Disassembly/Assembly Instructions

Disassembly Instructions – 0.7 hp. Pistol Grip Sanders

Warning: This pistol Grip Tool is equipped with a governor that requires FACTORY PRECISION ADJUSTMENT! If the governor needs servicing, the complete tool must be returned to the factory for proper adjustment of the governor.

General Disassembly Instructions:
1. Disconnect the tool from the air supply connection.
2. Remove disc mount assembly or locking-type pad and 53163 Side Handle.
3. Place housing in soft jaw vise. Important: To prevent damage to the housing, do not over tighten the vise.
4. Remove the 55029 Cover. Turn clockwise. (LEFT HAND THREAD)
5. Pull the motor assembly out of the housing.
6. Use a 3/4” (19 mm) socket to remove the 69272 Muffler Assembly.
7. Remove the 56027 Muffler Inserts (2).
General Disassembly Instructions Complete.

Motor Disassembly:
1. With the governor assembly pointing up, secure wrench flats of the 55034, 55038, or 55064 Adapter in a vise with aluminum or bronze jaws.
2. Remove the governor assembly. Turn clockwise. (LEFT HAND THREAD)
   Important: SAVE ALL OF THE SHIMS that are between the governor and the rotor. It is necessary to install the exact total thickness of these shims when the tool is assembled again.
3. Fasten the 96346 Bearing Separator around the 01028 Cylinder. Place the separator on the table of the 96232 Arbor Press with the motor spindle pointing down. Use a 5/32” (4 mm) diameter drive punch as a press tool to push the rotor out of the 02649 Bearing.
4. Use the 96213 Bearing Removal Tool to remove the 02649 Bearing from 01743 Rear Bearing Plate.
5. Remove the 01028 Cylinder and 01185 Vanes (4).
6. Secure 55025 Rotor in a vise with aluminum or bronze jaws.
7. Remove the 55034, 55038, or 55064 Adapter. Turn counterclockwise.
8. Remove the 01007 Bearing, 55026 Front Bearing Plate and 01010 Spacer.
9. Remove 01007 Bearing and shims from 55026 Front Bearing Plate.
Motor Disassembly Complete.

Trigger Valve Disassembly:
1. Remove the 96025 Pin from the housing and remove the trigger and valve.
2. Carefully remove the 55051 Valve Stop from the 55042 Valve Stem.
3. Remove 55041 Valve.
4. Remove the second 55051 Valve Stop from the 55042 Valve Stem.
Trigger and Valve Disassembly Complete.

Clean and Inspect Parts Before Assembling.

Motor Assembly:
1. Install the 01010 Spacer on rotor.
2. Install .003” (0.08 mm) shim thickness into the 55026 Front Bearing Plate and install the 01007 Bearing.
3. Install the bearing and plate onto the rotor.
4. Secure 55025 Rotor in a vise with aluminum or bronze jaws with the spindle pointing up.
5. Install the 55034, 55038, or 55066 Adapter onto 55025 Rotor. (Torque to 17 N•m/150 in. lbs.)
6. Use a .001” (0.03 mm) thick feeler gauge to check the clearance between the 55026 Front Bearing Plate and the 55025 Rotor. The correct clearance is .001” to .0015” (0.03 to 0.04 mm).
7. Apply the 95482 Dynabrade Air Lube 10W/NR (or equivalent) to the 01185 Vanes (4) and install them into the 55025 Rotor.
8. Install the 01028 Cylinder so that the air inlet opening in the cylinder does not face the 55026 Front Bearing Plate.
9. Use the RAISED OUTSIDE DIAMETER of the 96240 Bearing Press tool to install the 02649 Bearing into 01743 Rear Bearing Plate.
10. Use the RASIED INSIDE DIAMETER of the 96240 Bearing Press Tool and the 96232 Arbor Press to install the bearing and bearing plate onto rotor until the plate just touches the cylinder. Also, make sure to line-up the 50767 Pin in 01743 Rear Bearing Plate with the guide hole in 01028 Cylinder. Check and make sure that the air inlet openings in the cylinder and rear bearing plate line-up with each other. Important: The fit between bearing plates and cylinder should be snug. Not too tight or too loose.
11. With the 01743 Rear Bearing Plate pointing up, secure the wrench flats of the 55034, 55038, or 55064 Adapter in a vise with aluminum or bronze jaws.
12. Important: INSTALL ALL OF THE SHIMS from between the governor and the rotor that have been saved for this assembly. NOTICE: The exact total thickness of these shims is required to achieve the correct adjustment and function of the governor. DO NOT ASSEMBLE the air motor if the correct spacing has been compromised. If the shims have been lost or damage has occurred to the governor or to the mating governor valve surface on the inside of the housing, the tool must returned to the factory for proper spacing and replacement of the lost or damaged component(s). Apply a small amount of the Loctite® #567 (or equivalent) to the threads of the governor cage. Install the governor assembly onto the rotor.

Motor Assembly Complete.

Trigger Valve Assembly:
1. Press 55052 Valve Stem into the 55043 Trigger Post.
2. Install the 96069 Spring onto the valve stem and trigger post assembly.
3. Install o-rings onto the 55039 Bushing. Slide the 55039 Bushing with o-rings onto valve stem and trigger post assembly.
4. Position the larger diameter end of the 55051 Valve Stop so that it faces away from the 55039 Bushing. Carefully press the 55051 Valve Stop onto 55052 Valve Stem until it comes against the slight shoulder detail on the valve stem.
5. Install 55041 Valve onto valve stem.
6. Press the second 55051 Valve Stop onto valve stem with larger diameter end facing away from the 55041 Valve. Install the valve stop until it is flush with the end of the valve stem.
5. Press the 55035 Trigger onto the trigger Post. Make sure to line-up the cross holes of both parts. Secure the trigger to the trigger post with the 50936 Pin.
6. Install the 55058 Trigger Assembly into the housing and secure it with the 96025 Pin.

Trigger and Valve Assembly Complete.
Disassembly/Assembly Instructions

General Assembly Instructions:
1. Place housing in a soft jaw vise. Important: To prevent damage to the housing, do not over tighten the vise.
2. Install two new 56027 Muffler Inserts into the 69359 Muffler Body, or install a completely new 69272 Muffler Assembly. Use a 3/4" (19 mm) socket to install the muffler assembly.
3. Carefully install the motor assembly into the housing.
4. Install the 55029 Cover onto the housing. Turn counterclockwise. (LEFT HAND THREAD) (Torque to 28 N·m/250 in. lbs.)
5. When installing the 56023 Inlet Bushing, apply a small amount of #271 Loctite® (or equivalent) to the male threads. Use a 3/4" (19 mm) socket to install the inlet bushing. (Torque to 23 N·m/200 in. lbs.)
6. Supply 3 drops of the 95482 Dynabrade Air Lube10W/NR (or equivalent) directly into the air inlet.
7. Use a tachometer to check the speed of the motor. Supply 90 PSIG (6.2 Bar) operating air pressure at the air inlet of the tool. **Check spindle speed of a rotary sander or polisher regularly with 90 PSIG (6.2 Bar) at tool inlet without a pad or accessory mounted.**
   In accordance with EN 792 the no-load speed may not exceed the rated speed by more than 10%.
8. Install the disc mount assembly or locking-type pad and 53163 Side Handle.

General Assembly Instructions Complete.