

OSKAR Direct-Drive Blower

General Safety Information

MACHINE WARNING SIGNS



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



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



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

Used without the safety alert symbol (⚠) indicates potentially hazardous situation which, if not avoided, may result in property damage.



Warning of electric shock



Do not expose the equipment to rain or use in damp locations.



Figure 1



Do not use the equipment around flammable products, if not avoided, sparks can ignite vapors from flammable products. Read and understand all warnings and operating instructions before using this equipment. Failure to follow all instructions may result in electric shock, fire, and/or serious personal injury or property damage.



Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.



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Specifications

Motor	3 HP (2,237.1 W)
Air Volume (C.F.M.)	1917 Ft ³ /Min (54.3 M ³ /Min)
Arm Port Size	Ø6" x 2 holes (15.24 cm)
.....	Ø8" x 1 hole (20.32 cm)
Packing Size (L x W x H)	28.9" x 27" x 29.3" (73.5 x 68.5 x 74.5 cm)
Net Weight	163.1 lbs (74 kgs)
Gross Weight	229.2 lbs (104 kgs)

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(Continued)



Use this product carefully to effectively avoid any possible danger. Observe the following safety regulations to avoid bodily injury due to electrocution during use.

Read this Manual carefully before operating the product and preserve the Operation Manual properly.

1. Keep work area clean and organized.
 - A disorderly working environment will cause inconvenience and danger during operation.
2. Check if the working environment is suitable for using the product.
 - Do not use the product in a humid environment.
 - Use the product in a good working environment to reduce risks.
 - Do not use the product in a flammable gas or liquid environment to avoid danger.
3. Keep other persons away from the product, except for the operator, to avoid danger.
 - Do not let children get close to the product. All wires used by the product shall be in a safe location to prevent children from touching them.
4. All tools shall be safely stored.
 - When the tools are not used, please store them in a dry place safely beyond the reach and access of children.
5. If the machine breaks down, contact a service technician. Do not attempt to repair and possibly damage the machine.
6. When using the product, be sure to put on a welding suit and mask.
7. Use the electrical wires correctly.
 - During use, do not drag the electrical wires forcefully. Do not use these wires if fraying or current leakage occurs to avoid injury to the operator.
8. Before replacing parts, shut off power to the machine.
 - Check that the switch is in "on" or "off" position. Do not attempt the replacement when the machine is

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running. To replace parts or filter material, make certain that the switch is "off".

9. Use the power cord correctly. The total length of power cord shall not exceed 10 feet to avoid low power due to a drop in voltage and to prevent a possible hazard.



When connecting the product,

always follow the instructions in the Operation Manual to avoid injuries.

10. Care and Maintenance:

- Confirm that the parts/accessories have been fully assembled and will not adversely affect the machine operation.
- Check if the machine is operated properly.
- Replace damaged parts or accessories according to the instructions of the Manual. If the said instructions are not specified in the Manual, have a professional technician carry out the maintenance or replacement.
- Check that the electrical specifications of this machine meet safety requirements, and that the maintenance is carried out by a

professional technician. Use original manufacturer's parts and accessories to avoid injury.

- If a problem occurs, contact your dealer immediately.

ADDITIONAL BLOWER SAFETY RULES

The blower can be dangerous if it is operated incorrectly. Therefore, the product must be used cautiously to avoid causing a hazard or damage. Unnecessary injuries may occur by failing to follow the instructions of the Safety Rules Manual. Be sure to put on protection equipment or suit that can protect your body, such as helmet and eye mask to avoid injuries from occurring. If any doubts or any unfitness occurs during use, be sure to stop the operation immediately. Keep in mind that the user shall be liable for using according to the specified safety rules and for operating the machine correctly.

1. Read this Manual carefully before operating the product.
2. Be sure to follow local electrical and safety regulations and observe the electrical safety standards practiced in the relevant area. All electrical wire



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connections and installation shall be carried out by a professional technician.

3. Do not operate the product near flammable materials, as sparks may ignite these materials and cause an explosion. Please confirm there aren't any flammables near the working site to avoid hazard.
4. This product is suitable for collecting smoke and welding oil gas. Do not use it in collecting iron chips and dust at the same time to avoid producing sparks.
5. Before replacement of parts or any materials, be certain that the switch is disconnected.
6. Do not kink the power cord and keep it away from oil, chemicals or flammables.
7. Check that the voltage, phase count and grounding wire match the machine requirements.
8. When the fan blades are operated at high speed, do not reach hand near these blades to prevent finger from breaking or clothes/necktie from getting caught. Do not put the hand or foreign matter into the air inlet to avoid getting caught in the high-speed rotation of fan blades.

9. When not in use, all air inlets of blower shall be covered.

Assembly

⚠ WARNING

Do not connect the blower before the assembly is finished and you have read and understood all of the precautions stated in the Manual.

NOTE: For correct assembly, refer to the Illustrations and Parts List on pages 12-15.

Installation

MOVING AND TRANSPORTATION

The net weight of this machine is about 163.1 lbs. It CANNOT be handled and transported without the help of lifting tools. For your safety, read all instructions carefully.

⚠ WARNING

Do not move without the help of others to avoid causing danger.

ELECTRICAL INSTALLATION

POWER CONNECTION

1. Confirm that the power is properly connected under normal power supply condition. It is recommended to provide manual shutdown device before connecting power.
-



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2. It is recommended to protect the control equipment with suitable grade of fuse and the length of fuse and power cord shall not be over 10 feet.

SHUTDOWN

1. Disconnect power by manual method.
2. When stopping operation, check if the switch is under off status.

EARTHING WIRE

Connect yellow/green wires to the earthing wire power jack. Confirm that the earthing wire has been properly connected before connecting main power cord to the machine at all times.



Do not disconnect the wiring jack

before cutting off power!

POWER INSTALLATION AND STORAGE

The electrical power is configured as following. If conditions are beyond the scope stated below, then it is required to ensure that the power is well arranged and safe.

- Ambient temperature: Between 41°F and 131°F. If the time is over 24 hours, then the ambient average temperature shall not be over 122°F.
- Humidity: Between 30% and 95%
- Altitude: 3,280 feet

- Moving and Storing: -13°F to 131°F. For short-time storage (less than 24 hours), the storage temperature can be up to 158°F.

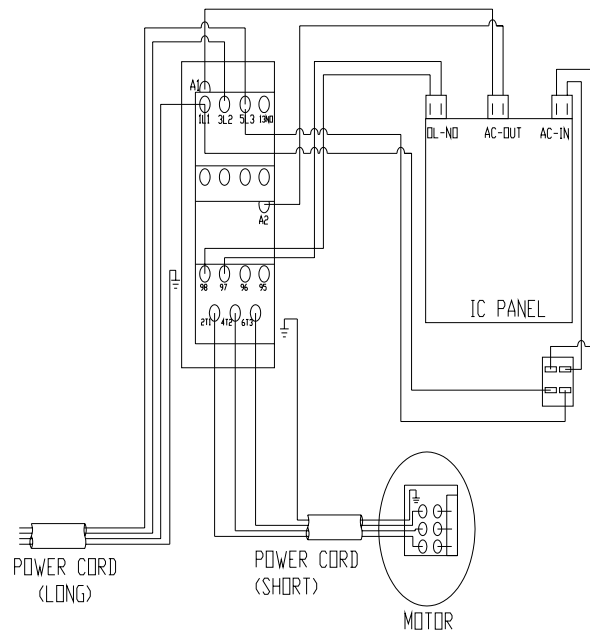


Figure 2 – Electrical Circuit Diagram

Operation

PRIOR TO START UP

Purpose: The blower is specially suitable for treating the smoke generated during ordinary welding processing work, which can effectively collect the smoke, dusts and chips

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resulting from the welding work in maintaining the air quality of the working environment.

- Before starting the machine, be sure to read this Manual carefully.
- Before starting the machine, check if relevant safety protection measures have been taken according to the Manual.
- Before starting the machine, watch the motor turning direction according to the instruction of arrow direction.

List. If any doubt arises or when the components are incomplete, contact your dealer.

START UP

1. To ensure satisfactory performance for the blower, please confirm the air volume and power.
2. Connect power according to electrical installation procedure after installing the blower. Disconnect power according to electrical installation procedure when the machine is not used.
3. The blower shall be turned on and off by pushing I/O button. Under normal operation status, use such I/O button.

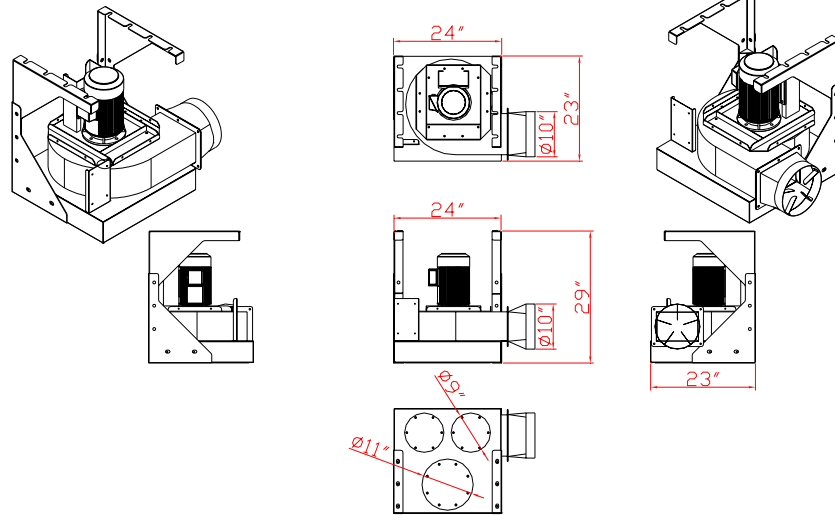
Unpacking

The machine should be unpacked carefully. Check if the machine and components are consistent with those indicated in the Parts

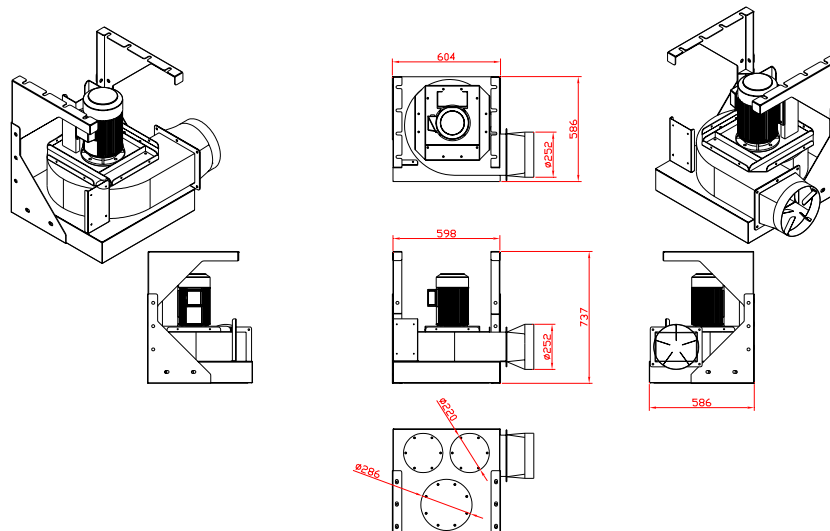


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Dimensions (in inches)



Dimensions (in mm)



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Features

Optional ceiling-mounting brackets

Standard wall-mounting brackets

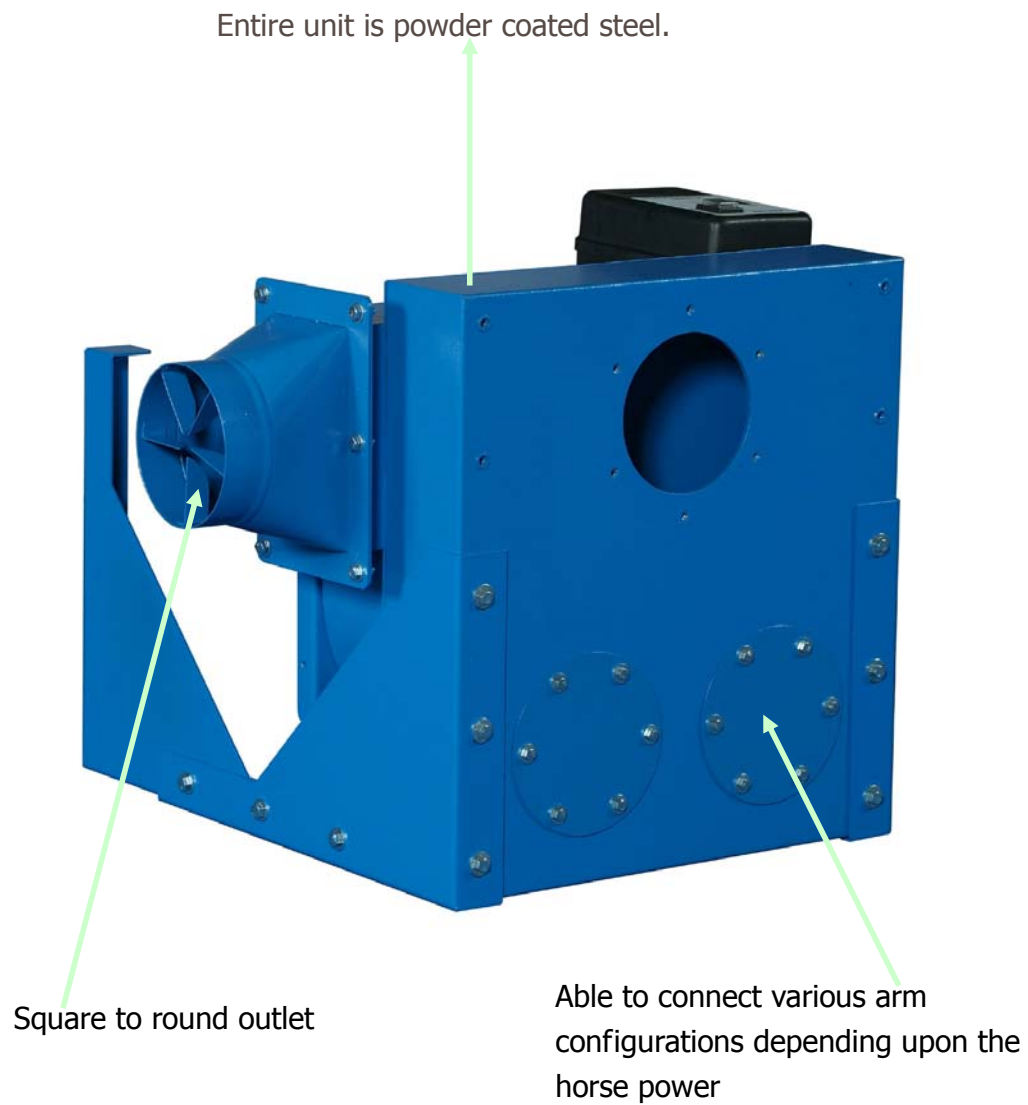


Control panel:
After settings, blower can be
automatically turned off.



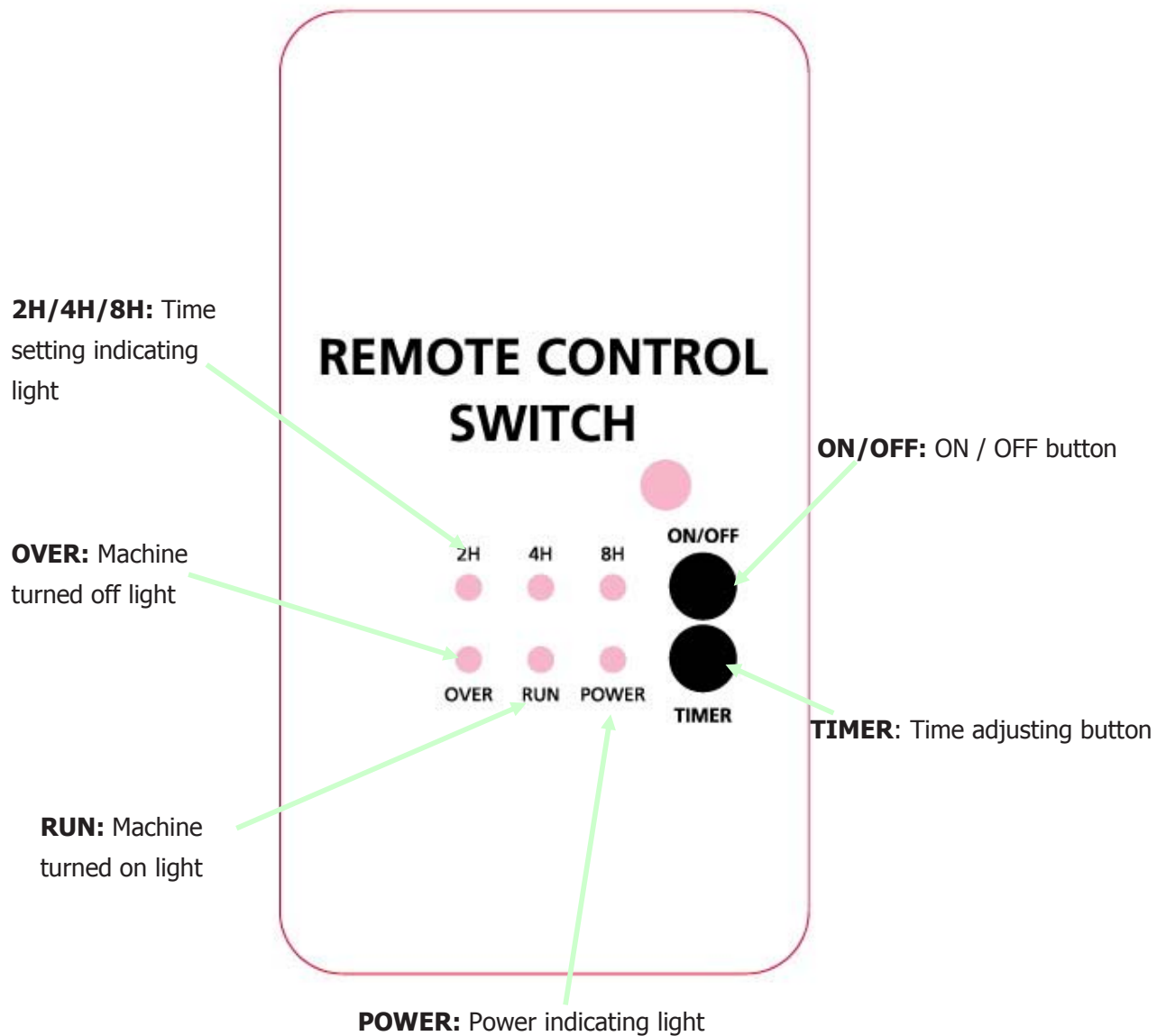
Remote control with
timer settings

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Control Panel



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Repair Parts Illustration

For Repair Parts, call 1-919-570-2862

24 hours a day – 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

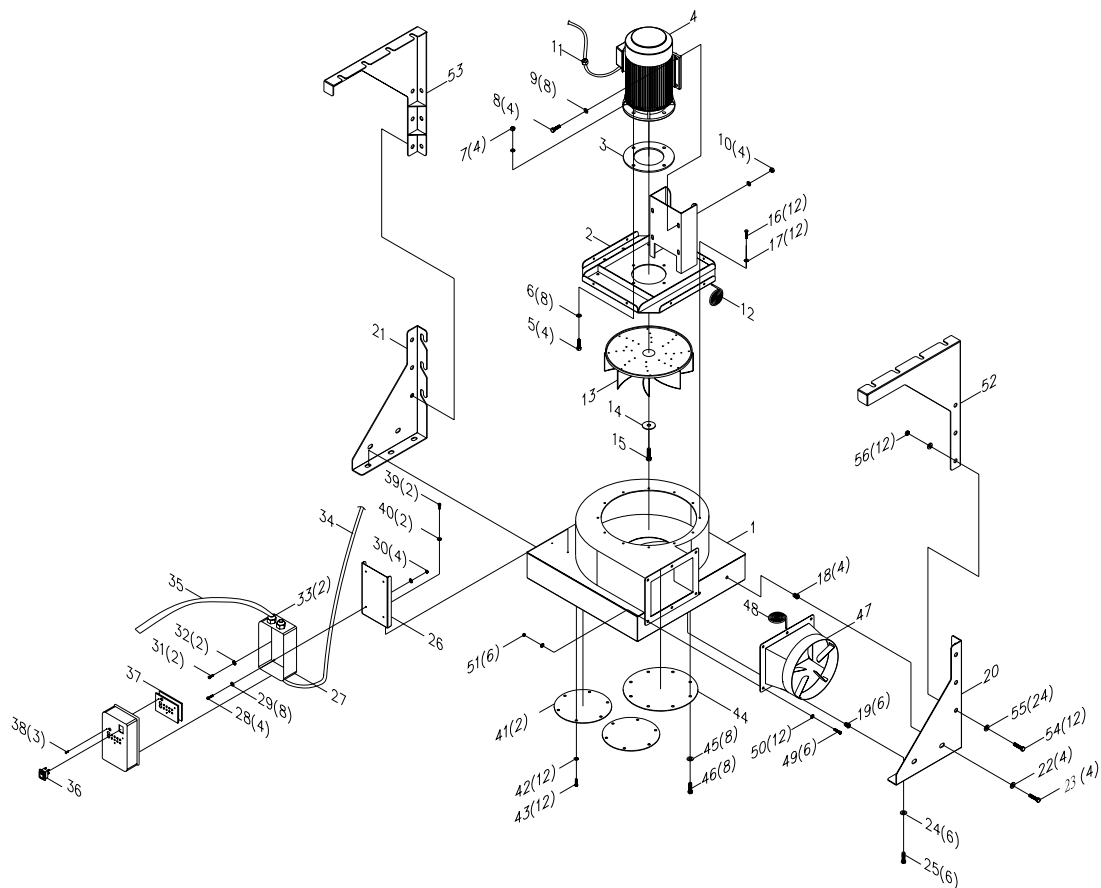


Figure 3

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Repair Parts List

Repair Parts List for Blower

Reference Number	Description	Part Number	Quantity
1	Machine	OSKAR-DBB-3-1	1
2	Motor Base	OSKAR-DBB-3-2	1
3	Motor Gasket	OSKAR-DBB-3-3	1
4	Motor	OSKAR-DBB-3-4	1
5	Hex Screw (5/16"*3/4")	OSKAR-DBB-3-5	4
6	Flat Washer (5/16"*OD23*2t)	OSKAR-DBB-3-6	8
7	Hex Nut (5/16")	OSKAR-DBB-3-7	4
8	Hex Screw (5/16"*1")	OSKAR-DBB-3-8	4
9	Flat Washer (5/16"*OD23*2t)	OSKAR-DBB-3-9	8
10	Hex Nut (5/16")	OSKAR-DBB-3-10	4
11	Strain Relief	OSKAR-DBB-3-11	1
12	Foam Tape	OSKAR-DBB-3-12	1
13	Impeller	OSKAR-DBB-3-13	1
14	Flat Washer (3/8"*OD45*3t)	OSKAR-DBB-3-14	1
15	Hex Screw (3/8"*1")	OSKAR-DBB-3-15	1
16	Hex Screw (5/16"*3/4")	OSKAR-DBB-3-16	12
17	Flat Washer (5/16"*OD23*2t)	OSKAR-DBB-3-17	12
18	Rivet (5/16")	OSKAR-DBB-3-18	4
19	Rivet (5/16")	OSKAR-DBB-3-19	6
20	Hanger (right)	OSKAR-DBB-3-20	1
21	Hanger (left)	OSKAR-DBB-3-21	1



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Reference Number	Description	Part Number	Quantity
22	Flat Washer (5/16"*OD30*3t)	OSKAR-DBB-3-22	4
23	Hex Screw (5/16"*3/4")	OSKAR-DBB-3-23	4
24	Flat Washer (5/16"*OD30*3t)	OSKAR-DBB-3-24	6
25	Hex Screw (5/16"*3/4")	OSKAR-DBB-3-25	6
26	Switch Base	OSKAR-DBB-3-26	1
27	Magnetic Switch	OSKAR-DBB-3-27	1
28	Round Phillips Head Screw (3/16"*3/4")	OSKAR-DBB-3-28	4
29	Flat Washer (1/8"*OD8*1t)	OSKAR-DBB-3-29	8
30	Hex Nut (3/16")	OSKAR-DBB-3-30	4
31	Phillips Head Sheet Metal Screw (5/32"*1/2")	OSKAR-DBB-3-31	2
32	Gear Shape Washer	OSKAR-DBB-3-32	2
33	Strain Relief	OSKAR-DBB-3-33	2
34	Line Cord (long)	OSKAR-DBB-3-34	1
35	Line Cord (short)	OSKAR-DBB-3-35	1
36	On/Off Switch	OSKAR-DBB-3-36	1
37	IC Panel	OSKAR-DBB-3-37	1
38	Countersunk Phillips Head Screw	OSKAR-DBB-3-38	3
39	Inner Hex Screw	OSKAR-DBB-3-39	2
40	Flat Washer	OSKAR-DBB-3-40	2
41	Arm Port Cover - 1	OSKAR-DBB-3-41	2
42	Hex Screw (1/4"*3/4")	OSKAR-DBB-3-42	12
43	Flat Washer (1/4"*OD23*2t)	OSKAR-DBB-3-43	12
44	Arm Port Cover - 2	OSKAR-DBB-3-44	1



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Reference Number	Description	Part Number	Quantity
45	Hex Screw (5/16"*3/4")	OSKAR-DBB-3-45	8
46	Flat Washer (5/16"*OD23*2t)	OSKAR-DBB-3-46	8
47	Square to Round	OSKAR-DBB-3-47	1
48	Foam Tape	OSKAR-DBB-3-48	1
49	Hex Screw (5/16"*3/4")	OSKAR-DBB-3-49	6
50	Flat Washer (5/16"*OD23*2t)	OSKAR-DBB-3-50	12
51	Hex Nut (5/16")	OSKAR-DBB-3-51	6
52	Upper Hanger (right)	OSKAR-DBB-3-52	1
53	Upper Hanger (left)	OSKAR-DBB-3-53	1
54	Hex Screw (1/2"*1")	OSKAR-DBB-3-54	12
55	Flat Washer (1/2"*OD28*2t)	OSKAR-DBB-3-55	24
56	Hex Nut (1/2")	OSKAR-DBB-3-56	12



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Appendix 1 - Electrical Circuit Diagram

