

**M5 BLUE BOY  
FIVE GALLON PAINT MIXER  
Owner's Manual**



# *Table of Contents*

Introduction.....	3
Safety Precautions.....	4
Installation Instructions.....	5
Electrical Connections.....	7
Operating Instructions.....	8
Maintenance Procedures.....	8
Parts lists .....	9
Wiring Schematics.....	13
Ordering Replacement Parts....	13



# *Introduction*

---

## **About Us**

[www.MiraclePaint.com](http://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 7).
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 8.



# Installation Instructions

## For Models Without Enclosure:

Remove Mixer from pallet.

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.

## For Models With Enclosure:

Do Not remove machine from shipping pallet before reading Installation Instructions.

Installation requires 2 or 3 people to help with lifting.

### **Tools Required:**

1/4" allen wrench

7/16" deep socket

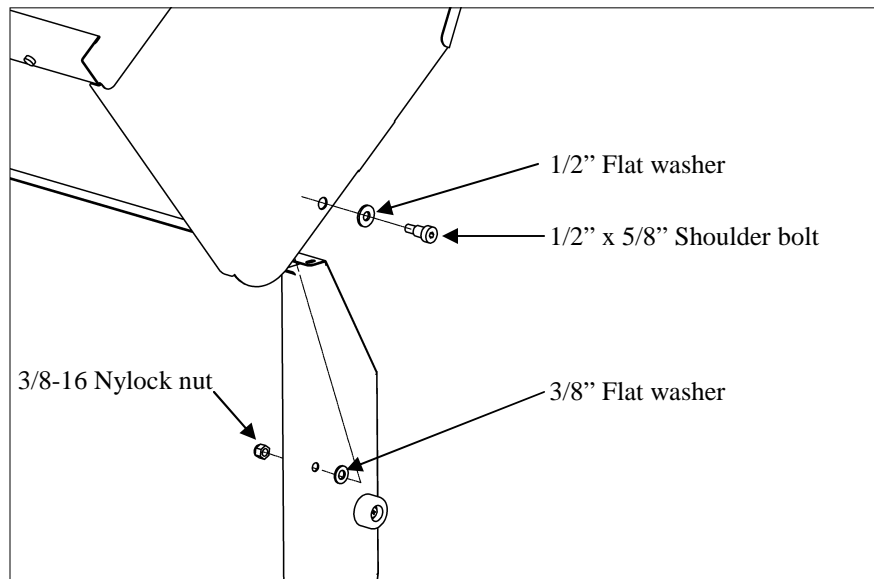
12" extension

Ratchet

9/16" wrench or socket

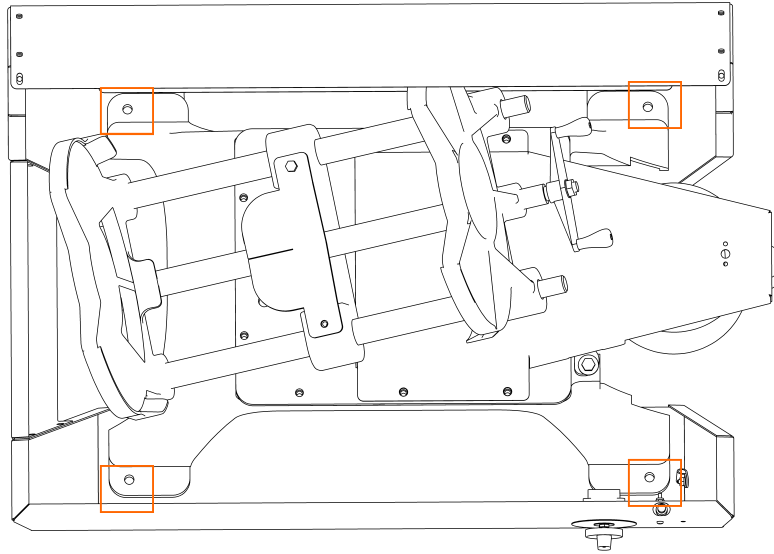
### **Step 1**

Remove Door from Enclosure by removing hardware shown:



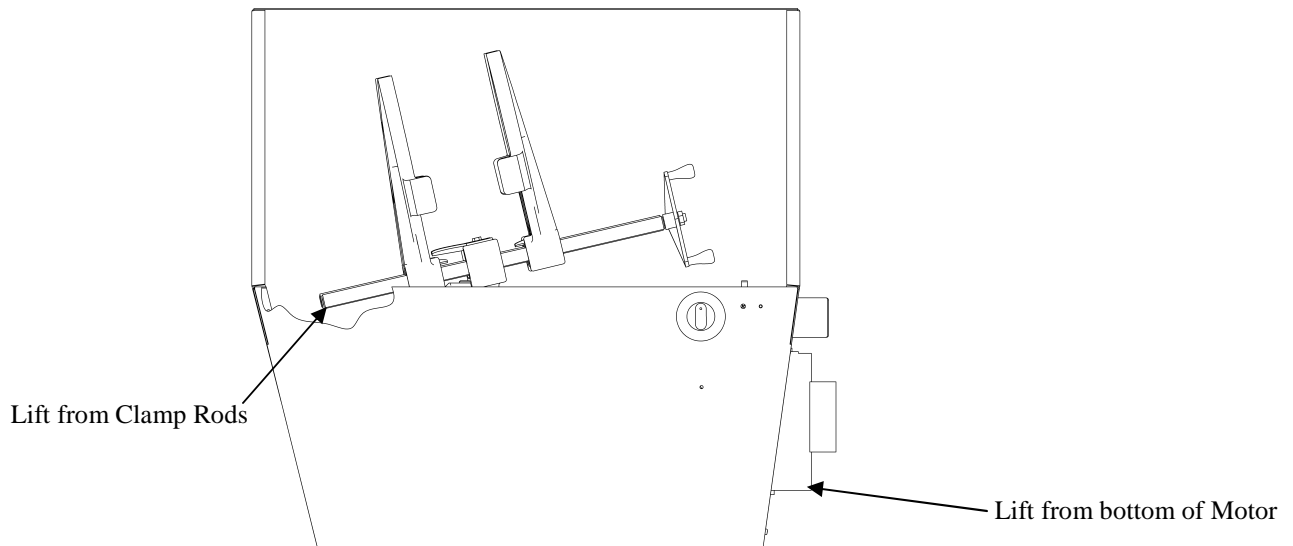
## Step 2

Remove (4) 1/4-20 hex nuts holding Mixer to pallet. Located inside the enclosure at the base of the Mixer.



## Step 3

Screw clamp all the way closed. Lift Mixer out of Enclosure. Lift from bottom of Motor and Clamp Rods. **Do Not lift from aluminum Clamp Plates.**



Set the Mixer in its permanent location and mark holes for anchoring Mixer to floor. Move Mixer out of the way so you can put the Enclosure in that permanent location. Place Mixer inside Enclosure aligning mounting/anchoring holes. Anchor to floor using appropriate hardware (not provided).

Connect wiring harness from Motor to Enclosure:

Connect the 2 black wires with white strip by pushing quick-disconnects together.

Connect the 2 black wires together by pushing quick disconnects together.

Assemble Door to Enclosure.

Mixer is now ready for use. Machine will not run with door open.

For X-proof models run conduit to motor (see page 7). No electrical components provided.



# 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. Close door (models with enclosure).
4. 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.

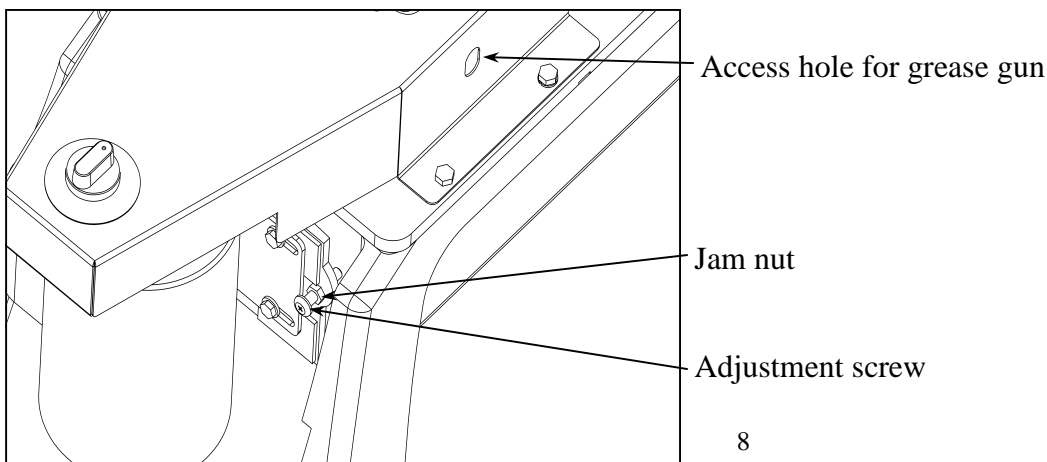
### Lubrication:

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). Remove back panel for models with enclosure. 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.**

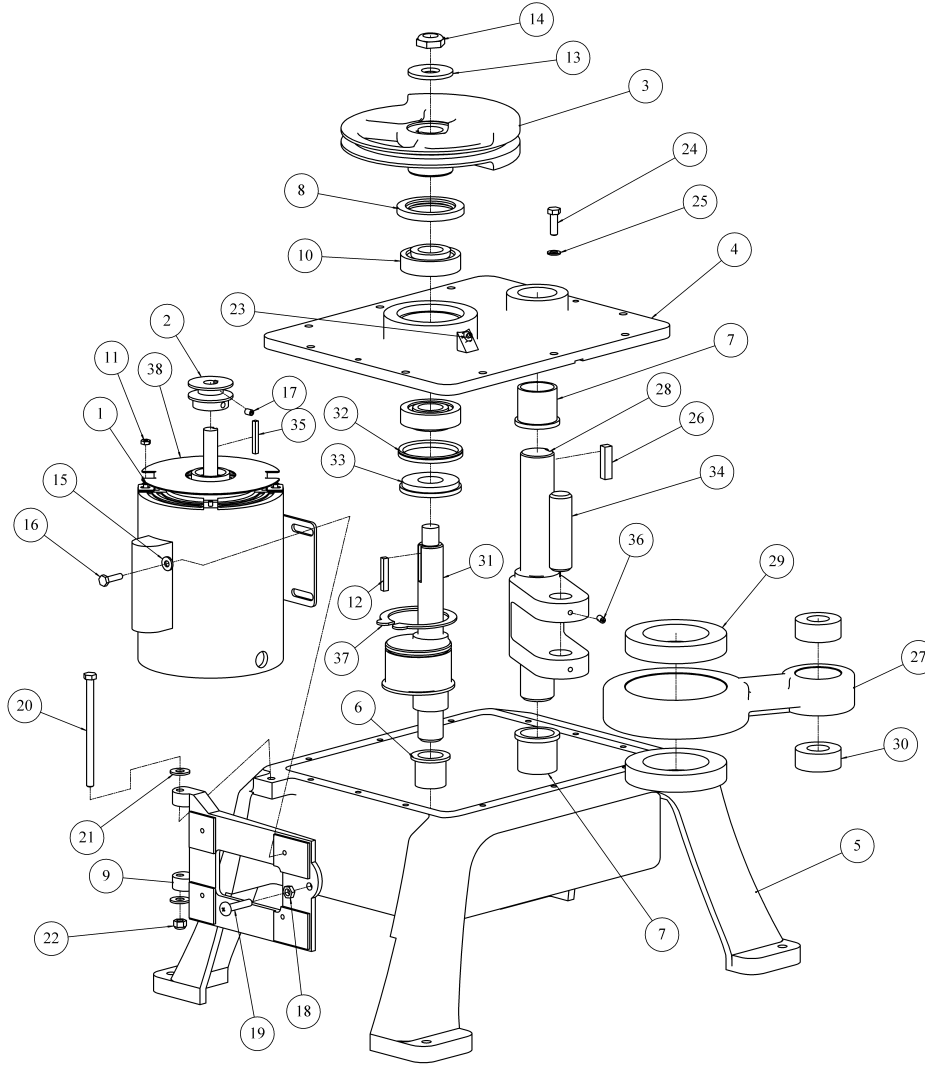
### Belt Adjustment:

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).



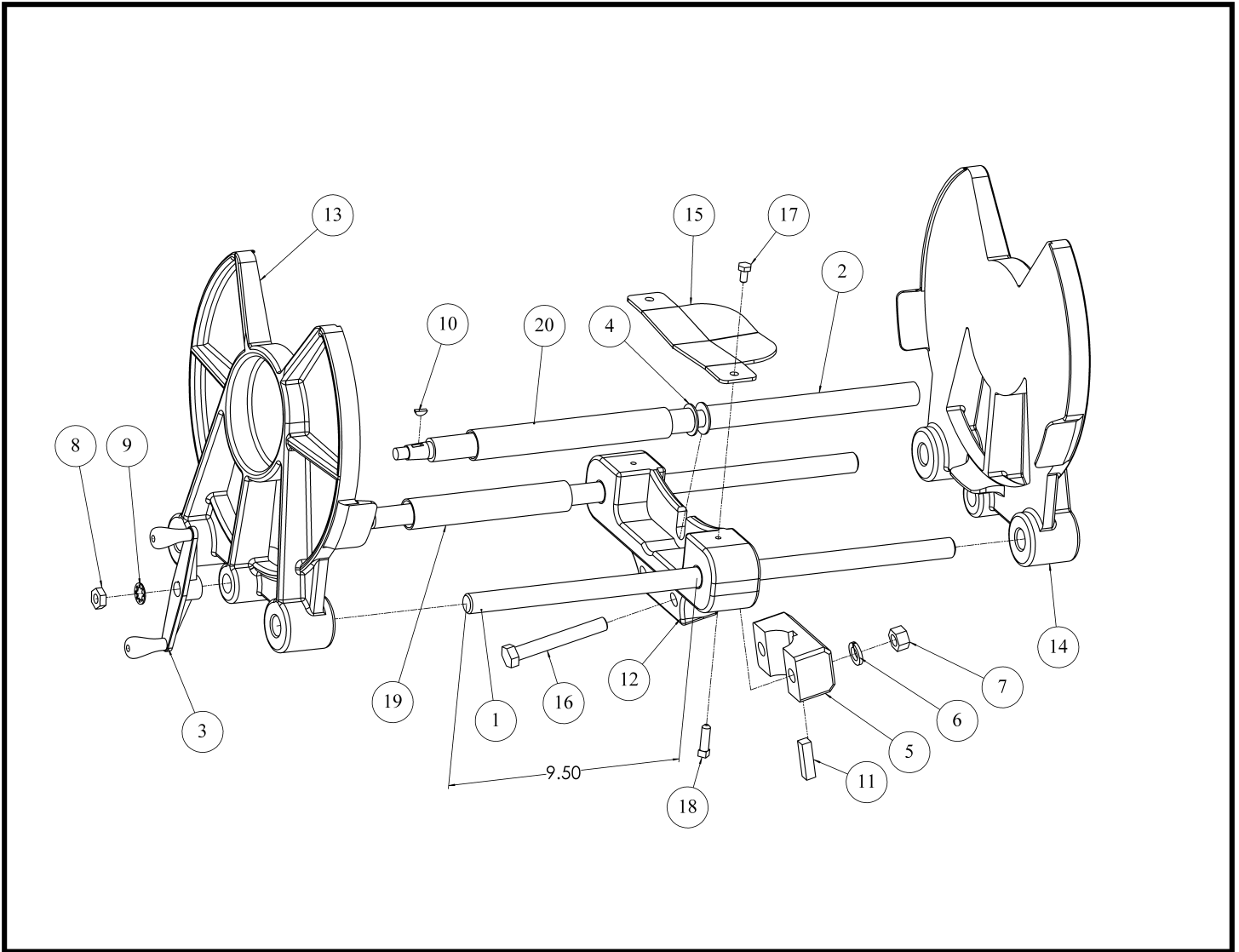


## M5 Mixer Drive Assembly



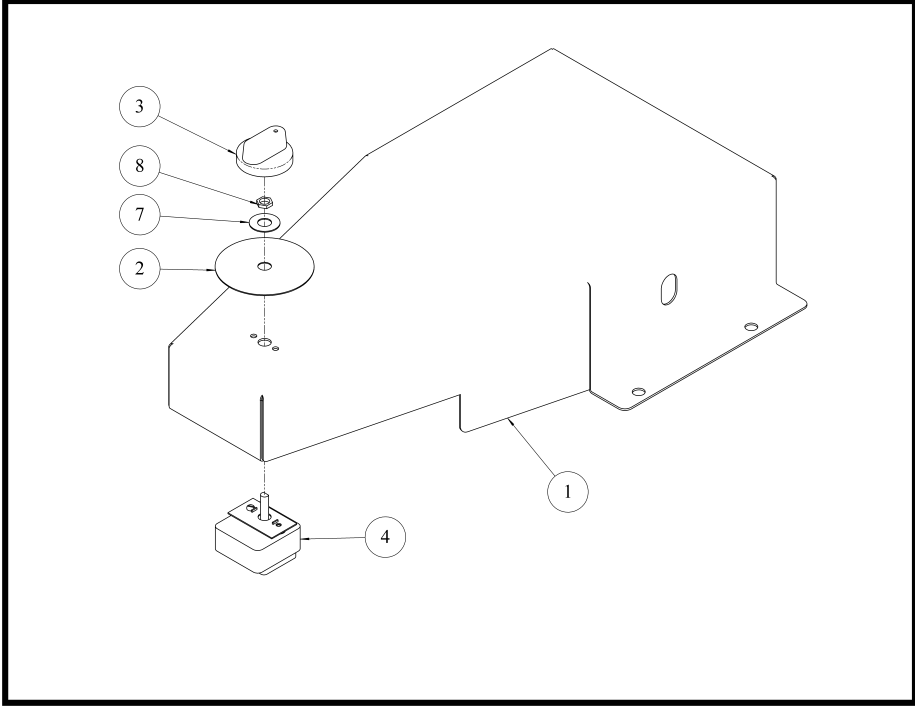
Item	Qty.	Part Number / Description	Item	Qty.	Part Number / Description
1	1	M5-535 Motor, 1/2HP-standard	20	1	Screw, hex hd cap 5/16-18 x 5.00
2	1	BB-14 Driver pulley, 2"	21	2	Flat washer, USS 5/16
3	1	M5-505 Pulley, driven	22	1	Nut, nylock 5/16-18
4	1	M5-502 Top cover, base	23	1	Grease zerk 1/8npt
5	1	M5-501 Base	24	10	Screw, hex hd cap 5/16-18x1.00
6	1	M5-523 Bronze flange bearing, 1.376 OD	25	10	Lockwasher, split 5/16
7	2	M5-524 Bronze flange bearing, 1.755 OD	26	1	M5-531 Square key 3/8 x 1.50
8	1	M5-525 Oil seal	27	1	M5-514 Pitman connector
9	1	BB-22 Motor base	28	1	M5-503 Shaft, pitman connector
10	2	M5-526 Taper roller bearing	29	2	M5-532 Ball bearing, 2.9528"
11	4	Nut, hex 10-32 (supplied w/ motor)	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	38	1	M5-548 Dust cover, Motor

## M5 Mixer Clamp Assembly



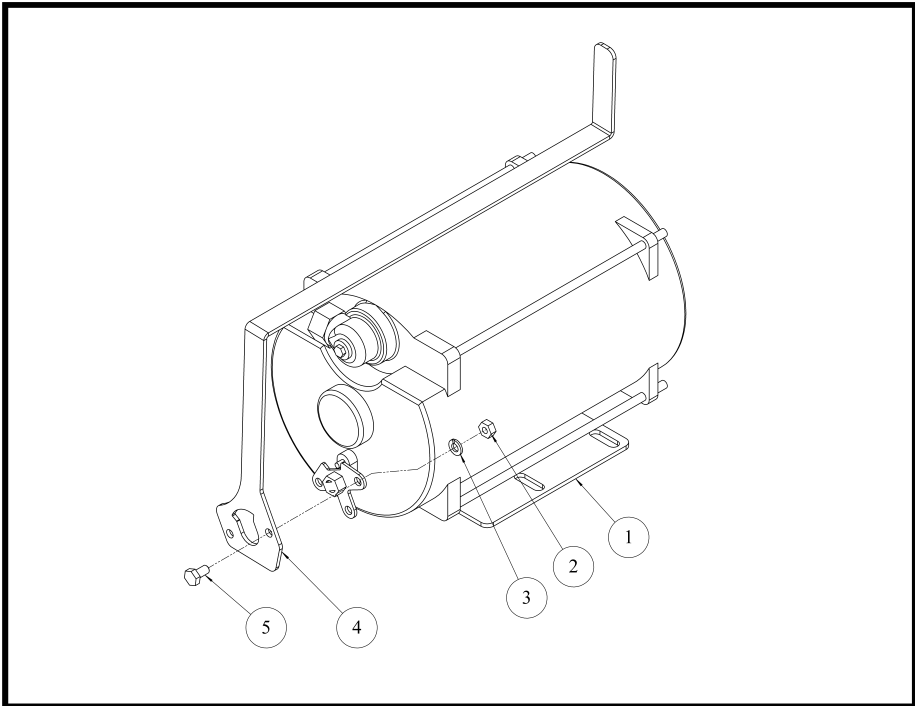
<u>Item</u>	<u>Qty.</u>	<u>Part Number / Description</u>	<u>Item</u>	<u>Qty.</u>	<u>Part Number / Description</u>
1	2	M5-509 Clamp rod, 5 gallon	11	1	Square key, 3/8 x 1.50
2	1	M5-510 Clamp lead screw, 5 gallon	12	1	M5-507 Clamp rod holder, 5 gallon
3	1	M5-549 Crank handle	13	1	M5-511 Clamp plate, LH threads
4	2	M5-522 Thrust bearing	14	1	M5-512 Clamp plate, RH threads
5	1	M5-508 Clamping block, 5 gallon	15	1	M5-518 Pail rest
6	2	Lockwasher, split 1/2"	16	2	Screw, hex hd cap 1/2-13 x 3.75
7	2	Nut, hex 1/2-13	17	2	Screw, hex hd cap 1/4-20 x .50
8	1	Nut, hex jam 7/16-20	18	2	Set screw, square hd 5/16-18 x 1.00
9	1	Lockwasher, int tooth 7/16"	19	4	M5-520 Clamp rod sleeve, 6.50" long
10	1	Woodruff key #404	20	2	M5-521 Clamp lead screw sleeve, 8.00" long

## M5 Mixer Timer Assembly



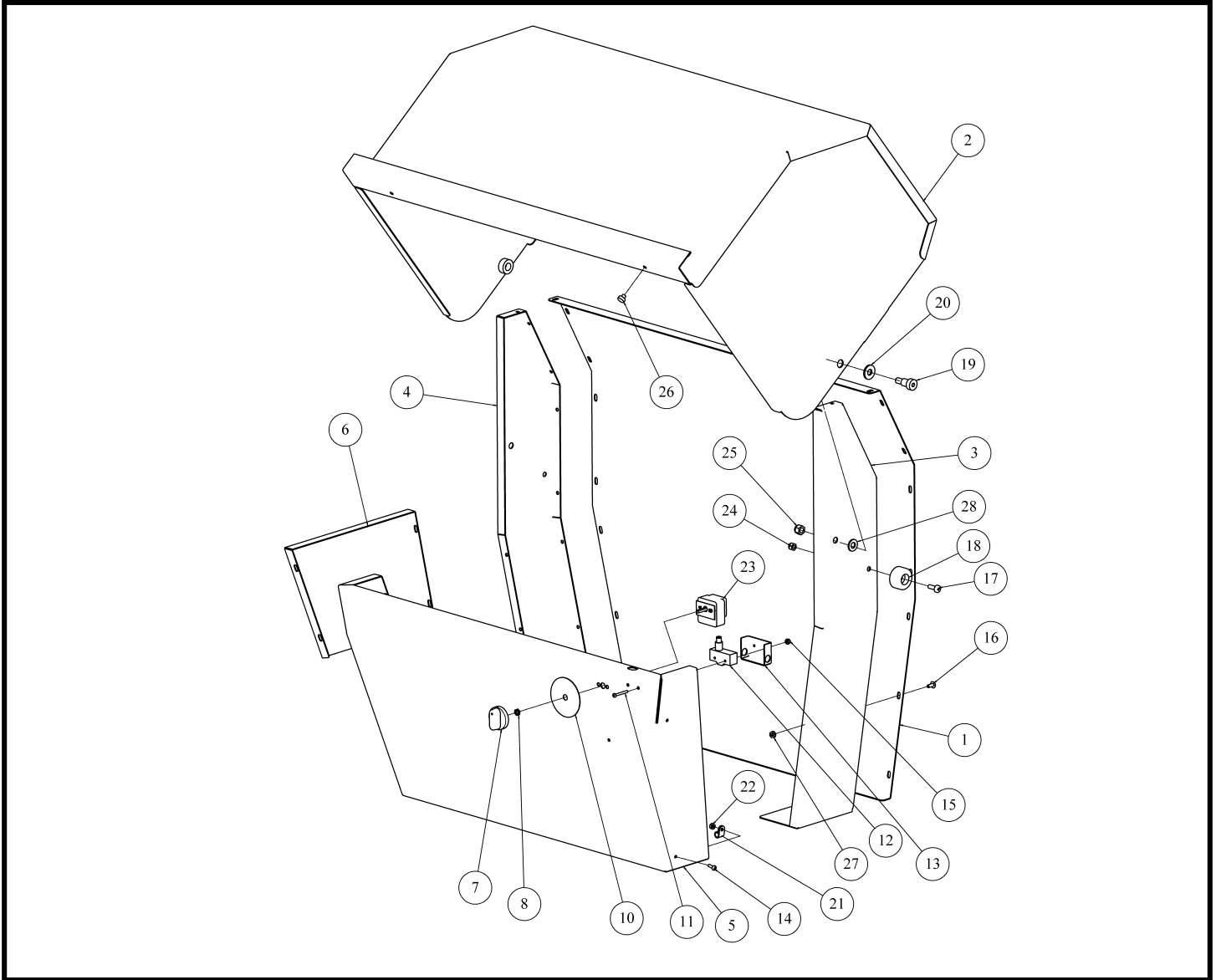
Item	Qty.	Part Number / Description
1	1	M5-506 Cover, belt
2	1	Timer face plate
3	1	Timer knob
4	1	M5-555 Timer, 30 minute
7	1	Timer washer
8	1	Timer nut

## M5 Explosion Proof Motor Assembly



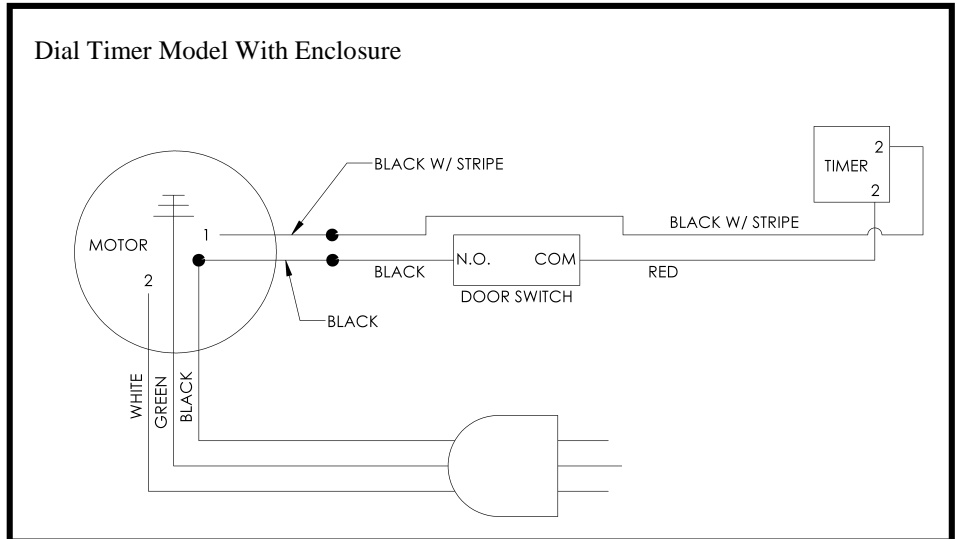
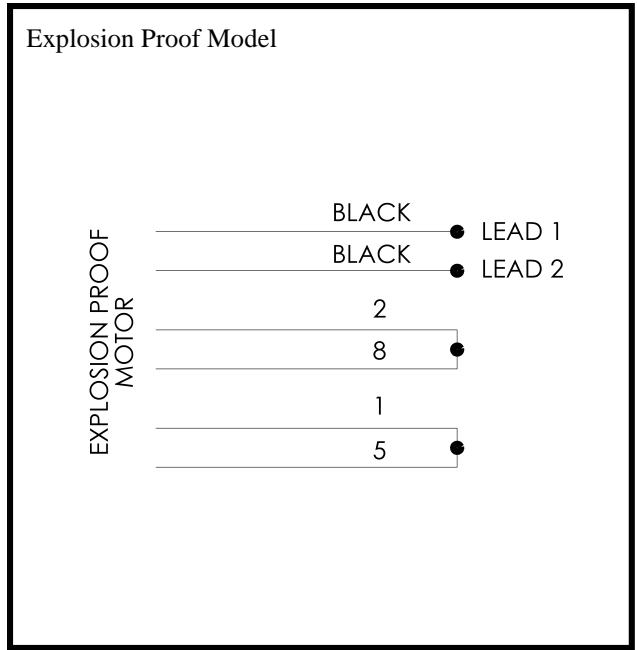
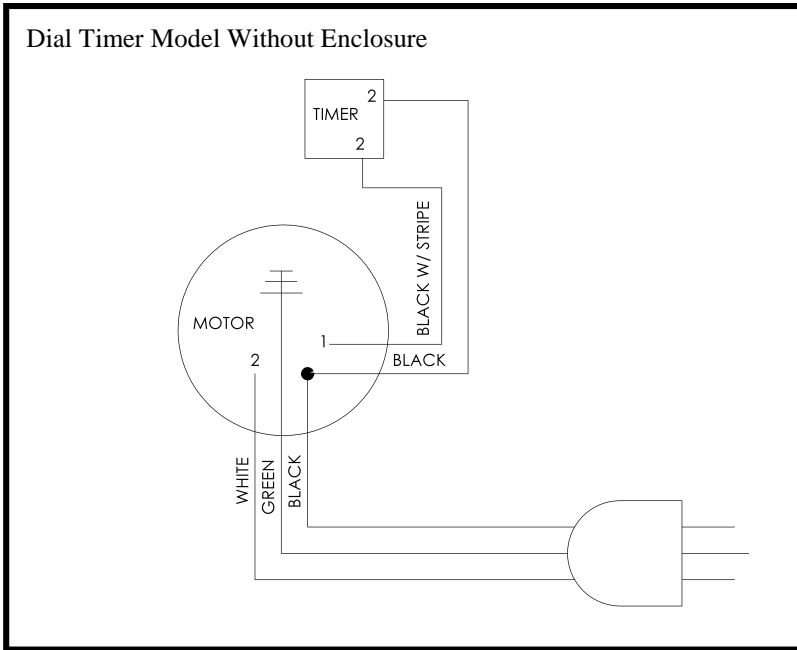
Item	Qty.	Part Number / Description
1	1	M5-536 Motor, X-proof
2	2	Nut, hex 1/4-20
3	2	Lockwasher, split 1/4"
4	1	M5-517 On-off lever, X-proof
5	2	Screw, hex hd cap 1/4-20 x .50

## M5 Enclosure Assembly



<u>Item</u>	<u>Qty.</u>	<u>Part Number / Description</u>	<u>Item</u>	<u>Qty.</u>	<u>Part Number / Description</u>
1	1	M5-541 Back panel, M5 enclosure	16	20	Screw, truss hd ph 10-32 x .50
2	1	M5-545 Door weldment, M5	17	2	Screw pan hd ph 1/4-20 x 1.00
3	1	M5-538 Right side panel, M5 enclosure	18	2	M5-554 Door bumper, M5
4	1	M5-539 Left side panel, M5 enclosure	19	2	Shoulder bolt, 1/2" x 5/8"
5	1	M5-537 Front panel, M5 enclosure	20	2	Flat washer, 1/2 SAE
6	1	M5-540 Middle left side panel, M5 enclosure	21	3	Plastic cable clamp
7	1	M5-550 Timer knob, M5	22	3	Nut, keps lock 8-32
8	1	M5-552 Timer nut, M5	23	1	M5-555 Timer, 30 minute
10	1	M5-551 Timer face plate, M5	24	2	Nut, nylock 1/4-20
11	2	Screw, pan hd ph 6-32 x 1.25	25	2	Nut, nylock 3/8-16
12	1	M5-553 Door switch, M5	26	2	Rubber bumper
13	1	PIM-10247 Switch cover	27	20	Nut, keps lock 10-32
14	3	Screw, pan head ph 8-32 x .50	28	2	Flat washer, 3/8 SAE
15	2	Nut, nylock 6-32			

## M5 Wiring Schematics



## *Ordering Replacement Parts*

Contact our Customer Service Department at:

Miracle Paint Rejuvenator Company  
 6270 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