

MODEL W1808/W1809/W1810 CYCLONE DUST COLLECTORS



W1808



W1809



W1810

OWNER'S MANUAL

Phone: (360) 734-3482 • Online Technical Support: tech-support@shopfox.biz

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WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Woodstock Technical Support

Your new **SHOP FOX** Cyclone Dust Collectors has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: **tech-support@shopfox.biz**. Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from **<http://www.shopfox.biz>**.
If you have comments about this manual, please contact us at:

Woodstock International, Inc.
Attn: Technical Documentation Manager
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MACHINE SPECIFICATIONS



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MODEL W1808 2 HP CYCLONE DUST COLLECTOR

Motor

Type	TEFC Class "F"
Horsepower	2 HP
Phase/Voltage	Single-Phase / 220V
Amps	14
Cycle/RPM	60 Hertz / 3450 RPM
Switch	Magnetic w/Thermal Overload Protection
Bearings	Shielded & Permanently Lubricated

Overall Dimensions

Length	62"
Width	38"
Height	93"
Footprint	61" x 38"
Box 1 (Cyclone) Size	54" x 28" x 34"
Box 1 Shipping Weight	282 lbs.
Box 2 (Cartridge Filter) Size	61" x 18" x 18"
Box 2 Shipping Weight	44 lbs.
Box 3 (Stand) Size	43" x 13 ¹ / ₂ " x 8 ¹ / ₂ "
Box 3 Shipping Weight	115 lbs.
Machine Weight with Stand	395 lbs.

Machine Specifications

Maximum CFM (7" Pipe, w/Filter Installed)	1383 CFM @ 2.6" SP
Maximum Static Pressure (4" Pipe)	9"
Impeller Size	14 ¹ / ₂ "
Intake Hole Size	7"
Cartridge Filter Diameter	15 ³ / ₄ "
Cartridge Filter Surface Area	96 sq. ft.
Cartridge Filter Capability	99.9% of 0.2~2 Micron Particles
Collection Drum Size	35 Gallons
Sound Level	75-76 dB

Construction:

Cyclone Body	16 Gauge Steel
Radial Impeller	Steel, Riveted
Collection Drum	Steel
Cartridge Filter	Spun-Bond Polyester
Blower Housing	11 Gauge Steel
Stand	14 Gauge Steel

Additional Features

Reinforced Intake
35 Gallon Collection Drum with Bag Holder and Plastic Collection Bag
Gentle Brush Cleaning Mechanism Inside Cartridge Filter
Remote Control w/Programmable Timer

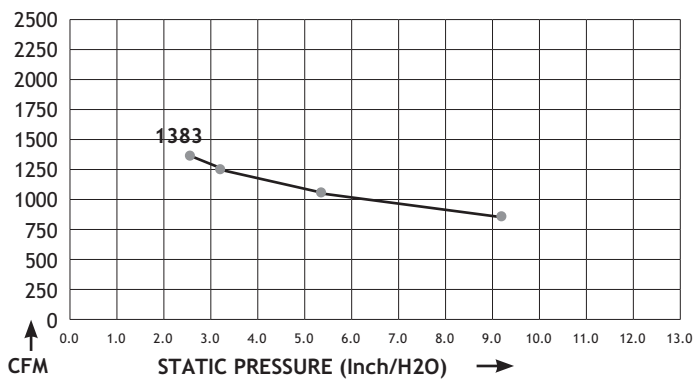
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MODEL W1808 2 HP CYCLONE DUST COLLECTOR

Performance Curve

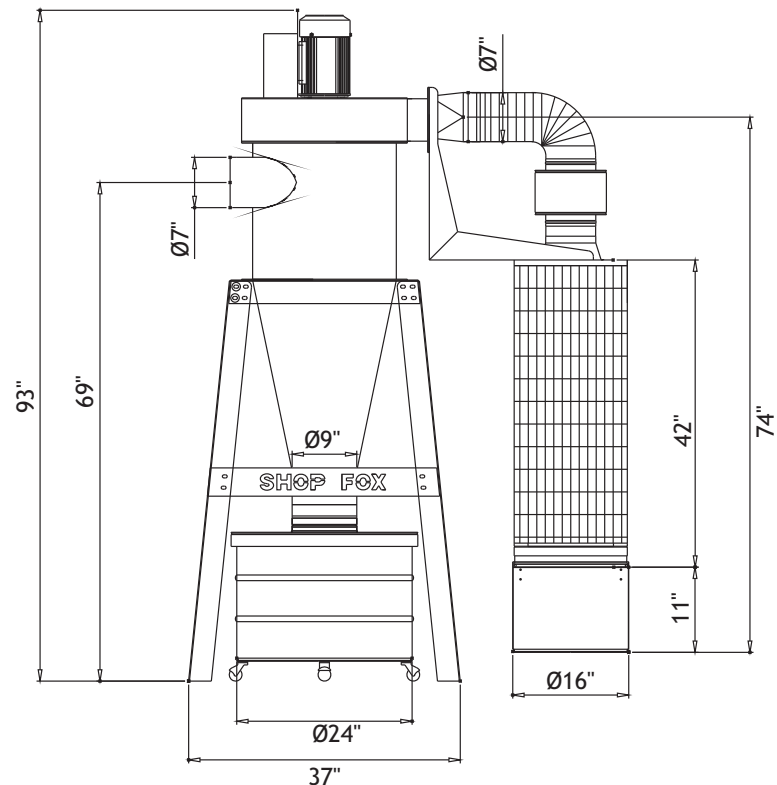
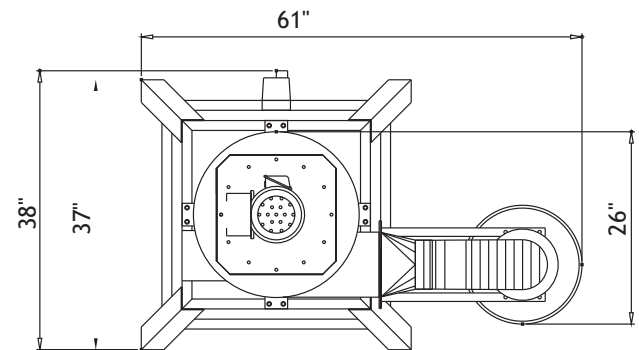


2 HP SHOP FOX DUST COLLECTOR PERFORMANCE RESULTS

Max CFM	Max SP	HP	Volts	Inlet	Impeller
1383	11.5	2 HP	220V	7"	14 1/2"

Restrictor Plate (inch)	Dia. 7"	Dia. 6"	Dia. 5"	Dia. 4"
Static Pressure (Inch/H2O)	2.6	3.2	5.4	9
CFM	1383	1311	1070	957

The airflow test probe is located 8x duct diameter upstream from the air inlet. Test pipe length is a minimum of 16x duct diameter.



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MODEL W1809 3 HP CYCLONE DUST COLLECTOR

Motor

Type	TEFC Class "F"
Horsepower	3 HP
Phase/Voltage	Single-Phase/220V
Amps	22A
Cycle/RPM	60 Hertz/3450 RPM
Switch	Magnetic w/Thermal Overload Protection
Bearings	Shielded & Permanently Lubricated

Overall Dimensions

Length	62"
Width	39"
Height	109"
Footprint	62" x 39"
Box 1 (Cyclone) Size	54" x 28 " x 33 1/2"
Box 1 Shipping Weight	353 lbs.
Box 2 (Cartridge Filter) Size	61" x 21 1/2" x 22"
Box 2 Shipping Weight	51 lbs.
Box 3 (Stand) Box Size	43" x 13 1/2" x 8 1/2"
Box 3 Shipping Weight	121 lbs.
Machine Weight With Stand	467 lbs.

Machine Specifications

Maximum CFM (8" Pipe, w/Filter Installed)	1654 CFM @ 2.3" SP
Maximum Static Pressure (4" Pipe)	10.84"
Impeller Size	15 1/2"
Intake Hole Size	8"
Cartridge Filter Diameter	20 1/8"
Cartridge Filter Surface Area	113 sq. ft.
Cartridge Filter Capability	99.9% of 0.2~2 Micron Particles
Collection Drum Size	55 Gallons
Sound Level	83 dB

Construction

Cyclone Body	16 Gauge Steel
Radial Impeller	Steel, Riveted
Collection Drum	Steel
Cartridge Filter	Spun-Bond Polyester
Blower Housing	11 Gauge Steel
Stand	14 Gauge Steel

Additional Features

Reinforced Intake
55 Gallon Collection Drum with Bag Holder and Plastic Collection Bag
Gentle Brush Cleaning Mechanism Inside Cartridge Filter
Remote Control w/Programmable Timer

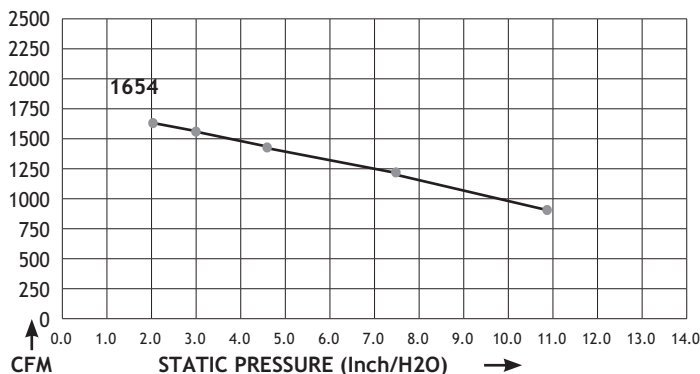
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MODEL W1809 3 HP CYCLONE DUST COLLECTOR

Performance Curve

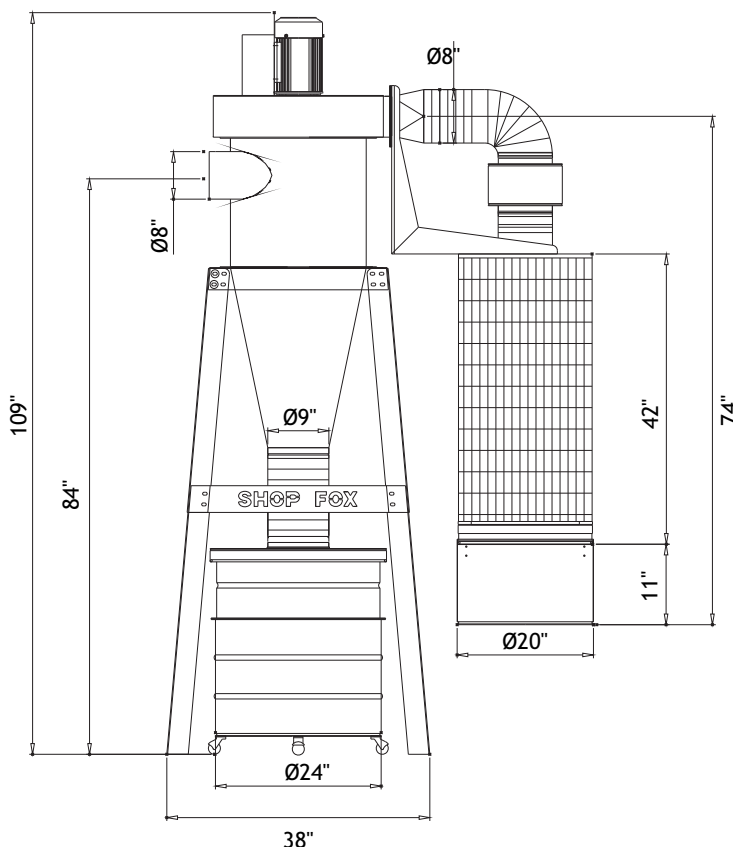
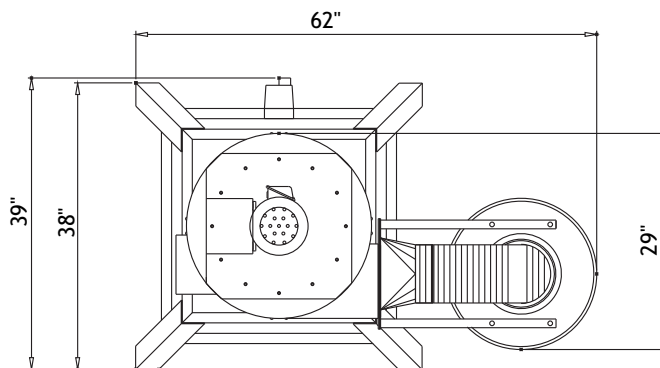


3 HP SHOP FOX DUST COLLECTOR PERFORMANCE RESULTS

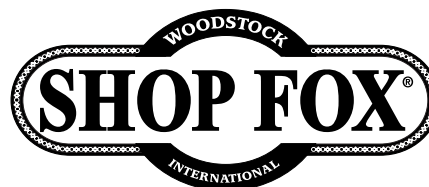
Max CFM	Max SP	HP	Volts	Inlet	Impeller
1654	14.33	3 HP	220V	8"	15 1/2"

Restrictor Plate (inch)	Dia. 8"	Dia. 7"	Dia. 6"	Dia. 5"	Dia. 4"
Static Pressure (Inch/H2O)	2.3	2.95	4.62	7.48	10.84
CFM	1654	1606	1432	1226	872

The airflow test probe is located 8x duct diameter upstream from the air inlet. Test pipe length is a minimum of 16x duct diameter.



MACHINE SPECIFICATIONS



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MODEL W1810 5 HP CYCLONE DUST COLLECTOR

Motor

Type	TEFC Class "F"
Horsepower	5 HP
Phase/Voltage	Single-Phase/220V
Amps	22.4
Cycle/RPM	60 Hertz/3450 RPM
Switch	Magnetic w/Thermal Overload Protection
Bearings	Shielded & Permanently Lubricated

Overall Dimensions

Length	67"
Width	54"
Height	111"
Footprint	67" x 54"
Box 1 (Cyclone) Size	61 $\frac{1}{2}$ " x 31 $\frac{1}{2}$ " x 33 $\frac{1}{2}$ "
Box 1 Shipping Weight	447 lbs.
Box 2 & 3 (Cartridges) Size	61" x 22" x 23 $\frac{1}{2}$ "
Box 2 & 3 Shipping Weight	50 lbs.
Box 4 (Stand) Size	43" x 14 $\frac{1}{2}$ " x 10"
Box 4 Shipping Weight	150 lbs.
Machine Weight	591 lbs.

Machine Specifications

Maximum CFM (10" Pipe, w/Filters Installed)	2450 CFM @ 2.25" SP
Maximum Static Pressure (4" Pipe)	12.12"
Impeller Size	16"
Intake Hole Size	10"
Cartridge Filter Diameter	20 $\frac{1}{8}$ "
Cartridge Filter Surface Area	2 x 113 sq. ft.
Cartridge Filter Capability	99.9% of 0.2-2 Micron Particles
Collection Drum Size	55 Gallons
Sound Level	86 dB

Construction

Cyclone Body	16 Gauge Steel
Stand	14 Gauge Steel
Radial Impeller	Steel, Riveted
Collection Drum	Steel
Cartridge Filter	Spun-Bond Polyester
Blower Housing	11 Gauge Steel

Additional Features

Reinforced Intake
55 Gallon Collection Drum with Bag Holder and Plastic Collection Bag
Gentle Brush Cleaning Mechanism Inside Cartridge Filter
Remote Control w/Programmable Timer

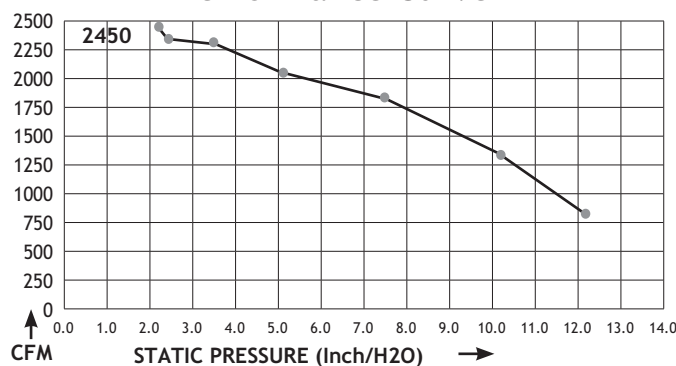
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MODEL W1810 5 HP CYCLONE DUST COLLECTOR

Performance Curve

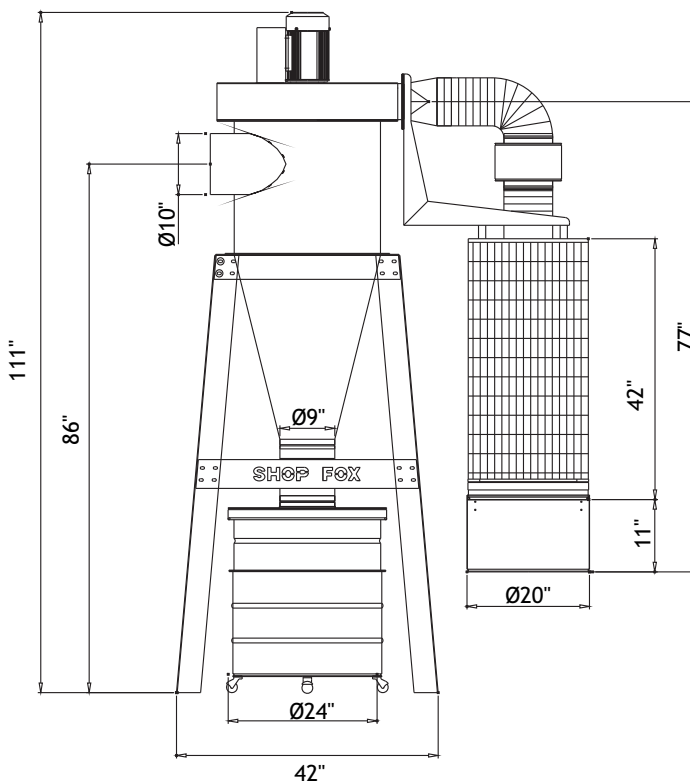
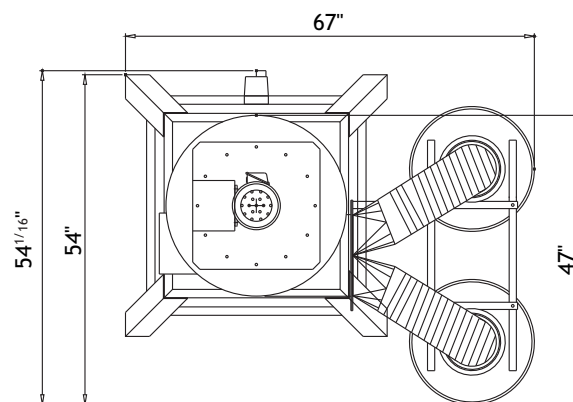


5 HP SHOP FOX DUST COLLECTOR PERFORMANCE RESULTS

Max CFM	Max SP	HP	Volts	Inlet	Impeller
2450	12.12	5 HP	220V	10"	16"

Restrictor plate (inch)	Dia 10"	Dia 9"	Dia. 8"	Dia. 7"	Dia. 6"	Dia. 5"	Dia. 4"
Static pressure (Inch/H2O)	2.25	2.41	3.45	5.08	7.49	10.22	12.12
CFM	2450	2368	2330	2083	1814	1326	891

The airflow test probe is located 8x duct diameter upstream from the air inlet. Test pipe length is a minimum of 16x duct diameter.



Controls and Features

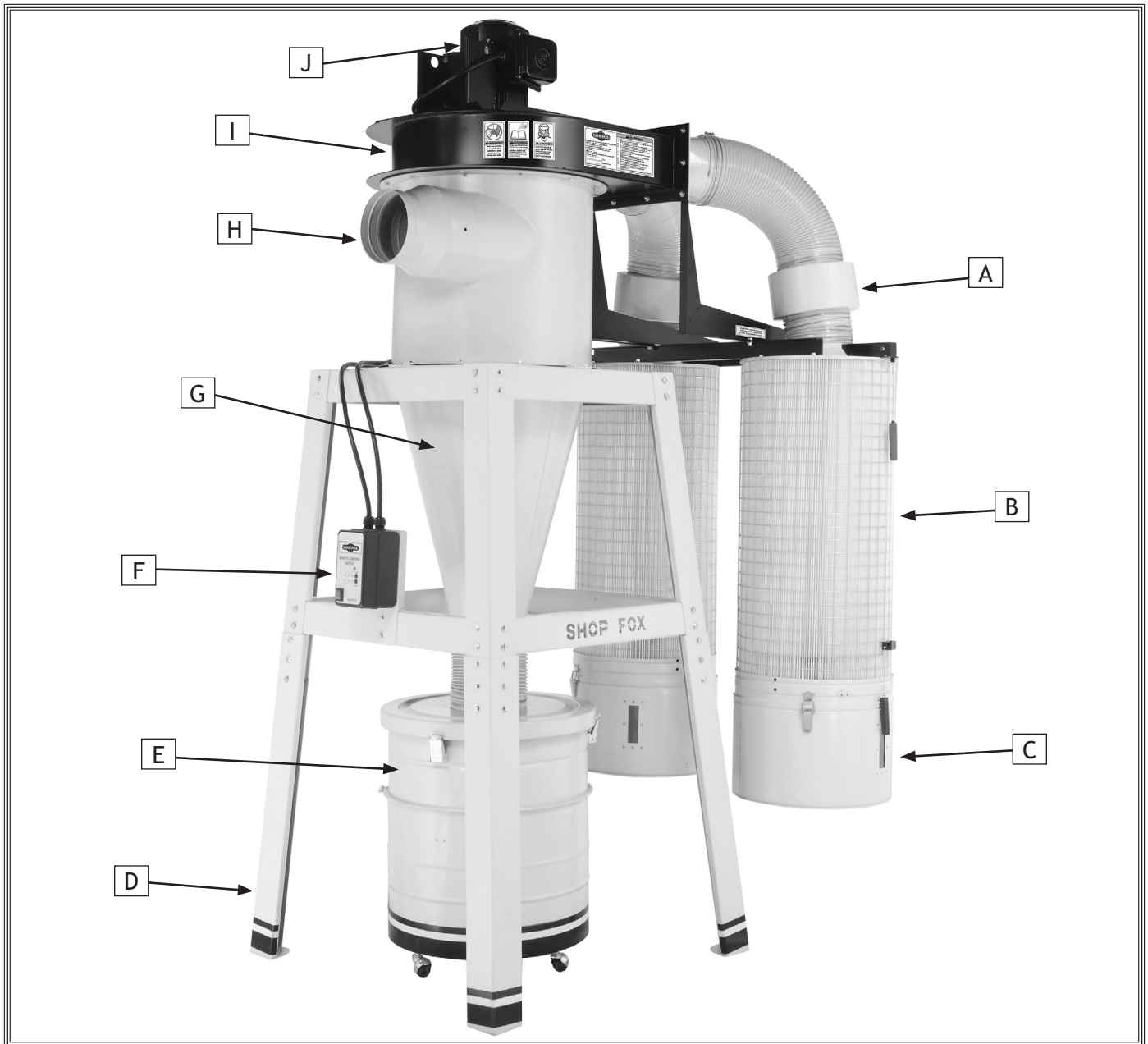


Figure 1. W1810 identification.

- A. Noise Reducer
- B. Canister Filters
- C. Cartridge Filter Collection Drum
- D. Stand
- E. Collection Drum
- F. Remote Magnetic Switch
- G. Cyclone Funnel
- H. Inlet
- I. Blower Housing
- J. Motor

SAFETY

**READ MANUAL BEFORE OPERATING MACHINE.
FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL
RESULT IN PERSONAL INJURY.**

DANGER

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

WARNING

Indicates a potentially 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


This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eye-glasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR AN NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.
7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power off and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords over-heat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ON.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

Additional Safety for Dust Collectors



!WARNING
 READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

!CAUTION
 USE this and other machinery with caution and respect. Always consider safety first, as it applies to your individual working conditions. No list of safety guidelines can be complete—every shop environment is different. Failure to follow guidelines could result in serious personal injury, damage to equipment or poor work results.

1. **MACHINE USE.** Do not use this dust collector to pick up liquids and metal scrap including, but not limited to, nails and filings. Metallic debris will contact the spinning impeller and could spark. The spark could then cause a sawdust explosion or severe fire hazard. Also, do not pick up material which cannot safely pass through the impeller such as solid wood scraps.
2. **KEEPING FINGERS SAFE.** Do not place your hands or tools near the open inlet during operation for any reason including, but not limited to, unclogging material and testing suction. The spinning impeller could cause serious damage to body parts.
3. **SAFE SERVICING.** Disconnect power and allow impeller to come to a complete stop before servicing or working on the dust collector ducting system.
4. **SUSPENDED DUST PARTICLES AND IGNITION SOURCES.** Do not operate the dust collector in areas where explosion risks would be high if dust were dispersed into the area. Areas of high risk include, but are not limited to, areas near pilot lights and/or open flames.
5. **EMPTYING DUST.** When emptying dust from the collection bags or drum, wear a respirator and safety glasses. Empty dust into an approved container and dispose of properly.
6. **AVOIDING FIRES.** Do not allow steel to strike against impeller—this may produce a spark. Sparks can smolder in wood dust for a long time before fire or flame is detected. If metal contacts metal during operation, immediately turn off the dust collector, unplug the power cord from the outlet or flip the disconnect switch and wait for all moving parts to stop. Remove collection bags and empty the dust into an approved air tight metal container in case of spark. Remedy the metal to metal contact problem before resuming operation.
7. **OPERATIONAL QUESTIONS.** If at any time you experience difficulties performing the intended operation, stop using the machine! Then contact our Tech Support or ask a qualified expert how the operation should be performed.
8. **DUST HAZARD.** Be aware that certain woods may cause an allergic reaction in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction. Always wear an approved respirator during and for a short time after machine operation!

ELECTRICAL

220V Operation

The Model W1808/W1809/W1810 is wired for 220V single-phase operation. Always connect this machine to a dedicated circuit (wire, breaker, plug, receptacle) with a verified ground, using the recommended circuit size and plugs/receptacles listed at the bottom of this page.

Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

This machine must be grounded! Verify the ground before connecting this machine to the power source.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

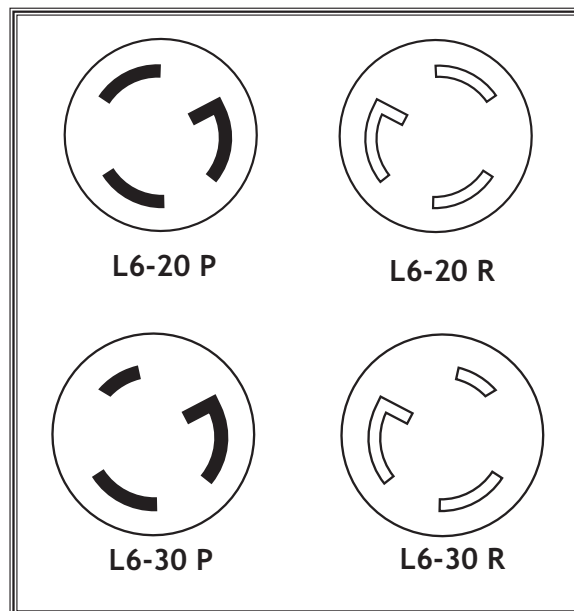


Figure 2. L6-20 and L6-30 plug and receptacle.

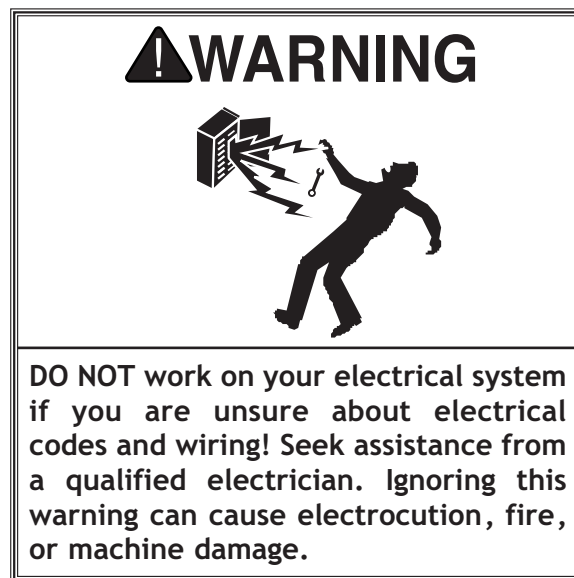
Extension Cords

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

- Use a cord rated for Standard Service (S).
- Do not use a cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

Electrical Specifications

Model	Operating Voltage	Amp Draw	Min. Circuit Size	Plug/Receptacle	Extension Cord
W1808	220V	14 Amps	20A	NEMA L6-20	14 Gauge
W1809	220V	22 Amps	30A	NEMA L6-30	10 Gauge
W1810	220V	22.4 Amps	30A	NEMA L6-30	10 Gauge



SETUP

Unpacking

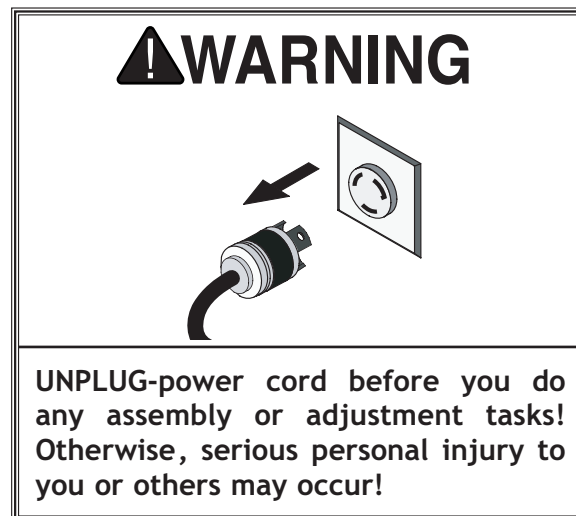
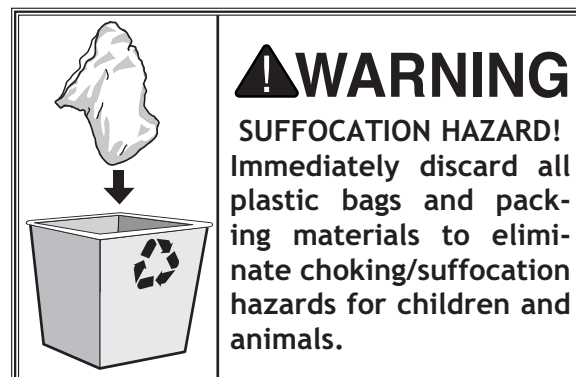
The Model W1808/W1809/W1810 has been carefully packaged for safe transportation. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

If any parts are missing, examine the packaging for the missing parts. For any missing parts, find the part number in the back of this manual and contact Woodstock International, Inc. at (360) 734-3482 or at tech-support@shopfox.biz

Items Needed for Setup

The following items are needed to complete the set up process, but are not included with your machine:

Description	Qty
• Forklift	1
• Extra Person for Lifting Help	1
• Wrench/Socket $\frac{5}{16}$ "	2
• Wrench/Socket $\frac{7}{16}$ "	2
• Wrench/Socket $\frac{1}{2}$ "	2
• Wrench/Socket $\frac{9}{16}$ "	2
• Blue Loctite (Medium Strength)	1
• Punches or Phillips Head Screwdrivers	2
• Chain with Lifting Hooks	(As Needed)



W1808/W1809 Inventory

The following is a description of the main components shipped with the Model W1808 and W1809. Lay the components out to inventory them.

Note: If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for safer shipping. Photos shown here are for the W1809.

Collector Box Contents (Figures 3-5):	Qty
A. Intake Barrel	1
B. Motor/Blower Housing Assembly	1
C. Cyclone Funnel.....	1
D. Noise Reducer 7" (W1808).....	1
D. Noise Reducer 8" (W1809).....	1
E. Clear Flexible Hose 7" x 18" (W1808)	1
E. Clear Flexible Hose 7" x 4" (W1808).....	1
F. Clear Flexible Hose 8" x 19" (W1809)	1
F. Clear Flexible Hose 8" x 4" (W1809).....	1
G. Intake Cylinder.....	1
H. Collection Drum Lid	1
I. Collection Drum, 35 Gallon	1
J. Upper Collection Drum, 25 Gallon (W1809).....	1
K. Bag Holder Plates, 35 Gallon (W1808)	4
K. Bag Holder Plates, 55 Gallon (W1809)	4
L. Hose Clamps 9"	2
M. Clear Flexible Hose 9" x 7" (W1808).....	1
M. Clear Flexible Hose 9" x 13" (W1809)	1
N. Outlet Port	1
O. Filter L-Braces	2
P. Barrel Gaskets	2
Q. Outlet Gasket	1
R. Brace Gaskets	2
S. Hardware Box	
—Rolls of 3 x 6 x 1800mm Foam Tape	
(Intake Cylinder).....	2
—Plastic Bags 640 x 1000mm (W1808 Bag Holder) ...	5
—Plastic Bags 640 x 1200mm (W1809 Bag Holder) ...	5
T. Hardware Box	
—Roll of Foam Tape 10 x 50 x 2mm (Drum)	1
—Drum Latches (Drum)	3
—Phillips Head Screws #10-24 x 3/8"(W1808 Drum) ..	22
—Phillips Head Screws #10-24 x 3/8"(W1809 Drum) ..	36
—Hex Nuts #10-24 (W1808 Drum).....	22
—Hex Nuts #10-24 (W1809 Drum).....	36

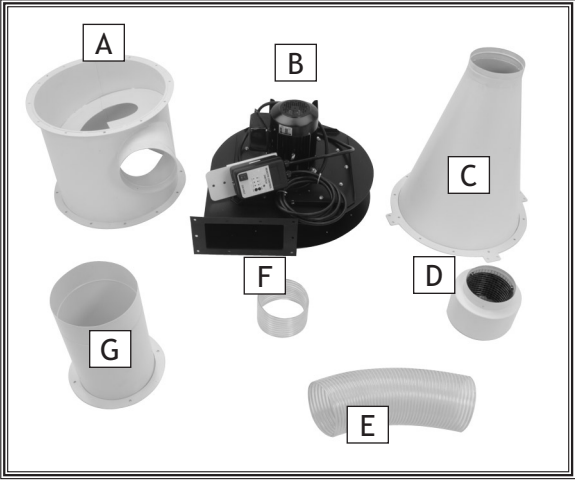


Figure 3. W1809 collector box contents (Picture 1).

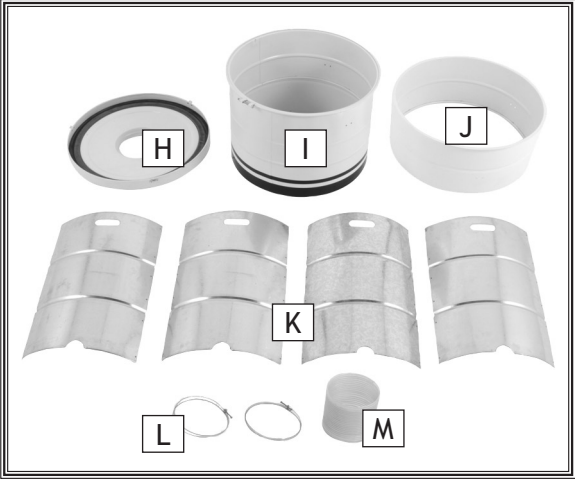


Figure 4. W1809 collector box contents (Picture 2).

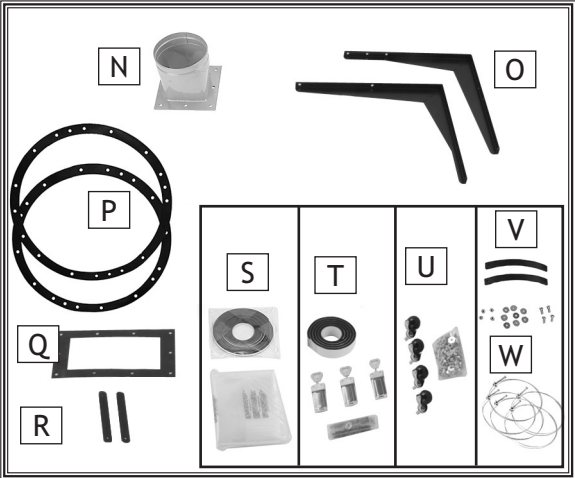


Figure 5. W1809 collector box contents, (Picture 3).

SET UP

U. Hardware Box	
—Hex Bolts $\frac{5}{16}$ "-18 x 1" (W1808 Funnel/Intake)....	20
—Hex Bolts $\frac{5}{16}$ "-18 x 1" (W1809 Funnel/Intake)....	23
—Hex Nuts $\frac{5}{16}$ "-18 (W1808 Funnel/Intake Barrel) .	20
—Hex Nuts $\frac{5}{16}$ "-18 (W1809 Funnel/Intake Barrel) .	23
—Hex Bolts $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	
(Intake Cylinder/Barrel/Motor)	20
—Flat Washers $\frac{5}{16}$ " (W1808)	
(Intake/Motor, Braces/Outlet)	56
—Flat Washers $\frac{5}{16}$ " (W1809)	
(Intake/Motor, Braces/Outlet)	62
—Fender Washers $\frac{5}{16}$ " (Filter/Braces)	4
—Casters (Drum)	4
—Hex Nuts $\frac{3}{8}$ "-16 (Drum)	4
—Lock Washers $\frac{3}{8}$ " (Drum)	4
—Flat Washers $\frac{3}{8}$ " (Drum)	8
V. Hardware Box	
—Rubber Handles (Bag Holder)	2
—Hex Bolts $\frac{1}{4}$ x $\frac{5}{8}$ " (Bag Holder)	4
—Fender Washers $\frac{1}{4}$ " (Bag Holder)	8
—Hex Nuts $\frac{1}{4}$ " (Bag Holder)	4
W. Hose Clamps 7" (W1808)	5
W. Hose Clamps 8" (W1809)	5

Stand Box Contents (Figure 6):		Qty
A. Lower Stand Legs	4	
B. Upper Stand Legs	4	
C. Upper Stand Braces	4	
D. Lower Stand Braces	4	
E. Hardware Bags (Not Shown)		
–Hex Bolts $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " (Stand)	42	
–Lock Nuts $\frac{3}{8}$ "-16 (Stand)	64	
–Flat Washers $\frac{3}{8}$ " (Stand)	132	
–Hex Bolts $\frac{3}{8}$ "-16 x 1" (Stand)	24	
–Hex Nuts $\frac{3}{8}$ "-16 (Stand)	2	

Filter Box Contents (Figure 7):		Qty
A. Canister Filter Assembly	1	

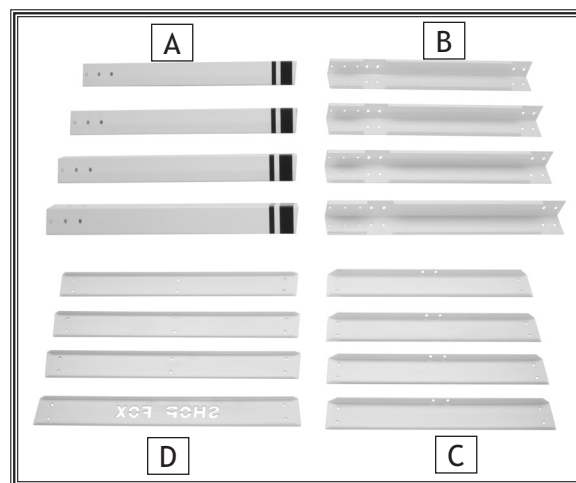


Figure 6. W1809 stand box contents.

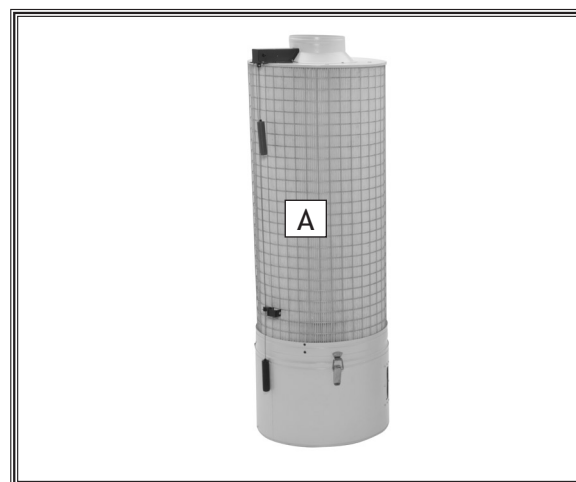


Figure 7. W1809 filter box contents.

W1810 Inventory

The following is a description of the main components shipped with the Model W1810. Lay the components out to inventory them.

Note: If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for safer shipping.

Collector Box Contents (Figures 8-10):	Qty
A. Intake Barrel	1
B. Motor/Blower Housing Assembly	1
C. Cyclone Funnel.....	1
D. Noise Reducers 8"	2
E. Clear Flexible Hoses 8" x 23"	2
F. Clear Flexible Hoses 8" x 4"	2
G. Intake Cylinder.....	1
H. Collection Drum Lid	1
I. Lower Collection Drum	1
J. Upper Collection Drum	1
K. Bag Holder Plates	4
L. Hose Clamps 9"	2
M. Clear Flexible Hose 9" x 10"	1
N. Outlet Port	1
O. Reducer	1
P. Filter L-Braces	2
Q. Filter Cross Braces	2
R. Barrel Gaskets	2
S. Outlet Gasket	1
T. Brace Gaskets	4
U. Hardware Box	
—Rolls of Foam Tape 3 x 6 x 1800mm (Intake Cylinder)	2
—Plastic Bags 640 x 1200 mm (Bag Holder)	5
V. Hardware Box	
—Rubber Handles (Bag Holder)	2
—Hex Bolts 1/4"-20 x 5/8" (Bag Holder)	4
—Fender Washers 1/4" (Bag Holder).....	8
—Hex Nuts 1/4"-20 (Bag Holder)	4
—Roll of Foam Tape 10 x 50 x 2mm (Drum)	1
—Drum Latches (Drum)	3
—Phillips Head Screws 10-24 x 3/8" (Drum)	36
—Hex Nuts #10-24 (Drum).....	36
W. Hardware Box	
—Hex Bolts 5/16"-18 x 1" (Funnel/Intake)	22
—Hex Nuts 5/16"-18 (Funnel/Intake).....	22
—Hex Bolts 5/16"-18 x 3/4" (Intake Cylinder/Barrel/Motor)	24
—Flat Washers 5/16" (Intake/Motor, Braces/Outlet) 60	
—Hex Bolts 3/8"-16 x 3/4" (Stand)	4

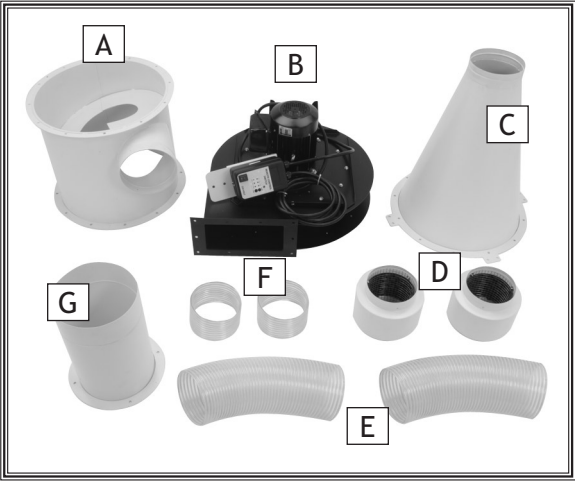


Figure 8. Collector box contents (Picture 1).

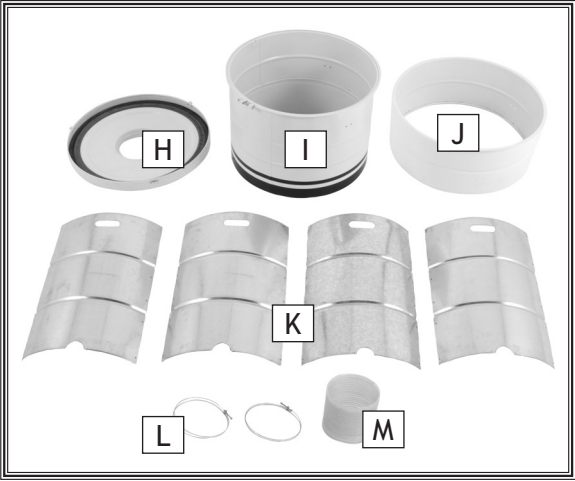


Figure 9. Collector box contents (Picture 2).

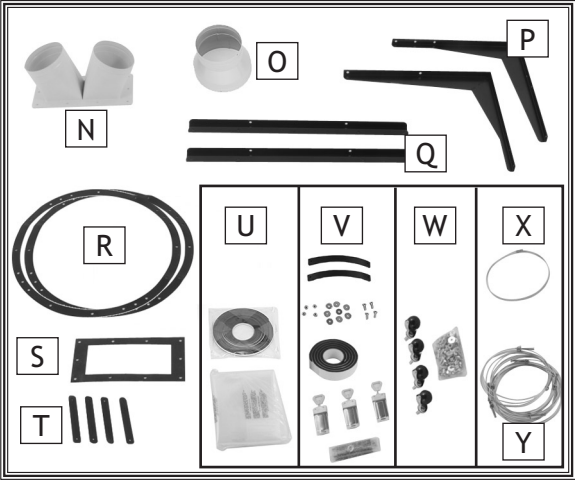


Figure 10. Collector box contents (Picture 3).

SET UP

W. Hardware Box (Ctd.)	
—Fender Washers $\frac{5}{16}$ " (Filter/Braces)	8
—Casters (Drum)	4
—Lock Washers $\frac{3}{8}$ " (Drum)	4
—Flat Washers $\frac{3}{8}$ " (Drum)	16
—Hex Nuts $\frac{3}{8}$ "-16 (Drum)	8
—Tap Screws M4 x 12 (Reducer)	3
X. Reducer Hose Clamp 10"	1
Y. Hose Clamps 8"	9

Stand Box Contents (Figure 11):		Qty
A. Lower Stand Legs	4	
B. Upper Stand Legs	4	
C. Upper Stand Braces	4	
D. Lower Stand Braces	4	
E. Hardware Bags (Not Shown)		
—Hex Bolts $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " (Stand)	58	
—Lock Nuts $\frac{3}{8}$ "-16 (Stand)	64	
—Flat Washers $\frac{3}{8}$ " (Stand)	132	
—Hex Bolts $\frac{3}{8}$ "-16 x 1" (Stand)	8	
—Hex Nuts $\frac{3}{8}$ "-16 (Stand)	2	

Contents of Filter Boxes (Figure 12):		Qty
A. Canister Filter Assemblies	2	

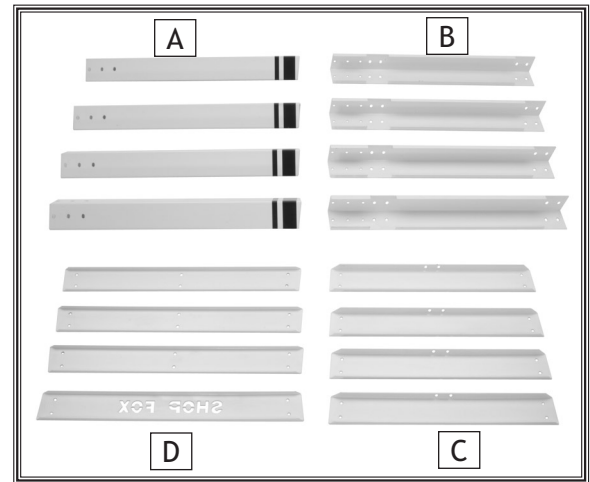


Figure 11. Stand box contents.

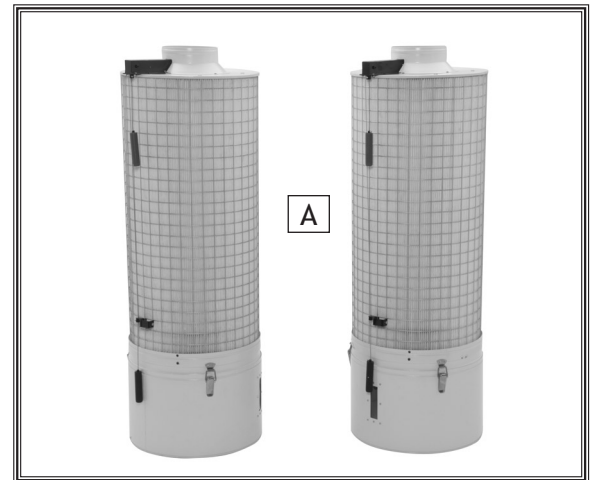


Figure 12. Filter box contents.

Assembly

The following instructions apply to all three models except where noted. To begin assembling the W1810, start at **Step 1**. To begin assembling the W1808/W1809, start at **Step 2**.

To assemble the dust collector, do these steps:

1. Model W1810 Only: Connect the upper stand legs with the lower braces, using (16) $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " hex bolts, (32) $\frac{3}{8}$ " flat washers, and (16) $\frac{3}{8}$ "-16 lock nuts, as shown in **Figure 13**. *Only finger tighten for now.*

2. Connect the upper braces to the upper stand legs, using (16) $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " hex bolts, (32) $\frac{3}{8}$ " flat washers, and (16) $\frac{3}{8}$ "-16 lock nuts, as shown in **Figure 14**.

Note: On Model W1808/W1809, the lower braces will not be installed until **Step 7** on **Page 20**.

3. Attach the cyclone funnel to the intake barrel with a barrel gasket between the two, as shown in **Figure 15**, with (12) $\frac{5}{16}$ "-18 x 1" hex bolts, (24) $\frac{5}{16}$ " flat washers, and (12) $\frac{5}{16}$ "-18 hex nuts.

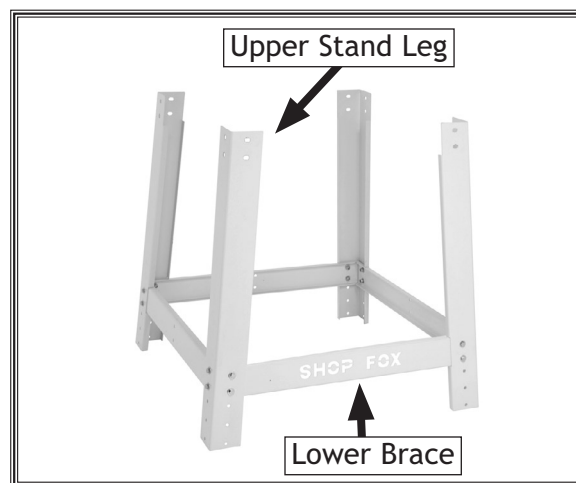


Figure 13. Upper stand legs connected to lower stand braces, Model W1810.

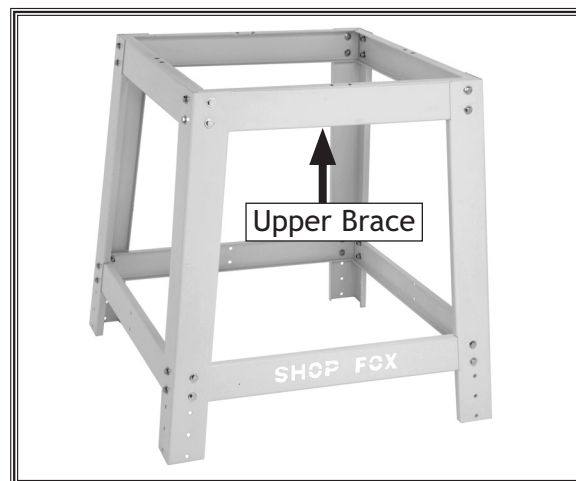


Figure 14. Upper braces attached to stand assembly, Model W1810.

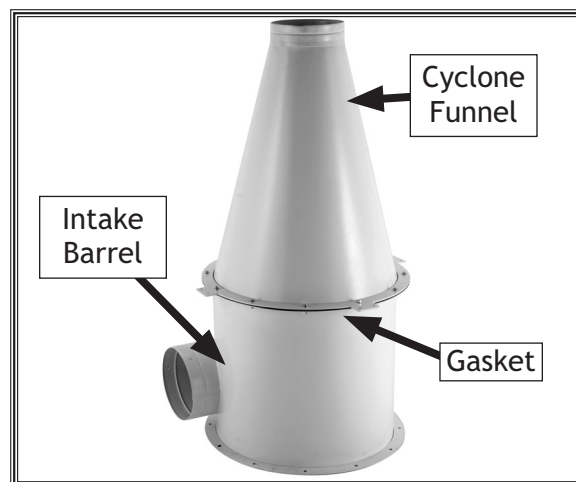


Figure 15. Cyclone funnel attached to intake barrel.

4. Place a large piece of cardboard on the ground to prevent scrapes from bare concrete for the next steps.
5. Lay the stand assembly on its side and slide the collector assembly into the stand assembly.
6. Fasten the collector assembly to the stand with (8) $\frac{3}{8}$ "-16 x 1" hex bolts, (16) $\frac{3}{8}$ " flat washers, and (8) $\frac{3}{8}$ "-16 lock nuts, as shown in **Figure 16**.
7. Model W1808-W1809: Slide the lower legs onto the upper stand assembly, and fit the lower braces into the leg notches. Fasten the upper and lower legs and lower braces using (24) $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " hex bolts, (16) $\frac{3}{8}$ "-16 x 1" hex bolts, (80) $\frac{3}{8}$ " flat washers, and (40) $\frac{3}{8}$ "-16 lock nuts. Refer to the W1808 and W1809 Parts Breakdowns on Pages 48 and 51 for more detail.

Note: On Model W1810, the lower legs will be installed in **Step 19**, on **Page 23**.

Note: It will be easier to assemble the lower legs and braces onto the upper stand assembly if you keep the fasteners loose.

8. Place the 3 x 6 x 1800mm roll of foam tape on the intake cylinder, as shown in **Figure 18**.

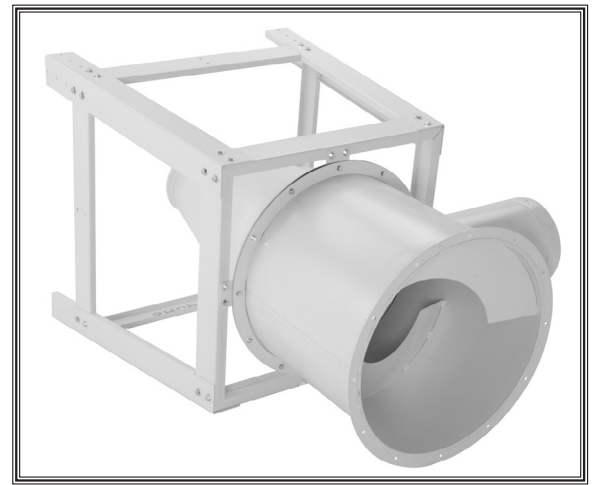


Figure 16. Collector assembly fastened to the stand, Model W1810.

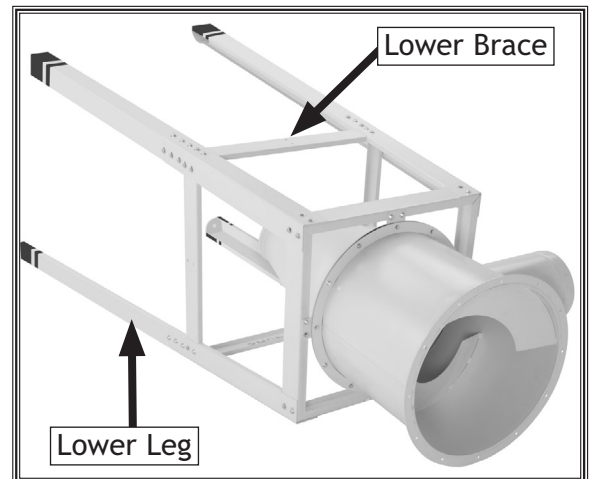


Figure 17. Collector assembly fastened to the stand, Model W1808-09.

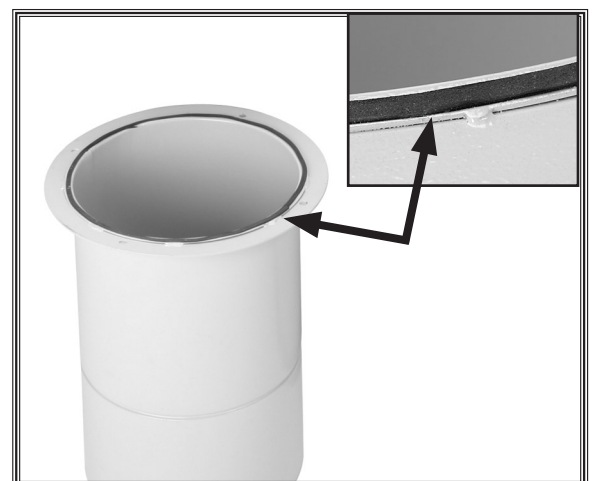


Figure 18. Foam tape adhered to intake cylinder.

9. Lift the assembly upright and rotate it so the inlet/outlet point where you want them for your shop setup.
10. Lift the motor/blower housing assembly with a fork-lift (or other means) and attach the intake cylinder to the bottom of the housing, as shown **Figure 19**, using (4) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (4) $\frac{5}{16}$ " flat washers.

Note: Because this part of the dust collector is not accessible after assembly, consider using medium strength (blue) Loctite® on the bolts that secure the intake cylinder to the motor/blower housing assembly to ensure that the fasteners won't come loose with vibration.

11. Place the remaining barrel gasket on top of the intake barrel, then carefully lower the motor/blower housing assembly approximately 1" away from the intake barrel.
12. Using two punches or Phillips screwdrivers, align the mounting holes, as shown in **Figure 20**, and lower the motor housing onto the intake barrel.
13. Attach the motor housing to the intake barrel, as shown in **Figure 21**, with (12) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (12) $\frac{5}{16}$ " flat washers.

Note: When installing the bolts above the intake port, use duct tape (**Figure 22**) on the bottom of your wrench to hold the bolts in place.



Figure 19. Intake cylinder attached to the bottom of motor housing.

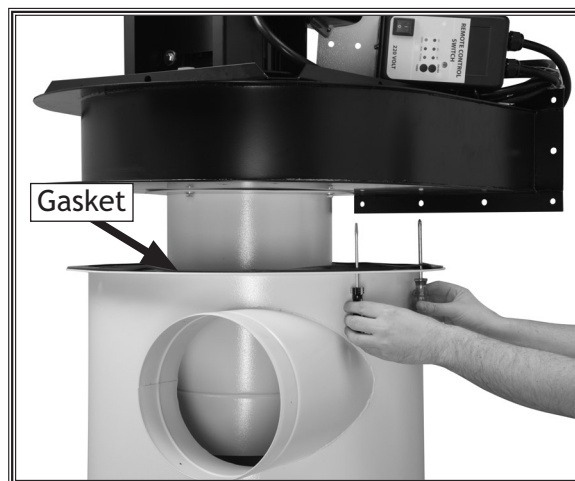


Figure 20. Aligning the mounting holes.



Figure 21. Securing intake barrel to blower.

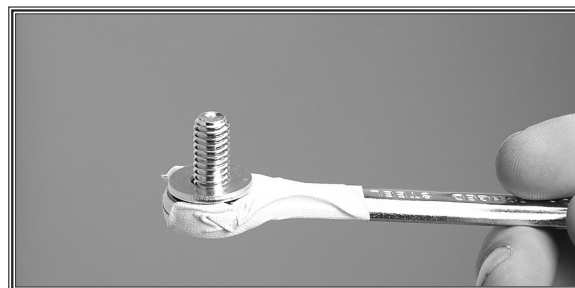


Figure 22. Using tape on a wrench to install a bolt.

14. Attach the outlet port and filter L-braces to the housing with the outlet gasket between, as shown in **Figures 23 & 24** using the fasteners below.

—Model W1810: Use (10) $\frac{5}{16}$ "-18 x 1" hex bolts, (20) $\frac{5}{16}$ " flat washers, and (10) $\frac{5}{16}$ "-18 hex nuts.

—Model W1809: Use (11) $\frac{5}{16}$ "-18 x 1" hex bolts, (22) $\frac{5}{16}$ " flat washers, and (11) $\frac{5}{16}$ "-18 hex nuts.

—Model W1808: Use (8) $\frac{5}{16}$ "-18 x 1" hex bolts, (16) $\frac{5}{16}$ " flat washers, and (8) $\frac{5}{16}$ "-18 hex nuts.

15. Model W1810 Only: Attach the filter cross braces to the L-braces, as shown in **Figure 25**, using (4) $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " hex bolts, (8) $\frac{3}{8}$ " flat washers, and (4) $\frac{3}{8}$ "-16 hex nuts.

16. Using the forklift, lift the entire assembly approximately 2' off the ground to gain clearance for filter installation.

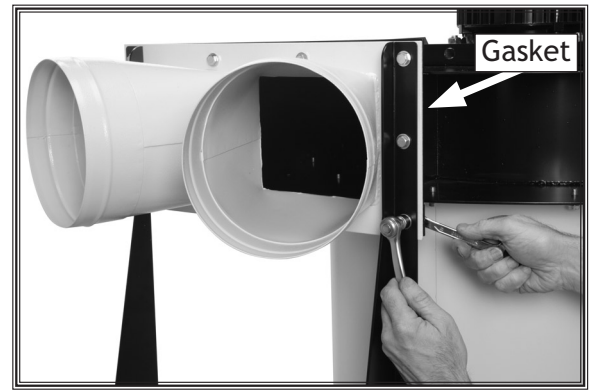


Figure 23. Attaching the outlet port and filter L-braces to the blower housing (Model W1810).

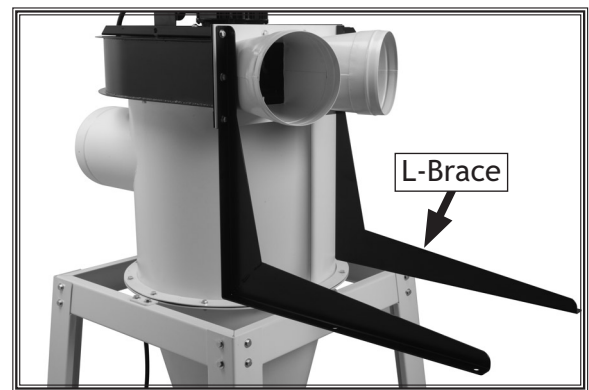


Figure 24. Filter L-braces attached to blower housing (Model W1810).

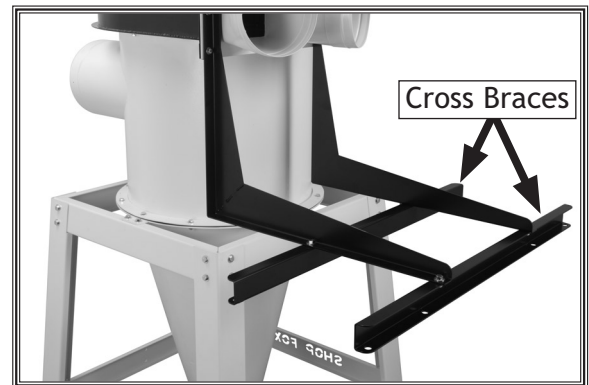


Figure 25. Filter cross braces (Model W1810).

17. Model W1810: Mount the two filters to the cross braces with brace gaskets between them, as shown in **Figure 26**, using (8) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (8) $\frac{5}{16}$ " fender washers.

Model W1808-9: Mount the filter to the L-braces with brace gaskets between them using (4) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (4) $\frac{5}{16}$ " fender washers.

18. Model W1810: Connect (2) 8" x 23" flexible hoses, (2) 8" noise reducers, and (2) 8" x 4" flexible hoses to the outlet ports and filters using (8) 8" hose clamps as shown in **Figure 27**. Extend the ribbed part of the hoses at least $\frac{1}{2}$ " past the outlet and filter ridges (**Figure 26**) and secure with the clamps.

Model W1808: Connect a 7" x 18" flexible hose, 7" noise reducer, and a 7" x 4" flexible hose to the outlet ports and filters using (4) 7" hose clamps.

Model W1809: Connect an 8" x 19" flexible hose, 8" noise reducer, and an 8" x 4" flexible hose to the outlet ports and filters using (4) 8" hose clamps.

Note: Try tapping gently on the ribbed part of the hose coils with a rubber hammer and a soft wood block to fit them onto the noise reducers.

19. Model W1810 Only: Attach the lower stand legs to the upper stand legs, as shown in **Figure 28**, using (24) $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " hex bolts, (48) $\frac{3}{8}$ " flat washers, and (24) $\frac{3}{8}$ "-16 lock nuts.

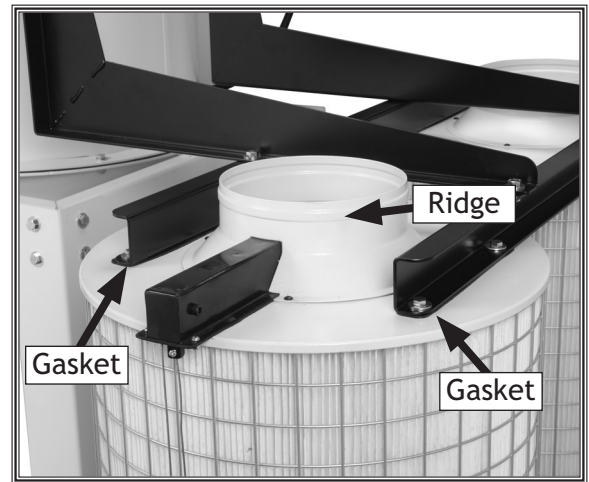


Figure 26. Filters mounted to cross braces.

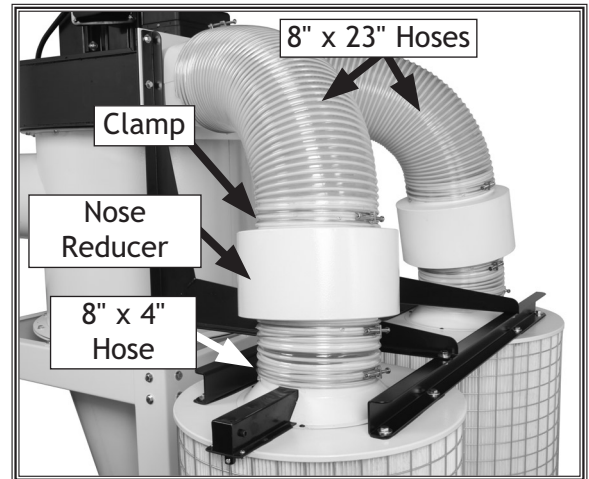


Figure 27. Hoses and noise reducers installed (Model W1810).



Figure 28. Lower stand legs attached (Model W1810).

20. Check to see if 10 x 50mm foam tape is pre-installed on the collector drum lid. If tape is not attached, install it as shown in **Figure 29**, and trim to length with a sharp knife, if necessary.

21. Attach the casters to the bottom of the lower collection drum, as shown in **Figure 30**, using (4) $\frac{3}{8}$ "-16 hex nuts, (8) $\frac{3}{8}$ " flat washers, and (4) $\frac{3}{8}$ " lock washers.

Note: The Model W1808 collection drum comes as a preassembled unit. The upper and lower collection drums on the Model W1809/W1810 require assembly (see **Step 22**).

22. Model W1809 & W1810 Only: Connect the upper and lower collection drums and secure with the included metal clamp and bolt, as shown in **Figure 31**.



Figure 29. Attaching foam tape to collector drum lid.



Figure 30. Casters attached to the lower collection drum.



Figure 31. (Top) Connecting upper and lower collection drums, (bottom) drum clamp installed between drums.

23. Install the three drum latches, as shown in **Figure 32**, with (6) 10-24 x $\frac{3}{8}$ " Phillips head screws and (6) 10-24 hex nuts.

Model W1809/W1810: Use the remaining (6) 10-24 x $\frac{3}{8}$ " Phillips head screws and (6) 10-24 hex nuts to plug the lower latch mounting holes.

24. Model W1808: Assemble the bag holder, as shown in **Figure 33**, using the (16) 10-24 x $\frac{3}{8}$ " Phillip head screws and (16) 10-24 hex nuts.

Model W1809 & W1810: Assemble the bag holder, as shown in **Figure 33**, using the (24) 10-24 x $\frac{3}{8}$ " Phillip head screws and (24) 10-24 hex nuts.

25. Install the rubber handles (**Figure 33**) on the inside of the bag holder with the (4) $\frac{1}{4}$ "-20 x $\frac{5}{8}$ " hex bolts, the (8) $\frac{1}{4}$ " fender washers, and the (4) $\frac{1}{4}$ "-20 hex nuts.
26. Insert the bag holder into a plastic dust collection bag, then insert the bag holder into the collector drum as shown in **Figure 34**.

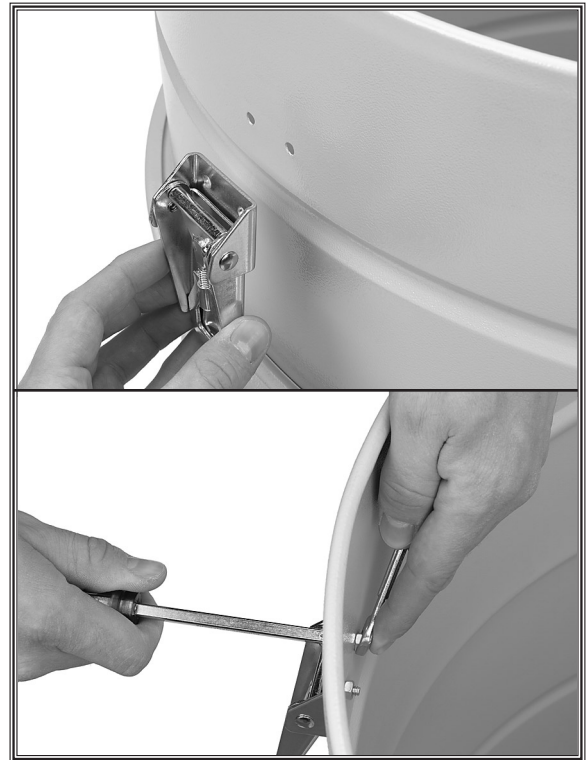


Figure 32. Installing latches on collector drum.



Figure 33. Bag holder.



Figure 34. Bag holder installed into collector drum, Model W1809.

27. Place the lid on the collection drum and hook the latches over the lid, as shown in **Figure 35**, and clamp in place.
28. Move the collector drum under the dust collector and connect it to the cyclone funnel with clear 9" flexible hose and the two 9" hose clamps, as shown in **Figure 36**.
29. Model W1810 Only: Slide the reducer over the port on the barrel (**Figure 37**), line up the mounting holes, and secure it in place with the (3) M4 x 12 tap screws.
30. Mount the switch on the stand, as shown in **Figure 38**, with (2) $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " hex bolts, (4) $\frac{3}{8}$ " flat washers, and (2) $\frac{3}{8}$ "-16 hex nuts.



Figure 35. Latch hooked over lid for clamping.



Figure 36. Drum attached to cyclone funnel with 9" hose clamps.

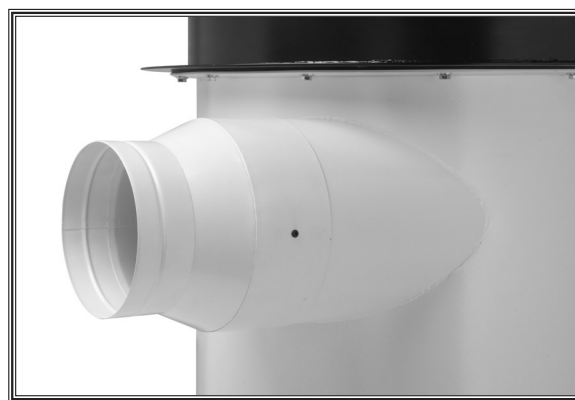


Figure 37. Reducer installed (Model W1810).



Figure 38. Switch mounted to stand.

Test Run

Complete this process once you have familiarized yourself with all the instructions in this manual.

To test run the cyclone dust collector, do these steps:

1. Read the entire instruction manual first!
2. Make sure all tools and foreign objects have been removed from the dust collector.
3. Review **Page 13**, install the plug on the power cord, and connect your dust collector to the power source.
4. Flip the main power switch at the lower left hand corner of the switch box.
5. Press the ON/OFF button to turn the machine **ON**.
 - The dust collector should run smoothly with little or no vibration.
 - Immediately stop the dust collector if you suspect any problems, and refer to **Page 46** to trouble-shoot/fix any problems before starting the dust collector again.
 - If the source of an unusual noise or vibration is not readily apparent, contact our technical support for help at (360) 734-3482 or contact us online at tech-support@shopfox.biz.
6. Press the TIMER button and cycle through each of the times to make sure the lights illuminate the switch.
7. Press the TIMER button on the remote control and cycle through the times in the same manner as **Step 6**.
8. Press the ON/OFF button on the remote control to make sure it is working properly.

WARNING



Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses during assembly and operation.

WARNING



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

OPERATIONS

General

The Model W1808/W1809/W1810 is designed to be a central dust collector system, and is capable of collecting dust from multiple machines running simultaneously.

Because of the large suction capacity of the Model W1808/W1809/W1810, great flexibility is possible in the planning and designing of your dust collection duct layout.

However you choose to build your dust collection system, always make sure there are no open flames or pilot lights in the same room as the dust collector. There is a risk of explosion if dust is dispersed into the air near flames.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced cyclone dust collector operator before performing any unfamiliar operations. **Above all, your safety should come first!**

!WARNING



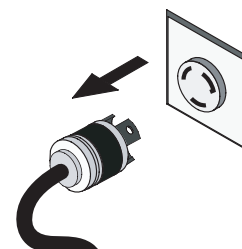
READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

!WARNING

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



!WARNING



DO NOT investigate problems or adjust the cyclone dust collector while it is running. Wait until the machine is turned OFF, unplugged, and all working parts have come to a complete stop before proceeding!

Remote Control

The remote control (**Figure 39**) for the Model W1808/W1809/W1810 is IR (infrared) rather than RF (radio frequency) to prevent accidental startups by other common RF items like garage door openers.

Because this remote system is IR, you must point the remote control directly at the switch to make it operate.

If you plan on placing your dust collector in a different room or outside of your shop, you must mount the switch in the shop and wire it through the wall to the dust collector to make use of the remote control.



Figure 39. Remote control.

Duct Material

You have many choices regarding main line and branch line duct material. For best results, use metal duct for the main line and branch lines, then use a short length of flexible hose to connect each machine to the branch lines.

Plastic duct is also a popular material for home shops. However, be aware that there is a fire or explosion hazard if plastic duct material is used for dust collection without being grounded against static electrical charge build-up. This topic will be discussed later in the manual. Another problem with using plastic is that it is less efficient per foot than metal.

Metal Duct

Advantages of metal duct (**Figure 40**) is its conductivity and that it does not contribute to static electrical charge build-up. However, static charges are still produced when dust particles strike other dust particles as they move through the duct. Since metal duct is a conductor, it can be grounded quite easily to dissipate any static electrical charges.

There are quite a number of options when it comes to metal duct, but metal duct that is specially manufactured for dust collection is the best choice. When selecting your metal duct, choose high quality metal duct with smooth welded internal seams that will minimize airflow resistance. This type of duct usually connects to other ducts or elbows with a simple, self-sealing clamp, is very quick and easy to assemble, and can be dismantled and re-installed with no problems. This is especially important if you ever need to change things around in your shop or add more tools.

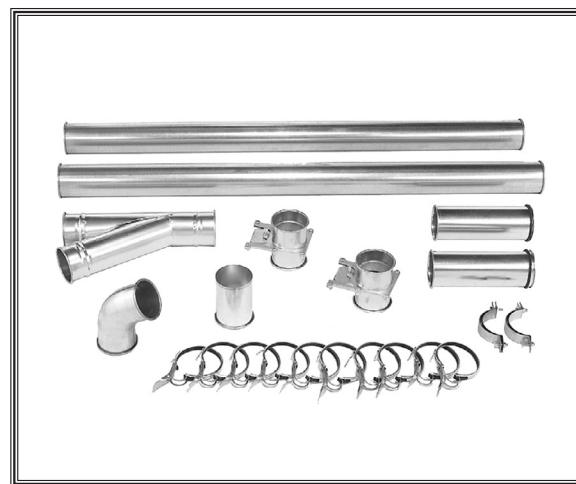


Figure 40. Examples of metal pipe and components.

Avoid inferior metal duct that requires you to cut it to length and snap it together. This type of duct is time consuming to install because it requires you to seal all the seams with silicone and screw the components on the ends with sheet metal screws. Another disadvantage is the rough internal seams and crimped ends that unavoidably increase static pressure.

Flexible Duct

Flexible hose is generally used for short runs, small shops and at rigid duct-to-tool connections. There are many different types of flex hose on the market today. These are manufactured from materials such as polyethylene, PVC, cloth hose dipped in rubber and even metal, including steel and aluminum.

The superior choice here is metal flex hose that is designed to be flexible, yet be as smooth as possible to reduce static pressure loss.

There are also many kinds of pure plastic flexible hose, such as non-perforated drainage type hose and dryer vent hose. Drainage type hose, while being economical, does not quite have the flexibility required for dust collection. The inside of the duct is also deeply corrugated and can increase the static pressure loss by as much as 50% over smooth wall duct. Dryer vent hose, while being completely flexible, is non-resistant to abrasion and has a tendency to collapse in a negative pressure system. We DO NOT recommend using dryer drainage-type vent hose in your dust collection system.

If using flex-hose, you should choose one of the many types that are designed specifically for the movement of solid particles, i.e. dust, grains and plastics. However, the cost of specifically designed flexible duct can vary greatly. For example, polyethylene hose is well suited for the removal of particulate matter, especially sawdust, since it is durable and completely flexible. Also, it is very economical and available in a wide variety of diameters and lengths for most applications.

Plastic Duct

The popularity of plastic duct (**Figure 42**) is due to the fact that it is an economical and readily available product. It is also simple to assemble and easily sealed against air loss. The primary disadvantage of plastic duct for dust collection is the inherent danger of static electrical build-up.

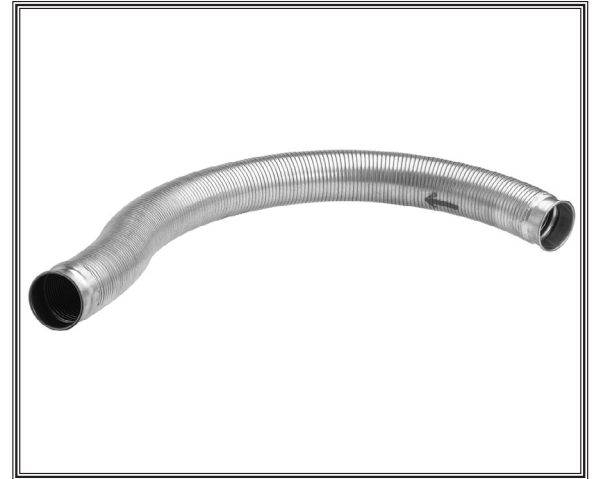


Figure 41. Example of flexible metal duct.



Figure 42. Example of plastic duct and components.

System Design

Step 1. Decide Who Will Design

For most small-to-medium sized shops, you can design and build the dust collection system yourself without hiring engineers or consultants. We have included some basic information here to get you started on a basic design.

If you have a large shop or end up designing a complicated system, then we recommend additional research beyond this manual, or that you seek the help of an expert.

Step 2. Sketch Your Shop Layout

When designing a successful dust collection system, planning is the most important step. In this step, you must sketch a basic layout of your shop. Your sketch only needs the basic details of the shop layout, similar to **Figure 43**, including all your current/planned machines and your planned placement of the dust collector.

Step 3. Sketch a Basic Duct Layout

For the next step, sketch how you will connect your machines to the dust collector. Consider these general guidelines for an efficient system:

1. Machines that produce the most saw dust should be placed nearest to the dust collector (i.e. planers and sanders).
2. Ideally, you should design the duct system to have the shortest possible main line and secondary branch ducts. See **Figures 44 & 45** for ideas of good duct layouts vs bad duct layouts.
3. Directional changes should be kept to a minimum. The more directional change fittings you use directly increases the overall resistance to airflow.
4. Gradual directional changes are more efficient than sudden directional changes (i.e. use the largest corner radius possible when changing hose or pipe direction).
5. Each individual branch line should have a blast gate immediately after the branch to control suction from one machine to another.
6. The simpler the system, the more efficient and less costly it will be.

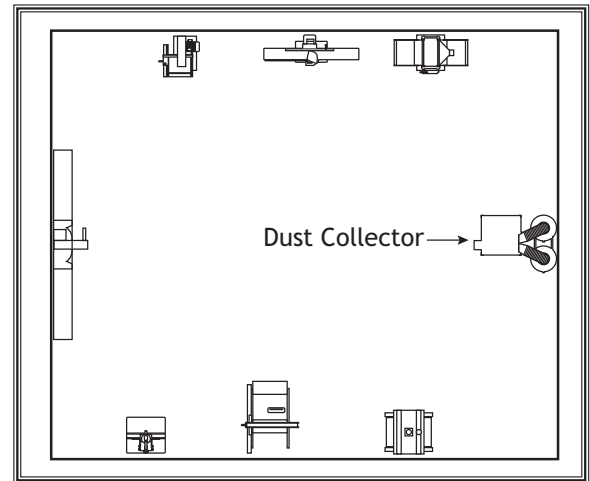


Figure 43. Initial sketch of shop layout.

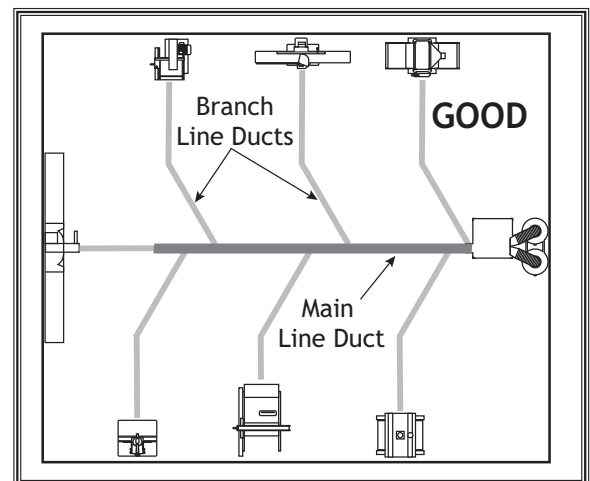


Figure 44. Good duct layout.

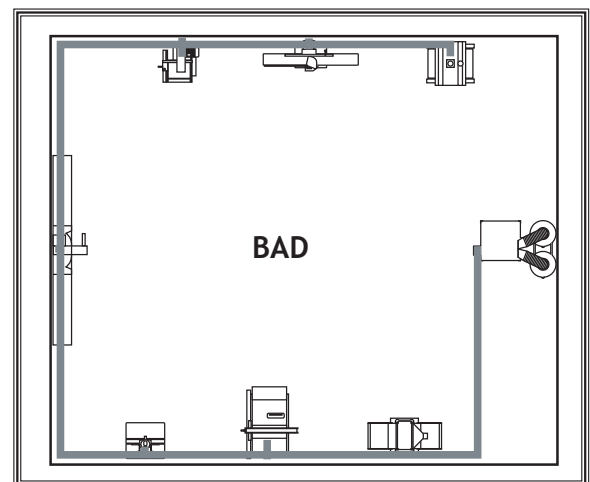


Figure 45. Bad duct layout.

Step 4. Determine Required CFM of Each Machine

Since each machine produces a different amount of sawdust, the requirements for the minimum amount of CFM to move that sawdust is unique to the machine (for example, a planer produces more sawdust than a table saw). Knowing this required CFM is important to gauging which size of duct to use.

Figure 47 will give you a close estimation of the airflow your machine requires. Keep in mind that machines that generate the most sawdust should be placed closest to the dust collector. If the machine has multiple dust ports, the total CFM required is the sum of all ports.

If your machine doesn't have a built in dust port, use **Figure 46** to determine which size of dust port to install on your machine.

Machine Dust Port Size	Approximate Required CFM
2"	98
2.5"	150
3"	220
4"	395
5"	614
6"	884
7"	1203
8"	1570
9"	1990
10"	2456

Figure 47. Approximate required airflow for machines, based on dust port size.

Machine	Average Dust Port Size
Table Saw	4"
Miter/Radial-Arm Saw	2"
Jointer (6" and smaller)	4"
Jointer (8"-12")	5"
Thickness Planer (13" and smaller)	4"
Thickness Planer (14"-20")	6"
Shaper	4"
Router (mounted to table)	2"
Bandsaw	4"
Lathe	4"
Disc Sander (12" and smaller)	2"
Disc Sander (13-18")	4"
Belt Sander (6" and smaller)	2"
Belt Sander (7"-9")	3"
Edge Sander (6" x 80" and smaller)	4"
Edge Sander (6" x 80" and larger)	5"
Drum Sander (24" and smaller)	2 x 4"
Drum Sander (24" and larger)	4 x 4"
Widebelt Sander (18" and smaller)	5"
Widebelt Sander (24"-37" single head)	2 x 6"
Widebelt Sander (24"-51" double head)	5 x 4"

Figure 46. Dust port size and quantity per average machine.

Write the required CFM for each machine on your sketch, as shown in **Figure 48**.

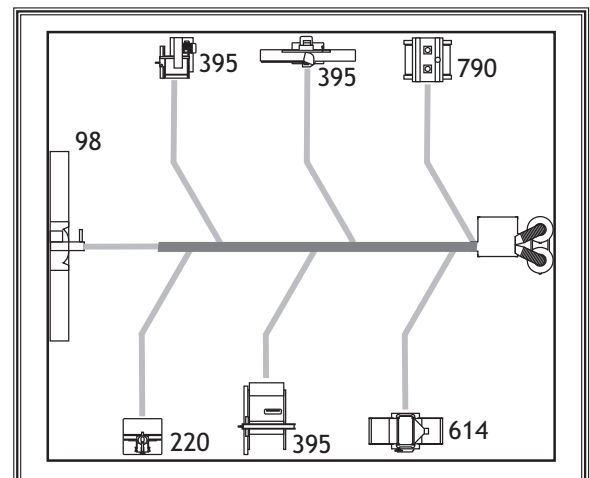


Figure 48. CFM requirements labeled for each machine.

Determining Main Line Duct Size

The general rule of thumb for a main line duct is that the velocity of the airflow must not fall below 3500 FPM.

For small/medium sized shops, using the inlet size of the dust collector as the main line duct size will usually keep the air velocity above 3500 FPM and, depending on your system, will allow you to keep multiple branches open at one time.

The inlet size is 7" for the W1808 and 8" for the W1809. For the Model W1810, the intake is 8" with the reducer installed. Mark your drawing as shown in **Figure 49**.

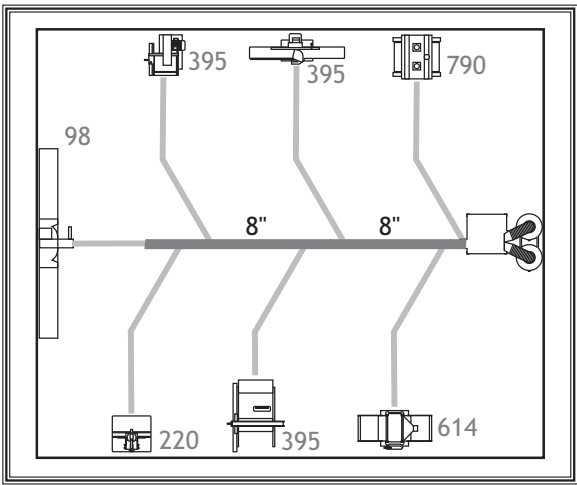


Figure 49. Main line size labeled on sketch.

Determining Branch Line Duct Size

The general rule of thumb for a branch line duct is that the velocity of the airflow must not fall below 4000 FPM.

For small/medium sized shops, using the dust port size from the machine as the branch line duct size will achieve the correct velocity in most applications. However, if the dust port on the machine is smaller than 4", make the branch line 4" and reduce the line right before the dust port.

Note: *Systems with powerful dust collectors work better if multiple blast gates are left open. This also allows you to run two machines at once. Experiment with different combinations of blast gates open/closed to find the best results for your system.*

Write your determined branch line sizes on your drawing, as shown in **Figure 50**.

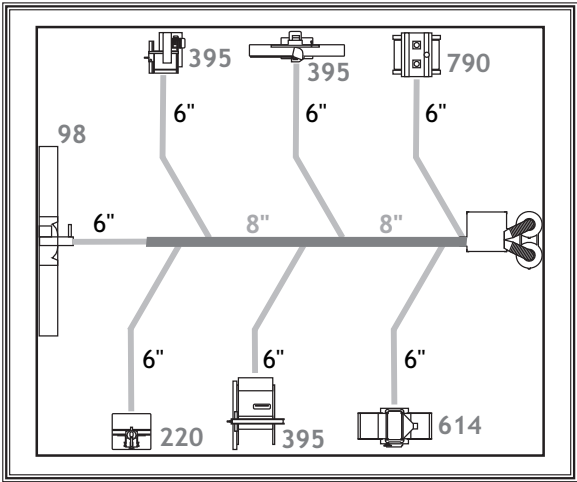


Figure 50. Branch line sizes labeled on sketch.

Multiple Dust Ports

If your machine has multiple dust ports, add the total CFM given for each dust port size from **Figure 47**. Refer to **Figure 51** and find the CFM that is closest to your total to determine the correct branch size. Split the branch line just before the dust ports with matching duct sizes.

Two Machines on Same Branch Line

If both machines will be running at the same time, add the total CFM given for each dust port size from **Figure 47**.

If both the machines will never be run at the same time, reference the machine with biggest dust port to **Figure 51** and add blast gates after the Y-branch to open/close the line to each machine.

Total CFM	Branch Line Size
600	5"
700	5"
800	6"
1000	6"
1200	7"
1400	8"
1600	8"

Figure 51. Branch line sizing chart by total CFM (for use when multiple machines share line).

Calculating Duct Resistance

Adding duct work, elbows, branches and any other components to a duct line increases airflow resistance (static pressure loss). This resistance can be minimized by using rigid (smooth) pipe and gradual curves, as opposed to flexible pipe and 90° elbows.

To help you think about this resistance, imagine riding a bicycle in a tunnel that is an exact replica of your duct work. If the inside of the tunnel is very bumpy (flexible pipe) and has a lot of sharp turns (90° elbows), it will take a lot more effort to travel from one end to the other.

The purpose of calculating the resistance is to determine if it is low enough from the machine to the dust collector to meet the given CFM requirement for the machine. Use the charts in **Figure 52** to calculate the resistance of duct work.

In most small/medium shops it is only necessary to calculate the line with the longest duct length or the most fittings (operating under the assumption that if the line with the highest resistance works, the others will be fine).

To calculate the static pressure of any given line in the system, do these steps:

1. Make a list of each size duct in the line, including the length, and multiply those numbers by the static pressure value given in **Figure 52**.
2. List each type of elbow or branch and multiply the quantity (if more than one) by the static pressure loss given in **Figure 52**.
3. Add the additional factors from **Figure 53** to your list.

Duct Dia.	Approximate Static Pressure Loss Per Foot of Rigid Pipe		Approximate Static Pressure Loss Per Foot of Flex Pipe	
	Main Lines at 3500 FPM	Branch Lines at 4000 FPM	Main Lines at 3500 FPM	Branch Lines at 4000 FPM
2"	.091	.122	.35	.453
2.5"	.08	.107	.306	.397
3"	.071	.094	.271	.352
4"	.057	.075	.215	.28
5"	.046	.059	.172	.225
6"	.037	.047	.136	.18
7"	.029	.036	.106	.141
8"	.023	.027	.08	.108
9"	.017	.019	.057	.079

Fitting Dia.	90° Elbow	45° Elbow	45° Wye(Y)	90° Wye(Y)
3"	.47	.235	.282	.188
4"	.45	.225	.375	.225
5"	.531	.266	.354	.236
6"	.564	.282	.329	.235
7"	.468	.234	.324	.216
8"	.405	.203	.297	.189

Figure 52. Static pressure loss charts.

Additional Factors	Static Pressure
Seasoned (well used) Dust Collection Filter	1"
Entry Loss at Large Machine Hood	2"

Figure 53. Additional factors affecting static pressure.

4. Total your list, as shown in the example in **Figure 54**, to come up with your overall static pressure loss number for that line.

Note: Always account for a seasoned filter, so you don't end up with a system that only works well when the filter is clean.

Note: When calculating static pressure loss to determine if multiple lines can be left open at the same time, only include the main line numbers once.

5. Compare the total static pressure loss for that line to the closest CFM given in the **Performance Curve** section on the machine specifications for your dust collector (located toward the front of this manual).

— If the CFM for your static pressure loss is above the requirement of the machine connected to the end of that branch line, then dust collection will most likely be successful. Congratulations! You've just designed your own dust system. Refer to **Page 37** to start buying the components necessary to make your system a reality.

— If the CFM for your static pressure loss is below the requirement of the machine, then that line will not effectively collect the dust. You must then modify some of the factors in that line to reduce the static pressure loss. Some of the ways to do this include: 1) Installing larger duct, 2) reducing amount of flexible duct used, 3) increasing machine dust port size, 4) moving machine closer to dust collector to eliminate duct length, and 5) reducing 90° elbows or replacing them with 45° elbows.

Main Line		
6" Rigid Pipe (.037) at 20'	.....	0.740
Branch Line		
4" Rigid Pipe (.075) at 10'	.....	0.750
4" Flex Pipe (.28) at 5'	.....	1.400
Elbows/Branches		
6" 45° Y-Branch	.....	0.329
4" 45° Elbow	.....	0.225
Additional Factors		
Seasoned Filter	.....	1.000
Total Static Pressure Loss	.....	4.444

Figure 54. Example list for totaling static pressure loss.

System Grounding

Since plastic hose is abundant, relatively inexpensive, easily assembled and air tight, it is a very popular material for conveying dust from woodworking machines to the dust collector. We recommend using flexible hose (flex-hose) to connect the woodworking machine to the dust collector. However, plastic flex-hose and plastic duct are an insulator, and dust particles moving against the walls of the plastic duct create a static electrical build up. This charge will build until it discharges to a ground. If a grounding medium is not available to prevent static electrical build up, the electrical charge will arc to the nearest grounded source. This electrical discharge may cause an explosion and subsequent fire inside the system.

To protect against static electrical build up inside a non-conducting duct, a bare copper wire should be placed inside the duct along its length and grounded to the dust collector. You must also confirm that the dust collector is continuously grounded through the electrical circuit to the electric service panel.

If you connect the dust collector to more than one machine by way of a non-conducting branching duct system and blast gates, the system must still be grounded as mentioned above. We recommend inserting a continuous bare copper ground wire (**Figure 55**) inside the entire duct system and attaching the wire to each grounded woodworking machine and dust collector.

Be sure that you extend the bare copper wire down all branches of the system. Do not forget to connect the wires to each other with wire nuts when two branches meet at a "Y" or "T" connection.

Ensure that the entire system is grounded. If using plastic blast gates to direct air flow, the grounding wire must be jumped (**Figure 56**) around the blast gate without interruption to the grounding system.

We also recommend wrapping the outside of all plastic ducts with bare copper wire to ground the outside of the system against static electrical build up. Wire connections at Y's and T's should be made with wire nuts.

Attach the bare ground wire to each stationary woodworking machine and attach to the dust collector frame with a ground screw as shown in **Figure 55**. Ensure that each machine is continuously grounded to the grounding terminal in your electric service panel.

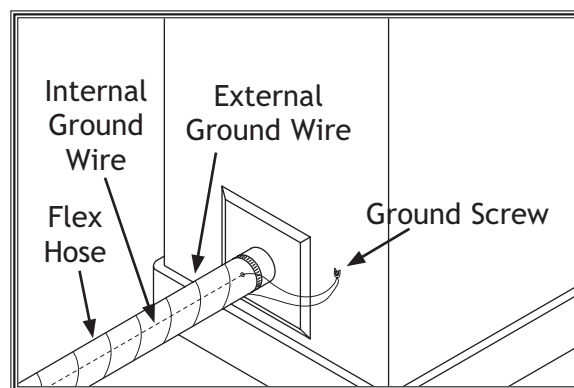
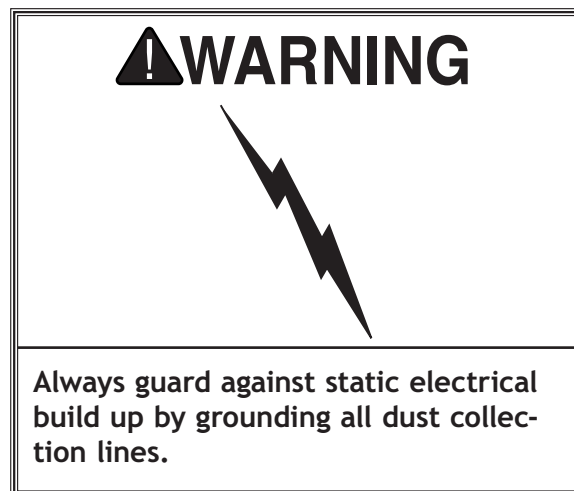


Figure 55. Flex-hose grounded to machine.

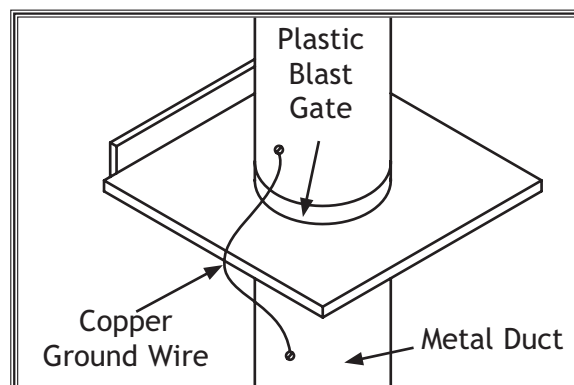


Figure 56. Ground jumper wire when using plastic blast gates and metal duct.

Cyclone Dust Collector Accessories

The following cyclone dust collector accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800-545-8420 or at sales@woodstockint.com.

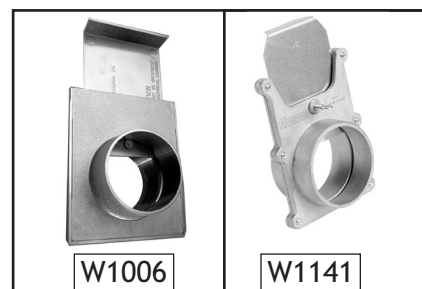
Blast Gates maximize system efficiency. Blast gates are available in both black ABS plastic and aluminum. Plastic blast gates are economically priced, have a textured surface and an easy sliding gate action. For those customers who prefer metal, our top quality aluminum blast gates feature a cast aluminum body with steel gate and locking knob. The following types and models are available:

Black ABS Plastic Blast Gates

W1006 3" Outer Diameter
W1007 4" Outer Diameter
W1008 5" Outer Diameter
W1009 6" Outer Diameter

Aluminum Blast Gates

W1141 3" Outer Diameter
W1142 4" Outer Diameter



The **Model W1053 Grounding Kit** provides everything you need to ground a dust collection system, including directions for installation. A large system may need more than one kit, so keep plenty of these on hand. This safety accessory is essential to any complete dust collection assortment.



The **Model W1055 Dust Collection Accessories Kit #2** provides the necessary hoses, clamps, hoods and fittings to connect two woodworking machines to a dust collector. Air flow to each machine is controlled by a blast gate. Kit comes complete with comprehensive instructions and can be expanded even further using our other dust collection accessories (list enclosed in each box).

Kit includes:

- (2) 4" Blast gates (W1007)
- (2) 4" x 10' Hose (W1031)
- (1) Table saw dust hood (W1004)
- (1) Universal dust hood (W1010)
- (1) 4" Y-fitting (W1015)
- (10) 4" Wire hose clamps (W1317)
- Shipping weight: 15 lbs. 14 oz.
- Package size: 24" x 24" x 12"

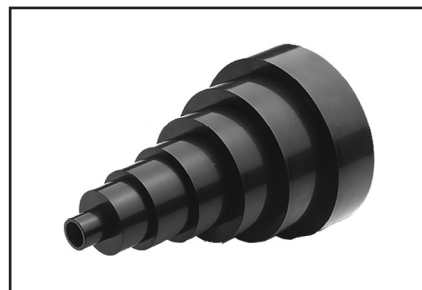


Elbows are necessary whenever ductwork changes direction, such as from a dust collector to an overhead main line, or when connecting individual machines to branch lines.

W1016: 3" Outer Diameter
W1017: 4" Outer Diameter



The **Model W1039 Universal Adapter** provides a multitude of dust collection reducing options. Simply cut away unneeded steps with a hacksaw. Outside diameter step sizes include 1", 2", 2½", 3", 4", 5" and 6".



Splices are used to connect full sections of hose for longer runs or to utilize short sections.

W1018: 3" Outer Diameter

W1019: 4" Outer Diameter



Reducers provide a step down from a larger main line to smaller branch lines. This step-down increases air velocity near the machine where it's needed most. These three size reductions will handle most system needs.

W1020: 3" x 2" Outer Diameter

W1011: 4" x 3" Outer Diameter

W1037: 5" x 4" Outer Diameter



T-fittings provide the option of adding branches to a system to service each machine in a shop. T's are very helpful when space or design constraints prohibit the use of Y's.

W1012: 3" Outer Diameter

W1013: 4" Outer Diameter.



Woodstock International hoses are ideally suited for dust removal because of their strength, durability and flexibility. Available in the most requested sizes and priced to move! The following types and models are available:

Wire-Reinforced Clear Hose

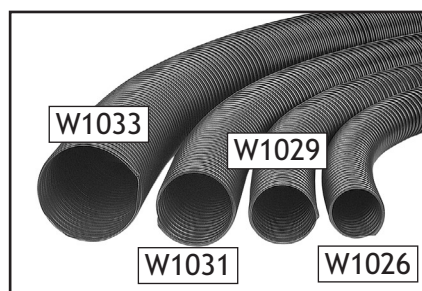
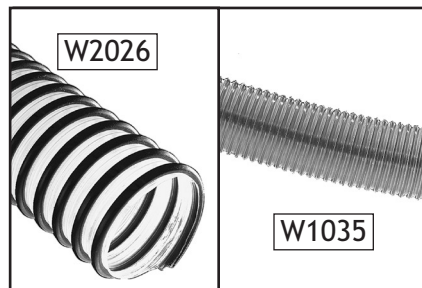
W1034 4" x 10'
W1035 5" x 10'
W1036 6" x 10'
D3887 7" x 3'
D3888 7" x 10'
D3889 8" x 3'
D3890 8" x 10'
D3891 9" x 2'
D3892 9" x 10'

Clear Dust Collection Hose

W2026 2" x 10'
W2027 2½" x 10'
W2028 3" x 10'
W2029 3" x 20'
W2031 4" x 10'
W2032 4" x 20'
W2033 5" x 10'

Black Dust Collection Hose

W1026 2" x 10'
W1027 2½" x 10'
W1028 3" x 10'
W1029 3" x 20'
W1030 3" x 50'
W1031 4" x 10'
W1032 4" x 20'
W1033 5" x 10'



SERVICE

General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: tech-support@shopfox.biz.

Emptying Drum

Empty the collection drum when it is no more than $\frac{3}{4}$ full. If the drum is overfilled, dust will be sucked into the inlet cylinder and pass through to the filter.

How quickly the drum will fill up is based on the type of work being done at that time.

A machine that produces fine dust, such as a sander or table saw, will slowly fill the drum.

A machine that produces curly shavings, such as a planer or jointer, will quickly fill the drum.

In the beginning, check your drum regularly to get an idea of how often it needs to be emptied.

Cleaning Filter

Your new cyclone dust collector has a gentle brush system inside the filter for cleaning. This brush system is controlled by the red and black handles shown in **Figure 57**.

To clean the filter, simply pull the red handle down all the way, then pull the black handle down and hook in place.

Always make sure to leave the red handle in the up position to ensure that the brushes return to their proper position and do not restrict the filter.

For a more thorough cleaning, the filters can be removed and rinsed off inside. However, make sure to clean the filters with the brush system first. Allow the filter to air dry, but never leave the filters in the sun to dry or they could become damaged. Do not blow out the filters with compressed air to avoid damaging them.

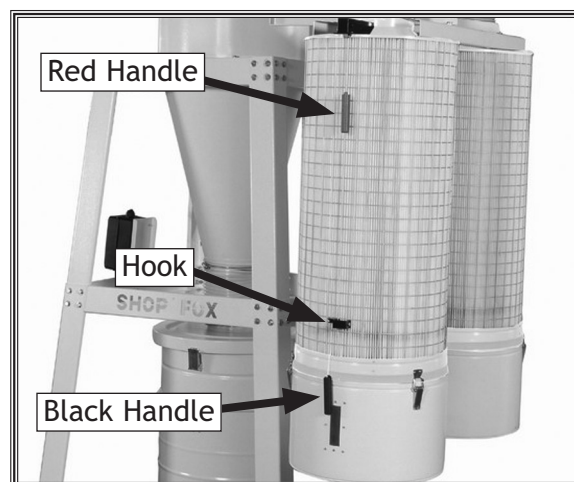
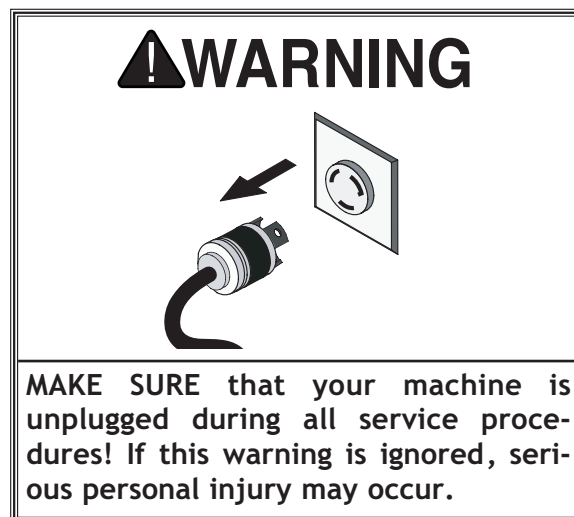


Figure 57. Brush handles for cleaning filter.

W1808 Electrical Components

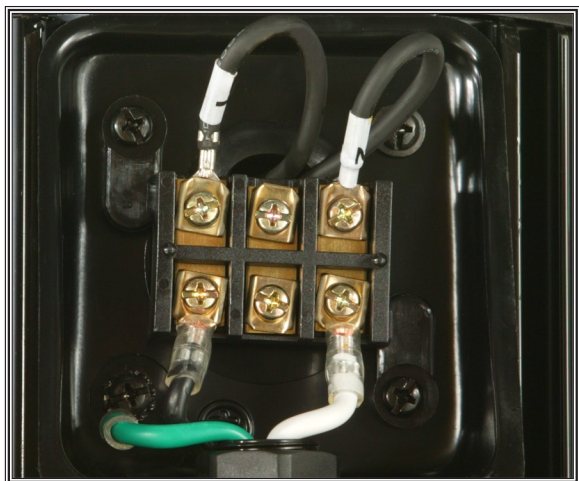


Figure 58. W1808 motor wiring.



Figure 59. W1808 capacitors.

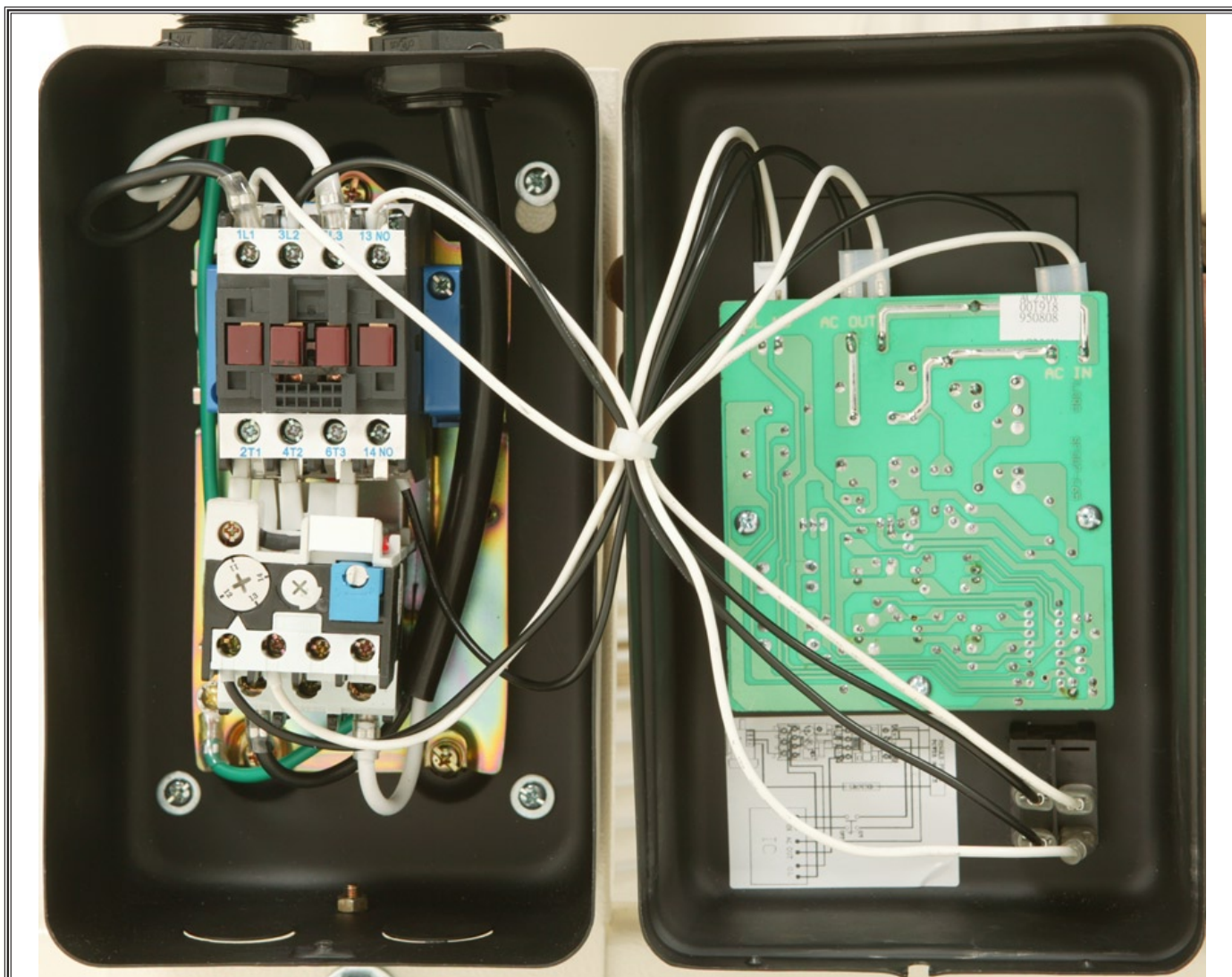


Figure 60. W1808 magnetic switch wiring.

W1809 Electrical Components



Figure 61. W1809 motor wiring.

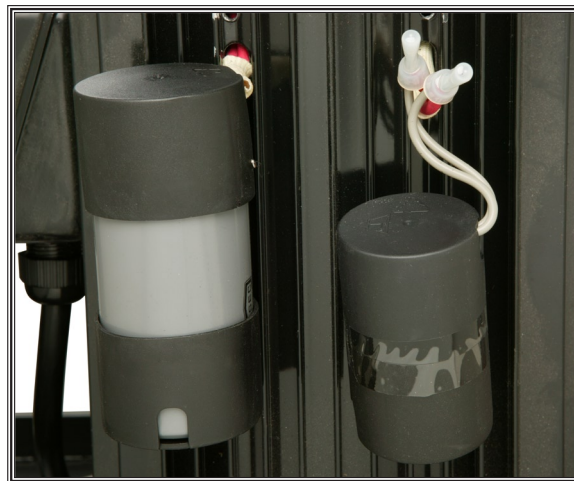


Figure 62. W1809 capacitors.

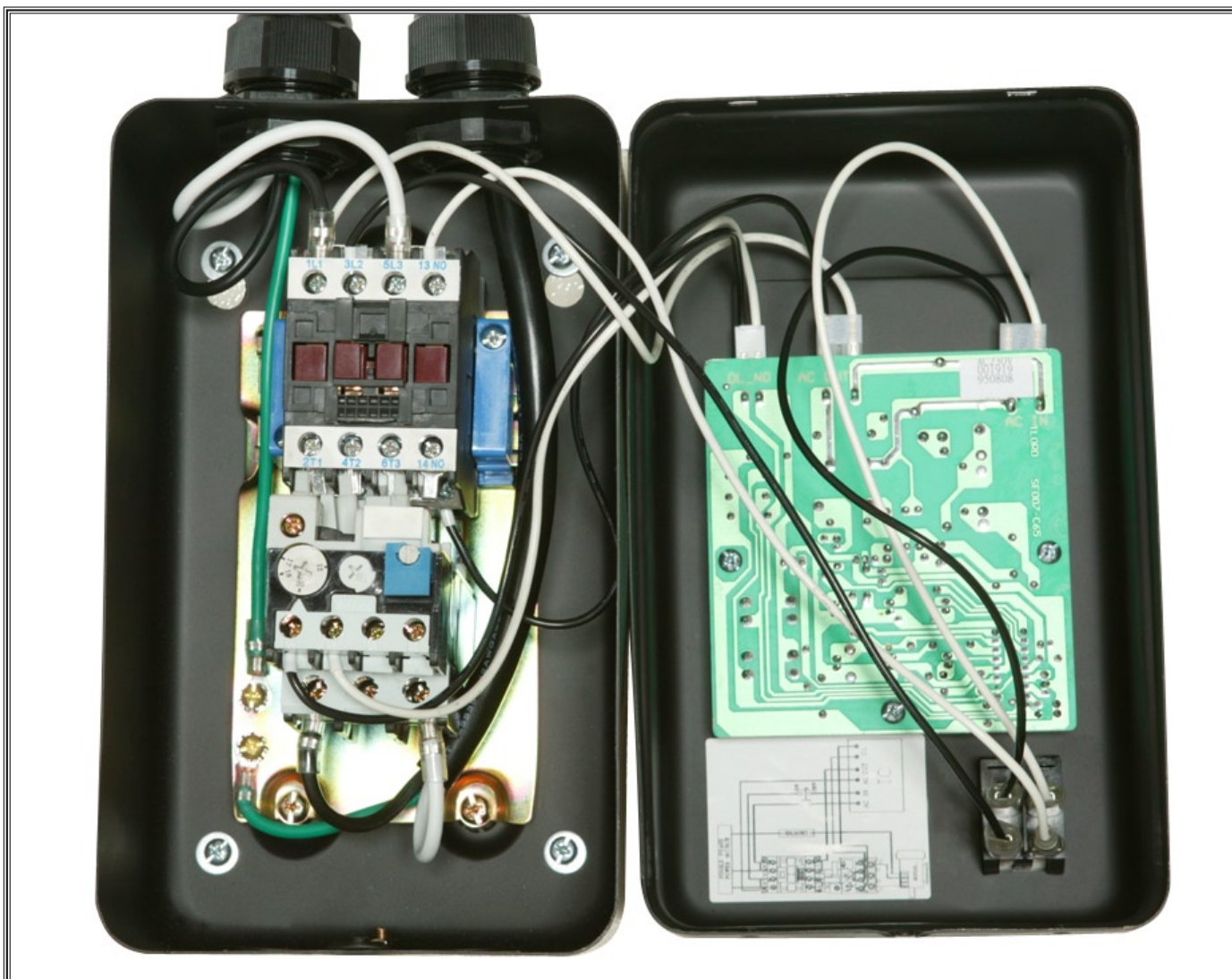







Figure 63. W1809 magnetic switch wiring.

COLOR KEY

BLACK	
WHITE	
GREEN	
RED	
GRAY	



W1810 Electrical Components

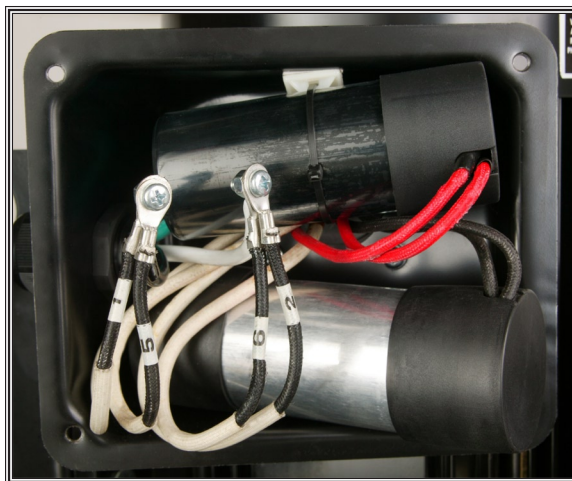


Figure 64. W1810 motor wiring.

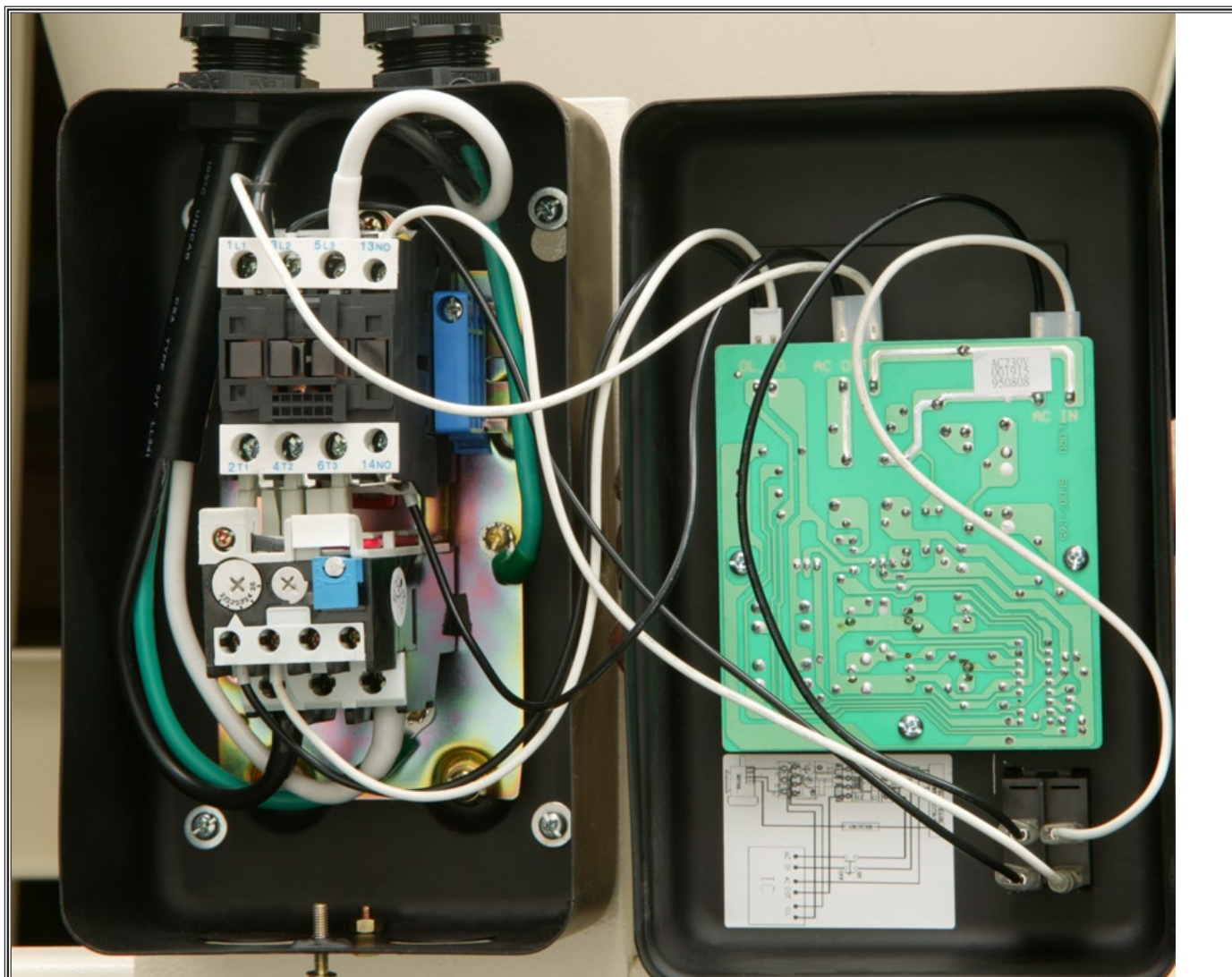
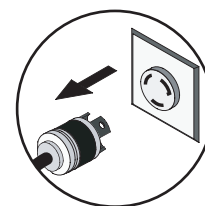


Figure 65. W1810 magnetic switch wiring.

Troubleshooting



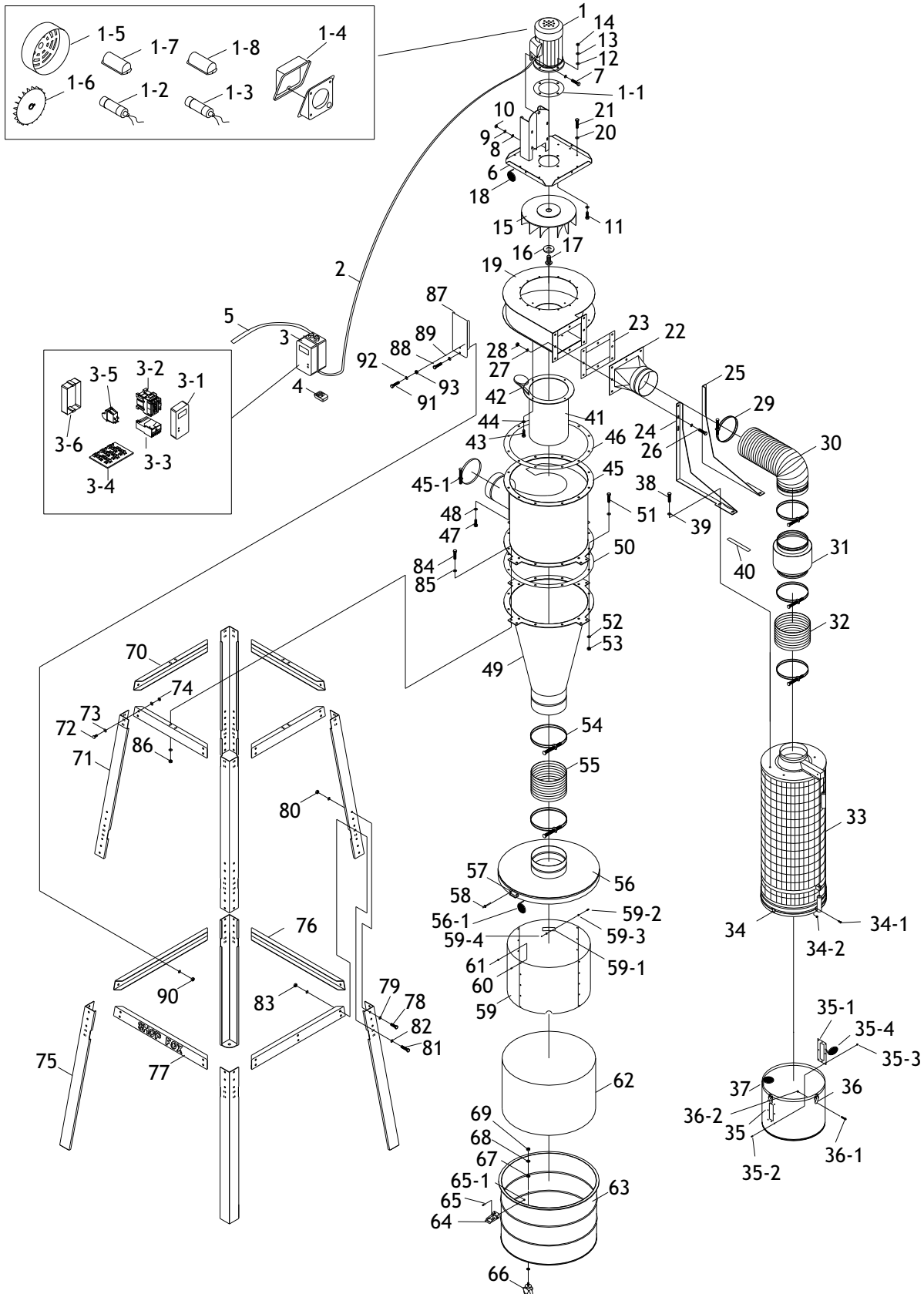
This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT** make any adjustments until power is disconnected and moving parts have come to a complete stop!

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not start.	<ol style="list-style-type: none"> 1. Power supply fuse or circuit breaker has tripped. 2. Toggle switch is broken inside. 3. Thermal protection circuit. Breaker amperage is set too low, or motor is at fault. 4. Controller batteries are dead. 5. Start capacitor is at fault. 6. Remote circuit board has failed. 7. Motor is at fault. 	<ol style="list-style-type: none"> 1. Disconnect power, and inspect circuit for electrical shorts and repair. Replace circuit breaker if it is old or has tripped many times. 2. Disconnect power, and use an ohmmeter to check switch terminals for continuity, and replace switch if required. 3. Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amperage setting. If switch is maxed out, replace motor. 4. Replace batteries. 5. Replace start capacitor. 6. Replace remote circuit board. 7. Replace motor.
Motor runs slower than normal.	<ol style="list-style-type: none"> 1. Poor electrical connection. 2. Run capacitor has failed. 3. Remote circuit board has failed. 4. Motor is wired incorrectly. 5. Motor is at fault. 	<ol style="list-style-type: none"> 1. Inspect the power supply for loose, corroded, or overheated electrical connections and repair. 2. Replace run capacitor. 3. Replace remote circuit board. 4. Have the power source voltage checked for 220V and check wiring. 5. Replace the motor.
Loud, repetitious noise, or excessive vibration coming from dust collector.	<ol style="list-style-type: none"> 1. Dust collector is not on a flat surface and wobbles. 2. Impeller fan is damaged and unbalanced. 3. The motor mounting is loose. 4. Motor fan cover is dented, causing the motor fan to hit the cover while spinning. 5. Impeller is loose on the motor shaft. 	<ol style="list-style-type: none"> 1. Stabilize the dust collector. 2. Unplug dust collector, and inspect the impeller for dents, bends, loose fins. Replace impeller if any damage is found. 3. Make sure all fasteners on the dust collector are tight. 4. Replace motor fan cover. 5. Replace the motor and impeller as a set if the motor shaft and the impeller hub is damaged.
Dust collector does not adequately collect dust or chips; poor performance.	<ol style="list-style-type: none"> 1. Dust collection drum is full. 2. Filter is dirty. 3. There is a restriction in the duct line. 4. The dust collector is too far away from the point of suction, or there are too many sharp bends in the ducting. 5. The lumber is wet and not flowing through the dust lines smoothly. 6. There is a leak in the ducting, or a series of small leaks, or too many open ports. 7. There are not enough open branch lines at one time, thereby causing a velocity drop in the main line.. 	<ol style="list-style-type: none"> 1. Empty collection drum. 2. Clean filter. 3. Remove dust line from dust collector inlet and unblock the restriction in the duct line. A plumbing snake may be necessary. 4. Relocate the dust collector closer to the point of suction, and rework ducting without sharp bends. Refer to System Design, beginning on Page 31. 5. Process lumber with less than 20% moisture content. 6. Rework the ducting to eliminate all leaks. Close dust ports for lines not being used. Refer to System Design on Page 31 for more solutions. 7. Open 1 or 2 more blast gates to different branch lines to allow the velocity in the main line to increase.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Dust collector does not adequately collect dust or chips; poor performance.	<ul style="list-style-type: none"> 8. The ducting and ports are incorrectly sized. 9. The machine dust collection design is inadequate. 10. The dust collector is too small for the dust collection system. 	<ul style="list-style-type: none"> 8. Reinstall correctly sized ducts and fittings. Refer to System Design on Page 31 for more solutions. 9. Use a dust collection nozzle on a stand. 10. Install a larger dust collector to power your dust collection system.

PARTS

W1808 Parts Breakdown



W1808 Parts List

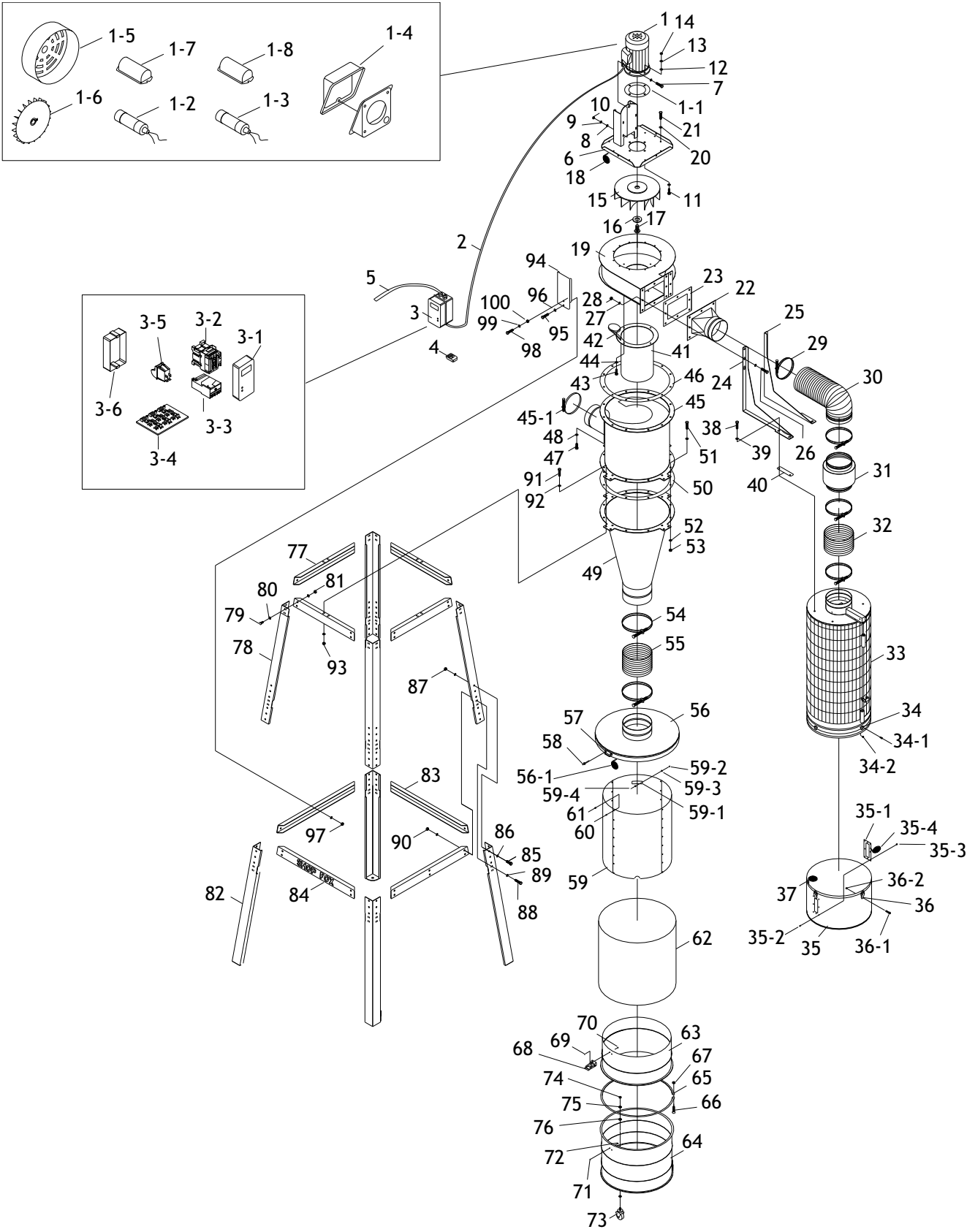
REF	PART #	DESCRIPTION
1	X1808001	MOTOR 2HP
1-1	X1808001-1	MOTOR GASKET
1-2	X1808001-2	START CAPACITOR 300MFD 125V
1-3	X1808001-3	RUN CAPACITOR 50MFD 250V
1-4	X1808001-4	JUNCTION BOX
1-5	X1808001-5	MOTOR FAN COVER
1-6	X1808001-6	MOTOR FAN
1-7	X1808001-7	S. CAPACITOR COVER
1-8	X1808001-8	R. CAPACITOR COVER
2	X1808002	WIRE 12AWG X 3C X 2.5M X 6R
3	X1808003	REMOTE CONTROL MAG. SWITCH 220V
3-1	X1808003-1	MAG SWITCH FRONT COVER
3-2	X1808003-2	CONTACTOR
3-3	X1808003-3	THERMAL OVERLOAD RELAY
3-4	X1808003-4	CIRCUIT BOARD
3-5	X1808003-5	SWITCH
3-6	X1808003-6	MAG SWITCH BACK COVER
4	X1808004	REMOTE CONTROLLER
5	X1808005	WIRE 12AWG X 3C X 3.2M X 6R
6	X1808006	MOTOR BASE
7	XPB16	HEX BOLT 3/8-16 X 1-1/2
8	XPW02	FLAT WASHER 3/8"
9	XPLW04	LOCK WASHER 3/8"
10	XPN08	HEX NUT 3/8-16
11	XPB16	HEX BOLT 3/8-16 X 1-1/2
12	XPW02	FLAT WASHER 3/8"
13	XPLW04	LOCK WASHER 3/8"
14	XPN08	HEX NUT 3/8-16
15	X1808015	IMPELLER 13-1/2"
16	X1808016	FENDER WASHER 3/8"
17	X1808017	SPECIAL SCREW 3/8" X 1" (LH)
18	X1808018	FOAM TAPE 3MM X 6MM X 1300MM
19	X1808019	BLOWER
20	XPW07	FLAT WASHER 5/16"
21	XPB07	HEX BOLT 5/16-18 X 3/4
22	X1808022	OUTLET PORT 7"
23	X1808023	GASKET 306MM X 226MM
24	X1808024	FILTER L-BRACE (RIGHT)
25	X1808025	FILTER L-BRACE (LEFT)
26	XPB03	HEX BOLT 5/16-18 X 1
27	XPW07	FLAT WASHER 5/16"
28	XPN02	HEX NUT 5/16-18
29	X1808029	HOSE CLAMP 7"
30	X1808030	CLEAR FLEX HOSE 7" X 18
31	X1808031	NOISE REDUCER 7"
32	X1808032	CLEAR FLEX HOSE 7" X 4"
33	X1808033	CARTRIDGE FILTER 400MM
34	X1808034	COLLECTION DRUM LATCH HOOK
34-1	XPS06	PHLP HD SCR 10-24 X 3/8
34-2	XPN07	HEX NUT 10-24
35	X1808035	COLLECTION DRUM DIA 400MM
35-1	X1808035-1	ACRYLIC BOARD 170MM X 75MM
35-2	XPS06	PHLP HD SCR 10-24 X 3/8
35-3	XPN07	HEX NUT 10-24
35-4	X1808035-4	FOAM TAPE 3MM X 6MM X 520MM

REF	PART #	DESCRIPTION
36	X1808036	COLLECTION DRUM LATCH
36-1	XPS06	PHLP HD SCR 10-24 X 3/8
36-2	XPN07	HEX NUT 10-24
37	X1808037	FOAM TAPE 19MM X 5MM X 1300MM
38	XPB07	HEX BOLT 5/16-18 X 3/4
39	XPW07	FLAT WASHER 5/16"
40	X1808040	FILTER BRACE GASKET 155MM X 37MM
41	X1808041	INTAKE CYLINDER 10"
42	X1808042	FOAM TAPE 3MM X 6MM X 1800MM
43	XPB07	HEX BOLT 5/16-18 X 3/4
44	XPW07	FLAT WASHER 5/16"
45	X1808045	INTAKE BARREL 20"
45-1	X1808045-1	HOSE CLAMP 7"
46	X1808046	GASKET DIA 584MM
47	XPB07	HEX BOLT 5/16-18 X 3/4
48	XPW07	FLAT WASHER 5/16"
49	X1808049	INTAKE FUNNEL 20"
50	X1808050	GASKET DIA 584MM
51	XPB03	HEX BOLT 5/16-18 X 1
52	XPW07	FLAT WASHER 5/16"
53	XPN02	HEX NUT 5/16-18
54	X1808054	HOSE CLAMP 9"
55	X1808055	CLEAR FLEX HOSE 9" X 7"
56	X1808056	DRUM LID
56-1	X1808056-1	FOAM TAPE 10MM X 50MM X 2000MM
57	X1808057	DRUM LATCH HOOK
58	X1808058	BLIND RIVET
59	X1808059	BAG HOLDER PLATE
59-1	X1808059-1	RUBBER HANDLE
59-2	XPB02	HEX BOLT 1/4-20 X 5/8
59-3	XPW06	FLAT WASHER 1/4"
59-4	XPN05	HEX NUT 1/4-20
60	XPS06	PHLP HD SCR 10-24 X 3/8
61	XPN07	HEX NUT 10-24
62	X1808062	PLASTIC COLLECTN BAG 640MM X 1000MM
63	X1808063	COLLECTION DRUM 35 GALLON
64	X1808064	DRUM LID LATCH
65	XPS06	PHLP HD SCR 10-24 X 3/8
65-1	XPN07	HEX NUT 10-24
66	X1808066	CASTER 2"
67	XPW02	FLAT WASHER 3/8"
68	XPLW04	LOCK WASHER 3/8"
69	XPN08	HEX NUT 3/8-16
70	X1808070	UPPER STAND BRACE
71	X1808071	UPPER STAND LEG
72	XPB21	HEX BOLT 3/8-16 X 3/4
73	XPW02	FLAT WASHER 3/8"
74	XPLN01	LOCK NUT 3/8-16
75	X1808075	LOWER STAND LEG
76	X1808076	LOWER STAND BRACE
77	X1808077	LOWER STAND BRACE (WITH SHOPFOX)
78	XPB21	HEX BOLT 3/8-16 X 3/4
79	XPW02	FLAT WASHER 3/8"
80	XPLN01	LOCK NUT 3/8-16
81	XPB18	HEX BOLT 3/8-16 X 1

REF	PART #	DESCRIPTION
82	XPW02	FLAT WASHER 3/8"
83	XPLN01	LOCK NUT 3/8-16
84	XPB18	HEX BOLT 3/8-16 X 1
85	XPW02	FLAT WASHER 3/8"
86	XPLN01	LOCK NUT 3/8-16
87	X1808087	SWITCH BASE

REF	PART #	DESCRIPTION
88	XPB21	HEX BOLT 3/8-16 X 3/4
89	XPW02	FLAT WASHER 3/8"
90	XPB08	HEX NUT 3/8-16
91	XPS06	PHLP HD SCR 10-24 X 3/8
92	XPW03	FLAT WASHER #10
93	XPB07	HEX NUT 10-24

W1809 Parts Breakdown



W1809 Parts List

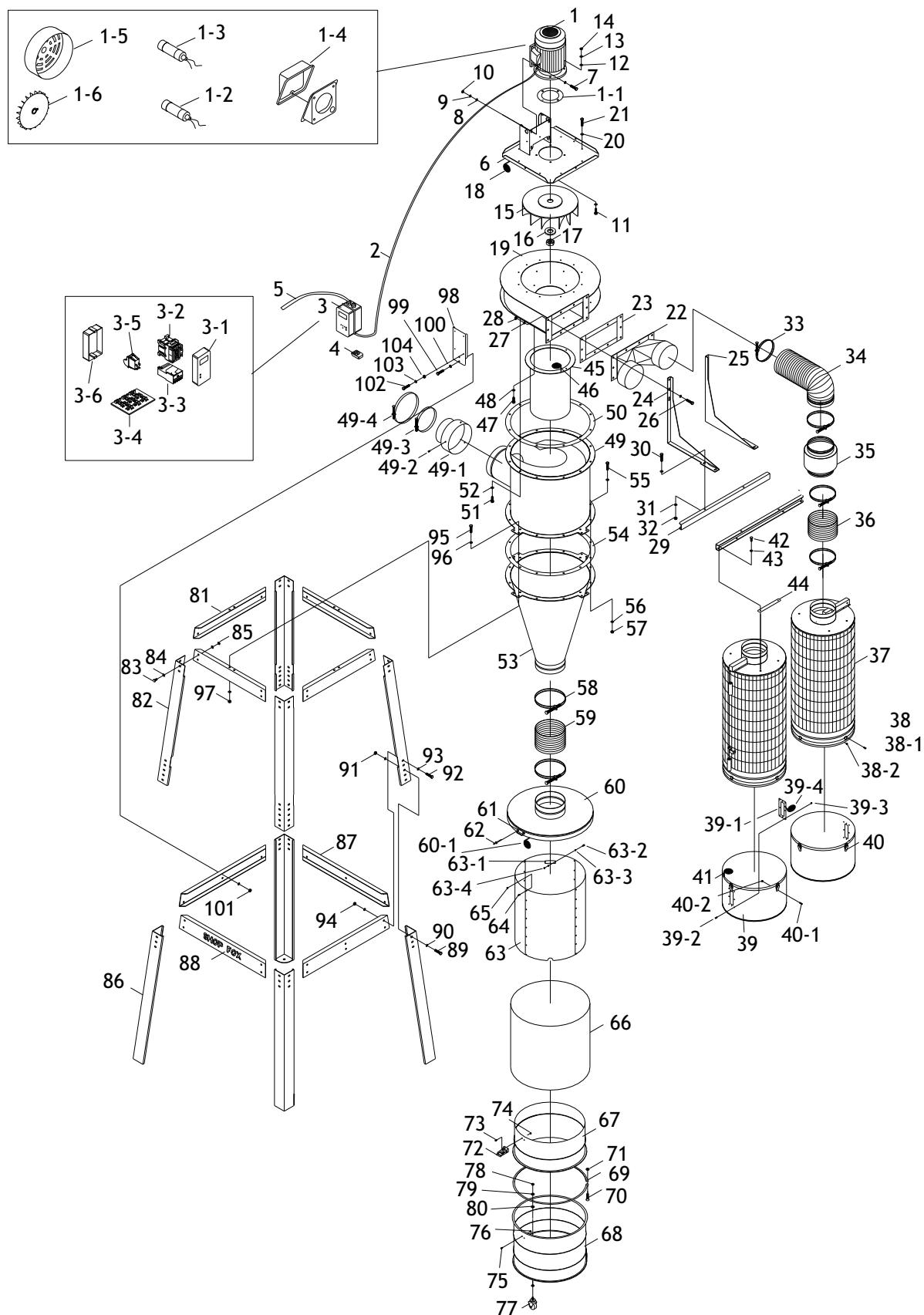
REF	PART #	DESCRIPTION
1	X1809001	MOTOR 3HP
1-1	X1809001-1	MOTOR GASKET
1-2	X1809001-2	START CAPACITOR 400MFD 125V
1-3	X1809001-3	RUN CAPACITOR 50MFD 250V
1-4	X1809001-4	JUNCTION BOX
1-5	X1809001-5	MOTOR FAN COVER
1-6	X1809001-6	MOTOR FAN
1-7	X1809001-7	S. CAPACITOR COVER
1-8	X1809001-8	R. CAPACITOR COVER
2	X1809002	WIRE 12AWG X 3C X 3M X 6R
3	X1809003	REMOTE CONTROL MAG. SWITCH 220V
3-1	X1809003-1	MAG SWITCH FRONT COVER
3-2	X1809003-2	CONTACTOR
3-3	X1809003-3	THERMAL OVERLOAD RELAY
3-4	X1809003-4	CIRCUIT BOARD
3-5	X1809003-5	SWITCH
3-6	X1809003-6	MAG SWITCH BACK COVER
4	X1809004	REMOTE CONTROLLER
5	X1809005	WIRE 12AWG X 3C X 3.2M X 6R
6	X1809006	MOTOR BASE
7	XPB16	HEX BOLT 3/8-16 X 1-1/2
8	XPW02	FLAT WASHER 3/8"
9	XPLW04	LOCK WASHER 3/8"
10	XPN08	HEX NUT 3/8-16
11	XPB16	HEX BOLT 3/8-16 X 1-1/2
12	XPW02	FLAT WASHER 3/8"
13	XPLW04	LOCK WASHER 3/8"
14	XPN08	HEX NUT 3/8-16
15	X1809015	IMPELLER 15"
16	X1809016	SPECIAL WASHER 3/8"
17	X1809017	SPECIAL SCREW 3/8"-1"(LH)
18	X1809018	FOAM TAPE 3MM X 6MM X 1600MM
19	X1809019	BLOWER
20	XPW07	FLAT WASHER 5/16"
21	XPB07	HEX BOLT 5/16-18 X 3/4
22	X1809022	OUTLET PORT 8"
23	X1809023	GASKET 326MM X 226MM
24	X1809024	FILTER L-BRACE (RIGHT)
25	X1809025	FILTER L-BRACE (LEFT)
26	XPB03	HEX BOLT 5/16-18 X 1
27	XPW07	FLAT WASHER 5/16"
28	XPN02	HEX NUT 5/16-18
29	X1809029	HOSE CLAMP 8"
30	X1809030	CLEAR FLEX HOSE 8" X 19"
31	X1809031	NOISE REDUCER 8"
32	X1809032	CLEAR FLEX HOSE 8" X 4"
33	X1809033	CARTRIDGE FILTER DIA 510MM
34	X1809034	COLLECTION DRUM LATCH HOOK
34-1	XPS06	PHLP HD SCR 10-24 X 3/8
34-2	XPN07	HEX NUT 10-24
35	X1809035	COLLECTION DRUM 510MM
35-1	X1809035-1	ACRYLIC BOARD 170MM X 75MM

REF	PART #	DESCRIPTION
35-2	XPS06	PHLP HD SCR 10-24 X 3/8
35-3	XPN07	HEX NUT 10-24
35-4	X1809035-4	FOAM TAPE 3MM X 6MM X 520MM
36	X1809036	COLLECTION DRUM LATCH
36-1	XPS06	PHLP HD SCR 10-24 X 3/8
36-2	XPN07	HEX NUT 10-24
37	X1809037	FOAM TAPE 19MM X 5MM X 1600MM
38	XPB07	HEX BOLT 5/16-18 X 3/4
39	XPW07	FLAT WASHER 5/16"
40	X1809040	BRACE GASKET 240MM X 32MM
41	X1809041	CYCLONE CYLINDER 10"
42	X1809042	FOAM TAPE 3MM X 6MM X 1800MM
43	XPB07	HEX BOLT 5/16-18 X 3/4
44	XPW07	FLAT WASHER 5/16"
45	X1809045	CYCLONE BARREL 20"
45-1	X1809045-1	HOSE CLAMP 8"
46	X1809046	GASKET DIA 584MM
47	XPB07	HEX BOLT 5/16-18 X 3/4
48	XPW07	FLAT WASHER 5/16"
49	X1809049	CYCLONE FUNNEL 20"
50	X1809050	GASKET DIA 584MM
51	XPB03	HEX BOLT 5/16-18 X 1
52	XPW07	FLAT WASHER 5/16"
53	XPN02	HEX NUT 5/16-18
54	X1809054	HOSE CLAMP 9"
55	X1809055	CLEAR FLEX HOSE 9" X 13"
56	X1809056	DRUM LID
56-1	X1809056-1	FOAM TAPE 10MM X 50MM X 2000MM
57	X1809057	DRUM LID LATCH
58	X1809058	BLIND RIVETS
59	X1809059	BAG HOLDER PLATE
59-1	X1809059-1	RUBBER HANDLE
59-2	XPB02	HEX BOLT 1/4-20 X 5/8
59-3	XPW06	FLAT WASHER 1/4"
59-4	XPN05	HEX NUT 1/4-20
60	XPS06	PHLP HD SCR 10-24 X 3/8
61	XPN07	HEX NUT 10-24
62	X1809062	PLASTIC BAG 640MM X 1200MM
63	X1809063	UPPER COLLECTN DRUM 25 GAL
64	X1809064	COLLECTION DRUM 35 GALLON
65	X1809065	DRUM CLAMP
66	XPB04	HEX BOLT 5/16-18 X 3
67	XPN02	HEX NUT 5/16-18
68	X1809068	DRUM LATCH
69	XPS06	PHLP HD SCR 10-24 X 3/8
70	XPN07	HEX NUT 10-24
71	XPS06	PHLP HD SCR 10-24 X 3/8
72	XPN07	HEX NUT 10-24
73	X1809073	CASTER 2"
74	XPN08	HEX NUT 3/8-16
75	XPLW04	LOCK WASHER 3/8"

REF	PART #	DESCRIPTION
76	XPW02	FLAT WASHER 3/8"
77	X1809077	UPPER STAND BRACE
78	X1809078	UPPER STAND LEG
79	XPB21	HEX BOLT 3/8-16 X 3/4
80	XPW02	FLAT WASHER 3/8"
81	XPLN01	LOCK NUT 3/8-16
82	X1809082	LOWER STAND LEG
83	X1809083	LOWER STAND BRACE
84	X1809084	LOWER STAND BRACE (WITH SHOPFOX)
85	XPB21	HEX BOLT 3/8-16 X 3/4
86	XPW02	FLAT WASHER 3/8"
87	XPLN01	LOCK NUT 3/8-16
88	XPB18	HEX BOLT 3/8-16 X 1

REF	PART #	DESCRIPTION
89	XPW02	FLAT WASHER 3/8"
90	XPLN01	LOCK NUT 3/8-16
91	XPB18	HEX BOLT 3/8-16 X 1
92	XPW02	FLAT WASHER 3/8"
93	XPLN01	LOCK NUT 3/8-16
94	X1809094	SWITCH BASE
95	XPB21	HEX BOLT 3/8-16 X 3/4
96	XPW02	FLAT WASHER 3/8"
97	XPB08	HEX NUT 3/8-16
98	XPS06	PHLP HD SCR 10-24 X 3/8
99	XPW03	FLAT WASHER #10
100	XPB07	HEX NUT 10-24

W1810 Parts Breakdown



W1810 Parts List

REF PART # DESCRIPTION

1	X1810001	MOTOR 5HP
1-1	X1810001-1	MOTOR GASKET
1-2	X1810001-2	START CAPACITOR 400MFD 250V
1-3	X1810001-3	RUN CAPACITOR 40MFD 450V
1-4	X1810001-4	JUNCTION BOX
1-5	X1810001-5	MOTOR FAN COVER
1-6	X1810001-6	MOTOR FAN
2	X1810002	WIRE 10AWG X 3C X 3M X 6R
3	X1810003	REMOTE CONTROL MAG. SWITCH 220V
3-1	X1810003-1	MAG SWITCH FRONT COVER
3-2	X1810003-2	CONTACTOR
3-3	X1810003-3	THERMAL OVERLOAD RELAY
3-4	X1810003-4	CIRCUIT BOARD
3-5	X1810003-5	SWITCH
3-6	X1810003-6	MAG SWITCH BACK COVER
4	X1810004	REMOTE CONTROLLER
5	X1810005	WIRE 10AWG X 3C X 3.2M X 6R
6	X1810006	MOTOR BASE
7	XPB16	HEX BOLT 3/8-16 X 1-1/2
8	XPW02	FLAT WASHER 3/8"
9	XPLW04	LOCK WASHER 3/8"
10	XPNO8	HEX NUT 3/8-16
11	XPB55	HEX BOLT 1/2-13 X 1-1/2
12	XPW01	FLAT WASHER 1/2"
13	XPLW07	LOCK WASHER 1/2"
14	XPNO1	HEX NUT 1/2-20
15	X1810015	IMPELLER 16"
16	X1810016	SPECIAL WASHER 3/4"
17	X1810017	SPECIAL SCREW 3/4" (LH)
18	X1810018	FOAM TAPE 3MM X 6MM X 1700MM
19	X1810019	BLOWER
20	XPW07	FLAT WASHER 5/16"
21	XPB07	HEX BOLT 5/16-18 X 3/4
22	X1810022	OUTLET PORT 8" X2
23	X1810023	GASKET 206MM X 226MM
24	X1810024	FITER L-BRACE (RIGHT)
25	X1810025	FITER L-BRACE (LEFT)
26	XPB03	HEX BOLT 5/16-18 X 1
27	XPW07	FLAT WASHER 5/16"
28	XPNO2	HEX NUT 5/16-18
29	X1810029	FILTER CROSS BRACE
30	XPB21	HEX BOLT 3/8-16 X 3/4
31	XPW02	FLAT WASHER 3/8"
32	XPNO8	HEX NUT 3/8-16
33	X1810033	HOSE CLAMP 8"
34	X1810034	CLEAR FLEX HOSE 8" X 23"
35	X1810035	NOISE REDUCER 8"
36	X1810036	CLEAR FLEX HOSE 8" X 4"
37	X1810037	CARTRIDGE FILTER 510MM X 1200MM
38	X1810038	COLLECTION DRUM LATCH HOOK
38-1	XPS06	PHLP HD SCR 10-24 X 3/8
38-2	XPNO7	HEX NUT 10-24
39	X1810039	COLLECTION DRUM DIA 510MM

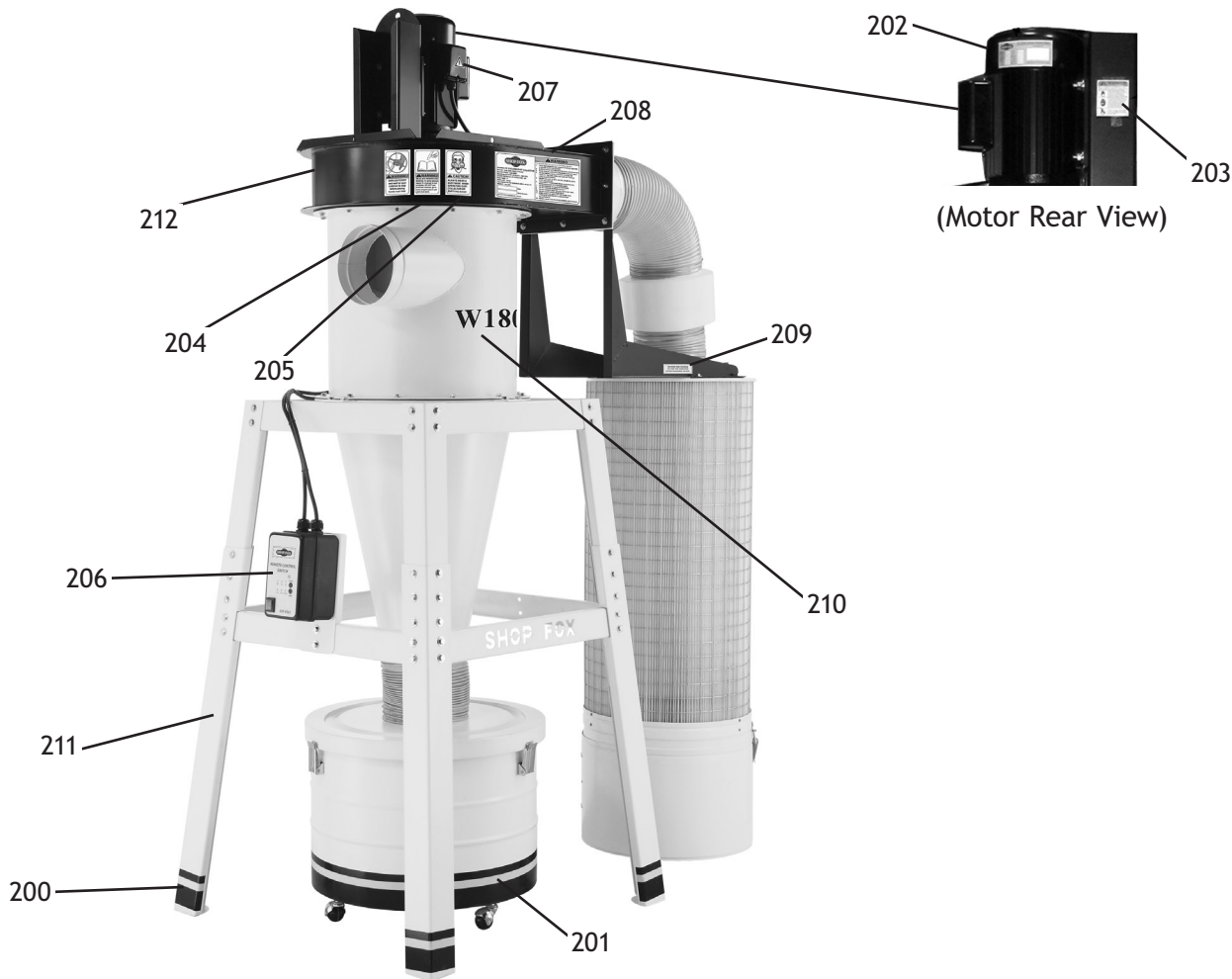
REF PART # DESCRIPTION

39-1	X1810039-1	ACRYLIC BOARD 170MM X 75MM
39-2	XPS06	PHLP HD SCR 10-24 X 3/8
39-3	XPNO7	HEX NUT 10-24
39-4	X1810039-4	FOAM TAPE 3MM X 6MM X 520MM
40	X1810040	COLLECTION DRUM LATCH
40-1	XPS06	PHLP HD SCR 10-24 X 3/8
40-2	XPNO7	HEX NUT 10-24
41	X1810041	FOAM TAPE 19MM X 5MM X 1600MM
42	XPB07	HEX BOLT 5/16-18 X 3/4
43	XPW07	FLAT WASHER 5/16"
44	X1810044	BRACE GASKET 240MM X 32MM
45	X1810045	CYCLONE CYLINDER 12"
46	X1810046	FOAM TAPE 3MM X 6MM X 1800MM
47	XPB07	HEX BOLT 5/16-18 X 3/4
48	XPW07	FLAT WASHER 5/16"
49	X1810049	CYCLONE BARREL 24"
49-1	X1810049-1	REDUCER 10" TO 8"
49-2	X1810049-2	TAP SCREW M4 X 12MM
49-3	X1810049-3	HOSE CLAMP 8"
49-4	X1810049-4	HOSE CLAMP 10"
50	X1810050	GASKET DIA 686MM
51	XPB07	HEX BOLT 5/16-18 X 3/4
52	XPW07	FLAT WASHER 5/16"
53	X1810053	CYCLONE FUNNEL 24"
54	X1810054	GASKET DIA 686MM
55	XPB03	HEX BOLT 5/16-18 X 1
56	XPW07	FLAT WASHER 5/16"
57	XPNO2	HEX NUT 5/16-18
58	X1810058	HOSE CLAMP 9"
59	X1810059	CLEAR FLEX HOSE 9" X 10"
60	X1810060	DRUM LID
60-1	X1810060-1	FOAM TAPE 10MM X 50MM X 2000MM
61	X1810061	DRUM LID LATCH
62	X1810062	BLIND RIVETS
63	X1810063	BAG HOLDER PLATE
63-1	X1810063-1	RUBBER HANDLE
63-2	XPB02	HEX BOLT 1/4-20 X 5/8
63-3	XPW06	FLAT WASHER 1/4"
63-4	XPNO5	HEX NUT 1/4-20
64	XPS06	PHLP HD SCR 10-24 X 3/8
65	XPNO7	HEX NUT 10-24
66	X1810066	PLASTIC BAG 640MM X 1200MM
67	X1810067	UPPER COLLECTION DRUM 25 GALLON
68	X1810068	COLLECTION DRUM 35 GALLON
69	X1810069	DRUM CLAMP
70	XPB04	HEX BOLT 5/16-18 X 3
71	XPNO2	HEX NUT 5/16-18
72	X1810072	DRUM LID LATCH
73	XPS06	PHLP HD SCR 10-24 X 3/8
74	XPNO7	HEX NUT 10-24
75	XPS06	PHLP HD SCR 10-24 X 3/8
76	XPNO7	HEX NUT 10-24
77	X1810077	CASTER 2"

REF	PART #	DESCRIPTION
78	XPNO8	HEX NUT 3/8-16
79	XPLW04	LOCK WASHER 3/8"
80	XPW02	FLAT WASHER 3/8"
81	X1810081	UPPER STAND BRACE
82	X1810082	UPPER STAND LEG
83	XPB21	HEX BOLT 3/8-16 X 3/4
84	XPW02	FLAT WASHER 3/8"
85	XPLN01	LOCK NUT 3/8-16
86	X1810086	LOWER STAND LEG
87	X1810087	LOWER STAND BRACE
88	X1810088	LOWER STAND BRACE (WITH SHOPFOX)
89	XPB21	HEX BOLT 3/8-16 X 3/4
90	XPW02	FLAT WASHER 3/8"
91	XPLN01	LOCK NUT 3/8-16

REF	PART #	DESCRIPTION
92	XPB21	HEX BOLT 3/8-16 X 3/4
93	XPW02	FLAT WASHER 3/8"
94	XPLN01	LOCK NUT 3/8-16
95	XPB18	HEX BOLT 3/8-16 X 1
96	XPW02	FLAT WASHER 3/8"
97	XPLN01	LOCK NUT 3/8-16
98	X1810098	SWITCH BASE
99	XPB21	HEX BOLT 3/8-16 X 3/4
100	XPW02	FLAT WASHER 3/8"
101	XPNO8	HEX NUT 3/8-16
102	XPS06	PHLP HD SCR 10-24 X 3/8
103	XPW03	FLAT WASHER #10
104	XPNO7	HEX NUT 10-24

W1808-10 Labels and Cosmetic Parts



REF	PART #	DESCRIPTION
200	X1808200	DECORATIVE STRIPE TAPE
201	X1808201	DECORATIVE STRIPE TAPE
202	X1808202	W1808 MOTOR SPEC LABEL
202	X1809202	W1809 MOTOR SPEC LABEL
202	X1810202	W1810 MOTOR SPEC LABEL
203	X1808203	MOTOR WARNING LABEL
204	XLABEL-12	READ MANUAL LABEL
205	XLABEL-06	RESPIRATOR/GLASSES LABEL
206	X1808206	REMOTE CONTROL SWITCH LABEL
207	XLABEL-04	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
208	X1808208	W1808 MACHINE ID LABEL
208	X1809208	W1809 MACHINE ID LABEL
208	X1810208	W1810 MACHINE ID LABEL
209	X1808209	RETURN RED HANDLE LABEL
210	X1808210	W1808 MODEL NUMBER LABEL
210	X1809210	W1809 MODEL NUMBER LABEL
210	X1810210	W1810 MODEL NUMBER LABEL
211	XPPAINT-1	SHOP FOX WHITE PAINT
212	XPPAINT-7	SHOP FOX BLACK PAINT

Warranty

Woodstock International, Inc. warrants all **SHOP FOX®** machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the **SHOP FOX®** machine or machine part which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a **SHOP FOX®** factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that **SHOP FOX®** machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all **SHOP FOX®** machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.

Warranty Registration

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Serial # _____ Dealer Name _____ Purchase Date _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

_____ Advertisement

_____ Friend

_____ Local Store

_____ Mail Order Catalog

_____ Website

_____ Other:

2. How long have you been a woodworker/metalworker?

_____ 0-2 Years

_____ 2-8 Years

_____ 8-20 Years

_____ 20+ Years

3. How many of your machines or tools are Shop Fox®?

_____ 0-2

_____ 3-5

_____ 6-9

_____ 10+

4. Do you think your machine represents a good value?

_____ Yes

_____ No

5. Would you recommend Shop Fox® products to a friend?

_____ Yes

_____ No

6. What is your age group?

_____ 20-29

_____ 30-39

_____ 40-49

_____ 50-59

_____ 60-69

_____ 70+

7. What is your annual household income?

_____ \$20,000-\$29,000

_____ \$30,000-\$39,000

_____ \$40,000-\$49,000

_____ \$50,000-\$59,000

_____ \$60,000-\$69,000

_____ \$70,000+

8. Which of the following magazines do you subscribe to?

_____ Cabinet Maker

_____ Popular Mechanics

_____ Today's Homeowner

_____ Family Handyman

_____ Popular Science

_____ Wood

_____ Hand Loader

_____ Popular Woodworking

_____ Wooden Boat

_____ Handy

_____ Practical Homeowner

_____ Woodshop News

_____ Home Shop Machinist

_____ Precision Shooter

_____ Woodsmith

_____ Journal of Light Cont.

_____ Projects in Metal

_____ Woodwork

_____ Live Steam

_____ RC Modeler

_____ Woodworker West

_____ Model Airplane News

_____ Rifle

_____ Woodworker's Journal

_____ Modeltec

_____ Shop Notes

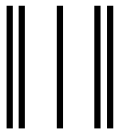
_____ Other:

_____ Old House Journal

_____ Shotgun News

9. Comments: _____

FOLD ALONG DOTTED LINE



Place
Stamp
Here



WOODSTOCK INTERNATIONAL INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309



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