Dynorbital-Spirit® Drop-In Motor Instructions

Parts Page Reorder No. PD13•02
Effective February, 2013
Supersedes PD10•25

For All Dynorbital-Spirit® Air Motor Replacements



Orbit Dia.	3" & 3-1/2"	5"	6"
3/8"	59450	59453	59456
3/16"	59451	59454	59457
3/32"	59452	59455	59458

Replacement Instructions

Drop-In Motor Repair Kit P/N 59459 is available which includes special repair tools for the correct removal and replacement of the air motor (see below).

Disconnect tool from power source before motor exchange

Removal:

1. Disconnect the sander from the air supply.
2. Invert the sander, and place the **57092** Repair Collar (supplied in the **59459** Drop-In Motor Repair Kit) around the housing and secure in a vise. Padding can be used on the vise jaws to protect the housing. **Important:** Do not over tighten the sander in the vise. If the sander is held too tight the removal of the lock ring and air motor will be difficult.
3. Remove the sanding pad with the **50679** Open-end Wrench (26 mm, supplied with Dynorbital-Spirit®).
4. Insert the **56058** Lock Ring Tool (supplied in the **59459** Drop-In Motor Repair Kit) into the corresponding tabs of the lock ring. Loosen the **59058** Lock Ring turning it counterclockwise.
5. Remove the **59058** Lock Ring from the air motor assembly (**Note:** Applies only to 3/16" and 3/32" diameter orbits).
6. Discard the air motor assembly.

Installation:

Important: Clean and inspect the housing, valve mechanism, and exhaust assembly. Replace any valve, muffler, or vacuum components as is necessary.

Follow all torque and lubrication specifications (see Parts Page Manual supplied with sander).

1. Place the **59058** Lock Ring over the motor shaft balancer (**Note:** Applies only to 3/16" and 3/32" diameter orbits).
2. Apply 1 drop of oil to the **01024** O-Ring (supplied with the drop-in air motor assembly).
3. With the sander housing secured in a vise (use the **57092** Repair Collar or padding on the jaws of the vise to protect the housing) slide the drop-in motor into the housing aligning the line-up post with the notch on the inside of the housing. **Note:** Make certain that the line-up post enters the notch in the housing and that the **01024** O-Ring remains seated in the side of the cylinder.
4. Tighten the lock ring with the **56058** Lock Ring tool (Torque to 17 N•m/ 150 in.-lbs.).
5. Install a Dynabrade weight-mated sanding pad.

Drop-In Motor Replacement Complete

Important: Before connecting the sander to the air supply. depress the throttle lever and place 2-3 drops of **95842** Dynabrade Air Lube directly into the air inlet. The sander should now be tested at 90 PSIG operating pressure at the sander. Operate the sander for 30 seconds to determine if it is operating properly and to allow the lubricating oil to permeate the air motor.

Waste Disposal: Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

Optional Dynabrade Accessories

59459 Drop-In Motor Repair Kit
Special tools for proper removal and installation of the Dynorbital-Spirit® drop-in motor.
57092 Repair Collar
56058 Lock Ring Wrench



57098 Full Service Repair Kit
Special tools for proper disassembly/assembly of the Dynorbital-Spirit® sander.
57092 Repair Collar
56058 Lock Ring Wrench
56056 Bearing Puller
57091 Bearing Press Tool
57099 Bearing Puller
96034 12 mm Hex Wrench
96066 3/4" Socket



10 Pack of Drop-In Motors
59470 3", 3-1/2" Dia., 3/8" Orbit
59471 3", 3-1/2" Dia., 3/16" Orbit
59472 3", 3-1/2" Dia., 3/32" Orbit
59473 5" Dia., 3/8" Orbit
59474 5" Dia., 3/16" Orbit
59475 5" Dia., 3/32" Orbit
59476 6" Dia., 3/8" Orbit
59477 6" Dia., 3/16" Orbit
59478 6" Dia., 3/32" Orbit



Complete Repair Solution
10 Pack of Drop-In Motors & 59459 Repair Kit
59460 3", 3-1/2" Dia., 3/8" Orbit
59461 3", 3-1/2" Dia., 3/16" Orbit
59462 3", 3-1/2" Dia., 3/32" Orbit
59463 5" Dia., 3/8" Orbit
59464 5" Dia., 3/16" Orbit
59465 5" Dia., 3/32" Orbit
59466 6" Dia., 3/8" Orbit
59467 6" Dia., 3/16" Orbit
59468 6" Dia., 3/32" Orbit

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