# **Disassembly/Assembly Instructions – DynaPen**

Important: Manufacturer's warranty is void if tool is disassembled before warranty expires. Please refer to parts breakdown for part identification. Make sure parts have been cleaned and thoroughly inspected for damage prior to assembly.

# Important: Disconnect tool from power source before tool repair.

(All threads are right hand)

# **Collet Disassembly & Assembly Instructions**

#### Disassembly

- 1. Use 95731 8mm Open-End Wrench to remove 51657 Collet Cap.
- 2. Remove 51673 or 51659 Collet Insert.

#### Assembly

- 1. Place 51673 or 51659 in end of 10836 Arbor. It should be a very clean fit that does not stick. If it sticks thoroughly inspect, clean and polish as necessary.
- 2. Screw on 51657 Collet Cap.

# Front Housing Disassembly & Assembly Instructions

## Disassembly

- 1. Remove collet and collet insert per Collet Disassembly/Assembly Instructions above.
- 2. Remove 10841 Tactile Grip by sliding it over the front of the tool.
- 3. Secure tool in vise using padded jaws by clamping onto wrench flats of 10840 Rear Housing so that 10839 Front Housing is facing up.
- 4. Use a HOT AIR GUN to apply heat to mating area of 10839 and 10840.
- 5. Use a 5/8" open-end wrench to remove 10839 by turning it counter-clockwise.
- 6. Secure 10839 in vise using padded jaws so that it is facing down.
- 7. Use a HOT AIR GUN to apply heat to 10833 Cylinder.
- 8. Use a 3/8" open-end wrench to remove 10833 by turning 10835 by turning it counter-clockwise.
- 9. Push 10836 Arbor from housing, and then remove the o-rings from 10839.
- 10. Secure 10833 in vise using padded jaws so that 10835 is facing up.
- 11. Use a HOT AIR GUN to apply heat to 10835.
- 12. Use a 3/8" open-ended wrench to remove 10835 by turning it counter-clockwise.
- 13. Push 10834 Piston from cylinder.
- 14. Clean all parts thoroughly.

## Assembly

- 1. Secure 10833 Cylinder into vise using padded jaws or 10.5mm collet in collet holder, so that the internal threads are facing up.
- 2. Lightly lubricate 10834 Piston with Dynabrade Air Lube (P/N 95842) and place into 10833.
- 3. Apply a small quantity of Loctite® #242 or equivalent onto external threads of 10835.
- 4. Thread 10835 into 10833 fully.
- 5. Using a 3/8" socket and torque wrench set at (17N•m/150in-lbs.) secure the piston and cylinder plug in place.
- 6. Place 01025 O-Rings onto 10836 Arbor.
- 7. Lubricate o-rings with Dynabrade Air Lube (P/N 95842).
- 8. Place 10836 with o-rings into 10839 Front Housing.
- 9. Align the hex faces by slightly shaking 10839 until 10836 is fully seated.
- 10. Secure assembly in vise using padded jaws so that 10839 is facing down.
- 11. Apply a small quantity of Loctite® #242 or equivalent to the external threads of 10833.
- 12. Thread 10833 into 10839 fully by hand.
- 13. Remove from vise and invert assembly so that 10839 is facing up.
- 14. Secure assembly in vise using padded jaws, by clamping onto 10833.
- 15. Using a 5/8" crows foot and a torque wrench set at (5 N•m/44 in-lbs.) secure the front housing and cylinder in place.
- 16. Slide 10841 Tactile Grip over the front of 10839 until grip bottoms out against part.
- 17. Assemble collet and collet insert per Collet Disassembly/Assembly Instructions above.

# **Rear Housing Disassembly & Assembly Instructions**

## Disassembly

- 1. Remove 10841 Tactile Grip by sliding it over the front of the tool
- 2. Secure tool in vise using padded jaws so that 10840 Rear Housing is facing up.
- 3. Use a HOT AIR GUN to apply heat to mating area of 10839 and 10840.
- 4. Use a 5/8" Open-End Wrench to remove 10840 by turning it counter-clockwise.
- 5. Clean all parts thoroughly.

# **Disassembly/Assembly Instructions – Continued**

# **Rear Housing Disassembly & Assembly Instructions**

## Assembly

- 1. Apply small quantity of Loctite® #242 or equivalent to external threads of 10840.
- 2. Thread 10840 Rear Housing onto 10839, drawing the two assemblies together.
- 3. Secure tool in vise using padded jaws by clamping onto wrench flats of 10840 Rear Housing so that 10839 Front Housing is facing up.
- 4. Using a 5/8" crowfoot and torque wrench set at (23 N•m/200in-lb torque) secure the front and rear housing in place.
- 5. Slide 10841 over the front of 10839 until grip bottoms out against part.

# **Hose Instructions:**

#### To repair or replace damaged hose:

- 1. Cut through hose approximately 1" back from end of hose using a sharp object, utility knife, razor blade, etc.
- 2. Pull hose off, trim off damaged area or install replacement hose; use only Dynabrade Air Line P/N 10971 or 10973 where applicable.

# Swivel Disassembly & Assembly Instructions

## Disassembly

- 1. Use 96343 Internal/External Retaining Ring pliers to remove 95998 Internal Retaining ring.
- 2. Remove 10966 Barb from 10969 Housing.
- 3. Remove 10972 O-ring from 10966.

## Assembly

- 1. Slide 10972 O-ring onto o-ring groove of 10966.
- 2. Lubricate o-ring and install 10966 into 10969.
- 3. Use 96343 pliers to install 95998.

# Valve Disassembly & Assembly Instructions

## Disassembly

- 1. Unscrew 51271 Inlet Barb, remove 51676 Conical Spring, 51663 Tip Valve, and 51664 Valve Seat.
- 2. Remove 51669 Retaining Ring and withdraw 51665 On/Off Valve.
- 3. Remove 95730 O-Rings.

## Assembly

- 1. Install new 95730 O-Rings.
- 2. Lubricate o-rings and install 51665 On/Off Valve in 51282 Valve Body.
- 3. Install 51664 Valve Seat.
- 4. Set 51665 Valve in the OFF position, (51669 Retaining Ring against 51282 Valve Body) and load 51663 Tip Valve, and 51676 Conical Spring in 51282 Valve Body. The small end of the 51676 Conical Spring must engage the short boss on 51663 Tip Valve.
- 5. Apply Thread Sealant to 51271 Inlet Barb and torque to 4.5 N·m (40 lb-in.).

# Filter Disassembly & Assembly Instructions

## Disassembly

- 1. Cut through hose approximately 1" back from end of hose. Using a sharp object, utility knife, razor blade, etc.
- 2. Pull hose off.
- 3. Secure 10842 In-line Filter in vise with soft jaws.
- 4. Use a 5/8" open-end wrench to remove 51269 1/4" NPT Push Lock by turning it counter-clockwise.
- 5. Push 56022 Inlet Screen from filter housing.

## Assembly

- 1. Place 56022 into the (internally) threaded opening of 51269.
- 2. Thread 51269 onto 10842.
- 3. Secure 10842 in vise with soft jaws.
- 4. Use 5/8" open-end wrench to tighten 51269 snugly. DO NOT OVER TIGHTEN.
- 5. Push 10973 Air Line firmly onto hose fitting beyond last barb or until hose bottoms out against part.

#### Hose assembly complete.

Assembly of DynaPen is complete. Please allow 30 minutes for adhesives to cure before operating the tool. Connect the DynaPen to an air source and check tool for proper operation.

# Assembly/Disassembly Tools