



# INSTRUCTIONS AND PARTS LIST FOR 1446ES AIR SHEAR (SERIAL "A")

Form Z545  
Date 11-02/F  
Page 1 of 4

## AIR SUPPLY

The efficiency and life of this tool depends on the proper supply of clean, dry, lubricated air at about 90 lbs. P.S.I., although higher or lower pressures may be used. The use of an air line filter, pressure regulator and lubricator is recommended.

Before connecting the tool, blow the air line to remove water and dirt which may have accumulated. This is especially important for a new line or when the line has not been used for some time.

## HOSE AND HOSE CONNECTION

The air supply hose is 3/8" I.D. If extension hose is necessary, use 1/2" hose, with couplings not less than 3/8" I.D.

## LUBRICATION

An oil supply to the air motor is important. SIOUX air line lubricators are recommended. Adjust to deliver 2 drops of SIOUX Air Motor Oil No. 288 per minute. When air line lubricator is not used squirt several drops of oil into the air inlet before using. Shear head must be lubricated after every 40 hrs. of operation, with SIOUX Grease No. 289A.

## SAFETY

1. Keep work area clean.
2. Do not force tool.
3. Secure work where possible- use clamps or vise.
4. Keep tools sharp and in good shape.
5. Disconnect tools when not in use.
6. The use of accessories not provided or specified may be hazardous.
7. Use goggles or safety glasses.

## WARNING

Designed to cut only up to 16 gauge steel, plastic and associated materials up to 3/32" thick. Failure to grease could void warranty. Sioux Tools cannot assume responsibility for damage to or malfunction of a shear head used in combination with any drill other than those regularly supplied by Sioux Tools.

## SHEAR HEAD MAINTENANCE INSTRUCTIONS

### ADJUSTMENT

To adjust the curl of waste material, the left side knife 54500 has elongated holes. Adjustment may be necessary after changing blades or material being cut. Loosen cap screws 07102 and tap side knife 54500 either forward or backward so that curl of waste does not hit shear housing 12598 of work material while cutting.

### DISASSEMBLY

To remove 53609 shear head from power unit and dismantle:

1. Loosen both rear cap screws 07102 three complete turns.
2. Remove shear head assembly 53609 from motor by

pulling head firmly forward. Slight twisting action may be required.

3. Remove three cap screws 07102 completely from shear housing 12598. Be careful not to lose rear spacer bushing 54502 when removing rear cap screw.
4. Remove center blade 54499 from shear housing 12598 by tapping blade gently rearward. Be careful not to lose spacer bushing 54502 from hole in center blade.
5. Side Knives 54500 and 54501 will now drop out of shear housing.

## ASSEMBLY

To assemble 53609 shear head and adapt to power unit:

1. Place the left side knife 54500 into position in the shear housing.
2. Insert center cap screw 07102 through housing and blade just far enough to slip spacer bushing 54502 over cap screw.
3. Place right side knife 54501 into position and push center cap screw through right side knife. Start cap screw into insert just enough to hold blades in place.

## DO NOT TIGHTEN.

4. Insert spacer bushing 54502 into hole in center blade 54499 and lubricate with a good grade of bearing grease.
5. Install center blade 54499 into shear housing 12598 by tapping blade gently forward using a drift to line up hole in center blade with forward holes in housing.
6. Insert and tighten forward cap screw 07102 making sure spacer bushing 54502 in center blade stays in position. Apply good grade of bearing grease to clevis in center blade. **WHEN SHEAR HEAD IS PROPERLY ASSEMBLED THE CENTER BLADE WILL PIVOT FREELY IN HEAD.**

7. Insert rear cap screw 07102 into shear housing 12598 but do not completely tighten.

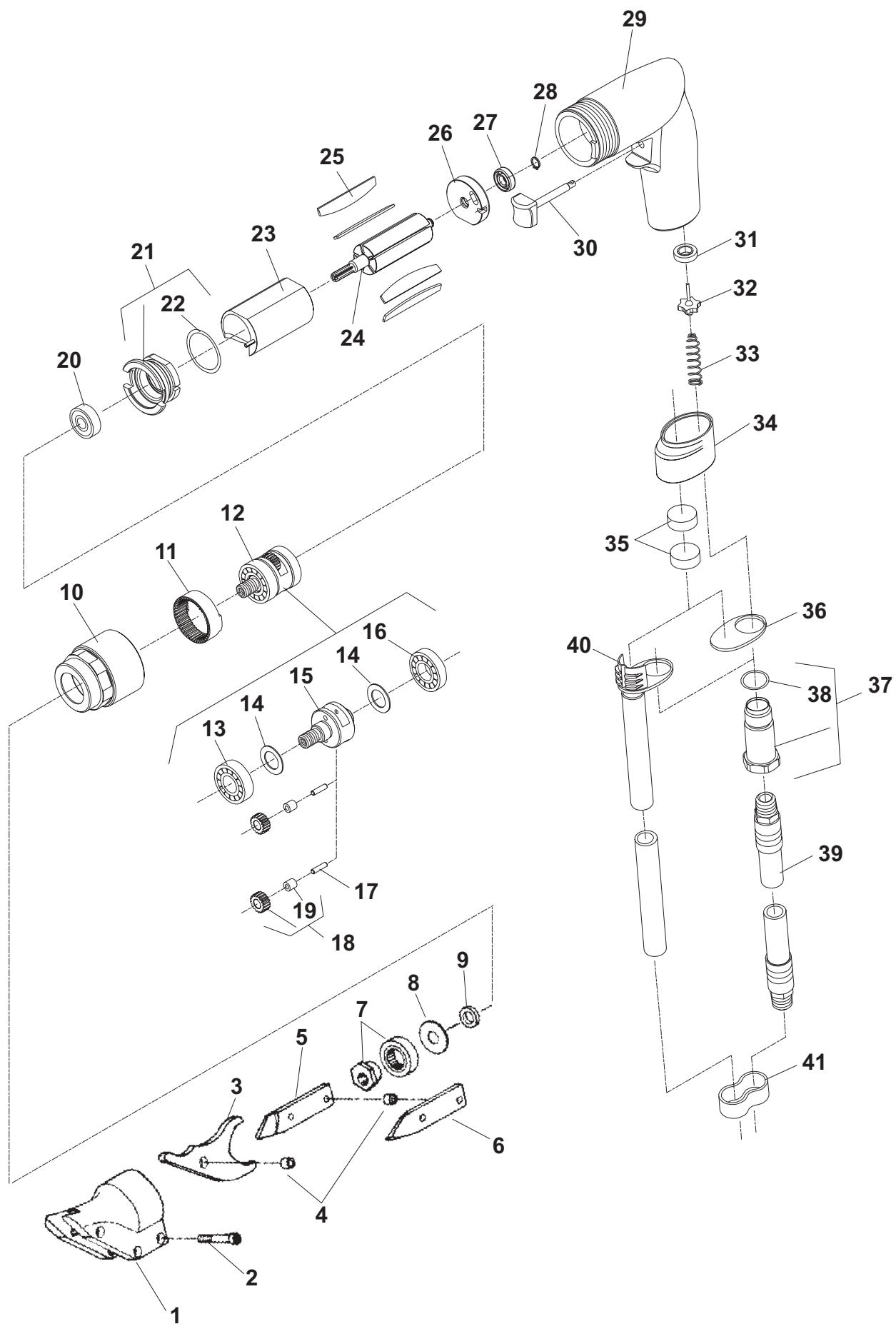
To install shear head assembly 53609 onto power unit:

1. Make sure rear cap screw and center cap screw 07102 are loosened three complete turns.
2. Place shear head onto unit and tighten cap screws 07102 snugly to lock head assembly in place. It may be necessary to gently tap the shear head assembly into place if it does not readily slip onto the power unit.

# SIOUX TOOLS INC.

250 SNAP-ON DRIVE ■ PO BOX 1596 ■ MURPHY, NC 28906 ■ USA ■

Printed In U.S.A.



# INSTRUCTIONS AND PARTS LIST FOR 1446ES AIR SHEAR (SERIAL "A")

Fig. No.	Part No.	Description
1.	12598	Housing-Shear
2.	07102	Screw-Socket Head Cap (3)*
3.	54499	Blade-Center
4.	54502	Bushing-Spacer (2)*
5.	54501	Knife-Side (Right)
6.	54500	Knife-Side (Left)
7.	53614	Ass'y-Eccentric
8.	35308	Washer
9.	44122	Spacer (For 1/4" Chucks)
10.	68928	Case-Gear
11.	67858	Gear-Ring
12.	67893	Ass'y-Planetary Reduction (Includes Fig. 13-19)
13.	10228	Bearing-Ball
14.	25439	Washer (2)*
15.	67869	Carrier-Gear
16.	10203	Bearing-Ball
17.	67857	Pin (2)*
18.	67944	Ass'y-Gear & Bearing (2)*
19.	10080	Bearing-Needle (2)*
20.	10220	Bearing-Ball
21.	13550	End Plate-Front (Includes Fig. 22)
22.	14342	Ring-"O"
23.	64057	Cylinder
24.	67855	Rotor-6 Tooth
25.	63192	Ass'y-Rotor Vane (Set of 5)
26.	67803	End Plate-Rear
27.	10253	Bearing-Ball (Seal side out)
28.	21491	Ring-Retainer
29.	67797	Housing
30.	67805	Trigger
31.	67798	Seat-Valve
32.	67804	Valve
33.	67828	Spring
34.	67800B	Muffler
35.	67807	Silencer-Pad (3)*
36.	67801A	Cap-Muffler
37.	67819	Adapter-Inlet (Includes Fig. 38)
38.	14378	Ring-"O"
39.	1376	Ass'y-Leader Hose
40.	67128	Hose-Exhaust
41.	40153	Clip-Hose (3)* Remote Exhaust

## Complete Assembly

67126      Ass'y-Housing (Includes Fig. 29-38)  
 67827      Ass'y-Motor (6 Tooth)(Includes Fig. 20-28)

\*Order Quantity As Needed

**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.**

250 SNAP-ON DRIVE ■ PO BOX 1596 ■ MURPHY, NC 28906 ■ USA ■

Printed In U.S.A.