# **STANLEY**

# **PG10 HYDRAULIC PROFILE GRINDER**



## **USER MANUAL** Safety, Operation and Maintenance









© 2014 Stanley Black & Decker, Inc. New Britain, CT 06053 U.S.A. 65846 2/2015 Ver. 6

## **DECLARATION OF CONFORMITY**

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



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

lo sottoscritto:

Weisbeck, Andy

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: Grinde	ler, Hydraulic
---------------------	----------------

Kategorie: Catégorie: Categoria: Categoria:

2. Make/Marke/Marque/Marca/Marca Stanley

3. Type/Type/Tipo/Tipo: PG1011001, PG1011001A

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	11148-7:2011	Self
EN ISO	3744:2010	Self
EN	28927-1:2009	Self
Machinery Directive	2006/42/EC:2006	Self

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

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 Hydraulic Too	ols, Milwaukie, Oregon	USA [	Date/Datum/le/Fecha/Data	1-6-11

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Cargo/Posizione Director of Product Development

**STANLEY** 

## **TABLE OF CONTENTS**

PREVENTATIVE MAINTENANCE	DECLARATION OF CONFORMITY	2
TOOL STICKERS & TAGS       6         HOSE TYPES       7         HOSE RECOMMENDATIONS       8         FIGURE 1. TYPICAL HOSE CONNECTIONS       8         HTMA REQUIREMENTS       9         OPERATION       10         PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	SAFETY SYMBOLS	4
HOSE TYPES.       7         HOSE RECOMMENDATIONS       8         FIGURE 1. TYPICAL HOSE CONNECTIONS       8         HTMA REQUIREMENTS.       9         OPERATION.       10         PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18		
HOSE RECOMMENDATIONS       8         FIGURE 1. TYPICAL HOSE CONNECTIONS       8         HTMA REQUIREMENTS       9         OPERATION       10         PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	TOOL STICKERS & TAGS	6
FIGURE 1. TYPICAL HOSE CONNECTIONS       8         HTMA REQUIREMENTS       9         OPERATION       10         PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	HOSE TYPES	7
HTMA REQUIREMENTS       9         OPERATION       10         PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	HOSE RECOMMENDATIONS	8
OPERATION       10         PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	FIGURE 1. TYPICAL HOSE CONNECTIONS	8
PREVENTATIVE MAINTENANCE       12         TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	HTMA REQUIREMENTS	9
TOOL PROTECTION & CARE       13         TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	OPERATION	10
TROUBLESHOOTING       14         SPECIFICATIONS       15         ACCESSORIES       15         PG10 PARTS ILLUSTRATION       16         PG10 PARTS LIST       18	PREVENTATIVE MAINTENANCE	12
SPECIFICATIONS	TOOL PROTECTION & CARE	13
ACCESSORIES		
PG10 PARTS ILLUSTRATION	SPECIFICATIONS	15
PG10 PARTS LIST	ACCESSORIES	15
	PG10 PARTS ILLUSTRATION	16
SPARK GUARD KIT	PG10 PARTS LIST	18
	SPARK GUARD KIT	20

## **IMPORTANT**

To fill out a Product Warranty Validation form, and for information on your warranty, visit Stanleyhydraulics.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 Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following 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.



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

This safety alert and signal word indicate 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 indicate 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> <u>to the equipment</u>.

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

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

#### LOCAL SAFETY REGULATIONS

PORTA

nance personnel.	Reep these instructions in an area accessible to the operator and mainte-

## **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 model PG10 Hydraulic Profile 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 grinder 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 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.
- Do not inspect, clean or replace the grinding wheel 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 the tool with the wheel guard removed.
- Do not operate a damaged, improperly adjusted, or incompletely assembled grinder.
- 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 wheel. Long hair or loose clothing can become drawn into rotating components.
- Keep the wheel off all surfaces when starting the grinder.
- Do not use a wheel that is cracked, chipped or otherwise damaged. Always inspect wheels for possible damage before installation or use.
- Always use wheels that conform to the specifications given in the OPERATION section of this manual.
- Do not reverse grinding wheel rotation direction by changing fluid flow direction.
- Do not move the tool until the wheel has stopped rotating. Release the trigger if the power supply has been interrupted.



## **TOOL STICKERS & TAGS**

CAUTION

7-10 GPM / 26-34 LPM DO NOT EXCEED 2000 PSI / 140 BAR



- JONOT USE DAMAGED WHEELS.
  USE ONLY WHEELS THAT MEET BEQUIREDMENTS OF ANSI BY 1, BY 5, 190 555, 503.
  USE ONLY WHEELS SHOULD BE NO LAPCER THANKS 5' 5' 5'56-11 THREAD, RATED FOR AT LEAST 5000 FIRM MANAMAM CEPTATING SPEED.
  LEAST 5000 FIRM MANAMAM CEPTATING SPEED.
  WISSPECT GUARD AND MOUNTING FLANGE FOR DAMAGE AFTER ANY WHEEL

25357 **CAUTION DECAL** 



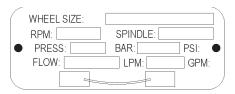
28409 COMPOSITE DECAL (CE)



51296 SOUND POWER LEVEL DECAL



11207 CIRCUIT TYPE D STICKER



28811 INFORMATION PLAQUE (CE)



RAILROAD HELP DESK

1-800-549-0517 **FOR CUSTOMER SERVICE OR TECHNICAL QUESTIONS** 

RAILROAD HELP DESK DECAL



28322 CE DECAL

#### 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.

#### 29714

03787

GPM DECAL (US)

#### PGTU NAME TAG (US & CE)

#### DANGER

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 COMDUCTIVE 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.

- A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
- DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
- DO 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 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

#### DANGER

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

  MAKE SURE HYDRAULD HOSES ARE PROPERLY CONMECTED 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. SYSTEM METURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS 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 FUNCTIONS 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 PROTECTION.
- 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

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*.

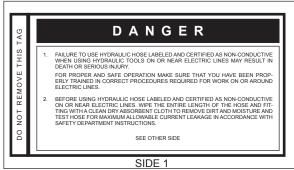
**Fabric-braided** (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is not certified non-conductive* and must never be used near electrical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

#### **HOSE SAFETY TAGS**

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley 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 RECOMMENDATIONS**

# 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 Hydraulic Tools 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	Oil Flow	Hose Lengths	engths	Inside Diameter	iameter	USE	Min. Workin	Min. Working Pressure
GPM	LPM	FEET	METERS	INCH	MM	(Press/Return)	PSI	BAR
		Certified No	an-Conductive	Hose - Fiber	Braid - for	Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks	Trucks	
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
	Conducti	Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS	<b>Braid or Fiber</b>	Braid -DO N	OT USE NE	AR ELECTRIC	AL CONDUCT	ORS
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	8/9	16	Both	2500	175
7 7 7	7	400 300	00 00	8/9	16	Pressure	2500	175
c:01-c	04-60	006-001	08-00	3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	2/8	16	Both	2500	175
2.0	00 40	700	75 20	2/8	16	Pressure	2500	175
2-0	94-00	001-100	06-61	3/4	19	Return	2500	175
707	20 40	700	09 06	3/4	19	Pressure	2500	175
2-0	94-00	002-001	00-00	1	25.4	Return	2500	175
0,7	00	10 of all	0 0	2/8	16	Pressure	2500	175
0 - 2	49-00	67 01 dn	o 01 dn	3/4	19	Return	2500	175
7 7 7	0 0	700	000	3/4	19	Pressure	2500	175
0 -0	49-00	70-100	05-0	_	25.4	Return	2500	175

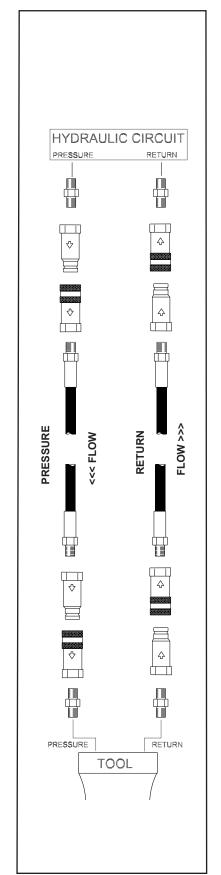


Figure 1. Typical Hose Connections

## HTMA / EHTMA REQUIREMENTS

**HTMA TOOL TYPE** HYDRAULIC SYSTEM REQUIREMENTS TYPE I TYPE II **TYPE RR** TYPE III 4-6 gpm 7-9 gpm 9-10.5 gpm 11-13 gpm Flow Range (15-23 lpm) (26-34 lpm) (34-40 lpm) (42-49 lpm) 1500 psi 1500 psi 1500 psi 1500 psi Nominal Operating Pressure (103 bar) (103 bar) (103 bar) (103 bar) (at the power supply outlet) 2100-2250 psi 2100-2250 psi 2200-2300 psi 2100-2250 psi System relief valve setting (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) 400 ssu\* 400 ssu\* 400 ssu\* 400 ssu\* Measured at a max. fluid viscosity of: (at min. operating temperature) (82 centistokes) (82 centistokes) (82 centistokes) (82 centistokes) 140° F 140° F 140° F 140° F Temperature: Sufficient heat rejection capacity to limit max. fluid temperature to: (60°C) (60°C) (60°C) (60°C) (at max. expected ambient temperature) Min. cooling capacity at a temperature 3 hp 6 hp 7 hp 5 hp difference of between ambient and fluid (2.24 kW) (3.73 kW) (5.22 kW) (4.47 kW) 40° F temps 40° F 40° F 40° F NOTE: (22°C) (22° C) (22°C) (22°C) Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool. 25 microns 25 microns 25 microns 25 microns Min. full-flow filtration 30 gpm 30 gpm 30 gpm 30 gpm Sized for flow of at least: (114 lpm) (114 lpm) (114 lpm) (114 lpm) (For cold temp. startup and max. dirt-holding capacity) Hydraulic fluid Petroleum based 100-400 ssu\* 100-400 ssu\* 100-400 ssu\* 100-400 ssu\* (premium grade, anti-wear, non-conductive) (20-82 centistokes) Viscosity (at min. and max. operating temps)

#### 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

#### **CLASSIFICATION EHTMA** HYDRAULIC SYSTEM REQUIREMENTS 20Lpm at 138 30Lpm at 138b EHTMA CATEGOR Flow Range 3.5-4.3 gpm 4.7-5.8 gpm 7.1-8.7 gpm 9.5-11.6 gpm 11.8-14.5 gpm (45-55 lpm) (13.5-16.5 lpm) (18-22 lpm) (27-33 lpm) (36-44 lpm) Nominal Operating Pressure 1870 psi 1500 psi 1500 psi 1500 psi 1500 psi (at the power supply outlet) (129 bar) (103 bar) (103 bar) (103 bar) (103 bar) System relief valve setting 2495 psi 2000 psi 2000 psi 2000 psi 2000 psi (at the power supply outlet) (172 bar) (138 bar) (138 bar) (138 bar) (138 bar)

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



## **OPERATION**

# PRE-OPERATION PROCEDURES CHECK HYDRAULIC POWER SOURCE

- Using a calibrated flow meter and pressure gauge, check that the hydraulic power source develops a flow of 7–10 gpm/26–38 lpm at 2200–2300 psi/152– 159 bar.
- 2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100–2250 psi/145–155 bar minimum.
- Check that the hydraulic circuit matches the tool for open-center (OC) or closed-center (CC) operation.

#### CHECK TOOL

- Make sure all tool accessories are correctly installed. Failure to install tool accessories 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**

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

#### CHECK GUARD WELDMENT

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

## INSTALLING AND REMOVING GRINDING WHEEL

#### NOTE:

Use 6 inch diameter up to 3 inch thick (Type 6 for USA) grinding wheels with a 5/8-11 threaded arbor hole. Only use grinding wheels which comply with ANSI B7.1, B7.5/ISO 525, 603.

READ AND BECOME FAMILIAR WITH THE SECTIONS IN THIS MANUAL ON SAFETY PRECAUTIONS, TOOL STICKERS AND TAGS, HYDRAULIC HOSE REQUIREMENTS, HYDRAULIC REQUIREMENTS, AND PREOPERATION PROCEDURES BEFORE USING THIS PRODUCT.

- Unscrew the two nuts (98) which secure the guard weldment (95) to the frame and remove the guard weldment.
- 2. Install the grinding wheel until it comes in contact with the drive flange.

- Using the wrench (89) provided, place it on the flats of the drive flange. Place a strap wrench on the grinding wheel and then tighten by gripping and turning the strap wrench while holding the wrench provided.
- 4. Replace the guard weldment.

## **IMPORTANT**

Never over-tighten the grinding wheel by impacting the wrench with a mallet or hammer. Sufficient torque is attained by hand-tightening the wheel with a strap wrench while securing the drive flange with the wrench provided.

#### ADJUST WHEEL FLANGES TO FIT RAIL

The wheel flanges may be adjusted to fit the width of the rail by removing one or more of the washers.

#### **CONNECTING THE HOSES**

- 1. Wipe all hose couplers with a clean lint-free cloth before making connections.
- Connect the hoses from the hydraulic power source to the hose couplers on the grinder. It is a good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the grinder motor.
- 3. Observe flow indicators stamped on hose couplers to be sure that oil will flow in the proper direction. The female coupler is the inlet coupler.

#### NOTE:

The pressure increase in uncoupled hoses left in the sun may result in making them difficult to connect. When possible, connect the free ends of operating hoses together.



## **OPERATION**

#### **OPERATING PROCEDURES**

- 1. Observe all safety precautions.
- 2. Always start the grinder with the grinding wheel away from the work surface by turning the hand wheel counter clockwise to raise the wheel.
- Move the hydraulic circuit control valve to the ON position.
- Squeeze the trigger momentarily. If the grinder does not operate, the hoses might be reversed. Verify correct connection of the hoses before continuing.
- 5. Start the grinder and move the grinding wheel to the work surface by turning the hand wheel clockwise.
- Grind a small amount of material at a time adjusting the grinding wheel as necessary by turning the hand wheel.

#### NOTE:

If the grinder is not loaded against a work surface when the trigger is released, the wheel will take 5-10 seconds to come to a complete stop. Avoid unintentional contact of the grinding wheel during the coast down period.

#### **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.



## PREVENTATIVE MAINTENANCE

- The gears and bearings in the ram, spindle, and housing assemblies should be regreased every 6 months or 500 hours. This procedure must be accomplished by a trained technician.
- After each servicing, measure the spindle speed (rpm – revolutions per minute) at 12 gpm/45 lpm input. The nominal speed is 4000, not to exceed 6000 rpm. This procedure must be accomplished by a trained technician.
- 3. Inspect the spindle and drive flange for signs of wear or damage. Run out should not exceed .004 in./.1 mm TIR on threads or .002 in./.05 mm TIR on arbor diameters and faces.
- 4. Check hoses and fittings weekly for any evidence of leakage, cover wear, cracking or cuts. If any of these defects are found, discontinue use of the tool immediately and have the defects repaired or replaced by a trained technician.

## **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 Hydraulic Tools. 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. 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 check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the grinder as listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80  $^{\circ}$ F/27  $^{\circ}$ C.

PROBLEM	CAUSE	SOLUTION
Grinder does not run.	Hydraulic power source not functioning.	Check power source for proper flow and pressure (7–10 gpm/26–38 lpm @ 1500–2000 psi/ 105–140 bar.
	Couplers or hoses blocked.	Locate and remove restriction.
	Hydraulic motor failure.	Inspect and repair.
	Hydraulic lines not connected.	Connect lines.
Grinder operates too slow.	Hydraulic motor speed to slow.	Check power unit for proper flow (7–10 gpm/26–38 lpm).
	High back-pressure.	Check hydraulic system for excessive back-pressure (over 250 psi/17 bar).
	Couplers or hoses blocked.	Locate and remove restriction.
	Oil too hot (above 140 °F/60 °C) or too cold (below 60 °F/16 °C).	Check hydraulic power source for proper oil temperature. Bypass cooler to warm oil or provide cooler to maintain proper temperature.
	Relief valve set too low.	Adjust relief valve to 2100–2250 psi/145–155 bar.
	Hydraulic motor worn.	Inspect, repair or replace.
	Flow control malfunctioning.	Have flow control serviced at an authorized Stanley service center.
Grinder operates too fast.	Flow control malfunctioning.	Have flow control and valve body serviced at an authorized Stanley service center.

## **SPECIFICATIONS**

Wheel Capacity	psi/70–140 bar .250 psi/17 bar gpm/26–38 lpm 8 SAE O-ring Male & Female le Pipe Adapter No 118 lb/53.5 kg ches/111.76 cm inches/50.8 cm inches/77.4 cm 4000 24251 140 °F/60 °C 102 dBA 93dBA
SOUND AND VIBRATION DECLARATION	
Test conducted on PG10110 S/N 206 operated at standard 10 gpm input	
Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels	102.00 dBA
Uncertainty, Kwa, in decibels	3 dBA
Measured A-weighted sound pressure level, Lpa (ref. 20 µPa) at operator's position, in decibels	93 dBA
Uncertainty, Kpa, in decibels	3 dBA
Values determined according to noise test code given in ISO 15744, using the basic standard ISO 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.	
Declared vibration emission value in accordance with EN 12096	
Measured vibration emission value: a	3.4 m/sec <sup>2</sup>
Uncertainty: K	1.0 m/sec <sup>2</sup>

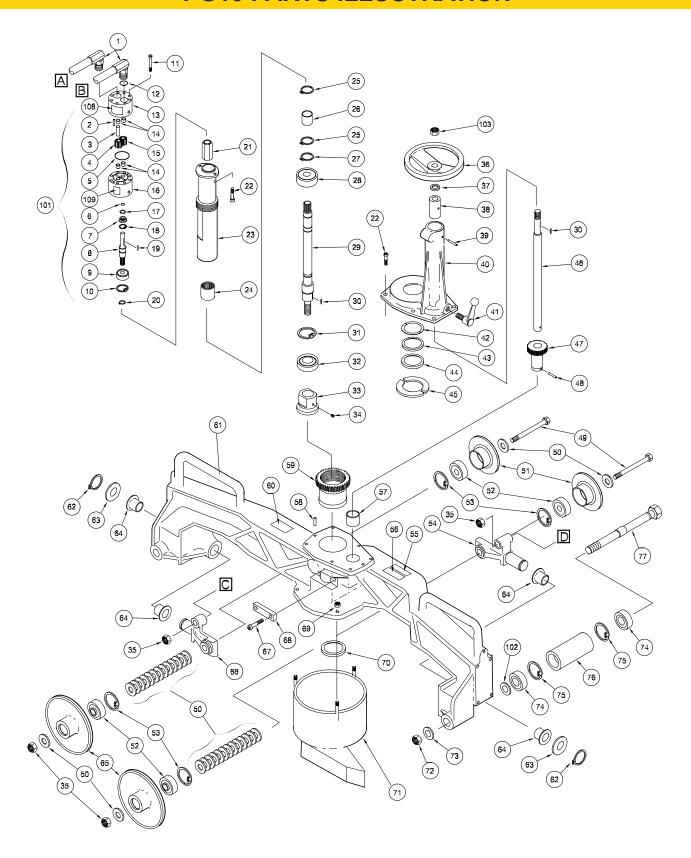
## **ACCESSORIES**

Values determined according to ISO 8662-4, ISO 5349-1,2

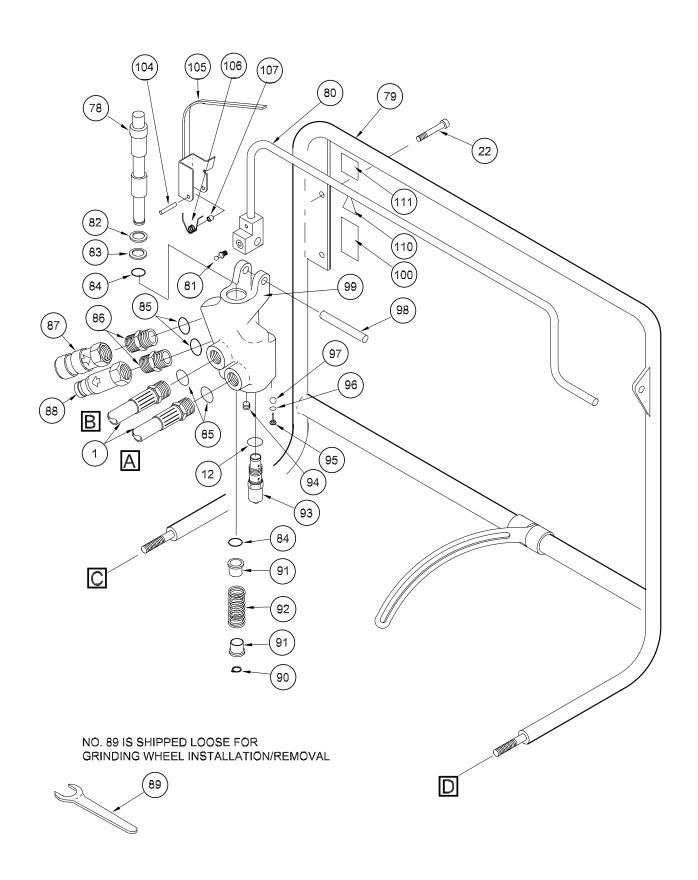
6 × 2 × 5/9 11 Th	road Cun Stone	2	29507
$0 \times 3 \times 3/8$	iread Cub Storie		2009 <i>1</i>



## **PG10 PARTS ILLUSTRATION**



## **PG10 PARTS ILLUSTRATION**



## **PG10 PARTS LIST**

ITEM	P/N	QTY	DESCRIPTION
1	25294	2	HOSE ASSY
2	00713	2	DOWEL PIN
3	06854	1	IDLER SHAFT
4	25717	1	IDLER GEAR
5	00178	1	O-RING, 2-1/8 × 2-1/4 × 1/16 70D •
6	00669	1	QUAD RING •
7	19884	1	SEAL GLAND
8	25166	1	MOTOR SHAFT
9	00148	1	BEARING
10	00166	1	RETAINING RING
11	00120	8	CAPSCREW
12	01604	3	O-RING (INCL WITH ITEM 1) •
13	06880	1	GEAR HOUSING
10	06846	1	GEAR HSG ASSY (INCL ITEMS 2 & 14)
14	06316	4	BUSHING
15	25718	1	DRIVE GEAR
16	19898	1	FRONT BEARING HOUSING
-	19905	1	FRONT BRG HSG ASSY (INCL ITEMS 14)
17	00171	1	O-RING 11/16 × 13/16 × 1/16 70D •
18	00170	1	RETAINING RING
19	06881	1	NEEDLE ROLLER
20	00708	1	RETAINING RING
21	25158	1	SPLINED COUPLING
22	02688	10	CAPSCREW
23	25099	1	RAM
24	25291	1	NEEDLE ROLLER BEARING
25	25289	2	RETAINING RING
26	25290	1	INNER RING
27	25281	1	RETAINING RING
28	25279	1	BEARING
29	27941	1	SPINDLE
30	00772	2	WOODRUF KEY
31	25278	1	RETAINING RING
32	25280	1	OIL SEAL, 1.250 × 2.047 × .299 •
33	25419	1	DRIVE FLANGE
34	01607	1	SET SCREW
35	04374	4	NUT
36	26809	1	HAND WHEEL
37	25287	1	WIPER •
38	27748	1	BUSHING
39	02900	1	ROLL PIN
40	27749	1	HOUSING
41	25285	1	ADJUSTABLE HANDLE
42	25104	1	BACKUP WASHER
43	25286	1	WIPER TYPE H •

ITEM	P/N	QTY	DESCRIPTION
44	25293	1	SQUARE RING •
45	25103	1	THRUST WASHER
46	26810	1	SHAFT
47	25083	1	PINION GEAR
48	25283	1	ROLL PIN
49	25304	2	CAPSCREW
50	20876	30	WASHER
51	25045	2	FLANGE
52	25303	4	BEARING
53	25302	4	RETAINING RING
54	25111	1	ARM L.H.
55	25610	1	HELP DESK STICKER
56	25357	1	CAUTION STICKER
57	25284	1	BUSHING
58	00272	2	DOWEL PIN
59	25082	1	FEED GEAR
60	29714	1	NAME TAG
61	25076	1	FRAME
62	25297	2	RETAINING RING
63	25296	2	THRUST WASHER
64	25295	4	FLANGED BUSHING
65	25046	2	FLANGE
66	25126	1	ARM R.H
67	10888	2	CAPSCREW
68	25167	1	KEY
69	04353	3	STOP NUT
70	25277	1	WIPER •
71	25060	1	GUARD WELDMENT
72	04984	2	STOP NUT
73	25300	2	WASHER
74	25299	4	BEARING
75	25298	4	RETAINING RING
76	25047	2	ROLLER
77	25048	2	SHAFT BOLT
78	25036	1	ON-OFF SPOOL (O.C.)
79	25161	1	HANDLE WELDMENT
80	28453	1	TRIGGER ASSY
81	18037	1	BALL JOINT STUD
82	25305	1	WIPER •
83	25256	1	WASHER •
84	08017	2	O-RING 7/8 × 1-1/16 × 3/32 -118 •
85	01605	4	O-RING .644 × .818 × .087 -908 (INCL W/ ITEMS 1 & 86) •
86	00936	2	ADAPTER
87	03972	1	FEMALE COUPLING, PARKER
	47436	1	FEMALE COUPLING, AEROQUIP

## **PG10 PARTS LIST**

ITEM	P/N	QTY	DESCRIPTION
88	03973	1	MALE COUPLING, PARKER
	47437	1	MALE COUPLING, AEROQUIP
89	25842	1	WRENCH (SHIPPED LOOSE)
90	17904	1	RETAINING RING
91	18008	2	SPRING WASHER
92	24819	1	SPRING
93	28914	1	FLOW CONTROL (PRE-SET)
94	00955	1	PIPE PLUG
95	24289	1	PLUG
96	01411	1	O-RING, .488 × .624 × .078 -906 •
97	20145	1	STEEL BALL
98	25292	1	ROLL PIN
99	25005	1	VALVE BLOCK
100	03787	1	GPM STICKER
	28811	1	INFORMATION PLAQUE (CE ONLY)
	21336	2	POP RIVET FOR INFORMATION PLAQUE (CE ONLY)
101	25251	1	MOTOR ASSY (INCL 2 THRU 11, & 13 THRU 20)
102	25052	2	WASHER
103	02179	1	NUT
104	18601	1	ROLL PIN
105	27366	1	LEVER WELDMENT
106	27599	1	SPRING (MODIFIED)
107	27370	1	SPACER
108	28409	1	DECAL, COMPOSITE SAFETY
109	28322	1	DECAL, CE
110	11207	1	DECAL, CIRCUIT TYPE D
111	51296	1	DECAL, SOUND POWER LEVEL
	25942	1	SEAL KIT

• Denotes part in seal kit

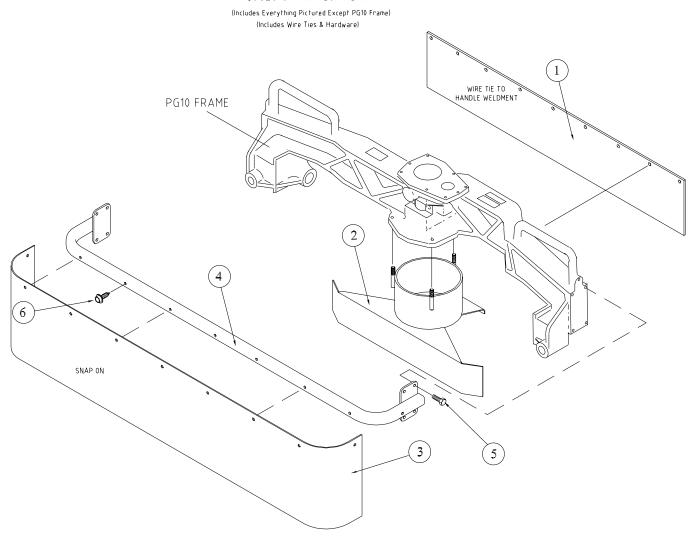
#### NOTE:

Use Part Number and Part Name when ordering.



## **SPARK GUARD KIT**

PG10 69820 SPARK GUARD KIT



	D/M	071/	PEGGEIPTION
ITEM	P/N	QTY	DESCRIPTION
1	69915	1	SPARK BARRIER SECONDARY
2	69899	1	GUARD WELDMENT
3	65202	1	SPARK BARRIER
4	62402	1	SPARK GUARD FRAME WELDMENT
5	2072	8	CAPSCREW
6	70743	9	FABRIC SNAP
7	2395	9	CABLE TIE (NOT PICTURED)
	69814	1	SPARK GUARD ASSY (INCL ITEMS 3 & 4)
	69820	1	SPARK GUARD KIT (INCL ITEMS 1 THRU 7



# STANLEY

Stanley Hydraulic Tools 3810 SE Naef Road Milwaukie, Oregon 97267-5698 USA (503) 659-5660 / Fax (503) 652-1780 www.stanleyhydraulics.com Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com