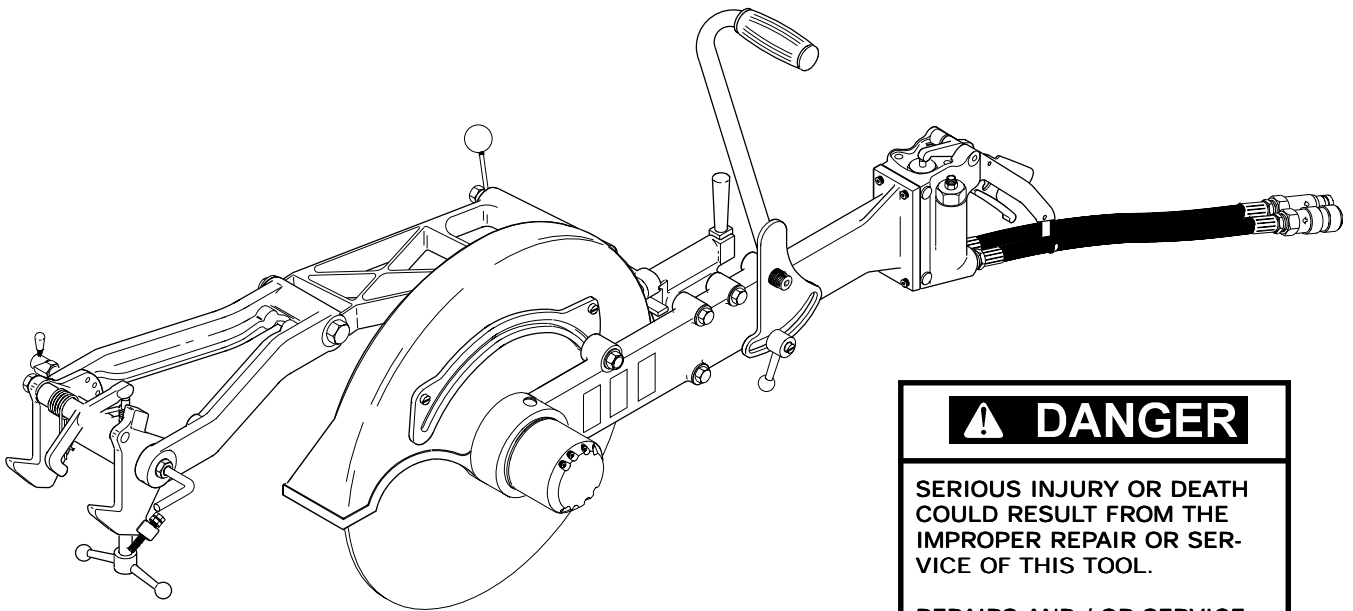


RS 25 HYDRAULIC RAIL SAW

Safety and Operation Manual



⚠ DANGER

SERIOUS INJURY OR DEATH
COULD RESULT FROM THE
IMPROPER REPAIR OR SER-
VICE OF THIS TOOL.

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

Focused on performance™

STANLEY®

*Hydraulic
Tools*

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OPS USA & CE VERSION
Printed in U.S.A.
31846 11/02 VER 2



**CERTIFICATE OF CONFORMITY
 ÜBEREINSTIMMUNGS-ZERTIFIKAT
 CERTIFICAT DE CONFORMITE CEE
 D'UN MARTEAU-PIQUEUR OU D'UN BRISE-BETON EXAMINE
 CERTIFICADO DE CONFORMIDAD
 CERTIFICATO DI CONFORMITA**



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

Mellits, Kirk E.

Surname and First names/Familiename und Vornamen/Nom et prénoms/Nombre y apellido/Cognome e nome

hereby certify that the construction plant or equipment specified hereunder:
bestätigt hiermit, daß die Konstruktion und Ausrüstung wie folgt spezifiziert ist:
atteste que le brise-béton:
por el presente certifico que la fabrica o el equipo especificado a continuacion:
certifico che l'impianto o l'attrezzatura sotto specificata:

1. Category: Rail Saw (Hydraulic)
 Kategorie:
 Catégorie:
 Categoría:
 Categoria:

2. Make/Ausführung/Marque/Marca/Fabbricazione **Stanley**

3. Type/Typ/Type/Tipo/Tipo: **RS25100**

4. Type serial number of equipment:
 Typ und Serien - Nr. der Ausrüstung:
 Numéro dans la série du type de matériel:
 Numero de serie tipo del equipo:
 Matricola dell'attrezzatura:

All

5. Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione **2001**

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 di-après.
ha sido fabricado de acuerdo con - tipo examen EEC como dice.
è stata costruita in conformità 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 Ablauf datum Date d'expiration Fecha de caducidad Data di scadenza
EN	28662-1	1988	Self	N/A
EN	1454	1996	Self	N/A
EN ISO	3744	1994	Self	N/A

6. Special Provisions: None
 Spezielle Bestimmungen:
 Dispositions particulières:
 Provisiones especiales:
 Misure special:

7. Measurements: Sound Power Level **108 dBA**
 Vibration Level **6.0 m/s²**


Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data 2001

Signature/Unterschrift/Signature/Firma/Firma *Kirk E. Mellits*

Position/Position/Fonction/Puesto/Posizione Engineering Manager





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SERVICING THE RS25 RAIL SAW: This manual contains safety, operation, and general maintenance instructions. It does not contain specific disassembly, assembly and repair instructions. Stanley Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. The service and repair manual is p/n 31847 and may be obtained from your dealer. Please read the following warning.

 DANGER
SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS EQUIPMENT.
REPAIRS AND / OR SERVICE TO THIS EQUIPMENT MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest authorized and certified dealer, call Stanley Hydraulic Tools, 1-800-549-0517 and ask for a Customer Service Representative.

SAFETY PRECAUTIONS

⚠ DANGER

Do not operate this equipment or associated equipment until the following safety instructions have been thoroughly read and understood! Read this manual before installing, operating or maintaining this equipment.

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 equipment.

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

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 5.

GENERAL SAFETY PRECAUTIONS

The model RS25 Hydraulic Rail Saw will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and 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, and safety shoes 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 rail saw.
- Do not operate the tool with the wheel guard removed.
- 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 rail saw.

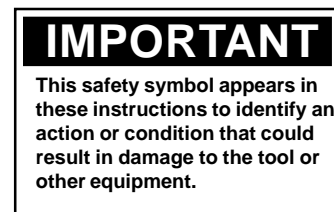
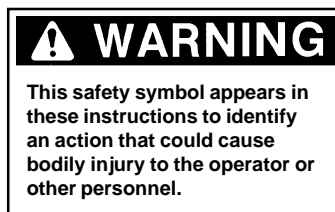
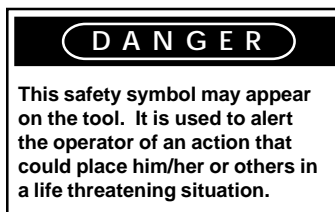
- Always hold the tool with both hands when the unit is running. Use a firm grip.
- Make sure the wheel has stopped before setting the tool down. Always carry the tool with the wheel stopped.
- Inspect the wheel guard and collars for damage after any wheel breakage.
- Do not operate the tool in the vicinity of flammable materials.
- Never exceed the maximum operating speed marked on the wheel.
- Do not attempt to adjust the flow control in the valve handle.
- Eye injury, and cutting or severing of body parts is possible if proper procedures are not followed.

CUTTING WHEEL SAFETY

- Do not store or transport the saw with the wheel installed.
- Ensure that the cutting wheel is correctly mounted and tightened before use.
- Operate the Rail Saw at "no load" for 30 seconds in a safe position and ensure there is no vibration or other defects detected. If considerable vibration or other defects are detected, stop operation of the tool immediately and determine the cause. Do not use the tool until the defect is corrected.
- If the Rail Saw is dropped with a cutting wheel installed, the cutting wheel should be examined thoroughly before use.
- Only use cutting wheels that comply with ANSI B7.5/ISO 525, 603.
- Check that the maximum operating speed (rpm - revolutions per minute) of the cutting wheel is equal to or greater than the rated shaft speed of the grinder. Stanley recommends wheels rated at 4700 RPM for 16 inch models and 5300 RPM for 14 inch models.

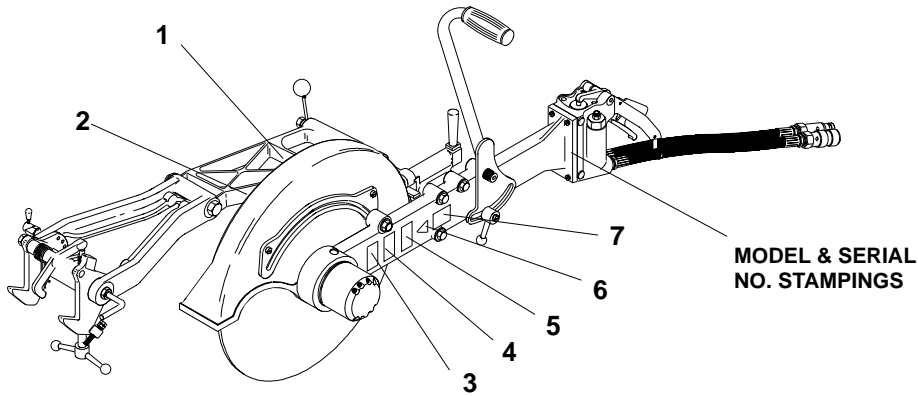
SAFETY SYMBOLS

Safety symbols 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.



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

TOOL STICKERS & TAGS



WHEEL SIZE

RPM: SPINDLE:

PRESS: BAR PSI

FLOW: LPM GPM

1
28811 INFORMATION PLAQUE
 (CE models only)

CAUTION

**PROTECT YOUR EYES...
WEAR SAFETY GOGGLES**



1. DO NOT USE DAMAGED WHEELS.
2. USE FULL TROTTLE ONLY WHILE CUTTING.
3. USE ONLY WHEELS MARKED HIGH SPEED REINFORCED THAT MEET REQUIREMENTS OF ANSI B7.5. WHEELS SHOULD BE NO LARGER THAN 16" DIA X 5/32" THICK WITH A 1" ARBOR HOLE & RATED FOR 4700 RPM MINIMUM SPEED.
4. INSPECT WHEEL GUARD & COLLARS FOR DAMAGE AFTER ANY WHEEL BREAKAGE ON THE MACHINE.
5. MAXIMUM SPINDLE SPEED IS 4700 RPM.

2
17641 ABRASIVE CUT-OFF SAFETY LABEL
 (16 inch models only)

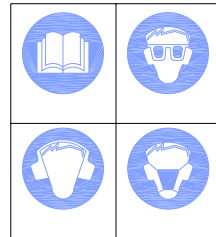
CAUTION

**PROTECT YOUR EYES...
WEAR SAFETY GOGGLES**



1. DO NOT USE DAMAGED WHEELS.
2. USE FULL TROTTLE ONLY WHILE CUTTING.
3. USE ONLY WHEELS MARKED HIGH SPEED REINFORCED THAT MEET REQUIREMENTS OF ANSI B7.5. WHEELS SHOULD BE NO LARGER THAN 14" DIA X 5/32" THICK WITH A 1" OR 22 mm ARBOR HOLE & RATED FOR 5300 RPM MINIMUM SPEED.
4. INSPECT WHEEL GUARD & COLLARS FOR DAMAGE AFTER ANY WHEEL BREAKAGE ON THE MACHINE.
5. MAXIMUM SPINDLE SPEED IS 5300 RPM.

2
05868 ABRASIVE CUT-OFF SAFETY LABEL
 (14 inch models only - except CE)



3
28409 COMPOSITE STICKER
 (CE models only)

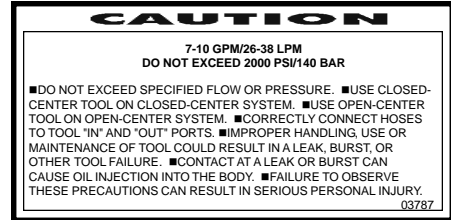
STANLEY	Stanley Hydraulic Tools 3810 SE Naef Rd Milwaukie, Oregon 97267 U.S.A.			
	<table border="0"> <tr> <td style="padding-right: 20px;">Model No.</td> <td>26-38 lpm/7-10 gpm</td> </tr> <tr> <td>RS25</td> <td>140 bar/2000 psi</td> </tr> </table>	Model No.	26-38 lpm/7-10 gpm	RS25
Model No.	26-38 lpm/7-10 gpm			
RS25	140 bar/2000 psi			

3 (16" model) **or 4** (14" model)
28728 NAME TAG
 (14 inch & 16 inch models)

TOOL STICKERS & TAGS (Continued)



4
25610 RAILROAD HELP DESK STICKER
(16 inch models only - except CE)



5
03787 FLOW & GPM STICKER
(14 & 16 inch models only - except CE)



5
28322 CE STICKER
(CE models only)

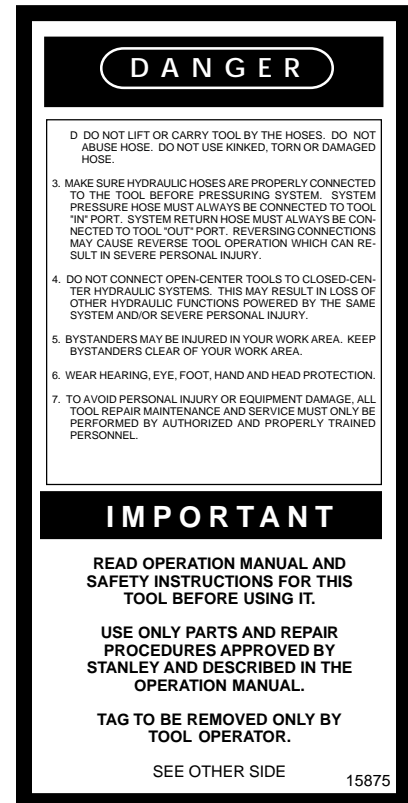
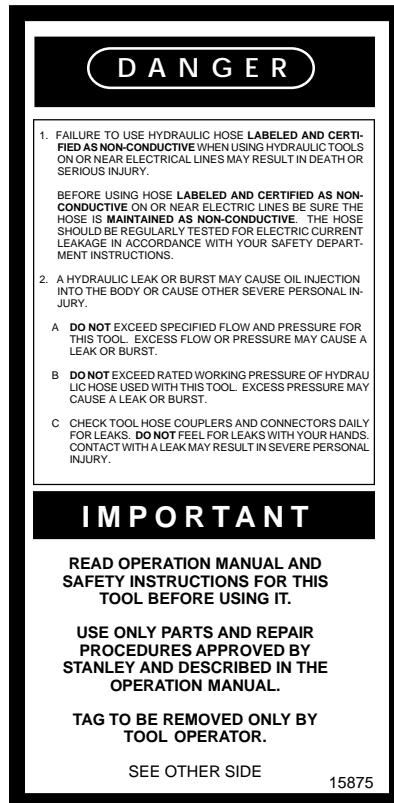


6
11207 CIRCUIT TYPE "D" STICKER
(CE models only)



7
11210 SOUND POWER LEVEL STICKER
(CE models only)

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



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

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

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

- 1 Certified non-conductive
- 2 Wire-braided (conductive)
- 3 Fabric-braided (not certified or labeled non-conductive)

Hose 1 listed above is the only hose authorized for use near electrical conductors.

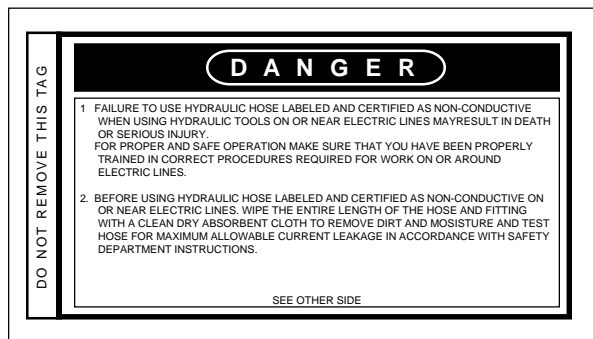
Hoses 2 and 3 listed above are **conductive** and **must never** be used near electrical conductors.

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 at no charge from your Stanley Distributor.

1 CERTIFIED NON-CONDUCTIVE HOSE

This tag is attached to all certified **non-conductive** hose.



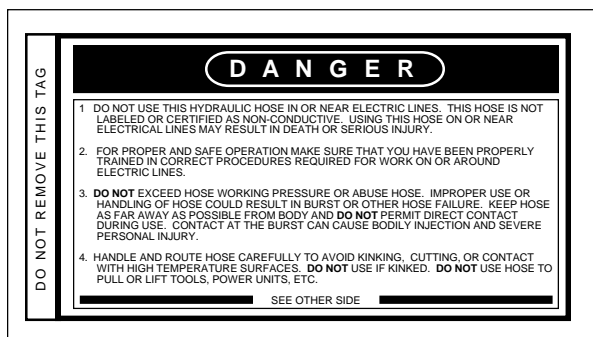
SIDE 1 (shown smaller than actual size)



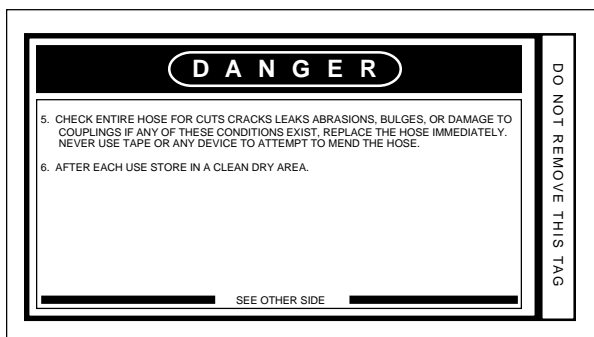
SIDE 2

2 AND 3 WIRE-BRAIDED AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE) HOSE

This tag is attached to all **conductive** hose.



SIDE 1 (shown smaller than actual size)



SIDE 2

HOSE PRESSURE RATING

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



ADDITIONAL REQUIREMENTS

IMPORTANT

In addition to the Safety Precautions on pages 2 thru 3 of this manual, observe the following for equipment protection and care.

- Always store an idle rail saw in a clean dry space, safe from damage or pilferage. Make sure the cutting wheel is removed.
- Do not exceed the rated limits or use the rail saw for applications beyond its design capacity.
- Always keep critical tool markings, such as labels and warning stickers legible.
- 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/175 bar.
- Permit only experienced personnel to perform tool repair.
- Be sure to wipe all couplers clean before connecting. Use only lint-free cloths.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the rail saw. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Check fastener tightness often and before each use daily.
- Quick disconnect couplings must conform to EHTMA/HTMA specifications.
- The Stanley HPR Twin Circuit Power Unit is recommended for use as the Rail Saw's hydraulic supply.

HTMA Requirements

Hydraulic System Requirements	Tool Category:		Type III	Type RR
	 Type I	 Type II		
Flow rate Tool Operating Pressure <i>(at the power supply outlet)</i>	4-6 GPM (15-23 lpm) 2000 psi (138 bar)	7-9 GPM (26-34 lpm) 2000 psi (138 bar)	11-13 GPM (42-49 lpm) 2000 psi (138 bar)	9-10.5 GPM (34-40 lpm) 2000 psi (138 bar)
System relief valve setting <i>(at the power supply outlet)</i>	2100-2250 (145-155 bar)	2100-2250 (145-155 bar)	2100-2250 (145-155 bar)	2200-2300 (152-159 bar)
Maximum back pressure <i>(at tool end of the return hose)</i>	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: <i>(at min. operating temperature)</i>	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: <i>(at max. expected ambient temperature)</i>	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 (5.22 kW) 40° F (22° C)	6 hp (4.5 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: <i>(For cold temp. startup and max. dirt-holding capacity)</i>	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 <i>(premium grade, anti-wear, non-conductive)</i> Viscosity <i>(at min. and max. operating temps)</i>	100-400 SSU* (20-82 centistokes)	100-400 SSU* (20-82 centistokes)	100-400 SSU* (20-82 centistokes)	100-400 SSU* (20-82 centistokes)
NOTE: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.				

*SSU = Saybolt Seconds Universal

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

PREOPERATION PROCEDURES

PREPARATION FOR INITIAL USE

Each unit as shipped has no special unpacking or assembly requirements prior to usage. Inspection to assure the unit was not damaged in shipping and does not contain packing debris is all that is required. After installation of a cutting wheel a unit may be put to use.

CHECK HYDRAULIC POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 9-10.5 gpm/34-40 lpm at 2000 psi/140 bar.
2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2200-2300 psi/152-159 bar minimum.
3. Check that the hydraulic circuit matches the tool for open-center (OC) or closed-center (CC) operation.

CHECK TOOL

1. 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

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

CHECK GUARD ASSEMBLY

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

INSTALLING AND REMOVING ABRASIVE CUTTING WHEELS

NOTE: Use 14 in. / 350 mm diameter (*for 14 in. model*) or 16 in. / 400 mm diameter (*for 16 in. model*) abrasive cutting wheels with a 1 in. arbor hole. **Only use cutting wheels which comply with ANSI B7.5/ISO 525, 603. Make sure the paper labels or blotters are installed between the wheel and collars.**

1. Before installing abrasive wheels, "sound" the wheel for possible damage by hanging the wheel vertically by the arbor hole and rapping lightly with a screwdriver handle or similar instrument. Thin, organic bond wheels will produce a low drumming tone if it is physically sound. If the wheel produces a "dead" or "flat" sound, it may be cracked. Cracked or damaged wheels must never be used.
2. Check that the surfaces of the wheel that come in contact with blotters and flanges are free of dirt and other foreign particles.
3. Remove the jam nut (77) and outside collar (78) by using a box type wrench while gripping the cutting wheel.
3. Install the cutting wheel. Make sure blotters or labels remain on the cutting wheel.
5. Reinstall the outside collar and jam nut. Tighten the jam nut with a box type wrench while gripping the cutting wheel. Only tighten sufficiently to prevent slippage of the wheel between the collars (78 & 79).

DRIVESHAFT SPEED CHECK

The speed of the motor output shaft should be checked at least every 100 hours of operation by trained and experienced personnel. A record of the speed checks should be maintained. The rated speed of the RS25 Rail Saw is 3600 rpm at 10 gpm / 38 lpm for the 16 inch/400 mm model and 4500 rpm at 10 gpm / 38 lpm for the 14 inch/350 mm model. The cutting wheel must be rated for a minimum of 4700 rpm for the 16 inch/400 mm model and 5300 rpm for the 14 inch/350 mm model. Tests should be conducted while operating the normal power supply used with the saw.

CONNECT HOSES

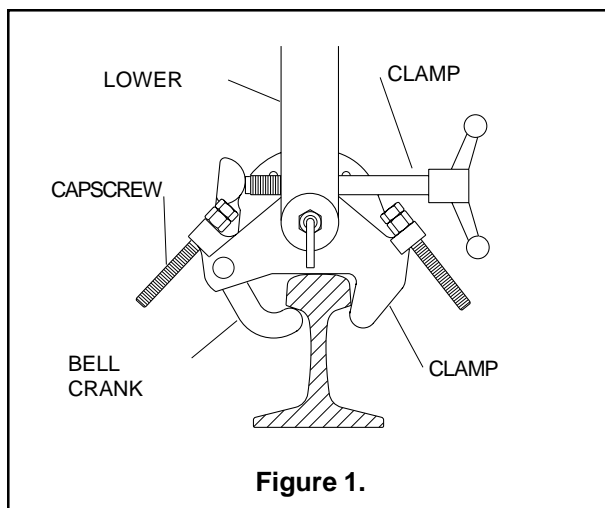
1. Wipe all hose couplers with a clean lint-free cloth before making connections.
2. Connect the hoses from the hydraulic power source to the hose couplers on the rail saw. It is a good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the rail saw 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.

OPERATING PROCEDURES

CLAMPING THE RAIL SAW TO THE RAIL

1. Observe all safety precautions.
2. Make sure the disconnect pivot bolt (24) is tight to the disconnect pivot (60) by turning the handle (20) to tighten the disconnect pivot bolt..
3. Fully extend the indicator (69) and position the rail clamp (76) on the rail so the clamp arms bear on the top and sides of the rail and the bell crank (6) bears under the rail as shown in figure 1.

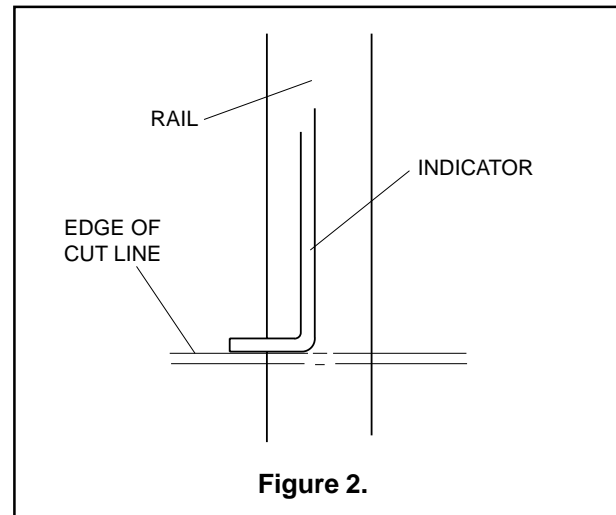


4. Move the rail saw along the rail until the indicator is next to the cut as shown in figure 2.

5. Tighten the bell crank to the rail by turning the clamp screw (75) clockwise.
6. While holding onto the upper link (18), release the detent (13) by turning the knob (7) and then position the lower link forward (*away from the operator*) until the detent can be re-engaged in one or the other of the two holes away from the "top dead center hole". This positions the saw so that the operator may stand erect while cutting the rail and also allows the saw to cut down to the flange of the rail.

An optional method is to disengage the detent and adjust the capscrews (*see figure 1*) as required.

7. Adjust the wheel guard (87) so that it does not interfere with the cutting process and cuttings are directed away from the operator.



SAWING THE RAIL

1. Always start the rail saw with the cutting wheel away from the work surface.
2. Start the cut with the wheel rotating.

NOTE: Do not "bump" the rail. Feed the wheel through the material as fast as possible without allowing the wheel to reduce its speed. Cutting through the material too slowly allows heat expansion and can cause wheel "pinching" in the material. "Pinching" the wheel from heat expansion is one of the most common causes of wheel breakage.

3. Starting at the top of the rail, cut straight down while rocking the handle back and forth. Cut down until near the flange.

4. When near the flange, stop the saw, release the detent and move the lower link toward the operator until the detent can be re-engaged in one of the holes away from the "top dead center hole". This positions the saw lower so that the flange of the rail may be easily cut.

If the detent has been removed in favor of using the capscrews as stops for the lower link, simply move the lower link toward the capscrew closest to the operator.

If the wheel is worn such that it will not completely cut through the rail, loosen the clamp lever on the saw, and rotate the saw to allow cutting from the opposite side. Readjust the lower link as required and finish the cut.

DETACHING THE UPPER AND LOWER LINKS

The upper (18) and lower (16) links can be detached from the motor mount (50) by unscrewing the disconnect pivot bolt (24).

SAW STORAGE

By disengaging the double cam (52), the upper link (18) and lower link (16) and clamp (76) can be rotated so that the entire saw has a flatter profile for storage.

Do not store the saw with the abrasive wheel attached.

CARE OF ABRASIVE CUT-OFF WHEELS

All abrasive cut-off wheels are breakable and, therefore, care must be exercised during handling and storage to prevent damage.

Wheels should be laid on a flat, rigid, surface away from excessive heat or moisture. Wheels should not be stored where they will be exposed to high humidity, water, other liquids or freezing temperature. If wheels are supplied with blotters attached, suitable separators should be used to preserve flatness.

COLD WEATHER OPERATION

If the saw 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.

INVESTIGATION OF WHEEL BREAKAGE

If a wheel breaks during use, a careful investigation should be conducted by to determine the cause of the breakage. The cause must then be corrected before using the saw again.

If unable to determine the cause of breakage, the wheel manufacturer should be consulted.

TROUBLESHOOTING

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

supplying the correct hydraulic flow and pressure to the saw as listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80°F/27°C.

When diagnosing faults in operation of the rail saw, always check that the hydraulic power source is

Saw does not run.	Hydraulic power source not functioning correctly	Check power source for proper flow and pressure (7-10 gpm/26-38 lpm, 2000 psi/140 bar).
	Coupler or hoses blocked	Remove obstruction.
	Mechanical failure.	Have tool serviced by authorized dealer.
Saw runs backwards.	Pressure and return lines incorrectly connected.	Correct hose connections. Motor shaft rotates counter-clockwise as viewed from the end of the motor shaft.
Saw cuts too slow.	Insufficient fluid flow or too high back pressure or relief valve set too low.	Check hydraulic supply. If hydraulic supply is correct, have unit serviced by authorized dealer.
	Wrong wheel for material being cut.	Use correct wheel.
Fluid leakage.	Seal failure.	Do not use and have serviced by authorized dealer.
Off center cut and binding.	Bearings worn on link arms.	Have unit serviced by authorized dealer.
	Incorrect cutting technique.	Review operating procedures.

RS25 (14 in. & 16 in. Blade) PARTS LIST

Item No	Part No	Qty	Description	Item No	Part No	Qty	Description
1	-----	4	* (see item # 131)	85	31032	A/R	.020 Shim
2	-----	5	* (see item # 131)	86	31033	A/R	.010 Shim
3	-----	5	* (see item # 131)	87	30957	1	Wheel Guard (16 in. model only)
4	-----	3	* (see item # 131)		28709	1	Wheel Guard (14 in. model only)
5	-----	1	* (see item # 131)	88	17652	1	Sector
6	28181	1	Bell Crank	89	28729	1	Carriage Bolt
7	-----	1	* (see item # 129)	90	01594	2	Washer
8	-----	1	* (see item # 129)	91	03906	1	Locknut
9	-----	1	* (see item # 129)	92	17676	2	Capscrew
10	-----	1	* (see item # 129)	93	03006	2	Machine Screw
11	-----	1	* (see item # 129)		28712	1	Motor Assy (Incl Items 94-102, 105-109, 118-121, & 125-126 - 16 in. model only)
12	-----	1	* (see item # 129)		28763	1	Motor Assy (Incl Items 94-102, 105-109, 118-121, & 125-126 - 14 in. model only)
13	-----	1	* (see item # 129)				
14	-----	1	* (see item # 131)				
15	30958	1	"D" Washer	94	31852	1	Bearing Hsg Assy (16 in. model only) (Incl item 100 & 125)
16	-----	1	* (see item # 131)				
17	-----	1	* (see item # 131)				
18	-----	1	* (see item # 131)				
19	-----	1	* (see item # 131)		31851	1	Bearing Hsg Assy (14 in. model only) (Incl item 100 & 125)
20	-----	1	* (see item # 131)				
21	-----	1	* (see item # 131)	95	372055	2	Dowel Pin (16 in. model only)
22	-----	1	* (see item # 131)		00713	2	Dowel Pin (14 in. model only)
23	-----	1	* (see item # 131)	96	00049	1	O-ring, 2 x 2-1/8 x 1/16 -033 (16 in. model only)●
24	-----	1	* (see item # 131)				
25	-----	1	* (see item # 131)		00178	1	O-ring (14 in. model only)
26	-----	1	* (see item # 131)●	97	18362	1	Idler Shaft (16 in. model only)
27	30671	1	Assist Handle		06854	1	Idler Shaft (14 in. model only)
28	31030	1	Handle Grip	98	18360	1	Drive Gear (16 in. model only)
29	31181	5	Belleville Washer		25718	1	Drive Gear (14 in. model only)
30	30667	1	Shoulder Bolt	99	18363	1	Idler Gear (16 in. model only)
31	31138	1	Valve Spool		25717	1	Idler Gear (14 in. model only)
32	01604	2	O-ring, .755 x .949 x .097 R17 ●	100	06316	2	Bushing
33	02931	1	Valve Cap	101	18389	1	Retaining Ring (16 in. model only)
34	00112	1	Quad Ring, 1/4 x 3/8 x 1/16 R16 ●		00166	1	Retaining Ring (14 in. model only)
35	31853	1	Flow Control (16 in. model only)	102	18388	1	Bearing (16 in. model only)
	31854	1	Flow Control (14 in. model only)		00148	1	Bearing (14 in. model only)
36	28108	1	Pipe Plug	103	00283	3	Lockwasher
38	02920	1	Spacer	104	16260	3	Capscrew
39	22707	1	Trigger	105	00772	1	Key
40	22704	1	Safety Catch	106	28733	1	Motor Shaft (16 in. model only)
41	22701	1	Torsion Spring		28762	1	Motor Shaft (14 in. model only)
42	03009	1	Roll Pin	107	18364	1	Key (16 in. model only)
43	00165	1	Screw		06881	1	Needle Roller (14 in. model only)
44	02911	1	Hose Clip	108	00664	1	Retaining Ring (16 in. model only)
45	31186	1	Poppet		00170	1	Retaining Ring (14 in. model only)
46	28552	1	Valve Handle Assy (Incl Item 36)	109	30590	1	Seal Gland (16 in. model only)
47	17641	1	Wheel Safety Label (16" model only)		30333	1	Seal Gland (14 in. model only)
	05868	1	Wheel Safety Label (14" model only)	110	00698	2	Helicoil
48	17681	1	Roll Pin	111	24059	1	Male Coupler Body
49	24869	1	Handle	112	24058	1	Female Coupler Body
50	35289	1	Motor Mount	113	31137	1	Plug
51	02688	4	Capscrew	114	02916	1	Spring
52	30632	1	Double Cam	115	07226	2	Hose Assy
53	30635	1	Spirol Pin	116	00175	4	O-ring, 1/2 x 5/8 x 1/16 (16 in. model only)●
54	29510	1	Eye Bolt				
55	04856	1	Retaining Ring	117	29604	2	Oil Tube
56	30841	2	Washer	118	30922	1	O-ring, 13/16 x 15/16 x 1/16 -015 (16 in. model only)●
57	-----	1	* (see item # 131)				
58	28673	1	Spring		350771	1	O-ring (14 in. model only)
59	30412	1	Motor Mount Pivot	119	30921	1	Quad Ring (16 in. model only)●
60	30530	1	Disconnect Pivot		00214	1	Quad Ring (14 in. model only)
61	28711	1	Tolerance Ring	120	31850	1	Gear Hsg Assy (16 in. model only) (Incl item 100 & 125)
62	30543	1	Stud				
63	04353	1	Locknut		31849	1	Gear Hsg Assy (14 in. model only) (Incl item 100 & 125)
64	-----	1	* (see item # 131)	121	18602	8	Capscrew (16 in. model only)
65	-----	1	* (see item # 131)		00120	8	Capscrew (14 in. model only)
66	-----	1	* (see item # 131)	122	28728	1	Name Tag (16 in. model only)
67	-----	2	* (see item # 131)		28409	1	Composite Sticker (14" model only)
68	-----	1	* (see item # 131)	123	25610	1	Railroad Help Desk Sticker (16 in. model only)
69	-----	1	* (see item # 131)				
70	-----	1	* (see item # 131)				
71	-----	1	* (see item # 131)		28728	1	Name Tag (14 in. model only)
72	-----	1	* (see item # 131)	124	03787	1	Flow & GPM Sticker (16" model only)
73	-----	1	* (see item # 131)		28322	1	CE Sticker (14 in. model only)
74	-----	1	* (see item # 131)	125	04040	2	Bushing (16 in. model only)
75	56708	1	Clamp Screw Assy		06316	2	Bushing (14 in. model only)
76	-----	1	* (see item # 131)	126	00145	8	Lockwasher (16 in. model only)
77	03012	1	Jam Nut	127	11207	1	"D" Sticker (14 in. model only)
78	31028	1	Outer Collar	128	28811	1	Info Plaque (14 in. model only)
79	04876	1	Inside Collar	129	56706	1	Detent Assy (S/N 2548 and Above)
80	00720	1	Set Screw		34880	1	Detent Assy (S/N 2547 and Below)
81	23246	1	Dowel Pin	130	-----	1	* (See item # 129)
82	17656	1	Thrust Collar	131	52537	1	Rail Clamp Assy.
83	03013	1	Retaining Ring	132	11210	1	Sound Power level sticker 108 dBA
84	31034	A/R	.005 Shim				

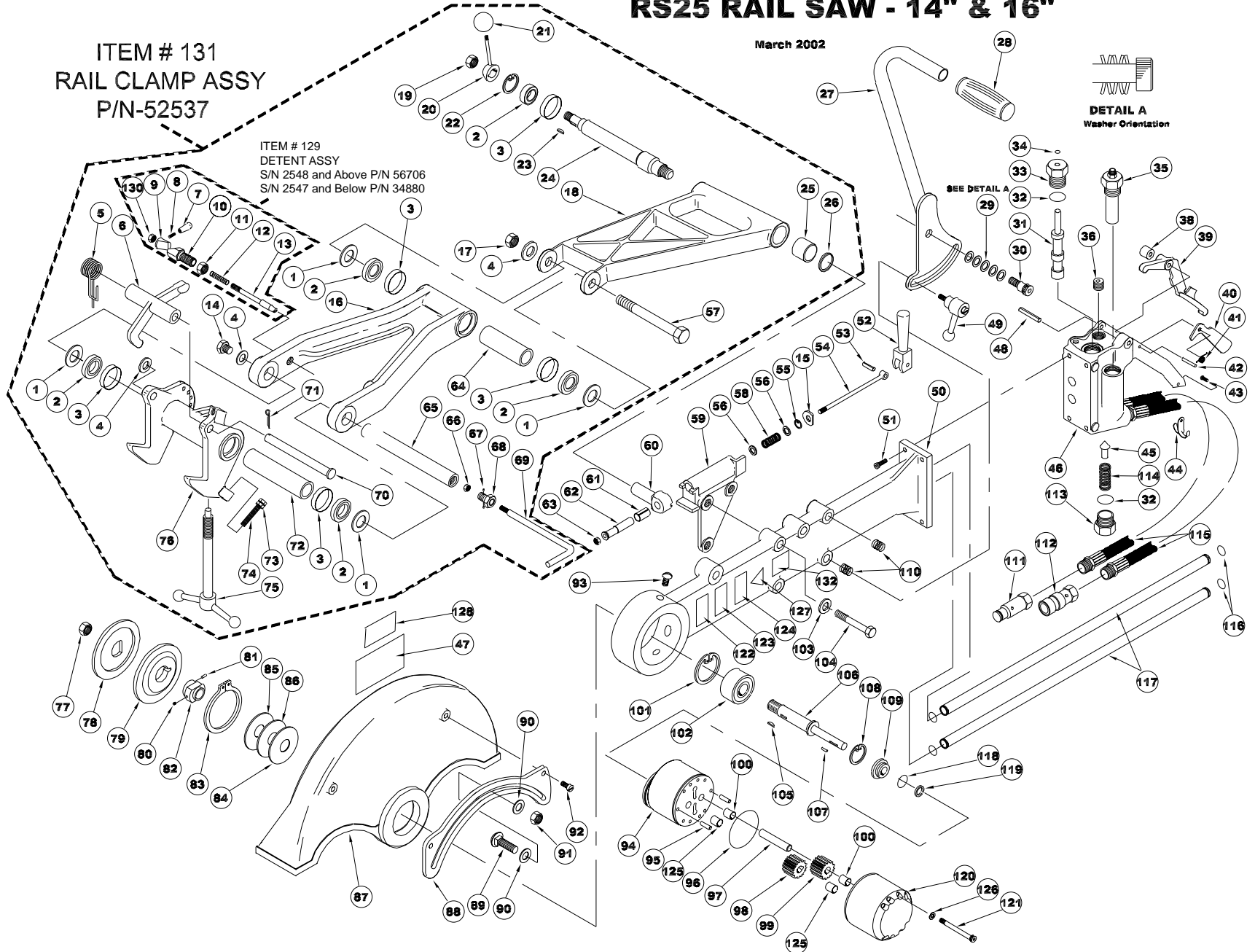
RS25 RAIL SAW - 14" & 16"

March 2002

ITEM # 131
RAIL CLAMP ASSY
P/N-52537

ITEM # 129
DETENT ASSY
S/N 2548 and Above P/N 56706
S/N 2547 and Below P/N 34880


DETAIL A
Washer Orientation



SPECIFICATIONS

Wheel Capacity
 14 inch model 14 in / 35.5 cm dia. x 25.4 mm arbor (ANSI B7.5/ISO 525, 603)
 16 inch model 16 in / 41 cm dia. x 1 in arbor (ANSI B7.5/ISO 525, 603)
 Pressure Range.....1800-2000 psi / 124-140 bar
 Maximum Back Pressure.....250 psi / 17 bar
 Flow Range.....HTMA Class RR, 9-10.5 gpm/34-40 lpm



EHTMA (D) 30 Lpm 138 Bar



EHTMA (E) 40 Lpm 138 Bar

Porting*-8 SAE O-ring
 Hose Whips* Yes
 Couplers EHTMA/HTMA Flush Face
 Overall Length (unfolded) 36 inches / 92 cm
 Overall Width 11 inches / 28 cm
 Height (with wheel - guard rotated to any position) 13 inches / 33 cm



Weight (less wheel)

14 inch model 55 lbs / 24.4 kg
 16 inch model 56 lbs / 25 kg
 Spindle Speed
 14 inch model (@ 10 gpm / 38 lpm) 4500 rpm
 16 inch model (@ 10 gpm / 38 lpm) 3600 rpm
 Maximum Fluid Temperature 140° F / 60° C
 Rail Size 75-165 lb / yard /37-82 Kg/M
 Sound Power Level.....108 dBA
 Sound Pressure Level At Operator (1 m).....97 dBA
 Vibration Level.....6.0 m/s²

* Couplers and whip hoses are furnished as standard equipment.

SEAL KIT 31845

- Denotes part in seal kit

ACCESSORIES

Railsaw Blade - 16 in. Norton Norzone III Fastcut	29745
Railsaw Blade - 16 in. Norton AT-36	22439
Railsaw Blade - 14 in. Norton Norzone III Fastcut	30974
Universal Bellcrank Kit (Grooved Rail)	34733

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

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: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, or excess hydraulic flow.

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 manner which exposes them to abuse or accident, without first obtaining the written consent of Stanley.

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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