



150 LB.

SPECIAL TUMBLER

MODEL L50ST42NH

OWNER'S MANUAL



MANUFACTURING COMPANY

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Foreign Distributors
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D0759

MAN355

3-88 100 DGR

SAFETY INSTRUCTIONS

- CAUTION: Keep Loading Door Closed.
- WARNING: The Dryer Must Be Used Only for Water-Washed Fabrics.
- WARNING: To Avoid Fire Hazard, Do Not Dry Articles Containing Foam Rubber or Similarly Textured Rubber-Like Materials.
- CAUTION: A Clothes Dryer Produces Combustible Lint and Should Be Exhausted Outside; And the Area Around the Dryer Should Be Kept Free of Lint.
- CAUTION: The Use of This Dryer for Acid Washing Will Substantially Shorten the Life of the Dryer.
- CAUTION: Failure to Completely Remove Abrasive Materials from Clothing Before Transfer to Dryer Will Substantially Shorten the Life of the Dryer.
- CAUTION: Remove Clothes from Dryer As Soon As It Stops. This Keeps Wrinkles from Setting In and Reduces the Possibility of Spontaneous Combustion.

CAUTION FOR YOUR SAFETY:

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. NOTE: THE PURCHASER TO POST THE CAUTION IN A PROMINENT LOCATION.

For optimum efficiency and safety, we recommend that you read the owner's manual before operating your Cissell Commercial Clothes Dryer.

RETAIN THIS MANUAL FOR FUTURE REFERENCE. STORE MANUAL IN A FILE OR BINDER.

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS MUST BE POSTED IN A PROMINENT LOCATION. INFORMATION TO BE POSTED CAN BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.

CAUTION

"DO NOT PUT INTO THIS DRYER FLAMMABLE ITEMS SUCH AS: BABY BED MATTRESSES, THROW RUGS, UNDERGARMENTS (BRASSIERES, ETC.) AND OTHER ITEMS WHICH USE RUBBER AS A PADDING OR BACKING." RUBBER EASILY OXIDIZES CAUSING EXCESSIVE HEAT AND POSSIBLE FIRE. FLAMMABLE ITEMS AND ITEMS CONTAINING RUBBER SHOULD BE AIR-DRIED.

CAUTION

Synthetic solvent fumes from drycleaning machines create acids when drawn through the dryer. These acid fumes cause rusting of painted parts, pitting of bright plated parts and completely removes the zinc from galvanized metal parts, such as the tumbler basket.

If the drycleaning machines are in the same area as the tumbler, then the tumbler make-up air must come from a source free of solvent fumes.

NOTE

WARNING: - SHUT MAIN POWER OFF EXTERNALLY TO MACHINE BEFORE SERVICING.

NOTICE: DATA IN THIS MANUAL IS SUBJECT
TO CHANGE WITHOUT PRIOR NOTICE.

STONE-WASH DRYER LIMITED WARRANTY

Cissell Manufacturing Company ("Cissell") warrants, except as hereinafter provided, the Stone-Wash Dryer to be free from defects in material or workmanship at the time of purchase, and to perform when placed into service by the original purchaser. Once the dryer has been placed into service, all warranties by Cissell expire. With respect to electric motors and other accessories furnished with the new equipment, but not manufactured by Cissell, the warranty is limited to that provided by the respective manufacturer.

Cissell's total liability arising out of the manufacture and sale of new equipment and parts, whether under the warranty or caused by Cissell's negligence or otherwise, shall be limited to Cissell repairing or replacing, at its option, any defective equipment or part returned F.O.B. Cissell's factory, transportation prepaid, within the applicable warranty period and found by Cissell to have been defective, and in no event shall Cissell be liable for damages of any kind, whether for any injury to persons or property or for any special or consequential damages. The liability of Cissell does not include furnishing (or paying for) any labor such as that required to service, remove or install; to diagnose troubles; to adjust, remove or replace defective equipment or a part; nor does it include any responsibility for transportation expense which is involved therein.

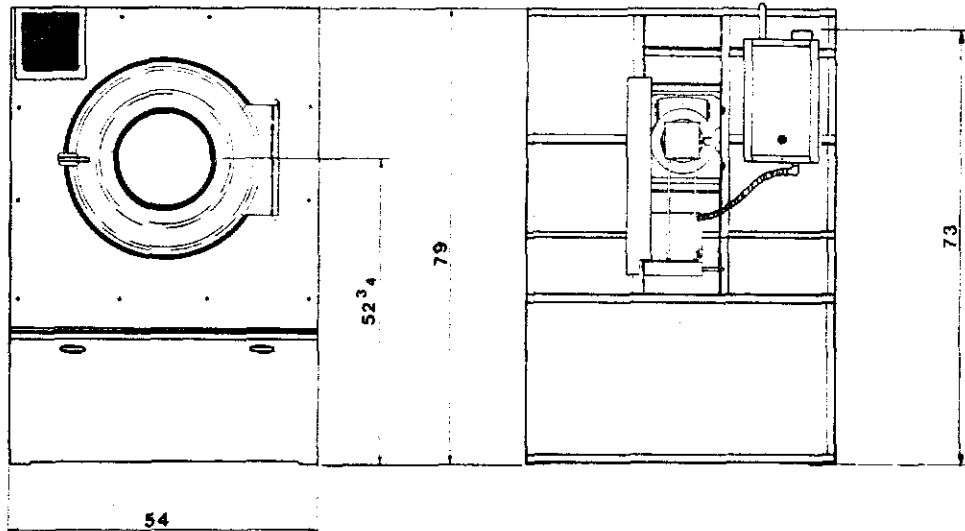
The warranty of Cissell is contingent upon installation if its equipment as instructed. The warranty is void on equipment or parts that have been: subject to misuse, accident, or negligent damage prior to placement into service; installed with electrical connections, plumbing or conditions other than those specified by Cissell; repaired with other than genuine Cissell replacement parts; damaged by fire, flood, vandalism, or such other causes beyond the control of Cissell; altered or repaired in any way that affects the reliability or detracts from its performance, or; which have had the identification plate, or serial number, altered, effaced or removed.

No defective equipment or part may be returned to Cissell for repair or replacement without prior written authorization from Cissell. Charges for unauthorized repairs will not be accepted or paid by Cissell.

CISSELL MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, STATUTORY OR OTHERWISE, CONCERNING THE EQUIPMENT OR PARTS INCLUDING, WITHOUT LIMITATION, A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR A WARRANTY OF MERCHANTABILITY. THE WARRANTIES GIVEN ABOVE ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. CISSELL NEITHER ASSUMES, NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT, ANY OTHER WARRANTY OR LIABILITY IN CONNECTION WITH THE MANUFACTURE, USE OR SALE OF ITS EQUIPMENT OR PARTS.

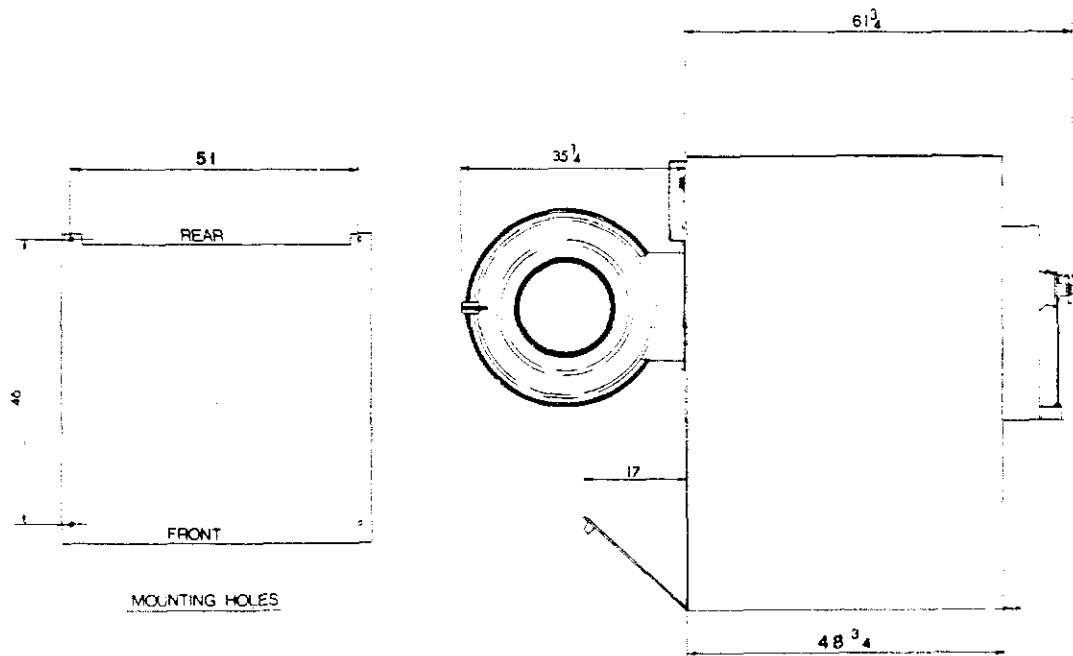
For warranty service, contact the Distributor from whom the Cissell equipment or part was purchased. If the Distributor cannot be reached, contact Cissell.

CISSELL 150 lb. "ST" MODELS



FRONT VIEW

REAR VIEW



MOUNTING HOLES

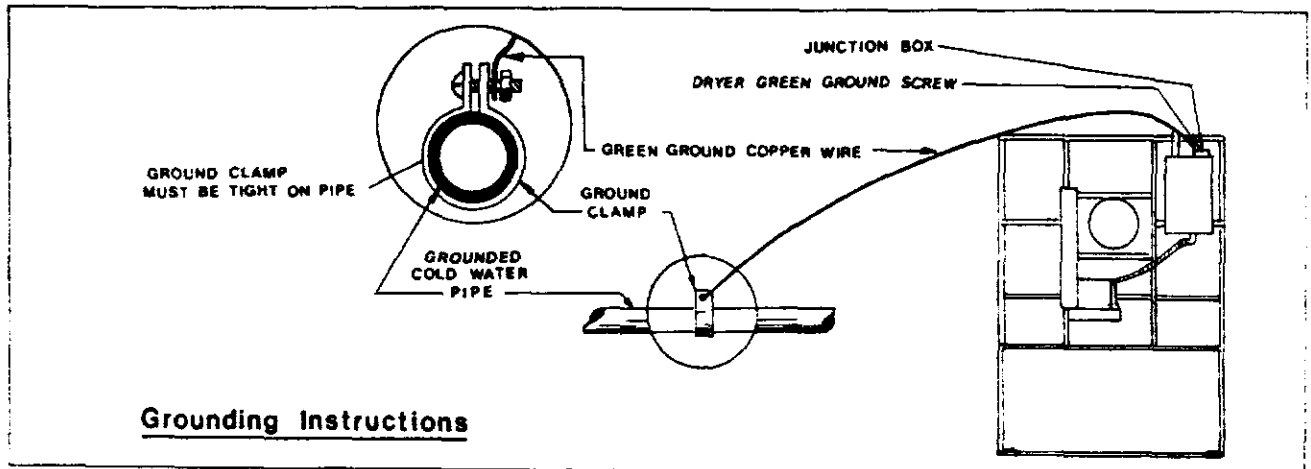
SIDE VIEW

ELECTRICAL CONNECTIONS - ALL DRYERS

Dryers must be electrically grounded - by a separate #14 or larger green wire from the grounding terminal within the service connection box to a cold water pipe. In all cases, the grounding method must comply with local electrical code requirements; or in the absence of local codes, with the National Electrical Code as ANSI/NFPA No. 70-1987.

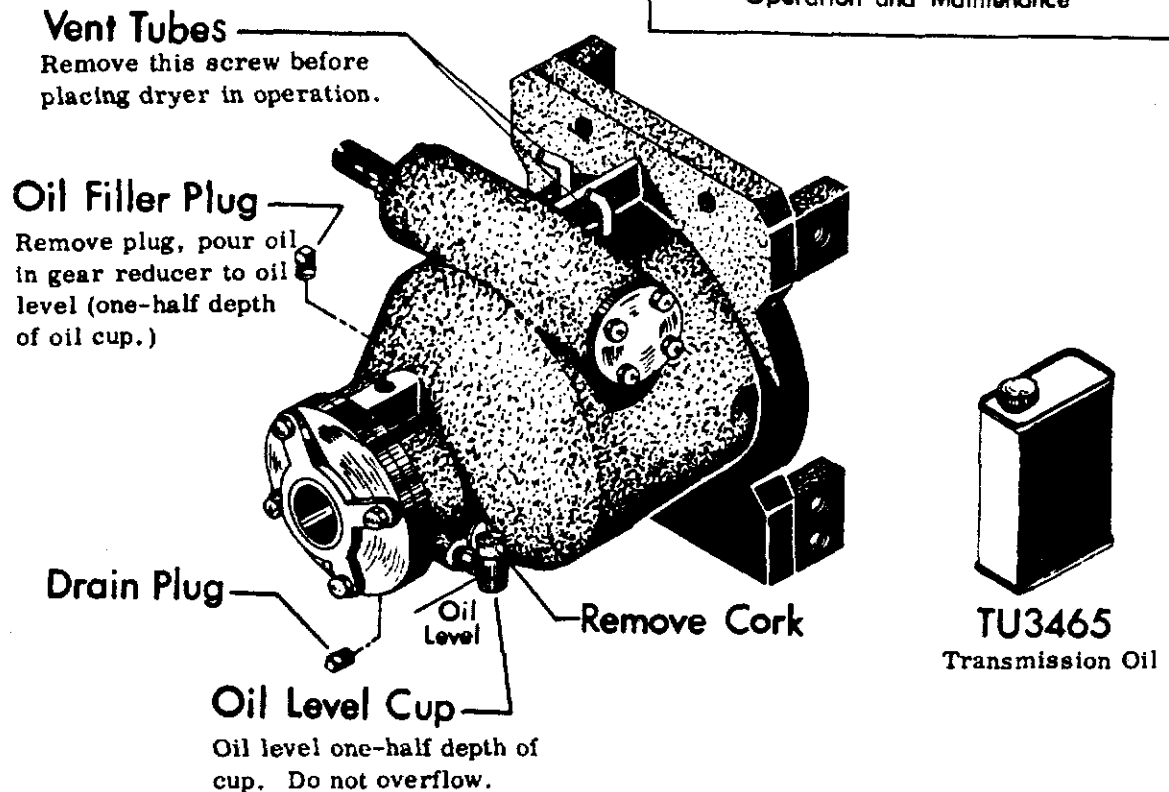
See wiring diagram furnished with dryer. Your Cissell dryer is completely wired at the factory and it is only necessary for the electrician to connect the power leads to the wire connectors with the service connection box on the rear of the dryer. Do not connect the dryer to any voltage or current other than that specified on the dryer rating plate. (Wiring diagram is located on rear wall of dryer).

All Panels must be in position before operation of dryer.



Large Gear Reducer

Operation and Maintenance



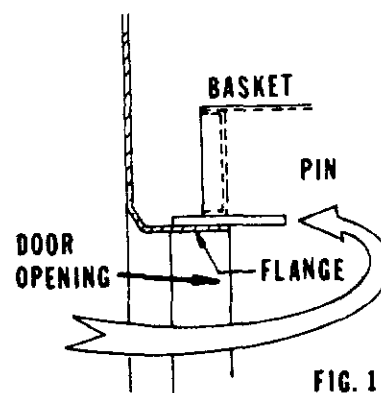
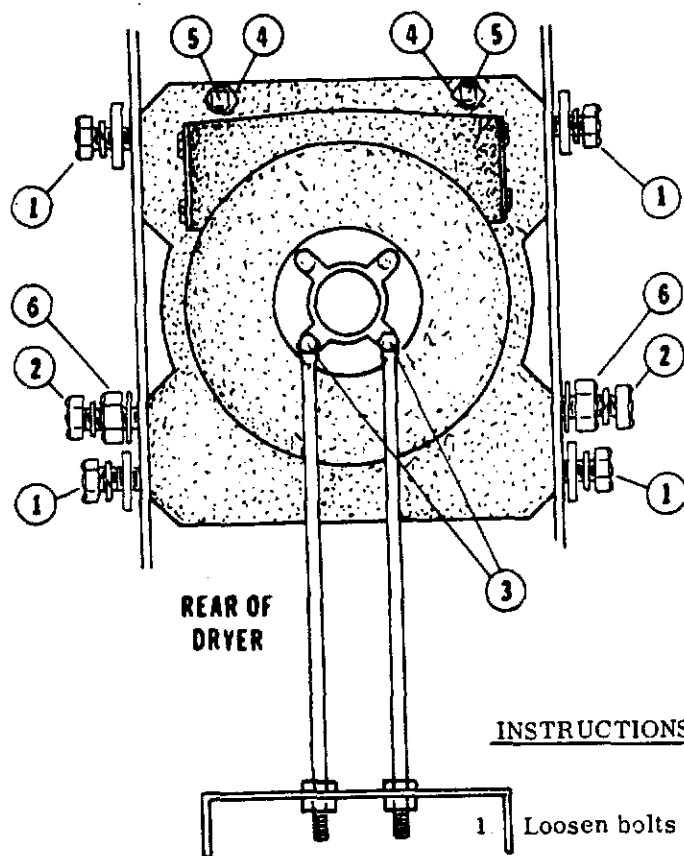
BEFORE PLACING THE DRYER IN OPERATION, Remove small screws from vent tubes in top rear of each Gear Reducer case. Remove the cork from the oil level inspection cup. If the oil level is correct, the oil level inspection cup will be half filled with oil. If not, add oil. Oil may be added to the Gear Reducer by removing the filler plug in the top rear of the Gear Reducer case. Do not operate a Gear Reducer unless the drain plug is tight, and the vent tube screw removed.

If it is necessary to return a Gear Reducer to the factory, either replace the small screws in the vent tubes and plug the oil-level inspection cup with a cork, or drain all oil from the reducer by removing the drain plug located in the bottom rear of the Gear Reducer case.

EACH GEAR REDUCER is filled with 5 pints of Cissell TU 3465 transmission oil before leaving the factory. Change oil once every 6 months.

THE LARGE TIMKEN BEARINGS, which support the worm gear and basket load, must operate in a preloaded condition, that is the worm gear must not have end play. The Gear Reducer is assembled at the factory to provide a 16-20 inch lb. pre-load on these bearings.

THE SMALL TIMKEN BEARINGS, which carry the worm must operate in a pre-loaded condition, that is, the worm must not have end play. The Gear Reducer is assembled at the factory to provide a 2-4 inch lb. preload on these bearings.



INSTRUCTIONS FOR ALIGNING BASKETS

1. Loosen bolts numbers one (1) thru five (5).
2. Place pin "A" in position shown in Fig. 1 & 2.
3. Check pins "B" at position shown in Fig. 1 & 2 for equal clearance.
4. If pin "B" clearance is unequal, adjust at nut #6.
5. When clearance at pin "B" is correct, tighten bolts #1 in the following order, as viewed from rear of dryer, top right, bottom left, top left and bottom right.
6. Tighten bolts #5 until flush against back of dryer. Tighten lock nut #4 to secure bolt #5 in position.
7. Tighten bolts #2 and #3.
8. Remove pin "A" and check for proper clearance at points "A" and "B". If clearance is incorrect, repeat the above steps.

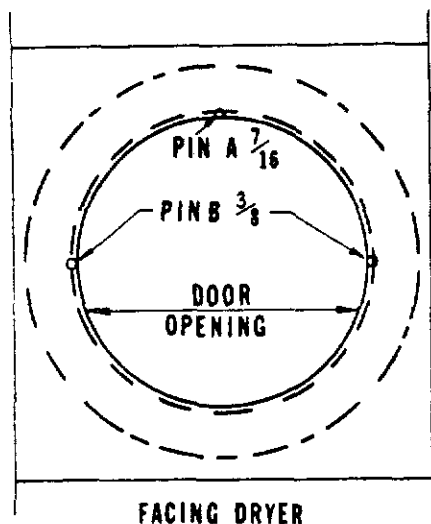


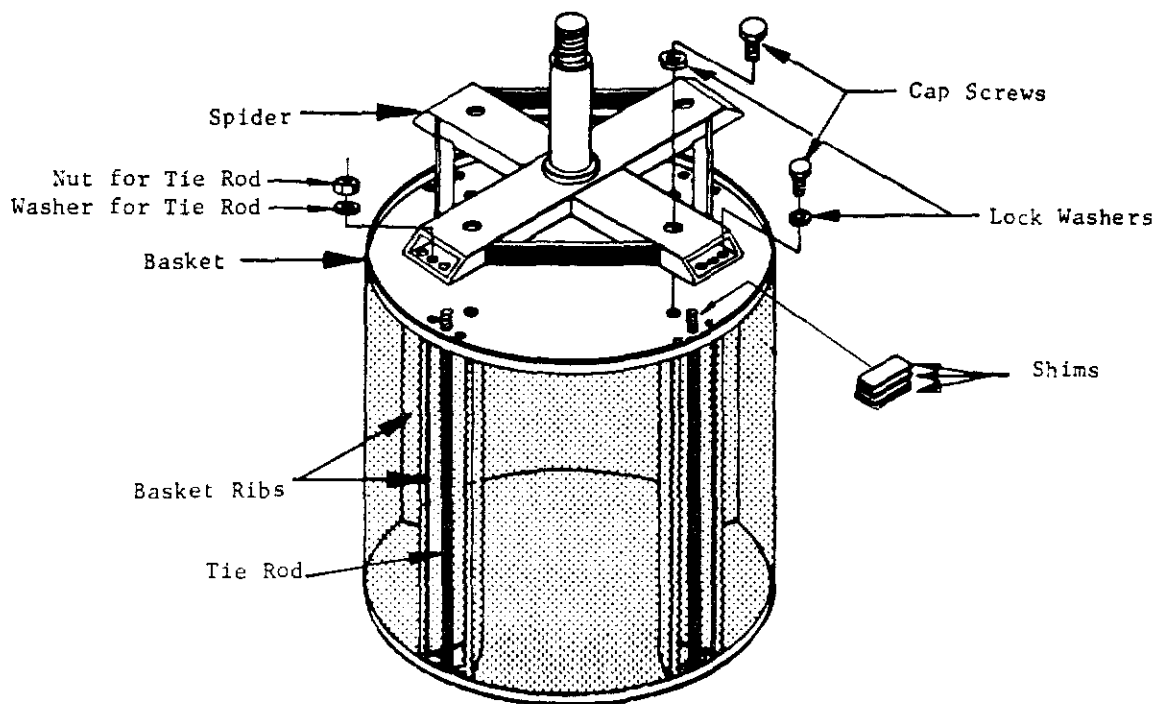
FIG. 2

NOTE: USE SHORT SECTIONS OF ROUND STEEL ROD FOR PINS OR DRILL BITS MAY BE USED IN PLACE OF ROUND ROD.

INSTRUCTIONS FOR SHIMMING THE BASKET & SPIDER ASSEMBLY

This procedure is usually necessary when replacing the basket or spider assembly on any Cissell dryer. The alignment of these two parts is crucial in assuring a true running basket.

- A. Align the basket per instructions on previous page.
- B. Rotate the basket to determine where the most out of round point is (where the basket scrapes or comes close to scraping the sweep sheet.).
- C. Mark this position and the nearest rib to this position. If it is between two ribs, both ribs may need to be shimmed.
- D. Remove the basket from the dryer (do not loosen the alignment bolts).
- E. With the basket on the floor (spider up), loosen the cap screws and tie rod nuts enough to insert one or two shims between the spider leg and the basket at the marked position. With shims in place, tighten the screws and nuts.
- F. Install spider and basket assembly and check again.
- G. If basket is still out of round, start at Step B and repeat procedure.
- H. When shimming is completed, re-align basket.



INSTRUCTIONS FOR DRYERS WITH REVERSING CONTROL TIMER

In operation, coasting of basket increases, making it necessary to readjust reversing timer:

CAUTION:

Failure to do this will cause the thermal overload units for the basket to cut-out unnecessarily and probably damage gear reducer.

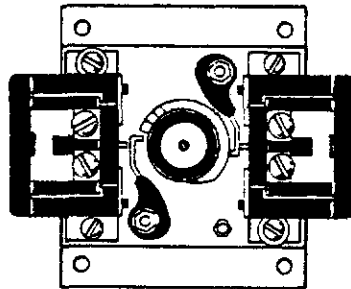
Adjustment of Reversing Timer:

CAUTION: Dryer power supply must be shut off before adjusting timer.

1. Reversing timer operates 18.7 seconds per reversal.
2. Rotate upper cam clockwise to increase stop time between reversals, counter-clockwise to decrease.
3. Lower cam has 10 divisions. Normal adjustment, 3 divisions, as shown.
4. Each division adds 1.87 seconds. Example:
3 divisions "off time" - 5.61 seconds
7 divisions "on time" - 13.09 seconds.
5. Recommended time basket must stop completely for 5 to 7 seconds between reversals. Minimum basket stopping time is 4 seconds.

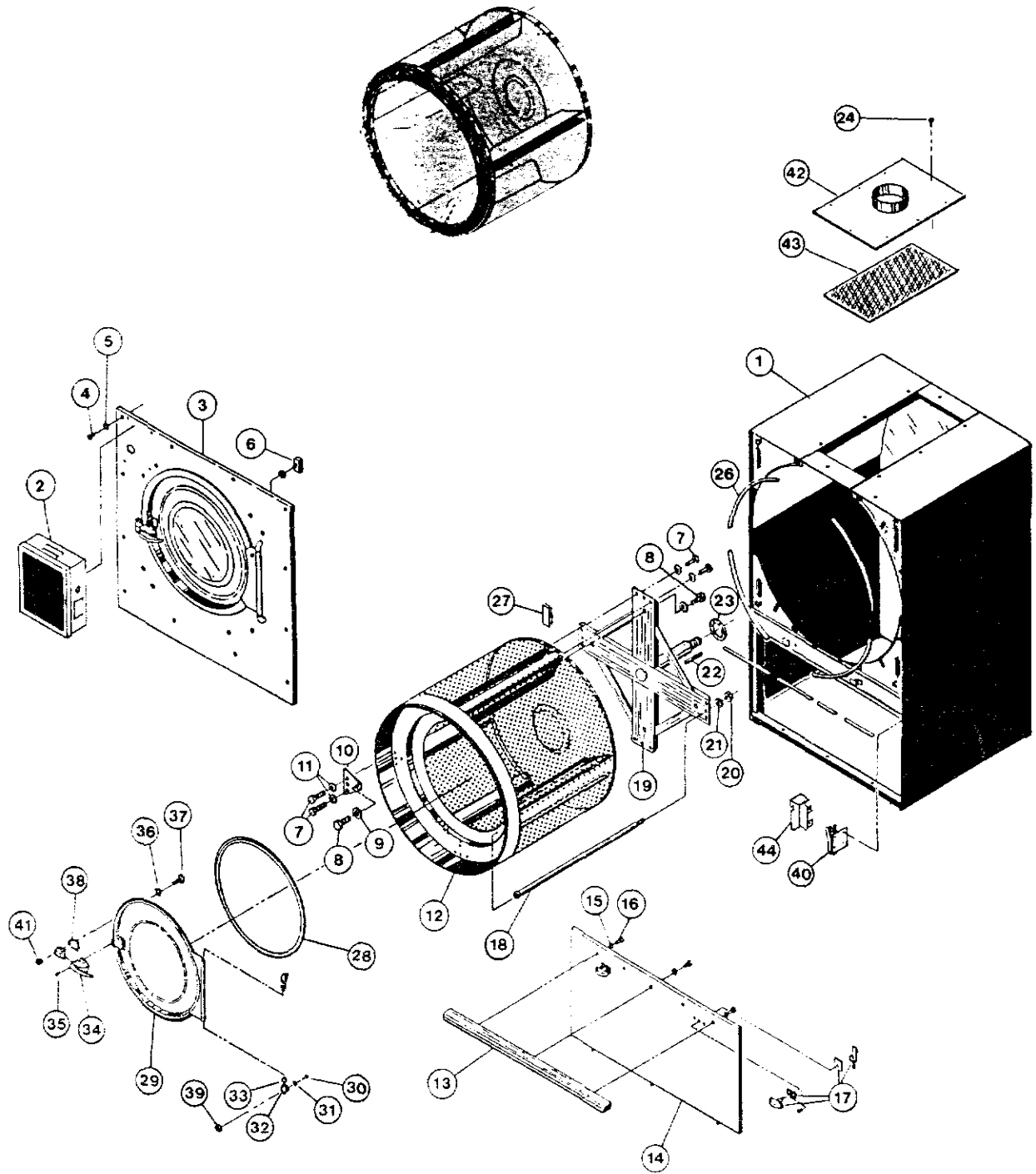
CAUTION

ONLY Operate Non-Reversing and Reversing SWITCH when basket is rotating or basket will not rotate.



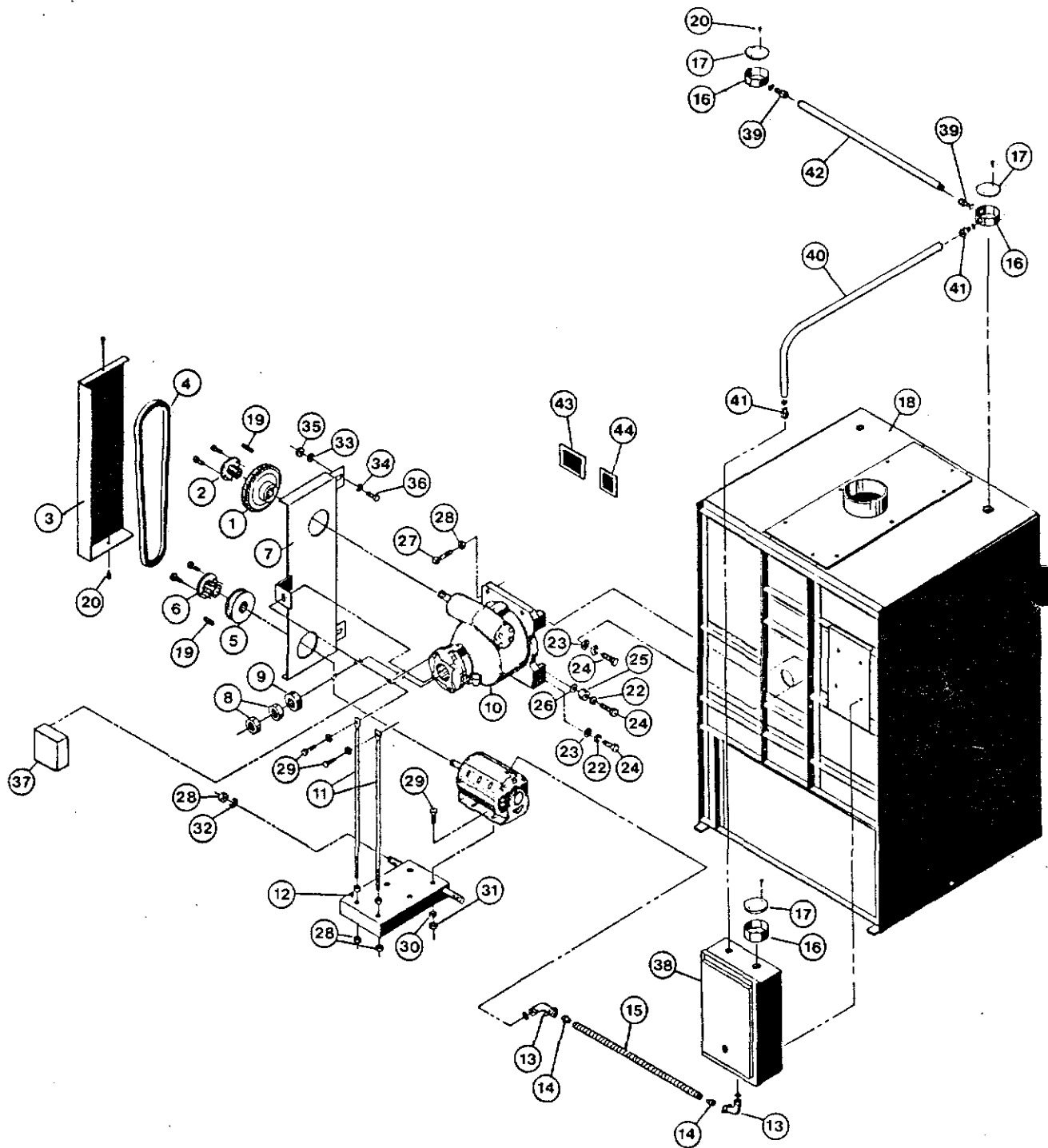
Furnas Timer

For Models Without Inner Door
 TUS10968 - Basket (With Liner)
 TUS10967 - Basket & Spider Assembly



FRONT VIEW PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	TUS10839	Jacket Weldment
2	TU10919	Control Box Assembly
3	TUS10921	Front Panel & Door Assembly
4	TU6854	#14 x 3/4" Pan Hd. Screw
5	RC349	1/4" I.T. Washer
6	FG140	Door Switch
7	TU2662	1/2-20 x 1 1/2 Cap Screw
8	TU2664	5/8-18 x 1 1/2 Cap Screw
9	TU5801	5/8 I.T. Washer
10	TU5397	Outside Rib Plate
11	OP251	1/2 I.T. Washer
12	TUS10912	Basket
	TUS10911	Basket & Spider
	TUS10910	Basket, Spider & Door
13	TU9444	Handle
14	TUS9472	Lint Trap Door
	TUS9607	Lint Trap Door Assembly
		Parts 13,14,15,16, & 20
15	FB187	#10 Lockwasher
16	F557	#10-24 x 3/8" Rd. Hd. Screw
17	K169	Handle Assembly Kit
18	TU10829	Tie Rod
19	TU10842	Spider
20	TU2881	5/8-18 Hex Nut
21	AT215	5/8 x 15/16 Nut
22	TU10421	Key (Worm Gear)
23	TU5290	Felt Seal
24	TU7733	#8 Self Drill Screw
25	TU8013	Cissell Nameplate
26	TU5302	Sweep Sheet Gaskets
27	TU5863	Basket Shim
28	TU5288	Vinyl Gasket
29	TUS10830	Basket Door
30	TU10867	5/16-18 x 1/2 Screw
31	TU10869	5/16 Washer
32	TU10865	Post Hinge
33	PIF172	Delrin Bushing
34	TU10931	Latch W/Strike
35	TU2686	#8-32 x 3/8 Screw
36	F860	1/2 Split Lockwasher
37	F857	1/2-20 X 1/2 Hex Screw
38	TU5503	Latch Spacer
39	TU10868	5/16-18 Hex Nut
40	TUS10883	Switch & Bkt. Assembly
41	X50	1/2-20 Crown Nut
42	TUS10828	Inlet Cover W/A
43	TU10943	Grating
44	TUS11011	Switch Guard

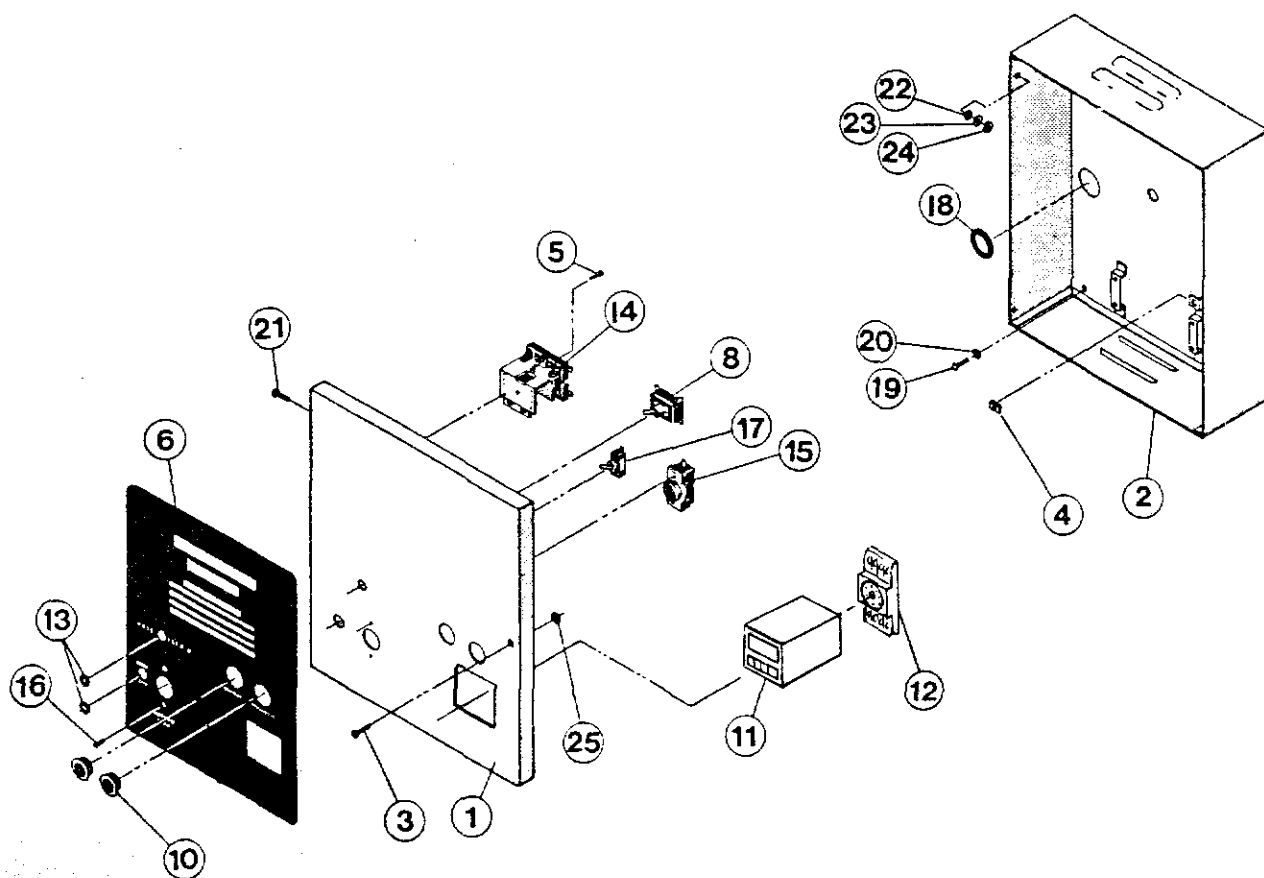


REAR VIEW PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	TU9663	Gear Sheave
2	TU3807	Sheave Bushing
3	TU5668	Outside Belt Guard
4	TU2363	"V" Belt 5L500
5	TU9751	Motor Sheave - 60 H .
	TU6081	Motor Sheave - 50 H .
6	TU2007	Sheave Bushing
7	TU9615	Inside Belt Guard
8	TU470	1 3/8-12 Hex Nut
9	TU6633	Basket Shaft Washer
10	TU418	Gear Reducer
11	TU5328	Belt Adjusting Rod
12	TU4626	Motor Mount
13	TU4791	90° Connector - 1/2"
14	TU2372	Snap Bushing -1/2"
15	504641292	1/2" Greenfield Cable - 22"
16	500300644	Junction Box
17	SB170	Junction Box Cover
18	TUS10839	Jacket
19	TU4684	Key
20	TU7733	#8 x 1/2 Self Drill Screw
21	RC347	1/2-13x1 1/2 Hex Hd. Screw
22	TU2831	1/2" Lockwasher
23	TU1851	1/2" Washer
24	TU2195	1/2"-13 x 1 3/4 Hex Hd. Screw
25	TU455	Cam Adjustment Nut
26	TU3575	7/8 I.T. Washer
27	TU5312	3/8-16 x 3" Sq. Set Screw
28	TU4787	3/8-16 Hex Nut
29	TU5439	5/16-18 x 3/4 Hex Hd. Screw
30	TU2814	5/16 Lockwasher
31	C249	5/16-18 Hex Nut
32	VSB134	3/8 Lockwasher
33	TU2846	1/4 Lockwasher
34	TU2847	1/4 Flat Washer
35	TU4934	1/4-20 x 7/16" Hex Nut
36	FB189	1/4-20 x 1" Hex Screw
37	TU7517	Shaft Cover
38	TU10945	Reversing Control Box
39	TU7130	1/2" Straight Connector
40	TU10944	3/4" Conduit
41	TU7131	3/4" Straight Connector
42	TU10945	1/2" Conduit
43	FI116	Rating Plate
44	TU3583	Clearance Plate

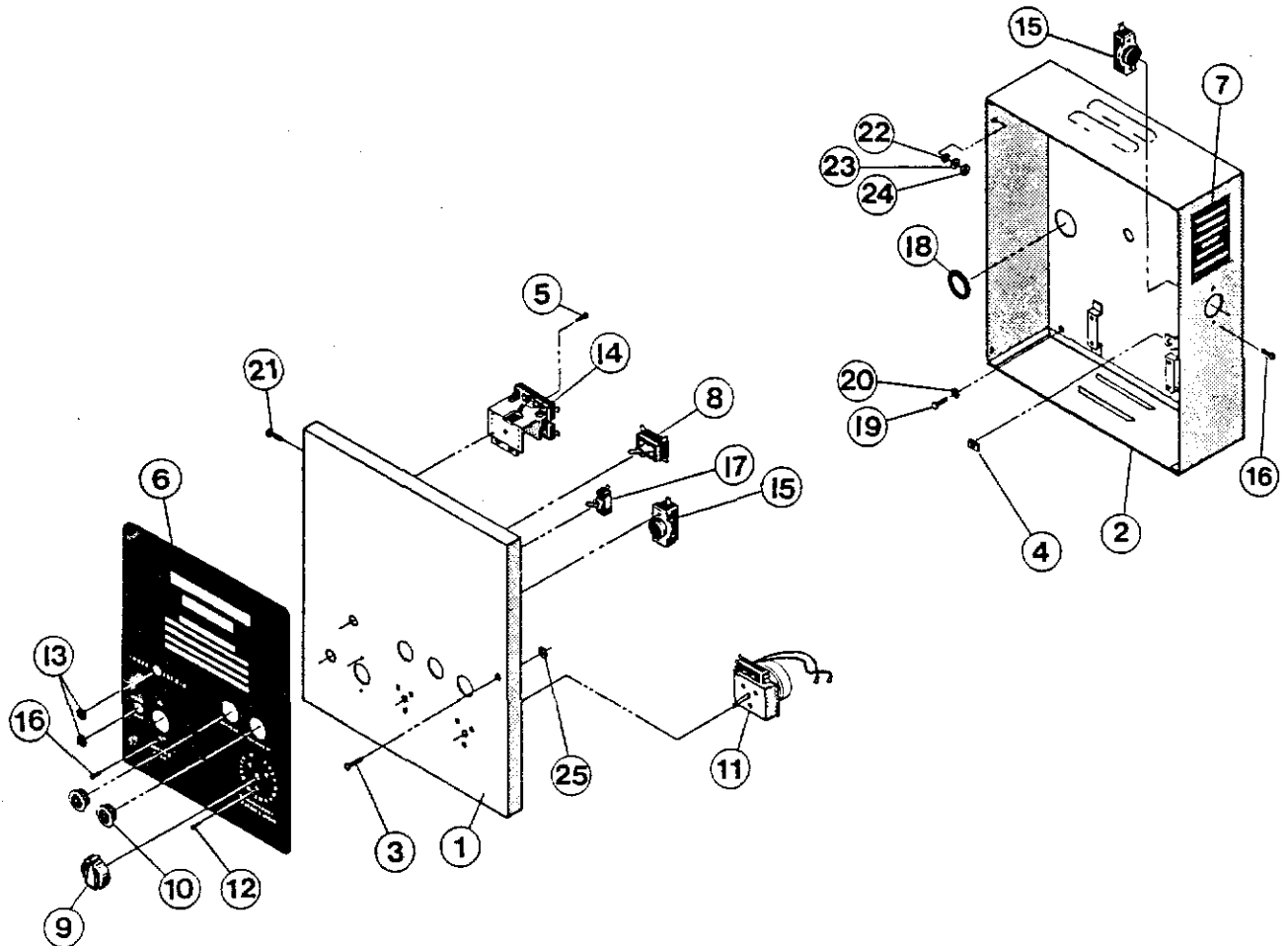
"LCD" Timer
TUMBLER CONTROL BOX ASSEMBLY - TU11005

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU11012	Control Panel W/A	16	ET208	#6-32x $\frac{1}{2}$ Pan Hd. Screw
2	TU11002	Control Box W/A	17	FG147	Toggle Switch (Rev.)
3	FG343	Screw Fastener	18	TU9693	Bushing
4	FG344	Speed Nut	19	CB36	$\frac{1}{4}$ -20x $\frac{1}{2}$ " Hex Hd. Bolt
5	TU7733	#8x $\frac{1}{2}$ " Self Tap Screw	20	TU2846	Washer
6	TU10961	Tumbler Control N/P	21	TU3479	#10-32-7/16 Truss Hd. Scw.
7			22	P104	$\frac{1}{2}$ " Cut Washer
8	TU264	Toggle Switch	23	FB187	#10 Lock Washer
9			24	TU2842	#10-32 Hex Nut
10	M454	Amber Lamp	25	FG345	Retaining Washer
11	TU11006	LCD Timer			
12	TU11007	Socket Asm.			
13	TU3805	15/32" Hex Lock Ring			
14	TU1985	Relay			
15	PT111	Push Button Switch			



TUMBLER CONTROL BOX ASSEMBLY - TU10919

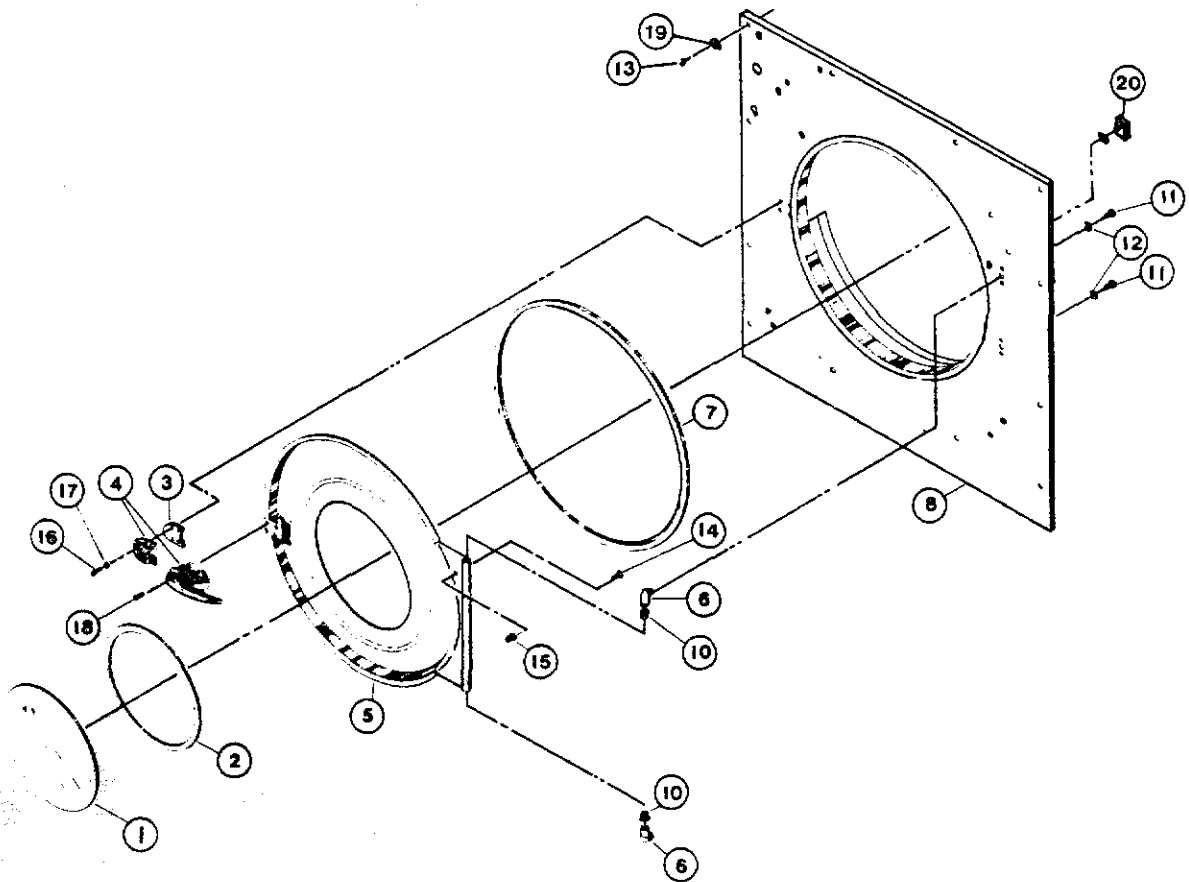
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU9603	Control Panel W/A	16	ET208	#6-32x $\frac{1}{2}$ Pan Hd. Screw
2	TU10909	Control Box W/A	17	FG147	Toggle Switch (Rev.)
3	FG343	Screw Fastener	18	TU9693	Bushing
4	FG344	Speed Nut	19	CB36	$\frac{1}{4}$ -20x $\frac{1}{2}$ " Hex Hd. Bolt
5	TU7733	#8x $\frac{1}{2}$ " Self Tap Screw	20	TU2846	Washer
6	TU10843	Tumbler Control N/P	21	TU3479	#10-32-7/16 Truss Hd. Scw.
7	TU10913	Label (Locate Door)	22	P104	$\frac{1}{2}$ " Cut Washer
8	TU264	Toggle Switch	23	FB187	#10 Lock Washer
9	TU2555	Knob Assy.	24	TU2842	#10-32 Hex Nut
10	M454	Amber Lamp	25	FG345	Retaining Washer
11	TU5842	60 Min. Timer			
12	M262	#8-32x3/8 Truss Hd. Screw			
13	TU3805	15/32" Hex Lock Ring			
14	TU1985	Relay			
15	PT111	Push Button Switch			

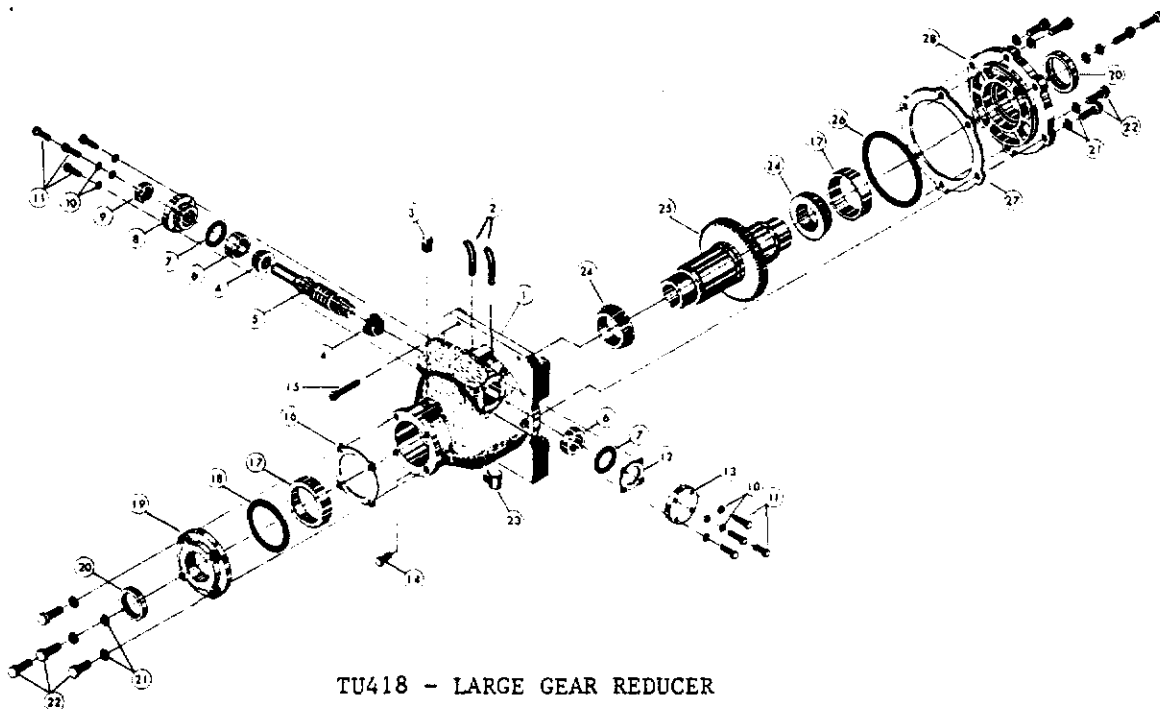


FRONT PANEL AND DOOR ASSEMBLY - TUS10921

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU217	Door Glass	12	TU3212	5/16" I.T. Lockwasher
2	TU1692	Gasket	13	TU3209*	#14X5/5" Pan Head Machine Screw
3	TU5503	Door Latch Spacer	14	TU3163	Catch Pin
4	TUA2319	Door Latch W/Keeper	15	TU4840	#10-32 Crown Nut
5	TUS5500	Door W/A	16	TU2687	#8-1/2" Ph. Hd. Scrw.
6	TU2236	Hinge Post	17	TU3785	#8 Cup Ex. T. Lockwasher
7	TU5288	Door Seal	18	TU2686	#8-32X3/8" Ph. Hd. Scrw.
8	TUS10922	Front Panel W/Seal	19	RC349*	1/4" Lockwasher
9	TU2641	Thermometer Gasket	20	FG140*	Door Switch
10	PIF172	Hinge Post Bearing			
11	TU2836	5/16"-18x1/2" Hex Scr.			

* Not Included in TUS10921 Assembly





TU418 - LARGE GEAR REDUCER

ALL HARDWARE SOLD ONLY IN PACKAGES OF 6

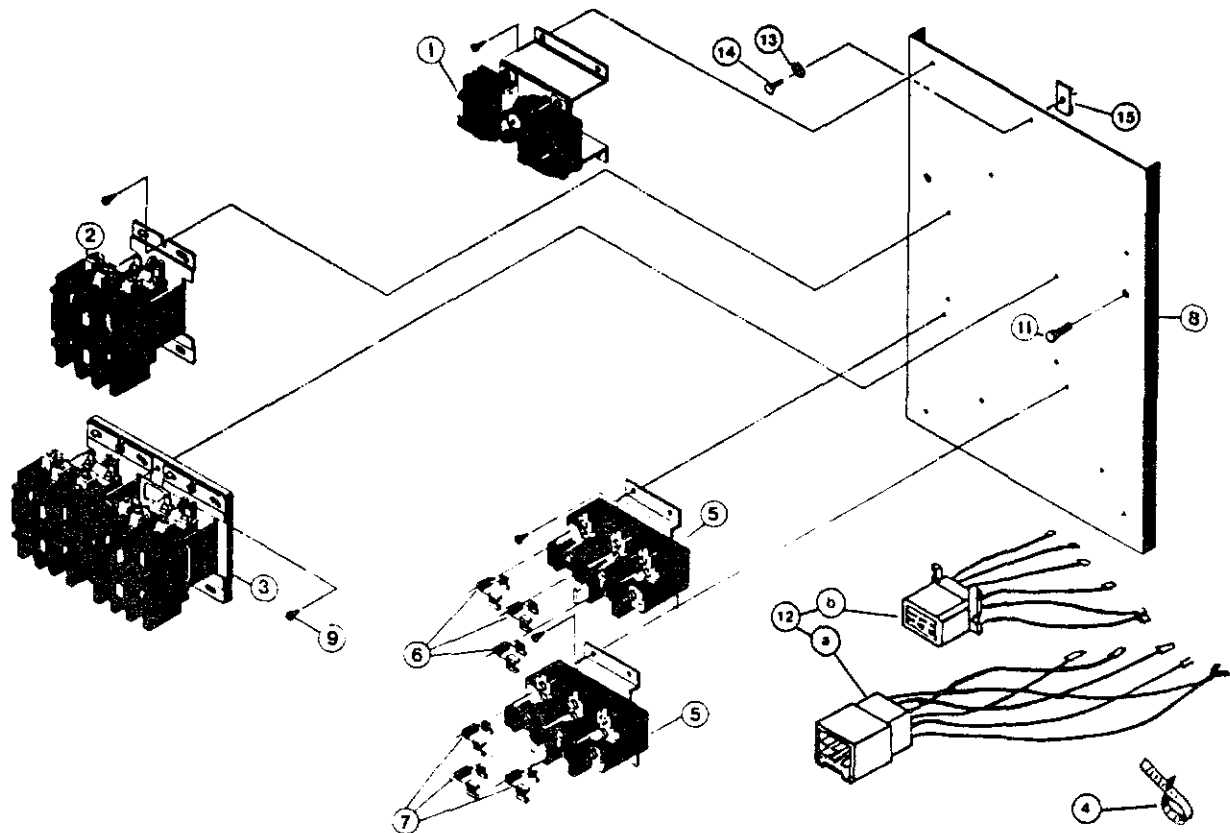
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	TU404	Housing	18	TU89	Large "O" Ring 58-21
2	TU69	Vent Tube	19	TU458	Large End Cap 6½" Diameter
3	J36	½" Pipe Plug	20	TU2536	Large Klozure
4	TU2535	Small Bearing Cone (21075)	21	TU3243	3/8" Internal Tooth Lock Washer
5	TU441	Worm	22	OP380	3/8"-16x½" Cap Screw
6	TU2534	Small Bearing Cup (21212)	23	TU70	Oil Cup
7	TU487	Small "O" Ring 3-58-1550	24	TU2538	Large Bearing Cone (29685)
8	TU406	Small Open End Cap	25	TU408	Worm Gear
9	TU2533	Small Klozure	26	TU448	Extra Large "O" Ring 70-58-1841
10	VSB134	3/8" Split Lock Washer	27	*TU1905	Shim (K-232) 9¼" Bolt Center, Set of 3 (Two .005 & one .007)
11	TU3246	3/8"-16x1" Cap Screw			
12	*TU447	Small Shim (K-209) Set of 3 (Two .005 & one .007)	28	TU405	Large End Cap 10 3/8" Diameter
13	TU407	Small Closed End Cap			
14	SU30	¼" Pipe Plug			
15	TU485	3/8"x3" Set Screw			
16	TU20	Large Shim (Set of 3) (K-218)			
17	TU2537	Large Bearing Cup (29620)			

*If Required

(TU3465 - One pint of Cissell transmission oil - not illustrated)

REVERSING CONTROL PANEL ASSEMBLY

TU10920



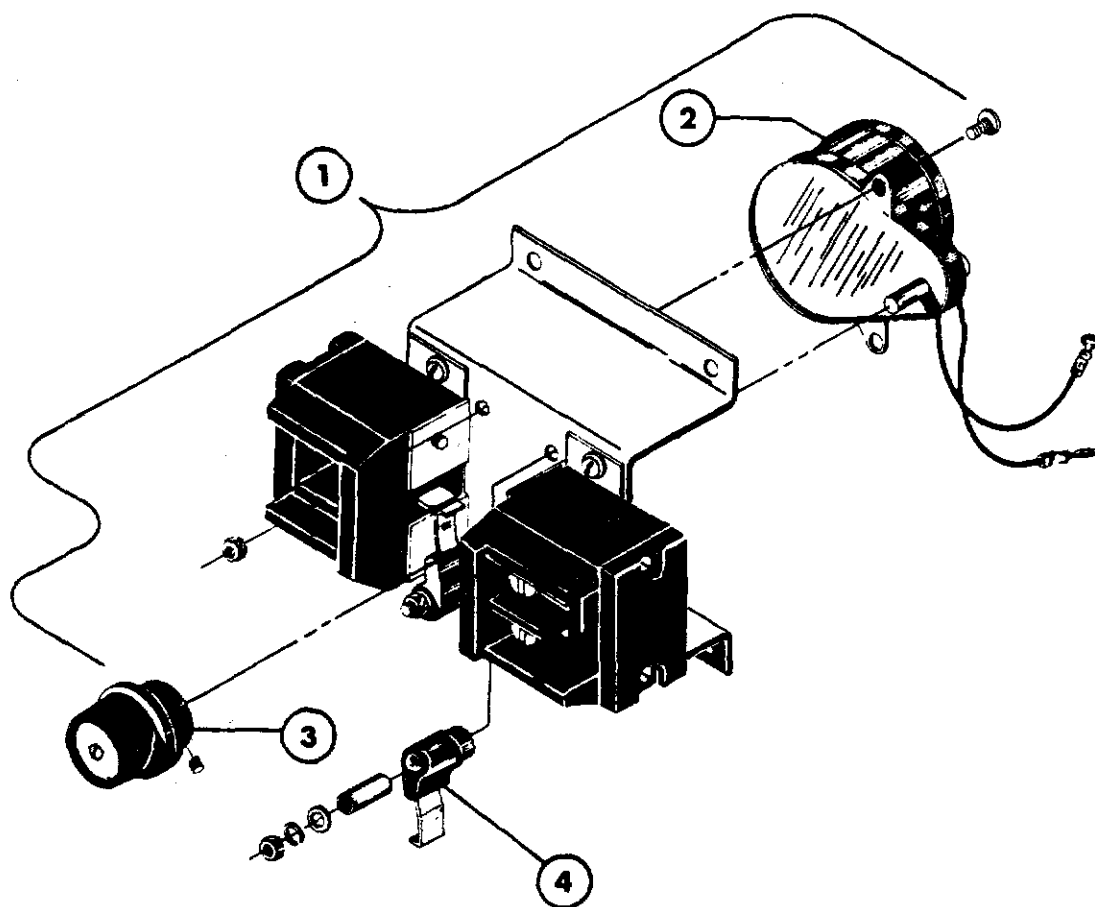
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU9747	Timer	9	TU7733	#8- $\frac{1}{2}$ " Self Drill Screw
2	*TU6965	Contactor 120 V. 60 Hz.	10		
	**TU6963	Contactor 208/240 V. 60 Hz.			
	***TU8727	Contactor 240 V. 50 Hz.			
3	*TU7252	Contactor 120 V. 60 Hz.	11	TU2793	$\frac{1}{4}$ -20x3/4" Hex Hd. Screw
	**TU6964	Contactor 208/240 V. 60 Hz.	12	TU8715	Wiring-Plug Type (For Dryers W/O Transformer)
	***TU8728	Rev. Contactor 240V. 50 Hz.		TU8716	Wiring-Plug Type (For Dryers W/Transformers)
4	TU10579	Harness Clamp			
5	TU6774	Overload Unit (2 req'd.)	12a	TU9692	Housing-Female
6	****TU267900	Overload Heater (Fan)	12b	TU9691	Housing-Male
7	****TU267900	Overload Heater (Basket)	13	RC349	$\frac{1}{2}$ " Int. Tooth Lockwasher
8	TU6959	Panel Plate	14	TU3209	#14x5/8 Pan Hd. M. Screw
			15	LB74	#14 Speed Nut

* TU7281 Contactor Coil only 120 V. 60 Hz.

** TU7282 Contactor Coil only 208/240 V. 60 Hz.

*** TU8689 Contactor Coil only 240 V. 50 Hz.

**** To order Overloader Heater, specify number on Heater number 6 & 7 such as H-25 on TU267900.



REVERSING TIMER

Ref. No.	Part No.	Description
1 *	TU9746	Timer Complete - 120 V./60 Hz.
	TU9747	Timer Complete - 240 V./60 Hz.
2	TU17371	Timer Motor - 110 V./60 Hz.
	TU17372	Timer Motor - 220 V./60 Hz.
3	TU9748	Timer Cam
4	TU4426	Timer Lever
*	TU9749	Timer Less Motor

