



# INSTRUCTIONS & PARTS LIST FOR 1446HPL AIR SHEAR

Form A900  
Date 3-02/A  
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. Gear case and Shear head must be lubricated after every 40 hours 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 or 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.

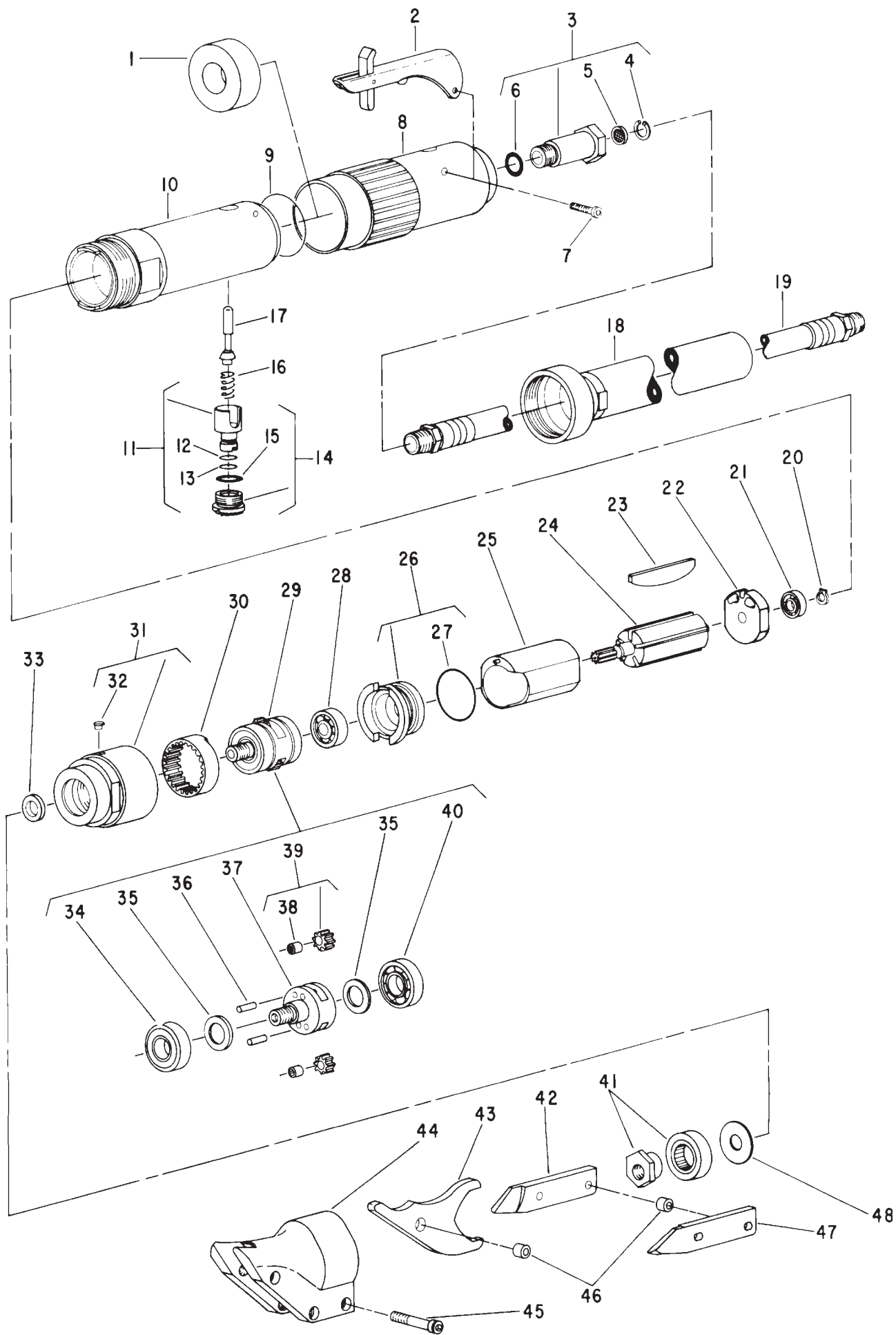
To install shear head assembly 53609 onto power unit:

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.

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

Printed In U.S.A.



# INSTRUCTIONS & PARTS LIST FOR 1446HPL AIR SHEAR

| Fig. No.                                  | Part No. | Description                               |
|---|----------|---|
| 1.  | 40116    | Silencing Material                        |
| 2.  | 63258    | Ass'y—Lever                               |
| 3.  | 54837    | Adapter—Inlet                             |
| 4.  | 21541    | Retainer                                  |
| 5.  | 30463    | Screen                                    |
| 6.  | 14312    | Ring—"O"                                  |
| 7.  | 65499    | Screw—Pan HD. (Self-Tap)(#6-32 x 3/4)(2)* |
| 8.  | 04042    | Housing—Cover (Non-Reversing)             |
| 9.  | 14333    | Ring—"O"                                  |
| 10.                                       | 64036    | Housing—Lever (Non-Reversing)             |
| 11.                                       | 54843    | Control—Speed                             |
| 12.                                       | 14394    | Ring—"O"                                  |
| 13.                                       | 14291    | Ring—"O"                                  |
| 14.                                       | 54844    | Retainer—Speed Control                    |
| 15.                                       | 14309    | Ring—"O"                                  |
| 16.                                       | 21427    | Spring                                    |
| 17.                                       | 63241    | Ass'y—Valve                               |
| 18.                                       | 63355    | Ass'y—Hose Exhaust                        |
| 19.                                       | 1317     | Hose—Leader                               |
| 20.                                       | 21491    | Ring—Retaining                            |
| 21.                                       | 10230    | Bearing—Ball                              |
| 22.                                       | 10552    | End Plate—Rear                            |
| 23.                                       | 63192    | Vane—Rotor (Set of 5)                     |
| 24.                                       | 54860    | Rotor                                     |
| 25.                                       | 64057    | Cylinder                                  |
| 26.                                       | 13550    | End Plate—Front                           |
| 27.                                       | 14342    | Ring—"O"                                  |
| 28.                                       | 10220    | Bearing—Ball                              |
| 29.                                       | 63390    | Ass'y—Planetary Reduction                 |
| (Includes Fig. 34, 35, 36, 37, 38, 39 40) |          |   |

Remote  
Exhaust

| Fig. No. | Part No. | Description                                   |
|----------|----------|---|
| 30.      | 19265    | Gear—Ring                                     |
| 31.      | 64082    | Case—Gear                                     |
| 32.      | 30375    | Fitting—Grease                                |
| 33.      | 44122    | Spacer—Chuck                                  |
| 34.      | 10228    | Bearing—Ball                                  |
| 35.      | 25439    | Washer—Thrust (2)*                            |
| 36.      | 30062    | Roller—Torrington (2)*                        |
| 37.      | 22703    | Spindle—Chuck                                 |
| 38.      | 10040    | Bearing—Needle (2)*                           |
| 39.      | 19317    | Ass'y—Gear & Bushing (2)*                     |
| 40.      | 10203    | Bearing—Ball                                  |
| 41.      | 53614    | Ass'y—Eccentric                               |
| 42.      | 54501    | Knife—Side (Right)                            |
| 43.      | 54499    | Blade—Center                                  |
| 44.      | 12598    | Housing—Shear                                 |
| 45.      | 07102    | Screw—Soc. Hd. Cap (3)*                       |
| 46.      | 54502    | Bushing—Spacer (2)*                           |
| 47.      | 54500    | Knife—Side (Left)                             |
| 48.      | 35308    | Washer  |
|          |          | 53609 Ass'y—Shear Head (Includes Figs. 41-48) |
|          |          | 30096 Wrench—Allen (5/32" Hex)                |

\*Order Quantity As Required

FURNISH CATALOG, SERIAL, AND MODEL NUMBER  
WHEN ORDERING PARTS



# GENERAL SAFETY INSTRUCTIONS FOR AIR TOOLS

1. **KEEP WORK AREA CLEAN:** Cluttered areas and benches invite accidents.
2. **AVOID DANGEROUS ENVIRONMENT:** Keep work-area well lit,
3. **KEEP CHILDREN AWAY:** All visitors should be kept safe distance from work area.
4. **STORE IDLE TOOLS:** When not in use, tools should be stored in dry, high or locked-up place-out of reach of children.
5. **DON'T FORCE TOOL:** It will work best and safest at the designed rate.
6. **RIGHT TOOL USE:** Don't force small tool to do the job of a heavy-duty tool.
7. **WEAR PROPER APPAREL:** No loose clothing or jewelry to get caught in moving parts.
8. **USE SAFETY GLASSES:** Use safety glasses with most tools. Also face or dust mask if it is a cutting operation.
9. **SECURE WORK:** Use clamps or vise to hold work. It's safer than using your hand and it allows freedom of both hands to hold tool.
10. **DON'T OVERREACH:** Keep proper footing and balance at all times.
11. **MAINTAIN TOOLS WITH CARE:** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
12. **DISCONNECT TOOLS:** When not in use: before servicing; when changing accessories such as blades, bits, cutter, etc.
13. **REMOVE ADJUSTING KEYS AND WRENCHES:** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
14. **CAUTION:** The use of an accessory with this tool not provided or specified by SIOUX TOOLS may be hazardous.

## ⚠ 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.