

Operating Instructions

Floor Saw FSG620 \star \star

Index 001



Congratulations!

You have decided to purchase a tried and tested TYROLIT-Hydrostress unit and have thus acquired a highly sophisticated and reliable state-of-the-art unit. The exclusive use of only TYROLIT Hydrostress spare parts ensures quality and interchangeability. If maintenance work is neglected or carried out inexpertly we will be unable to honour our warranty obligations. Any repair work must be carried out by trained personnel only.

Should you need more details concerning your TYROLIT Hydrostress unit in order to keep it in perfect condition, please contact our after-sales service for further information.

We hope that you enjoy untroubled and fault-free working with your TYROLIT unit.

TYROLIT Hydrostress

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1 Safety



These instructions are just one part of the documentation which is supplied together with the floor saw. These instructions go together with the "Safety Manual / System Description for Floor Saws" to form a complete set of documentation.



DANGER

Failure to comply with the safety instructions in the "Safety Manual / System Description" may result in serious injury or death.

Please ensure that the "Safety Manual / System Description for Floor saws" has been read and understood in full.

2 Design



Components

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1 Operating console

Water tank

4 Main motor

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- 7 Saw blade

- Name plate
- Cut guide 6 Shaft cover
- 8 Blade guard
- 9 Drive wheel

2.1 Saw blade drive



Saw blade drive (schematic)

- 1 Blade drive shaft
- 2 Drive belt
- 3 Main motor drive shaft

2.2 Lift drive



Lift drive (schematic)

Movable spindle 1

2.3 Travel drive



Travel drive (schematic)

- Drive shaft (main motor) 1
- 2 Hydrostat drive belt
- 3 Hydrostatic motors 4
 - Drive chain
- Wheel drive shaft 5
- 6 Drive wheel

3 Transport DANGER

Inexpert transport may result in death or serious injury.

- ► Floor saws must only be transported with the main motor switched off.
- Only transport vehicles, lifting tools and load suspension devices with sufficient loadbearing capacity must be used.
- ▶ Floor saws must only be hitched by the hitching points provided.
- Appoint an expert marshaller.
- When transporting by crane do not stand underneath suspended load.
- Always have the floor saw in your line of vision while it is being transported.

3.1 Hitching points



Hitching points

1 Crane hitching device

4 Initial start-up

4.1 Fitting battery



Fit battery (for type see Technical Data).

- 5 Assembly / Set-up
- 5.1 Mounting grip



5.2 Mounting saw blade



1. Apply footbrake





DANGER

Parts that fly off (segments, concrete splinters, saw blade, etc.) may cause serious injury or even death.

- Floor saws must only be operated with a blade guard.
- When assembling the saw blade on the right-hand side use the anchoring screw with the left-hand thread.

When assembling the saw blade on the left-hand side, use the anchoring screw with the right-hand thread.



Note the direction or rotation arrows on the saw blade.



1 Anchoring screw

*Note the direction of rotation



C: To prevent the saw blade rotating while being tightened, carefully place the saw blade on the floor.

5.3 Mounting saw blade on the other side

5.3.1 Disassemble the blade guard



5.3.2 Disassemble the shaft cover



5.3.3 Assembling the blade guard and shaft cover on the other side

Assembly of the blade guard and the shaft cover is performed in the opposite order to disassembly.

5.4 Connecting water line



The water tank should also always be full when an external water supply is used. This ensures that the joint cutter exerts sufficient weight on the cutting material.



6 Operation

6.1 Overview of operating elements



Operating elements

- 1 Raise / lower hand wheel
- 2 Choke
- 3 Ignition key
- 4 Feed adjuster (forward / backward travel)
- 5 Speed governor
 - EMERGENCY STOP switch
- 7 Foot brake

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- 8 Battery main switch
- 9 Feed gears coupling lever
- 10 Operating hours meter

6.2 Checking oil level



► Note the details from the motor manufacturer.

6.3 Checking the fuel level



• Check the tank display (1) and top up with ROZ 95 petrol as necessary.

6.4 Positioning the floor saw

- 1. Release footbrake
- 2. Slide floor saw into the working position.
- **3.** Fit the cutting guides to the floor saw.

6.5 Connecting the water supply



6.6 Switch on motor



Symbol	Significance
Å.	Coupling lever in coupled position
*0	Coupling lever in uncoupled position

- ✓ Coupling lever (5) is in the uncoupled position
- ✓ EMERGENCY STOP switch (3) has been released
- **1.** Pull out choke (1) according to temperature.
- **2.** Start motor with ignition key (2).
- **3.** Push choke (1) back in.
- 4. Set motor speed with speed governor (4).

6.7 Lowering / raising saw blade



Symbol	Significance	
<u>to</u>	Raising / lowering saw blade	

- **1.** Lower joint cutter with the hand wheel (1) to the desired cutting depth.
- **2.** Engage locking pin (2)

6.8 Adjusting the feed



Symbol	Significance
* O	Coupling lever in coupled position
*0	Coupling lever in uncoupled position
	Feed adjuster in the forwards direction of travel
	Feed adjuster in the backwards direction of travel

- ✓ Feed adjuster (1) is in the neutral position
- ✓ Footbrake (2) is released
- **1.** Place coupling lever (3) in the coupled position.
- 2. Using the feed adjuster (1), set the direction of travel and speed.

7 Maintenance

When?	What?
Daily	Check oil level.Perform a visual check for damage.
Weekly	 Check belt and chain tension and adjust as necessary.
Every 50 hours of operation	 Lubricate grease nipples.
Annually or every 100 operating hours	 Arrange a major service by TYROLIT Hydrostress AG or an authorised representative.
According to the information from the motor manufacturer	 Carry out all necessary measures in accordance with the operating instructions of the motor manufacturer.

7.1 Grease nipples



Position of grease nipples

- 1 Blade drive shaft: 2 items
- 2 Wheel drive shaft bearing: 2 items



7.2 Tensioning chain on travel drive

Tensioning chain

1 Chain

8 Malfunctions

Malfunction	Possible cause	Solution
Floor saw does not operate	EMERGENCY STOP switch has been pressed.	• Release EMERGENCY STOP switch.
Saw blade jammed	Saw blade is jammed in the cutting material	 Reverse the floor saw. If necessary release the saw blade by rocking. If necessary stop the motor, disassemble the saw blade and release this individually from the cutting material.
Saw blade does not rotate even	Belt tension too slack	 Tension or replace belt.
though the motor is running	Pulling pin on the anchoring flange has sheared off	 Mount new anchoring flange.
Feed not working	Operation of the control rods impaired	 Check control rods and repair as necessary.
	Defective hydrostat	 Check hydrostat and if necessary have this repaired by a TYROLIT Hydrostress engineer.
	Defective chain	 Have the chain replaced by a TYROLIT Hydrostress engineer.
	Main motor belt slipping	 Check belt for wear and if necessary have this replaced by a TYROLIT Hydrostress engineer. Increase belt tension as necessary.
Motor running off centre	Wrong fuel	 Switch off motor immediately and change fuel.
	Oil filter blocked	 Have oil filter changed.

9 Technical data

9.1 Dimensions

Parameter	Value
Weight	200 kg
Cutting depth (max.)	230 mm
Blade uptake diameter	25.4 mm
Max. saw blade diameter	600 mm
Dimensions (transport dimensions with blade guard folded up)	L: 990 mm W: 570 mm H: 1,070 mm

9.2 Motor

Parameter	Value
Туре	Honda
Power	20 PS
Rated speed	According to operating instructions from motor manufacturer
Oil content	According to operating instructions from motor manufacturer
Tank content	7.61
Fuel	Petrol
Cooling	Air cooling

9.3 Lift drive

Parameter	Value
Drive type	mechanical via spindle

9.4 Travel drive

Parameter	Value
Drive type	Hydraulic
Oil grade	ATF Dexron II D
Cooling	Air cooling by means of cooling ribs

9.5 Noise level and vibrations

Parameter	Value
Noise level at the ear of the user $(L_{\mbox{\scriptsize eq}})$	87.9 dB(A)*
Noise level at workplace (L _{PA})	89.1 dB(A)*
Sound power level in accordance with ISO 3744 (L_{wA})	109.1 dB(A)*
Vibrations DIN EN ISO 5349-2	< 2.5 m/s ²

*Value applies under the following condition: Travel drive is switched off and the saw blade is not engaged. The measurement is performed with the motor under full load with the saw blade dia. 600 mm. Higher noise levels may be generated in cutting operation.

9.6 Battery

Parameter	Value
Description	Battery 12-Volt, Group Size U1
DP battery part number	2500584
Length	196 mm
Width	130 mm
Height	165 mm
Capacity	300 Amps
Manufacturer's reference	53030 ETN 530 030 030
Special feature	Clamping shoe

EC declaration of conformity

Description	Floor Saw
Type designation	FSG620★★
Year of construction	2007
Manufacturer	TYROLIT Hydrostress AG

We declare under our own liability that this product complies with the following directives and standards:

Directive applied

Machine Directive	2006/42/EC
Noise Emission	2000/14/EC
Electricity Directives	93/68/EEC
Electromagnetic Compatibility	89/336/EEC
2002/95/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment	2002/95/EC
Waste Directive	2002/96/EC
Vibration Directive	2002/44/EC

Standards

EN 12100-1	Safety of machinery – Basic concepts, general design principles.
EN 12100-2	Safety of machinery - Basic concepts and general principles for design.
EN ISO 14121	Safety of machinery - Principles of risk assessment.
EN 294	Safety of machinery – Safety distances to prevent upper limbs reaching danger areas.
IEC 60204-1	Safety of machinery – Electrical equipment of machines, General Requirements.
IEC 6100-6-3	Electromagnetic Compatibility
EN 13862	Floor cutting-off machines. Safety.
EN 349	Safety of machinery – Safety distances to avoid crushing of body parts.
EN 982	Safety of machinery Safety requirements for safety systems and their components – hydraulics.
EN ISO 3744	Acoustics - Determination of sound power levels of noise sources using sound pressure