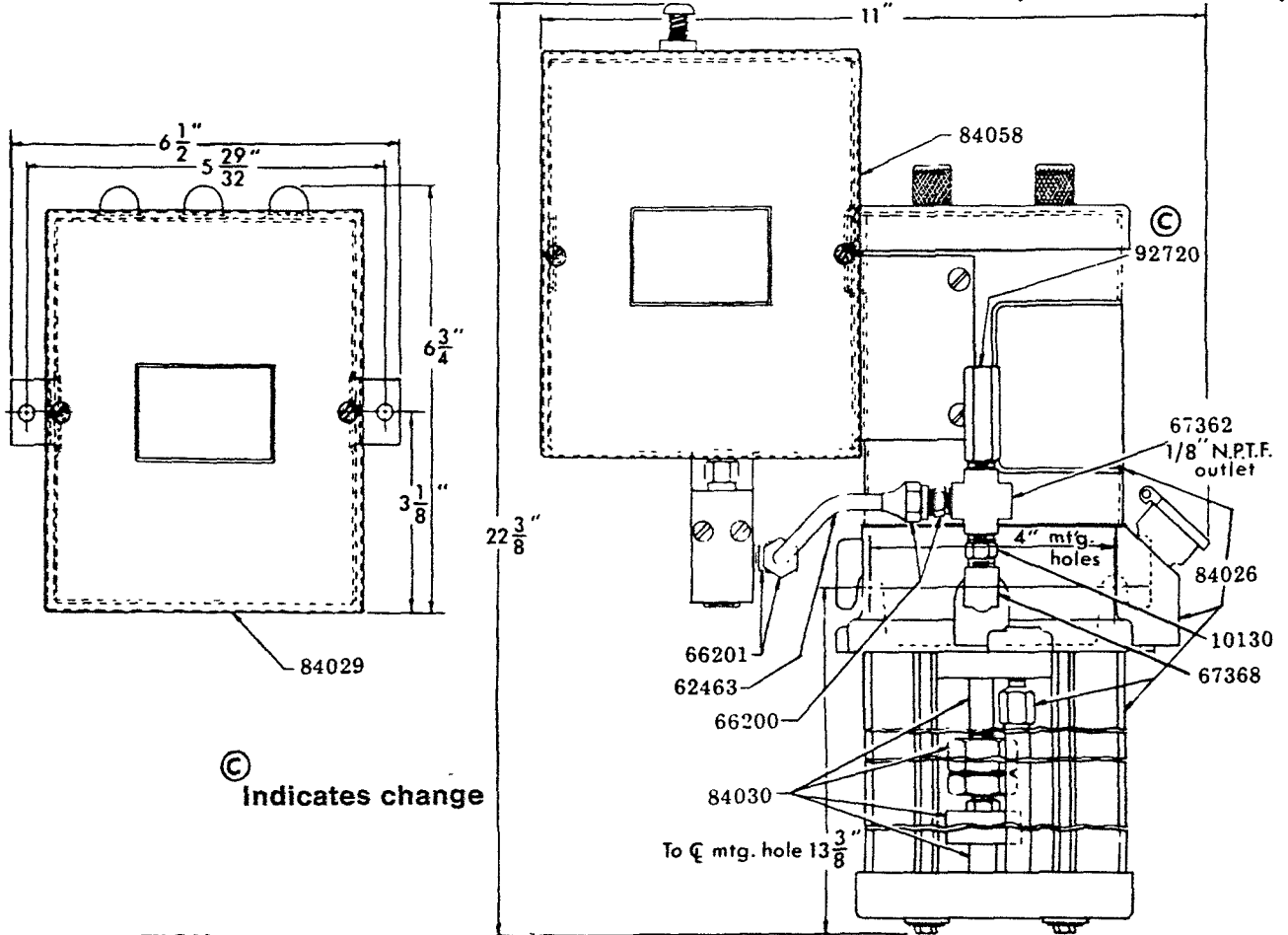


(WITH RESERVOIR)



Ⓒ Indicates change

DESCRIPTION

Model 84024 Deluxe Gear Pump Assembly basically consists of: An electric gear pump assembly with a low level switch assembly, a cycle timer with an integral pressure switch, and a running light assembly to monitor the system.

This pump assembly requires a 115 V., 60 Hz power source and is designed to cycle a low pressure, 1000 psig, Centromatic Injector System with a cycle period of not less than five or more than sixty minutes. This pump assembly is used in conjunction with a bulk reservoir.

OPERATION

At an interval determined by lubrication requirements, the gear pump is actuated by the cycle timer.

The gear pump builds pressure in the lubricant supply line, cycling the injectors. The gear pump continues to increase line pressure until the cycle timer pressure switch trips at approximately 1,000 psig, stopping the gear pump.

The line pressure decreases, due to the lubricant by passing the pump gears and returning to the reservoir. When the pressure is decreased sufficiently, the injectors reset and are ready for the next lubrication cycle.

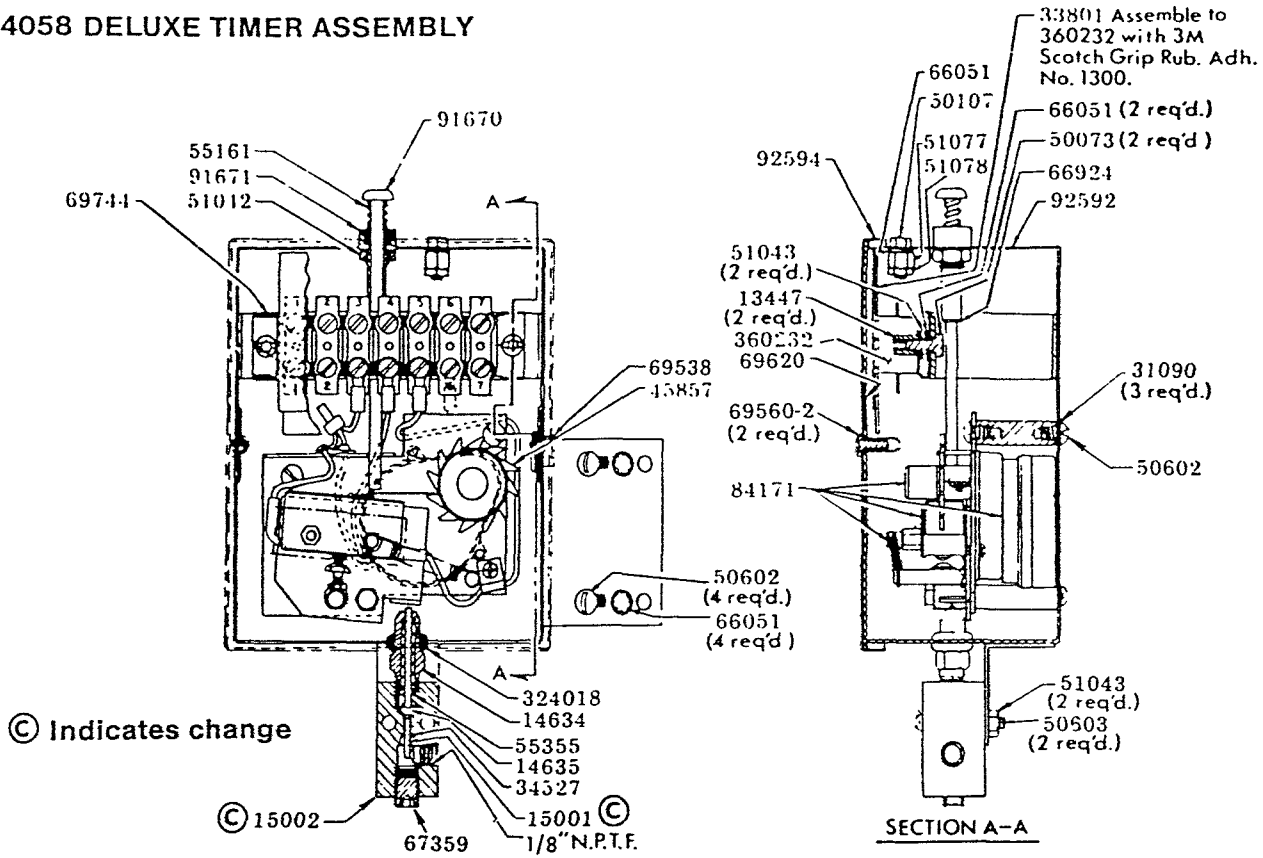
Three lights on the running light assembly monitor the gear pump assembly. A green light indicates that there is electric power to the cycle timer. An amber light indicates the pumping period and a red light indicates either a low fluid level or a system failure.

A low level switch turns on the red light a short time before the reservoir is completely out of lubricant. **Rule 1:** When the green and red light are on simultaneously, lubricant should be added to the reservoir.

When the reservoir is completely out of lubricant, the gear pump will run dry for approximately one minute before a time delay relay will shut off the pump with the green, amber and red lights on. **Rule 2:** When the green, amber and red lights are on simultaneously, either the reservoir is completely out of lubricant or there has been a system failure (pressure leak, pump malfunction, etc.) When this occurs, the pump will not operate until the malfunction has been corrected.

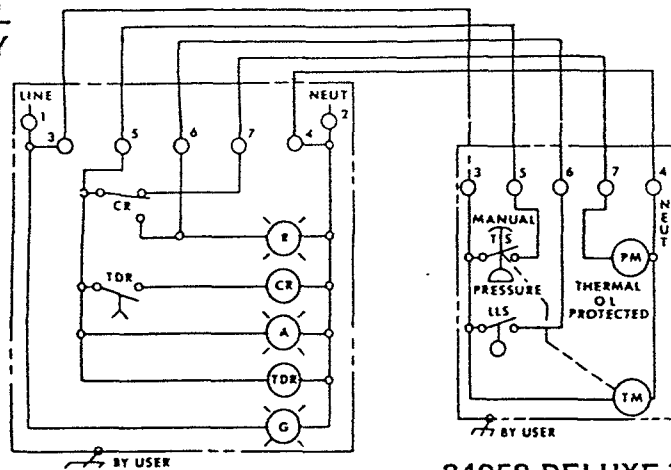
If the 92720 safety unloader should leak during the pumping period, tighten the set screw slightly to adjust the maximum allowable pressure.

84058 DELUXE TIMER ASSEMBLY



WIRING DIAGRAM FOR MODEL 84024 GEAR PUMP ASSEMBLY

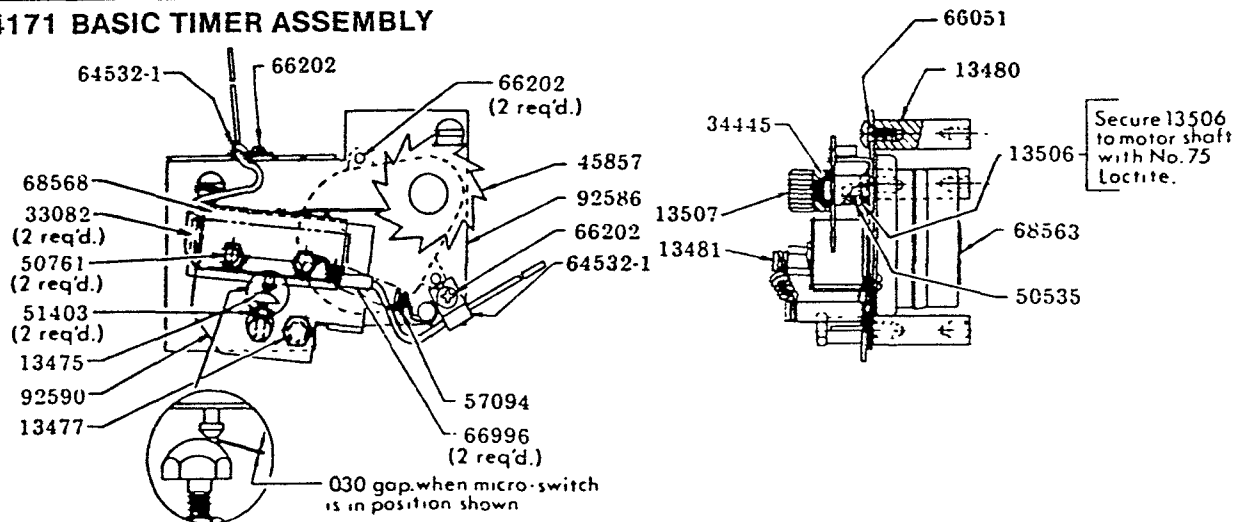
CODE	DESCRIPTION
R	RED TIGHT
CR	CONTROL RELAY
A	AMBER LIGHT
TDR	TIME DELAY RELAY
G	GREEN LIGHT
TS	TIMER SWITCH
LLS	LOW LEVEL SWITCH
PM	PUMP MOTOR
TM	TIMER MOTOR



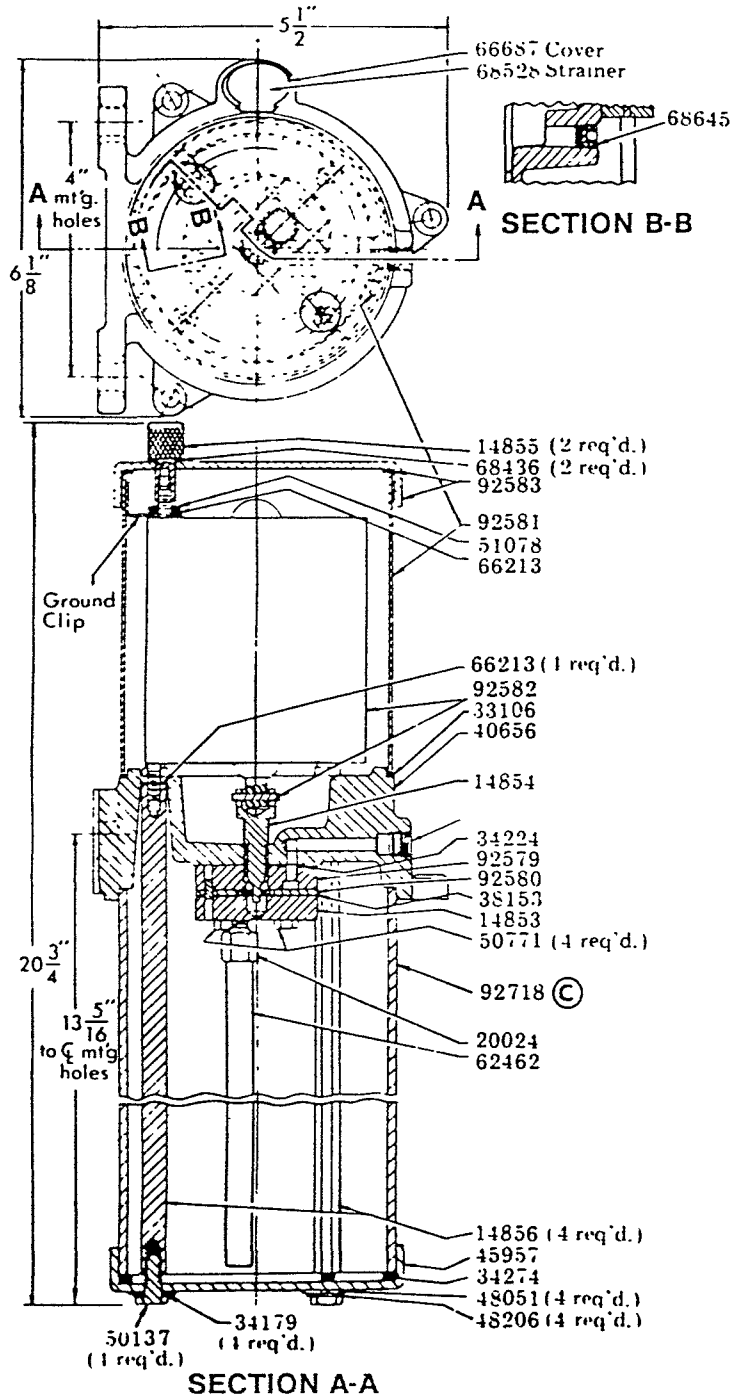
84029 RUNNING LIGHT BOX

84058 DELUXE TIMER

84171 BASIC TIMER ASSEMBLY

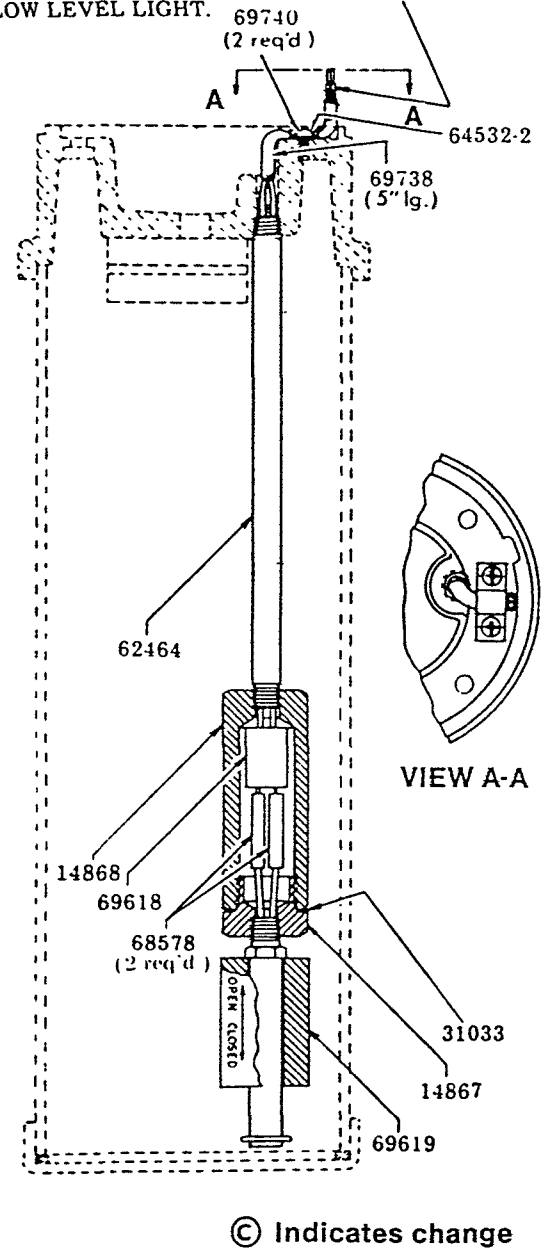


84026 GEAR PUMP (WITH RESERVOIR)



84030 LOW LEVEL SWITCH ASSEMBLY

2 WIRES IN 69738 SLEEVE 5" LG. TO BE CLAMPED UNDER 64532-2 CLIP AS SHOWN WITH (2) 66202 SCREWS AND PASS BETWEEN ELECTRIC MOTOR & MOTOR COVER, OUT THE MOTOR COVER NYLON BUSHING TO THE TIMER BOX AND LOW LEVEL LIGHT.



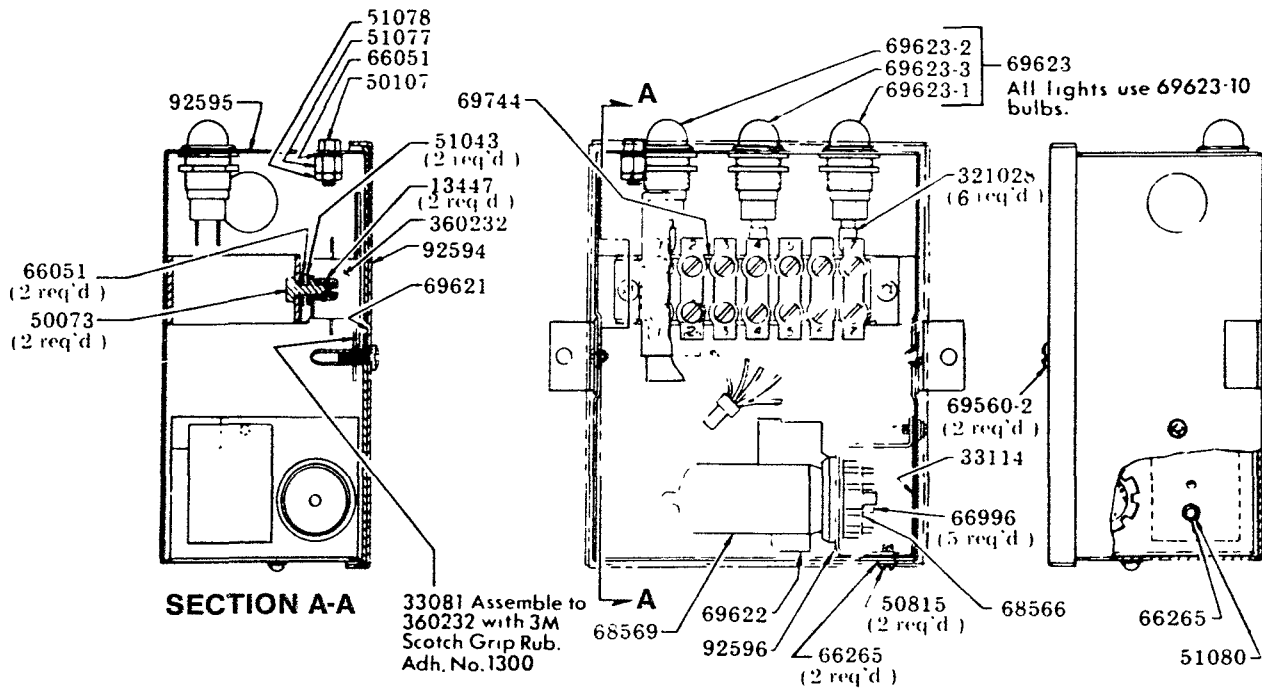
SPECIFICATIONS

Lubrication Cycle Intervals 5, 10, 15, 20, 30 or 60 minutes.
 Maximum Pumping Time per Cycle

Cycle Interval	Pumping Period	Output
5 minute	20 seconds	3 cu. in.
10 minute or greater	10 seconds	6 cu. in.

Lubricant Pressure Developed 875-1,200 psig
 Allowable Lubricant Viscosity 500-50,000 Saybolt Universal Seconds
 Lubricant Reservoir Capacity . . . 5 Pints

84029 RUNNING LIGHT BOX ASSEMBLY



*Recommended parts to be stocked for replacement parts.

REPAIR PARTS LIST

Part No.	Description	Part No.	Description	Part No.	Description
10130	Nipple	50535	Screw	68578	Butt Connector
13447	Nut	50602	Screw	68645	Plug
13475	Screw	50603	Screw	69538	Snap Bushing
13477	Bolt	50761	Screw	69560-2	Self Tapping Screw
13480	Spacer	50771	Screw	* 69618	Load Pac
13481	Nut	50815	Self-Tapping Screw	* 69619	Level Switch
13506	Cam Shaft	51042	Nut	69620	Wiring Diagram
13507	Knob	51043	Nut	69621	Wiring Diagram
14634	Indicator Housing	51077	Nut	* 69622	Relay
14635	Actuator Pin	51078	Nut	69623	Pilot Light
* 14853	Wear Plate (inlet)	51080	Nut	* 69623-1	Red Light
14854	Shaft Adapter	51403	Nut	* 69623-2	Green Light
14855	Motor Nut	55161	Spring	* 69623-3	Amber Light
14856	Tie Rod	* 55355	Spring	* 69623-10	Bulb
14867	Load Pac Adapter	57094	Spring	69738	Sleeve
14868	Load Pac Housing	62462	Pipe	69740	Self-Tapping Screw
15001	Pin	62463	Pipe	69744	Terminal Block
15002	Indicator Body	62464	Pipe Nipple	84026	Gear Pump
20024	Bushing	64532-1	Tube Clip	84029	Running Light Box
31033	Gasket	64532-2	Clip	* 84030	Low Level Switch
31090	Gasket	66051	Lockwasher	84058	Deluxe Timer Ass'y.
33081	Insulator	66200	Male Tube Connector	84171	Basic Time Ass'y.
33082	Insulator	66201	Male Elbow Tube Connector	91670	Rod Assembly
* 33106	Gasket	66202	Self-Tapping Screw	91671	Bushing Assembly
33114	Insulator	66213	Lockwasher	* 92579	Wear Plate (outlet)
* 34179	O-Ring	66265	Lockwasher	* 92580	Gear Housing Ass'y.
* 34224	O-Ring	66687	Oil Hole Cover	92581	Cover Assembly
* 34274	Gasket	66924	Tru-Arc	* 92582	Motor Assembly
* 34445	Gasket	66996	Insulator	92583	Top Cover Assembly
* 34527	O-Ring	67359	Plug	92586	Panel Assembly
* 38153	Shim	67362	Cross	92590	Sleeve & Plate Ass'y.
40656	Body	67368	Street Elbow	92592	Deluxe Timer Box
* 45857	Cam	68436	Lockwasher	92594	Cover & Gasket Ass'y.
45957	Cover Cap	68528	Strainer	92595	Light Box Assembly
48051	Washer	* 68563	Timer Motor	92596	Relay Support Plate
48206	Washer	* 68566	Ring Type Socket	* 92718	Tube
50073	Screw	* 68568	Micro-Switch	* 92720	Safety Unloader
50107	Screw	* 68569	Time Delay Relay	* 324018	Grommet
50137	Screw			360232	Cover