STANLEY®

Gasoline Tiller

GB Original instructions

SGT-25-450-V

Gasoline Tiller

GB

Manufactured under license by:
MATRIX GmbH • Postauer Straße 26 • D-84109 Wörth/Isar • www.matrix-direct.net

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GENERAL SAFETY RULES

ATTENTION: When using gasoline motors like this one, basic safety rules must be observed in order to reduce risk of accidents and/or damage to the machine. Read all instructions again before using the device in the future.

SAFETY PRECAUTIONS

• Read these instructions carefully.
• Never allow children or persons who are not familiar with these instructions to operate the machine. Local regulations may impose a limit on the age of the operator.
• Never operate the machine around children or pets.
• Keep in mind that the operator of the machine is responsible for any accidents that may occur to third parties and/or to their property.
• The machine must be operated solely by a capable person who is qualified to operate it.
• Always wear appropriate footwear (safety shoes) and long pants when operating this tool.
• Do not operate the machine when barefoot or when wearing open sandals.
• Carefully inspect the area where the equipment will be operated and remove any objects that could be thrown by the machine.

CAUTION

- Gasoline is extremely flammable:
- Store fuel only in containers designed for this purpose.
- Refill the machine with fuel only when outdoors and never smoke when re-filling the equipment with fuel.
- Add fuel before starting up the motor. Never remove the fuel tank plug or add gasoline while the motor is running or when the engine is hot.
- If gasoline is spilled, do not attempt to start up the motor; take the machine away from the area where the gasoline was spilled and keep all sparks away until the gasoline has evaporated.
• Replacing a defective muffler.
• Before each use, always check to be sure that the tools are not worn out or damaged. When changing a worn-out or damaged component or bolt, change all similar components out in order to preserve balance.
• Do not operate the machine in a confined space where dangerous carbon monoxide vapors could accumulate.
• Always be sure that the machine is balanced on its stands.
• Walk, never run, with the machine.
• Work is a diagonal direction, never from up and down.
• Pay very close attention when changing direction on slopes.
• Never work on slopes that are too steep.
• Pay very close attention when reversing the machine or pulling it towards you.
• Do not change direction adjustments and do not exceed the speed limit of the motor.
• When starting the motor, following the instructions carefully and keep your feet far away from the blades.
• Do not put your hands or feet near or on rotating parts.
• Never pick up or carry the machine while the motor is running .
• Shut off the motor:
• Every time you leave the machine.
- Before refilling it with gasoline.
- When performing maintenance and cleaning operations.
- While changing tools.
- When using any traction force other than the engine to move the machine.
• Reduce the starter when shutting off the machine and close the fuel hose when finished working.
• Use the tiller only with the blades provided.
• Always place your hands on the handlebar when using the machine. Do not hold the machine by its other parts while operating it.
• Keep all nuts, bolts and screws properly tightened so that you are sure that equipment is in optimum safety condition.
• Never store the equipment with gas in the tank, inside a building where vapors could reach an open flame or a spark.

• Allow the motor to cool off before storing it in any enclosed space.
• To reduce risk of fire, keep the storage area for the machine, tail pipe and gasoline free of any vegetation or excess lubricant.
• Replace any worn or damaged parts as a measure of safety.
• If the fuel tank must be drained, it must be done outdoors. Handle fuel in an environmentally safe manner.
• The fuel tank must be drained every time the tiller is moved.
• To reduce the effects of machine vibrations, wear protective gloves when operating it.
• Be sure to take breaks after every 30-minute period of work to avoid Hand Arm Vibration Syndrome.

PRELIMINARY MEASURES:
When working, always wear stable shoes and long pants.
Never operate the machine when barefoot or when wearing light sandals.
Inspect the entire terrain on which you will be operating the equipment and remove any objects that could be thrown by the machine.

CAUTION! – Gasoline is extremely flammable!
Store gasoline only in containers that are designed for this purpose. Fill it up only in the open air and do not smoke when filling it.
Fill the tank with gas before starting the motor. Do not open the gas tank closure plug or fill it with gasoline while the motor is operating, or when the motor is hot.
If the gasoline overflows, do not attempt to start up the motor for any reason.
Instead, remove the equipment from the area where the gas has been spilled. Then, avoid all attempts to start up the machine until all gasoline vapors have evaporated
Replace any damaged tailpipes.
Before use, always visually inspect for worn or damaged parts. If there are any worn or damaged parts, or fastening bolts, the entire set must be replaced.

HANDLING:
The engine must not be operated in enclosed areas in which carbon monoxide, a dangerous substance, could become concentrated.
Operate this machine only in daylight or with proper lighting. Be sure that you keep the unit balanced on its stands.
Do not operate the machine faster than you can walk.
For wheeled machines: Work transversely relative to the slope, never when climbing or descending. Pay particular attention when you are changing direction on a slope.
Be especially careful when you are making a U-turn with the machine or when you are pulling it towards you.
Never change the motor base adjustment or make it run too quickly.
Use caution when starting up the motor, in compliance with the manufacturer's instructions and be sure to keep a sufficient distance between your feet and the tool or tools.
Never put your hands or feet on or under rotating parts.
Never lift or carry a machine when its motor is running.
Always shut off the motor before filling the fuel tank with gasoline. When the motor is running unloaded, be sure to close the flow restrictor.
If the machine has a gasoline shutoff valve, it must be closed after any intervention
For safety reasons, the motor rotation speed must not exceed the data indicated on the power plate.
Always use two persons to transport or store the power tiller. Do not carry it all by yourself.

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SYMBOLS

Complies with appropriate safety standards.

Keep bystanders away.

Only operate the generator outside to ensure adequate ventilation.

Do not smoke or have open flames

Stay away from rotating augers.

During operation, toxic gases are produced e.g. carbon monoxide (Which is a colorless and odorless gas) this gas may lead to by suffocation.

Wear eye protection.
Wear hearing protection.

Read these instructions for use carefully.

wear gloves when operating

Wear safety footwear.

Never direct discharge towards persons or property.

Do not touch a hot muffler, gear housing or cylinder.

Important: Do not wear loose clothing, neckties or jewelry (rings, wristwatches) when operating this machine. They may be caught by moving parts.

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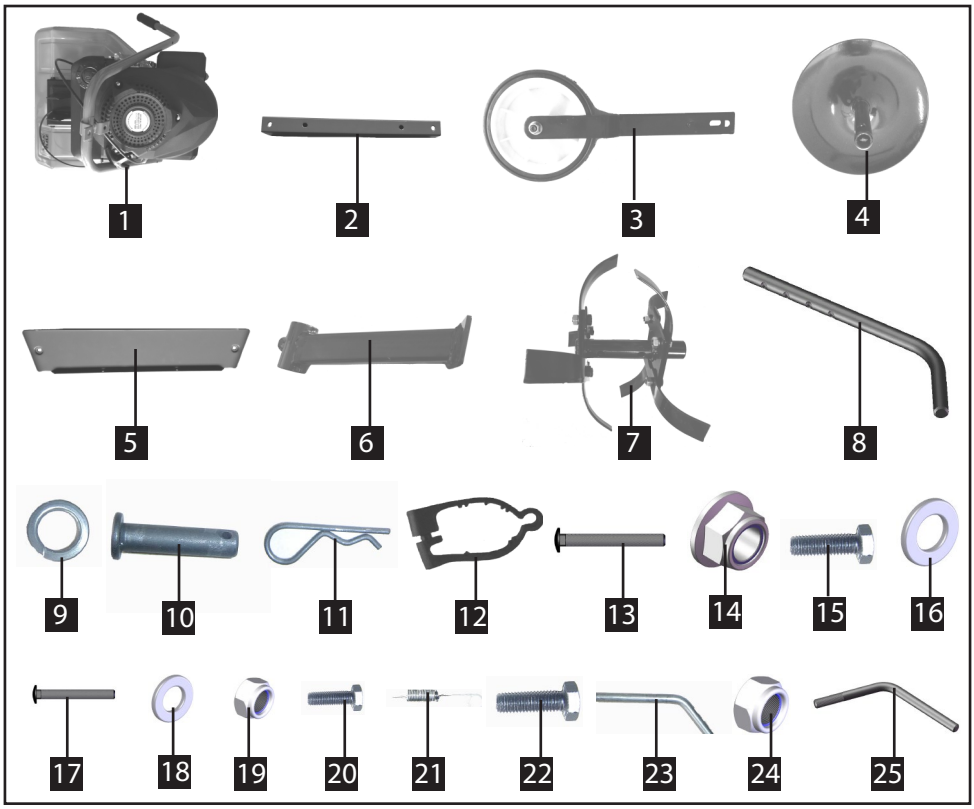
CONTENTS SUPPLIED



1.Tiller X 1
2.Girder X 1
3.Wheel assy X 1
4.Blade disc X 2
5.Safety plate X 1
6.Resistance rod Support X 1
7.Blade assy X 2
8.Resistance rod X 1
9.Spring washer D8 X 2
10.Pin X 3
11.Cotter pin X 4
12.Cable bandage X 3
13.Bolt M 8*70 X 2..
14.Hex flange face locknut M8 X3
15.Bolt M 8*25 X 2
16.Flat washer D8 X 5
17.Bolt M 6*35 X 2
18.Flat washer D6 X 2
19.Hex locknut M6 X 2
20.Hex bolt M 8*50 X 1
21.Extension spring X 1
22.Hex bolt M 8*70 X 1
23.Handle lock lever X 1
24.Hex locknut M8 X 1
25. Lock lever X 1

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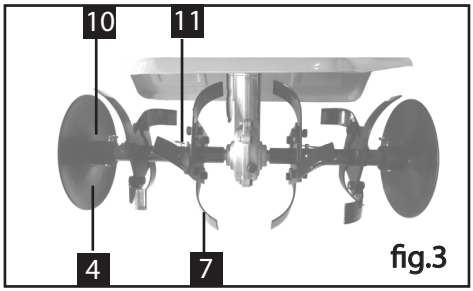
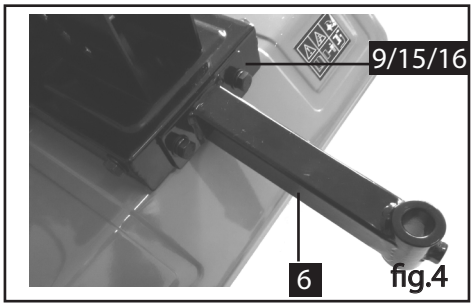
ASSEMBLY

Following the assembly directions below, you will assemble the front tine tiller in a few minutes.

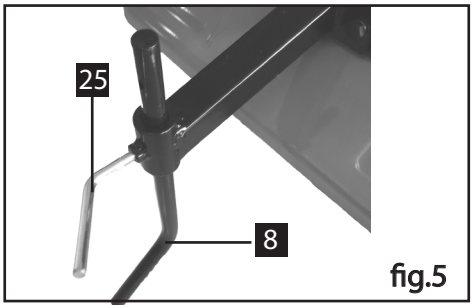
1.Place tilling tines on the tine shaft on both sides of the gear box. Line up the holes in the tine frame sleeves and tine shaft. Insert clevis pins through the holes in tine frames and tine shaft. Insert cotter pins through the holes in the clevis pins to secure them.(Fig.3)



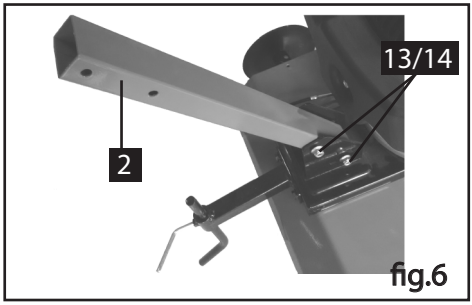
2. Install the resistance rod support with 2x spring washers, flat washers and M 8*25 screws. (Fig.4)



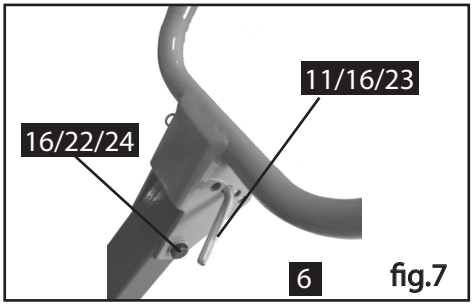
3. Insert the resistance rod in the hole of resistance rod support, then lock them with lock lever in desired position.(Fig.5)



4. Mount the girder on the tiller with 2 M8*70 screws and flange nuts.(Fig.6)



5. Install the handle on the girder with M 8*70 screw, washer and flange nut, then insert the lock lever in desired position to secure the top of handle(Fig.7).



6. Install the safety plate with 2x M 6*35 screws, washers and flange nuts.(Fig.8)

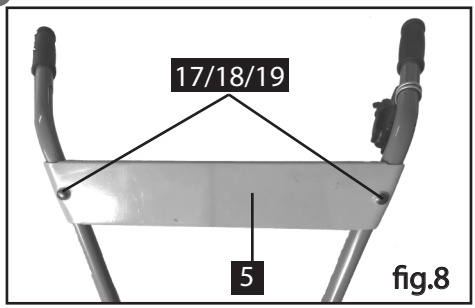


fig.8

7. Mount the Wheel assy on the tiller with M 8*50 screw and flange nut then hang extension spring. (Fig.9).

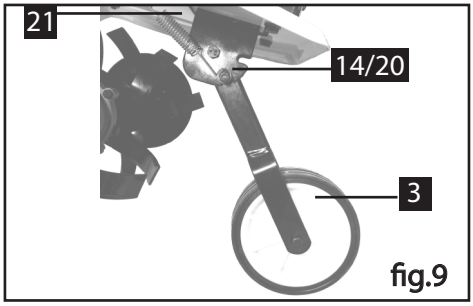


fig.9

8. Install the Cable bandage(See Fig.10)

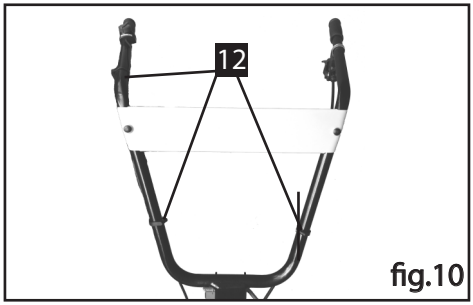


fig.10

Engine oil

Engine is shipped from factory without oil. You must add engine oil before starting engine.

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LAYOUT

1. Handle
2. Gasoline engine
3. Blade cover
4.Blade disc
5. Wheel
6. Blade
7. Resistance rod

OPERATION INSTRUCTION

1. Checking/Adding Oil (Figure 11)

Place engine in a horizontal position and clean the oil fill area of any debris before adding or checking the oil.
1) Remove the dipstick (G) and swipe with a clean cloth.
2) Insert the dipstick into the filler neck without screwing it in.
3) Pull the dipstick out and check the oil lever. The oil lever should be in between the MIN.and MAX. levels.
4) If low, add oil slowly into the engine oil fill tube(G). Do not overfill. After adding oil, wait one minute and then recheck the oil level.
5) Replace and tighten the dipstick.

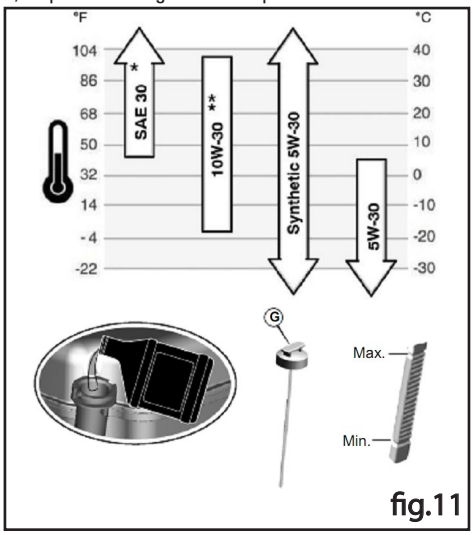

fig.11

2. Adding fuel (Figure 12)

1) Clean the fuel cap area of dirt and debris. Remove the fuel cap.
2) Fill the fuel tank with gasoline. To allow for expansion of the gasoline, do not fill above the bottom of the fuel tank neck.
3) Reinstall the fuel cap.

CAUTION:
1) Turn engine off and let engine cool at least 2 minutes before removing the fuel cap.
2) Fill fuel tank outdoors or in well-ventilated area.
3) Do not overfill fuel tank. Fill tank to approximately 1.5 inches (38mm) below top of neck to allow for fuel expansion.
4) Gasoline is extremely flammable and is explosive. Do not smoke and allow flames or sparks in the area where gasoline is stored or where the fuel tank is refueled.
5) Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.
6) If fuel spill,wait until it evaporates before starting engine.

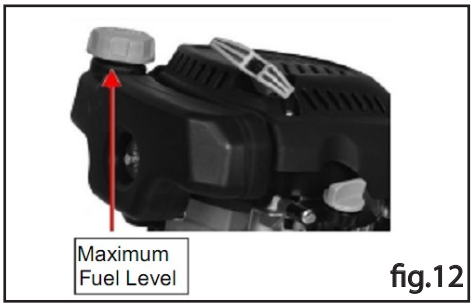

fig.12

3. Starting engine

Starting is different due to different equipments. It is optional according to your engine.
1) Check the engine oil lever. See the" Checking/ Adding Oil" section.
2) When starting a new engine for the first time, firmly push the red primer five times (Figure 13). Then for all future starts, push the primer three

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times.

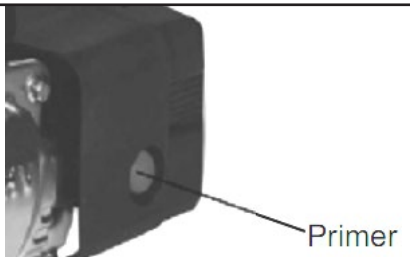

fig.13

Note:
1. If engine runs out of fuel or has been stored for an extended period of time, it may be necessary to prime 5 times.
2. Priming is usually unnecessary when restarting a warm engine.
3. If you push the primer too many times, an excessive amount of fuel will flood the engine. This flooded condition will make the engine difficult to start.
3) Push Engine switch to the "ON" position. (Figure 14)

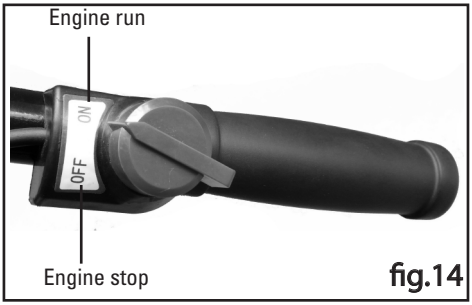

fig.14

4) Firmly hold the starter cord handle. Pull the starter cord handle slowly until resistance is felt, then pull rapidly.

4. Shutting the engine down

Push the Engine switch to the "OFF" position. (Figure 14)

5. Adjusting the clutch

If the main clutch cable is not adjusted well (too tight or loose), the clutch may not work well.
1) Starting the engine.
2) Take the clutch control rod to the middle position. (Figure 15)
3) Turn the adjusting nut in figure 16 in a clockwise direction to tighten the wheel clutch; or in a anticlockwise direction to loosen it.

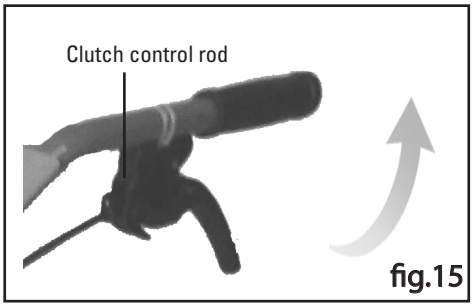

fig.15

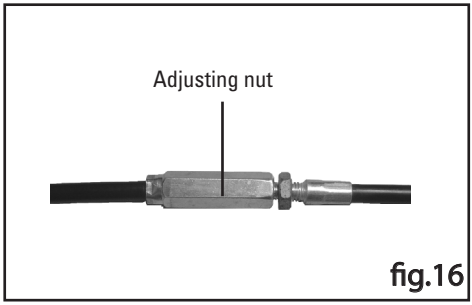

fig.16

6. Using the rear resistance rod or adjusting the tilling depth

Adjust the depth of rear resistance rod by changing the hole. (Figure 17)

7. Adjusting the height of the handle

Loosen the bolt and then adjust the height of the handle. (Figure 18)

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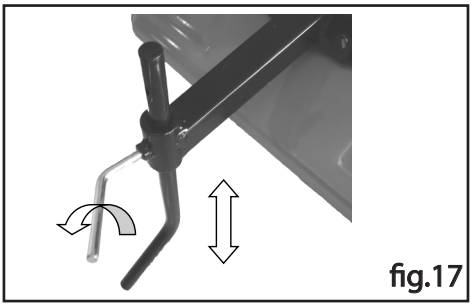

fig.17

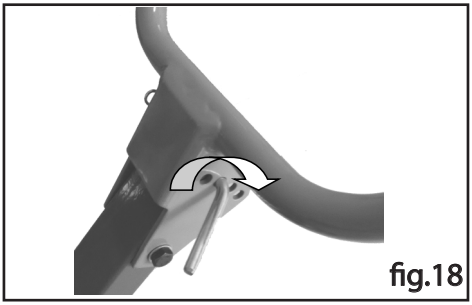

fig.18

Tilling

Tilling is digging in, turning over and breaking up garden soil and prepare a seedbed for planting. Best tilling depth is 100mm (4") to 150mm (6"). A tiller will also clear the soil of unwanted vegetation. The decomposition of this vegetation matter enriches the soil.

Avoid tilling soil that is too dry as it will pulverize and produce a dust that will not hold water. Water a few days before tilling. Also, tilling soil that is too wet will produce unsatisfactory clods. Wait a day or two after heavy rain for the soil to dry. Better growth will be obtained if an area is tilled properly and used soon after tilling to preserve the moisture content.

The type of soil and working conditions will determine the actual setting of the tilling depth. In some soils, the desired depth is reached first pass over garden. In other soils, the desired depth is obtained by going over the garden two or three times. In later case, the depth regulator rod should be lowered before each succeeding pass over the garden. Passes should be made across the length and width of the garden alternately. Do not try to dig too deeply in the first pass. If the machine jumps or bucks, allow the unit to move forward at a lightly faster rate.

If the tiller stops forward motion and tries to dig in one spot, rock the handles from side to side to start it moving forward again.

Rocks which are turned up should be removed from the garden area.

Cultivating

Cultivating is loosening or digging around growing plants to disrupt weeds and aerate soil. Less than 50mm (2") depth is always desirable.

MAINTENANCE

CAUTION:
Stop the engine at the flat ground, and do not touch the hot part or moving parts to avoid injury. If the maintenance is required with the engine running, be sure to keep good ventilation in the area. The exhaust emissions from the engine contain toxic carbon monoxide, breathing it may result injury and even death.

Keeping your tiller in top running condition will prolong its life, and help you obtain optimum performance whenever you wish to till your garden.

Cleaning tine area

Clean the tiller underside of the tine shield after each use. The dirt washes off tines easier if rinsed off immediately instead of after it dries.

1. Turn off engine. Engine must be cool.
2. Keep the engine's throttle control in its "STOP" position, and remove spark plug wire from spark plug and secure.
3. Remove all vegetation, string, wire, and other

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materials that may have accumulated to the axle between the inside set of tines and the seals on the transmission housing.
4. Always towel dry the tiller afterwards and apply a light coat of oil or silicone to prevent rusting or water damage.
5. Replace spark plug wire.

Never use a "pressure washer" to clean your tiller. Water can penetrate tight areas of the tiller and its transmission case and cause damage to spindles, pulleys, bearings, or the engine. The use of pressure washers will result in shortened life and reduce serviceability.

Lubrication

Remove the tine assemblies to lubricate the tine shafts at least once a season.

1. Replace the spark plug (Figure 19)

Check the gap (A) with a wire gauge (B).If necessary, reset the gap. Install and tighten the spark plug to the recommended torque. For gap setting or torque, see the Specifications section.

Note:
In some areas, local law requires using a resistor spark plug to suppress ignition signals. If this engine was originally equipped with a resistor spark plug, use the same type for replacement.

2. Replace the air filter (Figure 20)

1) Remove the air cleaner outside cover (A). Be careful to prevent dirt and debris from falling into the air cleaner assembly.
2) Separate the Air Filter (A) from the Air Filter Housing (B).
3) Inspect the Air Filter. Clean dirty Air Filter with warm water and mild soap. Allow air filter to dry thoroughly before re-installation.
4) Install the air filter assembly onto the carburetor and secure with screw.

Note: Do not use pressurized air or solvents to clean the filter. Pressurized air can damage the filter and solvents will dissolve the filter.

fig.19

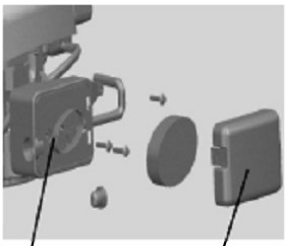

fig.20

3. Drain Oil out (Figure 21)

Caution: Use oil a hazardous waste product and must be disposed of Properly. Do not discard with household waste. Check with your local authorities, service center, or dealer for safe disposal/recycling facilities.

The oil must be drained from the Oil Drain Plug (Figure 21)
1) Remove the dipstick.
2) Please an approved container below the oil drain plug.
3) Remove the oil drain plug and allow oil to the drain into the approved container.
4) Install oil drain plug and wrench tighten.

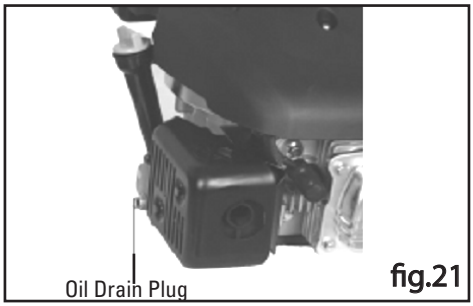

fig.21

WARNING: When you drain the oil from the oil drain plug, the fuel tank must be empty or fuel can leak out and result in fire or explosion.

STORAGE

If the tiller will not be used for a period longer than 30 days, following the steps below to prepare your tiller for storage.

1. Drain the fuel tank completely. Stored fuel containing ethanol or MTBE can start to go stale in 30 days. Stale fuel has a high gum content and can clog the carburetor and restrict fuel flow.
2. Start the engine and allow it to run until it stops. This ensures no fuel is left in the carburetor. This helps prevent gum deposits from forming inside the carburetor and possible engine damage.
3. While the engine is still warm, drain the oil from the engine. Refill with fresh oil of the grade recommended in the Engine Manual.
4. Allow the engine to cool. Remove the spark plug and put 30 ml (1 oz.) of high quality motor oil into the cylinder. Pull the starter rope slowly to distribute the oil. Replace the spark plug.

Remove the spark plug and drain all of the oil from the cylinder before attempting to start the unit after storage.

5. Use clean cloths to clean off the outside of the tiller and to keep the air vents free of obstructions.

Do not use strong detergents or petroleum based cleaners when cleaning plastic parts. Chemicals can damage plastics.

6. Inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.
7. Remove the tines. Clean and apply oil to the tines and tine shafts to prevent rusting. Mount the tines onto the tine shafts.
8. Oil the control cables and all visible moving parts. Do not remove the engine cover.
9. To store with the handles folded down, loosen the knobs that secure the upper handle to the lower handles. Carefully fold the upper handle down. Do not allow control cables to become pinched or bent. Tighten the knobs.

Do not sore tiller with fuel in a nonventilated area where fuel fumes may reach flame, sparks, or any ignition sources.
Use only approved fuel containers.

Specification

Engine	4-stroke, air-cooled single cylinder, OHV
Max. Power (kw/rpm)	1.8/4000
Displacement (cc)	98
Fuel Tank Capacity (L)	0.98
Oil Capacity(L)	0.4
Tilling Width (mm)	450
Tilling diameter (mm)	260
Tine Speed (rpm)	120
Sound power level L_{WA}	91.2 dB(A), K=3dB
Sound pressure level L_{PA}	87.8 dB (A), K=3dB
Garantierter Schallleistungspegel L_{WA}:	93dB(A)
Vibrating level on handlebar grips	
	Left: 11.7 m/s^2, K=1,5m/s^2
	Right: 10.0 m/s^2, K=1,5m/s^2

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TROUBLE SHOOTING

Problem	Cause	Remedy
Engine fails to start.	1. Spark plug wire disconnected. 2.Out of fuel or stale fuel. 3.Throttle control lever not in correct starting position. 4.Choke not in ON Position. 5.Blocked fuel line. 6.Fouled spark plug. 7.Engine flooding. 8.Tine clutch control not in neutral position.	1.Attach spark plug wire securely to spark plug. 2.Fill with clean, fresh gasoline. 3.Move throttle control lever to start position. 4.Chock must be positioned at CHOKE for a cold start. 5.Clean the fuel line. 6.Clean, adjust gap, or replace. 7.Wait a few minutes to restart, but do not prime. 8.Tine clutch control lever must be released to neutral to start the engine.
Engine runs erratically.	1. Spark plug wire loose. 2.Unit running on CHOKE. 3.Blocked fuel line or stale fuel. 4.Vent plugged. 5.Water or dirt in fuel system. 6.Dirty air cleaner. 7.Improper carburetor adjustment.	1. Connect and tighten spark plug wire. 2.Move choke lever to OFF. 3.Clean fuel line. Fill tank with clean, fresh gasoline. 4.Clear vent. 5.Drain fuel tank. Refill with fresh fuel. 6.Clean or replace air cleaner. 7.Refer to Engine Manual.
Engine overheats.	1. Engine oil level low. 2.Dirty air cleaner. 3.Air flow restricted. 4.Carburetor not adjusted properly.	1. Fill crankcase with proper oil. 2.Clean air cleaner. 3.Remove blower housing and clean. 4.Refer to Engine Manual.
Engine will not stop when throttle control is positioned at stop, or engine speed does not increase properly when throttle control is adjusted.	1. Debris interfering with throttle linkage. 2.Improper throttle linkage adjustment.	1. Clean dirt and debris. 2.Refer to Engine Manual to check and adjust throttle linkage.
Tiller moves forward during starting.	Tine clutch control not in neutral position.	Tine clutch control lever must be released to neutral to start the engine.
Tiller is difficult to control when tilling (machine jumps or lurches forward).	1. Improper tilling depth setting. 2.Too high engine speed on hard ground.	1.Raise the tines for shallower tilling by raising the depth regulator rod. 2.Set the throttle lever at lower speed.
Tines do not engage.	1. Foreign object lodged in tines. 2.Tine clevis pin(s) missing. 3.Belt worn and/or stretched. 4.Pulley and idler not in correct adjustment.	1.Stop tiller completely, check and discard foreign object. 2.Replace tine clevis pin(s). 3.Replace belt. 4.Contact dealer.

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Original Declaration of Conformity

CE

Matrix GmbH
Postauer Str. 26
D-84109 Wörth/Isar
Germany
Fax: +49 (0) 8702/45338 98
E-Mail: info@matrix-direct.net

(GB) hereby declares the following conformity under the EU Directive and standards for the following article

Front Tine Tiller /SGT-25-450-V

- ☒ 2006/42/EC
- ☒ 97/68/EC_2012/46/EC
- ☐ 93/68/EEC
- ☒ 2014/30/EU
- ☐ 2002/96/EC
- ☐ R&TTED 1999/5/EC
- ☒ 2000/14/EC_2005/88/EC
- ☐ 97/68/EC_ 2004/26/EC

EN 709; EN ISO 14982; Geräuschemission 2000/14/EC, Anhang VI & 2005/88/EC
Garantierter Schallleistungspegel: LwA= 97 dB (A) Gemessener Schallleistungspegel: LwA= 93,5 dB (A)
Benannte Stelle , Name und Anschrift der beteiligten Stelle: TÜV SÜD China. 16F, West Building, New Hua Lian Mansion, No. 775, Huaihai Road Shanghai 200020,P.R.China

The technical documentation is kept by our authorized representative:
Matrix GmbH
Postauer Str. 26
D-84109 Wörth/Isar
Germany

Wörth/Isar, den 23.11.2017
Art.-Nr.: 604.400.010

Joachim Lichtl (Geschäftsführer)

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GARANTIE

(GB) Guarantee

This appliance is a quality product. It was designed in compliance with current technical standards and made carefully using normal, good quality materials.
The warranty period is 24 months and commences on the date of purchase, which can be verified by the receipt, invoice or delivery note. During this warranty period all functional errors, which, despite the careful treatment described in our operating manual, are verifiably due to material aws, will be rectified by our after-sales service staff.
The warranty takes the form that defective parts will be repaired or replaced with perfect parts free of charge at our discretion. Replaced parts will become our property. Repair work or the replacement of individual parts will not extend the warranty period not will it result in a new warranty period being commenced for the appliance. No separate warranty period will commence for spare parts that may be fitted. We cannot offer a warranty for damage and defects on appliances or their parts caused by the use of excessive force, improper treatment and servicing.
This also applies for failures to comply with the operating manual and the installation or spare and accessory parts that are not included in our range of

products. In the event of interference with of modifications to the appliance by unauthorised persons, the warranty will be rendered void.
Damages that are attributable to improper handling, over loading, or natural wear and tear are excluded from the guarantee.
Damages caused by the manufacturer or by a material defect will be corrected at no charge by repair or by providing spare parts.
The prerequisite is that the equipment is handed over assembled, and complete with the proof of sale and guarantee.
For a guarantee claim, only use the original packaging.
That way, we can guarantee quick and smooth guarantee processing.
Please send us the appliances post-paid or request a Freeway sticker.
Unfortunately we will be unable to accept appliances that are not postpaid.
The warranty does not cover parts that are subject to natural wear and tear.
If you wish to make a warranty claim, report faults or order spare parts or accessories, please contact the after-sales centre below:

Subject to change without prior notice.

210 Bath Road; Slough, Berks SL1 3YD
www.stanleytools.co.uk
Tel: +44 (0)1753 511234
Fax: +44 (0)1753 512365

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GB WARRANTY

Purchased at: _____
in (city, street): _____
Name of customer: _____
Street address: _____
Postal code, city: _____
Telephone: _____
Date, signature: _____
Fault description: _____

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