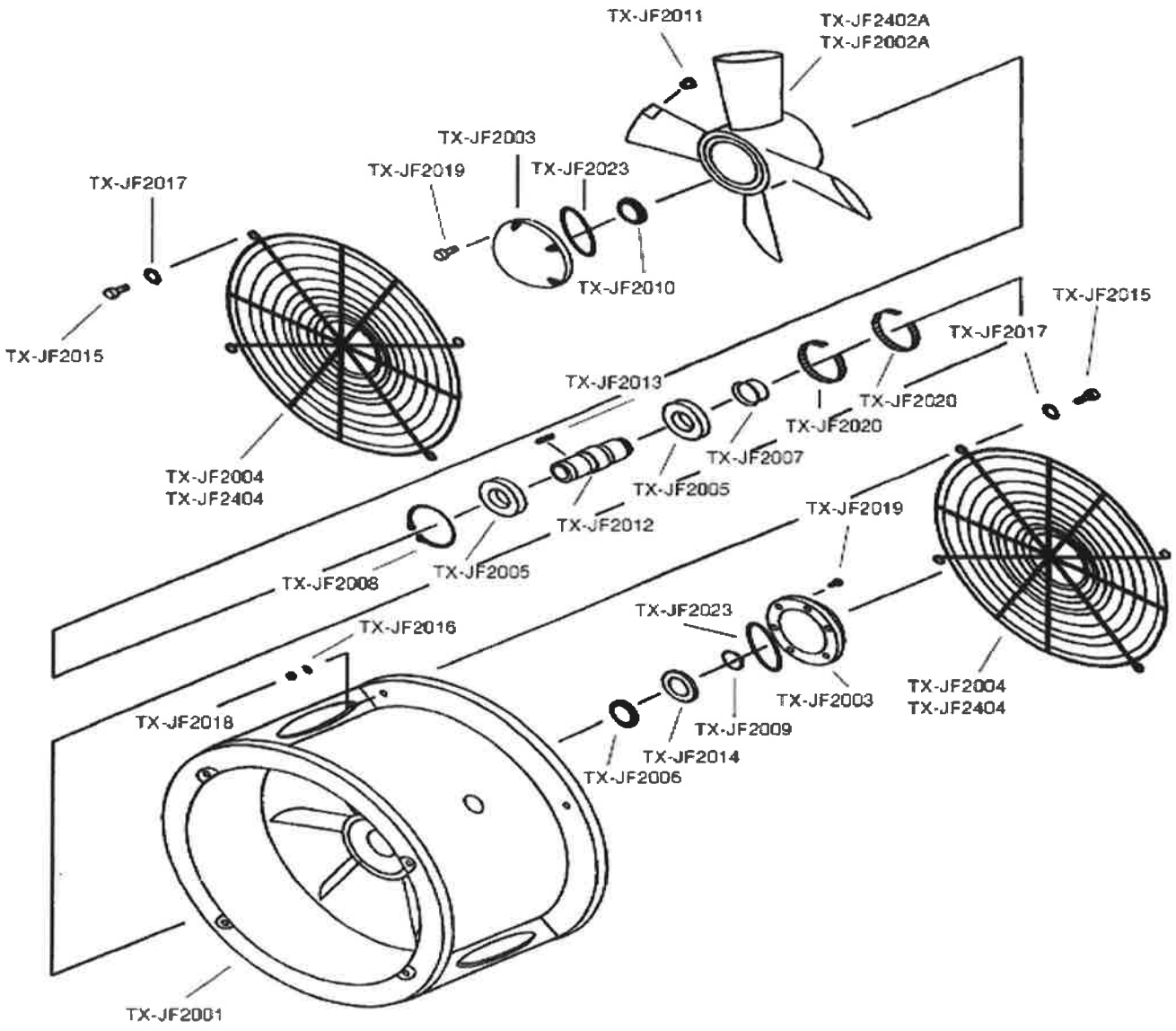
TEXAS PNEUMATIC TOOLS, INC.

20” & 24” Jet Fan Tool Kit

Disassembly/Assembly Instructions

Model No. TX-JFTK

Parts Breakdown



1 Disassembly

- Remove both fan screens from housing.
- Remove fan blade end cap and stationary housing end cap (TX-JF2019).
- Use Part No.TX-JF2022 (Bear Hug Socket) to remove Part No.TX-JF2010 (Bear Hug Nut). Place socket over nut and secure tips into notches on side of nut. (See Figure 1)

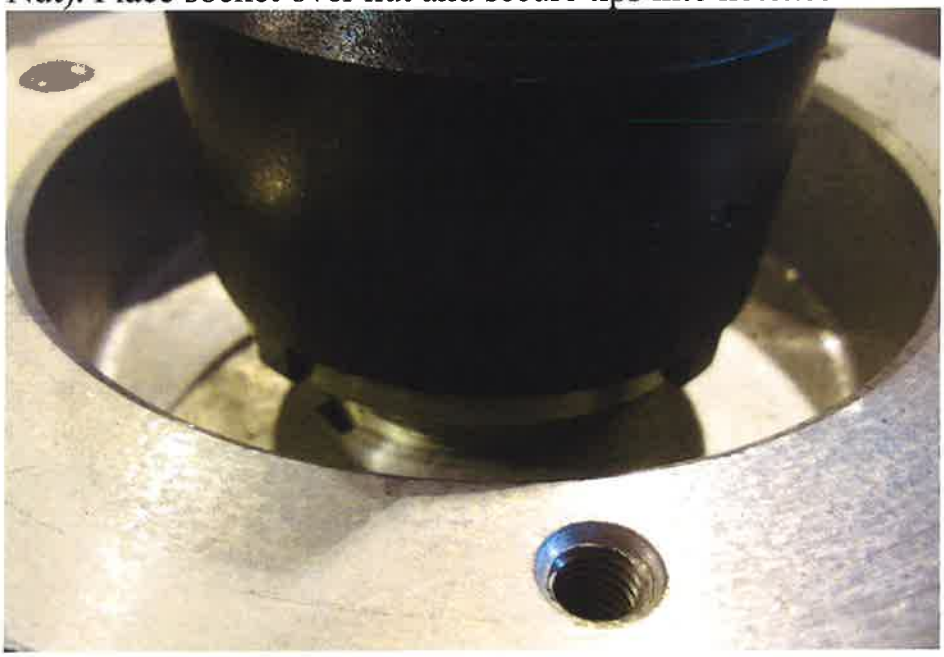


Figure 1

- Place Bear Hug Socket Holder (TX-JF2025) over Bear Hug Socket and secure into fan hub. (See Figure 2)

Figure 2

- Wedge Shaft Removal Tool (TX-JF2026) between fan blade and guide vane strut of stationary housing to prevent blade from rotating when removing bear hug nut.
- After the bear hug nut has been removed, make sure the shaft threads are clean and that no burrs or extrusions exist on the shaft. This will ease in the removal of the fan blade.
- Remove fan blade from shaft using a bearing puller. If a bearing puller is not available, a rubber mallet may be required to help extract fan blade from shaft. (from the reverse side, use a flat punch and rubber mallet with alternating blows)
- Once the fan blade has been removed, the large snap ring (TX-JF2008) is exposed. Use large snap ring pliers to remove snap ring.
- On the opposite side, use a smaller set of snap ring pliers to remove small snap ring (TX-JF2009).
- Once the small snap ring has been removed, the locking safety shield (TX-JF2014) can be removed.
- The shaft and bearing assembly can now be pressed out of the housing using the Shaft Removal Tool (TX-JF2026). Do not apply extreme pressure when pressing or stationary hub guide vanes may fracture. (See Figure 3)
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Figure 3

- Use TX-JF2030 (3/32" Seal Removal Tool) to remove the air seal (TX-JF2006) from the stationary housing. (See Figure 4)

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Figure 4

- Remove bearing tolerance rings (TX-JF2020) from inside bearing housing and dispose. **Tolerance rings cannot be reused.**
- Use a bearing puller to remove the bearings from the shaft. Bearing Puller Shaft Insert (TX-JF2029) is used with bearing puller to help with bearing removal. The speedy sleeve (TX-JF2007) can also be removed from the shaft at this point. (See Figure 5) Once removed, the speedy sleeve can not be reused.
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Figure 5

- Clean all necessary parts for reassembly.

2 Assembly

- For best results, use Jet Fan Repair Kit (TX-JFRK) to ensure original replacement parts and all components meet original standards.
- Make sure end caps and fan hub gaskets (TX-JF2023) are smooth and free from nicks and tears.
- Press one bearing (TX-JF2005) using Bearing & Shaft Pressing Tool (TX-JF2027) on the side of the shaft opposite the threaded end. **DO NOT PRESS BEARING ON THREADED END AT THIS POINT.**
- Position the large flange of the speedy sleeve (TX-JF2007) toward the bearing and place speedy sleeve over the shaft behind the first bearing. (See Figure 6)
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Figure 6

- Use the Speedy Sleeve Pressing Tool (TX-JF2028) to press the speedy sleeve into place. **THE SPEEDY SLEEVE SHOULD NOT TOUCH THE BEARING.** The Speedy Sleeve Pressing Tool will position the speedy sleeve in the exact position. Make sure the sleeve is smooth to the shaft. Any nicks in the sleeve could cause damage to the air seal. (See Figure 7)

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Figure 7

- Insert one tolerance ring (TX-JF2020) into inner most groove of bearing housing. **DO NOT INSERT BOTH TOLERANCE RINGS AT THIS POINT.**
- Drop shaft containing one bearing and speedy sleeve into housing until it rests against the one installed tolerance ring.
- The outer most tolerance ring can now be installed.
- Drop second bearing over the shaft and pressing into housing using Bearing & Shaft Pressing Tool (TX-JF2027). Both bearings are pressed into place almost simultaneously. **(TOLERANCE RINGS ARE DESIGNED FOR ONE PRESSING ONLY. NEVER ATTEMPT TO PRESS INNER BEARING THROUGH OUTER TOLERANCE RING)** (See Figure 8)

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Figure 8

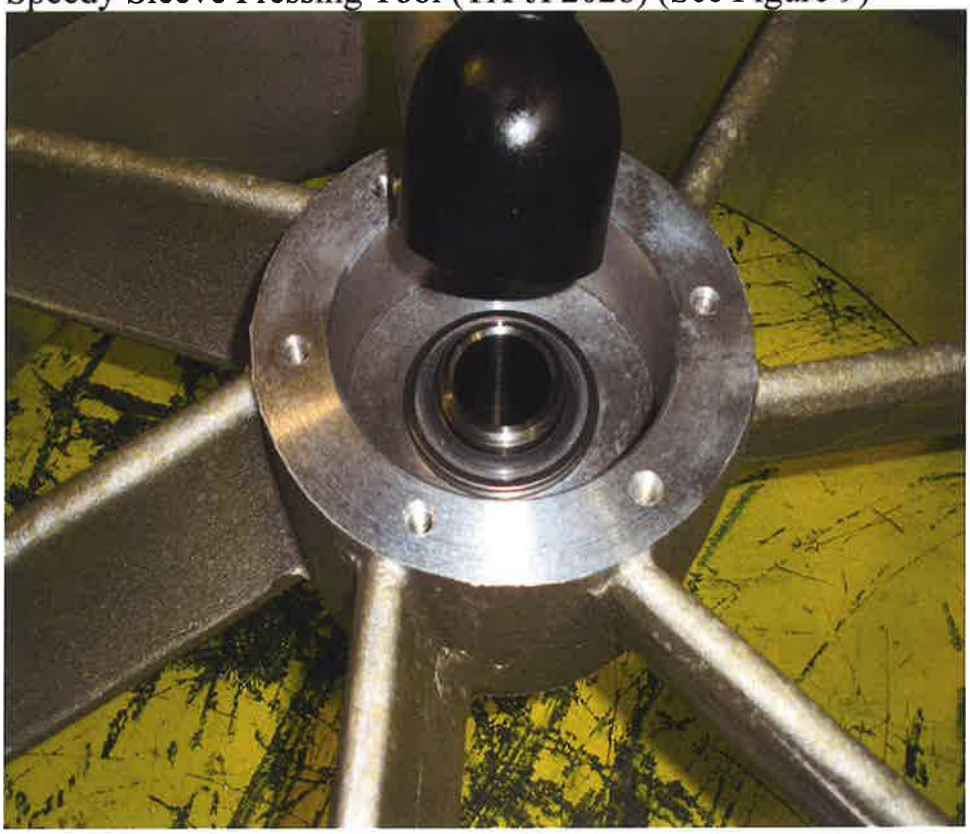
- Secure shaft assembly in housing with large snap ring (TX-JF2008).
- On the opposite side, insert air seal (TX-JF2006) into groove and seat firmly using the Speedy Sleeve Pressing Tool (TX-JF2028) (See Figure 9)
- 

Figure 9

- Place lock safety shield (TX-JF2014) over shaft and install small lock ring (TX-JF2009).

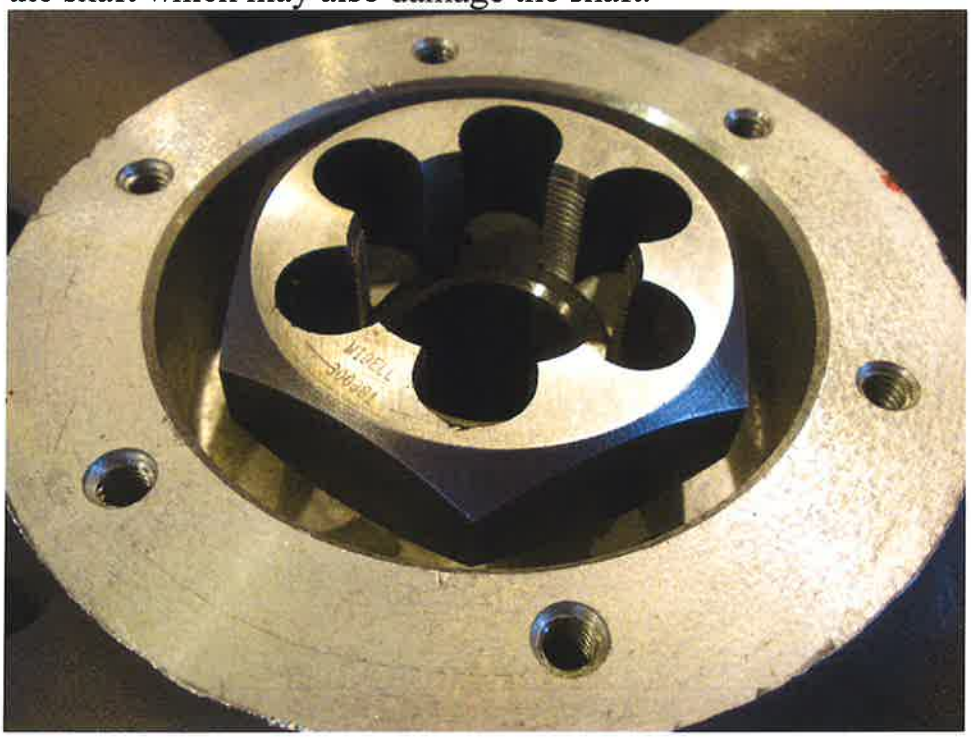
- Place gasket (TX-JF2023) and end cap (TX-JF2003) onto housing and secure. Alternate tightening of bolts to insure proper air seal. **DO NOT USE THE CAP REMOVED FROM THE FAN BLADE. THIS CAP HAS A TIMING MARK TO ENSURE PROPER BALANCE OF THE FAN BLADE.**
- Place shaft key (TX-JF2013) into slot and slide fan blade over shaft.
- Use rubber mallet to ensure that fan blade seats against bearing hub.
- Clean shaft threads using Shaft Thread Cleaning Tool (TX-JF2031) before installing bear hug nut. (See Figure 10) This is important because aluminum from the fan blade will usually be caught between the threads while placing fan blade onto shaft. If this material is not removed prior to installing the bear hug nut, it may cause galling of the nut and not allow for proper tightening. In addition, it may be necessary to cut the nut from the shaft which may also damage the shaft.
- 

Figure 10

- Secure fan housing to assembly table with clamps to keep housing from turning during bear hug tightening process. Use Shaft Removal Tool (TX-JF2026) to wedge between the fan blade and guide vane strut of the stationary housing to prevent fan blade from rotating during the tightening process. Tighten bear hug nut (TX-JF2010) onto shaft. Make sure the bear hug nut is tight against the blade.
- Install gasket (TX-JF2023) and end cap (TX-JF2003) onto blade. Alternate tightening of bolts to insure proper air seal. **BE SURE TO USE END CAP WITH TIMING MARK TO ENSURE PROPER BALANCE OF FAN BLADE. ALIGN TIMING MARK ON CAP WITH TIMING MARK ON FAN BLADE.**
- Install both fan guard screens (TX-JF2404) and test.
- Make sure grounding lug (AM7) is affixed to one of the fan guard screen bolts. The grounding lug is used with AM29 (grounding clamp with 6' wire) to discharge static during hazardous or explosive atmosphere use.

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