



CHICAGO
Electric Power Tools

CORDLESS 18V CIRCULAR SAW KIT

Model 37412

**ASSEMBLY and OPERATING
INSTRUCTIONS**



www.HarborFreight.com



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For technical questions and replacement parts, please call 1-800-444-3353



Specifications

ITEM	DESCRIPTION
Motor	3000 RPM, 200 watts
Blade Diameter	5-3/8 inches; hex key included for blade removal
Cutting Depths and Angles	At 90° 1-1/2 inches; at 45° 1-1/4 inches Angle settings: 0 to 50° in 10° degree increments; spindle: 3/8 inch
Battery	18 volts, 1.3 amps; one hour, 500 MA quick charger with adapter. Note: As battery is recharged many times it will maximize strength
Switch	Off, On, and safety lock
Weight	7.5 Lbs.

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extensions cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. Do not use a tool for a purpose for which it was not intended.
7. **Disconnect power.** Unplug charger when not in use.



8. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
9. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
10. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
11. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
16. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
17. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
18. **Secure work.** Use clamps or a vise to hold work. Do not use hands to secure.
19. **Never touch moving parts.** Never place your hands, fingers or other body parts near the tool's moving parts.
20. **Never operate without all guards in place.** Do not disable blade guard when cutting.
21. **Guard against kickback.** Kickback occurs when the saw stalls and is driven backwards toward the operator. When this happens, release switch immediately.





Note: Always switch to a fresh battery when tool performance begins to diminish. Severe heat is most destructive to a battery; the more heat generated, the faster the battery loses power. A battery that gets too hot can be permanently damaged. Never over-discharge a battery by using the tool even after tool performance is decreasing. Never attempt to discharge a tool's battery by continuing to pull the tool trigger. **When tool performance begins to diminish, stop the tool, re-charge the battery and use the fresh battery for optimal performance.**

Battery Precautions

1. Read all instructions and warnings on the battery before charging the battery.
2. To avoid accidents, charge the supplied battery only. Do not use a different charger with this battery.
3. Do not expose the battery to rain or wet conditions.
4. To avoid damage of cable and plug, never pull the cable to disconnect the charger.
5. Do not use the charger if the cable or plug are damaged.
6. Repairs should be carried out by experts only.
7. Do not touch the battery poles with any conductive source.
8. Do not store the battery in a box with other metal objects.
9. Ni-Cd Battery must be recycled or disposed of properly. Do not throw the battery in a fire.

Unpacking

When unpacking, check to make sure the following parts are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual. If any part of the machine is missing or broken, please call Harbor Freight Tools at the number on the front cover as soon as possible.

Note: Cutting blade and rip fence sold separately.

Charging Battery

The Battery does not come charged from the factory. Charge before using. Part numbers below refer to Parts List on page 8. Charging room temperature: 50° F - 104° F.

1. Insert the Battery (#14) into the black Charger Base. The Battery will only insert one way.
2. Plug the Charger Base into a wall socket. Note: The Charger Base has an ON red light, an OFF green light, and a SET button.
3. When the Charger Base is plugged into a wall socket, the GREEN light will go on. This shows that all circuitry is working properly and the Charger Base is ready to charge.
4. Press the SET button to start the charge. The red light will go on and will continue to be on while the Battery is charging. The Battery will charge in approximately 1-1/2 hours. When the RED light goes off, the Battery charge is complete.
5. After charging, unplug the Charger Base from the wall socket.
6. Remove the Battery from the Charger Base and insert the Battery into the base of the tool.

Note: The operation time of a new battery will ramp up as it is properly used and recharged. It will take about 5 cycles before the battery is at maximum efficiency.

Warning: If two or more batteries are to be charged, allow the Charging Base time to cool down between charges.





Warning: Never charge more than 2 hours continuously. Chargers should not be left plugged in or charging for more than 2 hours.

Operation

Install saw blade. Prepare and secure the material to be cut before turning on saw. Battery should have a full charge before using saw. Refer to illustrations that follow. Remove battery before making any adjustments.

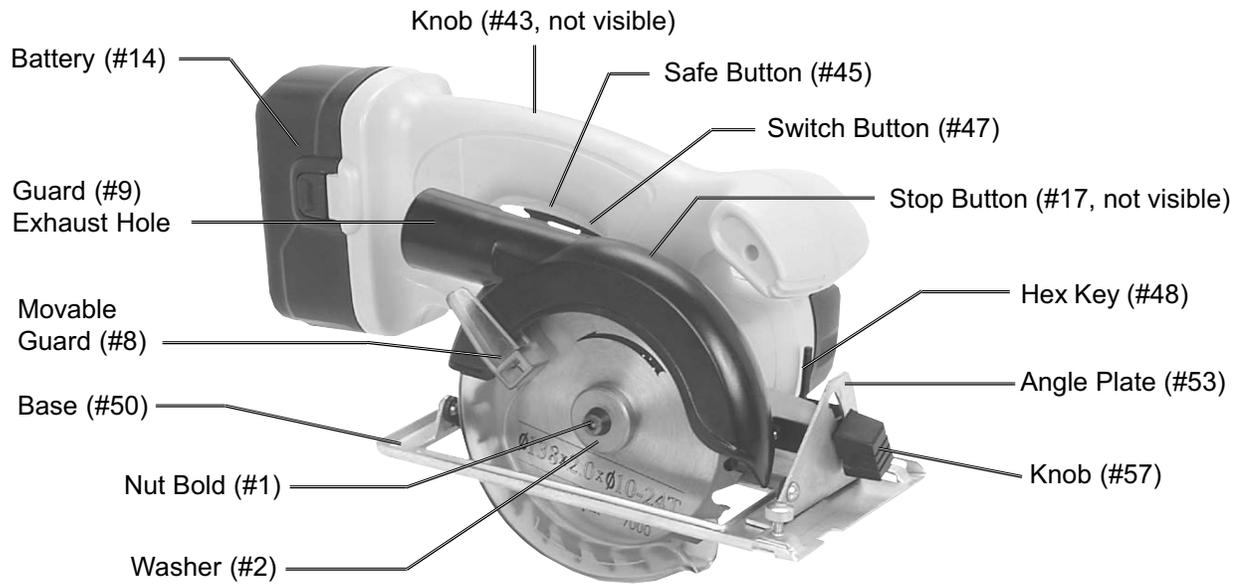
Warning: Do not hold tool by the handle while making adjustments as your fingers may touch the Switch and Safe buttons and start the saw.

Installing Cutting Blade

1. Remove battery.
2. Press on the stop button (#17) located on top of the saw to keep the saw blade from moving while turning the nut bolt.
3. Using the hex key (#48), loosen and remove nut bolt (#1) and washer (#2).
4. Rotate movable guard (#8) clockwise to allow entry of blade.
5. Insert saw blade through the base with teeth facing forward (and up) until the center holes of the saw blade and motor adapter (#5) align. (Notice the arrow on the movable guard and the arrow on the saw blade, they should be pointing in the same direction.)
6. Replace washer (#2) and nut bolt (#1). Tighten with hex key (#48) while pressing on the stop button (#17). Verify stop button is in the up (unlocked) position.
7. Replace key to its storage hole in the housing of the saw.

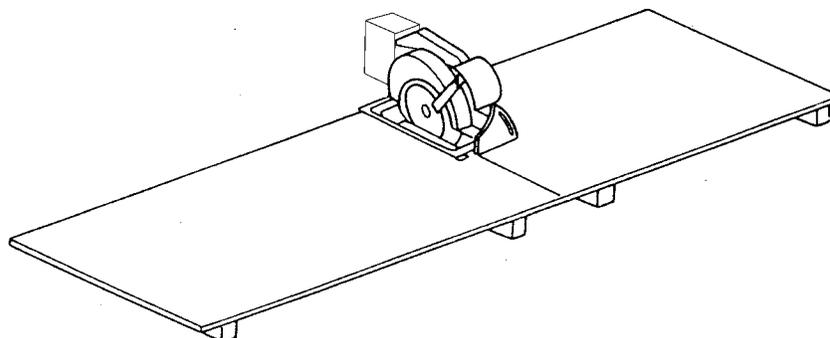
Adjusting The Saw Prior to Cutting

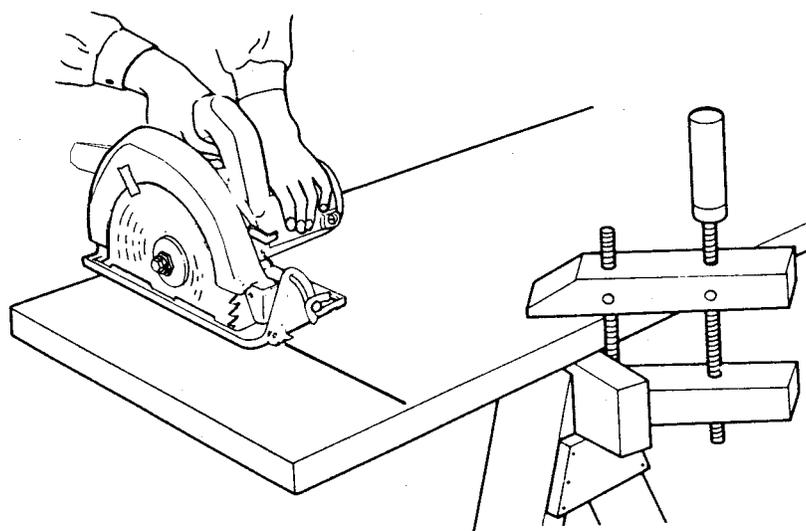
1. To adjust the **angle** of blade up to 50°, loosen knob (#57) and move base plate (#50) down, observing the degrees indicated on the angle plate (#53). Tighten knob (#57).
See illustration on next page.
2. To adjust the **depth** of the cut, loosen knob (#43, not visible) located behind motor housing, and move base plate (#50) down while observing the amount of saw blade exposed under base plate. Tight knob (#43).



Prepare Material Before Cutting

1. Support large panels to minimize risk of blade pinching and saw kickback.
2. Use a rip fence or secured straight edge guide when ripping material.
3. Securely clamp material to be cut to work bench.
4. Make sure saw does not cut into supports or workbench.
5. Use the appropriate type of blade for the material you are cutting.





Cutting

Warning: this tool can cause serious injury if not used properly. Read this entire manual before using. Verify that saw blade is securely tightened and both angle and height adjustment knobs are tight.

1. Secure rip fence or straight edge to the material to guide the saw on a straight path.
2. Place the saw base (#50) on material to be cut. Align the front notch (right edge aligns with saw blade) on the cut line.
3. Pull the rear lock switch (safe button #45) back with the middle finger and squeeze the switch button (#47) with the index finger. Do this before the saw blade touches the material.
4. With the saw at full speed, move the saw slowly forward to complete the cut.
5. When the cut is complete, release the power switch button (#47). Do not set the saw down until the blade stops turning.

Maintenance

1. Before remounting the saw blade, remove all sawdust that has accumulated around the guard (#9), nut bolt (#1), and washer (#2).
2. Regularly inspect all mounting screws and knobs to ensure that they are properly tightened.
3. Keep saw blades clean and sharp. Sharp blades minimize stalling and kickback.
4. Keep guards in good working order.
5. Keep motor air vent clean of dust and debris. Vacuum periodically.
6. If the tool is not operating normally, making unusual noises, or appears defective, stop using it immediately and get it repaired.
7. Clean tool with a damp cloth and light detergent. Do not use solvents as they can damage and crack the plastic parts.





Item #	Description	Qty
1	Nut Bolt	1
2	Washer	1
3	Saw Blade (not included)	1
4	Stud Screw M3*8	3
5	Adapter	1
6	Flange	1
7	Washer	1
8	Movable Guard	1
9	Guard (protection cover)	1
10	Stud Screw M4*10	1
11	Collar	1
12	Torgue Force Spring	1
13	Right Case	1
14	Battery TYD-B114	1
15	Battery Clip	1
16	Copper Wire (blue)	1
17	Stop Button	1
18	Stop Button Pillar	1
19	Stop Button Spring	1
20	Switch kw-v15	1
21	Ball Bearing 180100	1
22	Gearbox Case	1
23	Stop Dag	1
24	Gear and Bearing Box	1
25	Main Shaft and Planet Wheel Axle	1
26	Planet Gear	3
27	Spacer	1
28	Stud Screw M4*8	2
29	Spacer 4	2
30	Gear Box	1
31	Stud Screw M4*8	2
32	Motor Gear	1
33	Motor	1

Item #	Description	Qty
34	Copper Wire (red)	1
35	Copper Wire (black)	1
36	Left Case	1
37	Stud Screw M4*50	4
38	Motor Base	1
39	Screw ST2.9*25	2
40	Screw ST2.9*20	3
41	Back Case	1
42	Screw ST2.9*12	2
43	Knob	1
44	Spring	1
45	Safe Button	1
46	Spring	1
47	Switch Button	1
48	Hex Key 1/8 inch	1
49	Bolt M6*80	1
50	Base	1
51	Rivel 5	1
52	Guide Bar	1
53	Angle Plate	1
54	Rivel 5	1
55	Screw M4*8	2
56	Screw M6*12	1
57	Knob	1
58	Connecting Bar	1
59	Needle	1
60	Screw M3*5	1
61	Axle	1
62	Nut M5	1
63	Screw M4*10	1
64	Nut M4	1
65	Rubber Post	1
66	Rip Fence (not included)	1





Assembly Drawing

