

READ THIS FIRST

BRAKE COOLER USER GUIDE

MODEL 724BC-BK





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

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USER GUIDE

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

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

Save this guide for future reference.

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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-BK	3000	36V 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 Brake Cooler

- Always operate/charge this brake cooler with proper Makita® XGT™ batteries 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 cooler.

5. Operation

- **WARNING** Use caution not to direct toxic fumes into confined spaces with the brake cooler.
- Insert two Makita XGT batteries until they click. Both batteries are necessary for operation.
- Battery removal will get easier with more remove/replace cycles.
- 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 Makita.
(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

- Remove Makita batteries from fan.
- **⚠ CAUTION** Insert in Makita Charger. Use only Makita 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 Makita AC Fast Charger, an 8 Amp hour battery will recharge in 70 minutes, a 5 Amp hour battery will recharge in 50 minutes and a 4 Amp hour battery will recharge in 45 minutes.
- Other Makita 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 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

Makita products carry a separate 3-year limited warranty for the compatible battery packs and chargers. For more information contact them at www.makitatools.com or 1-800-4-MAKITA.

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

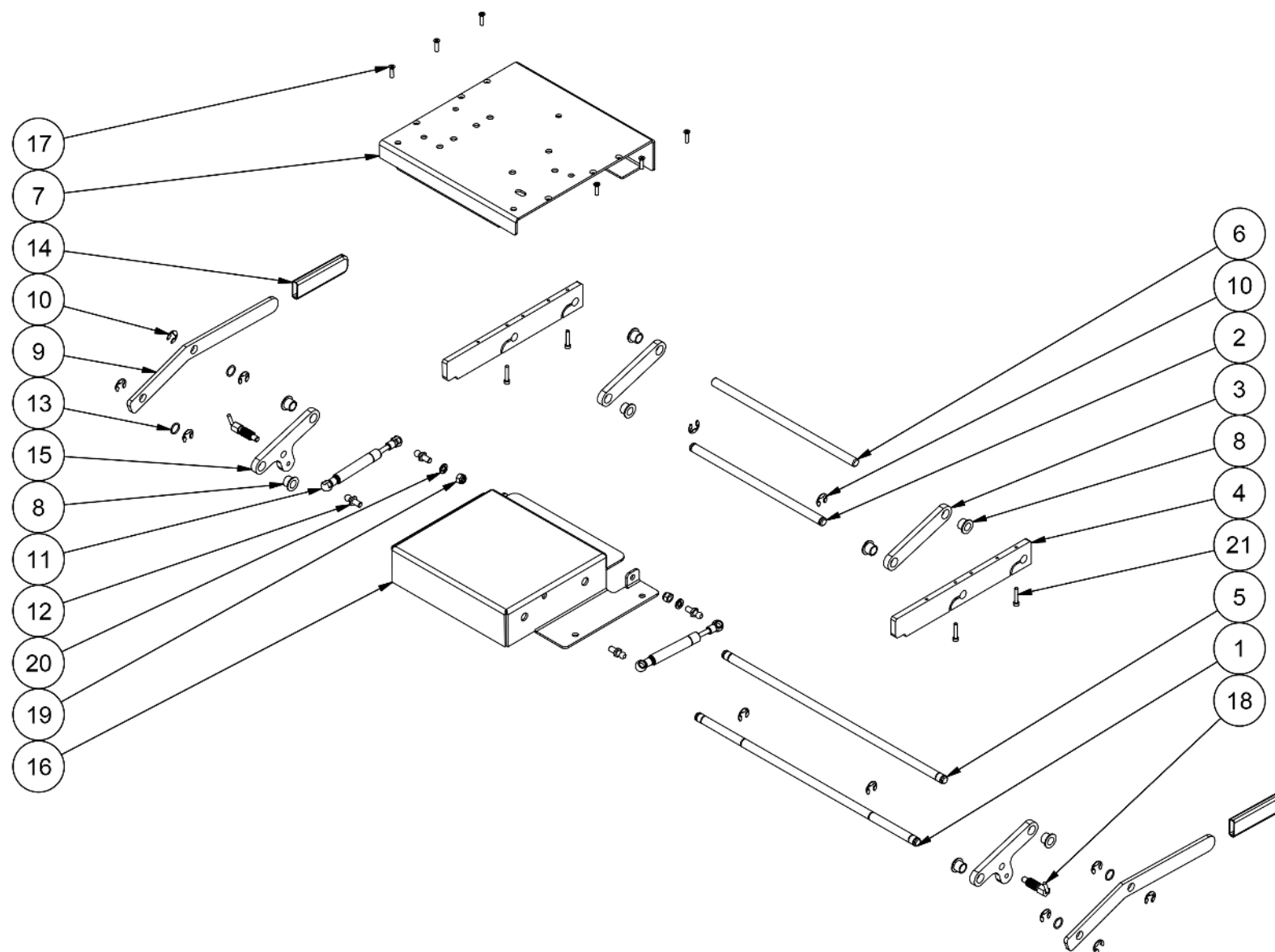
Email : info@supervac.com
Internet: www.supervac.com

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

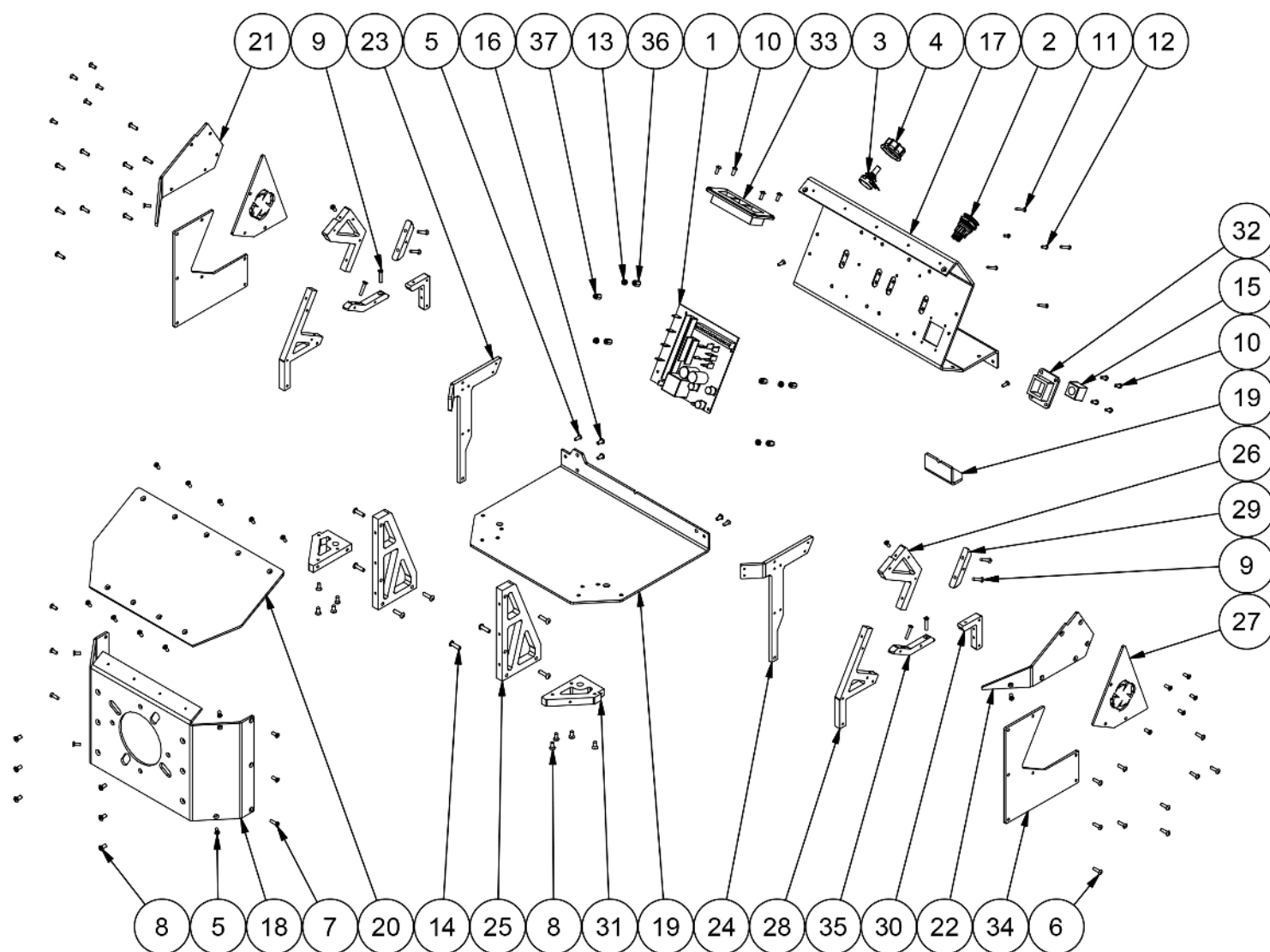


Parts List: Power Head

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	WELDMENT, FRONT GUARD, 724BCBX
22	1	018-16192	PLENUM, RUBBER RING, 724BCBX
23	1	018-16193	SHROUD, RUBBER RING, 724BCBX
24	11	034-11232	NUTSERT, TSN RIBBED, 1/4-20,CL
25	11	032-10727	SCREW,PHP,1/4-20 UNCx0.75

ITEM	QTY	PART#	DESCRIPTION
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	1	021-10523	MOTOR, 1 HP TEAO, 48VDC, V1X-BX
30	1	005-15355	POWER SUPPLY, 750W, 24V, V1X-BX
31	1	032-24492	SCREW,5/16-18 UNC X 7/8 in, BHCS, SS
32	2	032-24493	SCREW, 5/16-18 UNC X 1-1/4 in, BHCS, SS
33	2	005-18013	SEAL, CONTA-CLIP - 2x5MM
34	1	005-18010	SEAL, CONTA-CLIP - BLANK
35	1	018-15050	BRAKE COOLER, ADJUSTMENT, 724BCBX
36	1	005-18030	ADAPTER DUAL, BATTERY MAKITA XGT
37	4	005-15345	SPACER, BATTERY, DEWALT, V1X-BK
38	2	005-18032	ADAPTER PLUG, BATTERY MAKITA XGT
39	4	005-14090	TERMINAL, ELECTRIC RING, #10, 10-12
40	4	005-18042	TAB, ELECTRICAL XGT, VXX-BK
41	8	032-21006	SCREW, 6-32 UNC X 7/8 in, PFMS, SS
42	8	032-21274	SCREW, 6-32 UNC X 3/8 in, BHCS, SS
43	8	"032-21517"	WASHER, 6-32, INTERNAL STAR, S, ZINC
44	6	"032-24497"	WASHER,FLAT,SAE, 1/2", SS
45	2	"032-24496"	SCREW,HH,3/8-16x2-3/4,SS
46	2	"032-24495"	WASHER,FLAT,SAE, 3/8", SS
47	4	"032-24494"	SCREW,HH,5/16-18x1-3/4,SS
48	20	"032-24499"	WASHER,FLAT,SAE, 5/16", SS
49	2	"005-16111"	BATTERY, MAKITA XGT, 5.0Ah
50	8	"032-22091"	SCREW, 8-32 UNC X 1/2 in, BHCS, SS, BLACK, PATCH

Exploded Views: Brake Cooler

