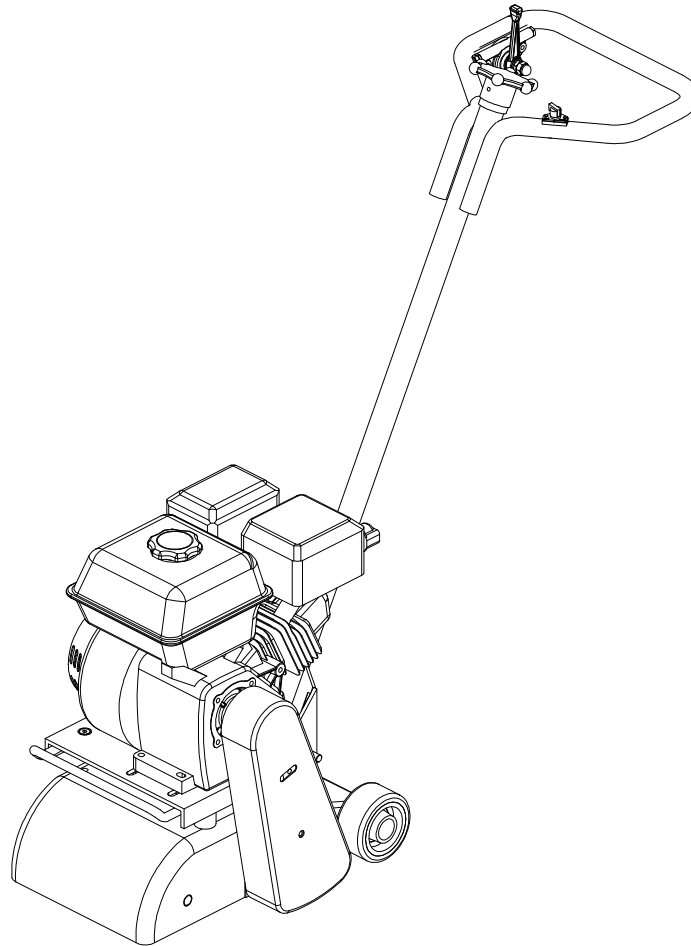


SPM-1



Concrete Scarifier

EC DECLARATION OF CONFORMITY / DECLARATION CE DE CONFORMITE / DECLARACIÓN DE CONFORMIDAD CE / DECLARAÇÃO CE DE CONFORMIDADE

GB/US

We, **Uni-corp Europe, 33 Avenue Pierre Brossolette, 94048 Créteil Cedex, France**, hereby certify that if the product described within this certificate is bought from an authorised Paclite dealer within the EEA, it conforms to the following directives: Machinery Directive 2006/42/EC, Electromagnetic Compatibility Directive 2004/108/EC (as amended by 92/31/EEC & 93/68 EEC). The physical agent (vibration) conforms with the directive 2002/44/EC. The low voltage directive 2006/95/EC, BS EN ISO 12100-1/2 Safety of machinery and associated harmonised standards, where applicable. Noise emissions conform to directive 2005/88/EC Annex VI), for machines under article 12 the notified body is **TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln, Germany**.

F

Nous soussignons, **Uni-corp Europe, 33 Avenue Pierre Brossolette, 94048 Créteil Cedex, France**, certifions que si le produit décrit dans ce certificat est acheté chez un distributeur de la marque déposée "Paclite" au sein de la EEA, celui-ci est conforme aux norms CEE ci-après: Norme de la machine 2006/42/CE, Norme compatible pour l'électromagnétisme 2004/108/CE (modifié par 92/31/CEE et 93/68/CEE). Le nombre de vibrations est en accord avec la directive 2002/44/CE. Caractéristiques basse tension 2006/95/CEE, BS EN ISO 12100-1/2, Norme de sécurité des machines et des critères associés et configurés, si applicable. Les émissions debruit sont conformes à la directive 2005/88/CE Annexe VI pour machines, article 12. L'objet mentionné est **TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln, Allemagne**.

E

La Sociedad, **Uni-corp Europe, 33 Avenue Pierre Brossolette, 94048 Créteil Cedex, France**, por el presente documento certifica que si el producto descrito en este certificado es comprado a un distribuidor autorizado de Paclite en la EEA, este es conforme a las siguientes directivas: 2006/42/CE de la CEE, Directiva 2004/108/CEE sobre Compatibilidad Electromagnética (según enmiendas 92/31/CEE y 93/68 CEE). El numero de vibraciones esta de acuerdo con la Directiva 2002/44/CE. Directiva sobre Bajo Voltaje 2006/95/CEE, BS EN ISO 12100-1/2 de Seguridad de Maquinaria y Niveles armonizados estándares asociados donde sean aplicables. Emisión de Ruidos conforme a la Directiva 2005/88/CE Anexo VI para máquinas bajo artículo 12 la mencionada unidad está **TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln, Germany**.

P

O signatário, **Uni-corp Europe, 33 Avenue Pierre Brossolette, 94048 Créteil Cedex, France**, pelo presente, declara que se o produto descrito neste certificado foi adquirido a um distribuidor autorizado do Paclite em qualquer país da EEA, está em conformidade com o estabelecido nas seguintes directivas comunitárias: 2006/42/CE, Directiva de Compatibilidade Electromagnética 2004/108/CEE (conforme corrigido pelas 92/31/EEC & 93/68 EEC). O numero de vibrações está de acordo com a directiva 2002/44/CE LB. A directiva de baixa voltagem 2006/95/CEE, BS EN ISO 12100-1/2 Segurança da maquinaria e às normas harmonizadas afins se aplicáveis. As emissões de ruído respeitam e estão dentro das directivas para máquinas 2005/88/CE Anexo VI, artigo 12, sendo o organismo notificado **TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln, Germany**.

PRODUCT TYPE.....	TYPE DE PRODUIT....	TIPO DE PRODUCTO..	TIPO DE PRODUCTO..
MODEL.....	MODELE.....	MODELO.....	MODELO.....
SERIAL No.....	Nº DE SERIE.....	Nº DE SERIE.....	Nº DE SÉRIE.....
DATE OF	DATE DE	FECHA DE	DATA DE
MANUFACTURE.....	FABRICATION.....	FABRICACIÓN.....	FABRIC.....
WEIGHT.....	POIDS.....	PESO.....	PESO.....



Signed by:

Signature:

Anita Tan

Quality Manager - On behalf of Uni-corp Europe

Directrice de Qualité - au nom de Uni-corp

Europe S.A.R.L.

Foreword

This manual has been written to help you operate your SPM-1 Concrete Scarifier safely. It is intended primarily for dealers and operators of Paclite Concrete Scarifiers. It is recommended that you keep this manual or a copy of it with the machine so that it is readily available for reference.

Before you operate or carry out any maintenance on this machine YOU MUST READ and UNDERSTAND this manual.

Should you have ANY QUESTIONS about the safe use or maintenance of this machine after reading this manual, ASK YOUR SUPERVISOR or CONTACT:

Uni-corp Europe on +33 (0) 1 4981 6955

Paclite reserves the right to change machine specification without prior notice or obligation.

Directions with regard notations

Text in this manual to which special attention must be paid are shown in the following way:



CAUTION

This CAUTION sign indicates a potential hazard, which if ignored, could result in injuries to the operator and/or those close by, as well as damaging the machine.



WARNING

This WARNING sign indicates a potential hazard, which if ignored could result in the DEATH of the operator and/or those close by.

Contents

Foreword.....	2
Safety Information	3-4
Machine Description	5
Pre-Start Checks	5-6
Start And Stop Procedure.....	6
Operation	7
Service and Maintenance	8-13
Trouble Shooting	13
Technical Data.....	14
Storage	14
Warranty	15

Safety Information

For your own personal protection and for the safety of those around you, please read and ensure you fully understand the following safety information. It is the responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. If you are unsure about the safe and correct use of the Concrete Scarifier, consult your supervisor or Paclite Equipment.



Improper maintenance can be hazardous. Read and understand this section before you perform any maintenance, service or repairs.

General Safety

- The owner of this machine must observe, and also train the user of the machine to observe, the effective labour protection laws in the country of application.
- This machine is to be used for its intended application only.
- This machine must only be operated by well-trained personnel.
- Personal Protective Equipment (PPE) must be worn by the operator whenever the equipment is being used.
- Cordon off the work area and keep members of the public and unauthorised personnel at a safe distance.
- Make sure you know how to safely switch this machine OFF before you switch it ON in case you run into any difficulties.
- Always switch OFF the engine before servicing it.
- During use, the engine becomes very hot. Always allow the engine to cool down before touching it.
- Never leave the engine running and unattended.
- Never remove or tamper with any fitted guards; they are there for your own protection. If they are damaged or missing, DO NOT USE THE MACHINE until the guard has been replaced or repaired.
- Always switch OFF the engine before transporting it, moving it around site or servicing it.
- Do not operate the machine when you are ill, feeling tired or when under the influence of alcohol or drugs.
- This machine is designed to eliminate the possible risks arising from the use of it. However, risks DO reside, and these residual risks are not clearly recognisable and may cause personal injury or property damage, and possibly death. If such unpredictable and unrecognisable risks become apparent, the machine must be stopped immediately, and operator or his supervisor must take appropriate measure to eliminate such risks. It is sometimes necessary that the manufacturer must be informed of such an event for future counter measuring.

Fuel Safety



Fuel is flammable. It may cause injury and property damage. Shut down the engine, extinguish all open flames and do not smoke while filling the fuel tank. Always wipe up any spilled fuel.

- Before re-fuelling, switch off the engine and allow it to cool.
- When re-fuelling, use a proper funnel, and avoid spilling over the engine.
- When re-fuelling, DO NOT smoke or allow naked flames in the area.
- Spilt fuel must be made safe immediately by using sand. If fuel is spilt on your clothes, change them.
- Store fuel in an approved, purpose made container away from heat and sources of ignition.

Health & Safety

Fuel

Do not ingest fuel or inhale fuel vapors and avoid contact with your skin. Wash fuel splashes immediately. If you get fuel in your eyes, irrigate with copious amounts of water and seek medical attention as soon as possible.

Dust

The scarification process can produce dust, which may be hazardous to your health. Always wear a mask that is suited to the type of dust being produced.

Exhaust Fumes



The exhaust fumes produced by this machine are highly toxic and can kill! Make sure the work area is adequately ventilated.

PPE (Personal Protective Equipment)

Suitable PPE must be worn when using this equipment i.e. safety goggles, gloves, ear defenders, dust mask and steel toe-capped footwear (with anti-slip soles for added protection). Wear clothing suitable for the work you are doing. Always protect skin from contact with concrete.

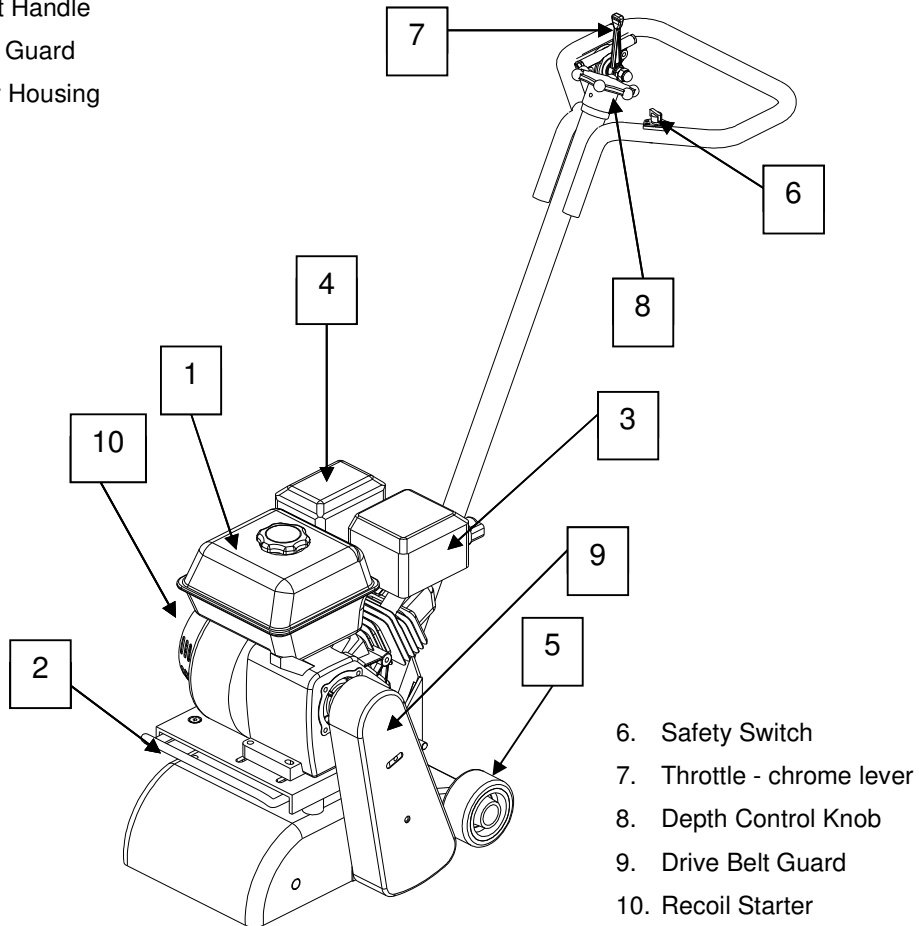
Environment



In order to protect the environment please recycle any discarded apparatus or accessories. Various parts are made from steel, aluminium and rubber. Take the discarded apparatus to the relevant recycling facilities

Machine Description

1. Fuel Tank
2. Easy Lift Handle
3. Exhaust Guard
4. Air Filter Housing
5. Wheels



Pre-Start Checks

The following Pre-start-up inspection must be performed before the start of each work session or after every four hours of use, whichever is first. Please refer to the service & maintenance section for detailed guidance. If any fault is discovered, the Concrete Scarifier must not be used until the fault is rectified.

1. Thoroughly inspect the machine for signs of damage. Make sure all guards are in place and secured.
2. Check hoses, filler openings, drain plugs and any other areas for signs of leakage. Fix any leaks before operating.

3. Check the engine oil level and top up as necessary. Use proper engine oil with the proper viscosity (SAE 10W-30 recommended).
4. Check the engine fuel level and top up as necessary. Use clean fuel. Use of contaminated fuel may damage the fuel system.
5. Check the air filter is clean. Excessive dirt/dust accumulation within the filter element will cause erratic engine operation. Clean the air filter element when it is contaminated. (See Service & Maintenance Section)
6. Check for fuel and oil leaks.
7. Be sure that the cutter drum assembly has been properly installed and the cutter drum shaft is in place and secured.
8. Vacuum port should have hose attached or cap installed to control dust generated during the operation.

Start and Stop Procedure



CAUTION

Improper operation can be hazardous. Read and understand this section before you start the machine

Before starting the engine, make sure that the Safety Switch is in the ON position and the Throttle Lever is set to idle position.

1. Verify the correct blades for the job have been chosen and that they are properly installed. Inspect the blades carefully for damage. Never use any questionable blades.
2. Check to be sure the blades are free of obstructions and the area is clear for operation.
3. Visually inspect the Concrete Scarifier. Check that all fasteners are secured and mechanical parts are in proper working order.

Before Starting Gasoline Engine

4. Check the oil in the engine crankcase. Be sure to maintain the proper level per the engine manufacturer specifications. If the oil is dirty and in need of changing, follow the Engine User Manual instructions.
5. Check the fuel supply. Refer to Engine User Manual.

Operation

Visually check to be sure that the blades are free of obstructions and the area is clear for operation.

Starting the Cut

- Slowly lower the cutter drum assembly to the slab surface with the depth control knob turning anti-clockwise.
- Continue lowering the cutter drum assembly until you hear the sound of the Tungsten Carbide Cutters contacting the slab surface.
- Adjust the depth of cut until the desired depth is reached.
- Use an Industrial Vacuum Dust Control System to prevent a large volume of airborne dust. For health reasons, make sure to wear an applicable respirator.

To Stop Cutting

- Turn the depth control knob clockwise to raise the cutter drum assembly away from the slab surface.
- Close the engine throttle and turn the ignition switch to the OFF position.

General Operation

- All cuts should be started from a stationary position. Operator should only move the machine forward when the cutting depth has been reached.
- The engine should not stall. Run at full throttle and adjust forward speed to adapt to the work being performed. Slower pace for very hard concrete compared to asphalt or deteriorated surfaces.
- Make several shallow cuts to achieve the desired depth for deep cuts. The cutter drum assembly will not be able to absorb the shock and damage to the equipment will result if the cutting depth is set too deep.
- It is recommended to make several passes with increments of 0.3mm, or even less if surface is extremely hard.

Service and Maintenance



CAUTION

Before carrying out any maintenance on this machine ensure the engine has been switched off. The engine should also be allowed to cool as parts of the engine become hot during use.

The Paclite Concrete Scarifiers are designed to give many years of trouble free operation. It is, however, important that the simple regular maintenance listed in this section is carried out. It is recommended that an approved Paclite dealer carry out all major maintenance and repairs. Always use genuine Paclite replacement parts, the use of spurious parts may void your warranty. Before any maintenance is carried out on the machine, switch off the engine and disconnect the HT lead from the spark plug. Always set the machine on level ground to ensure any fluid levels will be correctly read. Only use recommended oils.

Machine Cleaning

Remove the cutter drum and clean the machine thoroughly after each use with a high pressure hose to prevent the collection of dirt and residue. Failure to do so may shorten the life of the bearings. Replace decals immediately that are worn, missing, or damaged.

Drum Removal/Replacement

Note: To remove cutter drum assembly or perform drum maintenance, TILT MACHINE FORWARD. DO NOT tilt machine onto handle. Engine damage and/or operator injury may result (See Figure 1 & 2).



Figure 1



Figure 2

To Remove:

1. To remove the drum assembly, first remove the plastic cap using a screwdriver. (See Figure 3)

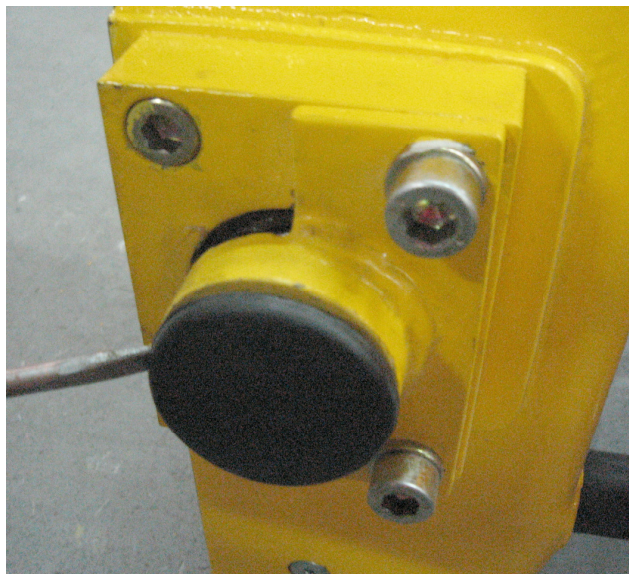


Figure 3

2. Unfasten the drum arbor shaft by using an air gun. Turn clockwise to unfasten. (See Figure 4)

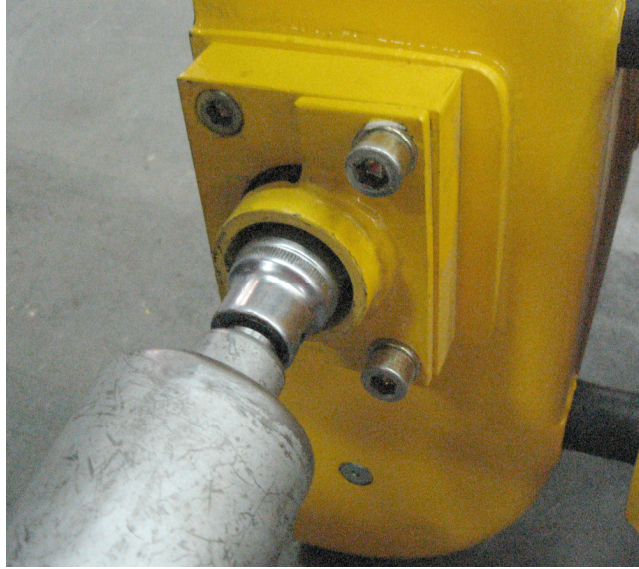


Figure 4

3. Hold the drum and remove the arbor shaft to remove the drum assembly. (See Figure 5)

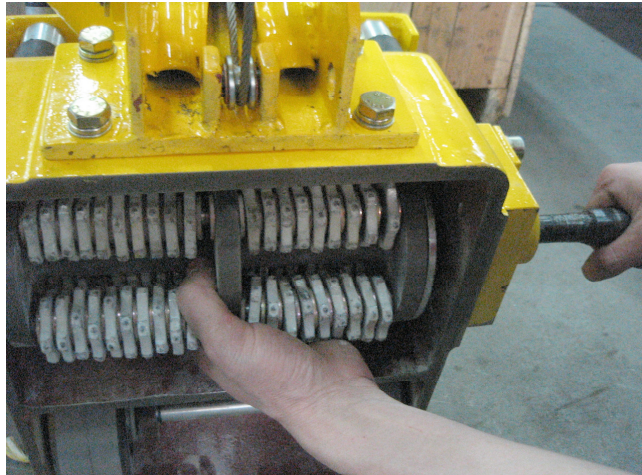


Figure 5

4. Reverse procedure to reassemble.

To Change Tungsten Carbide Cutter:

1. Using two spanners, unfasten the bolts. (See Figure 6)

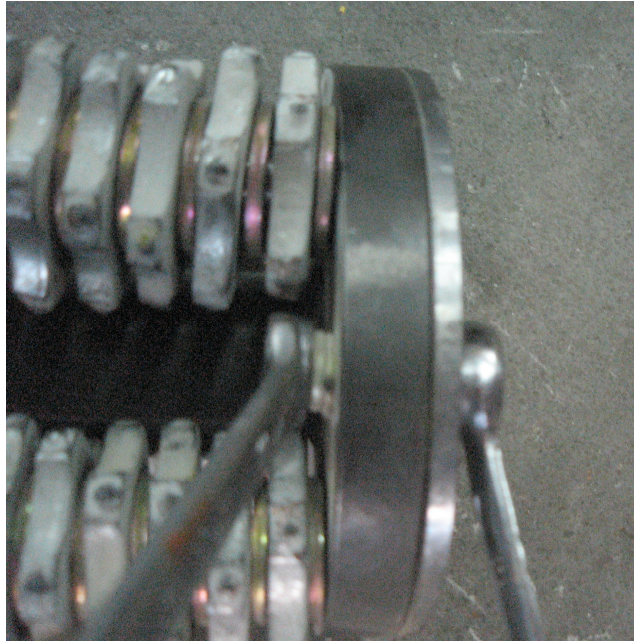


Figure 6

2. Remove the steel retaining plate. (See Figure 7)



Figure 7

3. Use a pin and a mallet to remove the blade shafts. (See Figure 8)

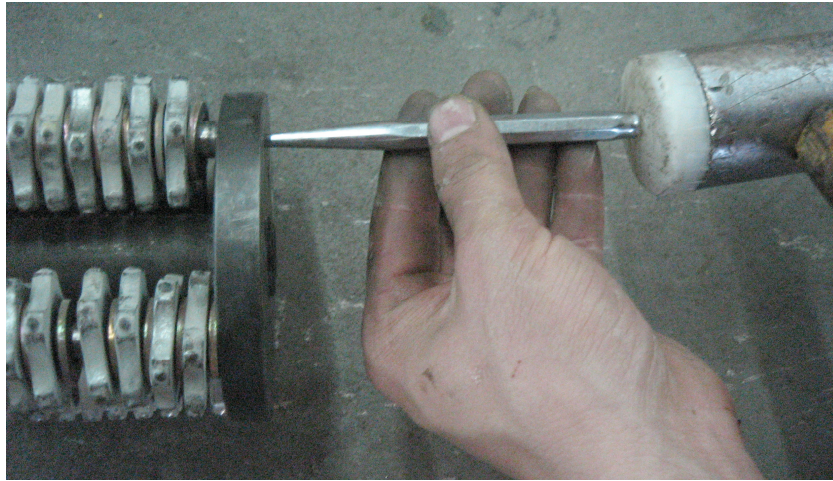


Figure 8

4. When replacing the blades, make sure the washers are arranged according to Figure 9.

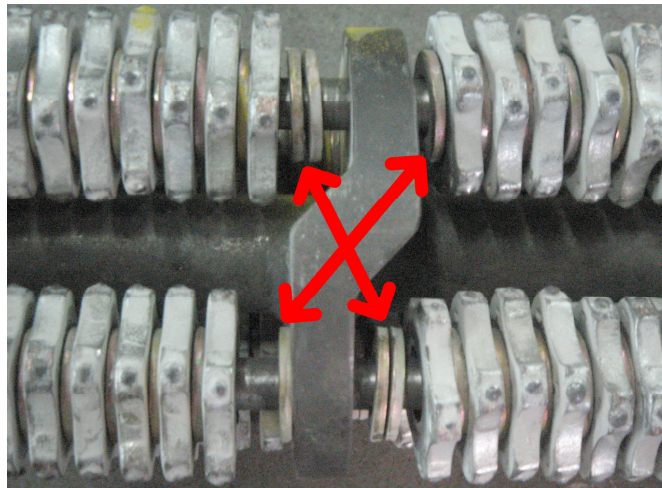


Figure 9

Drive Belt

Remove the belt guard then check the belt tension by placing light finger pressure on the top of the belt, as near central between the engine drive and cutter drum main shaft pulley. The belt should deflect by between 10mm ~ 15mm. If the belt tension requires adjustment, loosen the four engine mount bolts enough to allow the engine to be moved. Adjust the engine's position. Once set, retighten the engine mount bolts and check the belt tension a second time. Finally, refit the belt guard ensuring it is correctly and securely fitted.

***Please refer to engine manufacturer's user manual for servicing and maintenance of engine.**

Routine Maintenance	Before Operation	Every 4 Hours	Daily	Every 40-50 hrs of Operation	As required	Every Blade Change
Visual inspection of entire machine	▲					
Check engine oil	▲					
Check blades for uneven wear	▲					
Clean air filter element			▲			
Clean machine			▲			
Change engine oil				▲		
Belt tensioning					▲	
Check blade shaft						▲

Trouble Shooting

Problems	Possible Causes	Countermeasures
1) Engine stops suddenly or does not run.	A) No fuel. B) Engine switched off. C) Spark plug fouled. D) Engine cold. E) Engine flooded.	A) Open fuel cap, fill fuel tank. B) Switch engine on. C) Clean & reset plug gap. D) Close choke. E) Open choke, fully open throttle, pull recoil starter until engine fires.
2) Cutout safety switch wire disconnected		Reconnect wire.
3) Scarifier is powerless or unstable	A) Rotation speed of engine is too slow. B) Speed output of engine is too slow. C) V-belt is loose.	A) Keep speed high. B) Clean air filter. C) Retighten V-belt.

Technical Data

MODEL	SPM-1
DIMENSION (LxWxH) - mm (in)	900 x 420 x 1,110 (35.4 x 16.5 x 43.7)
OPERATING WEIGHT - kg (lb)	66 (146)
WORKING WIDTH - mm (in)	203 (8)
WORKING DEPTH - mm (in)	3 (0.1)
WORKING CAPABILITY - m ² /h (ft ² /h)	30 - 46 (323 - 495)
ENGINE	HONDA GX160/ROBIN EX17
ENGINE TYPE	4-STROKE GASOLINE
MAX. POWER OUTPUT - hp (kW)	GX160 @ 5.5 (4)/EX17 @ 5.7 (4.2)
MAX. ENGINE SPEED - rpm	HONDA @ 3,600 / ROBIN @ 4,000

Transportation and Storage

For long-term storage, empty the fuel in the carburetor by running the engine with the fuel tap being closed.

The chemical composition of the fuel will deteriorate after prolonged storage. When the machine needs to be stored for a long time, remove all the fuel from the fuel tank. Also remove the fuel from the float chamber of the carburetor by draining the fuel out from the drain plug.

Wash away dirt accumulated on the Concrete Scarifier. Cover the machine and store it in a dry place.

When transporting the Scarifier it should always be rolled where possible. If lifting is necessary, seek help. Never try to lift the machine by yourself.

Warranty

Your new Paclite SPM-1 Concrete Scarifier is warranted to the original purchaser for a period of one-year (12 months) from the original date of purchase.

The Paclite Equipment warranty covers defects in design, materials and workmanship.

The following are not covered under the Paclite Equipment warranty:

1. Damage caused by abuse, misuse, dropping or other similar damage caused by or as a result of failure to follow assembly, operation or user maintenance instructions.
2. Alterations, additions or repairs carried out by persons other than Paclite Equipment or their recognised agents.
3. Transportation or shipment costs to and from Paclite Equipment or their recognised agents, for repair or assessment against a warranty claim, on any machine.
4. Materials and/or labour costs to renew, repair or replace components due to fair wear and tear.
5. The engine, air filter and the engine spark plug.

Paclite Equipment and/or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with or by reason of or the inability to use the machine for any purpose.

Warranty Claims

All warranty claims should firstly be directed to Uni-corp Europe, either by telephone, by fax, by email, or in writing.

For warranty claims:

Uni-corp Europe S.A.R.L., Paclite Equipment, ZAC LES PETITS CARREAUX 12, AVENUE DES COQUELICOTS
94385 BONNEUIL- SUR -MARNE FRANCE

TEL +33 (0) 1 49 56 02 82 /FAX. +33 (0) 1 43 99 19 50

Email: sales@paclite-equip.com

Notes



Uni-corp Europe S.A.R.L.

Paclite Equipment

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2010



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