Edlund Company, Inc., 159 Industrial Parkway, Burlington, VT 05401 802-862-9661

SERVICE MANUAL- M106 REVA

MODEL 203 & 266

ELECTRIC CAN OPENER

Edlund Company, Inc., 159 Industrial Parkway, Burlington, VT 05401 802-862-9661

Repair and Service Guidelines

When a Model 203 or 266 electric can opener is returned to the factory for warranty repair, repair or for any other service issues, the following procedure will be used:

1. Read the Quality Improvement Report that accompanies the product to determine what problems or complaints that the customer has listed.

2. Perform a ground continuity test and a dielectric withstand test according to the Final Inspection Procedure EC1061.

   A. If the unit passes both tests, proceed to step #3.

   B. If the unit fails the ground continuity test, proceed to step #7.

   C. If the unit passes the ground continuity test but fails the dielectric withstand test, proceed to step #8.

3. If the unit passes both the ground continuity and the dielectric withstand test, it is safe to operate. Plug the cord set into a receptacle with the same voltage as listed on the rating label and check to be sure the motor runs when the actuating lever is placed in the rear position.

4. A. If the customer has not listed any problems or complaints, proceed to step #6.

   B. If the customer has listed any problems or complaints in the Quality Improvement Report, check to see if these complaints can be duplicated.

5. If the can opener functions as the customer has described, proceed to the Troubleshooting Guide to find the cause or causes of the problem and correct according to the correction procedure listed in the Trouble Shooting Guide and then perform the Final Inspection Procedure EC1061.

6. If the can opener does not function as the customer has described or if the customer has not listed any problems or has not fully described the problem, open a few cans to determine just how the can opener is functioning. Check the front to back clearance between the back of the knife and the front of the gear. When the actuating lever is in the rear position to make sure it is 0.001 – 0.005 wide. Check the up and down clearance between the top of the drive gear and the bottom of the knife holder with the knife removed and the actuating lever in the rear position to be sure it is between .100 - .110 inch. Check the on position of the motor to be sure the motor comes on just as the knife starts down over the top of the drive gear teeth and that the motor starts before the knife pierces the can.

   If the can opener is not functioning properly, proceed to the Trouble Shooting Guide and find the cause or causes of this problem. Correct the problem using the correction procedure listed and perform the Final Inspection Procedure EC1061.

7. If the unit has failed the ground continuity test proceed to the Trouble Shooting Guide, find the cause of the problem and correct according to the correction procedure. After the problem has been corrected, proceed to step #2 to perform the ground continuity and the dielectric withstand test to make sure that the unit is safe to operate before doing any repair.

8. If the can opener passes the ground continuity test, but fails the dielectric withstand test, consult the Trouble Shooting Guide and correct the problem using the correction procedure listed.

   If the handle knob and top cover is removed for any reason, remove the brush caps and check the length of the motor brushes. Replace the brushes and brush springs as needed.

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Model 203/266 Can Opener Assembly Procedures

The model 203 or 266 electric can opener will be assembled according to the following procedure.

Channel Assembly (A587)

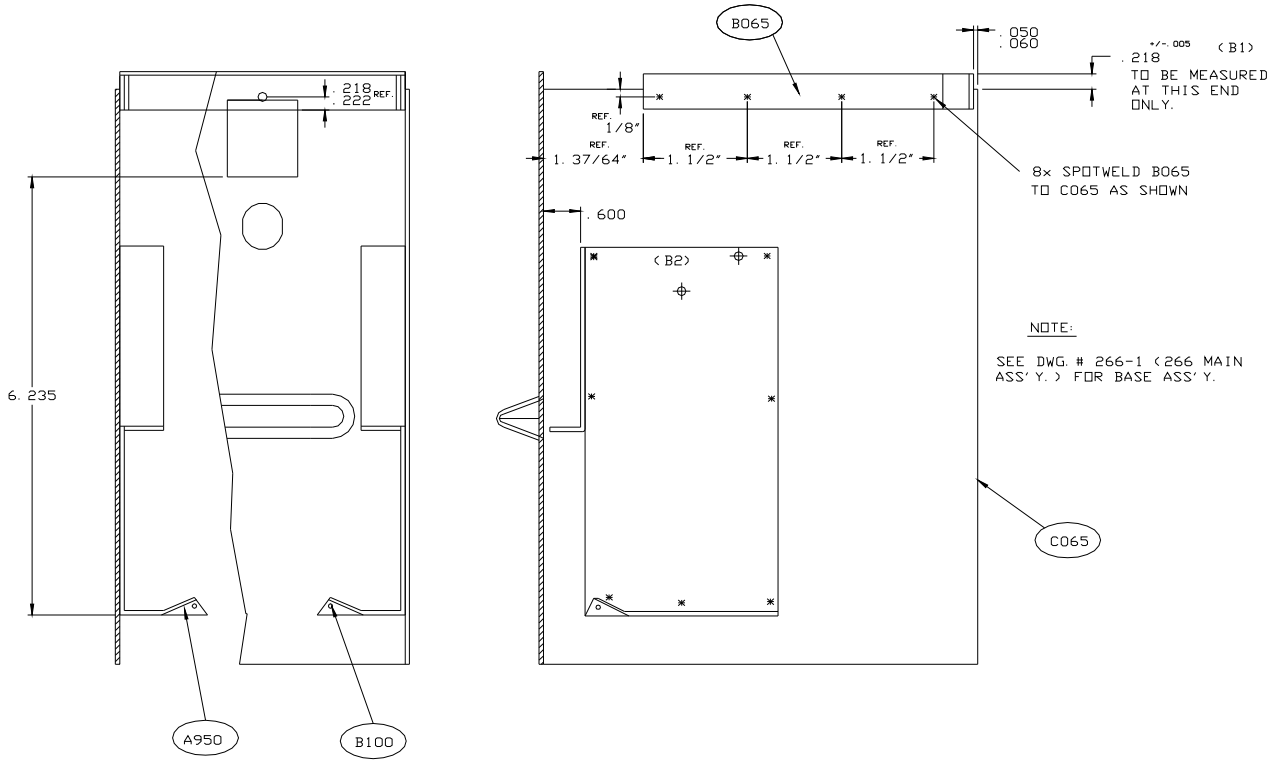
Assembly switch insulating pad (I004) and motor start switch (S229) in position shown over studs on inside of channel and secure with nuts (N011).

Push plastic slide tracks (T021) into space between front of channel and slide track bracket with two small holes facing up. Place the end of a return spring (S166) into holes in top of slide track closest to the channel.

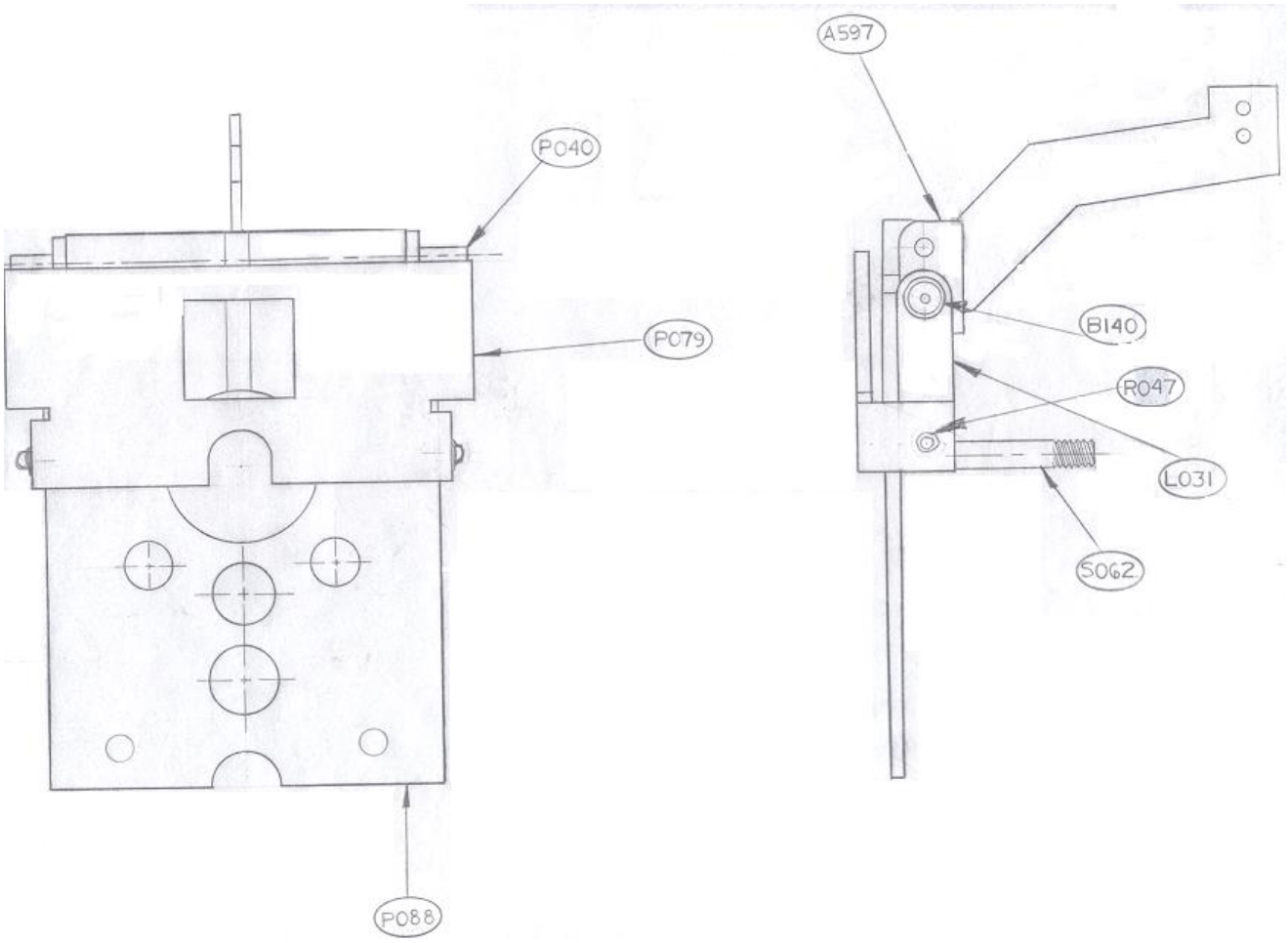
Insert spring block (B057) through the window of knife slide plate (P079), which is part of the linkage assembly (A580). (See Fig. 6.) Lubricate sides of motor slide plate (P088) and slide linkage assembly down into grooves in slide tracks with the knife slide plate (P079) toward the front of the channel. Return spring (S166) must be between the knife slide plate and the flange on the bottom of the spring block (B057). Attach two springs (S167) to bottom two holes of motor slide plate (P088) and to the holes in the turned up corners of the slide track brackets (B100) which are spot welded to the inside of the channel.

Align rectangular hole in knife slide plate with rectangular hole in channel, compress spring (S161) using vise grips pliers and start spring into recess in spring block. Make sure ends of spring do not catch on top of knife slide plate or bottom of recess in spring block. Use caution when inserting spring and make sure to use safety glasses when working on this product. Finish inserting this spring into spring block by using plastic or wooden mallet. Insert spacer (S145) into rectangular hole on the channel over spring block, place knife holder (H021) over spacer and secure using two screws (S071). Do not tighten these screws at this time. Secure knife (K006) on to knife holder using knife stud (S196). Tighten screws (S071). Knife must rotate freely after the knife stud is tightened and knife holder must move easily up and down when handle of linkage assembly is moved back and forth.

(A587)



LINKAGE ASSEMBLY A580 (FIGURE #6)



Motor and Gear Train Assembly

Assembly front gear plate assembly (A582) and rear gear plate assembly (A583) by pressing flanged bearings and ball bearings to the dimensions shown on the drawings. Place front gear plate assembly (A582) into front gearbox housing (H032) as shown in Fig. 7. Attach gear plate to housing using four standoffs (S184) and four hex nuts (N023). Pack bearing with general-purpose grease.

Install second gear and pinion assembly (A591) into flange bearing (B040) and insert first gear and pinion assembly (A590) into flanged bearing (B032). Slide output shaft and gear assembly (A542) through ball bearing (B028) in front gear plate assembly. Assembly two Belleville spring washers (W001) with concave sides together and one flat washer (W040) on small end of output shaft. Pack gearbox approximately one-third to one-half full of Texaco Marfax Multi Purpose 2 grease.

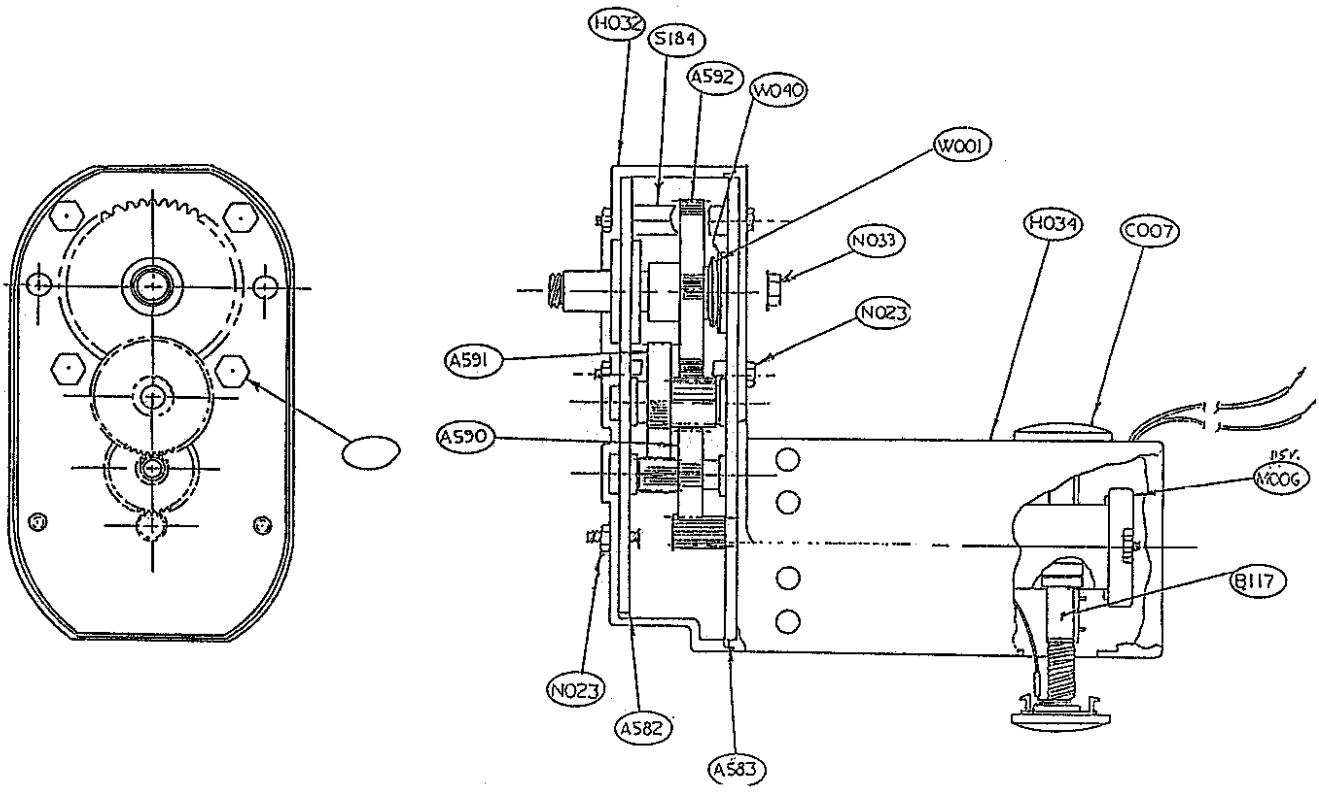
Slide rear gear place assembly (A583) over the standoffs (S184) and end of pinion and output shafts. Slide motor with appropriate voltage through bottom holes in ear gear plate assembly. Secure motor to front housing using two lock washers (W017) and two nuts (N019).

Slide rear motor and gear train housing (H034) over motor. Make sure that the two long leads are threaded through the hole in the top rear of the housing (H034) and that the brush leads are tucked down below top of brush holders on rear of motor. Secure rear housing over ends of standoff (S184) and slide switch bracket assembly (A620) over the top two standoffs. Secure everything with four nuts (N023.)

Place brush (B117) and brush spring (S158) into hole in gear motor housing and into brass brush holder. Insert “L” terminal of brush lead into top of brush spring, compress spring and secure in the housing using brush cap (C007). Repeat with other brush and lead.

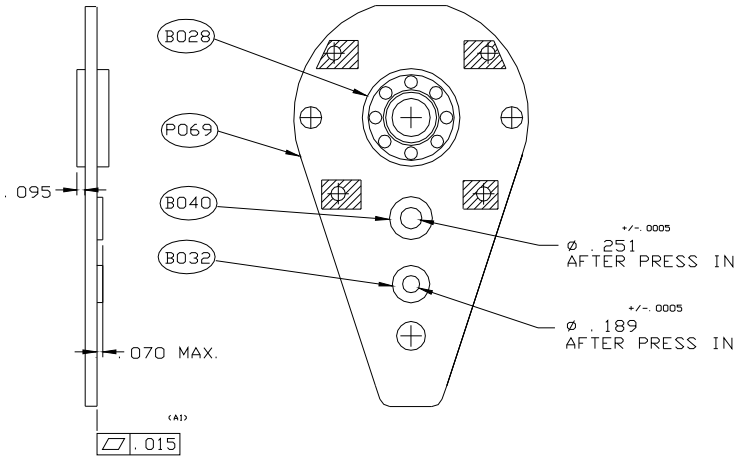
Slide motor and gear train assembly over the two studs on rear of motor slide plate (Fig. 3) and secure to linkage assembly using two nuts (N019).

MOTOR AND GEAR TRAIN ASSEMBLY (A588)

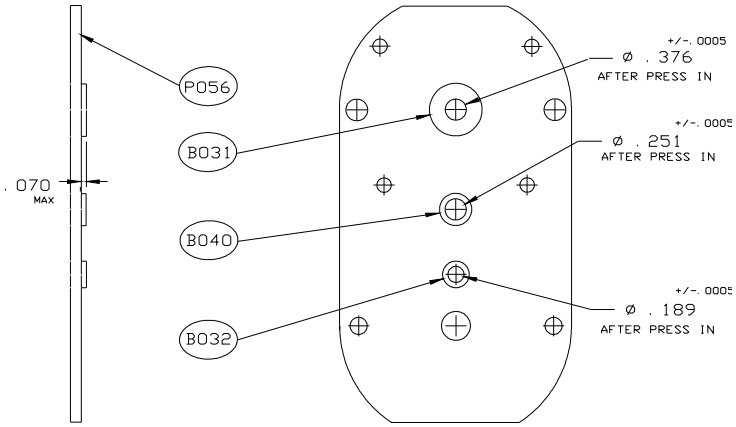


GEAR PLATE ASSEMBLY

A582



A583



Final Assembly

Slide appropriate cord strain relief over the end of cord set (see wiring diagrams) and insert cord set and strain relief into double "D" hole in rear of cover. If can opener is a Model 203 with a two-speed switch, insert the switch into the rectangular hole in the rear of cover.

Wire up final assembly using appropriate wiring diagram for 115 volt, 115 volt CSA or 230-volt motor.

Place drive gear (G006) on output shaft of gearbox and set switch (S229) so that motor will start when the knife is at the top of the drive gear teeth. Change on position of switch by screwing adjusting screw (S086) of switch actuating assembly (A620) in or out.

Set clearance between the front of the gear (G006) to the back of the knife (K006) with the toggle handle at the locked position (all the way back) to .001-.005 by shimming drive gear out using washer (W034).

Install cover assembly on opener by pushing back toggle handle and inserting handle through the slot in the top of the cover while sliding the front of cover over the front of the channel.

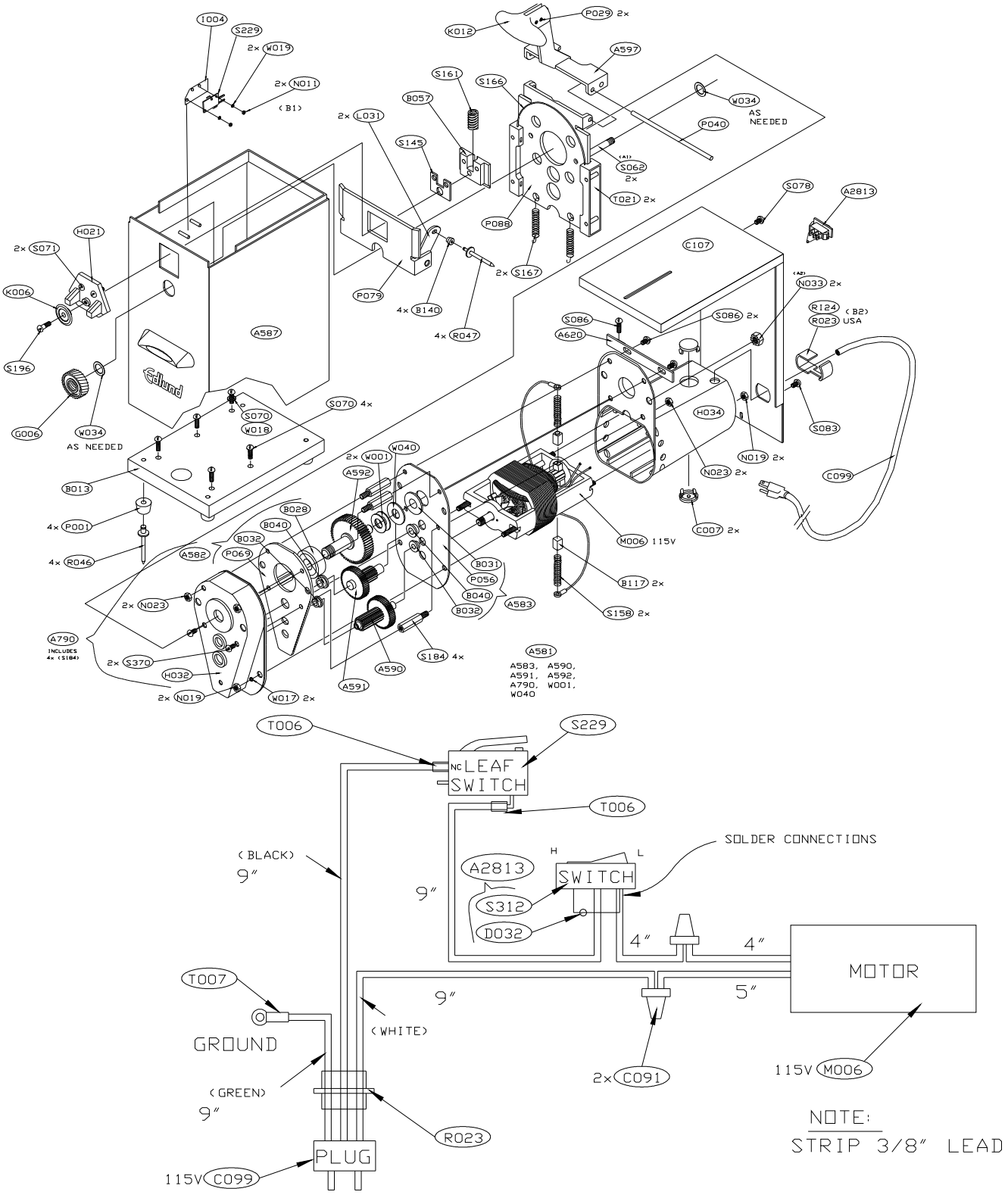
Be careful not to damage two-speed switch when lowering cover into position. Secure cover using screw (S078) on top and screw (S083) on bottom rear of cover. Install knob (K012) over toggle handle assembly (A597) and secure using two roll pins (P029).

Can opener assembly must be tested using final inspection instructions EC1061A.

PARTS LISTS

PART #	U/M	DESCRIPTION	PART #	U/M	DESCRIPTION
A2813	EA.	ASSEMBLY, #203/270ROCKER SWITCH 115V/230V	L031	EA.	LINK, #203/266
A580	EA.	ASSEMBLY, #203/266 LINKAGE	M006SP	EA.	MOTOR, #203/266 115V
A581	EA.	ASSEMBLY, #266 GEAR TRAIN	M007SP	EA.	MOTOR, #203/266 230V, B-8992
A582	EA.	ASSEMBLY, #203/266 FRONT GEAR PLATE	N011	EA.	NUT, 4-40 BRASS
A583	EA.	ASSEMBLY, 203/266 REAR GEAR PLATE	N015	EA.	NUT, 8-32, CLINCH #SN82NC27
A587	EA.	ASSEMBLY, #203/266 CHANNEL	N019	EA.	NUT, 10-32 PLATED HEX
A588	EA.	ASSEMBLY, #203/266 MOTOR & GR. TN. 115V	N023	EA.	NUT, 8-32 PLATED HEX
A589	EA.	ASSEMBLY, #203 SWITCH	N033	EA.	NUT, ¼-28 THD. SHAKEPROOF (KEPS)
A590	EA.	ASSEMBLY, #203/266 FIRST PINION	P001	EA.	PAD, ECO FOOT
A591	EA.	ASSEMBLY, #203/266 SECOND PINION	P029	EA.	PIN, ROLL 1/8 X 9/16 S/S
A592	EA.	ASSEMBLY, #203/266 OUTPUT SHAFT	P040	EA.	PIN, #203/266 TOGGLE
A593	EA.	ASSEMBLY, #203/266 MOTOR & GR. TN. 230V	P079	EA.	PLATE, #203/266 KNIFE SLIDE
A597	EA.	WELDMENT, #203/266 TRUNION	P088	EA.	PLATE, #203/266 MOTOR SLIDE
A620	EA.	ASSEMBLY, #266 SWITCH BRACKET	P140	EA.	PROTECTOR, #203 SWITCH
A790	EA.	ASSEMBLY, #203/266 FRONT HOUSING	R023	EA.	RELIEF, ELECTRIC STRAIN
A950	EA.	ASSEMBLY, #203/266 SLD TRK BRKT W/SCREWS	R024	EA.	RELIEF, STRAIN, ENGLISH ELECT., SMALL
B013	EA.	BASE, #203/266	R046	EA.	RIVET, SB 5-6
B028	EA.	BEARING, BALL #203/266	R047	EA.	RIVET, SB 6-6
B031	EA.	BEARING, #203/266 BRONZE	S062	EA.	SCREW, #203/266 HOUSING
B032	EA.	BEARING, #266 FIRST	S070	EA.	SCREW, 10-32 X 5/16 PLATED RHM
B040	EA.	BEARING, 2ND FF-310	S071	EA.	SCREW, 10-32 X 7/16 RHM, PLATED
B057	EA.	BLOCK, #203/266 SPRING	S074	EA.	SCREW, 4-40 X 5/8 BRASS RHM
B116	EA.	BREAKER, CANADIAN CIRCUIT	S078	EA.	SCREW, 6-32 X ¼ S/S RHM
B117	EA.	BRUSH, ECO MOTOR (2 REQ)	S083	EA.	SCREW, 8-32 X 3/16 S/S RHM
B140	EA.	BUSHING, ECO LINK	S085	EA.	SCREW, 8-32 X ¼ S/S RHM
C007	EA.	CAP, #203/266 BRUSH	S086	EA.	SCREW, 8-32 X 5/8 S/S PLATED RHM
C086	EA.	COIL FOR MOTOR REPAIRS, 115V	S145	EA.	SPACER, ECO KNIFEHOLDER
C087	EA.	COIL FOR MOTOR REPAIRS 230V	S158	EA.	SPRING, ECO BRUSH (2 REQ)
C091	EA.	CONNECTOR, #203/266 LEAD S-11	S161	EA.	SPRING, ECO BLOCK
C098	EA.	CORD, GOV'T SET, 9-1/2', SJT, 18/3 105	S166	EA.	SPRING, #203/266 RETURN
C099	EA.	CORD SET, REGULAR 7', 18/3, GRAY	S167	EA.	SPRING, ECO TENSION
C107	EA.	COVER, #203	S184	EA.	STANDOFF, #203/266 LONG
C107M	EA.	WELDMENT, #203 COVER CSA	S196	EA.	STUD, ECO KNIFE
C108	EA.	COVER, #266	S229	EA.	SWITCH, #203/266 LEAF
C108M	EA.	WELDMENT, #266 COVER CSA	S235	EA.	SWITCH, #203 TOGGLE, 7503K13
D032	EA.	DIODE, #203	S241	EA.	SPRING, MAGNET HOLDER
E026	EA.	EDGE, #203 SWITCH PROTECTOR	S370	EA.	SCREW, 8-32 X ½ RHM PLATED
G006M	BOX	GEAR, ECO 24 PKG.	T006	EA.	TERMINAL, #203/266 FEMALE, 3/16
G006SP	PKG.	GEAR, ECP SINGLE PACK	T007	EA.	TERMINAL, ECO ROUND
H021	EA.	HOLDER, ECO KNIFE	T021	EA.	TRACK, #203/266 SLIDE
H032	EA.	HOUSING, #203/266 FRONT	W001	EA.	WASHER, #203/266 BELLVILLE SPRING
H034	EA.	HOUSING, #203/266 REAR	W017	EA.	WASHER, #10 EXT. TOOTH LOCK, PTD
K006M	BOX	KNIFE, ECO 24 PKG.	W018	EA.	WASHER, #10 X 3/16 PLATED LOCK
K006SP	PKG.	KNIFE, ECO SINGLE PACK	W034	EA.	WASHER, ECO DRIVE GEAR SPACER
K010	EA.	KNIFE, #266 OVERSIZE	W040	EA.	WASHER, #203/266 THURST
K012	EA.	KNOB, ECO	W055	FT	WIRE, 18 GA. BLACK (ELECTRIC JUMPER)

203 MAIN 115 VOLT



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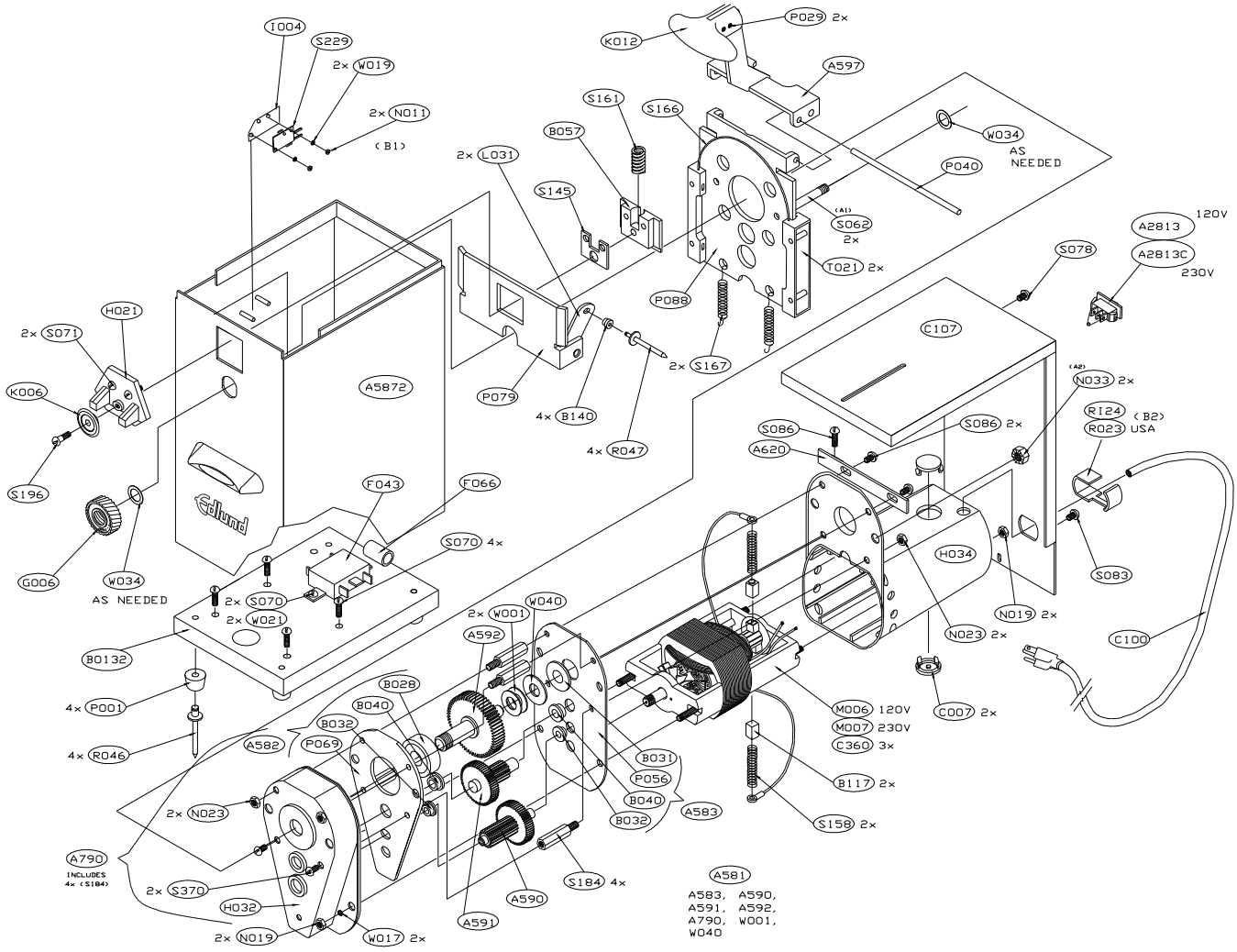
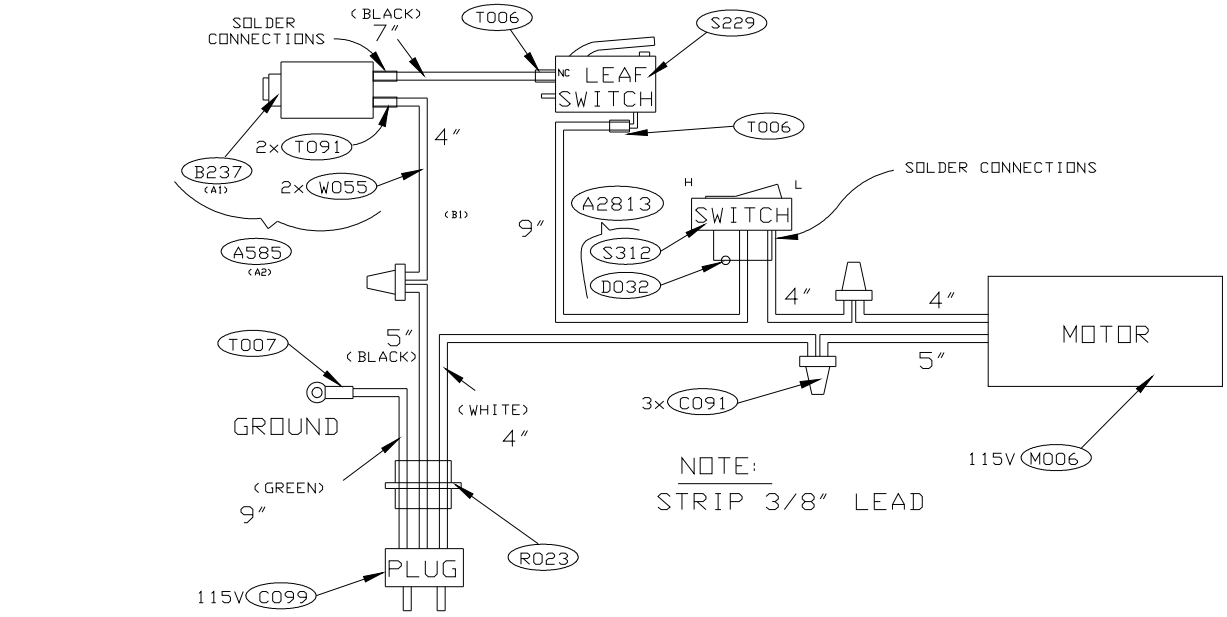
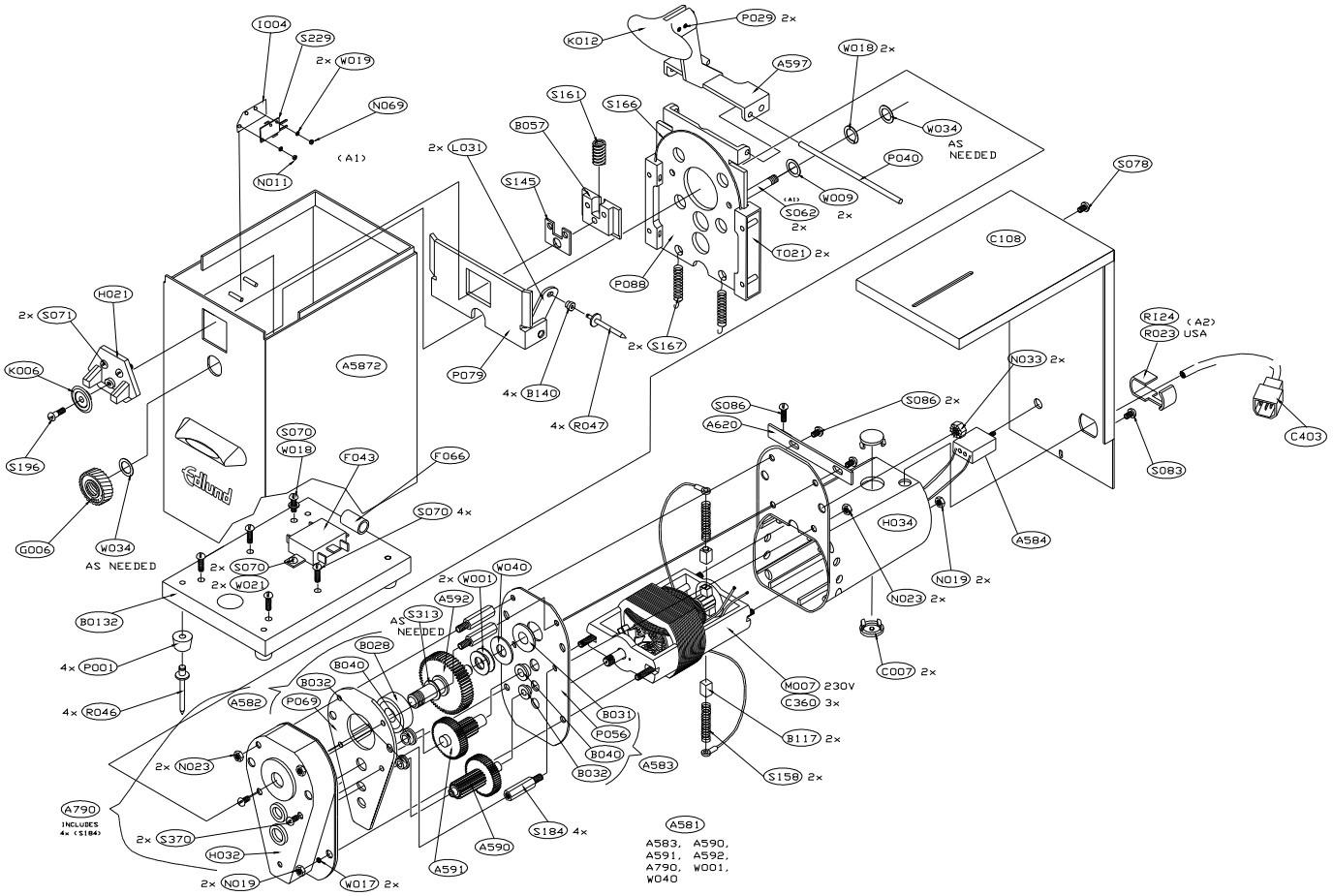
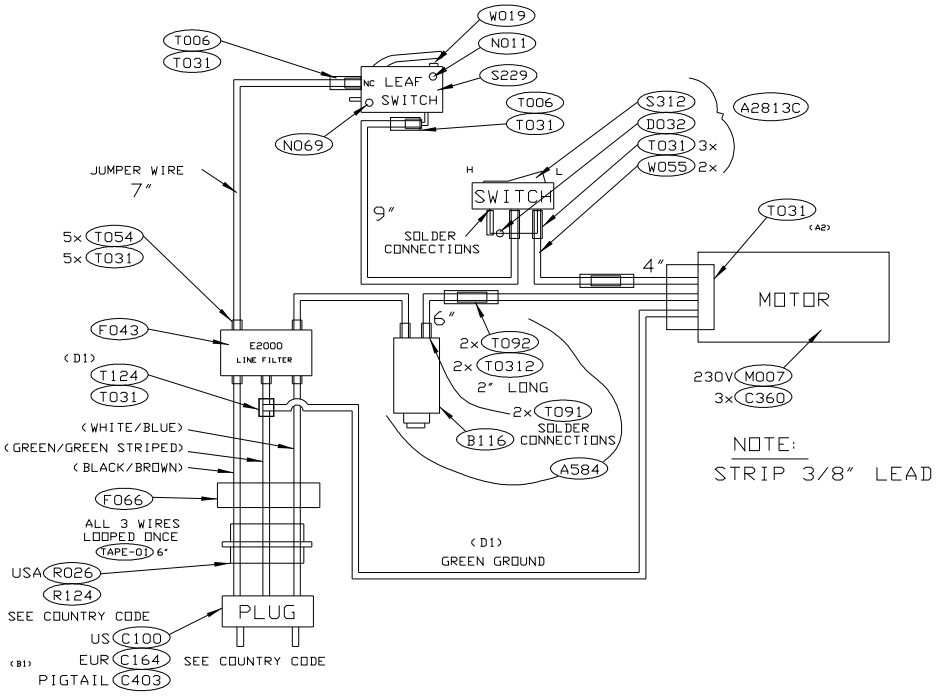
203 CE 115V





203-230V CE MAIN





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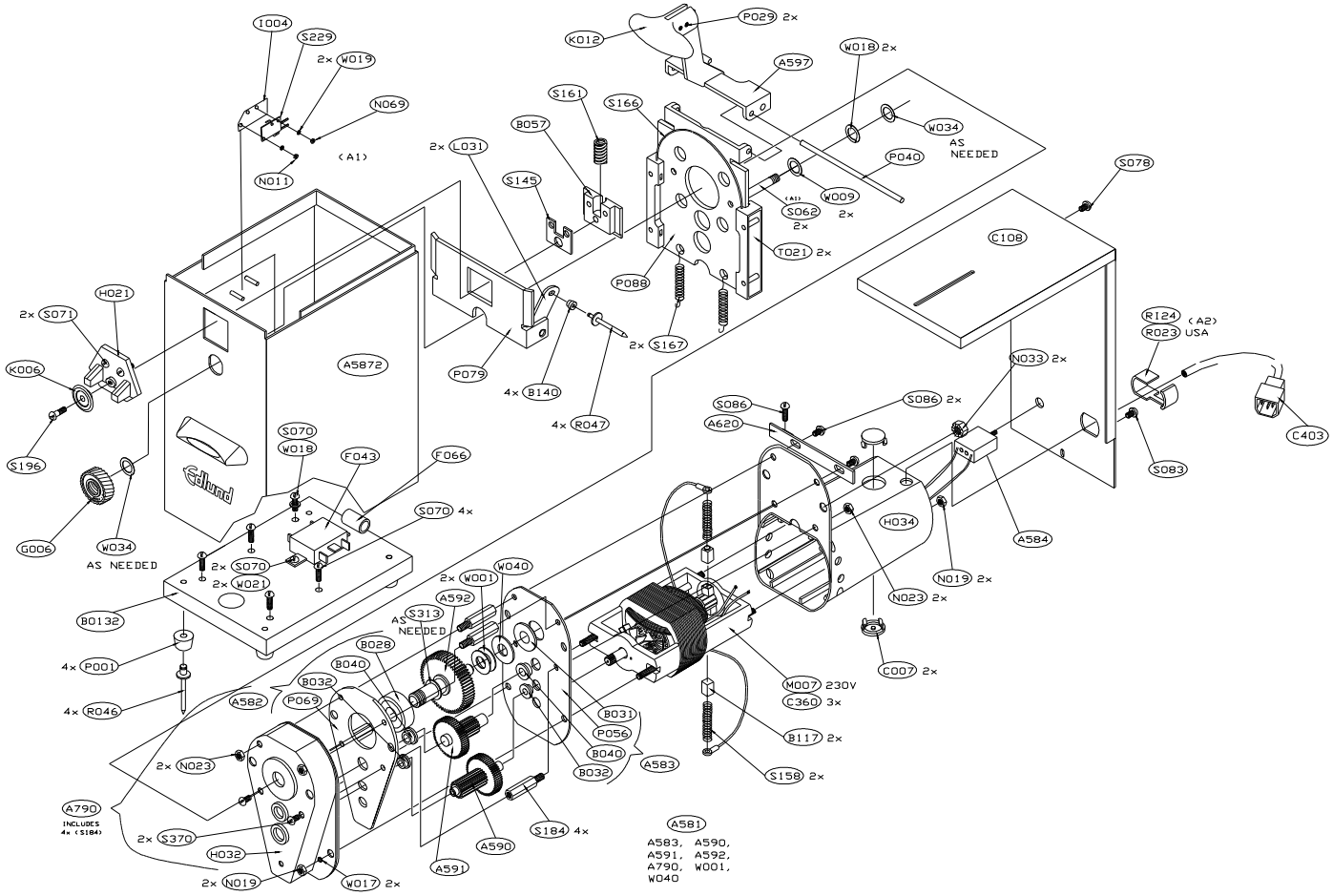
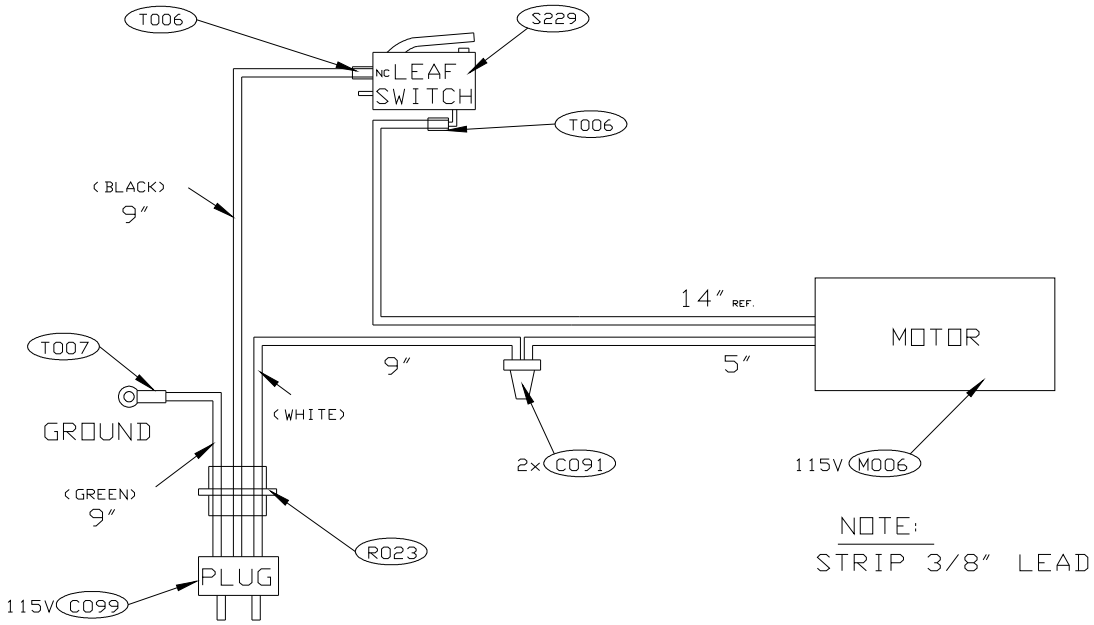
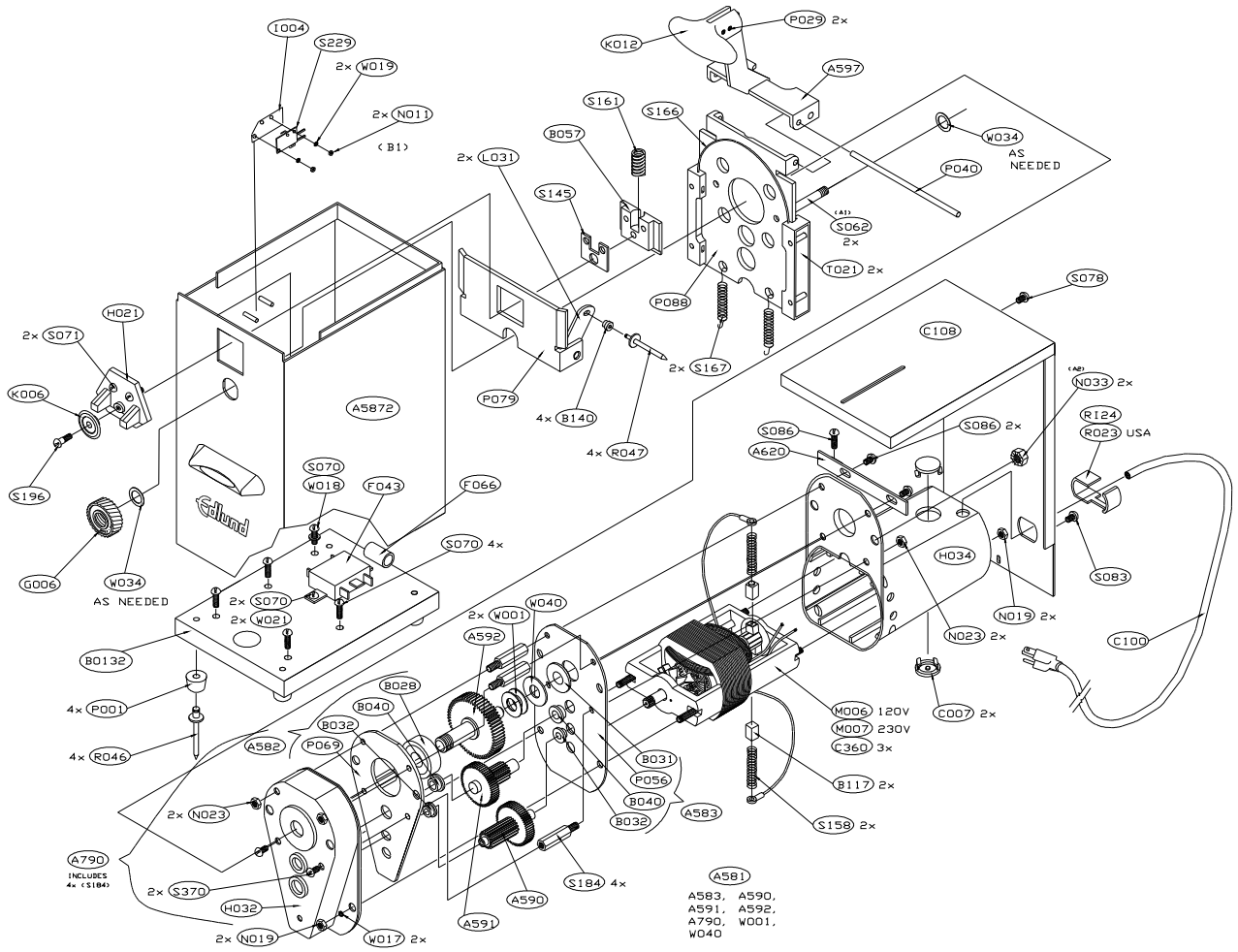
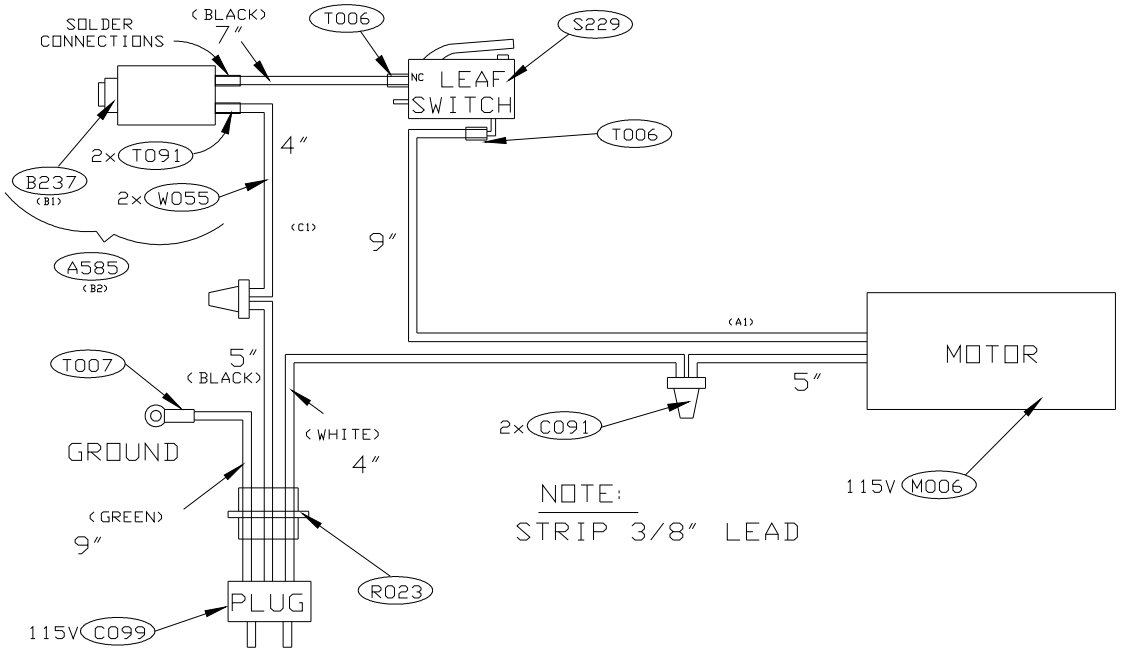
266 MAIN 115V



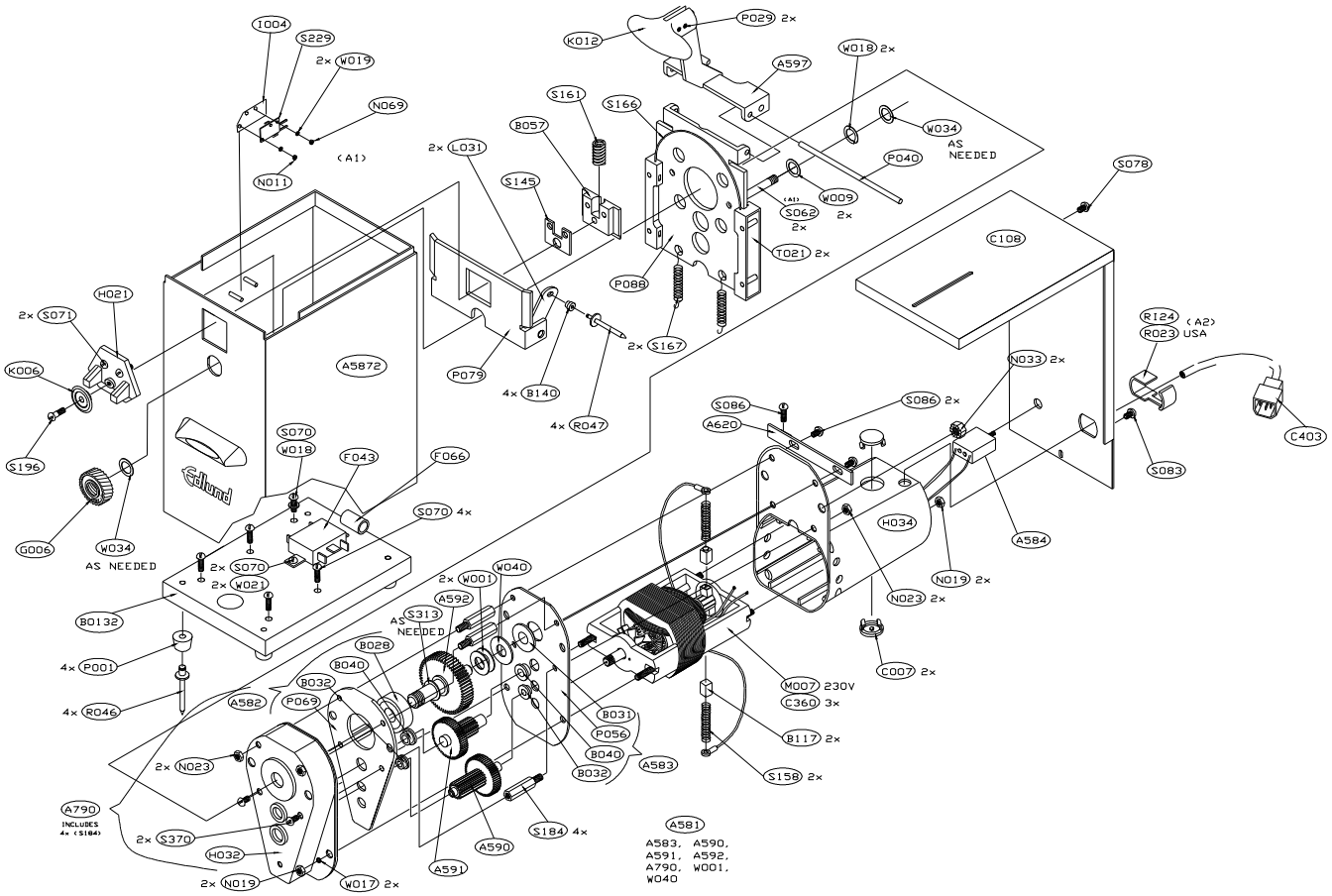


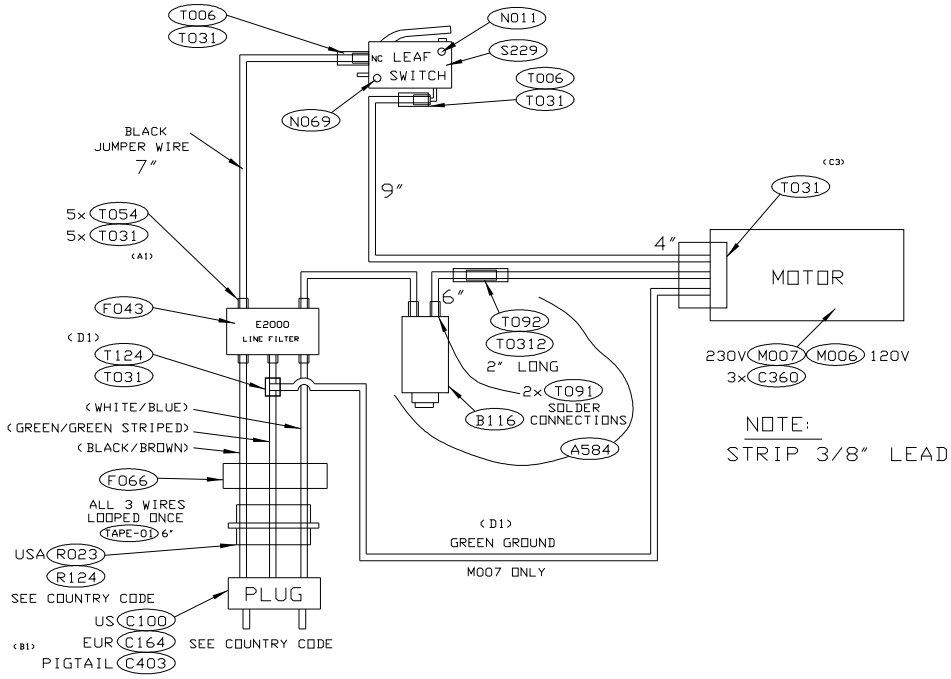
266 CSA 115V


I004
S229
2× W019
2× N011
(B1)
K012
P029 2×
A597
S161
S166
B057
2× L031
S145
W034
AS NEEDED
P040
(A1)
S062
2×
T021 2×
P088
S078
C108
2× S167
P079
4× B140
4× R047
H021
2× S071
K006
S196
G006
W034
AS NEEDED
A5872
S070
W018
F043
F066
S070 4×
2× S070
2× W021
B0132
4× P001
4× R046
A582
B028
B040
B032
P069
2× N023
A790
INCLUDES 4× (S184)
2× S370
H032
2× N019
W017 2×
A591
2× W001
W040
A592
A590
S184 4×
A581
A583, A590, A591, A592, A790, W001, W040
B031
P056
B040
B032
A583
S158 2×
M006 120V
M007 230V
C360 3×
B117 2×
(A2)
N033 2×
S086
S086 2×
A620
R124
R023 USA
H034
S083
N019 2×
N023 2×
C007 2×
C100


SOLDER CONNECTIONS
(BLACK) 7″
T006
S229
NC LEAF SWITCH
T006
2× T091
4″
B237
(B1)
2× W055
(C1)
9″
A585
(B2)
(A1)
MOTOR
5″
T007
5″ (BLACK)
GROUND
(WHITE)
4″
2× C091
NOTE:
STRIP 3/8″ LEAD
115V M006
(GREEN)
9″
R023
PLUG
115V C099

266-230V CE MAIN





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TROUBLE SHOOTING GUIDE

Problem	Cause	Correction
I. Can opener will not start.	1. Cordset not plugged into outlet.	1. Plug cordset into grounded outlet with same voltage as listed on rating label located on back of opener.
	2. Circuit breaker tripped (CSA & 230 volt models.)	2. Reset breaker, if breaker continues to trip, replace breaker.
	3. Inoperative actuating switch (S229).	3. Replace switch.
	4. Motor brushes (B117) worn.	4. Check for continuity and replace brushes and brush springs (S158) as required.
	5. Motor may have failed.	5. Check motor and replace as necessary with appropriate voltage motor.
	6. Broken wires or loose terminals.	6. Check wiring for continuity and repair or replace as required.
	7. Broken two speed switch (Model 203 only) (S312)	7. Replace switch.
	8. Cordset has broken wire.	8. Check for continuity and replace as required.
	9. Blown fuse on cordset (Great Britain - 230 volt model).	9. Check fuse and replace as necessary.
II. Can opener rejects cans.	1. Clearance between back of knife and front of gear too large (see sketch.)	1. With handle in locked-down position check clearance between back of knife and front of gear using flat feeler gauge. Clearance should be .001-.005. Shim gear with W034 washer to obtain clearance.
	2. Motor actuates too soon.	2. Screw down on S086 adjusting screw until motor comes on when bottom of knife is at top of gear teeth to half way down teeth of gear G006.
	3. Knifeholder is sticking.	3. If knifeholder does not move all the way down, switch will come on too soon. Remove and clean knifeholder and mounting surface. Lubricate with non-sticking vegetable oil.
	4. Knife not rotating.	4. Remove knife and knife stud, clean and lubricate using non-stocking vegetable oil. Replace knife and knife stud. Knife must rotate freely.
Problem	Cause	Correction
III. Drive gear won't turn can.	1. Worn drive gear (G006).	1. Replace gear.
	2. Clearance between top of drive gear and radius at back of knife larger than .120. (See sketch, Item II-1).	2. Check clearance. If clearance is larger than .120 replace knifeholder (H021) and check clearance. If clearance still too large, check linkage assembly, Assembly (A580) may be worn.
	3. Bent knife stud (S196).	3. Replace stud.
	4. Worn knife stud hole in knifeholder (H021).	4. Replace knifeholder.
	5. Gear in gear train broken loose from pinion.	5. If motor runs but output shaft doesn't rotate, check for loose gears on pinion shafts in gear train. Replace as necessary.
	6. Threaded hole in spring block (B057) distorted.	6. If linkage assembly not worn, check for distorted hole in spring block.
	7. Worn can stop on knifeholder (H021).	7. Replace knifeholder.
IV. Slivers found on can lid or in food product.	1. Factory knife edge altered or nicked.	1. Replace K006 knife.
	2. Knife doesn't rotate.	2. Remove knife from knifeholder, clean knife, knife stud and knife mounting surface. Lubricate with non-sticking vegetable oil. If knife still doesn't turn, replace knifeholder.
	3. Sharp edge on knifeholder can stop.	3. Check knifeholder for sharp edge or grooves on can stop. Replace as required.
	4. Drive gear is slipping or milling (removing metal from can bead).	4. See Problem III-2.
V. Knife won't sever lid completely.	1. Dull knife (K006).	1. Replace knife.
VI. Cans won't fit under knife when can opener is off.	1. Worn foot pads (P001).	1. Replace as necessary.
	2. Broken or weak return spring (S166).	2. Check return spring and replace as required.