## #16 FIREDRAGON Field Notes ©

**#180 and #181 RIELLO Fan Puller** The RIELLO Fan Puller was designed to work with RIELLO burner fans, but also fits onto many residential oil and gas powerburner fans, both foreign and domestic.

The #180 and #181 also remove some HVAC fans and is great for powerventers and other small fan hubs. Fits fans with up to a one inch (1") diameter hub and requires a special short shank 4mm Allen wrench (supplied) and a 5mm Allen wrench (supplied). The puller is made of heavy duty materials for long life and was designed to work with our Multidrivers and our metric ball bits.

The Mini Fan Puller is used in the following manner on a RIELLO burner:

- 1. Provide clear access to the fan by removing the fan housing cover by removing the three screws holding the fan housing cover in place.
- 2. Loosen and remove the fan securing screw or bolt and remove it from the fan hub (screw design varies with model and date of manufacture).
- 3. Place the #180 onto the fan hub.
- 4. Align the longer 4mm screw with the access cut-out in the fan where the set screw was released and tighten screw.

## DO NOT OVERTIGHTEN.

5. Tighten the other two (short) of the three (3) securing screws to finger-tight and tighten an additional ½ turn with the 4mm Allen short angle wrench (supplied).

## DO NOT OVERTIGHTEN.

- 6. Loosen the long set screw, ½ turn, on the set screw where the fan set screw was removed.
- 7. Place a 5mm Allen wrench onto the top screw and turn clock-wise until the fan is free of the shaft, **Figure 1**. The Multidriver can have a box wrench slid over its shaft to apply more torque for frozen fans, **Figure 2**.
- 8. To re-install the RIELLO fan.
  - a. Replace the set screw into the fan and leave loosened.
  - b. Place the fan so that the outer edge of the fan hub is just flush with the tapered end of the motor shaft, Figure 3.
    If properly set, the fan and motor shaft should form a V shape.
  - c. Tighten the set screw and spin the fan to see that it turns freely.
- 9. Replace the fan housing cover and screws.
- 10. Before applying power and re-installing the pump make sure the fan turns freely without striking any of the burner housing or fan enclosure.



Figure 1



Figure 2

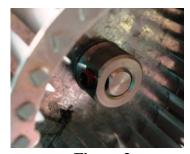


Figure 3