

VL Single Scabbling Hammer

Operation and Maintenance Manual



TRELAWNYTM
SURFACE PREPARATION TECHNOLOGY

www.trelawnyspt.co.uk

Tel: +44 (0)1926 883781
Fax: +44 (0)1926 450352



www.trelawneyspt.co.uk
Email: sales@trelawny.co.uk

DECLARATION OF CONFORMITY

We,

Trelawny SPT Limited of
Trelawny House, 13 Highdown Road, Sydenham Industrial Estate, Leamington Spa, Warwickshire, CV31
1XT, United Kingdom,

Declare that under our sole responsibility for supply/manufacture of the product

Name of product _____

Model, Serial Number _____

Year of production _____

to which this document relates is in conformity with the provisions of the following Directive(s), Normative Documents and their relevant Standards:

- | | |
|----------------------------|--|
| 2006/42/EC | MACHINERY DIRECTIVE |
| 2006/95/EC | LOW VOLTAGE DIRECTIVE
(Applicable only to products using electric power) |
| EN ISO 11148-4:2012 | HAND HELD NON-ELECTRIC
(Non-Rotary Percussive Tools) |

A handwritten signature in blue ink, appearing to read "Rob Chapman".

Date and place of issue,
24th June 2016
Leamington Spa, England.

Rob Chapman,
Managing Director.



Registered Office: Trelawny SPT Ltd, Trelawny House, 13 Highdown Road, Sydenham Industrial Estate, Leamington Spa, Warwickshire, CV31 1XT, United Kingdom



DOCUMENT No. Q:57/7

CZ	<p>Prohlášení o přizpůsobení My, společnost Trelawny SPT Limited podávamej daňové přiznání, že výrobek a dodávka výrobku název výrobku Model, výrobní číslo Pro které se průkaz týkající, je přizpůsobení s zásoby od následující příkazov a jejich pohotovostní: 2006/42/EC Příkaz soustrojí 73/23/EC Příkaz nízkého napětí (upotřebitelné jediné do výrobku použít elektrické energie)</p>	LT	<p>ATITIKTIES DEKLARACIJA Mes, Trelawny SPT Limite Prisiimdami visą atsakomybę, deklaruojame, kad tiekiamas / gaminamas produktas Produkto pavadinimas Modelis, serijos numeris Kuriam taikoma ši deklaracija, atitinka šių direktyvų, norminių aktų ir su jais susijusių standartų reikalavimus: 2006/42/EC Įrangos direktyva 73/23/EC Žemos įtampos direktyva (taikoma tik elektriniams įrengimams)</p>
DE	<p>Übereinstimmungserklärung Wir, Trelawny SPT Limited erklären, dass unter unserer alleinigen Verantwortung für die Lieferung und Herstellung des Produktes Name des Produktes Model, Seriennummer auf welches sich dieses Dokument bezieht, stimmt mit den Vorgaben der folgenden Direktive, normativen Dokumente und deren jeweiligen Masstabe ein: 2006/42/EC Maschinieriedirektive 73/23/EC Niederspannungsdirektive (nur zutreffend auf Produkte, die Strom benutzen)</p>	MT	<p>DIKJARAZZJONI TA KONFORMITA Ahna, Trelawny SPT Limited Niddikjaraw li ahna responsabbli kompletament għal provista / manifattura tal-prodott hawn imsemmi : Isem Il-Prodott Mudell, Serial number Dan id-dokument magħmul għal prodott imsemmi hawn fuq, li huwa skond il-provizjonijiet imsemmija fid-dokumenti tal-klassi tax-xogħol : 2006/42/EC Machinery Directive 73/23/EC Low Voltage Directive (tapplika biss għal prodotti li jaħdmu bl-elettriku)</p>
DK	<p>Erklæring om overensstemmelse Vi, Trelawny SPT Limited erklærer hermed at under vores ene forhandling ansvar for vores forhandling/produktion af produktet Produkt navn Model, serie nummer For hvilket dette dokument referer, at det er i overensstemmelse med bestemmelser af følgende direktiver, normative dokumenter og deres relevante standart: 2006/42/EC Machinery directive 73/23/EC Low voltage directive</p>	NL	<p>EENVORMIGHEIDSVERKLARING Wij, Trelawny SPT Limited Verklaren dat wij de volledige verantwoordelijkheid dragen voor het leveren/fabriceren van het volgende product: Naam van het product Type, Serienummer En verklaren dat het product waarnaar dit document verwijst eenvormig is met de voorzieningen van de volgende Richtlijn(en), Normatieve Documenten en hun relevante Standaarden: 2006/37/CE MACHINERICHTLIJN 73/23/CE LAAGSPANNINGSRICHTLIJN (uitsluitend van toepassing bij producten die elektrische stroom gebruiken)</p>
EE	<p>TOOTE VASTAVUSE DEKLARATSIOON Meie, Trelawny SPT Limited Deklareerime, et vastutame järgmise varustuse/toote müügi eest Toote nimetus Mudel, seeria number Antud dokument tõendab toote vastavust järgmistele direktiivide(de), normatiivaktidele ja nendega samaväärsetele standarditele: 2006/42/EC MASINA DIREKTIIVID 73/23/EC MADALPINGE DIREKTIIVID (Kohandatakse vaid toodetele, mis kasutavad elektrivoolu)</p>	PL	<p>Deklaracja Zgodności My, Firma Trelawny SPT Limited, oświadczamy w naszej odpowiedzialności, że produkcja i dostawa urządzenia Nazwa produktu Model, numer seryjny do którego ten dokument należy, jest zgodne z klauzulami następujących zarządzeń i ich istotnych standardów: 2006/42/EC Zarządzenie mechaniczne 73/23/EC Zarządzenie niskiego napięcia elektrycznego (Zastosowanie tylko przy urządzeniach elektrycznych)</p>
EL	<p>ΔΗΛΩΣΗ ΠΙΣΤΟΤΗΤΑΣ Η εταιρεία Trelawny SPT Limited Δηλώνει σπ υπο μοναδικη ευθυνη ως κατασκευαστη / προμηθευτη του παρακατω προιοντος περιγραφη προιοντος μοντελο, αριθμος σειρας και στο οποιο αναφερεται αυτη η δηλωση, ειναι συμβατο με τις προδιαγραφες που οριζονται στις ακολουθες Κοινοτικες Οδηγιες Ελεγκτικες Διαταξεις κι αλλες σχετικες προδιαγραφες 2006/42/EC ΟΔΗΓΙΑ ΠΕΡΙ ΜΗΧΑΝΗΜΑΤΩΝ 73/23/EC ΟΔΗΓΙΑ ΠΕΡΙ ΧΑΜΗΛΗΣ ΤΑΣΗΣ (αφορα μονον προιοντα που λειτουργουν με ηλεκτρικο ρευμα)</p>	PT	<p>DECLARAÇÃO DE CONFORMIDADE CE A empresa TRELAWNY SPT LIMITED Declara, sob sua inteira responsabilidade, que o fornecimento/fabrico do seguinte produto: Designação do produto Modelo, Número de Série a que esta declaração se refere, está em conformidade com o preceituado nas Directivas e Normas Comunitárias abaixo indicadas: 2006/42/EC DIRECTIVA DE MÁQUINAS 73/23/EC DIRECTIVA DE BAIXA VOLTAGEM (Aplicável apenas a produtos que utilizam energia eléctrica)</p>
ES	<p>Declaración de Conformidad Nosotros, Trelawny SPT Limited Declaramos que bajo nuestra completa responsabilidad de la fabricación/suministro del producto Nombre del Producto Modelo, No de Serie A quien este documento se refiere, está de acuerdo con lo relacionado en la Directiva, Normativa Documentada y sus relevantes standards: 2006/42/EC Directorio de Maquinaria 73/23/EC Directorio de Bajo Voltaje (Aplicable solamente a productos que funcionen con electricidad)</p>	RU	<p>СВИДЕТЕЛЬСТВО О СООТВЕТСТВИИ Мы, Trelawny SPT Limited Заявляем, что несем полную ответственность за поставку/производство нижеуказанной продукции Наименование изделия Модель, серийный номер на которую выдано настоящее Свидетельство, и которая соответствует положениям следующей(их) Директив(ы), нормативным документам и относящимся к ним стандартам: 2006/42/ЕС ДИРЕКТИВА ПО МЕХАНИЗМАМ 73/23/ЕС ДИРЕКТИВА ПО НИЗКОВОЛЬТНОМУ ОБОРУДОВАНИЮ (распространяется только на изделия с электропитанием)</p>
FI	<p>ILMOITUSVAHVISTUS Me, Trelawny SPT Limited Vahvistamme tuotteiden toimittamisesta/valmistamisesta Tuotenimi Malli, sarjanumero Tällä todistuksella vahvistamme säädökset seuraavin ohje/ohjesiin, Yleisiin papereihin ja niihin liittyvät vaatimukset: 2006/42/EC KONEISTON OHJEET 73/23/EC PIENJÄNNITTE OHJEET (tarvitaan ainoastaan tuotteille jotka käytävät sähkövoimaa)</p>	SE	<p>FÖRSÄKRAN OM ÖVERENSSTÄMMELSE VI, TRELAWNY SPT LIMITED FÖRKLARAR ATT VI MED ENSAMT ANSVAR ANSKAFFAT / TILLVERKAT PRODUKTEN PRODUKTNAMN MODELL och SERIE NUMMER TILL VILKEN DETTA DOKUMENT HÄNVISAR , ÄR I ÖVERENSSTÄMMELSE MED FÖLJANDE DIREKTIV , NORMATIVA DOKUMENT OCH DERAS RELEVANTA STANDARDER 2006/42/EC MASKINDIREKTIV 73/23/EC LÅGSTRÖMSDIREKTIV (TILLÄMPLIG PÅ ELEKTRISK DRIVNA PRODUKTER)</p>
FR	<p>DÉCLARATION DE CONFORMITÉ Nous, soussignés Trelawny SPT Limited déclarons que le produit sous-nommé Nom du produit Modèle et Numéro de Série et pour lequel nous prenons entière responsabilité pour sa fourniture et manufacture, est conforme aux clauses des directives suivantes, documents normatifs et normes qui s'y appliquent: 2006/42/EC DIRECTIVE POUR LA MACHINERIE 73/23/EC DIRECTIVE POUR BAS VOLTAGE (n'est applicable qu'aux produits utilisant l'énergie électrique)</p>	SI	<p>IZJAVA O SKLADNOSTI Trelawny SPT Limited pod polno odgovornostjo izjavljamo, da so spodaj navedeni proizvodi, ki jih dobavljamo/proizvajamo: Ime proizvoda Model, serijska številka na katere se ta dokument nanaša, proizvedeni v skladu z določili naslednjih direktiv, normativnih dokumentov in njihovih relevantnih standardov: 2006/42/EC DIREKTIVA O STROJIH 73/23/EC DIREKTIVA O STROJIH Z NIZKO VOLTAŽO (nanaša se samo na proizvode na električni pogon)</p>
HU	<p>MEGFELELŐSÉGI NYILATKOZAT Mi, A "Trelawny SPT Limited" cég Felelősségünk tudatában kijelentjük, hogy mint a termék szállítója/ gyártója Termék neve Típus, Sorozatszám amelyre jelen dokumentum vonatkozik, megfelel az alábbi irányelv(ek), Irányadó Dokumentumok előírásainak, és az azokat meghatározó szabványoknak: 2006/42/EC GÉPÉSZETI IRÁNYELVEK 73/23/EC KISFESZÜLTÉGŰ IRÁNYELVEK (Csak az elektromos meghajtású gépeknél)</p>	TR	<p>UYGUNLUK BEYANI Trelawny SPT Limited Aşağıdaki, üretim ve tedarikinden tek babýna sorumlu olduđu ürünün Ürün adı Model/Seri no bu belgenin ilgili olduđu aşağıdaki yönetmeliklerin, norm belgelerinin ve ilgili standartlarınyın koşullarýna uygun olduđunu beyan eder: 2006/42/EC MAKÝNALAR YÖNETMELÝĐÝ 73/23/EC DÜBÜK GERÝLYM YÖNETMELÝĐÝ (Yalnız elektrikli çalýþan ürünlerde geçerlidir)</p>
IT	<p>DICHIARAZIONE DI CONFORMITA La Società Trelawny SPT Limited Dichiaro, sotto la propria responsabilità, che la fornitura / produzione del prodotto nome prodotto modello, codice a cui si riferisce tale documento è conforme alle seguenti Direttive, ai documenti della Normativa ed ai relativi standard: 2006/42/EC DIRETTIVA SULLE APPARECCHIATURE 73/23/EC DIRETTIVA SUL BASSO VOLTAGGIO (applicabile esclusivamente per i prodotti che utilizzano energia elettrica)</p>		

INFORMATION

General Information

Before operating Trelawny Vibro-Lo Scabbling Hammer, this manual must be read and understood by the operator, if in any doubt, ask your supervisor before using this equipment. Local safety regulations must be followed at all times. Failure to follow these instructions could result in damage to the Scaler and/or personal injury.

Trelawny SPT Ltd disclaims all responsibility for damage to persons or objects arising as a consequence of incorrect handling of the tool, failure to inspect the tool for damage or other faults that may influence its operation prior to starting work, or failure to follow the safety regulations listed or applicable to the job site.

The Vibro-Lo Scabbling tool is fitted with either bush or cruciform cutter heads and is primarily designed for concrete reduction and the removal of laitance from concrete, It can also be used for the removal of heavy rust and scale.

Note: Bush Hammer style headed pistons are best suited to concrete reduction and for laitance removal; these reduce the damage caused to the aggregate using the cruciform cutter head, ensuring that a strong bond is created with the next layer.

Cruciform headed pistons are best suited for the removal of heavy rust and scale and also in the reduction of concrete where a smoother finish is required; this type of piston will reduce the aggregate as well as the concrete surface.

Air Supply

The compressed air must be free from water and dirt. The installation of a filter/regulator/lubricator air preparation set (with moisture trap) adjacent to the tool is strongly recommended.

Always clear the air hose before connection to the tool. Ensure that no moisture (condensation) is present in the air hose.

Ensure that a minimum 10mm (3/8") bore air hose is used and that all couplings are secure, leak free and in good condition.

Limit the length of air hose to 10M (33ft). Where extra length is necessary, for each additional 15M (50ft) of air hose used, the pressure drop is approximately 0.16bar (3psi).

Correct operating pressure is 6.2bar (90 psi).

Do not let the operating pressure fall below 5.5bar (80p.s.i.) or rise above 6.9bar (100 psi) absolute maximum.

The compressor must be able to supply a minimum of 9.44lps (20cfm), (Free air, not displaced as quoted by some compressor manufactures).

In particularly cold weather it is recommended that a proprietary anti-freeze lubricating oil is used.

Safety

Always, read instructions first before use.

Do wear Personal Protective Equipment including safety goggles, footwear, ear defenders and gloves. In some environments it will be necessary to wear facemasks or breathing apparatus.

Do be aware that this tool is not electrically insulated.

Do keep hands and clothing away from moving parts.

Do ensure that this tool is lubricated daily.

Do be aware that the tool can create dust and flying debris.

Do be aware of others working around you.

Do store this tool in a secure and dry environment.

Always observe safe-working practices at all times.

Do not allow the tool to run unattended.

Do not use this tool in potentially explosive environments.

Do not drag this tool by the air hose.

Do not use the Scaler as a lever.

Do not use petrol (gasoline), thinners or any other high flash point solvent to clean the tool.

Do not modify this tool in any way, as this will invalidate the warranty and could lead to serious injury.

Risk of Hand-arm Vibration injury

These tools may cause Hand-arm Vibration Syndrome injury if their use is not adequately managed. We advise you to carry out a risk assessment and to implement measures such as; limiting exposure time [i.e. actual trigger time, not total time at work], job rotation, ensuring the tools are used correctly, ensuring the tools are maintained according to our recommendations, and ensuring that the operators wear personal protective equipment [PPE] **particularly gloves and clothing** to keep them warm and dry.

Employers should consider setting up a programme of health surveillance to establish a benchmark for each operator and to detect any early symptoms of vibration injury.

We are not aware of any PPE that provides protection against vibration injury by attenuating vibration emissions.

See 'Specifications' section for vibration emission data.

Further advice is available from our Technical Department.

Recommended lubricants

Oil the tool daily before use. Put a few drops of one of the following zinc free air tool lubricants through the air inlet.

SHELL	S22 or R10
CASTROL	Hyspin ZZ32

Cleaning

At intervals of no more than 40 hours or if operation becomes unproductive and the piston shows signs of sticking, dismantle and clean with a highly refined paraffin.

Immediately after cleaning, thoroughly oil the tool with one of the recommended lubricants.

MAINTENANCE

Starting work

Prior to operating the tool check: -

That all fittings are secure, free from leaks and air hoses are in good condition.

That the air pressure is correct for this tool 6.2 bar (90p.s.i.). Put a few drops of recommended lubricant into the air inlet of the tool.

To operate the tool, which is dependant on the type of lever fitted, for those fitted with a safety lever, first push thumb button forwards and then for both styles of lever, pull the lever towards the handle grip to start the tool, then apply the cutter heads to the surface being prepared.

To switch off, simply release the throttle lever.

Care must be taken to avoid damaging or tripping over the air hose. Maintain contact with the work surface with sufficient pressure only to keep the tool from bouncing off. Excessive pressure can prevent the tool from working to its full capacity. Handled correctly the Scaler will work quickly and efficiently.

Excessive operator pressure will not improve the tool efficiency but will cause premature tool failure and operator fatigue.

Never allow the tool to run continuously whilst not in contact with the surface being prepared.

Maintenance

Maintenance must only be carried out by a competent person.

Disconnect the tool from the air supply before carrying out any of the following operations.

Clean all debris from the exterior of the tool.

One Piece Piston & Piston Assembly removal

Hold the Body (14) using the flats provided, in a vice with the Screw Cap (20) uppermost.

Unscrew the Screw Cap (20) using a open-ended spanner. Remove the Screw Cap, Nylon Pad (17) & O'Ring (18) as an assembly. It is recommended that the Piston Cushion O'Ring (18) is replaced.

From the bottom of the Body, push up on the Cutter Head end of the piston (16) and remove the Piston.

Inspect all parts for wear, particularly the Casting bore and the bore of the Cylinder Sleeve (15) if the tool has lost power.

Check the Piston's ground diameters, and the tungsten carbide tips for wear; replace any worn components as necessary.

Note: For most applications, the expected life of the tungsten carbide cutter is approximately 100hrs.

Valve body servicing

Clamp the assembly firmly in a soft face jawed vice, using the flats provided on the Valve Body (6), with the Throttle Lever (7) upper most.

Using a 3mm diameter pin punch, remove the Throttle Lever Roll Pin (8), and then remove the Throttle Lever (7).

Rotate the tool 180 degrees in the vice to access the valve.

Using a screwdriver, unscrew the Valve Cap (1), check the Valve Cap's O'Ring (2), remove the Spring (3), remove the Valve Stem (4) and the Valve seat 'O' Ring (5). Check the Valve Stem and O'Ring for wear.

Flexible Connector

If the Flexible Connector (13) requires replacement, return the tool to you local distributor who will arrange for a new connector to be fitted. These connectors are fitted with unique retaining clips (12) and a special machine is required to fit them. **Do not** replace with a similar hose or Jubilee type clips, this could be dangerous to the operator and will not produce the same vibration reduction characteristics.

Assembly

Before any assembly takes place, ensure all parts are clean and are coated in a thin film of recommended air tool lubricant. It is recommended that the Piston Cushion O'Ring is replaced along with any worn parts be replaced before assembly.

Valve Body assembly

Clamp the assembly firmly in a soft face jawed vice, using the flats provided on the Valve Body (6), insert new Valve Seat O'Ring (5) into Valve Body, followed by the Valve Stem (4), Spring (3), then the Valve Cap (1) complete with its O'Ring (2), tighten the Valve Cap with a screwdriver.

Rotate assembly 180 degrees in vice. Using a 3mm diameter pin punch locate and align the Throttle Lever (7) in position, then drive in the Throttle Lever Roll Pin (8) into the Pin location.

Piston and Casting assembly

Hold the Body using the flats provided, in a vice with the large opening uppermost.

Lubricate the Piston and Casting bores, then insert the Piston into the Casting bore.

Screw down the Screw Cap assembly (Check exploded view for correct assembly of Nylon Pad (17) and O'Ring (18) and tighten.

Disposal

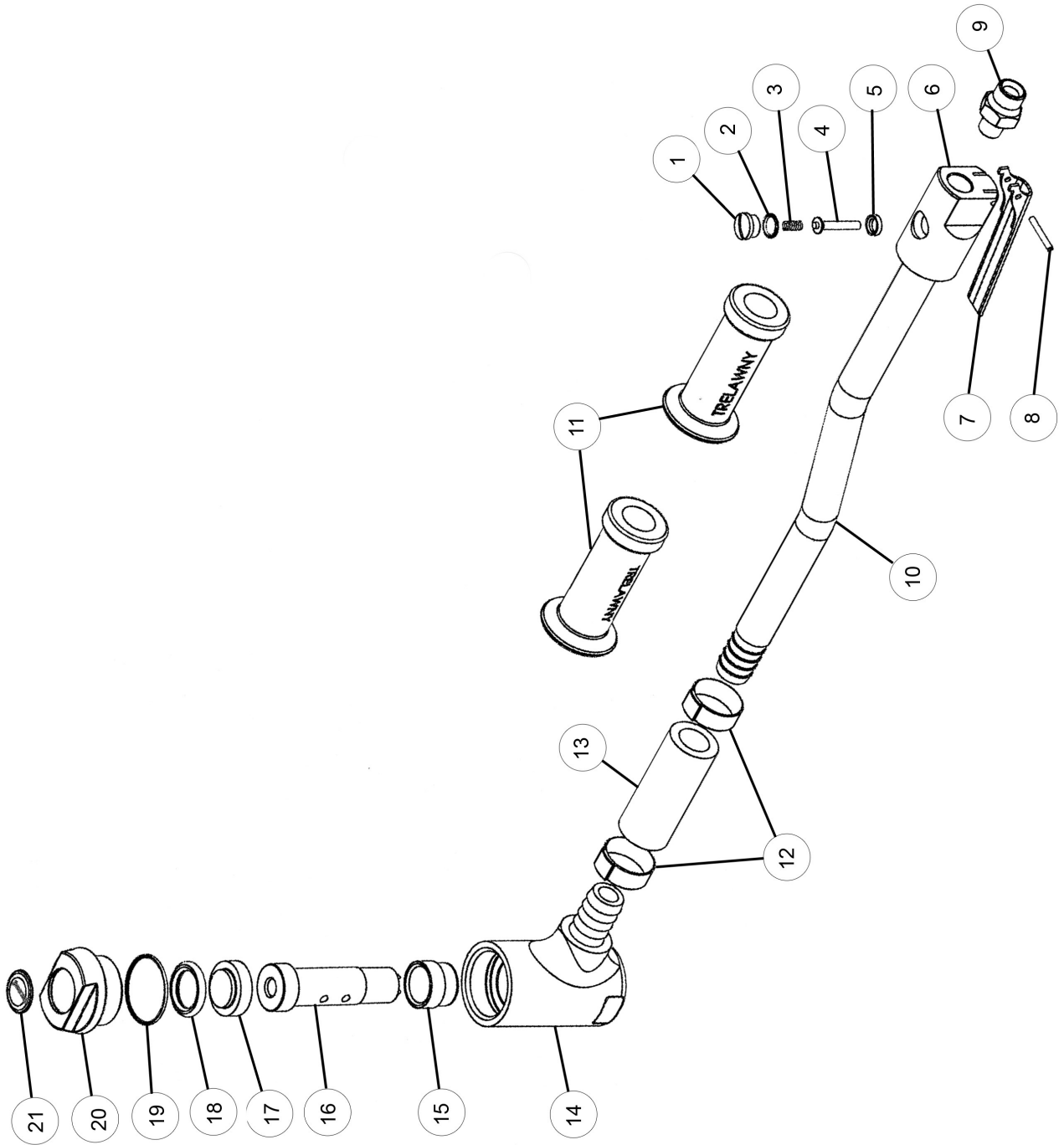
When the tool and its accessories are taken out of service for disposal, it is recommended that: -

They are rendered unusable to prevent improper re-use.

They are dismantled into component form, segregated according to material composition and disposed of using waste recycling processes specified by local regulations.

EXPLODED DIAGRAM

EXPLODED DIAGRAM



PARTS LIST

PARTS LIST

Item	Part Number	Description
1	615.3021	Valve Cap
2	809.0139	O'Ring - (Valve Cap)
3	712.3022	Valve Spring
4	618.3022	Valve Stem
5	809.0139	Square O'Ring
6	423.5321	Valve Body Assembly (Includes items 1 - 8)
7	716.3000	Lever
8	813.0108	Roll Pin
9	711.5301	Adapter
10	624.5350	Lo-Vib Handle
11	717.3060	Grip x 2
12	821.2000	Band-It Hose Clamp x 2
13	719.1380	Vibro-Lo Flexible connector
14	411.5225	VL Scabbler Body (includes item 15)
15	613.5370	Cylinder Sleeve
16	612.6010	Bush Piston (fitted as standard)
	612.6000	C/F Piston (Optional)
17	615.6005	Nylon Pad
18	809.6229	O'Ring - (Piston Cushion)
19	809.0299	O'Ring - (Screw Cap)
20	615.5370	Screw Cap
21	839.3003	Trelawny Badge
	*719.1000	3/8" Bore Hose 10 Metre
	*719.3000	3/8" Bore Hose 30 Metre
		*Items not shown on exploded diagram

TECHNICAL SPECIFICATIONS

		VL SINGLE SCABBLER
Piston Diameter		27.5mm (1.08")
Piston Length		87.4mm (3.44")
Piston Stroke		39.8mm (1.57)
Blows Per Minute		2800
Air Consumption		5.6 lps (12cfm)
Air Pressure		6.2 bar (90 psi)
Length		520mm (20.5")
Height		130mm (5.0")
Weight		2.85 kg (6.28 lbs)
Noise Level	L_{pA} dB (A)	
	L_{wA} dB (A)	98.5 dB(A)
Vibration Level - Concrete	(Trigger Hand) Bush Primary	9.4 m/s ² (K= 1.13m/s ²)
	Bush Secondary	14.1 m/s ² (K= 2.22m/s ²)
	(Trigger Hand) Cruciform Primary	9.15 m/s ² (K= 2.95m/s ²)
	Cruciform Secondary	13.7 m/s ² (K= 1.5m/s ²)
Vibration Level - Steel	(Trigger Hand) Primary	3.9 m/s ² (K= 0.74m/s ²)
	Secondary	8.36 m/s ² (K= 1.38m/s ²)

Declared vibration emission value are in accordance with BS EN 12096: 1997 (K) Equals the factor of uncertainty, which allows for variations in measurement and production. Vibration data figures are tri-axial, which gives the total vibration emission.

Risk of Hand Arm Injury

Because of various factors, the range of vibration emission during intended use of these tools is expected to be between 4.6m/s² – 22.4m/s². The vibration is dependent on the tool model, task, the operators grip, and feed force employed etc.

Noise level measured in accordance with: EN ISO 15744: 2008

Vibration measured in accordance with: BS EN ISO 28927:2012 and BS EN ISO 5349-1: 2001, BS EN ISO 5349-2: 2002

Machinery Directive Information

This machine has been designed and produced in accordance with the following directives: **2006/42/EC Machinery Directive** and applicable harmonised standard: EN ISO 1 1148-4:2012

Trelawny tools are thoroughly tested under specified conditions in accordance with applicable internationally recognised standards. When a tool is used on site the conditions may not be the same as those used in our tests.

Trelawny Surface Preparation Technology operates a policy of continuous product development and refinement and therefore reserves the right to change technical specifications and product designs without giving prior notice.

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Use only genuine Trelawny spares.

The use of non-Trelawny spare parts invalidates the warranty.

Trelawny SPT Ltd
13 Highdown Road, Sydenham Industrial Estate, Leamington Spa,
Warwickshire, CV31 1XT, United Kingdom
Telephone: +44 (0)1926 883781 - Fax: +44 (0)1926 450352
Email: sales@trelawny.co.uk

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