CRIMP, HAMMER, CUT, DIG, DRIVE, SAW, TAMP, PUMP, DRILL, TIGHTEN,

YOUR WAY THROUGH THE DAY.

ELECTRIC UTILITY TOOLS

CATEGORY	HYDRAULIC POWER TOOLS
YEAR 09-10	FORMAT PRODUCT CATALOG
STANLEY®	Hydraulic Tools

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. Stanley Hydraulic Tools has sales offices and distributors throughout North America, Central America, South America, Europe, Asia, Australia, and the Middle East.

OUR GOAL

Stanley Hydraulic Tools is committed to exceeding our customers' expectations through continuous innovation, excellence, quality, value and service.




CATALOG CONTENTS




POWERFUL TOOLS FOR POWERFUL JOBS

Stanley Hydraulic Tools offers the most complete line of hydraulic tools in the world and has been a leading supplier of equipment to the electric utility industry for decades.

Hydraulic tools are the perfect match for utility trucks equipped with hydraulic power such as bucket trucks or digger-derrick trucks. Hydraulic tools perform tough 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 many of the day-to-day tasks performed by utility workers.

Beginning in 1843 when Frederick Stanley established a little shop in New Britain, Connecticut to manufacture door bolts and other hardware from wrought iron, professionals have turned to Stanley tools for their toughest jobs. Our leadership in hydraulic tools was solidified with our acquisition of Ackley Hydraulic Tools in 1972. Located in Milwaukie, Oregon, Ackley had established itself in the electric utility industry with a specialized line of tools for utility workers including tree trimmers, pole tampers, crimpers, impact wrenches, and more. Our expertise was furthered with the addition of Dubuis in 2006. Located in Europe and operating since 1949, Dubuis adds a line of precision-engineered battery-powered hydraulic crimpers and cutters to our product offering.

LIGHT TO MEDIUM DUTY BREAKERS

MODELS BR37 TO BR45 - 35-55# CLASS

SPECIFICATIONS

Application: Light concrete or asphalt breaking or scoring; small rock breaking; rod driving, tamping.
Tool Bit Size: Varies. See page 4.
Hyd. Flow: BR37 & BR45: 7-9 gpm/26-34 lpm
BR40: 4-6 gpm/15-24 lpm
Weight: 37 lbs / 17 kg to 58 lbs / 26 kg
Length: 22.5 in. / 57 cm to 30 in. / 76 cm
Width: 14 in. / 36 cm to 18 in. / 45 cm
Connection: 3/8 in. flush face quick disconnect coupler

FEATURES

- Higher impact than comparably sized alternative platforms
- No tool exhaust
- Hydraulic oil provides continuous lubrication of internal parts for longer service life
- Modular design platform improves serviceability
- 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
- Hose whips and flush-face, quick disconnect couplers

The BR37, BR40, and BR45 are light to medium duty breakers for work in the 35 to 55 pound class.

MEDIUM DUTY BREAKERS

MODELS BR67 - 70# CLASS

The BR67 is a medium to heavy-duty breaker 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.

SPECIFICATIONS

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
Length: 27 in. / 68 cm - BR67 with T-Handle
Width: 16 in. / 41 cm - BR67 with T-Handle
Connection: 3/8 in. flush face quick disconnect coupler

FEATURES

- Higher impact than comparably sized alternative platforms
- No tool exhaust
- Hydraulic oil provides continuous lubrication of internal parts for longer service life
- Modular design platform improves serviceability
- 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 rod design for durability
- Hose whips and flush-face, quick disconnect couplers

BR45

BR67

BREAKERS

HEAVY DUTY BREAKERS

MODELS BR87 - 90# PLUS CLASS


BR87120

The BR87 is a heavy-duty 90 pound class breaker. 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.

SPECIFICATIONS

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 below.
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

FEATURES

- Higher impact than comparably sized alternative platforms
- No tool exhaust
- Hydraulic oil provides continuous lubrication of internal parts for longer service life
- Modular design platform improves serviceability
- 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 rod design for durability
- Hose whips and flush-face, quick disconnect couplers

BREAKERS

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	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	2250 psi / 155 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	2250 psi / 155 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	2250 psi / 155 bar	1-1/8 x 6 in. Hex	T Handle
	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	2250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ Ride Foot
	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	2250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ Ride Foot
	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	2250 psi / 155 bar	1 x 4-1/4 in. Hex	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	2250 psi / 155 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	2250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ Ride Foot
	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	2250 psi / 155 bar	1-1/4 x 6 in. Hex	T Handle
	BR67130E	67 lbs / 30 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ Ride Foot
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	2250 psi / 155 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	2250 psi / 155 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	2250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ Ride Ft

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 in. Hex x 4-1/4 in.	07702	Moil Point, 14 in. U/C
	07703	Narrow Point, 14 in. U/C
	07704	3 in. Chisel, 14 in. U/C
	07705	Clay Spade, 5-1/2 in. blade
	07706	Asphalt Wedge, 3 in. wide
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

Model	Part No.	Description
1-1/8 in. Hex x 6 in.	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
	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

YOUR MAIN SQUEEZE

BATTERY-POWERED CRIMPERS

MODEL BC06

The BC06 is a light weight tool for service entrance termination and underground crimping that accommodates wires up to 4/0. The BC06 is used to crimp sleeves, H-taps, C-taps and lugs commonly used in service entrance connectors. It features advance & hold / retract & hold operation with rapid advance that delivers cycle time of just 3.4 seconds and features auto shutoff when a complete crimp has been achieved. Head swivels 180°. Designed with built-in safety features and comes with a 2-year limited warranty and is available with vehicle charger, wall-mount charger, or no charger.

SPECIFICATIONS

Application: Service entry termination and underground crimping of sleeves, H-taps, C-taps and lugs commonly used in service entry connectors
Head Type: Permanent D3 and "O" Nose
Permanent D3 and "BG" Nose
Replaceable Kearney "O" Type Dies
(All heads accept "W" style dies)
Crimping Capacity: Copper #8 – 500 MCM
Aluminum #8 – 300 MCM
H-Taps up to 4/0 – 4/0
Crimping Force: 6 ton / 53 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 6.5 lb / 3.0 kg
Length: 20 in. / 508 mm
Width: 3.7 in. / 95 mm
Height: 4.6 in. / 117 mm
Head Rotation: 180°
Operation: Advance & hold / retract & hold with rapid advance and auto shutoff

For order information, see page 8

CRIMPING TOOLS

MANUAL CRIMPERS

MODELS C130-26/ C130-38/ C130-44

C130-26

C130-38

Stanley's hand operated crimping tools are light weight and self contained. Choose from three (3) different head openings that accept "U" style dies for 12 ton compression connectors. The quick-release die retainer system allows for easy, one handed die removal/installation. All models have a 2-stage pump for rapid advance of the die ram. Audible click when full crimp is reached. Piston returns with a twist of the rotating handle. Includes canvas bag.

MANUAL CRIMPERS

Model	Crimp Force	Head Opening	Head Rotation	Capacity	Weight	Length	Width	Height
C130-26	12 ton/ 107 kN	1.0 inch/ 26mm	350°	636 MCM AL, 500 MCM CU, 556.5 ACSR	11.8 lbs/ 5.4 kg	21.5 in./ 545 mm	2.8 in/ 70 mm	6.3 in/ 160 mm
C130-38	12 ton/ 107 kN	1.5 inch/ 38 mm	350°	750 MCM AL & CU, 556.5 MCM ACSR	14.2 lbs/ 6.4 kg	22.8 in./ 580 mm	2.8 in/ 70 mm	6.3 in/ 160 mm
C130-44	12 ton/ 107 kN	1.75 inch/ 44 mm	350°	750 MCM AL & CU, 556.5 MCM ACSR	14.3 lbs/ 6.5 kg	22.8 in./ 580 mm	2.8 in/ 70 mm	6.3 in/ 160 mm

MANUAL CRIMPERS

MODEL C130-WH3

The C130-WH3 hand operated crimping tool is a light weight and self contained compression tool used to install crimp type electrical connectors using Kearney style WH2/WH3 dies. The C130-WH3 has a 1.5 inch head opening and features a 2-stage pump for rapid advance. Audible click when full crimp is reached.

Piston returns with a twist of the rotating handle. Includes canvas bag.

SPECIFICATIONS

Application: Crimping electrical connections that require 12 tons of crimping force

Head Type: 12 ton head accepts Kearney style WH2/WH3 dies.

C130-WH3

MANUAL CRIMPERS

Model	Crimp Force	Head Opening	Head Rotation	Capacity	Weight	Length	Width	Height
C130-WH3	12 ton/ 107 kN	1.5 inch/ 38mm	350°	Tension fitting 477 26/7 ACSR, Terminals up to 1033 MCM stranded AL	14.3 lbs/ 6.5 kg	22.8 in./ 580 mm	2.8 in/ 70 mm	6.3 in/ 160 mm

BATTERY-POWERED CRIMPERS

MODEL CTB06201

CTB06201

Order model CTB06201W or CTB06201V

The CTB06201 is a 6 ton / 53 kN dieless crimping tool. The continuous swivel head has an open face design with capacities up to 500 MCM AL & CU. This unit is designed to crimp Anderson style connections as well as other connections that adhere to the ANSI C119.4 specification. Tool comes with a 2-year limited warranty and is available with vehicle charger or wall-mount charger.

SPECIFICATIONS

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

Head Type: Dieless Open Face
Crimping Capacity: #10-500 MCM AL & CU
Crimping Force: 6 ton / 53 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 13 lb / 6.2 kg
Length: 16 in. / 410 mm
Width: 4 in. / 100 mm
Height: 12 in. / 305 mm
Head Rotation: 360° Continuous
Operation: Advance & hold / retract & hold with rapid advance and audible pop to signal complete cycle

BATTERY-POWERED CRIMPERS

MODEL CTB06301

Order model CTB06301W or CTB06301V

The CTB06301 is a 6 ton / 53 kN dieless crimping tool. The continuous swivel head has a flip-top design with capacities up to 750 MCM AL & CU. This unit is designed to crimp Anderson style connections as well as other connections that adhere to the ANSI C119.4 specification. Comes with a 2-year limited warranty and is available with vehicle charger or wall-mount charger.

SPECIFICATIONS

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

Head Type: Dieless Flip-Top
Crimping Capacity: #10-750 MCM AL & CU
Crimping Force: 6 ton / 53 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 13 lb / 6.2 kg
Length: 12 in. / 304 mm
Width: 4 in. / 100 mm
Height: 12 in. / 305 mm
Head Rotation: 360° Continuous
Operation: Advance & hold / retract & hold with rapid advance and audible pop to signal complete cycle

BATTERY-POWERED CRIMPERS

MODEL CTB12101

The CTB12101 is a pistol-style 12 ton / 107 kN crimping tool with a C-shaped head that swivels 350° and accepts 12-ton "U" style dies. The unit is designed with 2-stage pump that delivers rapid advance functionality to cut cycle time. CE certified, comes with a 2-year limited warranty and is available with vehicle charger or wall-mount charger.

SPECIFICATIONS

Application: Battery powered crimping of electrical connections that require 12 tons of crimping force
Head Type: 1 inch head opening accepts "U" style dies
Crimping Capacity: 636 MCM AL, 500 MCM CU, 556.5 ACSR
Crimping Force: 12 ton / 107 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 15 lb / 6.8 kg
Length: 15 in. / 380 mm
Width: 4 in. / 100 mm
Height: 12 in. / 305 mm
Head Rotation: 350°
Operation: Advance & hold / retract & hold with rapid advance and audible pop to signal complete cycle

Order model CTB12101W or CTB12101V

BATTERY-POWERED CRIMPERS

MODEL CTB12201

Order model CTB12201W or CTB12201V

The CTB12201 is a pistol-style 12-ton crimping tool with a C-shaped head that swivels 350° and accepts 12-ton "U" style dies. The unit is designed with 2-stage pump that delivers rapid advance functionality to cut cycle time. CE certified, comes with a 2-year limited warranty and is available with vehicle charger or wall-mount charger.

SPECIFICATIONS

Application: Battery powered crimping of electrical connections that require 12 tons of crimping force
Head Type: 1.5 inch head opening accepts "U" style dies
Crimping Capacity: 750 MCM AL & CU, 556.5 MCM ACSR
Crimping Force: 12 ton / 107 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 17 lb / 7.7 kg
Length: 16 in. / 406 mm
Width: 4 in. / 100 mm
Height: 12 in. / 305 mm
Head Rotation: 350°
Operation: Advance & hold / retract & hold with rapid advance and audible pop to signal complete cycle

CRIMPING TOOLS

BATTERY-POWERED CRIMPERS

MODEL CTB12301

CTB12301

Order model CTB12301W or CTB12301V

The CTB12301 is a pistol-style 12-ton crimping tool with a Kearney style head that swivels 350° and accepts WH2 / WH3 dies. The unit is designed with 2-stage pump that delivers rapid advance functionality to cut cycle time. Conforms to CE requirements, comes with a 2-year limited warranty and is available with vehicle charger or wall-mount charger.

SPECIFICATIONS

Application: For crimping overhead lines, tension fittings, and terminals.
Head Type: 1.5 inch head opening accepts Kearney style WH2/WH3 dies. Adapter die part number 24787 (order separately) allows standard "U" style dies to be used in CTB12301 tool.
Crimping Capacity: Tension Fitting 477 26/7 ACSR Terminals up to 1033 MCM Stranded AL
Crimping Force: 12 ton / 107 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 17 lb / 7.7 kg
Length: 17 in. / 430 mm
Width: 4 in. / 100 mm
Height: 13 in. / 320 mm
Head Rotation: 350°
Operation: Advance & hold / retract & hold with rapid advance and audible pop to signal complete cycle

BATTERY-POWERED CRIMPING TOOLS

Model*	Part No.	Charger Type	Crimping Force	Capacity	Compression Tooling
BC06	BC0601WDO	110V AC Wall Charger	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	D3 and "O" Nose
	BC0601WDB	110V AC Wall Charger	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	D3 and "BG" Nose
	BC0601WKO	110V AC Wall Charger	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	Replaceable Kearney "O" Dies
	BC0601VDO	12V DC Vehicle Charger	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	D3 and "O" Nose
	BC0601VDB	12V DC Vehicle Charger	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	D3 and "BG" Nose
	BC0601VKO	12V DC Vehicle Charger	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	Replaceable Kearney "O" Dies
	BC0601NDO	N/A	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	D3 and "O" Nose
	BC0601NDB	N/A	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	D3 and "BG" Nose
	BC0601NKO	N/A	6 ton / 53 kN	Copper #8 – 500 MCM, Aluminum #8 – 300 MCM, H-Taps up to 4/0 – 4/0	Replaceable Kearney "O" Dies
CTB06201	CTB06201W	110V AC Wall Charger	6 ton / 53 kN	#10-500 MCM AL & CU	Dieless Open Face
	CTB06201V	12V DC Vehicle Charger	6 ton / 53 kN	#10-500 MCM AL & CU	Dieless Open Face
CTB06301	CTB06301W	110V AC Wall Charger	6 ton / 53 kN	#10-750 MCM AL & CU	Dieless Flip-Top
	CTB06301V	12V DC Vehicle Charger	6 ton / 53 kN	#10-750 MCM AL & CU	Dieless Flip-Top
CTB12101	CTB12101W	110V AC Wall Charger	12 ton / 107 kN	636 MCM AL, 500 MCM CU, 556.5 ACSR	1.0 in. / 26 mm Burndy Y35 head accepts 12 ton "U" style Burndy dies
	CTB12101V	12V DC Vehicle Charger	12 ton / 107 kN	636 MCM AL, 500 MCM CU, 556.5 ACSR	1.0 in. / 26 mm Burndy Y35 head accepts 12 ton "U" style Burndy dies
CTB12201	CTB12201W	110V AC Wall Charger	12 ton / 107 kN	750 MCM AL & CU, 556.5 MCM ACSR	1.5 in. / 38 mm Burndy Y750 head accepts 12 ton "U" style Burndy dies
	CTB12201V	12V DC Vehicle Charger	12 ton / 107 kN	750 MCM AL & CU, 556.5 MCM ACSR	1.5 in. / 38 mm Burndy Y750 head accepts 12 ton "U" style Burndy dies
CTB12301	CTB12301W	110V AC Wall Charger	12 ton / 107 kN	Tension Fitting 477 26/7 ACSR, Terminals up to 1033 MCM Stranded AL	Kearney style WH2 / WH3 dies. 1.5 in. / 38 mm opening
	CTB12301V	12V DC Vehicle Charger	12 ton / 107 kN	Tension Fitting 477 26/7 ACSR, Terminals up to 1033 MCM Stranded AL	Kearney style WH2 / WH3 dies. 1.5 in. / 38 mm opening

* BC06 Standard Package comes with BC06 with lanyard, 2 batteries, 1 charger and 1 bucket bag. Economy package comes with BC06 with lanyard, 1 battery, no charger or bucket bag. CTB models include battery tool with carry strap, 2 batteries, 1 charger, and 1 hard case.

BATTERY-POWERED CRIMPING TOOL ACCESSORIES

Part No.	Description
66194	14.4 VDC, 2.6 Ah Battery, NiMH
66233	Battery Charger, 110 VAC (Wall Charger)
66234	Battery Charger, 12 VDC (Vehicle Charger)
68002	DO, Jaw Permanent D3 and "O" Nose (Accepts "W" Style Dies) - BC06 Only
68003	DB, Jaw Permanent D3 and "BG" Nose (Accepts "W" Style Dies) - BC06 Only

Part No.	Description
68004	Jaw Replaceable Kearney "O" (Accepts "W" Style Dies) - BC06 Only
24787	Kearney, Y-35 Die Adapter - CTB12301 Only
66235	Carry Strap - All CTB & CCB Models Only
68273	Bucket Bag - BC06 Only
68274	Lanyard - BC06 Only

HIGH-PRESSURE CRIMPING HEADS — MODEL XC130-26

XC130-26

Order model XC130-26

The XC130-26 is a remote C-frame head that requires a 10,000 psi /700 bar pump to achieve 12 tons of crimping force. It can be operated from Stanley's GHA702 battery powered high pressure pump, Stanley's IP16 hydraulic intensifier (page 16), or other commercially available 10,000 psi pumps. The XC130-26 has a 1" head opening that uses "U" style dies and is a single acting tool. Comes with ¼" NPT male high pressure coupler.

SPECIFICATIONS

Application: Crimping electrical connections that require 12 tons of crimping force. Requires 10,000 PSI/700 bar pump
Head Type: 1 inch head opening accepts "U" type dies
Crimping Capacity: 636 MCM AL, 500 MCM CU, 556.5 ACSR
Crimping Force: 12 ton / 107 kN
Weight: 8.6 lb / 3.9 kg
Length: 7.7 in. / 195 mm
Width: 2.8 in. / 70 mm
Height: 4.9 in. / 125 mm

HIGH-PRESSURE CRIMPING HEADS — MODEL XC130-38

The XC130-38 is a remote C-frame head that requires a 10,000 psi/700 bar pump to achieve 12 tons of crimping force. It can be operated from Stanley's GHA702 battery powered high pressure pump, Stanley's IP16 hydraulic intensifier (page 16), or other commercially available 10,000 psi pumps. The XC130-38 has a 1.5" head opening that uses "U" style dies and is a single acting tool. Comes with ¼" NPT male high pressure coupler.

SPECIFICATIONS

Application: Crimping electrical connections that require 12 tons of crimping force. Requires 10,000 PSI/700 bar pump.
Head Type: 1.5 inch head opening accepts "U" style dies
Crimping Capacity: 750 MCM AL & CU, 556.5 MCM ACSR
Crimping Force: 12 ton / 107 kN
Weight: 10.4 lb / 4.6 kg
Length: 9.1 in. / 230 mm
Width: 2.8 in. / 70 mm
Height: 4.5 in. / 115 mm

XC130-38

Order model XC130-38

GET A GRIP

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° rotation for easy crimp alignment
- Work at all temperatures. Won't die in the cold or slow down in the heat
- Reverse-flow check valve to prevent operation if tool is plumbed backwards

HYDRAULIC CRIMPER — MODEL CT04

CT04

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.

SPECIFICATIONS

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

HYDRAULIC CRIMPER — MODEL CT06

The CT06 is furnished with a Die-Less Head for use with Anderson connectors and provides a crimping force of 6 tons / 5443 kg.

SPECIFICATIONS

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

Tool Bit Size: #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

CT06

HYDRAULIC CRIMPER — MODEL CT10

CT10

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.

SPECIFICATIONS

Application: Hydraulic powered crimping of electrical connections that require 12 tons of crimping force
Capacity: Varies by model number.
See order information, page 12
Hyd. Flow: 3-9 gpm / 11-34 lpm
Pressure: 1650-2500 psi / 114-172 bar
Weight: 17 lbs / 7.7 kg
Length: 22 in. / 57 cm
Width: 7 in. / 18 cm
Connection: 3/8 in. male pipe adapter to -8 SAE port

CRIMPING TOOLS

HYDRAULIC CRIMPER

MODEL CT15

CT15

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. The CT15 provides a crimping force of 15 tons / 13,600 kg.

SPECIFICATIONS

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

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

HYDRAULIC CRIMPING TOOLS

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Crimping Force	Capacity	Head Type
CT04	CT04016N	12 lbs / 5.5 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	4.4 ton / 4000 kg	#6-4/0	Kearney "D" Nest Kearney "O" Dies Burndy "W" Dies
CT06	CT06026N	13 lbs / 5.9 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	6 ton / 5443 kg	#10-750 MCM Aluminum A#10-500 MCM Copper	Anderson VC6-FTVR
	CT06096N	13 lbs / 5.9 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	6 ton / 5443 kg	#10-750 MCM Aluminum A#10-500 MCM Copper	No Head
CT10	CT10016N	17 lbs / 7.7 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	12 ton / 10,900 kg	500 MCM Copper 636 MCM Aluminum/556.5 ACSR	Burndy Y-35/U-Dies
	CT10056N	17 lbs / 7.7 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	11 ton / 10,000 kg	Tens. Fitting/47726-7 ACSR Term. thru 1033/MCM Straight Alum.	Kearney/PH2
	CT10056DH	18.5 lbs / 8.4 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 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	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	12 ton / 10,900 kg	750 MCM Copper/Alum.	Stanley1-5/8 Head/U-Dies
CT15	CT15036GN	29 lbs / 13.2 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	15 ton / 13,600 kg	500 MCM Copper/1500 MCM Alum. 795 MCM ACSR	Burndy Y-46/P-Dies
	CT15036UN	29 lbs / 13.2 kg	3-9 gpm / 11-34 lpm	1650-2000 psi / 114-140 bar	2250 psi / 155 bar	15 ton / 13,600 kg	500 MCM Copper/1000 MCM Alum. 795 MCM ACSR	Universal Head

HYDRAULIC CRIMPING TOOL ACCESSORIES

Model	Part No.	Description
CT10056DH	24787	Kearney Y-35 Die Adapter (CT10056DH Only)

Model	Part No.	Description
CT15036UN	33704	Die Holder, Y35 Burndy/U-Dies
	60837	Die Holder, Y46 Burndy/P-Dies

MANUAL CUTTERS

MODEL CG26

CG26

Order model CG26

The CG26 is a guillotine type cutter used for cutting ground rod, guy wire, ACSR, copper & aluminum. Features automatic release with an audible click when force of 6.2 tons / 55 kN is reached. Piston returns by pressing red release trigger. 2-stage pump provides rapid advance. Includes canvas bag.

SPECIFICATIONS

Application: Cutting ACSR wire, copper, & aluminum
Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking latch. 1.0 in. / 25 mm opening
Cutting Capacity: 5/8" / 16 mm standard guy wire, 1/2" / 13 mm ground rod, up to 350 MCM CU, up to 556.5 MCM AL & ACSR
Cutting Force: 6.2 ton / 55kN
Weight: 6.4 lb / 2.9 kg
Length: 16.9 in. / 430 mm
Width: 2.0 in. / 52 mm
Height: 5.5 in. / 140 mm
Head Rotation: 180°
Operation: Two-stage hydraulic system reduces the number of pumps

MANUAL CUTTERS

MODEL CG40

The CG40 is a guillotine type cutter used for cutting ACSR wire, copper, aluminum, EHS, guy wire and ground rods. Features automatic release with an audible click when force of 10 tons / 88 kN is reached. Piston returns with a twist of the rotating handle. 2-stage pump provides rapid advance. Includes canvas bag.

SPECIFICATIONS

Application: ACSR, aluminum, copper, EHS, guy wire & ground rods
Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking pin. 1.6 in. / 40 mm opening
Cutting Capacity: 1578 MCM AL & CU, 1500 MCM ACSR, 0.7 in. / 18 mm diameter guy wire, 0.75 in. / 19 mm ground rods, 61,000 PSI maximum hardness
Cutting Force: 10 ton / 88 kN
Weight: 13 lb / 5.9 kg
Length: 25.4 in. / 645 mm
Width: 3.3 in. / 85 mm
Height: 6.5 / 165 mm
Head Rotation: 350°
Operation: Two-stage hydraulic system reduces the number of pumps

CG40

Order model CG40

MANUAL CUTTERS

MODEL CG55

CG55

Order model CG55

The CG55 is a guillotine type cutter used for cutting copper and aluminum and telecommunication cable up to 2.2 inches. Features automatic release with an audible click when force of 4.8 tons / 43 kN is reached. Piston returns by pressing red release trigger. 2-stage pump provides rapid advance. Includes canvas bag.

SPECIFICATIONS

Application: Cutting Aluminum & Copper
Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking latch. 2.2 in. / 55 mm opening
Cutting Capacity: Up to 1500 MCM AL, up to 1000 MCM CU, AL overhead wire, up to 1000 MCM AL 25kv, underground wire
Cutting Force: 4.8 ton / 43 kN
Weight: 8.2 lb / 3.7 kg
Length: 22.0 in. / 560 mm
Width: 2.2 in. / 55 mm
Height: 5.5 in. / 140 mm
Head Rotation: 350°
Operation: Two-stage hydraulic system reduces the number of pumps

CUTTING TOOLS

BATTERY CUTTERS — MODEL CCB16


CCB16

The CCB16, with a 1.6 in. / 40 mm opening and 10 tons / 88 kN of force is ideal for cutting ACSR, copper, aluminum, EHS, standard guy wire and ground rod up to 0.75 in. / 19 mm. Features advance & hold / retract & hold functionality with rapid advance. Tool is covered by a 2-year limited warranty.

SPECIFICATIONS

Application: ACSR, aluminum, copper, EHS, guy wire & ground rods
Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking pin. 1.6 in. / 40 mm opening
Cutting Capacity: Up to 1578 MCM AL & CU, 1500 MCM ACSR, 0.7 in. / 18 mm diameter guy wire, 0.75 in. / 19 mm ground rods, 61,000 PSI maximum hardness
Cutting Force: 10 ton / 88 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 17 lb / 7.7 kg
Length: 19 in. / 480 mm
Width: 4 in. / 100 mm
Height: 13 in. / 320 mm
Head Rotation: 350°
Operation: Advance & hold / retract & hold operation. Two-stage hydraulic system increases cycle speed. Automatic release when full force of 10 tons / 88 kN is reached.

BATTERY CUTTERS — MODEL CCB22

The CCB22 has a 2.2 in. / 55 mm opening and is designed to cut copper and aluminum cables. The unit features advance & hold / retract & hold functionality with rapid advance and is covered by a 2-year limited warranty.

SPECIFICATIONS

Application: Aluminum & copper cables
Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking latch. 2.2 in. / 55 mm opening
Cutting Capacity: Up to 1500 MCM AL, up to 1000 MCM CU wire, AL overhead wire, up to 1000 MCM 25kV AL, underground wire
Cutting Force: 4.8 ton / 43 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 16.6 lb / 6.2 kg
Length: 22 in. / 560 mm
Width: 3.4 in. / 100 mm
Height: 13 in. / 320 mm
Head Rotation: 350°
Operation: Advance & hold / retract & hold operation. Two-stage hydraulic system increases cycle speed. Automatic release when full force of 4.8 tons / 43 kN is reached.


CCB22

BATTERY CUTTERS — MODEL CCB33


CCB33

With a massive 3.3 in. / 85 mm opening and 6.2 tons / 55 kN of force, the CCB33 is an excellent choice for cutting copper, aluminum, and telecommunication cables. Features advance & hold / retract & hold functionality with rapid advance. Tool is covered by a 2-year limited warranty.

SPECIFICATIONS

Application: Copper, aluminum, and telephone communication cables
Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking pin. 3.3 in. / 85 mm opening
Cutting Capacity: AL, CU, & telephone cables to 3.3 in. / 85 mm overall diameter
Cutting Force: 6.2 ton / 55 kN
Battery: 14.4V DC, 2.6 Ah, NiMH
Weight: 20 lb / 9 kg
Length: 22 in. / 560 mm
Width: 3.4 in. / 100 mm
Height: 13 in. / 340 mm
Head Rotation: 350°
Operation: Advance & hold / retract & hold operation. Two-stage hydraulic system increases cycle speed. Automatic release when full force of 6.2 tons / 55 kN is reached.

BATTERY CUTTING TOOLS

Model	Part No.	Charger Type	Cutting Force	Capacity
CCB16	CCB16001W	110V AC Wall Charger	10 ton / 88 kN	Up to 1578 MCM AL & CU, 1500 MCM ACSR, 0.7 in. / 18 mm diameter guy wire, 0.75 in. / 19 mm ground rods, 61,000 PSI maximum hardness
	CCB16001V	12V DC Vehicle Charger	10 ton / 88 kN	Up to 1578 MCM AL & CU, 1500 MCM ACSR, 0.7 in. / 18 mm diameter guy wire, 0.75 in. / 19 mm ground rods, 61,000 PSI maximum hardness
CCB22	CCB22001W	110V AC Wall Charger	4.8 ton / 43 kN	Up to 1500 MCM AL, up to 1000 MCM CU wire, AL overhead wire, up to 1000 MCM 25kV AL, underground wire
	CCB22001V	12V DC Vehicle Charger	4.8 ton / 43 kN	Up to 1500 MCM AL, up to 1000 MCM CU wire, AL overhead wire, up to 1000 MCM 25kV AL, underground wire
CCB33	CCB33001W	110V AC Wall Charger	6.2 ton / 55 kN	AL, CU, & telephone cables to 3.3 in. / 85 mm overall diameter
	CCB33001V	12V DC Vehicle Charger	6.2 ton / 55 kN	AL, CU, & telephone cables to 3.3 in. / 85 mm overall diameter

BATTERY CUTTING TOOL ACCESSORIES

Part No.	Description
66194	14.4 VDC, 2.6 Ah Battery, NiMH
66233	Battery Charger, 110 VAC (Wall Charger)
66234	Battery Charger, 12 VDC (Vehicle Charger)

Part No.	Description
66247	Blade, CCB16 (1 only, 2 required)
66235	Carry Strap - All CCB Models

HIGH-PRESSURE CUTTING HEADS

MODEL XCG25

XCG25

The XCG25 is a remote cutting head that requires a 10,000 psi /700 bar pump to achieve full cutting capacity. It can be operated from Stanley's GHA702 battery powered high pressure pump, Stanley's IP16 hydraulic intensifier (page 16), or other commercially available 10,000 psi pumps. The XCG25 has a 1" capacity and comes with ¼" NPT male high pressure coupler.

SPECIFICATIONS

Application: Cutting ground rod, guy wire, ACSR, copper, & aluminum

Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking latch. 1.0 in. / 25 mm opening

Cutting Capacity: 5/8" / 16 mm standard guy wire, 1/2" / 13 mm ground rod, up to 350 MCM CU, up to 556.5 MCM AL & ACSR

Cutting Force: 6.2 ton / 55 kN

Weight: 5.3 lb / 2.4 kg

Length: 8.5 in. / 215 mm

Width: 2.1 in. / 52 mm

Height: 3.5 in. / 90 mm

HIGH-PRESSURE CUTTING HEADS

MODEL XCG40

The XCG40 is a remote cutting head that requires a 10,000 psi /700 bar pump to achieve full cutting capacity. It can be operated from Stanley's GHA702 battery powered high pressure pump, Stanley's IP16 hydraulic intensifier (page 16), or other commercially available 10,000 psi pumps. The XCG40 has a 1.6 inch capacity and comes with ¼" NPT male high pressure coupler.

SPECIFICATIONS

Application: ACSR, aluminum, copper, EHS, guy wire & ground rods

Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking pin. 1.6 in. / 40 mm opening

Cutting Capacity: Up to 1578 MCM AL & CU, up to 1500 MCM ACSR, 0.7 in. / 18 mm diameter guy wire, 0.75 in. / 19 mm ground rods, 61,000 PSI maximum hardness

Cutting Force: 10 ton / 88 kN

Weight: 9.5 lb/ 4.3 kg

Length: 11.2 in. / 285 mm

Width: 3.4 in. / 85 mm

Height: 4.1 in. / 105 mm

XCG40

HIGH-PRESSURE CUTTING HEADS

MODEL XCG55

XCG55

The XCG55 is a remote cutting head that requires a 10,000 psi /700 bar pump to achieve full cutting capacity. It can be operated from Stanley's GHA702 battery powered high pressure pump, Stanley's IP16 hydraulic intensifier (page 16), or other commercially available 10,000 psi pumps. The XCG55 has a 2.2 inch capacity and comes with ¼" NPT male high pressure coupler.

SPECIFICATIONS

Application: Aluminum & copper cables

Head Type: Guillotine type cutter with quick opening and closing head and reinforced locking latch. 2.2 in. / 55 mm opening

Cutting Capacity: Up to 1500 MCM AL, up to 1000 MCM CU, AL overhead wire, up to 1000 MCM 25kV, underground wire

Cutting Force: 4.8 ton / 43 kN

Weight: 6.6 lb / 3.0 kg

Length: 11.8 in. / 300 mm

Width: 2.2 in. / 55 mm

Height: 4.3 in. / 110 mm

HIGH-PRESSURE PUMPS

PORTABLE HIGH-PRESSURE HYDRAULIC PUMP — MODEL GHA-702

GHA-702

Order model GHA-702

Equipped with a 24V rechargeable battery, the GHA-702 is a portable high-pressure hydraulic pump for use with a variety of remote crimping and cutting heads that require 10,000 psi. Includes remote control, 2 batteries, charger, and 6 foot non conductive high pressure hose with quick coupler.

SPECIFICATIONS

Application: Provides power to remote variety of crimping and cutting applications

Motor: 400 Watt motor with built-in overload protection
Oil Capacity: 0.2 gal / 0.75 L
Pressure: 10150 PSI / 700 bar
Battery: 24V DC, 3.3 Ah, NiMH
Weight: 19.4 lb / 8.8 kg
Length: 13.4 in. / 340 mm
Width: 7.1 in. / 180 mm
Height: 13.0 in. / 330 mm
Operation: Automatic shutoff when full operating pressure is achieved.

INTENSIFIER — MODEL IP16

SPECIFICATIONS

Application: The IP16 is a hydraulic powered intensifier that provides up to 10,000 psi and requires the use of the RV06 control valve for on/off operation. It can power a variety of crimping and cutting heads that require 10,000 psi
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
- Use with RV06 Rocker Valve
- High pressure couplers included

IP16

Order model IP16615D

ROCKER VALVE — MODEL RV06

RV06000

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

SPECIFICATIONS

Application: Used with IP16 (above) 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

ROCKER VALVES

Model	Part No.	Description
RV06	RV06000	Rocker Valve

DIGGER MODEL DR19

DR19

The DR19 is a compact digging spade for digging in materials such as heavy clay or light shale. The tool's "D" handle and tool bit holder are 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.

SPECIFICATIONS

Application: Digging and rod driving in heavy clay, light shale, hardpan, frozen ground or dry hard dirt.
Tool Bit Size: 7/8-in. Hex x 3-1/4 in. Shank Steel Bits
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 24 lbs / 10.9 kg
Length: 20 in. / 50.8 cm
Width: 3 in. / 8 cm
Connection: 3/8 in. flush face quick disconnect couplers

DIGGERS

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	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	2250 psi / 155 bar	1800 bpm	3-1/4 x 7/8 in. Shank

DIGGER ACCESSORIES

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

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.

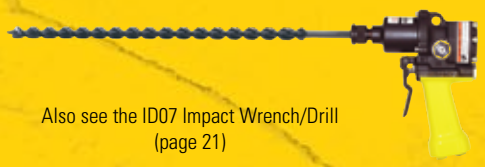
DRILL MODEL DL07

DL07

The DL07 is a variable speed drill with reverse capability. It features a 1/2 inch keyed chuck, dual position assist handle, dual-spool for open center or closed center operation, trigger guard, and is powered by an integral Hyrevz™ motor. A reverse-flow check valve prevents operation if tool is plumbed backwards. The DL07 is furnished with flush face quick disconnect couplers.

SPECIFICATIONS

Application: Drilling holes in wood, metal, masonry and wood.
Capacity: 1/2 in. Chuck
RPM: 350-1250
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 (page 21)

DRILLS

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
DL07	DL07550	6 lbs / 2.7 kg	3-10 gpm / 11-38 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	350-1250 rpm	1/2 in. / 12 mm Chuck	Dual-Spool

DR19

DL07

DRILLS & DRIVERS

SINKER DRILL — MODEL SK58

SK58

The SK58 is designed for drilling in rock and concrete up to 3inches/ 7.6 cm in diameter and 20 feet/6 m deep. The sinker drill uses air to clear holes of debris. It features a feathering trigger for easy starts, a direct drive rotation motor adjustable from 0 to 300 rpm, and is furnished with hose whips and flush faced quick disconnect couplers.

SPECIFICATIONS

Application: Heavy duty utility construction, blast hole drilling, leak detection for gas utilities and dowel drilling.
Capacity: 7/8 x 4-1/4 in. or 1 x 4-1/4 in. hex shank steel
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 67 lbs / 30 kg
Length: 26 in. / 66 cm
Width: 18 in. / 46 cm
Connection: 3/8 in. flush face quick disconnect couplers

SINKER DRILLS

Model	Part No.	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
SK58	SK58110	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	Air
	SK58130	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 ft Hole	7/8 in. x 4-1/4 in. Hex Shank	Air

SINKER DRILL ACCESSORIES

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

Part No.	Description
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 requires drill steel) - 1-1/2 in. dia. H thread

GROUND ROD DRIVER — MODEL GD50

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

SPECIFICATIONS

Application: Drives copper clad and galvanized ground rods
Capacity: 1/2 to 5/8 in. or 3/4 to 1 in. Ground Rod
Hyd. Flow: 5-9 gpm / 19-34 lpm
Weight: 52 lbs / 24 kg
Length: 25 in. / 65 cm
Width: 16 in. / 41 cm
Connection: 3/8 in. flush face quick disconnect couplers

GROUND ROD DRIVERS

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
GD50	GD50132RF	52 lbs / 24 kg	5-9 gpm / 19-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1/2 to 5/8 in. Rod	In-Line Valve/Couplers
	GD50133RF	52 lbs / 24 kg	5-9 gpm / 19-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	3/4 to 1 in. Rod	In-Line Valve/Couplers

HAMMER DRILL

MODEL HD08

The HD08 Hammer Drill utilizes percussion and rotation for drilling in hard material. 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.

SPECIFICATIONS

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

HAMMER DRILLS

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	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	2250 psi / 155 bar	1175 rpm @ 6 gpm	7/8 in. Dia.	SDS Plus Shk

HAMMER DRILL ACCESSORIES

Part No.	Description
16769	1/2 in. Geared Chuck
16770	Chuck Adapter
27807	Carbide bit 3/8 x 12 in. OAL
27814	Carbide bit 1/2 x 12 in. OAL

Part No.	Description
27826	Carbide bit 3/4 x 12 in. OAL
27827	Carbide bit 3/4 x 18 in. OAL
27832	Carbide bit 7/8 x 18 in. OAL

HD08

HD08 "D" handle

WORLDWIDE IMPACT

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

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

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

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

IMPACT DRILL/WRENCH

MODEL ID07

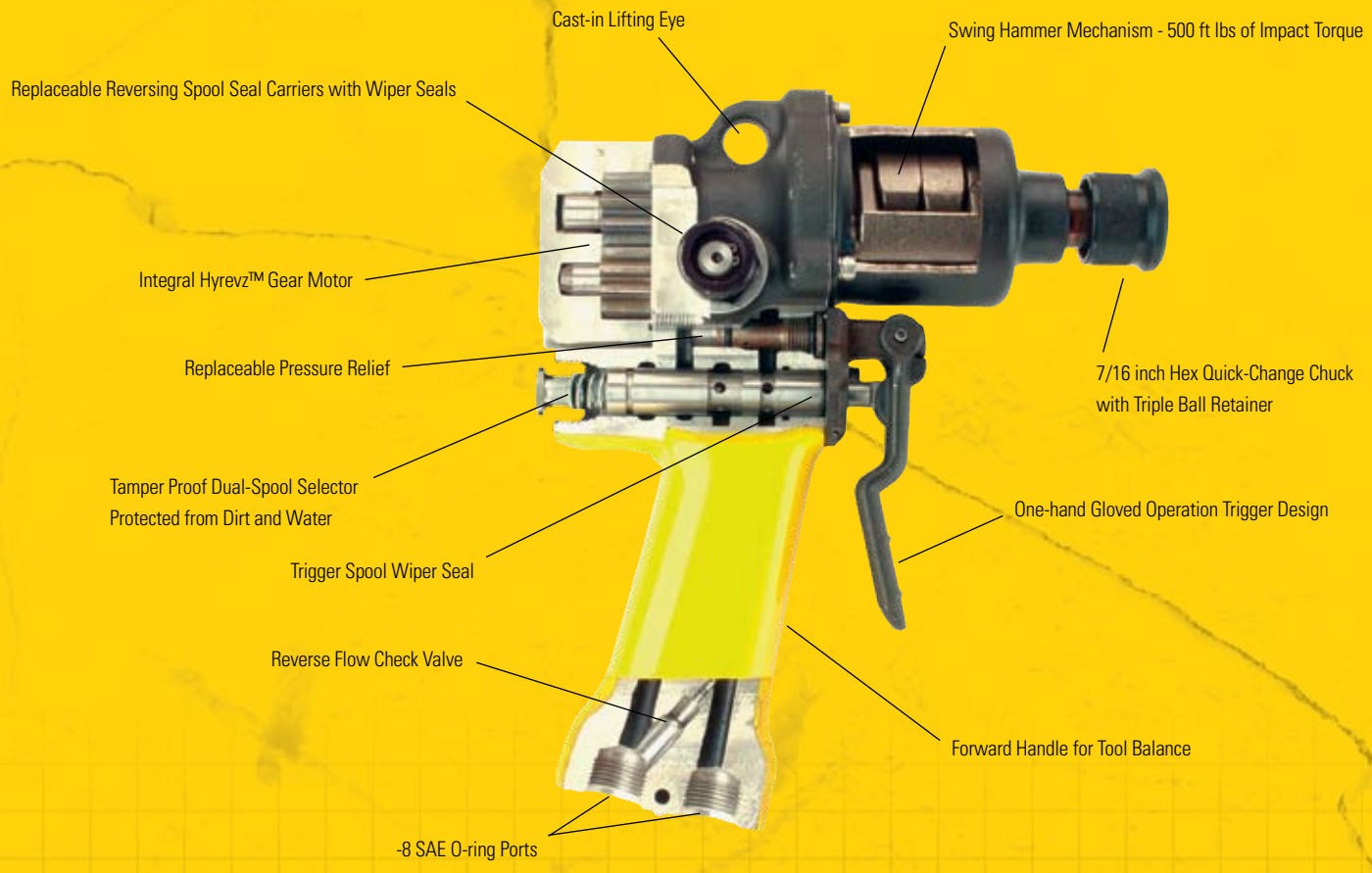
The ID07 is a high torque impact wrench used for tightening and loosening nuts and driving lag bolts. Because it is an impact drill/wrench, it is used for drilling in hard treated wood and utility poles without torque reaction to the operator.

SPECIFICATIONS

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

FEATURES

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



IMPACT DRILLS/WRENCHES

IMPACT DRILL & WRENCH

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Torque	Capacity	Misc.
ID07	ID07810	7.2 lbs / 3.3 kg	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	7/16 in. Quick Change	Standard
	ID07815	7.2 lbs / 3.3 kg	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	7/16 in. Quick Change	Trigger Guard

IMPACT DRILL & WRENCH ACCESSORIES

Part No.	Description
05079	Chuck Adapter, 1/2 in. sq. x 7/16 in. hex QC
05080	Adapter, 5/8 in. hex x 1/2 in. sq. drive
05109	Impact Socket, 9/16 in.
05110	Impact Socket, 5/8 in.
05111	Impact Socket; 11/16 in.
05112	Impact Socket, 3/4 in.
05113	Impact Socket, 13/16 in.
05114	Impact Socket, 7/8 in.
05115	Impact Socket, 15/16 in.
05116	Impact Socket, 1 in.
05117	Adapter, 7/16 in. hex male x 1/2 in. sq. drive
07192	Adapter, 1/2 in. sq. dr. to 5/8 QC
33155	Linemen's Socket, 13/16 in. and 15/16 in.
33156	Linemen's Socket, 1 in. and 1-1/8 in.
5/8 Hex Shank Pole Bits	
27845	9/16 x 8 x 22, 5/8 in. Hex Shank
27847	13/16 x 8 x 22, 5/8 in. Hex Shank

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

LIGHTER THAN AIR

Powering hydraulic tools doesn't require a large pull-behind power source like 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 biggest breakers to our smallest drills.

Our hydraulic power units use the latest in commercial engine technology from manufacturers such as Briggs & Stratton and Honda. 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 - Dozens of tools 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 - 149 to 330 lbs / 68 to 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.

POWER UNITS

POWER UNIT — MODEL GT09

Stanley's GT09 portable power unit provides 5 GPM/20 LPM of hydraulic power with pressure up to 2000 psi/138 bar. Its light weight and compact stainless-steel frame and fold-a-way handle simplify transportation and storage. The GT09 is powered by a commercial grade Honda GX270 engine with automatic throttle control and low engine oil protection. Model GT09H01 is CE certified.

GT09

SPECIFICATIONS

Application: Light duty hydraulic power supply for Type 1 hydraulic tools
Capacity: 5 gpm / 20 lpm
Pressure: 2000 psi / 138 bar
Weight: 149 lbs / 67.6 kg
Length: 26.25 in. / 66.7 cm
Width: 20.75 in. / 52.7 cm
Height: 21.25 in. / 54 cm
Engine: Honda GX270 4 stroke
Guaranteed Sound Power Level: 101 dBA
Heat Rejection Capacity: 2 HP
Connection: flush face quick disconnect couplers

FEATURES

- Compact stainless-steel tube frame with fold-away handle and lifting eye is light-weight and designed for portability.
- Powered by a reliable commercial-grade Honda GX270 engine with low engine oil protection.
- Automatic Power-on-Demand (POD) throttle control idles down the engine when tools are not in use.
- CE Certified and fully compliant with European noise regulations.
- Conforms to HTMA Type 1 requirements.
- Cooling system regulates hydraulic circuit temperature for maximum performance and reliability.
- Robust hydraulic pump is mounted directly to the engine, providing efficient energy transfer.

POWER UNIT — MODEL GT13

The GT13 is a medium duty hydraulic power unit that provides reliable hydraulic power wherever you need it, delivering 7 GPM/26 LPM and pressure up to 2000 PSI/140 bar. Its light weight and compact stainless-steel frame and fold-a-way handle simplify transportation and storage. The GT13 is powered by a commercial grade Honda GX390 engine with automatic throttle control and low engine oil protection, making it an excellent power source for use on back lots and easements where utility trucks may not be accessible.

GT13

SPECIFICATIONS

Application: Medium-duty hydraulic power supply for Type 2 hydraulic tools
Capacity: 7 gpm / 26 lpm
Pressure: 2150 psi / 148 bar
Weight: 162 lbs / 73.5 kg
Length: 26.25 in. / 66.7 cm
Width: 20.75 in. / 52.7 cm
Height: 21.25 in. / 54 cm
Engine: Honda GX390 4 stroke
Heat Rejection Capacity: 2 HP
Connection: flush face quick disconnect couplers

FEATURES

- Compact stainless-steel tube frame with fold-away handle and lifting eye is light-weight and designed for portability.
- Powered by a reliable commercial-grade Honda GX390 engine with low engine oil protection.
- Automatic Power-on-Demand (POD) throttle control idles down the engine when tools are not in use.
- Conforms to HTMA Type 2 requirements.
- Cooling system regulates hydraulic circuit temperature for maximum performance and reliability.
- Robust hydraulic pump is mounted directly to the engine, providing efficient energy transfer.

POWER UNIT MODEL GT18

GT18

The GT18 hydraulic power unit is engineered for continuous professional use and is optimized to deliver ideal flows and pressures to both Type 1 and Type 2 hydraulic tools. Its powerful 18 HP Briggs & Stratton engine and best-in-class cooling system deliver the power and heat rejection pros need to keep tools working uninterrupted all day in all types of conditions. The GT18 features a computerized all-electric throttle control system that idles-down the engine when tools aren't running, saving fuel and extending service life. Its feature-rich, dependable operation make the GT18 the workhorse of the industry.

SPECIFICATIONS

Application: Heavy-duty continuous use hydraulic power supply for both Type 1 & Type 2 tools.
Capacity: 5 or 8 gpm / 20 or 30 lpm
Pressure: 2000 psi / 140 bar
Weight: 330 lbs / 150 kg
Length: 35 in. / 90 cm
Width: 21.5 in. / 54.6 cm
Height: 29 in. / 73.7 cm
Engine: Briggs & Stratton 18 hp Vanguard
Connection: flush face quick disconnect couplers
Heat Rejection: Up to 5 hp

FEATURES

- 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
- Flush face quick disconnect couplers

POWER UNITS

Model	Part No.	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Auto Throttle
GT09	GT09H02	149 lbs / 67.6 kg	26.25 in. / 66.7 cm	20.75 in. / 52.7 cm	21.25 in. / 54 cm	Honda GX270	5 gpm / 20 lpm	2000 psi / 140 bar	yes
GT13	GT13H02	162 lbs / 73.5 kg	26.25 in. / 66.7 cm	20.75 in. / 52.7 cm	21.25 in. / 54 cm	Honda GX390	7 gpm / 26 lpm	2000 psi / 140 bar	yes
GT18	GT18B02	330 lbs / 150 kg	35 in. / 90 cm	23 in. / 59 cm	29 in. / 74 cm	Briggs	5 or 8 gpm / 20 or 30 lpm	2000 psi / 140 bar	yes

POWER UNIT ACCESSORIES

Part No.	Description
13360	GT18 Hose Basket Conversion Kit
33212	Weather Cover

Part No.	Description
64940	G18 Male Plug, 12 volt
64942	12V Receptacle Accessory

POWER UNITS

HYDRAVERTER MODEL HV18

HV18

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

SPECIFICATIONS

Application: Operates hydraulic tools using existing hydraulic equipment.
Capacity: 8 gpm / 30 lpm
Pressure: 2000 psi / 140 bar
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

HYDRAULIC CONVERTER

Model	Part No.	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Auto Throttle
HV18	HV18300	100 lbs / 45 kg	21 in. / 53 cm	19 in. / 48 cm	20 in. / 51 cm	n/a	8 gpm / 30 lpm (16-35 gpm Input)	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

HYDRAULIC CONVERTER ACCESSORIES

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

ALTERNATOR MODEL AL35

SPECIFICATIONS

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

ALTERNATOR

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Capacity
AL35	AL35095	70 lbs / 32 kg	19 in. / 48 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	3500W, 120/240V, 60 Hz

ALTERNATOR ACCESSORIES

Part No.	Description
13427	Mounting Frame

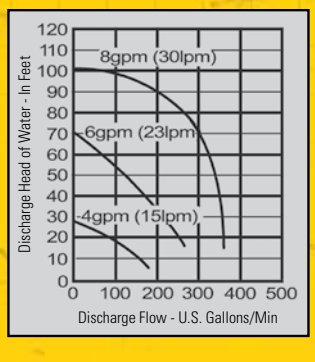
SUMP PUMP MODEL SM21

SM21

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

SPECIFICATIONS

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



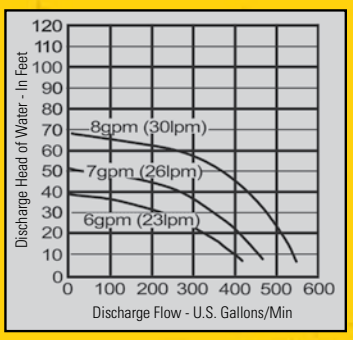
SUMP PUMP MODEL SM50

SM50

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

SPECIFICATIONS

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



SUBMERSIBLE PUMPS

Model	Part No.	Weight	Length	Width	Flow Range Working	Working Pressure	Full Relief Setting	Output	Discharge
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	2250 psi / 155 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	2250 psi / 155 bar	500 gpm / 1890 lpm	3 in. / 75 mm

SUBMERSIBLE PUMP ACCESSORIES

Part No.	Description
02183	Fire Hose, 25 in. x 2-1/2 in.
02317	Fire Nozzle - 1 in. output
05133	2-1/2 in. Thread Adaptor for Sump Pump to Fire Hose
05134	50 ft. Fire Hose, 2-1/2 in. dia.
05135	Spanner Wrench for Pin Lug Coupler

Part No.	Description
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

MAXIMUM CUTTING POWER

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

CHAIN SAW

MODEL CS05/CS06

SPECIFICATIONS

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
Overall Length: 27, 30, & 35 in. / 69, 76, & 89 cm
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
- Trigger lock
- Hand guard
- Dual spool for Open Center or Closed Center operation
- Low kickback bars and chains
- Inherently low-kickback hydraulic motor
- Automatic chain oiler
- Hyrevz™ motor

CHAIN SAW

MODEL CS25/CS28

SPECIFICATIONS

Application: Tree Trimming
Capacity: 12 & 15 in. / 30 & 38 cm Bars
Hyd. Flow: 4-6 gpm / 15-23 lpm for CS25, 7-9 gpm / 26-34 lpm for CS28
Weight: 8.4 & 9 lbs / 3.8 & 4 kg
Overall Length: 75 & 90 in. / 191 & 229 cm
Width: 4.375 in. / 11 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

CHAIN SAWS

Model	Part No.	Weight	Overall Length	Width	Flow Range	Working Pressure	Full Relief Setting	Cut Capacity	Misc.
CS05	CS05610	6.25 lbs / 2.8 kg	27 in. / 69 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS05620	6.25 lbs / 2.8 kg	30 in. / 76 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	15 in. / 38 cm	OC/CC
CS06	CS06610	6.25 lbs / 2.8 kg	27 in. / 69 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS06620	6.25 lbs / 2.8 kg	30 in. / 76 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	15 in. / 38 cm	OC/CC
	CS06630	6.25 lbs / 2.8 kg	35 in. / 89 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 in. / 51 cm	OC/CC
CS25	CS25811	9 lbs / 4 kg	90 in. / 229 cm	4.375 in. / 11 cm [1]	4-6 gpm / 15-23 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS25812	9 lbs / 4 kg	75 in. / 191 cm	4.375 in. / 11 cm [1]	4-6 gpm / 15-23 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
CS28	CS28811	9 lbs / 4 kg	90 in. / 229 cm	4.375 in. / 11 cm [1]	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS28812	8.4 lbs / 3.8 kg	75 in. / 191 cm	4.375 in. / 11 cm [1]	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC

[1] Measured at motor end

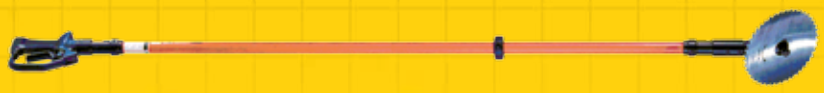
CHAIN SAW ACCESSORIES

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
CS25/28	05144	Chain/Bar Guard
	07616	Sprocket Spline Adapter
	07629	Rim Sprocket, .325P x 7 tooth

Model	Part No.	Description
ALL	08347	12 in. Saw Bar
	08348	Saw Chain for 12 in. bar
	11464	Scrench
	33289	Chain Saw File

CUTTING & TRIMMING

CIRCULAR SAW — MODEL CR27



SPECIFICATIONS

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

CIRCLE SAWS

Model	Part No.	Weight	Flow Range	Working Pressure	Full Relief Setting	Cutting Component (included)	Couplers
CR27	CR27891	9.6 lbs / 4.4 kg	5-7 gpm / 19-26 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	9 in. / 22.9 cm Saw Blade - 24 Tooth	No

CIRCLE SAW ACCESSORIES

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

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

PRUNER — MODEL PR41

SPECIFICATIONS

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

PRUNERS

Model	Part No.	Weight	Length	Flow Range	Working Pressure	Full Relief Setting	Cutting Component (included)	Couplers
PR41	PR41131 (o.c.)	11.5 lbs / 5.2 kg	84 in. / 213.4 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	2-1/4 in. / 5.7 cm Cut Knife	No
	PR41231 (c.c.)	11.5 lbs / 5.2 kg	84 in. / 213.4 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	2-1/4 in. / 5.7 cm Cut Knife	No

PRUNER ACCESSORIES

Model	Part No.	Description
PR41	58649	Knife

POLE TAMPER
MODEL TA54

SPECIFICATIONS

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

TAMPERS

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Blows/ Minute	Valve	Shoe
TA54	TA54103	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	2250 psi / 155 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	2250 psi / 155 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	2250 psi / 155 bar	1600 bpm	In Line	Kidney

TAMPER ACCESSORIES

Part No.	Description
00833	Kidney Shoe
00840	Round Shoe, 6 in. dia.

Part No.	Description
01070	Rectangular Shoe
38632	In-Line Valve Assembly, OC/CC

VENT FAN
MODEL VF80

SPECIFICATIONS

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.

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

VENT FAN

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity
VF80	VF8000	19 lbs / 8.6 kg	15 in. / 40 cm	19 in. / 49 cm	4-12 gpm / 15-45 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	1700 scfm / 802 lsec

VENT FAN ACCESSORIES

Part No.	Description
02397	Flexible Exhaust Hose

ACCESSORIES

HYDRAULIC HOSES

Part No.	Description
01412	Pigtail Hose Whip, 3/8 in. ID x 12 in., 3/8 in. male pipe, -6 SAE O-ring.
01652	Pigtail Hose Whip, 1/2 in. ID x 12 in., 3/8 male pipe, -8 SAE O-ring
05005	10 ft. certified non conductive, dual oil resistant 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

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

Part No.	Description
03288	3/8 Cap & Plug for all flush face sets
03971	3/8 Flush Face Set (3/8 NPT)

Part No.	Description
03974	3/8 Flush Face Set (1/2 NPT)
58718	3/8 Flush Faced Coupler Set, -8 SAE Male

PLUMBING

Part No.	Description
00936	Adapter, 1/2 SAE to 3/8 in. male pipe
04192	Hex Nipple, 1/2 in. male pipe

Part No.	Description
03044	Hex Nipple, 3/8 in. male pipe

TEST EQUIPMENT

Part No.	Description
02835	Accumulator Tester & Charger
04182	Flow and Pressure Tester

Part No.	Description
29085	Flow & Pressure Tester
31254	Accumulator Charging Kit (handheld tools only)

HYDRAULIC SYSTEM REQUIREMENTS

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

HYDRAULIC TOOL MANUFACTURERS' ASSOCIATION (HTMA) REQUIREMENTS

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

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

OPERATING PRESSURE:

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

RELIEF PRESSURE:

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

RETURN PRESSURE:

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

COOLING:

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

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

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

FILTRATION:

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

FLUID:

Hydraulic systems should use hydraulic fluid that has a viscosity of 130-225 SSU / 27-42 cst at l00° 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 the design of a hydraulic tool circuit, use the following as guidelines.

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 l00° 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 TYPES

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

- Certified non-conductive - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. Hose labeled certified non-conductive is the only hose authorized for use near electrical conductors.
- Wire-braided (conductive) - constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. This hose is conductive and must never be used near electrical conductors.
- Fabric-braided (not certified or labeled non-conductive) - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is not certified non-conductive and must never be used near electrical conductors.

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.

TOOL TO CIRCUIT HOSE RECOMMENDATIONS

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

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

SYSTEM SPECIFICATIONS

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 2250 psi / 155 bar. 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 250 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 25 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 with 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.

SYSTEM SPECIFICATIONS

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 psi. The maximum full-flow bypass pressure shall not be more than 2250 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 2250 psi / 155 bar. 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 250 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 25 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 with 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 psi. The maximum full-flow bypass pressure shall not be more than 2250 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.

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

HTMA RECOMMENDATIONS FOR A HYDRAULIC SYSTEM OPERATING TYPE II HYDRAULIC TOOLS:

- 8 gpm ± 10% / .8 gpm at 2000 psi measured at the tool inlet.
- 200 psi or less return pressure at 8.8 gpm, pressure measured at the tool outlet.
- Limit system temperature to 140° F on the hottest expected day. Choosing 100° F as the hottest expected day's temperature, the hydraulic system must maintain a 40 degree temperature difference, air to oil. For example, if the ambient air temperature is 100° F, then the oil temperature should not exceed 140° F.
- To simulate tool-generated heat during operation, HTMA recommends using 5 hp, minimum. A reading of 1100 psi minimum at 8 gpm at the flow and pressure tester will achieve the recommended 5 hp, minimum.

Select an open site where the air is relatively calm. Place one thermometer in the oil reservoir to measure the temperature of the circulating oil (surface mounted tank thermometers do not adequately measure the temperature of the bulk system oil). Hang the other thermometer in still air to measure the ambient air temperature.

Connect the flow and pressure tester to the tool hoses. Fully open the load valve on the tester.

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

LOW TEMPERATURE AND MAXIMUM VISCOSITY BACK PRESSURE TEST

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

Air: _____ ° F

Oil: _____ ° F

Flow rate: _____ gpm

Back pressure: _____ psi

HYDRAULIC SYSTEM'S CAPACITY TO DELIVER FLOW AGAINST 2000 PSI TEST

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

Flow rate: _____ gpm

Back pressure: _____ psi

Oil: _____ ° F

SYSTEM CAPACITY TO CONTROL TEMPERATURE TEST

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

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

Flow rate: _____ gpm

Pressure: _____ psi

Back pressure: _____ psi

Air: _____ ° F

Oil: _____ ° F

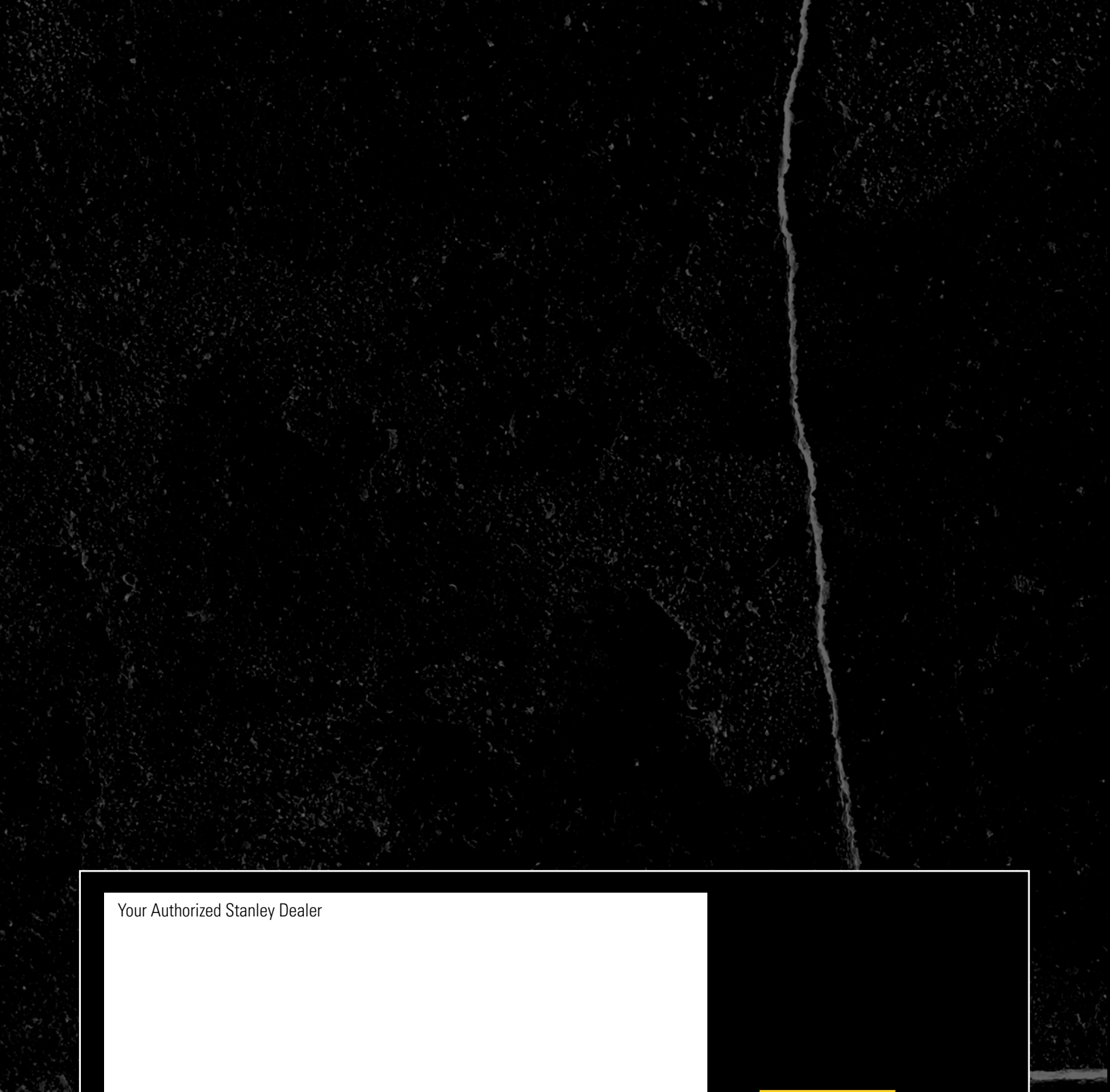
CALCULATE THE TOOL LOAD HP COOLING CAPACITY FOR AN EFFECTIVE 40 DEGREE TEMPERATURE DIFFERENCE, AIR TO OIL USING THE FOLLOWING FORMULA.

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

Example:

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

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



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