

# **OTC MEANS PULLERS**

Trusted pullers with a lifetime warranty to separate rusted, frozen or seized components

### **GRIP-O-MATIC PULLERS**



#### **1020 2-JAW AND 1021 3-JAW 1-TON PULLERS**

- 2-1/8" max reach
- 3-1/4" spread
- 5/16"-24 x 3-7/8" forcing screw
- 9/64" thick 1/4" wide jaw



#### **1022 2-JAW AND 1023 3-JAW 2-TON PULLERS** WITH REVERSIBLE JAWS

- 3-1/4" max reach
- 4" max spread for 1022; 4-3/4" max spread for 1023
- 3/8"-24 x 4-7/8" forcing screw
- Jaw thickness: 3/16" upper, 1/8" lower
- Jaw width: 1/4" upper, 1/2" lower



#### **1025 2-JAW AND** 1027 2/3-JAW 5-TON **LONG PULLERS WITH REVERSIBLE JAWS**

- 5-1/2" max reach
- 6" max spread for 1025; 7" max reach for 1027
- 9/16"-20 x 6-15/16" forcing screw
- Jaw thickness: 5/16" upper, 1/4" lower
- Jaw width: 3/8" upper, 3/4" lower



#### **1035 2-JAW AND 1037 2/3-JAW 7-TON PULLERS WITH REVERSIBLE JAWS**

- 5" max reach
- 9" max spread on 1035; 10-1/2" max spread on 1037
- 11/16"-18 x 9" forcing screw
- Jaw thickness: 5/16" upper, 11/32" lower
- Jaw width: 1" upper, 1" lower



#### **1024 2-JAW AND 1026 2/3-JAW 5-TON PULLERS** WITH REVERSIBLE JAWS

- 3-1/4" max reach
- 6" max spread for 1024; 7" max spread for 1026
- 9/16"-20 x 6-15/16" forcing screw
- Jaw thickness: 5/16" upper, 1/4" lower
- Jaw width: 3/8" upper, 3/4" lower



#### **1036 2-JAW AND** 1038 2/3-JAW 7-TON **LONG PULLERS**

- 8-3/4" max reach
- 9-1/2" max spread on 1036; 11" max spread on 1038
- 11/16"-19 x 9" forcing screw
- Jaw thickness: 11/32"
- Jaw width: 1"



## **GEAR AND PULLEY REMOVAL**



#### **522 LARGE GEAR & PULLEY PULLER**

- Easily remove gears, pulleys and components with tapped holes
- 2" to 7-3/4" spread
- 3/4"-16 x 11-5/8" forcing screw
- Use cap screws up to 1/2" in diameter



#### 7392 GEAR & PULLEY PULLER

- Remove timing gears, fan pulleys, harmonic balancers
- 1-1/2" to 4-1/4" spread
- 13" long forcing screw
- Includes two hex head cap screws, sized 3/8"-16 x 3"



#### 927 10-TON PUSH PULLER

- Remove and install press-fit parts
- Use with 1123 or 679 bearing splitter attachments
- 2-1/8" to 7-1/4" spread
- 8-1/4" max reach

### **BEARING SPLITTERS**



#### **1123 BEARING SPLITTER**

- Knife-like edges seat behind components to separate quickly
- Use with a push-puller or OTC Grip-O-Matic pullers
- 4-5/8" spread; 4-3/8" between screws



#### **1130 BEARING SPLITTER**

- Knife-like edges seat behind components to separate quickly
- Use with a push-puller or OTC Grip-O-Matic pullers
- 9" spread; 6" between screws



#### **679 V-BELT PULLEY ATTACHMENT**

- Clamps into V-belt groove to securely hold and pull
- Use with a push-puller or OTC Grip-O-Matic nullers
- 5-7/8"" spread; 6" between screws

### **PULLERS AND PULLER SETS**



#### **938 17-1/2 TON PUSH-PULLER**

- Max reach of 11-1/2" with adjustable spread from 3-1/8" to 11-3/4"
- Heavy-duty capacity will separate bearings, remove shafts and more
- Works with 1124, 1130 bearing splitters or 1150, 1151, 1153, 1165 and 1166 internal puller leas



#### 1150 INTERNAL PULLING **ATTACHMENT**

- Quickly remove bearing cups, oil seals, bushings and more
- 5/8"-18 cross block thread fits most slide hammers, OTC push-pullers and puller screws
- 4" reach; 1-1/2" to 6" spread



#### 1178 SLIDE HAMMER PULLER SET"

- · Set for pulling pilot bearings, oil seals, bushings, timing gears, harmonic balancers and more
- Includes medium jaws, long jaws, puller hook, pilot bearing jaw and two cross blocks



### **1676 STRONG BOX PULLER SET**

- Includes eight pullers, five attachments and extra puller jaws for most jobs
- Pull gears, flywheels, steering wheels, pitman arms, bearings and more
- Metal storage box keeps pullers organized and accessible



Photo for illustrative purposes only

#### 1682 17-1/2, 30 AND 50-TON **MASTER PULLER SET**

- The motherlode puller set with pullers, splitters, hydraulic rams, attachments and
- · Includes nearly 50 pullers, splitters and
- 3 hydraulic pumps and 3 rams will break loose nearly any stuck, frozen or rusted components



#### **1675 13-TON CAPACITY PULLER SET**

- Includes 11 pullers, 3 bearing splitters and nearly a dozen threaded adapters
- · Easily pull gears, bearings, shafts, pinions, outer races and more
- A true all makes/models puller set with 13 tons of force



### **SELECTING THE RIGHT PULLER**

#### 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. The splitter gets behind the component to prevent damage to the part.

Push-Puller® with attachments. External-internal adapters can thread directly into tapped holes on a component.



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



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



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 externalinternal 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.

#### **Safety Precautions**



#### WARNING: TO PREVENT PERSONAL INJURY WHEN USING PULLERS,





- Inspect puller for dents, cracks, or excessive wear before use. Inspect forcing screw for signs of galling or seizing. Replace worn or damaged components.
- Do not exceed puller's rated capacity, spread, or reach. Use correct size of puller for application.
- Ensure puller is correctly aligned with application and seated on component to be removed. Jaws must be parallel to forcing screw.
- Do not use wrench extensions when applying a load.
- Cover application with a shield or protective blanket before force is applied to contain flying debris should breakage occur.
- Apply force gradually. Do not use an impact wrench to apply force unless instructions specify use with an impact wrench.
- Do not strike or "sledge" puller or component.
- Do not modify puller by grinding, heating, or other means that could weaken puller strength.

#### **ABOUT MECHANICAL PULLERS**

A pulling system can exert tons of force and it is difficult to predict the exact force required for a pulling application. It is important to observe safety precautions when using a puller.

The OTC pulling system is versatile. For that reason, it is possible that various components in a pulling setup will have different tonnage ratings. The lowest capacity component determines the capacity of the entire setup. For example, when an accessory having a capacity of one ton is used with a 10-ton capacity puller, the puller setup can be used at a force of only one ton.

If you are unsure which puller or attachment to select for an application, contact your OTC tool representative.





