

M5 FIVE GALLON PAINT MIXER
Owner's Manual



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Introduction

About Us

www.MiraclePaint.com

Miracle Paint Rejuvenator recently celebrated its 80th Anniversary of producing quality specialty mixing solutions.

Fred A. Schletz, Miracle Paint's founder, invented the first shaker in 1932. His invention was designed to rejuvenate his stock of paint for his three paint stores so his inventory would not spoil. This timely invention not only helped Fred survive the depression years, the demand for his mixers became so great, that he sold the paint stores and started the Miracle Paint Rejuvenator company to produce mixers full time!

That commitment to innovation and quality engineering continues to this day with our most recent line roll out of heavy duty industrial mixers - Pacer Industrial Mixers. Whether your requirement is for Laboratory Mixers, Automotive Shakers, Architectural Paint Mixers, Shakers for Ink Preparation, Industrial Products Blenders or Tumbler and Debur Applications we have a heavy duty industrial mixer that meets your need!

Miracle Paint Rejuvenator's M5 Mixers are heavy duty quality built machines that offer dependable operation throughout their lifetime.

The highly efficient, fast operating clamping system allows you to shake 1, 2, or 5 gallon steel or plastic pails up to 80 pounds without the use of adapters.

To take full advantage of your mixer's capabilities, you should understand its features and proper operation. Before operating mixer read this manual completely and save for future reference.

Machine Models

This manual includes instructions and replacement parts information for the M5 & M5-EXP models.

- 115/230V 60 Hz 1/2 HP mixer - 30 minute dial timer
- 115/230V 60 Hz 1/2 HP Explosion Proof Mixer (Class 1, Group D environment) - no timer



Safety Precautions

Follow these safety precautions when operating the Miracle Paint Rejuvenators M5 Mixer.

Installation

1. Before operating the machine, read this Owner's manual carefully.
2. Avoid dangerous environments. Do not use the machine in a damp or wet environment.
3. Use the proper power source
Dial timer model: Plug cord into 110V grounded outlet.
Explosion proof model: Must be installed by qualified electrician in compliance with the hazardous environment the mixing is taking place in (see page 5).
4. Avoid extension cords. To minimize the risk of circuit overload, or improper electrical grounding do not use extension cords.

Operation

6. Ensure the can being mixed is securely clamped.
7. Keep customers away from mixing area. Only trained personnel should operate the mixer.

Maintenance

8. Do not get the timer or wiring wet. Failure to do so could result in electric shock.
9. Clean all surfaces of the machine with soap and water. Do not use any solvent-based cleaners or thinners.
10. Disconnect machine from power source before cleaning or servicing mixer.
11. Be sure to maintain the mixer on a regular basis. Follow the maintenance procedures on page 6.

Installation Instructions

Machine must be anchored to floor. Use appropriate hardware.

When anchoring the mixer ordinary precaution should be taken to level the machine. Corner shims may be necessary before securing the mixer to floor.



Electrical Connection and Grounding Requirements



M5

Your mixer **MUST BE PROPERLY GROUNDED**. If there is an electrical short circuit, grounding reduces the risk of electric shock.

The machine's power cord has a grounded plug. This plug must be inserted into an electrical outlet that is properly installed and grounded according to all local codes and ordinances.

If you must repair or replace the power cord or plug, do not connect the grounding wire to either flat-blade terminal. The wire with insulation having an outer surface that is green (with or without yellow stripes) is the grounding wire. Check with a qualified electrician if you don't completely understand these grounding instructions, or if you are not sure whether the machine is properly grounded. **DO NOT MODIFY** the plug provided: if it won't fit the outlet, have a proper outlet installed by a qualified electrician.

Extension Cords

Avoid using extension cords. If an extension cord is unavoidable, consult a qualified electrician to determine what type of extension cord will satisfy the grounding, current capacity, and other requirements of the particular situation.

M5-EXP

Must be installed by qualified electrician in compliance with the hazardous environment the mixing is taking place in. Consult electrician for timer options. Have flexible conduit attached to motor to allow motor freedom for belt adjustment.

Do not wire explosion proof equipment with plug and cord, as this should be wired direct in accordance with U.S. Underwriters' Class 1, Group D specifications.

When connecting motor to line, either rotation is permissible.



Operation

Safety Precautions

1. Make sure can lids are tightly closed.
2. Do not mix breakable containers such as glass, porcelain, etc.
3. Ensure container is securely clamped.
4. All customers should be kept away from the work area.
5. The mixer should be operated by trained personnel only.

Mixing Procedures

1. Place pail in clamp assembly with lid closest to crank handle and center it.
2. Turn Crank Handle clockwise to tighten clamp on pail. Make sure the Clamp Plates are in full contact with the top and bottom of the pail. When the Clamp Plates make even contact with the top and bottom of the pail, turn the Crank Handle 3/4 an additional turn until snug.
3. Set timer for desired mix time.

Maintenance Procedures

Always disconnect machine from power source before maintaining or servicing.

Cleaning:

Keep the machine clean. Colorant or paint spilled on the machine can be cleaned with warm soapy water. After washing, oil the Clamp Lead Screw and Clamp Rods with 3in1 oil. Be careful not to get the timer wet.

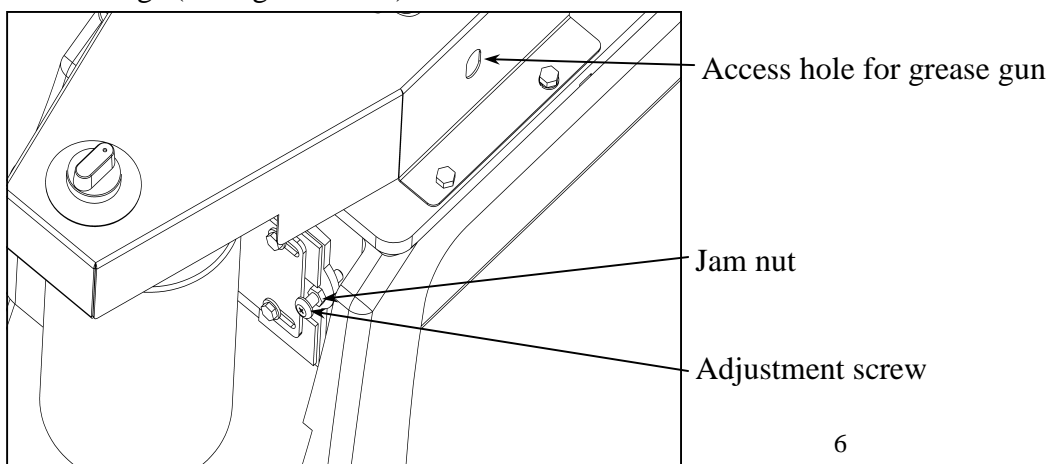
Lubrication:

Grease the Taper Roller Bearings after about every 100 hours of use. There is an access hole in the Belt Cover for a grease gun (see figure below). You may need a flashlight to see the grease zerk.

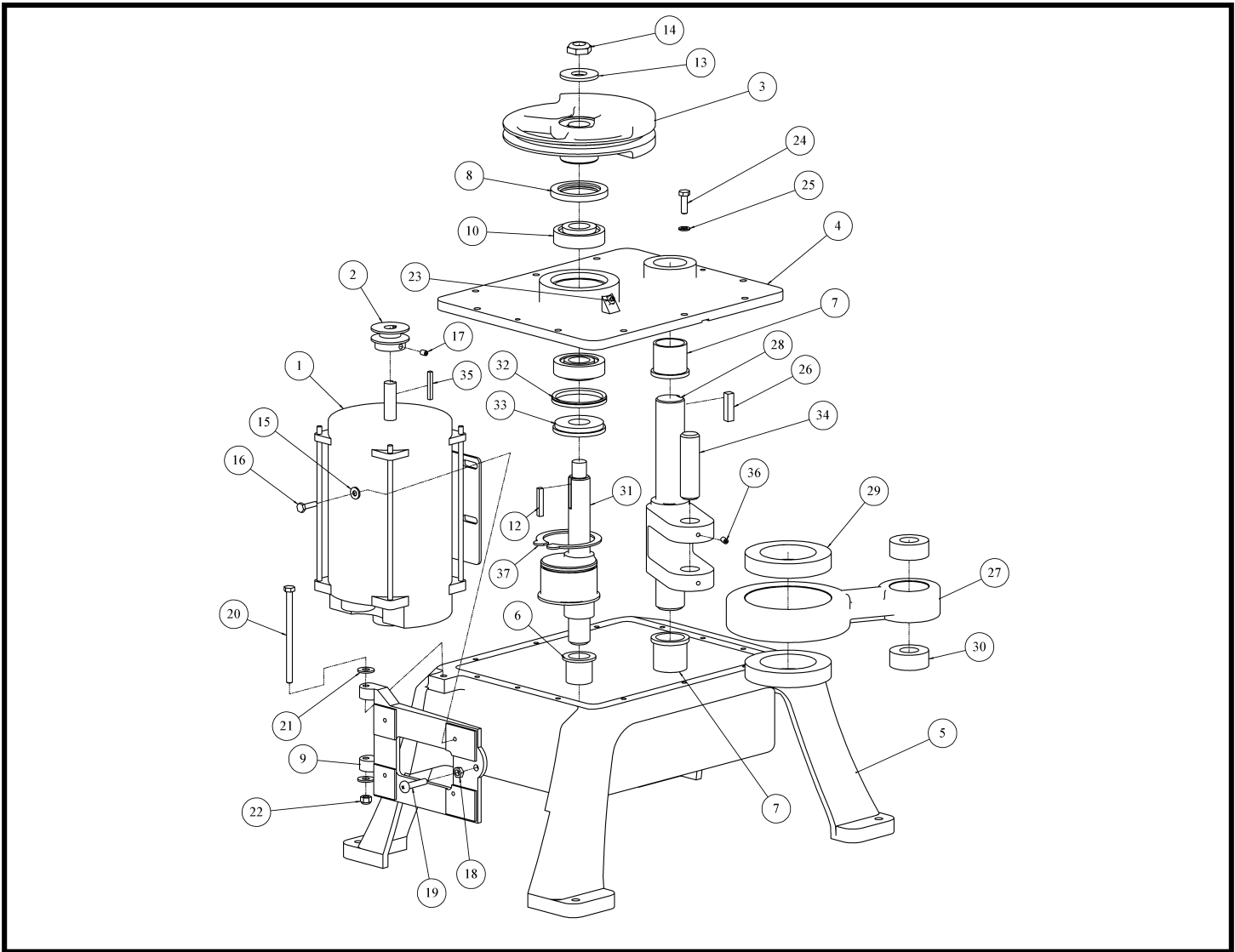
Keep the Clamp Lead Screw and Clamp Rods free of dirt, dried paint, and other materials. **Once a week apply a thin film of 3in1 oil to the Clamp Lead Screw and Clamp Rods.**

Belt Adjustment:

The belt adjustment screw is located next to the motor. Belt should be tightened if belt starts to squeal or machine mixing speed is noticeably slower. Loosen jam nut and turn adjustment screw clockwise one turn at a time until mixer runs properly, tighten jam nut. Do not over-tighten belt which will put strain on belt and motor bearings (see figure below).

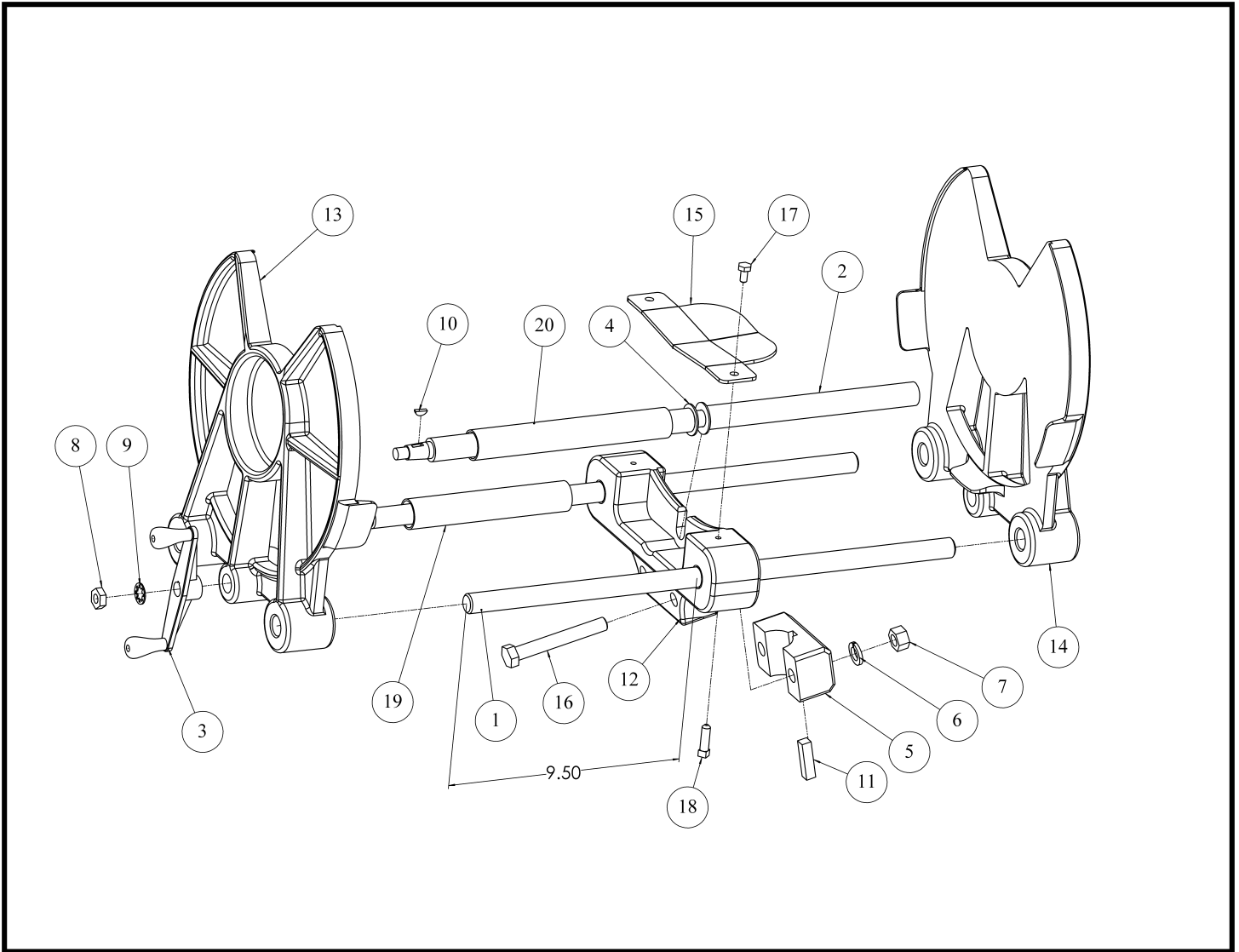


M5 Mixer Drive Assembly



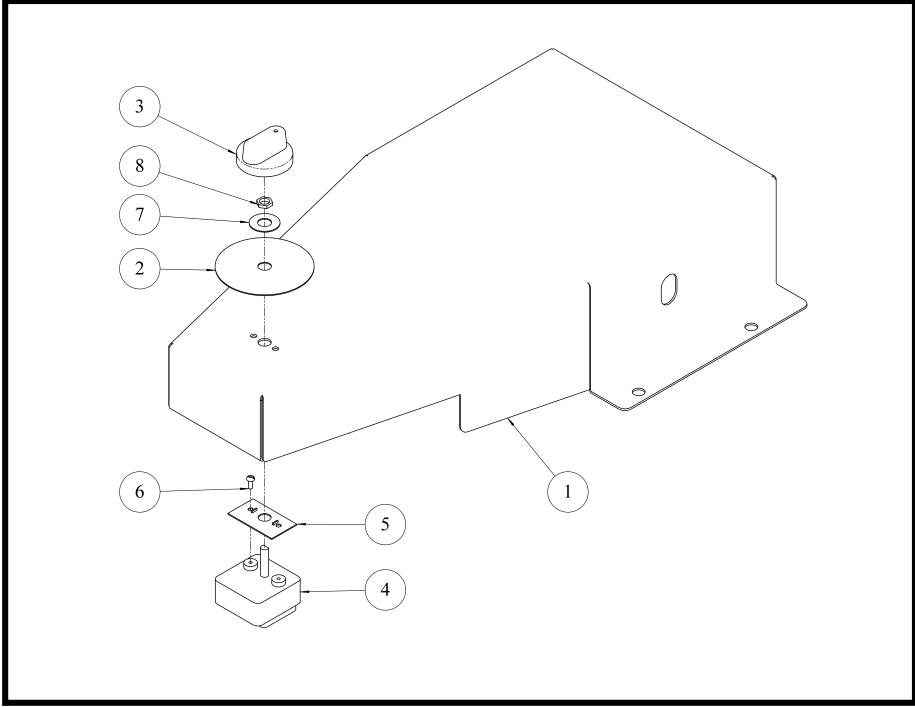
Item	Qty.	Part Number / Description	Item	Qty.	Part Number / Description
1	1	M5-535 Motor, 1/2HP-standard	21	2	Flat washer, USS 5/16
2	1	BB-14 Driver pulley, 2"	22	1	Nut, nylock 5/16-18
3	1	M5-505 Pulley, driven	23	1	Grease zerk 1/8npt
4	1	M5-502 Top cover, base	24	10	Screw, hex hd cap 5/16-18x1.00
5	1	M5-501 Base	25	10	Lockwasher, split 5/16
6	1	M5-523 Bronze flange bearing, 1.376 OD	26	1	M5-531 Square key 3/8 x 1.50
7	2	M5-524 Bronze flange bearing, 1.755 OD	27	1	M5-514 Pitman connector
8	1	M5-525 Oil seal	28	1	M5-503 Shaft, pitman connector
9	1	BB-22 Motor base	29	2	M5-532 Ball bearing, 2.9528"
10	2	M5-526 Taper roller bearing	30	2	M5-533 Ball bearing, 1.00"
12	1	M5-530 Square key, .25 x 1.50	31	1	M5-504 Eccentric shaft
13	1	Flat washer USS .75	32	1	M5-534 V-seal
14	1	Nut, nylock jam 3/4-10	33	1	M5-515 V-seal seat
15	4	Flat washer SAE .25	34	1	M5-527 Pin, 1.00 x 3.50
16	4	Screw, hex hd cap 1/4-20 x 1.00	35	1	M5-528 Square key 3/16x1.50
17	2	Set screw, knurled cup point 1/4-20x.38	36	2	Set screw, knurled cup point 1/4-20x.50
18	1	Nut, hex jam 5/16-18	37	1	M5-529 Snap ring, external
19	1	Screw, pan hd Phillips 5/16-18 x 1.50			
20	1	Screw, hex hd cap 5/16-18 x 5.00			

M5 Mixer Clamp Assembly



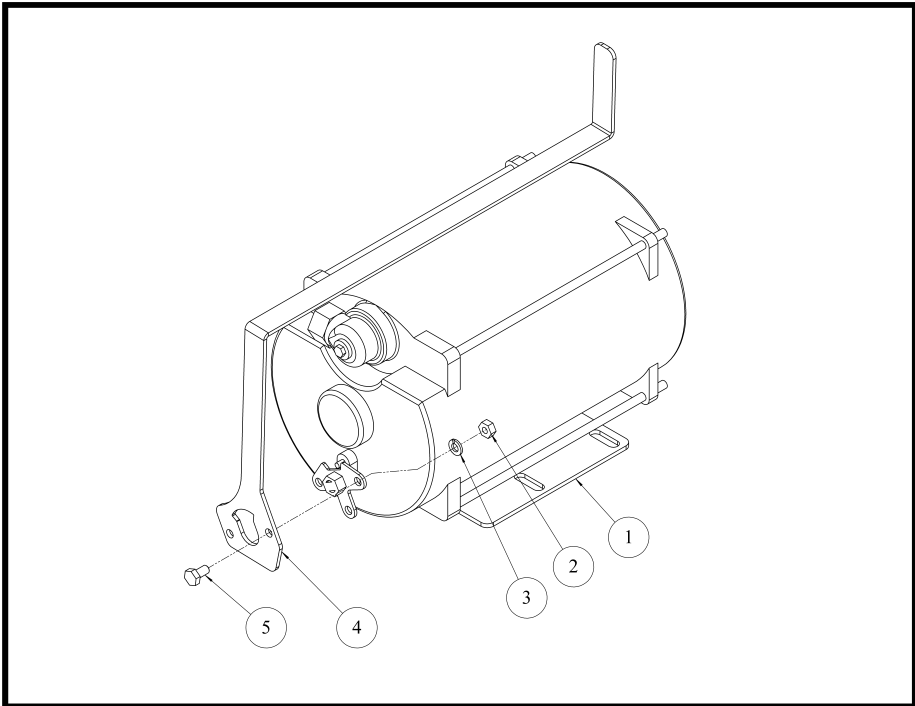
<u>Item</u>	<u>Qty.</u>	<u>Part Number / Description</u>	<u>Item</u>	<u>Qty.</u>	<u>Part Number / Description</u>
1	2	M5-509 Clamp rod, 5 gallon	12	1	M5-507 Clamp rod holder, 5 gallon
2	1	M5-510 Clamp lead screw, 5 gallon	13	1	M5-511 Clamp plate, LH threads
3	1	PIM-10023 Crank handle	14	1	M5-512 Clamp plate, RH threads
4	2	M5-522 Thrust bearing	15	1	M5-518 Pail rest
5	1	M5-508 Clamping block, 5 gallon	16	2	Screw, hex hd cap 1/2-13 x 3.75
6	2	Lockwasher, split 1/2"	17	2	Screw, hex hd cap 1/4-20 x .50
7	2	Nut, hex 1/2-13	18	2	Set screw, square hd 5/16-18 x 1.00
8	1	Nut, hex jam 7/16-20	19	4	M5-520 Clamp rod sleeve, 6.50" long
9	1	Lockwasher, int tooth 7/16"	20	2	M5-521 Clamp lead screw sleeve, 8.00" long
10	1	Woodruff key #404			

M5 Mixer Timer Assembly



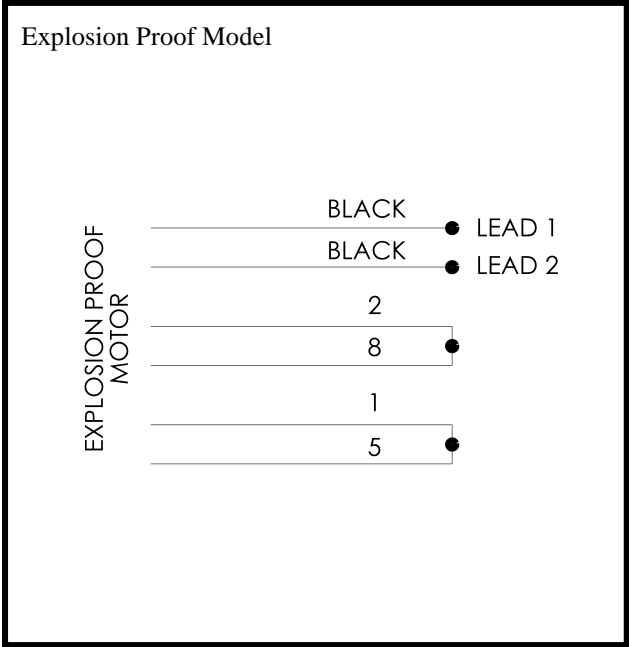
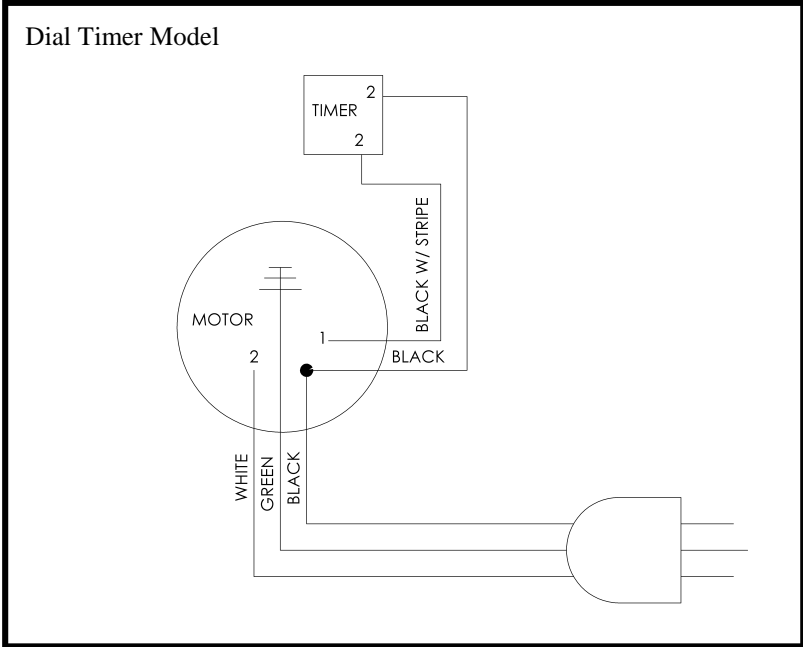
Item	Qty.	Part Number / Description
1	1	M5-506 Cover, belt
2	1	Timer face plate
3	1	Timer knob
4	1	BB-18 Timer 1 - 30 minute
5	1	Timer backing plate
6	2	Screw, pan head slotted self tap 4-24 x 5/16
7	1	Timer washer
8	1	Timer nut

M5 Explosion Proof Motor Assembly



Item	Qty.	Part Number / Description
1	1	M5-536 Motor, X-proof
2	2	Nut, hex 1/4-20
3	2	Lockwasher, split 1/4"
4	1	M5-517 On-off lever, X-proof
5	2	Screw, hex hd cap 1/4-20 x .50

M5 Wiring Schematics



Ordering Replacement Parts

Contact our Customer Service Department at:

Miracle Paint Rejuvenator Company
 6160 Claude Way East
 Inver Grove Heights, Minnesota 55076

Ph: 651-222-1900 or 888-236-1143
 Fax: 651-222-8549

Warranty: 1 year parts & labor