



GR29 Underwater Hydraulic Grinder

66486 User Manual 4/2024 Ver. 23

| <p>DECLARATION OF CONFORMITY ÜBEREINSTIMMUNGS-ERKLÄRUNG DECLARATION DE CONFORMITE CEE DECLARACION DE CONFORMIDAD DICHIARAZIONE DI CONFORMITA</p> |   | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|---------------------------------|---|--------|--------------------|------|--------|--------------|------|--------|-----------|------|--------|--------------|------|--------|--------------|------|---------------------|-----------------|------|
| <p>I, the undersigned: Vervier, Patrick Ich, der Unterzeichnende: Je soussigné: El abajo firmante: Io sottoscritto:</p> <p style="text-align: center; font-size: small;">Surname and First names/Familiennname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>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:</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>1. Category: Kategorie: Catégorie: Categoría: Categoria:</p> | <p>Grinder, Hydraulic</p> | | | | | | | | | | | | | | | | | | | | | |
| <p>2. Make/Marke/Marque/Marca/Marca</p> | <p>STANLEY</p> | | | | | | | | | | | | | | | | | | | | | |
| <p>3. Type/Typ/Type/Tipo/Tipo:</p> | <p>GR2930101</p> | | | | | | | | | | | | | | | | | | | | | |
| <p>4. Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement: Numero de serie del equipo: Matricola dell'attrezzatura:</p> | <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>All</p> </div> | | | | | | | | | | | | | | | | | | | | | |
| <p>Has been manufactured in conformity with Wurde hergestellt in Übereinstimmung mit Est fabriqué conformément Ha sido fabricado de acuerdo con E' stata costruita in conformità con</p> | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th style="width: 30%;">Directive/Standards Richtlinie/Standards Directives/Normes Directriz/Los Normas Direttiva/Norme</th> <th style="width: 30%;">No. Nr Numéro No n.</th> <th style="width: 40%;">Approved body Prüfung durch Organisme agréé Aprobado Collaudato</th> </tr> </thead> <tbody> <tr> <td>EN ISO</td> <td>20643:2008/A1:2012</td> <td>Self</td> </tr> <tr> <td>EN ISO</td> <td>28927-1:2019</td> <td>Self</td> </tr> <tr> <td>EN ISO</td> <td>3744:2010</td> <td>Self</td> </tr> <tr> <td>EN ISO</td> <td>11148-7:2012</td> <td>Self</td> </tr> <tr> <td>EN ISO</td> <td>13732-1:2008</td> <td>Self</td> </tr> <tr> <td>Machinery Directive</td> <td>2006/42/EC:2006</td> <td>Self</td> </tr> </tbody> </table> | | 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 | 20643:2008/A1:2012 | Self | EN ISO | 28927-1:2019 | Self | EN ISO | 3744:2010 | Self | EN ISO | 11148-7:2012 | Self | EN ISO | 13732-1:2008 | Self | Machinery Directive | 2006/42/EC:2006 | Self |
| 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 | 20643:2008/A1:2012 | Self | | | | | | | | | | | | | | | | | | | | |
| EN ISO | 28927-1:2019 | Self | | | | | | | | | | | | | | | | | | | | |
| EN ISO | 3744:2010 | Self | | | | | | | | | | | | | | | | | | | | |
| EN ISO | 11148-7:2012 | Self | | | | | | | | | | | | | | | | | | | | |
| EN ISO | 13732-1:2008 | Self | | | | | | | | | | | | | | | | | | | | |
| Machinery Directive | 2006/42/EC:2006 | Self | | | | | | | | | | | | | | | | | | | | |
| <p>5. Special Provisions: None Spezielle Bestimmungen: Dispositions particulières: Provisiones especiales: Disposizioni speciali:</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>6. Representative in the Union: Patrick Vervier, STANLEY Dubuis 17-19, rue Jules Berthonneau- CS 73406 41034 Blois CEDEX, France. Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>Done at/Ort/Fait à/Dado en/Fatto a <u>STANLEY Infrastructure, Milwaukie, Oregon USA</u> Date/Datum/le/Fecha/Data</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>Signature/Unterschrift/Signature/Firma/Firma</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>Position/Position/Fonction/Cargo/Posizione <u>Engineering Manager</u></p> | | | | | | | | | | | | | | | | | | | | | | |

DECLARATION OF CONFORMITY

STANLEY®

**UK
CA**

I, the undersigned:

Vervier, Patrick

Surname and First names

hereby declare that the equipment specified hereunder:

- 1. Category: **Grinder, Hydraulic**
- 2. Make: **STANLEY**
- 3. Type: **GR2930101**
- 4. Serial number of equipment: **All**

Has been manufactured in conformity with

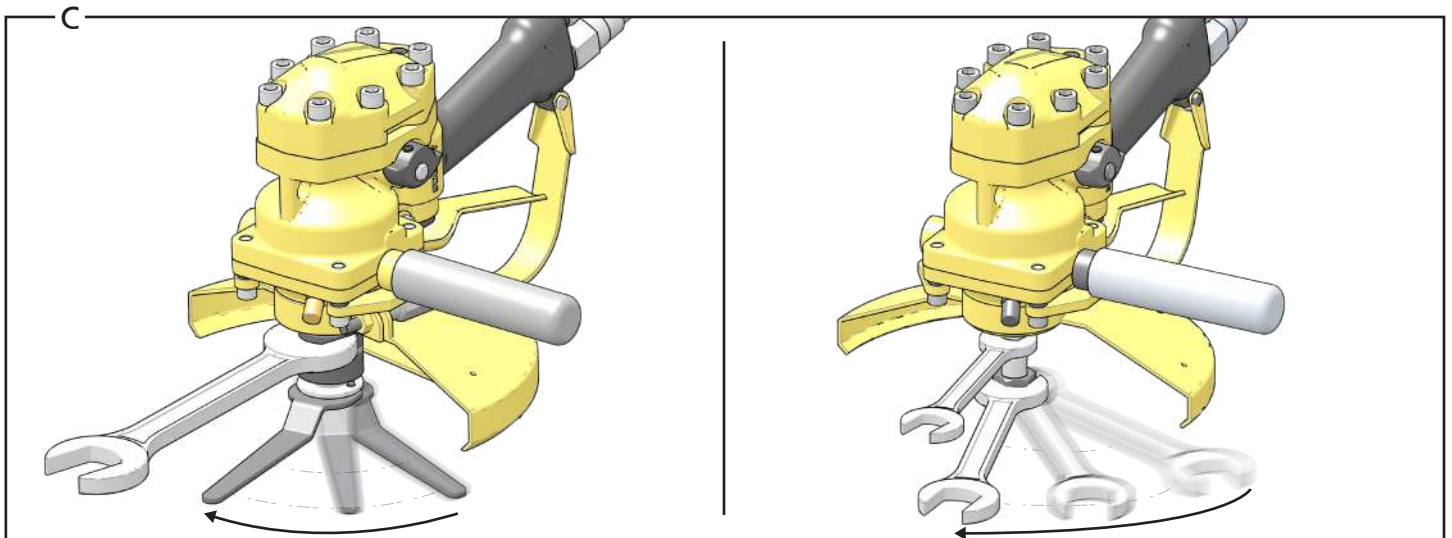
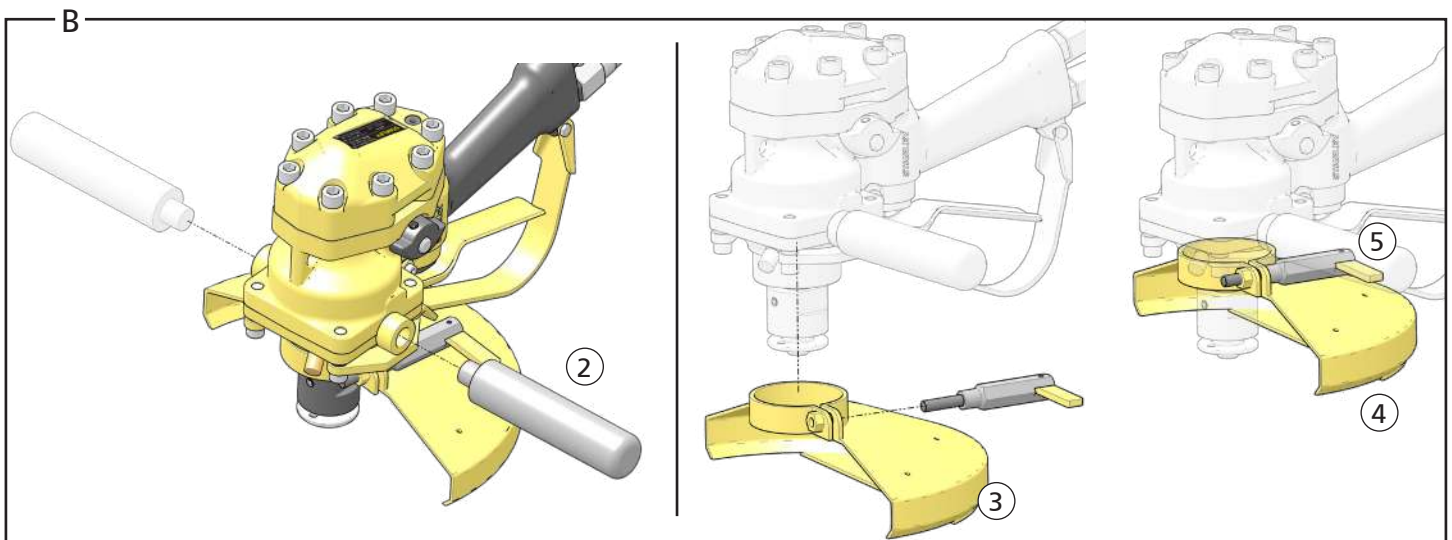
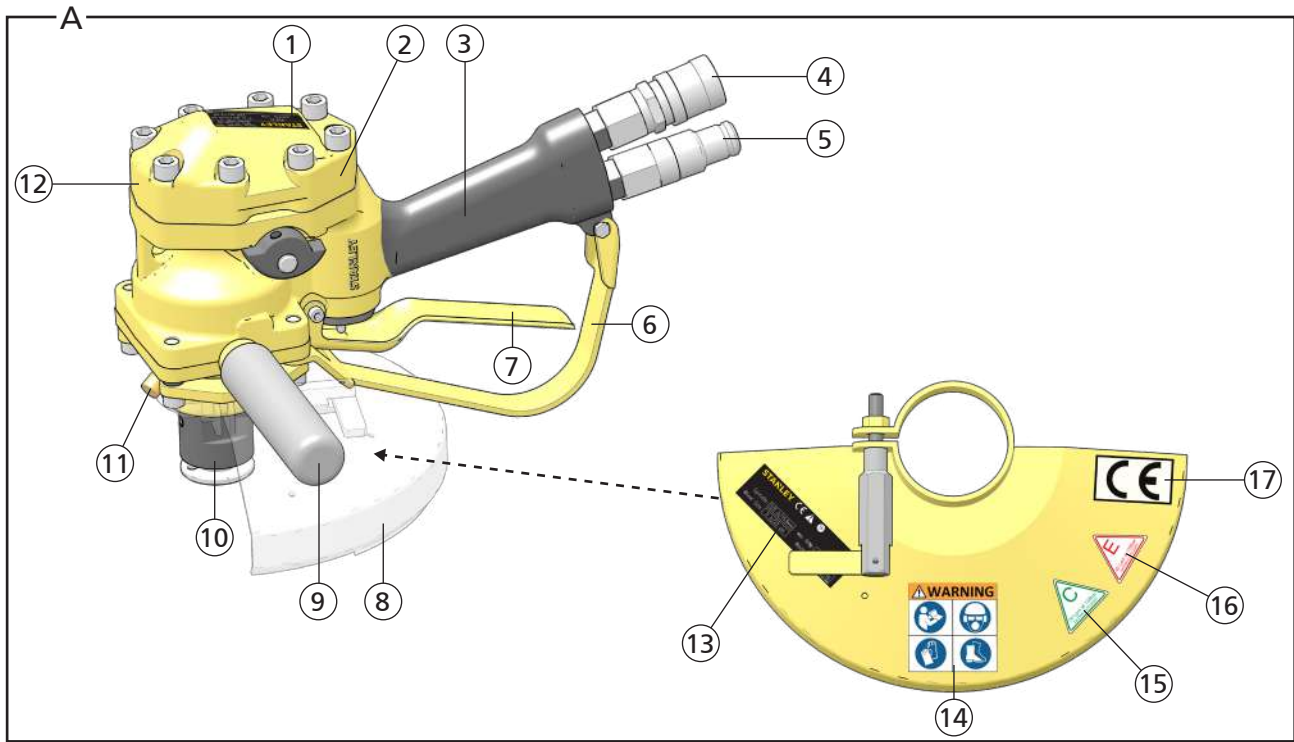
| Directive/Standards | No. | Approved body |
|---|--------------------|---------------|
| EN ISO | 20643:2008/A1:2012 | Self |
| EN ISO | 28927-1:2019 | Self |
| EN ISO | 3744:2010 | Self |
| EN ISO | 11148-7:2012 | Self |
| EN ISO | 13732-1:2008 | Self |
| Supply of Machinery (Safety) Regulations 2008 | S.I. 2008/1597 | Self |

- 5. Special Provisions: **None**
- 6. Representative in the Union: **Patrick Vervier, STANLEY Dubuis 17-19, rue Jules Berthonneau- CS 73406 41034 Blois CEDEX, France.**

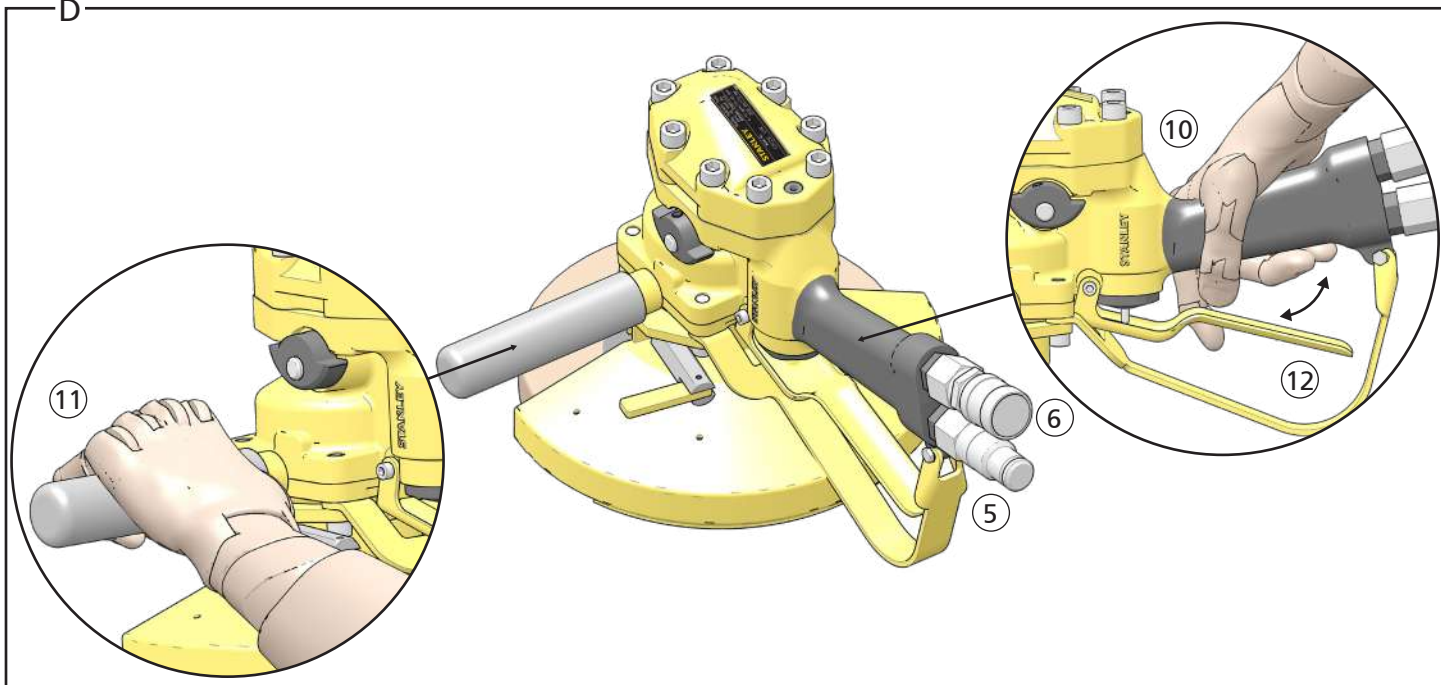
Done at STANLEY Infrastructure, Milwaukie, Oregon USA Date _____

Signature

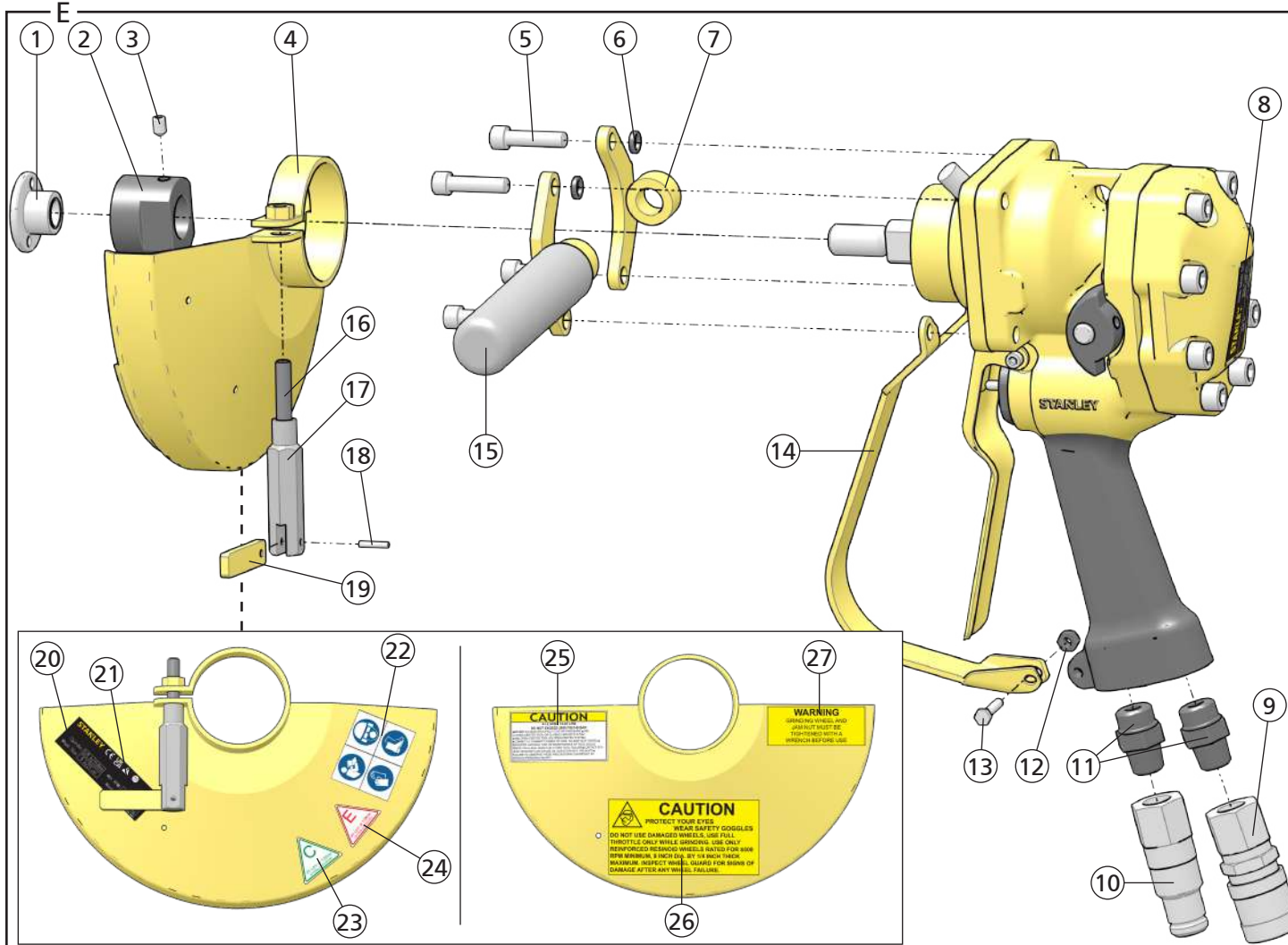
Position _____ Engineering Manager

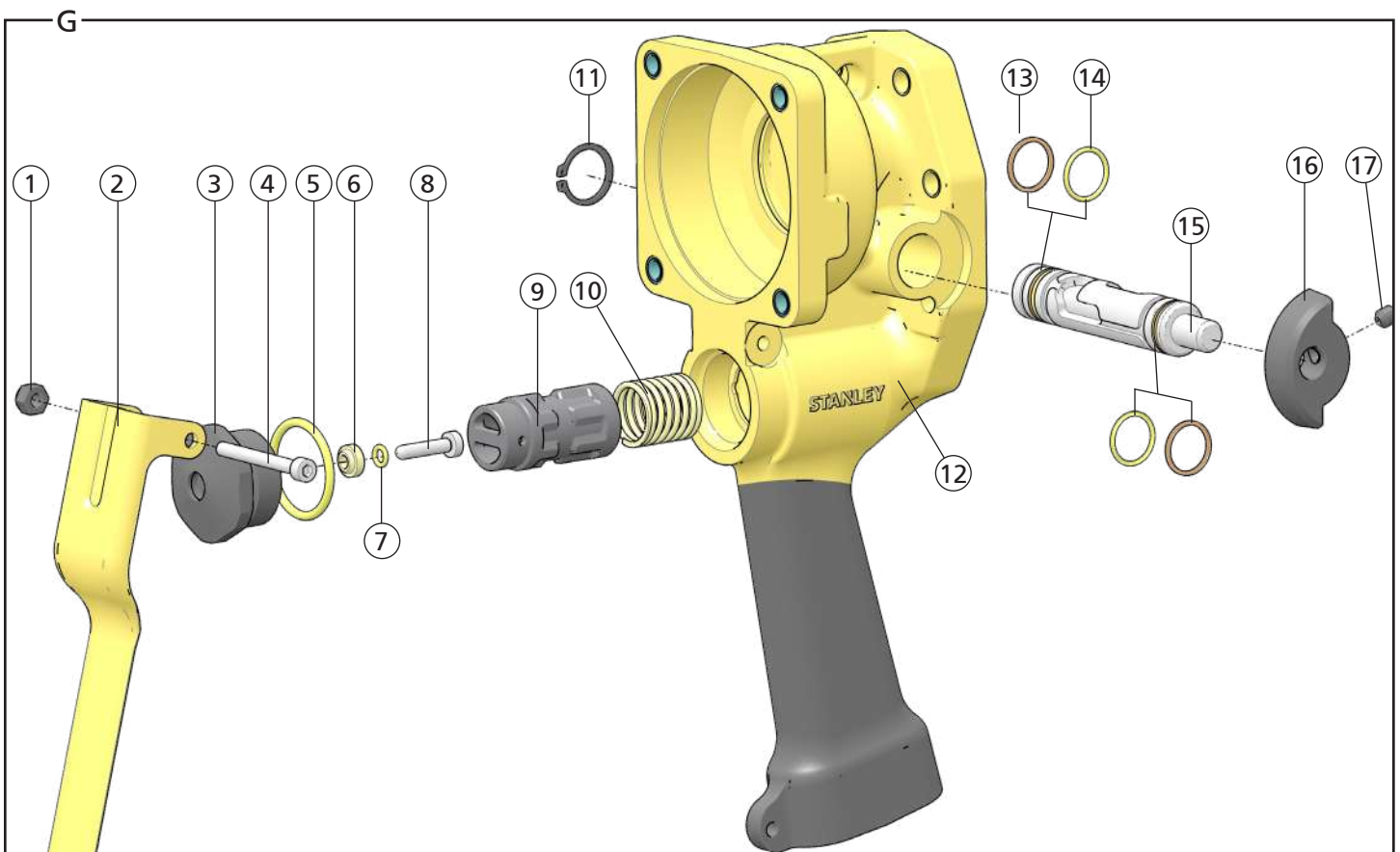
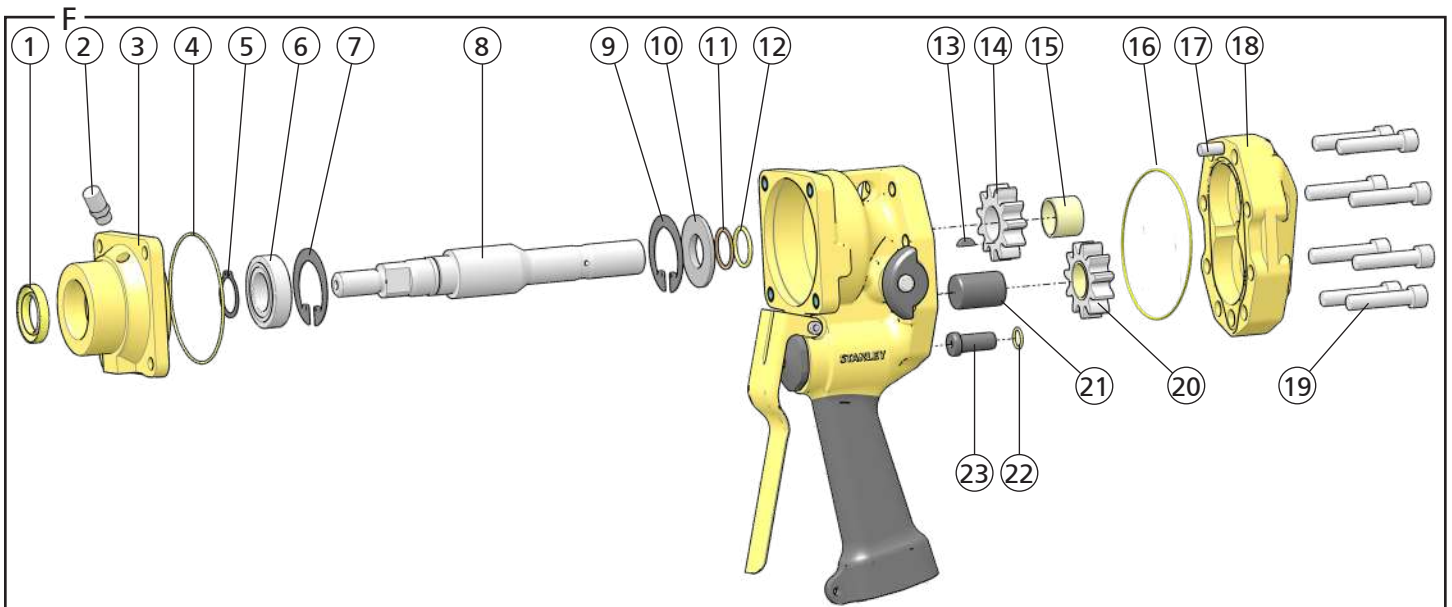


D



E









| GR29 Parts Illustration - Detail E | | |
|------------------------------------|-------|--|
| ITEM | P/N | DESCRIPTION |
| 1 | 16495 | Hub Nut - Model GR2930101 |
| | 13779 | Jam Nut - Model GR29310 |
| 2 | 28913 | Drive Flange - Model GR2930101 |
| 3 | 00599 | Set Screw - Model GR2930101 |
| 4 | 11937 | Wheel Guard - Model GR2930101 |
| | 08322 | Wheel Guard - Model GR29310 |
| 5 | 00230 | Cap Screw |
| 6 | 00231 | Washer |
| 7 | 13796 | Assist Handle Bracket |
| 8 | 73684 | Tool Name Tag |
| 9 | 03972 | Female Coupler |
| 10 | 03973 | Male Coupler |
| 11 | 00936 | Adapter |
| 12 | 07724 | Nylock Nut |
| 13 | 12470 | Cap Screw |
| 14 | 12285 | Trigger Guard |
| 15 | 08130 | Assist Handle |
| 16 | 12786 | Stud - Model GR2930101 |
| 17 | 12290 | Clamp Screw - Model GR2930101 |
| 18 | 00285 | Roll Pin - Model GR2930101 |
| 19 | 12291 | Thumb Plate - Model GR2930101 |
| 20 | 88859 | Tool Information Tag - Model GR2930101 |
| 21 | 88345 | Importer Decal - Model GR2930101 |
| 22 | 88347 | Composite Safety Decal - Model GR2930101 |
| 23 | 11206 | Circuit Type "C" Decal - Model GR2930101 |
| 24 | 12535 | Circuit Type "E" Decal - Model GR2930101 |
| 25 | 03788 | GPM Decal |
| 26 | 08688 | Grinding Wheel Safety Decal |
| 27 | 10396 | Warning Decal |
| 28 | 16969 | Seal Kit (Not Shown) - * In Seal Kit |

| GR29 Motor Parts Illustration - Detail F | | |
|--|-------|--------------------|
| ITEM | P/N | DESCRIPTION |
| 1 | 13812 | Rotary Shaft Seal* |
| 2 | 01220 | Grease Fitting |
| 3 | 13790 | Bearing Carrier |
| 4 | 00149 | O-ring* |
| 5 | 00672 | Retaining Ring |
| 6 | 13813 | Bearing |
| 7 | 00166 | Retaining Ring |
| 8 | 13791 | Spindle |
| 9 | 00166 | Retaining Ring |
| 10 | 07987 | Back-up Washer |
| 11 | 09396 | Back-up Ring* |
| 12 | 08017 | O-ring* |
| 13 | 13828 | Woodruff Key |
| 14 | 13783 | Drive Gear |
| 15 | 08014 | Bushing |

| GR29 Motor Parts Illustration - Detail F | | |
|--|--------|--|
| ITEM | P/N | DESCRIPTION |
| 16 | 00149 | O-ring* |
| 17 | 372055 | Dowel Pin |
| 18 | 13789 | Motor Cap Assembly (Includes 08014 & 372055) |
| 19 | 01870 | Cap Screw |
| 20 | 07989 | Idler Gear Assembly (Includes bushing) |
| 21 | 07991 | Idler Shaft |
| 22 | 03252 | O-ring |
| 23 | 13782 | Insert |
| 24 | 16969 | Seal Kit (Not Shown) - * In Seal Kit |

| GR29 Trigger & Reversing Spool Parts Illustration - Detail G | | |
|--|-------|--------------------------------------|
| ITEM | P/N | DESCRIPTION |
| 1 | 07724 | Nylock Nut |
| 2 | 12283 | Trigger |
| 3 | 22063 | Spool Cap |
| 4 | 00786 | Cap Screw |
| 5 | 06533 | O-ring* |
| 6 | 22064 | Rod Wiper* |
| 7 | 00026 | O-ring* |
| 8 | 23678 | Headed Push Pin |
| 9 | 73041 | Valve Spool |
| Note: Models with a serial number of 020516107 or earlier use an older version valve spool, part number 13781. Newer model spools are not backwards compatible. Contact your STANLEY dealer for service. | | |
| 10 | 07988 | Spring |
| 11 | 09275 | Retaining Ring |
| 12 | 73311 | Main Housing Assembly |
| 13 | 08015 | Back-up Ring* |
| 14 | 01211 | O-ring* |
| 15 | 08002 | Reversing Spool |
| 16 | 17061 | Valve Keeper |
| 17 | 00580 | Set Screw |
| 18 | 16969 | Seal Kit (Not Shown) - * In Seal Kit |

Safety Precautions

| | |
|---|--|
|  | The Safety Alert Symbol alerts you to potential personal injury hazards. Obey all safety messages that follow to avoid possible injury or death. |
|  | Indicates an imminently hazardous situation which will result in death or serious injury. |
|  | Indicates a potentially hazardous situation which could result in death or serious injury. |
|  | Indicates a potentially hazardous situation which could result in property damage. |

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



WARNING: Read all safety warnings and instructions. Failure to follow warnings and instructions may result in tool damage and/or serious injury.

WARNING: To reduce the risk of injury, read the instruction manual.

General

- Do not discard safety instructions. Give to the operator.
- This tool will provide 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.
- Inspect the tool before each use and ensure all decals are legible. Contact STANLEY if replacements are needed.
- 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. Keep out of the reach of children.
- Operators and maintenance personnel shall be able to physically handle the bulk, weight and power of the tool.
- Avoid unsuitable postures as these positions do not allow for counteracting of normal or unexpected movement of the tool, such as a sudden break of the tool bit. Change postures during extended tasks to help avoid discomfort or fatigue.
- Do not operate a damaged, improperly adjusted, modified or incompletely assembled tool.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Do not grind on vessels containing combustible substances.
- Never cause sparks in the vicinity of flammable materials.
- Provide adequate ventilation in closed areas when operating a gas or diesel hydraulic power source.
- Do not inspect, carry, clean, change accessories or perform maintenance on the tool while the power source is connected. Accidental engagement of the tool can cause serious injury.
- Prevent unintentional starting. Ensure the trigger is in the off position before connecting to the hydraulic power source, picking up or carrying the tool. Carrying tools with your finger on the trigger or energizing tools that have the trigger on invites accidents.
- Ensure the grinding wheel is stopped when setting down the tool. Never transport or store the tool with a grinding wheel installed.
- Ensure that the abrasive wheel is properly clamped before each use. Follow all instructions.
- Ensure work piece is securely fixed. Be aware that failure of the work piece or accessories may generate high velocity projectiles.
- Stay alert, watch what you are doing and use common sense when operating a hydraulic tool. Do not operate this tool if you are tired or under the influence of drugs or alcohol. A moment of inattention while operating hydraulic tools may result in serious injury.
- Assess risks to others around you before operating the tool.
- Use and maintain the tool as stated in this manual. Misuse of the tool can cause serious injury. Do not modify the tool in any way.
- Keep all body parts away from rotating components of the tool. Avoid direct contact with the tool as it may become hot.
- Do not start the tool if the grinding wheel is touching a surface.
- Supervising personnel should develop additional precautions relating to

the specific work area and local safety regulations.

- Never operate the tool if you cannot be sure that underground utilities are not present, such as electrical cables, gas pipes, etc. These can cause a hazard if damaged with the tool.
- The tool is not insulated against coming into contact with electric power. Use hose certified as non-conductive.
- Do not overreach. Maintain proper footing and balance at all times when using the tool. Do not start grinding until the work area is clear and you have secure footing.
- Do not reverse tool rotation direction by changing hydraulic fluid flow direction.
- Slips, trips and falls are major causes of workplace injury. Be observant of hoses or oily surfaces lying about the work area, as they can be a tripping hazard.
- Operator must start in a work area without bystanders and must assess the risk to bystanders.
- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Operators must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Only use clean hydraulic fluid and lubricants that have been recommended by STANLEY.
- Ensure tools are working properly and safely by performing preventative maintenance (PM) procedures.
- Repair and service of this tool must only be performed by an authorized and certified dealer.
- Use only replacement parts recommended by STANLEY.
- Do not force the tool to do the work of a larger tool. Use the correct tool for your application. Any use of this tool, outside those stated in this manual, are forbidden.
- Use only hoses and hose couplings that are rated for a minimum working pressure of 2500 PSI (172 BAR).
- Keep tool handles dry, clean and free from oil and grease. This will enable better control of the tool.
- In spite of the application of relevant safety regulations and the implementation of safety devices, certain residual risks cannot be avoided. These risks are: repetitive strain injury due to improper posture while using the tool and the risk of pinching fingers when pulling the tool trigger.

Dust and Fumes

- **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 grinding. 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.
- Working with certain materials may create emissions of dust and fumes, causing a potentially explosive environment. Take precautions.
- When dust or fumes are created, control them at the point of emission. Direct tool exhaust to minimize disturbance of dust.
- Operate and maintain the tool as recommended in this manual to minimize dust or fume emissions.
- Use respiratory protection in accordance with employers instruction or as required by occupational health and safety regulations.
- Avoid prolonged contact with dust. Allowing dust to get into your mouth, eyes or lay on the skin may promote absorption of harmful chemicals.
- Select and replace accessories as recommended in order to prevent an unnecessary increase in dust or fumes.
- Do not use the tool on asbestos.

PPE

- Always wear safety equipment such as impact resistant goggles, ear protection, head protection, breathing protection and safety shoes at all times when operating the tool.
- Hands may be exposed to hazards, impacts, cuts, abrasions and heat. Wear gloves.
- Grinding sparks can ignite clothing and cause severe burns. Ensure sparks do not land on clothing. Wear fire-retardant clothing and have a bucket of water nearby.
- Wear a hardhat if performing overhead work.
- Use PPE that conforms to standards ANSI Z87.1 (Eye and Face Protection), ANSI Z89.1 (Head Protection), ANSI Z41.1 (Foot Protection) and ANSI S12.6 (S3.19) (Hearing Protection).
- Do not wear loose fitting clothing, jewelry or gloves with cut or frayed fingers when operating the tool. Entanglement, choking, scalping and laceration can occur if loose clothing, personal jewelry, neck wear, hair or gloves are not kept away from the rotating tool and it's accessories.



M003
Wear Ear
Protection



M004
Wear Eye
Protection



M016
Wear a Mask

Sound

- Exposure to high noise levels can cause permanent, disabling hearing loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations. Appropriate controls to reduce the risk can include actions such as damping materials to prevent work pieces from "ringing".
- Use and maintain as recommended in the manual to prevent an unnecessary increase in noise levels.

Vibration

- When using a rotary tool to perform work related activities, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool. Tell your employer and consult a physician.
- Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- Use and maintain as recommended in the manual to prevent an unnecessary increase in vibration.
- Do not allow the abrasive product to chatter on the work piece as this is likely to cause a substantial increase in vibration.
- Check the vibration level after each service. If higher than normal, contact your STANLEY dealer.

Hydraulic

- **Warning:** Hydraulic fluid under pressure could cause skin injection injury. Do not check for leaks with your hands. If you are injured by hydraulic fluid, get medical attention immediately.
- Do not let hydraulic oil get on the skin. Hydraulic oil is hot. Wear Personal Protection Equipment (PPE) at all times.
- If exposed to hydraulic fluid, wash hands immediately.
- Do not exceed the maximum relief valve setting stated on the tool.
- Inspect and clean couplers before use, daily. Replace damaged couplers immediately.
- Hydraulic circuit control valve must be OFF before coupling or uncoupling tools. Failure to do so may damage the couplers and cause overheating of the hydraulic system.
- Ensure the couplers are properly connected and are tight.
- Do not operate the tool at fluid temperatures above 140°F (60°C). Higher temperatures can cause operator discomfort and damage to the

tool.

- Do not exceed the rated flow and pressure as stated on the tool. Rapid failure of the internal seals may result.

What is the GR29 Hydraulic Grinder?

GR29 is a right angle grinder that can be used for grinding and cleaning in underwater applications.

| Specifications | | |
|--|---|----------------------|
| Pressure | 1000-2000 PSI (70-140 BAR) | |
| Flow | 4-12 GPM (15-45 LPM) | |
| Hydraulic Circuit Type | Open Center | |
| Max RPM | 3200 RPM @ 12 GPM (45 LPM) | |
| Min. Hose Pressure Rating | 2500 PSI (172 BAR) | |
| Max. Relief Pressure | 2150 PSI (148 BAR) | |
| Recommended Back Pressure | 250 PSI (17 BAR) - Can be used with higher back pressures with reduced seal life. | |
| Couplers | 3/8 Inch NPT Flush Face | |
| Port Size | -8 SAE O-ring | |
| Max. Wheel Capacity | 9 Inches (23 cm) x 0.25 Inches thick | |
| Wheel RPM | Rated to a minimum of 6500 RPM | |
| Spindle | 5/8 Inches (15.5 mm), 11 thread | |
| Tool Weight | 15 Lbs (6.8 Kg) | |
| Tool Size | 14 Inches x 12 Inches x 9 Inches | |
| Max. Hydraulic Oil Temperature | 140°F (60°C) | |
| HTMA/EHTMA Category | Type I & III, Category C & E | |
| Underwater Tool Max. Depth | 1000 Feet | |
| Recommended Hose Diameters for Underwater Applications | | |
| Depth | 8 GPM (30 LPM) | 12 GPM (45 LPM) |
| 100 Feet (31 Meters) | 5/8 Inches (16 mm) | 5/8 Inches (16 mm) |
| 300 Feet (91 Meters) | 3/4 Inches (19 mm) | 1 Inch (25.4 mm) |
| 600 Feet (183 Meters) | 1 Inch (25.4 mm) | 1 Inch (25.4 mm) |
| 1000 Feet (305 Meters) | 1 Inch (25.4 mm) | 1 1/4 Inches (32 mm) |

| Sound & Vibration Declaration | |
|--|-------------------------|
| Measured A-Weighted sound power level | 104.8 dBA |
| Measured A-Weighted Sound Pressure | 96.8 dBA |
| Uncertainty | 0.05 dBA |
| Values determined according to noise test code given in ISO 15744, 11203 and 3744. Test conducted by independent notified body to comply with 2000/14/EC:2005. | |
| Declared vibration emission value in accordance with EN12096. | |
| Measured Vibration Emission Value: Trigger Handle | 2.13 m/sec ² |
| Measured Vibration Emission Value: Assist Handle | 1.07 m/sec ² |
| Uncertainty | 0.7 m/sec ² |

Parts of a GR29 - Detail A

| | |
|---|----------------|
| 1 | Tool Name Tag |
| 2 | Serial Number |
| 3 | Handle |
| 4 | Female Coupler |
| 5 | Male Coupler |

| | |
|----|------------------------------------|
| 6 | Trigger Guard |
| 7 | Trigger |
| 8 | Wheel Guard |
| 9 | Assist Handle |
| 10 | Drive Flange (Model GR2930101) |
| | Jam Nut (Model GR29301) |
| 11 | Grease Fitting |
| 12 | Year of Manufacture |
| 13 | Tool Information Tag |
| 14 | Composite Safety Decal (CE Models) |
| 15 | Circuit Type "C" Decal |
| 16 | Circuit Type "E" Decal |
| 17 | CE Decal |

Tool Setup

WARNING

Do not install or change tool accessories while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury. Disconnect the hydraulic power source before installing or changing accessories.

1. Disconnect the tool from the hydraulic power source.

Install Assist Handle - Detail B

The assist handle helps to absorb reaction torque and control the tool. Loss of control can cause personal injury. STANLEY recommends you use the assist handle whenever possible.

2. Screw the assist handle into the either side of the tool body.
Note: The assist handle is held with your non-dominant hand.

Install & Check Wheel Guard - Detail B

3. Inspect the wheel guard for cracks or damage. If damaged, replace immediately, before use. Do not use the tool if wheel guard is damaged.
4. Fit the wheel guard clamp around the bearing carrier. Orient it so that the guard is between the grinding wheel and the operator.
- 5.
6. Tightly screw the wheel guard clamp screw.

WARNING

Do not use the tool if the wheel guard is missing. Damaged grinding wheels can become high speed projectiles. Danger of serious injury or death. Properly install the wheel guard.

Install Grinding Wheel - Detail C

Note: Ensure that the abrasive product dimensions are compatible with the grinder. See "Specifications" on page 9. Ensure the operating speed of the abrasive product, in RPM, is equal or greater than the tool speed. Do not use the grinder over the maximum speed of the abrasive product being used. The grinding wheel should fit the spindle thread type and size exactly.

1. Check the wheel for cracks, chips or other damage. Replace if damaged.
2. Disconnect the tool from the hydraulic power source.
3. Remove the jam nut (GR29310) or the hub nut (GR2930101).
4. Place the wheel on the spindle. Use blotters if they are provided with the bonded abrasive product.

Note: If the wheel is provided with reducing adapters or bushings, ensure the adapter or bushings do not contact the face of the flange and that the

clamping force provides sufficient rotational driving action to prevent the abrasive product from slipping. When multiple flanges are supplied, always fit the correct flange for the wheel being used.

⚠ WARNING

Do not over-tighten the grinding wheel or use impact tools to install wheel. Damaged grinding wheels can become high speed projectiles.

5. Replace the jam nut (GR29310) or hub nut (GR293010).
Note: If using wheels with a cupped or depressed center, you must use the Depressed-Center Wheel Adapter. See "Accessories" on page 11.

Tool Operation - Detail D

1. Ensure the grinding wheel is tight and properly mounted.

Connect to a Hydraulic Power Source

2. Using a calibrated flow and pressure gauge, check the output of the hydraulic power source. Ensure it matches the flow and pressure in "Specifications" on page 9. Hydraulic fluid must be 50°F or above. Preheat if necessary.
3. Ensure that the hydraulic power source is equipped with a relief valve set to open at the maximum relief pressure. See "Specifications" on page 9.
4. Wipe hose couplers with a clean, lint free cloth.
5. Connect the return hose to the tool port marked "Out".
6. Connect the pressure hose to the tool port marked "In".
7. Ensure couplers are undamaged, properly connected and are tight.
8. Power up the hydraulic power source.

Using the Tool

9. Ensure the wheel is not touching a surface.
10. Hold the main tool handle with your dominant hand.
11. Hold the assist handle with your non-dominant hand.
Note: Hold the tool correctly and be ready to counteract normal or sudden movements. Have both hands available. Hold the tool with a light but safe grip, taking account of the required hand reaction forces because the risk arising from vibration is generally greater where the grip force is higher.
12. Slowly squeeze the trigger.
13. Run the tool at no-load for 1 minute. Ensure the grinding wheel rotates properly, is not damaged and does not cause abnormal vibration.

Note: GR29 should rotate counter-clockwise.

14. Release the trigger to stop the tool.

Note: If you encounter a breakdown or the tool stops for any reason, release the trigger and power down the hydraulic power source. If the abrasive product has been jammed, check the wheel for damage and ensure it is still correctly installed.

⚠ WARNING

Starting the grinder when the wheel is touching the work piece can push the operator off balance, creating a condition that can cause severe personal injury.

15. When starting work, always start the grinder before touching the grinding wheel to material. Ensure sparks will not create a hazard.
16. When grinding is complete, place the grinder in a stable position, where it cannot be accidentally started.

Note: STANLEY recommends that the grinder be placed in this stable position if the tool is not in use for longer than 5 seconds.

Tool Use Tips

- Use only STANLEY approved accessories. See "Accessories" on page 11.
- Always keep your body away from the grinding wheel's plane of rotation.
- Never jam or wedge the wheel during operation.
- Do not use grinding wheels for side grinding, unless the wheel has been designed for side grinding.
- Use caution when handling the work piece after grinding. The work

piece may be hot and have sharp edges. Use your Personal Protection Equipment.

- When cutting off, the work piece must be supported so that the slot is kept at a constant or increasing width during operation.
- Don't let the end of the spindle touch the bottom of the hole of cups, cones or plugs with threaded holes, intended to be mounted on machine spindles, by checking their dimensions and other relevant data.

Tool Maintenance

Daily Maintenance

1. Remove hydraulic power from the tool.
2. Check all hydraulic connections and hoses for damage. Replace damaged parts before operating the tool.
3. Inspect the wheel guard and associated parts. Ensure they are in good condition and are properly mounted. Replace if damaged.
4. Inspect the tool spindle, flanges, threads and the grinding wheel clamping device. Ensure they are in place, are in good condition and are correctly mounted.
5. Inspect tool to ensure all decals are legible. Contact STANLEY if replacements are needed.
6. Check the tightness of all fasteners. Tighten if necessary.
7. Using a calibrated flow and pressure gauge, check the output of the hydraulic power source. Ensure it matches the flow and pressure in "Specifications" on page 9.

Spindle Speed Test

Check the speed of the motor shaft at least every 100 hours of operation. Maintain a record of speed checks.

1. Using a calibrated flow and pressure gauge, check the output of the hydraulic power source. Ensure it matches the flow and pressure in "Specifications" on page 9.
2. Using a contact tachometer, check the spindle speed (without grinding wheel attached) and ensure it is no higher than the maximum speed marked on the tool information tag.

Underwater Maintenance

Perform maintenance on underwater models after each use.

1. Remove hydraulic power from the tool.
2. Using a water displacing oil, spray into the trigger.
3. Spray or dip the entire tool.

Grease the Bearing Carrier

Apply grease to the bearing carrier once per year.

1. Remove hydraulic power from the tool.
2. Hold the tool so that the bearing carrier is facing up.
3. Using waterproof EP-1 grease, grease the tool through the grease fitting.
4. Apply grease until air bubbles and water no longer leak through the seal in the bearing carrier.

Tool Storage & Transport

Drain the tool of hydraulic fluid and plug open hydraulic ports. Collect all hydraulic fluid for recycling (see "Tool Disposal" on page 10). Remove the grinding wheel. Clean the tool and store in a clean, dry space that is safe from damage. Ensure the tool is secured and will not move during transport. An unsecured tool could cause personal injury or damage to the tool. Store and handle the abrasive product with care and in accordance with the manufacturers instructions.

Tool Disposal

Hydraulic Oil

Hydraulic oil can contaminate the air, ground and water if not properly recycled. Recycle hydraulic oil in accordance with all State, Federal and local laws, at your local oil recycling facility.

Hydraulic Hoses

Hang hydraulic hoses to drain. Collect the oil for recycling. Contact your local

municipal recycling authorities for an approved hydraulic hose recycling site.

Tool Body

Drain hydraulic oil from the tool, making sure to collect the oil for recycling. Disassemble the tool and dispose of all non-metal parts. Recycle the metal components. Contact your local municipal recycling authorities for recycling instructions.

Accessories

| GR29 Accessories | |
|---|-------------|
| Description | Part Number |
| Depressed Center Wheel Adapter | 05194 |
| Grinding Wheel - 7 Inch Ø x 5/8 Inch-11 THD Arbor | 03691 |
| Grinding Wheel for Metal - 9 Inch Ø x 5/8 Inch-11 THD Arbor | 02587 |
| Grinding Wheel for Masonry - 9 Inch Ø x 5/8 Inch-11 THD Arbor | 02588 |

Troubleshooting

| Problem | Possible Cause | Solution |
|---|--|---|
| Tool doesn't run or runs poorly. | Hydraulic power source is not running properly. | Ensure the power source is delivering proper flow and pressure. See "Specifications" on page 9. Proper flow and pressure maintain proper tool speed. Check regularly. |
| | Defective or blocked hoses or quick disconnects. | Remove hydraulic power from the tool. Check the hoses and couplers. Replace if necessary. |
| | Tool Failure. | Contact your STANLEY dealer for service. |
| Tool runs backwards. | Hydraulic hoses incorrectly connected to the tool. | Ensure the return and pressure hoses are properly attached to the tool. See "Connect to a Hydraulic Power Source" on page 10. |
| Grinding wheel comes to an abrupt stop after trigger is released. | Mechanical failure. | Contact your STANLEY dealer for service. |
| Hydraulic oil leaking at motor cap. | Loose Fasteners. | Tighten all motor cap fasteners. Torque to 22-25 Ft. Lbs. (30 - 34 Nm). |
| | Motor cap damaged or O-rings are worn. | Contact your STANLEY dealer for service. |
| Hydraulic oil leaking at the reversing spool. | Damaged O-rings. | Contact your STANLEY dealer for service. |
| | Hydraulic hoses incorrectly connected to the tool. | Ensure the return and pressure hoses are properly attached to the tool. See "Connect to a Hydraulic Power Source" on page 10. |

STANLEY®

STANLEY

3810 SE Naef Road, Milwaukie, OR 97267 USA
(800) 972-2647 / Fax (503) 652-1780