

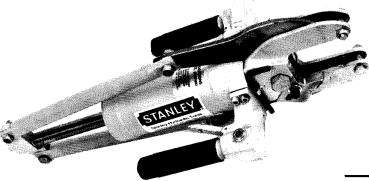
helps you do things right

**Stanley Hydraulic Tools**Division of The Stanley Works

3810 S.E. Naef Road Milwaukie, Oregon 97267 Phone: 503/659-5660 Telex: 360771

# PARTS LIST

**CC16** 



#### **SPECIFICATIONS**

 Capacity
 Adjustable to 1-1/4 in/3.2 cm

 Weight
 17 lbs/8 kg

 Length
 22 in/56 cm

 Width
 10 in/25 cm

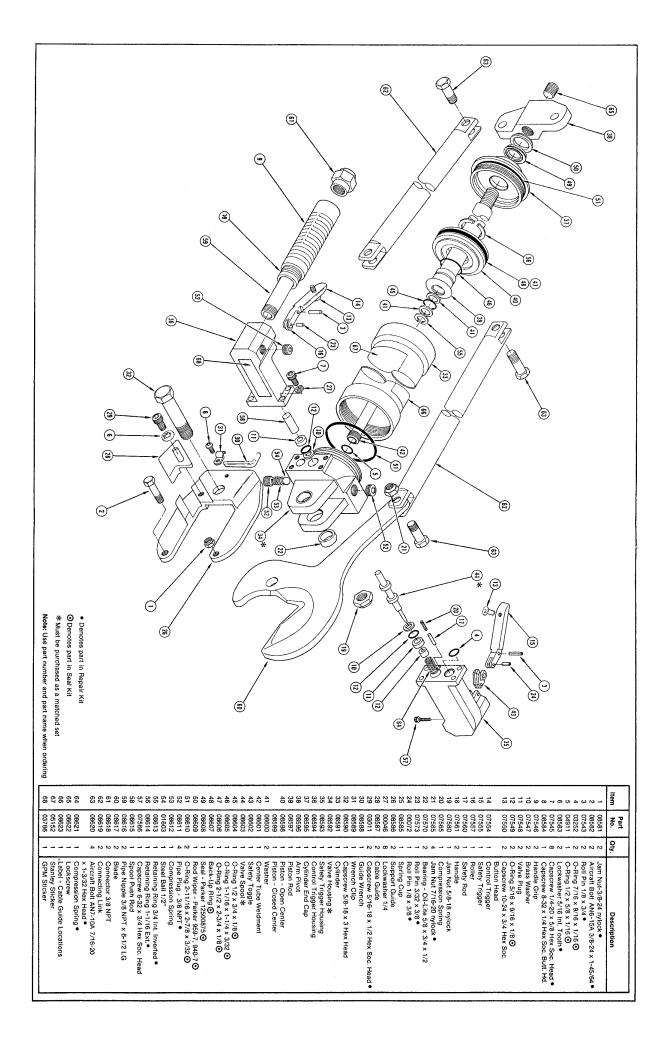
 Flow Range
 7-9 GPM/26-34 lpm

 Pressure
 2000 PSI/140 bar

 Porting
 3/8 NPT

**MODEL CC16** 

CABLE CUTTER



## **REPAIR AND SEAL KIT DATA**

Part No.	Qty.	Description
Repair Kit 108	173	
08581	1	Locknut
08582	1	Bolt
07543	2	Roll Pin
08583	1	Lockwasher
07545	2	Capscrew
07585	1 1	Locknut
07573	1 1	Roll Pin
00072	1 1	Roll Pin
03011	1	Capscrew
08611	1 1	Pipe Plug
08613	1 1	Retaining Ring
08614	1	Retaining Ring
08620	1 1	Bolt
08621	1 1	Spring

Part No.	Qty.	Description			
Seal Kit 10871					
03252	2	O-Ring			
04911	1	O-Ring			
07549	2	O-Ring			
08604	1	O-Ring			
08605	1	O-Ring			
08606	1	O-Ring			
08607	1	Back-up Ring			
08608	1	Seal			
08609	1	Rod Wiper			
08610	2	O-Ring			
	l				



3810 S.E. Naef Road Milwaukie, Oregon 97267 Phone: 503/659-5660

Telex: 360771

## **CC16**

**CABLE CUTTER** 

# Safety, Operation and Maintenance Manual



- o Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.
- o These safety precautions are given for your safety. Review them carefully before operating the tool and before performing maintenance or repairs.
- o Supervising personnel should develop additional precautions relating to the specific work area and local or company safety regulations.

#### GENERAL SAFETY PRECAUTIONS

- o The CC16 Cable Cutter will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read this manual and any stickers and tags attached to the cable cutter and before operation. Failure to do so could result in personal injury or equipment damage.
- o Operators must start in a work area without bystanders. Flying debris can cause serious injury.
- o Establish a training program for all operators to ensure safe operation.
- o The operator must be familiar with all prohibited work areas.
- o Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- o Always wear safety equipment such as safety goggles, ear and head protection, and safety shoes at all times.
- o Never use tools on or near energized lines. Know the location of buried or covered services before starting your work.
- o Never wear loose clothing that can get tangled in the working parts of the tool.
- o Do not overreach. Maintain proper footing and balance at all times.
- o Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the of the tool can cause serious injury.

#### GENERAL SAFETY PRECAUTIONS - CONT'D

- o Do not operate the tool at oil temperatures above 140 F/60 C. Operation at higher temperatures can cause higher than normal temperatures at the tool which can result in operator discomfort.
- o Never operate the tool without the plastic guard. Replace the guard immediately if it becomes damaged.

#### **OPERATION**

- o Always store the cutter in a clean dry place to avoid damage to the cutter and guard.
- Do not cut steel wire strands or steel supported cable as blade damage will result.
- o Never cut more than one cable at a time.
- o Keep the mating blade surfaces clean and lubricated to prevent rust and to provide reliable service during heavy use.
- o Many components of the cutter are made from aluminum for light weight. Do not drop or otherwise abuse the cutter.
- o The blade pivot bolt must be kept tight (30-50 lb. ft. torque) to prevent blade spreading.
- o Check that the blades are not chipped or damaged. Keep the blades sharp at all times.
- o Always keep tool markings, such as labels and warning stickers legible.
- o Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/175 bar. All hoses must have an oil resistant inner surface and an abrasion-resistant outer surface.
- o Tool repair should be performed by experienced personnel only.
- o Make sure all couplers are wiped clean before connection.
- o The hydraulic system control valve must be in the "OFF" position when coupling or uncoupling hydraulic tools. Failure to do so may result in accidental tool operation, damage to the quick couplers and excess hydraulic system heat.

## HYDRAULIC SYSTEM REQUIREMENTS

- o The hydraulic system should provide a flow of 7-9 gpm/26-34 lpm at an operating pressure of 2,000 psi/140 bar. Recommended relief valve settings are 2100-2250 psi/148-158 bar.
- o The system should have no more than 250 psi/17 bar backpressure measured at the tool end of the operating hoses. The system condition for measurement are at maximum fluid viscosity of 200 ssu (minimum operating temperatures).
- o The hydraulic system should have sufficient heat rejection capacity 'to limit the maximum oil temperature to 140 F/60 C degrees at the maximum expected ambient temperature.
- o The hydraulic system should have a minimum of 25 micron filtration. It is recommended that filter elements be sized for a flow of 30 gpm/114 lpm for cold temperature startup and maximum dirt holding capacity.
- o The hydraulic fluid used should have a viscosity between 100 and 200 ssu at the maximum and minimum expected operating temperatures. Hydraulic fluids of petroleum base with antiwear properties and viscosity indexes over 140 will meet recommended requirements over a wide range of operating temperatures.
- o The recommended hose size is .500 in/12 mm i.d. up to 50 ft/15 m long and .625 in/16 mm i.d. minimum up to 100 ft/30 m long.

OPERATING INSTRUCTIONS

#### IMPORTANT

Safe use of the tool depends on the operator. Careless use can result in serious personal injury. Caution must be used when operating near bystanders. If tool jams or operates incorrectly, turn "OFF" hydraulic power source and disconnect the hoses before attempting corrective action. When blades are jammed in a closed position they will open automatically when the jam is removed and the hydraulics reactivated. Never operate cutter with a missing or damaged guard.

#### CONNECTING HOSES

Wipe all couplers with a clean lint-free cloth before making connections.

#### CONNECTING HOSES - CONT'D

- 2) Connect the pressure hose to the handle fitting (3/8 NPTF) marked "IN". If the tool is connected incorrectly an internal reverse flow check prevents reverse operation. It is good practice to connect to return hoses first and disconnect them last to minimize or avoid trapped pressure within the tool.
- 3) If hose couplers are used, observe the arrow on the coupler to ensure that the flow is in the proper direction. The female coupler on the tool hose is the inlet (pressure) coupler.
- 4) Move the hydraulic circuit control to the "ON" position to operate.

NOTE: If uncoupled hoses are left in the sun, pressure increase inside the hose may make them difficult to connect. Connect the free ends of the operating hoses together.

#### TOOL OPERATION

- 1) Observe all safety precautions.
- 2) The cutter features a mandatory two-hand activation system. The inlet side trigger is a safety trigger and the return side trigger is the control trigger and activates the tool. Depress the release trigger first then the control trigger to operate the tool. When the control trigger is depressed, the blades will close. When released the blades will open.
- 3) Make cuts perpendicular to the cable axis; this prevents blade bending and breakage. The adjustable guides on each side of the blades prevent the cable from twisting out of alignment. The guides are stamped with numbers one through five. Use the cable guide location sticker to determine the setting for various cable diameters. A 1/4 inch allen wrench is provided for adjusting the socket head capscrews retaining the cable guides. Adjust both sides until the cable is at a right angle to the cutting plane. Cable should be in contact with both surfaces on each guide before the cut is made. Be sure the cable is forced into the blades as far as it will go before cutting.
- 4) Cut only one cable at a time with a diameter no more than 1.8 in. The cutter is not designed to cut groups of cable. Do not cut cable at the point of the blades. There is no cutting edge at the point and blade spreading or bending will result.

#### COLD WEATHER OPERATION

If the cutter is to used during cold weather (32 F/0 C degrees or lower), preheat the hydraulic oil at low engine speed. When using the normally recommended hydraulic oils, oil temperature should be at or above 50 F/10 C degrees before use.

Damage to the hydraulic system or cutter may result from use with oil that is too viscous or thick.

Since steel becomes brittle in extremely cold weather, the cutter should be kept warm before and during use in severe cold weather conditions. Failure to do so could lead to rapid blade failure.

SERVICE INSTRUCTIONS

#### PRIOR TO DISASSEMBLY

Familiarize yourself with the parts breakdown. Obtain a seal kit so all seals removed or exposed during repairs can be replaced.

#### PRIOR TO ASSEMBLY

Clean all internal surfaces and apply clean clean petroleum grease to all seals. Use pipe thread sealing compound or teflon tape on all pipe threaded connections. If desired, use a light to medium strength thread locking compound to prevent fastener loosening.

#### GENERAL MAINTENANCE NOTES

Many components of the cutter are made from aluminum for light weight. Do not drop or otherwise abuse the cutter.

#### Blades:

Keep the blade surfaces clean and lubricated to prevent rust and provide reliable service during heavy use. The blade pivot bolt must be tight (30-50 lb. ft. torque) to prevent blade spreading. Check that blades are not chipped or damaged. Keep the blades sharp at all times.

#### GENERAL MAINTENANCE NOTES - CONT'D

#### Cylinder:

Use a strap or chain wrench to avoid bending or distorting the cylinder tube during disassembly/assembly. The inside diameter must be free of nicks, scratches or other damage.

The cylinder may be honed so long as the total difference in outside diameter of the piston and the cylinder i.d. does not exceed .010 inch. The internal o-ring surfaces at the ends of the cylinder should also be free of nicks or scratches with a slight lead-in chamfer to prevent nicking or tearing the o-rings

#### Seals:

The seal grooves must be free of scratches or nicks to prevent internal leakage.

#### Piston and Rod Weldment:

The steel rings at either end surface of the piston (open center tools only) should move freely back and forth and must seat squarely on the piston faces. Particles caught between the ring and piston faces will create internal leakage and loss of cutting power.

The piston rod must be free of nicks and scratches to prevent leakage through the end cap seal. The piston, rod, threaded end and piston rings are welded components and cannot be replaced separately. The piston rod is hard chrome plated to prevent corrosion and lengthen service life.

#### Valve and Triggers:

Proper spool position is achieved when the spool push rod (activated by the control trigger) becomes flush with the end of the trigger housing when the trigger is squeezed against the handle grip. The trigger housing must be separated from the valve housing by removing four socket head capscrews to allow the end of the rod and housing to be seen. Adjust the socket head capscrew in the trigger until the position is correct.

If the spool push rod protrudes beyond the end surface of the trigger housing, the brass washer underneath the o-ring in the valve spool bore may bend and cause it to bind the spool. Should the spool or valve bore become damaged, they must be replaced as a matched set, honed and lap fitted at the factory.

The 5/16 inch diameter center tube is pressed into the valve housing and swaged to prevent leakage. If the center tube should become loose, the parts must be returned to the factory for proper repair.

#### GENERAL MAINTENANCE NOTES - CONT'D

#### Safety Trigger:

The notch in the toggle mechanism attached to the safety trigger must move into alignment with the stem of the valve spool when the safety trigger is squeezed. Adjustment can be made with the socket head capscrew in the safety trigger.

#### TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem. When diagnosing operation of the cutter, always check that the power source us supplying the correct hydraulic flow and pressure. Use a flow meter known to be accurate and check the flow at 80 F/27 C degrees.

PROBLEM	CAUSE	REMEDY	
Tool will no operate	Power source fault	Check for proper flow and pressure	
	Hoses connected in reverse	See "Connecting Hoses" in this Manual	
	Couplers or hoses blocked	Remove restriction	
Excessive backpressure	Fluid flow too high	9 gpm maximum	
	Couplers or hoses blocked	Remove restriction	
	Pistons and rings not moving freely	Repair/replace	
	Blade pivot bolt too tight	Torque to 30-50 lb	
	Fluid viscosity too high	Use 100-200 ssu @operating temp	

### TROUBLESHOOTING - CONT'D

PROBLEM	CAUSE	REMEDY
Loss of cutting power	System relief set too low	Should be set to at least 1500 psi
	Low system flow	Use at least 7
	Faulty piston seals	Replace
	Piston end rings not seating properly	Repair/replace
	Valve spool not correctly positioned	Adjust control trigger
	Center cylinder tube loose or faulty o- ring	Repair/replace
Ragged cut	Blade pivot bolt tool loose	Tighten to 30-50 1b ft
	Blades nicked or worn	Sharpen
	Blade overlap is insufficient	Adjust connectin arm pivot to completely into the piston rod oreplace blades

Hand held tools and their parts are warranted against defects in materials and workmanship for a period of 12 months from the date of purchase. Exceptions are cutting parts, steels and other parts not manufactured by Stanley (such as impact mechanisms, alternators, regulators and hoses) and parts subject to normal wear and tear (such as o-rings, saw blades and other parts that become worn through normal use of the tool).

The Warranty Registration Card packed with the tool must be filled out and returned to Stanley upon receipt of the tool.

Stanley reserves the right to replace or repair only those parts which under our examination prove to have been defective at the time of purchase.

Shipping charges are prepaid by the customer unless otherwise authorized by Stanley.

The warranty is void if maximum flow and pressure ratings are exceeded.

There is no other warranty expressed or implied.