STANLEY

SRP COMPACTION REVERSIBLE PLATE



SRP 4960 SRP 5960

USER MANUAL Safety, Operation and Maintenance









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:

Kategorie: Catégorie: Categoria: Categoria:	
Make/Marke/Marque/Marca/Marca	Stanley
Type/Typ/Type/Tipo/Tipo:	SRP 49601D, SRP 59601D
Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement: Numero de serie del equipo: Matricola dell'attrezzatura:	All
	Catégorie: Categoria: Categoria: Make/Marke/Marque/Marca/Marca Type/Type/Tipo/Tipo: Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement:

5. Mass/Masse/Masse/Massa 391 kg / 440 kg

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		
Machinery Directive	2006/42/EG 2006/42/EC 2006/42/CE 2000/14/EG 2000/14/EC 2005/88EG 2005/88/EC 2005/88/CE 2004/108/EG 2004/108/EC	Self Self Self Self Self Self Self Self		
Measurements:	SRP 4960 Hatz 1B40 6.6 kW	SRP 5960 Hatz 1B40 6.6 kW		
Messungen Mesures	106 dB	106 dB		
Mediciones Misurazioni	108 dB*	10 dB*		

6.	Special Provisions: Harmonized standards: Spezielle Bestimmungen: EN 500-1; EN500-4 Dispositions particulières: Provisiones especiales: Disposizioni speciali:	7. Measurements: Messungen Mesures Mediciones Misurazioni	Measured Sound Power Level Guaranteed Sound Power Level* Annex VIII of 2000/14/EC
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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 H		Date/Datum/le/Fecha/Data	20-10-2013
Signature/Unterschrift/Signature/Firma/Firma	Andy Wish		
Position/Position/Fonction/Cargo/Posizione	Director of Product Development		

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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 this machine, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.



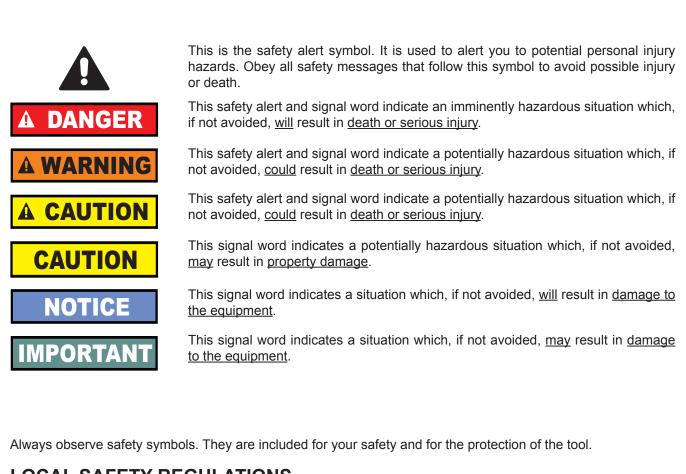
SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

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.



LOCAL SAFETY REGULATIONS Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and mainte-

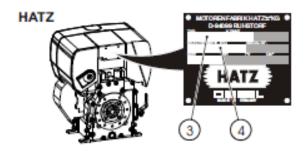
nance personnel.	Č	•		·	

FOREWORD









These instructions include:

- Safety regulations
- · Operating instructions
- Maintenance instructions

These instructions have been prepared for operation on the construction site and for the maintenance engineer.

These instructions are intended to simplify operation of the machine and to avoid malfunctions through improper operation.

Observing the maintenance instructions will increase the reliability and service life of the machine when used on the construction site and reduce repair costs and downtimes. Always keep these instructions at the place of use of the machine.

Only operate the machine as instructed and follow these instructions.

Do not fail to comply with all County and State safety provisions, as well as the rules for safety and health.

Also observe the corresponding rules and regulations valid in your country.

Stanley is not liable for the function of the machine when used in an improper manner and for other than the intended purpose.

Operating errors, improper maintenance and the use of incorrect operating materials are not covered by the warranty. The above information does not extend the warranty and liability conditions of business of Stanley.

We reserve us the right to make changes due to technical development without announcement.

STANLEY BOSS SIDE and

PLEASE ENTER (DATA C	N MACHINE	TYPE	PLATE)

1. MACH.-TYPE: _____

2. MACH.-NO.: ______

4. ENGINE-NO.: _____

Stanley Hydraulic Tools 3810 SE Naef Rd Milwaukie, OR 97267 Ph: 503-659-5660

Fax: 503-652-1780

www.stanleyhydraulics.com

SAFETY

This Stanley machine has been built according to the state of the art in compliance with the pertinent rules. Nevertheless, these machines can still constitute a hazard to persons and property if:

- · not used for the intended purpose,
- · not operated by suitably qualified and instructed personnel,
- · modified or converted in an improper manner,
- · the pertinent safety regulations are not observed

For this reason, any person entrusted with the operation, maintenance or repair of the machine is obliged to read and follow the operating instructions and particulary to observe the safety regulations. If necessary, it must be confirmed by the signature of the company using the machine.

Furthermore, the following must be made known and observed:

- pertinent regulations for the prevention of accidents.
- · generally recognised safety rules,
- · country-specific regulations

Normal use

The machine is suitable for all compaction jobs in civil works and road construction. All ground materials such as sand, gravel, sludge, crushed stone, asphalt and composite sett paving can be compacted.

Improper use

The machine can constitute hazards if not used by instructed personnell or for other than the intended purpose.

Weighing down and riding on the machine is forbidden.

The machine must not be used on slopes with a gradient of more than 25° (Honda 20°).

Do not use the machine on hard concrete, set asphaltic surfaces, highly frozen or unstable surfaces.

Who is allowed to operate the machine?

Only suitable qualified, instructed and authorised persons over 18 years of age may operate the machine.

In variance from this, minors can be employed, as long as it is necessary to their training objective and their protection is assured by a supervisor.

Persons under the influence of alcohol, medication or drugs must not operate, maintain or repair the machine.

Maintenance and repairs, in particular of hydraulic systems and electronic components require special knowledge and must be carried out only by skilled persons (mechanics specialising in construction and agricultural machinery).

Conversions and modifications to the machine

Unauthorised modifications and conversion of the machine are not permitted for safety reasons.

Spare parts and special equipment not delivered by Stanley are also not approved by Stanley. The installation and/or the use of such parts can also have a detrimental effect on the operating safety.

The manufacturer disclaims all liability for any damage resulting from the use of non-original parts or special equipment.

Safety information contained in the operating and maintenance instructions

The following terms and symbols are used in this operating manual that draw attention to important information:



Refers to special information and/or orders and prohibitions directed towards preventing damage



Refers to orders and prohibitions designed to prevent injury or extensive damage.



Refers to special information on how to use the machine most efficiently.

Important

Transporting the machine

Only load and transport the machine as specified in the operating instructions.

Only use suitable means of transport and hoisting with sufficient loading capacity!

Attach suitable slinging means to the points of attachment provided.

Secure the machine to prevent it from tilting or slipping. It is highly dangerous to walk or stand under suspended loads. Secure the machine on transport vehicles to prevent it from rolling, slipping and tilting.

Starting the machine

Prior to starting

Familiarise yourself with the operating and control elements and the mode of operation of the machine and the working environment. This includes, e.g. obstacles in the working area, loading capacity of the ground and the necessary safety provisions. Use personal protective equipment (safety footwear, hearing protectors, etc.).

Check to ensure that all safety devices are firmly in place. Do not start the machine if instruments or control devices are faulty.

Starting

For machines with hand start, only use the safety cranks tested by the manufacturer, and precisely follow the operating instructions of the motor manufacturer.

To crank-start diesel motors; Important is the correct position to the motor and the correct hand position on the crank.

The handcrank must be turned with maximum force until the motor starts, otherwise the crank can rebound.

Precisely follow the starting and stopping procedures specified in the operating instructions and observe indicator lights.

Only start and operate machines with an electrical starter from the instrument panel.

Starting and operation of the machine in potentially explosives atmospheres is forbidden!

Starting with battery junction cables

Connect «positive» to «positive» and «negative» to «negative» (earthing lead). Always connect the earthing lead last and disconnect first! Incorrect connection will cause serious damage to the electrical system.

Starting in enclosed spaces, tunnels, mines or deep ditches Engine exhaust gas are highly dangerous!

For this reason, when operating the machine in enclosed spaces, tunnels, mines or deep ditches, it is important to ensure that there is sufficient air to breath (see UVV «Construction work», BGV C22, paragraphs 40 and 41).



SAFETY

Machine control

Operating devices which adjust themselves automatically when released in normal use, must not be locked.

Check protective devices and brakes for proper functioning prior to operation.

When reversing, particularly on the edges and banks of ditches, as well as in front of obstacles, the machine operator cannot fall or be crushed.

Always keep a safe distance away from the edges and banks of ditches and refrain from any actions which could cause the machine to topple over!

Always control the machine, so that hand injuries through hard objects are avoided!

Always ascend slopes carefully in a direct path.

Reverse up steep slopes to prevent the machine from toppling over on to the machine operator.

If faults on the safety devices or other faults detrimental to the safe operation of the machine are noticed, operation of the machine must be stopped immediately and the faults remedied. When undertaking compaction work in the vicinity of buildings or above pipelines and similar, check the effect of the vibrations on the buildings and pipes and stop compaction work if necessary.

Parking the machine

Park the machine on a firm and level surface.

Shutdown the drive and secure it to prevent accidental movement and unauthorised use. If available, close the fuel valve. Do not place or store equipment with integrated moving gear on the chassis. The moving device is intended only for transportation purposes.

Filling Fuel

Only fill fuel by switched-off motor. No open fire, do not smoke. Do not spill any fuel, collect discharging fuel in a suitable container, prevent fuel from seeping into the soil.

Ensure that the filler cap is tight.

Leaky fuel tanks constitute an explosion hazard and must therefore be replaced immediately.

Maintenance and repairs

Observe the maintenance, inspection and adjustments and intervals specified in the operating instructions, as well as the information for part replacement.

Maintenance work must be undertaken only by qualified and authorised persons.

Maintenance and repairs only by switched-off drive.

Only carry out maintenance and repairs when the machine is parked on a firm and even surface and is secured to prevent it from rolling.

When changing larger assemblies and individual components, only use suitable and perfectly functioning hoistings and lifting gears with suitable loading capacity. Attach and secure parts on hoisting carefully!

Spare parts must comply with the technical requirements of the manufacturer. Therefore only use original spare parts.

Hydraulic lines must previously be rendered pressureless, before working on them. Hydraulic oil discharging under pressure can cause serious injuries.

Work on hydraulic devices must be undertaken only by persons with a special knowledge of hydraulics and the necessary experience!

Do not adjust pressure relief valves.

Drain hydraulic oil at operating temperature—caution risk of scalding!

Collect discharging hydraulic oil and dispose of the same in an environmentally-friendly manner.

Do not start the motor when hydraulic oil has been drained off. After completing all work (by pressureless system), inspect all connections and bolted connections for leaks.

Inspect all hoses and bolted connections for leaks at regular intervals and externally visible damage! Rectify any damage immediately.

Replace externally damaged hydraulic hose lines at regular intervals (depending on time used), even when no safety-relevant faults are visible.

Before working on the electrical system of the machine, disconnect the battery and insulate by covering or remove. Inspect the electrical equipment of the machine at regular intervals. Faults such as loose connections, worn or scorched cables must be immediately eliminated.

During transport, secure the battery to prevent it from tilting, short-circuit, slipping and damage.

Dispose of used batteries in a proper manner. Do not place any tools on the battery.

Handling acid-batteries

Transport filled batteries upright to prevent acid spillage. Keep away from sparks, open fire and other sources of ignition. Avoid contact of acid with skin and clothing. In case of contact, wash off acid immediately with clear water and go to medical institution.

Properly refit and inspect all protective devices after maintenance and repairs.

Testing

Road rollers, trench rollers and vibrating plates must be tested for safety by an expert depending on the particular application and operating conditions as required, however at least once a year.

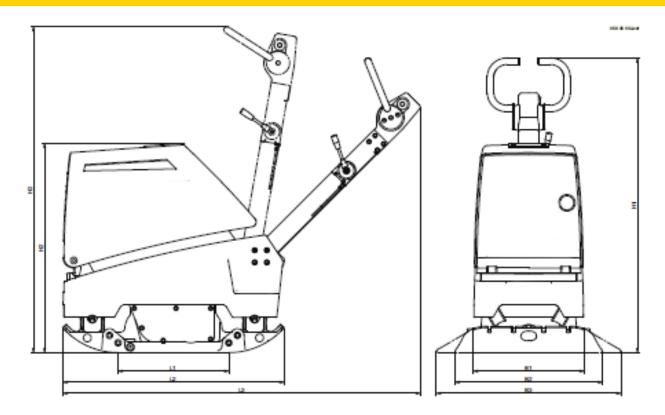
Disposal of the machine after finish of its service life

At disposal of the machine after finish of its service life, the owner is obliged to comply with national regulations and laws on wastes and protection of environment. Therefore we recommend in such cases to contact the following:

- professional specialized companies engaged in such activities and having the relevant certificate
- the manufacturers or contracting service organizations authorized by him.

The manufacturer is not responsible for damages to health of owners neither for damages to the environment in events of failing to comply with above mentioned hygienic and ecological principles.

TECHNICAL DATA



	SRP 4960 (HATZ)	SRP 5960 (HATZ)					
1. DIMENSIONS							
B1	450 MM	/ 17.7 IN.					
B2	600 MM	/ 23.6 IN.					
B3	750 MM	/ 29.5 IN.					
H1	CA. 1000 N	1M / 39.3 IN.					
H2	817 MM / 32.1 IN.	850 MM / 33.4 IN.					
H3	CA. 1285 N	1M / 50.5 IN.					
L1	450 MM	/ 17.7 IN.					
L2	898 MM	/ 35.3 IN.					
L3	CA. 1485 MM / 58.4 IN.	CA. 1453 MM / 57.7 IN.					
2 WEIGHTS							
BASIC UNIT	391 KG / 862 LB	440 KG / 970 LB					
W. MOUNT. BRACKETS 75 MM	413 KG / 910.5 LB	461 KG / 1016.3 LB					
W. MOUNT. BRACKETS 150 MM	424 KG / 934.7 LB	473 KG / 1042.7 LB					
ELECTRICAL STARTER	+ 15 KG / 33 LB	+ 17 KG / 37.4 LB					
3. DRIVE							
ENGINE	HATZ						
TYPE OF CONSTRUCTION	1-CYL-4-STF	ROKE DIESEL					
POWER OUTPUT	6.6 KW	(9.0 HP)					
SPEED	2900	2900 1/MIN					
COOLING	A	AIR					
FUEL CAPACITY	5.0 L / 1	.32 GAL					
	1.6 L/H / 0	0.42 GAL/H					
MAX. SLOPING POSITION	2	5°					

TECHNICAL DATA

	CDD 4060 (UATZ)	CDD FOCO (HATZ)			
MAN ODADE ADILITY	SRP 4960 (HATZ) SRP 5960 (HATZ				
MAX. GRADE ABILITY	30% VIA CENTRIFUGAL CLUTCH AND V-BELT				
DRIVE	HYDRAULIC				
CONTROL (FORWARD / REVERSE)	חוור אטור	RAULIC			
4. OPERATING SPEED	0.05	A / A / A / A A			
BASIC UNIT B1	U-35	M/MIN			
5. VIBRATION	40.141	50.141			
CENTRIFUGAL POWER	49 KN	59 KN			
VIBRATION FREQUENCY	65	HZ			
6. SUPERFICIAL POWER					
BASE UNIT	up to 835 m²/h	up to 890 m²/h			
W. MOUNT. BRACKETS 75 MM	up to 1115 m²/h	up to 1180 m²/h			
W. MOUNT. BRACKETS 150 MM	up to 1395 m²/h	up to 1485 m²/h			
7. SPECIAL EQUIPMENT					
VULKOLLAN MAT (PLATE ASSY) 24"	O (P/N	-75887)			
MOUNTING BRACKET (EXTENSION)	0.744	UD 4 D D			
3 IN. (7.5 CM)	SIAN	IDARD			
MOUNTING BRACKET (EXTENSION) 6 IN. (15 CM)) O (P/N-75271)				
0 IIV. (10 CIVI)	O = Option / S = Serial / —				
9. NOISE AND VIBRATION DATA	O - Option / O - Oction /	- Not available			
THE FOLLOWING NOISE AND VIBRAT IN THE VERSION (2006/42/EC), WAS D STANDARDS AND DIRECTIVES. IN OPE THE PREVAILING CONDITIONS. 9.1 NOISE DATA THE NOISE DATA SPECIFIED IN APPENDENT OF THE PROPERTY OF THE PR	ETERMINED, TAKING INTO A ERATIONAL USE, VALUES CA	ACCOUNT THE FOLLOWING AN DEVIATE DEPENDING ON			
DIRECTIVE IS FOR: SOUND PRESSURE LEVEL AT THE OPERATOR PLACE LPA	104	.7 dB			
MEASURED SOUND POWER LEVEL LWA,M	106	6 dB			
GUARANTED SOUND POWER LEVEL LWA,G	. 108 dB				
THE NOISE VALUES WERE DETERMING TIVES AND STANDARDS: DIRECTIVE 2					
9.2 VIBRATION DATA HAND/ARM VIBRATION VALUES ACCO MACHINERY DIRECTIVE:	RDING TO APPENDIX 1, SUE	3-CLAUSE 3.6.3.1 OF THE EC			
TOTAL VIBRATION VALUE OF THE ACCELERATION AHV	3.9 m/s²	4.9 m/s²			
UNCERTAINTY K	1.0 m/s²				
THE ACCELERATION VALUE WAS DETERMINED, TAKING INTO ACCOUNT THE FOLLOWING					



DIRECTIVES AND STANDARDS: EN 500-4 / DIN EN ISO 5349

1) AS THE PERMISSIBLE RATING SOUND LEVEL OF 85 DB (A) CAN BE EXCEEDED BY THIS MACHINE, OPERATORS MUST WEAR HEARING PROTECTORS.

Description

The SRP 4960 / 5960 is a reversible vibrating plate operating on the basis of the twin-shaft vibration system principle. The engine drives the exciter on the baseplate via a centrifugal clutch and a V-belt.

The exciter produces the vibration required for compaction as a result of the built-in imbalance.

The machine is guided at the tow-bar grip. It is operated with the operating controls on the tow-bar.

SRP 4960 / 5960 is suitable for all compaction work in the fields of civil engineering and road construction.

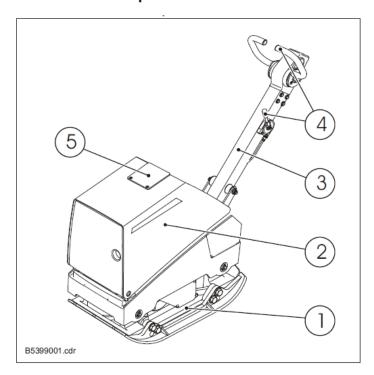
It can be used to compact all ground materials such as sand, gravel, slag, crushed stone, asphalt and composite sett paving.



Take great care on downslopes. The machine could slip down owing to loose material or if the surface is slippery.

Do not use the machine on hard concrete, set asphaltic surfaces, highly frozen or unstable surfaces.

Overview of components



- 1 Baseplate with exciter
- 2 Engine
- 3 Tow-bar
- 4 Operating controls / tow-bar
- 5 Central-point suspension

Before Operation



Use personal protective equipment (in particular hearing protectors and safety shoes). Risk of loss of hearing!

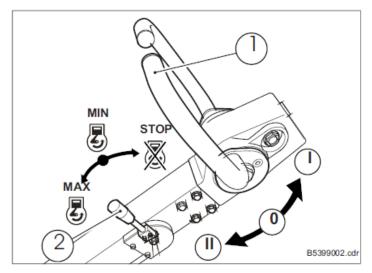
Observe the safety conditions.

Observe the operation and maintenance instructions

Read the Engine operating instructions. Observe the Importants on safety, operation and maintenance contained in them.

- Stand the machine on an even surface.
- Check
 - the Engine oil level
 - the hydraulic oil level
 - the fuel supply
 - that screw connections are secure
 - condition and function of hydraulic hose lines
 - the condition of the Engine and the machine.
- Top-off any missing lubrication in accordance with the lubrication table

Operating control at the tow-bar



1 Control Handle

The control handle serves for adjustment of the unbalances in the exciter and in turn for continuous regulation.

- I Forward
- 0 Point compacting
- II Reverse

The control handle will always remain in the forward position, unless you physically move the handle to a different position (i.e. reverse). When moving the control handle to any other position other than forward and you release the control handle, the control handle will return to the forward position automatically.

If the control handle is operated too quickly several times, the shift lever in the unit could cause an air lock to take place preventing reverse travel.

In this case:

- Push the control handle to the full forward travel position and hold for a few seconds to clear this condition. Also use the throttle a few times from low/idle and back to full speed to help remove the air lock.
- This should return the unit to normal shifting.

The control lever can be operated only with the engine running. The lever blocks if operated when the machine is stationary. Blocking is immediately cleared when the engine is restarted.

2 Engine throttle control lever

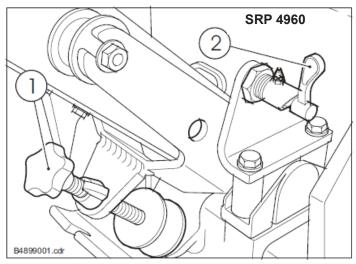
STOP Engine stop

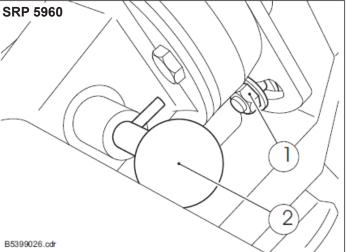
MIN Idle (detent position)

MAX Full load

The motor speed can be adjusted with the throttle control lever. At minimum motor speed (min), the drive to the exciter is disconnected at the centrifugal clutch and the motor idles. The centrifugal clutch engages when the throttle control lever is moved approximately ½ of its adjustment travel.

Adjusting / Locking the tow-bar





Adjusting the tow-bar

By turning adjustment-screw (2), the tow-bar can be set to any positions so as obtain the best working height on the tow-bar grip.

Locking the tow-bar

The handle can be fixed in upright (2) position. The tow-bar lock makes it easier to handle the machine when loading it.



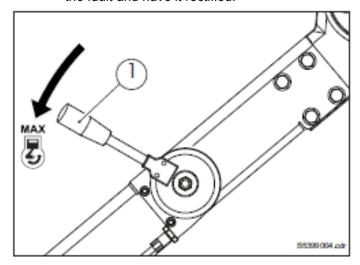
To prevent deflection, the tow-bar must not be locked during normal operation.

Starting the Engine (Electrical start)

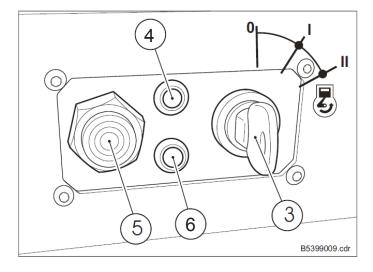


The oil pressure indicator (6) and charge indicator (4) serve for monitoring the oil pressure and function of the alternator.

If one of the indicator lamps lights up during operation, switch off the engine immediately, locate the fault and have it rectified.



• Set the engine speed lever (1) to full load (MAX).



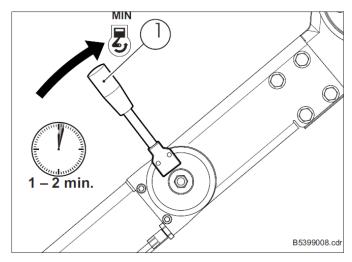
- Insert the ignition key (3) and turn to «I»; the charge indicator (4) and the oil pressure indicator (6) lights up and a horn (5) sounds.
- Turn the ignition key (3) to «II» and release when the engine starts.



The starting key must spring back to position «I» and remain there during engine operation.

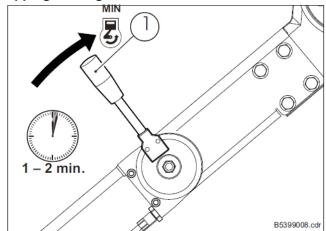
The charge (4) and oil pressure indicator (6) should turn off directly after the engine starts. Prior to starting up again, the key has to be returned to position «0».

Warm up Instructions:

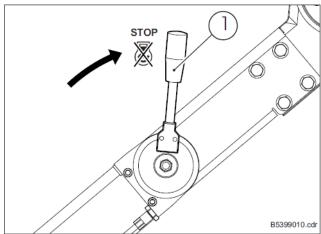


- Set the engine speed lever (1) to idle (MIN).
- Allow the engine to run for 1-2 minutes in order to warm up.

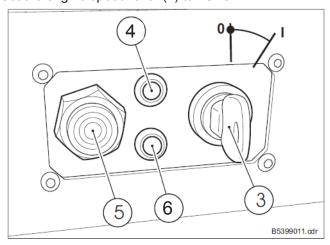
Stopping the Engine



- Set the engine speed lever (1) to idle (MIN).
- Allow the engine to run for 1-2 minutes.



• Set the engine speed lever (1) to «STOP».



- The charge indicator (4) and the oil pressure indicator (6) lights up and a horn (5) sounds.
- Turn the ignition key (3) to «0». The horn wil sound if the ignition key is not returned to the «0» position; a risk of total battery discharge exists.
- · Remove the key.

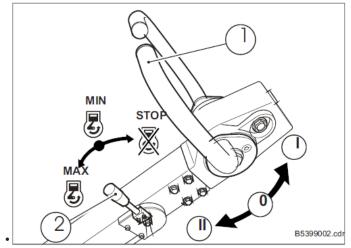
lack

At the end of a working day or a break protect the key from unauthorised access.

Danger

STANLEY

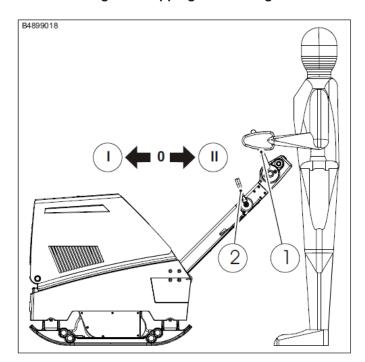
Operation



Set the engine speed lever (2) to full load (MAX).



Operate the machine only at full throttle and turn the machine always in idle position during short rest periods. Otherwise Danger of clutch damages or slipping of centrifugal clutch.



- The proper position for the operator is behind the machine.
- Control and steer the machine using the tow bar grip (1).
- Set the travel direction and speed with the travel lever (2).



For compaction of paving stones, it is recommended to use Vulkollan plates and protective brackets (special accessories) to prevent damages to the compaction material and to the machine.

If the machine is used without protective bracket, the threaded fastenings in the base plate must be sealed with the supplied screw plugs.

TRANSPORT

Loading and Transportation



Only use sufficiently strong and secure loading ramps when loading.

Check the contact points (frame, lifting rings) before use for damage and wear. Immediately replace damaged parts.

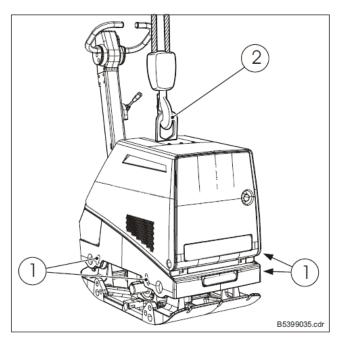
Secure the machine against rolling or slipping off and against tipping over.

Ensure that no persons will be endangered.

When loading, lashing down and lifting the machine always use the provided lifting points.

Persons are in danger, if they

- go near swinging loads or
- stand under swinging loads Lock the tow-bar to loading and transport.



After loading, the machine has to be attached in place (1). Use the centre-of-gravity suspension point (2) in order to lift the machine.

General Information

Maintenance:

- increased service life
- increased function
- reduced downtimes
- increased reliability
- reduced repair costs
- Observe the safety regulations!
- Maintenance works should only be carried out when the engine is shut off.
- The engine and machine should be cleaned thorougly before carrying out maintenance work.
- Park the machine on a flat surface and secure it against rolling away and slipping.
- Ensure that operating materials and replaced parts are disposed of safely and in an environmentally-friendly way.

- Before commencing work on any electrical equipment,
 disconnect the battery and cover it with insulating materials.
- Do not exchange «PLUS» and «MINUS» poles on the battery.
- It is essential that short-circuits be prevented in cables carrying current.
- Before welding work on the machine disconnect all battery connections and cables.
- Burn-out lightbulbs in indicator lamps should be replaced immediately.
- When cleaning the machine with a high-pressure water jet, do not spray the electrical components directly.
- After cleaning the components, blow-dry them with compressed air in order to prevent surface corrosion.

Maintenance Schedule

Maintenance- Works	Intervals	Daily	20 h	50 h	100 h	200 h	250 h	400 h	If Necessary
Clean machine		•							
Check engine oil	level ¹)	•							
Change engine oi	I ¹)		• 3)				•		
Check the water t	rap ¹)	•							
Clean engine oil f	ilter ¹)		• 3)						
Clean fuel filter 1)			,		•				
Change fuel filter	1)							•	
Check air filter 1)		•							
Change air filter e	element ²)							•	(•)
Check valve clear	rance ¹)		• 3)				•		
Exciter: Check oil	level			•					
Exciter: Change of	oil ²)				• 3)		•		
Check rubber buf	fers				•				
Check hydraulic	oil level	•							
Change hydraulic	oil								•
Check the hydrau	lic hose lines 2)				•				
Check V-belt			• ³)	•					
Check screwed co	onnections for		• 3)		•				

¹⁾See engine operating manual

²)Minimum once a year

³⁾for the first time

Lubrication Schedule

Lubricating point	Quantity	Changing intervals [operating hours]	Lubricant					
1. Engine								
SRP 4960	1.5	250²	Engine oil API SG-CE					
SRP 5960	1.01	200	SAE 10W40					
2. Exciter	2. Exciter							
SRP 4960	1.0	250³	Engine oil API SG-CE					
SRP 5960		or annually	SAE 10W40					
2. Hydraulic	2. Hydraulic							
SRP 4960	0.65	If Necessary	Hydro-Oil					
SRP 5960	0.331	ii iidoessary	HVLP 46					

Alternative Lubrication Schedule

	Engine oil API SG-CE SAE 10W40	Gear oil in acc. with JDM J 20 C	Special hydro-oil ISO-VG 32	Hydroil HVLP 46	ATF – oil
ARAL	Extra Turboral SAE 10W40	Fluid HGS	Vitam GF 32	Vitam HF 46	ATF 22
BP	Vanellus C6 Global Plus SAE 10W40	Hydraulik TF-JD	Energol HLP-HM 32	Bartran HV 46	Autran MBX
CASTROL	Tection SAE 10W40	Agri Trans Plus	Hyspin SP 32	Hyspin AVH-M 46	TQ-D
ESSO	Ultra 10W40	Torque Fluid 56	Univis N 32	Univis N 46	ATF 21611 II-D
FINA	a. Kappa FE b. Kappa Turbo DI	Transfluid AS	a. Hydran TSX 32 b. Biohydran TMP 32 ²⁾	_	Finamatic II D
FUCHS	Titan Unic MC	Agrifarm UTTO MP	a. Renolin ZAF 520 b. Plantohyd 32 S ²⁾	Renolin B 46 HVI	Titan ATF 3000
KLEENOIL PANOLIN			Panolin HLP Synth 32 ²⁾	_	
MOBIL	a. Delvac SHC b. Mobil Super M 10W40 c. Mobil Super S 10W40 ¹⁾	a. Mobilfluid 424 b. Mobilfluid 426	Mobil DTE 24	Univis N 46	ATF 220
SHELL	Engine Oil DG 1040	Donax TD	Tellus T32	Tellus T 46	a. Donax TA b. Donax TX
TOTAL	Rubia Polytrafic 10W-40	Transmission MP	Azolla ZS 32	Equivis ZS 46	Fluide ATX

¹⁾Semi-synthetic light-duty oils
²⁾Biological multi-purpose hydraulic-oils;
The miscibility and compatibility with mineral oil based hydraulic oils and biological hydraulic-oils should be examined in the individual case.
The residual mineral oil content should be reduced acc. to VDMA specification 24 569.





Maintenance Work (Hatz engine)

Only the maintenance work which has to be performed daily is included in the Operating Manual. Please refer to the engine Operating Manual and to the maintenance instructions and intervals listed therein.

Filling-up with fuel

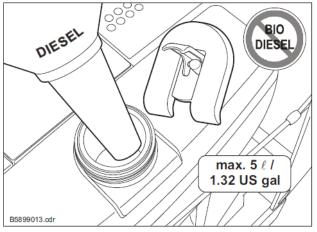


Only add fuel when engine is off and has cooled down.

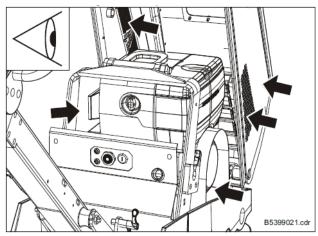
No open flame. Do not smoke.

Do not fill-up in closed rooms and do not inhale fuel fumes.

Collect spilt fuel in a suitable container and prevent spillage entering the soil.



- · Clean around the fuel filler socket.
- Open the fuel filler socket and visually check the fuel level. An unusable amount of fuel remains in the tank due to the design.
- Top-off if necessary; all diesel oils sold as fuel and com plying with the following minimum specification can be used: EN 590; DIN 51601 - DK; BS 2869 A1 / A2; ASTM D 975 - 1D / 2D.



· Close the tank tightly.

Checking Cooling air-/combustion air intake

Check intake opening for combustion air and cooling air intakes. Remove coarse ostructions such as leaves, stones and earth.

Check the engine oil level

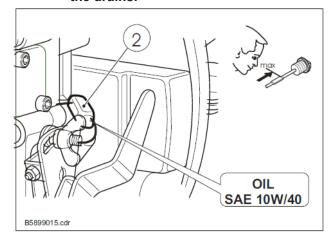


Environment

Immediately replace damaged seals.

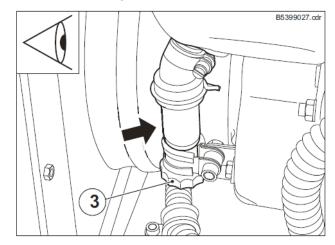
Collect old oil and dispose of it in an environment friendly manner.

Do not permit oil to run onto the floor into the drains.



- Stand the machine horizontally.
- Clean the area around the dip stick (5).
- With draw the dip stick (5) and wipe with a clean, fibre free cloth.
- To check the oil, screw the dipstick back in and then re move it again.
- Check the dip stick oil level and, if necessary, add oil to the «max» mark.

Check the water trap



Check the water trap on its water content every day, when the engine oil level is checked. The water which has collected is separated at a clearly visible line from the diesel fuel above it.

- · Open drain plug (3) and
- · drain the water out into a suitable container.



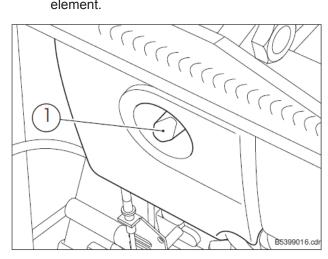
Cleaning the air filter

Change the filter element:

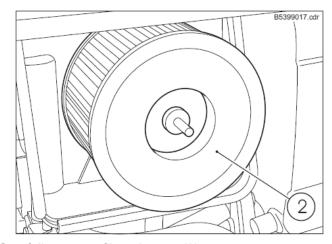


- if the filter element or sealing ring is damaged
- if sooty deposits are present
- if moist or oily deposits are present
- if engine performance reduces or
- if the exhaust gas changes colour
- minimum once a year

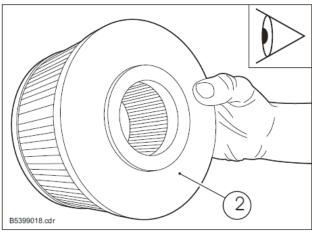
Never operate the engine without air filter element.



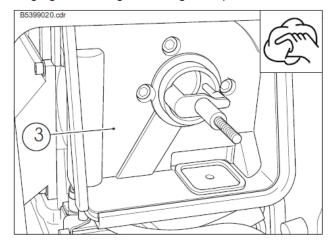
• Remove cover (1).



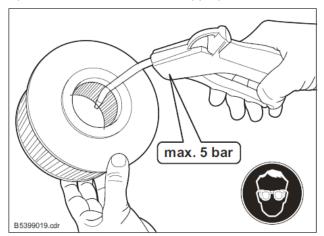
• Carefully remove filter element (2)



• Check filter element (2) for cracks or other damage by holding against the light or using a lamp.



- Clean filter cover (1) and housing (3).
- · Replace filter element or clean appropriate.



• If there is any dry pollution: Blow out the filter cartridge with dry air under pressure (max. 5 bar/70 psi) from the inside outwards, until no more dust comes out.



Risk of eye injuries! - Wear safety goggles.

Dange

- · Care refit filter element (2).
- Fit cover (1).



Maintenance Machine

Cleaning

Clean the machine thoroughly daily.



After cleaning

 all cables, hoses, connections and connectors are to be checked for leakage, holed connections, chafing points and other damage.

- Detected faults are to be eliminated immediately.

No combustible or aggressive materials are to be used for cleaning.

Tightening Torque

Ø	8.8		10.9		12.9	
Ø	Nm	ft lb	Nm	ft lb	Nm	ft lb
M 4	3	2	4,4	3	5	4
M 5	6	4	8,7	6	10	7
M 6	10	7	15	11	18	13
M 8	25	18	36	26	43	31
M 10	49	36	72	53	84	61
M 12	85	62	125	92	145	106
M 14	135	99	200	147	235	173
M 16	210	154	310	228	365	269
M 18	300	221	430	317	500	368
M 20	425	313	610	449	710	523
M 22	580	427	830	612	970	715
M 24	730	538	1050	774	1220	899

Strength classes for screws with untreated, non-lubricated surface.

The values result in 90% utilisation of the apparent yielding point at a friction coefficient µges= 0.14.

Tightening torques are checked for correctness using torque wrenches.

When using lubricant MoS2, the specified values do not apply.



Renew self-locking nuts after each removal.

Screwed Connections

With vibrating machines, it is important to check the screwed connections for tightness at regular intervals. Observe tightening torques.

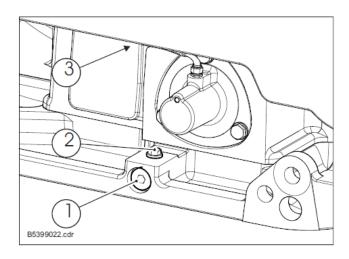
Changing rubber buffer

Inspect the rubber buffers for cracks and chipping as well as tightness and immediately replace if damaged.

Exciter: Oil change / Oil level



Check / change exciter oil when its warm. The venting screw (3) must always first be unscrewed when checking the oil level or changing the oil.



- Unscrew venting screw (3), oil filling plug (2) and oil drain plug (1).
- · Drain-off old oil.



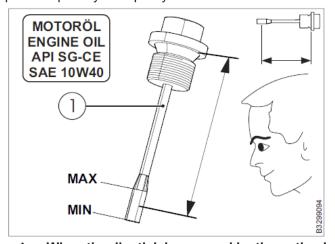
Care is to be taken with the draining of hot oil : danger of scalding!



Collect oil which has run out or overflowed and dispose it in an environment friendly manner.

Environment

- Screw-in oil drain screw (1).
- Fill-in new oil through the oil fill hole (2). See lubrication plan for quantity and quality.

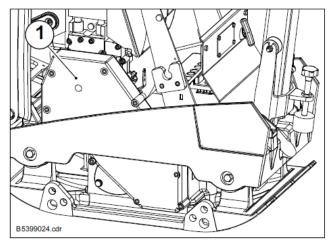




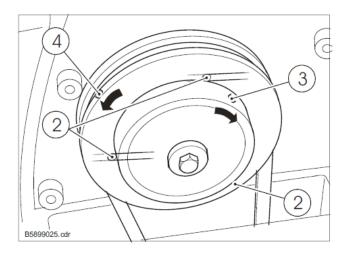
When the dipstick is screwed in, the optimal oil level is between the «MIN» and «MAX» markings.

- Replace oil filling plug (2) and venting screw (3).
- Unscrew oil filling plug (2), check the oil level again and top up with oil if necessary.

Tensioning the V-Belt



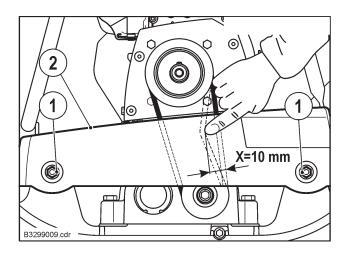
- · Remove V-belt guard (1).
- Check V-belt for tension and condition.
 Tension if necessary:



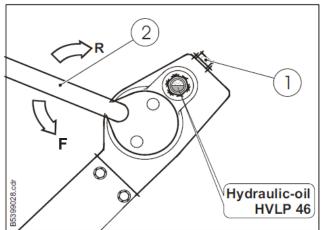
- · Loosen set screws (2), do not unscrew.
- Insert auxiliary tools (ø 6 mm) into bores (3) and (4).
- Tension V-belt by turning clutch halves (2) and (3) in opposite directions. X= 10 mm.
- Crank the drive manually and re-check tension and correct if necessary.
- · Replace V-belt guard.



Do not start the engine without V-belt guard. Danger of injuries.



Filling and Bleeding the Circuit



- · Release locking screw (1).
- · Set throttle lever (2) to «F».
- Pour in hydraulic fluid while continually changing the throttle lever position. To ensure correct bleeding, at times place the shaft vertically.
- · Stop filling when
 - a distinct «clicking»-noise is heard in the exciter while shifting the lever
 - you no longer feel a cushion of air when moving the throttle lever

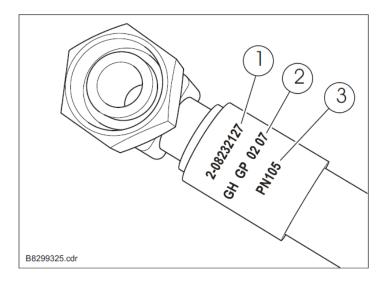


When filling, the circuit path is shortened.

- To check oil level, start engine and bring up to operating speed.
- Move throttle lever several times backwards and forwards between «F» and «R».
- The correct oil level should be somewhere in the area shown (See Illus.); at this point the throttle lever must be in the «F» position.
- If the level is too low, top up with hydraulic fluid; if too high, drain off excess fluid.
- With the machine running and the throttle lever in the «F» position, close locking screw (1).



Hydraulic Hose Lines



- 1 Serial No.
- 2 Manufacturer/Month and year of manufacture
- 3 Max. operating pressure

The function of hydraulic hose lines must be tested at regular intervals (minimum once a year) by an expert (with a knowledge of hydraulics).

Hose lines must immediately be replaced in the following instances:

- Damage to the outer layer to the inner lining (abrasion marks, cracks, cuts, etc.).
- Brittleness of the outer layer (cracking of hose covering).
- Unnatural deformations of the hose line. This applies to both a pressureless and pressurised condition (e.g. layer separation, blister formation, crushed areas, kinks).
- · Leaks.
- Damage or deformation of hose fittings (impaired sealing function).
- · Hose slips out of the fitting.
- Corrosion of fitting (degrading of function and strength).
- Improper installation.
- · Use beyond the expiry date of max. 6 years.

TROUBLESHOOTING

General Information

- · Observe the safety information
- Only qualified and authorised persons may carry out repair work (mechanics specialising in construction and agricultural machinery).
- In case of faults, the operating and maintenance instructions must be referred to for correct operation and maintenance.
- If the cause of the fault cannot be located or remedied, an authorised Stanley Service Center should be contacted.
- Always first check the most likely causes (fuses, LEDs, etc.).

Fault Table

Possible cause	Remedy	Remarks				
Engine does not start						
Speed control lever in «STOP»-position No fuel – Tank run dry	Set lever to «START»-position					
- Fuel filter blocked	Renew fuel filter					
- Defective feed pump	Function must be checked					
Oil pressure lost	Check engine oil level					
Compression too low	Contact a Stanley-service center					
Engine stops by itself during regular op	peration					
Fuel supply is interrupted						
– Tank run dry	Add fuel					
- Fuel filter blocked	Renew fuel filter					
- Defective feed pump	Function must be checked					
Oil pressure lost	Check engine oil level					
Mechanical defects	Contact a Stanley-service center					
Reduced engine performance						
Fuel supply is obstructed						
– Tank run dry	Add fuel					
- Fuel filter blocked	Renew fuel filter					
- Tank venting is inadequate	Ensure that tank is adequately vented					
- Leaks at pipes unions	Check threaded pipe unions					
Air cleaner blocked	Remove dirt from air cleaner					
Incorrect valve clearance	Adjust valve clearance					
Too much oil in engine	Correct the engine oil level					
Too much oil in exciter	Check exciter oil level	Contact a Stanley-service center				
Default in hydraulic system	Contact a Stanley-service center					
Engine runs, machine does not move forward						
Insufficient V-belt tension	Retention V-belt					
V-belt broken	Replace V-belt					
Centrifugal clutch lining worn	Replace linings and springs					
Too much oil in exciter	Check exciter oil level					
Default in hydraulic system	Contact a Stanley-service center					

NOTES

STANLEY®

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