GR29
UNDERWATER HYDRAULIC GRINDER

⚠ WARNING

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

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





SAFETY, OPERATION AND MAINTENANCE
USER'S MANUAL

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TABLE OF CONTENTS

CERTIFICATE OF CONFORMITY 4
SAFETY SYMBOLS 5
TOOL STICKERS & TAGS 8
HYDRAULIC HOSE REQUIREMENTS 9
HTMA REQUIREMENTS 10
OPERATION 11
- PREOPERATION PROCEDURES 11
- CHECK THE POWER SOURCE 11
- CHECK THE TOOL 11
- CHECK TRIGGER MECHANISM 11
- CHECK HANDLE 11
- CHECK AND ADJUST WHEEL GUARD 11
- INSTALLING AND REMOVING GRINDING WHEEL 11
- USE OF DEPRESSED-CENTER WHEEL ADAPTER 11
- CONNECT HOSES 11
- TOOL OPERATION 12
- COLD WEATHER OPERATION 12

TOOL EQUIPMENT & CARE 13
TROUBLESHOOTING 14
SPECIFICATIONS 15
ACCESSORIES 15
GR29 PARTS ILLUSTRATION 16
GR29 PARTS LIST 17
WARRANTY 18

SERVICING THE STANLEY HYDRAULIC GRINDER. This manual contains safety, operation, and routine maintenance instructions. 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 authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.

CERTIFICATE OF CONFORMITY

CERTIFICATE OF CONFORMITY
ÜBEREINSTIMMUNGS-ZERTIFIKAT
CERTIFICAT DE CONFORMITE CEE
CERTIFICADO DE CONFORMIDAD
CERTIFICATO DI CONFORMITA

STANLEY®

Hydraulic Tools

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

Burrows, James

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

hereby certify that the construction plant or equipment specified hereunder:
bestätige hiermit, daß das im folgenden genannten Werk oder Gerät:
certifies par ceci que l' usine ou l' équipement de construction indiqué cidessous:
por el presente certifico que la fabrica o el equipo especificado a continuacion:
certifico che l'impianto o l'attrezzatura sotto specificata:

1. Category: Grinder
   Kategorie:
   Catégorie:
   Categoria:
   Categoria:
2. Make/Ausführung/Marque/Marca/Marca Stanley
3. Type/Typ/Type/Tipo/Tipo: GR2930101
4. Serial number of equipment:
   Seriennummer des Geräts:
   Numéro de série de l'équipement:
   Numero de serie del equipo:
   Matricola dell´attrezzatura: **All**
5. Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione beginning 2005

Has been manufactured in conformity with - EEC Type examination as shown.
Wurde hergestellt in Übereinstimmung mit - EEC Typ-Prüfung nach.
Est fabriqué conformément - au(x) type(s) examiné(s) comme indiqué dans le tableau ci-après.
Ha sido fabricado de acuerdo con - tipo examen EEC como dice.
E' stata costruita in conformitá con - le norme CEE come illustrato.

	Examen CEE de type			
Directive Richtlinie Directives particulières Directriz Direttiva	No. Nr Numéro No n.	Date Datum Date Fecha Data	Approved body Prüfung durch Organisme agréé Aprobado Collaudato	Date of expiry Ablaufdatum Date d´expiration Fecha de caducidad Data di scadenza
Machinery Directive EN EN ISO EN	98/37/EC 792-7 3744 28662-4	1998 1994 1995 1994	Self Self Self Self	NA NA NA NA

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

Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data 5/17/05

Signature/Unterschrift/Signature/Firma/Firma James O'Burrow

Position/Position/Fonction/Puesto/Posizione Engineering Manager

5/17/05

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 indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.**

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

CAUTION — **This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate 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 in this manual.

The GR29 Underwater Hydraulic Grinder 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 hoses before operation. Failure to do so could result in personal injury or equipment damage.

• Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.

• Establish a training program for all operators to ensure safe operation.

• Do not operate the tool unless thoroughly trained or under the supervision of an instructor.

• Always wear safety equipment such as goggles, ear and head protection at all times when operating the tool.

• 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.

• 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.

• To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

• Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.

• Check fastener tightness often and before each use daily.

• Do not tighten or loosen the wheel nut by impact. Hold the shaft with a second wrench on the the flats behind the wheel and tighten securely.

• Do not overreach. Maintain proper footing and balance at all times.

• 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 when using the tool on or near electric lines.

• Always hold the tool with both hands when the unit is running. Use a firm grip.

• Keep all parts of your body away from the rotating wheel.

SAFETY PRECAUTIONS

• Keep the wheel off all surfaces when starting the grinder.

• Always carry the tool with the wheel stopped.

• Make sure the wheel has stopped before setting down the tool.

• Keep the handles clean and free of fluid at all times.

• Always inspect wheels for possible damage before installation.

• Never transport or store the tool with the wheel mounted on the grinder.

• Never cock, jam or wedge the wheel during operation.

• Never cause sparks in the vicinity of flammable materials.

• Do not operate the tool with the wheel guard removed.

• Do not start grinding until you have a clear work area and secure footing.

• Do not allow other persons near the tool when starting or cutting.

• Never operate the tool when you are tired or fatigued.

• Do not use a wheel that is cracked or otherwise damaged.

• Always use wheels that conform to the specifications given in the Operation Section of this manual.

• Do not reverse wheel rotation direction by changing fluid flow direction.

TOOL STICKERS & TAGS



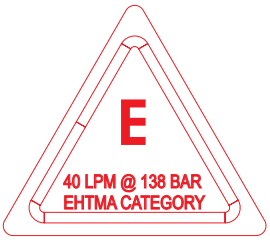
28811
Information Plaque

28322
CE Decal

28409
Composite Decal

WARNING
Grinding Wheel and Jam nut must be tightened with a wrench before use.

10396
Warning Decal



12535
Circuit Type E
Decal

CAUTION
4-12 GPM / 15-45 LPM
DO NOT EXCEED 2000 PSI / 140 BAR

DO NOT EXCEED SPECIFIED FLOW OR PRESSURE USE CLOSED-CENTER TOOL ON CLOSED-CENTER SYSTEM. USE OPEN-CENTER TOOL ON OPEN-CENTER SYSTEM. CORRECTLY CONNECT HOSES TO TOOL "IN" AND "OUT" PORTS. IMPROPER HANDLING, USE OR OTHER MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTION INTO THE BODY. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

03788
GPM Decal



11206
Circuit Type C
Decal

CAUTION
PROTECT YOUR EYES
WEAR SAFETY GOGGLES
Do not use damaged wheels use full throttle only while grinding. Use only reinforced resinoid wheels rated for 6500 RPM minimum 9 inch diameter by inch thick maximum. Inspect wheel guard for signs of damage after any wheel failure.

08688
Safety Decal

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 CERTIFIED 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 ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.

2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.

A **DO NOT** EXCEED SPECIFIED FLOW AND PRESSURE FOR

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.

DANGER

D DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "IN" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.

4. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.

5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.

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.

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

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

❶ Certified non-conductive

❷ Wire-braided (conductive)

❸ Fabric-braided (not certified or labeled non-conductive)

Hose ❶ listed above is the only hose authorized for use near electrical conductors.

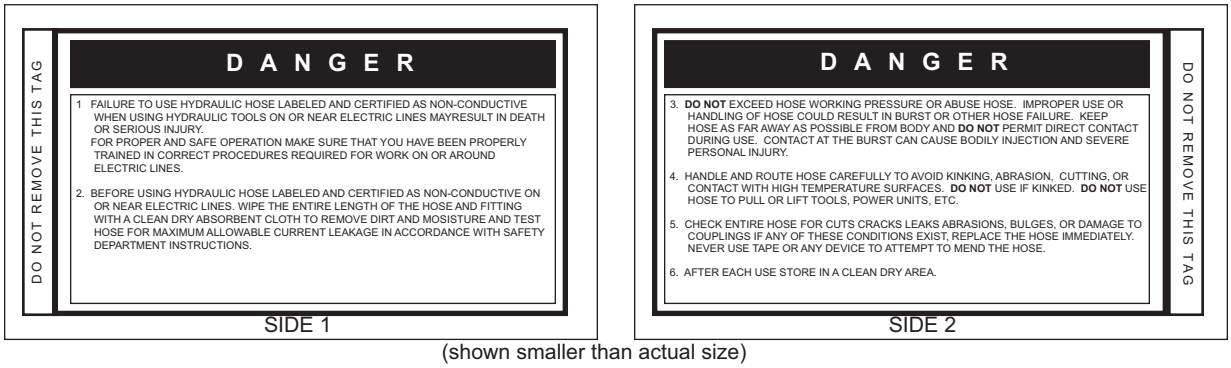
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

HOSE SAFETY TAGS

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

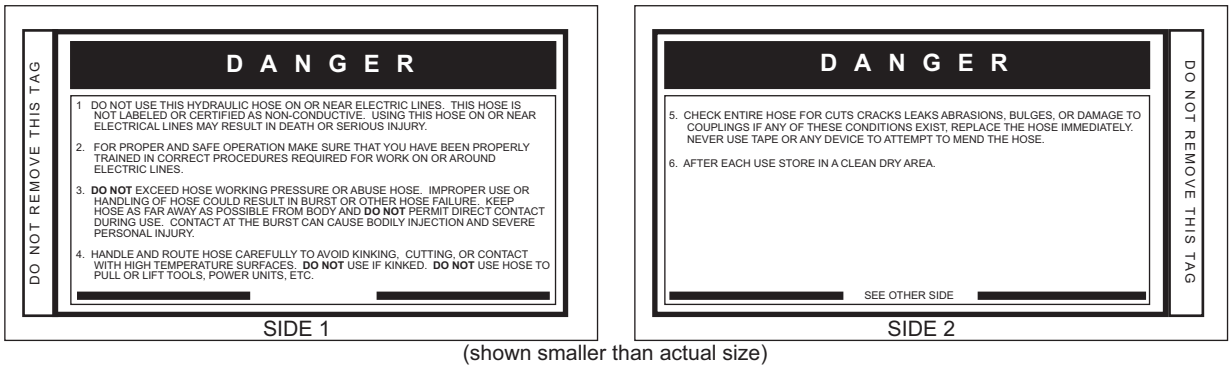
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Stanley Distributor.

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



(shown smaller than actual size)

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



(shown smaller than actual size)

HOSE PRESSURE RATING

The rated working pressure of the hydraulic hose **must be equal to or higher than** the relief valve setting on the hydraulic system.

HTMA REQUIREMENTS

HYDRAULIC SYSTEM REQUIREMENTS	TOOL CATEGORY  TYPE 1	 TYPE II	TYPE III	TYPE RR
FLOW RATE	4-6 gpm (15-23 lpm)	7-9 gpm (26-34 lpm)	11-13 gpm (42-49 lpm)	9-10.5 gpm (34-40 lpm)
TOOL OPERATING PRESSURE (at the power supply outlet)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)
SYSTEM RELIEF VALVE SETTING (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 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 min. 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 max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. 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)	7 hp (4.47 kW) 40° F (22° C)	6 hp (5.22 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 Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)
HYDRAULIC FLUID Petroleum based (premium grade, anti-wear, non-conductive) VISCOSITY (at min. and max. operating temps)	100-400 ssu*	100-400 ssu*	100-400 ssu* (20-82 centistokes)	100-400 ssu*
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

NOTE:
These are general hydraulic system requirements. See tool Specification page for tool specific requirements.

OPERATION

PREOPERATION PROCEDURES

CHECK THE POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 4-12 gpm/15-45 lpm at 950-2000 psi/67-140 bar.

2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 2100-2250 psi/145-155 bar minimum.

3. Check that the hydraulic circuit matches the tool for open-enter (OC) or closed-center (CC) operation.

CHECK THE TOOL

1. Make sure all tool accessories are correctly installed. Failure to install tool properly can result in damage to the tool or personal injury.

2. There should be no signs of leaks.

3. The tool should be clean, with all fittings and fasteners tight.

CHECK TRIGGER MECHANISM

1. Check that the trigger operates smoothly and is free to travel between the “ON” and “OFF” positions.

2. Check that the trigger is set to disengage the grinder when released.

CHECK HANDLE

Check that the cross handle is securely screwed into the handle bracket. Remove any oil from the handle.

CHECK AND ADJUST WHEEL GUARD

1. Inspect the wheel guard for cracks and other structural damage.

2. If necessary, adjust the position of the wheel guard by loosening the two capscrews on the guard clamp. Make sure the capscrews are tightened securely after adjustment.

INSTALLING AND REMOVING GRINDING WHEEL

1. Remove and set aside the jam nut from the output shaft.

2. Position the grinding wheel over the shaft.

3. Screw the jam nut down onto the spindle shaft. Tighten the nut securely by using two open-end wrenches, one wrench on the flats of the spindle shaft, the other wrench on the jam nut.

4. Remove the grinding wheel by loosening the jam nut as in Step 3.

IMPORTANT

Never over-tighten the grinding wheel jam nut by impacting either wrench with a mallet or hammer. Sufficient torque is attained by hand-tightening the nut with two open-end wrenches.

USE OF DEPRESSED-CENTER WHEEL ADAPTER

The Depressed-Center Wheel Adapter (part number 05194) must be used with wheels having a cupped or depressed center.

CONNECT HOSES

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

2. Connect the hoses from the hydraulic power source to the tool fittings or quick disconnects. It is good practice to connect return hoses first and disconnect them last to minimize or avoid trapped pressure within the tool.

3. Observe the arrow on the couplers to ensure that the flow is in the proper direction. The female coupler on the tool is the inlet (pressure) coupler.

4. Move the hydraulic circuit control valve to the “ON” position to operate the tool.

5. Squeeze the grinder trigger momentarily. If the grinder does not operate, the hoses might be reversed. Verify correct connection of the hoses before continuing.

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

OPERATION

TOOL OPERATION

For best results, use only Stanley approved accessories. They have been designed and selected to get the most from the tool.

Review the Safety Precautions given at the front of this manual before operating the tool.

Remember to grip the tool with both hands at all times during startup and operation and be sure you have full balance before starting grinder rotation. Always keep your body away from the “plane of rotation” of the grinding wheel.

Always start the grinder with the wheel away from the work surface. Start hydraulic flow at one gpm and slowly increase flow to a level that produces desired efficiency, but allows the operator to maintain full balance and control.

⚠ WARNING

Starting the hydraulic grinder on the work with full hydraulic flow can push the operator off balance, creating a condition that can cause severe personal injury.

Refer to the Troubleshooting section of this manual to isolate other possible conditions that can lower tool efficiency.

COLD WEATHER OPERATION

If the grinder 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° F/10° C (400 ssu/82 centistokes) before use.

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

TOOL EQUIPMENT & CARE

NOTICE

In addition to the Safety Precautions on page 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 Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) page in this manual for correct flow rate and model number. 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 grinder, always make sure the hydraulic power source is supplying the correct hydraulic flow and pressure to the tool as listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80° F/27° C.

PROBLEM	CAUSE	SOLUTION
Low performance.	Incorrect hydraulic flow.	Check that the power source is producing 4-12 gpm/15-45 lpm at 1000-2000 psi/70-140 bar.
	Defective quick disconnects.	Check quick disconnects.
Fluid leaks at motor cap assembly face.	Fasteners loose.	Tighten to recommended torque value.
	Face o-ring worn or missing.	Replace as required.
	Motor cap assembly/main housing damaged.	Replace as required.
Fluid leaks at reversing spool.	Damaged o-rings.	Replace as required. Refer to assembly instructions to prevent cutting the o-rings.
	Wrong hydraulic fluid. Circuit too hot.	See Hydraulic System Requirements for correct fluid/circuit specifications.
	Hydraulic pressure and return reversed.	Correct hose connections.
Fluid gets hot, power unit working hard.	Open-center tool on a closed-center circuit and vice versa.	Use tool to match circuit.
	Too much fluid going through tool.	Adjust flow for 12 gpm/34 lpm maximum.
	Circuit is generating high heat with flow controls, open relief valve, etc.	Use pump size and rpm for producing needed flow only. Eliminate circuit heating cause.
	Circuit has contaminants that have caused pump and valve wear and high heat generation.	Replace worn pump and valves. Install a large clean filter and keep circuit fluid clean.
Tool doesn’t run.	Power unit not functioning.	Check that the power source is producing 4-12 gpm/15-45 lpm at 1000-2000 psi/70-140 bar.
	Coupler or hoses blocked.	Remove obstruction.
	Mechanical failure.	Disassemble tool and inspect for damage.
Tool runs backwards.	Pressure and return hoses reversed.	Correct for proper flow direction. Grinding wheel should rotate counter-clockwise when viewed from the shaft end.
Grinding wheel comes to abrupt stop after trigger is released.	Porting spool incorrectly assembled.	Refer to Service Instructions.
	Check valve in trigger spool not functioning correctly.	Replace trigger spool assembly. Check valve not serviceable.
	Mechanical failure.	Disassemble tool and inspect for damage.

SPECIFICATIONS

Capacity ..... 9 in./23 cm Wheel on 5/8 in. -11 THD Arbor
Weight (with Wheel Guard) ..... 15 lbs/6387 kg
Length ..... 9 in./23 cm
Width (without Wheel Guard) ..... 4-1/2 in./11.5 cm
Pressure ..... 1000-2500 psi/70-175 bar
Flow Range ..... 4-12 gpm/15-45 lpm
Optimum Flow ..... 2700 rpm at 10 gpm/38 lpm
Porting ..... -8 SAE O-Ring
Connect Size and Type ..... (2) 3/8 in. NPT Adapters
Hose Whips ..... No
Motor ..... Integral

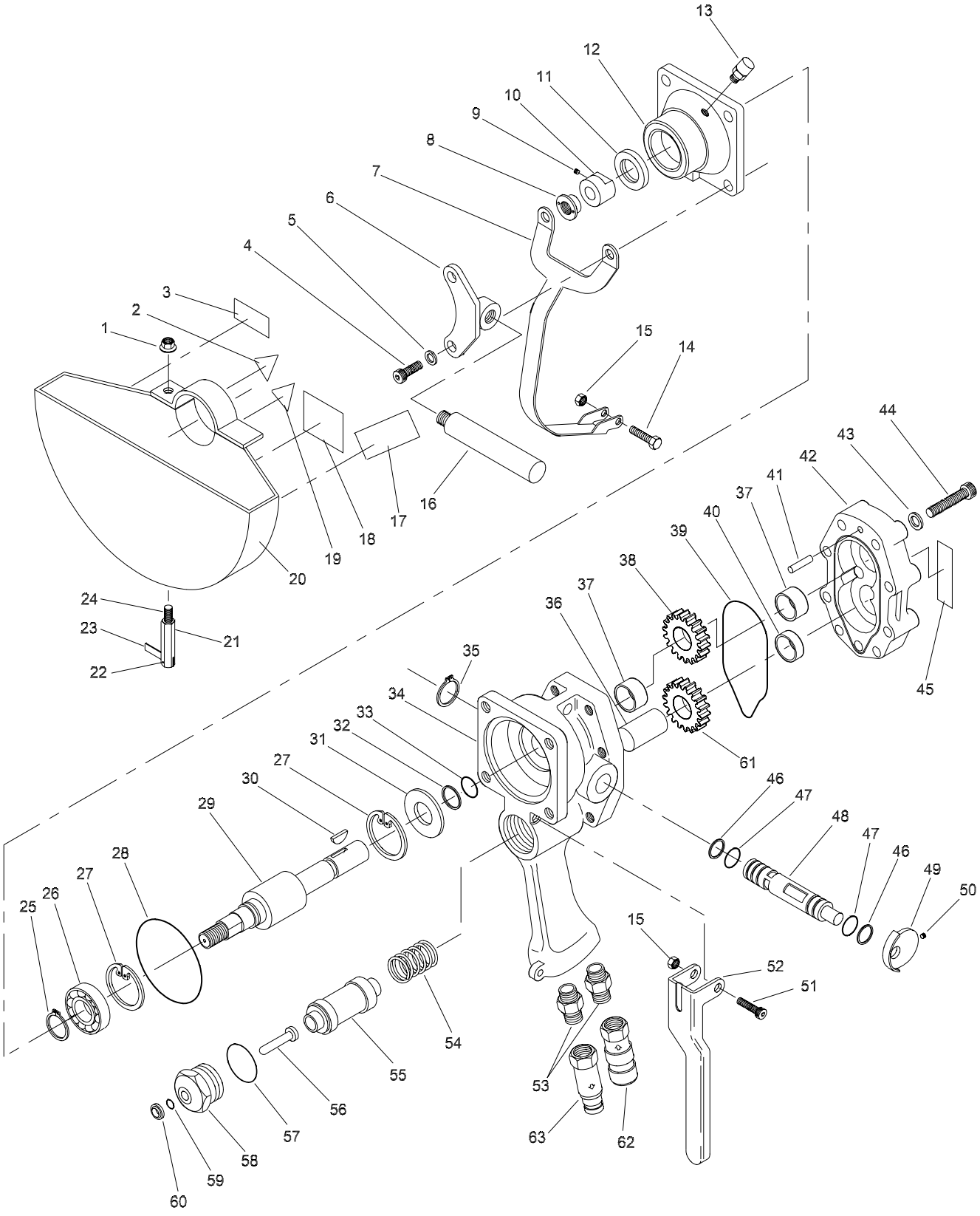
SOUND POWER AND VIBRATION DECLARATION	
Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels	105 dBA
Measured A-weighted sound pressure level, Lpa (ref. 20 µPa) at operator's position, in decibels	97 dBA
Values determined according to noise test code given in using the basic standard ISO3744 NOTE- The sum of a measured noise emision value and its associated uncertainty represents an upper boundry of the range of values which is likely to occur in measurements.	
Declared vibration emission value in accordance with EN 12096	
Measured vibration emmission value: a (Throttle Handle)	1.0 m/sec^2
Uncertainty: K (Throttle Handle)	0.15 m/sec^2
Measured vibration emmission value: a (Support Handle)	2.1 m/sec^2
Uncertainty: K (Support Handle)	0.20 m/sec^2
Values determined according to ISO 8662-1, ISO 8662-4, ISO 5349-1	

ACCESSORIES

Description **Part Number**

Grinding Wheel for Metal 9 in. Diameter x 5/8 in. -11 THD Arbor 02587
Grinding Wheel for Masonry 9 in. Diameter x 5/8 in. -11 THD Arbor 02588
Grinding Wheel 7 in. x 5/8 in. -11 THD Arbor 03691
Depressed Center Wheel Adapter 05194

GR29 PARTS ILLUSTRATION



GR29 PARTS LIST

Item No.	Part No.	Qty	Description
1		1	Nut
2	11206	1	Circuit Type “C” Decal (CE Only)
3	28322	1	CE Decal (CE Only)
4	00230	4	Capscrew
5	00231	2	Lockwasher
6	13796	2	Dead Handle Bracket Weldment
7	12285	1	Trigger Guard
8	16495	1	Hub Nut
9	00599	1	Setscrew
10	28913	1	Drive Flange
11	13812	1	Shaft Seal
12	13790	1	Bearing Carrier
13	01220	1	Grease Fitting
14	12470	1	Capscrew
15	07724	2	Nut
16	08130	1	Handle
17	28811	1	Information Plaque
18	28409	1	Composite Safety Decal (CE Only)
19	12535	1	Circuit Type “E” Decal (CE Only)
20	11937 08322	1	Wheel Guard Wheel Guard GR29310 Only
21	12290	1	Clamp Screw
22	00285	1	Roll Pin
23	12291	1	Thumb Plate
24	12786	1	Stud
25	00672	1	Retaining Ring
26	13813	1	Ball Bearing
27	00166	2	Retaining Ring
28	00149	1	O-Ring
29	13791	1	Spindle Shaft
30	13828	1	Woodruff Key
31	07987	1	Back-up Washer
32	09396	1	Back-up Ring
33	08017	1	O-Ring
34	12286	1	Main Housing
35	09275	1	Retaining Ring
36	07991	1	Idler Shaft
37	08014	2	Bushing
38	13783	1	Drive Gear
39	08023	1	O-Ring
40	07978	1	Bushing
41	372055	1	Dowel Pin
42	13789	1	Motor Cap Assy.

Item No.	Part No.	Qty	Description
43	00812	8	Washer
44	01870	8	Capscrew
45	13778	1	Name Tag
46	08015	2	Back-up Ring
47	01211	2	O-Ring
48	08002	1	Reversing Spool
49	17061	1	Valve Keeper
50	00580	1	Setscrew
51	00786	1	Capscrew
52	12283	1	Trigger
53	00936	2	Adapter
54	07988	1	Spring
55	13781	1	Spool Assy.
56	23678	1	Headed Push Pin
57	06533	1	O-Ring
58	22063	1	Spool Cap
59	00026	1	O-Ring
60	22064	1	Rod Wiper
61	07989	1	Idler Gear Assy.
62	03972	1	Female Coupler
63	03973	1	Male Coupler
	03789	1	GPM Decal GR29310 Only
	16969	1	SEAL KIT

WARRANTY

Stanley Hydraulic Tools (hereinafter called “Stanley”), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley’s factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

EXCEPTIONS FROM WARRANTY

NEW PARTS: New parts which are obtained individually are warranted, subject to the exceptions herein, to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage. Seals and diaphragms are warranted to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage or 2 years after the date of delivery, whichever period expires first. Warranty for new parts is limited to replacement of defective parts only. Labor is not covered.

FREIGHT COSTS: Freight costs to return parts to Stanley, if requested by Stanley for the purpose of evaluating a warranty claim for warranty credit, are covered under this policy if the claimed part or parts are approved for warranty credit. Freight costs for any part or parts which are not approved for warranty credit will be the responsibility of the individual.

SEALS & DIAPHRAGMS: Seals and diaphragms installed in new tools are warranted to be free of defects in material and/or workmanship for a period of 6 months after the date of first usage, or for a period of 2 years from the shipping date from Stanley, whichever period expires first.

CUTTING ACCESSORIES: Cutting accessories such as breaker tool bits are warranted to be free of defects in material and or workmanship at the time of delivery only.

ITEMS PRODUCED BY OTHER MANUFACTURERS: Components which are not manufactured by Stanley and are warranted by their respective manufacturers.

a. Costs incurred to remove a Stanley manufactured component in order to service an item manufactured by other manufacturers.

ALTERATIONS & MODIFICATIONS: Alterations or modifications to any tool or part. All obligations under this warranty shall be terminated if the new tool or part is altered or modified in any way.

NORMAL WEAR: any failure or performance deficiency attributable to normal wear and tear such as tool bushings, retaining pins, wear plates, bumpers, retaining rings and plugs, rubber bushings, recoil springs, etc.

INCIDENTAL/CONSEQUENTIAL DAMAGES: To the fullest extent permitted by applicable law, in no event will STANLEY be liable for any incidental, consequential or special damages and/or expenses.

FREIGHT DAMAGE: Damage caused by improper storage or freight handling.

LOSS TIME: Loss of operating time to the user while the tool(s) is out of service.

IMPROPER OPERATION: Any failure or performance deficiency attributable to a failure to follow the guidelines and/or procedures as outlined in the tool’s operation and maintenance manual.

MAINTENANCE: Any failure or performance deficiency attributable to not maintaining the tool(s) in good operating condition as outlined in the Operation and Maintenance Manual.

HYDRAULIC PRESSURE & FLOW, HEAT, TYPE OF FLUID: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, excess hydraulic flow, excessive heat, or incorrect hydraulic fluid.

REPAIRS OR ALTERATIONS: Any failure or performance deficiency attributable to repairs by anyone which in Stanley’s sole judgement caused or contributed to the failure or deficiency.

MIS-APPLICATION: Any failure or performance deficiency attributable to mis-application. “Mis-application” is defined as usage of products for which they were not originally intended or usage of products in such a matter which exposes them to abuse or accident, without first obtaining the written consent of Stanley. PERMISSION TO APPLY ANY PRODUCT FOR WHICH IT WAS NOT ORIGINALLY INTENDED CAN ONLY BE OBTAINED FROM STANLEY ENGINEERING.

WARRANTY REGISTRATION: STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools’ first date of usage. The term “DOCUMENTATION” as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS “DOCUMENTATION”.

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

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