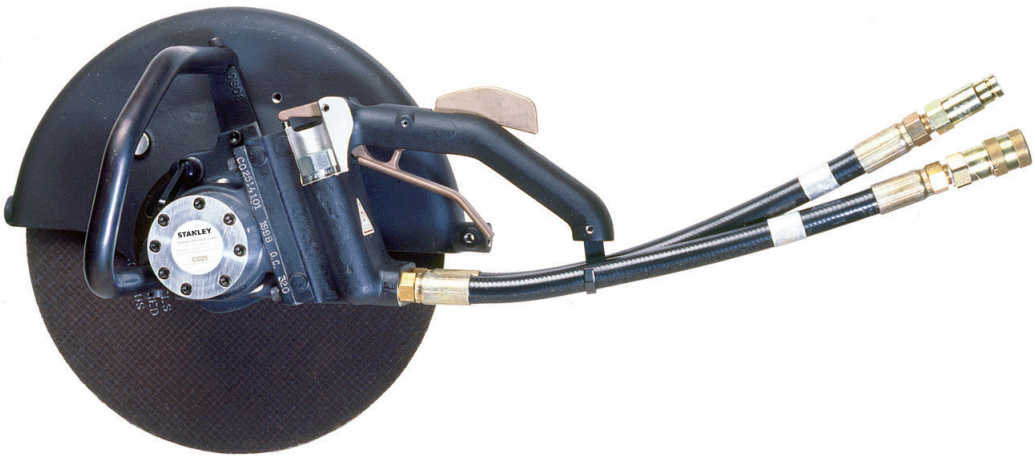
STANLEY®

CO25
HYDRAULIC
CUT-OFF SAW



USER MANUAL
Safety, Operation and Maintenance

New Britain, CT 06053
U.S.A.
34962 4/2019 Ver. 26

DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY
ÜBEREINSTIMMUNGS-ERKLARUNG
DECLARATION DE CONFORMITE CEE
DECLARACION DE CONFORMIDAD
DICHIARAZIONE DI CONFORMITA

STANLEY Infrastructure

CE

I, the undersigned:
Ich, der Unterzeichnende:
Je soussigné:
El abajo firmante:
lo sottoscritto:

Nuerenberg, David

Surname and First names/Familiennname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome

hereby declare that the equipment specified hereunder:
bestätige hiermit, daß erklaren Produkt genannten Werk oder Gerät:
déclare que l'équipement visé ci-dessous:
Por la presente declaro que el equipo se especifica a continuación:
Dichiaro che le apparecchiature specificate di seguito:

1. Category:
   Kategorie:
   Catégorie:
   Categoria:
   Categoria: **Cut-Off-Saw, Hydraulic**
2. Make/Marke/Marque/Marca/Marca **STANLEY**
3. Type/Typ/Type/Tipo/Tipo: **CO2554101, CO2514101**
4. Serial number of equipment:
   Seriennummer des Geräts:
   Numéro de série de l'équipement:
   Numero de serie del equipo:
   Matricola dell´attrezzatura: **All**

Has been manufactured in conformity with
Wurde hergestellt in Übereinstimmung mit
Est fabriqué conformément
Ha sido fabricado de acuerdo con
E' stata costruita in conformitá con

Directive/Standards Richtlinie/Standards Directives/Normes Directriz/Los Normas Direttiva/Norme	No. Nr Numéro No n.	Approved body Prüfung durch Organisme agréé Aprobado Collaudato
EN ISO EN ISO Machinery Directive EN ISO EN ISO EN ISO	3744 (15744) 20643 2006/42/EC 11148-12, Cl. 5.5 11148-12, Cl, 5.6 13732-1	Self Self Self Self Self Self

5. Special Provisions: **None**
   Spezielle Bestimmungen:
   Dispositions particulières:
   Provisiones especiales:
   Disposizioni speciali:

6. Representative in the Union: **Patrick Vervier**, **Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France.**
   Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione

Done at/Ort/Fait à/Dado en/Fatto a STANLEY Infrastructure, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data 4-27-2018

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Cargo/Posizione North America Quality Manager

STANLEY

TABLE OF CONTENTS

SAFETY SYMBOLS....4
SAFETY PRECAUTIONS....5
TOOL STICKERS & TAGS....7
HOSE TYPES....8
HOSE RECOMMENDATIONS....9
HTMA / EHTMA REQUIREMENTS....10
OPERATION....11
SAW CART ASSEMBLY....15
SAW CART OPERATION....17
TOOL PROTECTION & CARE....18
TROUBLESHOOTING....19
SPECIFICATIONS....20
PARTS ILLUSTRATION....21
PARTS LIST....22

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.

⚠WARNING

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.

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

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

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

CAUTION — This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE — This signal word indicates a situation which, if not avoided, will result in damage to the equipment.

IMPORTANT — This signal word indicates a situation which, if not avoided, may result in damage to the equipment.

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 safety 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. If so, place the added precautions in the space provided on the previous page.

The CO25 Hydraulic Cut-Off Saw 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.
- 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 safety equipment such as goggles, ear, breathing and head protection, and safety shoes at all times when operating the tool. Use gloves and aprons when necessary.
- The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Maintain proper footing and balance at all times. Always hold the tool with both hands when the unit is running. Use a firm grip.
- 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.
- 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 tools.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Keep all parts of your body away from the rotating parts. Long hair or loose clothing can become drawn into rotating components.
- Always use accessories that conform to the specifications given in this manual.
- Release the trigger if the power supply has been interrupted.
- When working near electrical conductors, always assume that all conductors are energized and that insulation, clothing and hoses can conduct electricity. Use hose labeled and certified as non-conductive.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
    - Lead from lead-based paints,
    - crystalline silica from bricks and cement and other masonry products, and
    - arsenic and chromium from chemically-treated lumber.

  Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

  Protect yourself and those around you. Research and understand the materials you are cutting. Follow correct safety procedures and comply with all applicable national, state or provisional health and safety regulations relating to them, including, if appropriate arranging for the safe disposal of the materials by a qualified person.
- Never carry the tool or put it down while the wheel is rotating. Make sure it is completely stopped before moving your position or set the tool down.
- Do not operate the tool with the wheel guard removed.
- Keep the handles dry, clean and free of oil at all times.
- Operate the tool in well ventilated areas only.
- Do not operate the tool if the wheel does not stop when the trigger is released.
- Inspect the wheel guard and collars for damage after any wheel breakage on the tool.

SAFETY PRECAUTIONS

- Always use full throttle when cutting.
- Never cock, jam or wedge the wheel during the cut. Do not use the side of the wheel as a cutting surface and be aware of kick-back from the saw.
- Make sure the tool is designed for the wheel direction suitable for the job. Do not reverse the direction of the wheel rotation by changing the direction of the oil flow.
- Always operate the tool within it's rated capacity. Never exceed the maximum operating speed marked on the wheel.
- Do not operate the tool near flammable materials. Sparks can ignite flammable or combustible materials.
- Do not over-reach.
- Do not use the tool for applications for which it was not designed.
- Keep the wheel off all surfaces when starting the saw.
- Do not attempt to adjust the flow control on the valve handle.
- Know the location of buried or covered services before starting work.
- Adjust the wheel guard so it is between you and the cutting wheel.
- Never operate the tool when you are tired.

CUT-OFF WHEEL SAFETY

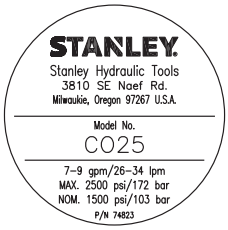
- Always inspect the cut-off wheels for possible damage before operating the tool. Do not use a wheel that is cracked or otherwise damaged.
- Never transport or store the tool with the cut-off wheel mounted on the saw.
- If the cut-off saw is dropped with a cutting wheel installed, thoroughly examine the cutting wheel before use.
- Make sure the cutting wheel is correctly mounted and tightened before use.
- Operate the cut-off saw at no load for 30 seconds in a safe position. If considerable vibration or other defects are detected, stop operation of the tool immediately and determine the cause. Do not use the tool until the defect is corrected.
- Only use cutting wheels that comply with ANSI B7.5/ISO 525, 603.
- Check that the maximum operating speed of the cutting wheel is equal to or greater than the rated shaft speed of the cut-off saw. Wheels must be rated at 4700 RPM minimum.
- **Warning:** Hydraulic fluid under pressure could cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.
- Always support and secure items being worked on.
- Caution when handling the work piece after cutting, object can be hot and have sharp edges, use your personal protection equipment.
- Keep your work area clean and clear of tripping hazards, oily surfaces and hoses laying about can be hazardous.
- Make sure adequate lighting is always available.
- Never operate the tool if you cannot be sure that underground utilities are not present. Underground electrical utilities present an electrocution hazard. Underground gas utilities present an explosion hazard. Other underground utilities may present other hazards.
- Do not operate this tool in a potentially explosive environment. Do not grind on vessels containing combustible substances.
- Any use of this tool outside those stated in this manual are forbidden.

TOOL STICKERS & TAGS

11207
CIRCUIT TYPE D DECAL
(CE MODELS ONLY)

STANLEY

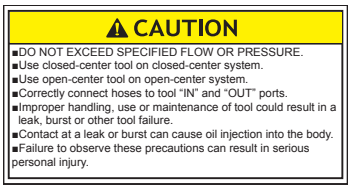
74770
LOGO DECAL



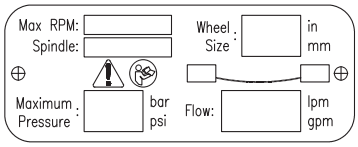
74823
CO25 NAME TAG

CE

28322
CE DECAL
(CE MODELS ONLY)



09612
GPM DECAL



76610
INFORMATION PLAQUE

81434
SOUND POWER DECAL
(CE MODELS ONLY)

05868 SAFETY LABEL

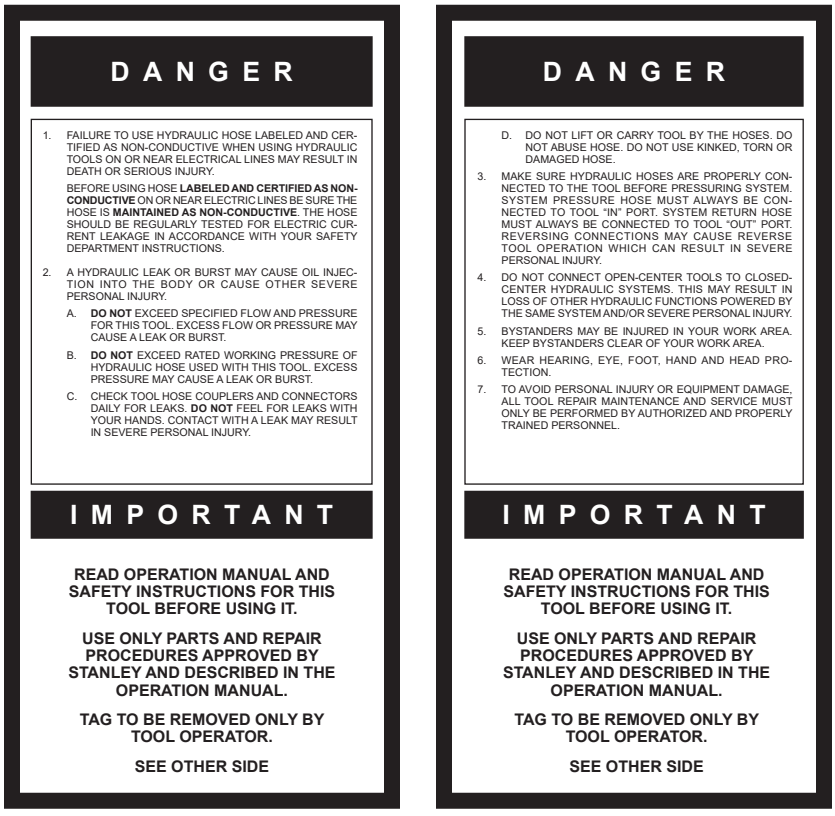
28886
COMPOSITE DECAL
(CE MODELS ONLY)

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.



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 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.*

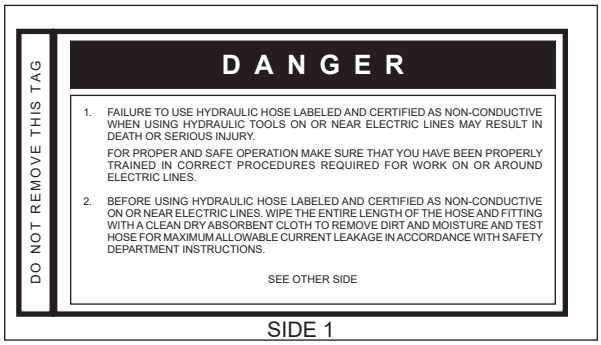
Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is **not certified non-conductive** and must never be used near electrical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

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

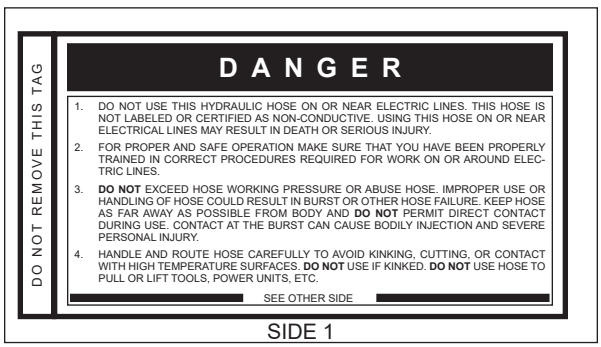


SIDE 1

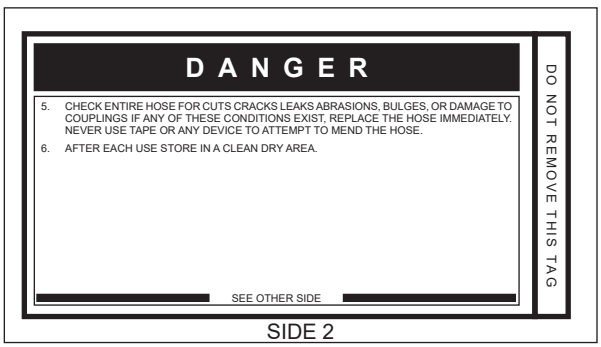
SIDE 2

(Shown smaller than actual size)

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



SIDE 1



SIDE 2

(Shown smaller than actual size)

Tool to Hydraulic Circuit Hose Recommendations

The chart to the right shows recommended minimum hose diameters for various hose lengths based on gallons per minute (GPM)/liters per minute (LPM). These recommendations are intended to keep return line pressure (back pressure) to a minimum acceptable level to ensure maximum tool performance.

This chart is intended to be used for hydraulic tool applications only based on STANLEY tool operating requirements and should not be used for any other applications.

All hydraulic hose must have at least a rated minimum working pressure equal to the maximum hydraulic system relief valve setting.

All hydraulic hose must meet or exceed specifications as set forth by SAE J517.

Oil Flow		Hose Lengths		Inside Diameter		USE (Press/Return)	Min. Working Pressure	
GPM	LPM	FEET	METERS	INCH	MM		PSI	BAR
Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks								
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS								
4-6	15-23	up to 25	up to 7.5	3/8	10	Both	2500	175
4-6	15-23	26-100	7.5-30	1/2	13	Both	2500	175
5-10.5	19-40	up to 50	up to 15	1/2	13	Both	2500	175
5-10.5	19-40	51-100	15-30	5/8	16	Both	2500	175
5-10.5	19-40	100-300	30-90	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	5/8	16	Both	2500	175
10-13	38-49	51-100	15-30	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
10-13	38-49	100-200	30-60	3/4	19	Pressure	2500	175
				1	25.4	Return	2500	175
13-16	49-60	up to 25	up to 8	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
13-16	49-60	26-100	8-30	3/4	19	Pressure	2500	175
				1	25.4	Return	2500	175

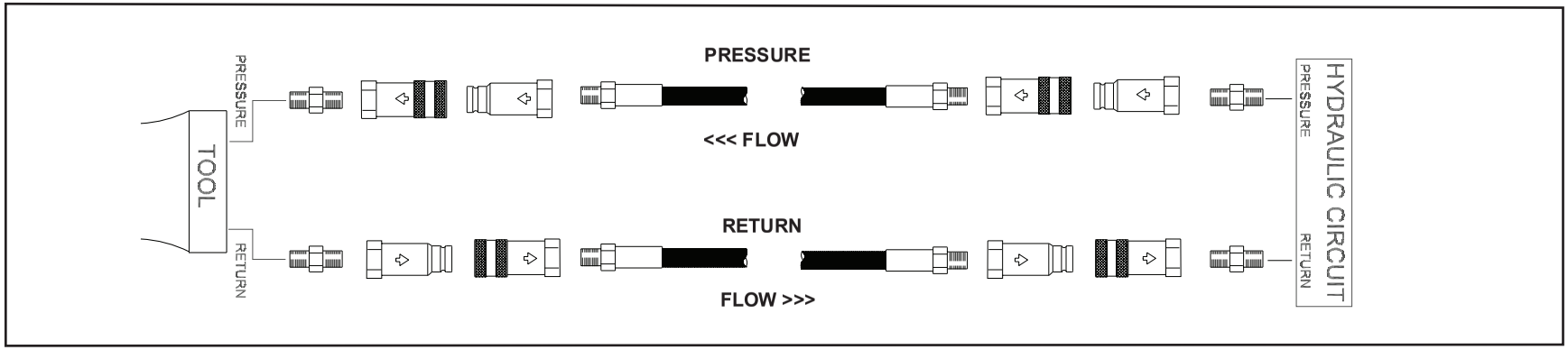


Figure 1. Typical Hose Connections

HTMA / EHTMA REQUIREMENTS

HTMA HYDRAULIC SYSTEM REQUIREMENTS	TOOL TYPE: TYPE I	TYPE II	TYPE RR	TYPE III
Flow range	4-6 GPM (15-23 LPM)	7-9 GPM (26-34 LPM)	9-10.5 GPM (34-40 LPM)	11-13 GPM (42-49 LPM)
Nominal operating pressure (At the power supply outlet)	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)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)	2100-2250 psi (145-155 bar)
Maximum back pressure (At tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max fluid viscosity of: (At minimum operating temperature)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (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 (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)	7 hp (4.47 kW) 40° F (22° C)
Note: Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.				
Filter minimum full-flow filtration	25 microns	25 microns	25 microns	25 microns
Sized for flow of at least: (For cold temp startup and maximum dirt-holding capacity)	30 GPM (114 LPM)	30 GPM (114 LPM)	30 GPM (114 LPM)	30 GPM (114 LPM)
Hydraulic fluid, petroleum based (premium grade, anti-wear, non-conductive) Viscosity (at minimum and maximum operating temps)	100-400 ssu (20-82 centistokes)	100-400 ssu (20-82 centistokes)	100-400 ssu (20-82 centistokes)	100-400 ssu (20-82 centistokes)
Note: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures. *SSU = Saybolt Seconds Universal				

EHTMA HYDRAULIC SYSTEM REQUIREMENTS	CLASSIFICATION: 				
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.

STANLEY

OPERATION

PREPARATION PROCEDURES

CHECK THE POWER SOURCE

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

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7–9 gpm (26–34 lpm) at 2000 psi (140 bar).

2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100–2250 psi (145–155 bar).

CHECK THE TOOL

The following items should be checked daily:

1. Make sure the hydraulic system control valve is in the “OFF” position and the hoses are disconnected before inspecting the cutoff saw.

2. Inspect the cut-off wheel and guard. Make sure the correct cut-off wheel is installed for the job. If not, follow the instructions for Cut-off Wheel Replacement section of this manual.

3. Inspect the wheel for chips, cracks, or other damage. For maximum tool performance, replace the wheel if it is worn or defective.

4. Inspect the wheel guard for cracks or other structural damage.

5. There should be no signs of leaks.

6. Inspect the handlebar. Make sure the handlebar is securely fastened to the cutoff saw and is clean of any oil to ensure a firm grip.

IMPORTANT

Check the speed of the motor output shaft after every 100 hours of operation.

CHECK TRIGGER MECHANISM

1. Inspect the trigger and safety catch. Make sure the trigger operates smoothly and is free to travel between the “ON: and “OFF” positions.

2. Make sure the trigger is set to disengage the cut-off saw when released.

3. Check that the safety catch on the handle assembly is operating properly. It should prevent engagement of the trigger unless the catch is pressed down fully in the handle slot.

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. It is good practice to 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 valve handle 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 hoses together.

TOOL OPERATION

STARTUP

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

2. At the beginning of each shift, or after a new wheel is installed, run the cut-off saw at operating speed for at least one minute before starting work.

HANDHELD CONFIGURATION:

1. Press the safety catch into the handle, then slowly squeeze the trigger.

2. Run the saw at least one minute.

3. Release the trigger and safety catch.

MOUNTED CONFIGURATION (SAW CART):

1. Make sure the lower edge of the cutoff wheel is at least 1

inch above the work surface.

2. Slowly squeeze the hand control lever.

3. Run the saw at least one minute, then release the control lever.

If excessive vibration or any other defect is detected, stop the tool immediately and determine the cause. Do not use the tool until the problem is corrected.

GENERAL OPERATION

HANDHELD CONFIGURATION:

1. Whenever possible, clamp or hold down the work and support it securely on both sides of the cut.

2. Press the safety catch into the handle, then slowly squeeze the trigger.

3. Start the cut with the wheel rotating. Start the work gently with consistent pressure. Do not bump the saw into the work piece.

4. Feed the wheel through the material as fast as possible without slowing the wheel rotation speed.

Note: Cutting through the material too slowly causes heat expansion and can result in wheel "pinching" in the material. This is one of the most common causes or wheel breakage.

MOUNTED CONFIGURATION (SAW CART): SEE "SAW CART ASSEMBLY" ON PAGE 15.

When the cutoff saw is mounted on a saw cart, always use a motor-type hydraulic system control valve to turn the saw "ON" and "OFF". All ports must be connected to the tank (hydraulic system reservoir) when the control valve is in neutral. Alternatively, use a direct line from the tool outlet to the tank.

IMPORTANT

Keep all four wheels of the cart on the cutting surface at all times. Do not tip the front of the cart up during operation or while the blade is in motion.

1. Align the cut line indicator on the line to be cut.

2. Lower the blade to approximately 1/2 to 1-inch above the cutting surface. Set the depth gauge to ensure accurate cutting depth.

3. Make sure the water hose and its connections are secure and there is a steady flow of coolant water.

4. Slowly squeeze the hand control lever.

5. Slowly and safely lower the rotating blade into the cutting surface to the desired depth:

   - Increase the depth by turning the depth-control crank counterclockwise (CCW).

   - Periodically look at the depth gauge and pointer to check the actual depth of the cutting blade.

6. Move slowly and safely forward along the cutting line until the desired cut is complete. The safe forward rate depends on your blade type.

7. Release the hand control lever.

8. To raise the blade from of the cutting surface, wait until the blade comes to a complete stop in the work material.

   - Turn the depth-control crank clockwise (CW) until the blade clears the surface.

WET CUTTING

1. Make sure the cutting wheel is suitable for wet cutting.

2. When shutting down a wet-cutting operation:
   - Stop the tool.

   - Shut off the water.

   - Restart the tool and allow the wheel to spin off the excess water.

BROKEN CUT-OFF WHEELS

Cut-off wheels designed for use with portable saws are extremely tough. When used as directed, they are difficult to break during normal use.

If a wheel breaks while operating the cut-off saw, investigate the cause of the failure and correct the problem as soon as possible. If you cannot determine the cause of failure, contact the wheel manufacturer.

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. Place dust 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 from the cut-off wheel surfaces.
6.

PERIODIC MAINTENANCE

For maximum performance and reliability of the tool, periodically check the following components.

THRUST COLLAR AND INSIDE/OUTSIDE COLLAR INSPECTION

Periodically inspect the thrust collar for damage when you remove the cut-off wheel (see “Cut-off wheel replacement” on page 14).

1. Remove the key and thrust collar from the motor shaft.
2. Check the thrust collar for burrs. Remove burrs as required.
3. Check the threads on the clamping set screw.
4. Inspect the collar bores and flanges.
5. Check for burrs. Remove burrs as required.
6. Check that the bearing surfaces are flat and run true when mounted on the motor shaft and thrust collar.

DRIVE-SHAFT SPEED CHECK

Check the speed of the motor output shaft at least every 100 hours of operation. The test should be performed only by a trained, experienced technician.

- Maintain a record of the speed checks.
- The maximum rated speed of the CO25 Hydraulic Cutoff Saw is 4500 RPM.
- The rated speed of the cutting wheel must be equal to, or greater than that of the tool to ensure the integrity of the wheel at maximum tool speed.
- Use the hydraulic power supply normally used with the cutoff saw when conducting this test.
- Excessive speed may be caused by excessive hydraulic fluid flow to the tool.

BEARING CHECK

Periodically inspect the bearings and associated parts for proper operation. A worn or damaged bearing can cause motor damage.

CARE AND STORAGE

Remove the cutoff wheel from the tool after use. Do not store or transport the saw with the wheel installed. Clean and inspect the wheel and tool before storing.

CUTOFF WHEELS

All abrasive cutoff wheels are breakable. Exercise care in handling and storage to prevent damage.

1. Clean used wheels to remove any dirt, debris or grease. Dry thoroughly.
2. Inspect the wheel for chips, cracks or other damage. For maximum tool performance, replace the wheel if it is worn or defective.
3. Store cutoff wheels on a flat surface of steel or similar rigid material.
4. If wheels are supplied with blotters attached, insert suitable separators between each wheel and the supporting surface to preserve flatness.
5. Do not store wheels where they will be exposed to high humidity, water or other liquids, excessive heat or freezing temperatures.
6. Avoid temperatures low enough to cause condensation on the wheels if they are moved from storage to an area of higher temperature.
7. Wheels carried on emergency vehicles should be removed after use and discarded or stored carefully (steps 1 and 2).

OPERATION

TOOL

1. Clean the tool to remove any dirt, debris or grease. Dry with compressed air or clean dry cloths.

2. Replace any damaged or missing safety labels and tags before storing the tool. Otherwise, the tool might be improperly used by someone who is not familiar with the safety requirements.

3. Store the tool in a clean, dry place.

CUT-OFF WHEEL REPLACEMENT

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. Install the inside collar and blotter and rotate the collar to align the slot in the collar with the pin on the thrust collar.

4. The maximum rated speed of the hydraulic cut-off saw is 4500 RPM. Never install a cut-off wheel that is not rated equal to or greater than that of the tool to ensure the integrity of the wheel at the maximum tool speed.

5. Prior to installing the wheel, inspect it for chips, cracks or other damage and replace if damaged.

6. Install the outside blotter and collar and rotate the collar so that the flat on the motor shaft aligns with the flat on the outside collar.

7. Install the wheel nut using a wrench while gripping the cutoff wheel. Tighten securely.

COLD WEATHER OPERATION

Before using the tool in cold weather, preheat the hydraulic fluid with the power unit operating at a low speed. The oil should be at or above 50°F (10°C) with a viscosity of 400 SSU (82 cs) before operating the tool.

SAW CART ASSEMBLY

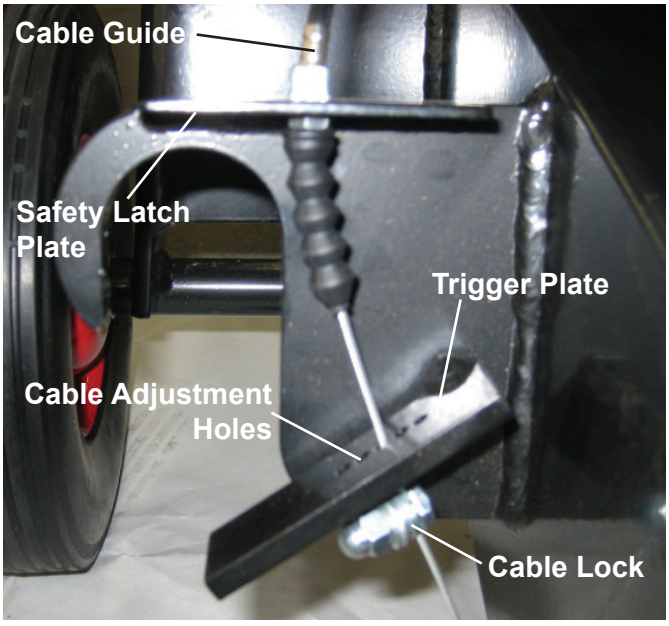
SAWCARTASSEMBLYINSTRUCTIONS

1. Your slab saw cart comes fully assembled from the factory. The only adjustments necessary may be the throttle cable after the cut-off saw has been installed.

2. When mounting the cut-off saw to the saw cart, the tubular handle attached to the cut-off-saw must be removed. This will allow the cut-off-saw to be mounted on the saw cart.

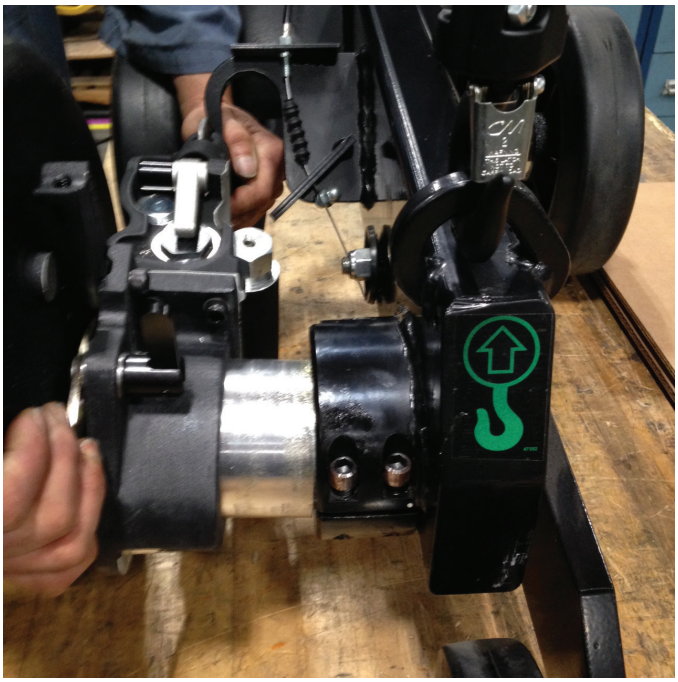
3. Cut-off saw with handle removed shown below.

Note: Prior to mounting the cut-off saw the safety catch on the cut-off saw must be depressed and is held down by the safety latch plate on the saw cart at all times for the trigger to operate. See location of safety latch plate pictured below and safety catch pictured above.

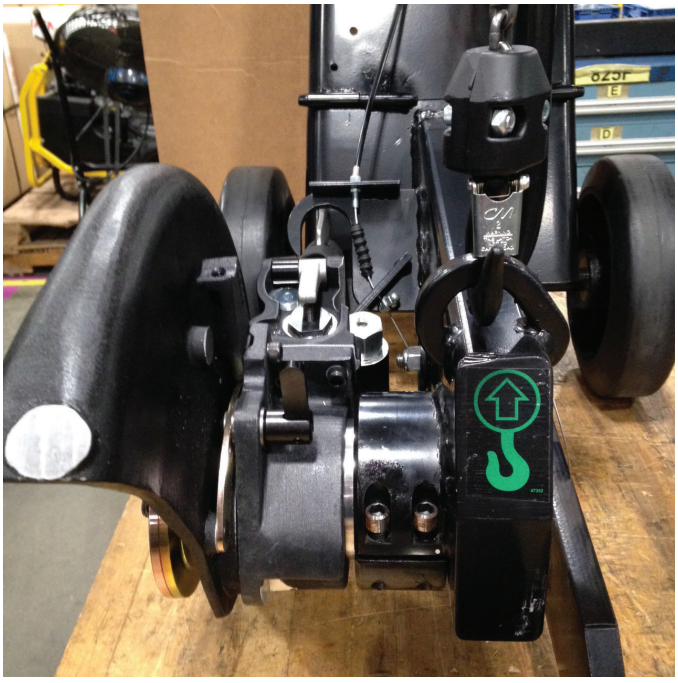


4. When mounting the cut-off saw, make sure it is pushed backed fully into the motor mount. Rotate the handle up to where it locks in. Make sure the safety catch on the cut-off saw is depressed and under the safety latch plate for the trigger to operate.

SAW CART ASSEMBLY



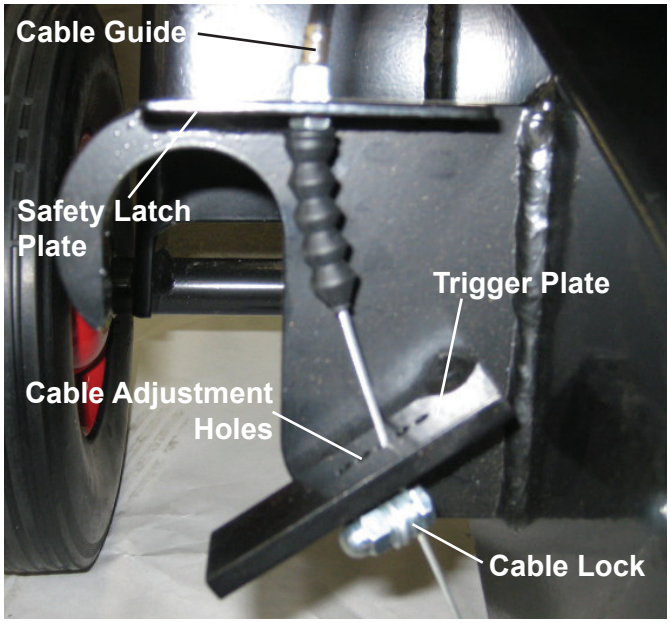
5. Motor mount.



6. Side view of mounting.

7. After mounting the cut-off-saw, make sure the cutting blade is perpendicular to the floor and parallel with the cart frame.

8. Adjust the cable lock and the adjustment screw on the control lever on the handle to acquire the correct trigger control. Additional full trigger movement can be attained by moving the cable to a different hole location on the trigger plate (see below).



Note: The safety catch on the cut-off saw must be

depressed by the safety latch plate at all times for the trigger to operate.

9. Before operating the cut-off saw and before attaching any hydraulic power source check that the wheel guard on the cut-off saw is in place and that the cutting wheel is secure.

Note: If the saw is to be removed from the cart and used in a hand-held manner, make sure to re-attach the tubular handle to the cutting head body before using.

Saw cart operating instructions

- For operation of the attached tool (saw motor) and power source, consult the respective operating manuals before you begin.
- Follow all safety precautions in this manual, along with any respective manuals relating to attached tools and power sources.
- When you are ready to cut, align the cut line indicator on the line to be cut.
- Make sure the water hose and its connections are secure and the water coolant is flowing easily.
- To engage the motor and blade, slowly squeeze the hand control lever.
- Slowly and safely descend the blade into the cutting surface to the desired depth by turning the depth control crank counter-clockwise.
- Move slowly and safely forward along cutting line until desired cut is achieved.
- Disengage the motor and blade by releasing the hand control lever.
- After the blade has stopped rotating, lift the blade out of the cutting surface by turning the depth control crank clockwise until the blade is safely clear of the surface.
- When operation is complete, turn off power source and disconnect hoses.

Maintenance

1. Item 24 on the parts illustration page of the slab saw cart manual is a grease fitting, apply grease once a month under normal use or twice a month under heavy use.

2. Lubricate all moving parts weekly with a general lubricant.

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 (see Specifications) in this manual for correct flow rate and model number. Personal Injury and rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.
- 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 wrench, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the tool as listed in the following table. Use a flow meter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80° F/27° C.

PROBLEM	CAUSE	SOLUTION
Tool does not operate.	Hydraulic control valve OFF.	Turn the hydraulic system control valve ON.
	Hydraulic hoses not connected properly.	Make sure the hoses are connected and the couplers are tight.
	Hydraulic system not functioning.	Check power unit for correct flow and pressure.
	Couplers or hoses blocked.	Remove obstruction.
	Mechanical failure.	Disassemble tool and inspect for damage.
Tool operates in reverse.	Hoses connected to wrong ports on tool.	Connect input (supply) line to IN port and connect output (return) line to OUT port.
Oil leakage between motor housing and ON/OFF valve block or motor.	Oil tube O-ring failure.	Replace O-ring.
	Motor face seal failure.	Replace seal.
Trigger difficult to operate.	Hoses connected to wrong ports on tool.	Connect input (supply) line to IN port and connect output (return) line to OUT port.
	Excessive back pressure.	If back pressure is greater than 250 psi/17 bar, correct the return line obstruction or restriction.
Saw cuts too slowly.	Wrong cut-off wheel for work material.	Use correct wheel.
	Insufficient oil flow.	Adjust oil flow to 7-9 gpm/26-34 lpm.
	Relief valve setting too low.	Adjust relief valve to 2100-2250 psi/145-155 bar.

SPECIFICATIONS

Wheel Capacity	14-inch/35.56 cm
Weight	20 lbs/9 kg
Overall Length	21-inch/53 cm
Width	11-inch/28 cm
Pressure Range	1500-2000 psi/105-140 bar
Flow Range	7-9 gpm/26-34 lpm
Optimum Flow	8 gpm/30 lpm
System Type	Open Center, HTMA Type II
Porting	8 SAE O-Ring
Connect Size and Type	3/8-inch Male Pipe Adapter
Max Spindle Speed	4500 RPM

ACCESSORIES

DESCRIPTION	PART NUMBER
14-inch Abrasive Wheel for Metal, 1-inch Arbor	02691
14-inch Abrasive Wheel for Masonry, 1-inch Arbor	02692
Diamond Blade, 14-inch Dry Cut	62358
Water Attachment Kit for CO25 (Includes (1) Water Hose Assy P/N-33220, (1) 9.125-inch Long Tube P/N-33226, (1)-7.812-inch Long Tube P/N-33227, (1) Brass Adaptor P/N-35196, (3) Male 90Deg Elbow 1/4" hose barb P/N-33223, (1) Male Elbow Brass P/N-35197	33228
Slab Saw Cart	69290
Water Tank Kit for Slab Saw Cart (Includes (1) Tank Top Bracket P/N-69296, (1) Tank Bracket P/N-69542, (1) Water tank P/N-41240, (1) Needle Valve Clamp P/N-69914, (2) Capscrews P/N-32412, (9) Capscrews P/N-15476, and (11) Nuts P/N-00719	69704
Handle Extension Kit (Includes- (2) Oil Tubes P/N-31945, (1) Handle Weldment P/N-34116, (1) Extension P/N-34172, (4) O-Rings P/N-00175, Hardware- (2) Lockwashers P/N-01459, (2) 3/8" Capscrews P/N-02116, (4) 5/16" Capscrews P/N-10888 and Inst Sheet	34175

SOUND POWER AND VIBRATION DECLARATION

Test conducted on CO25141

Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels	109.4 dBA
Measured A-weighted sound pressure level, Lpa (ref. 20 µPa) at operator's position, in decibels	101.5 dBA

Values determined according to noise test code given in EN ISO 15744, 11203 and 3744.

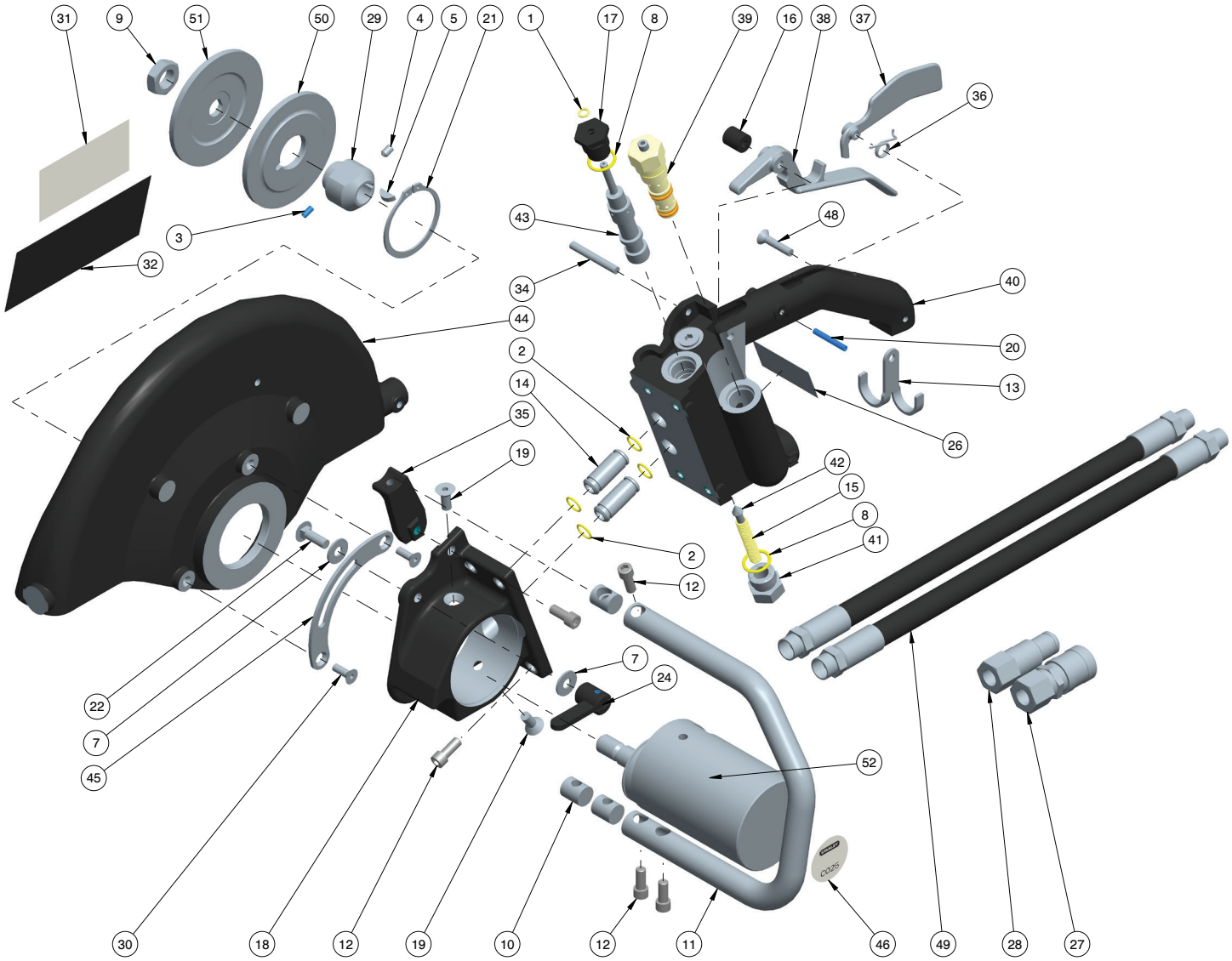
Note: The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.

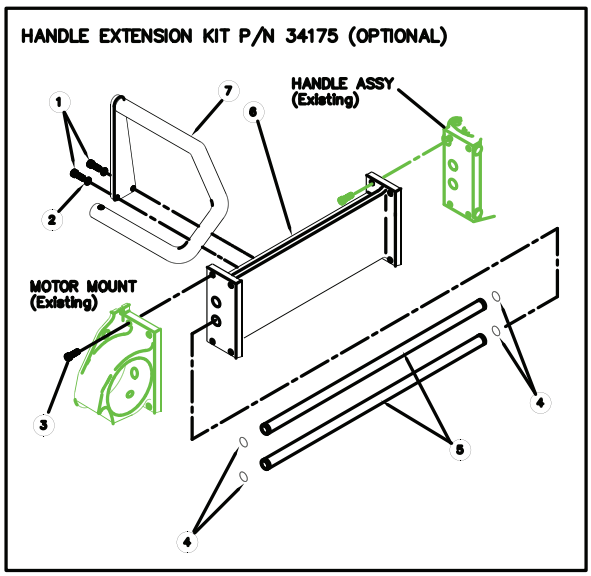
Measured vibration emission value: a (Trigger Handle)	4.9 m/sec²
Measured vibration emission value: a (Assist Handle)	4.2 m/sec²
Uncertainty: K	0.98 m/sec²

Values determined according to EN ISO 20643

STANLEY

PARTS ILLUSTRATION





For Parts to Handle Extension Kit, See Accessories on Page 20

PARTS LIST

Item No.	Part No.	Qty	Description
1	00112	1	QUAD RING*
2	00175	4	O-RING*
3	00563	1	ROLL PIN
4	00720	1	SETSCREW
5	00772	1	WOODRUFF KEY
7	01594	2	WASHER
8	01604	2	O-RING*
9	01714	1	HEX JAM NUT CCW (RH)
	03012	1	HEX JAM NUT CW (LH)
10	02649	3	HANDLE BAR RETAINER
11	02654	1	HANDLE BAR
12	02688	8	CAPSCREW
13	02911	1	HOSE CLIP
14	02912	2	OIL TUBE
15	02916	1	COMPRESSION SPRING
16	02920	1	ON-OFF VALVE SPACER
17	02931	1	ON-OFF VALVE CAP
18	02950	1	MOTOR HOUSING
19	03006	2	CAPSCREW
20	17668	1	ROLL PIN
21	03013	1	RET RING
22	03025	1	CARRIAGE BOLT
24	03050	1	SWING OVER NUT ASSY
26	09612	1	GPM STICKER
27	03972	1	COUPLER,3/8FEM.
28	03973	1	COUPLER,3/8MALE
29	04673	1	THRUST COLLAR
30	05071	2	CAPSCREW
31	74770	1	STANLEY STICKER
32	05868	1	ABRASIVE SAFETY LABEL
34	17681	1	SPRING PIN
35	20461	1	HANDLE STRUT ASSY
36	22701	1	TORSION SPRING
37	22704	1	SAFETY CATCH
38	22707	1	TRIGGER
39	31854	1	FLOW REGLTR.CRTRDG.

Item No.	Part No.	Qty	Description
40	28552	1	VALVE HANDLE ASSY (INCLUDES - SAE PLUGS
41	31137	1	PLUG
42	31186	1	POPPET (CONE)
43	32026	1	VALVE SPOOL (CCW MODELS ONLY)
	31138	1	VALVE SPOOL (CW MODELS ONLY)
44	32436	1	WHEEL GUARD
45	32445	1	GUARD CLAMP SECTOR
46	74698	1	NAME TAG STICKER - CO25
48	35963	1	SCREW, OVAL HEAD
49	56725	2	HOSE ASSY RAILROAD 18"
50	62290	1	INSIDE COLLAR
51	62291	1	OUTSIDE COLLAR
52*	73441	1	MOTOR ASSY CO25 CCW ROTATION (MODELS CO25141, CO2514101, CO25141D
	73440	1	MOTOR ASSY CO25 CW ROTATION (MODELS CO25541 & CO2554101)
IF RESEALING MOTOR, TORQUE MOTOR BOLTS TO 15-17 FT. LBS. (20-23 Nm).			
	31845	1	SEAL KIT

* All tools, S/N 052416033 and higher, use new style motors. These motors fit on all CO25 models.

• Denotes Part in Seal Kit

Coupler Set P/N-03971

Additional decals for CE tools can be found on page 7.

STANLEY

STANLEY®

STANLEY Infrastructure
6430 SE Lake Road
Portland, Oregon 97222 USA
(503) 659-5660 / Fax (503) 652-1780
www.stanleyinfrastructure.com