

GyroFlex™ Mixer User Manual



User Guide • **Getting Started** Replacement parts • Accessories • Contact Us

Your

customers have a vision, you have a challenge and Fluid Management has the answer.

Fluid Management is a global leading manufacturer of mixing and tinting equipment, plus specialized equipment for a variety of industries that include home improvement, food, chemical, and cosmetics. Located in Wheeling Illinois, Fluid Management is a United States owned and operated company with historical roots dating back to 1927. In 1996, Fluid joined the IDEX Corporation as it prepared to address the changing business environments of the 21st century.

As industry leaders, Fluid Management provides trend setting creative initial design through comprehensive equipment selections. FM Direct, Fluid Management's after-sales service is one of a kind. FM Direct technicians are Fluid Management employees, trained to understand our products like no one else. Fluid Management strives for close teamwork with our customers.

The combination of leading edge technology, world class service and support, and a company prepared for the future technological trends of an ever changing business environment makes Fluid Management the ideal partner. Thank you for putting your trust in Fluid Management products. We will help you with services that will help you serve your valued customers.



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Fluid Management

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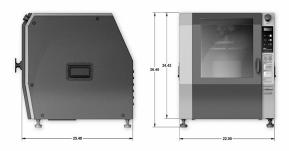
Published in the United States.

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What's next?



GYROFLEX™ MIXER



nce you've installed your
GyroFlex™ one-gallon
mixer, what's next? In this
booklet, you'll find more information to
help you get the most from your new
Fluid Management GyroFlex™ mixer.

Table of Contents:

- 4 Safety and Service
- 6 Product Overview and Technical Specifications
- 7 Installation
- 8 Basic Operational Instructions
- 13 Maintenance and Service
- **15** Replacement Parts

Property of Fluid Management

Important safety information

WARNINGS



This machine draws 10 Amps at 120 ± 10% VAC.

Do not modify the provided plug.

Improper use of grounding plug can result in risk of electric shock.

Hazardous moving parts. Keep fingers and other body parts away.

Grounding

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electrical shock by providing an escape for the electric current. This product is equipped with a cord that has a grounding wire and an appropriate grounding plug. The plug must be inserted into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER

Improper installation of the grounding plug can result in a risk of electric shock. If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The insulation wire with green or green and yellow stripes on the outer surface is the grounding wire.

Check with a qualified electrician if the grounding instructions are not completely understood, or if in doubt about whether the product is properly grounded. *Do not modify the plug provided*. If it will not fit into the outlet, have the proper outlet installed by a qualified electrician.

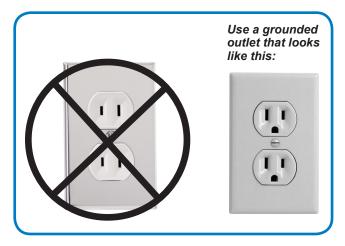
Cautions

Check with a qualified electrician or service person if grounding instructions are not completely understood or if in doubt as to whether product is properly grounded.

Do not use an adapter or extension cord with this product.

This unit must be plugged into a dedicated electrical line.

To reduce the risk of electric shock or injury, use indoors only.



NOTE

This product is for use on a dedicated nominal 115 Volt (US only) circuit that has a grounding plug.

Scope of Manual



WARNING: UNPLUG BEFORE SERVICING



CAUTION:
CONTAINS MOVING PARTS



WARNING: DO NOT USE WITH OR NEAR FLAMMABLES

This manual provides the machine operator instructions for the safety, installation, parts, and maintenance of the GyroFlex $^{\text{TM}}$ one-gallon mixer.

How to use this manual

This manual is organized into seven sections including this one. Each section provides detailed information on GyroFlex™ mixer topics and provides a basic reference that can be used to address installation and maintenance issues. See the replacement parts list on page 15 for ordering information.

For your safety

The GyroFlex™ line of quality mixers is a safe, fast, and reliable collection of equipment designed to bring many years of operation. In order to avoid damage to the equipment or bodily injury, basic precautions must be taken before operating. The following is a list of precautions to be taken before initial use and during normal use.

Safety Precautions

- Read this manual and all warning labels before using the machine.
- 2 Keep the manual in a safe place.
- Read and adhere to all Warning and Caution labels on machine.
- Prepare, level and clear the area where the machine will be installed.
- To avoid risk of fire or injury, unplug the power before servicing electrical components.
- **6** Do not attempt to mix flammable materials.
- After installing, run the machine for a three minute cycle without a can inside.

Information and Instruction Labels

You should become familiar with the labels affixed to the machine, as well as the symbols which appear throughout this manual.

Read all the warning labels on the exterior and interior of the mixer. The operational instructions are on the front right panel. If the labels become damaged or unreadable, you may purchase replacements from Fluid Management. See the replacement parts list on page 15 of this manual for ordering information.

Safety Notice Information

WARNING: HAZARDOUS ELECTRICAL COMPONENTS

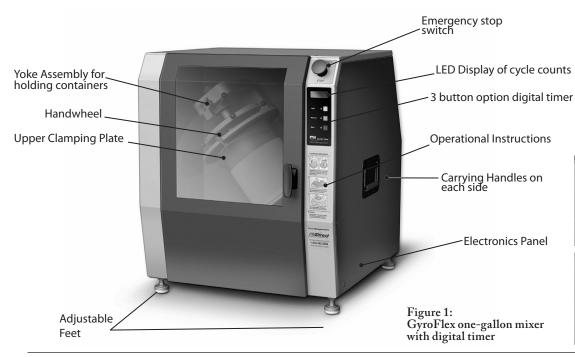
The two main notices used in this manual and on the GyroFlex™ mixer are **Warning** and **Caution**. A **Warning** △ notice will tell you about a hazard that could cause serious injury to you or extensive damage to the equipment. This information is featured in the beginning of the manual to emphasize safety.

When you see a **Warning** notice in this manual, read it carefully before continuing with the operation of the mixer. Take all necessary precautions to avoid potential injury.



CAUTION: POTENTIAL SAFETY HAZARD

A caution notice tells you about a danger that could cause injury to you or minor damage to the mixer. When you see a **Caution** notice in this manual, read it carefully and be sure you understand it before continuing.







TECHNICAL SPECIFICATIONS

Height: 26" (66.04 cm) Width: 22" (55.88 cm) Depth: 27.4" (69.60 cm) Weight: 185 pounds (83.9

kg)

Maximum power: 115 Volts

+/- 10%, 8 Amps 60 Hz Frequency

For 230 Volts consult factory.

Maximum Can Weight: 20

pounds (9.07 Kg)

Maximum Can Height: 7.9"

(20.07 cm)

Introduction

The GyroFlex[™] one-gallon automatic mixer mixes standard and non-standard one-gallon containers with fast and thorough action. The machine has a fully gyroscopic motion operated by an aluminum yoke, motor and gearbox. The clamping mechanism accommodates one-gallon containers, as long as they are flat on the top and bottom. The clamp can easily be tightened and loosened by turning the knobs on the handwheel. The GyroFlex[™] is fast, reliable, and easy to use. It is designed to be placed on a sturdy table, counter top or stand.

The gear drive requires no lubrication and the belts should last for many years. The GyroFlex™ is virtually maintenance free and should deliver many years of reliable service. It is constructed from heavy gauge steel and has a durable finish that can easily be cleaned. The machine automatically shuts off if the door is unlatched while mixing for safe operation.

Highlights:

- Fast and Flexible
- Gyroscopic mix motion
- Handles a variety of paint containers without adapters.
- Mixes in one to three minutes
- Automatic shut off
- Fits on a sturdy table top or counter
- Adjustable feet
- •Carrying handles on each side
- Optional LED display

WARNINGS



The surface the mixer sits on must be strong enough to support it's weight of 185 pounds.

Improper leveling may cause severe damage to machine during mixing operation.

Verify that your paint mixer is properly leveled on floor, counter top, or stand it will sit on.

Prior to using, level surface mixer will be placed on.

Adjust feet so they are firmly in contact with floor.

Always shut off power and unplug your GyroFlex™ mixer from AC power outlet before servicing.

This machine is not explosion proof and must not be used in a flammable atmosphere.

Do not mix flammable materials in the mixer.

Unpacking and Set up

Inspect the crate for damage.

If any damage is found, notify the carrier immediately. Arrange for inspection in order to claim recovery. Claims for damage must be made by the consignee (YOU). The carrier assumes full responsibility upon acceptance of the shipment and will not entertain any claims by the consignor.

2 Remove unit from pallet.

1 - Remove machine from skid.

See instructions on door for detailed instructions.

3 Position mixer in permanent location.

Choose a location for your mixer that is capable of supporting the weight (185 pounds / 83.9 Kilograms) and sturdy enough to withstand mix motion vibration.

4 Leveling

Although the mixer is balanced by the manufacturer, variations in the surface it is placed on may require further adjustments by leveling the feet.



Improper leveling may cause severe damage to the paint mixer when machine is mixing.

- 1 Level the mixer by adjusting the four feet as necessary. Each foot must be in direct contact with the surface it sits on.
- 2 Lock the feet into place by tightening the locknut to the frame. Ordinarily, the easiest way to adjust the unit is to leave three of the legs locked and adjust the fourth leg until it fits snug. At this point, all four legs should be firmly in contact with the surface you will be using the machine on.

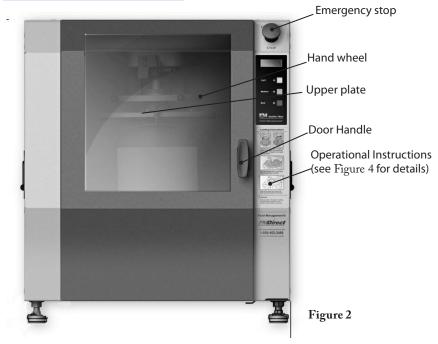
Cautions

Do not run mixer without a container in place.

Do not run paint mixer without removing it from skid first.

Remove brackets included with shipping before running mixer.





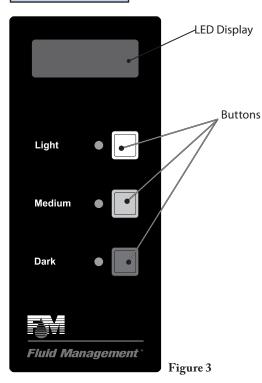
GyroFlex™ Mixer Digital Timer Basic Operation

To stop mixer at any time during operation, press the red Emergency stop button.

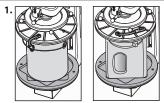
- 1- Twist handle on door to open.
- **2** Position yoke so (Figure 4, step 1) handwheel is at top of machine. Turn upper plate so bail retainer is in front of mixer (Figure 4, step 1).
- **3** Insert container into mixer. It should sit tightly in plastic seat for matching can shape (Figure 4, step 1).
- **4** Turn handwheel clockwise (left) until it stops to clamp can firmly in place. Turn top lever towards the back of the machine until it goes past the rubber stop (Figure 4, step 2) and is firmly in place (Figure 4, step 3).
- **5** Make sure can is positioned vertically. Close door. Turn handle clockwise until it stops (Figure 2). A safety switch prevents operation of paint mixer while door is unlatched.
- **6** Select appropriate cycle for your paint by pressing the light, medium, or dark blue button on label in upper right hand corner (Figure 3). The mixer will begin cycle when button is pushed.
- **7** After mixer has stopped, unlatch door. Make sure can is upright. Unlock locking lever. Turn handwheel counter clockwise (right) to raise upper plate. Remove paint can.

The power does not need to be removed if mixer is in frequent use. The power can be turned off at end of working period.

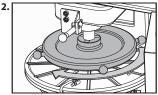
Digital Timer



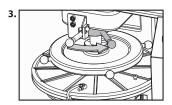
Loading Instructions



Place the container securely in the matchng shape on the base.



Turn hand wheel until it completely stops to clamp the container.

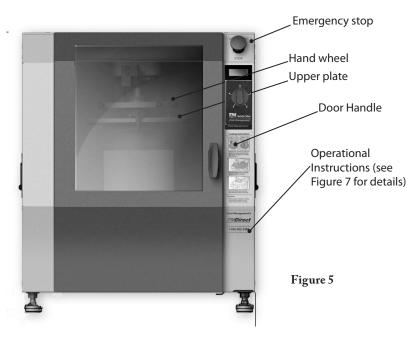


Lock hand wheel by pushing the lever toward the back of the mixer.

Figure 4

To Unload:

Reverse steps 1 through 3, making sure that the container is in the upright position before removing.



GyroFlex™ Mixer Mechanical Timer Basic Operation

To stop mixer at any time during operation, press red Emergency stop button.

- 1- Twist handle on door to open.
- **2** Position yoke so (Figure 7, step 1) handwheel is at top of machine. Turn upper plate so bail retainer is in front of mixer (Figure 7, step 1).
- **3** Insert container into mixer. It should sit tightly in plastic seat for matching can shape (Figure 7, step 1).
- **4** Turn handwheel clockwise (left) until it stops to clamp can firmly in place. Turn top lever towards back of machine until it goes past rubber stop (Figure 7, step 2) and is firmly in place (Figure 7, step 3).
- ${f 5}$ Make sure can is positioned vertically. Close door and turn handle clockwise until it stops (Figure 5). A safety switch prevents operation of paint mixer while door is unlatched.
- **6** Select appropriate cycle for your paint by turning knob on timer in upper right hand corner (Figure 6). The mixer will begin cycle when knob is turned.
- **7** After mixer has stopped, unlatch door. Make sure can is upright and unlock locking lever. Turn handwheel counter clockwise (right) to raise upper plate. Remove paint can.

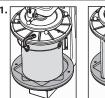
The power does not need to be removed if mixer is in frequent use. The power can be turned off at end of working period.

Mechanical Timer



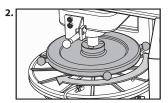
Figure 6

Loading Instructions

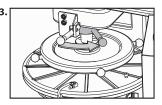




Place the container securely in the matchng shape on the base.



Turn hand wheel until it completely stops to clamp the container.

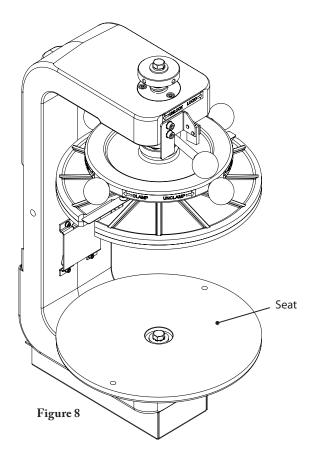


Lock hand wheel by pushing the lever toward the back of the mixer.

Figure 7

To Unload:

Reverse steps 1 through 3, making sure that the container is in the upright position before removing.



Using the Quart Adapter

The quart adapter can be used to accommodate any non-standard and standard containers. D-shaped, rectangular shaped and standard round cans can all be mixed in the GyroFlex™ mixer. An inset for each container shape has been molded into the adapter. You simply place the adapter and container in the seat of the yoke assembly, clamp into place and follow the basic operation instructions (See pages 8 and 9).

To stop the mixer at any time during operation, press red Emergency stop button on front of machine.

- **1** Select adapter shape that matches the container you are using.
- **2** Place adapter in matching shape of yoke assembly seat (Figure 8).
- 3 Clamp handle down and lock in place.
- 4 Follow instructions for basic operation.

Quart adapter accommodates:

- Standard round can
- D-shaped container
- Rectangular container



D-shaped Container



Rectangular Container



Standard round can

Maintenance and Service



To ensure safe, dependable operation of your GyroFlex™ mixer, follow the maintenance schedule detailed below:



Unplug from outlet before servicing and cleaning.

CLEAN EVERY DAY:

- Clean all accessible inside surfaces with a mild cleaning solution.
- Clean control panel surfaces with a mild cleaning solution.
- Clean all outside cabinet surfaces with a mild cleaning solution.

ADJUST EVERY SIX MONTHS:

· Level and adjust feet as necessary. Start with front right foot first.

EVERY 3 YEARS

Change secondary axis belt.



Maintenance and Service

Use the chart below to record your scheduled maintenance of your GyroFlex™ mixer:



Never lubricate gears, as this could cause slippage if belt gets contaminated. Keep the belt clean, dry, and free from soap and water.

SCHEDULED MAINTENANCE PROCEDURES				
DATE	COMPONENT	STATUS	RECORDED BY:	
	I.			



Maintenance and Service

Troubleshooting chart

Using the chart below, locate the problem in the first column, then check the cause from the second column. Follow the action recommended in the last column.

Contact Fluid Management Customer Service if you are unable to determine the problem.

PROBLEM	FIRST CHECK:	ACTION
The mixer does not start.	Is mixer plugged in?	Connect mixer to power source.
	Is voltage present?	•Contact an electrician.
	Is front door latched?	•Close and latch front door.
	Is motor overheated?	•Allow motor to cool.
The mixer will not shut off.	Is time shown on LED	•Let mixer finish mixing cycle.
	display counting down?	•Unplug mixer.
		Contact After Sales Support.
The motor has voltage and hums, but won't run.	Is the line voltage low?	Confirm that the mixer is on a dedicated line.
An excessive amount of	Is mixer out of balance?	•Adjust legs until balanced.
vibration occurs.	Is one of adjustable legs broken, low or damaged?	•Replace or adjust damaged leg.
	Is paint can positioned in the seat correctly?	•Position can in the seat.
The LED display flashes "door".	Is the door open?	•Close the door.



Safety and Service

Service:

- FM Direct® Factory Direct Service Technicians located throughout the United States, Puerto Rico, Hawaii, Canada and the Bahamas.
- On site setup and training for store personnel.



2007 FM Direct® Service Technician Locations:

Phoenix, AZ.	Atlanta, GA.
Sacramento, CA.	Chicago, IL.
San Jose, CA.	Louisville, KY.
Los Angeles, CA.	Winston-Salem, N.C.
San Diego, CA.	Baltimore, MD.
Denver, CO.	Yonkers, N.Y.
Hartford, CT.	Syracuse, N.Y.
St. Louis, MO.	Boston, MA.
Dallas, TX.	Detroit, MI.
San Antonio, TX.	Twin Cities, MN.
Houston, TX.	Columbus, OH.
Memphis, TN.	Philadelphia, PA.
Miami, FL.	Richmond, VA.
Orlando, FL.	Seattle, WA.
Pensacola, FL.	Toronto, CANADA
Tampa, FL	

Always observe the following precautions in order to reduce the risk of accident:

Do not attempt to service a product yourself unless instructed to do so by Fluid Management Customer Service. Use only a service provider who is approved to repair your particular product.

Note: Some parts can be upgraded or replaced by the customer. These parts are referred to as Replacement parts. Fluid Management expressly identifies parts as such, and provides documentation with instructions when it is appropriate for customers to replace those parts. You must closely follow all instructions when performing such replacements. Always make sure that the power is turned off and that the product is unplugged from any power source before you attempt the replacement.



Fluid Management Customer Service: 1.800.462.2466

Save time and money. If something should go wrong, we suggest consulting the maintenance and service section of this book. It is designed to solve basic problems before consulting a service technician. It also provides replacement part information for you.

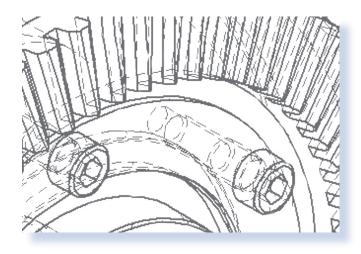
However, should you need assistance, please have your model and serial number ready. Be located near your machine when you call and have a Purchase Order number if ordering parts.

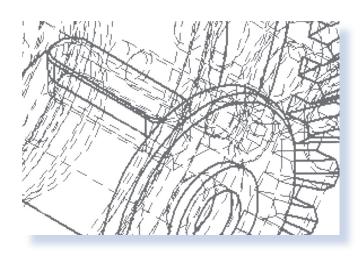
On the right side of the machine is a black and silver sticker. It includes the serial number and model number of your machine. Please make a note of these numbers below:

Date of purchase:	
Model Number:	-
Serial Number:	
Your Service Technician's	



Replacement Parts





This section is designed to assist you in:

- IDENTIFYING SERVICE FUNCTIONS and
- IDENTIFYING REPLACEMENT PARTS

Occaisionally, a customer may experience a complication with one of our products. If this should happen, please call our toll-free number and we can help you solve the problem or send you replacement parts.

TERMS: Unless prior arrangements have been made, parts will be shipped **UPS** - C.O.D. All prices are FOB, Wheeling, Illinois and are subject to change without notice.

In all correspondence or phone orders, please state the model number and the serial number of the machine.

Orders less than \$30.00 will be assessed an \$8.00 handling charge.

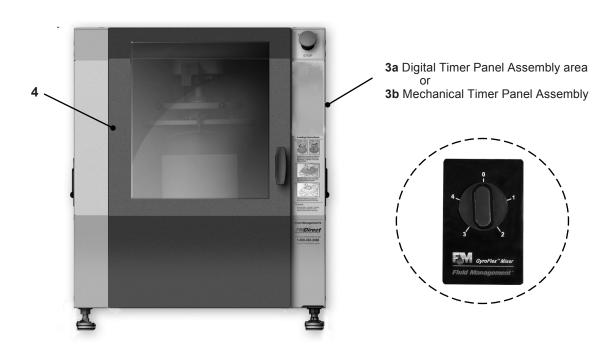
There is a restocking fee of 25% on all returned goods.

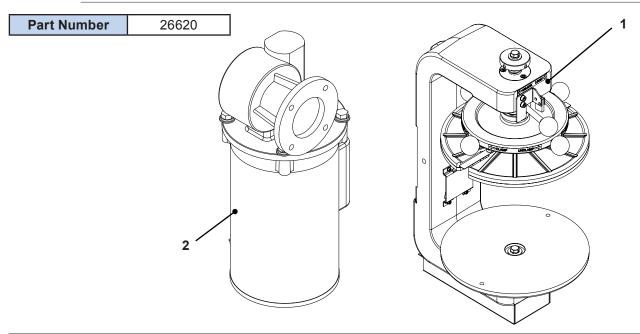
RETURNS: No parts are to be returned without prior authorization. A Returned Goods Authorization (**RGA**) or Returned Materials Authorization (**RMA**) number is required.

All warranty repairs must be performed by FM Direct® or FM authorized service personnel. Any service work performed by non-authorized service personnel will void the FM Original Equipment Manufacturer warranty.



GyroFlex™ Mixer 29100 Model Series

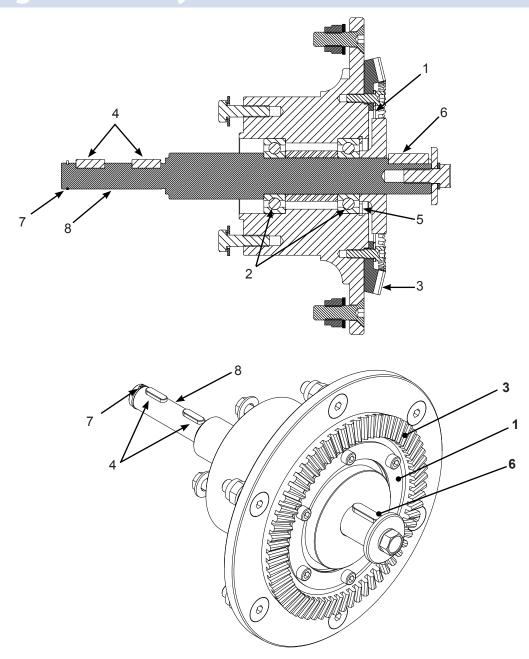




ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	27641	Yoke assembly for round, square, and D-shaped cans	1
2	27639	Drive assembly	1
3a	30255	Panel assembly, digital timer	1
3b	30290	Panel assembly, mechanical timer	1
3c	30313	Panel assembly, digital timer, two button	1
4	29130	Door assembly	1
5	27640	Flange assembly	1

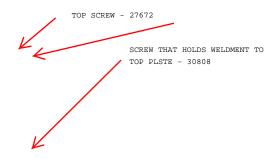


Flange Assembly 27640



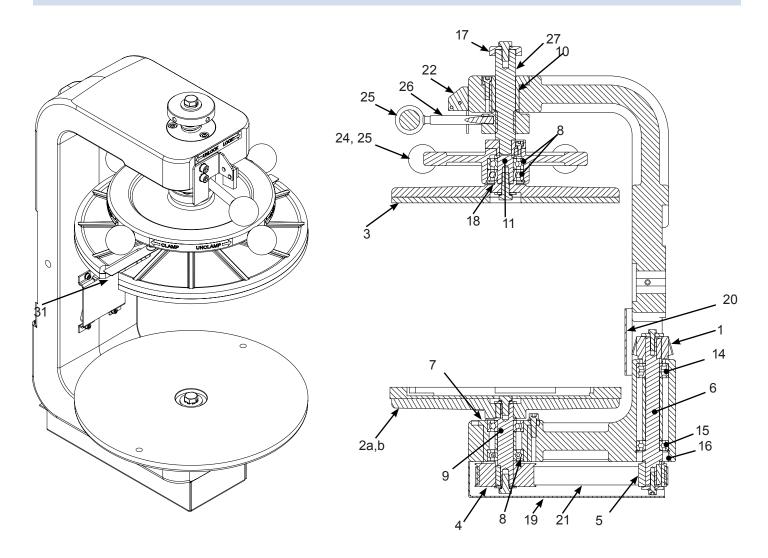
ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	27624	Gear support ring	1
2	27565	Ball bearings D25-52-15	2
3	27645	Bevel ring gear OGG (#C3002679)	1
4	27648	Parallel key 8 x 7 x 28	1
5	27643	Retaining ring	1
6	27662	Parallel key 6 x 6 x 20	1
7	27679	Retaining ring, 18	1
8	28564	Power shaft	1





SCREW THAT HOLDS
PLATE ON 27672

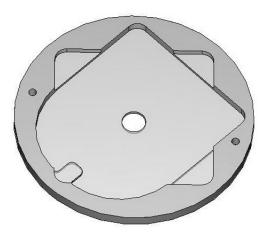
Yoke Assembly 27641 cont.



ITEM	PART NUMBER	DESCRIPTION	QUANTITY
19	27620	Lower gear cover	1
20	27621	Center gear cover	1
21	27571	Toothed belt	1
22	28562	Locking clamp assembly	1
23	29042	Bail retainer	1
24	28615	Stud, threaded, 5/16" x 1.5 "	4
25	4000008	Knob, black	5
26	28494	Shaft, locking nut handle	1
27	28738	Weldment shaft assembly	1
28	28809	Can adapter	1
29	27872	Insert, 1/4-20 threaded	2
30	01105	Screw, 1/4 - 20	2
31	30281	Bail retainer arm	1
32	28485	Locking nut	1

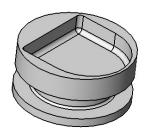


Container Seats 28809

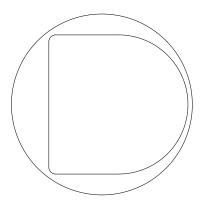


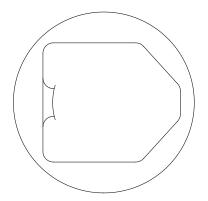
One-gallon Seat*

Quart Adapter 29488









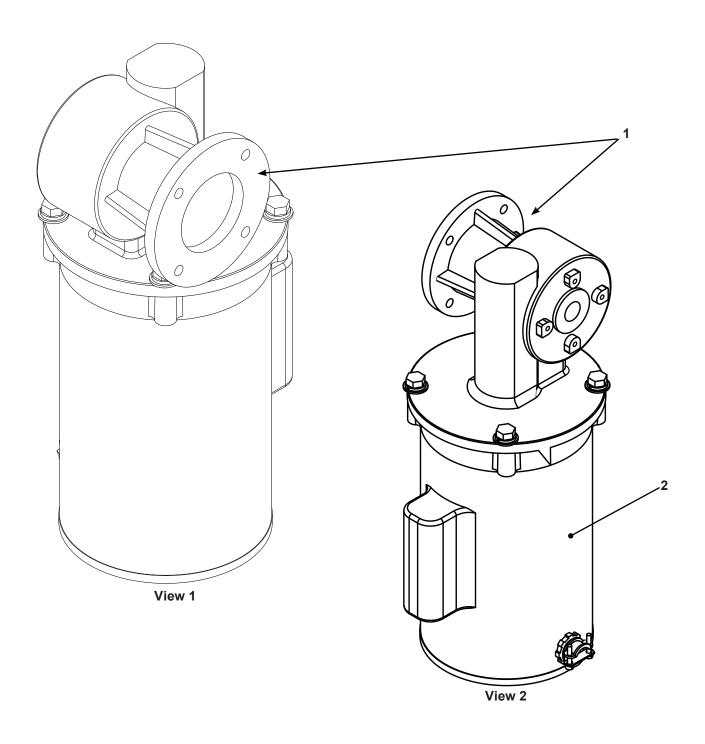
QUART ADAPTER
BOTTOM VIEW

QUART ADAPTER TOP VIEW

ITEM	PART NUMBER	DESCRIPTION	QUANTITY
2	28809	One-gallon square, round, and rectangular can adapter*	1
3	29488	Quart adapter	1



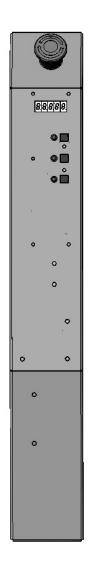
Drive Assembly 27639

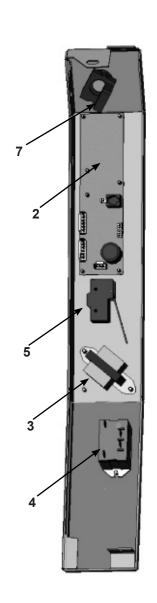


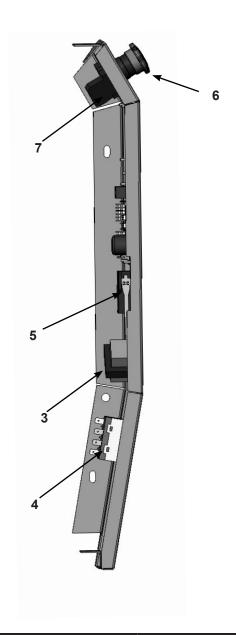
ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	27564	Gearbox	1
2	28483	1/2 HP, IPH. 115/230 Volt 60 HZ MOTOR	1



Digital Timer Electronics Panel Assembly 30255 - Three button, 30313 - Two button



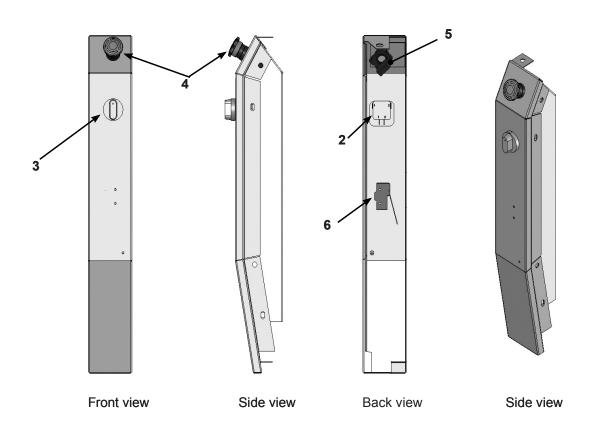




ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	29450	Digital timer harness (not shown)	1
2	F29082-01	Timer board assembly	1
3	29463	120 Volt transformer	1
4	27963	Power relay	1
5	5308214	Limit switch with control bar	1
6	26050	Emergency stop button	1
7	26052	NC contact switch	1



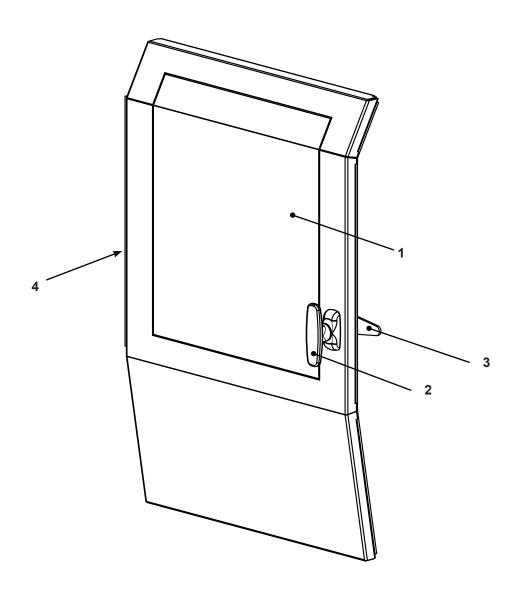
Mechanical Timer Electronics Panel Assembly 30290



ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	29449	Mechanical timer harness (not shown)	1
2	28618	Four minute mechanical timer	1
3	28619	Mechanical timer knob	1
4	26050	Emergency stop button	1
5	26052	NC contact switch	1
6	5308214	Limit switch with control bar	1



Door Assembly 29130



ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	29632	Window	1
2	29269	T-style handle door latch	1
3	27686	Pawl	1
4	30029	Hinge	1



