTF

\* Has built-in 2-way control valve.

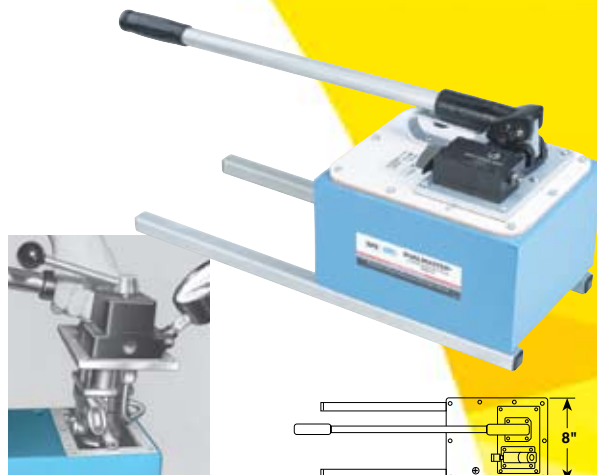
### Dualmaster® Two-Stage Hand Pumps

Our finest hand-operated power units! These fast-acting, two-stage pumps not only handle high force, high pressure requirements up to 10,000 PSI, but deliver extremely high volume at low pressure (7.35 cu. in. per stroke from 0 to 200 PSI) to quickly move the ram piston to and from the work! Pumps have a built-in relief valve, pre-set at the factory for 10,000 PSI. Maximum handle effort is 90 lbs. Two basic Dualmaster models are offered: No. 4008 for use with single-acting rams, and No. 4009 for use with double-acting rams. For information on pressure gauges, hoses, and other accessories for your Dualmaster, see pages 299 and 300.

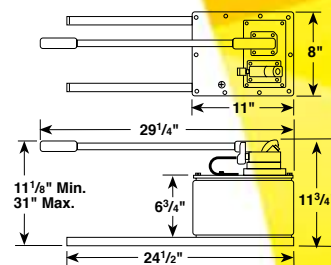
**No. 4008** – Hydraulic hand pump with No. 9584 2-position, 3-way control valve (for operating single-acting rams), and No. 4006 BL2 2-gallon reservoir with legs. Wt., 50 lbs.

**No. 4009** – Hydraulic hand pump with No. 9500 3-position, 4-way control valve (for operating double-acting rams), and No. 4006 BL2 2-gallon reservoir with legs. Wt., 64 lbs., 3 oz.

Pump No.	Maximum Pressure	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port
4008 and 4009	1st stage 200 PSI 2nd stage 10,000 PSI	2-1/2" 1/2"	1-1/2"	460 cu. in. usable	3/8" NPTF



Pump and valving mount on common cover plate; permits use on other than standard OTC reservoirs.



#### Performance Example

Job: To fully extend an OTC 4105 ram (has 10 7/8" stroke)	4008/4009 Pump	4016 Pump	4002 Pump
5" of ram travel is under no load, 5" is under load	37 strokes	74 strokes	141 strokes

### Air/Hydraulic Pump

With shop air as the energy source, these pumps have the power and oil capacity (80 cu. in. usable oil) to drive even the large 55-ton rams. They are ideal all-around power sources for dozens of body, frame, and alignment applications. They can be used with a variety of rams, presses, and hydraulic pullers operating at up to 10,000 PSI. An internal relief valve protects the hydraulic components regardless of hydraulic pressure. In addition, a two-stage release mechanism gives fast or metered ram return while reducing hydraulic shock.

In addition to all the features and performance characteristics of the 4020/4025, the 4021 is equipped with a 15 ft. remote control cord. The 4022 is equipped with a 2-gal. reservoir. These pumps require 9 cfm at 100 PSI air pressure at the pump.

**No. 4020** – Air/hydraulic pump. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 98 cu. in. usable oil capacity in plastic reservoir. Wt., 15 lbs., 3 oz.

**No. 4021** – Air/hydraulic pump with a remote control actuator, 15 ft. cord. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 105 cu. in. capacity plastic reservoir. Wt., 19 lbs., 3 oz.

**No. 4022** – Air/hydraulic pump with a 2-gallon (442 cu. in.) plastic reservoir. Wt., 26 lbs., 3 oz.

**No. 4025** – Air/hydraulic pump. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 98 cu. in. usable oil capacity in metal reservoir. Wt., 14 lbs., 13 oz.

**No. 213896** – Metal reservoir. 98 cu. in. usable oil capacity. Includes gasket and fasteners. Wt., 6 lbs., 2 oz.

**No. 61243** – Replacement plastic reservoir for 4020 pump, 98 cu. in. usable oil capacity. Wt., 1 lb., 1 oz.

**No. 33853** – Replacement gasket for 4020 pump reservoir. Wt., 1 oz.



4020



4021

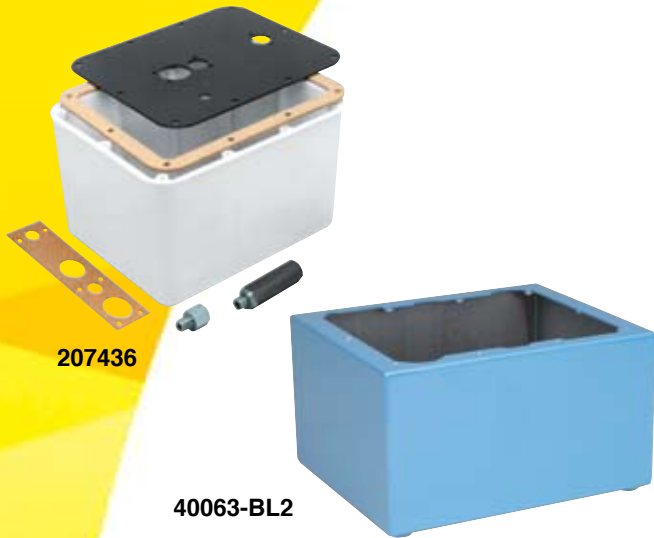
#### Performance @ 100 PSI

Hydraulic Pressure*	Oil Delivery
0 PSI	59 cu. in./min.
5,000 PSI	30 cu. in./min.
10,000 PSI	4 cu. in./min.

\* Oil delivery based on 20 cfm air supply at the pump.

# SHOP EQUIPMENT

## Hydraulic Pumps



### Two-Gallon Reservoir

Increase the oil capacity of your 4020, 4021, or 4025 air/hydraulic pumps with this kit. It gives you a two-gallon reservoir and everything else needed to make those pumps ideal for large, single-acting rams or for multiple ram applications.

**No. 207436** – 2-gallon reservoir kit for 4020, 4021, or 4025 air/hydraulic pumps. Includes reservoir, gasket, top mounting plate, bolts, and fittings. Gives 442 cu. in. usable oil capacity. 11-1/2" x 9-1/2" x 6-1/2". Wt., 6 lbs., 13 oz.

**No. 40063-BL2** – 2-gallon (462 cu. in. usable) "standard" reservoir only for Vanguard® pumps. Size: 12-1/2" x 10-1/2" x 6-1/2" high. Wt., 9 lbs., 3 oz.



### Vanguard® Two-Stage, High-Pressure Power Units

Thousands of users have put Vanguard to work in a variety of hydraulic power applications. And the reputation for trouble-free performance this pumping unit has earned is a proven, documented fact, not just a sales claim! Vanguard is a fast-acting, precision-built, two-stage pumping unit consisting of a gear pump for the low-pressure stage and an axial-piston pump for the high-pressure stage, the latter being "supercharged" by the gear pump. Vanguard delivers low volume at high pressure, yet provides high volume at low pressure for fast cylinder piston approach and return. Units feature a 10,000 PSI universal motor, which starts under full load. They are suitable for operation up to 10,000 PSI. Motor is 1-1/8 h.p., 12,000 RPM, (27 amp draw). Rated for intermittent duty.

**No. 4062** – Vanguard 2-stage hydraulic pump with 2-position/ 3-way valve and 6 ft. remote motor control (115V). 2 gal. of oil supplied. Wt., 71 lbs., 10 oz.

**No. 4064** – Vanguard 2-stage hydraulic pump with 3-position/ 4-way valve and 6 ft. remote motor control (115V). 2 gal. of oil supplied. Wt., 74 lbs., 7 oz.

#### Specifications

A	B	C	D	E	F
18-1/4"	12-1/2"	10-1/2"	7"	10"	8"

#### Performance Oil Delivery

100 PSI	1,000 PSI	5,000 PSI	10,000 PSI
650 cu. in./min.	80 cu. in./min.	70 cu. in./min.	55 cu. in./min.

Pump No.	For use with:	Control Valve	Reser-voir	Motor Control	Voltage
4062	Sgl.-acting rams	2-pos., 3-way	2 gal.	Remote 6 ft. cord	1-1/8 H.P., 115V*
4064	Dble.-acting rams	3-pos., 4-way	2 gal.	Remote 6 ft. cord	50/60Hz, Sgl. Phase

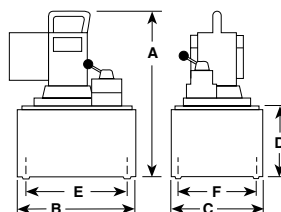
\* For 230 volt, please specify.

#### Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10-1/8" stroke:

Pump No.	5" travel No load	5" travel Under load	Total Time
4062 Power	1.5 sec.	12 sec.	13.5 sec.
4002 Hand Pump	141 strokes of pump handle		4 to 5 min.*

\* Handle effort at max. pressure is 140 lbs.





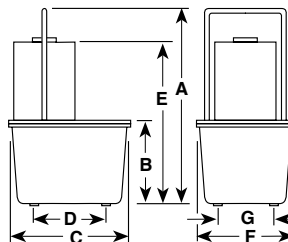
### Two-Stage Electric/Hydraulic Pumps

They're called "RamRunners" and that's just what they do...run large single- or double-acting rams for fast frame straightening, wheel alignment, etc. They deliver up to 45 cu. in./min. at max. operating pressure of 10,000 PSI. The 4044 has a 2-position/2-way valve with "advance" and "return" positions and is for use with single-acting rams. The 4046 and 4057 have a 3-position/4-way valve with "advance," "hold," and "return" positions; for use with double-acting or multiple single-acting rams. Nos. 4044 and 4046 are equipped with a 1/2 h.p. single-phase, 60 Hz, 115 volt thermal protected electric motor and are designed to start under load. No. 4057 has a 1-1/2 h.p. electric motor. The RamRunners also feature a 6 ft. remote control cord for "on/off" control. One gallon and two quarts of oil are supplied.

**No. 4044** – RamRunner two-stage hyd. pump with 2-position/2-way manual valve and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil. Wt., 58 lbs.

**No. 4046** – RamRunner two-stage hydraulic pump with 3-position/4-way manual valve for double-acting rams, and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil. Wt., 54 lbs.

**No. 4057** – RamRunner two-stage hydraulic pump with 3-position/4-way valve for double-acting rams, and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil. Wt., 54 lbs.



### Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10" stroke:

Pump No.	5" travel No load	5" travel Under load	Total Time
4044	3 sec.	39 sec.	42 sec.
4046	1.2 sec.	14 sec.	15.2 sec.

Pump No.	Max. Press. Output	RPM	Oil Del.* (cu. in./min. @)			Voltage	Reservoir		Dimensions						
			0 PSI	100 PSI	10,000 PSI		Cap.	Usable	A	B	C	D	E	F	G
4044	10,000 PSI	3,450	290	240	17	1/2 h.p., 115 volt** 60 Hz, Sgl. Phase	1.9 gal.	295 cu. in.	18-1/2"	7"	11-3/8"	7-1/8"	14-7/8"	9-1/4"	5-1/8"
4046	10,000 PSI	3,450	525	490	45	1-1/2 h.p., 115 volt** 60 Hz, Sgl. Phase	1.9 gal.	315 cu. in.	20"	7"	11-3/8"	7-1/8"	14-7/8"	9-1/4"	5-1/8"

\* Typical delivery, actual flow will vary with field conditions.

\*\* For 230 volt, please specify.

### Control Valves

**No. 9582** – This is a 2-position/3-way, lever operated, detent positioned valve for use with single-acting rams. It has "advance" and "hold" positions. Wt., 2 lbs., 5 oz.

**No. 9500** – A 3-position/4-way, lever operated, detent positioned valve for use with double-acting rams. Has "advance," "neutral," and "return" positions. Cylinder ports are blocked in "neutral" and pump flow is directed back to the reservoir. Wt., 4 lbs., 8 oz.



9582

9500

# SHOP EQUIPMENT

## Hydraulic Pumps

### Vanguard Jr.® Two-Stage, High-Pressure Power Units

Combines compact size and light weight with 2-stage high performance. Choose from several models with electric motors and many options. Designed for operating pressures up to 10,000 PSI.

Vanguard Jr. gives you just what you need: 2-stage flexibility with high performance, and a selection of units and options that lets you tailor the pump to your needs. Refer to the performance and speed tables below, and you'll see how these pumps cut down the time needed for almost any job. The 2-stage operation automatically matches pump performance to the job requirements. The low-pressure, high-volume stage provides fast ram approach and return. Then at approximately 200 PSI, the high-pressure, low-volume stage takes over to handle high force requirements. These pumps are ideal for hundreds of hydraulic applications such as clamping, bending, straightening, pressing, forming, testing, pushing, and pulling. Each is equipped with a relief valve factory-set at 10,000 PSI (the maximum operating pressure of the pump). Choose from models with electric (115 or 230 volt) motors and options that include remote hand- and foot-operated motor controls, adjustable pressure regulator, and pressure switch. Vanguard Jr. starts easily under load and has been thoroughly field-tested for high cycle reliability.

#### Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10-1/8" stroke:

Pump No.	5" travel No load	5" travel Under load	Total Time
4031	4 sec.	34 sec.	38 sec.
4002 Hand Pump	141 strokes of pump handle		4 to 5 min.*

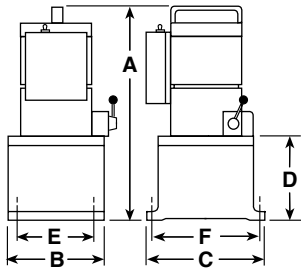
\* Handle effort at max. pressure is 140 lbs.

**No. 4031** – Vanguard Jr. two-stage hydraulic pump with 2-position/3-way valve and 6 ft. remote motor control (specify 115V or 230V). 1 gal. of oil supplied. Wt., 35 lbs., 7 oz.

**No. 4033** – Vanguard Jr. two-stage hydraulic pump with 3-position/4-way valve and 6 ft. remote motor control (specify 115V or 230V). 1 gal. of oil supplied. Wt., 36 lbs.

**No. 4036** – Vanguard Jr. two-stage hydraulic pump with 3-position/4-way valve and run/off/jog motor control (specify 115V or 230V). 2 gal. of oil supplied. Wt., 61 lbs., 7 oz.

Universal Motor  
Version



**Specifications** Note: Dimensions shown apply to pumps with 104 cu. in. reservoir.

A	B	C	D	E	F
16"	6"	8"	4-3/4"	5-1/8"	7-1/8"

#### Performance

The low-pressure, high-volume stage provides fast ram approach. When high force is needed, the high-pressure, low-volume stage takes over. The figures below indicate oil delivery of the electric power unit at various pressure levels.

170 cu. in./min. at 100 PSI    32 cu. in./min. at 1,000 PSI  
25 cu. in./min. at 5,000 PSI    18 cu. in./min. at 10,000 PSI

Pump No.	For use with:	Control Valve	Reservoir	Motor Control
4031	Single-acting rams	2-position 3-way	.45 gallon 104 cu. in.	Remote 6 ft. cord
4033	Double-acting rams	3-position 4-way	.45 gallon 104 cu. in.	Remote 6 ft. cord
4036	Double-acting rams	3-position 4-way	2 gallon 462 cu. in.	Run/off/jog

### Universal Motor Version and Large Reservoir Models

These all have a 10,000 PSI pump and universal motor: 1/2 h.p., 12,000 RPM, 115 or 230 volt (specify), 60/50 cycle A.C. single phase. No. 4036 has an extra-large 2-gallon (462 cu. in.) reservoir to permit full stroke of large displacement rams. Also suited for applications where several rams are used.

### High Capacity Reservoir Conversion Kit

Increase the oil capacity of your No. 4031 or No. 4033 pump with this kit. It gives you a plastic reservoir and everything else needed to give you 462 cu. in. of oil.

**No. 27874** – 2-gallon reservoir conversion kit. 6-1/2" x 9-1/2" x 11-1/2". Wt., 12 lbs., 13 oz.