



VibroMet® 2 Vibratory Polisher



Buehler Worldwide Mission Statement

We are Buehler, the science behind materials preparation and analysis, and the premier company in our field, since 1936. Our global mission is to deliver outstanding value and delight our customers by providing innovative, quality, on-time products, and services.

To fulfill our mission, we will continue to:

- Listen to and understand our customers to exceed their expectations.
- Apply engineering and technical support to provide innovative solutions to our customers.
- Achieve profitable growth.
- Foster an environment of creativity, respect, teamwork, open communication, and ethical behavior.
- Provide the training and tools which allow all of us to achieve our mission.
- Continually improve our performance in all aspects of the business.

About Buehler

For over 75 years, Buehler has been a leading manufacturer of scientific instruments and supplies for use in materials analysis. Buehler products are used throughout the world in manufacturing facilities, quality laboratories, and universities to analyze all types materials, including:

- Ferrous and Non-ferrous metals
- Thermal spray coatings
- Printed Circuit Boards
- Fasteners
- Ceramics
- Composites
- Semiconductors
- Rocks
- Glasses
- Plastics

Companies use Buehler products to improve the material within their product, monitor production or incoming purchased material, do failure analysis, and perform basic materials research. Buehler products fall into three categories:

- Sample preparation equipment for cutting, grinding and polishing specimen material (usually cross sectioning) prior to microstructural inspection.
- Metallographic consumables for the sample preparation equipment including; cutoff wheels, saw blades, mounting compounds, grinding papers, polishing cloths and polishing suspensions.
- Inspection and testing equipment including microscopes, image analyzers, video equipment, and hardness testers.

EC – DECLARATION OF CONFORMITY

Name of Manufacturer and contact information:	 BUEHLER USA 41 Waukegan Road Lake Bluff, Illinois 60044 USA 1-800-BUEHLER / www.buehler.com
Contact information of Buehler's authorized representative within the Community:	BUEHLER GmbH In der Steele 2 40599 Düsseldorf, Germany (49) (211) 974 100 / www.buehler-met.de Juergen Vossbruch
Machine Name and Description:	Name: VibroMet® 2 Vibratory Polisher Catalog Number: 67-1635-160 / 67-1635-250 Description: Vibratory Polisher with amplitude vibratory drive system
Machine Serial Number:	Serial Number: <i>Month Code – VP2 – Number of units built.</i> (Every unit assembled is registered in our database.)
Buehler declares this product to be in accordance with EC Directive(s):	
Safety of Machinery (2009):	EMC (2007):
2006/42/EC according to the following standards: EN ISO 12100-1: 2003 EN ISO 12100-2: 2003 EN 60204-1: 2006	98/37EC according to the following standards: EN 61000-6-2: 2005-01) EN 61000-6-4: 2002 EN 61326: 2001, A1, A2, A3
Quality Assurance:	Underwriters Laboratories, Inc. / ID# A3104 1130 W. Lake Cook Road / Suite 340 Buffalo Grove, IL 60089 / USA
This machine is CE-marked:	Lake Bluff, Illinois, USA
Prepared by:	Kate Watling, Technical Communicator 

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VibroMet 2 Vibratory Polisher

The VibroMet 2 Vibratory Polisher is designed to prepare high quality polished surfaces on a wide variety of materials. The VibroMet 2 has a powerful drive mechanism that produces nearly 100% horizontal vibratory motion with virtually no vertical motion.

The horizontal motion of 7200 cycles-per-minute produces a gentle and very effective polishing action with superior quality results and exceptional flatness. The unique vibratory action produces less deformation, flatter surfaces, and reduces edge rounding.

Warranty

This unit is guaranteed against defective materials and poor workmanship for a period of 24 months or 2000 hours (whichever comes first), from the date of receipt by the customer. The warranty is void if inspection shows evidence of abuse, misuse, unsafe use or unauthorized repair. This warranty covers all Buehler costs associated with the replacement of defective materials (e.g., parts and labor).

If for any reason this unit must be returned to Buehler for warranty service, please contact Buehler Service at www.Buehler.com or 1-800-283-4537 for prior authorization and shipping instructions. (If outside the US or Canada contact your local Buehler Representative.) Please include the following information:

- Customer Purchase Order Number
- Buehler Invoice Number and Date
- Serial Number
- Reason for Return

Specifications

	VibroMet 2 Vibratory Polisher 67-1635-160	VibroMet 2 Vibratory Polisher 67-1635-250
Dimensions	18" W x 22.5" D x 14" H / (460 mm W x 570 mm D x 360 mm H)	
Voltage Range	110 V (+/- 10%) 60 Hz 1 Phase	220 V (+/- 10%) 50 Hz 1 Phase
Wattage	30 W	30 W
Shipping Weight	175 lbs (80 kg)	175 lbs (80 kg)

VibroMet 2 Vibratory Polisher Decibels (dB)

Non-load with hood closed decibel (dB) level was taken approximately one foot from the front of the machine, level with the control panel.

- Ambient sound 60 dB.
- At 30% Vibration Amplitude62 dB
- At 50% Vibration Amplitude63 dB
- At 100% Vibration Amplitude65 dB

Unpacking

The VibroMet 2 has been carefully packaged to protect it during transit from the factory to your location. Carefully unpack and check contents. If any components are missing or damaged, save the packing list and materials and advise the carrier and Buehler of the discrepancy.

Carefully unpack and check that the following items have been received:

- AK Kit #120
40-7222 MicroCloth® 12-inch, PSA backed, Polishing Cloth
40-7742 MasterTex® 12-inch, PSA backed, Polishing Cloth



- Load fixture

- MasterMet® Colloidal Silica Suspension 0.06 µm (2 oz)



- MicroPolish® II Deagglomerated Alumina Suspension (6 oz)



Equipment Damage. The VibroMet 2 weighs 175 lbs (80 kg) Follow local safety practices to safely lift the VibroMet 2 from the shipping carton. Improper lifting can result in personal injury or machine damage.

The VibroMet 2 is bolted to a wood base for protection during shipping. Open areas are provided at the corners of the base for ease of lifting. Use the removable handles at the bottom of the machine to lift the VibroMet 2 out of the carton.

Do not lift the VibroMet 2 by the clamp or bowl assembly. Position the VibroMet 2 on a table so it overhangs on the edge and remove the bolts securing the VibroMet 2 to the wood base.

Safety Information

For safe installation and operation of this equipment, carefully read and understand the contents of this manual. Improper operation, handling, or maintenance can result in severe personal injury and equipment damage.

The VibroMet 2 is designed for use in dry, indoor laboratory and workshop environments away from strong electromagnetic fields and with normal temperature ranges (41° F to 104° F / 5° C to 40° C) and non-condensing humidity ranges (30-90%).

Machine Use and Care

All operators should be trained in the use of the VibroMet 2 Vibratory Polisher. If training is needed contact Buehler at 800.BUEHLER (800.283.4537) or your local Buehler Sales Representative.

Always use safety glasses. Flying debris and liquids can cause severe eye injury.

Dress properly. Do not wear loose clothing or jewelry and contain long hair. They can be caught in moving parts and may result in severe personal injury.

Protective equipment should be worn to handle specimens, which may be sharp or hot.

Do not operate machine in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Sparks may ignite the dust or fumes.

Maintain the VibroMet 2 with care. Properly maintained machines are less likely to bind and are easier to control. Any alteration or modification is a misuse and may result in a dangerous situation.

Only qualified repair personnel must perform machine service. Service or maintenance performed by unqualified personnel could result in a risk of injury.

Replace damaged or defective parts immediately and use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electrical shock or injury.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the machine operation. If damaged, have the machine serviced before using. Poorly maintained machines cause many accidents.

Do not abuse the power cord. Never use the cord to cart the machine or pull the plug from an outlet. Keep the cord away from heat, oil, sharp edges, or moving parts. Replace damage cords immediately. Damage cords increase the risk of electrical shock.

Use of extension cords is not recommended for Buehler machines and equipment.

Remove worn-out Pressure Sensitive Adhesive (PSA) backed abrasive papers and cloths from the platen after use. If left on the polisher for a prolonged period they may be difficult to remove.

Safety Terms



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



NOTICE indicates practices not related to personal injury.

Installation



Equipment Damage. Follow all locally approved procedures and safety practices when lifting and installing this machine. Improper lifting can result in machine damage.

Select a location for your VibroMet 2 that provides an adequate working space and a power source. Placement of the VibroMet 2 should be on a sturdy, level surface. Buehler Tech-Met[®] tables are highly recommended.

Electrical Installation



Electrical Shock Hazard. A qualified electrical technician should perform electrical installation and maintenance.

Electrical Shock Hazard. Do not change the power plug in any way. Buehler machines are equipped with a polarized plug (one blade is wider than the other) and a ground pin. Polarized plugs reduce the risk of electrical shock. This plug will fit in a polarized outlet only one way.

- *Disconnect the power supply before making any electrical adjustments.*
- *Capacitors inside the machine may retain a charge even if the machine is disconnected from the power supply.*

Installation of the VibroMet 2 must comply with local electrical standards or codes of practice.

The Specification Plate is located on the back of the VibroMet 2. Check that Specification Plate values for phase, voltage, current, and power consumption are compatible with the intended electrical supply before installation.

Power Switch

The main power switch is located in the left corner on the back of the machine.

To activate power to the VibroMet 2, move the power switch to the UP position.

Note: If the VibroMet 2 malfunctions for any reason, shut the power off by moving the power switch to the DOWN position.

Applying Polishing Cloths

The platen surface must be clean and dry before polishing cloths can be applied, especially when using pressure sensitive (PSA) backed cloths.

1. Remove the screws securing the PVC Polishing bowl to the VibroMet 2 (see Figure 1).
2. Remove any residue from previous polishing cloths with a suitable cleaning solvent.
3. Remove the release liner on the back of the polishing cloth.
4. Place one edge of the polishing cloth on the edge of the platen.
5. Make sure the polishing cloth is centered on the platen.
6. Working in one direction, slowly press the polishing cloth on to the platen. This will help eliminate the formation of air bubbles.

Rubbing the polishing cloth from the center out to the edge can eliminate any remaining air bubbles.

7. Replace the PVC Polishing Bowl and secure with the screws.



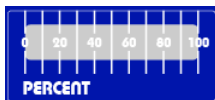
Figure 1 VibroMet 2 PVC Polishing Bowl

Operation

Front Control Panel



Figure 2 VibroMet 2 Front Control Panel




Amplitude The PERCENT bar graph indicates the percentage of vibration amplitude.


Using a vibratory sensor, the cycles-per-minute can be correlated with the percent of vibration indicated on the graph.

Press the INCREASE button to increase the amount of vibratory amplitude.


Press the DECREASE button to decrease the amount of vibratory amplitude.


Cycle Controls the polishing action of the VibroMet 2 Polisher.

Press the  button to activate the polishing action.

Press the  button to stop the polishing action.

Power Activates power to the VibroMet 2 Polisher.

Press the  button to activate the power.

Press the  button to deactivate the power.



Equipment Damage. If a loud striking noise occurs during the polishing cycle, stop the machine immediately. The striking noise may be caused by the armature and core making contact. Continue striking may result in damage to the machine. See the Maintenance (Adjusting the air gap) section for corrective action.

Loading Specimens

1. Place the loading fixture on a flat, level surface.
2. Place the mounted specimen, face down, in the appropriate circle indent ($1\frac{1}{2}$ ", $1\frac{1}{4}$ " and 1" diameters).
3. Place the specimen holder over the mounted specimen. The specimen holder will rest on the loading fixture.
4. Tighten the setscrew with the supplied wrench to secure the specimen mount in the specimen holder.

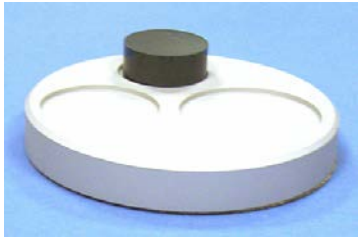


Figure 3 Loading Fixture with Specimen Figure 4 Specimen Holder on Loading Fixture

Specimen Weights

Mounted specimens are set in special holders that provide pressure to effectively polish specimen surfaces.

If additional pressure is needed, weights can be added to the specimen holders.

1. Screw the threaded shaft into the opening on top of the specimen holder.
2. Hand-tighten the shaft until secure.
3. Place a weight through the shaft to rest on top of the specimen holder.

Up to three weights can be added to each specimen holder.

When adding weights, wet the surface of the weights before installation with a clean polishing lubricant (i.e. Metadi[®] Fluid or AutoMet[®] Lapping Oil) to prevent chatter during the polishing process.



Figure 5 VibroMet 2 Specimen Weights

NOTICE

Un-mounted specimen with sufficient weight, thin specimens mounted to wafer holders, and specimens mounted in other specimen holders from different machines can also be polished with the VibroMet 2 Polisher.

	Weight		Unit of Force	
	Pounds	Grams	lb/in ²	gm/in ²
Sample Holders				
1-inch mounts	.88	400	1.12	79.0
1¼-inch mounts	.88	400	.72	50.5
1½-inch mounts	.88	400	.50	35.0
Accessory weight studs (1 per holder)	.44	200	N/A	N/A
	.02	10		
Wafer Holders	.88	22.25	N/A	N/A

Table 1 VibroMet 2 Specimen Holder Weight Specifications

Abrasive Application

Thoroughly wet the polishing cloth with distilled or deionized water before applying an abrasive suspension.

Apply a sufficient amount of abrasive to completely cover the polishing cloth by redistributing the abrasive with clean fingers or by the movement of the specimens during the polishing process.

Metadi® Diamond Pastes

When using Metadi® diamond pastes, dispense the paste from the applicator to the polishing cloth in a spoke-like pattern.

Redistribute the paste with clean fingers to provide uniform coverage and add enough extender to completely cover the polishing cloth with a film of liquid.

When using Metadi® diamond compounds with AutoMet® Lapping Oil, make sure the diamond paste is well distributed or the polishing action of the samples may be irregular.

Polishing Tips

If the specimen material is water reactive, ethylene glycol can be used as a substitute for water, however the polishing time may need to be extended.

Buffer water can be used to prevent reaction with water sensitive materials. Buffer solutions are adjusted to a specific pH and a pH solution of 7.0 (neutral) is recommended for vibratory polishing.

Polishing steps and times will vary depending on the specimen material.

- a. Run through a polishing sequence and monitor the progress at 15 to 30 minute intervals.
- b. Remove the specimens from the polisher.
- c. Clean and dry them.
- d. Examine the specimen under a microscope.
- e. Adjust the polishing sequence as needed. Some polishing times will exceed one hour.
- f. Keep a record of successful preparation and polishing sequences for future applications.

VibroMet 2 Recommended Polishing Procedures

NOTICE

These recommendations are guidelines to assist in determining the best procedure for a specific specimen material.

Starting Condition	Surface or Covering	Abrasive Type/Style	Lubricant	Approximate Load	Vibratory Times
Low to Medium Carbon Steel and General Purpose Procedure					
600 grit	TexMet® / Nylon	6 micron Metadi®	Metadi® Fluid	1 weight	60-240 min
6 micron	MicroCloth®	1 micron Metadi®	Metadi® Fluid	1 weight	60-180 min
Graphite Irons for the retention of graphite					
600 grit (dry)	CarbiMet®	3 micron	AutoMet® Lapping Oil	1 weight	30-45 min
3 micron	MicroCloth®	1 micron Metadi®		1 weight	30-45 min
Hard Ferrous Alloys					
6 micron	TexMet®	3 micron	Metadi® Fluid	2 weights	80-240 min
3 micron	MicroCloth®	1 micron	Metadi® Fluid	2 weights	60-120 min
Stainless Steels, Nickel, Zirconium, and Hafnuim Alloys					
600 grit	TexMet®	6 micron Metadi®	Metadi® Fluid	1 weight	120-240 min
6 micron	TexMet® / Nylon	1 micron .05 micron	Metadi® Fluid	2 weights	120-240 min
1 micron	MicroCloth®	Alumina / MasterMet®	Metadi® Fluid	2 weights	60-240 min
Aluminum, Brass, and other Non-ferrous Alloys					
1200 grit	TexMet® / Nylon	3 micron	Metadi® Fluid	1 weight	60-240 min
3 micron	TexMet® / Nylon	1 micron	Metadi® Fluid	1 weight	120-240 min
1 micron	MicroCloth®	.06 micron	MasterMet®	None	120-240 min
PC Boards					
1200 grit	TexMet® / Nylon	3 micron	Metadi® Fluid	1 weight	60-180 min
3 micron	TexMet® / Nylon	1 micron	Metadi® Fluid	2 weights	60-180 min
1 micron	MicroCloth®	.06 micron	MasterPolish® MasterMet®	1 weight	30 min
Ceramics					
15 micron	TexMet®	9 micron	Suspensions	2-3 weights	120-360 min
9 micron	TexMet®	6 micron	Suspensions	2-3 weights	120-360 min
3 micron	TexMet®	1 micron	Suspensions	2-3 weights	120-360 min
1 micron	TexMet®	MasterMet®	Suspensions	2-3 weights	120-360 min

Table 2 VibroMet 2 Recommended Polishing Procedures

Maintenance

The VibroMet 2 will continue to perform at optimum levels with proper care, daily cleaning, and general maintenance.

The protective hood and touch-panel control pad should be cleaned using mild soap and water applied with a soft cloth. **Do not** use ammonia-based cleaners, i.e. Windex®. Cloudiness and cracking can occur.

Exterior painted surfaces should be cleaned with a non-abrasive household cleaner.

Adjusting the Air Gap

The air gap is the space between the armature face and the core assembly face. The air gap must be set at **.035 inch**. A proper air gap is necessary for optimum performance. The air gap is set and tested before leaving Buehler. However, the air gap can change due the application of high voltage or improper handling.

When the air gap is too narrow the armature and core will collide during a polishing cycle. This “striking” can cause machine damage (i.e. broken springs, cracked base or bowl, or cracked armature or core).

If the air gap is too wide the VibroMet 2 will draw a high current, which may cause coil burnout, lack of vibratory action, or failure of control.



Electrical Shock Hazard. Power off the unit before servicing.

Tools Needed

- 7/16 Socket Wrench
 - 9/16 Wrench
 - Feeler Gauge
1. Disconnect and unplug the VibroMet 2 from all power sources.
 2. Remove the PVC polishing bowl and drive plate.
 3. Remove the screws securing the cabinet to the base of the machine.
 4. Lift off the cabinet and disconnect the electrical cables from the cabinet to the base.
 5. Loosen the screws that secure the core assembly to the base. Only loosen the screws just enough to relieve holding pressure.
 6. Move the core assembly in small increments in the appropriate direction (either away from or closer to the armature assembly). Keep the core assembly equal on each side.
 7. When a .035-inch gap has been reached, tighten the screws securing the core assembly to the base.
 8. Recheck the gap space after the core assembly has been secured.
 9. Reconnect the electrical cables from the base to the cabinet.
 10. Replace the cabinet and secure to the base.
 11. Replace the drive plate PVC polishing bowl.
 12. Reconnect power to the VibroMet 2.

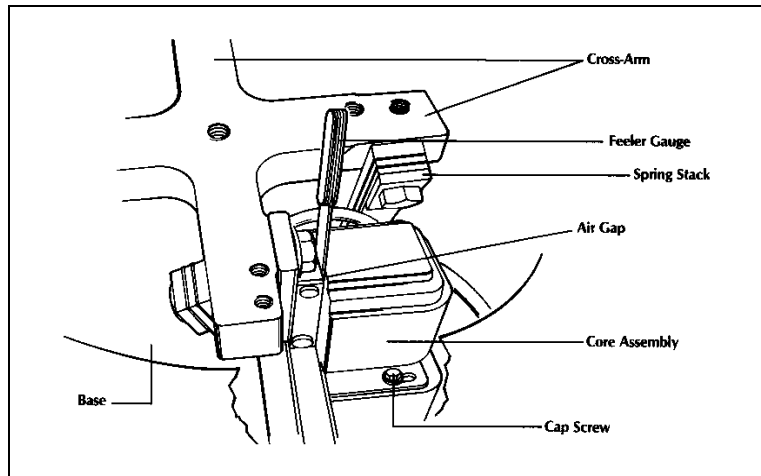


Figure 7 VibroMet 2 Air Gap Adjustment Diagram

Trouble Shooting Chart

Problem	Possible Cause	Correction
No response	Faulty switch Failed magnet Electrical short	Replace or repair the switch Replace the magnet Repair the short
Weak action	Low voltage Loose bowl Broken springs Loose springs	Correct the power supply Tighten the securing screws Replace the Springs** Tighten the spring bolts**
Hum but no vibration	Defect SCR or rectifier	Replace broken parts
Loud striking noise	Air gap not adjusted correctly No lubrication between weights and holders	Adjust air gap to correct gap of .035 inch Coat contacting surface with clean lubricant
Specimen holders not rotating at normal rate (6 rev-per-min)	Control set too low Insufficient lubricant Cloth not secured Machine is not level	Increate the rate Add clean polishing medium Secure the cloth in the proper manner Level the machine

** For more detailed information, contact Buehler Service at 1-800 BUEHLER (1-800-283-4537) or

Service@buehler.com

VibroMet 2 Vibratory Polisher Accessories

Specimen Holders	67-1525
Set of 3 holders for 2-inch (50 mm) diameter mounted specimens	
Specimen Holders	67-1526
Set of 3 holders for 1-inch (25 mm) diameter mounted specimens	
Specimen Holders	67-1527
Set of 3 holders for 1¼-inch (30 mm) diameter mounted specimens	
Specimen Holders	67-1528
Set of 3 holders for 1½-inch (40 mm) diameter mounted specimens	
Specimen Weights	67-1529
Set of 9 weights and 3 studs for use with 67-1526, 67-1527, and 37-1528 Specimen Holders. Up to 3 weights can be used with each holder.	
Extra Polishing Bowl	67-1530
Loading Fixture	67-1540
1-inch (25 mm), 1¼-inch (30 mm), and 1½-inch (40 mm) loading fixture	
Loading Fixture	67-1541
2-inch (50 mm) loading fixture	
MasterMet® Colloidal Silica Suspension 0.06 µm (6 oz)	40-6370-006
MicroPolish® II Deagglomerated Alumina Suspension (6 oz)	40-6365-006
MasterTex® 12-inch, PSA backed, Polishing Cloth	40-7742
MicroCloth® 12-inch, PSA backed, Polishing Cloth	40-7222

Buehler Environmental Policy

Buehler is committed to complying with accepted environmental practices, including the commitment to meet or exceed applicable legal and other requirements, to strive for continual improvement in our environmental management system, and to minimize the creation of wastes and pollution. We at Buehler will, therefore, manage our processes, our materials, and our people in order to reduce the environmental impacts associated with our products.

To help conserve natural resources and to protect human health and environment, please follow your state and local regulations on recycling and disposing of waste, consumables, or parts related to your Buehler machine.

For End Of Life on Buehler machines, if recycling and disposal facilities are not available in your area, please call Buehler Service at 1.800.BUEHLER (283.4537) or email at service@buehler.com. We will provide options on how to properly recycle and dispose of your Buehler machine.

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

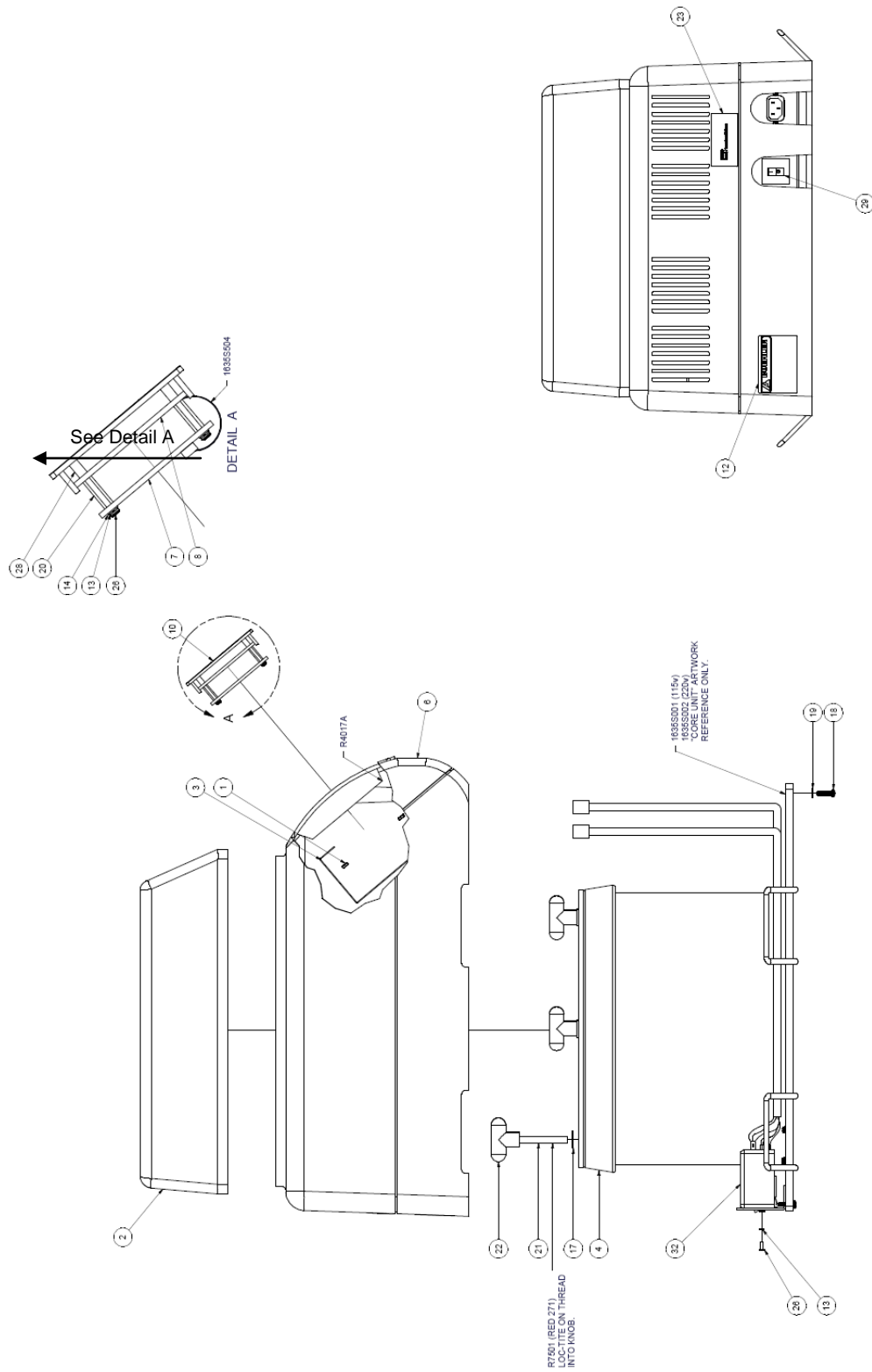


Figure 8a VibroMet 2 Assembly Diagram

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	1180S72	NUT, 6-32 KEPS
2	1	1635S009	COVER-VIBROMET 2
3	1	1635S024	GUARD, SPLASH PCB
4	1	1635S030	BOWL, POLISHING VIBROMET 2
5	1	1635S032	RING, VIBROMET 2
6	1	1635S037	CABINET-VIBROMET 2
7	1	1635S501	PCB, DRIVE CONTROL
8	1	1635S502	PCB, OPERATOR CONTROL
9	1	1635S504	CABLE, PCB TO PCB INTERFACE
10	1	1635S510	NAMEPLATE, VIBROMET
11	1	M6086	GROUND LABEL
12	1	N/A	CUSTOM PRINTED SPEC PLATE
13	8	R0606LW	LOCK WASHER #6 SS
14	6	R0606W	WSHR, #6 SS
15	1	R0609LWE	WSHR, EXT #8 STN STL
16	1	R0612LWE	WSHR, #10 EXTERNAL LOCK SS
17	6	R0618W	WSHR, 5/16IN SS
18	5	R10313	SCR, M5 X 20 PAN HD PHIL SS
19	5	R10431	WSHR, M5 FLAT SS
20	6	R10489	STANDOFF, 1/4 HEX X 7/8, 6-32
21	6	R11316	STUD, 5/16-18 X 3 SS
22	6	R11317	KNOB, POLYPROPYLENE TWO ARM
23	1	R11504	DECAL, HAZARDOUS VOLTAGE
24	.01	R4017A*	ADHESIVE SEAL-CLEAR RTV 11 OZ.
25	.01	R4559	ADHESIVE-ANAEROBIC THREAD GR.
26	8	R7491	SCR, 6-32 X 3/8 PAN HD PHIL SS
27	.01	R7501*	ANAEROBIC ADHESIVE SHAFT GRADE
28	6	R8572	SPACER 6-32 .25 DIA X.420 LONG
29	1	R8814	CIRCUIT BREAKER, 10A 250V
30	1	R8831	SCR, 10-32 X 3/8 PH-W/W ST CD
31	1	R8835	SCR, 8-32 X 3/8 PH-W/W STL CD
32	1	R9839	FILTER, LINE 6 AMP W/IEC SKT

* = NOT SHOWN

Figure 8b VibroMet 2 Assembly Diagram Parts List

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	M6086	GROUND LABEL
2	1	R0609LWE	WSHR, EXT #8 STN STL
3	1	R0612LWE	WSHR, #10 EXTERNAL LOCK SS
4	1	R8831	SCR, 10-32 X 3/8 PH-W/W ST CD
5	1	R8835	SCR, 8-32 X 3/8 PH-W/W STL CD

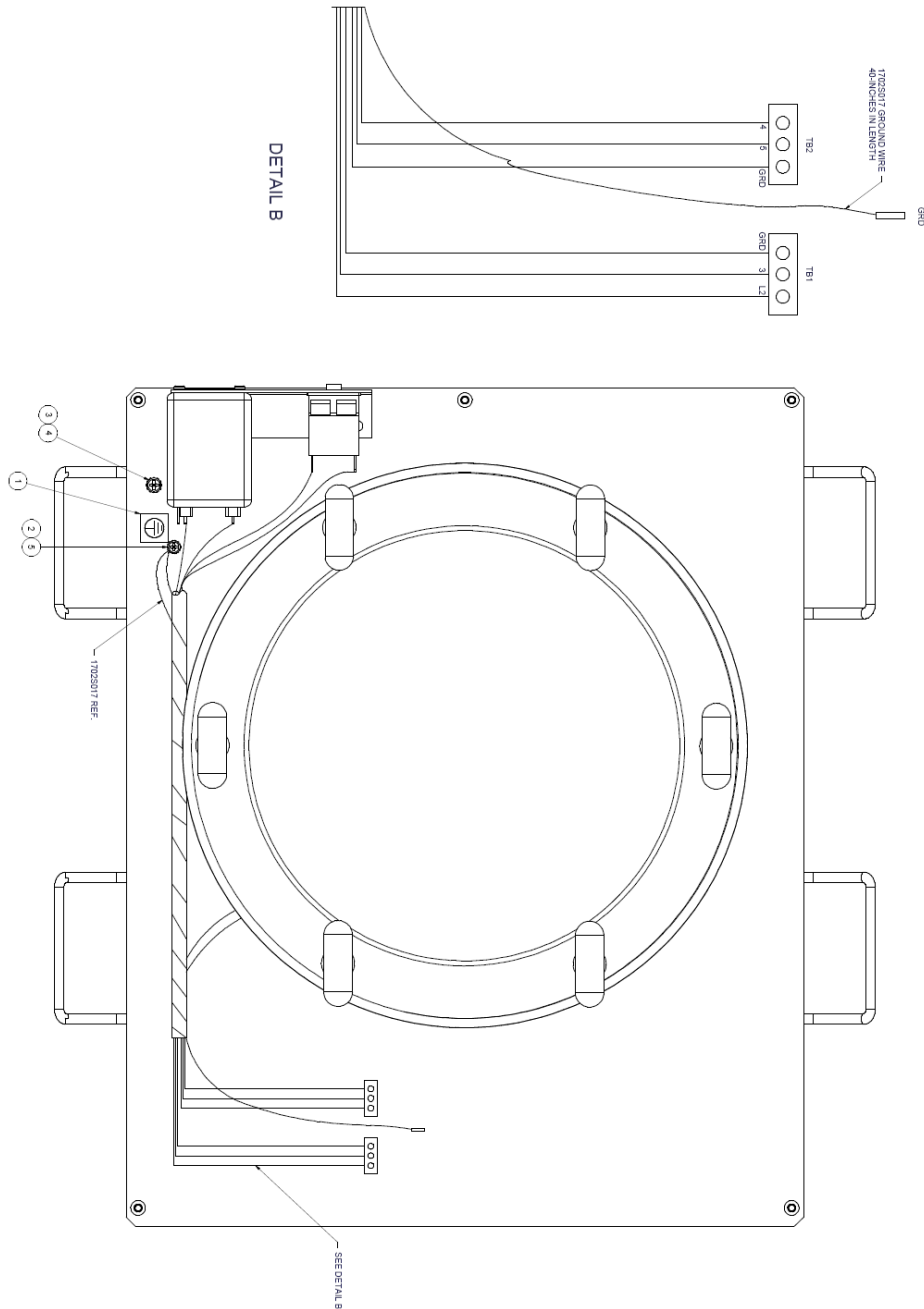


Figure 9 VibroMet 2 Assembly Diagram 2 and Parts List

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

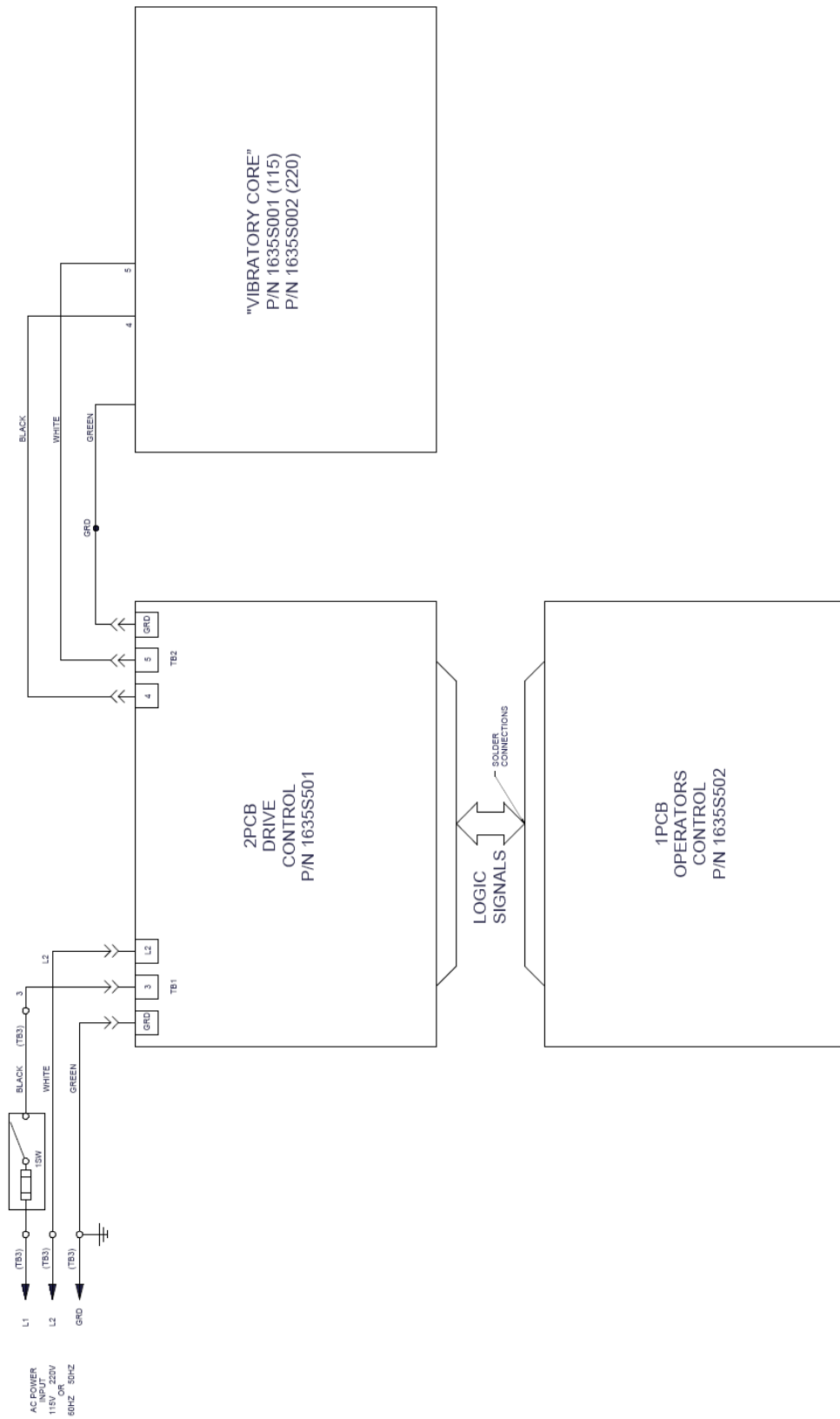


Figure 10 VibroMet 2 Electrical Diagram

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

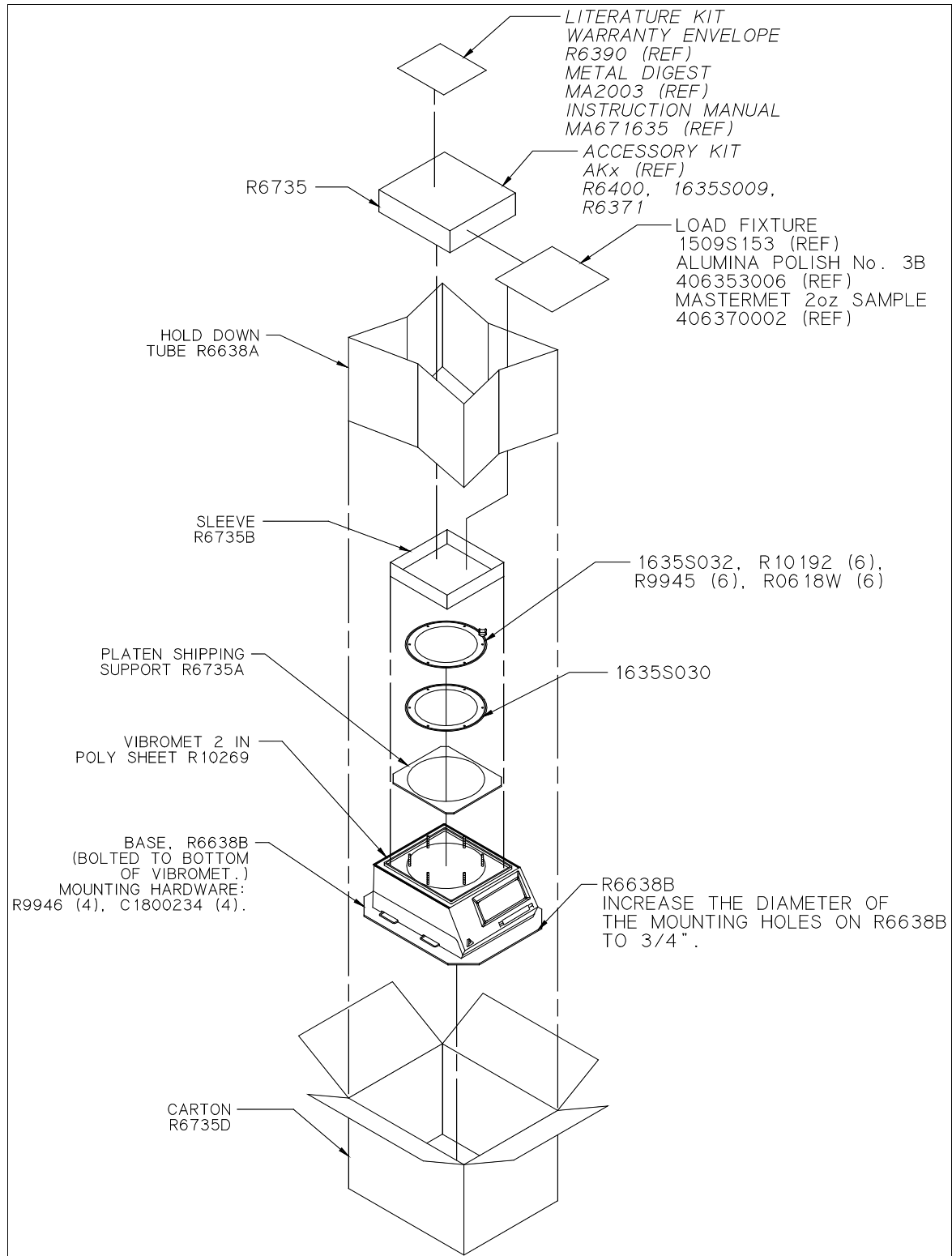


Figure 11 VibroMet 2 Packaging Diagram

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

Part Number	Description	Qty	U/M
AK#120	ACCESSORY KIT FOR 671635	1	EA
R6303	CLOTH COVER 13" X 13"	1	EA
407222	MICROCLOTH FOR 12 IN WHEEL PSA	0.1	PK
407742	MASTERTEX FOR 12 IN WHEEL PSA	0.1	PK
C1800234	WSHR, 5/16IN I.D X 1.25	4	EA
MA671635	MANUAL, INSTRUCT-VIBROMET 2	1	EA
M5001	INSUL SLIP ON LVG 16/14-.25	2	EA
R0606LW	LOCK WASHER #6 SS	8	EA
R0606W	WSHR, #6 SS	5	EA
R0609LWE	WSHR, EXT #8 STN STL	2	EA
R0612LWE	WSHR, #10 EXTERNAL LOCK SS	1	EA
R0615W	WSHR, 1/4IN SS	4	EA
R0618W	WSHR, 5/16IN SS	6	EA
R10313	SCR, M5 X 20 PAN HD PHIL SS	5	EA
R10431	WSHR, M5 FLAT SS	5	EA
R10489	STANDOFF, 1/4 HEX X 7/8, 6-32	6	EA
R11316	STUD, 5/16-18 X 3 SS	6	EA
R11317	KNOB, POLYPROPYLENE TWO ARM	6	EA
R4017A	ADHESIVE SEAL-CLEAR RTV 11 OZ.	0.01	TB
R4559	ADHESIVE-ANAEROBIC THREAD GR.	0.01	EA
R7491	SCR, 6-32 X 3/8 PAN HD PHIL SS	2	EA
R7501	ANAEROBIC ADHESIVE SHAFT GRADE	0.01	ML
R8572	SPACER 6-32 .25 DIA X.420 LONG	6	EA
R8814	CIRCUIT BREAKER, 10A 250V	1	EA
R8831	SCR, 10-32 X 3/8 PH-W/W ST CD	1	EA
R8835	SCR, 8-32 X 3/8 PH-W/W STL CD	2	EA
R9008A	CORD, IEC POWER - U.S.	0	EA
R9008B	CORD, IEC POWER - EUROPE	0	EA
R9008C	CORD, IEC POWER - U.K.	0	EA
R9008D	CORD, IEC POWER - JAPAN	0	EA
R9095	CONNECTOR, .187 MALE TAB BRASS	1	EA
R9839	FILTER, LINE 6 AMP W/IEC SKT	1	EA
R9946	SCR, 5/16-18 X 2 SOC HD CAP SS	4	EA
1180S72	NUT, 6-32 KEPS	4	EA
1635S001	VIBROMET 2 POL ASSY. 115V	1	EA
1635S009	COVER-VIBROMET 2	1	EA
1635S024	GUARD, SPLASH PCB	1	EA
1635S030	BOWL, POLISHING VIBROMET 2	1	EA
1635S032	RING, VIBROMET 2	1	EA
1635S037	CABINET-VIBROMET 2	1	EA
1635S501	PCB, DRIVE CONTROL	1	EA
1635S502	PCB, OPERATOR CONTROL	1	EA
1635S504	CABLE, PCB TO PCB INTERFACE	1	EA
1635S510	NAMEPLATE, VIBROMET	1	EA
1702S017	WIRE GROUND 40 IN	1	EA
1790S062	PLATE, BILINGUAL CAUTION	1	EA

VibroMet® 2 Assembly Drawing and Parts List

Note: Drawings and part numbers are subject to change without notice.

2780S511	CABLE, AC INPUT	1	EA
406370006	MASTERMET POLISHING SUSPENSION	1	EA
636377006	MASTERPREP SUSPENSION, 6 OZ	1	BT
671540	VIBROMET SPEC LOADING FIXTURE	1	EA

Buehler Office Addresses World Wide

Buehler USA

41 Waukegan Road
Lake Bluff, IL 60044 / USA
Tel: (847) 295 6500
Sales: (800) BUEHLER / (800) 283 4537
Fax: (847) 295 7979
Website: www.buehler.com
Export Sales: buehler.intl@buehler.com
Customer Service: custserv@buehler.com
E-mail: info@buehler.com
Technical Questions: TechSupport@buehler.com
Service E-mail: Service@buehler.com

Buehler GmbH

In der Steele 2
40599 Düsseldorf
Germany
Tel: (49) (211) 974 100
Fax: (49) (211) 974 1079
Buehler Germany Website:
www.buehler-met.de
E-mail: info@buehler-met.de
Service E-mail: service@buehler-met.de

Buehler Canada

Tel: (800) 268 3593 / (905) 430 4684
Fax: (888) 268 0371 / (905) 430 4647
Buehler Canada Website: www.buehler.ca
Email: info@buehler.ca

Buehler Canada Service

10 Carlow Court #2
Whitby, Ontario L1N 9T7
Tel: (800) 268 3593 / (905) 201 4686
Fax: (905) 201 4683
Email: info@buehler.ca

Buehler UK Service

101 Lockhurst Lane
Coventry, CV6 5SF
England
Tel: (44) 0800 707 6273
Fax: (44) 0800 707 6724
Buehler United Kingdom Website:
www.buehler.co.uk
E-mail: sales@buehler.co.uk
Service E-mail: service@buehler.co.uk

Buehler France

Tel: (33) (0) 800 89 73 71
Fax: (33) (0) 800 88 05 27
Buehler France Website: www.buehler.fr
E-mail: info@buehler.fr

Buehler France Service

69570 Dardilly, France
Tel: (04) 37 59 81 20
Fax: (04) 37 59 81 29
Email: sav@buehler.fr

Buehler South Asia / Pacific

5/R Vogue Centre
696 Castle Peak Road
Lai Chi Kok, Kowloon
Hong Kong, SAR, China
Tel: (852) 2307 0909
Buehler, Asia-Pacific Web Site:
<http://www.buehler-asia.com>
Fax: (852) 2307 0223
E-mail: info@buehler.com.hk

For all other service inquiries contact Buehler at www.buehler.com/locations/service.htm.

Notes
