

TEXAS PNEUMATIC TOOLS, INC.

TX-CHRK

CHIPPING HAMMER THROTTLE REPAIR KIT INSTRUCTIONS

The tools in this kit have been designed to remove and reinstall the Throttle Valve and Push Pin Bushings in various models of Chipping Hammers manufactured by the following companies: *Texas Pneumatic Tools, American Pneumatic, Continental, Chicago Pneumatic (except Simplate tools), Harper, Ingersoll-Rand, Jet, Kent and Thor.*

- There is no particular sequence for removing or replacing the Throttle Valve Bushing (TX-01004) or the Push Pin Bushing (TX-01007).
- The Push Pin Bushing (TX-01007) might separate during removal because the major thread diameter of the Push Pin Bushing Tap (TX-CHRK-09) is very close to the outer diameter of the Push Pin Bushing. If this happens, remove the first piece and repeat the steps for the second.
- All handles are not the same even if purchased from the same manufacturer. The critical dimension is the distance between the bottom end (larger diameter) of the Throttle Valve Bushing (TX-01004) and the end of the Push Pin Bushing closest to it. When assembled, the Throttle Valve (TX-01003) should not bottom out against the end of the Throttle Valve Push Pin (TX-01006) or Push Pin Bushing before it has a chance to seat within the Throttle Valve Bushing. Normally, if the Push Pin Bushing extends 1/8" to 3/16" into the slot for the Throttle Lever (TX-01010), the Throttle will work as designed.
- As mentioned above, all handles are slightly different. Use the Setting Tool (TX-CHRK-03) to press the Throttle Valve Bushing into position. The bottom edge of the knurled portion of the Setting Tool will align with the beginning of the threads in the throttle port of the handle. To ensure the correct positioning for the Throttle Valve Bushing, insert the Throttle Valve Push Pin, Throttle Valve and Throttle Valve Spring (TX-01002) into the handle. Screw the Throttle Valve Plug (TX-01001) into the port and check the distance between the Throttle Lever and the Throttle Valve Push Pin. The Throttle Lever should be relaxed with approximately 1/8" of play. If there is no play between the Throttle Lever and the Throttle Valve Push Pin, the tool could idle when compressed air is connected. If there is too much play, the Throttle Valve Push Pin will not engage the Throttle Valve with enough length to allow maximum compressed air flow to the tool.
- It is necessary to start over if the bushing is pressed in too far.

TX-CHRK PARTS LIST

PLASTIC CASE
THROTTLE VALVE BUSHING PULLER
PUSH PIN BUSHING PULLER
SETTING TOOL
BEARING FIXTURE ASSEMBLY (05, 06, 14 & 15)
BEARING FIXTURE HOUSING
BEARING FIXTURE RETAINING RING
HEX NUT
THROTTLE VALVE BUSHING TAP
PUSH PIN BUSHING TAP
PUSH PIN BUSHING REAMER
TAP GUIDE BUSHING (Larger ID Hole)
REAMER GUIDE BUSHING (Smaller ID Hole)
PUSH PIN BUSHING REAMER (For IR Tools)
THRUST BEARING
THRUST BEARING RACE

TX-CHRK-00
TX-CHRK-01
TX-CHRK-02
TX-CHRK-03
TX-CHRK-04
TX-CHRK-05
TX-CHRK-06
TX-CHRK-07
TX-CHRK-08
TX-CHRK-09
TX-CHRK-10
TX-CHRK-11
TX-CHRK-12
TX-CHRK-13
TX-CHRK-14
TX-CHRK-15

THROTTLE PARTS LIST

THROTTLE VALVE PLUG TX-01001
THROTTLE VALVE SPRING TX-01002
THROTTLE VALVE WITH "O" RING TX-01003
THROTTLE VALVE BUSHING TX-01004
THROTTLE VALVE "O" RING TX-01005
THROTTLE VALVE PUSH PIN TX-01006
PUSH PIN BUSHING TX-01007
7/8" - 24 x 3/8" FPT PERMANENT BUSHING TX-01008
THROTTLE LEVER PIN TX-01009
THROTTLE LEVER TX-01010
STOP PIN TX-01017
I-R THROTTLE VALVE HH-602*
I-R THROTTLE VALVE BUSHING HH-603*
I-R THROTTLE VALVE PUSH PIN HH-604*
I-R PUSH PIN BUSHING HH-605*

~ Made in U.S.A. ~

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Email: tptinfo@airtools.com

TEXAS

1-800-231-9740

NEVADA

1-800-858-1222

VIRGINIA

1-800-626-1091

MICHIGAN

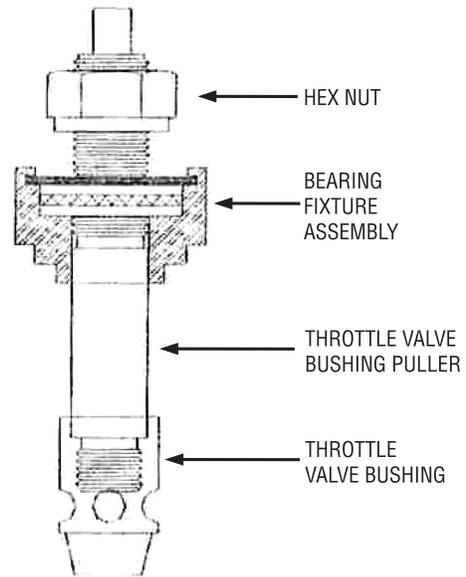
1-877-575-5733

254-587-2533 (Int'l calls)

CHIPPING HAMMER THROTTLE REPAIR KIT INSTRUCTIONS

THROTTLE VALVE BUSHING REMOVAL

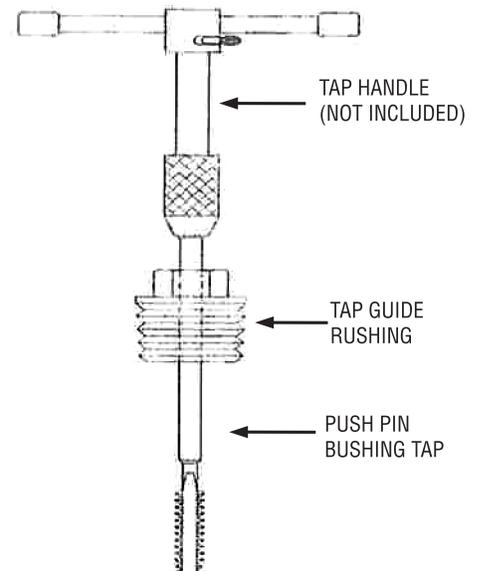
1. Remove the **Throttle Valve Plug (TX-01001)**, **Throttle Valve Spring (TX-01002)**, **Throttle Valve w/ "O" Ring (TX-01003)** and **Throttle Valve Push Pin (TX-01006)**.
2. Place the **Throttle Valve Bushing Tap (TX-CHRK-08)** in the throttle port of the chipping hammer handle. Due to the length of the throttle on the **Throttle Valve Bushing Tap**, the **Tap Guide Bushing** cannot be used for this step.
3. Use a tap handle (Not Included) and the **Throttle Valve Bushing Tap (larger tap) (TX-CHRK-08)** to cut threads into the seat of the **Throttle Valve Bushing (TX-01004)**. There will only be 2.5 to 3 threads when finished.
4. Screw the **Throttle Valve Bushing Puller (TX-CHRK-01)** into the newly tapped threads until tight against the bottom.
5. Slide the **Bearing Fixture Assembly (TX-CHRK-04)** over the **Throttle Valve Bushing Puller (TX-CHRK-01)** until it rests against the throttle port of the chipping hammer handle.
6. Screw the **Hex Nut (TX-CHRK-07)** on the **Throttle Valve Bushing Puller (TX-CHRK-01)** until it tightens against the **Bearing Fixture Assembly (TX-CHRK-04)**.
7. Use a wrench (3/4") to tighten the **Hex Nut (TX-CHRK-07)** until the **Throttle Valve Bushing (TX-01004)** is pulled from the handle. A small wrench may be necessary to hold the top end of the **Throttle Valve Bushing Puller (TX-CHRK-01)** while tightening the **Hex Nut (TX-CHRK-07)**.



PUSH PIN BUSHING REMOVAL

NOTE: It is not necessary to remove the **Throttle Valve Bushing (TX-01004)** in order to remove and reinstall the **Push Pin Bushing (TX-01007)**.

1. Remove the **Throttle Valve Plug (TX-01001)**, **Throttle Valve Spring (TX-01002)**, **Throttle Valve w/ "O" Ring (TX-01003)** and **Throttle Valve Push Pin (TX-01006)**.
2. Place the **Tap Guide Bushing (TX-CHRK-11)** over the shank of the **Push Pin Bushing Tap (Smaller Tap) (TX-CHRK-09)** and screw the **Tap Guide Bushing** into the throttle port of the chipping hammer handle. The **Tap Guide Bushing** only needs to be finger tight. See Adjacent Illustration



CHIPPING HAMMER THROTTLE REPAIR KIT INSTRUCTIONS

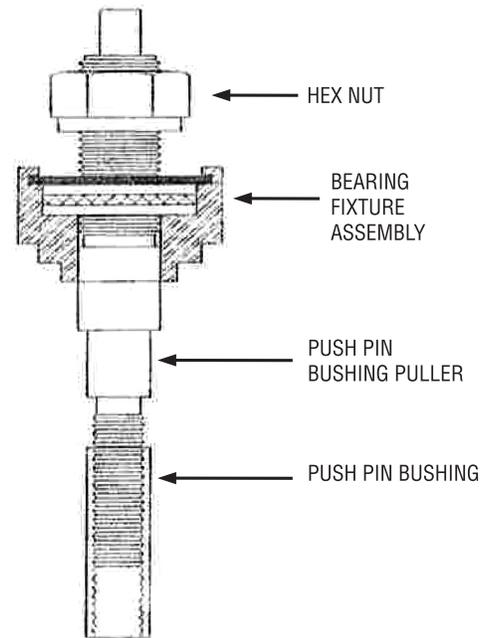
3. Use a tap handle (Not Included) and the **Push Pin Bushing Tap (TX-CHRK-09)** to cut threads into the **Push Pin Bushing (TX-01007)**. The threads must be cut the full length of the bushing. Remove the **Tap Guide Bushing** and **Push Pin Bushing Tap** when complete.

4. Screw the **Push Pin Bushing Puller (TX-CHRK-02)** into the newly tapped threads until it tightens against the **Push Pin Bushing (TX-01007)**

5. Slide the **Bearing Fixture Assembly (TX-CHRK-04)** over the **Push Pin Bushing Puller (TX-CHRK-02)** until it rests against the throttle port of the chipping hammer handle

6. Screw the **Hex Nut (TX-CHRK-07)** on the **Push Pin Bushing Puller (TX-CHRK-02)** until it tightens against the **Bearing Fixture Assembly (TX-CHRK-04)**.

7. Use a wrench (3/4") to tighten the **Hex Nut (TX-CHRK-07)** until the **Push Pin Bushing (TX-01007)** is pulled from the handle. A small wrench may be necessary to hold the top end of the **Push Pin Bushing Puller (TX-CHRK-02)** while tightening the **Hex Nut (TX-CHRK-07)**. As mentioned at the beginning of this manual, the **Push Pin Bushing** might separate during the removal process. If this happens, repeat **Steps 2 through 7** to remove all pieces of the **Push Pin Bushing**.



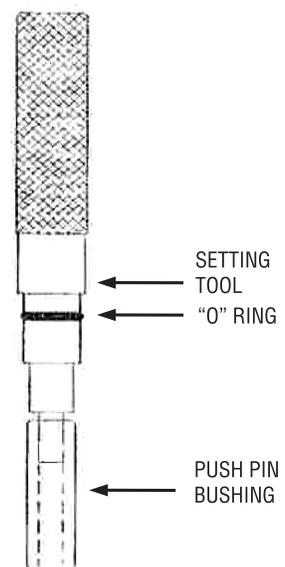
PUSH PIN BUSHING INSTALLATION

1. Set the new **Push Pin Bushing (TX-01007)** into the throttle port of the chipping hammer handle and allow it to rest at the starting point of its press fit location.
2. Place the **Setting Tool (TX-CHRK-03)** in the throttle port and allow the end to be inserted into the new **Push Pin Bushing (TX-01007)**.

NOTE: If you have not removed or have already installed the **Throttle Valve Bushing (TX-01004)**, proceed as instructed. The **Setting Tool (TX-CHRK-03)** is designed to seat the **Push Pin Bushing** even if the **Throttle Valve Bushing** is in place.

3. Center the **Setting Tool (TX-CHRK-03)** in the throttle port and begin tapping the new **Push Pin Bushing (TX-01007)** into its press fit position. It is recommended to use a smooth face, 24 oz. hammer for best results.

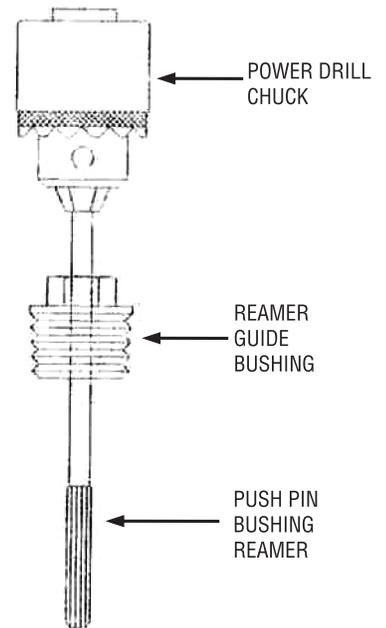
NOTE: Heating the chipping hammer handle and freezing the **Push Pin Bushing** will make this step easier. The heat will slightly expand the handle and freezing will contract the bushing.



CHIPPING HAMMER THROTTLE REPAIR KIT INSTRUCTIONS

REAMING THE PUSH PIN BUSHING

1. Place the **Reamer Guide Bushing (TX-CHRK-12)** over the shank of the **Push Pin Bushing Reamer (TX-CHRK-10)** and screw the **Reamer Guide Bushing** into the throttle port of the chipping hammer handle. The **Reamer Guide Bushing** only needs to be finger tight.
2. Tighten the chuck of a power drill onto the **Push Pin Bushing Reamer** shank. Ream the **Push Pin Bushing** with one full, easy stroke. Remove the **Reamer Guide Bushing** and **Push Pin Bushing Reamer** from the throttle port of the chipping hammer.
3. Check the bore of the **Push Pin Bushing (TX-01007)** with a new **Push Pin (TX-01006)**.
4. If necessary, repeat **Steps 1 through 3** until a satisfactory fit is achieved.



THROTTLE VALVE BUSHING INSTALLATION

1. Place a new **Throttle Valve Bushing (TX-01004)** over the end of the **Setting Tool (TX-CHRK-03)**. The "O" ring on the **SETTING TOOL** is used to help keep the **Throttle Valve Bushing** in place when placing it into the throttle port of the chipping hammer handle.
2. Center the **Setting Tool (TX-CHRK-03)** in the throttle port and begin tapping the new **Throttle Valve Bushing (TX-01004)** into its press fit position. It is recommended to use a smooth face, 24 oz. hammer for best results.

NOTE: Heating the chipping hammer handle and freezing the **Throttle Valve Bushing** will make this step easier. The heat will slightly expand the handle and freezing will contract the bushing.

- * **ADDITIONAL NOTE:** When removing and installing **Push Pin Bushings** and **Throttle Valve Bushings** on Ingersoll Rand (IR) Chipping Hammer Handles, substitute the IR part number for the Texas Pneumatic part number with a corresponding description. It will also be necessary to use the **Push Pin Bushing Reamer (TX-CHRK-13)** for the Ingersoll Rand **Push Pin Bushing (HH605)**.

