



MODEL W1785 PALM NAILER



OWNER'S MANUAL

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

COPYRIGHT © JUNE, 2007 BY WOODSTOCK INTERNATIONAL, INC.
WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

#9629TS 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.

SAFETY

WARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



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



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



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

WARNING

Safety Instructions for Pneumatic Tools

1. **KEEP ALL SAFETY DEVICES IN PLACE** and in working order.
2. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before operation.
3. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
4. **DO NOT USE IN DANGEROUS ENVIRONMENT.** Do not use pneumatic tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.
5. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept at a safe distance from work area.
6. **MAKE WORKSHOP CHILD PROOF** by locking your shop and shutting off air valves.
7. **DO NOT FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
8. **USE THE RIGHT TOOL.** Do not force tool or attachment to do a job for which it was not designed.
9. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.**

WARNING

Safety Instructions for Pneumatic Tools

10. **USE PROPER AIR HOSE** for the tool. Make sure your air hose is in good condition and is long enough to reach your work without stretching.
11. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear a protective hair covering to contain long hair.
12. **ALWAYS USE SAFETY GLASSES.** Also use a face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
13. **WEAR APPROVED HEARING PROTECTION.** Air escaping from pneumatic tools can exceed safe exposure limits and may cause hearing damage with prolonged exposure.
14. **SECURE WORK.** Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate tool.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools lubricated and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **REDUCE THE RISK OF UNINTENTIONAL FIRING.** Do not carry tool with hand on trigger and always disconnect from air when not in use.
17. **DISCONNECT TOOLS** before servicing, changing accessories, or moving to another location.
18. **DO NOT OVERREACH.** Keep proper footing/balance at all times.
19. **USE THE RECOMMENDED ACCESSORIES.** Consult owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **CHECK FOR DAMAGED PARTS BEFORE USING.** 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.
21. **NEVER LEAVE UNATTENDED TOOL CONNECTED TO AIR.** Disconnect the air hose and do not leave tool until it is relieved of any built up pressure.
22. **NEVER ALLOW UNTRAINED USERS TO USE THIS TOOL WHILE UNSUPERVISED.**
23. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING TOOL.** Seek formal training or research books or magazines that specialize in pneumatic tools.
24. **BE AWARE OF HOSE LOCATION WHEN USING PNEUMATIC TOOLS.** Hoses can easily become a tripping hazard when laid across the floor or spread out in a disorganized fashion.

WARNING

Additional Safety for Nailers

1. **HAND INJURIES:** Do not place your hands near the nail point of entry. A nail can deflect and tear through the surface of the workpiece, puncturing your hand or fingers.
2. **COMBUSTIBLE GASES:** Never connect the nailer to pressurized oxygen or other combustible gases as a power source. Only use filtered, lubricated, and regulated compressed air.
3. **SAFE HANDLING:** Never point the nailer at others! Do not keep the trigger pulled when loading fasteners, carrying, or holding tool. Carry the nailer only by the handle, never by any other part. Do not carry the nailer by the air hose. Disconnect the nailer from the air hose when going up and down ladders.
4. **CLEANING:** Never use gasoline or other flammable liquids to clean the nailer; vapors in the nailer will ignite by a spark and cause it to explode.
5. **HOSE USAGE:** Make sure your air hose is designed for the tool in use, is in good condition, and is long enough to reach your work without stretching. However, an overly long air hose in the work area may be a tripping hazard.
6. **OPERATING QUESTIONS:** If you are not sure about the intended operation, stop using the nailer. Seek formal training.
7. **MAINTENANCE:** Always disconnect air from the nailer when servicing or installing nails. During maintenance, a nailer connected to air may fire accidentally, causing serious personal injury.
8. **COMPRESSED AIR RATING:** Do not connect the nailer to compressed air that exceeds 120 PSI.
9. **CHECK VALVE:** Do not use a check valve or any other fitting that allows air to remain in the tool.
10. **MODIFICATIONS:** DO NOT modify this tool or bypass safety nose mechanisms.

WARNING

Never point this nailer at yourself or another person! Always pay attention to the direction this nailer is pointed. Use this tool with respect and caution to lessen the possibility of operator or bystander injury. Ignoring this warning may result in serious personal injury.

CAUTION

Nailer accidents routinely happen while moving the gun to another location, such as up ladders, to another room, or even another job site. Always disconnect the gun immediately after use and never transport the gun while connected to the air—even if the air compressor is disconnected from its power source!

INTRODUCTION

Woodstock Technical Support

This Model W1785 Palm Nailer 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 tools! In the event that questions arise about your tool, 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
P.O. Box 2309
Bellingham, WA 98227
Email: manuals@woodstockint.com

Tool Data

Nail Size	5d-70d
Blows Per Minute	1000
Average Air Consumption.....	5 CFM
Operating Air Pressure	70-100 PSI
Air Inlet Fitting.....	1/4" NPT
Weight	1.9 lbs.

!WARNING



Read the manual before operation. Become familiar with this nailer, its safety instructions, and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

!CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other tools with caution and respect. Failure to do so could result in serious personal injury, damage to equipment or poor work results.

Compressed Air System

The Model W1785 is designed to be operated at 70-100 PSI using clean, dry, regulated, compressed air. **Do not exceed the 120 PSI maximum pressure for your model.**

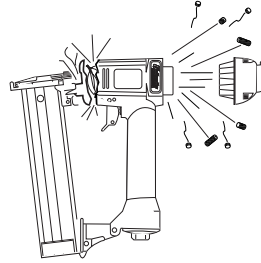
Before using your nailer, regulate the air pressure to find the optimum setting within the specified operating range. Start by testing the nailer at a low setting, then increase the air pressure as needed for satisfactory results.

An in-line filter/lubricator/regulator unit can be installed as depicted in **Figure 1**.

This filter/lubricator/regulator unit will protect your tool from damaging water build-up, allow you to adjust and maintain regulated air pressure, and save you the inconvenience of having to manually lubricate your tool every time you use it.

If you plan on installing a filter/lubricator/regulator unit in your compressed air system, always follow the connection instructions that come with the unit.

CAUTION



Exceeding the maximum permissible operating pressure may damage the nailer and cause it to malfunction. To protect yourself from personal injury, DO NOT allow the air pressure to exceed the recommended pressure for this nailer!

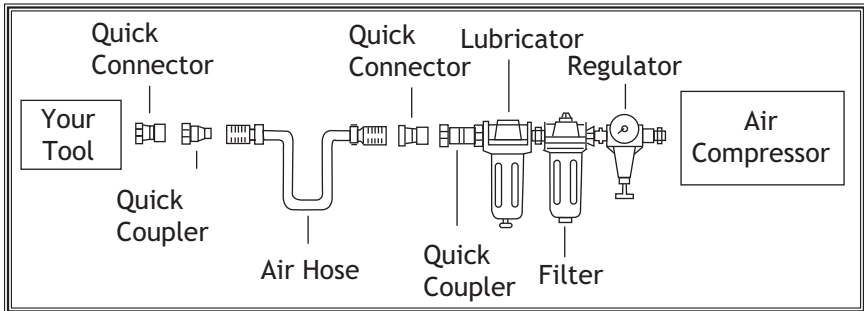


Figure 1. Typical filter/lubricator/regulator installation order.

SETUP

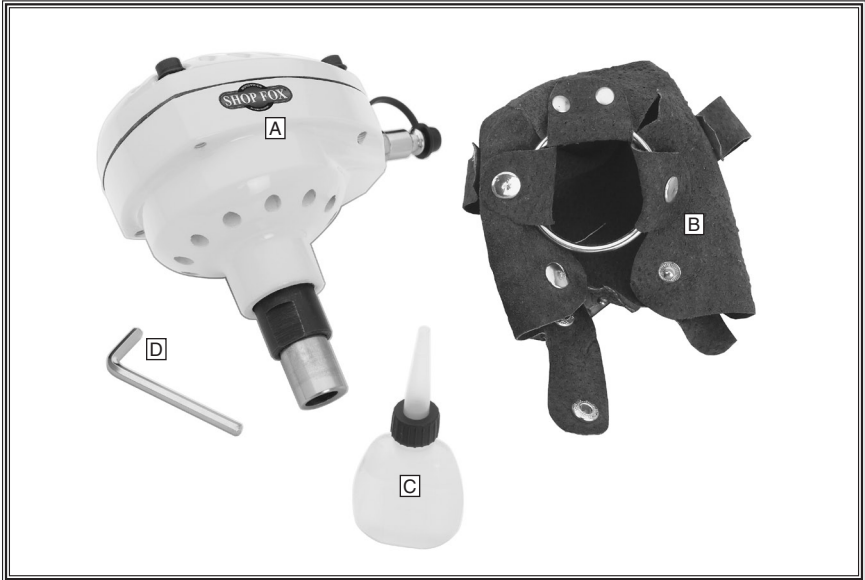
Unpacking

This tool has been carefully packaged for safe transportation. If you notice the tool has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

Inventory

The following is a description of the main components shipped with the Model W1785. Lay the components out to inventory them.

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



Model W1785 Inventory	Qty
A. Palm Nailer	1
B. Leather Pouch	1
C. Pneumatic Tool Oil	1
D. Hex Wrench 4mm	1

OPERATIONS

Operating

If you have not read the safety instructions in this manual, do not operate the nailer.

Before you operate your nailer, place five to six drops of the included oil into the quick connect fitting where the nailer connects to the air supply.

To operate your nailer, do these steps:

1. Connect the air supply to the quick connect fitting.
2. Make sure your hand and other body parts are positioned out of the way of a potential path of a nail in case of deflection.

Deflection is caused when grain irregularities, knots or foreign objects inside the wood cause the nail to change its path, resulting in the nail puncturing the surface of the workpiece, as shown in Figure 2.

Besides damaging your workpiece, deflection can cause injury if your free hand is securing the workpiece in the location that the nail deflects.

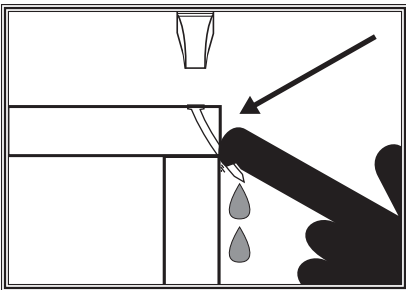


Figure 2. Example of nail deflection.

3. Hold the nail firmly in place with one hand as if using a regular hammer.
4. Place the tip of the palm nailer over the end of the nail. When the ram pin touches the nail head, the nailer will automatically begin to hammer the nail into the workpiece.
5. Hold the nailer in place until the sliding depth guide is fully depressed.

Note: You can stop the nailer at any time by simply lifting it away from the nail. This is useful if you do not want to countersink the nail into the workpiece.

If allowed to continue until it stops, the nailer will countersink the nail to an approximate depth of 2mm or $5/64$ ".

6. When the nail is fully hammered into the workpiece, the nailer will automatically stop.

⚠ WARNING



Operating this nailer can propel objects into the air, causing immediate eye damage. To protect yourself, always wear ANSI approved safety glasses or goggles when operating this equipment.

Replacing Pistons/ O-Rings

Under heavy use, the piston or O-rings may wear out. Replacement is quick and easy. Contact your authorized Shop Fox dealer to obtain the Piston Repair Kit (Part Number X1785127), or the Complete O-Ring Kit (Part Number X1785128).



To replace a piston, do these steps:

1. DISCONNECT NAILER FROM THE AIR SUPPLY!
2. Use a 19mm wrench to remove the nose piece, then remove the depth guide, compression spring, and flat washer.
3. Use the 4mm hex wrench to remove the four cap screws on the nailer rear cap, then remove the cap.
4. Push the ram pin towards the inside of the nailer. This will push the cylinder free of the housing.
5. Take hold of the ram pin and pull the piston from the cylinder.
6. Place the new O-ring on the new piston, and apply a thin film of tool oil on the O-ring.
7. Insert the new piston in the cylinder. The new piston should easily slide into the cylinder. **DO NOT force the piston into the cylinder!** If the piston is not easily inserted, check the alignment of the piston inside the cylinder.
8. After the piston is inserted correctly, place the cylinder back in the nailer housing. If seated correctly, the cylinder will snap into place.
9. Push the cylinder collar down into the housing as far as it will go. The horizontal air slots on the side of the cylinder should be visible.
10. Replace the rear cap and secure it with the four cap screws.
11. Re-install the flat washer, compression spring, depth guide, and nose piece onto the front of the nailer, and use a 19mm wrench to tighten the nose piece.
12. For more assistance, or to install the complete O-Ring Repair Kit, refer to the **Parts Breakdown** on **Page 10** for component locations.

CLEANING & LUBRICATION

Cleaning

Use a good solvent to clean the nose assembly of the nailer. Always be sure that the nailer is dry before using it again.

Do not allow dust, chips, sand, etc. into the air connectors or into the body of the nailer; this may result in leaks and damage to the nailer and the air couplings.

WARNING

Never clean this tool with gasoline or other flammable liquids. Vapors in the tool may ignite, causing the tool to explode. Ignoring this warning may lead to serious personal injury or even death!

Lubricating

Standard pneumatic tool oil has been included with your new Shop Fox nailer to help maintain its useful life. Place two to six drops of oil in the nailer air inlet (as shown in **Figure 3**) before every use, or after 2 hours of continuous use.

Wipe off any excess oil near the nailer exhaust to avoid dust build-up. When the oil that was included with the nailer has been completely used, replace with a quality pneumatic tool oil.

Another option to manual oiling would be to install a lubricator in your air compressor line. If your air compressor line already has a lubricator, then regular lubrication of your nailer will not be necessary. Just make sure there is always oil in the lubricator.

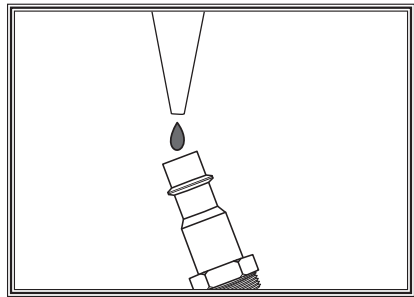
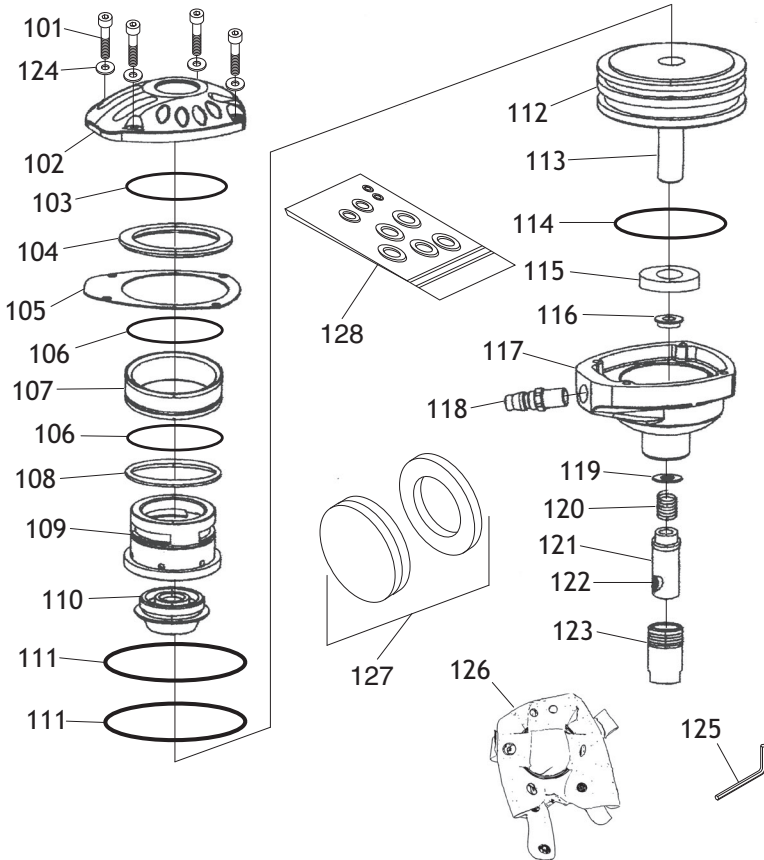


Figure 3. Lubricating nailer via air inlet.

PARTS BREAKDOWN & PARTS LIST



REF	PART #	DESCRIPTION
101	XPSB15M	CAP SCREW M5-.8 X 20
102	X1785102	CAP
103	X1785103	O-RING 53.5 X 2.6
104	X1785104	RUBBER SEAL 54MM
105	X1785105	GASKET
106	X1785106	O-RING 53.5 X 2.6
107	X1785107	CYLINDER COLLAR
108	X1785108	SEALING RING
109	X1785109	CYLINDER
110	X1785110	CYLINDER COVER
111	X1785111	O-RING 43 X 2.6
112	X1785112	PISTON
113	X1785113	RAM PIN
114	X1785114	O-RING 61.4 X 2.6

REF	PART #	DESCRIPTION
115	X1785115	BUMPER 16 X 40 X 8
116	X1785116	AXLE SLEEVE 8MM
117	X1785117	HOUSING
118	X1785118	AIR INLET PLUG 1/4" NPT
119	X1785119	SPECIAL WASHER 9 X 20 X 1
120	X1785120	COMPRESSION SPRING
121	X1785121	DEPTH GUIDE
122	X1785122	MAGNET
123	X1785123	NOSE PIECE M20-1.5 X 37
124	XPW02M	FLAT WASHER 5MM
125	XPAW04M	HEX WRENCH 4MM
126	X1785126	LEATHER POUCH
127	X1785127	PISTON REPAIR KIT
128	X1785128	COMPLETE O-RING KIT

TROUBLESHOOTING

Symptom	Possible Cause	Possible Solution
Air leaking at trigger valve area.	1. O-rings in trigger valve housing are damaged.	1. O-rings must be replaced & operation of safety nose must be checked.
Air leaking between housing and hose	1. Loose screws in housing. 2. Damaged O-ring. 3. Loose air fitting.	1. Tighten screws. 2. Replace O-ring 3. Tighten air fitting & use teflon tape.
Air leaking between housing and cap.	1. Damaged seal.	1. Replace damaged seals.
Tool runs slowly or has a loss of power.	1. Undersized air hose. 2. Nailer is not lubricated. 3. Broken spring in cap assembly. 4. Exhaust port in cap is blocked.	1. Use a larger hose. 2. Lubricate nailer. 3. Replace spring. 4. Clean or replace damaged internal parts.
Nailer does not fire.	1. Nailer is not lubricated. 2. Piston shaft is damaged. 3. Air pressure too low.	1. Follow lubricating instructions. 2. Replace piston shaft. 3. Check/increase air pressure.
Air blows out of exhaust cap; nailer will not fire.	1. O-ring slipped out of groove or damaged inside nailer.	1. Reinstall/replace suspect O-ring; turn down air pressure.

WARRANTY AND RETURNS

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?

<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: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



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



FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE