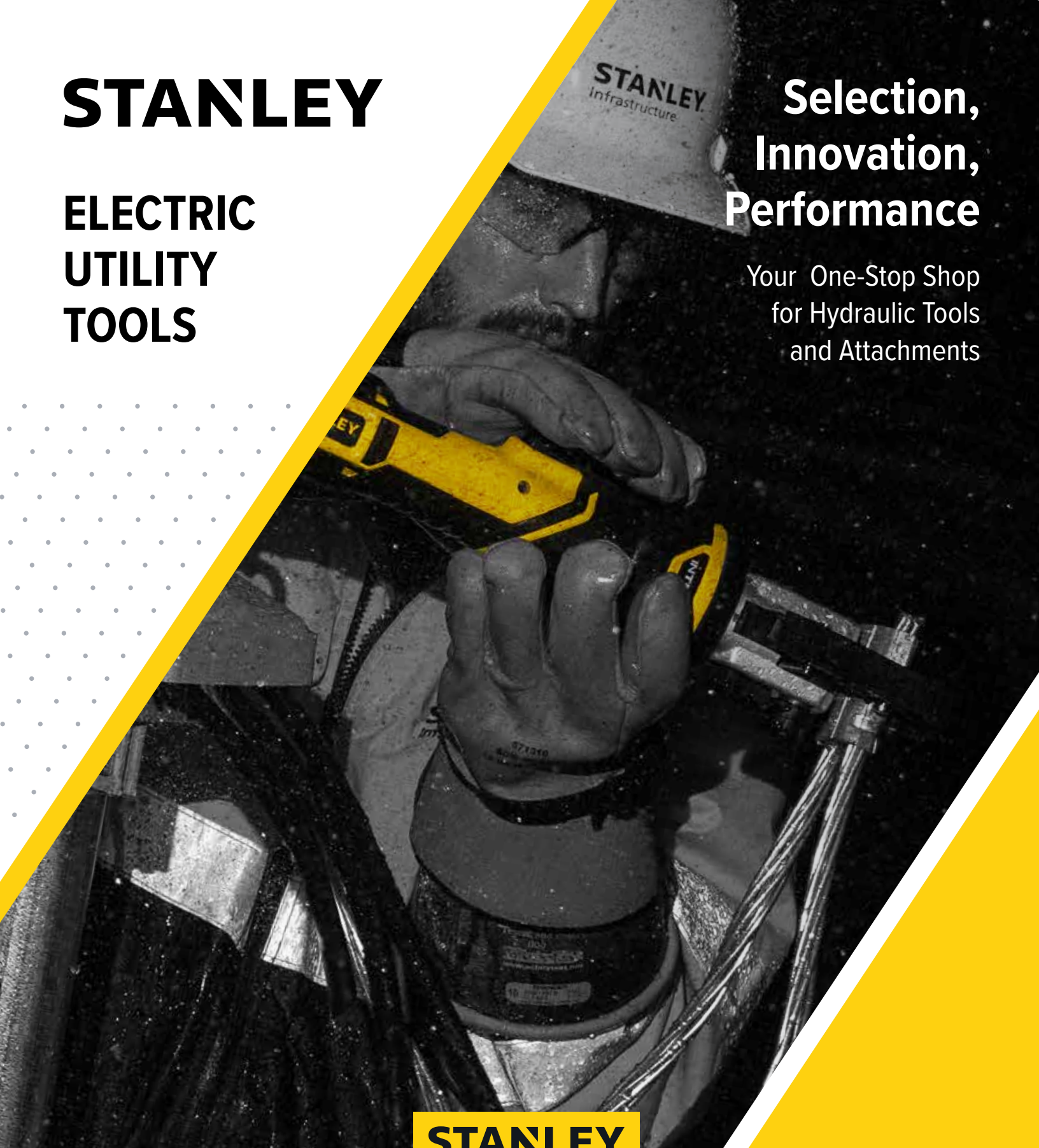


# STANLEY

## ELECTRIC UTILITY TOOLS

## Selection, Innovation, Performance

Your One-Stop Shop  
for Hydraulic Tools  
and Attachments



**STANLEY**  
Infrastructure

INDUSTRIAL TOOLS & ATTACHMENTS

 **PALADIN** **STANLEY** **LABOUNTY**  **PENGO**



### GREAT BRAND, GREAT TOOLS

STANLEY has a proud tradition of being a global leader in the development of a wide range of innovative hydraulic products used in a variety of industries and applications throughout the world. As a proud member of Stanley Black & Decker, a 175 year old company committed to the manufacture and distribution of quality tools for the professional, industrial, and consumer, we at Stanley Infrastructure are dedicated to providing our customers with innovative customer-driven product designs, world class quality, unmatched product support, and superior value.

### GLOBAL REPRESENTATION

STANLEY Infrastructure produces an extensive line of products for use in construction, demolition, scrap processing, recycling, utilities, municipalities, railroads, industry, landscaping, underwater, construction, and specialty trades. STANLEY Infrastructure Tools has sales offices and distributors throughout North America, Central America, South America, Europe, Asia, Australia, and the Middle East.

### OUR MISSION

Stanley is committed to providing innovative solutions for infrastructure based applications. We are for those who make the world move.



Proudly offering Pengo attachments now. Learn more at [Powerfulattachments.com](http://Powerfulattachments.com) or call 1800-599-0211

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All STANLEY® tools, accessories, parts and allied equipment are subject to design improvements, specification and price changes at any time without notice and with no obligation to units already sold. Weights, dimensions and operating specifications listed herein are subject to change without notice. Where specifications are critical to your application, please consult the factory.



# CRIMPING & CUTTING UNTETHERED



## BRIGHT LED RING

STANLEY's new line of crimping and cutting tools consists of both 6 and 12 ton models with application specific handle and head styles. Using extensive user input, these tools were developed to help utility workers complete the toughest tasks they face every day on the job.

- Weather-resistant tool bodies, which incorporate an innovative membrane that allows air in to cool the motor while keeping moisture and dust out. Linemen work in every imaginable weather condition, so should the tools they use.
- Critical components such as the controller board, motor switch, and battery connections are protected by additional moisture resistant technologies.



## WEATHER RESISTANT



## DeWALT BATTERY PLATFORM

- These new STANLEY tools share into the premium 20v Max battery platform from DeWALT. This means that a single DeWALT battery can power crimping and cutting tools as well as any of the 100+ power tools currently in the 20v Max line.
- InteLED™ system consists of a very bright ring of LEDs to provide worksite illumination as well as intuitive user feedback about crimp quality. During advance cycle, LEDs shine bright white to help eliminate shadows and minimize work errors.
- On-board memory that records cycle count and crimp quality information. Users can access this information via USB cable with STANLEY's crimp software.

### Inline Crimper Model IBC600

Time saving rocker trigger system with integrated lockout for safety. 360 Degree rotational head. Easily interchangeable jaws with quick release pin. ACSR cutting jaws will easily cut cables to 477 MCM. EHS cutting jaws power through up to 3/8" EHS guy wire.

#### SPECIFICATIONS

6 Tons Crimping Force  
CU/AL Connectors to 500 MCM  
HTAPS to 4/0-4/0  
Jaws Available: D3+O, D3+BG, Kearney+BG, ACSR, EHS  
Accepts Standard "W" Dies or Kearney Dies  
Available In Kit Form and As Bare Tool

#### Different Jaw Configurations

D3+O  
D3+BG  
Kearney+BG  
ACSR  
EHS

#### INTELED Illumination Technology

Illuminates work area and provides crimp feedback.

#### Weather Resistant Protective Membrane

Allows electronics to be ventilated while keeping water, dust, and mud out of the crimper.



**Quick Release Pin**  
Allows for easy jaw change.

**Double Action  
Rocker Trigger**  
Allows quick cycle time.

**Premium DeWALT  
20V MAX Battery**  
Compatible with 100+ DeWALT tools.

### Pistol Grip Crimper Model PBD600

Flip-top four point dieless head. Head opening release pin permanently attached to avoid misplacement. Double trigger with intergrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

#### SPECIFICATIONS

Compression Force: 6 Tons  
Crimping capacity: Lugs & Splices - Copper #8-500 MCM, Aluminum #8-300MCM, HTAPS - up to 4/0-4/0.  
Available In Kit Form and As Bare Tool



### Pistol Grip Crimper Model PBD1200

One inch C head that accepts standard U type dies. Double trigger with integrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

#### SPECIFICATIONS

Compression Force: 12 Tons  
Crimping capacity: 636 MCM AL, 500 MCM CU, 556 ACSR.  
Head opening: 1"  
Available In Kit Form and As Bare Tool



### Pistol Grip Crimper Model PBD1201

One-and-a-half-inch C head that accepts standard U type dies. Double trigger with integrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

#### SPECIFICATIONS

Crimping Force: 12 Tons  
Crimping Capacity: CU/AL Connectors Up to 750 MCM, ACSR - 556  
Head Opening: 1.5"  
Available In Kit Form and As Bare Tool



### Pistol Grip Crimper Model PBD1202

One and a half inch Kearney style head that accepts WH2 and WH3 style dies. Double trigger with integrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

#### SPECIFICATIONS

Compression Force: 12 Tons  
Crimping capacity: 750 MCM AL+CU, 556 ACSR.  
Head opening: 1.5"  
Available In Kit Form and As Bare Tool



ELECTRIC UTILITY TOOLS

# CORDLESS CUTTING TOOLS

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ELECTRIC UTILITY TOOLS

# ORDERING INFORMATION

**Pistol Grip Cutter** Model PBCC40

One and a half inch (40mm) guillotine head. Double trigger with integrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

**SPECIFICATIONS**

Cutting Force: 8.8 Tons  
Cutting Capacity: Up to 1750 MCM CU/AL, Up to 1590 ACSR,  
Up to .7” Guy Wire or .5” EHS, Up to .75” Ground Rods  
Available In Kit Form and As Bare Tool



**Pistol Grip Cutter** Model PBCC65

Two and a half inch (65mm) scissor style head. Double trigger with integrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

**SPECIFICATIONS**

Cutting Force: 6.0 Tons  
Cutting Capacity: Up to 2.5” CU/AL  
Available In Kit Form and As Bare Tool



**Pistol Grip Cutter** Model PBCC85

Three and a quarter inch (85mm) guillotine head. Double trigger with integrated lockout for safety. Secondary white LED light in handle for improved illumination of work area.

**SPECIFICATIONS**

Cutting Force: 5.5 Tons  
Cutting Capacity: Up to 1250 MCM CU/AL, 3.3” Telecom Cable  
Available In Kit Form and As Bare Tool



**Stanley Inline Crimping Tools**

Part No.	Description
IBC600B0	6 TON INLINE TOOL - D3/O JAWS
IBC600BG	6 TON INLINE TOOL - D3/BG JAWS
IBC600BKE	6 TON INLINE TOOL - KEARNEY/BG JAWS
IBC600BACSR	6 TON INLINE TOOL – ACSR CUTTER
IBC600BEHS	6 TON INLINE TOOL – EHS CUTTER
IBC600K02	6 TON INLINE TOOL KIT- D3/O JAWS - 2X 2 AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
IBC600KG2	6 TON INLINE TOOL KIT- D3/BG JAWS - 2X 2 AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
IBC600KKE2	6 TON INLINE TOOL KIT- KEARNEY/BG JAWS - 2X 2 AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
IBC600K05	6 TON INLINE TOOL KIT- D3/O JAWS - 2X 5 AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
IBC600KG5	6 TON INLINE TOOL KIT- D3/BG JAWS - 2X 5 AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
IBC600KKE5	6 TON INLINE TOOL KIT- KEARNEY/BG JAWS - 2X 5 AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
IBC600KACSR2	6 TON INLINE TOOL KIT – ACSR CUTTER - 2X 2AH DEWALT BATTERIES – 120V AC CHARGER – BUCKET BAG
IBC600KACSR5	6 TON INLINE TOOL KIT – ACSR CUTTER - 2X 5AH DEWALT BATTERIES – 120V AC CHARGER – BUCKET BAG
IBC600KEHS5	6 TON INLINE TOOL KIT – EHS CUTTER - 2X 5AH DEWALT BATTERIES – 120V AC CHARGER – BUCKET BAG
IBC600KEHS2	6 TON INLINE TOOL KIT – EHS CUTTER - 2X 2AH DEWALT BATTERIES – 120V AC CHARGER – BUCKET BAG



**Pistol Grip Crimping & Cutting Tools**

PBD600B	6 TON PISTOL CRIMPING TOOL - FLIP TOP DIELESS HEAD - BARE TOOL
PBD600K5	6 TON PISTOL CRIMPING TOOL KIT - FLIP TOP DIELESS HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
PBD1200B	12 TON PISTOL CRIMPING TOOL - 1" C HEAD - BARE TOOL
PBD1200K5	12 TON PISTOL CRIMPING TOOL KIT - 1" C HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
PBD1201B	12 TON PISTOL CRIMPING TOOL - 1.5" C HEAD - BARE TOOL
PBD1201K5	12 TON PISTOL CRIMPING TOOL KIT - 1.5" C HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
PBD1202B	12 TON PISTOL CRIMPING TOOL - 1.5" KEARNEY HEAD - BARE TOOL
PBD1202K5	12 TON PISTOL CRIMPING TOOL KIT - 1.5" KEARNEY HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
PBCC40B	8.8T PISTOL CUTTING TOOL - 40MM/1.57" GUILLOTINE HEAD - BARE TOOL
PBCC40K5	8.8T PISTOL CUTTING TOOL KIT - 40MM/1.57" GUILLOTINE HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
PBCC65B	6.0T PISTOL CUTTING TOOL - 65MM/2.55" SCISSOR HEAD - BARE TOOL
PBCC65K5	6.0T PISTOL CUTTING TOOL KIT - 65MM/2.55" SCISSOR HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG
PBCC85B	5.5T PISTOL CUTTING TOOL - 85MM/3.34" GUILLOTINE HEAD - BARE TOOL
PBCC85K5	5.5T PISTOL CUTTING TOOL KIT - 85MM/3.34" GUILLOTINE HEAD - 2X 5AH DEWALT BATTERIES - 120V AC CHARGER - BUCKET BAG

**Batteries & Accessories**

DCB205	DEWALT 20V MAX* LI-ON 5AH BATTERY
DCB203	DEWALT 20V MAX* LI-ON 2AH LI-ION BATTERY
DCB115	DEWALT 20V ACCESSORY CHARGER
DCB119	DEWALT 12V MAX - 20V MAX LI-ION VEHICLE BATTERY CHARGER
92821	D3/O CRIMPING JAW
92822	D3/BG CRIMPING JAW
92823	KEARNEY CRIMPING JAW
92892	6 TON INLINE ACSR CUTTING JAWS
91662	REPLACEMENT ACSR BLADE
82604	6 TON INLINE TOOL – ACSR CUTTER
94814	6 TON INLINE EHS CUTTING JAWS
93045	REPLACEMENT EHS BLADE
82878	REPLACEMENT EHS BLADE KIT (2 BLADES, 1 SHOE, 1 WIRE GUIDE, HARDWARE, LOCTITE)
BB02	BUCKET BAG - PISTOL GRIP CORDLESS CUTTING & CRIMPING TOOLS
BB01	BUCKET BAG - INLINE CORDLESS CUTTING & CRIMPING TOOLS



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DRILLS

Hydraulic Crimper Model CT06



CT06

The CT06 is furnished with a 4-point dieless head and provides a crimping force of 6T/5443kg

SPECIFICATIONS

Application: Application: Service entry termination and underground crimping as well as other ANSI C119.4 compliant connections.

Capacity: #10-750 MCM Aluminum and #10-500 MCM Copper

Connection: 3/8 in. male pipe adapter to -8 SAE port

Hydraulic Crimper Model CT10



CT10

The CT10 is available in 4 models furnished with one of the following heads: 1" C-style head, Kearney style PH2 head, 1.5" C-style head, Kearney style WH3 head w/ 1.5" opening.

Depending on the head type, the CT10 is compatible with industry standard U-type, PH2, or WH3 dies from major manufacturers.

SPECIFICATIONS

Application: Hydraulic powered crimping of electrical connections that require 12 tons of crimping force

CLength: 22 in. / 57 cm

Width: 7 in. / 18 cm

Connection: 3/8 in. male pipe adapter to -8 SAE port

The CT10 is available in 4 models furnished. The CT10 provides a crimping force of 11 or 12 tons / 10,000 or 10,900 kg depending on the model.

Hydraulic Crimper Model CT15



CT15

The CT15 is available with a universal style 2" C head, which will allow the use of industry standard "P" type dies. With appropriate adapters, the CT15 can also accept "U" type dies.

SPECIFICATIONS

Application: Crimping connectors, terminals and lugs to electric power cable with 15 tons of force.

Capacity: 500 MCM Copper, 1500 MCM Aluminum and 795 MCM ACSR

Connection: 3/8 in. male pipe adapter to -8 SAE port

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Crimping Force	Capacity	Head Type
CT06	CT06026N	13 lbs / 5.9 kg	3-9 gpm / 11-34 lpm	1,650-2,000 psi / 114-140 bar	2,250 psi / 155 bar	6 ton / 5,443 kg	#10-750 MCM ALUMINUM A#10-500 MCM COPPER	4-POINT DIELESS
CT10	CT10016N	17 lbs / 7.7 kg	3-9 gpm / 11-34 lpm	1,650-2,000 psi / 114-140 bar	2,250 psi / 155 bar	12 ton / 10,900 kg	500 MCM COPPER 636 MCM ALUMINUM/556.5 ACSR	1" C-STYLE HEAD
	CT10056N	17 lbs / 7.7 kg	3-9 gpm / 11-34 lpm	1,650-20,00 psi / 114-140 bar	2,250 psi / 155 bar	11 ton / 10,000 kg	TENS. FITTING/47726-7 ACSR TERM. THRU 1033/MCM STRAIGHT ALUMINUM	KEARNEY/PH2
	CT10056DH	18.5 lbs / 8.4 kg	3-9 gpm / 11-34 lpm	1,650-2,000 psi / 114-140 bar	2,250 psi / 155 bar	12 ton / 10,900 kg	TENS. FITTING/47726-7 ACSR TERM. THRU 1033/MCM STRAIGHT ALUMINUM	KEARNEY/WH3
	CT10066AN	19 lbs / 8.9 kg	3-9 gpm / 11-34 lpm	1,650-2,000 psi / 114-140 bar	2,250 psi / 155 bar	12 ton / 10,900 kg	750 MCM COPPER/ALUMINUM	1.5" C-STYLE HEAD
CT15	CT15036GN	29 lbs / 13.2 kg	3-9 gpm / 11-34 lpm	1,650-2,000 psi / 114-140 bar	2,250 psi / 155 bar	15 ton / 13,600 kg	500 MCM COPPER/1500 MCM ALUM. 795 MCM ACSR	2" C-STYLE HEAD

Accessories

Model	Part No.	Description
CT10056DH	24787	KEARNEY Y-35 DIE ADAPTER (CT10056DH ONLY)

Drill Model DL07

The DL07 is a variable speed drill with reverse capability. It features a 1/2 inch keyed chuck, dual position assist handle, dual-spool for open center or closed center operation, trigger guard, and is powered by an integral Hyrevz™ motor.

A reverse-flow check valve prevents operation if tool is plumbed backwards. The DL07 is furnished with flush face quick disconnect couplers.

SPECIFICATIONS

Application: Drilling holes in wood, metal, masonry and wood.

Capacity: 1/2 in. Chuck

RPM: 350-1,250

Hyd. Flow: 3-10 gpm / 11-38 lpm

Weight: 6 lbs / 2.7 kg

Length: 9 in. / 23 cm

Width: 4 in. / 10 cm

Connection: 3/8 in. flush face quick disconnect couplers



DL07

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
DL07	DL0755201	6 lbs / 2.7 kg	3-10 gpm / 11-38 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	350-1,250 rpm	1/2 in. / 12 mm Chuck	DUAL-SPOOL

Sinker Drill Model SK58



SK58

The SK58 is designed for drilling in rock and concrete up to 3 inches / 7.6 cm in diameter and 20 feet / 6 m deep.

The sinker drill uses air to clear holes of debris. It features a feathering trigger for easy starts, a direct drive rotation motor adjustable from 0 to 300 rpm, and is furnished with hose whips and flush faced quick disconnect couplers.

SPECIFICATIONS

Application: Heavy duty utility construction, blast hole drilling, leak detection for gas utilities and dowel drilling.

Capacity: 7/8 x 4-1/4 in. or 1 x 4-1/4 in. hex shank steel

Hyd. Flow: 7-9 gpm / 26-34 lpm

Weight: 67 lbs / 30 kg

Length: 26 in. / 66 cm

Width: 18 in. / 46 cm

Connection: 3/8 in. flush face quick disconnect couplers

Model	Part No.	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
SK58	SK58110	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	AIR
	SK58130	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	20 ft Hole	7/8 in. x 4-1/4 in. Hex Shank	AIR

Accessories

Part No.	Description	Part No.	Description
04914	Carbide Rock Bits for use with air (also requires drill steel) - 2 in. dia. H thread	05174	Drill Steels for use with air - 7/8 x 4-1/4 in. H thread, 24 in. U/C
05170	Drill Steels for use with air - 1 x 4-1/4 in. H thread, 24 in. U/C	05177	Carbide Rock Bits for use with air (also requires drill steel) - 1-3/8 in. dia. H thread CLOSEOUT
05171	Drill Steels for use with air - 1 x 4-1/4 in. H thread, 48 in. U/C	05178	Carbide Rock Bits for use with air (also requires drill steel) - 1-1/2 in. dia. H thread

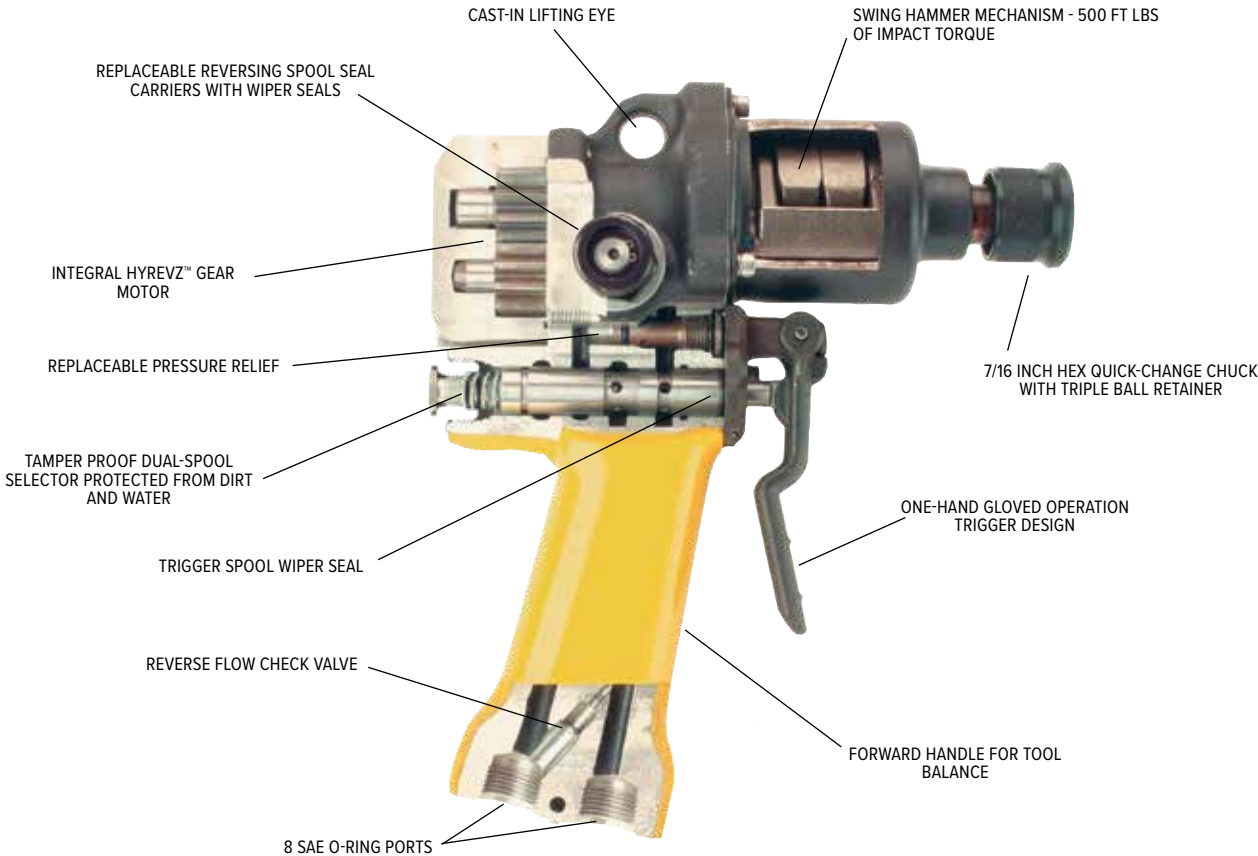
# WORLDWIDE IMPACT

We provide tools to utilities, municipalities, districts, governments and private contractors for construction and maintenance of electric power, telephone service, gas, water, wastewater, and cable TV distribution. And to transportation entities for construction and maintenance of streets, roads, highways and railways.

Hydraulic tools are the perfect match for utility trucks equipped with hydraulic power such as bucket trucks or digger-derrick trucks. Hydraulic tools perform tasks such as setting hardware on utility poles, crimping cable connections, tamping utility poles after setting, pumping utility vaults, and clearing right of ways.

Utility trucks with hydraulic tool circuits or compact power units meeting HTMA standards can operate tools for breaking, drilling and cutting of pavement, railroad cutting and drilling, and many other day-to-day tasks performed by utility workers, road crews, and railway crews.

Our tools are used in cities and towns around the world to help build and maintain their infrastructures.



## Impact Drill/Wrench Model ID07

The ID07 is a high torque impact wrench used for tightening and loosening nuts and driving lag bolts. Because it is an impact drill/wrench, it is used for drilling in hard treated wood and utility poles without torque reaction to the operator.



### SPECIFICATIONS

Application: Nut and bolt tightening or loosening, lag bolt driving and wood drilling applications.  
 Capacity: 7/16 in. Quick Change or 1/2 in. Square Drive  
 Hyd. Flow: 4-12 gpm / 15-45 lpm  
 Weight: 7.2 lbs / 3.3 kg  
 Length: 9 in. / 23 cm  
 Width: 5 in. / 11 cm  
 Connection: 3/8 in. Male Pipe Adapter to -8 SAE port


### FEATURES

- 500 ft. lbs. / 675 Nm of impact torque
- Durable Swing-hammer mechanism
- Forward-Reverse spool with heavy duty wiper seals and replaceable seal carriers
- Reverse-flow check valve prevents operation if tool is plumbed backwards
- Cast-in lifting eye
- Built-in selector for Open Center or Closed Center systems
- Replaceable pressure relief valve designed for serviceability
- Available with a 7/16 inch hex quick-change chuck
- With or without a trigger guard

Part No.	Description
05079	Chuck Adapter, 1/2 in. sq. x 7/16 in. hex QC
05080	Adapter, 5/8 in. hex x 1/2 in. sq. drive
05109	Impact Socket, 9/16 in.
05110	Impact Socket, 5/8 in.
05111	Impact Socket; 11/16 in.
05112	Impact Socket, 3/4 in.
05113	Impact Socket, 13/16 in.
05114	Impact Socket, 7/8 in.
05115	Impact Socket, 15/16 in.
05116	Impact Socket, 1 in.
05117	Adapter, 7/16 in. hex male x 1/2 in. sq. drive
07192	Adapter, 1/2 in. sq. dr. to 5/8 QC
33155	Linemen's Socket, 13/16 in. and 15/16 in.
33156	Linemen's Socket, 1 in. and 1-1/8 in.
5/8 Hex Shank Pole Bits	
27845	9/16 x 8 x 22, 5/8 in. Hex Shank

Part No.	Description
27847	13/16 x 8 x 22, 5/8 in. Hex Shank
7/16 Hex Shank Pole Bits	
27850	9/16 x 8 x 12, 7/16 in. Hex
27851	11/16 x 8 x 12, 7/16 in. Hex
27852	13/16 x 8 x 12, 7/16 in. Hex
27853	15/16 x 8 x 12, 7/16 in. Hex
27854	1-1/16 x 8 x 12, 7/16 in. Hex
27855	9/16 x 12 x 16, 7/16 in. Hex
27856	11/16 x 12 x 16, 7/16 in. Hex
27857	13/16 x 12 x 16, 7/16 in. Hex
27858	15/16 x 12 x 16, 7/16 in. Hex
27859	1-1/16 x 12 x 16, 7/16 in. Hex
27860	9/16 x 18 x 22, 7/16 in. Hex
27861	11/16 x 18 x 22, 7/16 in. Hex
27862	13/16 x 18 x 22, 7/16 in. Hex
27863	15/16 x 18 x 22, 7/16 in. Hex
27864	1-1/16 x 18 x 22, 7/16 in. Hex

DiggerModel DR19



DR19

The DR19 is a compact digging spade for digging in materials such as heavy clay or light shale. The tool’s “D” handle and tool bit holder are heat insulated for operator comfort. Tool steels are held in place by a slide that is ball-and-spring detented. The DR19 uses standard 7/8-inch hex, round collar, steel tool bits and comes with hose whips and flush-face, quick disconnect couplers.

**SPECIFICATIONS**

Application: Digging in clay, light shale, hard pan and frozen ground. Depending on soil conditions, can drive single rods with appropriate drive bit

Tool Bit Size: 7/8-in. Hex x 3-1/4 in. Shank Steel Bits

Hyd. Flow: 7-9 gpm / 26-34 lpm

Weight: 24 lbs / 10.9 kg

Length: 20 in. / 50.8 cm

Width: 3 in. / 8 cm


Connection: 3/8 in. flush face quick disconnect couplers

Model	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Blows/ Minute	Capacity
DR19111	24 lbs / 10.9 kg	20 in. / 50 cm	3 in. / 7.6 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1,800 bpm	3-1/4 x 7/8 in. Shank

Accessories

Part No.	Description	Part No.	Description
02328	CLAY SPADE, 16 IN. U/C	02341	ASPHALT CUTTER, 5 IN. BLADE X 11 IN. U/C
02330	3 IN. CHISEL, 14 IN. U/C	04401	MOIL POINT, 18 IN. U/C
02339	1 IN. CHISEL, 14 IN. U/C	05255	ROD DRIVER, 3/4 IN.

Ground Rod DriverModel GD50



The GD50 drives ground rods with proven hard-hitting “top driving” power and frequency. With two models available, either 1/2 to 5/8 in. or 3/4 to 1 in. ground rod can be driven. A cast-in lifting eye allows the operator to suspend the driver above the rod with ease. The long side handles give the operator control during the driving process. The GD50 contains an interchangeable, deep socket anvil to fit the rod end. All hammering is against the anvil and not the rod. The GD50 is furnished with flush faced quick disconnect couplers, 8-foot hose whips, and dual-spool in-line ON/OFF valve.

**SPECIFICATIONS**

Application: Drives copper bonded and galvanized ground rods

Capacity: 1/2 to 5/8 in. or 3/4 to 1 in. Ground Rod

Hyd. Flow: 5-9 gpm / 19-34 lpm

Weight: 52 lbs / 24 kg

Length: 25 in. / 65 cm


Width: 16 in. / 41 cm

Connection: 3/8 in. flush face quick disconnect couplers

If driving galvanized ground rods, up size to the next capacity GD50 or consult factory.

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
GD50	GD50132RF	52 lbs / 24 kg	5-9 gpm / 19-34 lpm	1,500-2000 psi / 105-140 bar	2,250 psi / 155 bar	1/2 to 5/8 in. Rod	IN-LINE VALVE/COUPLERS
	GD50133RF	52 lbs / 24 kg	5-9 gpm / 19-34 lpm	1,500-2000 psi / 105-140 bar	2,250 psi / 155 bar	3/4 to 1 in. Rod	IN-LINE VALVE/COUPLERS

Hammer DrillModel HD01



The STANLEY HD01 hammer drill is ideal for most drilling applications whether in concrete, masonry, wood or metal. The powerful, high rate, hammer function makes it easy to drill in masonry and other like materials. For drilling in materials such as wood and metal, the hammer function can be turned off.

The sturdy, light-weight construction of the HD01 features a D-handle and assist handle that make it easier to maneuver than a pistol-grip tool. And, the power-to-weight ratio of the HD01 brings even the toughest jobs down to size.

The HD01 comes standard with a chuck that accepts SDS Plus bits. A geared drill chuck and adapter are available for use with common wood auger bits or twist drills. The HD01 will accept other common accessories that have the standard SDS Plus shank.

A depth gauge attachment is standard. The selector valve allows the HD01 to be used on open-center or closed-center hydraulic systems.

**SPECIFICATIONS**

Application: For drilling holes up to 7/8 inch diameter in concrete utility poles and masonry.

Capacity: SDS Plus Drill Bits - up to 7/8 inches in concrete

Hyd. Flow: 3-9 gpm / 11-34 lpm

Weight: 8.4 lbs / 4.1 kg

Length: 14.1 in. / 36 cm

Width: 5.6 in. / 14 cm

Connection: 3/8 NPT Male Pipe to -8 SAE port

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
HD01	HD01531	8.4 lbs / 4.1 kg	14.1 in. / 36 cm	5.6 in. / 14 cm	3-9 gpm / 11-34 lpm	750-2,000 psi / 50-140 bar	2,250 psi / 155 bar	800 rpm @ 6 gpm	7/8 in. DIA.	SDS PLUS SHK
	HD0153101	8.4 lbs / 4.1 kg	14.1 in. / 36 cm	5.6 in. / 14 cm	3-9 gpm / 11-34 lpm	750-2,000 psi / 50-140 bar	2,250 psi / 155 bar	800 rpm @ 6 gpm	7/8 in. DIA.	SDS PLUS SHK; CE

Accessories

Model	Part No.	Description	Model	Part No.	Description
Carbide Bits					
HD01	27807	3/8 X 12 IN. OAL			
	27814	1/2 X 12 IN. OAL			
	27826	3/4 X 12 IN. OAL			
	27827	3/4 X 18 IN. OAL			
	27832	7/8 X 18 IN. OAL			
HD01	72992	1/2 IN. FRICTION CHUCK ADAPTER			



HAND HELD  
BREAKERS

STANLEY®  
Infrastructure

STANLEY®  
Infrastructure

HAND HELD  
BREAKERS

Light to Medium Duty Breakers Model BR45 - 40# Plus Class



BR45

40 LB  
2-6" CONCRETE

The BR45 is light to medium duty breakers for work in the 35 to 55 pound class around the globe.

SPECIFICATIONS

Application: Light concrete or asphalt breaking or scoring, small rock breaking, ground rod driving, tamping.

Tool Bit Size: See page 8.

Hyd. Flow: 4-6 gpm / 15-24 lpm, 5.5 gpm / 20 lpm or

7-9 gpm / 26-34 lpm. See page 8.

Weight: 37 lbs / 17 kg to 58 lbs / 26 kg

Length: 22.5 in. / 57 cm to 30 in. / 76 cm

Width: 14 in. / 36 cm to 18 in. / 45 cm

Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- Convenient, maneuverable size makes this class a favorite for light to medium sized jobs
- Choose from North American or European models
- BR45550 model designed for operation at 4-6 gpm / 15-24 lpm range
- T-type or Anti-vibration handle (see order information)
- EZ-Ride™ or standard foot (see order information)
- Hose whips and flush-face quick disconnect couplers

Medium Duty Breakers Model BR67 - 70# Class



BR67

70 LB  
6-8" CONCRETE

The BR67 is a medium to heavy-duty breaker for work in the 70 pound class and above. It is highly productive in construction, street maintenance, repair of water and gas mains, and general contracting jobs.

SPECIFICATIONS

Application: Concrete or asphalt breaking or scoring; small rock breaking; ground rod, anchor, & stake driving.

Tool Bit Size: 1-1/8 x 6 in. or 1-1/4 x 6 in.

Hyd. Flow: 7-9 gpm / 26-34 lpm

Weight: 72 lbs / 33 kg-BR67 with T-Handle

Length: 27 in. / 68 cm-BR67 with T-Handle

Width: 16 in. / 41 cm-BR67 with T-Handle

Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- Our original breaker design
- Delivers excellent overall performance
- Provides good balance of power to weight
- T-type or Anti-Vibration handle
- EZ-Ride™ or standard foot
- Strong tie rod design for durability
- Hose whips and flush-face quick disconnect couplers

Heavy Duty Breakers Model BR87 - 90# Class



BR87

90 LB  
8+'' CONCRETE

The BR87 is a heavy-duty breakers for work in the 90 pound class and heavier. With a longer piston stroke, our 90 lb class breakers are our hardest hitting hand held breakers.

SPECIFICATIONS

Application: Concrete or asphalt breaking or scoring, small rock breaking, ground rod, anchor, & stake driving.

Tool Bit Size: 1-1/8 x 6 in. or 1-1/4 x 6 in.

(see ordering info)

Hyd. Flow: 7-9 gpm / 26-34 lpm

Weight: 84 lbs / 3 kg

Length: 29 in. / 73.5 cm

Width: 16 in. / 41 cm

Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- Our hardest hitting breaker class, designed for the biggest breaking jobs
- Longer stroke delivers greater impact force
- T-type handle
- EZ-Ride™ or standard foot
- Strong tie rod design for durability
- Hose whips and flush-face quick disconnect couplers

Breakers (North America)

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Bit Size	Misc.
BR45	BR45110	45 lbs / 20 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	7/8 x 3-1/4 in. HEX	T HANDLE
	BR45120	51 lbs / 23 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. HEX	T HANDLE
	BR45120E	51 lbs / 23 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. HEX	EZ RIDE FOOT
	BR45125S	55 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. HEX	ANTI VIBRATION
	BR45130	51 lbs / 23 kg	25 in. / 65 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. HEX	T HANDLE
	BR45130E	51 lbs / 23 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. HEX	EZ RIDE FOOT
	BR45135S	55 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. HEX	ANTI VIBRATION
	BR45150	45 lbs / 20 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1 x 4-1/4 in. HEX	T HANDLE
	BR45550	45 lbs / 20 kg	25 in. / 65 cm	14 in. / 36 cm	4-6 gpm / 15-24 lpm	1,300-2,000 psi / 90-140 bar	2,250 psi / 155 bar	1 x 4-1/4 in. HEX	T HANDLE
	BR67120	72 lbs / 33 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. Hex	T HANDLE
BR67	BR67120E	72 lbs / 33 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ RIDE FOOT
	BR67125	78 lbs / 36 kg	29 in. / 73 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. Hex	ANTI VIBRATION
	BR67130	72 lbs / 33 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. Hex	T HANDLE
	BR67130E	67 lbs / 30 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ RIDE FOOT
	BR67135	78 lbs / 36 kg	29 in. / 73 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. Hex	ANTI VIBRATION
BR87	BR87120	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. Hex	T HANDLE
	BR87120E	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ RIDE FOOT
	BR87130	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. Hex	T HANDLE
	BR87130E	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ RIDE FOOT

Accessories

Model	Part No.	Description
7/8 in. HEX x 3-1/4 in.	02328	Clay Spade, 16 in. U/C
	02330	3 in. Chisel, 14 in. U/C
	02339	1 in. Chisel, 14 in. U/C
	02341	Asphalt Cutter, 5 in. Blade x 11 in. U/C
	04401	Moil Point, 18 in. U/C
	04961	Moil Point, 14 in. U/C
	05255	Rod Driver, 3/4 in.
1 in. HEX x 4-1/4 in.	07702	Moil Point, 14 in. U/C
	07703	Narrow Point, 14 in. U/C
	07704	3 in. Chisel, 14 in. U/C
	07705	Clay Spade, 5-1/2 in. Blade
	07706	Asphalt Wedge, 3 in. Wide

Model	Part No.	Description
1-1/8 in. HEX x 6 in.	02331	Clay Spade, 5-1/2 in. Blade
	02332	Asphalt Cutter 5 x 11 in. U/C
1-1/8 in. Hex x 6 in.	02333	Moil Point 14 in. U/C
	02334	3 in. Chisel, 14 in. U/C
	03990	Chisel Point 14 in. U/C
	04176	Ground Rod Driver, 1 in. Rod
	08106	Asphalt Wedge
1-1/4 in. Hex x 6 in.	08107	Keen Kut Chisel
	02335	Asphalt Cutter, 5 in. Blade x 11 in. U/C
	02336	Moil Point, 14 in. U/C
	02337	3 in. Chisel, 14 in. U/C
	02338	1 in. Chisel with heavy duty 14 in. U/C
	04367	Ground Rod Driver, 1 in. Rod
	04404	Moil Point Heavy Duty 18 in.
	04405	Clay Spade, 18 in. Blade
	07862	Keen Kut Chisel
	08119	Asphalt Wedge
	09262	Clay Spade, 5-1/2 in. Blade
	17782	Detachable Shank



Power Unit Model HP8



HP8

The HP8 hydraulic power unit is engineered for continuous professional use and is optimized to deliver ideal flows and pressures to both Type 1 and Type 2 hydraulic tools. Its powerful 18 HP Briggs & Stratton engine and best-in-class cooling system deliver the power and heat rejection pros need to keep tools working uninterrupted all day in all types of conditions. The HP8 features a manual controlled engine idle/throttle selector. Its feature-rich, dependable operation make the HP8 the workhorse of the industry.

SPECIFICATIONS

Application: Heavy-duty continuous use hydraulic power supply for both Type 1 & Type 2 tools.  
Connection: flush face quick disconnect couplers

FEATURES

- Meets HTMA requirements for Type 1 and Type 2 hydraulic tool circuits
- 5 or 8 gpm / 20 or 30 lpm @ 2,000 psi
- Heat rejection capacity exceeding 5 hp
- Quartz hour meter
- Direct mounted hydraulic pump
- Air-oil cooler
- Lift and latch handle
- Solid tires
- Maintenance-free battery
- Hydraulic and engine oil filter
- Engine oil level shut-down,
- 5.5 gallon / 20 liters fuel capacity
- Flush face quick disconnect couplers

Model	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Auto Throttle
HP8	330 lbs / 150 kg	36 in. / 90 cm	23 in. / 58 cm	29 in. / 74 cm	Briggs	5 or 8 gpm / 20 or 30 lpm	2,000 psi / 140 bar	NO

Accessories

Part No.	Description	Part No.	Description
13360	HP8 Hose Basket Conversion Kit	33212	Weather Cover
		64940	HP8 Male Plug, 12 volt
		64942	12V Receptacle Accessory

Hydraverter Model HV18



HV18

The HV18 is an efficient, clean air-oil cooled portable hydraulic system for operating hydraulic tools from another hydraulic source such as a backhoe, excavator, or skidsteer loader. The HV18 obtains its power from the hydraulics of any backhoe, excavator, skidsteer loader or any other hydraulic equipment capable of supplying up to 35 gpm / 132 lpm at 2,000-3,000 psi with back-pressures up to 400 psi.

The HV18 features cooled hydraulic oil for the hydraulic tools independent of the source oil. It is the perfect solution for operating hydraulic tools using existing hydraulic equipment.

Model	Part No.	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Auto Throttle
HV18	HV18300	100 lbs / 45 kg	21 in. / 53 cm	19 in. / 48 cm	20 in. / 51 cm	n/a	8 gpm / 30 lpm (16-35 gpm Input)	2,000 psi / 140 bar	N/A
	HV18301	100 lbs / 45 kg	21 in. / 53 cm	19 in. / 48 cm	20 in. / 51 cm	n/a	8 gpm / 30 lpm (13-25 gpm Input)	2,000 psi / 140 bar	N/A

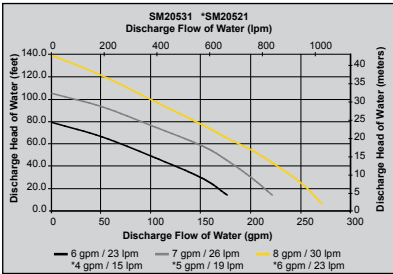
Accessories

Part No.	Description
51290	Hose Kit, 2 hoses, 3/4 in. x 10 ft, w/ ff faster couplers

Sump Pump Model SM20



The SM20 is one of the lightest and most durable pumps available. Completely submersible and pumping 250 gpm / 946 lpm at a 10-foot head and moving solids up to 5/16 of an inch makes it ideal for vaults and manholes. It features a cast aluminum inlet, steel or urethane impeller, Hyrevz™ motor, and is furnished with flush face quick disconnect couplers.

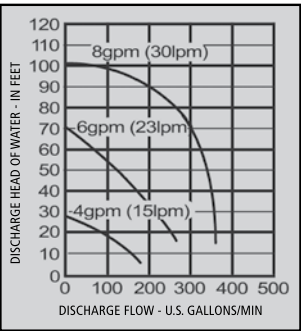


Sump Pump Model SM21



SM21

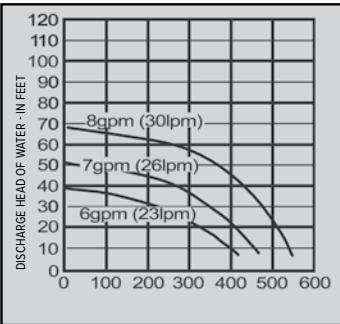
The SM21 is the ideal pump for areas of confined space and small openings. The SM21 pumps up to 300 gpm / 1125 lpm at a 50-foot head. The cast iron impeller is within 3/4 of an inch of the base allowing the pump to remove more liquids than other pumps. The SM21 features a lifting eye, 2.5 in. NPTF discharge, and is furnished with hose whips and flush face quick disconnect couplers. Pump requires no priming and can be run dry.



Sump Pump Model SM50



The SM50 can pump an impressive 500 gallons per minute / 30,000 gallons per hour. It is completely submersible, can draw water down to a depth of 3.5 inches. It features a cast aluminum inlet, stainless steel impeller, lifting eye, 3 inch Camlock male discharge, and is furnished with flush face quick disconnect couplers. Pump requires no priming and can be run dry.



Model	Part No.	Weight	Flow Range Working	Working Pressure	Full Relief Setting	Output	Discharge
SM20	SM2043101 SM2052101 SM2053101	13.7 lbs	4-9 gpm / 15-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	250 gpm / 946 lpm	2.5 in / 63.5 mm
SM21	SM2151101	25 lbs / 11.34 kg	4-9 gpm / 15-34 lpm	1,000-2000 psi / 70-140 bar	2,250 psi / 155 bar	300 gpm / 1,125 lpm	2.5 in. / 63.5 mm
SM50	SM50100	21 lbs / 9.5 kg	7-12 gpm / 26-45 lpm	1,000-2000 psi / 70-140 bar	2,250 psi / 155 bar	500 gpm / 1,890 lpm	3 in. / 75 mm

Accessories

Part No.	Description	Part No.	Description
02183	Fire Hose, 25 in. x 2-1/2 in.	05135	Spanner Wrench for Pin Lug Coupler
02317	Fire Nozzle - 1 in. output	15248	Adapter, 3 in. female camlock x male fire hose (nh) thread
05133	2-1/2 in. Thread Adaptor for Sump Pump to Fire Hose	52720	Adapter, 3 in. male NPT x 3 in. male Camlock
05134	50 ft. Fire Hose, 2-1/2 in. dia.	56761	Lay-Flat Discharge Hose, 3 in. x 25 ft with Camlock fittings
		59101	Adapter, 2-1/2 in. male NPT x 3 in. male Camlock

Chainsaw

Model CS05/CS06



FEATURES

- Highest power-to-weight ratio of any chain saw on the market today
- Trigger lock
- Hand guard
- Dual spool for Open Center or Closed Center operation
- Low kickback bars and chains
- Inherently low-kickback hydraulic motor
- Automatic chain oiler
- Hyrevz™ motor

Pole Saw

Model CS25/CS26



FEATURES

- Used for trimming and pruning large tree branches
- Ideal for use by right-of-way crews, arborists, utilities, parks departments, grounds keepers, and forest trail maintenance crews
- Fiberglass pole handle
- Hyrevz™ motor
- Dual spool for operation on Open Center or Closed Center systems
- Automatic chain oiling

Model	Part No.	Weight	Overall Length	Width	Flow Range	Working Pressure	Full Relief Setting	Cut Capacity	Misc.
CS05	CS05610	6.25 lbs / 2.8 kg	27 in. / 69 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS05620	6.25 lbs / 2.8 kg	30 in. / 76 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	15 in. / 38 cm	OC/CC
CS06	CS06610	6.25 lbs / 2.8 kg	27 in. / 69 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS06620	6.25 lbs / 2.8 kg	30 in. / 76 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	15 in. / 38 cm	OC/CC
	CS06630	6.25 lbs / 2.8 kg	35 in. / 89 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1,500-2,000 psi / 105-140 bar	2,250 psi / 155 bar	20 in. / 51 cm	OC/CC
CS25	CS25811	9 lbs / 4 kg	90 in. / 229 cm	4.375 in. / 11 cm <sup>1</sup>	4-6 gpm / 15-23 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS25812	9 lbs / 4 kg	75 in. / 191 cm	4.375 in. / 11 cm <sup>1</sup>	4-6 gpm / 15-23 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	12 in. / 30 cm	OC/CC
CS28	CS28811	9 lbs / 4 kg	90 in. / 229 cm	4.375 in. / 11 cm <sup>1</sup>	7-9 gpm / 26-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS28812	8.4 lbs / 3.8 kg	75 in. / 191 cm	4.375 in. / 11 cm <sup>1</sup>	7-9 gpm / 26-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	12 in. / 30 cm	OC/CC

<sup>1</sup> Measured at motor end

Accessories

Model	Part No.	Description
CS05/CS06	07629	Rim Sprocket, .325P x 7 tooth
	07638	15 in. Saw Bar
	07639	20 in. Saw Bar
	07641	Saw Chain for 15 in. Bar
	07642	Saw Chain for 20 in. Bar

Model	Part No.	Description
CS25/28	05144	Chain/Bar Guard
	07616	Sprocket Spline Adapter
	07629	Rim Sprocket, .325P x 7 Tooth
ALL	08347	12 in. Saw Bar
	08348	Saw Chain for 12 in. bar
	11464	Srench
	33289	Chain Saw File

Circle Saw

Model CR27



FEATURES

- Used for trimming and pruning tree branches
- Ideal for use by right-of-way crews, arborists, utilities, parks departments, grounds keepers, and forest trail maintenance crews
- Fiberglass pole handle
- Integral Hyrevz™ motor
- Angled head

- Dual spool for operation on Open Center or Closed Center systems
- Double cone-lock blade nut
- Blade brake to reduce coast-down time

Model	Part No.	Weight	Flow Range	Working Pressure	Relief Setting	Cutting Component Included	Couplers
CR27	CR27891	9.6 lbs / 4.4 kg	5-7 gpm / 19-26 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	9 in. / 22.9 cm Saw Blade - 24 Tooth	NO

Accessories

Part No.	Description
00425	9 in. / 22.9 cm Circle Saw Blade - 44 Tooth
34356	9 in. / 22.9 cm Circle Saw Blade - 24 Tooth

Part No.	Description
34653	Tooth Setting Tool for 34356 Blade
11299	File Guide with 7/32 in. round File

Pruner

Model PR41



FEATURES

- Used for selective tree limb pruning up a 2-1/4 inch / 5.7 cm cut
- Ideal for use by right-of-way crews, arborists, utilities, parks departments, grounds keepers, and forest trail maintenance crews
- Lightweight head design that provides easy handling

- Full power on both opening and closing cycles
- Improved geometry of knife and hook provides increased cutting efficiency
- Fiberglass pole handle

Model	Part No.	Weight	Length	Flow Range	Working Pressure	Full Relief Setting	Cutting Component (included)	Couplers
PR41	PR41131 (O.C.)	11.5 lbs / 5.2 kg	84 in. / 213.4 cm	3-9 gpm / 11-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	2-1/4 in. / 5.7 cm Cut Knife	NO
	PR41231 (C.C.)	11.5 lbs / 5.2 kg	84 in. / 213.4 cm	3-9 gpm / 11-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	2-1/4 in. / 5.7 cm Cut Knife	NO

Accessories

Model	Part No.	Description
PR41	58649	Knife

Pole Tamper Model TA54



SPECIFICATIONS

Application: Compacting soil around utility poles, sign and fence posts.  
Capacity: Kidney shaped shoe  
Connection: -8 SAE Port

FEATURES

- Ideal for soil compaction around utility poles, signs and fence posts
- Long stroke keeps the TA54 above the fill
- 1600 blows per minute - 2-1/2 inch stroke
- Available with On/Off valve in handle, remote in-line valve or no valve
- 2 moving parts

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Blows/ Minute	Valve	Shoe
TA54	TA54103	39 lbs / 18 kg	71 in. / 180 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	1,600 bpm	IN HANDLE	KIDNEY
	TA54603	39 lbs / 18 kg	69 in. / 175 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	1,600 bpm	N/A	KIDNEY
	TA54603A	39 lbs / 18 kg	69 in. / 175 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	1,600 bpm	IN LINE	KIDNEY

Accessories

Part No.	Description	Part No.	Description
00833	Kidney Shoe	01070	Rectangular Shoe
00840	Round Shoe, 6 in. dia.	38632	In-Line Valve Assembly, OC/CC

Vent Fan Model VF80

SPECIFICATIONS

Application: Ventilating large spaces such as vaults.  
Capacity: 1,700 scfm / 802 lsec  
Hyd. Flow: 4-12 gpm / 15-45 lpm  
Weight: 19 lbs / 8.6 kg  
Length: 15 in. / 40 cm  
Width: 19 in. / 49 cm  
Connection: 3/8 in.

FEATURES

- Designed for heavy duty service
- Quiet operation
- Centrifugal blower to deliver large volume of air
- High impact plastic case
- Standard 8 inch / 20 cm discharge
- Accepts standard heaters and coolers
- Hyrevz™ motor



Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity
VF80	VF8000	19 lbs / 8.6 kg	15 in. / 40 cm	19 in. / 49 cm	4-12 gpm / 15-45 lpm	1,000-2,000 psi / 70-140 bar	2,250 psi / 155 bar	1,700 scfm / 802 lsec

Accessories

Part No.	Description
02397	Flexible Exhaust Hose

Hydraulic Hoses

Part No.	Description
01412	PIGTAIL HOSE WHIP, 3/8 IN. ID X 12 IN., 3/8 IN. MALE PIPE, -6 SAE O-RING.
01652	PIGTAIL HOSE WHIP, 1/2 IN. ID X 12 IN., 3/8 MALE PIPE, -8 SAE O-RING
05005	10 FT. CERTIFIED NON-CONDUCTIVE, DUAL OIL RESISTANT PIGTAILS, 3/8 IN. NPT MALE FITTINGS WITH GUARD
05120	CLEAR VINYL HOSE GUARD (PER FT.)
31848	50 FT. X 1/2 IN. ID WIRE BRAID, DUAL HOSE WITH COUPLERS
31972	25 FT. X 1/2 IN. ID WIRE BRAID, DUAL HOSE WITH COUPLERS
44931	RUBBER HOSE, NON-CONDUCTIVE, 3/8 IN. X 8 FT
47318	RUBBER HOSE, NON-CONDUCTIVE, 3/8 IN. X 10 FT
56797	RUBBER HOSE SET, NON-CONDUCTIVE, 3/8 IN. X 10 FT, WITH COUPLERS

Quick Disconnect Couplers

Part No.	Description
03288	3/8 CAP & PLUG FOR ALL FLUSH FACE SETS
03971	3/8 FLUSH FACE SET (3/8 NPT)

Plumbing

Part No.	Description
00936	ADAPTER, 1/2 SAE TO 3/8 IN. MALE PIPE
04192	HEX NIPPLE, 1/2 IN. MALE PIPE
03044	HEX NIPPLE, 3/8 IN. MALE PPPE

Test Equipment

Part No.	Description
02835	ACCUMULATOR TESTER & CHARGER
04182	FLOW AND PRESSURE TESTER

Part No.	Description
65897	RUBBER HOSE SET, NON-CONDUCTIVE, 3/8 X 14 FT, WITH COUPLERS
58633	TWINNED HOSE, 1/2 IN. X 25 FT, WIRE BRAID, WITH COUPLERS
58634	TWINNED HOSE, 1/2 IN. X 50 FT, WIRE BRAID, WITH COUPLERS
58973	RUBBER HOSE SET, NON-CONDUCTIVE, 3/8 IN. X 8 FT, WITH COUPLERS
65617	RUBBER HOSE SET, NON CONDUCTIVE, 3/8 IN. X 10 FT, -8 MALE SAE X 3/8 NPTF MALE

Part No.	Description
03974	3/8 FLUSH FACE SET (1/2 NPT)
58718	3/8 FLUSH FACED COUPLER SET, -8 SAE MALE

Part No.	Description
29085	FLOW & PRESSURE TESTER
31254	ACCUMULATOR CHARGING KIT (HANDHELD TOOLS ONLY)



# HYDRAULIC SYSTEM REQUIREMENTS

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# HYDRAULIC SYSTEM REQUIREMENTS



Hydraulic systems come in many forms—from those found in the simple hydraulic jack to the more sophisticated systems found in earth moving equipment. The system required to operate most hydraulic tools found in this catalog would require 8 gpm / 30 lpm and be capable of providing system pressure up to 2000 psi / 140 bar.. This system is referred to as a Type II, as classified by the Hydraulic Tool Manufacturers Association (HTMA). But there are also 3 other classifications. They are discussed below.

## Hydraulic Tool Manufacturers’ Association (HTMA) Requirements

Hydraulic tools fall into 4 classifications, Type I, Type II, Type III, and Type RR as set by HTMA. The system requirements for powering these tools are as follows:

Type I	5	gpm ±10% / 19 lpm
Type II	8	gpm ±10% / 30 lpm
Type III	12	gpm ±10% / 45 lpm
Type RR	10	gpm ±10% / 38 lpm

## OPERATING PRESSURE:

Hydraulic systems should be capable of providing the appropriate operating pressure and flow for the system types noted above when measured across the tool connections. Deviation from the nominal flow rates should be no more than plus or minus 10% at a operating pressure of 2000 psi / 138 bar. This is the pressure that the tools will normally operate at which is not to be confused with the relief pressure.

## RELIEF PRESSURE:

Hydraulic systems should be capable of limiting the maximum pressure by using either a pressure compensating pump or a relief valve with a non-pressure compensating pump. The system pressure limiting component shall begin to control the maximum pressure at no less than 2150 psi. This is commonly known as the “cracking pressure”. The system pressure limiting component shall limit the maximum pressure to 2250 psi for a Type I, Type II, or Type III tool. The system pressure limiting component shall limit the maximum pressure to 2500 psi for a Type RR tool.

## Return Pressure:

The hydraulic systems should generate no more than 250 psi / 17 bar return pressure (back pressure) at the tool when operating at maximum flow for the tool type. System conditions for this pressure are at maximum hydraulic fluid viscosity of 400 SUS (SSU) at minimum operating temperature.

## Cooling:

The hydraulic systems should have sufficient heat rejection capacity to limit maximum oil temperature to 140°F/60°C at the maximum expected ambient temperature. Recommended minimum cooling capacities to dissipate tool-generated heat are:

Type I	3 Horsepower / 2.24 kW
Type II	5 Horsepower / 3.73 kW
Type III	7 Horsepower / 5.22 kW
Type RR	6 Horsepower / 5.22 kW

When determining cooling capacity, the intended duty cycle and the system generated heat must both be considered.

## Filtration:

Systems should have 25 micron nominal filtration for the hydraulic fluid. Recommended filter element size is at least three times system rated flow to prevent filter bypass under low temperature start-up.

## Fluid:

Hydraulic systems should use hydraulic fluid that has a viscosity of 130-225 SSU / 27-42 cst at 100° F / 38° C. Hydraulic fluids of petroleum base with antiwear properties and high viscosity indexes over 140 will meet recommended hydraulic fluid requirements over a wide range of operating temperatures. They should be demulsifying type to allow water to settle out of the fluid.

## The Basic Principle of Hydraulics for Tool Operation

The basic principle of hydraulics used for tool operation can be compared with a typical household water system.

The typical rotary car-wash brush tool, that is operated from water through a garden hose, is in actuality a hydraulic tool. Water rushing through the garden hose drives a small motor in the car-wash tool which, in turn, rotates the brush. However, it is not just the rushing water that is driving the motor. There is also pressure associated with the rushing water—about 60 pounds per square inch (psi). Without the pressure, the tool would have no power. Without pressure, any force applied to the tool, such as pushing down on the tool, would stall the tool.

Water rushing through the hose (or the flow of water) is measured in gallons per minute (gpm) and results in the speed of the tool (in the case of the car-wash tool, the speed of the brush). Pressure associated with the water provides power to the tool.

The same principle applies in one of our tools. In a breaker, for example, the flow results in the speed of the tool and the resistance to that flow creates a demand for pressure. If the system has the capacity to deliver the pressure, power is transmitted to the tool to do work.

Hydraulic tools actually use less flow (gpm) than that produced through a garden hose. The pressure, however, is considerably higher. Hydraulic tools require pressures up to 2000 psi but only need 5 to 10 gpm to operate effectively. Of course, a typical HTMA hydraulic system returns fluid to a reservoir for re-use as opposed to the household water system that spills fluid to waste.

## Open-Center and Closed-Center Systems

There are two basic types of hydraulic systems — Open-Center and Closed-Center.

## Open-Center is Constant Flow — Variable Pressure

When a tool valve is in the OFF position, hydraulic oil flows through the ON/OFF valve ports of the tool and back to the reservoir. The system is constantly flowing oil through the tool valve ports and back to the reservoir at no pressure. When the tool valve is ON, oil circulates through the tool causing the tool to operate, and then returns to the reservoir. Pressure is created when resistance to flow is sensed by the system. This occurs when the tool is put to work. Pressure will increase as the tool needs it up to the relief setting in the hydraulic system.

## Closed-Center is Constant Pressure — Variable Flow

When a tool valve is in the OFF position, hydraulic oil flow stops at the ON/OFF valve port of the tool. The system will build and hold pressure without returning oil to the reservoir. When the tool valve is ON, oil circulates through the tool causing the tool to operate, and then returns to the reservoir. Pressure tends to be constant in the system. Pressure will increase as the tool needs it up to the settings in the hydraulic system. And if pressures higher than the system setting are demanded by the work, flow will decrease.

## Fluid Temperature

The following information will serve to assist those installing hydraulics in mobile applications for handheld tools. While many hydraulic circuits can run upwards to 200°F, temperatures over 110°F / 43°C are uncomfortable to human touch. Our desire is to hold oil temperature to a maximum of 140°F / 43°C.

In almost any hydraulic tool circuit, oil cooling methods will be required except for very short periods of operation or in underwater and extreme cold environments. If you are involved in the design of a hydraulic tool circuit, use the following as guidelines.

## Basic Don’ts for Cool Oil Control

- DON’T — Rely on a large reservoir to control oil heating. Large reservoirs, even with good air circulation, do not adequately dissipate heat.
- DON’T — Set relief pressure too low (open-center circuits) for percussion type tools (breakers, hammer drills, etc.). Pressure peaks may run up to 350 PSI over gauge pressure, popping the relief and causing heat as well as low tool performance.
- DON’T — Pump more oil than the tool should use and avoid flow controls if possible. Instead, size the pump for desired flow volume. Gear type flow dividers can be used to reduce flow more efficiently than valves, reducing heat.
- DON’T — Use heavy oils such as 30W or 10W30 engine oils. These will cause resistance in lines and add to backpressure and heat.
- DON’T — Run return oil through control valves or other circuit components, except coolers and return line filters.

## DO THE FOLLOWING TO REDUCE HEAT GENERATION

- Operate pumps at moderate speed — gear pumps usually generate less heat and are less prone to cavitation at speeds of 1,000-2,000 RPM.
- Use generous line sizes — Especially on pump suction and return from tool to tank.
- Use oils in 130-225 SSU at 100° F / 38° C range with high viscosity index. (see hydraulic fluid recommendations at the end of this section)

## PROVIDE GOOD COOLING FOR HYDRAULIC OIL

- Use an air-to-oil cooler of maximum size for space available. Use a shrouded, high capacity fan. Many vehicles do not cool well when parked with engine at low speed. Do NOT use a “thermal” viscous-drive fan because these fans do not draw air unless the engine is hot.

# HYDRAULIC SYSTEM REQUIREMENTS



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### Flow Controls

1. General Notes — To reduce or control flow rate through Stanley Tools, flow control valves are sometimes necessary. All possible effort should be made to avoid use of flow control valves where appropriate pump volume can be used because:

A. Excess oil volume and subsequent pressure drop generates heat.

B. When percussion type tools that generate pressure pulses are used, flow controls may oscillate and cause flow changes which reduce tool performance and add increased heating.
2. Flow Control of Open-Center Circuits — Always use a priority type pressure-compensated flow control. This will prevent relief popping and reduce heat build-up. The excess flow should be routed in an unrestricted manner to the reservoir.
3. Flow Control of Closed-Center Circuits — Use a two-port, pressure-compensated flow control. Some of these are very compact, in the range of 1-1/4” diameter by 5” long, and can be attached to the tool pressure pigtail. Do not use priority type controls on closed-center circuits, as this will cause the pump to operate at full volume — further heating the oil.

### Quick Disconnects

1. Only use quick disconnects matching hose diameters. i.e. 1/2 inch port quick disconnect for 1/2 inch inside diameter hose.
2. Use as few quick disconnects as possible and avoid using adapter fittings with quick disconnects. Fittings and quick disconnects, while necessary, create flow restriction which causes heat and reduced tool performance.

### Tool To Circuit Hose Recommendations

Oil Flow		Each Hose Length		Inside Diameter		USE	Wire Braid Hose Spec	Working Pressure		Fiber Braid Hose Spec	Operating Pressure	
GPM	LPM	FEET	METERS	INCH	MM			PSI	BAR		PSI	BAR
5-8	19-30	up to 50	up to 15	1/2	13	Both	SAE 100R17-8	3000	230	SAE 100R7-8	2000	140
5-8	19-30	51-100	15-30	5/8	16	Both	SAE 100R17-10	3000	230	SAE 100R8-10	2750	190
5-8	19-30	100-300	30-90	5/8	16	Pressure	SAE 100R2-10	2750	190	SAE 100R8-10	2750	190
				3/4	19	Return	SAE 100R1-12	1250	86	SAE 100R7-12	1250	86

NOTE: SAE 100R16 may be used in place of SAE 100R2

3. Always use HTMA recommended quick disconnects that are flush-faced and dripless.

### Hose Types

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with Stanley Hydraulic Tools. They are:

- Certified non-conductive - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. Hose labeled certified non-conductive is the only hose authorized for use near electrical conductors.

Wire-braided (conductive) - constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. This hose is conductive and must never be used near electrical conductors.

Fabric-braided (not certified or labeled non-conductive) - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is not certified non-conductive and must never be used near electrical conductors.

### HTMA Type I Tool Circuit Specifications

- Acceptable flow rate is 4 - 6GPM at 2000 PSI when measured at the tool hose ends.
- Back pressure not to exceed 250 PSI on the return side of the system when measured at the tool hose end.
- Tool circuit system pressure limiting component shall begin to control pressure no less than 2100 PSI and shall limit maximum pressure to no more than 2250 PSI.
- The system shall have sufficient heat rejection capacity to limit the maximum oil temperature to 140° F at the maximum expected ambient temperature. Cooling should be sized for 40° for maximum ambient air temperature.
- System filtration should be 25 micron or better.
- Oil viscosity should be 100 - 400 SSU across the entire operating temperature of 50° - 140° F.

(Reference HTMA - Recommended Standards for Hydraulic Operation for further details.)

### HTMA Type II Tool Circuit Specifications

- Acceptable flow rate is 7 - 9 GPM at 2000 PSI when measured at the tool hose ends.
- Back pressure not to exceed 250 PSI on the return side of the system when measured at the tool hose end.
- Tool circuit system pressure limiting component shall begin to control pressure no less than 2100 PSI and shall limit maximum pressure to no more than 2250 PSI.
- The system shall have sufficient heat rejection capacity to limit the maximum oil temperature to 140° F at the maximum expected ambient temperature. Cooling should be sized for 40° for maximum ambient air temperature.
- System filtration should be 25 micron or better.
- Oil viscosity should be 100 - 400 SSU across the entire operating temperature of 50° - 140° F.

(Reference HTMA - Recommended Standards for Hydraulic Operation for further details.)

### Fluids for Mobile Hydraulic Tool Circuits

The specification listed here will provide good all season operation if your circuit is of proper design and normal maintenance is performed. (Periodic filter change, draining of condensate, etc.)

Item	U.S.A.	Metric
Viscosity (Fluid Thickness)	50° F 450 SSU Max.	10° C 95 Centistokes Max.
Viscosity (Fluid Thickness)	100° F 130-225 SSU	38° C 27-42 Centistokes
Viscosity (Fluid Thickness)	140° F 85 SSE Min.	60° C 16.5 Centistokes Min.
Pour Point (Min.for cold startup)	-10° F	23° C
Viscosity Index	(ASTM D2220)	140 Minimum
Demulsibility	(ASTM D1401)	30 Minutes Max.
Flash Point	(ASTM D92)	340° F Min.
Rust Inhibition	(ASTM D665 A&B)	Pass
Oxidation	(ASTM D943)	1000 Hours Min.
Pump Wear Test	(ASTM D2882)	60 mg Max.
Biodegradability	CEC-L-33-A94	>60%

### Recommended Fluids

The fluids listed here work well over a wide temperature range at start-up, allow moisture to settle out, and resist biological growth likely in cool-operating hydraulic circuits. These fluids are recommended by Stanley Hydraulic Tools for use in our tools. Other fluids that meet or exceed the specifications of these fluids may also be used. Biodegradable fluids listed are compatible with all tool seals and hoses.

Brand	Biodegradable	Description
CITGO	No	Hydurance All Temp
AMS Oil	No	HVH 32
Exxon Mobil	No	Univis HVI26*
Exxon Mobil	No	DTE 10 Excel
Shell	No	S2 V 32
Chevron	No	Rando HDZ 32
Conoco Phillips	No	Unax AW-WR-32
Clarion (CITGO)	Yes	Green Bio 32
Exxon Mobil	Yes	EAL 224H
Chevron	Yes	Clarity AW32
RSC Bio Solutions	Yes	Envirologic 132
Shell	Yes	Naturelle HF-E-32

\*Recommended for extreme cold weather operation.

# HYDRAULIC SYSTEM REQUIREMENTS

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## Testing a Hydraulic System for Comparison to HTMA Recommendations

The objective of this test is to determine how your hydraulic system performance compares with HTMA (Hydraulic Tool Manufacturers Association) recommended hydraulic system performance.

To perform these tests, you will need a flow and pressure tester such as our P/N 04182 or P/N 29085 shown below and two thermometers (the P/N 29085 has a built-in thermometer).



STANLEY P/N 04182



STANLEY P/N 29085

## HTMA recommendations for a hydraulic system operating Type I hydraulic tools:

- 5 gpm ± 10% / .5 gpm at 2000 psi measured at the tool inlet.
- 200 psi or less return pressure at 5.5 gpm—pressure measured at the tool outlet.
- Limit system temperature to 140° F on the hottest expected day. Choosing 100° F as the hottest expected day’s temperature, the hydraulic system must maintain a 40 degree temperature difference, air to oil. For example, if the ambient air temperature is 100° F, then the oil temperature should not exceed 140° F.
- To simulate tool-generated heat during operation, HTMA recommends using 3 hp, minimum. A reading of 1030 psi minimum at the flow and pressure tester will achieve the recommended 3 hp, minimum.

## HTMA recommendations for a hydraulic system operating Type II hydraulic tools:

- 8 gpm ± 10% / .8 gpm at 2000 psi measured at the tool inlet.
- 200 psi or less return pressure at 8.8 gpm, pressure measured at the tool outlet.
- Limit system temperature to 140° F on the hottest expected day. Choosing 100° F as the hottest expected day’s temperature, the hydraulic system must maintain a 40 degree temperature difference, air to oil. For example, if the ambient air temperature is 100° F, then the oil temperature should not exceed 140° F.

- To simulate tool-generated heat during operation, HTMA recommends using 5 hp, minimum. A reading of 1100 psi minimum at 8 gpm at the flow and pressure tester will achieve the recommended 5 hp, minimum.

Select an open site where the air is relatively calm. Place one thermometer in the oil reservoir to measure the temperature of the circulating oil (surface mounted tank thermometers do not adequately measure the temperature of the bulk system oil). Hang the other thermometer in still air to measure the ambient air temperature. Connect the flow and pressure tester to the tool hoses. Fully open the load valve on the tester.

Start up the system (with tool circuit control valve OFF) and warm the hydraulic fluid (if necessary) to a minimum of 50° F.

## Low temperature and maximum viscosity back pressure test

Turn ON the tool circuit control valve. Record oil temperature, ambient air temperature, flow rate, and back pressure.

Air: \_\_\_\_\_ ° F  
Oil: \_\_\_\_\_ ° F  
Flow rate: \_\_\_\_\_ gpm  
Back pressure: \_\_\_\_\_ psi

## Hydraulic system’s capacity to deliver flow against 2000 psi test

Close the load valve to where the pressure gage reads 2000 psi. Record flow rate, back pressure, and oil temperature.

Flow rate: \_\_\_\_\_ gpm  
Back pressure: \_\_\_\_\_ psi  
Oil: \_\_\_\_\_ ° F

## System capacity to control temperature test

Raise the system temperature to 140° F by adjusting the pressure using the load valve on the flow and pressure tester. If it takes more than 1900 psi to get the system temperature to 140° F, adjust the pressure to stabilize the system temperature at some lower temperature, e.g. 120° F.

When the system temperature has remained constant for about 15 minutes, record the flow rate, pressure, back pressure, oil temperature, and air temperature.

Flow rate: \_\_\_\_\_ gpm  
Pressure: \_\_\_\_\_ psi  
Back pressure: \_\_\_\_\_ psi  
Air: \_\_\_\_\_ ° F  
Oil: \_\_\_\_\_ ° F

## Calculate the tool load hp cooling capacity for an effective 40 degree temperature difference, air to oil using the following formula.

$$\frac{(\text{Pressure} - \text{Back pressure}) \times \text{gpm}}{43 \times (\text{Oil temperature} - \text{Air Temperature})} = \text{hp (horse power)}$$

Example:

Flow rate: 5 gpm  
Pressure: 1500 psi  
Back pressure: 100 psi  
Air: 70 ° F  
Oil: 120 ° F

$$\frac{(1500 - 100) \times 5}{43 \times (120 - 70)} = 3.3 \text{ hp at } 40 \text{ deg F temperature difference}$$





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