



STANLEY

Hydraulic Power Tools

**Product
Catalog**





Hydraulic Tools

Great Brand, Great Tools

Stanley Hydraulic Tools 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 the Stanley Works, a 165 year old company committed to the manufacture and distribution of quality tools for the professional, industrial, and consumer, we at Stanley Hydraulic Tools are dedicated to providing our customers with innovative customer-driven product designs, world class quality, unmatched product support, and superior value.

Global Representation

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

Our Goal

Stanley Hydraulic Tools is committed to being a "great brand" through continuous innovation, excellence, quality, value and service.

Shown below counter clockwise from center: Stanley Mounted Breaker model MB70EXS, LaBounty Mounted Breaker model MB556, Stanley Handheld Breaker model BR67, Stanley Power Unit model GT18, Stanley Railway Products Gas Rail Saw model RGS10, LaBounty Universal Processor Model UP30.



Catalog Contents

Breakers	2 - 4
Chippers & Diggers	5
Crimping Tools	6 - 7
Cut-Off Saws	8 - 9
Grinders	10
Drills	11 - 13
Diamond Saws	14 - 15
Impact Wrenches	16 - 19
Drivers & Pullers	20 - 21
Power Units	22 - 23
Pumps	24 - 25
Tree Trimming Tools	26 - 27
Tampers	28
Ventilation & Electric Tools	29
Hi-Pressure Tools	30
Underwater Tools	31 - 36
Ordering Information (Tools & Accessories)	37 - 46
Hydraulic System Requirements	47
Hydraulic Basics	48 - 49
Recommended Hydraulic Fluids	50
HTMA Type I Hydraulic System Specifications	51 - 52
HTMA Type II Hydraulic System Specifications	53 - 54
Testing a Hydraulic System	55 - 56

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.





Global Military Forces Tactical Support Equipment

Stanley Hydraulic Tools is a leading provider of hydraulic tools to national defense agencies all over the world. Our tools are used by combat engineers to assist in the building of roads, digging trenches, constructing aircraft arresting systems, light demolition, cutting and grinding operations, timber cutting and clearing operations, underwater construction and demolition, and many other types of general construction in support of military war-time and peace-time operations .

Stanley Hydraulic Tools are found on military specialty equipment such as the Mercedes-Benz built Small Emplacement Excavator (SEE Tractor), the M88 Armored Recovery Vehicle, Mobile Aircraft Arresting System (MAAS) and Underwater Construction Teams (UCT).

Tools provided for tactical support to military engineers encompass concrete breakers, diamond chain saws and regular chain saws, cut-off saws, water pumps, post drivers, post pullers, core drills, underwater tools, mounted breakers, shears, grapples and more.

Look for us to continue to play an active role in furnishing tools to militaries around the world.



BR37 to BR48 Light to Medium Duty Breakers - 35-55# Class

Application:	Light concrete or asphalt breaking or scoring, small rock breaking, rod driving, tamping.
Tool Bit Size:	Varies <i>See Order Info at back of catalog</i>
Hyd. Flow:	4-6 gpm (15-24 lpm), 5.5 gpm (20 lpm) or 7-9 gpm (26-34 lpm) <i>See Order Info at back of catalog</i>
Weight:	37 lbs (17 kg) to 58 lbs (26 kg) <i>See Order Info at back of catalog</i>
Length:	22.5 in (57 cm) to 30 in (76 cm) <i>See Order Info at back of catalog</i>
Width:	14 in (36 cm) to 18 in (45 cm) <i>See Order Info at back of catalog</i>
Connection:	3/8 in Flush Face Quick Disconnect Coupler

The BR37, BR40, BR45, and BR48 are light to medium duty breakers for work in the 35 to 55 pound class around the globe. They are used in utility construction, street maintenance, repair of water and gas mains, and general contracting jobs.

Features:

- 19 models to choose from - North American and European (see order information)
- Feathering ON/OFF valve to control speed and make initial tool placement easy
- Trouble-free diaphragm accumulator for added blow energy
- Handles system back pressures up to 250 psi (17 bar).
- T-type or Anti-vibration handle (see order information)
- EZ-Ride™ or standard foot (see order information)
- Available in 1-1/8 inch hex by 6 inch or 1-1/4 inch hex by 6 inch standard tool steels
- Hose whips and flush-face, quick disconnect couplers.



Also available in underwater model.
See Underwater Tools in this catalog.

BR72 - BR72S Medium Duty Breakers - 60# Class

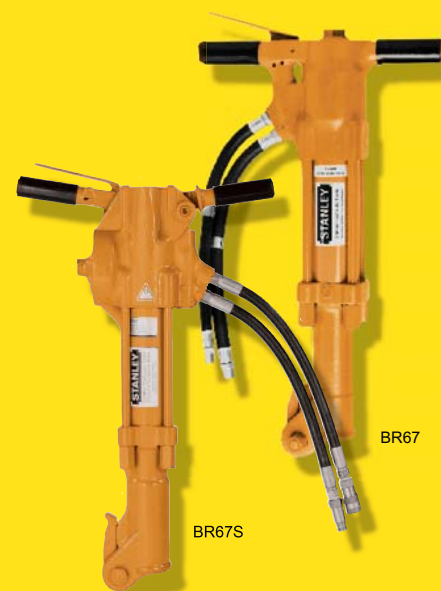
Application:	Concrete or asphalt breaking or scoring, small rock breaking, rod driving.
Tool Bit Size:	1-1/8 x 6 in. or 1-1/4 x 6 in.
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	59 lbs (27 kg) T-Handle, 61 lbs (27.6 kg) with Anti Vibe Handle
Length:	28 in (71 cm) with T-Handle, 29 in (73 cm) with Anti Vibe Handle
Width:	14.25 in (36 cm) with T-Handle, 17.5 in (45 cm) with Anti Vibe Handle
Connection:	3/8 in Flush Face Quick Disconnect Coupler

The BR72 and BR72S are medium duty breakers for work in the 60 pound class and above. A lower noise level than a pneumatic breaker is a major benefit of hydraulic percussion tools. No tool exhaust, high blow energy and continuous lubrication make hydraulic paving breakers the best choice.

Features:

- Feathering ON/OFF valve to control speed and make initial tool placement easy
- Trouble-free diaphragm accumulator for added blow energy
- Handles system back pressures up to 250 psi (17 bar).
- T-type handle
- Spring mounted foot for easier retraction of bit from work
- Strong tie bolt design for durability
- Hose whips and flush-face, quick disconnect couplers.





BR67

BR67S

BR67 and BR67S Medium to Heavy Duty Breakers - 70# Class

Application:	Concrete or asphalt breaking or scoring, small rock breaking, 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:	67 lbs (30 kg)-BR67 with T-Handle, 75 lbs (34 kg)-BR67S with Anti Vibe Handle
Length:	27 in (68 cm)-BR67 with T-Handle, 29 in (73 cm)-BR67S with Anti Vibe Handle
Width:	16 in (41 cm)-BR67 with T-Handle, 18 in (46 cm)-BR67S with Anti Vibe Handle
Connection:	3/8 in Flush Face Quick Disconnect Coupler

The BR67 and BR67S are medium to heavy-duty breakers for work in the 70 pound class and above. A lower noise level than a pneumatic breaker is a major benefit of hydraulic percussion tools. No tool exhaust, high blow energy and continuous lubrication make hydraulic paving breakers the best choice.

Features:

- Feathering ON/OFF valve to control speed and make initial tool placement easy
- Trouble-free diaphragm accumulator for added blow energy
- Handles system back pressures up to 250 psi (17 bar).
- T-type handle
- EZ-Ride™ or standard foot
- Strong tie bolt design for durability
- Hose whips and flush-face, quick disconnect couplers.



Also available in underwater model.
See Underwater Tools in this catalog.



BR87

BR89

BR87 and BR89 Heavy Duty Breakers - 90# Plus Class

Application:	Concrete or asphalt breaking or scoring, small rock breaking, rod, anchor, & stake driving.
Tool Bit Size:	6 x 1-1/8 in. or 6 x 1-1/4 in. (see ordering info)
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	83 lbs (37.7 kg)
Length:	29 in (73.5 cm)
Width:	16 in (41 cm)
Connection:	3/8 in Flush Face Quick Disconnect Coupler

The BR87 and BR89 are the heavy-duty breakers for work in the 90 pound class and heavier. A lower noise level than a pneumatic breaker is a major benefit of hydraulic percussion tools. No tool exhaust, high blow energy and continuous lubrication make hydraulic paving breakers the best choice.

Features:

- Feathering ON/OFF valve to control speed and make initial tool placement easy
- Trouble-free diaphragm accumulator for added blow energy
- Handles system back pressures up to 250 psi (17 bar).
- T-type handle
- EZ-Ride™ or standard foot (except BR89)
- The BR89 has a spring mounted foot for easier retraction of the bit from the work
- Strong tie bolt design for durability
- Hose whips and flush-face, quick disconnect couplers.



Also available in underwater model.
See Underwater Tools in this catalog.



BR87



BR89



BR67S Anti-Vibration Handle



BR67

CH15 Chipping Hammer

Application:	Chipping concrete, rock, or masonry such as utility vaults, street curbing, masonry work.
Capacity:	Versa-chuck allows use of .580 hex shank or .680 round Shank Steel Bits
Hyd. Flow:	4-6 or 7-9 gpm (15-23 or 26-34 lpm)
Weight:	16 lbs (7.25 kg)
Length:	17 in (43 cm)
Width:	3 in (8 cm)
Connection:	1/2 in Flush-Face, Quick Disconnect Couplers

The CH15 is a small chipping hammer designed for light to medium duty breaking. It is commonly used for manhole and utility vault modifications or masonry repair and demolition. The body of the tool is shock and heat insulated. A unique versa-chuck offers a choice of fixed or rotatable tool bits. Comes with hose whips and flush-face, quick disconnect couplers.



Also available in underwater model.
See Underwater Tools in this catalog.

CH18 Chipping Hammer

Application:	Chipping light concrete, rock, or masonry such as utility vaults, street curbing, masonry work.
Capacity:	.580 in Hex x 2-1/2 in Shank Steel Bits
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	24 lbs (11 kg)
Length:	20 in (51 cm)
Width:	3 in (8 cm)
Connection:	3/8 in Flush-Face, Quick Disconnect Couplers

The CH18 is a light but powerful chipping hammer designed for medium duty chipping. It is commonly used for manhole and utility vault modifications or masonry repair and demolition. The tool's "D" handle and tool bit holder are shock and heat insulated for operator comfort. Tool steels are held in place by a slide that is ball-and-spring detented. The CH18 uses standard .580-inch hex, round collar, chipper tool bits and comes with hose whips and flush-face, quick disconnect couplers.



Also available in underwater model.
See Underwater Tools in this catalog.

DR19 Digger

Application:	Digging and rod driving in heavy clay, light shale, hardpan, frozen ground or dry hard dirt.
Capacity:	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

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 shock and 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.



CH15



CH18 Underwater Model



CH15



DR19

STANLEY

Stanley “CT” Crimpers are the original low pressure crimping tools that offer many advantages over hand pump, battery and high pressure crimpers

- 5 – 10 times faster than battery or high pressure tools.
- Easier, quicker and less labor intensive to use than hand pump or pop tool.
- Operate from truck system pressure – no high pressure intensifier required. An accurate built in pressure relief ensures that a full die load is achieved at the minimum 1650 psi and prevents over crimping if higher pressure is present.
- Patented open center/closed center selector that permits use on either type of hydraulic system. Easy and accurate adjustment can be made with common tools.
- Double Acting. This means that you have pressure to crimp and pressure to retract the ram which eliminates die “hang-up” on the connector. Double acting also means quicker crimps than with battery or high pressure tools which are single-acting spring return.
- Continuous 360 degree rotation of the cylinder and die head for easy crimp alignment.
- Available from a service entrance crimper to a 15 ton model. All with the popular style heads that are compatible with most makes of dies, Stanley has a CT that’s right for you. Stanley’s fast gun – the original “utility standard”.
- Always work at all temperatures. They don’t die in the cold or slow down in the heat.

CT10 with Kearney Head, 1-1/2 inch Opening

CT04 Crimper

Application:	Crimping service entrance connectors up to 4/0
Capacity:	#6 to 4/0 Copper & Aluminum Conductor
Flow:	3-9 gpm (11-34 lpm)
Pressure:	1650-2500 psi (114-172 bar)
Weight:	12 lbs (5.5 kg)
Length:	20 in. (50 cm)
Width:	3.75 in. (9.5 cm)
Connection:	3/8 in male pipe adapter to -8 SAE port

The CT04 is a small lightweight tool ideal for service entrance termination and provides a crimping force of 4.4 tons (4000 kg). The CT04 accepts 90% of available service entrance connectors and accommodates wires up to 4/0 in. (13 mm) diameter.

The CT04 is compatible with Kearney “D” Nest Dies, Kearney “O” Dies, and Burndy “W” Dies. Furnished with “D” nest dies.



CT06 Crimper

Application:	Crimping connectors to electric power cable with Anderson VC6 die-less head
Capacity:	#10-750 MCM Aluminum and #10-500 MCM Copper
Hyd. Flow:	3-9 gpm (11-34 lpm)
Pressure:	1650-2500 psi (114-172 bar)
Weight:	13 lbs (5.9 kg)
Length:	20 in. (50 cm)
Width:	7.25 in. (18 cm)
Connection:	3/8 in male pipe adapter to -8 SAE port

The CT06 is furnished with an Anderson VC6-FTVR, Die-Less Head for use with Anderson connectors and provides a crimping force of 6 tons (5443 kg).

CT10 Crimper

Application:	Crimping connectors, terminals & lugs to electric power cable.
Capacity:	500 MCM Copper to 1033 MCM Aluminum (depending on model)
Hyd. Flow:	3-9 gpm (11-34 lpm)
Pressure:	1650-2500 psi (114-172 bar)
Weight:	17 lbs (7.7 kg) (see ordering info)
Length:	22 in. (56.9 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 with one of the following heads: Burndy Style Y35 head; Kearney Style PH2 head; Burndy Style Y750 head with 1-1/2 inch opening; Kearney Style WH3 head with 1-1/2 inch opening. The CT10 provides a crimping force of 11 or 12 tons (10,000 or 10,900 kg) depending on the model. The CT10 is compatible with the following dies (model dependent):

Burndy Y35 Head Dies:

Burndy Y35, L & H U-Type dies, Alcoa 12A, 12AC, 12HA, 12HAC, 30A dies; Anderson HC-12, HC12H dies, Huskie EP410, EP410T, EP430, EP510, EP410HT, RP410H, EP510H, PDY-1220, PDY-1216 dies; Thomas and Betts 12 ton dies.

Kearney PH2 Head Dies:

Kearney PH2 dies; Huskie EP510K dies.

Kearney WH3 Head with 1-1/2 inch opening Dies:

Kearney WH3 dies; Huskie EP510HK dies.

Burndy Head with 1-1/2 inch opening Dies:

Burndy Y35, Y750 BH dies; Alcoa 12A, 12AC, 12HA, 12HAC, 30A dies; Anderson HC-12, HC12H dies, Huskie EP410, EP410T, EP430, EP510, EP410HT, RP410H, EP510H, PDY-1220, PDY-1216 dies; Thomas and Betts 12 ton dies.



Model CT10 with Burndy Y35 Head



CT15 Crimper

Application:	Crimping connectors, terminals and lugs to to electric power cable with 15 tons of force.
Capacity:	500 MCM Copper, 1500 MCM Aluminum and 795 MCM ACSR
Hyd. Flow:	3-9 gpm (11-34 lpm)
Pressure:	1650-2500 psi (114-172 bar)
Weight:	29 lbs (13.2 kg)
Length:	29 in. (74 cm)
Width:	7 in. (18 cm)
Connection:	3/8 in male pipe adapter to -8 SAE port

The CT15 is available in 2 models: A dedicated Burndy Y46 head or a universal head that will accept Kearney style dies (PH4/PH14). With appropriate die holders, the universal model will allow the use of Burndy "P" type and "U" type dies. Die holders sold separately (see order information). The CT15 provides a crimping force of 15 tons (13,600 kg).



Heavy Rescue & Recovery and Natural Disasters

Stanley Hydraulic Tools has been providing tools for heavy rescue and recovery for over 20 years worldwide. The small size of the hydraulic tool power supply makes for a small package of rescue support tools that can be quickly transported by local fire departments, Urban Search & Rescue Teams (USAR); Federal Emergency Management Teams (FEMA); Hazardous Materials (HAZMAT) rescue support teams, and other heavy rescue support teams in response to natural disasters or CBRNE (chemical, biological, radiological, nuclear, collapse structure rescue, and high-yield explosives) incident intervention and mitigation.

Tools provided for heavy rescue and recovery and natural disasters encompass concrete breakers, diamond chain saws and regular chain saws, cut-off saws, water pumps, crimping tools, core drills, mounted breakers, shears, grapples and more.

Look for us to continue to provide innovative tools to help strengthen the preparedness and readiness for heavy rescue and recovery and natural disasters.



STANLEY

Model CO25 Cut-Off Saw

Application:	Cutting metal or masonry materials such as concrete, brick, structural steel, pipe, and guardrail.
Wheel Size:	1 in. arbor, 14 in. Diameter Abrasive or Diamond Segmented
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	20 lbs (9.1 kg)
Length:	21 in (53.3 cm)
Width:	11 in (28 cm)
Connection:	3/8 in Flush Face Quick Disconnect Coupler

Features:

- Cast Aluminum Handle with Inter-locking safety trigger
- Adjustable wheel guard
- Build-in flow control to prevent overspeeding, and a blade brake that retards spindle rotation
- Two models available: clockwise or counter-clockwise rotation
- hose whips and flush-face, quick disconnect couplers

Options include a handle extension kit for upright operation to meet operator preference, a water attachment kit for dust suppression and a saw cart (pictured below) for flat concrete and asphalt cutting.



CO25 shown with abrasive blade (not included)

CO23 Cut-Off Saw

Application:	Dimensional cutting of metal or masonry materials such as concrete, brick, structural steel, and pipe.
Wheel Size:	1 in. arbor, 10 in. Diameter Abrasive or Diamond Segmented
Hyd. Flow:	10-15 gpm (35-57 lpm)
Weight:	23 lbs (9.1 kg)
Length:	19 in (53.3 cm)
Width:	11 in (28 cm)
Connection:	-8 SAE Threaded Ports

Features:

- Inter-locking safety trigger
- Adjustable shoe
- Ideal tool for accurate dimensional cutting of masonry and metal materials
- Can also be used underwater
- Integral gear motor with clockwise rotation
- Hose whips and flush-face, quick disconnect couplers



CO23 shown with diamond segmented blade (not included)



Also available in underwater model. See Underwater Tools in this catalog.

The Stanley Saw Cart

shown to the left, is designed to accommodate the model CO25 Cut-Off Saw for slab or flat cutting. It permits the operator to stand and walk behind while operating saw. The Saw Cart features a handle bar mounted ON/OFF control, calibrated manual depth adjustment, and a folding cutting guide. Use the optional water attachment kit for dust suppression.

The SawCart moves forward as the CO25 performs the cut. The operator can increase the speed of this movement by pushing the cart in coordination with the forward cutting ability of the CO25. This coordination of movement is dependent on the direction of rotation of the CO25 and, therefore, a CO25 with clockwise rotation is a must. The rotation helps pull the saw through the cut and does not push back against the operator.



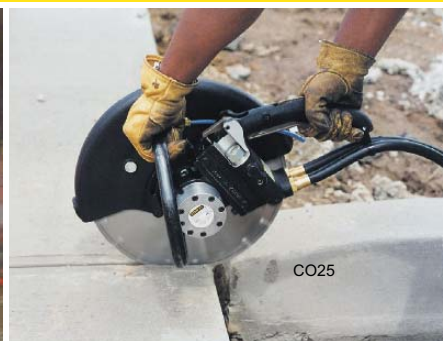
CO25 shown mounted on optional saw cart with abrasive blade (not included)



CO25 with extended handle



CO25



CO25



CO25 and Saw Cart



GR30 Grinder

Application:	Grinding and cleaning.
Capacity:	5/8 in. - 11 Arbor, 9 in. (22.8 cm) Dia. Wheel
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	13 lbs (5.9 kg)
Length:	8 in. (20 cm)
Width:	28 in. (71 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

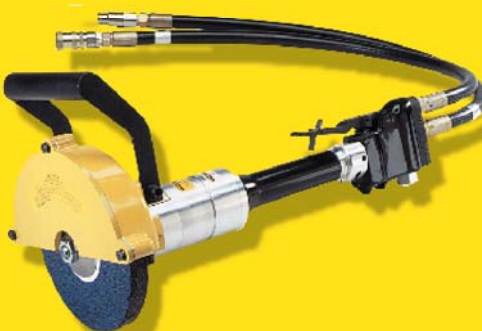
The GR30 can be used for grinding and cleaning with either cup or standard type grinding wheels and wire or nylon brushes. The GR30 features an assist handle, adjustable, rotating wheel guard, insulated handle, flow control for over-speed prevention, counter-clockwise rotation and is powered by an integral Stanley Hyrevz™ motor. The GR30 is furnished with hose whips and flush face quick disconnect couplers.



HG60 Bull-Nose Grinder

Application:	Grinding and de-burring.
Capacity:	5/8 in. - 11 Arbor, 2.5 in. Dia. x 2.75 in. Grinding Stone
Hyd. Flow:	5-10 gpm (19.38 lpm)
Weight:	11 lbs (5.13 kg)
Length:	23 in. (58 cm)
Width:	3 in. (8 cm)
Connection:	3/8 in. Flush-Face Quick Disconnect Couplers

The HG60 is ideal for grinding and de-burring drilled holes. Its compact and lightweight design helps reduce operator fatigue in repetitive grinding operations. The built-in flow control valve prevents the chance of excessive spindle speed, protecting the motor and increasing tool life. The HG60 features an interlocking safety trigger, insulated handle, counter-clockwise rotation and is powered by an integral Stanley Hyrevz™ motor. It is furnished with hose whips and flush face quick disconnect couplers.



HG80 Horizontal Grinder

Application:	Grinding and deburring of right angle surfaces.
Capacity:	5/8 in. - 11 Arbor, 8 in. Dia. x 1 in. (20 x 2.5 cm) Grinding Wheel
Hyd. Flow:	7-9 or 8-10 gpm (26-34 or 30-38 lpm) (see ordering info)
Weight:	14 lbs (6.4 kg)
Length:	23 in. (58 cm)
Width:	10 in. (25 cm)
Connection:	3/8 in. Flush-Face Quick Disconnect Couplers

The HG80 is used for grinding and shaping right angle surfaces such as I-beams and structural steel. The HG80 is built for heavy-duty use with deep row ball bearing, needle main spindle bearings, independently supported spindle, and cast aluminum wheel guard. The HG80 features an interlocking safety trigger, insulated handle, spindle shaft lock, counter-clockwise rotation and is powered by an integral Stanley Hyrevz™ motor. It is furnished with hose whips and flush face quick disconnect couplers.



HG60 handle

HG60 on rail

GR30 close-up

CD10 Core Drill

Application:	Drilling concrete, masonry and asphalt materials.
Capacity:	5/8 to 6-3/8 in. Dia. Core Bits
Connection:	1-1/4 in UNC Male, 1/2 in UNC Female and 1/2-5/8 in Male Adapter
RPM:	380, 900 & 1800
Hyd. Flow:	5-13 gpm (22-50 lpm)
Weight:	18 lbs (8.5 kg)
Length:	19 in. (48 cm)
Width:	4 in. (10 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

The CD10 is well suited for drilling concrete, masonry and asphalt materials. It can be operated freehand or mounted in an optional drill stand. The CD10 maintains speed regardless of drill load improving the life of the bits. The CD10 features a three-speed gearbox which provides a speed selection to match the best speed for the range of drill bits. It comes with a metal carrying case, water connection with control valve, and a drilling aid to assist in starting freehand drilling without drill bit walk, hose whips and flush face quick disconnect couplers.

CD12 Core Drill

Application:	Drilling concrete, masonry and asphalt materials.
Capacity:	5/8 to 14 in. Dia. Core Bits
Connection:	1-1/4 in UNC Male, 1/2 in UNC Female and 1/2-5/8 in Male Adapter
RPM:	500, 1200 & 2400
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	19 lbs (8.6 kg)
Length:	19 in. (48 cm)
Width:	4 in. (10 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

The CD12 is operated from a furnished drill stand for drilling with 5/8 inch diameter up to 14 inch diameter core bits. The drill stand may be adjusted at any angle to drill holes from 45° to perpendicular. The stand can be anchored to the work surface with anchor screws or by using a vacuum pump. The stand has leveling screws and a gear feed that can be set for left or right hand operation. The CD12 has a three-speed gearbox which provides a speed selection to match the best speeds for the range of drill bits. The CD12 is furnished with wrenches for installing or removing drill bits, a water attachment, a detented ON/OFF directional spool, and flush face quick disconnect couplers. A model is available with a spacer block to increase drill diameter capacity to 14 inches.

DL07 Drill

Application:	Drilling holes in wood, metal, masonry and wood.
Capacity:	1/2 in. Chuck
RPM:	350-1250
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

Also see the ID07 Impact Wrench/Drill



Also available in underwater model. See Underwater Tools in this catalog.

The DL07 is a forward-reversible, variable speed drill. 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. The DL07 is furnished with flush face quick disconnect couplers.

CD10

CD12 truck mounted for special application

CD12 Core Drill

DL07

CD10 with stand



HD08 Hammer Drill

Application:	Drilling in rock, concrete, wood or masonry.
Capacity:	SDS Plus Drill Bits - up to 7/8 inches in concrete
Hyd. Flow:	3-9 gpm (11-34 lpm)
Weight:	6 lbs (2.7 kg)
Length:	13 in. (35 cm)
Width:	5.5 in. (14 cm)
Connection:	3/8 NPT Male Pipe to -8 SAE port

The HD08 is ideal for just about any drilling job whether in rock, concrete, wood or masonry. With 4500 blows per minute and 1175 rpm the powerful hammer function makes it easy to drill in rock, concrete, masonry and other such materials. The hammer function can be turned off for efficient light drilling in wood and metal. The HD08 features an integral gear motor, built-in flow control, depth gauge, assist handle, and dual-spool capability for operation on open-center or closed-center hydraulic systems. Optional bit holders are available for rope thread bits, twist groove shank bits, and taper shank bits.



HD45 Hammer Drill

Application:	Drilling holes in concrete, rock, or masonry.
Capacity:	#736 Skil Hex
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	45 lbs (20 kg)
Length:	22 in. (57 cm)
Width:	14 in. (35 cm)
Connection:	3/8 in. flush face quick disconnect couplers

The HD45 is designed for drilling holes in concrete, rock, or masonry from 3/4 in. (19 mm) to 2 in. (50 mm) in diameter and up to 29 in. (73.7 cm) deep as well as core drilling up to 4 in. (102 mm) in diameter. The HD45 uses standard Skil 736 shank, carbide tipped, fluted drill bits and requires no fluid or compressed air to clear holes during operation. The HD45 features a feathering trigger for easy starts, adjustable rotation speed (both forward and reverse), and is furnished with hose whips and flush face quick disconnect couplers.



Also available in underwater model.
See Underwater Tools in this catalog.



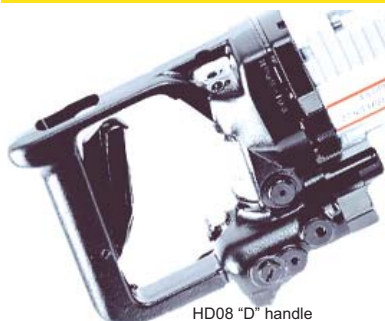
SK47 Sinker Drill

Application:	Blast hole drilling, leak detection for gas utilities, dowel drilling.
Capacity:	7/8 x 4-1/4 in. Hex Shank Drill Steel
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	52 lbs (24 kg)
Length:	23 in. (58 cm)
Width:	14 in. (35 cm)
Connection:	3/8 in. flush face quick disconnect couplers

The SK47 is designed for blast hole drilling, leak detection for gas utilities, and dowel hole drilling up to 2 inches (5 cm) in diameter and 10 feet (3 m) deep. The sinker drill uses air flushing to clear holes of debris. The air flow automatically is shut off when the drill is Off. The SK47 is light and easy to handle. It is ideal for applications requiring frequent moves on the job site. It features a feathering trigger for easy starts, adjustable rotation from 0 to 300 rpm, and is furnished with hose whips and flush face quick disconnect couplers.



HD08



HD08 "D" handle



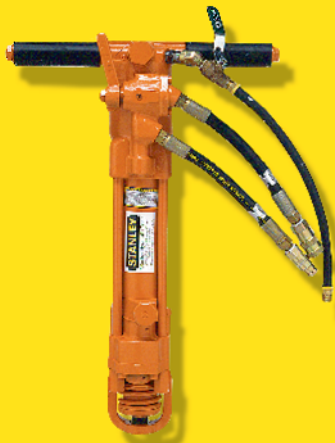
HD45



HD08 assist handle & depth gauge



HD45 Hammer Drill being used horizontally and powered by a GT18 Power Unit



SK58 Sinker Drill

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 Steels (see ordering info)
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

The SK58 is designed for blast hole drilling, leak detection for gas utilities, and dowel hole drilling up to 3 inches (7.6 cm) in diameter and 20 feet (6 m) deep. The sinker drill uses air or water flushing (model dependent) to clear holes of debris. The sinker drill 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.



Also available in underwater model. See Underwater Tools in this catalog.

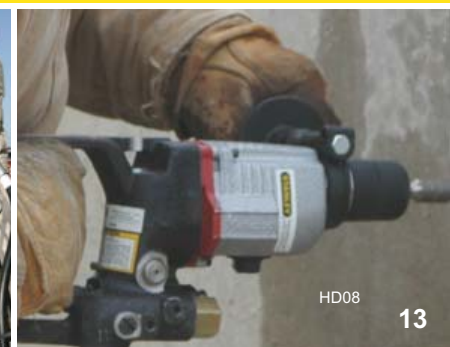


HD45

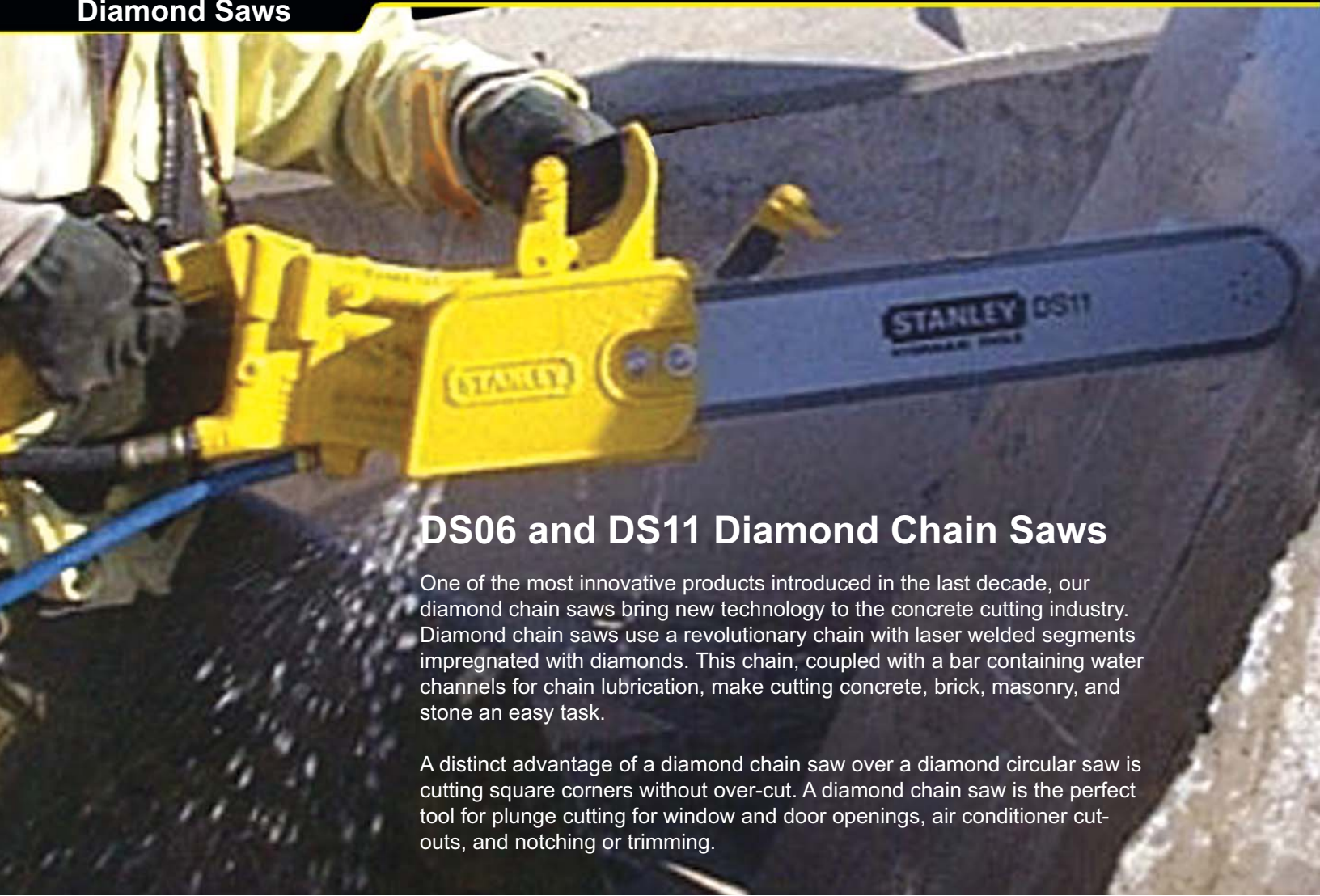
SK58 Handle & controls



HD45



HD08



DS06 and DS11 Diamond Chain Saws

One of the most innovative products introduced in the last decade, our diamond chain saws bring new technology to the concrete cutting industry. Diamond chain saws use a revolutionary chain with laser welded segments impregnated with diamonds. This chain, coupled with a bar containing water channels for chain lubrication, make cutting concrete, brick, masonry, and stone an easy task.

A distinct advantage of a diamond chain saw over a diamond circular saw is cutting square corners without over-cut. A diamond chain saw is the perfect tool for plunge cutting for window and door openings, air conditioner cut-outs, and notching or trimming.

DS06 Diamond Chain Saw

Application:	Cutting concrete, reinforced concrete, conduit, brick, stone and other masonry.
Capacity:	13 in. (33 cm) Bar
Hyd. Flow:	4-6 or 7-9 gpm (15-23 or 26-34 lpm) (see ordering info)
Weight:	14 lbs (6 kg)
Length:	24 in. (61 cm)
Width:	9 in. (23 cm)
Connection:	3/8 in. flush face quick disconnect couplers



The DS06 is lightweight, powerful and ideal for fast cutting of concrete, reinforced concrete, conduit, brick, stone and other masonry. 13 inch plunge cut capability allows quick cutting of window, door, conduit and duct openings in walls and notching and trimming of concrete pipe. Trigger activated water for lubrication and cooling is ported through the bar and applied at the point where the concrete is being cut.

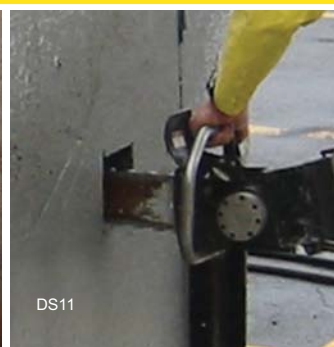
The DS06 is provided with The Wall Walker™ to provide leverage for cutting, water connection, and flush face quick disconnect couplers. The bar and chain are sold separately.



2 DS11's cutting rectangle



DS06



DS11



DS06



DS11 Diamond Chain Saw

- Application:
- Cutting concrete, reinforced concrete, conduit, brick, stone and other masonry.
- Capacity:
- 15 or 18 in. (33 or 46 cm) Bar
- Hyd. Flow:
- 7-9 gpm (26-34 lpm)
- Weight:
- 26 lbs (11 kg)
- Length:
- 38 in. (97 cm)
- Width:
- 9 in. (23 cm)
- Connection:
- 3/8 in. flush face quick disconnect couplers

The DS11 is a heavy duty and powerful diamond chain saw that is ideal for fast cutting of concrete, reinforced concrete, conduit, brick, stone and other masonry. Plunge cut capability allows quick cutting of window, door, conduit and duct openings in walls and notching and trimming of concrete pipe. Trigger activated water for lubrication and cooling is ported through the bar and applied at the point where the concrete is being cut.

The DS11 features ergonomic handles and guards to help reduce operator fatigue, water connection, flush face quick disconnect couplers, and is powered by a Stanley Hyrevz™ motor. The Wall Walker™ that provides leverage for cutting is standard equipment. The bar and chain are sold separately.



Also available in underwater model.
See Underwater Tools in this catalog.



Diamond chains with SealPro™ work at much lower water pressures than non-sealed diamond chains, completely eliminating the need for water booster pumps. The new chains can be used with water from an ordinary garden hose and will yield excellent chain life at pressures as low as 20 psi. No booster pump means simpler setup, reduced time on the job and less water to clean up afterwards.

Other important advantages of SealPro™ technology result from the reduced chain stretch that occurs as the user gets full value from the most expensive component of the cutting system...the diamonds. It also means fewer tensioning adjustments over time.



Diamond Chain Technology

The newest generation of diamond chains dramatically reduce the chain wear of cutting concrete. SealPro™ technology extends chain chassis life by up to 50% or more, simplifies water pressure requirements and reduces the frequency of chain tensioning adjustments on concrete chainsaws.

SealPro™ technology incorporates a patented new chain chassis design that seals out the abrasive contaminants present in the concrete cutting environment. A unique O-ring design seals the rivet-joints of the chain, keeping the abrasive materials out and the lubrication in.

Chain Selection Chart

Aggregate	Extra Hard		Hard	Medium		Soft		Abrasive
Material	Chert Flint	Basalt Quartz	Granite River Rock	Marble Limestone	Sandstone			Masonry, Brick, Block, Green Concrete
Approximate Moh's Scale	9	8	7	6	5	4	3	
Reinforcing Steel	Lots of Steel			Some Steel			No Steel	
	1"	Double Mat	Single Mat	#5	#4	#3	Wire Mesh	

Saw Chain Wear (in.-ft.)	150 in-ft		600-800 in-ft		2000 in-ft		
Pinnacle-32 Pinnacle-37							
Ultra-32 Ultra-37	200 in-ft						1500 in-ft

Infrastructure Construction and Main- tenance in Cities, Towns, Counties, States, and Countries

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.

Virtually all tools in this catalog are used by cities, towns, counties, states, and countries to help build and maintain their infrastructures.

We will continue to look for innovative tools to help strengthen user ability for construction and maintenance of infrastructures.

Lineman tightening hardware with a
Stanley ID07 Impact Drill/Wrench

ID07 Impact Drill/Wrench

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

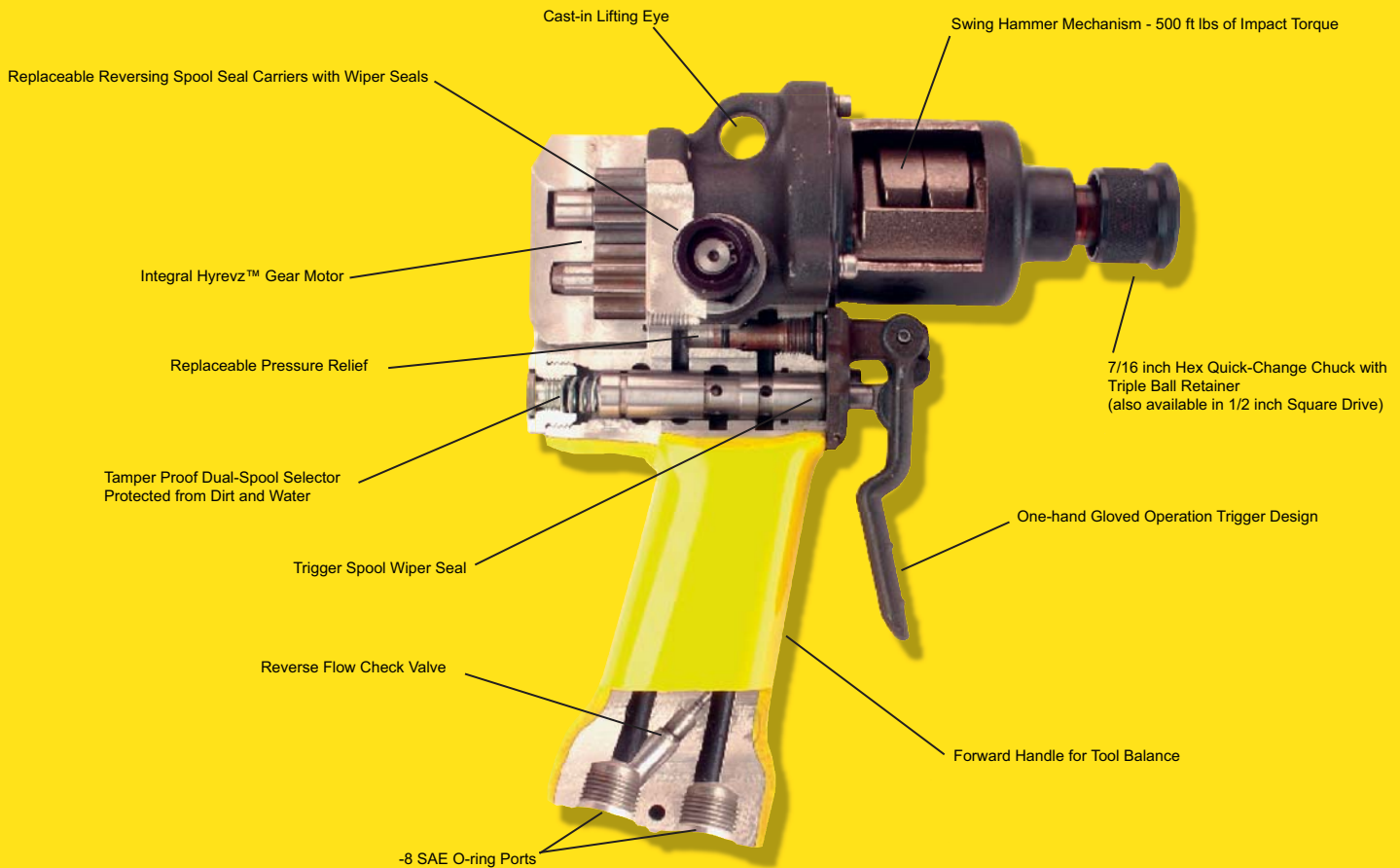
The ID07 is a high torque impact wrench used for tightening and loosening nuts and driving lag bolts. Because it is an impact drill/wrench, it is used for drilling in hard treated wood and utility poles without torque reaction to the operator.

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
- Cast-in lifting eye
- Built-in selector for Open Center or Closed Center systems
- Available with a 7/16 inch hex quick-change chuck or 1/2 inch square drive
- With or without a trigger guard.



Also available in underwater model.
See Underwater Tools in this catalog.





IW12 Impact Wrench

Application:	Nut and bolt tightening or loosening, anchor bolt driving.
Capacity:	3/4 in. Square Drive
Hyd. Flow:	4-12 gpm (15-45 lpm)
Weight:	14 lbs (6.4 kg)
Length:	9.5 in. (24 cm)
Width:	4 in. (10 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

Features:

- Adjustable impact intensity, from 250 to 1200 ft. lb. (340 to 1632 Nm)
- Swing Hammer Mechanism
- Feathering trigger
- Reversing valve for instant change over from forward to reverse
- 3/4 inch square drive
- 3/8 in. Flush Face Quick Disconnect Couplers
- Optional adapter available to accommodate 5/8 inch hex wood auger bits



Also available in underwater model.
See Underwater Tools in this catalog.



IW16 Impact Wrench

Application:	Nut and bolt tightening or loosening, anchor bolt driving
Capacity:	1 in. Square Drive
Hyd. Flow:	7-12 gpm (26-45 lpm)
Weight:	26 lbs (12 kg)
Length:	14.5 in. (37 cm)
Width:	4.5 in. (11 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

Features:

- Adjustable impact intensity, from 500 to 2500 ft. lb. (680 to 3400 Nm)
- Swing Hammer Mechanism
- Feathering trigger and "D" handle
- Reversing valve for instant change over from forward to reverse
- 1 inch square drive
- 3/8 in. Flush Face Quick Disconnect Couplers



Also available in underwater model.
See Underwater Tools in this catalog.



IW24 Impact Wrench

Application:	Nut and bolt driving and screw anchor applications, power to Stanley "Hydrant Saver"
Capacity:	1.5 in. Square Drive
Hyd. Flow:	7-12 gpm (26-45 lpm)
Weight:	43 lbs (20 kg)
Length:	16.5 in. (41 cm)
Width:	5 in. (13 cm)
Connection:	3/8 in. Male Pipe Adapter to -8 SAE straight thread port

Features:

- Adjustable impact intensity, from 800 to 3500 ft. lbs. (1088 to 4760 Nm)
- Swing Hammer Mechanism
- "D" handle
- Feathering trigger
- Reversing valve for instant change over from forward to reverse
- 1-1/2 inch square drive
- 3/8 in. Flush Face Quick Disconnect Couplers.



Also available in underwater model.
See Underwater Tools in this catalog.

Tool Selection Guide

Tool	Bolt Grade	Bolt Dia	Torque
ID07	1 - 8	1/4 to 3/4 in (6 to 19 mm)	up to 500 ft. lb. (675 Nm)
IW12	1 - 8	5/8 to 1 in (16 to 25 mm)	up to 1200 ft. lb. (1632 Nm)
IW16	1 - 8	7/8 to 1-3/8 in (22 to 35 mm)	up to 2500 ft. lb. (3400 Nm)
IW24	1 - 8	1 to 1-5/8 in (16 to 41 mm)	up to 3500 ft. lb. (4760 Nm)

Adjustable Impact Intensity

A unique feature of the IW12, IW16 and IW24 hydraulic impact wrenches is adjustable impact intensity. This feature permits the user to make adjustments to how intense the impact against the fastener is, thus, affecting resultant torque.

While an impact wrench is not a torque wrench, being able to adjust impact intensity permits tightening up to the final torque without over-torque. The final torque is then completed using a torque wrench. This method is a real timesaver in applications such as multiple assemblies

Impact Wrenches



Model IW12 being used to loosen bolts securing a rail joint. The IW12 produces up to 1200 ft. lbs. (1632 Nm) of impact intensity.



Hydrant Saver (IW24 Not Included)

The Hydrant Saver can be powered by the IW24 Impact Wrench to safely remove fire hydrant valve seats - even those that have seized due to lack of periodic maintenance. The Hydrant Saver allows servicing of hydrants obstructed by walls, fences, buildings, etc. that previously had to be replaced.

Two complete kits available: Northern Kit with 8 ft. power tube and the Southern Kit with a 6-1/2 ft. power tube. Both kits include a 1-1/2 ft. extension, alignment wrench, retaining pins, and a Mueller 5-1/4 in. socket. A complete selection of sockets is available from Stanley Hydraulic Tools to fit the most commonly found hydrants.





Driving Ground Rod with a
GD50 Ground Rod Driver



Pulling a U-channel
post with a PP10
Post Puller



EA08 shown with Torque Tube
and optional auger

EA08 Earth Auger

Application:	Earth boring for posts and poles.
Capacity:	Up to 18 in. (46 cm) Diameter x 42 in. (107 cm) Long Auger
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	47 lbs (21 kg)
Length:	11 in. (30 cm)
Width:	46 in. (117 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

The EA08 features an output torque of 250 ft lb (339 Nm) to handle a wide variety of earth boring applications up to 18 inches (46 cm) in diameter and 42 inches (107 cm) deep. It is configured with 4 handles for two-man operation but can be used by one-man by connecting the torque tube to a power unit or other solid object. An ergonomically designed forward and reverse control valve lever is integrated into the handle. EA08 models are available to accept 1-1/4 inch square female, snap connections or 1-3/8 inch hex male, pinned connections. The EA08 is furnished with flush face quick disconnect couplers. Augers are sold separately.



EA08 Earth Auger



GD50 driving
ground rod



PP10 pulling
rod



In-Line Valve

GD50 Ground Rod Driver

Application:	Drives copper clad and galvanized ground rods
Capacity:	1/2 to 5/8 in. or 3/4 to 1 in. Ground Rod (see ordering info)
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

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. An in-line valve in 8-foot hose whips provide ON/OFF control. 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.

PD45 Post Driver

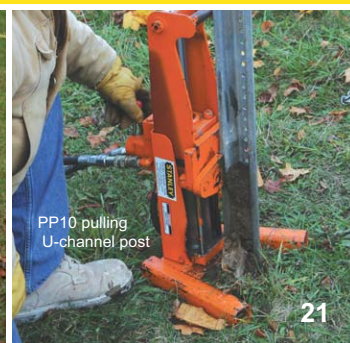
Application:	Drives a variety of shapes and sizes of sign posts
Capacity:	U-Channel Posts, Square Posts, Round Post, Delineators,
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	65 lbs (29 kg)
Length:	30 in. (76 cm)
Width:	10 in. (25 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

The PD45 features dual guiding handles, a lifting eye and remote or integral On/Off Valve. Models with integral triggers run the full length of the handles and are spring loaded to the OFF position. A model is available to drive DOT required breakaway posts to within 4 inches (100 mm) above ground level. All PD45 models are furnished with flush faced quick disconnect couplers.

PP10 Post Puller

Application:	Pulls a variety of sign and fence posts
Capacity:	Sign posts up to 8 in. (20 cm) Wide.
Hyd. Flow:	3-9 gpm (11-34 lpm)
Weight:	70 lbs (32 kg)
Length:	13 in. (32 cm)
Width:	14 in. (35 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

The PP10 is designed to remove flanged type sign posts and irregularly shaped posts up to 8 in. (20 cm) wide. It features an 8 inch (203 cm) stroke and pulling force of 9800 lbs (4450 kg). The PP10 uses two methods to solve post pulling problems. For flanged posts, the PP10 uses gripper jaws to grasp the flange. For many other posts, a chain is used. Pins on the end of the chain may be inserted into holes in perforated posts to keep the chain from sliding. A control valve is located on the tool. The PP10 is furnished with gripper jaws, chain with pins, and flush face quick disconnect couplers.



Portable with Plenty of Power

STANLEY

The power required to operate construction tools does not need to be something as large as the size of an air compressor. The fact is, a power supply about the size of a wheelbarrow, such as our GT18 Power Unit, is more than sufficient to operate any tool shown in this catalog from our 90# breakers to small drills.

Our hydraulic power units use the latest in commercial engine technology from manufacturers such as Briggs & Stratton, Honda, and Ruggerini. These engines are air cooled, fuel efficient, light weight, rugged, and pack plenty of power to operate our most demanding tools without over-taxing the engine. Check out the advantages of hydraulic power units over other types of equipment such as air compressors or engine driven tools.

- Versatile - we have over 50 tools that can be operated from these power units
- Air cooled - no winter freezing considerations
- Fuel efficient - 1.3 gallons per hour (4 liters per hour) estimated fuel consumption
- Quiet operation
- Lightweight - 330 lbs (150 kg)
- Small size - can fit into small truck or van
- Portable - can be wheeled around jobsite like a wheelbarrow
- Serviceability - can be serviced by small engine dealers such as garden shops, and rental yards.

Combine these advantages with our years of experience in developing hydraulic power sources and a full line of powerful construction tools and you have the flexibility to take on any job.



GT18 Power Unit



Application:	Hydraulic power supply for hydraulic tools.
Capacity:	5 or 8 gpm (20 or 30 lpm)
Pressure:	2000 psi (140 bar)
Weight:	330 lbs (150 kg) (Briggs & Stratton model)
Length:	35 in. (90 cm)
Width:	21.5 in. (54.6 cm)
Height:	29 in. (73.7 cm)
Engine:	Briggs & Stratton 18 hp Vanguard or Honda 20 hp OHV (see ordering info)
Connection:	Flush Face Quick Disconnect Couplers

- Meets HTMA requirements for Type 1 and Type 2 hydraulic tool circuits.
- 5 or 8 gpm (20 or 30 lpm) @ 2000 psi
- Heat rejection capacity exceeding 5 hp.
- Computerized throttle control
- Quartz hour meter
- Direct mounted hydraulic pump
- Air-oil cooler
- Lift and latch handle
- Pneumatic tires
- Maintenance-free battery
- Hydraulic and engine oil filter
- Engine oil level shut-down,
- 7 gallon (26.5 liters) fuel capacity
- 110 VAC, 60 Hz electric power (Briggs only)
- Flush face quick disconnect couplers.

HV18 Hydraulic Converter



Application:	Operates Hydraulic Tools using Existing Hydraulic Equipment.
Capacity:	8 gpm (30 lpm)
Pressure:	2000 psi
Weight:	100 lbs (45 kg)
Length:	21 in. (53 cm)
Width:	19 in. (48 cm)
Height:	20 in. (51 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

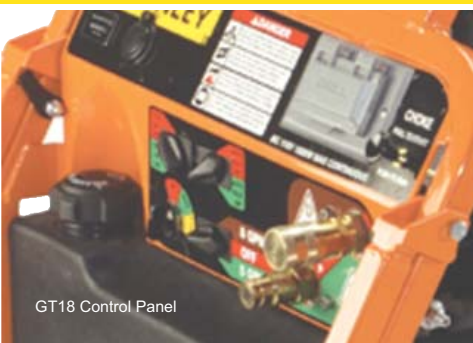
The HV18 is an efficient, clean air-oil cooled portable hydraulic system for operating hydraulic tools from another hydraulic source such as a backhoe, excavator, or skidsteer loader. The HV18 obtains its power from the hydraulics of any backhoe, excavator, skidsteer loader or any other hydraulic equipment capable of supplying up to 35 gpm (132 lpm) at 2000-3000 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.

MHP1 TracHorse



Application:	Mobile hydraulic power supply and tool, equipment, and rubble transport
Capacity:	1000 lb (454 kg) Load Capacity, Hyd Tools Requiring up to 10 gpm (38 lpm)
Hyd. Flow:	8 gpm (30 lpm) up to 2000 psi (138 bar)
Weight:	1290 lbs (585 kg)
Length:	80 in. (203 cm)
Width:	32 in. (81 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

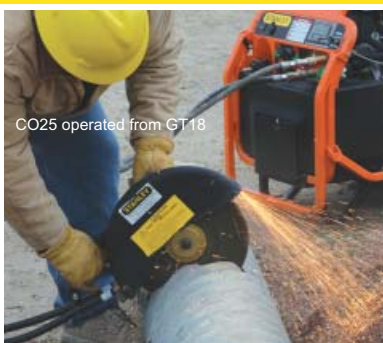
The MHP1 is a self-propelled mobile hydraulic power supply that allows transportation of tools and equipment, as well as, operation of hydraulic tools in any job site environment. Simple operating controls allow for maneuvering in a wide range of applications. The auxiliary hydraulic tool circuit is designed for continuous duty applications and features the standard highly efficient cooling found on all Stanley hydraulic power units. The MHP1 features rubber tracks, dual lever controls, hydraulic dump, removable side racks, and flush face quick disconnect couplers.



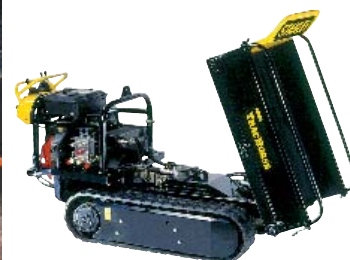
GT18 Control Panel



HV18 Control Panel



CO2 operated from GT18



MHP1 with bed up

STANLEY

Fluid Management - Controlling and Moving Fluids

Stanley's line of pumps make serious work of moving fluids from situations such as flooded manholes and utility vaults, broken water main cavities, flooded trenches, and controlling mine flooding.

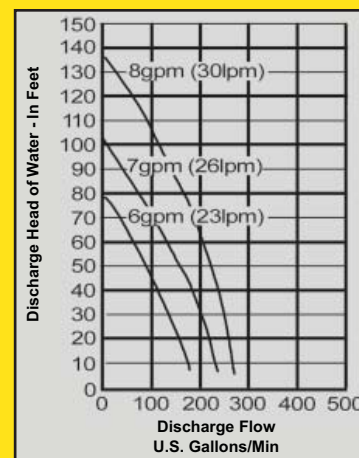
Some of the benefits of Stanley pumps are:

- High volume output
- Completely submersible
- Self priming
- No suction hose
- Can run dry without damage
- Maintenance free - wear resistant parts
- Small and lightweight - very portable
- High power to weight ratio

SM20 Sump Pump

Application:	Pumping Liquids
Capacity:	250 gpm (946 lpm), 2.5 in. NPTF Discharge
Hyd. Flow:	4-9 gpm (15-34 lpm) (See Order Info)
Weight:	13.7 lbs (6.3 kg)
Length:	7.5 in. (19 cm)
Width:	9.6 in. (24 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

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, urethane impeller, Hyrevz™ motor, and is furnished with flush face quick disconnect couplers.

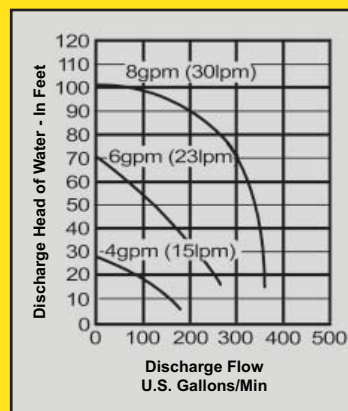




SM21 Sump Pump

Application:	Pumping Liquids.
Capacity:	300 gpm (1125 lpm), 2.5 in. (63.5 mm) Discharge
Hyd. Flow:	4-9 gpm (15-34 lpm)
Weight:	20 lbs (11.34 kg)
Length:	16 in. (40.6 cm)
Width:	6.25 in. (15.9 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

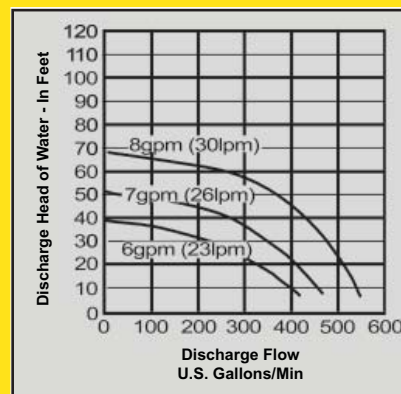
The SM21 is the ideal pump for areas of confined space and small openings. The SM21 pumps up to 300 gpm (1125 lpm) at a 50-foot head. The cast iron impeller is within 3/4 of an inch of the base allowing the pump to remove more liquids than other pumps. The SM21 features a lifting eye, 2.5 in. NPTF discharge, and is furnished with hose whips and flush face quick disconnect couplers.



SM50 Sump Pump

Application:	Pumping Liquids
Capacity:	500 gpm (1890 lpm), 3 in. Male Camlock Discharge
Hyd. Flow:	7-12 gpm (26-45 lpm)
Weight:	21 lbs (9.5 kg)
Length:	10.5 in. (26.7 cm)
Width:	10 in. (25.4 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

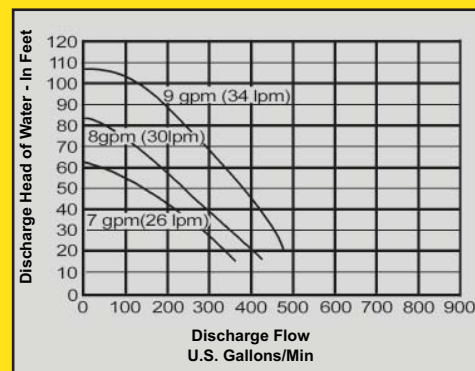
The SM50 can pump an impressive 500 gallons per minute (30,000 gallons per hour). It is completely submersible, can draw water down to a depth of 3.5 inches, and can run dry. It features a cast aluminum inlet, stainless steel impeller, lifting eye, 3 inch Camlock male discharge, and is furnished with flush face quick disconnect couplers.



TP03 Trash Pump

Application:	Pumping Liquids with Solids up to 3 in.
Capacity:	450 gpm (1688 lpm), 3 in. NPTF Discharge
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	32 lbs (14.52 kg)
Length:	14 in. (35.5 cm)
Width:	12 in. (30.4 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

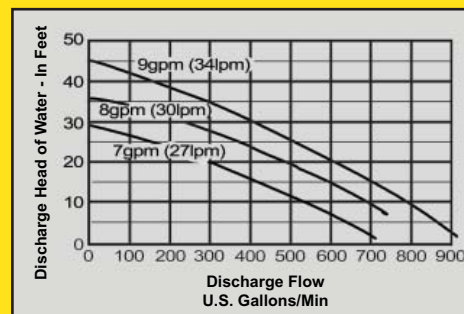
The TP03 is a submersible trash pump and will pump liquids with concentrations of solids up to 25% by volume. It features a tough urethane bowl and impeller, lifting eye, removable top plate, 3 inch NPTF discharge, and flush face quick disconnect couplers.



TP08 Trash Pump

Application:	Pumping liquids with Solids up to 4 in.
Capacity:	800 gpm (3028 lpm), 4 in. Male Camlock Discharge
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	59 lbs (26.7 kg)
Length:	19 in. (48.3 cm)
Width:	15 in. (38 cm)
Connection:	3/8 in. Flush Face Quick Disconnect Couplers

The TP08 is a heavy duty submersible trash pump capable of pumping high volumes of water, sand slurries, gravel, sludge and solids up to 4 inches in diameter. It features a steel bowl, cast iron impeller, polyethylene wear plates, carrying handle, removable top plate, 4 inch male Camlock discharge, and flush face quick disconnect couplers.



Cutting with Hydraulic Power

Operators familiar with conventional cutting equipment such as gasoline chain saws and circle saws are easily impressed with the power of hydraulic cutting equipment because the power-to-weight ratio is significantly higher. For example, our CS06 Chainsaw produces almost twice as much power as its gasoline engine counterparts and weighs about half as much.

Compared to conventional cutting equipment Stanley hydraulic cutting tools offer:

- More work in less time
- Less effort
- Longer tool life
- Minimal maintenance
- Minimal downtime
- Increased safety
- Longer warranty

**STANLEY**

CS05/CS06 Chain Saw

Application:	Wood Cutting - Trees, Limbs, Timbers, Utility Poles, Wood Structures
Capacity:	12, 15, & 20 in. (30, 38, & 51 cm) Bars
Hyd. Flow:	4-6 gpm (15-23 lpm) for CS05, 7-9 gpm (26-34 lpm) for CS06
Weight:	6.25 lbs (2.8 kg)
Length:	14 in. (36 cm) (less bar)
Width:	9 in. (23 cm)
Connection:	3/8 in. NPT Male Adapter

Features:

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



Also available in underwater model.
See Underwater Tools in this catalog.



CR27 Circular Saw

Application:	Tree Trimming and Brush Cutting
Capacity:	9 in. (23 cm) Dia. Saw Blade
Hyd. Flow:	5-7 gpm (19-26 lpm)
Weight:	9.75 lbs (4.4 kg)
Length:	79 in. (200 cm)
Width:	9 in. (23 cm)
Connection:	3/8 in. NPT Male Adapter

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.



CS23/CS26 Chain Saw

Application:	Tree Trimming
Capacity:	12, 15, 18 in. (30, 38, 46 cm) Bars
Hyd. Flow:	7-9 gpm (26-34 lpm) for CS23, 3-5 gpm (11-19 lpm) for CS26
Weight:	9 lbs (4 kg)
Length:	74 in. (188 cm)
Width:	6 in. (15 cm)
Connection:	3/8 in. NPT Male Adapter

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



PR41 Pruner

Application:	Tree Trimming
Capacity:	2.25 in. (5.7 cm) Cut
Hyd. Flow:	3-9 gpm (11-34 lpm)
Weight:	11.5 lbs (5.2 kg)
Length:	84 in. (213 cm)
Width:	6 in. (15 cm)
Connection:	3/8 in. NPT Male Adapter

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



CS06



PR41



CR27



TA54603 without valve

TA54103 with valve in handle

TA54 Pole Tamper

Application:	Compacting soil around utility poles, sign and fence posts.
Capacity:	Kidney shaped shoe
Hyd. Flow:	3-9 gpm (11-34 lpm)
Weight:	39 lbs (18 kg)
Length:	66 & 71 in. (167 & 180 cm) (see order information)
Width:	4 in. (10 cm)
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 (see order info)
- 2 moving parts



TA57 Backfill Tamper

Application:	Back filling small or narrow areas.
Capacity:	6 in. (15.2 cm) round shoe
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	46 lbs (20 kg)
Length:	48 in. (122 cm)
Width:	4 in. (10 cm)
Connection:	3/8 in flush faced quick disconnect couplers

Features:

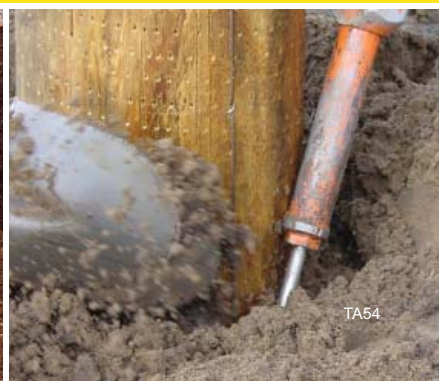
- Ideal for back filling in small or narrow areas
- Long stroke keeps the TA57 above the fill
- 750 blows per minute - 3 inch stroke
- 3 moving parts
- On/Off valve
- Optional 6 inch square shoe



TA54



TA54



TA54



TA57

AL35 Alternator



Application: Electric power for lights, small power tools, plastic pipe fusion irons
 Capacity: 3500W, 120/240V, 60Hz
 Hyd. Flow: 7-9 gpm (26-34 lpm)
 Weight: 70 lbs (32 kg)
 Length: 19 in. (48 cm)
 Width: 9 in. (23 cm)
 Connection: 3/8 in. NPT Male Adapter

Features:

- Ideal addition to service vehicles for 120/240 volt electric power up to 3500 watts.
- Built-in circuit breaker protection - no fuses
- Two 110 volt, 15-amp duplex outlets
- One 240 volt, 30-amp twist lock outlet
- One 240 volt, 20-amp duplex outlet
- Built-in voltmeter
- Brushless design reduces maintenance requirements
- Hyrevz™ motor
- Rubber shock-mount feet

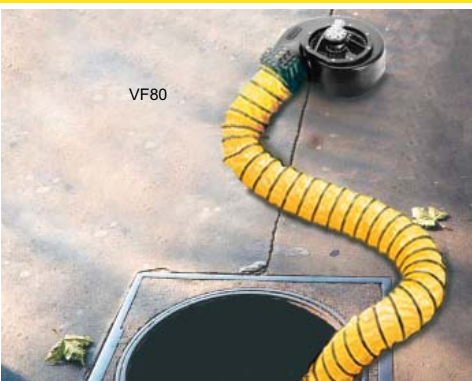
VF80 Vent Fan



Application: Ventilating large spaces such as vaults.
 Capacity: 1700 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. Flush Face Quick Disconnect Couplers

Features:

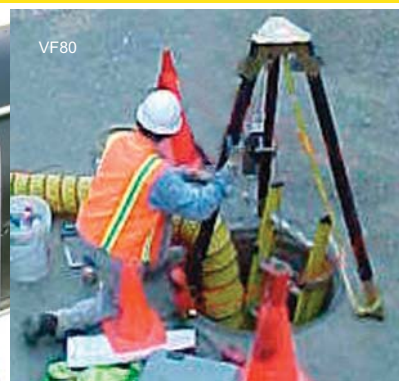
- Designed for heavy duty service
- Quiet operation
- Centrifugal blower to deliver large volume of air
- High impact plastic case
- Standard 8 inch (20 cm) discharge
- Accepts standard heaters and coolers
- Hyrevz™ motor



VF80



AL35



VF80



VF80 Motor



IP16 Intensifier

Application:	Provides High Pressure Output for High Pressure Tools
Capacity:	10,000 psi (690 bar)
Hyd. Flow:	3-10 gpm (11-38 lpm)
Weight:	12 lbs (5.4 kg) Dry
Length:	10-1/2 in. (25.9 cm)
Width:	6 in. (15.2 cm)
Height:	5 in. (12.9 cm)
Connection:	3/8 in. NPT Adapter to -8 SAE Port

Features:

- Operates single or double-acting high pressure tools
- Can be driven from almost any HTMA Type I, II or III hydraulic circuit
- Can be used on open center or closed center hydraulic circuits
- Built-in oil reservoir for high pressure output
- Provides an audible "click" when preset pressure is achieved
- Complete selection of optional accessories
- High pressure couplers included

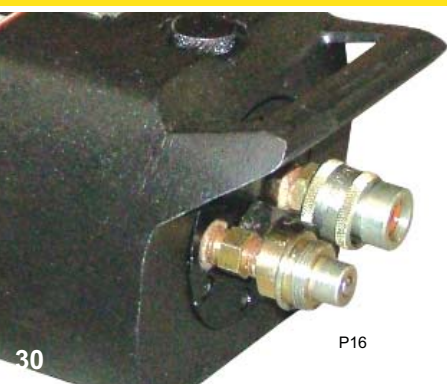


RV06 Rocker Valve

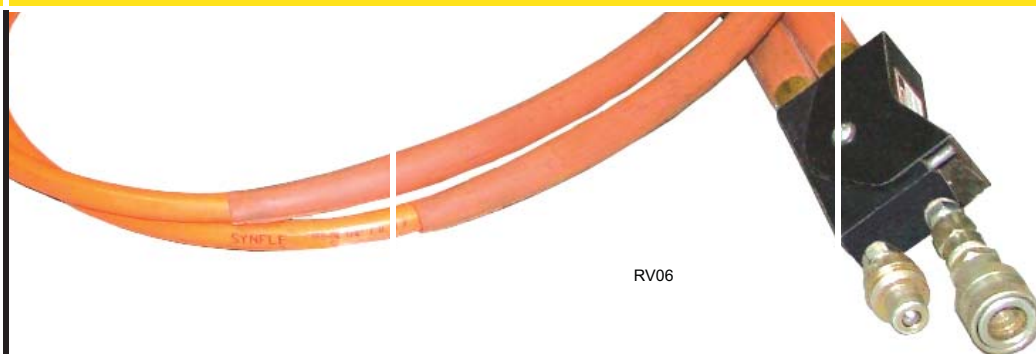
Application:	Used with IP16 to control high pressure crimping tools
Capacity:	10,000 psi (690 bar)
Weight:	2.6 lbs (1.18 kg)
Length:	5-1/8 in. (13.2 cm)
Width:	2 in. (5 cm)
Connection:	1/4 in. Female NPT Port

Features:

- Rocker type trigger spring loaded to neutral or "hold" position
- Full forward and reverse action
- Can be used with single or double-acting tools
- Hose and high pressure couplers included



P16



RV06

Underwater Tool Section

STANLEY

Tools for Underwater Construction, Salvage and Demolition

Stanley Hydraulic Tools is a leading worldwide provider of underwater hydraulic tools to professional divers, marine maintenance, construction, and salvage companies, military diving teams, domestic rescue and recovery organizations, and commercial companies operating in a marine environment. Our tools are used in building bridge footings, underwater construction and maintenance of piers, docks, and shoreline structures, marine floor anchoring and rigging, salvage operations, demolition of structures and obstructions, and many other types of general construction, salvage, or demolition associated with a marine environment.

Stanley Underwater Hydraulic Tools are found on oil platforms, nuclear electric generating plants, with pipeline and cable installers, on marine demolition sites, on dam construction, mining exploration, and on marine exploration and archaeology expeditions.

Tools provided for underwater construction, salvage, and demolition encompass concrete breakers, chipping hammers and diggers, diamond chain saws and regular chain saws, cut-off saws, hammer drills, impact wrenches, water pumps, drills, mounted breakers, shears, grapples and more.

Look for us to continue to provide quality tools for working in marine environments.



BR45 Light to Medium Duty Breaker - 35-55# Class

Application:	Light concrete breaking, small rock breaking, coral removal, rod driving, tamping.
Tool Bit Size:	1 in. hex Shank
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	50 lbs (22 kg)
Length:	25 in (65 cm)
Width:	14 in (36 cm)
Connection:	3/8 in NPT Hose Whips

Features:

- Feathering ON/OFF valve to control speed, making start-up and initial tool placement easy
- Trouble-free diaphragm accumulator to provide added punch and reduced recoil
- Will handle system back pressures up to 250 psi (17 bar).
- Accepts standard 1 inch hex tool bits



BR67 Medium to Heavy Duty Breaker - 70# Class

Application:	Concrete breaking, small rock breaking, rod driving, tamping
Tool Bit Size:	6 x 1-1/8 in. Hex Shank
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	67 lbs (30 kg)
Length:	27 in (68 cm)
Width:	16 in (41 cm)
Connection:	3/8 in NPT Hose Whips

Features:

- Feathering ON/OFF valve to control speed, making start-up and initial tool placement easy
- Trouble-free diaphragm accumulator to provide added punch and reduced recoil
- Will handle system back pressures up to 250 psi (17 bar).
- Accepts standard 1-1/8 inch hex tool bits



BR87 Heavy Duty Breaker - 90# Plus Class

Application:	Concrete breaking or scoring, small rock breaking, rod driving, tamping
Tool Bit Size:	6 x 1-1/8 in. hex shank
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	83 lbs (37.7 kg)
Length:	29 in (73.5 cm)
Width:	16 in (41 cm)
Connection:	3/8 in NPT Hose Whips

Features:

- Feathering ON/OFF valve to control speed, making start-up and initial tool placement easy
- Trouble-free diaphragm accumulator to provide added punch and reduced recoil
- Will handle system back pressures up to 250 psi (17 bar).
- Accepts standard 1-1/8 inch hex tool bits

CH15 Chipping Hammer



Application:	Chipping concrete, rock, masonry or coral
Capacity:	.580 in Hex x 2-1/2 in Shank Steel Bits
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	16 lbs (7.25 kg)
Length:	17 in (43 cm)
Width:	3 in (8 cm)
Connection:	3/8 in NPT Hose Whips

Features:

- Body of tool is shock and heat insulated
- Tool steels are held in place by an adjustable chuck
- Uses standard .580-inch hex, round collar, steel tool bits
- Furnished with hose whips

CH18 Chipping Hammer



Application:	Chipping light concrete, rock, masonry or coral
Capacity:	.580 in Hex x 2-1/2 in Shank Steel Bits
Hyd. Flow:	7-9 gpm (26-34 lpm)
Weight:	24 lbs (11 kg)
Length:	20 in (51 cm)
Width:	3 in (8 cm)
Connection:	3/8 in NPT Hose Whips

Features:

- "D" handle and tool bit holder are shock and heat insulated
- Tool steels are held in place by a slide that is detented for balls and springs
- Uses standard .580-inch hex, round collar, steel tool bits
- Furnished with hose whips

CO23 Cut-Off Saw



Application:	Dimensional cutting of metal or masonry materials such as concrete, structural steel, and pipe.
Wheel Size:	10 in. Diameter Abrasive or Diamond Segmented
Hyd. Flow:	10-15 gpm (35-57 lpm)
Weight:	23 lbs (9.1 kg)
Length:	19 in (53.3 cm)
Width:	11 in (28 cm)
Connection:	-8 SAE Threaded Ports

Features:

- Inter-locking safety trigger
- Adjustable shoe,
- 10 inch wheel capacity and 1 inch arbor
- Integral gear motor with counter-clockwise rotation
- Furnished with hose whips





CS06 Chain Saw

Application: Wood Cutting - Trees, Timbers, Wood Structures
 Capacity: 15 & 18 in. (30 & 46 cm) Bars (see order info)
 Hyd. Flow: 7-9 gpm (26-34 lpm)
 Weight: 6.25 lbs (2.8 kg)
 Length: 14 in. (36 cm) (less bar)
 Width: 9 in. (23 cm)
 Connection: 3/8 in NPT Hose Whips

Features:

- Inter-locking trigger
- Hyrevz™ motor
- Low kickback bars and chains
- Hand guard
- Dual spool for Open Center or Closed Center operation



CS11 Chain Saw

Application: Extreme duty applications such as bridge pilings and utility poles.
 Capacity: 24, 30, 36 in. (61, 76, 91 cm) (see order info)
 Hyd. Flow: 10-14 gpm (38-53 lpm)
 Weight: 14 lbs (6 kg)
 Length: 17 in. (43 cm)
 Width: 9 in. (23 cm)
 Connection: 3/8 in NPT Hose Whips

Features:

- Highest power-to-weight ration of any chain saw on the market
- Interlocking triggers
- Bucking spurs and hand guards



DS11 Diamond Chain Saw

Application: Cutting concrete, reinforced concrete, conduit, brick, stone and other masonry.
 Capacity: 15 or 18 in. (33 or 46 cm) Bar
 Hyd. Flow: 7-9 gpm (26-34 lpm)
 Weight: 26 lbs (11 kg)
 Length: 38 in. (97 cm)
 Width: 9 in. (23 cm)
 Connection: 3/8 in NPT Hose Whips

Features:

- Plunge cut capability
- Hyrevz™ motor
- Water connection
- Ergonomic handles and guards
- The Wall Walker™ that provides leverage for cutting is standard equipment

Note: bar and chain are sold separately.



DL07 Drill

Application: Drilling holes in wood, metal and masonry.
 Capacity: 1/2 in. or 5/8 in. Chuck
 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. Adaptor to -8 SAE Port

Features:

- 1/2 inch or 5/8 inch keyed chuck
- Dual position assist handle
- Feathering trigger for speed control
- Reversible, insulated handle
- Trigger guard
- Integral Hyrevz™ motor



GR29 Grinder

Application: Metal grinding, buffing, polishing
 Hyd. Flow: 4-10 gpm (15-38 lpm)
 Weight: 14 lbs (6.4 kg)
 Length: 9 in. (23 cm)
 Width: 5 in. (11 cm)
 Connection: 3/8 in. Adaptor to -8 SAE Port

Features:

- 5/8 in. - 11 Threaded Arbor
- Assist Handle
- Trigger guard
- 2700 rpm @ 10gpm
- Integral Hyrevz™ motor



ID07 Impact Drill/Wrench

Application: Nut and bolt tightening or loosening, lag bolt driving and wood drilling applications.
 Hyd. Flow: 4-12 gpm (15-45 lpm)
 Weight: 8 lbs (4 kg)
 Length: 9 in. (23 cm)
 Width: 5 in. (11 cm)
 Connection: 3/8 in. Adaptor to -8 SAE Port

Features:

- Swing-hammer mechanism
- Integral Hyrevz™ motor
- 1/2 inch square drive chuck
- Over-sized reversing spool & heavy duty wiper seal
- Trigger guard



IW12 Impact Wrench

Application: Nut and bolt tightening or loosening, anchor bolt driving.
 Hyd. Flow: 4-12 gpm (15-45 lpm)
 Weight: 14 lbs (6.4 kg)
 Length: 9.5 in. (24 cm)
 Width: 4 in. (10 cm)
 Connection: 3/8 in. Adaptor to -8 SAE Port

Features:

- 3/4 inch square drive
- Reversing valve
- Adjustable impact intensity, from 250 to 1200 ft. lb. (340 to 1632 Nm)
- Feathering trigger



IW16 Impact Wrench

Application: Nut and bolt tightening or loosening, anchor bolt driving
 Hyd. Flow: 7-12 gpm (26-45 lpm)
 Weight: 26 lbs (12 kg)
 Length: 14.5 in. (37 cm)
 Width: 4.5 in. (11 cm)
 Connection: 3/8 in. Adaptor to -8 SAE Port

Features:

- Adjustable impact intensity, from 500 to 2500 ft. lb. (680 to 3400 Nm)
- Feathering trigger and "D" handle
- Reversing valve
- 1 inch square drive



IW24 Impact Wrench

Application: Nut and bolt driving and screw anchor applications.
 Hyd. Flow: 7-12 gpm (26-45 lpm)
 Weight: 43 lbs (20 kg)
 Length: 16.5 in. (41 cm)
 Width: 5 in. (13 cm)
 Connection: 3/8 in. Adaptor to -8 SAE Port

Features:

- 1-1/2 inch square drive
- Large "D" handle and feathering trigger
- 3/8 in. Flush Face Quick Disconnect Couplers.
- Impact intensity, from 800 to 3500 ft. lbs. (1088 to 4760 Nm)
- Integral Hyrevz™ motor
- Reversing valve



HD45 Hammer Drill

Application: Drilling holes in concrete, rock, or masonry.
 Capacity: #736 Skil Hex
 Hyd. Flow: 7-9 gpm (26-34 lpm)
 Weight: 45 lbs (20 kg)
 Length: 22 in. (57 cm)
 Width: 14 in. (35 cm)
 Connection: 3/8 in. NPT Hose Whips

Features:

- Drills holes in concrete, rock, or masonry from 3/4 in. (19 mm) to 2 in. (50 mm) in diameter and up to 29 in. (73.7 cm) deep as well as core drilling up to 4 in. (102 mm) in diameter.
- Uses standard Skil 736 shank, carbide tipped, fluted drill bits and requires no fluid to clear holes during operation.
- Feathering trigger for easy starts
- Adjustable rotation speed (both forward and reverse)
- Hose whips and flush face quick disconnect couplers.



SK58 Sinker Drill

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 Steels (see ordering info)
 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. NPT Hose Whips

Features:

- Drills holes up to 3 inches (7.6 cm) in diameter and 20 feet (6 m) deep
- Uses water flushing to clear holes of debris
- Feathering trigger for easy starts
- Direct drive rotation motor adjustable from 0 to 300 rpm
- Hose whips and flush faced quick disconnect couplers

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.

A standard 25% restocking charge is applied to all returned tools and parts. All returns must be authorized by the Sales Administration Department. An additional charge may be assessed for customizing tools. Please contact your sales representative for more information. All tools and accessories are sold FOB, Milwaukie, Oregon USA.

Breakers (North America)

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Capacity	Misc.
BR37	BR37110	37 lbs/17 kg	22.5 in./57 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	7/8 x 3-1/4 in. Hex	T Handle
BR40	BR40550	41 lbs/18 kg	23.5 in./60 cm	14 in./36 cm	4-6 gpm/15-24 lpm	1300-2000 psi/90-140 bar	1 x 4-1/4 in. Hex	T Handle
BR45	BR45120	48 lbs/22 kg	25 in./65 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	EZ Ride Foot
	BR45120E	48 lbs/22 kg	25 in./65 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	T Handle
	BR45125S	58 lbs/26 kg	28 in./72 cm	17.5 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	Anti Vibration
	BR45130E	48 lbs/22 kg	25 in./65 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	EZ Ride Foot
	BR45135S	58 lbs/26 kg	28 in./72 cm	17.5 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 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	1500-2000 psi/105-140 bar	1 x 4-1/4 in. Hex	T Handle
	BR45350	50 lbs/22 kg	25 in./65 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1 x 4-1/4 in. Hex	U/W, T Handle
BR67	BR67120	67 lbs/30 kg	27 in./68 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	T Handle
	BR67120E	67 lbs/30 kg	27 in./68 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	EZ Ride Foot
	BR67125	75 lbs/34 kg	29 in./73 cm	18 in./46 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	Anti Vibration
	BR67130	67 lbs/30 kg	27 in./68 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 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	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	EZ Ride Foot
	BR67135	75 lbs/34 kg	29 in./73 cm	18 in./46 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	Anti Vibration
	BR67320	67 lbs/30 kg	27 in./68 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hexx	U/W, T Handle
BR72	BR72120	59 lbs/27 kg	28 in./71 cm	14.25 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	T Handle
	BR72125S	61 lbs/27.6 kg	29 in./75 cm	17.5 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	Anit Vib.
	BR72130	59 lbs/27 kg	28 in./71 cm	14.25 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	T Handle
	BR72135S	61 lbs/27.6 kg	29 in./75 cm	17.5 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	Anti Vib.
BR87	BR87120	83 lbs/37.7 kg	29 in./73.5 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	T Handle
	BR87130	83 lbs/37.7 kg	29 in./73.5 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	T Handle
	BR87130E	83 lbs/37.7 kg	29 in./73.5 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	EZ Ride Ft
	BR87320	83 lbs/37.7 kg	29 in./73.5 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	U/W, T Handle
BR89	BR89120	83 lbs/37.7 kg	29 in./73.5 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	T Handle
	BR89130*	83 lbs/37.7 kg	29 in./73.5 cm	16 in./41 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6 in. Hex	T Handle

Breakers (European)

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Capacity	Misc.
BR40	BR4056201	41 lbs/18 kg	23.5 in./60 cm	14 in./36 cm	4-6 gpm/15-24 lpm	1300-2000 psi/90-140 bar	1 x 4-1/4 in. Hex	CE, T Handle
	BR4056801	41 lbs/18 kg	23.5 in./60 cm	14 in./36 cm	4-6 gpm/15-24 lpm	1300-2000 psi/90-140 bar	1 x 4-1/4 in. Hex	CE, Anti Vib.
BR45	BR4512201E	56 lbs/25 kg	25 in./65 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/8 x 6 in Hex	CE, EZ Ride Foot
	BR4514801	58 lbs/26 kg	28 in./72 cm	17.5 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	7/8 x 3-1/4 in. Hex Parallel	CE, Anti Vib.
	BR4516201	58 lbs/26 kg	25 in./65 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1 x 4-1/4 in. Hex Parallel	CE, T Handle
	BR4516801	58 lbs/26 kg	28 in./72 cm	17.5 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1 x 4-1/4 in. Hex Parallel	CE, Anit Vib.
BR47	BR4717201	54 lbs/24.5 kg	28.5 in./72 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6-1/4 in. Hex	CE, T Handle
	BR4757201	54 lbs/24.5 kg	28.5 in./72 cm	14 in./36 cm	5.5 gpm/20 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6-1/4 in. Hex	CE, T Handle
BR48	BR4817801	58 lbs/26 kg	30 in./76 cm	18 in./45 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6-1/4 in. Hex	CE, Anti Vib.
	BR4857801	58 lbs/26 kg	30 in./76 cm	18 in./45 cm	5.5 gpm/20 lpm	1500-2000 psi/105-140 bar	1-1/4 x 6-1/4 in. Hex	CE, Anti Vib.

Breaker 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.
1-1/8 in. Hex x 6 in.	02331	Clay Spade, 5-1/2 in. blade
	02332	Asphalt Cutter 5 x 11 in. U/C
	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.	02335	Asphalt Cutter, 5 in. blade x 11 in. U/C
	02336	Moil Point, 14 in. U/C

Model	Part No.	Description
	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
	08119	Asphalt Wedge
	09262	Clay Spade, 5-1/2 in. blade
	17782	Detachable Shank
	07702	Moil Point, 14 in. U/C
	07703	Narrow Point, 14 in. U/C
1 in. Hex x 4-1/4 in.	07704	3 in. Chisel, 14 in. U/C
	07705	Clay Spade, 5-1/2 in. blade
	07706	Asphalt Wedge, 3 in. wide
	07707	Ground Rod Driver, 1 in. rod

Chain Saws

Model	Part No.	Weight	Length	Width	Flow Range	Pressure Range	Cut Capacity	Misc.
CS05	CS05610	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	4-6 gpm/15-23 lpm	1500-2000 psi/105-140 bar	12 in./30 cm	OC/CC
	CS05620	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	4-6 gpm/15-23 lpm	1500-2000 psi/105-140 bar	15 in./38 cm	OC/CC
CS06	CS06610	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	12 in./30 cm	OC/CC
	CS0661001	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	12 in./30 cm	OC/CC, CE
	CS06620	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	15 in./38 cm	OC/CC
	CS0662001	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	15 in./38 cm	OC/CC, CE
	CS06630	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	20 in./51 cm	OC/CC
	CS0692001	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	15 in./38 cm	OC/CC, CE, U/W
	CS06920*	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	15 in./38 cm	OC/CC, U/W
	CS06930*	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	18 in./46 cm	OC/CC, U/W
	CS0693001	6.25 lbs/2.8 kg	14 in./36 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	18 in./46 cm	OC/CC, CE, U/W
CS11	CS113NO001	14 lbs/6 kg	17 in./43 cm	9 in./23 cm	10-14 gpm/38-53 lpm	1500-2000 psi/105-140 bar	24, 30, 36 in./61, 76, 91 cm	Hvy Duty, No Bar, U/W, CE

Chain Saw 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
	07935	File Guide with file
	08347	12 in. Saw Bar
	08348	Saw Chain for 12 in. bar

Model	Part No.	Description
CS11	11294	Flat File
	11464	Scrench
	01824	24 in. Chain
	02684	24 in. Sprocket Nose Bar
	02938	Sprocket
	03182	30 in. Sprocket Nose Bar
	03193	36 in. Sprocket Nose Bar
	03194	30 in. Chain
	03195	36 in. Chain

Chipping Hammers

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Capacity	Misc.
CH15	CH15121	16 lbs/7.3 kg	17 in./43 cm	3 in./7.6 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	.580 Hex or .680 Round	-
	CH1512101	16 lbs/7.3 kg	17 in./43 cm	3 in./7.6 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	.580 or .680 Hex	CE
	CH1532101	16 lbs/7.3 kg	17 in./43 cm	3 in./7.6 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	.580 or .680 Hex	CE, U/W
	CH15521	16 lbs/7.3 kg	17 in./43 cm	3 in./7.6 cm	4-6 gpm/15-23 lpm	1000-2000 psi/70-140 bar	.580 or .680 Hex	-
	CH1552101	16 lbs/7.3 kg	17 in./43 cm	3 in./7.6 cm	4-6 gpm/15-23 lpm	1000-2000 psi/70-140 bar	.580 or .680 Hex	CE
CH18	CH18111	24 lbs/10.9 kg	20 in./51 cm	3 in./7.6 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	.580 Hex	-
	CH18311	24 lbs/10.9 kg	20 in./51 cm	3 in./7.6 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	.580 Hex	U/W

Chipping Hammer Accessories

Model	Part No.	Description	Model	Part No.	Description
CH15/CH18	02278	Flat Chisel Bit, 1 in. x 18 in. .580 Hex		03690	Chisel Bit, 1 in. x 9 in. .580 Hex
	02279	Bull Point Bit, 1 in. x 18 in. .580 Hex		03963	Chisel Bit, 2 in. x 5 in. .580 Hex

Crimping Tools

Model	Part No.	Weight	Length	Width	Flow Range	Pressure Range	Crimping Force	Capacity	Compression Tooling
CT04	CT04016N	12 lbs/5.5 kg	20 in./50 cm	3-3/4 in./9.5 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	4.4 ton/4000 kg	#6-4/0	Kearney "D" Nest Kearney "O" Dies Burdny "W" Dies
CT06	CT06026N	13 lbs/5.9 kg	20 in./50 cm	7-1/4 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	6 ton/5443 kg	#10-750 MCM Aluminum A#10-500 MCM Copper	Anderson VC-FTVR
CT10	CT10016N	17 lbs/7.7 kg	22 in./56.9 cm	7 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	12 ton/10,900 kg	500 MCM Copper 636 MCM Aluminum/556.5 ACSR	Burdny Y-35/U-Dies
	CT10056N	17 lbs/7.7 kg	22 in./56.9 cm	7 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	11 ton/10,000 kg	Tens. Fitting/47726-7 ACSR Term. thru 1033/MCM Straight Alum.	Kearney/PH2
	CT10056DN	18.5 lbs/8.4 kg	22 in./56.9 cm	7 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	12 ton/10,900 kg	Tens. Fitting/47726-7 ACSR Term. thru 1033/MCM Straight Alum.	Kearney/WH3
	CT10066AN	19 lbs/8.9 kg	22 in./56.9 cm	7 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	12 ton/10,900 kg	750 MCM Copper/Alum.	Stanley1-5/8 Head/U-Dies
CT15	CT15036GN	29 lbs/13.2 kg	29 in./74 cm	7 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	15 ton/13,600 kg	500 MCM Copper/1500 MCM Alum. 795 MCM ACSR	Burdny Y-46/P-Dies
	CT15036UN	29 lbs/13.2 kg	29 in./74 cm	7 in./18 cm	3-9 gpm 11-34 lpm	1650-2500 psi 114-172 bar	15 ton/13,600 kg	500 MCM Copper/1000 MCM Alum. 795 MCM ACSR	Universal Head

Crimping Tool Accessories

Model	Part No.	Description	Model	Part No.	Description
	24787	Kearney Y-35 Die Adapter	CT15036UN	33704	Die Holder, Y35 Burndy/U-Dies
	28179	Swivel Kit, CT06, CT10, CT15 (non-current model)		60837	Die Holder, Y46 Burndy/P-Dies

Cut-Off Saws

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Rotation/RPM	Wheel Capacity	Misc.
CO23	CO23341	23 lbs/10 kg	19 in./50 cm	11 in./28 cm	10-15 gpm/38-57 lpm	1500-2000 psi/105-140 Bar	CCW/3300	10 in./25 cm	U/W
CO25	CO25141	20 lbs/9 kg	21 in./53 cm	11 in./28 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 Bar	CCW/4500	14 in./35 cm	-
	CO2514101	20 lbs/9 kg	21 in./53 cm	11 in./28 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 Bar	CCW/4500	14 in./35 cm	CE
	CO25541	20 lbs/9 kg	21 in./53 cm	11 in./28 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 Bar	CW/4500	14 in./35 cm	-
	CO2554101	20 lbs/9 kg	21 in./53 cm	11 in./28 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 Bar	CW/4500	14 in./35 cm	CE

Cut-Off Saw Accessories

Model	Part No.	Description
CO25	02691	14 in. Abrasive Wheel for metal, 1 in. arbor
	02692	14 in. Abrasive Wheel for masonry, 1 in. arbor
	03694	10 in. dia. Diamond Wheel for masonry for CO23 UW 1 in. arbor
	04117	10 in. dia. Abrasive Wheel for metal for CO23 UW 1 in. arbor, long wear
	33228	Water Attachment for CO25

Model	Part No.	Description
	33281	Slab Saw Cart for CO25
	33474	Water Tank Kit for part #33281
	34175	Handle Extension Kit CO23/25
	62358	Diamond Blade, 14 in. dry cut

Diamond Saws

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Cutting Capacity	Misc.
DS06	DS06200001*	14 lbs/6 kg	24 in./61 cm	9 in./23 cm	4-6 gpm/15-23 lpm	1000-2000 psi/70-140 bar	13 in./33 cm Bar	CE
	DS063000*	14 lbs/6 kg	24 in./61 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	13 in./33 cm Bar	-
	DS06300001*	14 lbs/6 kg	24 in./61 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	13 in./33 cm Bar	CE
DS11	DS113000*	26 lbs/11 kg	38 in./97 cm	9 in./23 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	15, 18 in./33, 46 cm Bar	-
	DS115000*	26 lbs/11 kg	38 in./97 cm	9 in./23 cm	12 gpm/45 lpm	1000-2000 psi/70-140 bar	15, 18 in./33, 46 cm Bar	U/W

* NOTE: Bar and Chain Not Included - Must be Ordered Separately

Diamond Saw Accessories

Model	Part No.	Description
DS06	35037	Bar, 13 in. Sprocket Nose
	56799	Diamond Chain, 13 in. Ultra 25
	56800	Diamond Chain, 13 in. Pinnacle 25
DS06/DS11	20857	Chain Repair Spinner
	20858	Chain Repair Breaker
	20859	Diamond Chain Butterfly Repair Kit
	26020	Water Pump Kit, 115/230 Volt, 60 hz
	26237	Water Pump Kit, European
	29361	HP1 Vanguard engine Water Pump Kit
	HWP10	Water Pump Attachment for GT18 & HP1, w/Couplers
	60859	Water Flow Meter, 0-7 gpm

Model	Part No.	Description
DS11	28232	Tool Box
	30305	Bar, 15 in., sprocket nose
	30306	Bar, 18 in., sprocket nose
	39496	SpeedHook® Kit
	39497	42 in. SpeedHook® Rail
	39501	Saw mounting bracket assy
	40327	21 in. SpeedHook® Rail
	56801	Diamond Chain, 15 in., Ultra 32
	56802	Diamond Chain, 18 in., Ultra 37
	56803	Diamond Chain, 15 in., Pinnacle 32
	58632	Diamond Chain, 18 in., Pinnacle 37

Diggers

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Blows/Minute	Capacity
DR19	DR19111	24 lbs/10.9 kg	20 in./50 cm	3 in./7.6 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	1800 bpm	3-1/4 x 7/8 in. Shank

Digger Accessories

Model	Part No.	Description
DR19	02328	Clay Spade, 16 in. U/C
	02330	3 in. Chisel, 14 in. U/C
	02339	1 in. Chisel, 14 in. U/C

Model	Part No.	Description
	02341	Asphalt Cutter, 5 in. blade x 11 in. U/C
	04401	Moil Point, 18 in. U/C
	05255	Rod Driver, 3/4 in.

Drills

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Performance	Capacity	Misc.
CD10	CD10100	18 lbs/8.5 kg	19 in./48 cm	4 in./10 cm	5-13 gpm/22-50 lpm	1000-2000 psi/70-140 bar	380, 900 & 1800 rpm	5/8 to 6-3/8 in. Bits	Threaded Spindle
CD12	CD12100	19 lbs/8.6 kg	19 in./48 cm	4 in./10 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	500, 1200 & 2400 rpm	5/8 to 12 in. Bits	Threaded Spindle Includes Anchor Stand
	CD12200	19 lbs/8.6 kg	19 in./48 cm	4 in./10 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	500, 1200 & 2400 rpm	5/8 to 14 in. Bits	Threaded Spindle Includes Anchor Stand
DL07	DL07550	6 lbs/2.7 kg	9 in./23 cm	4 in./10 cm	3-10 gpm/11-38 lpm	1000-2000 psi/70-140 bar	350-1250 rpm	1/2 in./12 mm Chuck	Dual-Spool

Drills Continued

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Performance	Capacity	Misc.
DL07	DL0755001	6 lbs/2.7 kg	9 in./23 cm	4 in./10 cm	3-10 gpm/11-38 lpm	1000-2000 psi/70-140 bar	350-1250 rpm	1/2 in./12 mm Chuck	Dual Spool
	DL07652	6 lbs/2.7 kg	9 in./23 cm	4 in./10 cm	3-10 gpm/11-38 lpm	1000-2000 psi/70-140 bar	350-1250 rpm	5/8 in./15 mm Chuck	-

Drill Accessories

Model	Part No.	Description	Model	Part No.	Description
DL07/DL08/DL09	01857	Adjustable Chuck & Adapter, 3/4 in., sq. x 3/4 in.		41245	3 in. Segmented, thin-wall bit
	04365	3/4 in. Chuck, 3JT Taper for DL44 & DL22, use 7/16 in. bits		41246	4 In. Segmented, thin-wall bit
CD10/CD12	41239	Motor Mount for 41238 Anchor Stand		41247	6 in. Segmented, thin-wall bit
	41240	Portable Water Tank		41778	Carrying Case
	41241	7/8 in. Crown, thin-wall bit		41781	Saddle Clamp
	41242	1 in. Crown, thin-wall bit		44957	Vacuum Pump
	41243	1-1/4 in. Crown, thin-wall bit		62275	CD10 Anchor Stand
	41244	2 in. Segmented, thin-wall bit			Integral Motor Mount

Earth Auger

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Capacity	Misc.
EA08	EA08101A	47 lbs/21 kg	11 in./30 cm	46 in./117 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	18 in./46 cm Dia. Auger	1-1/4 in. Sq. Female
	EA08102A	47 lbs/21 kg	11 in./30 cm	46 in./117 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	18 in./46 cm Dia. Auger	1-3/8 in. Hex Male

Earth Auger Accessories

Model	Part No.	Description	Model	Part No.	Description
EA08100	20931	Point (includes mtg. bolt)	EA08102A	47411	Auger, 10 in. dia x 42 in. OAL
EA08101A	39409	Auger, 8 in dia x 42 in. OAL		47412	Auger, 12 in. dia x 42 in. OAL
	39410	Auger Extension, 8 in. dia x 36 in. OAL		47413	Auger, 16 in. dia x 42 in. OAL
	39413	2 in. Trailer Ball/Brkt anchor		47414	Auger, 18 in. dia Nursery
	43660	Drive Hub - Stanley 1-1/4 hex		47415	Extension Tube, 15 in. OAL
EA08102A	47406	Auger, 2 in dia x 42 in. OAL (requires 58585)		47429	Digging Tooth w/Hardface
	47407	Auger, 3 in. dia x 42 in. OAL (requires 58586)		47430	2 in. Center Screw Bit for 6-12 in.
	47408	Auger, 4 in. dia x 42 in. OAL		47431	Center Screw Bit for 3 in.
	47409	Auger, 6 in. dia x 42 in. OAL		47432	Center Screw Bit for 4 in.
	47410	Auger, 8 in. dia x 42 in. OAL		58585	Drive Coupler, 13/16 x 1-3/8 in.
				58586	Drive Coupler, 1-1/8 x 1-1/8 in.

Grinders

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Rotation/RPM	Wheel Capacity	Misc.
GR29	GR29310	14 lbs/6.4 kg	9 in./23 cm	41 in./105 cm	4-10 gpm/15-38 lpm	1000-2500 psi/70-176 bar	CCW/2700	9 in./22.8 cm	U/W
	GR2930101	14 lbs/6.4 kg	9 in./23 cm	41 in./105 cm	4-10 gpm/15-38 lpm	1000-2500 psi/70-176 bar	CCW/2700	9 in./22.8 cm	CE, U/W
GR30	GR30701	13 lbs/5.9 kg	8 in./20 cm	28 in./71 cm	7-9 gpm/26-34 lpm	1500-2000 psi/70-140 bar	CCW/5800	9 in./22.8 cm	-
	GR30070101	13 lbs/5.9 kg	8 in./20 cm	28 in./71 cm	7-9 gpm/26-34 lpm	1500-2000 psi/70-140 bar	CCW/5800	9 in./22.8 cm	CE
	HG60130B	11 lbs/5 kg	23 in/58 cm	3 in/8 cm	5-10 gpm/19-38 lpm	1500-2000 psi/70-140 bar	CCW/4500	2-1/2 in/6.3 cm	Bullnose
	HG80110B	14 lbs/6 kg	23 in/58 cm	10 in/25 cm	8-10 gpm/30-38 lpm	1500-2000 psi/70-140 bar	CCW/4500	8 in/20 cm	-
	HG80120B	14 lbs/6 kg	23 in/58 cm	10 in/25 cm	8-10 gpm/30-38 lpm	1500-2000 psi/70-140 bar	CW/4500	8 in/20 cm	-

Grinder Accessories

Model	Part No.	Description	Model	Part No.	Description
GR29/GR30	02587	Grinding Wheel for metal, 9 in. dia. x 5/8 in., 11 thd. Arbor		03691	Grinding Wheel, 7 in. dia. x 5/8 in., 11 thd. Arbor
	02588	Grinding Wheel for masonry, 9 in. dia. x 5/8 in., 11 thd. arbor		05194	Depressed Center Wheel Adapter

Order Information

Ground Rod Drivers

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Capacity	Misc.
GD50	GD50132RF	52 lbs/24 kg	25 in./65 cm	16 in./41 cm	5-9 gpm/19-34 lpm	1500-2000 psi/105-140 bar	1/2 to 5/8 in. Rod	In-Line Valve/Couplers
	GD50133RF	52 lbs/24 kg	25 in./65 cm	16 in./41 cm	5-9 gpm/19-34 lpm	1500-2000 psi/105-140 bar	3/4 to 1 in. Rod	In-Line Valve/Couplers

Hammer Drills

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Performance	Capacity	Misc.
HD08	HD08531G	6 lbs/2.7 kg	13 in./35 cm	5-1/2 in./14 cm	3-9 gpm/11-34 lpm	750-2000 psi/50-140 bar	1175 rpm @ 6 gpm	7/8 in. Dia.	SDS Plus Shk
HD45	HD45110B	45 lbs/20 kg	22 in./57 cm	14 in./35 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	300 rpm	#736 Skil Hex	-
	HD451101	45 lbs/20 kg	22 in./57 cm	14 in./35 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	300 rpm	#736 Skil Hex	CE
	HD45310	45 lbs/20 kg	22 in./57 cm	14 in./35 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	300 rpm	#736 Skil Hex	U/W
	HD4531001	45 lbs/20 kg	22 in./57 cm	14 in./35 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	300 rpm	#736 Skil Hex	CE, U/W

Hammer Drill Accessories

Model	Part No.	Description	Model	Part No.	Description
HD08	16769	1/2 in. Geared Chuck	HD45	02282	1-1/4 x 24 in.
	16770	Chuck Adapter		02283	2 x 24 in.
HD45	30279	Adapter to take percussion core bits		04668	1 x 18 in.
	Carbide Bits			04896	1-1/4 x 36 in.
HD08	27807	3/8 x 12 in. OAL		05163	7/8 x 24 in.
	27814	1/2 x 12 in. OAL		05167	1-1/2 x 24 in.
	27826	3/4 x 12 in. OAL	Percussion Core Bits		
	27827	3/4 x 18 in. OAL	HD45	27902	2-1/2 in. dia. x 6 in. OAL
	27832	7/8 x 18 in. OAL		27904	3 in. dia. x 6 in. OAL
HD45	02281	1 x 24 in.	30279	HD45 (Skil 736) Adapter (required)	

Hydraulic Valves & Flow Controls

Part No.	Description	Part No.	Description
04722	9 gpm flow control, Brand Hydraulics, C-50-9	38632	In-line Valve, OC/CC

Impact Drills - Yellow Jacket

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Torque	Capacity	Misc.
ID07	ID07810	7.2 lbs/3.3 kg	9 in./23 cm	5 in./11 cm	4-12 gpm/15-45 lpm	750-2000 psi/50-140 bar	500 ft lbs	7/16 in. Quick Change	Dual-Spool
	ID0781001	7.2 lbs/3.3 kg	9 in./23 cm	5 in./11 cm	4-12 gpm/15-45 lpm	750-2000 psi/50-140 bar	500 ft lbs	7/16 in. Quick Change	CE
	ID07815	7.2 lbs/3.3 kg	9 in./23 cm	5 in./11 cm	4-12 gpm/15-45 lpm	750-2000 psi/50-140 bar	500 ft lbs	7/16 in. Quick Change	Trigger Gaurd
	ID07820	7.2 lbs/3.3 kg	9 in./23 cm	5 in./11 cm	4-12 gpm/15-45 lpm	750-2000 psi/50-140 bar	500 ft lbs	1/2 in. Square Drive	Dual-Spool
	ID0782001	7.2 lbs/3.3 kg	9 in./23 cm	5 in./11 cm	4-12 gpm/15-45 lpm	750-2000 psi/50-140 bar	500 ft lbs	1/2 in. Square Drive	CE
	ID07920	7.2 lbs/3.3 kg	9 in./23 cm	5 in./11 cm	4-12 gpm/15-45 lpm	750-2000 psi/50-140 bar	500 ft lbs	1/ in. Square Drive	U/W

Impact Drill & Wrench Accessories

Model	Part No.	Description	Model	Part No.	Description
ID07/IW08/IW09	05079	Chuck Adapter, 1/2 in. sq. x 7/16 in. hex QC		05109	Impact Socket, 9/16 in.
	05080	Adapter, 5/8 in. hex x 1/2 in. sq. drive		05110	Impact Socket, 5/8 in.
	05108	Impact Socket, 1/2 in.		05111	Impact Socket; 11/16 in.

Impact Drill & Wrench Accessories

Model	Part No.	Description
	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
	21755	Impact Sockets, Socket Set, extra long
	31951	Trigger Guard Kit, ID07
	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		
ID07/IW08/IW09/IW12	27845	9/16 x 8 x 22, 5/8 in. Hex Shank
	27847	13/16 x 8 x 22, 5/8 in. Hex Shank

Model	Part No.	Description
7/16 Hex Shank Pole Bits		
ID07/IW08/IW09	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

Impact Wrenches

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Torque	Capacity	Misc.
IW12	IW12140	14 lbs/6.4 kg	9 in./24 cm	4 in./10 cm	4-12 gpm/15-45 lpm	1000-2000 psi/70-140 bar	250-1200 ft lbs	3/4 in. Square Drive	-
	IW1214001	14 lbs/6.4 kg	9 in./24 cm	4 in./10 cm	4-12 gpm/15-45 lpm	1000-2000 psi/70-140 bar	250-1200 ft lbs	3/4 in. Square Drive	CE
	IW12340C	16 lbs/7.3 kg	9 in./24 cm	4 in./10 cm	4-12 gpm/15-45 lpm	1000-2000 psi/70-140 bar	250-1200 ft lbs	3/4 in. Square Drive	U/W
	IW1234001	14 lbs/6.4 kg	9 in./24 cm	4 in./10 cm	4-12 gpm/15-45 lpm	1000-2000 psi/70-140 bar	250-1200 ft lbs	3/4 in. Square Drive	CE
IW16	IW16150	26 lbs/12 kg	14 in./37 cm	5 in./11 cm	7-12gpm/26-45 lpm	1500-2000 psi/105-140 bar	500-2500 ft lbs	1 in. Square Drive	-
	IW16350	26 lbs/12 kg	14 in./37 cm	5 in./11 cm	7-12gpm/26-45 lpm	1500-2000 psi/105-140 bar	500-2500 ft lbs	1 in. Square Drive	U/W
	IW1635001	26 lbs/12 kg	14 in./37 cm	5 in./11 cm	7-12gpm/26-45 lpm	1500-2000 psi/105-140 bar	500-2500 ft lbs	1 in. Square Drive	CE, U/W
	IW1615001	26 lbs/12 kg	14 in./37 cm	5 in./11 cm	7-12gpm/26-45 lpm	1500-2000 psi/105-140 bar	500-2500 ft lbs	1 in. Square Drive	CE
IW24	IW24160	43 lbs/20 kg	16 in./41 cm	5 in./13 cm	7-12gpm/26-45 lpm	1800-2000 psi/124-140 bar	800-3500 ft lbs	1-1/2 in. Square Drive	-
	IW24360	43 lbs/20 kg	16 in./41 cm	5 in./13 cm	7-12gpm/26-45 lpm	1800-2000 psi/124-140 bar	800-3500 ft lbs	1-1/2 in. Square Drive	U/W

Impact Wrench Accessories

Model	Part No.	Description
IW12	01857	3/4 in. sq. female x 3/4 in. Jacobs chuck
IW24	31043	Hydrant Saver, Northern Kit, 8 ft power tube, 1-1/2 ft extension, seat alignment starter wrench, Mueller 5-1/4 in. Socket, plus pins
	31044	Hydrant Saver, Southern Kit, 6-1/2 ft power tube, 1-1/2 ft extension, seat alignment starter wrench, Mueller 5-1/4 in. socket plus pins
Hydrant Saver	30716	Power tube, 8 ft.
	30717	PowerTube, 6-1/2 ft
	30718	Extension, 1-1/2 ft for Power Tube
	30719	Extension, 3 ft for Power Tube
	30720	Extension, 4 ft for Power Tube
	30721	Wrench, seat alignment starter

Model	Part No.	Description
	30722	Socket, 4-1/4 in. Mueller, M&H, Smith, Columbia
	30723	Socket, 5-1/4 in. Mueller, M&H, Smith, Columbia
	30724	Socket, 5-1/4 in. Waterous
	30725	Socket, 4-1/4 in. Waterous
	30726	Socket, 5-1/4 in. Kennedy
	30727	Socket, 4-1/4 in. Kennedy
	30728	Socket, 5-1/4 in. Clowe
	30729	Socket, 4-1/4 in. Clowe
	31045	Pin for 5-1/4 in. Sockets
	31046	Pin for Extension and 4-1/4 in. Sockets

Post Driver

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Capacity	Misc.
PD45	PD45131	65 lbs/29 kg	30 in./76 cm	10 in./25 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	U-Channel, Delineator, Square & Round Post	Remote Valve
	PD45132	67 lbs/29 kg	30 in./76 cm	10 in./25 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	U-Channel, Delineator, Square & Round Post	Valve Handle
	PD45132G	67 lbs/29 kg	30 in./76 cm	10 in./25 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	U-Channel, Delineator, Square & Round Post	Valve Handle Extended Anvil

Post Driver Accessories

Model	Part No.	Description
PD45	15184	Adapter - 1-3/4 in. square post
	15185	Adapter - 2 in. round post

Model	Part No.	Description
	15186	Adapter - 2-1/4 in. sq. post
	15187	Adapter - 2 in. sq. post

Post Puller

Model	Part No.	Weight	Length	Width	Flow Rnge	Pressure	Capacity	Misc.
PP10	PP10100	70 lbs/32 kg	13 in./32 cm	14 in./35 cm	3-9 gpm/11-34 lpm	1000-2000 psi/70-140 bar	8 in./20 cm Post	-

Power Units

Model	Part No.	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Auto Throttle
GEN2	GT18B02	330 lbs/150 kg	35 in./90 cm	23 in./59 cm	29 in./74 cm	Briggs	8 gpm/30 lpm	2000 psi/140 bar	yes
	GT18B03	330 lbs/150 kg	35 in./90 cm	23 in./59 cm	29 in./74 cm	Briggs	8 gpm/30 lpm & 110 Vac	2000 psi/140 bar	yes
	GT18B05	330 lbs/150 kg	35 in./90 cm	23 in./59 cm	29 in./74 cm	Briggs	8 gpm/30 lpm & 110 Vac, 12 Vdc	2000 psi/140 bar	yes
	GT18B09	340 lbs/150 kg	35 in./90 cm	23 in./59 cm	41 in./104 cm	Briggs	8 gpm/30 lpm w/hose basket	2000 psi/140 bar	yes
	GT18H02	348 lbs/158 kg	35 in./90 cm	23 in./59 cm	39 in./99 cm	Honda	8 gpm/30 lpm	2000 psi/140 bar	yes
	GT18H04	348 lbs/158 kg	35 in./90 cm	23 in./59 cm	29 in./74 cm	Honda	8 gpm/30 lpm & 12 Vdc	2000 psi/140 bar	yes
HP1D	HP18284	384 lbs/174 kg	35 in./90 cm	24 in./61 cm	29 in./74 cm	Ruggerini	8 gpm/30 lpm	2000 psi/138 bar	no
GTR	GTR20H02	286 lbs/130 kg	35 in./90 cm	23 in./59 cm	23.5 in./74 cm	Honda	2x5 or 1x10 gpm/2x20 or 1x38 lpm	2000 psi/140 bar	no
	GTR20B02	286 lbs/130 kg	35 in./90 cm	23 in./59 cm	29 in./74 cm	Briggs	2x5 or 1x10 gpm/2x20 or 1x38 lpm	2000 psi/140 bar	yes
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)	2000 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)	2000 psi/140 bar	n/a

Mobile Power Units

Model	Part No.	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Auto Throttle
MHP	MHP11111000	1200 lbs/545 kg	80 in./203 cm	32 in./81 cm	40 in./102 cm	Briggs	8 gpm-30 lpm	2000 psi/140 bar	no
	MHP12211000	1200 lbs/545 kg	80 in./203 cm	32 in./81 cm	40 in./102 cm	Honda	2x5 or 1x10 gpm/2x20 or 1x38 lpm	2000 psi/140 bar	no
	MHP12311000	1200 lbs/545 kg	80 in./203 cm	32 in./81 cm	40 in./102 cm	Ruggerini	2x5 or 1x10 gpm/2x20 or 1x38 lpm	2000 psi/140 bar	no

Power Unit Accessories

Model	Part No.	Description
GT18/HP1/GTR	13360	Hose Basket Conversion Kit
	33212	HP1 Weather Cover
	64940	Male Plug, 12 volt
	52721	High altitude carburetor jet kit, 0-6000 ft (for Honda only)

Model	Part No.	Description
	52722	High altitude carburetor jet kit, 6-8000 ft (for Honda only)
HV18	51290	Hose Kit, 2 hoses, 3/4 in. x 10 ft, w/ ff faster couplers
MHP	48755	Demolition Tub Kit

Rocker Valves

Model	Part No.	Description
RV06	RV06000	Rocker Valve

Sinker Drills

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Performance	Capacity	Misc.
SK47	SK47130	52 lbs/24 kg	23 in./58 cm	14 in./36 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	10 ft Hole	7/8 in. x 4-1/4 in. Hex Shank	Air
SK58	SK58110	67 lbs/30 kg	26 in./66 cm	18 in./46 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	Air
	SK58120	67 lbs/30 kg	26 in./66 cm	18 in./46 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	Water
	SK58130	67 lbs/30 kg	26 in./66 cm	18 in./46 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	20 ft Hole	7/8 in. x 4-1/4 in. Hex Shank	Air
	SK58310	67 lbs/30 kg	26 in./66 cm	18 in./46 cm	7-9 gpm/26-34 lpm	1500-2000 psi/105-140 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	Water, U/W

Sinker Drill Accessories

Model	Part No.	Description
SK47/SK58	04914	Carbide Rock Bits for use with air (also re-quires drill steel) - 2 in. dia. H thread
	04915	Drill Steels for use with water - 1 x 4-1/4 in. H thread, 36 in. U/C
	05170	Drill Steels for use with air - 1 x 4-1/4 in. H thread, 24 in. U/C
	05171	Drill Steels for use with air - 1 x 4-1/4 in. H thread, 48 in. U/C

Model	Part No.	Description
	05174	Drill Steels for use with air - 7/8 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
	05178	Carbide Rock Bits for use with air (also re-quires drill steel) - 1-1/2 in. dia. H thread

Submersible Pumps

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Output	Discharge
SM20	SM2043101	18 lbs/8.16 kg	7.5 in./19 cm	9.6 in./24 cm	4-9 gpm/15-34 lpm	1000-2000 psi/70-140 bar	250 gpm/946 lpm	2.5 in./63.5 mm
	SM2052101	18 lbs/8.16 kg	7.5 in./19 cm	9.6 in./24 cm	4-6 gpm/15-23 lpm	1000-2000 psi/70-140 bar	250 gpm/946 lpm	2.5 in./63.5 mm
	SM2053101	18 lbs/8.16 kg	7.5 in./19 cm	9.6 in./24 cm	4-9 gpm/15-34 lpm	1000-2000 psi/70-140 bar	250 gpm/946 lpm	2.5 in./63.5 mm
SM21	SM2151101	25 lbs/11.34 kg	16 in./40.6 cm	6.25 in./15.9 cm	4-9 gpm/15-34 lpm	1000-2000 psi/70-140 bar	300 gpm/1125 lpm	2.5 in./63.5 mm
SM50	SM50100	21 lbs/9.5 kg	10.5 in./26.7 cm	10 in./25.4 cm	7-12 gpm/26-45 lpm	1000-2000 psi/70-140 bar	500 gpm/1890 lpm	3 in./75 mm

Submersible Pump Accessories

Model	Part No.	Description
SM20/SM21/SM50	01304	Flat Bottom Suction Screen for SM22
	02183	Fire Hose, 25 in. x 2-1/2 in.
	02317	Fire Nozzle - 1 in. output
	02812	Street Elbow 90-degree for SM23 Pump
	05133	2-1/2 in. Thread Adaptor for Sump Pump to Fire Hose

Model	Part No.	Description
	05134	50 ft. Fire Hose, 2-1/2 in. dia.
	05135	Spanner Wrench for Pin Lug Coupler
	15248	Adapter, 3 in. female camlock x male fire hose (nh) thread
	52720	Adapter, 3 in. male NPT X 3 in. male Camlock
	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

Tampers

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Blows/Minute	Valve	Shoe
TA54	TA541103	30 lbs/13.6 kg	71 in./180 cm	4 in./10 cm	3-9 gpm/11-34 lpm	1000-2000 psi/70-140 bar	1600 bpm	In Handle	Kidney
	TA54603	39 lbs/18 kg	66 in./167 cm	4 in./10 cm	3-9 gpm/11-34 lpm	1000-2000 psi/70-140 bar	1600 bpm	n/a	Kidney
	TA54603A	39 lbs/18 kg	66 in./167 cm	4 in./10 cm	3-9 gpm/11-34 lpm	1000-2000 psi/70-140 bar	1600 bpm	In Line	Kidney
TA57	TA57112	46 lbs/20 kg	48 in./122 cm	4 in./10 cm	7-9 gpm/26-34 lpm	1000-2000 psi/70-140 bar	750 bpm	In Handle	Round

Tamper Accessories

Model	Part No.	Description
TA54	00833	Kidney Shoe
	00840	Round Shoe, 6 in. dia.
	01070	Rectangular Shoe

Model	Part No.	Description
	38632	In-Line Valve Assembly, OC/CC
TA57	08252	Square Shoe, 6 in. x 6 in.

Trash Pumps

Model	Part No.	Weight	Length	Width	Flow Range	Pressure	Output	Discharge
TP03	TP0300301	32 lbs/14.52 kg	14 in./35.5 cm	12 in./30.4 cm	7-9 gpm/26-34 lpm	2000 psi/140 bar	450 gpm/1688 lpm	3 in./75 mm
TP08	TP08013	65 lbs/29.48 kg	19 in./48.3 cm	15 in./38 cm	7-9 gpm/26-34 lpm	2000 psi/140 bar	800 gpm/3028 lpm	4 in./100 mm

Trash Pump Accessories

Model	Part No.	Description
TP03/TP08	52720	Adapter, 3 in. NPT/3 in. Camlock Male
	56761	Lay-Flat Discharge Hose, 3 in. X 25 ft with Camlock fittings

Model	Part No.	Description
	65624	Lay-Flat Discharge Hose, 4 in. X 25 ft with Camlock Fittings

Hydraulic Hoses

Model	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 pig-tails, 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

Model	Part No.	Description
	47318	Rubber hose, non-conductive, 3/8 in. x 10 ft
	56797	Rubber Hose Set, Non-Conductive, 3/8 in. x 10 ft, w/couplers
	65897	Rubber Hose Set, Non-Conductive, 3/8 X 14 ft, w/couplers
	58633	Twinned Hose, 1/2 in. X 25 ft, wire braid, w/couplers
	58634	Twinned Hose, 1/2 in. X 50 ft, wire braid, w/couplers
	58973	Rubber Hose Set, Non-Conductive, 3/8 in. x 8 ft, w/couplers
	65617	Rubber Hose Set, non conductive, 3/8 in. x 10 ft, -8 male SAE x 3/8 NPTF Male

Quick Disconnect Couplers

Model	Part No.	Description
	02002	Dust Plug for 02874 for Snap-tite body
	02007	Dust Cap for 02874 for Snap-tite nose
	02312	1/2 in. Quick Disconnect Coupling, Bruning
	02313	3/8 in. Quick Disconnect Coupling, Bruning
	02324	1/2 in. Cap and Plug for 02312
	02872	Snap-tite 1/2 in. Coupler
	02874	Snap-tite 3/8 in. NPT Coupling
	03288	3/8 Cap & Plug for all flush face sets

Model	Part No.	Description
	03971	Bruning Flush Face Set (3/8 NPT)
	03974	Bruning Flush Face Set (1/2 NPT)
	24069	HTMA Flush Face Set (3/8 NPT)
	24070	HTMA Flush Face Set (1/2 NPT)
	58717	3/8 Flush Faced Coupler Set, -6 SAE Male
	58718	3/8 Flush Faced Coupler Set, -8 SAE Male
	40092	3/4 Flush Faced Coupler, Male
	65811	3/4 Flush Faced Coupler, Female

Plumbing

Model	Part No.	Description
	00936	Adapter, 1/2 SAE to 3/8 in. male pipe
	02151	Bushing, 1/2 in. to 3/4 in.

Model	Part No.	Description
	04192	Hex Nipple, 1/2 in. male pipe
	3044	Hex Nipple, 3/8 in. male pipe

Test Equipment

Model	Part No.	Description
	02835	Accumulator Tester & Charger
	04182	Flow and Pressure Tester
	31254	Accumulator Charging Kit (handheld tools only)

Model	Part No.	Description
	29085	Flow & Pressure Tester

Service Repair Tools

Model	Part No.	Description
	01120	Tamper Sleeve Tool
	04337	O-Ring Tool Kit
	33115	CT Swivel Service Tool
BR37	04919	Flow Sleeve Removal Tool
BR37/BR67 HD45/DK58	04910	Flow Sleeve Removal Tool
BR67	04909	Spacer, Flow Sleeve Installation
BR67/SK58	04908	Split Ring, Auto Valve Removal
BR67/BR87 SK58	05508	Accumulator Disassembly Tool
	05640	Accumulator Cylinder Puller
HD45/SK47	05879	Latch Installation Tool
SK47/SK58 HD45	05062	Latch Installation Tool
	05045	Latch Removal Tool

Model	Part No.	Description
SK58	05048	Latch Installation Tool
	05061	Bearing Installation Tool
	05871	Collet, 3/8
SK58 CO23 UW	05044	Bearing Installation Tool
TA54	01949	Sleeve Alignment Tool

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 and be capable of providing system pressure up to 2000 psi. 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 $\pm 10\%$ (19 lpm)
Type II	8	gpm $\pm 10\%$ (30 lpm)
Type III	12	gpm $\pm 10\%$ (45 lpm)
Type RR	10	gpm $\pm 10\%$ (38 lpm)

Pressure:

Hydraulic systems should be capable of providing the appropriate pressure and flow for the system types listed above when measured across the tool connections. Deviation from the nominal flow rates should be no more than plus or minus 10% at a system pressure of 2000 psi/138 bar.

Return Pressure:

The hydraulic systems should generate no more than 200 psi/14 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/RR	5 Horsepower (3.73 KW)
Type III	7 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.

Hydraulic Basics

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 assisting your customer with the design of a hydraulic tool circuit, use the following as guidelines. Failure to adhere to these guidelines may result in voiding tool warranty and probably will result in a very unhappy customer.

Basic Don'ts for Cool Oil Control

1. DON'T — Rely on a large reservoir to control oil heating. Large reservoirs, even with good air circulation, do not adequately dissipate heat.
2. 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.
3. 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.
4. DON'T — Use heavy oils such as 30W or 10W30 engine oils. These will cause resistance in lines and add to backpressure and heat.
5. 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

1. 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.
2. Use generous line sizes — Especially on pump suction and return from tool to tank.
3. 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

1. 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.

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.

Hose Lengths

1. Use 1/2 inch inside diameter for hose lengths up to 50 feet.
2. Use of hose lengths beyond 50 feet is not recommended. If necessary, see item 3.
3. Use 5/8 inch inside diameter for pressure and 3/4 inch inside diameter for return on hose lengths up to 100 feet.
4. Hose lengths beyond 100 feet are considered extreme and problematic. For this reason, we do not ever recommend using hose lengths beyond 100 feet.

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



Recommended Hydraulic Fluids

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.)

SPECIFICATIONS		
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.

RECOMMENDED FLUIDS		
BRAND	BIODEGRADABLE	DESCRIPTION
AMS-Oil	No	Hydraulic Fluid MN 150 SSU, 100 V.I.
Chevron	No	AW-MV-32
Exxon	No	Univis J-26
Mobil	No	D.T.E.13
Gulf	No	Harmony AW-HVI-1 50-32
Shell	No	Lo-Hydraul 32 or Tellus T-32
Sun	No	Sunvis 805 MG
Texaco	No	Rando HD-AZ
Union	No	Unax AW-WR-32
Mobil	Yes	EAL 224H
Texaco	Yes	BioStar 32
Terresolve	Yes	EnviroLogic 132
Shell	Yes	Naturelle HF-E-32
Pennzoil	Yes	Pennzsafe SL200



Hydraulic System Specifications Suitable for Powering HTMA Type I Hydraulic Tools

GENERAL SPECIFICATIONS

The following specifications are for a hydraulic system which will deliver the performance of an HTMA Type 1 system. The HTMA Type 1 system has a flow requirement of 5 gpm, plus or minus 10%.

The hydraulic system shall be an open-center type system and deliver the design flow rate over a pressure load range of 1000 to 2000 psi. Alternatively, the system may be a closed-center type having the same hydraulic performance.

The system pressure limiting component shall begin to control at a pressure no less than 2150 psi and shall limit the maximum pressure to no more than 2500 psi. This component may be a relief valve, used with a non-pressure compensating pump system, or the pressure control used with a pressure-compensating pump system.

The flow loss in the return side of the system must be low enough so that the return pressure (back pressure), when measured at the tool end of the tool hose is not more than 200 psi. This measurement is to be made with the system at minimum operating temperature and the hydraulic oil viscosity no higher than 400 SSU (86 cst). For ISO Grade 32 hydraulic oil, the system temperature will be approximately 50 deg F (10 deg C).

The hydraulic system shall have sufficient heat rejection capacity to limit the maximum oil temperature to 140 deg F (60 deg C) at the maximum expected ambient temperature. The minimum cooling capacity to dissipate tool-generated heat is 3 hp (7,635 BTU/hr). This cooling capacity may be modified taking into consideration intended tool operation duty cycle and system generated heat.

The hydraulic system shall have a return line filter rated for 10 micron nominal filtration. The filter shall have a flow capacity of at least 15 gpm.

The hydraulic system shall use a fluid which has a viscosity of 150-225 SSU (32-50 cst) at 100 deg F (38 deg C). Hydraulic fluids of petroleum base with anti-wear properties and high viscosity indexes over 140 will meet fluid requirements over an wide range of operating temperatures.

DETAIL SPECIFICATIONS

The hydraulic reservoir shall be of a metal construction with a fluid holding capacity of 8 to 13 gallons. The reservoir shall include a vented filler/breather with a filter basket. It shall have a 140-mesh or 125 micron pump suction strainer located near the bottom and a rigid internal baffle to prevent direct cross flow from return to suction. The fluid return shall be below the lowest fluid level in order to prevent air entrainment. The reservoir shall include a fluid level indicator to show fluid level from the minimum requiring fill to the maximum showing full. It shall include a drain, low near the bottom, to provide for draining settled-out water or complete emptying of the reservoir. There shall be provision for access to the inside for servicing the suction strainer and cleaning the reservoir.

The fluid line from the reservoir to the pump suction port shall have an inside diameter of 1.25 inches (32 mm).

The pump shall be sized to deliver the system design flow at a shaft speed determined by the prime mover speed and any speed reduction between it and the pump. For vehicles with automatic transmissions, the engine speed should be between 1700 and 2000 rpm. For example, if the power takeoff speed ratio is .75, then the pump speed will be 1275 to 1500 rpm. The pump displacement will be between 0.770 and 0.906 cubic inches per rev. For a fixed-displacement pump, these displacements will be that of the pump. For variable-displacement pumps, these displacements will be the pump displacement setting while operating the hydraulic tool system. The pump shall have a maximum pressure rating of at least 3000 psi.

The pressure line from the pump outlet to the directional valve shall have an inside diameter of 0.75 inches (19 mm). The working pressure of the line shall be at least 2500 psi.

If no bi-directional tools will be used, the directional control valve shall be ¾ -inch size two-position two-port or three-port diverter valve. Only the pressure side flow will go through the valve. For an open-center system, in the OFF position the valve will bypass flow to the system return; in the ON position the valve will block the bypass to the system return. For a closed-center system, in the OFF position the valve will block the pump port and connect the tool to the return; in the ON position the valve will connect the pump to the tool. It must be rated for working pressure of at least 2500 psi.

If bi-directional tools will be used, the directional control valve shall be a ¾-inch size three-position, four-port valve. The valve spool shall be a motor spool. For an open-center system, all ports must be connected to the tank port in the neutral position. For a closed-center system, the tool ports must be connected together. It must be rated for working pressure of at least 2500 psi.

The relief valve may be a separate component or integral to the directional control valve. It may be either direct operating or pilot operated. It shall be set with the cracking pressure at 2150-2250 psi. The maximum full-flow bypass pressure shall not be more than 2500 psi.

The air-to-oil cooler must be sized and placed to have the required heat rejection capacity. If the vehicle engine does not have a temperature-controlled fan, the oil cooler may be mounted in front of the vehicle radiator. The cooler will be the largest that will

cover the radiator and must be at least 1 ½ inches thick. The oil cooler must have low enough air flow resistance so as not to seriously reduce the vehicle cooling capacity. If the vehicle has a temperature-controlled fan, then an air-to-oil cooler with fan(s) must be selected. This cooler must be installed where it will have unimpeded air flow. The ports in the cooler shall be at least 1-inch size. Integral to the cooler or separately installed with the cooler shall be a bypass check valve or thermal diverter valve to allow fluid to bypass the cooler at low temperatures and high viscosities until the fluid temperature reaches working temperatures. If a thermal diverter valve is used, it should have a temperature setting between 85 and 95 deg F (29 and 35 deg C). If a separately-fanned cooler is selected, it shall have a thermal switch to turn on the fan(s) when oil flows through the cooler.

The system return lines shall have an inside diameter of .75 or 1.00 inch. The lines shall have a working pressure rating of at least 250 psi.

The hydraulic system shall have HTMA flush-face quick-acting couplers for connecting tools to the system. The coupler nose shall be on the pressure port and the coupler body shall be on the return port. These will be located according to the requirements of the end-user.

All connections shall be assembled and sealed to assure there will be no leaks. All components shall be suitable for mobile hydraulic systems and have flow capacity and working pressures which meet the requirements of the system. All lines shall be installed and restrained to prevent contact with hot engine components and prevent fatigue failure due to vibration or abrasion. The system shall be flushed clean and filled with clean hydraulic fluid.

The system will be accepted after verification by the customer that the system performance meets specifications.

Hydraulic System Specifications Suitable for Powering HTMA Type II Hydraulic Tools

GENERAL SPECIFICATIONS

The following specifications are for a hydraulic system which will deliver the performance of an HTMA Type 2 system. The HTMA Type 2 system has a flow requirement of 8 gpm, plus or minus 10%.

The hydraulic system shall be an open-center type system and deliver the design flow rate over a pressure load range of 1000 to 2000 psi. Alternatively, the system may be a closed-center type having the same hydraulic performance.

The system pressure limiting component shall begin to control at a pressure no less than 2150 psi and shall limit the maximum pressure to no more than 2500 psi. This component may be a relief valve, used with a non-pressure compensating pump system, or the pressure control used with a pressure-compensating pump system.

The flow loss in the return side of the system must be low enough so that the return pressure (back pressure), when measured at the tool end of the tool hose is not more than 200 psi. This measurement is to be made with the system at minimum operating temperature and the hydraulic oil viscosity no higher than 400 SSU (86 cst). For ISO Grade 32 hydraulic oil, the system temperature will be approximately 50 deg F (10 deg C).

The hydraulic system shall have sufficient heat rejection capacity to limit the maximum oil temperature to 140 deg F (60 deg C) at the maximum expected ambient temperature. The minimum cooling capacity to dissipate tool-generated heat is 5 hp (12,725 BTU/hr). This cooling capacity may be modified taking into consideration intended tool operation duty cycle and system generated heat.

The hydraulic system shall have a return line filter rated for 10 micron nominal filtration. The filter shall have a flow capacity of at least 25 gpm.

The hydraulic system shall use a fluid which has a viscosity of 150-225 SSU (32-50 cst) at 100 deg F (38 deg C). Hydraulic fluids of petroleum base with anti-wear properties and high viscosity indexes over 140 will meet fluid requirements over an wide range of operating temperatures.

DETAIL SPECIFICATIONS

The hydraulic reservoir shall be of a metal construction with a fluid holding capacity of 12 to 20 gallons. The reservoir shall include a vented filler/breather with a filter basket. It shall have a 140-mesh or 125 micron pump suction strainer located near the bottom and a rigid internal baffle to prevent direct cross flow from return to suction. The fluid return shall be below the lowest fluid level in order to prevent air entrainment. The reservoir shall include a fluid level indicator to show fluid level from the minimum requiring fill to the maximum showing full. It shall include a drain, low near the bottom, to provide for draining settled-out water or complete emptying of the reservoir. There shall be provision for access to the inside for servicing the suction strainer and cleaning the reservoir.

The fluid line from the reservoir to the pump suction port shall have an inside diameter of 1.25 inches (32 mm).

The pump shall be sized to deliver the system design flow at a shaft speed determined by the prime mover speed and any speed reduction between it and the pump. For vehicles with automatic transmissions, the engine speed should be between 1700 and 2000 rpm. For example, if the power takeoff speed ratio is .75, then the pump speed will be 1275 to 1500 rpm. The pump displacement will be between 1.449 and 1.232 cubic inches per rev. For a fixed-displacement pump, these displacements will be that of the pump. For variable-displacement pumps, these displacements will be the pump displacement setting while operating the hydraulic tool system. The pump shall have a maximum pressure rating of at least 3000 psi.

The pressure line from the pump outlet to the directional valve shall have an inside diameter of 0.75 inches (19 mm). The working pressure of the line shall be at least 2500 psi.

If no bi-directional tools will be used, the directional control valve shall be ¾ -inch size two-position two-port or three-port diverter valve. Only the pressure side flow will go through the valve. For an open-center system, in the OFF position the valve will bypass flow to the system return; in the ON position the valve will block the bypass to the system return. For a closed-center system, in the OFF position the valve will block the pump port and connect the tool to the return; in the ON position the valve will connect the pump to the tool. It must be rated for working pressure of at least 2500 psi.

If bi-directional tools will be used, the directional control valve shall be a ¾ -inch size three-position, four-port valve. The valve spool shall be a motor spool. For an open-center system, all ports must be connected to the tank port in the neutral position. For a closed-center system, the tool ports must be connected together. It must be rated for working pressure of at least 2500 psi.

The relief valve may be a separate component or integral to the directional control valve. It may be either direct operating or pilot operated. It shall be set with the cracking pressure at 2150-2250 psi. The maximum full-flow bypass pressure shall not be more than 2500 psi.

The air-to-oil cooler must be sized and placed to have the required heat rejection capacity. If the vehicle engine does not have a temperature-controlled fan, the oil cooler may be mounted in front of the vehicle radiator. The cooler will be the largest that will cover the radiator and must be at least 1 ½ inches thick. The oil cooler must have low enough air flow resistance so as not to seriously reduce the vehicle cooling capacity. If the vehicle has a temperature-controlled fan, then an air-to-oil cooler with fan(s) must be selected. This cooler must be installed where it will have unimpeded air flow. The ports in the cooler shall be at least 1-inch size. Integral to the cooler or separately installed with the cooler shall be a bypass check valve or thermal diverter valve to allow fluid to bypass the cooler at low temperatures and high viscosities until the fluid temperature reaches working temperatures. If a thermal diverter valve is used, it should have a temperature setting between 80 and 90 deg F (26 and 32 deg C). If a separately-fanned cooler is selected, it shall have a thermal switch to turn on the fan(s) when oil flows through the cooler.

The system return lines shall have an inside diameter of .75 or 1.00 inch. The lines shall have a working pressure rating of at least 250 psi.

The hydraulic system shall have HTMA flush-face quick-acting couplers for connecting tools to the system. The coupler nose shall be on the pressure port and the coupler body shall be on the return port. These will be located according to the requirements of the end-user.

All connections shall be assembled and sealed to assure there will be no leaks. All components shall be suitable for mobile hydraulic systems and have flow capacity and working pressures which meet the requirements of the system. All lines shall be installed and restrained to prevent contact with hot engine components and prevent fatigue failure due to vibration or abrasion. The system shall be flushed clean and filled with clean hydraulic fluid.

The system will be accepted after verification by the customer that the system performance meets specifications.

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 \pm 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 \pm 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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