



## KNOWLEDGE BASE

Article Type: Reference Materials

### Mix Mizer Pulser Module

#### Description:

Reference material on Mix Mizer Pulser Module #MZ550075, where used. parts list, photos's and brief description.

#### **WARNING**

Never work on, clean or service this unit, control panel or any machine or open or remove any protective cover, guard, grate, door, or maintenance panel until the power or energy sources has been turned off, locked out / tagged out, and all moving parts have come to a complete stop and or blocked to prevent movement. Machinery is dangerous - avoid personal injury and or death by following manufacture, Local, and OSHA safety procedures. Contact Columbia Machine for safety decals, guards, horns and beacons.



## **Mix-Mizer**

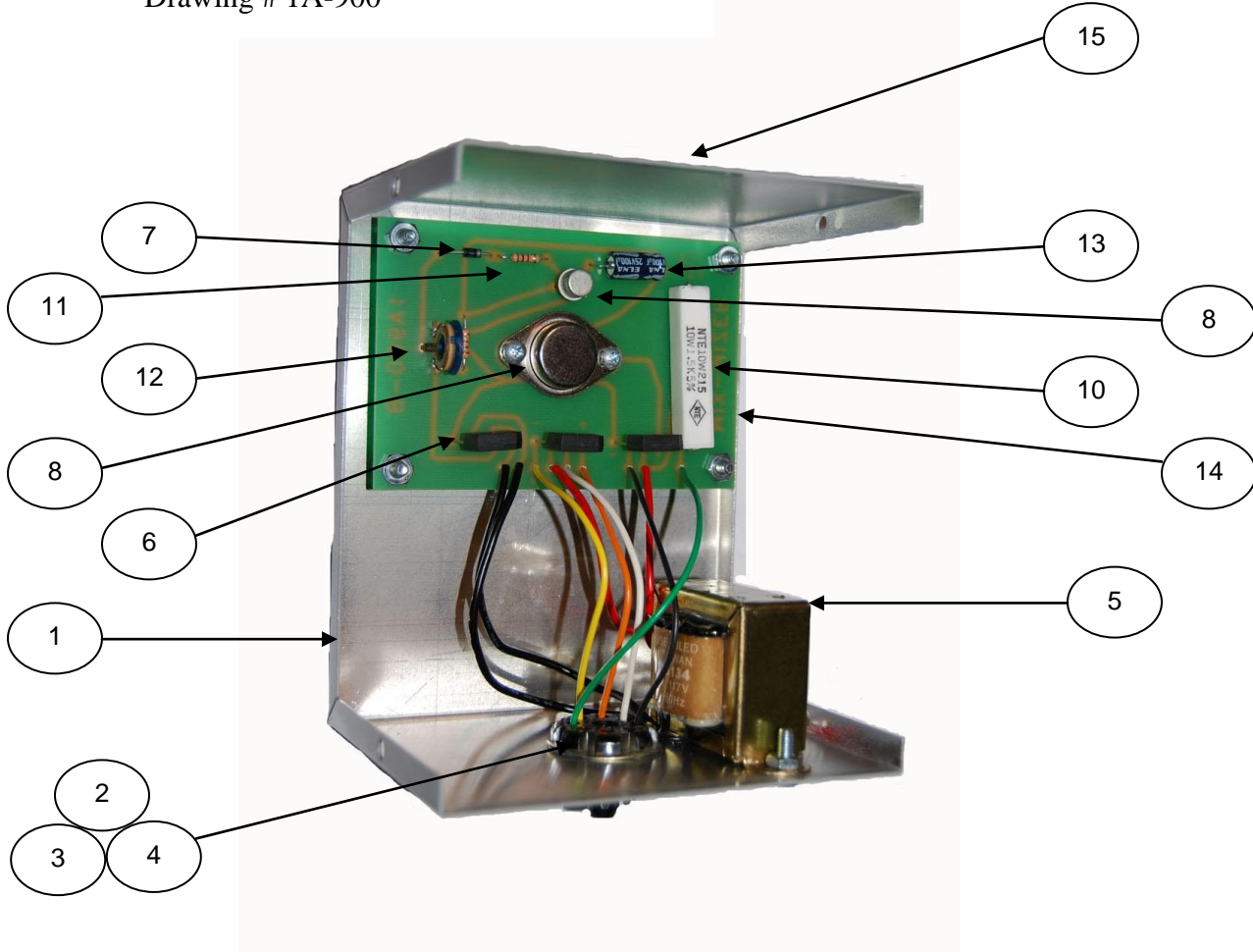
Pulser Module – MZ550075  
Drawing # 1A-900

Used on; Model 4, Load Sense, and M4T  
Batch/Mix control systems

The Pulser module produces a electrical pulse to energize the “Stepping Switch solenoid”. A pulse is the result of a contact closure within a delay relay in sockets “1” through “18”, if the “Power Control” is set to “Run”. Each pulse advances the switch one step.

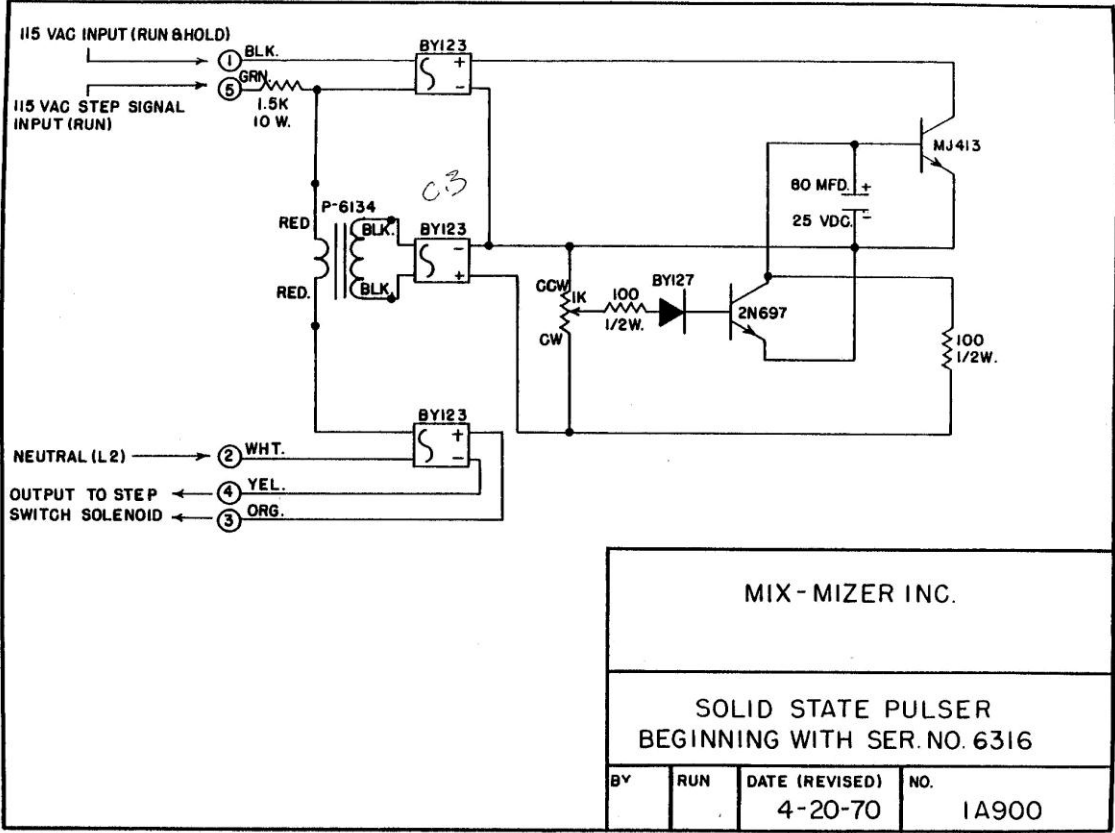
A pulse is maintained only for the brief instant required for the solenoid to step the switch and open its interrupter contacts at the end of the stroke. If the “Progress Indicator” is restrained, the interrupter contacts cannot open to communicate the pulse. Thus, damage to the “Pulser or Stepping Switch” may result due to the sustained pulse.

Mix-Mizer  
 Pulsar Module – MZ550075  
 Drawing # 1A-900



SEQ#	Item Number	Description	Qty.
1	2011088	ENCL ALUMINUM,4X,CU-2107B	1
2	237270	CONNECTOR CORD PLUG 8P1 86-CP8	1
3	MZ226697	SADDLE, 12-100-03	1
4	MZ226695	RING, MOUNTING	1
5	2010602	TRNSFMR 1PHASE 1.2A P-6134	1
6	MZ235019	RECTIFIER, NTE168	3
7	MZ235005	DIODE, A14F (BY127)	1
8	MZ235105	MZ235150OR, MJ413	1
9	MZ235150	TRANSISTOR, NTE123	1
10	MZ212145	RESISTOR, 1500 OHM, 10W, 10%	1
11	203162	RESISTOR, 100 OHMS 5% 1/2WATT	1
12	MZ215175	POT, TRIM, 1K OHM	1
13	MZ200260	CAPACITOR, 100UF, 25V	1
14	2010687	MIXMIZER PC BOARD 1A900-B	1
15	2011037	MIXMIZER ACCESS FACEPLAT 1A900	1

Mix-Mizer  
 Pulser Module – MZ550075  
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***Installing a new or rebuilt Step switch:***

If the step switch does not advance or goes into orbit, it will be necessary to adjust the sensitivity of the Pulser module. This can be done by following the steps listed below.

1. Remove cover on Pulser module.
  2. Locate sensitivity adjustment on circuit board, this is a small potentiometer, about the size of a dime, mounted vertically, then follow steps (a or b) below.
    - a) If the Step switch does not advance properly, using a small screw driver or fingers, turn the potentiometer counter-clockwise (CCW) in very small adjustments.
    - b) If the Step switch goes into orbit, using a small screw driver or fingers, turn the potentiometer clockwise (CW) in very small adjustments.
- Note: CCW: increases the pulse strength  
CW: decreases the pulse strength***
3. When adjustments are finished, replace cover on the Pulser module.

***Installing a new or rebuilt Pulser module:***

If the Step switch does not advance or goes into orbit it will be necessary to adjust the sensitivity of the Pulser module. This can be done by following the steps listed above.