



**NOTE: Parts are no longer available for this tool.**

**The manual will continue on the next page.**



# INSTRUCTIONS AND PARTS LIST FOR 8500 SERIES IMPACT WRENCH

## 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 personal 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.

### ELECTRICAL SAFETY

1. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double Insulated  eliminates the need for the three wire grounded power cord and grounded power supply system.
2. **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.
3. **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet.** Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
5. **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce 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 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 switch is OFF before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch ON invites accidents.
4. **Remove adjusting keys or wrenches before turning the tool ON.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper tooling and balance enable better control of the tool in unexpected situations.
6. **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

### TOOLS USE AND CARE

1. **Use clamps or other practical way 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.
2. **Do not force 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.
3. **Do not use tool if switch does not turn it ON or OFF.** A tool that cannot be controlled with the switch is dangerous and must be repaired.

**SIoux  
TOOLS INC.**

2901 FLOYD BOULEVARD ■ PO BOX 507 ■ SIOUX CITY, IOWA 51102-0507 USA ■

Printed In U.S.A.

4. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
7. **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.
8. **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




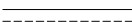





1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance Section of this manual.** Use of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

## SPECIFIC SAFETY RULES FOR IMPACT WRENCHES

**Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

**Avoid prolonged exposure to vibration.** Prolonged exposure to vibration can cause injury.

## SYMBOL DEFINITION

V .....	volts
A .....	amperes
Hz .....	hertz
W .....	watts
kW .....	kilowatts
μF .....	microfarads
l .....	liters
kg .....	kilograms
N/cm <sup>2</sup> .....	newtons per square centimeter
Pa .....	pascals
h .....	hours
min .....	minutes
s .....	seconds
 .....	alternating current
3  .....	three-phase alternating current
3 <sub>N</sub>  .....	three-phase alternating current with neutral
 .....	direct current
 .....	direct current
n <sub>0</sub> .....	no load
 .....	alternating or direct current
 .....	Class II Construction
 .....	splash-proof construction
 .....	watertight construction
./min .....	revolutions or reciprocation per minute

**EXTENSION CORD SELECTION**

If an extension cord is used, make sure the conductor size is large enough to prevent excessive voltage drop which will cause loss of power and possible motor damage. A table of recommended extension cord sizes will be found in this section. This table is based on limiting line voltage drop to 5 volts (10 volts for 230 volts) at 150 % of rated amperes.

If an extension cord is to be used outdoors it must be marked with the suffix W-A following the cord type designation. For example-SJTW-A to indicate it is acceptable for outdoor use.

**RECOMMENDED EXTENSION CORD SIZES FOR USE WITH PORTABLE ELECTRIC TOOLS**

		Length of Cord In Feet									
		115V	25 FT	50 FT	100 FT	150 FT	200 FT	250 FT	300 FT	400 FT	500 FT
		230V	50 FT	100 FT	200 FT	300 FT	400 FT	500 FT	600 FT	800 FT	1000 FT
Amp Rating	0-2	18	18	18	16	16	14	14	12	12	
	2-3	18	18	16	14	14	12	12	10	10	
	3-4	18	18	16	14	12	12	10	10	8	
	4-5	18	18	14	12	12	10	10	8	8	
	5-6	18	16	14	12	10	10	8	8	6	
	6-8	18	16	12	10	10	8	6	6	6	
	8-10	18	14	12	10	8	8	6	6	4	
	10-12	16	14	10	8	8	6	6	4	4	
	12-14	16	12	10	8	6	6	6	4	2	
	14-16	16	12	10	8	6	6	4	4	2	
	16-18	14	12	8	8	6	4	4	2	2	
	18-20	14	12	8	6	6	4	4	2	2	
<b>AWG</b>											

**SWITCH**

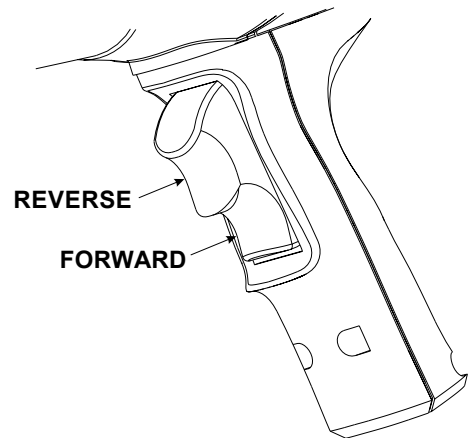
Pressing the lower part of the switch runs the tool in a forward (right hand thread) direction. Pressing the upper part of the switch reverses motor direction. This allows “rocking” fasteners to break them loose.

**OPERATION**

Position the impact wrench correctly, so that the socket fits straight on the fastener.

**MAINTENANCE**

- Blow out air vents with clean dry air periodically.
- Carbon Brushes should be regularly inspected for wear. Be sure tool is unplugged before inspecting brushes. To inspect brushes, unscrew the plastic brush inspection caps (located in the sides of the motor housing) and the spring and brush assemblies may be withdrawn from the tool. Keep brushes clean and sliding freely in their guides. Replace worn brushes.



**LUBRICATION**

This tool has been properly lubricated at the factory and is ready for use. Periodic relubrication will be necessary to maintain the tool in an efficient operating condition.

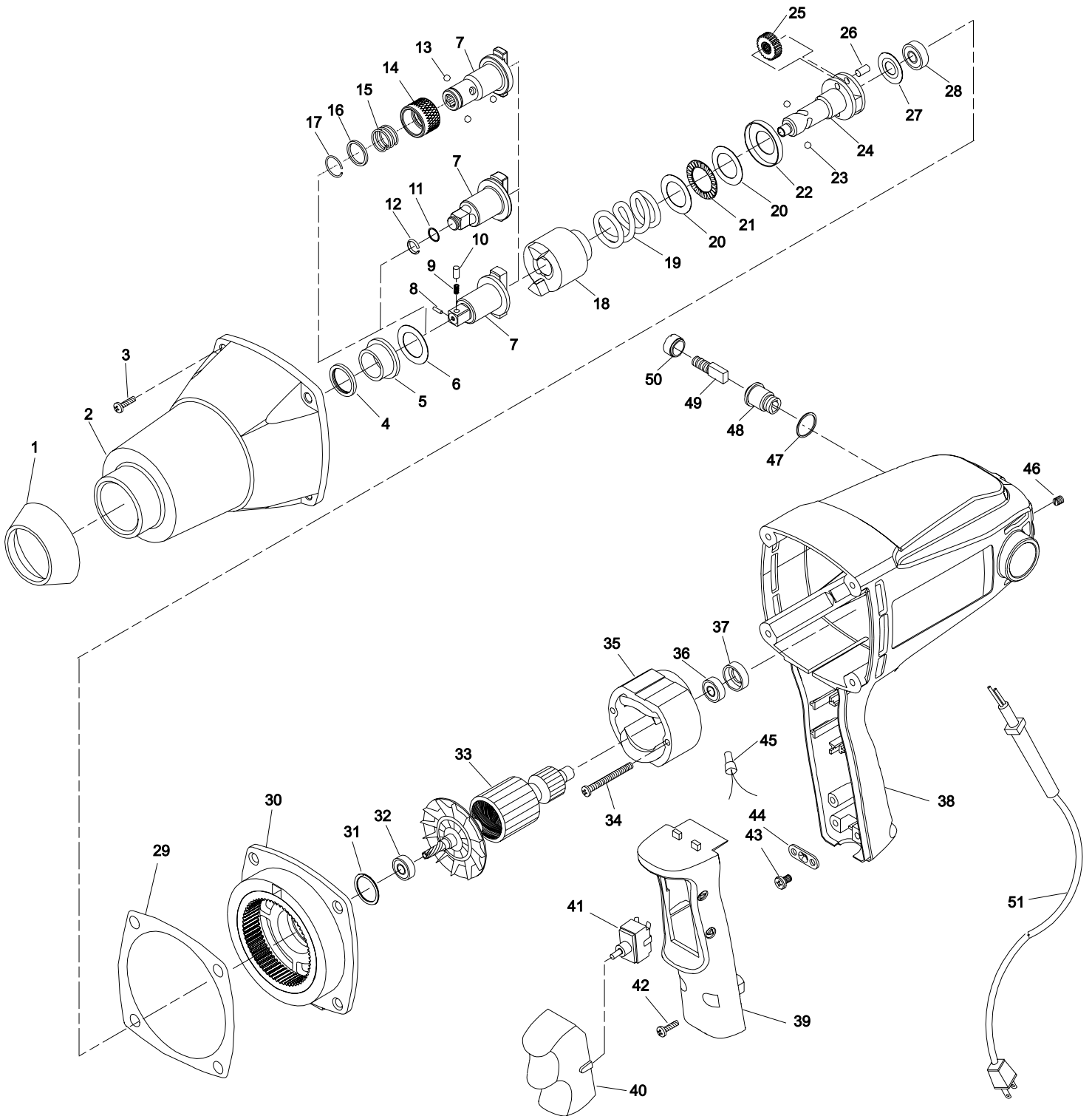
It is recommended that you contact your Sioux representative to have the tool lubricated in the following intervals. For continuous operation, have the tool lubricated after every 30 hours of use. With intermittent work, have it lubricated after every 50 hours of use. Use Sioux 1236 grease in impact mechanism assembly.

**ACCESSORIES**

Use only socket designed for use with impact wrenches. CAUTION: The use of any other attachment or accessory might be hazardous.

**SPECIFICATIONS**

No-load speed (RPM) .....	1800
Impacts per minute (BPM) .....	2600
Ultimate torque (LBS/FT) .....	265
Input .....	120 V AC/DC, 8.5 A



# PARTS LIST FOR

## 8500 (120V) 1/2 SQ PIN TYPE ANVIL

## 8500J (230V) 1/2 SQ PIN TYPE ANVIL

## 8536 (120V) 7/16 HEX Q.C. ANVIL

## 8536J (230V) 7/16 HEX Q.C. ANVIL

Fig. No.	Part No.	Description
1.	14299	Protector—Rubber
2.	66983	Ass'y—Hammer Case (Includes Fig. 1, 4 & 5)
3.	67002	Screw (4)*
4.	30768	Seal
5.	67093	Bushing
6.	10035	Bearing—Thrust
7.	66958	Anvil (Pin Type)(Includes Fig. 8-10)
	66959	Anvil (Ring Type)(Includes Fig. 11, 12)
	66961	Anvil (7/16 Q.C.)
8.	66968	Pin—Roll (Anvil)
9.	66966	Spring (Anvil)
10.	66967	Button—Locking (Anvil)
11.	14311	Ring—"O"
12.	66969	Ring—Steel
13.	10324	Ball (3)*
14.	34455	Retainer—Ball
15.	21414	Spring
16.	34456	Ring—Guide
17.	21487	Ring—Retainer
18.	66762	Hammer
19.	66734	Spring
20.	67219	Race—Bearing Thrust (2)*
21.	67220	Thrust—Bearing
22.	66765	Guide—Spring
23.	10299	Ball—Steel 1/4" diameter (2)*
24.	66763	Carrier—Pinion
25.	67392	Ass'y—Gear and Bearing (2)*
26.	34121A	Pin (2)*
27.	25776	Washer—Pin Stop
28.	10145	Ball—Bearing
29.	67209	Gasket
30.	66766	Plate—Intermediate (Includes Fig. 31)
31.	66941	Ring—Retaining

Fig. No.	Part No.	Description
32.	66995	Bearing—Ball
33.	66986	Armature (8500, 8536)
	67783	Armature (8500J, 8536J)
34.	66999	Screw (2)*
35.	66987	Field (8500, 8536)
	67782	Field (8500J, 8536J)
36.	66995	Bearing
37.	66996	Mount—Bearing
38.	67004	Housing—Motor
39.	67005	Cover—Handle
40.	66990	Actuator
41.	66989	Switch
42.	66998	Screw (2)*
43.	67000	Screw (2)*
44.	67001	Clamp—Cord
45.	66988	Connector
46.	67003	Screw (2)*
47.	66994	Ring—"O"
48.	66991	Holder-Brush (2)*
49.	66992	Set—Brush And Spring
50.	66993	Cap—Brush (2)*
51.	66997	Cord (8500, 8536)
	67781	Cord (8500J, 8536J)

NOT PICTURED:

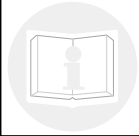
67760	Nameplate (8500)
67533	Nameplate (8500J)
67765	Nameplate (8536)
67766	Nameplate (8536J)
67534	Label—Identification (8500, 8500J)
67791	Label—Identification (8536, 8536J)
67091	Label—Warning

\*Order Quantity As Required

**FURNISH CATALOG, SERIAL, AND MODEL NUMBER  
WHEN ORDERING PARTS**



**▲ WARNING**



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm.

**▲ ADVERTENCIA**



El polvo generado al lijar, aserrar, afilar, taladrar y realizar otras tareas de construcción contiene sustancias químicas que podrían causar cáncer, malformaciones congénitas y otras alteraciones del aparato reproductor.

**SIoux  
TOOLS INC.**

2901 FLOYD BOULEVARD ■ PO BOX 507 ■ SIOUX CITY, IOWA 51102-0507 USA ■

Printed In U.S.A.

This pdf incorporates the following model numbers:

8500, 8500J, 8536, 8536J