

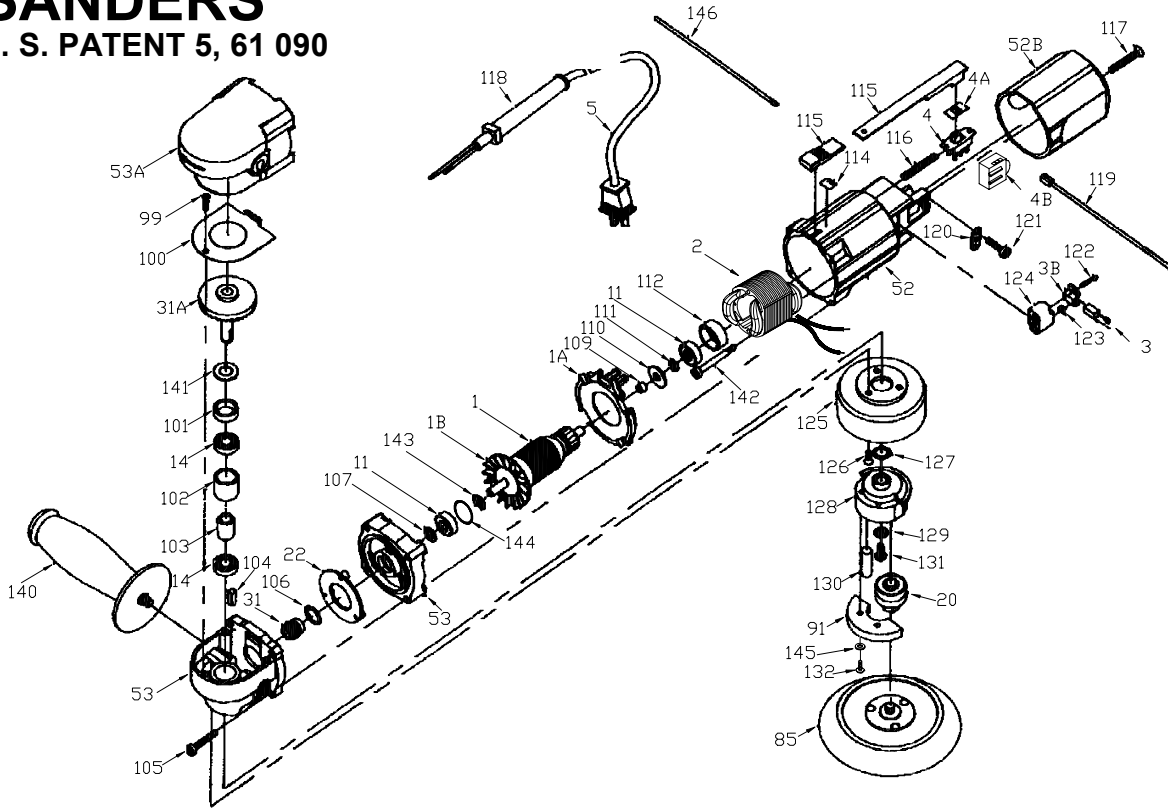
PORTER-CABLE

RANDOM ORBIT SANDERS

U. S. PATENT 5, 61 090

WARNING: Electrical repairs should only be attempted by trained repairmen. Contact the nearest Porter-Cable Service Center or other competent repair center.

7334
7335
7336
7336SP



Ref. No.	Part No.	Description
1	872987**	Armature, Incl: Ref. 1B
1A	698153	Baffle
1B	811292**	Armature Fan, Current
	811246**	Armature Fan, Early
2	872988	Field, 7335 & 7336T2, Incl: Ref 3
	872988	Field, All T1, 7334 T2
3	888386	Brush/Holder Assy., 7335 & 7336T2
	690741	Brush, All T1, 7334 T2
3B	690742	Brush Holder, All T1, 7334 T2
4	694006	Switch
4A	694924	Dust Shield
4B	693971	VS Switch, 7335, 7336
5	872258	Cord
11	855284**	Comm End Bearing
14	855219	Bearing
20	872991	Spindle & Bearing Assy.
22	698178	Grease Plug, All T1, 7334 T2
31	872990**	Pinion
31A	872989	Gear & Shaft Assy.
52	888001	Motor Hsg., Incl.: Ref. 3, 119, 122
52B	699688	Mtr. Hsg. Cap, 7334
	698738	Mtr. Hsg. Cap, 7335, 7336
53	891106	Gear Hsg./Int. Plate, Incl.: Ref. 144
53A	699946**	Gear Housing Cover
85		See Accys.
91	874011	Counterweight, 7334, 7335
	699933	Counterweight, 7336
99	882187	Screw
100	699938	Plate-Gear
101	872502	Spacer
102	699925	Spacer
103	699924	Spacer
104	698202**	Key-Square, Before S/N 019181

Ref. No.	Part No.	Description
105	876651	Screw
106	699682**	Slinger (Early Models), CF
107	872503	Spacer
109	698394	Tube-Insulating
110	695893	Washer-Fiber
111	849328	Spacer
112	694432	Bearing Mount
114	874502	Switch Decal, 7334 T2, 7335, 7336
	873307	Switch Decal, 7334 T1
115	874525	Switch Button and Slide Pkg., 7334 T2, 7335, 7336
	873697**	Switch Button and Slide Pkg., 7334 T1
116	698536	Spring, 7334 T1 Only
117	694012	Screw
118	810716	Strain Relief
119	887666	Lead T2
	699998	Lead Assy. T1
120	861434	Cord Clamp
121	882185	Screw
122	879298	Screw T2
	854805	Screw T1
123	868775	Spring
124	690740	Brush Holder Base
125	699942	Cover
126	849819	Screw
127	851584	Washer Thrust
128	884277	Eccentric Hsg., Incl: Ref. 132
129	874513**	Eccentric Washer
130	695936	Rubber Plug
131	874511**	Hex Screw
132	877817	Screw
140	699681	Aux. Handle
141	873140	Shim (As Required)
142	695185	Screw

Ref. No.	Part No.	Description
143	847564**	Snap Ring
144	697029**	O-Ring
145	859359**	Washer, (Balance)
146	693969	Insulating Sleeve
*	n 48222**	Lubricant, 5 1/2 oz.
*	n 875667**	Lubricant, 4 lbs.
*	48779	Spindle Wrench
*	16005	Conversion Kit - 5" to 6"
*	13705	Conversion Kit, - 6" to 5"
*	73340	Dust Collector Hood
*	73333	Dust Hood and Hose Kit
*	39335	1 1/2" to 2 1/2" Hose Adapter
*	892163	Carrying Case

Accessories (Optional)

*	13700	5" Pad, 7334, Standard 7335
*	16000	6" Pad, Standard 7336
*	13701	5" Contour Pad, 7334, 7335
*	16001	6" Contour Pad, 7336
*	14700**	5" Pad w/Holes, 7334, 7335
*	17000**	6" Pad w/Holes, 7336
*	14701**	5" Contour Pad w/Holes, 7334
*	17001**	6" Contour Pad w/Holes, 7336
*	n 54745	Polishing Pad, Standard 7336SP

* Not Shown

7334, 7335 7336, 7336SP

SERVICE NOTES

SQUARE KEY/WASHER/SCREW (7334 TYPE 1 & EARLY 7335/7336)

Early units used a square key (Ref. 104) and an external tooth lock washer (Ref. 129) to retain the eccentric housing (Ref.128) to the gear/shaft assembly (ref. 31A).

The lock washer was changed to a flat washer (Ref. 129) at S/N 016674. The flat washer was changed to a special eccentric washer at serial number 066261.

The square key (Ref. 104) is not used after S/N 019181.

The retaining screw (Ref. 131) was changed from a Phillips head to a hex head at serial number 049598.

All tools being serviced should be reassembled without the square key (Ref. 104) and with the special eccentric washer (Ref. 129) and the hex head screw (Ref. 131).

DO NOT use any retaining compound (Loctite, etc.) on screw (Ref. 131). Tighten screw to 35/40 in lbs.

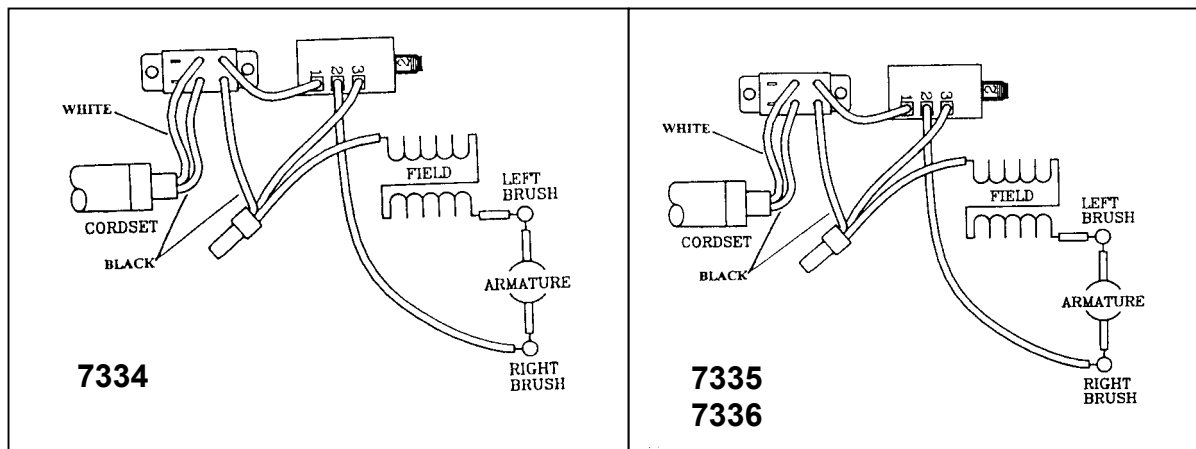
SWITCH BUTTON/SLIDE (7334 TYPE 1)

Early units had a black switch button. Later units have a red switch button. Only the red button is supplied for service. The switch button and slide should always be installed as a set.

SNAP-RING (7334 (TYPE 1))

The snap-ring (Ref. 143) was not used on early units. It is recommended the snap-ring be installed on those units during repairs.

WIRING DIAGRAMS



INTERMEDIATE PLATE, O-RING

Current models incorporate an O-ring in the bearing bore of the intermediate plate. Early models did not have this O-ring. The new intermediate plate kit (with O-ring) will be supplied for all service requirements.

When assembling the bearing to the new style intermediate plate, use a new O-ring and lightly coat the bearing bore with RTV silicone just prior to assembly.

LUBRICANT

Early units had a very light colored (almost clear) lubricant (801750, 801751). Current units have dark green lubricant. When servicing early units, we recommend change to the new lubricant.

SERVICE NOTES

7334, 7335, 7336, 7336SP

COMM END BEARING (REF.#11)

Press Armature shaft sub-flush .080 - .095, (3/32"), to bearing.

PADS WITH HOLES (REF. 85)

Pads with holes can be used to improve dust pick-up when using the dust collector hood. These pads require abrasive discs with holes (see catalog) or that holes be punched in standard abrasive discs.

WASHER (REF.#145)

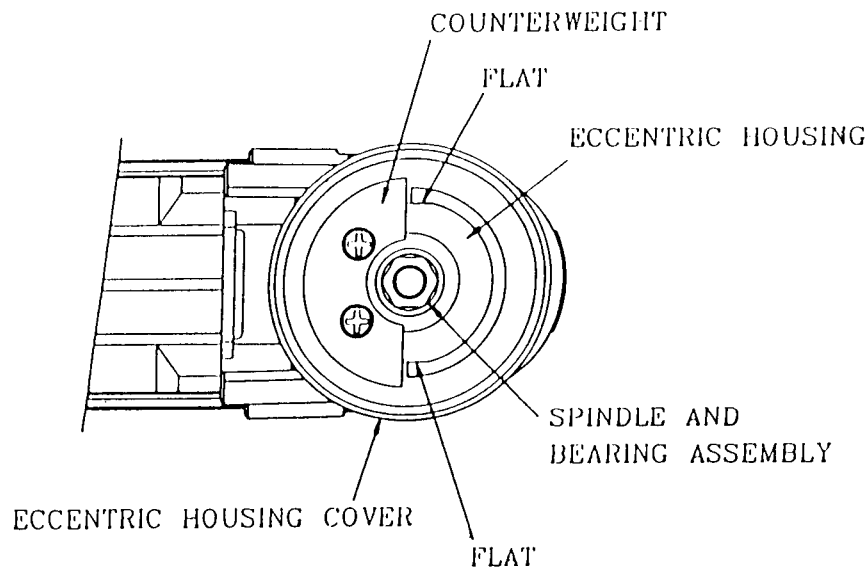
A flat washer may be used under the head of one or both counterweight screws (Ref. #132) to fine tune balance.

DISASSEMBLY

CAUTION: Disconnect tool from power source before servicing.

Service to the cord, switch, and brushes may be accomplished by removing the motor housing cap (Ref. #52B). Any service to the motor or gear case areas requires removal of the random orbit system and the gear housing cover, as follows:

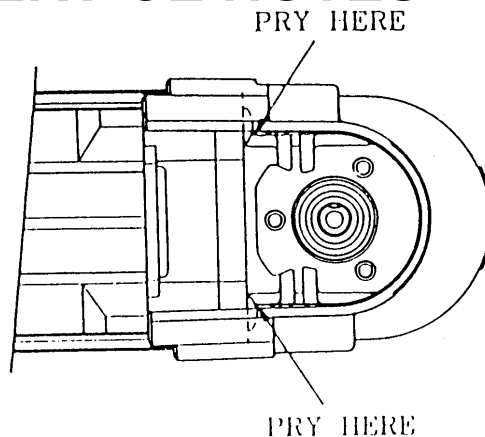
1. Hold spindle with spindle wrench, while rotating pad counter-clockwise to remove.
2. Hold flats of eccentric housing (see Fig. 1) with pump pliers, while removing two counterweight screws.



3. Remove counterweight; pull spindle and bearing assembly out.
4. Hold flats of eccentric housing with pump pliers, while removing eccentric housing retaining screw and washer.
5. Pull eccentric housing OFF. Remove spacer (Ref. #127) and key (Ref. #104). (Note: Key was used on units below S/N 019181 ONLY. Delete key when reassembling).
6. Remove three retaining screws and eccentric housing cover (Ref. #125).
7. Insert the blade of a 3/16" wide, "flat" screwdriver at one pry point (see Fig. 2) and pry housing cover (Ref. 53A) outward and forward to release from gear housing. Repeat at the second pry point to release and remove cover.

7334
7335
7336
7336SP

SERVICE NOTES



ARMATURE/PINION/BEARING/INTERMEDIATE PLATE/FAN

The pinion gear (Ref. #31) is a press-fit to the armature shaft. Disassembly/assembly requires an arbor press and special fixtures (available from Porter-Cable Technical Service) to disassemble:

1. Support intermediate plate/armature assembly on 867759 bearing removal fixture (pinion end up). Press against the end of the armature shaft to drive the armature/pinion assembly out of the intermediate plate.

NOTE: Current armature fans are bonded to the insulating tube on the armature shaft. Early armature fans were bonded directly to the steel armature shaft (the insulating tube was shorter and did not reach the fan).

2.a. Current (Fan on Tube): Wrap one shop towel around armature body and another around the fan to protect hands from sharp edges. Grasp body in one hand and fan in the other. Twist fan to break bond (to insulating tube). The fan will be damaged and **MUST** be replaced.

2.b. Early (Fan on shaft): Use a bearing press sleeve (from 865002 set) and the arbor press to move the fan back against the armature insulating sleeve.

3.a. Current (Fan on Tube): slide fan back toward armature coils. Position armature assembly to the 867759 bearing puller with pulley jaws positioned between the fan and the bearing. Use arbor press to drive armature out of bearing and pinion. The bearing will be damaged and **MUST** be replaced. Remove snap ring and fan.

3.b. Early (Fan on Shaft): Position armature assembly to the 867759 bearing puller with puller jaws positioned between the fan and the bearing. Use arbor press to drive armature out of bearing and pinion. The bearing will be damaged and **MUST** be replaced

REASSEMBLE:

1.a. Current (Fan on Tube): Apply super glue to bore of new fan. Use special fixture (699921) to position fan on armature (length of fixture = distance from fan to end of shaft).

1.b. Early (Fan on shaft): Apply super glue to armature shaft adjacent to the fan. Use special fixture (699921) to reposition fan on armature (length of fixture = distance from fan to end of shaft).

2. Install snap ring (Ref. 143).

NOTE: Early units were not equipped with this snap ring. Install a snap ring when repairing these units.

3. Coat intermediate plate bore with Loctite and assemble new bearing.

4. Use special fixture (699921) to support the inner race of the bearing (and intermediate plate) while pressing the armature through the bearing until approximately ¼" of shaft protrudes through bearing.

5. Remove from fixture. Place pinion spacer (Ref. 107), slinger (Ref. 106), and pinion onto armature shaft. Press until end of pinion is flush with end of shaft.

SLINGER (REF.106)

The slinger was only used on very early models. It is not required and can be omitted from all models.