



- S2425 •
- S2450 •
- S2451 •

Vortex Paint Mixers

OPERATOR MANUAL



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WARRANTY

HERO PRODUCTS EQUIPMENT WARRANTY CONTINENTAL USA & CANADA

Paint Mixers and Shakers

Parts Warranty ⁰ – 2 years

Labor Warranty 1 – 1 year

HERO warrants its equipment to be free of material and workmanship defects to the original user, for the period of one (1) year with an additional one (1) year on parts. This warranty entitles the equipment owner to on-site parts repair or replacement at no charge under the conditions outlined in this document. Cleaning and general maintenance are the responsibility of the owner/operator and are <u>not</u> covered by the warranty. This includes the replacement of certain parts due to normal wear as determined by HERO.

The warranty is applicable to the original owner and/or location only and is non-transferable without prior written approval from HERO.

The warranty period begins when the equipment is shipped from HERO's manufacturing facilities.

The warranty does <u>not</u> cover damage and repairs to same due to improper use or non-completion of recommended daily maintenance procedures, unauthorized service and/or modifications, AC power problems, or other manufacturers' interfaced equipment. Damage and subsequent repairs due to fire and other manmade calamities or any acts of God such as, but not limited to, floods and lightning, are also <u>not</u> covered. All service work completed by HERO due to damage <u>not</u> covered by the equipment warranty will be billed at HERO's standard service rates.

I.C.T.C.'s/HERO's liability is limited to the repair or replacement of parts found to be defective and does not include other damages or expenses of any kind incurred in connection with the purchase and operation of the equipment.

All warranty work requests or claims must be directed to HERO Customer Service at any of the following:

Canadian Mail: 720 Eaton Way • Delta, BC • Canada • V3M 6J9

US Mail: P.O. Box 75 • Custer, WA • USA • 98240-0075

Fax: 604-522-8735

Email: <u>customercare@hero.ca</u>

Help Desk: 800-494-4376, option 1

^o Parts warranty includes shipping via a carrier and service type compatible with the nature of the equipment failure and as determined by an authorized HERO Customer Service Representative. When expedited delivery is not warranted, the customer may request and pay for the difference between such service and HERO's standard shipping method.



¹ The labor warranty on units covers on-site and travel labor to and from the customer's location. **An authorized HERO Customer Service Representative must approve all warranty repairs before any work is performed**.



SAFETY WARNINGS

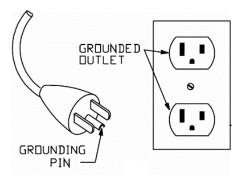
- This product is NOT explosion proof.
- Unplug the machine before performing any service operations.
- ➤ Do not use in environments with solvent vapors. This machine is not designed to be used in environments with solvent vapors.
- > Do not use in hazardous locations. This machine is not designed to be used in hazardous locations (Class I Division I).
- For use indoors only. Do not install or use outdoors.
- The mixer is designed to operate only if the door is closed. Do not attempt to alter the electrical interlock of the timer and cover.
- > Immediately repair any fault in the door interlock system to avoid injury from improper operation.
- The mechanical timer turns the mixer on and off. The mixer can be stopped before completion of the timer cycle by slowly opening the mixer door. The mixer shuts off after opening the door 1 to 2 inches. It is then safe to open the door fully and remove the can. Do not open the door if the mixer does not stop.
- > The main motor of the mixer is equipped with an automatic thermal overload device. In the event the motor stops running due to overload, it will automatically reset itself when the motor returns to normal operating temperature.

This manual should be kept in a safe place



GROUNDING INSTRUCTIONS

- 1. This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- 2. WARNING Improper installation of the grounding plug can result in a risk of electric shock. When repair or replacement of the cord or plug is necessary, 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.
- 3. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- 4. This product is for use on a nominal 120-volt circuit, and has a grounding plug similar to the plug illustrated. Only connect the product to an outlet having the same configuration as the plug. Do not use an adapter with this product.



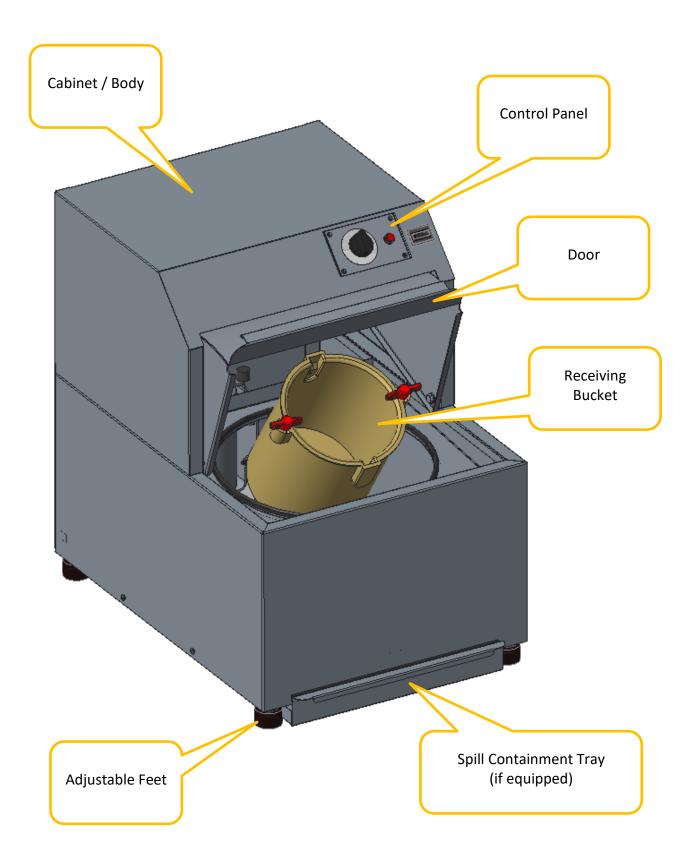


GENERAL INFORMATION

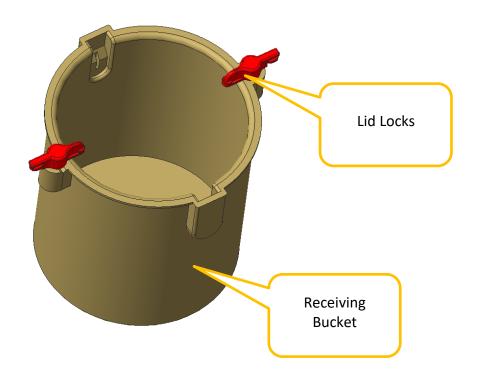
- Unplug the machine before performing any service operations.
- Forcing the mechanical timer back to the zero position will cause premature failure of the mechanical timer
- When not in use for extended periods of time, ensure that the machine, including its power cord, is properly stored in a way that it is protected from damage.
- Always ensure the lids to any can or pail being mixed are on tight before placing them into the mixer.
- > Do not drop/slam the paint can into the mixer when loading.
- > Do not load or attempt to mix containers that are improperly or partially sealed as the container may spill inside the machine.
- ➤ Clean any spills immediately. Build-up of spilled materials could affect the drive mechanism. See the Spill Cleanup section of this manual for details.

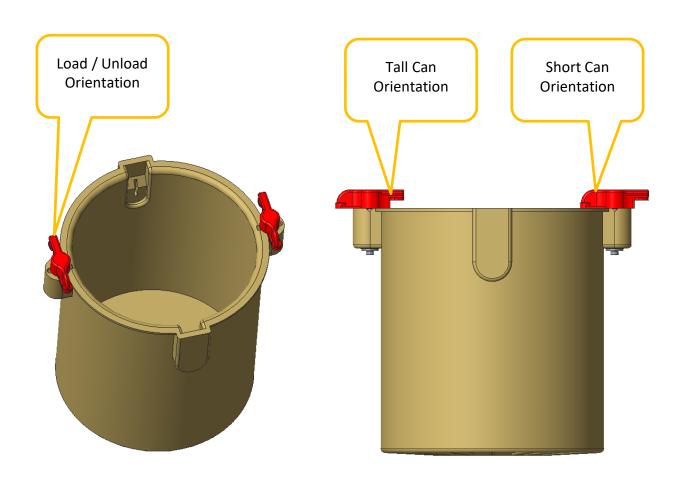


IDENTIFICATION











SETUP

Unpacking

- 1. Remove packaging from mixer.
- 2. Visually inspect mixer for any external and concealed damage. Should any damage be noted, a hidden damage report must be filed by the consignee. Do not delay in filing the report.
- 3. Contact HERO Customer Service before proceeding if damage is found.
- 4. Remove from the shipping pallet by lifting the unit straight up. Do not lift the machine using the door as a handle.
- 5. Cut the tie wrap from around the power cord.
- 6. Position the mixer in a designated location.
- 7. Open the door and remove the adapter(s) from the receiving bucket.
- 8. If equipped, insert the drip/spill try underneath the mixer.
- Plug the power-cord into a properly grounded electrical receptacle. Make sure the power cord is routed in a way that it is protected from damage and is not underneath anything causing it to be crimped or twisted.

NOTE: Do not use an extension cord to plug the mixer into an outlet.

Levelling

- 1. Each corner of the mixer is equipped with an adjustable levelling foot.
- 2. Loosen the locking nut on each of the levelling feet.
- 3. Grasp the cabinet and move it to see if it rocks. If it does not rock, it is level.
- 4. If the cabinet does rock, adjust the pertinent levelling feet up or down until the rocking has been eliminated.
- 5. Visually verify that all four feet are firmly on the ground.
- 6. Once the mixer is level, secure the feet jam nuts against the mixer base to prevent the feet from moving.



OPERATING INSTRUCTIONS

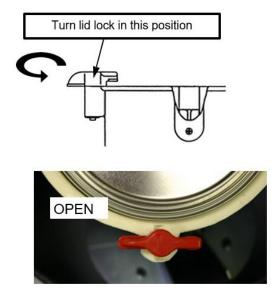
Loading

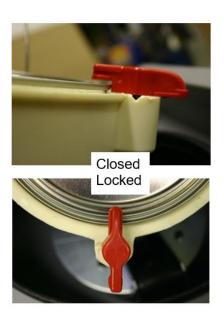
- 1. Make sure that the container is full and properly sealed.
- 2. Open the mixer door.
- 3. Rotate the receiving bucket until its opening is facing towards the front.
- 4. Rotate the lid locks to prevent interference with can insertion.
- 5. Carefully place the container into the receiving bucket.
- 6. Ensure the can bail ears slide into the anti-rotation slots of the receiving bucket.
- 7. Rotate the lid locks 90° to "lock" the lid in place.
- 8. Close mixer door.

Use the included adapters to mix quarts, square quarts, colorant cans or pints. Place the can into the adapter and slide the adapter into the can holder. Operate the mixer as usual.

Unloading

- 1. Open mixer door.
- 2. Rotate the receiving bucket until its opening is facing towards the front.
- 3. Rotate the lid locks to prevent interference with can removal.
- 4. Lift the can out of the mixer.







Control Panel Operation – Mechanical Timer Models

- 1. Turn the timer to the desired mixing time.
- 2. Timer will automatically start the mixer.
- 3. Wait until the mixing cycle ends.
- 4. Open the door.

Control Panel Operation – Electronic Timer Models

- 1. Select the mixing time by pressing the 1 (light), 2 (medium) or 3 (dark) button.
- 2. Timer will automatically start the mixer.
- 3. Wait until the mixing cycle ends.
- 4. Open the door.



CARE & CLEANING

Maintenance

These models of vortex mixers are designed for maintenance-free operation. For technical support, contact HERO Customer Service at 800-494-4376 or customercare@hero.ca.

Spill Cleanup

- 1. Unplug the machine.
- 2. Secure the area of the paint spill with wet paint warning signs.
- 3. Cleanup the paint around the machine or put some absorbent material on the spill. Make sure the surface where the spill resides is thoroughly cleaned.
- 4. Open the door and remove the paint can from the bucket, placing the can in a larger container.
- 5. Scrape the inside of the mixer using a small squeegee or spatula tool. First scrape the sides down onto the sloped mixer chamber base and then draw the paint forward using the spatula into the drain holes located in the corners of the base at the front of the machine.
- 6. If equipped, pull out the paint containment tray from below the mixer and discard the captured paint.
- 7. Remove the back panel screws and the back panel.
- 8. Remove all the wet paint from the drive and cover assembly.
- 9. Do not use flammable liquid solvents in cleaning up any spills. Use only water-based cleaners.
- 10. After complete cleanup, allow for parts to dry.
- 11. Reinstall the parts disassembled.
- 12. Plug the mixer into the power receptacle.



SERVICE INSTRUCTIONS

Service shall be carried out by authorized service personnel. For technical support, contact HERO Customer Service at 800-494-4376 or customercare@hero.ca.

CAUTION: Remove power to the mixer prior to cleaning or servicing the machine.

Receiving Bucket Replacement

- 1. Unplug the power cord to remove all power from the mixer.
- 2. Remove the three screws and from inside the base of the receiving bucket.
- 3. Lift the bucket up and off of the mounting flange.
- 4. Replacement is the reverse of removal.
- 5. On installation, apply medium strength thread locking compound to the screws to ensure they remain secure.

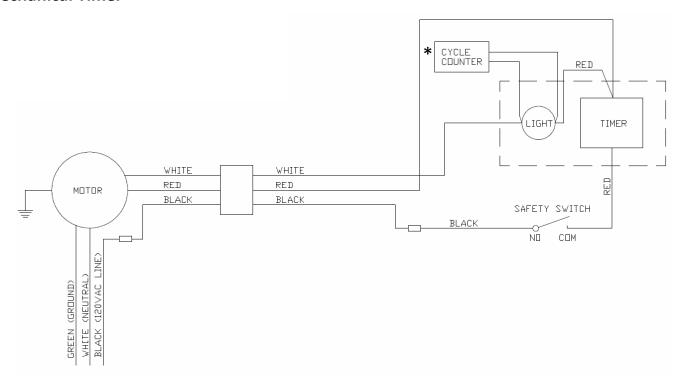
Floor Stand to Countertop Conversion

- 1. Unplug the power cord to remove all power from the mixer.
- 2. Lay the mixer over on its side.
- 3. Remove the four bolts and lock washers underneath the mixer located in the extreme corners of the stand.
- 4. DO NOT remove the 3 nuts in the center of the bottom of the mixer that fasten the shake frame to the base.
- 5. After removing the 4 bolts and lock washers, separate the stand
- 6. Unscrew the 4 feet from the floor stand base.
- 7. Reinstall the 4 feet along with the lock washers in the bolts holes of the previously removed 4 bolts.
- 8. The lock washers should be installed between the mixer and the foot lock nut.
- 9. Set the mixer feet so there is a clearance of 1 3/4 inches between the mixer and the floor.
- 10. Note the clearance at the bottom of the mixer will allow for the paint containment tray to slide underneath the mixer.
- 11. Rotate the mixer to the upright position. Level the mixer.
- 12. The reverse of this procedure can be done to change a countertop unit to a floor stand unit.

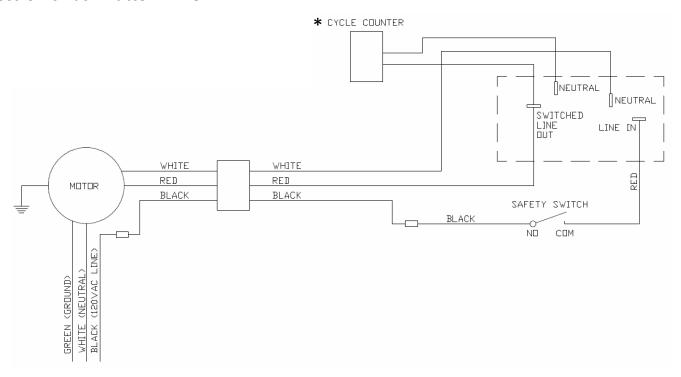


WIRING DIAGRAMS

Mechanical Timer



Electronic Push Button Timer



* optional feature



TROUBLESHOOTING

Service shall be carried out by authorized service personnel. For technical support, contact HERO Customer Service at 800-494-4376 or customercare@hero.ca.

PROBLEM	CAUSE	SOLUTION
Mixer moves on floor	Partial can in mixer.	Mix only full cans.
	Can is not fully seated in receiving bucket.	Confirm that can is fully inserted into receiving bucket.
	Mixer not levelled.	Adjust level. See Levelling.
Excessive noise when mixing.	Back panel fasteners loose.	Tighten fasteners.
	Debris inside drive mechanism.	Clear debris from mixer.



Overall Dimensions

	S2425	S2450	S2451
Height	25"	25"	36"
Width	18"	18"	18"
Depth	24"	24"	24"
Weight	90 lb	100 lb	110 lb

Electrical Rating

	120 V 60 Hz models	230 V 60Hz models	230 V 50 Hz models
Voltage	120 VAC	230 VAC	230 VAC
Frequency	60 Hz	60 Hz	50 Hz
Current	6 A	3 A	3 A
Phase	1	1	1
Certified to Canadian			
and US standards (CSA/UL)	Yes	No	No

Container Size Accommodation

	S2425	S2450	S2451
½ pint	Y (w/ adapter)	Y (w/ adapter)	Y (w/ adapter)
1 pint	Y (w/ adapter)	Y (w/ adapter)	Y (w/ adapter)
1 quart	Y (w/ adapter)	Y (w/ adapter)	Y (w/ adapter)
1 gallon	Υ	Υ	Υ

Maximum Load Rating

S2425	S2450	S2451
18 lb	20 lb	20 lb



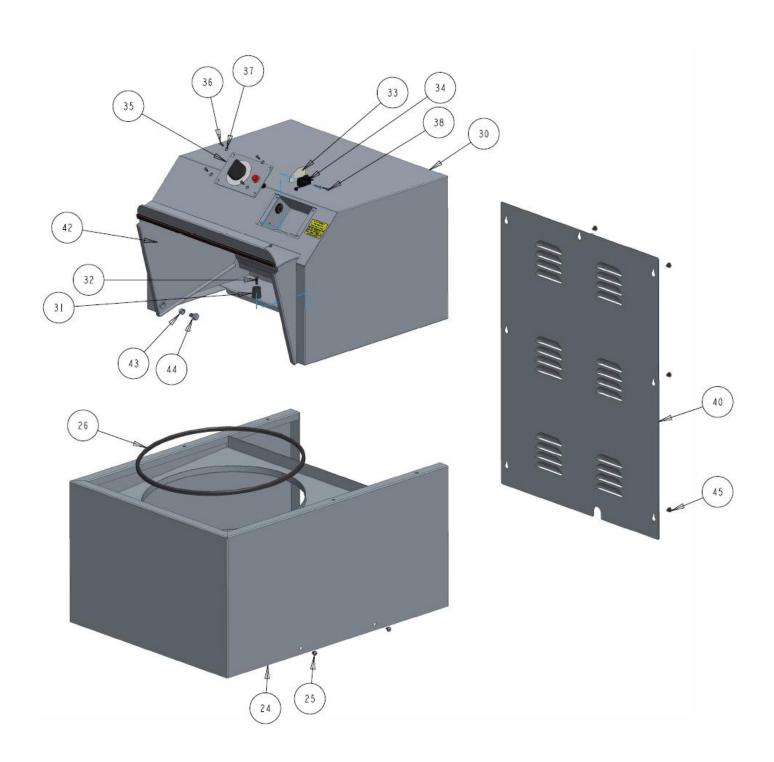
PARTS LIST

NOTE: Some parts may not be available as individual items and may only be sold as part of a sub-assembly. Contact HERO Customer Care for details.

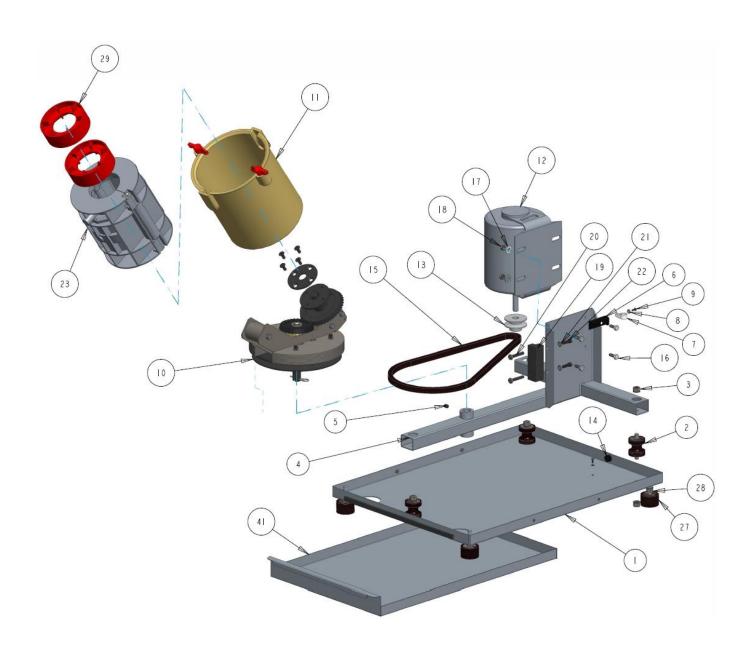
Cabinet & Drive

LTEM	DESCRIPTION	DART NO	٦
ITEM		PART NO.	4
2	MOTOR TRAY ASSEMBLY SHOCK ASSY	HL350-A14	III 250 ALZ FOR SOUARE CAN MODELS
3	NUT-HEX-KEP-3-8-16-ST-ZP	HL350-A15-I HW405IP	HL350-AI7 FOR SQUARE CAN MODELS
4	T BAR ASSY	HL350-A5-1	_
5			-
	SET SCREW 5/16 - 18 X 3/8 KNURLED	HW2011	4
6	BRACKET, HARNESS PLUG PLASTIC P-CLAMP 1/2 ID	HL350-201	_
7		HL350-137	_
8	WASHER, FLAT #6 SAE PLTD	HW5006P	4
9	SCREW, 6-32 X 3/8 PHILLIPS PAN HEAD PLTD	HW30050P HL350-A75	
	CRADLE ASSY S245X		HL350-A80 FOR S2425
11	CANISTER ASSY	HL350-A28	HL350-A28-KSC FOR SQUARE CAN MODELS
12	MOTOR IIOV (MARATHON 48SI7D2I07)	HL350-20	- HI 250 204 50D 02425
13	PULLEY, 2"	HL350-23	HL350-264 FOR S2425
14	STRAIN RELIEF	HL350-46	
15	V-BELT	HL350-21	HL350-265 FOR S2425
16	BOLT, HEX 1/4-20 x 3/4 PLTD	HWI020P	4
17	WASHER-FLAT-I-4-ST-ZP	HW5030P	_
18	NUT-HEX-KEP-I-4-20-ST-ZP	HW4021P	_
19	TENSIONER BRACKET S24XX	HL350-240	_
20	HHCS 1/4-20X1-1/2 YLW ZPLT GR8 FULL THRD	HW1831	_
21	WASHER, LOCK I/4 PLTD	HW5040P	_
	1/4-20 x 3/4 SKT CAP STEEL SCREW (BLACK)	U110-00119	_
	ADAPTER ASSY	HL350-AII	
24	LOWER SHELL ASSY - 2450	HL350-A74	HL350-A29 FOR S2425
25	SCREW, 10-32 X 1/4 PAN HD PHIL, EXT SEM	HW30382P	_
26	EDGE PROTECTOR	HL350-101	_
27	FOOT ASSEMBLY	HL350-A16-I	_
28	NUT-HEX-KEP-3-8-16-ST-ZP	HW4051P	_
29	RED ADAPTOR (PINT - 1/2 PINT)	HL350-63	_
30	TOP SHELL ASSEMBLY - 2450	HL350-A76	_
31	BUMPER	HL350-98	_
32	SCREW 10-32 X 5/8 PAN HD COMBO	HW3040P	_
	INSULATOR MICROSWITCHES S2700 - S2400	HL442-60	
	SWITCH, SAFETY	HL350-68	4
	MECHANICAL TIMER ASSY	HL350-A40-6M	HL350-A93 FOR ELECTRONIC TIMER
_	SCREW OVAL PHILLIPS 6-32 X 3/8	HW300562P	
	WASHER NO 6 EXTERNAL LOCK COUNTER SINK	HW50052P	_
38	SCREW 4-40 X 5/8 PAN HEAD PHILIPS PLTD	HW3005P	_
39	OUTER SHELL COVER	28-2	_
40	BACK PANEL	HL350-4	
41	PAINT TRAY ASSEMBLY	HL350-A37	IF EQUIPPED
42	DOOR ASSEMBLY - S24XX	HL350-A82	
43	BRONZE SLEEVE	HL350-13	_
44	CAPSCREW, HEX HEAD 5/16-18 X 1/2 GR5 PLTD	HWI050P	_
45	SCREW, 10-32 X 1/4 PAN HD PHIL, EXT SEM	HW30382P	





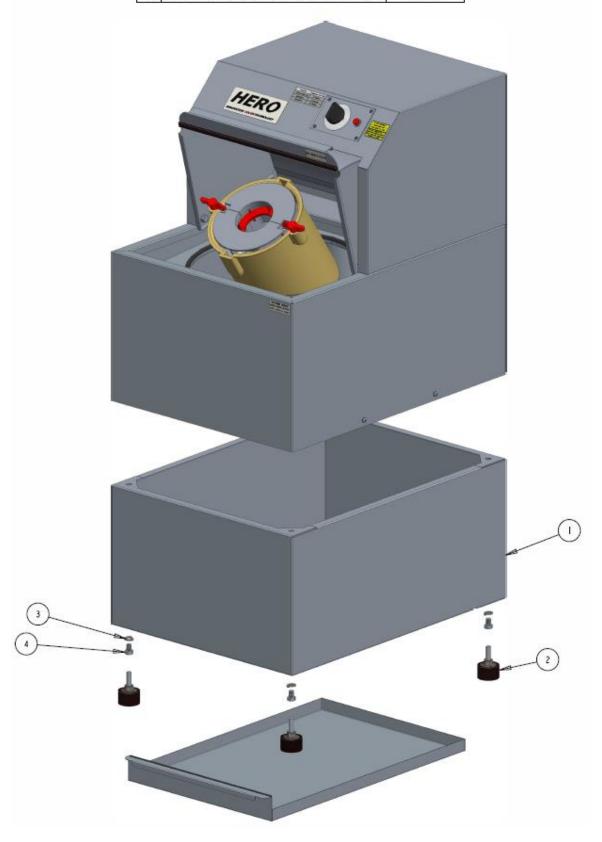






Cabinet Base

ITEM	DESCRIPTION	PART NO.
1.	STAND ASSEMBLY, 2400	HL350-A8
2	FOOT STUD ASSY	HL350-A16
3	WASHER, LOCK 3/8 PLTD	HW5063P
4	CAPSCREW HEX HEAD 3/8NC X 1/2 GRADE 5 PLTD	HW10829

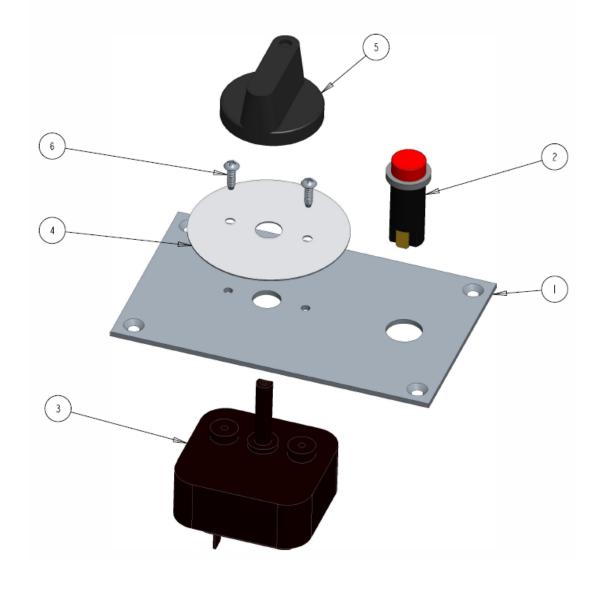




Timer – Mechanical

ITEM	DESCRIPTION	PART NO.
	PANEL, TIMER MOUNTING	HL350-A65-6M
2	LIGHT, RED	HL442-76
3	TIMER	HL350-I5-6M
4	DIAL PLATE	HL350-39-6M
5	KNOB	HL350-121-6M
6	SCREW #4 X 3/8 PAN HEAD PLTD STEEL SELF TAP	HW3004P

HL-350-A40-6M IS THE COMPLETE TIMER ASSY INCLUDING ITEMS 1-6

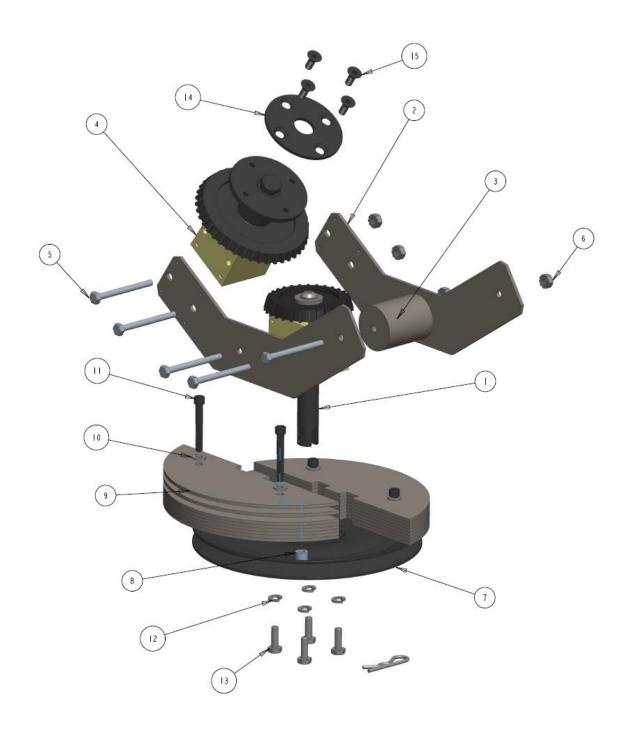




Mechanism - \$2450 & \$2451

ITEM	DESCRIPTION	PART NO.
	GEAR DRIVE ASSY (FOR MAIN DRIVE)	HL350-A23-G
2	CRADLE PLATE	HL350-24
3	COUNTER WEIGHT - I 5/8 OD	HL350-26
4	GEAR DRIVE ASSY (FOR CANISTER)	HL350-A35-G
5	BOLT, HEX 1/4-20 x 2 1/2 SAE J429 GRADE 5	HWI047P
6	NUT-HEX-KEP-I-4-20-ST-ZP	HW402IP
7	FLYWHEEL PULLEY 8" ASSY.	HL350-A66
8	SPACER	HL350-254
9	FLYWHEEL PLATE	HL350-252
10	WASHER, LOCK I/4 PLTD	HW5040P
- 11	CAP SCREW 1/4-20 x 1 5/8	HWI035
12	WASHER, LOCK I/4 PLTD	HW5040P
13	BOLT, HEX 1/4-20 x 3/4 PLTD	HWI020P
14	CANISTER MOUNTING DISK	HL350-30
15	FLAT HEAD SOCKET CAPSCREW 1/4-20X5/8	HW10165







Mechanism – S2425

ITEM	DESCRIPTION	PART NO.
	PULLY 8 IN.	HL350-22
2	GEAR DRIVE ASSY (FOR MAIN DRIVE)	HL350-A23-G
3	CRADLE PLATE	HL350-24
4	COUNTER WEIGHT - I 5/8 OD	HL350-26
5	GEAR DRIVE ASSY (FOR CANISTER)	HL350-A35-G
6	WASHER, LOCK 1/4 PLTD	HW5040P
7	BOLT, HEX 1/4-20 x 3/4 PLTD	HWI020P
8	BOLT, HEX 1/4-20 x 2 1/2 SAE J429 GRADE 5	HWI047P
9	NUT-HEX-KEP-I-4-20-ST-ZP	HW402IP
10	CANISTER MOUNTING DISK	HL350-30
	FLAT HEAD SOCKET CAPSCREW 1/4-20X5/8	HWI0165

