

GR Series Coffee Grinders

Models:

- ▶ **GR - 1.2** ▶ **GR - 2.2**
- ▶ **GR - 1.3** ▶ **GR - 2.3**



Driven To Pioneer Innovation™

Table of Contents

Contact Information	2	Service and Support	3
Product Description/Features	2	Warranty	3
Specifications	2	Principles of Operation	4
Dimensions & Utility Connections	2	Grind Adjustment	4
Installation	3	Programming Instructions	5
Operating Instructions	3	Parts	6
		Wiring Diagrams	13
		Appendix A	15

FETCO® is a trademark or trade name of Food Equipment Technologies Company. All other trademarks or trade names are trademarks or trade names of their respective owners.

Contact Information

FETCO

Food Equipment Technologies Company
600 Rose Road
Lake Zurich • IL • 60047-0429 • USA

Phone: (800) 338-2699 (US & Canada)
(847) 719-3000
Fax: (847) 719-3001

Email: sales@fetco.com
techsupport@fetco.com

Internet: www.fetco.com

Product Description/Features

GR-1.2- One permanent hopper – 2 Portion Sizes

GR-1.3- One permanent hopper – 3 Portion Sizes

GR-2.2- Dual removable hoppers – 2 Portion Sizes per side

GR-2.3- Dual removable hoppers – 3 Portion Sizes per side

- ▶ FETCO slicing type grinding burrs
- ▶ Self adjusting brew basket holder
- ▶ Fully automatic, with digital timer control
- ▶ Front accessible & Service Friendly
- ▶ Motor overload protection
- ▶ Control board overload protection

Specifications

Hopper Capacity: GR-1.2 & 1.3: 15 lbs. / 6.8 kg.
GR-2.2 & 2.3: 5 lbs. / 2.3 kg. each

Timer Range: 00.1 sec. – 999.0 sec.

Grind Rate*: 18 oz. / 510g per minute

Grind Setting Default: Medium

Brew Basket Size: 7" to 9" diameter

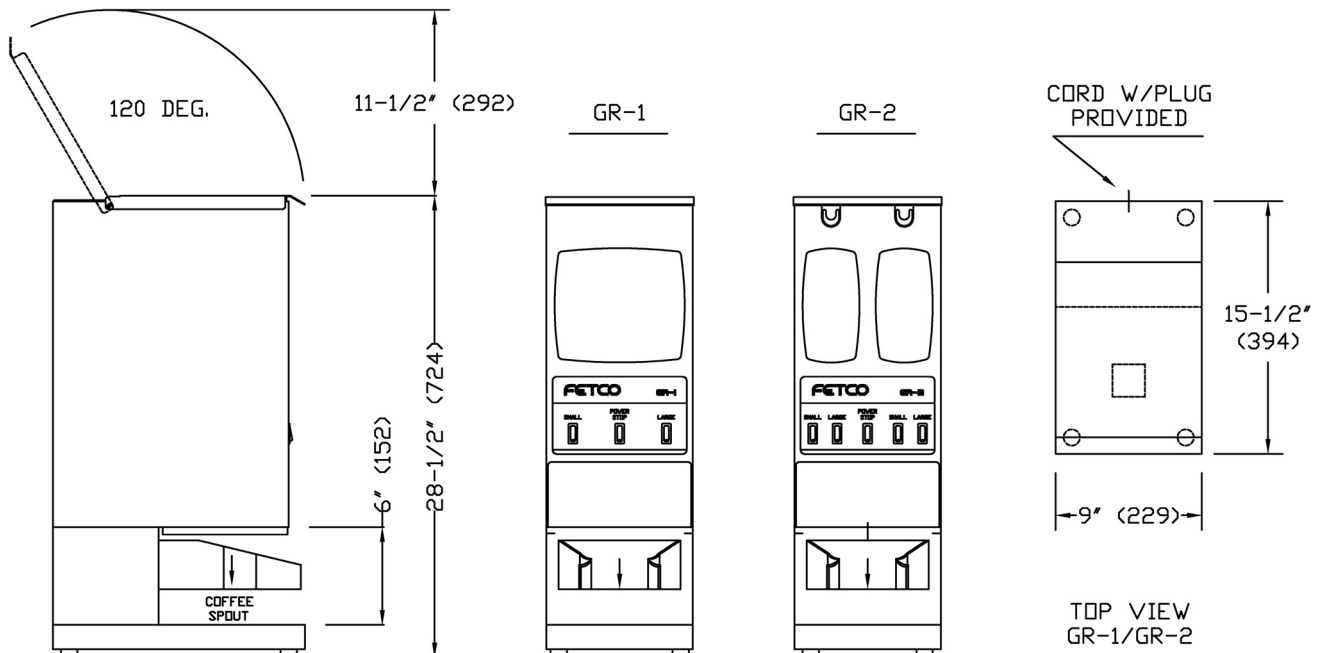
* Grind rate is determined at medium grind with medium size, average to dark roast beans

Electrical:

North America: 120 VAC, single phase
Type A motors: 5.2 amps, 0.67 HP
Type B motors: 9.5 amps, 0.74 HP
NEMA 5-15P plug/cord

Export: 230 VAC, single phase
Type B motors: 3.8 amps, 0.74 HP

Dimensions & Utility Connections



Installation

Warning: Read this User's Guide before installing. Damage caused by improper installation will not be covered under warranty.

1. Inspect the container for visual or hidden damage. The carrier must be notified of any punctured or damaged cartons immediately.
2. Install the grinder in selected location making sure surface is level, and that grinder will fit. **Caution: Never push equipment against cords or wall outlets.**
3. Remove cord from inside hopper and plug into the back of the grinder.
4. Before plugging grinder into 120 volt, 15 amp. wall outlet make sure outlet is not overloaded, a dedicated circuit is preferred.
5. Following the operating procedures below test grinder for proper operation.
6. If you need further assistance please call our Technical Support Dept. at 800-338-2699 or e-mail techsupport@fetco.com.



Operating Instructions

1. **Turn grinder on/off switch to the on position.**
 - The power switch will illuminate to indicate that the grinder has power and is operational.
2. **Fill the hopper(s) with whole coffee beans.**
 - The GR-2 models have two 5lb. removable hoppers. These hoppers must sit squarely on the floor of the hopper chamber. When placing the hoppers inside the hopper chamber make sure chamber is clear of stray whole beans and debris. The hoppers will not sit properly if this is not done.
 - Both hoppers must be placed into the grinder before operating grinder; and plastic covers must be on hoppers.
3. **Place the brew basket with paper coffee filter in the plastic holding arms.**
 - The plastic arms will hold all FETCO brew baskets up to 52H models; and will fit most all other manufactures.
 - All other sizes, FETCO recommends placing paper coffee filters on lower shelf and grinding directly into filter.
4. **Press portion switch. (Factory Defaults)**
 - Small portion: 4 ounces
 - Medium portion: (Available only on GR-1.3 and GR-2.3.) Approximately 6 ounces
 - Large portion: 8 ounces
5. **Allow grinder to complete its cycle then remove brew basket from plastic holding arms.**

Cleaning:

- a) Use stainless steel cleaner on all stainless steel surfaces. (Never use abrasives on these surfaces.)
- b) Use damp cloth on other surfaces. Use mild detergent as needed.
- c) Removable hoppers on GR-2 models are dishwasher safe (the covers are not).
- d) After washing hoppers FETCO recommends hand drying them.

Service and Support

For service and support information, contact the Technical Support department. Our hours are 7:00 AM to 6:00 PM Central Time, Monday through Friday. Phone: (800) 338-2699 or (847) 719-3000. Email: techsupport@fetco.com.

Utilize only qualified beverage equipment service technicians for service. A Service Company Directory may be found on our web site, <http://www.fetco.com>.

Warranty

All FETCO grinders come with a limited warranty. Warranty service must be authorized by the Technical Support Department. A Return Authorization number will be issued for all parts replaced under warranty.

Principles of Operation

GR-1

When one of the start switches is pressed, the timer energizes the grinding motor. The coffee beans are fed into the grinding chamber by a rotating auger spring. When the timed cycle is complete, voltage is removed from grinding motor.

The power/stop switch is used only when it is necessary to interrupt the grind cycle before the cycle is finished.

GR-2

When one of the start switches is pressed, the timer simultaneously energizes the grinding motor and the hopper solenoid. The hopper solenoid opens the guillotine on the bottom of the hopper, which allows the coffee beans to drop into the grinder. The coffee beans are fed into the grinding chamber by a rotating auger spring.

When the timed cycle is complete, voltage is removed from the hopper solenoid and the guillotine closes, stopping the flow of beans out of the hopper. The auger spring continues to feed any remaining beans into the grinding chamber.

Several seconds after the guillotine closes, voltage is removed from the grinding motor. This delay ensures that all beans have passed through the grinding chamber, preventing cross contamination of different coffees.

The motor delay is factory set at 8 seconds, but can be adjusted if necessary. (See Programming section.)

The power/stop switch is used only when it is necessary to interrupt the grind cycle before the cycle is finished.

Grinder Foreign Object Protection

FETCO coffee grinders feature two types of overload protection to prevent damage to the unit if a foreign object enters the grinding chamber and stalls the motor.

- The control board is equipped with a thermal breaker with an audible alarm that will cut power to the motor if the control board overheats.
- The motor is equipped with a thermal breaker (no alarm) that will cut power to the motor if the motor overheats.

Once the foreign object is removed and the unit cools down, the thermal breakers will automatically reset.

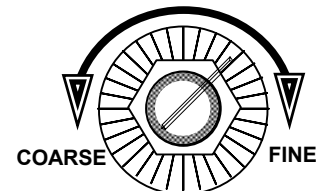
Warning: If this occurs DO NOT TRY TO FIX THIS PROBLEM YOURSELF. Immediately unplug the grinder and call a qualified service technician.

Grind Adjustment

1. Empty the hopper(s).
GR-1: Scoop out as many beans as possible. Lift the window up and sweep out the remaining beans.
GR-2: Remove both hoppers and dump the beans out. Place both hoppers back in grinder.
2. Press one of the large portion switches. This will clear the grinding chamber of any remaining beans.
3. Remove the front cover. There are 2 screws in front and 2 underneath near the coffee outlet.
4. Using a 7/8" or 22 mm wrench turn the retaining nut counter-clockwise at least one turn.
5. Using a 3/8" to 1/2" standard screwdriver turn the adjustment screw clockwise for a finer grind, counter-clockwise for a coarser grind. *Note: Do not exceed more than a 1/4 turn in either direction.*
6. Turn retaining nut clockwise, locking adjustment screw in place.
7. Grind a small amount of coffee beans to test the setting. Repeat the above steps if necessary.

To reset the grind setting to the factory default:

- Follow steps 1 - 4 of the grind adjustment procedure.
- Turn the adjustment screw clockwise until the grinding discs touch, then back off slightly.
- Using a marker, mark the twelve o'clock position of the adjustment screw.
- Turn the screw counter clockwise to just past the four o'clock position.
- Turn retaining nut clockwise locking adjustment screw in place.
- Test by grinding a small batch.



Note: It may be necessary to adjust the grind time to compensate for the new grind setting.

A finer grind will produce less ground coffee per minute and a coarser grind will produce more ground coffee per minute.

Programming Instructions

Software Version 0.9 and Above

(See Appendix A for units manufactured before August 2003)

- ▶ Turn the power switch off.
- ▶ Remove the lower cover.
- ▶ Turn the power switch on.
The currently programmed model number will flash briefly. (example: **12** = GR-1.2, **23** = GR-2.3)
- ▶ Then, if the software default settings are currently programmed, the display will read **DEF**. If not, the display will be blank.
- ▶ Hold **SET** for 5 seconds, until the display reads **SET**.
- ▶ Release **SET**, the software version will be displayed.
(Example: 0.9, 1.0, etc.)
- ▶ Press **SET**. The display will read **TYP** briefly, followed by the currently programmed model number. Press the **UP** and **DOWN** buttons until the correct model number is displayed. (GR-1.2 = **12**, GR-2.3 = **23**, etc.)
- ▶ Press **SET**. The display will read **DEF**. Press **SET** to skip this section.
To reset the unit to factory default settings, hold **SET** for 5 seconds, until **STo** is displayed briefly. This will exit programming mode. To re-enter programming mode, hold **SET** for 5 seconds again.
- ▶ Press **SET**. The display will read **DLY** briefly, followed by the current motor delay setting in seconds. (**GR-2.2 & 2.3 only**)
Press **UP** and **DOWN** to adjust.
- ▶ Press **SET**. The first switch number will be displayed briefly, followed by the current setting in seconds.
Example: LH1 = Left side small batch, 7.0 seconds
- ▶ Press **SET**. The next switch number will be displayed briefly, followed by the current setting.
Example: LH2 = Left side medium batch, 13.5 seconds.
- ▶ Continue this way until all switches are programmed. See the chart for switch designations.
- ▶ Important! To save your changes and return to operating mode, you must hold **SET** for 5 seconds until the display reads **STo**.

23

DEF

SET

X.X

TYP

23

DEF

STo

DLY

8.0

LH1

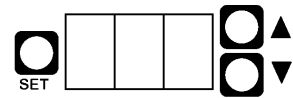
7.0

LH2

13.5

STo

CONTROL BOARD



MOTOR DELAY

This sets the time that the motor continues to run after the hopper guillotine closes on GR-2 series grinders. This delay ensures that all beans have passed through the grinding chamber, preventing cross contamination of different coffees.
Default setting: 8 sec.

SWITCH DESIGNATIONS

Model GR-	1.2	1.3	2.2	2.3
Left Small	LH1	LH1	LH1	LH1
Left Med.		LH2		LH2
Left Large	LH3	LH3	LH3	LH3
Right Small			RH1	RH1
Right Med.				RH2
Right Large			RH3	RH3

DEFAULT SETTINGS

Small – LH1/RH1 = 7 sec.
Med. – LH2/RH2 = 13.5 sec.
Large – LH3/RH3 = 20.0 sec.

Approximate grind times for medium size, average to dark roast beans.

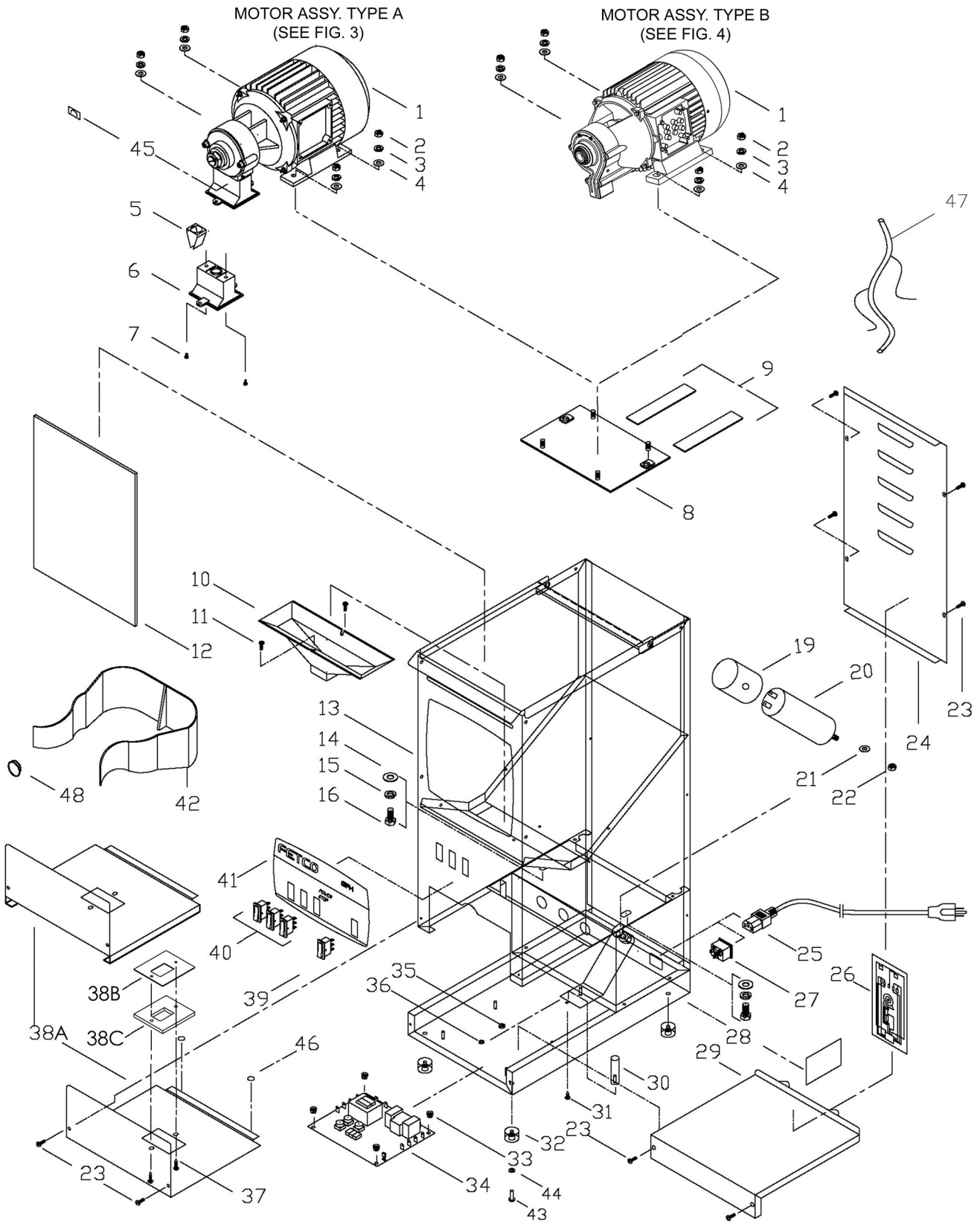
Batch Size	Typical Coffee Dosage		Timer setting
	Ounces	Grams	
½ Gallon	2 – 4 oz.	57 – 113 grams	6.7 - 13.3 sec.
2.5 – 3.0 Liters	2 - 4.5 oz.	57 – 128 grams	6.7 - 15 sec.
1 Gallon	4 – 8 oz.	113 – 227 grams	13.3 - 27 sec.
1.5 Gallons	6 – 12 oz.	170 – 340 grams	20 – 40 sec.
2 Gallons	8 – 16 oz.	227 – 454 grams	27 – 53 sec.
3 Gallons	12 – 24 oz.	340 – 680 grams	40 - 80 sec.
6 Gallons	39 – 51 oz.	1.1 – 1.44 kg.	130 -170 sec.

Grind times are affected by conditions of the coffee beans such as: age, size, oily or dry, and degree of roast.

Parts

Figure 1 – GR-1.2 & GR-1.3

Grinders with serial numbers beginning with the number 2 or 3 were manufactured with Type A motors.
Grinders with serial numbers beginning with the number 7 were manufactured with Type B motors.

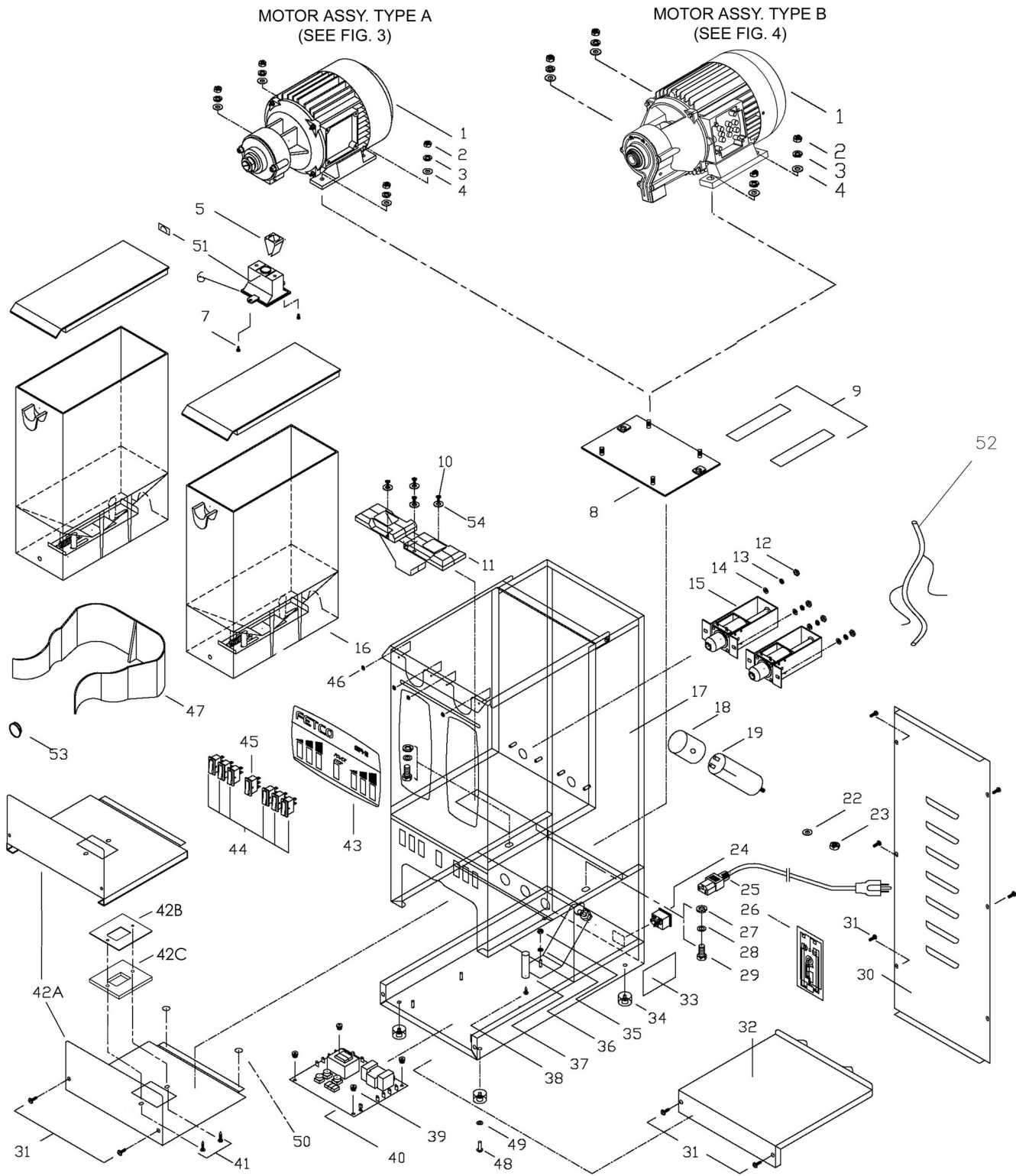


Parts List – Figure 1

ITEM	QTY	PART.NO.	DESCRIPTION
1	1	-----	MOTOR ASSEMBLY, TYPE A (SEE FIG. 3)
	1	-----	MOTOR ASSEMBLY, TYPE B (SEE FIG. 4)
2	4	84024	NUT, HEX, 1/4"-20 SCREW SIZE
3	4	83025	WASHER, 1/4" S.S. SPRING LOCK
4	4	83034	WASHER 1/4" S.S., FLAT
5	1	K056	COFFEE FLOW GUIDE (SET OF 2) (FOR TYPE A MOTORS ONLY)
6	1	23086	COFFEE OUTLET, GR1/GR2 (FOR TYPE A MOTORS ONLY)
7	2	82070	SCREW M3x8 PAN HD PHIL 18-8 S.S., M.S. (FOR TYPE A MOTORS ONLY)
8	1	03185	PLATE, GRINDER MOTOR
9	2	29015	TAPE, NOISE DAMPING
10	1	23070	FUNNEL, HOPPER, GR-1
11	2	82059	SCREW, #8-32 X 3/8 TRUSS HD PHIL., MACHINE
12	1	28002	WINDOW, GR-1
14	2	83031	WASHER 3/8", S.S. FLAT
15	2	83032	WASHER 3/8" S.S. REG SPRING LOCK
16	2	82069	SCREW, 3/8"-16x 3/4" LG, HEX HD. CAP. S.S.
		23094	CAP, CAPACITOR-220VAC (EXPORT VERSION ONLY)
19	1	23093	CAP, CAPACITOR - 120VAC
		67001	CAPACITOR, 120VAC VERSION, 40uF, 450VAC, 50-60Hz
20 (TYPE A MOTORS)	1	67002	CAPACITOR, 220VAC, 12uF, 450VAC, 50-60 Hz (EXPORT VERSION ONLY)
		67003	CAPACITOR, 100VAC, 50uF, 250VAC, 50Hz (JAPAN VERSION ONLY)
		67004	CAPACITOR, 120VAC VERSION, 80uF, 450VAC, 50-60Hz
20 (TYPE B MOTORS)	1	67005	CAPACITOR, 230VAC VERSION, 18uF, 450VAC, 50Hz (EXPORT VERSION ONLY)
	2	67004	CAPACITOR, 120VAC VERSION, 80uF, 450VAC, 50-60Hz (JAPAN VERSION - 2 REQD.)
21	1	83033	WASHER, M8 REG S.S. SPRING LOCK
22	1	84023	NUT, HEX, M8 S.S.
23	8	82071	SCREW, #6-32 x 3/8" PAN HD PHIL w/ DOUBLE ACTION SPRING WSHR.
24	1	01407	COVER, REAR, GR-1
25	1	63038	CORD, AMERICAN, 6 FT LG
		63041	CORD, EUROPEAN, 6.5FT LG
		63042	CORD, AUSTRALIAN, 6.5 FT LG
		63044	CORD, SOUTH AFRICA, 6.5 FT LG
		63043	CORD, ENGLAND, 6.5FT LG
26	2	401204	WIRING DIAGRAM, UNIVERSAL, GR-1
		401205	WIRING DIAGRAM, 220/240 VAC, 50-60 HZ, 2.5 AMP
27	1	65005	CONNECTOR, POWER INLET
29	1	002178	WELDMENT, BASE COVER, GR1/2
30	1	21058	ROD, VIBRATION DAMPENING
31	1	82032	SCREW, #8 x 1/2 S.S. T.S. PHILL TRUSS HD
32	4	73030	FOOT, GRINDER
33	4	29007	NUT, #4-40 NYLON FINGER
34	1	K032	CONTROL BOARD REPLACEMENT KIT, 120VAC
		K048	CONTROL BOARD REPLACEMENT KIT, 220VAC (EXPORT ONLY)
35	1	84002	NUT, HEX, #8-32 S.S.
36	1	83026	WASHER, #8 S.S. INTERNAL TOOTH LOCK
37	2	82075	SCREW, #6-32 X 5/8 PHIL. TRUSS. S/M/S/ (TYPE A MOTORS ONLY)
		82053	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE (TYPE B MOTORS ONLY)
38A	1	01406	COVER, GRINDER SERVICE
		K058	SERVICE GRINDING COVER WITH RAILS
38B	1	03471	COVER GASKET, GRINDING OUTLET (TYPE B MOTORS ONLY)
38C	1	24104	GASKET OUTLET (TYPE B MOTORS ONLY)
39	1	58063	SWITCH, POWER ROCKER, RED 120VAC
40	2 or 3	58061	SWITCH, START ROCKER, N/O 250V
41	1	45074	OVERLAY, GR-1.2
		45075	OVERLAY, GR-1.3
42	1	23108	HOLDER, BREW BASKET, GR1/2
43	4	82097	SCREW, #10-32 x 0.625 S.S. PAN HEAD PHILLIPS
44	4	83037	WASHER, #10 SPRING LOCKR
45	1	44017	LABEL, GRAIN SIZE ADJUSTMENT, GR1/2
46	2	97033	BUMPER, 1/2" DIA. FLAT TOP, ADHESIVE BACKED, BLK
47	1	402061	ELECTRICAL HARNESS, GR1.2
		402062	ELECTRICAL HARNESS, GR1.3
48	3	86053	PLUG, 0.812 DIA HOLE,

Figure 2 – GR-2.2 & GR-2.3

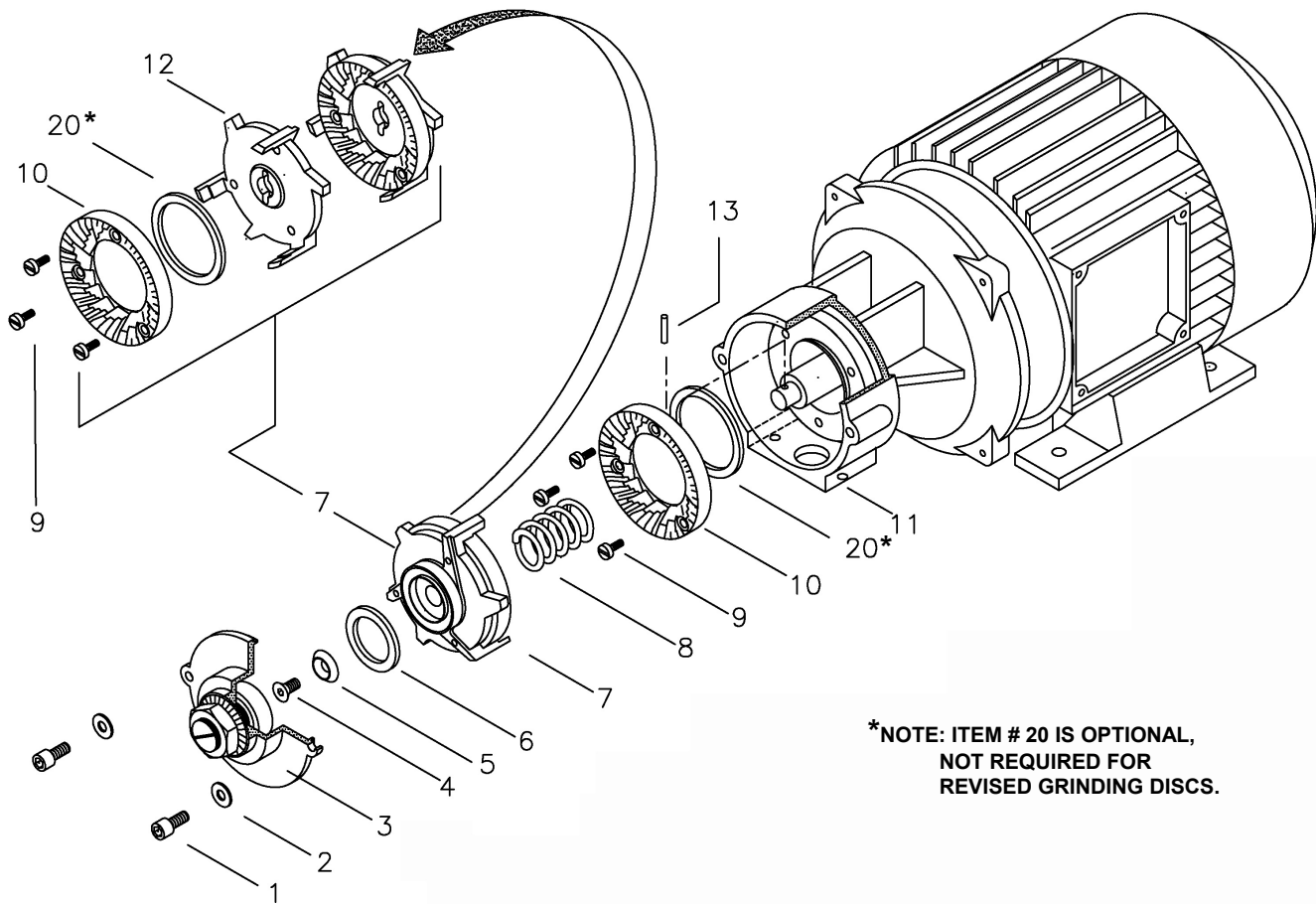
Grinders with serial numbers beginning with the number 2 or 3 were manufactured with Type A motors.
Grinders with serial numbers beginning with the number 7 were manufactured with Type B motors.



Parts List – Figure 2

ITEM	QTY	PART NO.	DESCRIPTION
1	1	-----	MOTOR ASSEMBLY, TYPE A (SEE FIG. 3)
		-----	MOTOR ASSEMBLY, TYPE B (SEE FIG. 4)
2	4	84024	NUT,HEX, 1/4"-20, 18-8 S.S
3	4	83025	WASHER, 1/4" S.S. SPRING LOCK
4	4	83034	WASHER, 1/4" S.S. FLAT
5	1	K056	COFFEE FLOW GUIDE (SET OF 2) (FOR TYPE A MOTORS ONLY)
6	1	23086	COFFEE OUTLET, GR1/GR2 (FOR TYPE A MOTORS ONLY)
7	2	82070	SCREW M3x8 PAN HD PHIL 18-8 S.S., M.S. (FOR TYPE A MOTORS ONLY)
8	1	03185	PLATE,GRINDER MOTOR
9	2	29015	TAPE, NOISE DAMPING
10	4	82053	SCREW, #6-32x1/2" PHIL.SCREW TRUSS. HEAD M.S.
11	2	23085	MANIFOLD
12	4	84018	NUT, HEX,#10-32 MACHINE SCREW
13	4	83037	WASHER, #10 REG.SPR.LOCK
14	4	83036	WASHER, #10 FLAT
15	2	102091	ASSEMBLY, SOLENOID, 120VAC
		102154	ASSEMBLY, SOLENOID, 230VAC (EXPORT VERSION ONLY)
		102155	ASSEMBLY, SOLENOID, 100VAC (JAPAN VERSION ONLY)
16	2	A066	ASSEMBLY, HOPPER, GR2 (SEE FIG. 5)
18	1	23093	CAP, CAPACITOR,120VAC
		23094	CAP, CAPACITOR, 220VAC (EXPORT VERSION ONLY)
19 (TYPE A MOTORS)	1	67001	CAPACITOR, 120VAC VERSION, 40uF, 450VAC, 50-60Hz
		67002	CAPACITOR, 220VAC, 12uF, 450VAC, 50-60 Hz (EXPORT VERSION ONLY)
		67003	CAPACITOR,100VAC, 50uF, 250VAC, 50Hz (JAPAN VERSION ONLY))
19 (TYPE B MOTORS)	1	67004	CAPACITOR, 120VAC VERSION, 80uF, 450VAC, 50-60Hz
	1	67005	CAPACITOR, 230VAC VERSION, 18uF, 450VAC, 50Hz (EXPORT VERSION ONLY)
	2	67004	CAPACITOR, 120VAC VERSION, 80uF, 450VAC, 50-60Hz (JAPAN VERSION - 2 REQD.)
22	1	83033	WASHER, M8,SPRING LOCK
23	1	84023	NUT, HEX, M8 , S.S.
24	1	65005	CONNECTOR, POWER INLET
25	1	63038	CORD, AMERICAN, 6FT
		63043	CORD, ENGLAND, 6.5FT
		63042	CORD, AUSTRALIAN, 6.5FT
		63041	CORD, EUROPEAN, 6.5FT
		63044	CORD, SOUTH AFRICA , 6.5FT
26	2	401197	WIRING DIAGRAM, UNIVERSAL, GR-2
27	2	83031	WASHER, 3/8", S.S. FLAT
28	2	83032	WASHER, 3/8" S.S.SPRING LOCK
29	2	82069	SCREW, 3/8"-16x3/4"LG, HEX HD,CAP
30	1	01410	COVER, REAR,GR-2
31	10	82071	SCREW, #6-32x3/8" PAN HD PHIL w/ DUAL ACTION
32	1	002178	WELDMENT, BASE COVER, GR1/2
34	4	73030	FOOT, GRINDER
35	1	84002	NUT, HEX, #8-32 S.S
36	1	83026	WASHER, #8, S.S. INTERNAL TOOTH LOCK
37	1	21058	ROD, VIBRATION DAMPENING
38	1	82032	SCREW, #8 X 1/2 TRUSS HD PH, SS SHEET MET
39	4	29007	NUT, #4-40 NYLON FINGER
40	1	K032	CONTROL BOARD REPLACEMENT KIT, 120VAC
		K048	CONTROL BOARD REPLACEMENT KIT, 220VAC (EXPORT ONLY)
41	2	82075	SCREW, #6-32 X 5/8 PHIL. TRUSS. S/M/S/ (TYPE A MOTORS ONLY)
		82053	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE (TYPE B MOTORS ONLY)
42A	1	01406	COVER, GRINDER SERVICE
		K058	SERVICE GRINDING COVER WITH RAILS
42B	1	03471	COVER GASKET, GRINDING OUTLET (TYPE B MOTORS ONLY)
42C	1	24104	GASKET OUTLET (TYPE B MOTORS ONLY)
43	1	45073	OVERLAY, GR2.2
		45072	OVERLAY, GR2.3
44	4 or 6	58061	SWITCH, START ROCKER N/O 250 VAC
45	1	58063	SWITCH, POWER ROCKER,RED 120 VAC
46	4	29010	FASTENER,9/32" HEAD DIA.x.165" LG, NYLON PUSH IN,(HOPPER GUIDE)
47	1	23108	HOLDER, BREW BASKET,GR1/2
48	4	82097	SCREW, #10-32 X 0.625 S.S. PAN HEAD PHILLIPS
49	4	83037	WASHER#10 SPRING LOCK
50	2	97033	BUMPER,1/2" DIA. FLAT TOP, ADHESIVE BACKED , BLK
51	1	44017	LABEL, GRAIN SIZE ADJUSTMENT, GR1/2
52	1	402063	ELECTRICAL HARNESS, GR-2.2
		402064	ELECTRICAL HARNESS, GR2.3
53	3	86053	PLUG, 0.812 DIA. HOLE,
54	4	24090	WASHER,18-8 SS,#6 SCREW SIZE,SEALING,NEOPRENE BONDED

Figure 3 – GR-1 & GR-2 Motor Assy. – Type A



***NOTE: ITEM # 20 IS OPTIONAL,
NOT REQUIRED FOR
REVISED GRINDING DISCS.**

Parts List – Figure 3

ITEM	QTY	PART NO.	Description
1	2	56012	COVER SCREWS
2	2	56013	COVER WASHERS
3	1	56011	COVER ASSEMBLY FOR GRINDING CHAMBER (includes K042 bearing assy.)
(3)	1	K042	BEARING ASSEMBLY (includes bearing and adjustment shaft) (inside ITEM #3 – cover assembly)
4	1	56014	ROTOR SCREW
5	1	56015	ROTOR WASHER
6	1	56009	ROTATING DISC FLANGE WASHER
7	NA	NA	ROTOR ASSEMBLY – NOT SOLD AS A COMPLETE ASSEMBLY
8	1	85010	AUGER SPRING
9	6	82161	GRINDING DISC MOUNTING SCREWS
10	1	14006	GRINDING DISC, SET OF TWO
11	1	NOT AVAILABLE	GRINDING CHAMBER HOUSING ASSY. (SEE NOTE BELOW)
12	1	56008	ROTATING DISC FLANGE (ALSO REQUIRES #20 – 24049 GRINDING RING)
13	1	87018	MOTOR SHAFT PIN
20	2	24049	GRINDING RING, HDPE

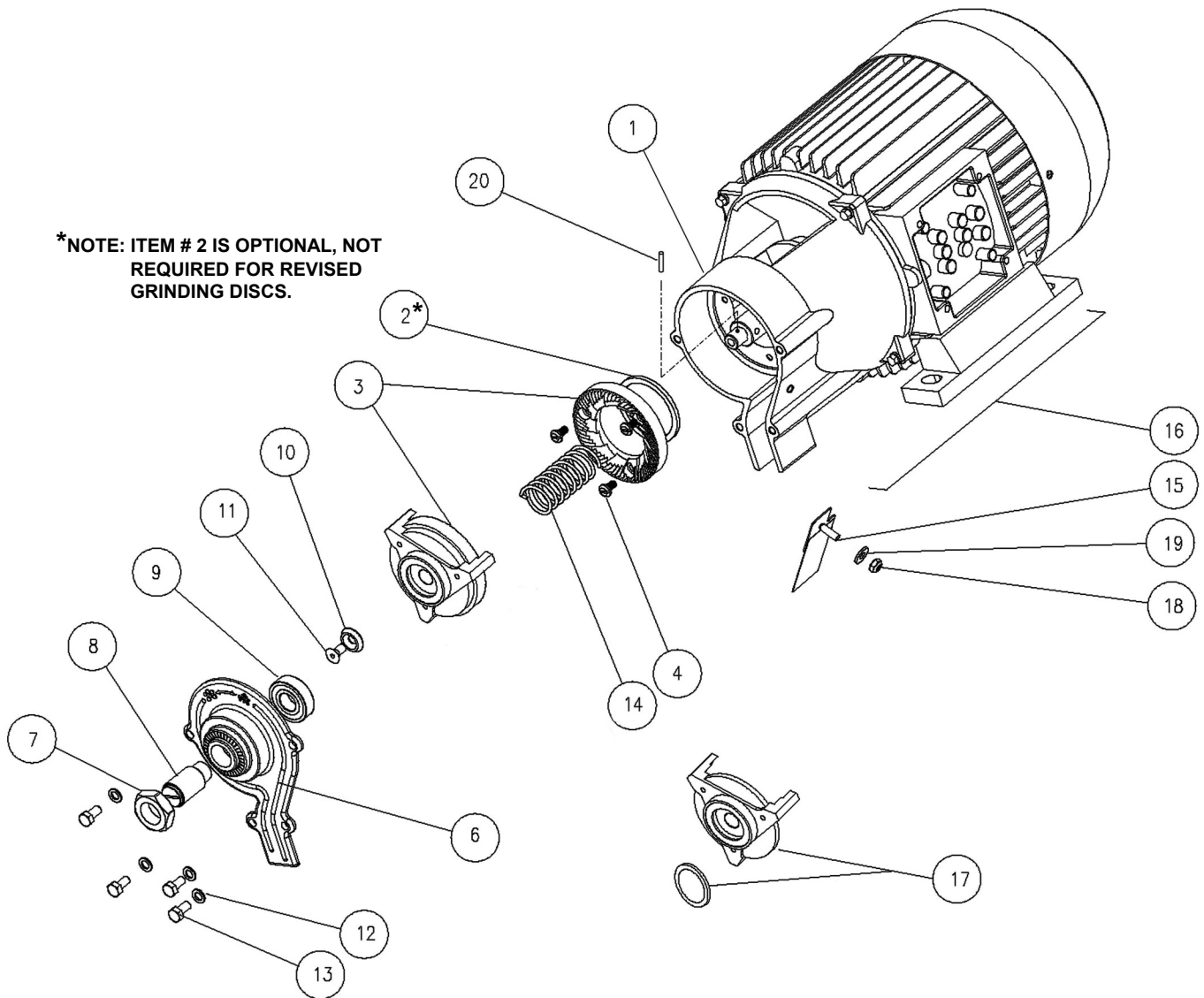
NOTE: Item # 11 - GRINDING CHAMBER HOUSING is no longer available. Grinders that require this part must be retrofitted to the Type B configuration shown in Fig. 4. The existing motor can still be used.
To retrofit the grinding chamber, order part # **K078 – GRINDING CHAMBER RETROFIT KIT**.

The complete **Type A MOTOR ASSEMBLY** shown above is no longer available. Grinders that require a new motor must be retrofitted to the Type B motor shown in Fig. 4.
To retrofit the entire motor assembly, order part # **K077 – MOTOR ASSEMBLY RETROFIT KIT**.

Figure 4 – GR-1 & GR-2 Motor Assy. – Type B

Part # 102376 - ASSEMBLY, MOTOR, .74HP, 120VAC, 60Hz

Part # 102377 - ASSEMBLY, MOTOR, .74HP, 230VAC, 50Hz (EXPORT ONLY)

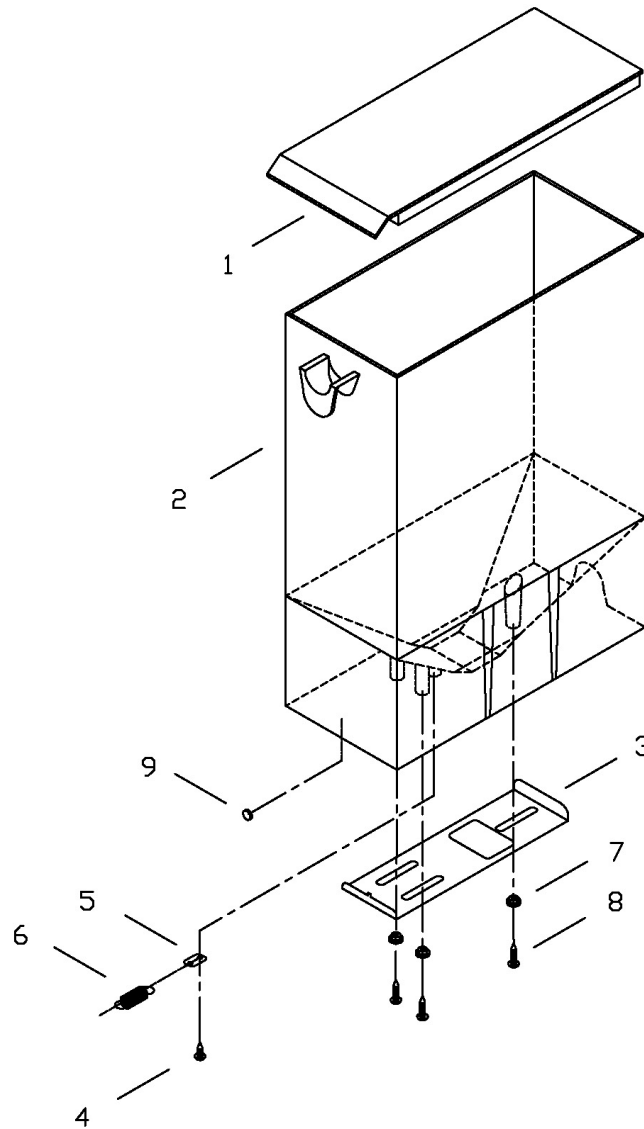


***NOTE: ITEM # 2 IS OPTIONAL, NOT
REQUIRED FOR REVISED
GRINDING DISCS.**

Parts List – Figure 4

ITEM	QTY	PART NO.	Description
1	1	102362	ASSY, GRINDING HOUSING GR1/2
2	2	24049	RING, HDPE, GRINDING
3	1	14006	GRINDING DISC, SET OF TWO
4	3	82161	SCREW, M4 x 0.7 x 10mm LG., PAN HEAD, SLOTTED, 18-8 SS.
6	6	56026	COVER, GRINDING CHAMBER HOUSING
7	1	56020	NUT, M16x1 JAM
8 & 9	1	K042	BEARING ASSEMBLY (factory assembled - includes #8 adjustment shaft and #9 bearing)
10	1	56015	WASHER, GR-1/GR-2 COUNTERSUNK
11	1	56014	SCREW, M5 X 10, FLAT HEAD SLOTTED
12	4	56013	WASHER, M5, SERRATED BELLEVILLE
13	4	56012	SCREW, M5 X 12 METRIC, HEX HEAD
14	1	85031	SPRING, GRINDER AUGER 6 MM PITCH
15	1	002409	WELDMENT, COFFEE GUIDE, GR1/2
16	1	56027	MOTOR, Seg80-4A, 120V, 60Hz
		56028	MOTOR, Seg80-4A, 230V, 50Hz (EXPORT VERSION ONLY)
17	1	102380	ASSEMBLY, ROTATING DISC FLANGE & WASHER, GR-1/2
18	1	84030	LOCKNUT, #8-32 SCREW SIZE, HEX THIN NYLON INSERT
19	1	83051	WASHER, #8 SCREW SIZE, FLAT
20	1	87018	MOTOR SHAFT PIN

Figure 5 – GR-2.2 & GR-2.3 Hopper Assembly, Part # A066

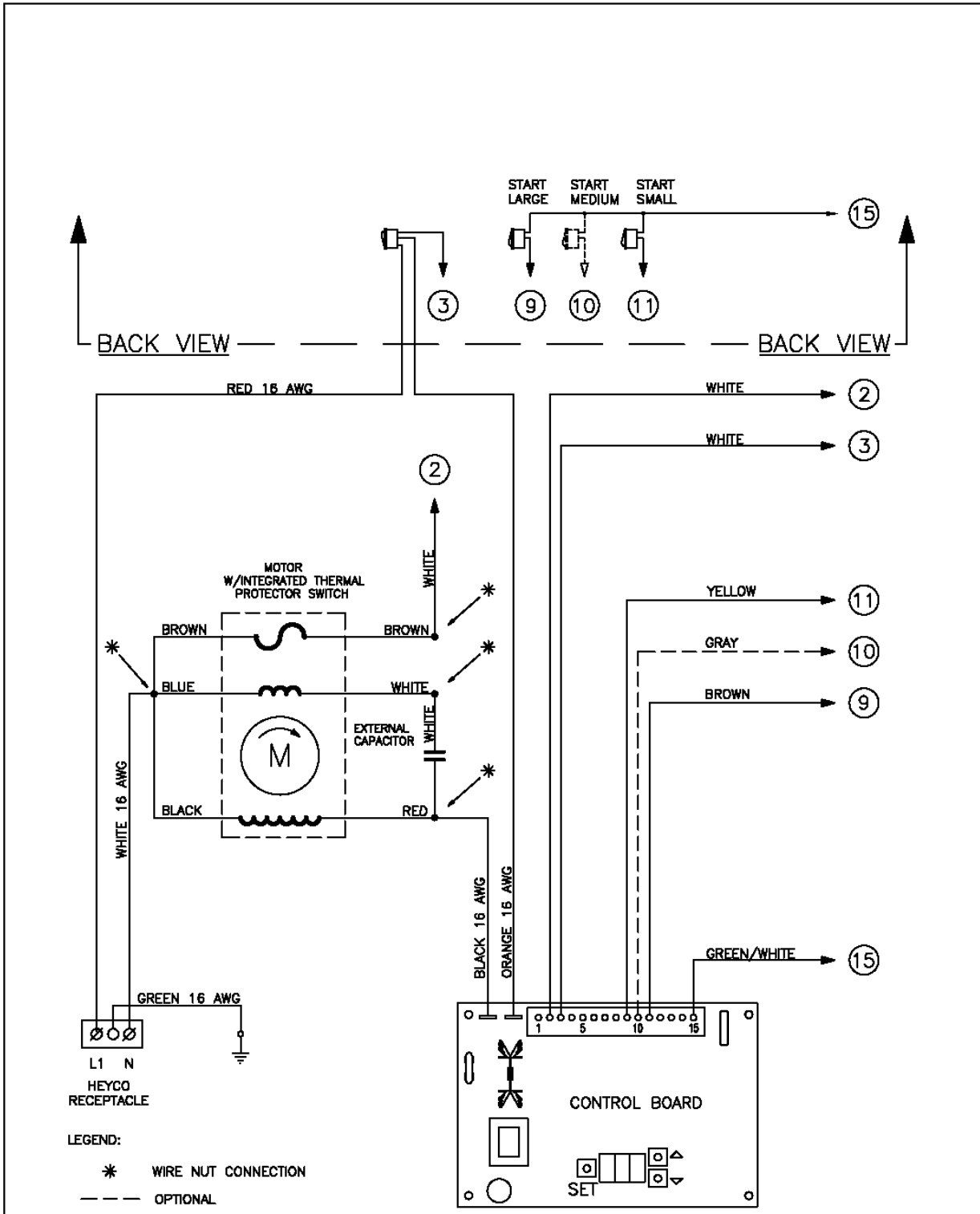


ITEM	QTY	PART NO.	Description
1	1	23081	LID, HOPPER, GR2
2	1	23082	BODY, HOPPER, GR2
3	1	03198	GUILLOTINE
4	1	82074	SCREW, #6 x 3/8 PHIL TRUSS HEAD SELF TAPING
5	1	03200	BRACKET, GUILLOTINE SPRING, GR2
6	1	85012	SPRING, EXPANSION, 3/8 x .026 x 1.375L 0.60 LBS/IN
7	3	29008	WASHER, SHOULDER, 3/32L, .375A, 1/16B, .248C, .136D
8	3	82075	SCREW, #6 x 5/8 TRUSS HEAD PHILLIPS SHEET META
9	1	97033	BUMPER, 1/2 DIA, FLAT TOP, ADHESIVE BACKED, BLK

Wiring Diagrams

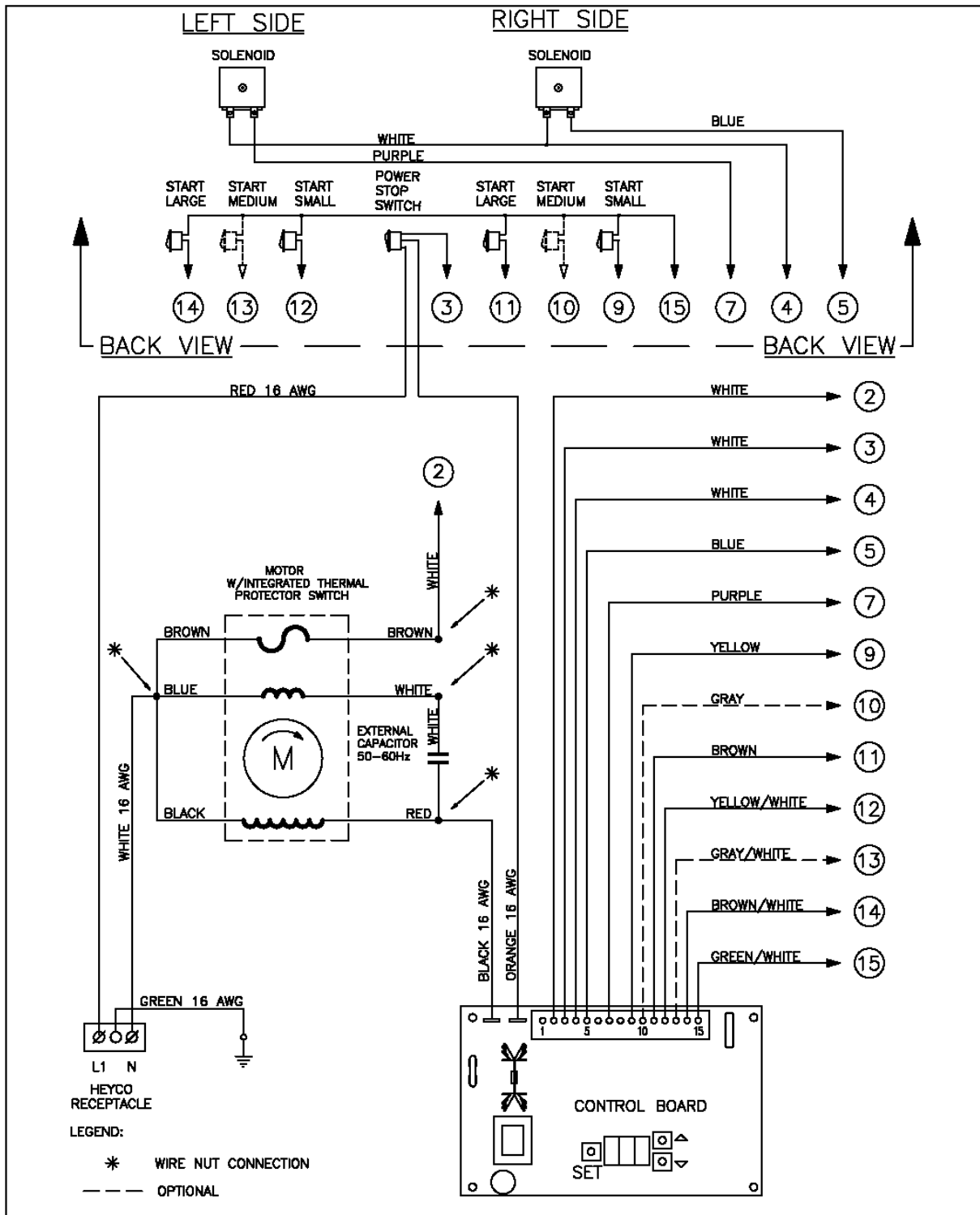
GR-1

Effective August 2003



FETCO FOOD EQUIPMENT TECHNOLOGIES COMPANY, INC.
640 HEATHROW DRIVE, LINCOLNSHIRE, IL 60066, USA.
PHONE: (800) 338-2699, (847) 821-1177
e-MAIL: techsupport@fetco.com, http://www.fetco.com

FETCO PRODUCT NO. GR-1 (TRIAC)	DESCRIPTION WIRING DIAGRAM, UNIVERSAL, GR-1	WIRING DIAGRAM NO. 401204-004
--	---	---



FETCO FOOD EQUIPMENT TECHNOLOGIES COMPANY, INC.
640 HEATHROW DRIVE LINCOLNSHIRE, IL, 60069, USA.
PHONE: (800) 338-2598, (847) 821-1177
e-MAIL: techsupport@fetco.com, http://www.fetco.com

FETCO PRODUCT NO. GR-2(TRIAC)	DESCRIPTION WIRING DIAGRAM, UNIVERSAL, GR-2	WIRING DIAGRAM NO. 401197-008
---	--	---

Appendix A

Programming Instructions

For GR-1 & GR-2 Grinders manufactured prior to August 2003

Factory Settings:

- GR-1.2
Small batch switch: 13 seconds grind time.
Large batch switch: 26 seconds grind time.
- GR-1.3
Small batch switch: 13 seconds grind time.
Medium batch switch: 19.5 seconds grind time.
Large batch switch: 26 seconds grind time.
- GR-2.2
Small batch switch: 7 seconds grind time. } **(plus)** 7seconds additional after hopper closes.
Large batch switch: 13.5 seconds grind time. }
- GR-2.3
Small batch switch: 7 seconds grind time. } **(plus)** 7seconds additional after hopper closes.
Medium batch switch: 13.5 seconds grind time. }
Large batch switch: 20 seconds grind time. }

Timer Adjustment:

- Remove the base panel
- Press and hold the set button for three to five seconds. The LED display will show SET. (While in the programming mode the grinder motor and guillotine solenoids are disabled.)
- Select the start switch you wish to reprogram, depress switch. The display will momentarily show the switch identification (S.I.D.).

Switch Identification:

Model	Sm. Batch Left	Med. Batch Left	Lrg. Batch Left	Sm. Batch Right	Med. Batch Right	Lrg. Batch Right
GR-1.2	LH1	X	LH3	X	X	X
GR-1.3	LH1	LH2	LH3	X	X	X
GR-2.2	LH1	X	LH3	RH1	X	RH3
GR-2.3	LH1	LH2	LH3	RH1	RH2	RH3

- The display will then show the current timer setting for the switch you have selected.
- By pressing the up and down buttons you can now change your timer settings.
- The new programmed time will be automatically saved when you select the next start switch to be programmed.
- When all Start switches are programmed with the desired settings, press the set button. The display will then go blank and the control board will return to normal operation. *Note: All changes will be lost if you do not press the set button.*

Approximate grind times for medium size, average to dark roast beans.

Batch Size	Typical Coffee Dosage		Timer setting
	Ounces	Grams	
½ Gallon	2 – 4 oz.	57 – 113 grams	6.7 - 13.3 sec.
2.5 – 3.0 Liters	2 - 4.5 oz.	57 – 128 grams	6.7 - 15 sec.
1 Gallon	4 – 8 oz.	113 – 227 grams	13.3 - 27 sec.
1.5 Gallons	6 – 12 oz.	170 – 340 grams	20 – 40 sec.
2 Gallons	8 – 16 oz.	227 – 454 grams	27 – 53 sec.
3 Gallons	12 – 24 oz.	340 – 680 grams	40 - 80 sec.
6 Gallons	39 – 51 oz.	1.1 – 1.44 kg.	130 -170 sec.

Grind times are affected by conditions of the coffee beans such as: age, size, oily or dry, and degree of roast.

