

CT15 HYDRAULIC CRIMPING TOOL



USER MANUAL Safety, Operation and Maintenance



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IMPORTANT

To fill out a product warranty validation form, and for information on your warranty, visit www.stanleyinfrastructure.com and select the Company tab > Warranty.

Note: The warranty validation record must be submitted to validate the warranty.

SERVICING: This manual contains safety, operation and routine maintenance instructions. STANLEY Infrastructure recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

AWARNING

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest certified dealer, call STANLEY Infrastructure at (503) 659-5660 and ask for a Customer Service Representative.



SAFETY SYMBOLS

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This safety alert and signal word indicates an imminently hazardous situation which, if not avoided, <u>will</u> result in <u>death or serious injury</u>.

This safety alert and signal word indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious injury</u>.

This safety alert and signal word indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious injury</u>.

This signal word indicates a potentially hazardous situation which, if not avoided, <u>may</u> result in <u>property damage</u>.

This signal word indicates a situation which, if not avoided, <u>will</u> result in <u>damage</u> to the equipment.

This signal word indicates a situation which, if not avoided, <u>may</u> result in <u>damage</u> to the equipment.

STANLEY

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY PRECAUTIONS

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.

These precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. Place the added precautions in the space provided in this manual.

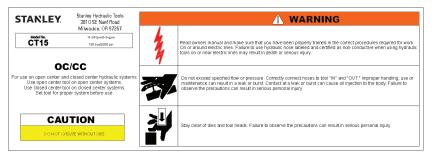
The CT15 Hydraulic Crimping Tool will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hose before operation. Failure to do so could result in personal injury or equipment damage.



- The operator must start in a work area without bystanders. Flying debris can cause serious injury.
- Make sure all critical tool markings, such as labels and warning decals, are securely in place and legible. Replace any that are damaged or missing.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor. Establish a training program for all operators to ensure safe operation.
- Always wear personal protection equipment (PPE) such as goggles, ear and head protection, and safety shoes at all times when operating the tool. Use gloves and aprons when necessary.
- Never wear loose clothing or unrestrained long hair that can become entangled in the working parts of the tool.
- Keep all parts of your body away from the tool and maintain proper footing and balance at all times.
- Do not rely exclusively on the safety devices built into the tool.
- Always be well-rested and mentally alert before operating the tool.
- The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.

- Know the location of buried or covered electrical services before starting work.
- Keep your work area clean and clear of tripping hazards. Oily surfaces and hoses lying around can be hazardous.
- Always operate the tool within it's rated capacity.
- Do not use the tool for applications for which it was not designed.
- Do not inspect, clean or replace any parts if the hydraulic power source is connected. Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Always connect hoses to the tool hose couplers before energizing the hydraulic power source. Be sure all hose connections are tight and are in good condition.
- Always replace hoses, couplings, and other parts with replacement parts recommended by STANLEY. Refer to the parts list at the end of this manual for part numbers.
- 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.
- Do not operate a damaged, improperly adjusted or incompletely assembled tool. Do not carry the tool by the hoses.
- Keep the handles dry, clean and free of oil.
- Ensure adequate lighting for the area where the tool is being used.
- Use proper lifting techniques when handling the tool. Do not overreach. Maintain secure footing and balance at all times.
- When using tools near energized transmission lines, be sure to use only hoses labeled and certified nonconductive.
- Turn off the power unit or move the hydraulic control valve to neutral before setting the tool down.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

TOOL STICKERS & TAGS



DO NOT OPERATE WITHOUT DIES.

DANGER

D. DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE (INKED, TORN OR DAMAGED HOSE. MAKE SURE HYDRAULC HOSES ARE PROPERLY CON-NECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CON-NECTED TO TOOL 'IN' PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL 'OUT' PORT. TOOL 'IN' PORT. SYSTEM RETURN HOSE EVENTONE HONG MAY CAUSE REVERSE PERSONAL INJURY.

PERSONAL INJURY. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC TUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.

WEAR HEARING, EYE, FOOT, HAND AND HEAD PRO-TECTION.

TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS

TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY

STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY

TOOL OPERATOR.

SEE OTHER SIDE

3.

5.

6.

07961 Warning Decal

76653

CT15 1650 PSI Combined Sticker

NOTE:

THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE LEGIBLE AT ALL TIMES.

REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL STANLEY DISTRIBUTOR.

The safety tag (P/N 15875) at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.

DANGER

- 1. FAILURE TO USE HYDRAULIC HOSE LABELED AND CER-TIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY. BEFORE USING HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE ON OR NEAR ELECTRICILIES BE SURE THE
- CONDUCTIVE ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS MAINTAINED AS NON-CONDUCTIVE. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CUR-RENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.
- A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJEC-TION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
- A DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST. B. DO NOT EXCEED RATED WORKING PRESSURE OF
- BO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL, EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
 CHECK TOOL HOSE COUPLERS AND CONNECTORS
- C. CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. DO NOT FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR. SEE OTHER SIDE

SAFETY TAG P/N 15875 (Shown smaller then actual size)



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 nonconductive 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.

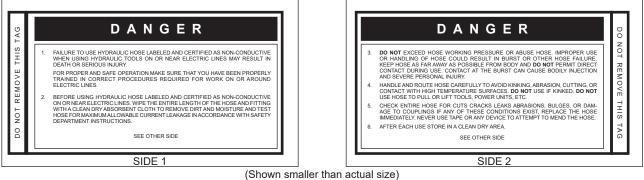
Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is **not certified non-conductive** and must never be used near electrical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

HOSE SAFETY TAGS

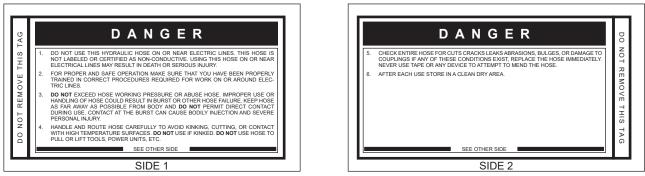
To help ensure your safety, the following DANGER tags are attached to all hose purchased from STANLEY. DO NOT REMOVE THESE TAGS.

If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your STANLEY Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE



THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.



(Shown smaller than actual size)

r USE Min. Working Pressure	A (Press/Return) PSI BAR	Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks	Both 2250 155	Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS	Both 2500 175	Both 2500 175	Both 2500 175	Both 2500 175	Pressure 2500 175	Return 2500 175	Both 2500 175	Pressure 2500 175	Return 2500 175	Pressure 2500 175	4 Return 2500 175	Pressure 2500 175	Return 2500 175	Pressure 2500 175	4 Return 2500 175
Inside Diameter	INCH MM	Hose - Fiber Braid	3/8 10	Braid -DO NOT US	3/8 10	1/2 13	1/2 13	5/8 16	5/8 16	3/4 19	5/8 16	5/8 16	3/4 19	3/4 19	1 25.4	5/8 16	3/4 19	3/4 19	1 25.4
Hose Lengths	METERS	on-Conductive H	up to 3	Braid or Fiber I	up to 7.5	7.5-30	up to 15	15-30		08-00	up to 15	СС СС СС	02-01		00-00	0 	np to 8	c c	Q-30
Hose L	FEET	Certified No	up to 10	ve Hose - Wire	up to 25	26-100	up to 50	51-100		000-001	up to 50	100	001-10		002-001	10.14	c7 01 dn	901.90	001-07
Oil Flow	LPM		15-34	Conducti	15-23	15-23	19-40	19-40		18-40	38-49	07 00	00-49	07 00	00-49	00 01	49-00	10.60	49-00
OilF	GPM		4-9		4-6	4-6	5-10.5	5-10.5	107	0.01-0	10-13		<u>-0</u>		<u>-0</u>		13-10		05
Tool to Hydraulic Circuit Hose	eed arious These Th																		

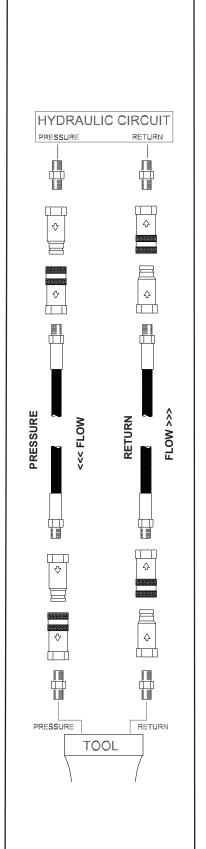


Figure 1. Typical Hose Connections

HOSE RECOMMENDATIONS

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HTMA / EHTMA REQUIREMENTS

HTMA / EHTMA REQUIREMENTS

		TOOL	TYPE	
HTMA HYDRAULIC SYSTEM REQUIREMENTS	ΤΥΡΕ Ι	TYPE II	TYPE RR	TYPE III
Flow range	4-6 GPM	7-9 GPM	9-10.5 GPM	11-13 GPM
	(15-23 LPM)	(26-34 LPM)	(34-40 LPM)	(42-49 LPM)
Nominal operating pressure	1500 psi	1500 psi	1500 psi	1500 psi
(At the power supply outlet)	(103 bar)	(103 bar)	(103 bar)	(103 bar)
System relief valve setting	2100-2250 psi	2100-2250 psi	2200-2300 psi	2100-2250 psi
(At the power supply outlet)	(145-155 bar)	(145-155 bar)	(152-159 bar)	(145-155 bar)
Maximum back pressure	250 psi	250 psi	250 psi	250 psi
(At tool end of the return hose)	(17 bar)	(17 bar)	(17 bar)	(17 bar)
Measured at a max fluid viscosity of:	400 ssu*	400 ssu*	400 ssu*	400 ssu*
(At minimum operating temperature)	(82 centistokes)	(82 centistokes)	(82 centistokes)	(82 centistokes)
Temperature: Sufficient heat rejection capacity to limit maximum fluid temperature to: (At maximum expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Minimum cooling capacity at a temperature difference of between ambient and fluid temps	3 hp	5 hp	6 hp	7 hp
	(2.24 kW)	(3.73 kW)	(5.22 kW)	(4.47 kW)
	40° F	40° F	40° F	40° F
	(22° C)	(22° C)	(22° C)	(22° C)
Note: Do not operate the tool at oil temperatures above 140° discomfort at the tool.	° F (60° C). Operat	ion at higher tempe	eratures can cause	operator
Filter minimum full-flow filtration	25 microns	25 microns	25 microns	25 microns
Sized for flow of at least:	30 GPM	30 GPM	30 GPM	30 GPM
(For cold temp startup and maximum dirt-holding capacity)	(114 LPM)	(114 LPM)	(114 LPM)	(114 LPM)
Hydraulic fluid, petroleum based (premium grade, anti-	100-400 ssu	100-400 ssu	100-400 ssu	100-400 ssu
wear, non-conductive) Viscosity (at minimum and maximum	(20-82	(20-82	(20-82	(20-82
operating temps)	centistokes)	centistokes)	centistokes)	centistokes)
Note: When choosing hydraulic fluid, the expected oil tempe suitable temperature viscosity characteristics. Hydraulic fluid range of operating temperatures.				

*SSU = Saybolt Seconds Universal

		C	LASSIFICATIO	N	
EHTMA HYDRAULIC SYSTEM REQUIREMENTS	B ISLpm at 138bar EHMA CATEGORY	20Lpm at 138bar EHTMA CATEGORY	Solam at 138ber EHTMA CATEGORY	E folgen et 138ber EHTMA CATEGORY	Solem at 138bar EHMA CATEGORY
Flow range	3.5-4.3 GPM (13.5-16.5 LPM)	4.7-5.8 GPM (18-22 LPM)	7.1-8.7 GPM (27-33 LPM)	9.5-11.6 GPM (36-44 LPM)	11.8-14.5 GPM (45-55 LPM)
Nominal operating pressure (At the power supply outlet)	1870 psi (129 bar)	1500 psi (103 bar)	1500 psi (103 bar)	1500 psi (103 bar)	1500 psi (103 bar)
System relief valve setting (At the power supply outlet)	2495 psi (172 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)

Note: These are general hydraulic system requirements. See tool specification page for tool specific requirements.



OPERATION

PREPARATION

Careful inspection of the tool and hydraulic system before startup is important for safe, reliable operation of the tool.

The following items should be checked daily, at the start and the end of each work shift.

- 1. Make sure the proper dies are securely in place. Operating the tool without dies can deform the crimping heads. Refer to "Die Installation" on page 10.
- 2. Connect hoses. Wipe all hose couplers with a clean, lint-free cloth before making connections. Dirty couplers can contaminate the hydraulic lines and prevent a good seal at the connection.
- 3. Check all fasteners for tightness.
- 4. Check the equipment for oil leaks. If leaks are observed, do not use the tool; have the equipment serviced before use.
- 5. Check the tool and hydraulic system for proper operation and performance.
- 6. If the equipment does not appear to operate properly, have it serviced before use.
- 7. Periodically verify the crimping force of the tool. Refer to "Die Load Verification" on page 11.

SETUP AND TEST

Never operate the tool without dies. Operating without dies can deform the crimping head (retainer die yoke or C-frame).

If this happens, the dies cannot be installed and the crimping head must be replaced.

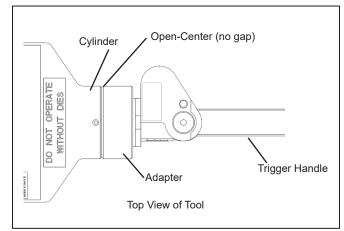
Never install the dies while the hydraulic hoses are connected to the tool.

Verify the crimping force before operating the tool.

OPEN CENTER/CLOSED CENTER SETUP

The CT15 Hydraulic Crimping Tool can be configured for either open-center (OC) or closed-center (CC) operation. The current setting is easily determined by looking at the gap between the adapter and the cylinder:

TO CHANGE THE CURRENT SETTING:





- 1. Remove the hydraulic hose coupling from the return port on the tool, if one is installed. When making the change from CC to OC, hydraulic fluid may be trapped in the tool, preventing complete movement of the adapter. Remove the return coupling to allow the hydraulic fluid to escape.
- 2. Loosen the 2 setscrews on the cylinder.
- 3. Turn the adapter until it stops:
 - Counter clockwise (CCW) to change to closed center (creates gap)
 - Clockwise (CW) to change to open center (closes gap)
- 4. Tighten the two setscrews.

DIE INSTALLATION

Each crimping head has two die holders: one stationary and one moved by hydraulic flow when the trigger is squeezed. Tooling manufacturers have different names for their corresponding parts. For simplicity, the generic term "die holder" will be used in the following instructions.

To install dies, follow the instructions below.

- 1. If the hydraulic hoses are connected:
 - a. Turn the hydraulic system control valve OFF.
 - b. Disconnect first the hydraulic input (supply) hose, then the output (return) hose.
- 2. Clean the surfaces of the die holder to remove any dirt or grease.
- 3. Select the dies for the task:
 - a. If the die load *has not* been verified, select blank dies and verify die load.
 - b. If the die load *has* been verified, select a set of dies to match the sleeve or connector to be



OPERATION

crimped.

DIE LOAD VERIFICATION

With blank (test) dies installed, use a die load tester to verify the crimping force in the tool before operating a new crimping tool or placing the tool in service. Also, periodically during normal use

- 1. Make sure blank (test) dies are installed in the die holder. If not, follow "Die Installation" on page 10.
- Connect the tool to an appropriate hydraulic power source. Follow hydraulic hose connection safety guidelines and instructions in this section. If possible, use the hydraulic power source you plan to use for crimping.
- 3. Place the die load tester between the blank (test) dies.
- 4. Actuate the tool and read the value shown on the load tester indicator. The force should be 15 tons (13,600 kg), depending on the pressure from the hydraulic power source.
- 5. If the indicated value is low and the system pressure relief valve setting is greater than 1650 psi (114 bar), adjust the relief valve on the CT to get the correct die load.

If the indicated value is high, adjust the relief valve on the CT to get the correct die load.

- 6. When the value is within the acceptable range, turn the hydraulic system control valve OFF and disconnect the hoses from the tool.
- 7. Follow "Die Installation" on page 10 to remove the blank dies and install the proper crimping dies.

OC/CC SETTING

Check the open-center/closed-center (OC/CC) setting on the tool. The current setting is easily determined by looking at the gap between the adapter and the cylinder.

- Open Center: No gap
- Closed Center: Approximately 1/4-inch (6.4-mm) gap

If the setting is not correct for your hydraulic system, follow "Open center/closed center setup" on page 10, to make the change.

DIE CHECK

Make sure the dies installed in the tool match the sleeve or connector to be crimped. If not, follow the instructions in t"Die Installation" on page 10.

CHECK POWER SOURCE

Using a calibrated flow meter and pressure gauge, check the hydraulic power source at the tool's input port. Make sure the system maintains an operating flow in the

range of 3-9 GPM/11-34 LPM within a pressure range of 1650-2000 psi /114-140 bar.

The hydraulic fluid temperature should be at least $80^{\circ}F/27$ °C for this test.

CONNECT HOSES

- 1. Wipe all hose couplers with a clean, lint-free cloth before making connections.
- 2. Connect hoses from the hydraulic power source to the tool fittings or quick disconnects. Connect the return hose first and disconnect it last to minimize or eliminate trapped pressure within the wrench.
- 3. Observe the flow indicators stamped on the main body assembly and the hose couplers to ensure that the flow is in the proper directions. The female couple on the tools "IN" port is the inlet (pressure) coupler.

Note: If the uncoupled hoses are left in the sun, pressure increase within the hoses can make them difficult to connect. Whenever possible, connect the free ends of the hoses together.

OPERATION

Observe all safety precautions when operating the tool. Read Safety and Hydraulic System Requirements, before operating the tool for the first time.

CONDUCTOR PREPARATION

- 1. If the conductor is insulated, remove the insulation from the end of the conductor.
 - a. Use an insulation stripping tool. If a stripping tool is not available, carefully shave the insulation from the cable.
 - b. Be sure not to nick or cut the strands of the conductor.
- 2. Remove any oxide or foreign matter from the exposed conductor. A bright, shiny surface is required for a good connection. Do not wire-brush tin-plated copper conductors or tinned connectors.

STARTUP

1. Move the hydraulic system control valve to the ON position.

OPERATION

AWARNING

The crimping force between the dies in the tool head can cause severe personal injury. Keep hands away from the die area when operating the tool.

- 2. Remove any trapped air from the tool by squeezing the trigger 4 or 5 times to advance and retract the piston to nearly full stroke.
- 3. Position the tool to make the crimp.

IMPORTANT

Failure to center the connector between the dies will damage the dies and/or die holders.

- 4. Hook the stationary die on the connector being crimped to ensure the connector is centered between the dies.
- 5. Squeeze the trigger to advance the piston and crimp the connector.
- 6. Release the trigger to retract the piston.
- 7. Slide the tool into position for the next crimp. Some sleeves and connectors have special crimping requirements. Refer to the fitting manufacturer's requirements.
- 8. Remove the tool by lifting it free of the connector.

SHUTDOWN

- 1. Move the hydraulic system control valve to the OFF position.
- 2. Disconnect the hydraulic hoses from the tool: first the input (supply) hose, then the output (return) hose.
- 3. Insert plugs in the hose ends, couplers or tool ports, as applicable.
- 4. Wipe the tool thoroughly with a clean dry cloth.
- 5. Clean any foreign matter or joint compound from the die holder surfaces.

COLD WEATHER OPERATION

IMPORTANT

Use an oil with the recommended specification from the HTMA Requirement table. Using oil that is too viscous (thick) can damage the hydraulic system.

If the tools is to be used during cold weather, preheat the hydraulic fluid at low engine speed. When using the normally recommended fluids, fluid temperature should be at or above 50 $^{\circ}$ F/10 $^{\circ}$ C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or compression tool can result from use with fluid that is too viscous or too thick.

STORAGE

Replace any damaged or missing safety labels and tags before storing the tool. Clean, dry and lubricate moving parts before storage. Store in a clean, dry place.

TOOL PROTECTION & CARE

NOTICE

In addition to the safety precautions found in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the "IN" port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by STANLEY. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.

- Do not exceed the rated flow. Rapid failure of the internal seals may result. Refer to "SPECIFICATIONS" on page 15 for correct flow rate.
- Always keep critical tool markings, such as warning stickers and tags, legible.
- Do not force a small tool to do the job of a larger tool.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

When diagnosing faults in operation of the tool, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the tool as listed in the table. Use a flow meter known to be accurate. Check the flow with the hydraulic oil temperature at least 80 $^{\circ}$ F/27 $^{\circ}$ C.

PROBLEM	CAUSE	SOLUTION		
	Hydraulic hoses not connected properly.	Make sure hoses are connected and the couplers are tight.		
	Hydraulic control valve OFF.	Turn the hydraulic system control valve ON.		
Tool does not operate.	Hydraulic system not functioning.	Check hydraulic power unit for correct flow and pressure.		
	Couplers or hoses blocked.	Remove obstruction.		
	Pressure port check valve is installed in tool return port.	Install pressure port check valve in pressure port.		
Tool operates in reverse (piston advances/retracts when trigger is squeezed).	Hoses connected to wrong ports on tool.	Connect input (supply) line to IN port. Connect output (return) line to OUT port.		
	Hydraulic system pressure too low.	Check hydraulic power source for correct flow and pressure.		
	Relief valve set too low.	Increase relief valve pressure.		
Tool under-crimps. Die load less	Dirt or obstruction between dies.	Remove obstruction. Clean die area.		
than 10 tons/9072 kg.	Piston seal worn or damaged.	Contact an authorized STANLEY Distributor.		
	Improper die set for wire and connector.	Install proper die set.		
Tool over-crimps. Die load more than 16 tons/13,600 kg.	Hydraulic system pressure too high.	Check hydraulic power source for correct flow and pressure.		
	Relief valve set too high.	Decrease relief valve pressure.		
	Hoses connected to wrong ports on tool.	Connect input (supply) line to IN port. Connect output (return) line to OUT port.		
Trigger difficult to operate.	Excessive back-pressure.	If back-pressure is greater than 250 psi/17 bar, clear the return line obstruction or restriction.		
	Trigger guard bent and binding on spool in bore.	Repair or replace trigger assembly.		

SPECIFICATIONS

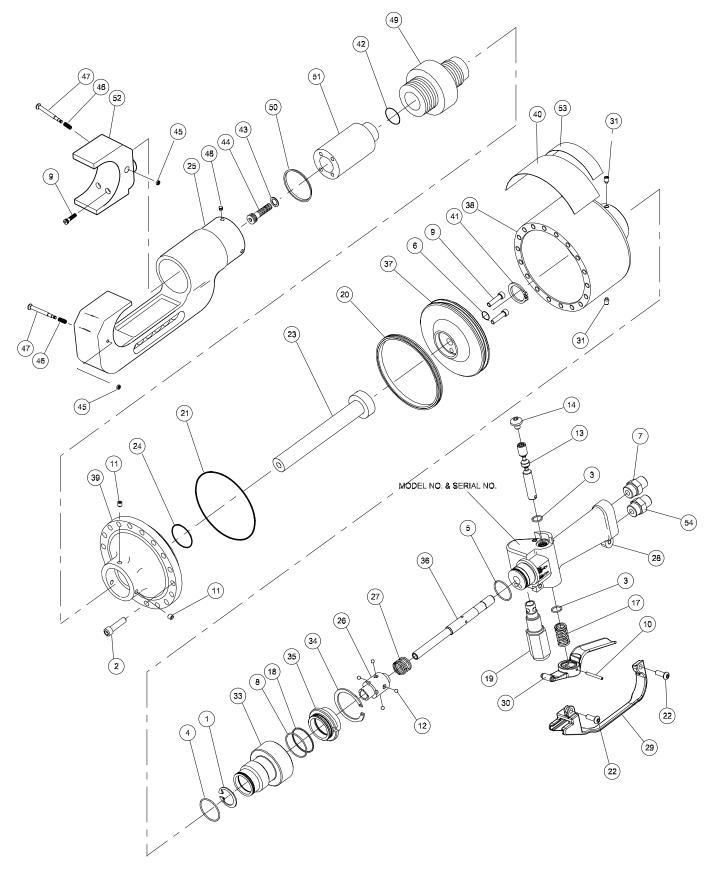
Capacity	500 MCM Copper to 1500 MCM Aluminum, 795 MCM ACSR
Crimping Force	15 tons @ 1650 psi / 13,600 kg @ 114 bar
Pressure Range	
Flow Range	
Optimum Flow	
	No
Overall Width	

CRIMPING DATA

	Wire Size (mcm*)					
Model	Copper	Aluminum	ASCR			
CT15036UN (STANLEY Universal Pressure)						
Crimping Force: 15 tons (13.6 tonne)						
Crimping Capacity:						
Die Holder: C-style Y35	750	750	556.5			
Die Holder: C-style Y46	1500	1000	795			
Die Holder: Kearney PH2/PH13	1033	1033	477			
Die Holder: Kearney PH4/PH14	1500	1000	1027			
Die Holder: T&B TBM15	1000	1000	795			
CT15036GN (C-style Y46)						
Crimping Force: 15 tons (13.6 tonne)						
Crimping Capacity:						
C-style Y46 P-dies	1500	1250	795			
C-style U-dies (requires P-UADP Adaptor)	750	750	556.5			

MCM: Thousand Circular Mils

CT15036GN PART ILLUSTRATION



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CT15036GN PART LIST

ITEM NO.	PART NO.	QTY	DESCRIPTION
1	118	1	Retaining Ring
2	144	18	HSHCS 5/16-18 x 1-1/4
3	7626	2	O-Ring
4	9330	1	O-Ring
5	294	1	O-Ring
6	360	1	O-Ring
7	936	2	Adapter
8	1259	1	O-Ring
9	1521	2	HSHCS 1/4-20 x 1
10	1534	1	Roll Pin
11	7736	2	Setscrew
12	1608	4	Steel Ball 3/16
13	1809	1	Valve Spool
14	1812	1	Valve Spool Screw
15		-	No Item
16		-	No Item
17	16556	1	Spring
18	18050	1	Back-Up Ring -029
19	21424	1	Relief Valve
20	21847	1	T-Seal
21	21848	1	O-Ring
22	22147	2	Capscrew
23	65726	1	Push Rod
24	1259	1	O-Ring
25	28294	1	Die Yoke
26	38622	1	Valve Sleeve
27	39925	1	Compression Spring
28	39939	1	Valve Handle
29	51182	1	Trigger Guard
30	51183	1	Trigger
31	52534	2	Setscrew
32		-	No Item
33	58439	1	Adapter
34	58440	1	Retaining Ring
35	58441	1	Sleeve
36	58442	1	Oil Tube
37	58443	1	Piston
38	58444	1	Cylinder
39	62286	1	Cylinder Head
40	76653	1	CT15 Sticker

ITEM NO.	PART NO.	QTY	DESCRIPTION
41	58594	1	Retaining Ring
42	935	1	O-Ring
43	1459	1	Lockwasher, 3/8
44	4311	1	HHCS 3/8-16 x 2.25
45	7467	2	Die Button
46	18689	2	Spring
47	18690	2	Die Pin
48	24874	1	Setscrew 10-32 x 1/4
49	28295	1	Head Adapter
50	28507	1	Rod Wiper
51	37734	1	Extender
52	37735	1	Die Retainer
53	7961	1	Warning Sticker
54	67259	1	Check Valve Assy
	58552		Seal Kit

SEAL KIT 58552

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