

MODEL M1051 6" BENCH GRINDER



OWNER'S MANUAL

Phone: 1-360-734-3482 • On-Line Technical Support: tech-support@shopfox.biz

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#8020CR

Printed in China

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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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!





INTRODUCTION

Woodstock Technical Support

We stand behind our machines! In the event that a defect is found, parts are missing or questions arise about your machine, please contact Woodstock International Technical Support at 1-360-734-3482 or send e-mail to: tech-support@shopfox.biz. Our knowledgeable staff will help you troubleshoot problems, send out parts or arrange warranty returns.

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
P.O. Box 2309
Bellingham, WA 98227

About Your New 6" Bench Grinder

Your new SHOP FOX® 6" Bench Grinder 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.

The Model M1051 6" Bench Grinder is great for grinding and buffing small projects. The compact design and quiet operation allow it to be installed almost anywhere.

Woodstock International, Inc. is committed to customer satisfaction in providing this manual. It is our intent to make sure all the information necessary for safety, ease of assembly, practical use and durability of this product be included.

Machine Specifications

Motor	1/3 HP, 110V, Single-Phase
Motor Speed	3450 RPM
Grinding Wheel Size	6" X (1/2" to 3/4")
Arbor Diameter	1/2"
Net Weight.....	18 lbs

SAFETY

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

SAFETY

⚠ 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.

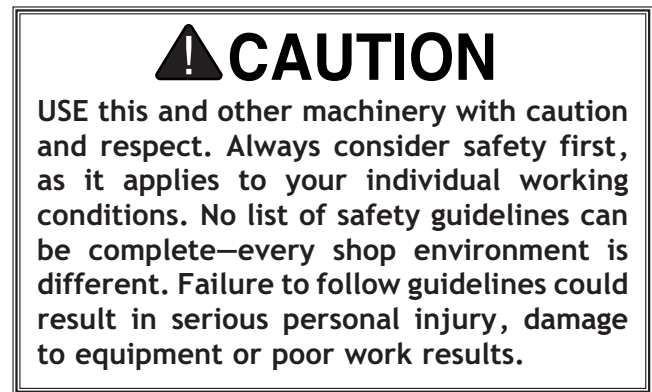
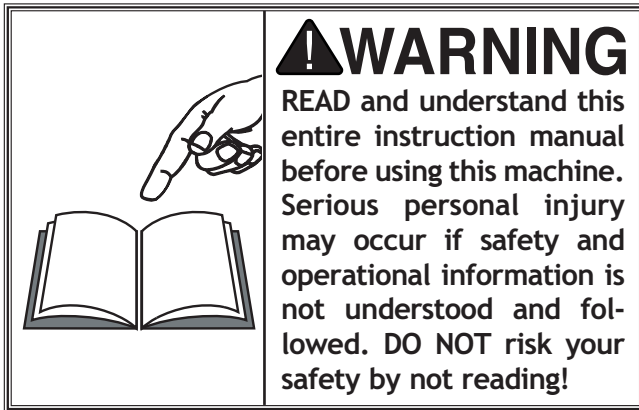
NOTICE This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

Standard Safety Instructions

1. **THOROUGHLY READ THE INSTRUCTION MANUAL BEFORE OPERATING YOUR MACHINE.** Learn the applications, limitations and potential hazards of this machine. Keep the manual in a safe and convenient place for future reference.
2. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and poor lighting invite potential hazards.
3. **GROUND ALL TOOLS.** If a machine is equipped with a three-prong plug, it must be plugged into a three-hole grounded electrical receptacle or grounded extension cord. If using an adapter to aid in accommodating a two-hole receptacle, ground using a screw to a known ground.
4. **WEAR EYE PROTECTION AT ALL TIMES.** Use safety glasses with side shields or safety goggles that meet the appropriate standards of the American National Standards Institute (ANSI).
5. **AVOID DANGEROUS ENVIRONMENTS.** Do not operate this machine in wet or open flame environments. Airborne dust particles could cause an explosion and severe fire hazard.
6. **ENSURE ALL GUARDS ARE SECURELY IN PLACE** and in working condition.
7. **MAKE SURE SWITCH IS IN THE OFF POSITION** before connecting power to machine.
8. **KEEP WORK AREA CLEAN**, free of clutter, grease, etc.
9. **KEEP CHILDREN AND VISITORS AWAY.** Visitors must be kept at a safe distance while operating unit.
10. **CHILDPROOF YOUR WORKSHOP WITH PADLOCKS**, master switches or by removing starter keys.
11. **STOP AND DISCONNECT THE MACHINE WHEN CLEANING, ADJUSTING OR SERVICING.**

12. **DO NOT FORCE TOOL.** The machine will do a safer and better job at the rate for which it was designed.
13. **USE CORRECT TOOL.** Do not force machine or attachment to do a job for which it was not designed.
14. **WEAR PROPER APPAREL.** Do not wear loose clothing, neck ties, gloves, jewelry, and secure long hair away from moving parts.
15. **REMOVE ADJUSTING KEYS, RAGS, AND TOOLS.** Before turning the machine on, make it a habit to check that all adjusting keys and wrenches have been removed.
16. **AVOID USING AN EXTENSION CORD.** But if you must use one, examine the extension cord to ensure it is in good condition. Immediately replace a damaged extension cord. Always use an extension cord that uses a ground pin and connected ground wire. Use an extension cord that meets the amp rating on the motor nameplate. If the motor is dual voltage, be sure to use the amp rating for the voltage you will be using. If you use an extension cord with an undersized gauge or one that is too long, excessive heat will be generated within the circuit, increasing the chance of a fire or damage to the circuit.
17. **KEEP PROPER FOOTING AND BALANCE** at all times.
18. **DO NOT LEAVE MACHINE UNATTENDED.** Wait until it comes to a complete stop before leaving the area.
19. **PERFORM ALL MACHINE MAINTENANCE.** Follow lubrication and accessory attachment instructions in the manual.
20. **KEEP MACHINE AWAY FROM OPEN FLAME.** Operating machines near pilot lights or open flames creates a high risk if dust is dispersed in the area. Dust particles and an ignition source may cause an explosion. Do not operate the machine in high-risk areas, including but not limited to, those mentioned above.
21. **IF AT ANY TIME YOU ARE EXPERIENCING DIFFICULTIES** performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.
22. **HABITS—GOOD AND BAD—ARE HARD TO BREAK.** Develop good habits in your shop and safety will

Additional Safety Instructions for Grinders



1. **EYE PROTECTION.** Grinding causes small particles to become airborne at a high rate of speed. **ALWAYS** wear safety glasses when using this machine.
2. **MOUNTING TO BENCH/STAND.** An unsecured grinder may become dangerously out of control during operation. Make sure grinder is **FIRMLY** secured to a bench/stand before use.
3. **WHEEL SPEED RATING.** Wheels operated at a faster speed than rated for may break or fly apart. Before mounting a new wheel, be sure the wheel RPM rating is equal or higher than the speed of the grinder.
4. **WHEEL FLANGES.** Only use the flanges included with the grinder when mounting wheels. Other flanges may not properly secure the wheel and cause an accident.
5. **RING TEST.** Perform a “ring test” on grinding wheels before installation to ensure that they are safe to use. A wheel that does not pass the ring test may break or fly apart during operation.
6. **STARTING GRINDER.** If a wheel **IS** damaged, it will usually fly apart shortly after start-up. To protect yourself, always stand to the side of the grinder when turning it **ON**, allow it to gain full speed and wait for at least 1 minute before standing in front of it.
7. **LUNG PROTECTION.** Grinding produces hazardous dust, which may cause long-term respiratory problems if breathed. Always wear a NIOSH approved dust mask or respirator when grinding.
8. **SIDE GRINDING.** Grinding on the side of wheels can cause them to break and fly apart—unless the wheel is rated for side grinding.
9. **TOP GRINDING.** Grinding on the top of wheels greatly increases the risk of workpiece kickback. Always grind on the downward part of the wheel.
10. **HAND/WHEEL CONTACT.** Grinding wheels have the capability of removing a lot of skin fast. Keep a firm grip on the workpiece and position your hands a safe distance away when grinding. Avoid wearing gloves as they may get caught in the grinding wheel and cause even more serious entanglement injuries.
11. **TOOL REST POSITION.** If the tool rest is too far away from the wheel, the workpiece may be pulled down, causing loss of control and pulling your hand into the grinding wheel. Keep the tool rest within $\frac{1}{8}$ " from the wheel when operating.

ELECTRICAL

110V Operation

The SHOP FOX® M1051 operates at 110 volts. The motor supplied with this machine is rated at 1/3 HP. When choosing an outlet for this machine, consider using one with a 15 amp circuit breaker or fuse. Keep in mind that a circuit being used by other machines or tools at the same time will add to the total load being applied to the circuit. Add up the load ratings of all machines on the circuit. If this number exceeds the rating of the circuit breaker or fuse, use a different circuit.

Extension Cords

When it is necessary to use an extension cord, use the following guidelines:

- Use cords rated for standard service.
- Never exceed a length of 100 feet.
- Use cords with 14 ga. wire or bigger.
- Insure cord has a ground wire and pin.
- Do not use cords in need of repair.

Grounding

This machine must be grounded! The electrical cord supplied with the Model M1051 comes with a grounding pin. Do not remove it (see Figure 2). If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician or have an appropriate adapter installed.

Note: When using an adapter, the adapter must be grounded.

⚠ WARNING

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate 12 A.W.G. copper grounding wire from the outlet to a known ground. Under no circumstances should the grounding pin from any three-pronged plug be removed or serious injury may occur.

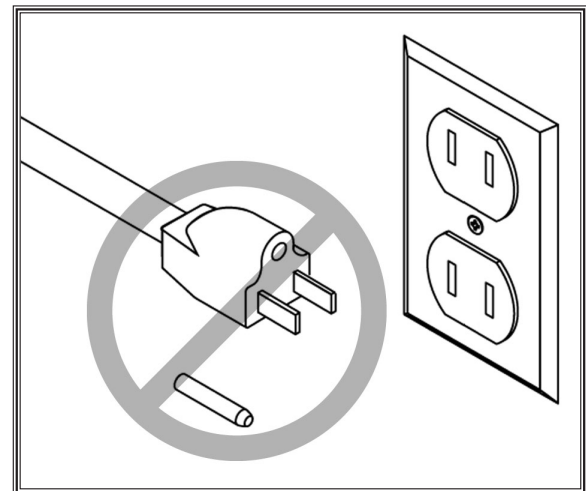


Figure 2. Never remove the grounding pin!

SET UP

Unpacking

The SHOP FOX® Model M1051 has been carefully packaged for safe transporting. If you notice the machine has been damaged, please contact Woodstock International Technical Support at 1-360-734-3482 or send e-mail to: tech-support@shopfox.biz

Inventory

The following is a description of the main components shipped with the SHOP FOX® Model M1051. You should lay the components out to easily identify them.

Box Contents:

A.	Eye Shield	2
B.	Spark Breaker	2
C.	Phlp Hd Scr M5-.8 X 45	2
D.	Flat Washer 5mm	2
E.	Flat Washer 5mm.....	2
F.	Lock Washer 5mm	2
G.	Phlp Hd Scr M5-.8 X 8.....	2
H.	Lock Washer 5mm	2
I.	Hex Nut M5-0.8	2
J.	Grinding Wheel 30 Grit	1
K.	Grinding Wheel 60 Grit	1
L.	Flat Washer 8mm.....	4
M.	Lock Washer 8mm.....	4
N.	Hex Bolt M8-1.25 X 12	4
O.	Right-hand Tool Rest.....	1
	Left-hand Tool Rest (Not Shown)	1
P.	6" Bench Grinder Unit (Not Shown).....	1

Should any part be missing, examine the packaging carefully to be sure those parts are not among the packing materials. If any parts are missing, 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

NOTICE

If ordering replacement parts, refer to the parts list and diagram in the back of the manual.

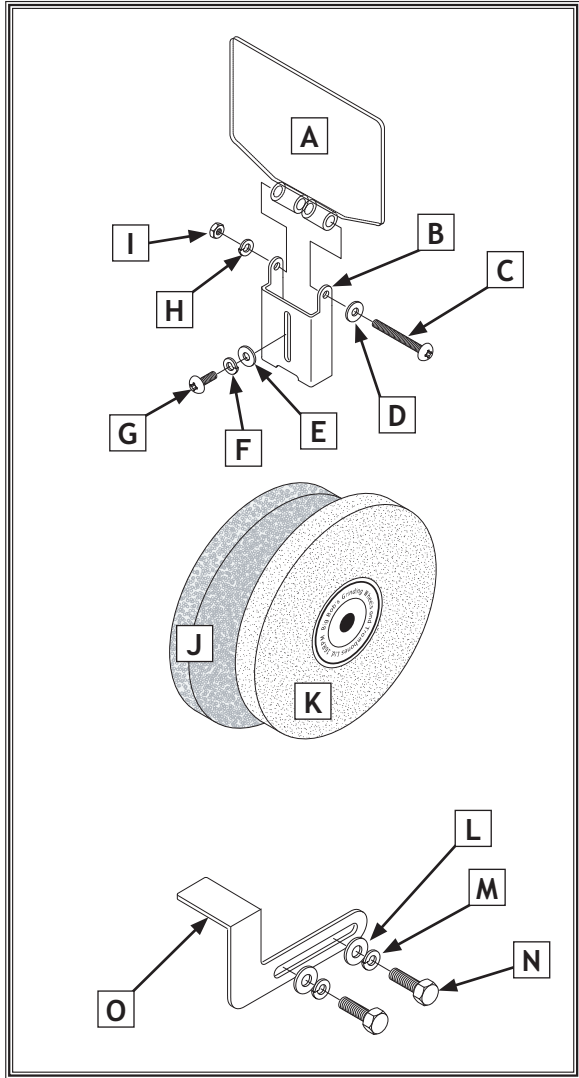


Figure 3. Inventory.

SET UP

Shop Preparation

- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for other machinery when establishing a location for your new machine.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- **Electrical:** Electrical circuits should be dedicated. Outlets should be located near the machine, so power or extension cords are clear of high-traffic areas. Follow local electrical codes for proper installation of new lighting, outlets, or circuits.

Mounting

The 6" Bench Grinder should be mounted to a workbench to avoid accidental tipping. If you intend on using the 6" Bench Grinder for portable applications, mount it to a heavy plywood base (at least 1" thick) that is wide enough to prevent tipping or rocking during use.

To mount the bench grinder, do these steps:

1. Determine the surface or object to which you will mount your 6" Bench Grinder, and obtain the needed hardware for your mounting application.
2. Fasten the 6" Bench Grinder to your supporting surface, using the dimensions in **Figure 4**. **DO NOT** overtighten the mounting bolts or you will crack the base.
3. Check the stability of the mounted 6" Bench Grinder to make sure it is stable enough to be used safely.

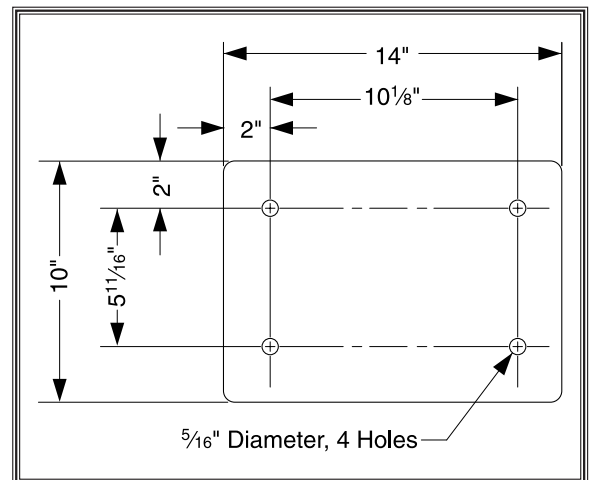
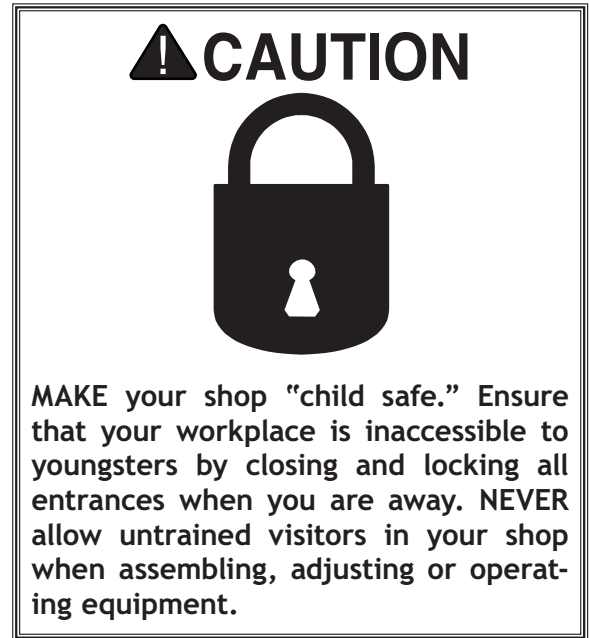


Figure 4. Dimensions for mounting 6" Bench Grinder.

Tool Rest and Eye Shield

The tool rest supports the workpiece during grinding. Certain types of grinding may require jigs or accessories to assure the proper angle of the work piece against the wheel.

The eye shield must be positioned between the grinding wheel and your face during grinding. The eye shield is NOT a substitute for safety glasses or a safety face shield. You must wear ANSI approved face and eye protection.

Using the hardware from the **Inventory** list on **Page 7**; assemble the tool rest and eye shield as they are shown in **Figure 5**.

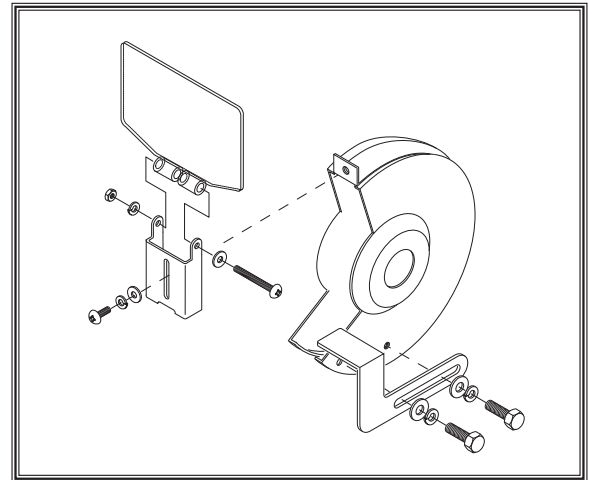


Figure 5. Tool rest and eye shield assembly.

Grinding Wheel Installation

Before installing the included grinding wheels, check them for integrity by performing a "ring test." Hang on a string, then lightly tap the rim of the wheel with a piece of wood such as the handle of a hammer. The wheel should have a ringing or harmonic type of sound. If the wheel responds with a dull thud it may indicate that the wheel has cracks. Do not use a wheel which is suspected of having cracks, or if there are visual chips, nicks or dents in the wheel surface. These discontinuities can lead to wheel failure causing the wheel to fly apart at operating speed.

Always be sure to use a wheel that is rated for operating at speeds equal to or greater than 3450 RPM. Install the grinding wheel, paper disk, wheel flange, and nut in the order shown in **Figure 6**, and then attach the side cover.

Note: *The arbor shaft and nut on the left hand side of the grinder is a left hand thread, so tightening it will require turning it counterclockwise.*

CAUTION

NEVER assemble a grinding wheel on the arbor without paper or fiber discs between the wheel and the flange. Omitting the discs can put undue stress on the wheel causing it to crack and possibly fly apart. **ALWAYS** "ring test" a wheel before assembly to make certain it is sound with no cracks or flaws.

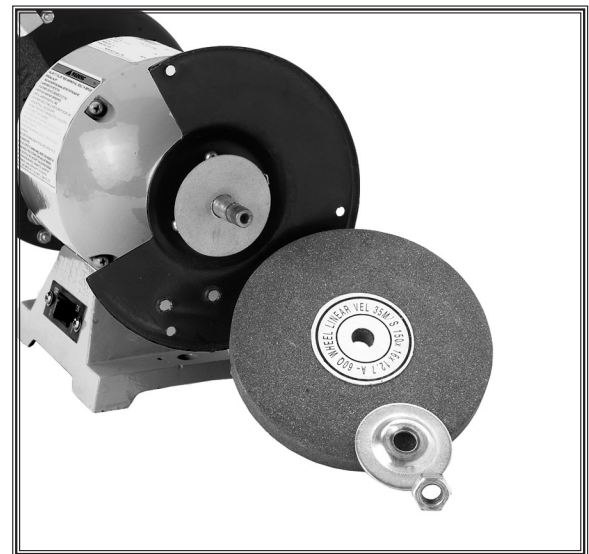


Figure 6. Wheel installation order.

Test Run

Once your machine is mounted and assembled, you should perform a test run to make sure it works properly.

To perform a test run, do these steps:

1. Make sure all tools are removed from the grinder area.
 2. Make sure the switch is in the OFF position.
 3. Plug the grinder into the power source.
 4. Move the switch to the ON position.
- Under normal conditions, the grinder will make a loud humming noise, with only minor vibration.
 - If you hear or see anything unusual with the grinder, turn it **OFF**, unplug it, and troubleshoot the cause of the problem. If you **CANNOT** determine the source of the problem, call our tech support **BEFORE** starting the machine again.

! WARNING



DO NOT investigate problems or adjust the bench grinder while it is running. Wait until the machine is turned OFF, unplugged and the spindle has come to a complete stop before proceeding!

SET UP

OPERATIONS

General

Your Model M1051 Bench Grinder will allow you to perform many types of grinding and buffing operations. However, the following section is not a complete guide every possible task variation.

We strongly recommend that you read books, trade magazines, or seek formal training before attempting any grinding or buffing operations in which you are not confident with. **Above all, your safety should come first.** This recommended research will pay off with increased safety, improved work results, and the knowledge to be a better metalworker.

Grinding Operations

WARNING

NEVER grind non ferrous metals like aluminum, brass, copper, bronze, and others, or the grinding wheel will load up, overheat, and can explode during operation.

Once assembly has been completed, your bench grinder is ready for use in the shop.

When mounting a new wheel, or when there is any concern about wheel integrity, stand away from the line of rotation of the wheel and then turn the grinder **ON**. Allow the grinder operate for one minute. If there is a problem it will generally occur when the grinder is first started. If the grinding wheel is OK, rest the workpiece on the tool rest and ease the workpiece into the grinding wheel. Begin grinding without holding the workpiece in one spot.

WARNING



Operation of this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating a grinder. Everyday glasses or reading glasses are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

WARNING

DO NOT make adjustments while the grinder is running. Ensure that the switch is OFF, power is disconnected and moving parts have stopped before making adjustments. Failure to comply could result in serious injury or electrical shock hazard.

Wheel Selection

Aluminum oxide and silicon carbide wheels are marked in a somewhat uniform manner by all the major manufacturers. Understanding these markings will help you understand the capabilities of various wheels. Always refer to the manufacturer's grinding recommendations when selecting a wheel for your project.

The basic format for wheel numbering is:

Prefix Type	Abrasive Size	Grit Type	Grade	Bond
36	A	60	L	V

The most common abrasive types used are A for Aluminum Oxide and C for Silicon Carbide, and occasionally SG for seeded gel. The prefix is the manufacturer's designation for a particular type.

The grit size is a number referring to the size of the abrasive grain in the wheel. The lower the number the coarser the wheel—10 is a very coarse wheel for roughing and 220 is usually the upper range for fine finish work.

Grade is an indication of the hardness of the wheel, with A being softest to Z the hardest.

Bond Type refers to the type of bonding material used to hold the abrasive material. Most general purpose wheels will have a V indicating Vitrified clay is used, providing a high strength and good porosity. The other most common is B for resin where synthetic resins are used. These are used to grind cemented carbide and ceramic materials.

There may be other numbers inserted that have meaning for a particular type of wheel. Refer to the manufacturer's technical data for a complete explanation.

WARNING

DO NOT use this grinder with a liquid cooling system required for wet grinding wheel operations. Ignoring this warning can lead to electrocution.

Changing Grinding Wheels

Before installing any grinding wheel, check it for integrity by performing a "ring test." Hang on a string, then lightly tap the rim of the wheel with a piece of wood such as the handle of a hammer. The wheel should have a ringing or harmonic type of sound. If the wheel responds with a dull thud it may indicate that the wheel has cracks. Do not use a wheel which is suspected of having cracks, or if there are visual chips, nicks or dents in the wheel surface. These discontinuities can lead to wheel failure causing the wheel to fly apart at operating speed.

Do not use a wheel that is suspected of having cracks, or if there are visual chips, nicks or dents in the wheel surface. These discontinuities can lead to wheel failure where the wheel flies apart at operating speed. Always be sure to use a wheel which is rated for operating at speeds equal to or greater than 3450 RPM.

To change a grinding wheel, do these step:

1. DISCONNECT THE GRINDER FROM POWER!
2. Disassemble grinder to the level shown in **Figure 7**.
3. Use a $\frac{3}{4}$ " or 19mm open end wrench on the nut which holds the wheel on the arbor. Hold the wheel from turning with the other hand.

Note: *The arbor shaft and nut on the left hand side of the grinder is a left hand thread, so loosening it will require turning it clockwise.*

4. Install the new wheel in the order shown in **Figure 8**. and tighten the arbor nut snugly, but do not over tighten or you will crack the wheel.
5. Run a new wheel for at least 1-2 minutes while standing clear of the line of rotation. If a wheel does have defects it will generally fail as soon as it gets up to full speed.



Figure 7. Grinding wheel access.

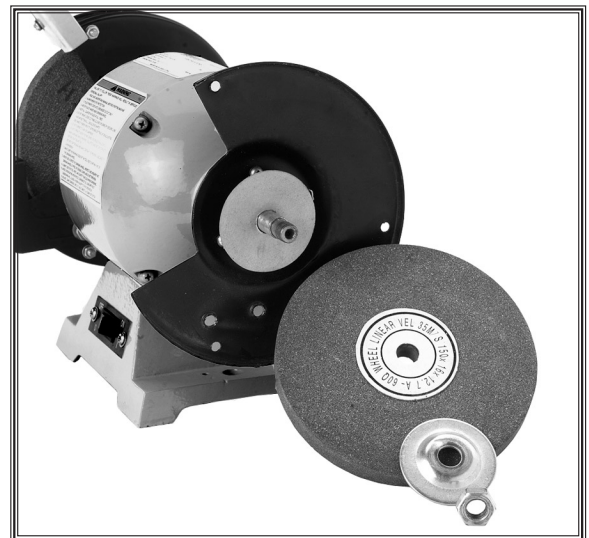


Figure 8. Grinding wheel arrangement.

CAUTION

NEVER assemble a grinding wheel on the arbor without paper or fiber discs between the wheel and the flange. Omitting the discs can put uneven stress on the wheel causing it to crack and possibly fly apart. **ALWAYS** "ring test" a wheel before assembly to make certain it has no cracks or flaws.

MAINTENANCE

General

Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Cracked or loose grinding wheel.
- Any other condition that could hamper the safe operation of this machine.

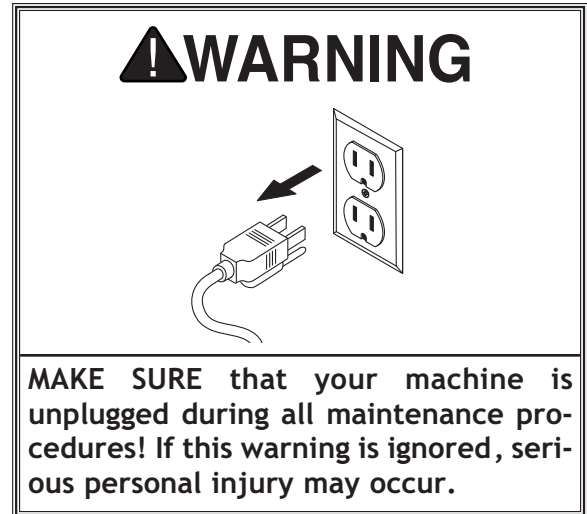
Lubrication & Cleaning

This grinder has sealed bearings that require no user lubrication.

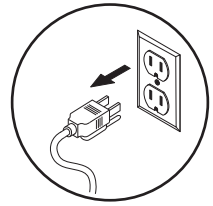
The grinding wheel should be inspected before every use. Use the ring test method noted in the Grinding Wheel section in **Changing Grinding Wheels** on **Page 13** to verify the structural integrity. Take care in storing grinding wheels to keep them free from potential damage by being dropped, or having other items drop on them.

Replace the wheel when the wheel diameter is reduced to 4". Operating at anything less than this diameter does not allow the proper alignment of the Tool Rest and the Eye Shield, and the grinding wheel may fly apart.

Depending on the type of grinding you do, the grinding wheel may require periodic dressing. There are several different types of wheel dressing devices available on the market. Use a suitable diamond or silicon carbide stick type dresser. Sweep it smoothly and evenly several times across the face of the wheel. Dressing restores the abrasive quality of the wheel surface, plus it will bring the wheel edge back to a square form. Refer to the instructions which accompany your dressing accessory for complete detail on wheel dressing.



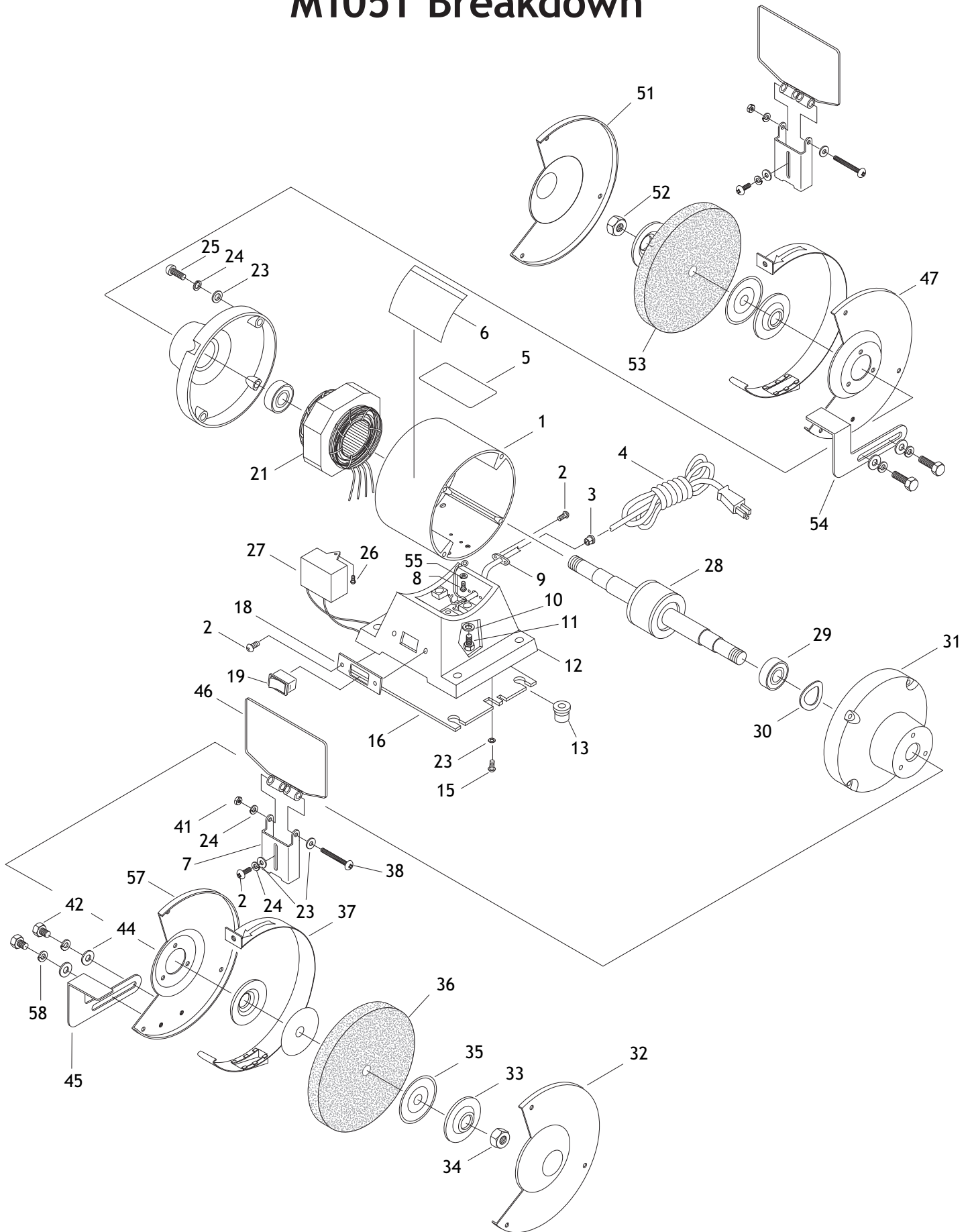
Troubleshooting



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; fuses or circuit breakers blow.	<ol style="list-style-type: none"> 1. Open circuit in motor or loose connections. 2. Start capacitor is at fault. 3. Short circuit in motor or loose connections. 4. Incorrect fuses or circuit breakers in power supply. 	<ol style="list-style-type: none"> 1. Inspect/repair all lead connections on motor for loose or open connections. 2. Replace start capacitor. 3. Inspect all connections on motor for loose or shorted terminals or worn insulation. 4. Install correct fuses or circuit breakers.
Motor overheats, stalls (resulting in blown fuses or tripped circuit).	<ol style="list-style-type: none"> 1. Motor overloaded. 2. Short circuit in motor or loose connections. 3. Depth of cut too great. 	<ol style="list-style-type: none"> 1. Reduce load on motor. 2. Inspect connections on motor for loose or shorted terminals or worn insulation. 3. Slow down the rate of movement of the workpiece into wheel.
Wavy condition on surface of workpiece.	<ol style="list-style-type: none"> 1. Machine vibrating. 2. Workpiece is not held in place firmly. 3. Wheel face uneven. 4. Wheel is too hard. 	<ol style="list-style-type: none"> 1. Make sure machine is securely mounted on a solid surface. 2. Use a holding device to firmly retain the workpiece. 3. Dress the grinding wheel. 4. Use softer wheel, or reduce the feed rate.
Lines on surface of workpiece.	<ol style="list-style-type: none"> 1. Impurity on wheel surface. 2. Workpiece not being held tightly. 	<ol style="list-style-type: none"> 1. Dress the grinding wheel. 2. Use a holding device to firmly retain the workpiece.
Burning spots or cracks in the workpiece.	<ol style="list-style-type: none"> 1. Improper type of grinding wheel. 2. Improper feed rate. 3. Coolant required. 	<ol style="list-style-type: none"> 1. Try a wheel which is softer style or a coarser grit. 2. Slow down the rate of movement of the workpiece into wheel. 3. Add optional coolant system or introduce coolant by hand.
Wheel dulls quickly, grit falls off.	<ol style="list-style-type: none"> 1. Depth of cut too great. 2. Wheel is too soft. 3. Wheel diameter too small. 4. Bad wheel dress. 5. Defective wheel bonding. 	<ol style="list-style-type: none"> 1. Slow down the rate of movement of the workpiece into wheel. 2. Wheel too soft for the material being ground, select harder bond. 3. Replace the wheel. 4. Dress the wheel. 5. Consult manufacturer of grinding wheel.
Wheel clogs and workpiece shows burn marks.	<ol style="list-style-type: none"> 1. Wheel is too hard. 2. Feed rate too slow. 3. Bad wheel dress. 	<ol style="list-style-type: none"> 1. Wheel too hard for the material being ground, select softer bond. 2. Increase the rate of movement of the workpiece into wheel. 3. Dress the wheel.

M1051 Breakdown



REF	PART #	DESCRIPTION
1	XM1051001	MOTOR BODY
2	XPS05M	PHLP HD SCR M5-.8 x 8
3	XM1051003	STRAIN RELIEF
4	XPWRCRD110L	POWER CORD 110V W/PLUG
5	XM1051005	NAMEPLATE LABEL
6	XM1051006	WARNING LABEL
7	XM1051007	SPARK BREAKER
8	XPS05M	PHLP HD SCR M5-.8 x 8
9	XM1051009	MOUNTING PLATE
10	XPW03M	FLAT WASHER 6MM
11	XPB18M	HEX BOLT M6-1 X 15
12	XM1051012	BASE
13	XM1051013	RUBBER FOOT
15	XPS09M	PHLP HD SCR M5-.8 X 10
16	XM1051016	BASE PLATE
18	XM1051018	SWITCH PLATE
19	XM1051019	SWITCH
21	XM1051021	STATOR
23	XPW02M	FLAT WASHER 5MM
24	XPLW01M	LOCK WASHER 5MM
25	XPS57M	PHLP HD SCR M5-.8 X 14
26	XPS07M	PHLP HD SCR M4-.7 X 8
27	XM1051027	CAPACITOR
28	XM1051028	ROTOR

REF	PART #	DESCRIPTION
29	XP6202	BALL BEARING 6202ZZ
30	XM1051030	WAVY WASHER
31	XM1051031	BEARING HOUSING
32	XM1051032	WHEEL COVER RH OUTER
33	XM1051033	WHEEL FLANGE
34	XM1051034	WHEEL NUT RH
35	XM1051035	PAPER DISC
36	XM1051036	GRINDING WHEEL 60 GRIT
37	XM1051037	WHEEL RIM GUARD
38	XPS54M	PHLP HD SCR M5-.8 X 45
41	XPN06M	HEX NUT M5-0.8
42	XPB06M	HEX BOLT M8-1.25 X 12
44	XPW01M	FLAT WASHER 8MM
45	XM1051045	TOOL REST RH
46	XM1051046	EYESHIELD
47	XM1051047	WHEEL COVER LH INNER
51	XM1051051	WHEEL COVER LH OUTER
52	XM1051052	WHEEL NUT LH
53	XM1051053	GRINDING WHEEL 30 GRIT
54	XM1051054	TOOL REST LH
55	XPW01M	FLAT WASHER 8MM
57	XM1051057	WHEEL COVER RH INNER
58	XPLW04M	LOCK WASHER 8MM

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 the **SHOP FOX**[®] factory service center or authorized repair facility designated by our Bellingham, WA office, 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.

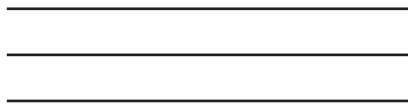
1. How did you learn about us?
 Advertisement Friend Local Store
 Mail Order Catalog Website Other:
2. How long have you been a woodworker/metalworker?
 0-2 Years 2-8 Years 8-20 Years 20+ Years
3. How many of your machines or tools are Shop Fox®?
 0-2 3-5 6-9 10+
4. Do you think your machine represents 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?

<input type="checkbox"/> Cabinet Maker	<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Today's Homeowner
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wood
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

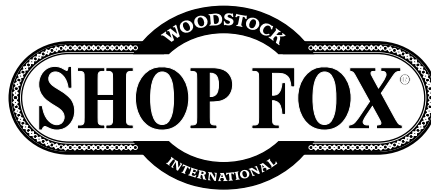
9. Comments: _____

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