

# READ THIS FIRST

**BRAKE COOLER USER GUIDE**

**MODEL 724BC-BL**





### **PERSONAL RESPONSIBILITY CODE**

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and/or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Services Association, Inc.  
P.O. Box 147, Lynnfield, MA 01940 [www.FEMSA.org](http://www.FEMSA.org)

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## USER GUIDE

This manual covers the description, cautions, operation, and maintenance of the Super Vac 724BC-BL.

 **WARNING** Please take the time to read this manual before operating the fan.

Save this guide for future reference.

## CONTENTS

|                                                |       |
|------------------------------------------------|-------|
| 1. BREAKAGE OR DAMAGE DURING SHIPMENT .....    | 2     |
| 2. GENERAL DESCRIPTION AND SPECIFICATIONS..... | 3     |
| 3. PRODUCT SAFETY PRECAUTIONS .....            | 3     |
| 4. BEFORE OPERATING BRAKE COOLER .....         | 4     |
| 5. OPERATION .....                             | 4     |
| 6. CHARGING THE BATTERY PACKS.....             | 5     |
| 7. MAINTENANCE AND REPAIR.....                 | 5     |
| 8. WARRANTY.....                               | 6     |
| 9. CONTACT INFORMATION.....                    | 7     |
| 10. EXPLODED VIEWS AND PARTS .....             | 8-11  |
| ADJUSTMENT STAND .....                         | 8-9   |
| POWER HEAD .....                               | 10-11 |
| BRAKE COOLER.....                              | 12-13 |

## **1. Breakage or Damage During Shipment**

The transportation company is fully responsible for all shipping damage and will resolve problems promptly if you handle it correctly. Please read these instructions carefully.

Examine the contents of all shipping cases. If you find any damage, call your transportation agent at once and have them make a description on the freight or express bill describing the damage and the number of pieces. Then write us and we will send you the original bill of lading. Get a claim blank from the express or truck company. Fill the claim form out. Attach the claim blank to the original bill of lading together with a copy of our invoice. Attach a memo on which you show the value of the damaged goods. Mail or hand these papers to your local transportation agent. They will process your claim with reasonable promptness.

Please note, we cannot and will not enter claims for damages. If we filed claim here, it would be sent to your local freight agent for verification and investigation. This time can be saved by your filing the claim directly. Every consignee is on the ground floor and in contact with the local agent who inspects the damaged goods, and thus, each claim can be given individual attention.

Since our goods are packed to comply with the regulations of all railroad, truck, and express companies, we cannot allow deduction from any invoice because of any damage, however, be sure to file your claim promptly. Our goods are sold F.O.B. factory. We take receipt from the transportation company certifying that the goods were delivered to them in good order, and our responsibility ceases.

It is seldom that any breakage or damage occurs in any of our shipments, and in no case will the customer be out any expense if they follow the above instructions.

Be sure to keep all damaged goods subject to examination of the truck or express company inspector, who may call on you some time later. These damaged goods, of course, will belong to them, and they will inform you what to do with them. If you dispose of these damaged goods, your claim may not be paid.

## 2. General Description and Specifications

Super Vac brake coolers are specifically designed to provide a convenient and portable source of air.

| Model #  | RPM  | Voltage           | Motor                            | H x W x D         | Weight |
|----------|------|-------------------|----------------------------------|-------------------|--------|
| 724BC-BL | 3000 | 18V DC or 115V AC | Totally Enclosed Air Over (TEAO) | 37" x 28.5" x 24" | 86 lbs |

*Specifications are subject to change without notification. Refer to model decal affixed to brake cooler to determine actual specifications. For units not supplied with shore power option, disregard 115V AC references.*

This brake cooler is designed for high powered air movement.

## 3. Product Safety Precautions

- Do not use the brake cooler for purposes other than its intended use.
- Wear eye and ear protection when operating the brake cooler.
- Never operate brake cooler while fatigued.
- Do not disassemble or modify the brake cooler in any way. Doing so may lead to mechanical failure or personal injury.
- Do not wear loose clothing that could become entangled in the operating brake cooler.
- Never permit anyone to operate brake cooler without proper instruction.
- Do not operate brake cooler without proper inlet or outlet guards in place. If guards are missing or damaged, contact factory for replacements.
- Do not place fingers or other foreign objects through inlet or outlet guards. Should a foreign object enter the brake cooler, immediately stop motor. Be certain all mechanical motion has stopped. Disconnect battery plug wire from IonPac2.0 before removing foreign object.
- Do not use with any power voltage other than the indicated voltage.
- Never handle energized power cords with wet hands.
- Do not place or operate brake cooler on unsteady tables, slanted surfaces or other unstable surfaces. Never use this brake cooler in any explosive environment.
- Never let extension cords or plug connection lay in water. Locate the brake cooler so that it cannot fall into water inadvertently.

### 4. Before Operating Ventilator

- Always operate/charge this brake cooler with a proper Milwaukee M18 battery or 115V/230V, 60 & 50 Hertz power source.
- Never use power cords with frayed, cut, or brittle insulation.
- **⚠ CAUTION** A complete inspection of the brake cooler should be made prior to operation.
- Inspect power cord plug for sound connections.
- **⚠ CAUTION** Check all threaded fasteners for proper tightness
- Inspect inlet and outlet guards for damage or missing pieces. Replace damaged or missing guards before operating brake

### 5. Operation

- **⚠ WARNING** Use caution not to direct toxic fumes into confined spaces with the brake cooler.
- Insert a Milwaukee M18 battery until it clicks. Only a single battery is necessary for operation.
- Battery removal will get easier with more remove/replace cycles. The Battery Adapter & M18 Battery interface is required by Milwaukee.
- Fan will need to be reset (turned off & on) if a new battery is inserted.
  - If fan is not reset, then the fan will not recognize the new battery and run until previous battery is empty.
- If using shore (mains) power, use an extension cord to connect to 110 – 240V AC.
- Press and hold power button until blue backlight indicates powering up.
- When the fan is on, it will need to run at the minimum speed allowed by Milwaukee. (This feature is to protect the batteries from small parasitic draws)
- Turn speed control clockwise until desired speed is reached.
- Power button will indicate approximate power left. (It is normal for colors to flicker back and forth if 2 batteries are being used)
  - Green: 50 - 100%
  - Yellow: 20 - 50%
  - Red: 0 - 20% (Low Battery Warning: Front Facing LED will also flash if turned on)
- To turn off, press and hold power button until blue backlight shows.



## 6. Charging the Battery Pack

- Remove Milwaukee batteries from fan.
- **⚠ CAUTION** Insert in Milwaukee Charger. Use only Milwaukee brand battery chargers.
- When the battery pack temperature is outside the charging range (40-105°F or 5-40°C), the red light on the charger will flash and the battery will not charge.
- Once the battery pack is within the acceptable temperature range, normal charging will take place.
- Using the Milwaukee SuperCharger™, a 12 Amp hour battery will recharge in 60 minutes and an 8 Amp hour battery will recharge in 40 minutes.
- Other Milwaukee chargers, including units that work with vehicle DC power, may take longer to fully charge the batteries.

## 7. Maintenance and Repair

**⚠ CAUTION** Maintenance should only be performed by experienced and trained personnel. If you have any questions, contact Super Vac before attempting any maintenance at [info@supervac.com](mailto:info@supervac.com) or 1-800-525-5224.

### To-Do Checklists:

#### Daily/After Each Use:

- Charge batteries completely
- Check that Guards are undamaged and effectively prevent objects from contacting the blade
- Wheels and feet are in place and tight
- Tilt Mechanism works properly
  - If tilt adjust is too loose, tighten knurled nut on the Tilt Mechanism.
  - For larger adjustments, tighten nut with 9/16" (14mm) wrench.

#### Weekly/Monthly/Quarterly:

- Calibrate Battery
  - Fully charging, then fully discharging, and fully charging once again before storage
  - Replace battery (-ies) if battery shows signs of damage from dropping or excessive heat
- Check for loose fasteners
- Check condition of the power cord (if purchased with Shore Power) (14mm) wrench.

#### Yearly:

- Battery Condition
  - Check runtime in low wind and average temperature conditions
  - If runtime is below 75% of advertised runtime, replacing batteries is recommended
- Excessive vibration
  - Blade imbalance due to accumulation of dirt on blade
- Check Blade interference
  - Remove front guard and rotate manually to check for interference

## **8. Warranty**

Milwaukee products carry a separate 3-year limited warranty for the compatible battery packs, chargers and ODM battery adapter. For more information contact them at [www.milwaukeeetool.com](http://www.milwaukeeetool.com) or 1-800-729-3878.

Super Vacuum Manufacturing Company warrants that the equipment is free from defects in materials and workmanship when used and operated for a period of five years, excluding the motor which has a 3-year warranty. The responsibility of Super Vacuum Manufacturing Company under this limited warranty is limited to the repair and replacement of any parts which are found defective and which are returned to Super Vacuum Manufacturing Company at 3842 Redman Dr, Fort Collins, CO 80524 with transportation charges prepaid (C.O.D. shipments will not be accepted).

Prior to returning defective parts to SUPER VACUUM MANUFACTURING COMPANY, the original purchaser shall make a claim in writing to SUPER VACUUM MANUFACTURING COMPANY at the above address indicating the model number and type of defect. No parts or equipment will be received by SUPER VACUUM MANUFACTURING COMPANY for repair or replacement under this warranty without specific written authority from it in advance.

Any parts damaged by improper installation, overloading, abuse or accident of any type or cause are not covered by this warranty.

All equipment manufactured by us is pre-run and tested before leaving our plant and is shipped in good working order and condition. We therefore extend to the original purchasers the following Limited Warranty for the period of five years from the original date of purchase:

1. This warranty does not apply to defects caused by accident, misuse, neglect, or wear and tear, nor can we be held responsible for incidental and consequential expense and loss, nor does this warranty apply to equipment where alterations have been executed without our knowledge or consent. These conditions are readily discernible when the equipment is returned to us for inspection.
2. On all component parts not manufactured by SUPER VACUUM MANUFACTURING COMPANY, their warranty is to the extent that the manufacturer of such component warrants them to SUPER VACUUM MANUFACTURING COMPANY, if at all. Look in your local business phone directory for the nearest repair station for the brand of parts you have or write to us for the address.
3. If equipment received is found to have been damaged in transit, a claim should be made against the carrier within three days, as we assume no responsibility for such damage.
4. Any service other than our Authorized Service voids this warranty.
5. This warranty is in lieu of and is intended to exclude all other warranties, express or implied, oral or written, including any warranties of MERCHANTABILITY or FITNESS for a particular purpose.



## 9. Contact



For parts or service information, contact:

**Super Vacuum Manufacturing Company, Inc.**

3842 Redman Dr.  
Fort Collins, CO 80524

Phone: 800-525-5224  
970-297-7100

Fax: 970-297-7099

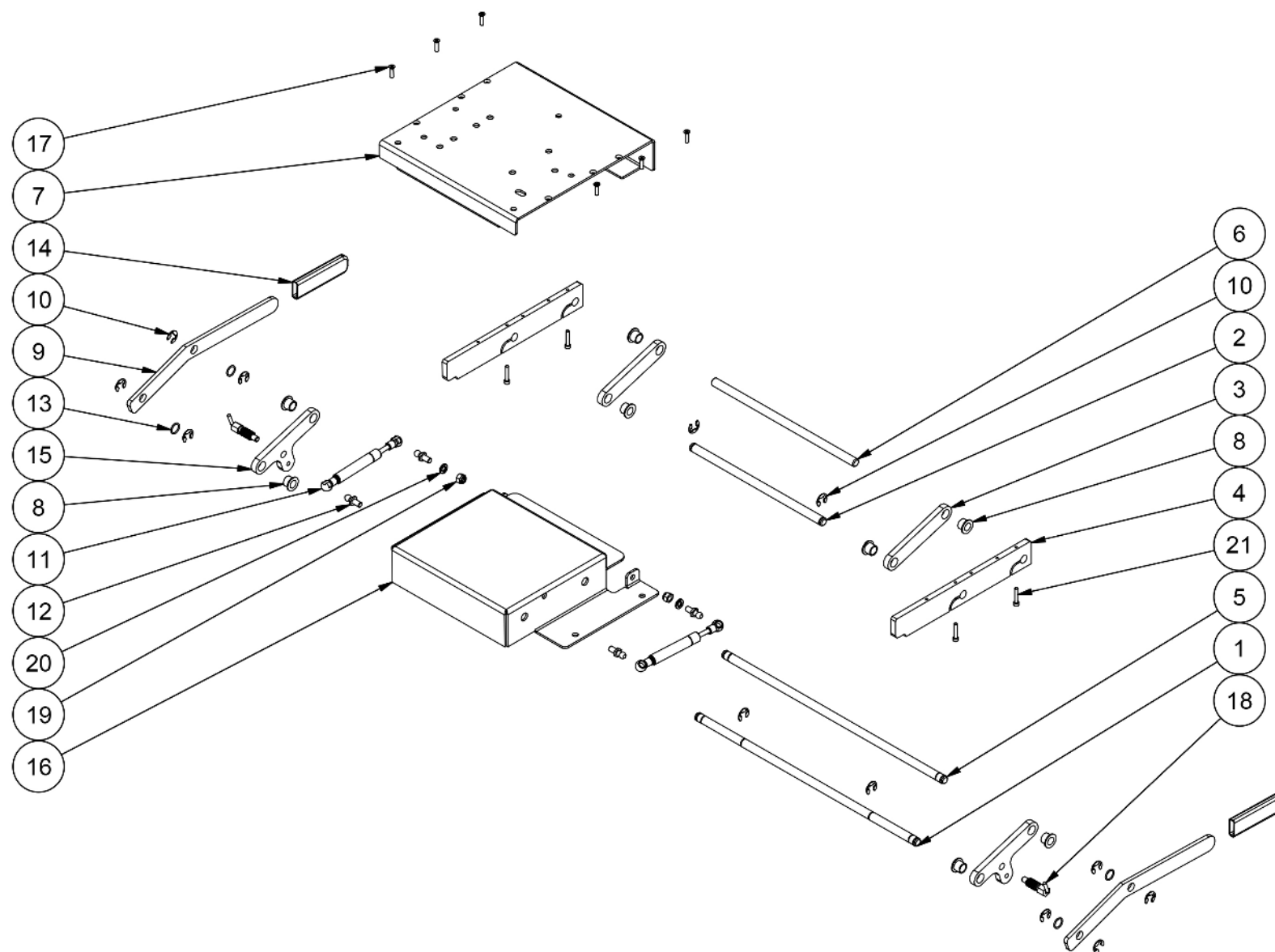
Email : info@supervac.com  
Internet: www.supervac.com

## 10. Exploded Views and Parts: Adjustment Stand

| ITEM | QTY | PART#     | DESCRIPTION                           |
|------|-----|-----------|---------------------------------------|
| 1    | 1   | 018-16203 | SHAFT, BOTTOM FRONT, BRAKE COOLER     |
| 2    | 1   | 018-16200 | SHAFT, BOTTOM REAR, BRAKE COOLER      |
| 3    | 2   | 018-16204 | BRACKET, TILT, BRAKE COOLER           |
| 4    | 2   | 018-16207 | MOUNT, PIVOT, BRAKE COOLER            |
| 5    | 1   | 018-16202 | SHAFT,TOP FRONT, BRAKE COOLER         |
| 6    | 1   | 018-16201 | SHAFT,TOP REAR                        |
| 7    | 1   | 018-16208 | TOP PLATE, TILT, BRAKE COOLER         |
| 8    | 8   | 065-13846 | BUSHING, 5X 75X .03125 THERM. POLYMER |
| 9    | 2   | 018-16206 | HANDLE, MOUNT, BRAKE COOLER           |
| 10   | 12  | 018-16212 | E-Ring, 5133-50, .044T, SS            |
| 11   | 2   | 023-15314 | GAS SPRING                            |

| ITEM | QTY | PART#     | DESCRIPTION                           |
|------|-----|-----------|---------------------------------------|
| 12   | 4   | 023-15313 | MOUNT, GAS SPRING                     |
| 13   | 4   | 018-16213 | ORING,ID 0.551,SIZE 0.551,AS568A-015  |
| 14   | 2   | 008-10211 | CAP, NEOPRENE, BLACK                  |
| 15   | 2   | 018-16205 | BRACKET, TILT, BRAKE COOLER           |
| 16   | 1   | 018-16209 | BASE, TILT, BRAKE COOLER              |
| 17   | 6   | 032-10709 | SCREW,FHPMS,10-24 UNC x 3/4 in,SS     |
| 18   | 2   | 018-16195 | PLUNGER, RETRACTABLE, 1/2" - 13X1", S |
| 19   | 2   | 032-10789 | NUT,NYLOCK, 5/16-18 UNC,SS            |
| 20   | 2   | 032-10787 | WASHER,LOCK,SPRING,REGULAR, 5/16", SS |
| 21   | 4   | 032-10710 | SCREW,SHCS,10-24x1,SS                 |

# Exploded View: Adjustment Stand

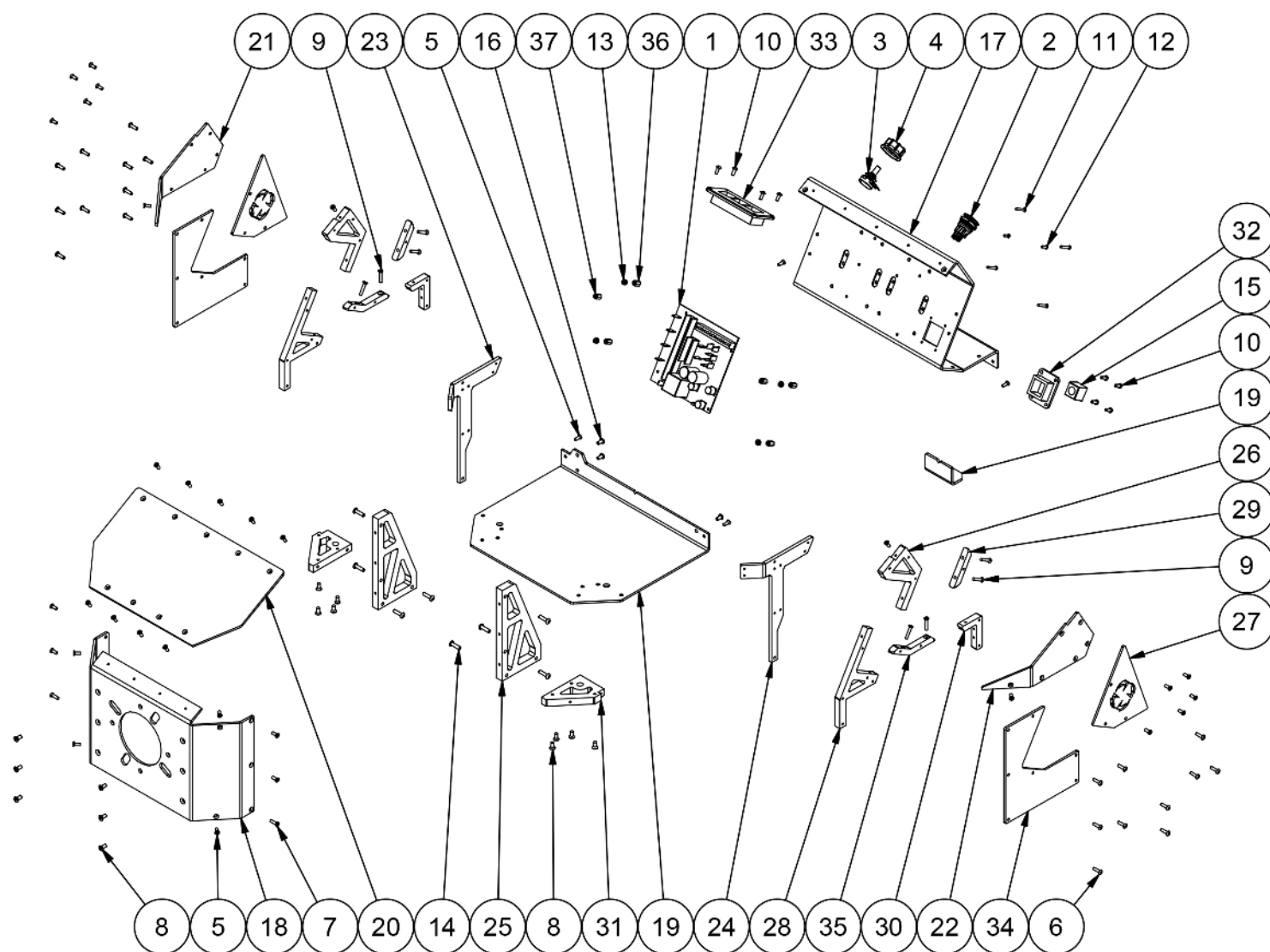


## Parts List: Power Head

| ITEM | QTY | PART#     | DESCRIPTION                                      |
|------|-----|-----------|--------------------------------------------------|
| 1    | 1   | 021-10514 | CONTROLLER, HG, 18V / 36V DC MOTOR               |
| 2    | 1   | 005-13562 | SWITCH, MOMENTARY, RGB, V1X-BX                   |
| 3    | 1   | 005-10268 | POTENTIOMETER, V1X-BX                            |
| 4    | 1   | 005-10267 | KNOB, POTENTIOMETER, V1X-BX                      |
| 5    | 35  | 032-21087 | SCREW, 6-32 UNC X 3/8 in, PFMS, SS, BLACK, PATCH |
| 6    | 20  | 032-21360 | SCREW, 6-32 UNC X 1/2 in, BHCS, SS, BLACK, PATCH |
| 7    | 2   | 032-21088 | SCREW, 6-32 UNC X 1/2 in, PFMS, SS, BLACK, PATCH |
| 8    | 14  | 032-21818 | SCREW, 8-32 UNC X 3/8 in, PFMS, SS, BLACK, PATCH |
| 9    | 8   | 032-21090 | SCREW, 6-32 UNC X 3/4 in, PFMS, SS, BLACK, PATCH |
| 10   | 8   | 032-21359 | SCREW, 6-32 UNC X 3/8 in, BHCS, SS, BLACK, PATCH |
| 11   | 4   | 032-20291 | SCREW, 4-40 UNC X 3/4 in, PFMS, SS, BLACK        |
| 12   | 2   | 032-20288 | SCREW, 4-40 UNC X 3/8 in, PFMS, SS, BLACK        |
| 13   | 4   | 032-10123 | NUT, 4-40, ZINC                                  |
| 14   | 8   | 032-22092 | SCREW, 8-32 UNC X 5/8 in, BHCS, SS, BLACK, PATCH |
| 15   | 1   | 005-18014 | SEAL, CONTA-CLIP - 10MM                          |
| 16   | 3   | 032-27592 | SCREW, M4X0.7 ANSI M, 8mm, BHCS, SS, BLACK       |
| 17   | 1   | 018-16232 | PLATE, BATTERY SUPPORT WALL 724BCBX              |
| 18   | 1   | 018-16231 | PLATE, MOTOR 724BCBX                             |
| 19   | 1   | 018-16216 | WLDMNT, BASE PLATE 724BCBX                       |

| ITEM | QTY | PART#     | DESCRIPTION                        |
|------|-----|-----------|------------------------------------|
| 20   | 1   | 018-16233 | PLATE, TOP COVER 724BCBX           |
| 21   | 1   | 018-16219 | PLATE, TOP RIGHT CORNER 724BCBX    |
| 22   | 1   | 018-16220 | PLATE, TOP LEFT CORNER 724BCBX     |
| 23   | 1   | 018-16221 | PLATE, T GUSSET RIGHT 724BCBX      |
| 24   | 1   | 018-16222 | PLATE, T GUSSET LEFT 724BCBX       |
| 25   | 2   | 018-16227 | PLATE, MOTOR GUSSET 724BCBX        |
| 26   | 2   | 018-16226 | BLOCK, TOP SUPPORT 724BCBX         |
| 27   | 2   | 018-16217 | PLATE, HEAT SHIELD 724BCBX         |
| 28   | 2   | 018-16225 | BLOCK, LOWER SUPPORT 724BCBX       |
| 29   | 2   | 018-16224 | BLOCK, HEAT SHIELD UPPER 724BCBX   |
| 30   | 2   | 018-16223 | BLOCK, PWR SUPPLY COVER 724BCBX    |
| 31   | 2   | 018-16228 | PLATE, MOTOR BOLT 724BCBX          |
| 32   | 1   | 005-18061 | PLASTIC, 1-HOLE PASS-THROUGH       |
| 33   | 1   | 005-18060 | PLASTIC, 3-HOLE PASS-THROUGH       |
| 34   | 2   | 018-16218 | PLATE, SIDE FULL COVER 724BCBX     |
| 35   | 2   | 018-16234 | BLOCK, HEAT SHIELD, LOWER, 724BCBX |
| 36   | 4   | 032-10166 | FEMALE, THREADED HEX, STANDOFF     |
| 37   | 2   | 032-10167 | NYLON, 6 6, PLASTIC, HEX, STANDOFF |

# Exploded Views: Power Head

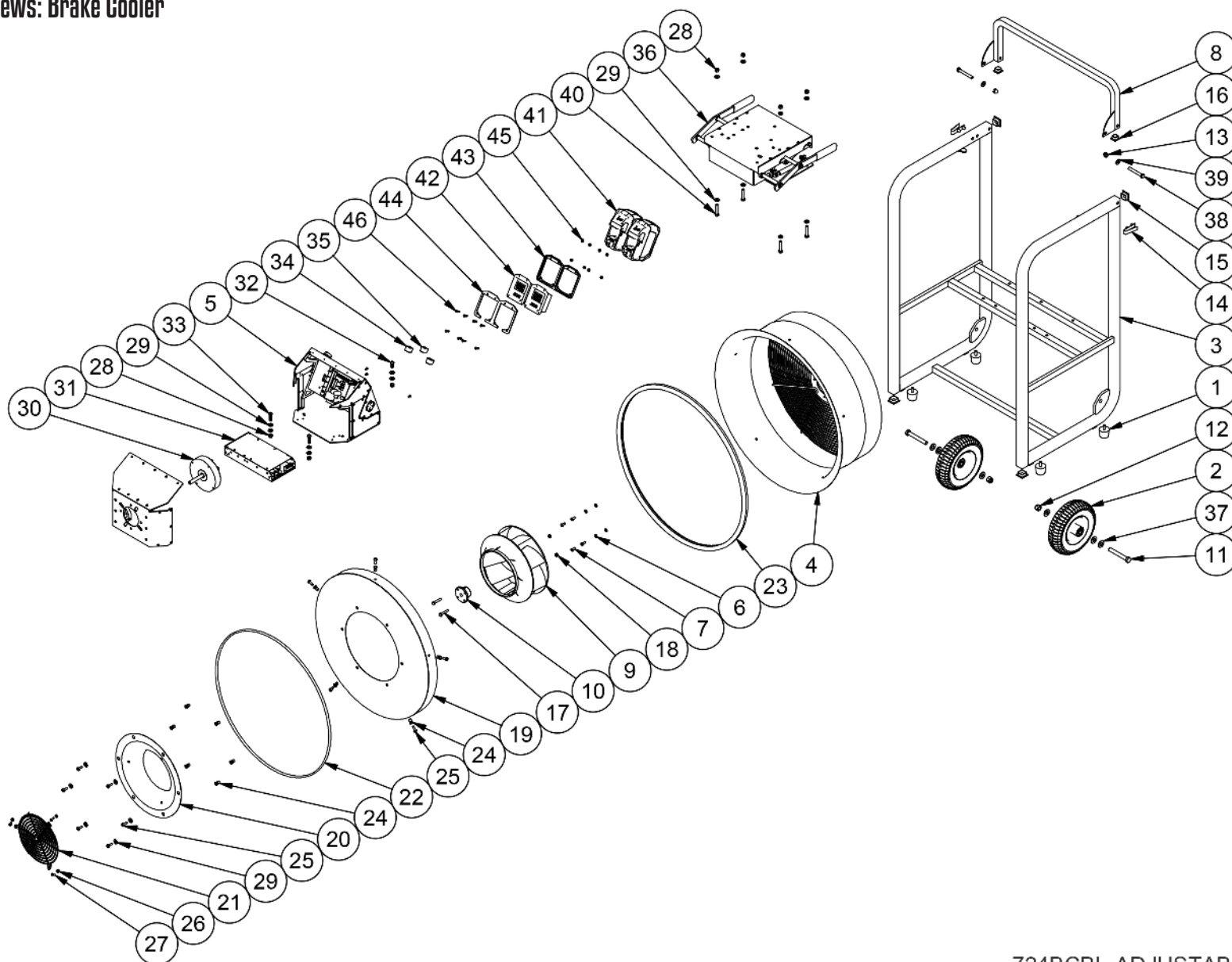


## Parts List: Brake Cooler

| ITEM | QTY | PART#     | DESCRIPTION                                        |
|------|-----|-----------|----------------------------------------------------|
| 1    | 4   | 024-13473 | FEET RUBBER CONE SHAPE, PPV                        |
| 2    | 2   | 008-13374 | WHEEL, 8 INCH                                      |
| 3    | 1   | 018-15019 | FRAME, ADJ BRAKE COOLER, 724BCBX                   |
| 4    | 1   | 018-16194 | WLDMNT, SHROUD 724BCBX                             |
| 5    | 1   | 018-16238 | POWER HEAD, BRAKE COOLER, 724BCBX                  |
| 6    | 4   | 032-24440 | WASHER, 1/4-20, SPLIT LOCK, S, ZINC                |
| 7    | 4   | 032-24285 | SCREW, 1/4-20 UNC X 5/8 in, BHCS, SS, BLACK, PATCH |
| 8    | 1   | 018-16198 | HANDLE, BRAKE COOLER, 724                          |
| 9    | 1   | 003-14149 | BLADE, PROPELLER, BRAKE COOLER                     |
| 10   | 1   | 008-14171 | BUSHING, BLADE, H 12MM, 724BC-BD/BL                |
| 11   | 2   | 032-24498 | SCREW,HH,1/2-20x3-3/4,SS                           |
| 12   | 2   | 032-18802 | NUT, 1/2, NYLOC, G8                                |
| 13   | 2   | 032-14559 | NUT,ACORN, 3/8-16 UNC, SS                          |
| 14   | 2   | 008-10192 | SPRING, A-180-S VALCO 40 PCS. PER LB.              |
| 15   | 4   | 008-10190 | PLUG, FINISHING, 1 1/4 SQ, RIBBED, BLACK           |
| 16   | 2   | 008-10189 | PLUG, FINISHING SQ RIBBED, BLACK 1"                |
| 17   | 2   | 032-10735 | SCREW,HH,1/4-20x1-1/2,SS                           |
| 18   | 2   | 032-24435 | NUT, 1/4-20 UNC, HEX, S, ZINC                      |
| 19   | 1   | 018-14035 | PLENUM, INTAKE, 724BC                              |
| 20   | 1   | 003-14150 | BLADE, INLET CONE, BRAKE COOLER                    |
| 21   | 1   | 018-16237 | WELDMNT, FRONT GUARD, 724BCBX                      |
| 22   | 1   | 018-16192 | PLENUM, RUBBER RING, 724BCBX                       |
| 23   | 1   | 018-16193 | SHROUD, RUBBER RING, 724BCBX                       |

| ITEM | QTY | PART#     | DESCRIPTION                             |
|------|-----|-----------|-----------------------------------------|
| 24   | 11  | 034-11232 | NUTSERT, TSN RIBBED, 1/4-20,CL          |
| 25   | 11  | 032-10727 | SCREW,PHP,1/4-20 UNCx0.75               |
| 26   | 3   | 032-22974 | NUT, 10-24 UNC, NYLOC HEX, S, ZINC      |
| 27   | 3   | 034-10963 | SCREW,PHP,10-24 UNCx0.5                 |
| 28   | 7   | 032-10789 | NUT,NYLOCK, 5/16-18 UNC,SS              |
| 29   | 20  | 032-24499 | WASHER,FLAT,SAE, 5/16", SS              |
| 30   | 1   | 021-10523 | MOTOR, 1 HP TEO, 48VDC, V1X-BX          |
| 31   | 1   | 005-15355 | POWER SUPPLY, 750W, 24V, V1X-BX         |
| 32   | 1   | 032-24492 | SCREW,5/16-18 UNC X 7/8 in, BHCS, SS    |
| 33   | 2   | 032-24493 | SCREW, 5/16-18 UNC X 1-1/4 in, BHCS, SS |
| 34   | 2   | 005-18013 | SEAL, CONTA-CLIP - 2x5MM                |
| 35   | 1   | 005-18011 | SEAL, CONTA-CLIP - 2MM                  |
| 36   | 1   | 018-15050 | BRAKE COOLER, ADJUSTMENT, 724BCBX       |
| 37   | 6   | 032-24497 | WASHER,FLAT,SAE, 1/2", SS               |
| 38   | 2   | 032-24496 | SCREW,HH,3/8-16x2-3/4,SS                |
| 39   | 2   | 032-24495 | WASHER,FLAT,SAE, 3/8", SS               |
| 40   | 4   | 032-24494 | SCREW,HH,5/16-18x1-3/4,SS               |
| 41   | 2   | 005-16100 | BATTERY, MILWAUKEE, 12AH, V1X-BX        |
| 42   | 2   | 005-16103 | ADAPTER, MILWAUKEE, ODM, V1X-BX         |
| 43   | 1   | 019-20287 | MILWAUKEE_BATTERY_MOUNT_LOWER           |
| 44   | 1   | 019-20288 | MILWAUKEE_BATTERY_MOUNT_SPACER          |
| 45   | 8   | 032-22242 | NUT, 8-32 UNC, HEX, S, ZINC             |
| 46   | 8   | 032-22250 | SCREW, 8-32 UNC X 11/16 in, PPMS, SS    |

# Exploded Views: Brake Cooler



724BCBL-ADJUSTABLE