

## SET UP INSTRUCTIONS FOR MG TAPE APPLICATOR

Note: New solid state MG has infrared generators (no visible light). Typical life expectancy: 50,000 hours continuous.

1. **Electric and Air Requirements:** Plug in cord in grounded outlet 115 VAC -CAUTION- Make sure circuit is not overloaded. Machine requirement is 5 AMP. Air supply of 4CFM at 60 PSI needed at machine.
2. **Sensing:** Do not cover sensing point with metering units. If sensing point is covered with metering unit or other foreign objects it may cause machine to activate at the wrong time.
3. **Control Knobs:** The higher the number on the dial the later the tape is applied or cut off.
4. **Starting:** When starting the machine all switches should be in the off position. Turn on main switch first, then the motor switch and then select metering units to be used, and their mode of operation (spot or strip). Note: Center Off.
5. **Guides:** When guides are placed on the table they should be parallel to the control box.
6. **Threading Tape:** In threading tape; air supply to the metering unit should be disconnected first, then the taping shoe should be pushed down slightly so there is an opening between the tape check roller and the tape check stud.
7. **Metering Units:** Top flow control valve located above air-valve, controls the leading edge - bottom control valve located below air valve controls trailing edge - by turning adjustment screw counter clockwise the action of the metering unit is delayed. This is in case there is a difference in the initial laydown between metering units.

If the knife tears or cuts into the sheet the cutoff action should be delayed by turning the bottom flow control valve screw counter clockwise.

cont. next page

**SET UP INSTRUCTIONS FOR MG TAPE APPLICATOR**  
cont.

8. **Tape Guides:** Tape guides are to be placed in the taping shoe for  $\frac{1}{2}$ ,  $\frac{3}{4}$  and 1" tape respectively. Also plastic guide located under Hexagon unwind should be turned in position for the various tape widths.
9. **Spotting Mechanism:** When spots are desired, metering head switch should be placed in the spot mode. Graduations on spotting disc from number to number represent one inch.

Pattern can be moved on sheet by turning apply control knob. make sure cut control knob is at least on #7. (If you have cut control knob at a lower number you may cancel your program prematurely).

10. **Sensitivity Adjustment:** Under main control panel are the power supplies. The card closest to the transformer controls product sensing and the other controls the spotter sensing. These controls are preset into maximum resistance position. For adjusting (if LED or phot transistor is replaced) set  $\frac{1}{2}$  way to focus infrared generator, then return to maximum.

**Problems****Reason****Remedy****1. Sheet Wrinkles.**

A. Not enough air pressure.

Increase air pressure to 50 PSI - 60 PSI max.

B. Rollers of metering unit do not touch drive rollers. There are three rollers on metering unit.

Loosen four screws which connect side plates to holding block and push metering unit down and lock screws.

C. Tape applied too soon.

Turn apply control knob to higher number.

**2. Heads automatically apply tape when main switch is turned on.**

A. Metering unit is covering sensing point.

Move metering unit away from sensing point.

B. Dust is covering cell or light. Cell is located above infrared source.

Wipe Light and Cell with soft rag.

**3. Sheets skewed through machine.**

A. Sheet guides not parallel with machine.

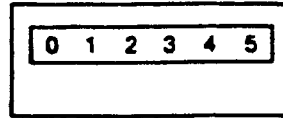
Make sure sheet guides are parallel to side of machine.

B. Rollers of one or more metering units not touching Drive Rollers.

Same as 1B.

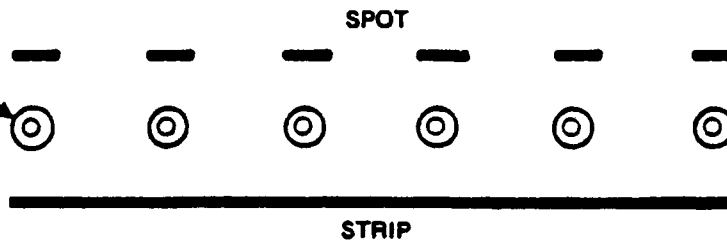
# NEW SOLID STATE CONTROL.

MG  
Tape Machine

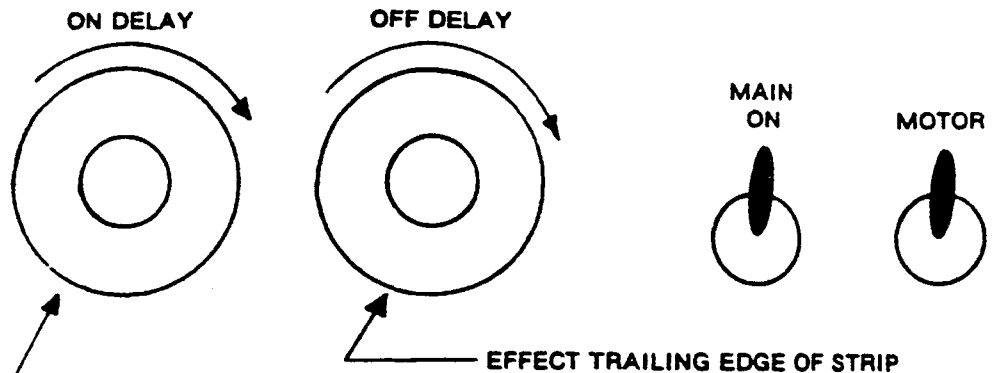


**NOTE:**  
EACH SWITCH POSITION RELATES TO  
THE OUTPUT SOCKET MOUNTED FOR  
EACH TAPING HEAD.

**EXAMPLE:**  
EXTREME  
LEFT SWITCH  
FOR EXTREME  
LEFT HEAD  
SOCKET.



1. EACH SWITCH HAS 3 POSITIONS. (CENTER OFF)
2. MOVE LEVER TO "SPOT" WILL AUTOMATICALLY ENABLE CLUTH & SPOTING PROGRAM.
3. MOVE LEVER TO "STRIP" WILL ENGAGE HEAD FOR CONTINUOUS ON PRODUCT.



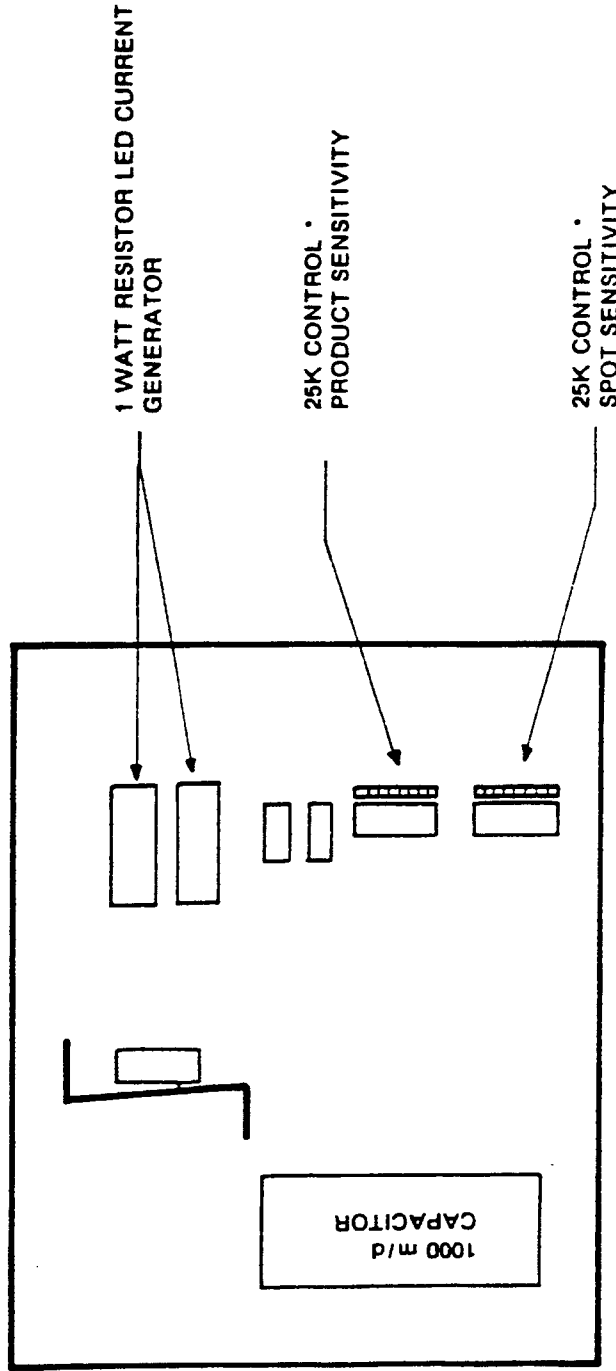
EFFECT'S LEADING EDGE OF STRIP & SPOT

NOTE: COUNTER SWITCH SHOULD

NOTE: MAIN SWITCH

MC 30  
TAPE MACHINE

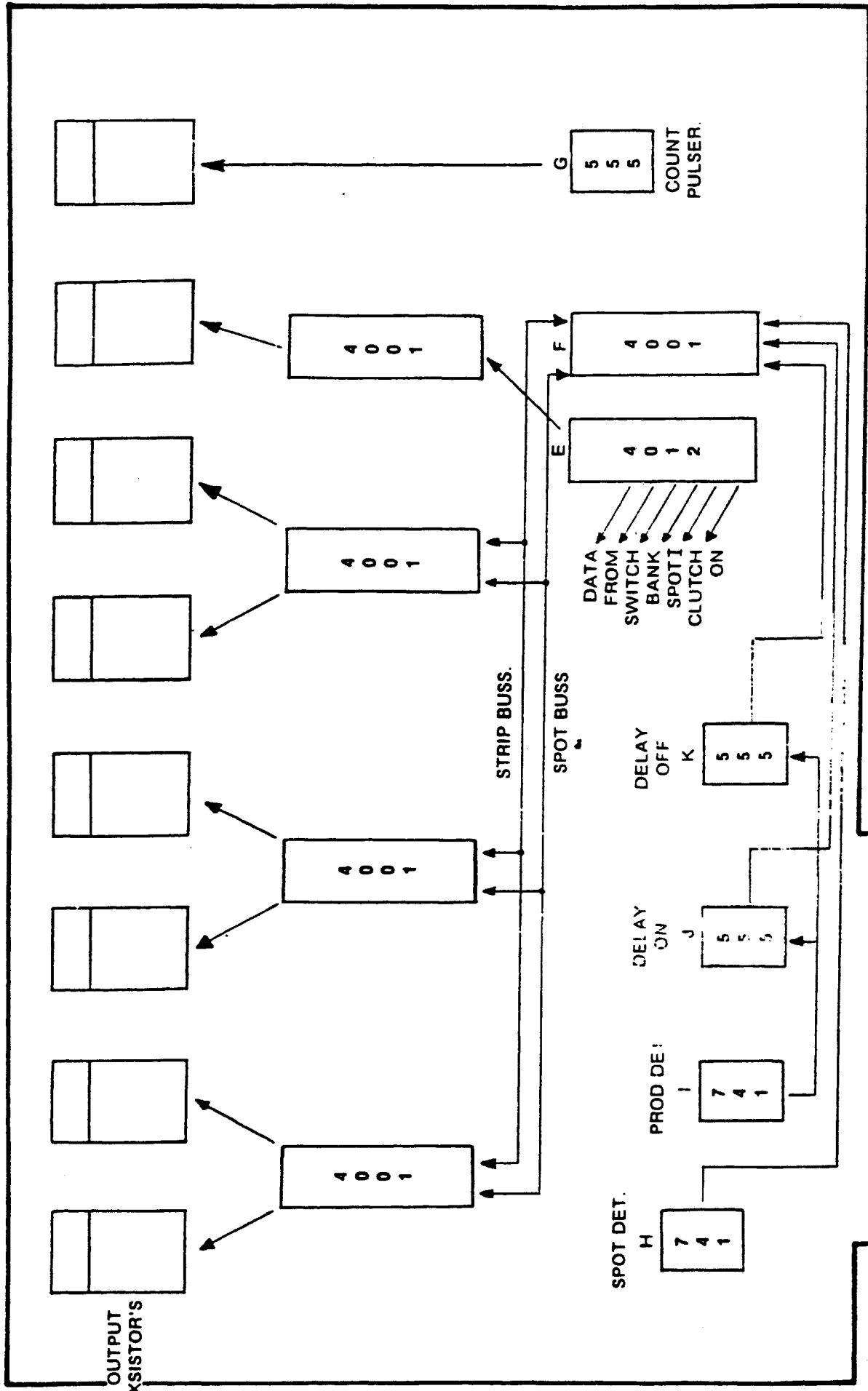
REGULATED POWER SUPPLY  
LOCATED UNDER FRONT PANEL ON POWER CHASSIS



NOTE: PRESET 1/2 ITS TRAVEL FOR FOCUSING LIGHT & CELL. ROTATE TO MAX (NO OTHER ADJUSTMENT NECESSARY).

NOTE: LIGHT SOURCE IS INVISIBLE INFRA RED SIGNAL.

HEAD 1 HEAD 2 HEAD 3 HEAD 4 HEAD 5 HEAD 6 AUTO CLUTCH COUNT



SIGNAL FLOW CHART OF MG 30 MASTER CARD.

**MGL INTERNATIONAL, INC.**

**TYPE 15 000 TAPE METERING UNIT  
PARTS LIST**

<b>PART NO.</b>	<b>DESCRIPTION</b>
15001	Main Frame Plate
15002	Access Side Plate
15003	Tape Shoe Pivot Pin
15004	Knife Arm Pivot Pin
15005	Cy. Pivot Mount Pin
15006	Tape Guide Pin
15007	Capstan Pin
15008	Unwind Pin
15009	Tape Apply Roller Pin
15010	Pressure Roller Pin ( 2 )
15011	Tape Check & Link Pin ( 2 )
15012	Clevis & Knife Link Pin ( 2 )
15013	Mounting Clamp
15014	Tape Shoe
15015	Link
15016	Knife Arm
15017	Cyl. Rod Clevis
15018	Knife
15019	Pressure Roller Mount ( 1 )
15019B	Pressure Roller Block
15019C	Pressure Roller Mount Bar
15020	Air Valve & Cyl. Mount Block
15021	Tape Check Stud Clamp Mount
15022	Tape Check Stud
15023	Tape Guide Positioning Spring
15024	Unwind Tape Core Holder
15025	Unwind Brake Spring & Pad
15026	Pressure Roller Guide Pin ( 1 1/4" )
15027	Pressure Roller Guide Pin ( 1" )
15028	Capstan Roller
15029	3 Position Tape Guide
15030	Trailing Pressure Roller

**MGL INTERNATIONAL, INC.**

**TYPE 15 000 TAPE METERING UNIT  
PARTS LIST**

<b>PART NO.</b>	<b>DESCRIPTION</b>
15031	Tape Apply Roller
15032	Leading Pressure Roller
15033	Clamp Locking Knob
15034	Inboard Tape Guide
15035	Outboard Tape Guide
15036	Tape Check Roller
15037	Stripper Shoe
15038	1/4 x 4 1/4 Air Tube ( 2 )
15039	Air Valve
15040	Air Cylinder
15041	Tension Arm
15042	1/4 - 20 Hex Nut
15043	1/8 Npt Cyl Barb ( 2 )
15044	#10-32 Nipple ( 2 )
15045	#10-32 Coupling
15046	#10-32 Barb ( 2 )
15047	Flow Control Valve ( 1 )
15048	11/16 x .026 Spring ( 2 )
15049	1" x .026 Spring ( 2 )
15050	1/8 x 1/4 Poly Flow 90° Ell
15051	Tape Shoe Spring ( 2 )
15052	1/16 x 1-3/8 Steel Pin
15053	Threaded Rod
15054	#6 - 32 - 1/8 Set Screw ( 4 )
15055	#6 - 32 x 1/4 But Head Screw ( 2 )
15056	#8 - 32 x 1/4 But Head Screw ( 5 )
15057	#8 - 32 x 3/8 But Head Screw ( 23 )
15058	#10 x 32 x 1/2 But Head Screw ( 4 )
15059	#10 x 32 x 1 1/2 Round Head Screw ( 2 )
15060	1/4 "C" Ring ( 2 )



**MGL INTERNATIONAL, INC.**

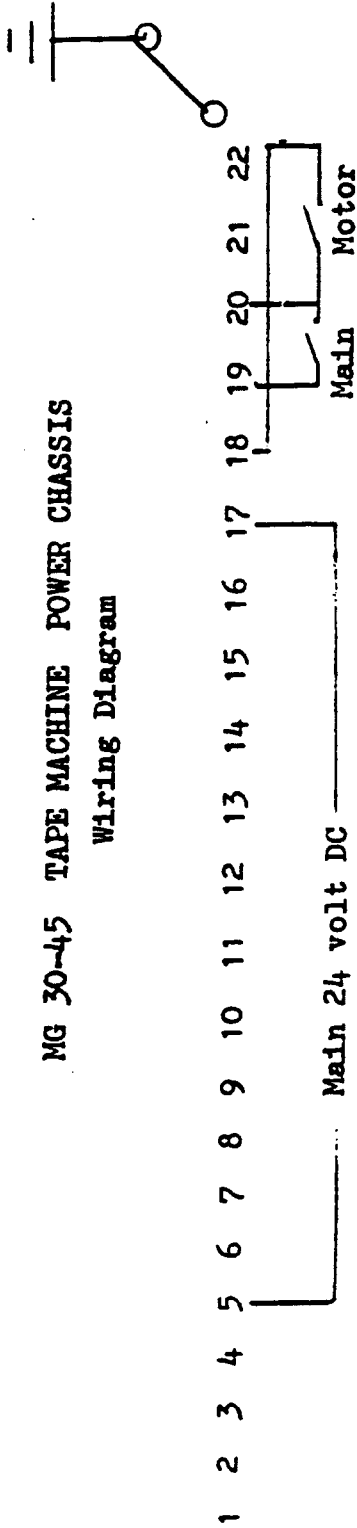
**TYPE 15 000 TAPE METERING UNIT  
PARTS LIST**

<b>PARTS NO.</b>	<b>DESCRIPTION</b>
15061	3/16 "E" Ring ( 8 )
15062	1/4 "E" Ring ( 9 )
15063	3/8 "E" Ring ( 2 )
15064	3/16 x 1/4 x 1/4 Oilite Bushing ( 4 )
15065	1/4 x 3/8 x 1/4 Oilite Bushing ( 12 )
15066	3/8 x 1/2 x 3/8 Oilite Bushing ( 2 )
15067	3/4 x 1" Long Emory Drum
15068	Core Holder Clip
15069	Valve Cord & Plug
15070	Input Air Tube
15071	Tension Spring

NOTE: Part No 15054 to Part No 15064  
Items not shown on parts drawing.

# MG 30-45 TAPE MACHINE POWER CHASSIS

## Wiring Diagram



Fuse Location 5 AMP for 110 AC VOLT  
2 AMP for 24 VOLT DC

1	GND	DC minus
2	Spot Photo Transistor (Yel)	- Input Red Output
3	Spot LED (Orange)	- Input Red Output
4	Clutch (Green)	- Input White Output
5	+24 volt DC Buss	
6	+12 volt DC Buss	
7	GND	
8	Prod. Photo Transistor	- Input Green Output Red
9	Prod. LED	- Input Orange Output Red
10	Head #6 Yel	
11	Head #5 White	
12	Head #4 Black	
13	Head #3 Orange	
14	Head #2 Blue	
15	Head #1 Brown	
16	Spare	
17	+24 volt source	- Red Output
18	Motor	- Output Blue and Black
19	110 volt AC fuse	
20	110 volt AC Input from fuse	
21	110 volt AC Neutral	- White Input Blue and Black Output
22	110 volt AC Hot	- Black Input

EDGE CONNECTOR WIRING TABLE  
EC-1 (Pin 1 is closest to edge of pc. board)

1	To Counter	-	1	(4)	Green
2	To Clutch	-	1	(10)	Yellow
3	To Head #6	-	1	(11)	White
4	To Head #5	-	1	(12)	Orange
5	To Head #4	-	1	(13)	Black
6	To Head #3	-	1	(14)	Blue
7	To Head #2	-	1	(15)	Brown
8	To Head #1	-	1	(5)	Violet
9	24 Volt Buss DC Plus				
10	Common for power transistor (GND) Frame GND, Bottom Chassis				
11	Photo Transistor input spot TS-1 (2) Yellow 22"				
12	Photo Transistor input Detector TS-1 (8) Green				
13	Timer input apply delay - From control)* Yel 6"				
14	Timer input cut delay - From Control) * Green 6"				
15	VCC (12 Volt) - From Common (Both timer controls) *				
16	LED GEN - Not Used				
17	LED GEN - Not Used				
18	Blank				
19	Blank				
20	Blank				
21	Blank				
22	GND: Frame GND Bottom Chassis Black 22"				

Notes  
\*\* Leads that are wired unto front panel  
all wire #22 Gauge Style 1007

