REQUIREMENTS

Air Supply

A water free and filtered air supply is required, at a pressure of 6 bar (87 lb/in²), with a flow of 9.3 l/s (20 cu.ft/min.); controlled by a pressure regulator selected from the Desoutter Air Line Service Equipment Catalogue.

Lubrication

Correct lubrication is vital for the maximum performance of the tool and an airline lubricator should be fitted into the system down stream of the filter.

Desoutter recommend the use of an ISO Viscosity Classified Oil, grade number ISO VG 15, in the lubricator.

OPERATING

Supplied with each tool is an exhaust hose, this can be fitted if required to direct the exhaust air away from the tool.

If required the head can be orientated to suit the application. Slacken lock nut (1) reposition the head and tighten the lock nut.

SERVICE REQUIREMENTS

General Notes

Use the following lubricants:

Oil - ISO Viscosity Classified - ISO VG 15, for motors.
Grease - BP FG00 EP, for motor bearings.
Grease - Duckhams Type Q5618, for gears and other bearings.
Silicone Grease - Molykote 33, for ‘O’ rings.

The following tools will be required:

Clamp Block — Part No. 39373 (1 pair)
Spanner — 32mm
Spanner — 30mm
Spanner — 24mm
Spanner — 19mm

The following torque values MUST be used:

Item 1 to Item 2: 24 Nm (18 lbf.ft.)
Item 2 to Item 3: 30 Nm (22 lbf.ft.)
Item 3 to Item 34: Hand tighten, faces abutting
Item 51 to Item 34: 13.5 Nm (10 lbf.ft)
Item 101 to Item 110: 24 Nm (18 lbf.ft)
Item 115 to Item 110: 24 Nm (18 lbf.ft)

The following components have left hand threads: Lock Nut (1), End Cap (2), Clamp Nut (101), Angle Body (110) and Adaptor (115).

It is important that the end cap (2) is slackened first, NEVER attempt to unscrew the control top when the above component is fully tightened.

Bearings that have a retainer holding the balls in place must be assembled into the tool with the blank face of the retainer to the air flow; in the case of the motor the blank faces must face each other across the rotor.

Replace as necessary all ‘O’ rings, gaskets, bearings and rotor blades.

When locating the motor complete (25) in the control top complete (54) the pin projecting out of rear bearing housing complete (29) must enter the ‘R’ marked hole in the control top.

It is important that spacer (47) is located the correct way round: concave side to the rear of the tool.

TO DISMANTLE

Mount the motor case (33) between a pair of clamp blocks and clamp firmly in a vice. Slacken lock nut (1) and unscrew the angle head complete (116).

Unscrew the end cap (2) then the control top complete (54). Remove the motor case from the clamps and push the internal components out of the case.

The remainder of the dismantling follows normal engineering practice with reference to the illustration.

TO ASsemble

Using the illustration as a guide, assemble the control top, the planet cage assembly and the angle head complete.

During assembly of the angle head check that shims (104) provide an axial and radial clearance of 0.013-0.038mm (0.0005-0.0015 in.) and that shim (112) is selected to obtain smooth rotation without any harshness.

The following instructions for the motor complete (31) must be followed:

Take the rotor (26) and place the rear bearing plate (24), with grooves to rotor, into position. Press bearing (23) onto the rotor so that there is a 0.038mm (0.0015 in.) gap between the rotor and the rear bearing plate. Holding the rotor and rear bearing plate assembly with the gear end of the rotor uppermost, slide the cylinder (25) over the rotor.

Locate the rotor blades (27) into their slots in the rotor and lubricate. Place the front bearing plate (24) into position, with grooves to rotor. Press the front bearing (23) onto the rotor until all the free axial movement between the front and rear bearings is removed. Place the front bearing housing (21) over its bearing making sure that the location pin and hole are aligned.

Locate the rear bearing housing (29) with cap (30) and check that the rotor is free to rotate.

Stand control top on air inlet adaptor, place gasket (32) in position so that the required pin location hole is clear. Remove the rear bearing housing (29) from the motor complete (31) and locate in the control top, load the rest of the motor into position then slide the motor case (33) over the motor and screw fully into the control top.

Slide the planet cage assemblies into the motor case checking that as they engage with the motor they are free to rotate, fit and fully tighten the end cap (2).

Screw the lock nut (1) fully onto the angle head complete (116) then with the coupling (3) in position screw the angle head onto the tool and lock in the required orientation.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Item No.</th>
<th>Part No.</th>
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* Indicates normal replacement items. It is recommended that adequate stocks are held for servicing requirements.

# Indicates updated parts.

Always quote tool number, serial number and spare part number when ordering spares.

**SUPPLIED ACCESSORIES**

- 222453 Exhaust Hose
- 235203 Clip—Exhaust Hose

Desoutter Limited
319, Edgeware Road, Colindale. London NW9 6ND
Telephone: 081-205 7050  Telex: 21392
Fax: 081-205 5167

Printed in England.
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A water free and filtered air supply is required, at a pressure of 6 bar (87 lbf/in²), with a flow of 9.3 l/s (20 cu.ft/min.); controlled by a pressure regulator selected from the Desoutter Air Line Service Equipment Catalogue.

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Correct lubrication is vital for the maximum performance of the tool and an airline lubricator should be fitted into the system down stream of the filter.

Desoutter recommend the use of an ISO Viscosity Classified Oil, grade number ISO VG 15, in the lubricator.

OPERATING

Supplied with each tool is an exhaust hose, this can be fitted if required to direct the exhaust air away from the tool.

If required the head can be orientated to suit the application. Slacken lock nut (1) reposition the head and tighten the lock nut.

SERVICE REQUIREMENTS

General Notes

Use the following lubricants:

Oil - ISO Viscosity Classified - ISO VG 15, for motors.
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Grease - Duckhams Type Q5618, for gears and other bearings.
Silicone Grease - Molykote 33, for ‘O’ rings.

The following tools will be required:

Clamp Block — Part No. 38373 (1 pair)
Spanner — 32mm
Spanner — 30mm
Spanner — 24mm
Spanner — 19mm

The following torque values MUST be used:

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Mount the motor case (33) between a pair of clamp blocks and clamp firmly in a vice. Slacken lock nut (1) and unscrew the angle head complete (116).

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TO ASSEMBLE

Using the illustration as a guide, assemble the control top, the planet cage assembly and the angle head complete.

During assembly of the angle head check that shims (104) provide an axial and radial clearance of 0.013-0.038mm (0.0005-0.0015 in.) and that shim (112) is selected to obtain smooth rotation without any harshness.

The following instructions for the motor complete (31) must be followed:

Take the rotor (26) and place the rear bearing plate (24), with grooves to rotor, into position. Press bearing (33) onto the rotor so that there is a 0.036mm (0.0015 in.) gap between the rotor and the rear bearing plate. Holding the rotor and rear bearing plate assembly with the gear end of the rotor uppermost, slide the cylinder (25) over the rotor.

Locate the rotor blades (27) into their slots in the rotor and lubricate. Place the front bearing plate (24) into position, with grooves to rotor. Press the front bearing (23) onto the rotor until all the free axial movement between the front and rear bearings is removed. Place the front bearing housing (21) over its bearing making sure that the location pin and hole are aligned.

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