

3 in 1 FLOOR NAILER

MODEL # IH-HF3N1

SET UP AND OPERATING INSTRUCTIONS



Read and understand tool labels and manual. Failure to follow warnings could result in DEATH or SERIOUS INJURY.

For technical questions or replacement parts, please call 1-800-551-2406

Manufactured by:



Please read this manual before operating, and understand the warnings and cautions. The installation, operation and maintenance procedures should be read carefully, and the manual kept for reference. Note: additional safety measures may be required as a result of your particular application of the tool.

SAFETY INSTRUCTIONS

Eye protection that conforms to ANSI specifications and provides protection against flying particles both from the FRONT and SIDE should ALWAYS be worn by the operator and others in the work area when loading, operating, or servicing this tool. Eye protection is required to guard against flying fasteners and debris, which could cause severe eye injury. Note: non-side shielded spectacles and face shields alone do not provide adequate protection.

Caution: Additional safety precautions will be required in some environments. For example, the work area may include exposure to a noise level which can lead to hearing damage. The employer and user must ensure that any necessary hearing protection is provided and used by the operator and others in the work area. Some environments will require the use of ANSI approved head protection.

Air supply and connections

- Do not use oxygen, combustible gases or bottled gasses as a power source for this tool, as the tool could explode, causing personal injury.
- Do not use supply sources which can potentially exceed 120 PSI, as tool could burst, causing personal injury.
- The connector on the tool must not hold pressure when air supply is disconnected. If a wrong fitting is used, the tool can remain charged with air after disconnecting, and can drive a fastener even after the air is disconnected, possibly causing injury.
- Always disconnect air supply: before making adjustments, when servicing the tool, when clearing a jam, when the tool is not in use, and when moving to a different work area, as accidental actuation may occur possibly causing an injury.

Loading Tool

When loading the tool: never place a hand or any part of the body in fastener discharge area of the tool, never point tool at anyone. Do not pull the trigger or depress the trip as an accidental actuation may occur, causing injury.

Operation

- Always handle the tool with care. Never pull the trigger unless nose is directed toward the work, keep others a safe distance from the tool while tool is in operation, as accidental actuation may occur, possibly causing injury.
- The operator must not hold the trigger pulled on contact arm tools except during fastening operation as serious injury could result if the trip accidentally contacted someone or something, causing the tool to fire.
- Keep hands and body away from the discharge area of the tool. A contact arm tool may bounce from the recoil of driving a fastener and an unwanted second fastener may be driven, possibly causing injury.

Loading Tool (con't.)

- Check operation of the contact arm mechanism frequently. Do not use the tool if the arm is not working correctly as accidental driving of a fastener may result. Do not interfere with the proper operation of the contact arm mechanism.
- Do not drive fasteners on top of other fasteners or with the tool at an overly steep angle, as this may cause deflection of fasteners which could cause injury.
- Do not drive fasteners close to the edge of the work piece as the wood may split, allowing the fastener to be deflected, possibly causing an injury.

Maintenance

When working on air tools, note the warnings in this manual and use extra care when evaluating problem tools.

SPECIFICATIONS

- Fasteners: 15-1/2 gauge, 1/2" crown staples from 1-1/2" to 2" long
- Magazine capacity: 100 fasteners
- Operating pressure: 70-110 PSI (4.8-7.5 bar)
- Max pressure: 120 PSI
- Air consumption: 0.5 CFM per staple, 30 staples/minute @ 80 PSI

Note: Take the actual rate at which the tool will run to determine the amount of air required. For instance, if your fastener usage averages 15 fasteners per minute, you need 50% of the tool's CFM requirement of free air to run the tool at 30 fasteners per minute.

OPERATION

Caution: This flooring stapler was designed for use in installing unfinished hardwood flooring. It can be used to install pre-finished flooring, however caution must be used to ensure that the finish is not damaged by the tool. It is recommended that the tool be tested on a sample section to be certain that the technique of use does not leave marks on the finish. This procedure should be followed before each job due to variations in flooring and tool condition.

Air supply and connections

- Fittings:** Install a male plug on the tool which is free flowing and will release air pressure from the tool when disconnected from the supply source.
- Hoses:** Air hoses should have a minimum of 150 PSI working pressure rating, or 1.5 times the maximum pressure that could be produced in the air system. The supply hose should contain a fitting that will provide quick disconnecting from the male plug on the tool.
- Supply source:** Use only clean, regulated compressed air as a power source for this tool. Do NOT use oxygen, combustible gas, or bottled gas as a power source for this tool, as tool may explode.
- Regulator:** A pressure regulator with an operating pressure of 0 - 125 PSI is required to control the operating pressure for safe operation of this tool.
- Operating Pressure:** Do not exceed the recommended maximum operating pressure of 120 PSI as tool wear will be greatly increased. The air supply must be capable of maintaining the operating pressure of the tool. Pressure drops in the air supply can reduce the tool's driving power. Desired operating pressure is between 70 to 100 PSI.

Air supply and connections (con't.)

Filter: Dirt and water in the air supply are major causes of wear in pneumatic tools. A filter will help to get the best performance and minimum wear from the tool. The filter must have adequate flow capacity for the specific installation. The filter has to be kept clean to be effective in providing clean compressed air to the tool. Consult the manufacturer's instructions on proper maintenance of your filter. A dirty and clogged filter will cause a pressure drop that will reduce the tool's performance.

Lubrication

Frequent lubrication is required for best performance. Oil added through the air line connection will lubricate the internal parts. Use a good quality air tool oil. Do not use detergent oil or additives as these will cause accelerated wear to the seals and bumpers in the tool, resulting in poor performance and frequent need for maintenance.

If an inline oiler is not used, add oil during use into the air fitting on the tool once or twice a day. Only a few drops at a time are necessary. Too much oil will collect inside the tool and will be noticeable in the exhaust cycle.

Cold weather operation

For cold weather operation, near and below freezing, the moisture in the air line may freeze and prevent tool operation. We recommend the use of a winter formula air tool lubricant.

Caution: Do not store tools in a cold environment to prevent frost or ice formation on the tool's operating valves and mechanisms that could cause tool failure.

Note: Some commercial air line drying liquids are harmful to O-rings and seals - do not use these low temperature air dryers without checking compatibility.

Loading the Floor Nailer

To prevent accidental injuries:

- Always wear ANSI approved eye protection
- Never place a hand or any other body part in nail discharge area of the tool while the air supply is connected
- Never point the tool at other people
- Never pull the trigger unless nose is directed at the work
- Always handle the tool with care
- Do not pull the trigger or depress the trip mechanism while loading the tool

Staple loading

Pull cover open. Insert stick of staples. Push cover forward until the detent pin snaps into place, locking the cover. The tool is now ready to operate.

Tool operation

- Floor nailer is actuated (fired) by hitting the cap firmly with a mallet (not included).
- Always wear ANSI approved eye protection.
- Never use this tool in a manner that could cause a fastener to be directed toward the user or others in the work area.
- Do not use the tool as a hammer to position flooring strips, as this could damage the tool. Use the mallet for this purpose instead.
- Always carry the tool by the handle. Never carry the tool by the air hose.
- Do not alter or modify this tool from the original design or function.

Tool operation (con't.)

- Always be aware that misuse and/or improper handling of this tool can cause injury to yourself and other.
- Never clamp or tape the trigger or contact trip in an actuated position.
- Never leave a tool unattended with the air hose attached.
- Do not operate this tool if it does not contain a legible warning label.
- Do not continue to use a tool that leaks air or does not function properly. Take the tool to a qualified service technician for proper servicing.

MAINTENANCE

Caution:

- Use caution when working with the spring assembly. The spring is wrapped around, but not attached to, a roller. If the spring is extended beyond its length, the end will come off of the roller and the spring will roll up with a snap, with a chance of pinching your hand. Also, the edges of the spring are very thin and can cut. Care must also be taken to ensure no permanent kinks are put in the spring, as this will reduce the spring's force.
- Do not use modified replacement parts or parts which will not give equivalent performance to the original equipment.

Assembly procedure for seals

When repairing a tool, make sure the internal parts are clean and lubricated. Coat each O-ring with O-ring lubricant before assembling. Use a small amount of oil on all moving surfaces and pivots. After reassembly, add a few drops of air tool oil through the air line fitting before testing.

Air supply pressure and volume

Air volume is as important as air pressure. The air volume supplied to the tool may be inadequate because of undersized fittings and hoses, or from the effects of dirt and water in the system. Restricted air flow will prevent the tool from receiving an adequate volume of air, even though the pressure reading is high. The results will be slow operation, misfeeds, or reduced driving power. Before evaluating tool problems for these symptoms, trace the air supply from the tool to the supply source for restrictive connectors, swivel fittings, low points containing water, and anything else that would prevent full volume flow of air to the tool.

To replace piston

- 1) Insert the flats on the lower end of the driver piston stem carefully into the end of a piston/plunger wrench.
- 2) Using another piston/plunger wrench, or another wrench of the proper size, unscrew the plunger from the upper end of the stem. After this is done, it will be possible to lift the poppet off the stem.
- 3) Place the piston/plunger wrench down over the piston stem onto the driver piston, locking the piston ears in the slots in the wrench. Unscrew the piston from the stem.

To replace driver

- 1) It is not necessary to disassemble the piston-poppet-driver assembly to replace the driver. Pull the poppet up on the driver piston stem as far as it will go.
- 2) Insert the piston/plunger wrench over the driver piston, locking the piston ears in the slots in the wrench. Unscrew the piston from the threaded portion of the stem.

To replace driver (con't.)

- 3) To remove the driver blade from the piston stem, push the driver blade pin out of the stem. This will release the blade.
- 4) Insert new driver blade into the slot in the end of the driver piston stem and assemble the driver blade pin. Test the side play in the driver blade by grasping the driver piston stem in one hand and the blade in the other, moving the blade sideways in alignment with the slot in case of any slight misalignment between the blade and guide in the nose. If there is no side play, the blade should be removed and the top (pin end) just barely dressed off with a stone. It is not necessary to do more than smooth off the top to get the necessary side play. Do not grind. Reinsert the blade and pin in the stem and test for side play once more. Repeat as necessary to get this small amount of side play. Carefully examine the large threaded portion of the piston stem. A nylon lock can be seen imbedded in a recessed hole in the stem. It is very important that this nylon lock can be replaced when its locking efficiency has been reduced through several disassemblies of the piston. It is necessary to use the sharp point of a knife or some such instrument to remove this nylon lock. Insert a new one by setting it into the recessed hole in the stem, and tapping it gently until firmly seated.
Reverse these instructions to reassemble
- 5) Assemble plunger flush with the end of piston stem.

To replace piloted valve seals

- 1) Remove exhaust deflectors and four hex socket head cap screws holding cap to cylinder. Remove cap exposing the poppet piston and piloted valve.
- 2) Remove gasket, piloted valve seat, piloted valve, spring and O-rings.
- 3) Clean all O-ring grooves. Lubricate new O-rings and assemble.
- 4) After new O-rings have been assembled to piloted valve, insert spring into valve body. Lay tool on its side and slide valve into position. Turn tool upright and replace gasket.
- 5) After new O-ring has been assembled to valve seat, slide it through the gasket and over the piloted valve.
- 6) Insert new O-ring in stepped hole in cap directly over piloted valve. Assemble cap using four socket head cap screws and replace exhaust deflector.

To replace wear plate or blade guide

- 1) Separate the magazine from the nose by removing four socket head cap screws
- 2) Remove and replace wear plate or blade guide.


To replace detent spring or pusher spring

- 1) Remove magazine
- 2) Set the magazine down on a flat surface. Cup palm over the hooked end of the cover to prevent the detent pin and the detent pin spring from slipping out and being lost when cover is removed. Turn the magazine upside down and reach in with a small screwdriver, or needle nose pliers, and lift the pusher spring off the pusher. Slide cover out the back end of the magazine.
- 3) To remove the springs from the magazine, use a 3/32" pin punch and drive the spring anchor pin out of the magazine body. Replace and reverse the instructions to reassemble.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	LIKELY SOLUTIONS
Trigger valve housing leaks air	O-ring cut or cracked	Replace O-ring
Trigger valve stem leaks air	O-ring/seals cut or cracked	Replace trigger valve assembly
Frame/nose leaks	Loose nose screws	Tighten and recheck
	O-ring or gasket is cut or cracked	Replace O-ring or gasket
	Bumper cracked/worn	Replace bumper
Frame/cap leaks air	Damaged gasket or seal	Replace gasket or seal
	Cracked/worn head valve bumper	Replace bumper
	Loose cap screws	Tighten and recheck
Failure to cycle	Air supply restriction	Check air supply equipment
	Tool dry, lack of lubrication	Use air tool oil
	Worn head valve O-rings	Replace O-rings
	Broken cylinder cap spring	Replace cylinder cap spring
	Head valve stuck in cap	Disassemble/check/lubricate
Lack of power; slow to cycle	Tool dry, lacks lubrication	Use air tool oil
	Broken cylinder cap spring	Replace cap spring
	O-rings/seals cut or cracked	Replace O-rings/seals
	Exhaust blocked	Check bumper, head valve spring, muffler
	Trigger assembly worn/leaks	Replace trigger assembly
	Dirt/tar build up on driver	Disassemble nose/driver to clean
	Cylinder sleeve not seated correctly on bottom bumper	Disassemble to correct
	Head valve dry	Disassemble/lubricate
	Air pressure too low	Check air supply equipment
Skipping fasteners; intermittent feed	Worn bumper	Replace bumper
	Tar/dirt in driver channel	Disassemble and clean nose and driver
	Air restriction/inadequate air flow through quick disconnect socket and plug	Replace quick disconnect fittings
	Worn piston O-ring	Replace O-ring, check driver
	Tool dry, lacks lubrication	Use air tool oil
	Damaged pusher spring	Replace spring
	Low air pressure	Check air supply system to tool
	Loose magazine nose screws	Tighten all screws
	Fasteners too short for tool	Use only recommended fasteners
	Bent Fasteners	Discontinue using these fasteners
	Wrong size fasteners	Use only recommended fasteners
	Leaking head cap gasket	Tighten screws/replace gasket
	Trigger valve O-ring cut/worn	Replace O-ring, check driver
	Broken/chipped driver	Replace Driver (check piston O-ring)
	Dry/dirty magazine	Clean / lubricate with air tool oil
	Worn magazine	Replace magazine

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	LIKELY SOLUTIONS
Fasteners jam in tool	Driver channel worn	Replace nose check door
	Wrong size fasteners	Use only recommended fasteners
	Bent fasteners	Discontinue using these fasteners
	Loose magazine/nose screws	Tighten all screws
	Broken/chipped driver	Replace driver
 Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect air supply before service.		

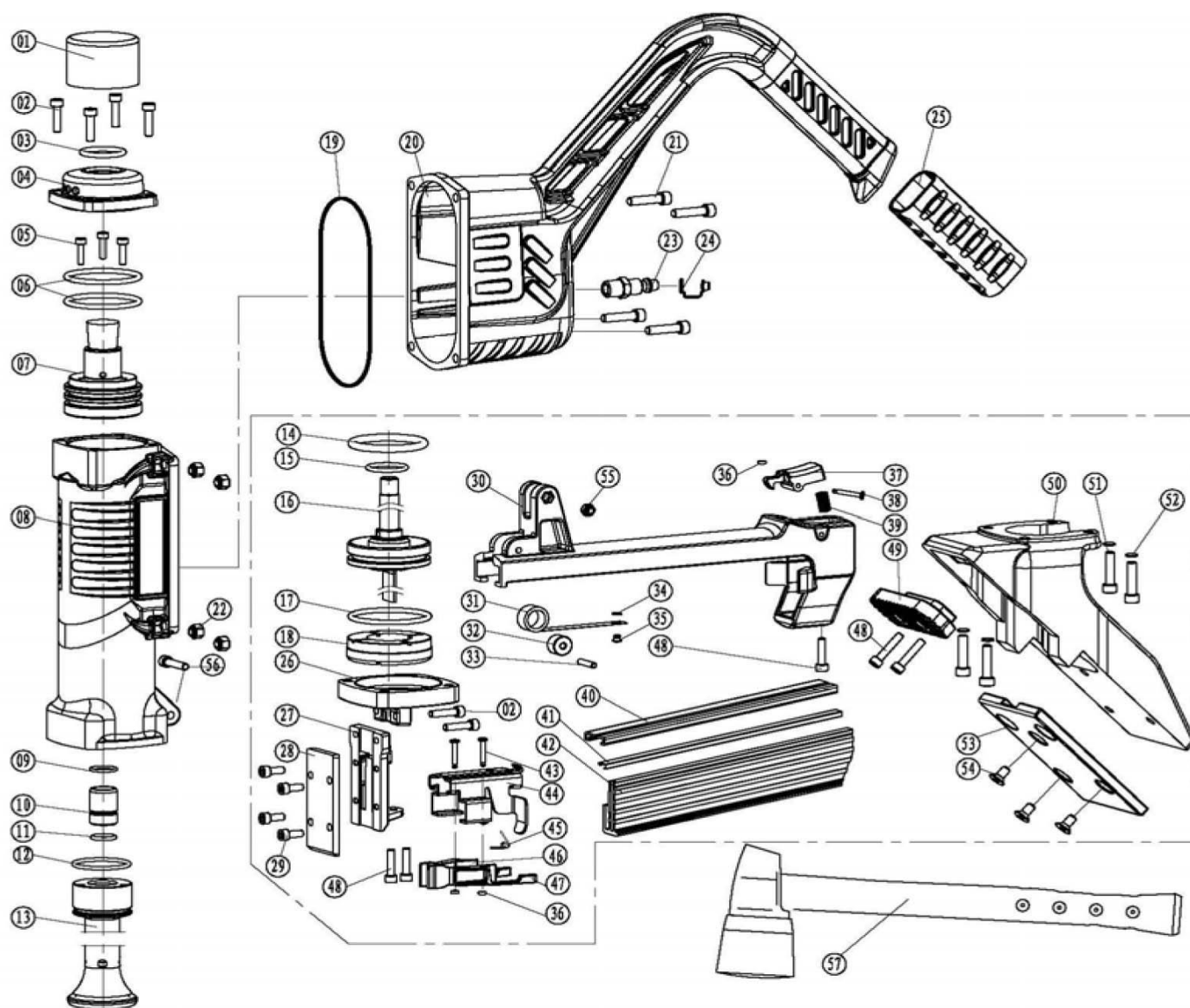
Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

PLEASE READ THE FOLLOWING CAREFULLY

The manufacturer and/or distributor has provided the parts list and assembly diagram in this manual as a reference tool only. Neither the manufacturer or distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he or she is qualified to replace any parts of the product. In fact, the manufacturer and/or distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts thereto or arising out of his or her installation of replacement parts thereto.

PARTS LIST			
PART	DESCRIPTION	PART	DESCRIPTION
1	Whack cap	34	Snap retainer
2	Bolt M5*20	35	Spring pin
3	O-ring 25*3.55	36	O-ring 1.7*2
4	Air deflector	37	Latch
5	Bolt M4*16	38	Pin
6	O-ring 46.2*3.55	39	Spring
7	Piston seat	40	Pusher seat shelf
8	Gun body	41	Driver guide strip
9	O-ring 15.6*1.8	42	Magazine
10	Sealing nut	43	Pin
11	O-ring 12.8*1.8	44	Pusher seat shelf
12	O-ring 34.5*2.65	45	Spring
13	Piston sleeve	46	Right pusher
14	O-ring 32*4.5	47	Left pusher
15	O-ring 12.8*2.5	48	Bolt M5*16
16	Main piston	49	Seat pad
17	O-ring 50*3.55	50	Base
18	Bumper	51	Gasket
19	Sealing washer	52	Bolt M6*40
20	Brace	53	Base plate
21	Bolt M6*25	54	Bolt M6*12
22	Nut M6	55	Nut M5
23	Air inlet plug	56	Bolt M5*28
24	Protective cap	57	Mallet (not included)
25	Brace sleeve		
26	Cylinder seat		
27	Driver guide		
28	Nail head		
29	Bolt M5*10		
30	Magazine cover		
31	Spring II		
32	Spring core		
33	Pin A4*20		



LIMITED WARRANTY

1. DURATION: From the date of purchase by the original purchaser as follows: Wood Industries, Inc.(Standard Duty and Unannounced –One Year).
2. WHO GIVES THIS WARRANTY (WARRANTOR): Wood Industries, Inc. Address: 21 Front Street, Belmont, MS 38827, USA.
3. WHO RECEIVES THIS WARRANTY (PURCHASER): The original purchaser (other than for purposes of resale) of the Wood Industries, Inc. product.
4. WHAT PRODUCTS ARE COVERED BY THIS WARRANTY: Any Wood Industries, Inc. nailer, stapler or air accessory supplied or manufactured by Warrantor.
5. WHAT IS COVERED UNDER THIS WARRANTY: Substantial defects in material and workmanship which occur within the duration of the warranty period.
6. WHAT IS NOT COVERED UNDER THIS WARRANTY:
 - A. Implied warranties, including those of merchantability and FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED FROM THE DATE OF ORIGINAL PURCHASE AS STATED IN THE DURATION. If this product is used for commercial, industrial or rental purposes, the warranty will apply for ninety (90) days from the date of purchase. Some States do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.
 - B. ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE, OR MALFUNCTION OF WOOD INDUSTRIES, INC. PRODUCT. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
 - C. Any failure that results from an accident, purchaser's abuse, neglect or failure to operate products in accordance with instructions provided in the owner's manual(s) supplied with product. Accident, purchaser's abuse, neglect or failure to operate products in accordance with instructions shall also include the removal or alteration of any safety devices. If such safety devices are removed or altered, this warranty is void.
 - D. Normal adjustments which are explained in the owner's manual(s) provided with the product.
 - E. Items or service that are normally required to maintain the product, i.e. o-ring, springs, bumpers, driver blades, gaskets, seals, nozzles, material hoses, or any other expendable part not specifically listed. These items will only be covered for ninety (90) days from date of original purchase. Underlined items are warranted for defects in material and workmanship only.
 - F. Cosmetic defects that do not interfere with the product's function.
7. RESPONSIBILITIES OF WARRANTOR UNDER THIS WARRANTY: Repair or replace, at Warrantor's option, products or components which are defective, have malfunctioned and/or failed to conform within duration of the warranty period.
8. RESPONSIBILITIES OF PURCHASER UNDER THIS WARRANTY:
 - A. Provide dated proof of purchase and maintenance records.
 - B. Call 1-800-551-2406 to obtain your warranty service options. Freight costs must be borne by the purchaser.
 - C. Use reasonable care in the operation and maintenance of the products as described in the owner's manual(s).
9. WHEN WARRANTOR WILL PERFORM REPAIR OR REPLACEMENT UNDER THIS WARRANTY: Repair or replacement will be scheduled and serviced according to the normal work flow at the servicing location, and depending on the availability of replacement parts.

This Limited Warranty applies in the United States, Canada and Mexico only and gives you specific legal rights. You may also have other rights which vary from state to state or country to country.

IRON HORSE



**PO Box 720
21 Front Street
Belmont, MS 38827
Ph: (662) 454-0005
Fx: (662) 454-0010
Toll Free: (800) 551-2406**