

AirMaxTM Mach <u>3 Power Unit Maintenance</u>

1

2

Maintenance tips that improve both performance and tool life

The AirMaxTM Mach 3 motor delivers high levels of torque over a wide range

of speeds. To keep the motor operating at peak

efficiency, it should be cleaned and inspected after every 80 hours of usage.

As long as there is no performance loss, most of the inspection of the air motor can be done without disassembly. However, if the operator mentions a loss in power, use the following procedure. For complete instructions refer to the AirMaxTM Mach 3 Operating Instructions.

Air Motor Disassembly

- 1. Tool and Maintenance Kit #185975 is required to dissemble a Mach 3 trimmer.
- 2. Unscrew retainer using the spanner wrench. Note: This is a left-hand thread and must be turned right (clockwise) to unscrew. Slide components out of handle. If parts don't slide out easily, tap the handle lightly against a plastic block to dislodge.
- 3. Separate the motor from the gear head and adapter.
- 4. Place the upper bearing plate removal clamps around the upper bearing as shown in *Figure 3*.
- 5. Using a hammer and plastic sleeve, tap the gear teeth cap until the rotor is free from the upper bearing plate. Figure 4. Remove the upper bearing and cylinder.
- 6. Remove vanes from the rotor and inspect for chipped or broken tips, grooves and vane height. Replace vanes with grooves more that .010" (.25 mm) deep or with a height less than .195" (.5 mm). Next, inspect the rotor for cracked, broken teeth, or excessive wear.

Inspect

- □ Clean buildup out of inlet and exhaust ports
- □ Check gear teeth for cracks or damage. Worn teeth are indicated by rounded or pointed tops
- □ Inspect guide pin to verify it is not bent
- □ Check the cylinder interior for grooves
- □ Replace any parts that are damaged or worn
- \Box Check vanes as shown in *Figure 5*



Mach 3 Air Motor

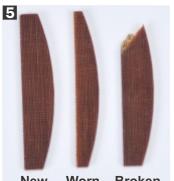
Adapter, Muffler Retainer

Note:

Left-hand thread



Place air motor in bearing plate assembly tool and tap to remove.





Make sure O-Ring is seated.

□ Verify the O-Ring is inplace inside handle *Figure 6*

New Worn Broken