

Ref. Ref. Ref. Part No. Part No. Description No. Description No. Part No. Description No. Armature 115V (7806 & 781 T3 & T4) Armature 115V (790 & 7905 & 7958 864052* Spindle 38 850559 136 824355 Field Screw (780, 781, 785, 7805, 864048 Motor Hsg. Assy (T1,T2,T3) Incl: Ref. 3B, 146, 156 52 858087* 7806, 7855) Field Screw (790,795,7905,7908,7955,7958) 852354 Armature 115V (780, 781, 785, 7805, 861031 868886 Motor Hsg Assy (T4) Incl: Ref. 3B, 7806, 7855) 146,156 849314 138 Terminal Gear Housing (780, 781, 785, 7805, Armature 115V (790, 795, 7905, 7908, 861033 857852** 53 851857 855598 140 Shim .005 as required 7955, 7958) 7806, 7855) Shim .010 as required Armature 220V (7806 & 781 T3) CF Armature 220V (790 & 7905 & 7958 861204 857853** Gear Housing (790,795,7905,7908,7955,7958) 141 825571 Pad Spacer Pad Nut (Early Models Only) 861241 143 18213** Gear Housing Cover Handle (T1,T2,T3) 849114 144 811383 Auxiliary Handle 861090 Armature 220V (780, 781, 785, 7805, 861468 146 804310 Brush Holder Screw 57A 90 Motor Circuit Protector 115V 7806.7855) 850557 Handle Cover (T1, T2, T3) 154 861941 Motor Circuit Protector 115V (Early 795,7955,7958 Only) Brush Cap Shield Housing Shield Housing Insulator Lock Washer (T1,T2,T3) Lock Washer (T1,T2,T3) Screw (Early 795,7955,7958 Only) Nut (Early 795,7955,7958 Only) Spindle "O" Ring Switch Insulator (T1,T2,T3) Lock Washer 861092 Armature 220V (790, 795, 7905, 7908, 866526* Clutch Kit 849190 Spindle Nut 851676 156 2 861032 Field 115V (780, 781, 785, 7805, 101 842597 Bearing Plug 158 851284 7806.7855) 102 802315 Pinion Gear Nut 175 810508 Field 115V (790,795,7905,7908, 103 861034 850556 Pinion Gear Spacer 179 802648 7955,7958) Field 220V (780,781,785,7805, 849379 Bearing Plate 180 802430 861091 105 106 852402 Tool Rest Screw Tool Rest Washer 803216 7806,7855) 803060 182 803112 861093 Field 220V (790, 795, 7905, 7908, 107 810622 828612 Tool Rest 184 7955,7958) 110 801896 Specification Plate Screw 854630 3 3A 3B Air Intake Plate Screw (T1,T2,T3)
Air Intake Plate (T1,T2,T3)
Switch Mounting Screw (T1,T2,T3)
Ground Wire Screw (T1,T2,T3) 853274 Brush 186 188 111 859549 855873 Lock Washer 851403 Brush Cap 857093 801434 Slinger Caution Plate 851276 Brush Holder 114 858008 862999 4 849095 Switch 844107 194 115 822195 Pinion Lock Washer Cord 115V 823379 116 838487 Strain Reliever 195 802941 Locking Spindle Pin Cord Clamp
Screw (11,T2,T3)
Actuator Screw (11,T2,T3)
Actuator Retainer (11,T2,T3) 850550 854607 844009 823378 Cord 220V 117 199 857222 Switch Actuator Spring (T1, T2, T3) 11 855218 Commutator Bearing 118 200 201 858135 114 855222 Fan End Bearing 119 802318 Tool Rest Washer 17 18 19 681637 Screw (T4) 849084 202 866816** Slinger Fan End Slinger Comm. End Switch Actuator (T1, T2, T3) Handle Cover Screw (T1, T2, T3) Screw (T4) 121 851776 849195 203 866817** 855201 848564 Spindle Bearing 205 858136 Tool Rest Nut 19A 20 21 22 855240 862641 18214** Spindle Bearing 123 851281 Handle Screw 208 Flange Nut Nut (T4) 125 853518 Brush Holder Washer 867350** Hardware Kit 862572 Actuator (T4) Lock Washer (T1,T2,T3) Gear Housing Screw (780,781, 785,7805,7806,7855) 126 822133 858447 18216 Wrench to use with Ref. 143 811153 End Cap (T4) Armature Fan Lubricant (5½ oz. Tube) Lubricant (4 lb. Can) 852670 867713 Handle Set (T4) Incl. Ref. 18, 20, 59842 Gear Housing Screw (790,795, 7905,7908,7955,7958) 123,200 838279 863106 Gear Set (781 & 7905 T3 & T4) Gear Set (7806 & 790 T3 & T4) Gear Set (7958 T3 & T4) 31 868319** 868320** 852176 Spindle Seal 868321 857616 850552 129 Spindle Pin See Service Notes

Spindle Lock Spring

Spindle Plate Screw

Gear Housing Cover Screw

Rockwell

International

Spindle Key

130

133

850553

842816

851282

Gear Set (780, 781, 7805, 7855,

7905, 7955) Gear Set (785, 790, 795, 7806) Gear Set (7908, 7958)

868316

868317

868318

SERVICE NOTES

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

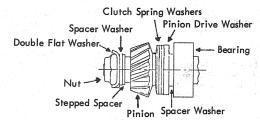
Lubricate armature shaft, pinion and all clutch components. Assemble and tighten pinion nut to 150 in. lbs. Back off one full turn and retighten to 70 in. lbs. Do not bend the double flat washer over the nut at this time.

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.

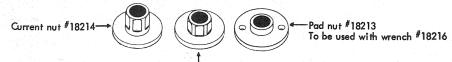
MOTOR AND GEAR HOUSING

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.



Shorter nut #53820

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.