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)

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

Managing Director,

Rob Chapman,

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

DOCUMENT No. Q.577
**General Information**

Before operating Trelawny Triple 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 Scabbler 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 Triple 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 14.2lps (30cfm), (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 (90 p.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.

**Piston removal**
Hold the Pistons (avoid clamping on the ground surfaces) in a soft fibre jawed vice, with the Backhandle uppermost and the main Handle away from you.  
Remove the four Allen headed screws securing the overhead handle or weight.

Remove the three O’Rings (18) and Cylinder Nylon Pads (17) from top of the cylinders.  
Discard the O’Rings and replace with new.

Remove tool from the vice. From the bottom of the body, push up on the cutter head end of the Piston (16).  
Inspect all parts for wear, particularly the Cylinder Sleeve (15) bores.

Check the Pistons ground diameters, and tungsten carbide tips for wear.

Check the ground surfaces on both the Cylinder Sleeves and Pistons for wear, and for score marks caused by grit or other foreign bodies.

Replace any worn components or any showing signs of scoring as necessary.

**Note:** For most applications, the expected life of the tungsten carbide cutters 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) uppermost.

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.

Fit the cylinder Nylon Pads (17) on top of the pistons cylinder bore with its stepped section uppermost, then fit new O’Rings (18) on top of the cylinder Nylon Pads.

Screw down the Backhandle (19) evenly, use a medium strength thread locking adhesive on the first few threads of each of the 4 x M8 cap head screws (20) such as Loctite 243, tighten using a 6mm Allen key.

**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.
## TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>Poor performance or lack of power</th>
<th>Low air pressure.</th>
<th>Ensure that the air pressure is correct at 90psi, max 100psi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If tool has been left for some time without use, the oil may dry out slightly causing a sticky residue.</td>
<td>Strip tool down and re-oil.</td>
<td></td>
</tr>
<tr>
<td>Tool worn out, can you feel side ways movement between the piston and cylinder bore.</td>
<td>Replace the piston and cylinder, along with a new bush seal.</td>
<td></td>
</tr>
</tbody>
</table>

| 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. Do not use quick release couplings to switch tool off. |

### PARTS LIST

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>615.3021</td>
<td>Valve Cap</td>
</tr>
<tr>
<td>2</td>
<td>809.0139</td>
<td>O’Ring - Valve Cap</td>
</tr>
<tr>
<td>3</td>
<td>712.3022</td>
<td>Valve Spring</td>
</tr>
<tr>
<td>4</td>
<td>618.3022</td>
<td>Valve Stem</td>
</tr>
<tr>
<td>5</td>
<td>809.0139</td>
<td>Square O’Ring - Valve Seat</td>
</tr>
<tr>
<td>6</td>
<td>423.5321</td>
<td>*Valve Body Assembly (includes items 1-8)</td>
</tr>
<tr>
<td>7</td>
<td>716.3000</td>
<td>Throttle Lever</td>
</tr>
<tr>
<td>7</td>
<td>716.1000</td>
<td>*Throttle Lever Safety</td>
</tr>
<tr>
<td>8</td>
<td>813.0108</td>
<td>Roll Pin</td>
</tr>
<tr>
<td>9</td>
<td>711.5301</td>
<td>Airline Adapter</td>
</tr>
<tr>
<td>10</td>
<td>624.5301</td>
<td>Tube Handle</td>
</tr>
<tr>
<td>11</td>
<td>717.3060</td>
<td>Rubber Grip (2 x required)</td>
</tr>
<tr>
<td>12</td>
<td>625.5301</td>
<td>Locknut</td>
</tr>
<tr>
<td>13</td>
<td>810.9000</td>
<td>Sealing Washer</td>
</tr>
<tr>
<td>14</td>
<td>411.6220</td>
<td>Standard Body (Includes item 15)</td>
</tr>
<tr>
<td>15</td>
<td>613.5370</td>
<td>Sleeve (3 x required)</td>
</tr>
<tr>
<td>16</td>
<td>612.6010</td>
<td>Piston One Piece - TCT Bush Hammer (Fitted as standard) (3 x required)</td>
</tr>
<tr>
<td>16</td>
<td>612.6000</td>
<td>*Piston One Piece - TCT Cruciform (3 x required)</td>
</tr>
<tr>
<td>17</td>
<td>615.6005</td>
<td>Nylon pad (3 x required)</td>
</tr>
<tr>
<td>18</td>
<td>809.6229</td>
<td>Cylinder O’Ring (3 x required)</td>
</tr>
<tr>
<td>19</td>
<td>611.6040</td>
<td>Backhandle</td>
</tr>
<tr>
<td>20</td>
<td>806.0830</td>
<td>M8 x 30 cap head Screw (4 x required)</td>
</tr>
<tr>
<td>20</td>
<td>806.1000</td>
<td>*3/8” Bore Hose (10 metre)</td>
</tr>
<tr>
<td>20</td>
<td>806.3000</td>
<td>*3/8” Bore Hose (30 metre)</td>
</tr>
</tbody>
</table>

*Items not shown on exploded diagram*
### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th><strong>Piston Diameter</strong></th>
<th>27.5mm (1.08&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Piston Length</strong></td>
<td>87.4mm (3.44&quot;)</td>
</tr>
<tr>
<td><strong>Piston Stroke</strong></td>
<td>39.8mm (1.57&quot;)</td>
</tr>
<tr>
<td><strong>Blows Per Minute</strong></td>
<td>2800</td>
</tr>
<tr>
<td><strong>Air Consumption</strong></td>
<td>7.5 lps (16cfm)</td>
</tr>
<tr>
<td><strong>Air Pressure</strong></td>
<td>6.2 bar (90 psi)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Length</strong></th>
<th>460mm (18.0&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Height</strong></td>
<td>220mm (8.6&quot;)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>4.8 kg (10.4 lbs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Noise Level</strong></th>
<th>L_{PA} dB (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L_{PA} dB (A)</strong></td>
<td>98.5</td>
</tr>
</tbody>
</table>

### TRIPLE SCABBLER BACK HANDLE

<table>
<thead>
<tr>
<th><strong>Vibration Level Bush Piston (Trigger Hand)</strong></th>
<th>15.53 m/s² (K= 4.14m/s²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td>48.49 m/s² (K= 5.43m/s²)</td>
</tr>
<tr>
<td><strong>Vibration Level Cruciform Piston (Trigger Hand)</strong></td>
<td>13.31 m/s² (K= 2.37m/s²)</td>
</tr>
<tr>
<td><strong>Primary</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td>46.55 m/s² (K= 7.38m/s²)</td>
</tr>
</tbody>
</table>

Declared vibration emission value are in accordance with BS EN ISO 28927 and BS EN ISO 20643
(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 the back handle tool is expected to be between 48.5m/s² - 67.9m/s².
Because of various factors, the range of vibration emission during intended use of the vibration reduced tool is expected to be between 20.07m/s² - 28.1m/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: 1999
Vibration measured in accordance with: EN ISO 28927 and EN ISO 20643

**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 1148-4:2010

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.