

CHICAGO

Electric Power Tools

14.4 VOLT IMPACT DRIVER KIT 1/4" HEX DRIVE

Model 92472

OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our Web site at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

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

PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	Power Output Source: 14.4 VDC Battery Battery Type: 1.3 Ah Panasonic® Power Input Source: 120 VAC/60 Hz Charger Charge Time: 1 Hour Quick Charge Charger Power Plug: 2 Prong, Polarized
Drive Size/Type	1/4" Quick Change Hex Drive
Impact Type	Pin Clutch
Trigger Type	Variable Speed: 0-2300 RPM/IPM; Reversible w/Trigger Lock
Maximum Torque	850 In./Lbs
Accessories	Carrying Case / Charger / Battery 1/4" Socket / 5/16" Socket / 3/8" Socket / 15/32" Socket
Over all Dimensions	7-3/4" L x 3-3/8" W x 9-1/2" H
Weight	4.10 Pounds


UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts List on page 10** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

SAVE THIS MANUAL

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

GENERAL SAFETY RULES

 **WARNING!**
READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below may result in
electric shock, fire, and/or serious injury.
SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.

3. Keep bystanders, children, and visitors away while operating a power tool.

Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

ELECTRICAL SAFETY

1. Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.

2. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

PERSONAL SAFETY

1. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

3. Avoid accidental starting. Be sure the Trigger (34) is released before plugging in. Carrying power tools with your finger on the Trigger, or plugging in power tools with the Trigger depressed, invites accidents.

4. Remove adjusting keys or wrenches before turning the power tool on. A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.

5. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the power tool in unexpected situations.

6. Use safety equipment. Always wear ANSI approved safety glasses underneath a full face safety shield. Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

7. Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

TOOL USE AND CARE

1. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
2. **Do not use the power tool if the Trigger (34) does not turn it on or off.** Any tool that cannot be controlled with the Trigger is dangerous and must be replaced.
3. **Disconnect the power tool from its Battery (40) before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
4. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
5. **Maintain tools with care. Keep tools dry and clean.** Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
6. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
7. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES


1. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of


obstructions, grease, oil, trash, and other debris. Do not use the Impact Driver in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.


2. **Maintain labels and nameplates on this product.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
3. **When using the Impact Driver, always maintain a firm grip on the tool with both hands.**
4. **Hold the tool by its insulated gripping surfaces when performing an operation where the Impact Driver may contact hidden wiring.** Contact with a “live” wire will make exposed metal parts of the Impact Driver “live” and shock the operator.
5. **Do not use the Impact Driver or Charger (46) if it has been dropped, damaged, left outdoors, or immersed in liquid.**
6. **To avoid electrical shock, do not handle the Charger (46), its Power Cord Plug, or the Impact Driver with wet hands.**
7. **Keep the Handle of the Impact Driver dry, clean, and free from oil and grease.**
8. **Always turn off the Impact Driver and unplug the Charger (46) from its electrical outlet before changing accessories or performing any inspection, maintenance, or cleaning procedures.**
9. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Impact Driver.
10. **To avoid electrical shock, do not pull or carry the Charger (46) by its Power Cord.**
11. **Never leave the Charger (46) unattended when it is plugged into an electrical outlet.** Make sure to unplug it from its electrical outlet before leaving.
12. **Proper Battery Care:** Battery (40) leakage may occur under extreme usage or temperature conditions. If Battery fluid comes in contact with skin, wash with soap and water and rinse with lemon juice and vinegar. If the fluid comes into contact with the eyes, flush with water for several minutes and contact a doctor immediately. Never burn the Battery, as it can explode in a fire. Do not charge the Impact Driver with a leaking Battery. Contact local solid waste authorities for instructions on correct disposal or recycling of the Battery.

13. Always switch to a fresh Battery (40) 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 while tool performance is decreasing. Never attempt to discharge a tool's Battery by continuing to pull the tool Trigger (34). When tool performance begins to diminish, stop the tool, recharge the Battery, and use the fresh Battery for optimal performance.

14.  **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain 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 and cement or 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. (*California Health & Safety Code 25249.5, et seq.*)

15.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Electromagnetic fields in close proximity to a heart pacemaker could cause interference or failure of the pacemaker. In addition, people with pacemakers should adhere to the following: Avoid operating power tools alone. Don't use a power tool with the power switch (Trigger) locked on. If powered via a power cord be certain that the tool is properly grounded. A ground fault interrupt (GFCI) system is also a good precaution. This inexpensive device is a good safety measure because it prevents a sustained electrical shock. Properly maintain and inspect all tools before use to avoid electrical shock.

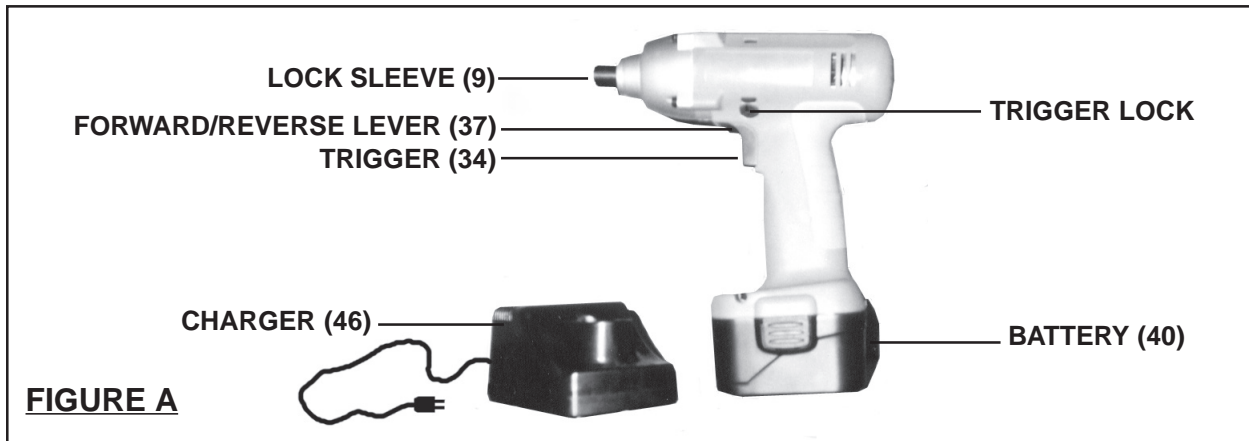
16.  **WARNING!** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

PRODUCT FEATURES

NOTE: For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagram on page 11.**

1.  **WARNING!** Always make sure the Trigger (34) of the Impact Driver is in its "OFF"

in its “**OFF**” position, the Battery (40) is removed from the Impact Driver, and the Charger (46) is unplugged from its electrical outlet prior to making any adjustments to the tool. (See Figure A.)



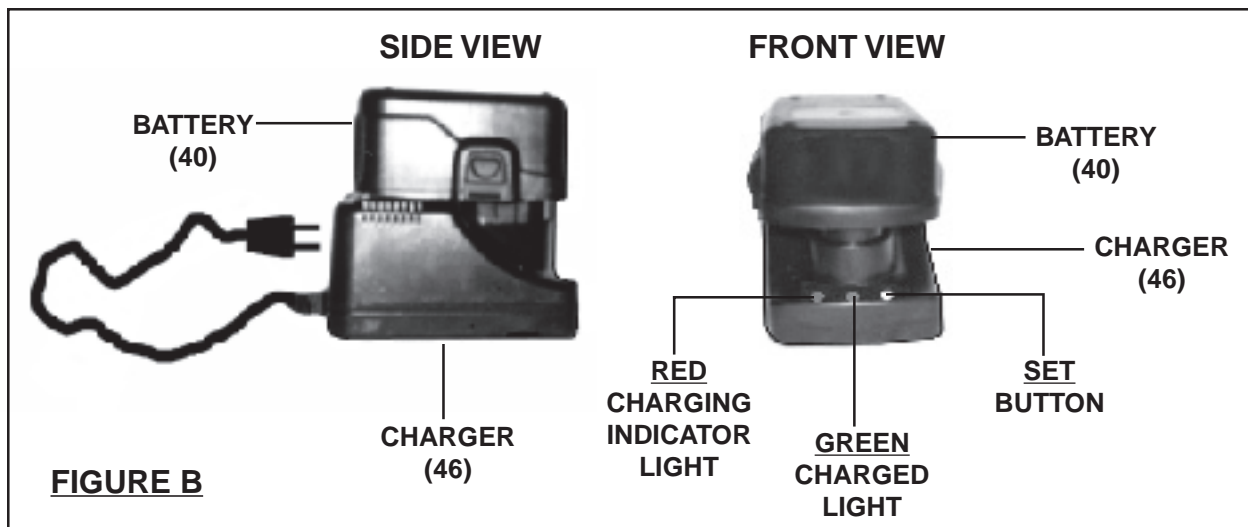
2. **Lock Sleeve (9):** Accepts the 1/4” *shank* diameter Double End Screwdriver (39), 1/4” Socket (42), 5/16” Socket (43), 3/8” Socket (44), and 15/32” Socket (45). To install the Screwdriver or Sockets with the Impact Driver pointed away from your body, pull back on the Lock Sleeve. Insert the shank of the Screwdriver or Socket all the way into the Lock Sleeve. Then, release the Lock Sleeve to hold the Screwdriver or Socket in place. (See Figure A.)
3. **Trigger (34):** The Trigger is operated *manually* simply by squeezing the Trigger to turn on the Impact Driver and releasing pressure on the Trigger to turn off the Driver. The Trigger features a Trigger Lock for continuous running of the Impact Driver. To set the Impact Driver in a continuous run mode, squeeze the Trigger and depress the Trigger Lock. Then, release pressure on the Trigger. The Impact Driver will continue to run. To turn off the Impact Driver, squeeze and let up on the Trigger. (See Figure A.)
4. **Forward/Reverse Lever (37):** The Forward/Reverse Lever allows you to change the rotational direction of the Impact Driver. To change the rotational direction, make sure the Impact Driver is at a complete stop. While holding the tool in your hand, for a *clockwise* rotation, move the Lever to the *right*. For a *counterclockwise* rotation, move the Lever to the *left*. (See Figure A.)

TO CHARGE THE IMPACT DRIVER

1. **NOTE:** The Battery (40) requires charging. (See Figure A.)
2. When the Battery (40) requires recharging, a **1- 1-1/2 hour** charge allows the tool to

operate at full power. Do not recharge the Battery longer than 1-1/2 hours, as damage to the Battery and/or Charger (46) will occur. (See Figure A.)

3. Make sure the Trigger (34) on the Impact Driver is in its “**OFF**” position. Slide the Battery (40) off the Handle of the Impact Driver. Next, insert the Battery onto the Charging Socket of the Charger (46). Then, plug the Charger into the nearest 120 volt, grounded, electrical outlet. Do not leave unattended while charging. (See Figure A.)
4. Press the **SET** Button on the Charger (46) to begin charging. (See Figure B.)
5. Verify that the **RED** Charging Indicator Light comes on. If it does not illuminate, check the power connection or try a different electrical outlet. (See Figure B.)
6. When the Battery is fully charged, the **RED** Charging Indicator Light will automatically turn off and the **GREEN** Charged Light will illuminate. (See Figure B.)
7. **NOTE:** While charging, the Battery (40) and Charger (46) may become warm to the touch. This is normal, and does not indicate a problem. (See Figure B.)
8. Once the Battery (40) is fully charged, disconnect the Charger from the electrical outlet. Then, remove the Battery from the Charger. (See Figure B.)




OPERATING INSTRUCTIONS

1. When installing Screwdriver or Sockets, make sure the Battery (40) is removed from the Impact Driver to avoid accidental starting. Then, insert and lock in place the Screwdriver or Socket in the Lock Sleeve (9) of the Impact Driver. (See Figure A.)

2. If necessary, adjust the Forward/Reverse Lever (37). **(See Figure A.)**
3. Whenever possible, secure the workpiece in place, using a vise or clamps (not included).
4. Insert the fully charged Battery (40) into the Handle of the Impact Driver.
(See Figure B.)
5. **Make sure to hold the Impact Driver firmly with both hands, as torque from the Motor will cause the tool to twist.**
6. Insert the Screwdriver (39) into the screw, or insert the Socket (42, 43, 44, 45) onto a bolt. Then, turn on the Impact Driver, using the Trigger (34). **(See Figure A.)**
7. When finished using the Impact Driver, release the Trigger (34) to stop the tool. Make sure to torque the bolt with a torque wrench (not included) according to the manufacturer's recommended torque setting. Then, remove the Battery (40) and Screwdriver, or Socket, from the Impact Driver. **(See Figure A.)**
8. Make sure to store the Impact Driver and its accessories in the Carrying Case (47), and place the Carrying Case in a safe, dry, clean location out of reach of children.

INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Always turn the Trigger (34) to its “OFF” position, remove the Battery (40), and unplug the Charger (46) from its electrical outlet before performing any inspection, maintenance, or cleaning.
2. **Before each use:** Inspect the general condition of the Impact Driver. Check for misalignment or binding of moving parts, cracked or broken parts, leaking Battery, damaged Charger wiring, chipped or broken Drill Bit/Sockets, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use.
Do not use damaged equipment.
3. **Battery precautions:** Never burn Batteries, as they can explode in a fire. Do not charge leaking Batteries. Only a qualified service technician should perform maintenance on the Battery. Contact local solid waste authorities for instructions on correct disposal or recycling of the Battery.
4. **Daily:** With a soft brush or cloth, remove all dirt and debris from the Impact Driver. Do not immerse the Impact Driver in any liquids.

5. **When storing:** Always remove the Battery (40) from the Impact Driver. Keep the Impact Driver and its accessories in a clean, dry location and out of children's reach.

6.  **CAUTION!** All maintenance, service, or repairs not listed in this manual are only to be attempted by a qualified service technician.

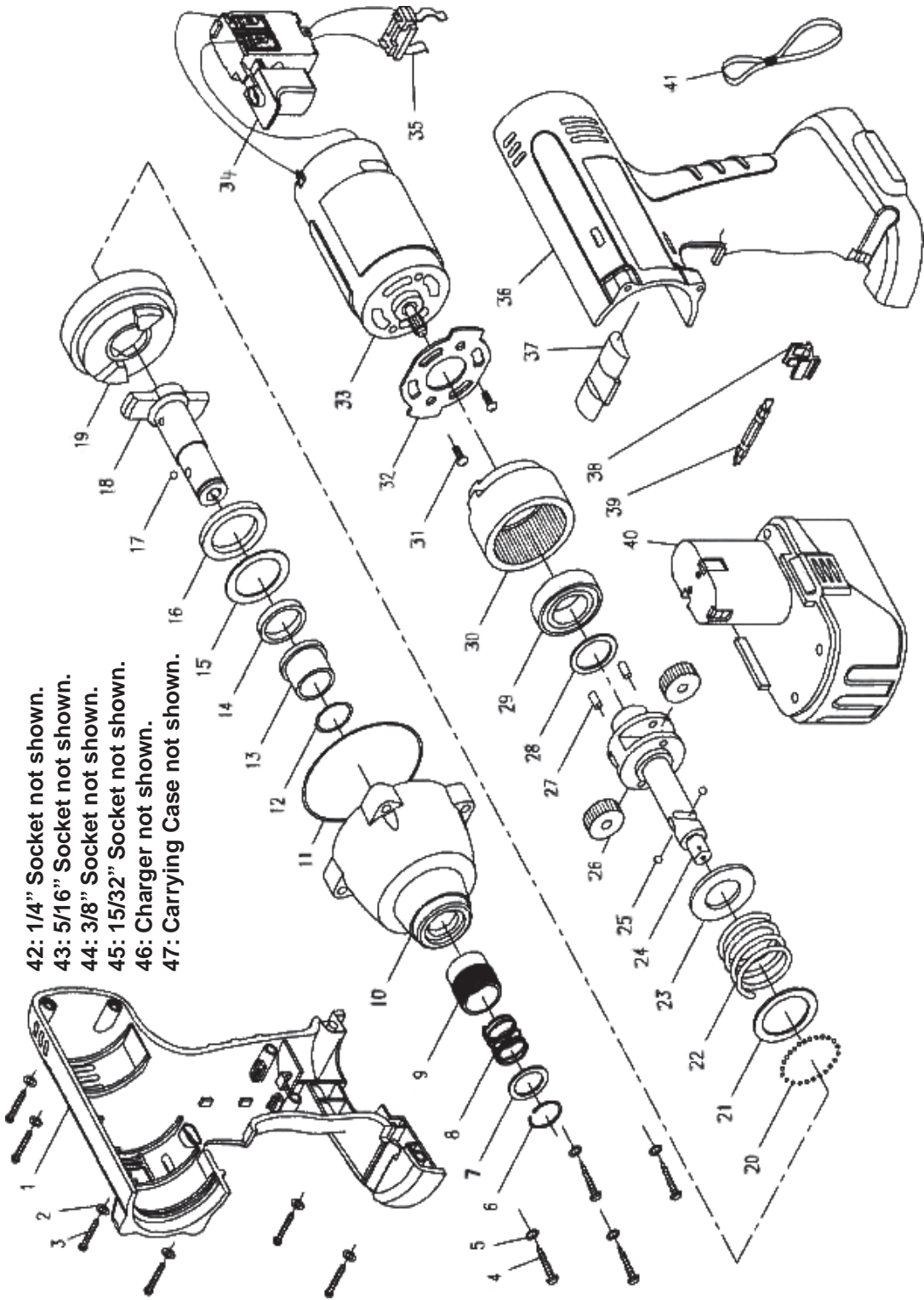
PLEASE READ THE FOLLOWING CAREFULLY

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PARTS LIST

Part #	Description	Part #	Description
1	Right Case	25	Steel Ball
2	Washer (1)	26	Planetary Gear
3	Stun Screw (1)	27	Runner Axle
4	Stun Screw (2)	28	Bearing Plate
5	Washer (2)	29	Bearing
6	Retainer Ring	30	Inner Gear
7	Spring Washer	31	Stun Screw (3)
8	Spring	32	Mount Plate
9	Lock Sleeve	33	Motor
10	Machine Head	34	Trigger
11	Lock Washer	35	Battery Clamp
12	Seal Loop	36	Left Case
13	Oil Bearing	37	Forward/Reverse Lever
14	Oil Seal	38	Screw Clamp
15	Plate	39	Screwdriver
16	Rubber Plate	40	Battery
17	Steel Ball	41	Carrying Strap
18	Impact Driver	42	1/4" Socket
19	Impact Setting Plate	43	5/16" Socket
20	Iron Shot	44	3/8" Socket
21	Steel Ball Plate	45	15/32" Socket
22	Spring	46	Charger
23	Spring Plate	47	Carrying Case
24	Main Shaft		

ASSEMBLY DIAGRAM



- 42: 1/4" Socket not shown.
- 43: 5/16" Socket not shown.
- 44: 3/8" Socket not shown.
- 45: 15/32" Socket not shown.
- 46: Charger not shown.
- 47: Carrying Case not shown.

NOTE:
Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.