

V-Series Mixer | End User Guide

Getting Started

Maintenance and Care

Troubleshooting

Service Parts

Warranty



Your

customers have a vision, you want to make it happen, and Fluid Management can give you the answer. Fluid Management is a global leader in dispensing and mixing equipment used in the paint industry, as well as, specialized equipment for the food and beverage, chemical, health and beauty, and home improvement industries. Located in the suburbs of Chicago, Illinois, Fluid Management is a United States owned and operated company with historical roots to the paint industry dating back to 1927. In 1996, IDEX Corporation purchased Fluid Management giving the organization the financial wherewithal and global footprint of a large organization while still maintaining its deep values and history.

As industry leaders, Fluid Management provides trend-setting creativity in the design, products, and services it offers. United with FMDirect, our nationwide service team, we provide after-sales support around the clock—when you need them. Being factory-direct employees, FMDirect technicians are experts on Fluid Management equipment and understand customer needs from start to finish.

The combination of leading edge technology, excellent service and support, and a company prepared for the future's ever-changing business environment makes Fluid Management an ideal partner to assist in providing solutions to your business needs.

Thank you for putting your trust in Fluid Management products and making us part of your customer's vision.



Fluid Management

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nce your V-Series Mixer is installed, what's next? In this guide, you'll find more information to help you get the most from your new Fluid Management V-Series Mixer.



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About this Guide

Safety Precautions

- Read this guide and all warning labels before using the machine.
- Keep this guide in a safe place.
- Read and adhere to all Warning and Caution labels on the 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.
- DO NOT use mixer on or near flammable or combustible materials
- DO NOT mix flammable materials.
- Plug into an approved grounded outlet only. Make sure the outlet meets all national and local codes.
- To reduce the risk of electric shock or injury, use indoors only.
- This mixer contains moving parts. Tightly seal the container before operating.

How to Use this Guide

This guide is organized into eleven sections. Each section provides detailed information on V-Series Mixer topics and provides a basic reference that can be used to help you with specific issues.

Important: Carefully read all the installation instructions and the safety information before you first use your V-Series Mixer.

This guide provides instructions for safely and easily installing your V-Series Mixer when it arrives. This publication also includes operational instructions, daily and preventative maintenance procedures, basic troubleshooting suggestions, adapters to use for various can types, customer service, and warranty information.

If you are an experienced user, you may already know enough to get started. Make sure you look over the information in *Getting to Know Your V-Series Mixer* to find out about the features of this V-Series Mixer.

If you have internet access, the most current information for your V-Series Mixer is available from the worldwide web at

http://www.fluidman.com

For Your Safety

Customer safety is important. Our products are designed to be safe and effective. However, mixers are electrical equipment. The V-Series Mixer is safe, fast, and reliable—designed to bring many years of operation. There are precautions you can take to avoid damage to the equipment or bodily injury before operating. By carefully following the instructions in this document and the warning and maintenance labels on the machine, you can help protect yourself from hazards and create a safer work environment.

Equipment can become damaged due to misuse or neglect. Some product damage is serious enough that the product should not be used again until it has been inspected and, if necessary, repaired by a Fluid Management authorized service technician. As with any electronic device, pay close attention to the mixer when it is turned on. On very rare occasions, you might notice an odor or see a puff of smoke or sparks vent from your machine, or you might hear sounds like popping, cracking or hissing. These conditions might merely mean that an internal electronic component has failed in a safe and controlled manner. However, it may indicate a potential safety issue. **DO NOT** take risks or attempt to diagnose the situation yourself. Contact Fluid Management at 1-800-462-2466 for assistance.

Important Safety Information

Information and Instruction Labels

You should become familiar with the information labels affixed to the machine, as well as the warnings, cautions, and notes which appear throughout this guide. Read all the warning labels on the exterior and interior of the mixer. If the labels become damaged or unreadable, you may purchase replacements from Fluid Management Customer Service.



Safety Notice Information

The two main notices used in this guide and on the V-Series Mixer are Warning and Caution.



WARNING

HAZARDOUS ELECTRICAL COMPONENTS A Warning notice tells 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 guide to emphasize safety. When you see a Warning notice in this guide, read it carefully before continuing with the operation of the machine. Take all necessary precautions to avoid potential injury.



Use a dedicated 15 amp circuit (US & Latin America only)



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 guide, read it carefully and be sure you understand it before continuing.



General Safety Information

DO NOT attempt to service a product yourself unless instructed to do so by Fluid Management Customer Service. Use only a Fluid Management Authorized Service Technician to repair your equipment. Please note that some parts can be upgraded or replaced by the customer. Fluid Management identifies those 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 the machine is unplugged before you attempt the replacement. If you have any questions or concerns, contact Fluid Management Customer Service.

Important Safety Information



Warnings

- This machine draws
 6.0 Amps at 120 ± 10% VAC
 3.6 Amps at 220 ± 10% VAC
- DO NOT modify the provided plug
- Improper use of grounding plug can result in risk of electric shock.



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.

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.

Note: This product is for use on a dedicated nominal 120 Volt (US only) or nominal 220 Volt circuit where applicable and has a grounding plug.

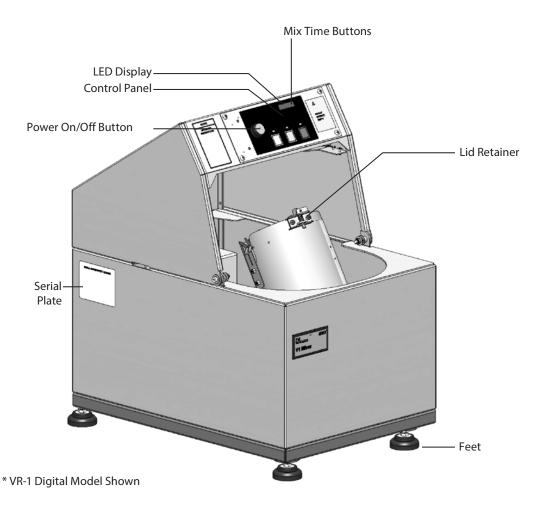
Safety and Regulatory Compliance Information

See the affixed labeling on the machine. ETL Listed, conforms to UL STD 1450. Certified to CAN/CSA STD C22.2 NO. 68.

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Getting to Know Your V-Series Mixer



Features

- One-gallon mixer for round and square containers (V-1 model; VR-1 model mixes round only)
- · Durable steel frame
- Three mixing settings- Light, Medium, and Dark (or 1-4 minutes with Mechanical Knob Timer Model)
- · Pint and quart mixing possible with adapter
- · Partially enclosed motor for clean, quiet and safe operations
- · Easy access for maintenance
- · Compact design fits on counter or stacking unit

Technical Specifications

V1 Series

Height: 26" (66 cm) Width: 17" (43 cm) Depth: 24" (61 cm)

Weight: 165 pounds (75 kg)

Maximum power:

120 volts, 6.0 Amps +/- 10%, 60 Hz

VR1 Series

Height: 27.9" (71 cm) Width: 17" (43 cm) Depth: 24" (61 cm)

Weight: 117 pounds (53 kg)

Maximum power:

120 volts, 6.0 Amps +/- 10%, 60 Hz 220 volts, 3.6 Amps +/- 10%, 50Hz

Environmental Conditions

- Operating temperature: between 50°F (10°C) and 104°F (40°C)
- Relative humidity: between 5% and 85% without condensation

Highlights

- Mixes round and square cans (V-1 model only; VR-1 model mixes round only)
- Fast and thorough mixing action
- Fully rotational, dual-axis vortex motion
- Adapter allows for pint and quart mixing
- Programmable mix timer up to 5 minutes
- LED display shows mix time countdown and life cycle counter
- · Automatic shut off
- Small and compact to fit on counter or stacking unit

Getting to Know Your V-Series MixerTips to improve operations

These tips will help improve the operation of your V-Series Mixer:

- · DO NOT mix dented or damaged cans
- DO NOT mix flammable materials or solvent based colorants
- DO NOT run the mix without a container in place
- For optimal performance, DO NOT run mixer on carpet, countertops, or tables
- · Seal the paint container tightly before mixing to prevent any spills
- Press the red Emergency Button to stop the machine in an emergency
- · When the red LED is lit on the display, the machine has power
- Position the containers correctly to ensure best mixing results
- · Make sure the mixer is level and the position where it will be operating
- The mixer will stop running if the door is opened during operation
- · Follow the preventative maintenance procedures in this guide.



Warnings

ALWAYS shut off the power and unplug your machine from the AC power outlet before servicing.

This unit must be plugged into a dedicated electrical line. This includes: 15 Amp line for 120 Volt equipment

The surface the mixer sits on must be strong enough to support its weight.

Your V-Series Mixer has been designed so that you can set it up quickly and begin using it right away. If you have never used a mixer, read this section for instructions on getting started and installing your machine.



Getting StartedInstallation

Unpacking and Set up

Follow the steps on the next two pages to set up your V-Series Mixer

Important: Before you plug the V-Series Mixer into a power outlet, carefully read all of the following installation instructions and the safety information. It is recommended that at least one other person assist in taking the machine off the pallet.

Make sure these items are available before installing.

V-Series Mixer Surge protector (recommended, not included)

2 Tools needed for installation:

9/16" socket wrench and extension Scissors or diagonal cutters Straight screw driver

- 3 Unpack the machine while still on the shipping skid.
 - a. Remove the interior packaging materials
 - b. While unpacking, inspect the machine for any damage that may have occurred during shipping.

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.

Verify the contents against the packing slip. Note if any items are missing or damaged. Call Fluid Management Customer Service at 1-800-462-2466 if any items are missing.

- 4 Remove from skid (see unpacking instructions attached to machine).
 - a. Open upper cabinet by removing the back screw that secures the top cabinet to the lower cabinet. Do not discard this screw. (See Figure 1.)
 - b. Carefully flip the top cabinet forward.
 - c. Remove shipping bolts located through the holes in the inner base. Using 9/16" socket wrench and extension, unbolt the two bolts that secure the machine to the skid.
 - d. Using at least two people, remove mixer from skid and lower to floor.



Warnings

Verify that your mixer is firmly positioned on the surface it will sit on.

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

Protect the cords and any surge protectors from liquids. Liquids can cause gradual corrosion of the power cord which can result in overheating

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



Cautions

DO NOT operate the mixer until it is in a permanent location.

ALWAYS route power cords so they will not be walked on, tripped over, or pinched by objects

Avoid using extension cords with unit.

Getting StartedInstallation

Remove the packing blocks from inside the mixer (for V1 models only)

- a. Carefully lift up the top cover until it rests on the front of the mixer.
- b. Unscrew the wooden block on the interior of the mixer between the gears and the motor (see Figure 2).
- c. Remove the wooden block.
- d. Close the top cover and reattach the latch (see Figure 1).

Remove the packing blocks from inside the mixer (for VR1 models only)

- a. Close the upper cabinet and secure it to the lower cabinet by reattaching the back screw (see Figure 1).
- b. Carefully lift up the mixer at an angle providing access to the bottom.
- c. Remove the three (3) central bolts holding the shipping blocks (see Figure 3).
- d. Carefully set the mixer down and open the top cover.
- e. Use the cord that joined together the shipping blocks to pull the blocks out of the mixer.

6 Position mixer in permanent location.

- a. Choose a location for your mixer capable of supporting its weight. (V-1 = 165 pounds, 75 kilograms, VR-1 = 117 pounds, 53 kilograms).
- b. Make sure there is enough room to access the rear of the machine to perform routine maintenance.
- c. Adjust the feet to level the mixer and prevent it from rocking.

7 Final preparations.

Plug in the power cord. Follow *Basic Operations* for operating instructions.



Figure 1



Figure 2



Figure 3

Basic Operations

Mixing

There are three mix cycles to choose from – **Light**, **Medium**, and **Dark** depending on the paint you are mixing. Follow these steps to begin the mix cycle for your V-Series Mixer:

1 Press the Power On/Off button.

2 Place container.

- a. Open the mixer door.
- b. Turn the can holder towards you and place the paint container inside the holder.

Note: Make sure the paint container is tightly sealed to prevent spills. For plastic square paint containers, align the container's handle with the metal lever on the side of the can holder. (See Figure 4.)



Note: If you are mixing a metal paint container, make sure the handles fit firmly into the slots on the side of the can holder. (See Figure 5.)

d. Close the mixer door.

3 Select the mix cycle.

- a. Press the **Light**, **Medium**, or **Dark** button to start the mixing cycle. (See Figure 6.) The mix times are factory set at 1.5, 2, and 3 minutes, respectively.
- b. To program your timer for alternate mix settings, contact Fluid Management Customer Service.

Note: For mechanical timer models, turn the timer knob to the desired mixing time (1 to 4 minutes). (See Figure 7.)



- a. Open the door when the mixing cycle is complete.
- b. Turn the lid retainer levers to the open position.
- c. Remove the paint container.



Figure 4

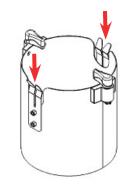


Figure 5



Figure 6



Figure 7

Basic OperationsUsing the adapter

The adapter is used to mix quarts and pints. Each can shape is molded into the adapter.

- 1 Open the adapter.
 Select the appropriate adapter to match the paint container size.
- Place the paint container in adapter. (See Figures 8 and 9.)









Figure 8



Figure 9

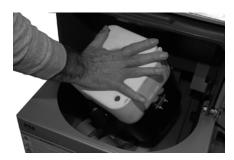


Figure 10



Figure 11

Accessories

V-Series Mixer Adapters

PART NUMBER	DESCRIPTION	IMAGE
25090	Round Quart Adapter for use with VR-1 Mixer	
30598	Square Quart Adapter for use with V-1 Mixer	

Contact Fluid Management Customer Service for custom adapters that are available.

V-Series Mixer Stands

PART NUMBER	DESCRIPTION	IMAGE
30740	Holds two V-Series Mixers	
32340	Lifts mixer to conveyor height	

Maintenance, Care, and Use



To ensure safe, dependable operation of your V-Series Mixer follow the maintenance schedule detailed below:

Clean every day:

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

Every six months:

- Level the machine.
- Adjust belt tension as needed.
- Check for dirt accumulations on motor. Remove dirt by vacuuming.

Every year:

- Lubricate the sleeve bearings on the motor with 30-35 drops of SAE 20 oil.
- Change the drive belt.



Unplug from outlet before servicing and cleaning.

Frequently Asked Questions Equipment troubleshooting

Most problems with the V-Series Mixer can be easily solved with a quick and easy solution. For instance, follow the daily cleaning suggestions in the **Maintenance**, **Care**, **and Use** and the **Getting to Know Your V-Series Mixer** section. Think about the conditions that led up to the problem. Making a note of things you did before the problem occurred will help you narrow down possible causes and find the answers you need.

First, make sure:

- The power cords are securely connected to a working dedicated power source.
- The power button is on.
- You have followed the suggestions in the Maintenance, Care, and Use section.
- The machine is situated on a flat, level, and stable surface capable of supporting the weight of the machine.

Use the chart below to locate the problem, check the possible cause, and then take the action recommended. Contact Fluid Management Customer Service if you are unable to find a resolution.

PROBLEM	FIRST CHECK	ACTION
The mixer does not start.	Is mixer plugged in?	Connect mixer to power source.
	Does "0" appear on led?	 Connect mixer to power source.
	Is voltage present?	 Contact an electrician.
	Is front door closed?	Close front door.
	• Is motor overheated?	 Allow motor to cool for at least five minutes. Check for an excessive accumulation of dirt. Vacuum if necessary.
		 Call customer service.
The mixer will not shut off.	Is time shown on led display showing and counting down?	Let mixer finish mixing cycle.
		 Unplug mixer.
		 Call customer service.
The motor has voltage and hums, but it will not run.	Is the line voltage low?	 Make sure the mixer is on a dedicated line.
	• Is the belt too loose or too tight?	 Check the tension of the belt.
		 Call customer service.
An excessive amount of vibration	Is can holder empty?	Place container in can holder.
occurs.	• Is mixer level?	 Adjust legs until balanced.
	 Is one of adjustable legs broken, low, or damaged? 	Replace or adjust damaged leg.
	 Is paint can positioned in the can holder correctly? 	Position container in the can holder.
The motor starts slowly.	Is the belt tension too tight?	Adjust the tension of the belt.

Service

FMDirect

Fluid Management products are backed by FMDirect, our nationwide team of phone and field service engineers. Providing you with local, hands-on support, over 30 factory-direct service technicians deliver expertise when and where you need it.

- 24/7 multilingual tech support
- Professional installation and on-site operator training
- Fully-stocked parts inventory on FMDirect vans
- Extended warranty and preventive maintenance programs

Upgrades and Replacement Parts

Some parts can be upgraded or replaced by the customer. 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.

DO NOT attempt to service a product yourself unless instructed to do so by a Customer Service Representative. Use only a service provider who is approved to repair your particular product.

Obtain Warranty Service

First, follow the advice in this guide. If the unit still does not function, call Customer Service for information about how to obtain warranty service.



Fluid Management Customer Service 1.800.462.2466

Save time and money. If something should go wrong, we suggest consulting the Maintenance, Troubleshooting and Service sections of this guide. They are designed to solve basic problems before consulting a service technician.

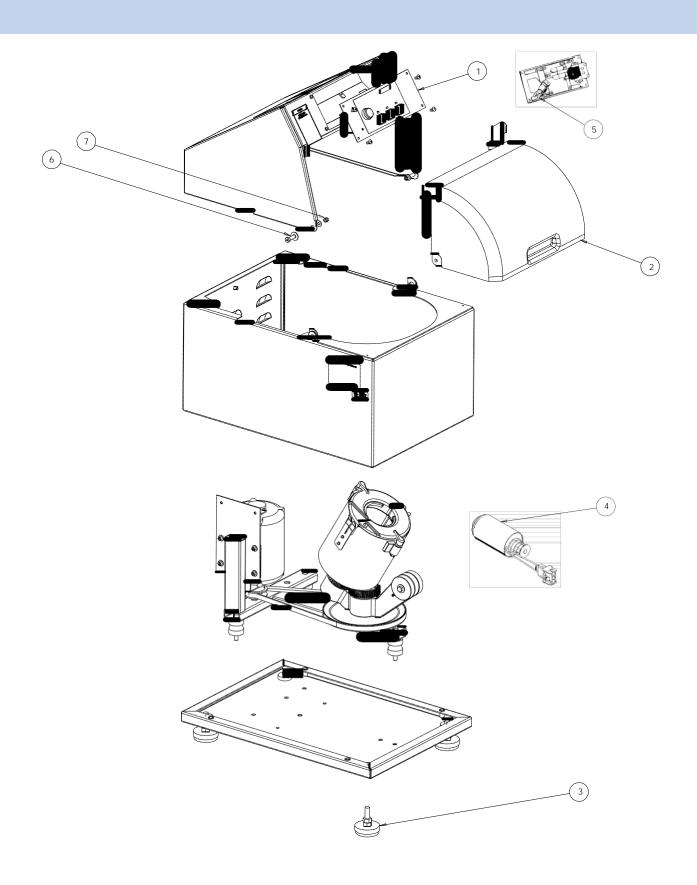
However, should you need assistance, please have your model and serial number ready. Be near your machine when you call and have a purchase order number if ordering parts.

Fluid Management®	
SERIAL NO.	
MODEL NO.	
PN 4980001	
1 800 462 2466 MADE IN USA 1023 Wheeling Road, Wheeling, Illinois 60090-5776	

The serial plate is located on the side panel of the machine. It includes the serial and model numbers for your machine. Please make a note of these numbers below:

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

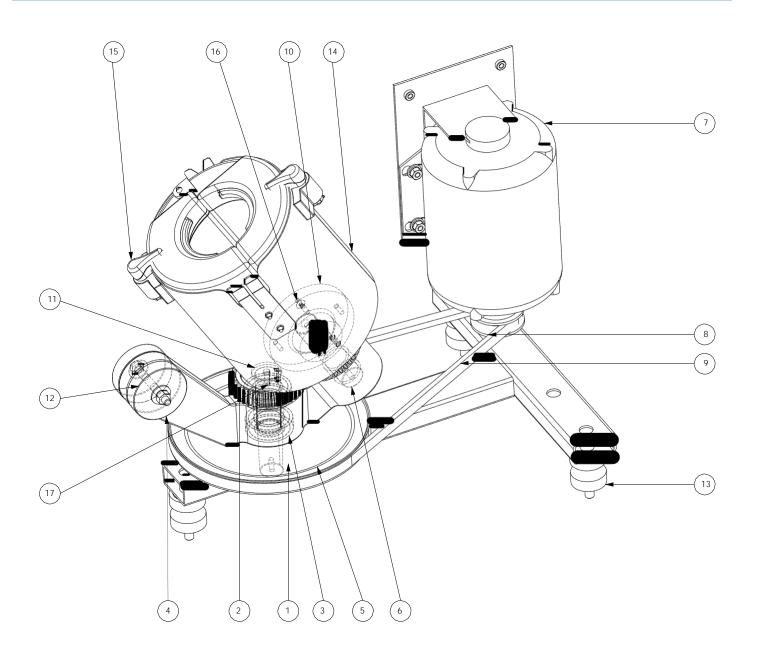
Parts



Parts

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	27970	CONTROL PANEL - DIGITAL TIMER 120V	1
1	35831	CONTROL PANEL - MECHANICAL KNOB TIMER 120V	1
1	30990	CONTROL PANEL - MECHANICAL KNOB TIMER WITH INTERLOCK 120V	1
1	35886	CONTROL PANEL - MECHANICAL KNOB TIMER 220V	1
2	35146	PLASTIC DOOR ASSEMBLY	1
3	35049	ADJUSTMENT FOOT	1
4	32782	SOLENOID ASSEMBLY - INTERLOCK MODEL	1
5	26065	CONTROL PANEL SWITCH	1
6	F015308025	SHOULDER SCREW 8X25MM, M6 THREAD	2
7	F0098P06	HEX NUT, M6 WITH NYLON PATCH	2

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Parts

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	35014	SHAFT, MAIN TRANSARMS	1
2	24188	GEAR, BEVEL	2
3	3005002	BEARING	4
4	35015	TRANSARM	1
5	3005014	PULLEY	1
6	35019	BEARING SHAFT	2
7	16429	MOTOR, 48 FRAME - MODEL 120V	1
7	00630	MOTOR, 1/3 HP ODP 1425 RPM - 220V MODEL	1
8	26004	SHEAVE - 120V MODELS	1
8	32449	SHEAVE - 220V MODELS	1
9	35021	V-BELT	1
10	35026	HUB AND SHAFT ASSEMBLY	1
11	3005011	SQUARE KEY, 3/16 X 7/16 LONG	2
12	3005103	COUNTERWEIGHT	2
13	23430	SHOCK MOUNT	3
14	35545	BUCKET ASSEMBLY	1
15	35123	LID RETAINER LEVERS	2
16	F0145A05B14	SCREWS, FHCS M5 X 15	4
17	F0141P0616	HEX NUT, M6 X 15MM	1

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