

# **POWERNAIL® CO.**

## ***Model BR50 Pneumatic Brad Nailer***



### **OPERATION AND MAINTENANCE MANUAL MANUAL DE OPERACION Y DE MANTENIMIENTO MANUEL D'INSTRUCTIONS ET D'ENTRETIEN**

#### **WARNING**



Read this manual before you use this Powernailer®. Follow all safety warnings and instructions. If you are uncertain about the operation of the nailer, call us directly at 1-800-323-1653 for assistance or contact the closest Powernail Dealer for help. Please retain this information for future reference.

REV 15.08.07

## **INTRODUCTION**

The BR50 Brad Nailer is a trigger-pull nailer designed to bring Pownail quality and flooring expertise to a pneumatic brad nailer.

The BR50 is designed for use with brad finish nails in lengths of 5/8" to 2". The Model BR50 nails from 1/2" to 1-3/4" board and trim.

## **INDEX**

Index.....	2	Safety Labels.....	7
Warranty.....	2	Troubleshooting Chart.....	9
Safety Instructions.....	3	Parts List.....	10
Operating the tool.....	4-6	Schematic.....	11
Air Supply.....	5	Phone Support.....	12
Loading fasteners.....	6	Web Site.....	12
Clearing a jam.....	7	Pownail Company Info.....	12

## **LIMITED WARRANTY**

POWERNAIL® Company, Inc. warrants to its customer, and to the first end-use purchaser of POWERNAIL BR50 Brad Nailer purchased from an authorized POWERNAIL distributor, that each serialized manufactured BR50 Brad Nailer by POWERNAIL®, for a period of 12 months from the date of purchase; shall be free of defects in materials and workmanship and will meet POWERNAIL'S specifications in effect at the time of product shipment. POWERNAIL will repair or replace, at its option, any BR50 Brad Nailer that does not conform to this warranty. Claims must be made no later than fifteen (15) days after the end of the warranty period. POWERNAIL will perform all repair or replacements itself or through its authorized contractors. POWERNAIL is not responsible for shipping, labor or other direct or indirect costs. Damage caused by abuse, misuse, unusual or excessive wear is excluded. Repair or modification of the Products by unauthorized parties will void this warranty. The customer is responsible for returning Products to POWERNAIL for verification of nonconformance. Warranties for Products not manufactured by POWERNAIL are limited to warranties provided to POWERNAIL by the manufacturer of such product that are assignable to customer.

THESE WARRANTIES AND REMEDIES ARE EXCLUSIVE OF ALL OTHERS, EXPRESS OR IMPLIED. THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PURPOSE ARE EXPRESSLY EXCLUDED. IN NO EVENT SHALL POWERNAIL'S LIABILITY FOR A WARRANTY CLAIM EXCEED THE PRICE PAID TO POWERNAIL FOR THE NONCONFORMING PRODUCT, REGARDLESS OF THE FORM OR BASIS OF THE CLAIM OR CAUSE OF ACTION.

## **SAFETY INSTRUCTIONS**



When operating this Nailer, the operator and others in the work area should ALWAYS wear approved SAFETY GLASSES, with front and side eye protection. Eye protection will help guard against flying nails and debris, which could cause severe eye injury.



EAR PROTECTION should be used to prevent hearing damage when there are high noise levels in the work area. ALWAYS use ear plugs with a noise reduction rated at 29 db or higher at a construction site.

### **Noise characteristic values in accordance with ENxx1:**

A-weighted single-event sound pressure level at operator's position: LPA, 1s94dBA

A-weighted single sound pressure level: LpA, 1s, 1m89dBA

### **Vibration characteristic values in accordance with ISO 8662, PART II**

Weighted root mean square acceleration 3.2m/s<sup>2</sup>

Always **DISCONNECT THE AIR SUPPLY** before making any adjustments, repairing, clearing jams or when the Nailer is not in use. Do not use on scaffolding or ladders and disconnect nailer from air supply when transporting between installation areas.

Never attach the female end of a quick disconnect to the Nailer. This will trap air inside the Nailer and permit it to be discharged. Only the unrestricted male connection should be attached to the Nailer.

Nailer requires an air source that can continuously deliver 70 to 100 psi at 3-1/2 cubic feet of air per minute for operation.

Normal air pressure should not exceed 100 psi or damage to the Nailer and seals may occur. Excess air pressure can cause the Nailer to explode.

To prevent fire or explosion, use only regulated compressed air—do not use bottled gases of any kind (no oxygen or combustible gasses) to power this Nailer.

Nailer is intended for use installing wood flooring and is not to be used for purposes not specified in the operations manual.

Do not use any nails other than 18 gauge straight brad finish nails which are designed specifically for your nailer.

Use only Powernail replacement parts in the repair or maintenance of this nailer. Parts or repair services are available from the manufacturer or from agents authorized by the manufacturer. Repairs should be carried out only by trained service personnel in the field of fastener driving tools who will observe proper safety controls while performing maintenance. Service personnel should be qualified to assess the safe working condition of fastener driving tools.

Always make sure nailer is empty of nails before connecting an air hose, so as to prevent any accidental discharge from occurring. **ONLY CONNECT AIR TO AN UNLOADED NAILER.**

Do not depress the trigger when loading. If the fasteners are jammed, disconnect the tool from the air supply before you remove the jammed nails.



Never place any part of the body in the discharge path of the Nailer when air is connected to the Nailer. Never point the tool at yourself or others, even if the tool is not loaded. For safety, keep out of reach of children. Never leave the Nailer unattended while it is connected to an air supply.

Do not fire into hard materials or attempt to use on hard or brittle material such as concrete, steel or tile. Before using this tool, carefully check that all parts are working correctly. Do not use the tool if it is not operating correctly, check for causes and adjust as necessary for proper operation. When not in use, the tool should be cleaned, fully assembled and then stored in a dry location. This will extend the life of the tool and reduce any oxidation.

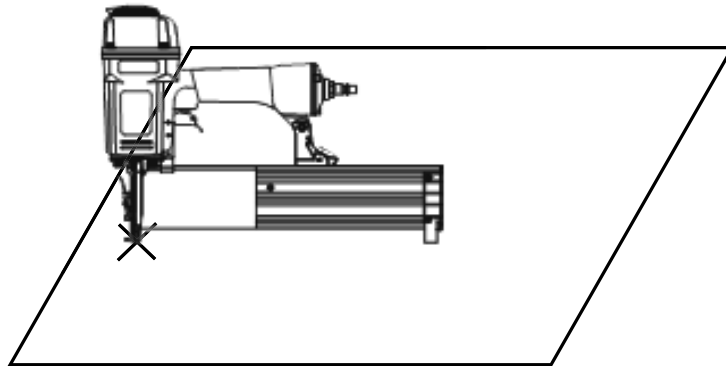
## **OPERATION**

APPLICATIONS: The Model BR50 nails from 1/2" to 1-3/4" board and trim.

\*Only use tool for its intended purposes. Drive fasteners into work surfaces only; never into materials too hard to penetrate.

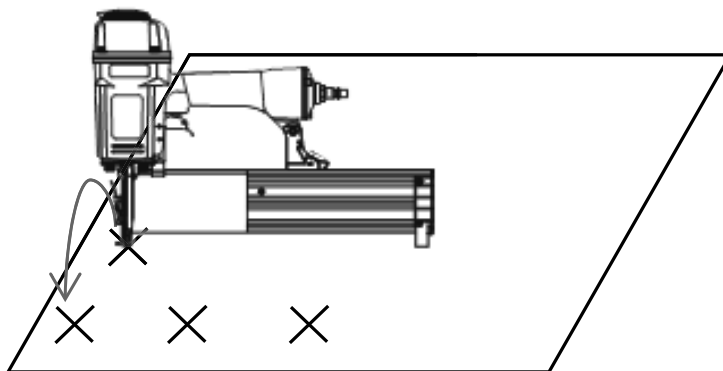
### **Single-fire Procedure**

1. Set the nailer to the work surface with the nose pressed down to release the safety.
2. Squeeze the trigger once for single-fire operation.



### **“Bump-fire” Procedure**

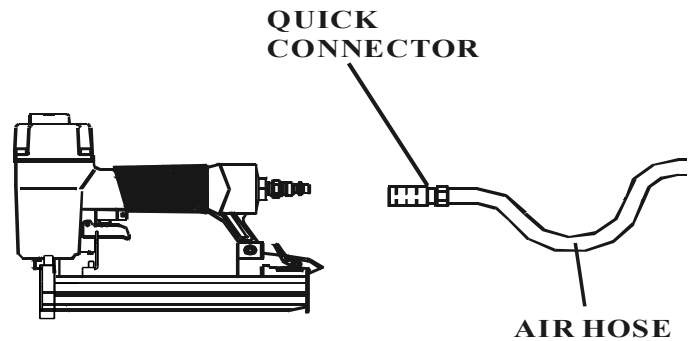
1. First squeeze and hold the trigger in the fire position.
2. Then push nailer-nose to the surface you wish to nail. The nailer will fire each time the nailer nose is pushed to the work surface while keeping the trigger in the fire position.



## **OPERATION, continued...**

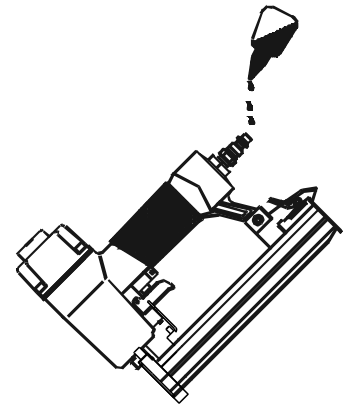
### **CONNECTING THE TOOL TO AN AIR SUPPLY**

Your air tool is fully assembled when you receive it. Before using it, attach the air line and desired air system accessories. Be sure the air hose is depressurized when installing or removing adapters to the air line. To prevent misfire, do not connect air to a loaded nailer.



**Figure 1**

1. An automatic airline oiler is recommended but oil may be added manually before every operation or after about 1 hour of continuous use.
2. Place two (2) drops of air-tool oil (figure 2) into the air plug at the rear of the nailer. If you are using an automatic in-line oiler, check and add oil if necessary.
3. Turn your compressor on and set the compressors pressure regulator to the proper pressure for the size and type of fastener being used. Normal operating pressure should be adjusted between 70-100 psi based on fastener and wood being used.
4. Connect the tool to the air supply (Figure 1).



**Figure 2**

## **OPERATING TIPS**

Before using this tool, carefully check that all parts are working correctly. Do not use the tool if it is not operating correctly, check for causes and adjust as necessary for proper operation.

Secure your work. Use clamps or a vise to hold your work project in place. It is safer than using your hands and it frees both hands to operate tool.

Do not drive fasteners on top of other fasteners or with tool at too steep of an angle; the fasteners may ricochet and injure someone.

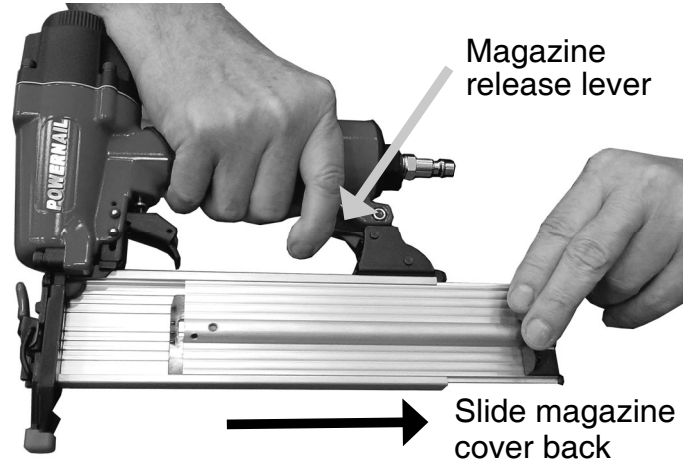
Do not drive fasteners too close to the edge of the work surface. The work piece is likely to split and the fastener could fly free or ricochet and injure someone.

Do not fire into hard materials or attempt to use on hard or brittle materials such as concrete, steel or tile.

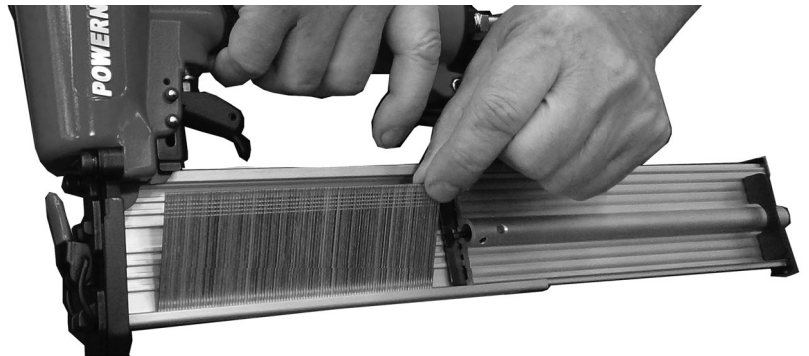
## OPERATION, LOADING BRADS

1. Disconnect air supply.
- 

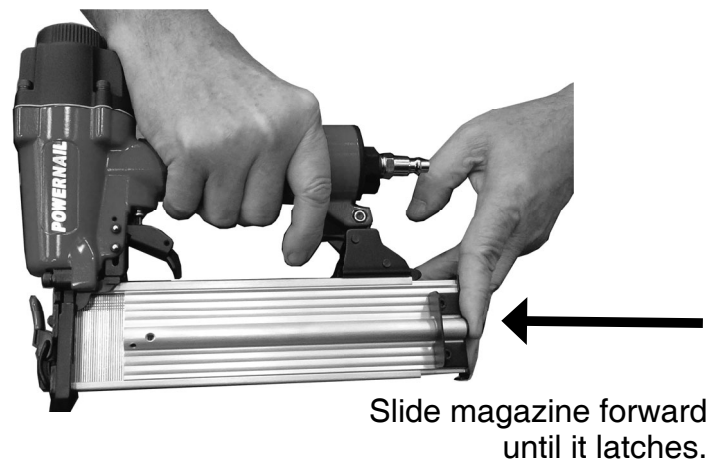
2. Pull the release lever to unlatch magazine cover and slide it to the rear



3. Lay 1 strip of fasteners inside the channel.



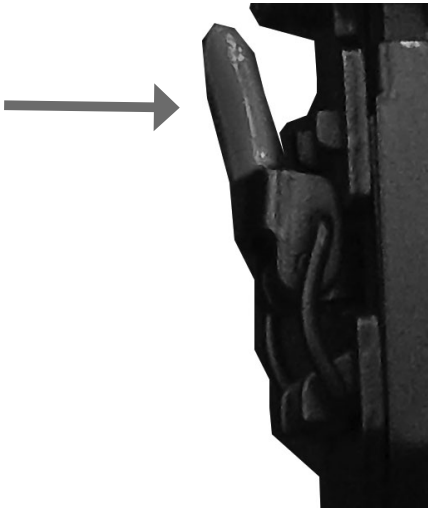
4. Slide the magazine cover forward until it latches.



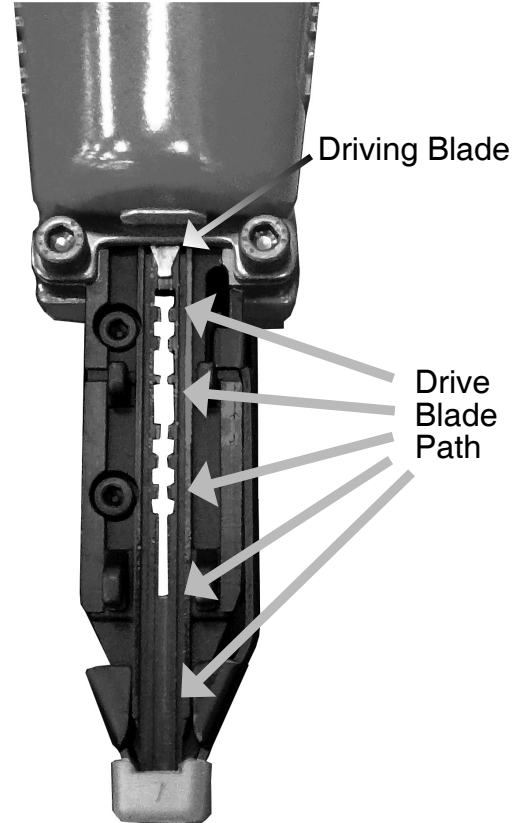
5. Connect air supply to the tool and test-fire on sample wood.

## CLEARING JAMS

1. **Disconnect air supply.**
2. Pull the release lever to unlatch magazine cover and slide it to the rear
3. Use the release lever to remove the nose-cover assembly.



4. Inspect and clear the driveblade path of any material or debris.



## NAILER SAFETY LABELS

**Operating Pressure  
70 - 100 psi**



### **WARNING!**

1. Read and understand operating manual before using.
2. Operator and all the by-standers must wear ANSI approved safety glasses, ear and head protections.
3. Never use oxygen or other flammable gases. Only choose clean dry regulated compressed air below 100 PSI pressure.
4. Remove finger from trigger while not operating.
5. Never trip over the hose. Make sure all connections are tight.
6. Disconnect the tool from air supply before clearing jams, serviceing, adjusting or during non-operation.
7. Don't point tool at people or animals while operating.





## **TROUBLE SHOOTING CHART**

Here are some common issues that may occur during use.

If the nailer is not working as it should, stop using the tool immediately and resolve the issue before continuing.

	PROBLEM	POSSIBLE CAUSE	SOLUTION
1	Air leaking at Trigger valve area	1. Damaged O-rings in trigger valve housing	1. Replace O-rings and check the operation of safety yoke mechanism
2	Air leaking between housing and nose	1. Loose screws in housing	1. Tighten screws
3	Air leaking between housing and cap assembly	1. Loose screws 2. Damaged seal.	1. Tighten screws. 2. Replace seal.
4	Tool skips driving fastener	1. Worn bumper. 2. Dirt in nose. 3. Dirt or damage prevents fasteners from moving freely in magazine. 4. Inadequate air flow. 5. Worn O-ring on piston or lack of lubrication. 6 Damaged O-rings on trigger valve. 7. Air leaks. 8. Air leakage due to worn cap seal.	1. Replace bumper 2. Clean nose. 3. Clean magazine and inspect and repair damage. 4. Check fitting, hose and air pressure. 5. Replace O-rings and lubrication. 6. Replace O-rings. 7. Tighten screws and fittings. 8. Replace seal.
5	Weak drive	1. Tool not lubricated. 2. Broken spring in cap assembly. 3. Exhaust port in cap is blocked.	1. Lubrication. 2. Replace spring. 3. Clean or replace damaged internal parts.
6	Tool jams	1. Worn or damaged nose. 2. Damaged driver. 3. Incorrect size of fasteners. 4. Bent fasteners. 5. Magazine or nose screws are loose.	1. Replace nose. 2. Replace driver. 3. Use recommended fasteners. 4. Replace with new fasteners. 5. Tighten screws.
7	Tool does not fire	1. Fasteners jammed in magazine or discharge area. 2. Piston shaft is damaged. 3. Air pressure too low.	1. Inspect and clean magazine. 2. Replace piston shaft. 3. Check/increase air pressure.

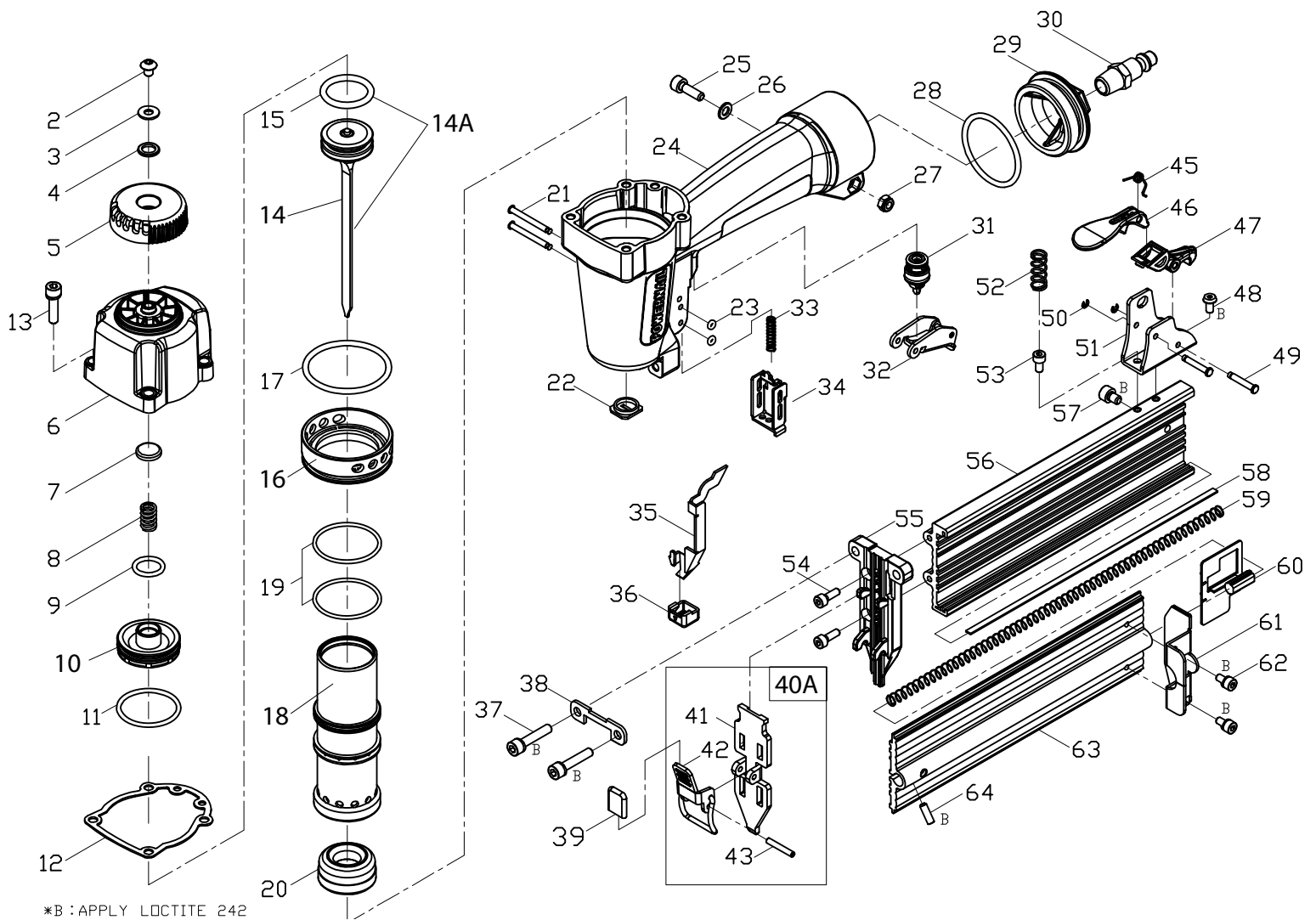
## **MODEL BR-50 PARTS LIST**

ITEM	DESCRIPTION	Req	PART #
2	UM HD Bolt	1	n/a
3	Flat Washer	1	n/a
4	Seal	1	n/a
5	Exhaust Cover	1	n/a
6	Cap	1	n/a
7	Valve Seat	1	n/a
8	Valve Spring	1	n/a
9	O-Ring	1	09-BR5009
10	Collar	1	09-BR5010
11	O-Ring	1	09-BR5011
12	Cap Gasket	1	09-BR5012
13	Hex Soc HD Bolt+SW	4	09-BR5013
14	Drive Blade	1	n/a
14A	Drive Blade Asm. w/O-Ring	1	09-BR5014A
15	O-Ring	1	09-BR5015
16	Collar	1	n/a
17	O-Ring	1	09-BR5017
18	Cylinder	1	09-BR5018
19	O-Ring	2	09-BR5019
20	Bumper	1	09-BR5020
21	Stepped Pin	2	09-BR5021
22	Joint Guide	1	09-BR5022
23	Retainer	2	09-BR5023
24	Body	1	n/a
25	Hex Soc HD Bolt	1	09-BR5025
26	Flat Washer	1	09-BR5026
27	Lock Nut	1	09-BR5027
28	O-Ring	1	n/a
29	Rear Cover	1	n/a
30	Air Plug	1	n/a
31	Bump Fire Switch Asm.	1	n/a
32	Trigger Assembly	1	n/a
33	Trigger Spring	1	n/a
34	Guide Safety Lever	1	n/a
35	Safety	1	09-BR5035
36	Rubber Safety Pad	1	09-BR5036

ITEM	DESCRIPTION	Req	PART #
37	M5x25 S.H.C.S+SW w/patch	2	09-BR5037
38	Driver Guide Bracket	1	n/a
39	Release Pad	1	09-BR5039
40A	Removable Gate Plate	1	09-BR5040A
41	Driver Guide Cover	1	n/a
42	Latch	1	n/a
43	Rolled Pin	1	n/a
44A	Magazine Assembly	1	n/a
45	Release Lever Spring	1	n/a
46	Release Lever	1	09-BR5046
47	Latch	1	n/a
48	UM. HD. Bolt	1	n/a
49	Shaft	2	n/a
50	E-Ring	2	09-BR5050
51	Bracket	1	09-BR5051
52	Spring	1	09-BR5052
53	Hex Soc HD Bolt	1	09-BR5053
54	M4-0.7x12 S.H.C.S. w/patch	2	09-BR5054
55	Gate	1	09-BR5055
56	Fixed Magazine	1	n/a
57	Hex Soc. HD. Bolt	1	09-BR5057
58	Nail Guide Liner	1	n/a
59	Pusher Spring	1	n/a
60	Pusher	1	n/a
61	Tail Cover	1	n/a
62	Hex Soc. HD. Bolt+SW	2	09-BR5062
63	Sliding Magazine Cover	1	n/a
64	Set Screw	1	09-BR5064

KEY: S=Sold Separately, n/a Not available separately, KIT=Sold as part of a Kit

# MODEL BR-50 SCHEMATIC



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