

TEXAS PNEUMATIC TOOLS, INC.

Service, Operation AND Parts Manual

PISTON SCALERS



T3 PISTON SCALER



S1 PISTON SCALER

TOOL
SPECIFICATIONS

| PART # | WEIGHT | LENGTH | CFM CONSUMED | BORE | STROKE | BPM | INLET | MINIMUM HOSE SIZE |
|--------|---------------------|-----------------|-----------------------|-----------------|-------------------|------|----------|-------------------|
| S1 | 4.5 lbs. 2.04 kg | 9" 228.6 mm | 9 CFM 254.9 l/min | 7/8" 22.2 mm | 13/16" 20.6 mm | 4000 | 3/8" NPT | 3/8" 10 mm |
| T3 | 8.3 lbs. 3.76 kg | 11" 279.4 mm | 15 CFM 424.8 l/min | 7/8" 22.2 mm | 13/16" 20.6 mm | 5200 | 3/8" NPT | 3/8" 10 mm |

~ Made in U.S.A. ~

www.airtools.com

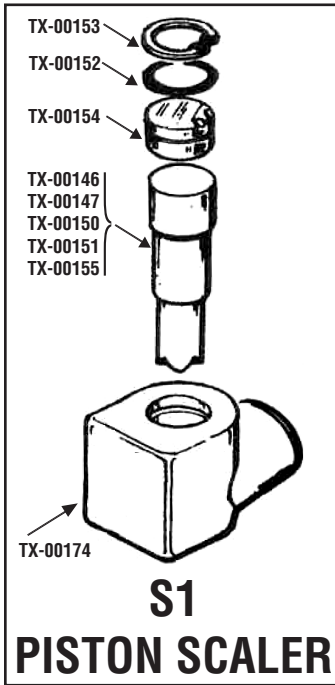
Email: tptinfo@airtools.com

TEXAS
1-800-231-9740
254-587-2533 (Int'l calls)

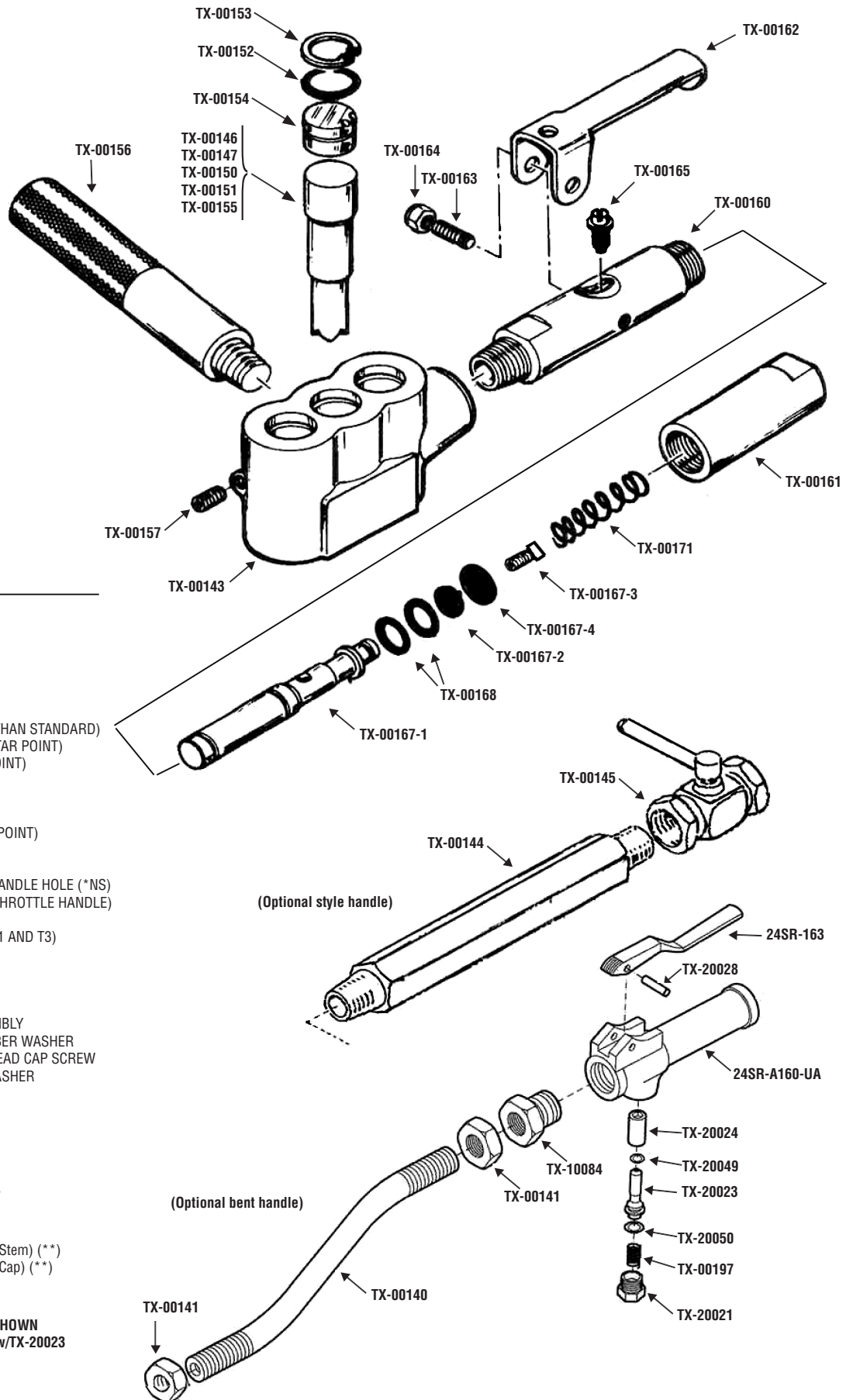
NEVADA
1-800-858-1222

VIRGINIA
1-800-626-1091

PISTON SCALERS



T3 PISTON SCALER



PART LIST

| PART # | DESCRIPTION |
|--------------|--|
| TX-00140 | BENT HANDLE PIPE |
| TX-00141 | JAM NUT |
| TX-00143 | BODY (T3) |
| TX-00144 | AIR HANDLE |
| TX-00145 | AIR COCK |
| TX-00146 | STANDARD STEEL PISTON |
| TX-00147 | STEEL PISTON (2" LONGER THAN STANDARD) |
| TX-00150 | CARBIDE TIPPED PISTON (STAR POINT) |
| TX-00151 | REXALLOY PISTON (STAR POINT) |
| TX-00152 | RING SEAL FOR PLUG |
| TX-00153 | RETAINER RING FOR PLUG |
| TX-00154 | NYLON PLUG |
| TX-00155 | REXALLOY PISTON (CHISEL POINT) |
| TX-00156 | SUPPORT HANDLE (T3) |
| TX-00157 | PIPE PLUG FOR BODY (T3) |
| TX-00158 | ½" PIPE PLUG - SUPPORT HANDLE HOLE (*NS) |
| TX-00159 | SNAP HANDLE COMPLETE (THROTTLE HANDLE) |
| TX-00160 | SNAP HANDLE BODY |
| TX-00161 | SNAP HANDLE BODY END (S1 AND T3) |
| TX-00162 | THROTTLE LEVER |
| TX-00163 | PIVOT SCREW |
| TX-00164 | PIVOT SCREW NUT |
| TX-00165 | OPERATING STUD |
| TX-00167-1 | SNAP HANDLE VALVE ASSEMBLY |
| TX-00167-2 | THROTTLE VALVE FLAT RUBBER WASHER |
| TX-00167-3 | THROTTLE VALVE SOCKET HEAD CAP SCREW |
| TX-00167-4 | METAL CAP FOR RUBBER WASHER |
| TX-00168 | RING SEAL FOR VALVE |
| TX-00171 | VALVE SPRING |
| TX-00174 | BODY (S1) |
| TX-00197 | THROTTLE VALVE SPRING |
| TX-10084 | BRASS BUSHING |
| TX-20021 | THROTTLE CAP |
| TX-20023 | THROTTLE VALVE ASSEMBLY |
| TX-20024 | THROTTLE VALVE BUSHING |
| TX-20028 | LEVER PIN |
| TX-20049 | THROTTLE VALVE "O" RING (Stem) (**) |
| TX-20050 | THROTTLE VALVE "O" RING (Cap) (**) |
| 24SR-163 | LEVER |
| 24SR-A160-UA | BODY |

* NS - NOT SHOWN
 ** Included w/TX-20023

Service and Operations

AIR SUPPLY

For efficient performance, a regulated supply of clean, dry air is required (90 p.s.i. at the tool). Most air tools will give superior service if the air is moisture free and lubricated, plus down time will be minimized. If the compressor is pumping excessive water, a cooler or moisture separator (TX-MSS-400 or TX-MSS-800) should be attached to the compressor or air line. A filter, pressure regulator and Texas Pneumatic in-line lubricator (TX-OL) should be part of the air line system to the tool. The air supply line should be a minimum 3/8" I.D. hose with no restrictive couplings or fittings in the hose line. If quick disconnect air couplings are used, they should definitely be separated from the tool by the use of a hose whip (TX-2HW).

LUBRICATION

An in-line lubricator such as the Texas Pneumatic TX-OL is recommended. If an automatic lubricator is not used, it is recommended before using and after 2-3 hours use, to pour several drops of oil into the air inlet port. Texas Pneumatic lubricating oil (TX-PL001) or 5 wt. oil of good grade is recommended. A heavy oil will cause loss of power and efficiency. In the matter of preventative maintenance, Texas Pneumatic tool flush (TX-TF001) of similar solvent can be used to flush the tool. Add a couple of teaspoons to air inlet port and operate the tool for a few seconds. It may be necessary to do this several times. The above should be done anytime the piston scaler becomes sluggish or erratic or stops working. Flushing of the tool will most likely remove any foreign particles. After flushing and always before storage (this is most important if the air line has excessive moisture), the tool should be re-lubricated to prevent rust which will cause the tool to malfunction.

PREPARING FOR OPERATION

Piston scalers are hard hitting tools used to remove heavy layered corrosion or rust and for numerous other uses, such as removing dried concrete from inside concrete trucks or roughing concrete surfaces for refinishing. The type of pistons available are steel, Rexalloy and carbide tipped. The carbide tipped and Rexalloy pistons can be sharpened on a diamond wheel if desired. Last, but most importantly, safety glasses should be worn at all times while operating this or any other percussion tool.

T3 PISTON SCALER

The T3 Piston scaler has an interchangeable port for the snap handle (throttle handle-TX-00159) and the support handle (TX-00156). It can also be operated with only the throttle handle attached. It is necessary to use a pipe plug (TX-00158) in the hole not occupied by the throttle handle. To prevent any damage to the body and pistons, the tool should be held firmly against the work surface when in use. The throttle handle should be checked occasionally to make sure it is screwed tight into the body. This applies to all other handles or pipe plugs for both type piston scalers. To disassemble, take the retaining ring (TX-00153) off the top of the nylon plug (TX-00154) and press piston (TX-00146 or others) on a work surface to remove nylon plug. Place a new ring seal (TX-00152) on the plug and reassemble in reverse order. The snap handle (throttle handle) is a durable design. To replace the throttle valve "O" rings (TX-00168), remove the snap handle body end (TX-00161). It is also necessary to remove the throttle lever (TX-00162) and the operating stud (TX-00165) from the snap handle body (TX-00160). The snap handle valve assembly (TX-00167-1) can be pulled from the body. Check the condition of the flat rubber washer (TX-00167-2) and replace if necessary. Replace by removing the socket head cap screw (TX-00167-3). The flat rubber washer will fit inside the metal cap (TX-00167-4). Please note, older designs used a nylon washer (TX-00170) and clip ring (TX-00169) on the old style throttle valve body (TX-00167). The new throttle valve (TX-00167-1) replaces the old design with no changes to any of the other throttle valve body parts. When reinstalling the throttle valve into the throttle valve body (TX-00160), carefully push valve into the body using pneumatic lubricating oil (TX-PL001) so the "O" rings (TX-00168) will not be cut on the openings of the body for the operating stud (TX-00165) or the pivot screws (TX-00163). It is advisable to use a drop of Loctite (blue) on the threads of the operating stud and pivot screws when re-assembling. A drop of Loctite should also be used when assembling the socket head cap screw (TX-00167-3) into the throttle valve (TX-00167-1).

S1RK S1 PISTON SCALER REPAIR KIT

INCLUDES:

- 1 TX-00146 STANDARD STEEL PISTON
- 1 TX-00152 RING SEAL FOR PLUG
- 1 TX-00153 RETAINER RING FOR PLUG
- 1 TX-00154 NYLON PLUG
- 1 TX-00165 OPERATING STUD
- 1 TX-00168 THROTTLE VALVE "O" RING
- 1 TX-00171 VALVE SPRING

T3RK T3 PISTON SCALER REPAIR KIT

INCLUDES:

- 3 TX-00146 STANDARD STEEL PISTONS
- 3 TX-00152 RING SEAL FOR PLUGS
- 3 TX-00153 RETAINER RING FOR PLUGS
- 3 TX-00154 NYLON PLUGS
- 1 TX-00165 OPERATING STUD
- 2 TX-00168 THROTTLE VALVE "O" RING
- 1 TX-00171 VALVE SPRING

PISTON TYPES

STANDARD STEEL PISTON

- TX-00146
- TX-00147 (2 INCHES LONGER)

CARBIDE TRIPPED PISTON

- TX-00150 (STAR POINT)

REXALLOY PISTON

- TX-00151 (STAR POINT)
- TX-00155 (CHISEL POINT)

PISTON SCALER MODELS:

S1 SINGLE PISTON SCALER

- S1-150 SINGLE PISTON SCALER w/TX-00150 CARBIDE TIP PISTON
- S1-151 SINGLE PISTON SCALER w/TX-00151 REXALLOY PISTON
- S1-AC SINGLE PISTON SCALER w/AIR COCK HANDLE
- S1-AC-151 SINGLE PISTON SCALER w/AIR COCK HANDLE & TX-00151 REXALLOY PISTON
- S1-BH SINGLE PISTON SCALER w/BENT HANDLE
- S1-BH-151 SINGLE PISTON SCALER w/BENT HANDLE & TX-00151 REXALLOY PISTON
- S1-BH-AC SINGLE PISTON SCALER w/BENT HANDLE & AIR COCK HANDLE
- S1-BH-AC-151 SINGLE PISTON SCALER w/BENTHANDLE, AIR COCK & TX-00151 REXALLOY PISTON

T3 TRIPLE PISTON SCALER

- T3-150 TRIPLE PISTON SCALER w/TX-00150 CARBIDE TIP PISTONS
- T3-151 TRIPLE PISTON SCALER w/TX-00151 REXALLOY PISTONS
- T3-AC TRIPLE PISTON SCALER w/AIR COCK HANDLE
- T3-AC-151 TRIPLE PISTON SCALER w/AIR COCK HANDLE & TX-00151 REXALLOY PISTONS
- T3-BH TRIPLE PISTON SCALER w/BENT HANDLE
- T3-BH-151 TRIPLE PISTON SCALER w/BENT HANDLE & TX-00151 REXALLOY PISTONS
- T3-BH-AC TRIPLE PISTON SCALER w/BENT HANDLE & AIR COCK HANDLE
- T3-BH-AC-151 TRIPLE PISTON SCALER w/BENT HANDLE, AIR COCK & TX-00151 REXALLOY PISTONS

REXALLOY SCALER PISTONS are machined from solid cobalt alloy. REXALLOY pistons afford ignition protection within the tool and on the work surface.

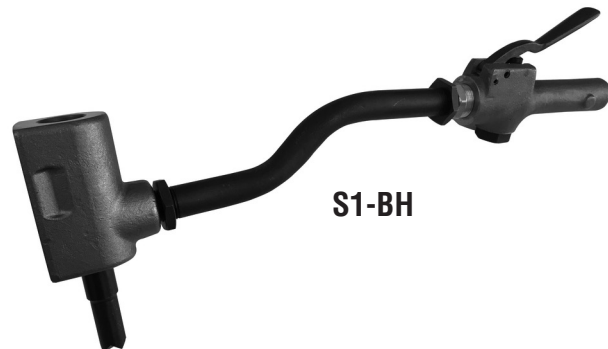
- *Certified spark resistant by OSHA*
- *Meets U.S. Navy parameters*
- *Non-magnetic*
- *Hardness: 58-63 Rockwell C*
- *Tensile Strength: 50-60,000 P.S.I.*
- *Solid one-piece tool bit*
- *Can be Re-sharpened*
- *Available in star & chisel point*

**REXALLOY is a registered trade mark.*

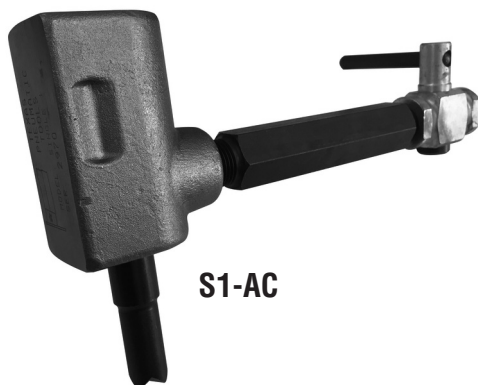
**** Made in U.S.A. ****



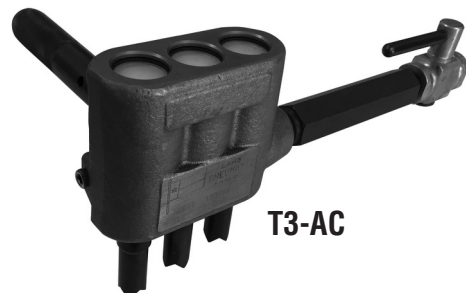
T3-BH



S1-BH



S1-AC



T3-AC