TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

SF3EX SCALING HAMMER

OPERATIONS AND MAINTENANCE MANUAL

CONTENTS

INTRODUCTION

Your new Trelawny SPT tool will more than satisfy your expectations. It has been manufactured under stringent Trelawny SPT Quality Standards to meet superior performance criteria. You will find your new tool easy and safe to operate, and, with proper care, it will give you many years of dependable service.

WARNING

Carefully read through these original instructions before using your new Trelawny tool. Take special care to read the warnings. Your Trelawny tool has many features that will make your job faster and easier. Safety, performance, and dependability have been given top priority in the development of this tool, making it easy to maintain and operate.

ENVIRONMENTAL PROTECTION

The machine, accessories and packaging should be sorted for environmentally friendly recycling. The plastic components are labelled for categorised recycling.

DISPOSAL

Waste products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

DECLARATION OF CONFORMITY

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Fax: +44 (0) 1926 450352

TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

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

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: Scaling Hammer
Model: SF3Ex

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
EN ISO 11148-4:2010	HAND HELD NON-ELECTRIC (Non-Rotary Percussive Tools)
EN ISO 4414:2010	General rules and safety requirements
EN ISO 4414	SAFE PNEUMATIC EQUIPMENT OF MACHINERY

Conformity with the following relevant legislation:

2014/34/EU ATEX DIRECTIVE

Based on following harmonised standards:

EN 60079-0:2018

EN ISO 80079-36:2016

EN ISO 80079-37

II 2 G Ex h IIC T4 Gb

II 2 D Ex h IIIC T135°C Db

Year and place of issue,
2020
Leamington Spa, England

Adam Dickinson,
Managing Director

CE UKCA

DECLARATION OF CONFORMITY

CZ

Prohlášenl o přizpüsobení
My, společnost Trelawny SPT Limited
podajemy daňové přiznáni. že výrobek a dodávka výrobku
název výrobku
Model, výrobni číslo
Rok výroby
Pro které se prúkaz týkajici, je přizpúsobeni s zásoby od následujici přikazov a jejich pohotovostni:
98/37/EC Přikaz soustroji
73/23/EC Přikaz nizkého napéti (upotřebitelne jediné do výrobku použiti elektnckej energie)

DE

Ubereinstimmungserklarung
Wir, Trelawny SPT Limited
erklaren, dass unter unserer alleinigen Verantwortung fur die Lieferung und Herstellung des Produktes
Name des Produktes
Model, Seriennummer
Jahr der Herstellung
auf welches sich dieses Dokument bezieht. stimmt mit den Vorgaben der folgenden Direktive, normativen Dokumente und deren jeweiligen Masstabe ein:
98/71/EC Maschineriedirektive
73/23/EC Niederspannungsdirektive (nur zutreffend auf Produkte, die Strom benutzen)

DK

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
Produktionsár
For hvilket delle dokument referer, at deler i overensstemmelse med bestemmelser af følgende direktiver, normative dokumenter og deres relevante standart:
98/37/EC Machinery directive
73/23/EC Low voltage directive

EE

TOOTE VASTAVUSE DEKLARATSIOON
Meie, Trelawny SPT Limited
Deklareerime, et vastutame jägmise varustuse/toote müügi eest
Toote nimetus
Mudel, Seeria number
Aasta toodangu
Antud dokument tõendab toote vastavust järgmistele direktiivi(de)le, normatiivaktidele ja nendega samaväärsetele standarditele:
98/37/EC MASINA DIREKTIIVID
73/23/EC MADALPINGE DIREKTIIVID (Kohandatakse vaid toodetele, mis kasutavad elektrivoolu

ES

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
Año de producción
A quién este documento se refiere, está de acuerdo con lo relacionado en la Directriz, Normativa Documentada y sus relevantes standards:
98/37/EC Directorio de Maquinaria
73/23/EC Directorio de Bajo Voltaje (Aplicable solamente a productos que funcionen con electricidad)

FI

ILMOITUSVAHVISTUS
Me. Trelawny SPT Limited
Vahvistamme tuotteiden toimittamisesta/valmistamisesta
Tuotenimi
Malli, sarjanumero
Valmisttusvuosi
Tällä todistuksella vahvistamme säädökset seuraviin ohje/ohjesiin, Yleisiin papereihin ja niihin liittyvät vaatimukset:
98/37/EC KONEISTON OHJEET
73/23/EC PIENJÄNNITE OHJEET (tarvitaan ainoastaan tuotteille jotka käyttävät sähkovoimaa)

FR

DÉCLARATION DE CONFORMITÉ
Nous, soussignés Trelawny SPT Limited
déclarons que le produit sous-nommé
Nom du produit
Modèle et Numéro de Serié
Année de production
et pour lequelnous prenons entière responsabilité pour sa fourniture et manufacture, est conforme aux clauses des directives suivantes documents norminatifs et normes qui s'y appliquent:
98/37/EC DIRECTIVE POUR LA MACHINERIE
73/23/EC DIRECTIVE POUR BAS VOLTAGE (n'est applicable qu'aux produits utilisant l'énergie électrique)

GR

ΔΗΛΩΣΗ ΠΙΣΤΟΤΗΤΑΣ
Η εταιρεια Trelawny Spt Limited
Δηλωνει ότι έχει τη μονδικη ευθυνη ως κατασκευαστρια / προμηθευτρια του παρακατω προιοντος περιγραφη προιοντος μοντελο, αριθμος σειρας
έτος παραγωγής
και στο οποιο αναφερεται αυτη η δηλωση, ειναι συμβατο με τις προδιαγαφες που οριςονται στις ακολουθες Κοινοτικες Οδηγιες Ελεγκτικες Διαταξεις κι αλλες σχετικες προδιαγραφες
98/37/EC ΟΔΗΓΙΑ ΠΕΡΙ ΜΗΧΑΝΗΜΑΤΩΝ
73/23/EC ΟΔΗΓΙΑ ΠΕΡΙ ΧΑΜΗΛΗΣ ΤΑΣΗΣ (αφορα μονον προιοντα που λειτουργουν με ηλεκτρικο ρευμα)

HU

MEGFELELŐSÉGI NYILATKOZAT
Mi. A "Trelawny SPT Limited" cég
Felelösségünk tudatában kijelentjük, hogy mint a termék szállitója/gyartója
Termék neve
Tipus, Sorozatszáma
Gyártási év
amelyre jelen dokumentum vonatkozik, megfelel az alábbi Irányelv(ek), Irányadó Dokumentumok elöirásainak, és az azokat meghatározó szabvanyoknak:
98/37/EC GÉPÉSZETI IRÁNYELVEK
73/23/EC KISFESZÜLTSÉGÜ IRÁNYELVEK (Csak az elektromos meghajtású gepeknél)

IT

DICHIARAZIONE DI CONFORMITA
La Società Trelawny SPT Limited
Dichiara, sotto la propria responsabilità, che la fornitura / produzione del prodotto
Nome prodotto
Modello, codice
Anno di produzione
a cui si riferisce tale documento è conforme aile seguenti Direttive, ai documenti della Normativa ed ai relativi standard:
98/37/EC DIRETTIVA SULLE APPARECCHIATURE
73/23/EC DIRETTIVA SUL BASSO VOLTAGGIO (applicabile esclusivamente peri prodotti che utilizzano energia elettrica)

LT

ATITIKTIES DEKLARACIJA'
Mes, Trelawny SPT Limite
Prisiimdami visą atsakomybę deklaruojame, kad tiekiamas / gaminamas produktas
Produkto pavadinimas
Modelis, serijos numeris
Pagaminimo
Kuriam taikoma ši deklaracija, atitinka šių direktyvų, norminių aktų ir su jais susijusių. standartų reikalavimus:
98/37/EC Įtrangos direktyva
73/23/EC Zemos įtampos direktyva (taikoma tik elektriniams įrengimams)

MT

DIKJARAZZJONI TA KONFORMITA
Ahna, Trelawny SPT Limited
Niddikjaraw li ahna responsabbli kompletament għal provista / manifattura tal-prodott hawn 1msemmi:
Isem Il-Prodott
Mudell, Serial number
Sena la 'produzzjoni
Dan id-dokument magħmul għal prodott imsemmi hawn fuq, li huwa skond il-provizjonijiet imsemmija fid-dokumenti tal-klassi tax-xogħol:
98/37/EC Machinery Directive
73/23/EC Low Voltage Directive (tapplika biss għal prodotti li jaħdmu bl-eletrkiu)

NL

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
Productiejaar
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:
98/37/CE MACHINERICHTLIJN
73/23/CE LAAGSPANNINGSRICHTLIJN (uitsluitend van toepassing bij producten die elektrische stroom gebruiken)

PL

Deklaracja Zgodnosci
My, Firma Trelawny SPT Limited.
oświadczamy w naszej odpowiedzialności, ze produkcja i dostawa urzctdzenia
Nazwa produkta
Model, numer seryjny
Rok produkcji
do którego ten dokument należy, jest zgodne z klauzulami nastąpujacych zarządzen i ich istotnych standartów:
98/37/EC Zarządzenie mechaniczne
73/23/EC Zarządzenie niskiego napięcia elektrycznego (Zastosowanie tylko przy urządzeniach elektrycznoych)

PT

DECLARAÇÃO DE CONFORMIDADE CE
A empresa TRELAWNY SPT LIMITED
Declara, sob sua inteira responsabilidade, que o fornecimento/fabrico do seguinte produto:
Designaçáo do produto
Modelo, Número de Série
Ano de produçáo
a que esta declaraçáo se refere. está em conformidade com o preceituado nas Directivas e Normas Comunitárias abaixo indicadas:
98/37/EC DIRECTIVA DE MÁQUINAS
73/23/EC DIRECTIVA DE BAIXA VOLTAGEM (Aplicável apenas a produtos que utilzi am energia eléctrica)

RU

СВИдЕТЕПЬСТВО О СООТВЕТСТВИИ
Мы, Trelawny SPT Limited
Заявляем, что несем полную ответственость за поставку/производство нижеуказанной продукцим
Наименование изделия
Модель, серийный номер
Год вылуска
на котоеую выдано настящее Свидетельство, и которая соответствует положениям слдующей(их) директив(ы), нормативным документам и относящимся к ним стандартам:
98/37/EC ДИРЕКТИВА ПО МЕХАНИЗМАМ
73/23/EC ДИРЕКТИВА ПО НИЗКОВОЛЬТНОМУ ОЪОРУДОВАНИЮ (распространяется только на изделия с злектропитанием)

SE

FÖRSÄKRAN OM ÖVERENSSTÄMMELSE
VI, TRELAWNY SPT LIMITED
FÖRKLARAR ATT VI MED ENSAMT ANSVAR ANSKAFFAT / TILLVERKAT PRODUKTEN PRODUKTNAMN
MODELL och SERIE NUMMER
Tillverkningsár
TILL VILKEN DETTA DOKUMENT HÄNVISAR ÄR I ÖVERENSSTÄMMELSE MED FÖLJANDE DIREKTIV, NORMATIVA DOKUMENT OCH DERAS RELEVANTA STANDARDER
98/37/EC MASKINDIREKTIV
73/23/EC LÄGSTRÖMSDIREKTIV (TILLÄMPLIG PÄ ELEKTRISK DRIVNA PRODUKTER)

SI

IZJAVA O SKLADNOSTI
Trelawny SPT Limited
pod polno odgovornostjo izjavljamo, da so spodaj navedeni proizvodi, ki jih dobavljamolproizvajamo:
Ime proizvoda
Model. serijska številka
Leto proizvodnje
na katere se ta dokument nanaša. proizvedeni v skladu z določili naslednjih direktiv, normativnih dokumentov in njihovih relevantnih standardov:
98/37/EC DIREKTIVA O STROJIH
73/23/EC DIREKTIVA O STROJIH Z NIZKO VOLTAŽO (nanaša se samo na proizvode na električni pogon)

TR

UYGUNLUK BEYANI
Trelawny SPT Limited
AÞaöýdaki, üretim ve tedarikinden tek baÞýna sorumlu olduöu ürünün
Ürün ady
Model/Seri no
Üretim yili
bu belgenin ilgili olduöu apaöýdaki yönetmeliklerin, norm belgelerinin ve ilgili standartlarýnýn koÞullarýna uygun olduöunu beyan eder:
98/37/EC MAKÝNALAR YÖNETMELÝDÝ
73/23/EC DÜÞÜK GERÝLÝM YÖNETMELÝDÝ (Yalnýyz elektrikle çalyÞan ürünlerde geçerlidir)

DECLARATION OF CONFORMITY

Appendix 1 - Hazardous Area Certification

The SF3Ex Scaling Hammer certified compliant to the ATEX Directive (2014/34/EU) for safe use within a hazardous area and has been assessed so by Element Materials Technology.

This product conforms to the Standards:

EN 60079-0:2018

EN ISO 80079-36:2016

EN ISO 80079-37

And is attributed with the product certification codes:

II 2 G Ex h IIC T4 Gb

II 2 D Ex h IIIC T135˚C Db

With ATEX Certificate Number: EMT19ATEX0020X

Special Conditions of Safe Use

1. Air compressors used in conjunction with the Scaling Hammers shall incorporate means to prevent the ingress of dust or other foreign material into the air supply i.e a filter on the compressor intake.

2. For air compressors used in conjunction with the Scaling Hammers, only lubricants that are resistant to carbonisation shall be used.

3. The external painted surfaces of the equipment are not to be exposed to charging mechanisms stronger than manual rubbing.

4. Air supply hoses used in conjunction with the equipment must be manufactured from anti-static material with a surface resistance no greater than 10˚Ω.

5. Equipment is to be lubricated before as detailed in the Operations & Maintenance Manual.

6. Any lubricating oil used must have an auto ignition temperature of > 185˚c.

7. The equipment must not be stored in an explosive acetylene atmosphere (to prevent the formation of acetylides on the copper heads).

Equipment must only be installed & maintained by suitably qualified and competent personnel in accordance with the instructions provided and the terms of the applicable product services.

FOREWORD

Thank you for your purchase of a Trelawny SF3Ex Scaling Hammer. This manual contains the necessary maintenance information for you to ensure proper operation and care for this machine. Also see the manual that is supplied by the engine manufacturer. It is essential for you to read through this manual thoroughly. In the unlikely event that you experience problems with your Trelawny SF3Ex Scaling Hammer, please do not hesitate to contact your local Trelawny dealer or agent. We always welcome feedback and comments from our valued customers.

GENERAL INFORMATION

Before operating Trelawny ATEX Scaling Hammers, 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 it's operation prior to starting work, or failure to follow the safety regulations listed or applicable to the job site.

These scaling tools are designed for removal of heavy rust and scale.

WARNING! Before operating, performing maintenance or repairing the scaling hammers this manual must be read and understood. If in any doubt, ask your supervisor before using this equipment.

SAFETY

Do:
- Be aware that this tool is not electrically insulated.
- Be aware that the tool can create dust and flying debris.
- Keep hands and clothing away from moving parts.
- Be aware of others working around you.
- Ensure that this tool is lubricated daily.
- Store this tool in a secure and dry environment.
- 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.
- Always observe safe-working practices at all times.

Do not:
- Allow the tool to run unattended.
- Modify this tool in any way, this will invalidate the warranty and could also lead to serious injury.
- Drag the tool by the air hose.
- Use petrol (gasoline), thinners or any other high flash point solvent to clean the tool.

WARNING! Always observe safe-working practices at all times.

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 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.

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 antistatic 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 (90psi).

Do not let the operating pressure fall below 5.5bar (80psi.) or rise above 6.9bar (100psi) absolute maximum.
The compressor must be able to supply a minimum of 12 lps (25cfm) for Triple Scalers, (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.

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 (90psi.). 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.

VERY IMPORTANT
Only Trelawny Beryllium Copper Heads must be used in this tool. DO NOT substitute with any other head.

MAINTENANCE

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.

Please be aware: that this tool will reduce in power or stop working if the end cap (17) has become unscrewed.

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.

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

Always use clean oil from a sealed container and ensure ignition temperature is above 185degC°.

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.

Head removal - Taper Fit (On site)

Lay the scaling hammer on a solid surface with the cutter head (27) facing uppermost. Place the head removal washer (32) between the cutter head and the body; insert the removal pin (31), into cutter head hole (refer to diagram for pictorial illustration). Wearing safety glasses and using a medium size hammer give a sharp blow to the head of the pin, which will release the cutter head from the piston.

Piston/Cylinder Assembly removal (Workshop)

Hold the scaler body (23) in a vice, using the flats provided and with the end cap uppermost. On triple scalers, secure the tool in a vice, clamping on all three cutter heads. Unscrew the end cap (17). Remove spring cap (19) and spring (18) from the end cap. From the bottom of the body, push up the cutter head to remove the piston assembly.

Head Removal - Taper Fit (Workshop)

Lay the piston and cylinder assembly on a solid surface with the cutter head facing uppermost. Place the head removal washer (32) between the cutter head and the cylinder; insert the removal pin (31), into cutter head hole (refer to diagram for pictorial illustration). Wearing safety glasses and using a medium size hammer, give a sharp blow to the head of the pin, which will release the cutter head from the piston. Inspect all components for wear, replace as necessary.

Valve body servicing (Workshop)

Clamp the handle (10) assembly firmly in a soft face jawed vice (valve body end) throttle lever 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. Unscrew the valve cap (1) using a screwdriver, check the valve cap 'O'Ring (2), remove the spring (3), push out the valve stem (4) and remove the 'O'Ring (5). Check the valve and 'O'Ring for wear.

Assembly (Workshop)

Before any assembly takes place, ensure all parts are clean and have a film of air tool oil lubrication unless otherwise stated. Avoid lubricating oil or grease contaminating the threads of the end cap (17), the threads within the bore of the bodies (23) and the tapers on piston and cutter heads. The end caps will require securing with a thread-locking adhesive. It is good practice to renew all 'O' Rings (2/5) and the brush seals (22). Replace any parts showing signs of wear; paying particular attention to the small bore of the cylinder.

Head Assembly - Taper Fit (On-Site)

Thoroughly clean around area of cutter head and piston. Remove all traces of debris/oil from the taper on the piston (20) and internal taper of the cutter head (25) by cleaning with suitable oil free solvent. Place the tool in a position where the end cap is on a solid surface; Select one of the cleaned new cutter heads and place onto the taper of the piston. Using a soft-faced hammer deliver a sharp blow to the cutter head.

Head Assembly - taper fit (Workshop)

Remove all traces of oil and dirt etc, from the taper diameter on the piston (20) and cutter head (25) by cleaning with suitable oil free solvent. Fit the piston into the cylinder (21) as shown in the service layout. Place the assembly onto a solid surface; fit a new brush-seal (22) over the piston and into the recess of the cylinder. Select one of the cleaned new cutter heads and place onto the taper of the piston. Using a soft-faced hammer deliver a sharp blow to the cutter head.

Note: If you are re-fitting a used cutter head to the piston it is essential that the internal diameter of the cutter head is re-surfaced using a medium grade of emery cloth - this will ensure a good fit between cutter head and piston, do not use adhesive of any description on the taper. If the taper has expanded too much on the old cutter heads, they may not stay on the piston, replacements will be required.

Piston/Cylinder assembly (Workshop)

Lubricate the piston (20) and cylinder bore (21) and push the piston into the cylinder bore. Lay the tool on a bench with the body (23) on its side and insert the cylinder assembly into the body.

Valve Body assembly (Workshop)
Clamp the handle (10) assembly firmly in a soft faced vice (valve body end), insert new valve stem 'O'Ring (5) into valve body (6), 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.

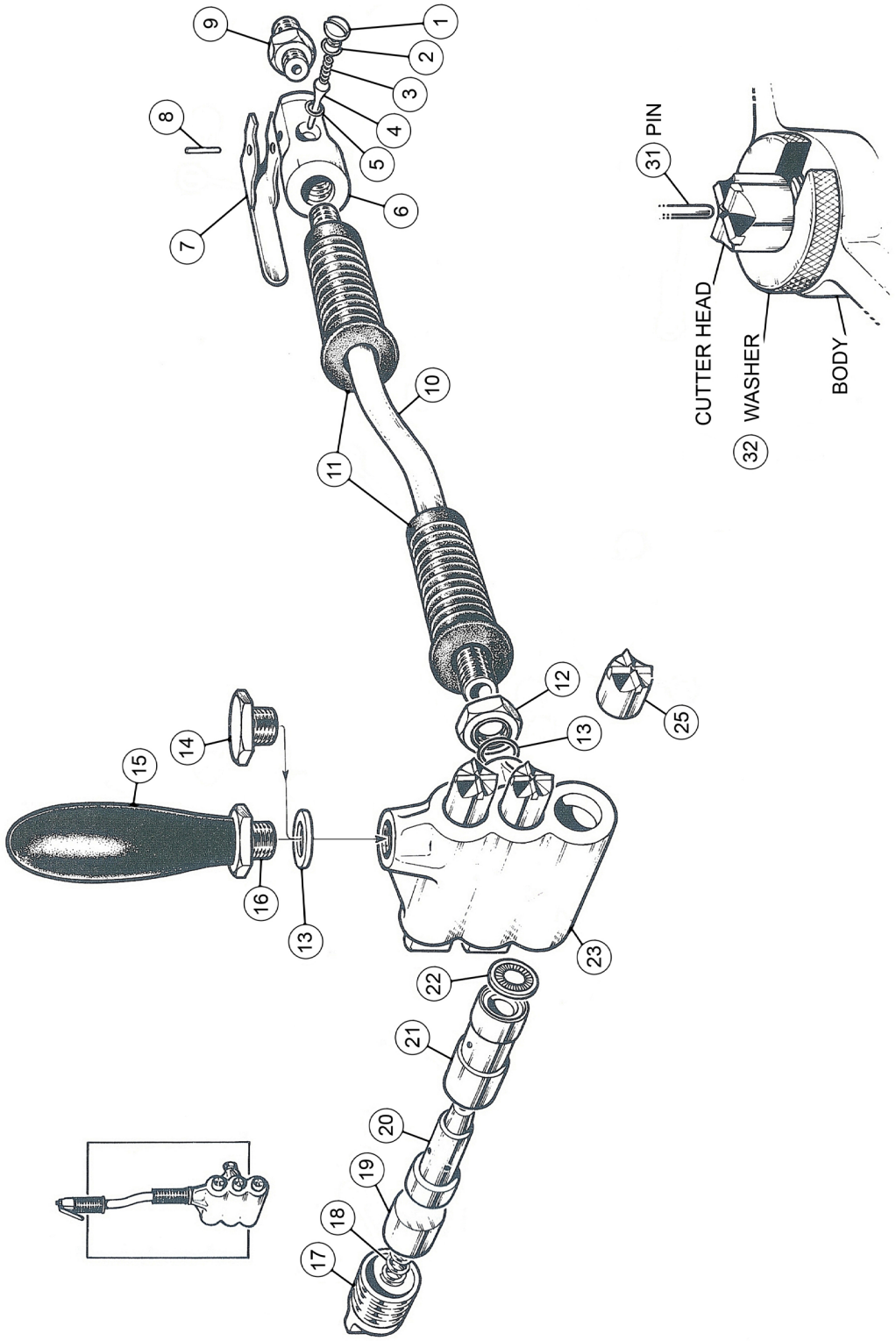
FINAL ASSEMBLY (Workshop)
Assemble the end cap (17), fit spring (18) into the end cap and fit spring cap (19) into the end cap as shown in the service layout. Select as required, a piston/cutterhead, insert into the body (23) and apply a few drops of air tool lubricant to the top of the piston(s). Hold the handle (10) in a soft faced vice ensuring the screw cap threads are uppermost. Remove all traces of oil from the screwed cap threads and threads of the body by cleaning with suitable oil free solvent. Apply a bead of Loctite 243 sealant to the first 3 threads of the end cap. Screw end cap assembly into the body until finger tight and using a suitable spanner torque down to 55N.m. (40 lbs.ft).

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.

VERY IMPORTANT
Only Trelawny Beryllium Copper Heads must be used in this tool. DO NOT substitute with any other head.

EXPLODED DIAGRAM



PARTS LIST

Item NO.	PART NO.	DESCRIPTION
1	615.3021	Valve Cap
2	809.0139	Valve Cap O'Ring
3	712.3022	Valve Spring
4	618.3022	Valve Stem
5	809.0089	Valve Seat O'Ring
6	*423.5321	Valve Body Assembly
7	716.3000	Throttle Lever
8	813.0108	Roll Pin
9	711.5301	Adaptor
10	624.5301	Main Handle (Standard Tools)
11	717.5301	Rubber Grip
12	625.5301	Locknut
13	810.9001	Sealing Washer
14	634.5301	Hexagon Plug
15	822.5302	Side Handle Grip
16	422.5315	Side Handle
17	615.5341	Screwed Cap
18	712.5301	Compression Spring
19	615.5361	Spring Cap
20	612.5301	Piston (Std taper fit)
21	613.5301	Cylinder (Std taper fit)
22	614.5301	Brush Seal
23	611.5301	Triple Scaler Body (Std taper fit)
25	606.5303	Beryllium Copper Head (Taper Fit)
31	827.0428	Cutterhead Removal Pin
32	633.5301	Cutter Head Removal Washer
	446.1530x	Service Kit (2,4,5,7,8,17,18,19,20,22,25,31,32)

Trouble Shooting	Cause	Action
Poor performance or lack of power.	Low air pressure.	Ensure that the air pressure is correct at 90psi, max 100psi.
	If tool has been left for some time without use, the oil may dry out slightly, causing a sticky residue.	Strip tool down, clean and re-oil.
	Tool worn out, can you feel side ways movement between the piston and cylinder bore.	Replace the piston and cylinder, along with a new bush seal.
Tool continues to run with trigger released.	Valve seal may have become dislodged through the tool being disconnected with the trigger in the open position.	Ensure that the trigger has not been taped or wired in the open position.
Tapered cutterhead will not stay on piston.	Air pressure too high, piston hits bottom of cylinder causing head to be jettisoned.	Ensure that the air pressure is correct at 90psi, max 100psi.
	Traces of oil remained on the tapered surfaces when replacing cutter head.	Ensure that the cutterhead and pistons tapers are completely free of oil, use a good degreasing agent and clean cloth prior to assembly.

TECHNICAL SPECIFICATION

Model	Piston Diameter	Piston Length	Piston Stroke	Blows Per Minute	Air Consumption	Air Pressure	Length	Working Height	Weight	Noise Level LpA dB (A)	Noise Level LwA bD (A)	Vibration Level m/s2 Primary	Vibration Level m/s2 Secondary
SF3Ex	27mm (1.06")	68.6mm (2.7")	26.0mm (1.023")	3 x 3000	5.2 lps (11 cfm)	6.2 bar (90psi)	450mm (17.7")	152.5mm (6.0")	3.7 kg (8.1 lbs)	92.7	105.7	13.4 (k)	12.0 (k)

Noise Levels: Noise level measured in accordance with: EN ISO 15744: 2008
Vibration Levels: Vibration measured in accordance with: EN ISO 28927-9:2012 and EN ISO 20643:2005. (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. Because of various factors, the range of vibration from these tools may vary between -0% +40% (13.4 m/s2 -18.76 m/s2). The vibration is dependent on the task, the operators grip and feed force employed etc.

NOTE: The above vibration levels were obtained from tri-axial measurements to comply with the requirements of "The Control of Vibration at Work Regulations 2005*" and the revisions to the (8662) now EN ISO 28927-9:2012 and EN ISO 20643:2005 series of standards. These values are at least 1.4 times larger than the values obtained from single axis measurements. *Based on European Union Council Directive 2002/44/EC (Physical Agents (Vibration) Directive)).

Machinery Directive Information:
This tool 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
EN ISO 11148-4: 2010 Hand Held Non-Electric (Non-Rotary

Percussive Tools)

This tool conforms with the following EC legislation: ATEX DIRECTIVE 2014/34/EU
Based on the following harmonised standards: EN60079-0:2018
EN ISO 80079-36:2016
EN ISO 80079-37

Notified Body: Element Material Technology LTD
Certificate Number: EMT19ATEX0020X

If your company has any problem with our products or would like to discuss the possibility of an improvement being made to them, then please do not hesitate to contact us. Your comments are both important and appreciated.

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.

The use of non-Trelawny spare parts will invalidate the ATEX certification and also the warranty.
Trelawny SPT Ltd
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Telephone: +44 (0) 1926 883781 – Fax +44 (0) 1926 450352
Email: sales@trelawny.co.uk

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VERY IMPORTANT
Only the Tool Assembly is ATEX certified and any packaging comes with the tool is not covered by the certification

DEALER STAMP:

NEED TO CONTACT US?

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Manual Part Number:
735.3608