

# ROCKWELL GRINDER

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**WARNING!** Electrical repairs should only be attempted by trained repairmen. Contact the nearest Rockwell Service Center or other competent repair center.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	
1	864052**	Armature 115V (7806 & 781 T3 & T4)	38	850559	Spindle	136	824355	Field Screw (780,781,785,7805,7806,7855)	
	864048	Armature 115V (790 & 7905 & 7958 T3 & T4)	52	858087**	Motor Hsg. Assy (T1,T2,T3) Incl: Ref. 3B,146,156		852354	Field Screw (790,795,7905,7908,7955,7958)	
	861031	Armature 115V (780,781,785,7805,7806,7855)		868886	Motor Hsg Assy (T4) Incl: Ref. 3B,146,156		138	849314	Terminal
	861033	Armature 115V (790,795,7905,7908,7955,7958)	53	857852**	Gear Housing (780,781,785,7805,7806,7855)	140	851857	Shim .005 as required	
	861204	Armature 220V (7806 & 781 T3) CF		857853**	Gear Housing (790,795,7905,7908,7955,7958)	141	855598	Shim .010 as required	
	861241	Armature 220V (790 & 7905 & 7958 T3 & T4)	53A	849114	Gear Housing Cover	143	825571	Pad Spacer	
	861090	Armature 220V (780,781,785,7805,7806,7855)	57	861468	Handle (T1,T2,T3)	144	18213**	Pad Nut (Early Models Only)	
	861092	Armature 220V (790,795,7905,7908,7955,7958)	57A	850557	Handle Cover (T1,T2,T3)	146	811383	Auxiliary Handle	
2	861032	Field 115V (780,781,785,7805,7806,7855)	90	866526**	Clutch Kit	146	804310	Brush Holder Screw	
	861034	Field 115V (790,795,7905,7908,7955,7958)	100	849190	Spindle Nut	154	861941	Motor Circuit Protector 115V (Early 795,7955,7958 Only)	
	861091	Field 220V (780,781,785,7805,7806,7855)	101	842597	Bearing Plug	156	851676	Brush Cap Shield	
	861093	Field 220V (790,795,7905,7908,7955,7958)	102	802315	Pinion Gear Nut	158	851284	Housing Shield	
3	853274	Brush	103	850556	Pinion Gear Spacer	175	810508	Housing Insulator	
3A	851403	Brush Cap	104	849379	Bearing Plate	179	802648	Lock Washer (T1,T2,T3)	
3B	851276	Brush Holder	105	852402	Tool Rest Screw	180	802430	Lock Washer (T1,T2,T3)	
4	849095	Switch	106	803060	Tool Rest Washer	181	803216	Screw (Early 795,7955,7958 Only)	
5	823379	Cord 115V	107	810622	Tool Rest	182	803112	Nut (Early 795,7955,7958 Only)	
	823378	Cord 220V	110	801896	Specification Plate Screw	184	828612	Spindle "O" Ring	
11	855218	Commutator Bearing	111	859549	Air Intake Plate Screw (T1,T2,T3)	185	854630	Switch Insulator (T1,T2,T3)	
11A	855222	Fan End Bearing	111	859549	Air Intake Plate Screw (T1,T2,T3)	186	855873	Lock Washer	
17	681637	Screw (T4)	112	857093	Air Intake Plate (T1,T2,T3)	188	801434	Slinger	
18	851776	Screw (T4)	114	858008	Switch Mounting Screw (T1,T2,T3)	189	862999	Caution Plate	
19	855201	Spindle Bearing	115	844107	Ground Wire Screw (T1,T2,T3)	194	822195	Pinion Lock Washer	
19A	855240	Spindle Bearing	116	838487	Strain Reliever	195	802941	Locking Spindle Pin	
20	862641	Nut (T4)	117	850550	Cord Clamp	199	857222	Switch Actuator Spring (T1,T2,T3)	
21	862572	Actuator (T4)	118	854607	Screw (T1,T2,T3)	200	858135	Screw	
22	811153	End Cap (T4)	119	844009	Actuator Screw (T1,T2,T3)	201	802318	Tool Rest Washer	
23	867713	Handle Set (T4) Incl. Ref. 18, 20, 123,200	120	849084	Actuator Retainer (T1,T2,T3)	202	866816**	Slinger Fan End	
			121	849195	Switch Actuator (T1,T2,T3)	203	866817**	Slinger Comm. End	
			122	848564	Handle Cover Screw (T1,T2,T3)	205	858136	Tool Rest Nut	
			123	851281	Handle Screw	208	18214**	Flange Nut	
			125	853518	Brush Holder Washer	209	867350**	Hardware Kit	
			126	822133	Lock Washer (T1,T2,T3)	*	18216	Wrench to use with Ref. 143	
			127	858447	Gear Housing Screw (780,781,785,7805,7806,7855)	*	852670	Armature Fan	
				838279	Gear Housing Screw (790,795,7905,7908,7955,7958)	*	59842	Lubricant (5 1/2 oz. Tube)	
			128	852176	Spindle Seal	*	863106	Lubricant (4 lb. Can)	
			129	857616	Spindle Pin				
			130	850552	Spindle Lock Spring				
			133	850553	Spindle Key				
			134	842816	Spindle Plate Screw				
			135	851282	Gear Housing Cover Screw				

\*\* See Service Notes



**Rockwell International**

# SERVICE NOTES

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## TYPE 3 & 4 - ARMATURE, GEAR SETS, GEAR HOUSINGS

Type 3 & 4 armature and gear sets are not interchangeable with Type 2 or earlier models unless the new Type 3 & 4 gear housing, gear set, and clutch washers are used. The Type 3 & 4 gear housings can be used on older models but the earlier model gear housing cannot be used on the Type 3 & 4.

## TYPE 3 & 4 - PINION CLUTCH ADJUSTMENT

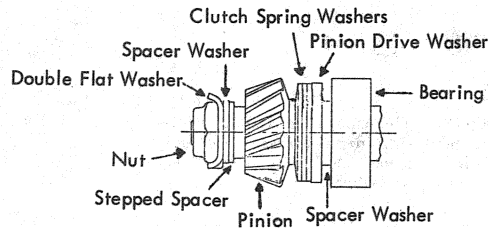
Lubricate armature shaft, pinion and all clutch components. Assemble and tighten pinion nut to 150 in. lbs. Back off one full turn and retighten to 70 in. lbs. Do not bend the double flat washer over the nut at this time.

To check for proper clutch operation at the output spindle, reassemble the gear housing, tighten the screws (NOTE: Continue to hold armature in the same manner as when installing the clutch.) and turning the pad locking nut over, place the pad nut onto the spindle shaft. This will allow a 13/16" socket to be placed over the nut to check the "slip torque" of the output shaft. The clutch "slip torque" must be within the range specified below:

Unit RPM	Output Torque (ft. lbs.)
5000	14 to 40
6000	11 to 32
8000	9 to 25

When the above operation is completed, remove the gear housing assembly, bend the double flat washer over the pinion nut and reassemble the tool.

If clutch slippage is evident on any grinder received for repair, first check the slip torque. If this is not within the specified range, replacement of all clutch components may be necessary. Use all clutch components with clutch kit #866526. An assembly instruction sheet is included with each kit.



## CLUTCH SLIPPAGE

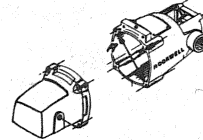
A limited quantity of early Type 3 grinders were built without the double flat washer bent over the armature shaft retaining nut. Armature gear pinion slippage may develop on these units. To correct slippage, we suggest the installation of all parts included in the clutch kit #866526.

Clutch kit #866526 includes all parts with Ref. No. 90. To replace any one of these parts, we recommend the use of the complete clutch kit to insure maximum clutch functioning.

## MOTOR AND GEAR HOUSING

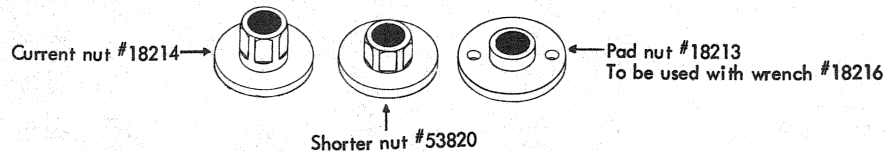
A limited quantity of early models incorporate housings with a smaller diameter at point "A." Should matching difficulties arise, replacement of both gear and motor housings may be necessary.

With early set of gears #852403, #852404, and #852405, a shorter gear locking pin, Ref. 129, #849187 has to be used.



## QUICK-CHANGE PAD LOCKING NUT

Early versions of the "Quick-Change Pad" required a shorter nut #53820. Current versions require a longer nut #18214. Using the improper nut could result in difficulties in securing the pad.



## FAN END AND COMMUTATOR END SLINGERS, REF. 202, 203

Slingers 866816 and 866817 will be used in currently built grinders to aid in eliminating dust contamination of the bearings. It is suggested that any grinder in for repair, with a bearing problem, have the slingers installed.

## HARDWARE KIT

Hardware Kit includes the following reference numbers for use when complete tear-down is required: 3, 3A, 90, 101, 105, 106, 111, 114, 115, 118, 119, 122, 123, 125, 126, 127, 128, 134, 135, 136, 138, 146, 179, 180, 184, 186, 200, 201, 205.