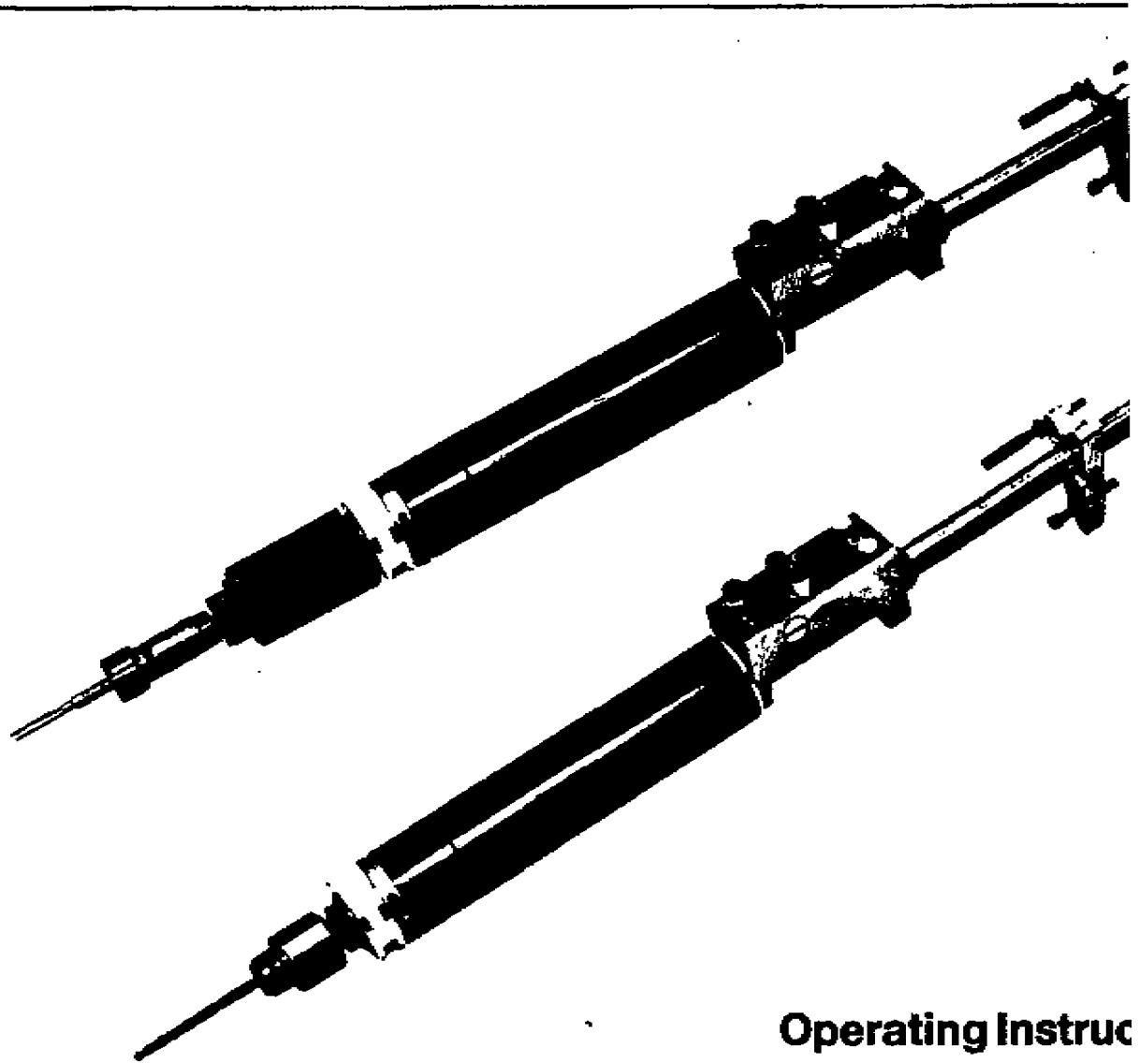
Desoutter

Auto Feed Drills and Tappers

Types	Code
AFD40-23000	111164
AFD40-10000	108194
AFD40- 5300	115144
AFD40- 3800	113104
AFD40- 3000	112134
AFD40- 1700	110194
AFD40- 1200	109164
AFD40- 800	116114
AFD40- 500	114174
AFT40- 1200	117184
AFT40- 800	119124
AFT40- 500	118154



Operating Instruc
Servicing Instruct
Parts List

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Telephone: 01-205 7050 Telex: 21392

Printed in England 4-84

AFD40
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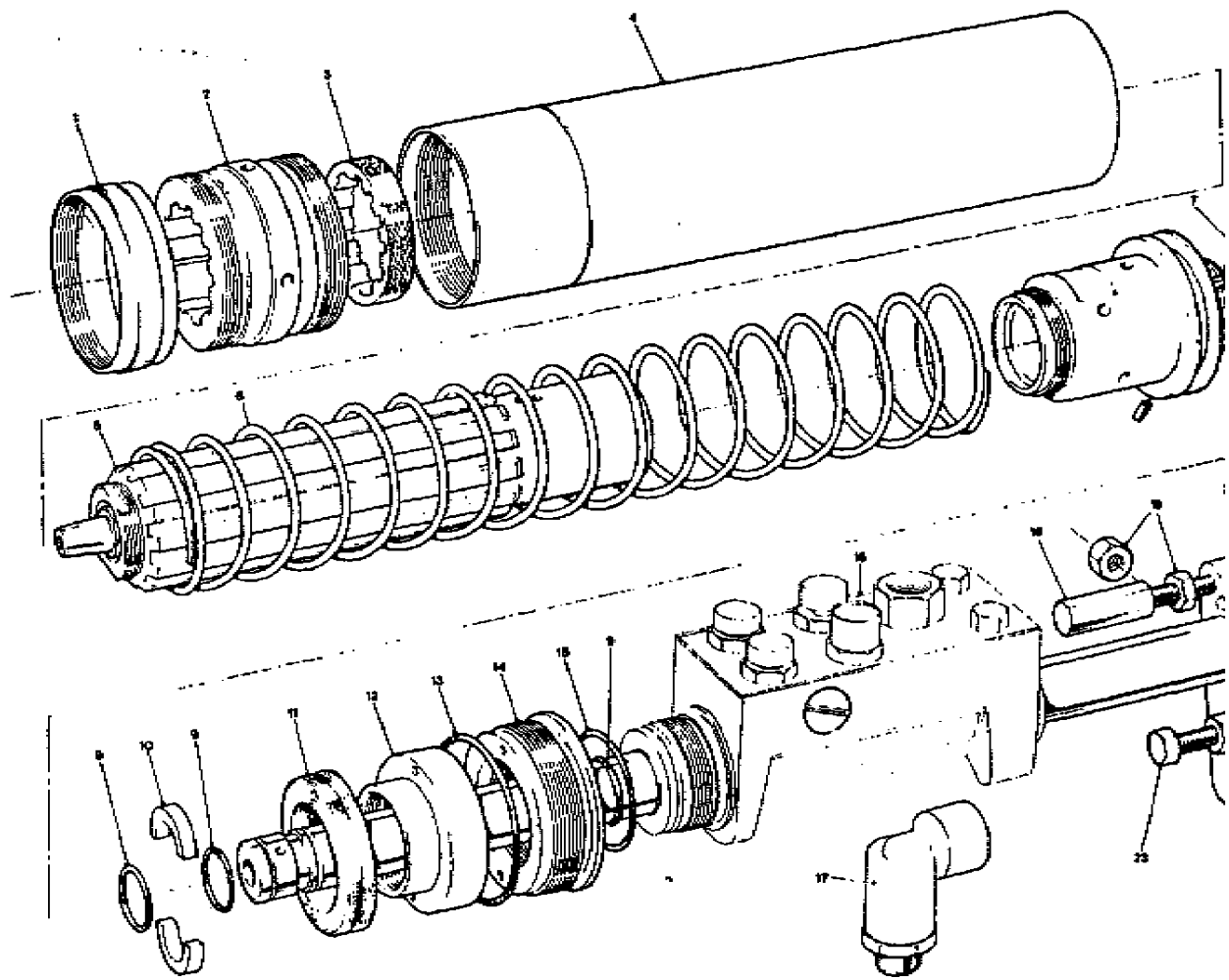
Parts List – Main Assembly

Item No.	Part No.	Description	Qty.
1	54223	Thread Protecting Cap	1
2	49333	Bearing Sleeve	1
3	53263	Silencer Ring	1
4	50093	Outer Case	1
5	See later Section	Motor and Gearbox Complete	1
6	49483	Return Spring	1
* 7	260813	Spring Pin 3mm dia x 6mm lg	2
8	257403	Felt Wiper Ring	1
* 9	37223	'O' Ring	2
10	154263	Clamp Ring	1
* 11	257383	Piston Seal	1
12	265023	Clamp Nut	1
* 13	50783	'O' Ring	1
14	255783	Adaptor	1
* 15	225563	'O' Ring	1
16	See later Section	Control Top Complete	1
17	62542	Male Stud Elbow	1
18	60923	Stroke Adjusting Screw	1
19	52473	Locknut	3
20	254983	Crosshead	1
21	260823	Air Feed Tube	1
22	56053	Screw	1
23	51933	Adjusting Screw	1

* Indicates normal replacement items. It is recommended that adequate stocks are held for servicing requirements.

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



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Parts List – Motor & Gearbox

Item No.	Part No.	Description	Qty.
201	265243	Clamp Nut	1
202	265233	Spindle Nut	1
*203	2413	Bearing	2
204	49023	Washer	1
205	2633	Washer	1
206	See later Sections	Gear Assemblies	
207	254893	Front Bearing Housing	1
*208	256123	Spring Pin	2
*209	33433	Bearing	2
210	254873	Bearing Plate	2
211	254853	Cylinder	1
212	257063	Rotor, 7 teeth, 500, 3000 rpm	1
	37163	Rotor, 8 teeth, 800, 1700, 3800 rpm	1
	98223	Rotor, 6 teeth, 1200, 5300 rpm	1
	268673	Rotor, 6 teeth, Ext. long, 23,000 rpm	1
	266663	Rotor 8 teeth, 10,000 rpm	1
*213	500193	Rotor blade	5
214	254913	Rear Bearing Housing	1
215	254903	End Cap	1
216	252763	Motor Assembly 7 teeth, 500, 3000 rpm	1
	252803	Motor Assembly 8 teeth, 800, 1700, 3800 rpm	1
	252783	Motor Assembly 12 teeth, 1200, 5300 rpm	1
	268563	Motor Assembly 6 teeth 23,000 rpm	1
	266663	Motor Assembly 8 teeth 10,000 rpm	1
217	238853	Motor Case	1
218	255793	Piston	1
219	257273	Motor and Gearbox Assembly, 23,000 rpm	1
	273203	Motor and Gearbox Assembly, 10,000 rpm	1
	257293	Motor and Gearbox Assembly, 5300 rpm	1
	257303	Motor and Gearbox Assembly, 3800 rpm	1
	257313	Motor and Gearbox Assembly, 3000 rpm	1
	257323	Motor and Gearbox Assembly, 1700 rpm	1
	257333	Motor and Gearbox Assembly, 1200 rpm	1
	257343	Motor and Gearbox Assembly, 800 rpm	1
	257353	Motor and Gearbox Assembly, 500 rpm	1

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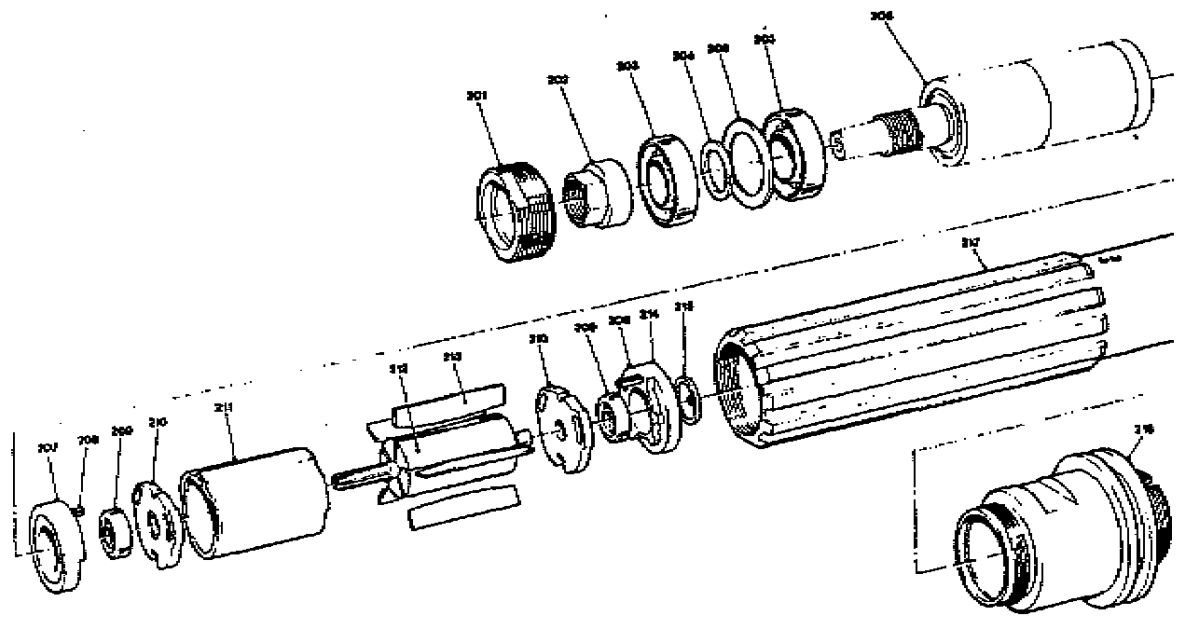

Parts List – Gearbox

tem No.	Part No.	Description	Qty.
301	201263	Spacer, 1200 rpm only	1
	49373	Bearing Spacer, 3000, 3800, 5300 rpm	1
302	25568	Key	2
303	49433	Gear Ring, 500, 800 rpm	1
	56763	Gear Ring, 1200 rpm	1
304	49443	Planet Cage, 500 rpm	1
	49423	Planet Cage, 800 rpm	1
	201243	Planet Cage, 1200 rpm	1
305	40363	Planet Wheel, 500 rpm	1
	36723	Planet Wheel, 800 rpm	1
	201253	Planet Wheel, 1200 rpm	1
306	80013	Planet Pin	1
307	49453	Planet Cage Assembly, 500 rpm	1
	49413	Planet Cage Assembly, 800 rpm	1
	201233	Planet Cage Assembly, 1200 rpm	1
308	2413	Bearing	2
309	37623	Distance Washer, 1200 rpm only	1
310	25568	Key, 500, 800, 3000, 3800, 5300 rpm only	2
311	150823	Gear Ring, 500, 3000 rpm	1
	51973	Gear Ring, 800 rpm	1
	36713	Gear Ring, 1200 rpm	1
	56763	Gear Ring, 3800, 5300 rpm	1
312	2423	Bearing	1
313	51723	Distance Collar, 500 rpm	1
	51693	Distance Collar, 800 rpm	1
314	25573	Circlip, 1200 rpm only	1
315	502093	Needle Cage	2
316	150813	Planet Wheel, 500, 3000 rpm	2
	36703	Planet Wheel, 800, 3800 rpm	2
	65383	Planet Wheel, 1200, 5300 rpm	2
317	52083	Planet Cage, 500 rpm	1
	52063	Planet Cage, 800 rpm	1
	83123	Planet Cage, 1200 rpm	1
	49473	Planet Cage, 3000 rpm	1
	49463	Planet Cage, 3800 rpm	1
	201293	Planet Cage, 5300 rpm	1
318	1453	Planet Pin	2
319	153583	Planet Cage Assembly, 500 rpm	1
	52053	Planet Cage Assembly, 800 rpm	1
320	78053	Planet Cage Assembly, 1200 rpm	1
321	150803	Planet Cage Assembly, 3000 rpm	1
	49073	Planet Cage Assembly, 3800 rpm	1
	201283	Planet Cage Assembly, 5300 rpm	1
322	65373	Rotor Pinion, 1200, 5300 rpm only	1

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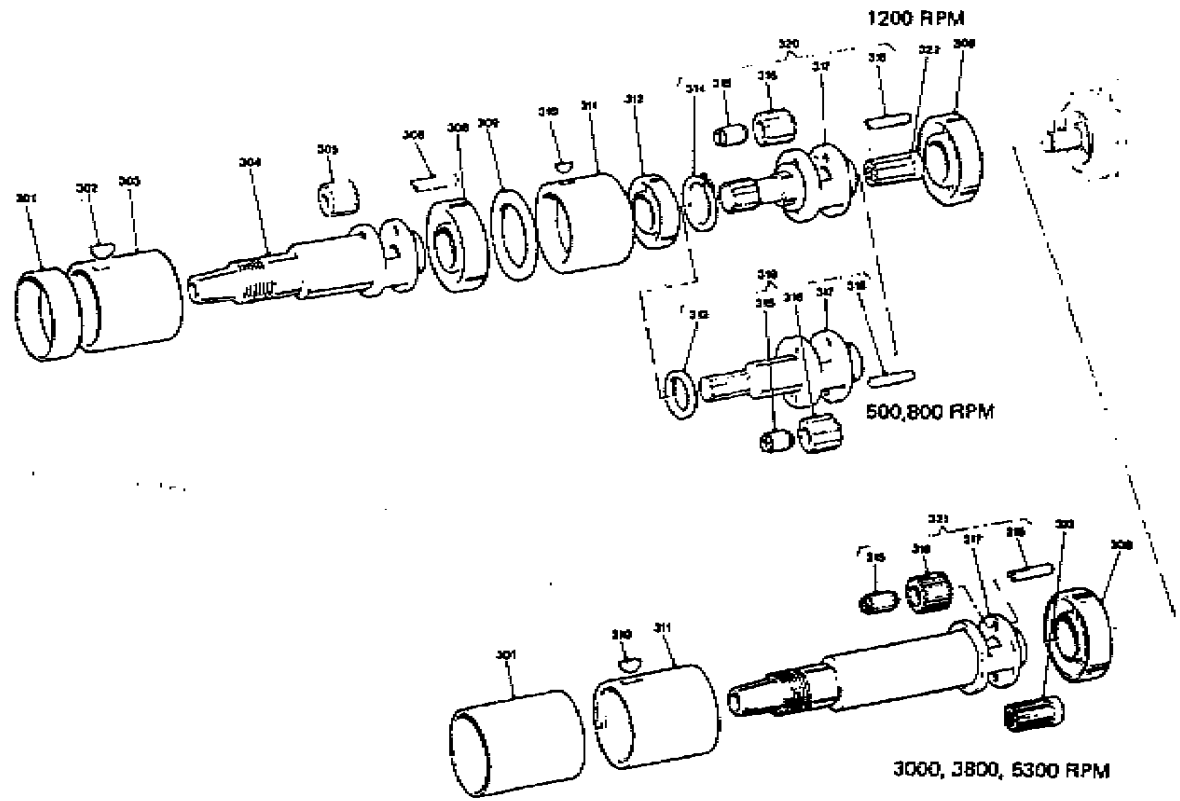

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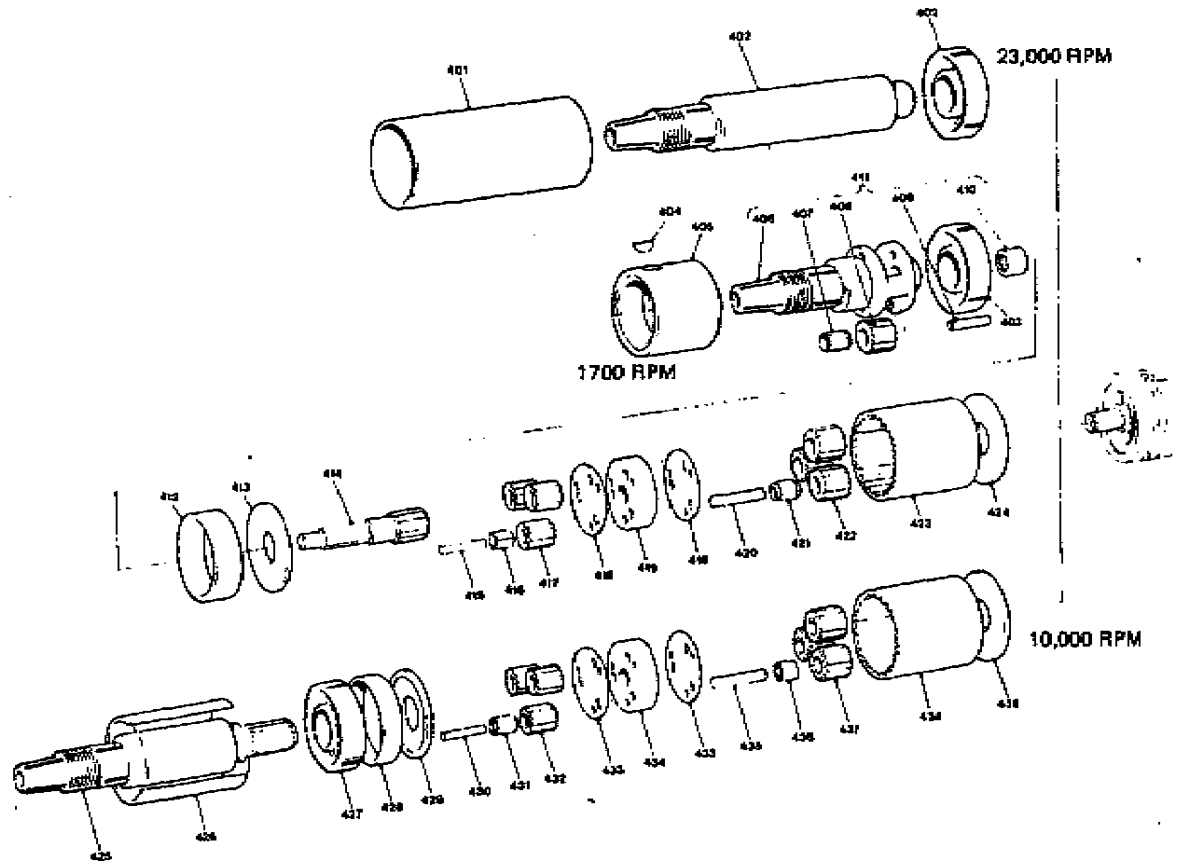
Parts List – Gearbox

Item No.	Part No.	Description	Qty.
401	68983	Bearing Spacer, 23,000 rpm only	1
402	68973	Chuck Spindle	1
* 403	2413	Bearing	1
* 404	25568	Key, 1700 rpm only	1
405	52003	Internal Gear	1
406	51993	Planet Cage	1
* 407	502093	Needle Cage	2
408	36703	Planet Wheel	2
409	1453	Planet Pin	2
410	52033	Roller Bearing	2
411	51983	Planet Cage Assembly	1
412	277893	Spacer	1
413	277903	Washer Front	1
414	277883	Intermediate Pinion	1
415	251493	Planet Pin	3
* 416	266643	Needle Roller	30
417	266543	Planet Wheel	3
418	266493	Retaining Washer	2
419	266573	Planet Carrier	1
420	500683	Planet Pin	3
* 421	251663	Bearing	3
422	266513	Planet Wheel	3
423	266483	Gear Ring	1
424	266503	Washer, Rear	1
425	266703	Chuck Spindle	1
426	50083	Bearing Spacer	1
* 427	2413	Bearing	1
428	204223	Distance Piece	1
429	76203	Thrust Washer, Front	1
430	251493	Planet Pin	1
431	251663	Cage Needle Roller	3
432	266543	Planet Wheel	3
433	266493	Pin Retaining Washer	2
434	266573	Double Planet Carrier	1
435	500683	Planet Pin	3
* 436	266643	Needle Roller	30
437	266513	Planet Wheel	3
438	266483	Gear Ring	1
439	266503	Washer, Rear	1

* Indicates normal replacement items. It is recommended that adequate stocks are held for servicing requirements.

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

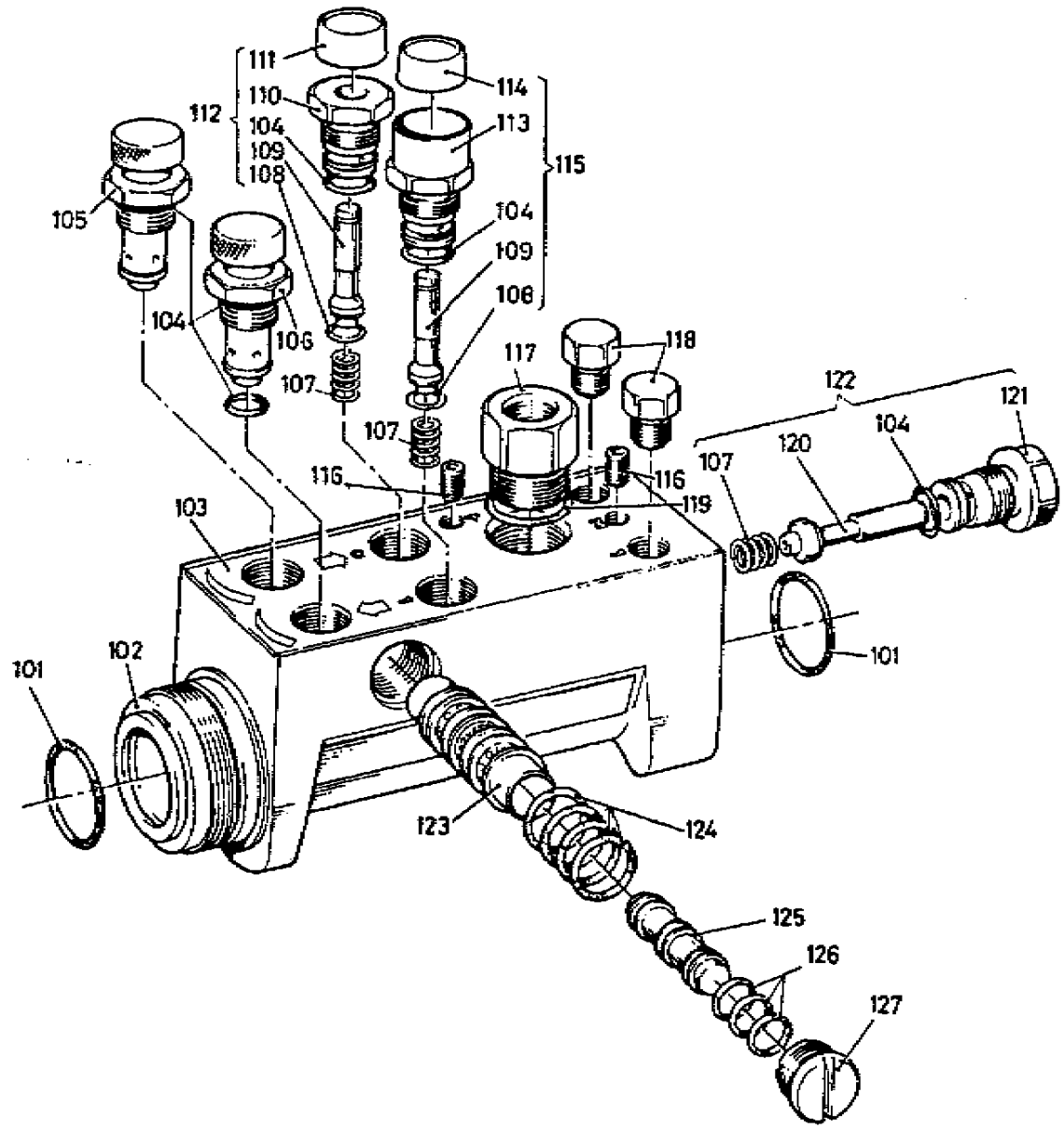


Parts List – Control Top

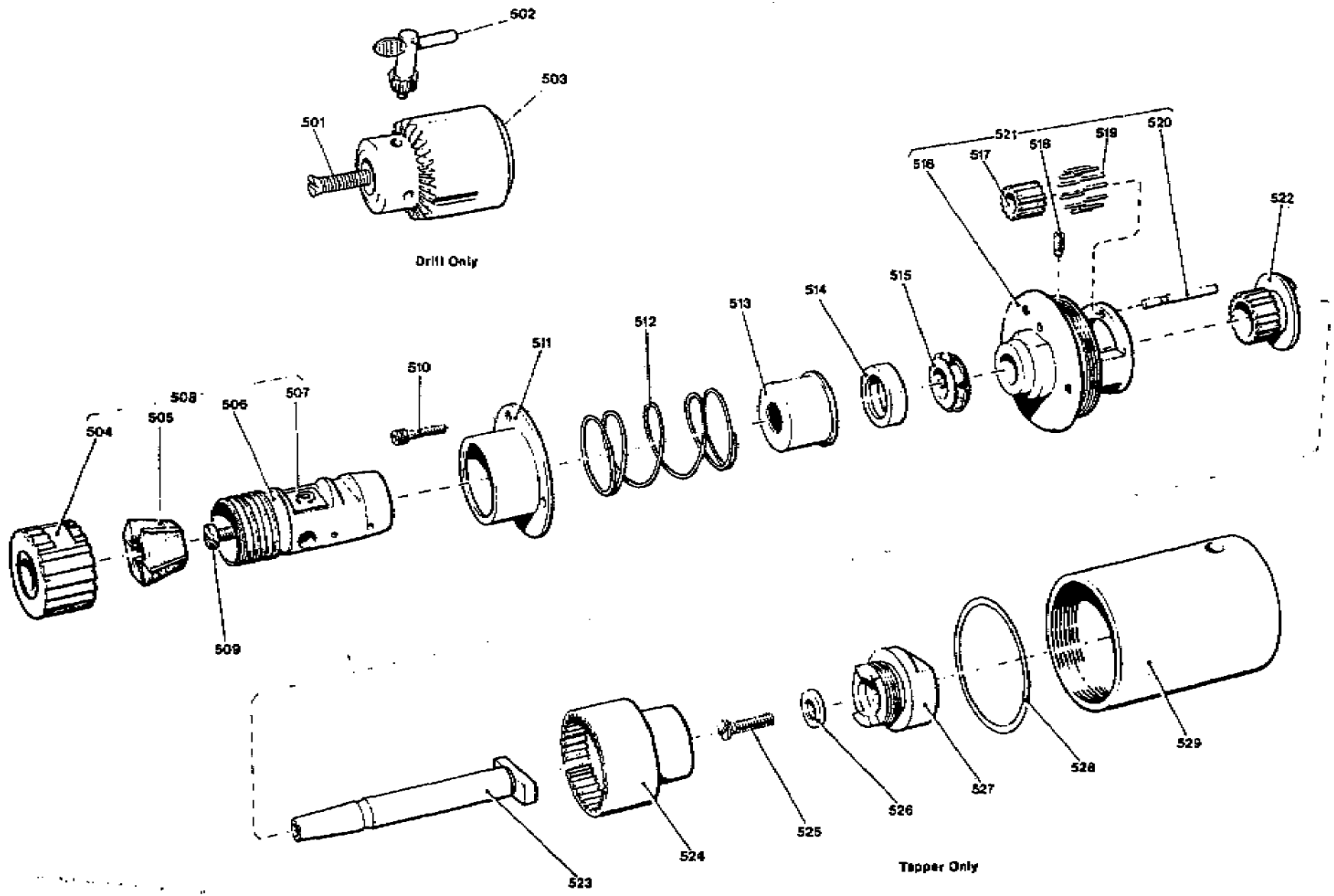
Item No.	Part No.	Description	Qty.
*101	41523	'O' Ring	2
102	255763	Control Top with Bushes	1
103	256903	Control Panel	1
*104	40503	'O' Ring	6
105	256973	Return Valve	1
106	256933	Needle Valve	1
107	39783	Spring	3
*108	43583	'O' Ring	2
109	202773	Valve Spindle	2
110	51793	Valve Body	1
111	202833	Button - Red	1
112	203763	Stop Valve Complete	1
113	256923	Valve Body Shrouded	1
114	202843	Button - Green	1
115	256913	Start Valve Complete	1
116	236693	Plug	2
117	42953	Inlet Adaptor - ¾ in. BSP	1
—	47133	Inlet Adaptor - ¾ in. NPT	1
	257043	Pressure Reducer 1/8 in. BSP	1
	257053	Pressure Reducer 1/8 in. NPT	1
118	51873	Plug	2
*119	40533	'O' Ring	1
120	51743	Valve Spindle Complete	1
121	172013	Valve Body	1
122	172003	Stroke Control Valve	1
123	257003	Valve Bush	1
*124	43463	'O' Ring	4
125	202763	Piston Control Valve	1
*126	41513	'O' Ring	3
127	202803	End Cap	1
	256823	Control Top Complete - ¾ in. BSP	1
	256833	Control Top Complete - ¾ in. NPT	1

* Indicates normal replacement items. It is recommended that adequate stocks are held for servicing requirements.

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



Chuck and Tapping Head



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Servicing Instructions/Parts List–Tapping Head

Item No.	Part No.	Description	Qty.
501	205323	Chuck Retaining Screw for speeds 1700 rpm, 2300 rpm, 3200 rpm, 4600 rpm	1
	205313	Chuck Retaining Screw for speeds 500 rpm, 700 rpm, 1000 rpm	1
502	29202	Chuck Key for speeds 500 rpm 700 rpm, 1000 rpm	1
	29242	Chuck Key for speeds 1700 rpm 2300 rpm, 3200 rpm, 4600 rpm	1
503	34332	Chuck for speeds 500 rpm, 700 rpm, 1000 rpm	†
	34752	Chuck for speeds 1700 rpm, 2300 rpm, 3200 rpm, 4600 rpm	†
504	31642	Nut	1
505	29472	Collet 5/16 in. Capacity	1
	29482	Collet ¼in. Capacity	1
506	31622	Body 5/16 in. Capacity	†
	31632	Body ¼in. Capacity	1
507	31672	Jaws	1
508	37832	Tapping Chuck Assembly 5/16 in. Capacity	1
	37822	Tapping Chuck Assembly ¼in. Capacity	1
509	79783	Screw	1
510	57003	Screw	3
511	62153	Spring Housing	1
512	62293	Spring	1
513	62143	Thrust Race Housing	1
514	68818	Outer Race	1
515	68828	Case and Balls	1
516	61553	End Cap	1
517	1443	Wheel	2
518	10763	Screw	2
519	1463	Roller	22
520	10753	Pin	2
521	65123	End Cap Assembly	1
522	10713	Sun Pinion	1
523	77753	Chuck Spindle	1
524	10703	Reverse Internal Gear	1
525	64888	Screw	1
526	55073	Washer	1
527	53033	Driving Dog	1
528	162773	Shim 0.005in. (0,12 mm)	As req'd
	162783	Shim 0.010in. (0,25 mm)	As req'd
	162793	Shim 0.020in. (0,50 mm)	As req'd
529	53043	Extension Case	1
	31682	Chuck Nut Spanner	1
	31692	Chuck Body Spanner	1
	5393	Hexagon Key	1

* Indicates normal replacement items. It is recommended that adequate stocks are held for servicing requirements.

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

SINGLE SPINDLE TAPPING HEAD

To Dismantle

To remove the chuck (508) from the chuck spindle (523) first remove the retaining screw (509). Insert wedges either side of the chuck spindle, placing one side of the wedge on a bench. Tap the other side until the chuck slides clear.

Unscrew the three screws (556) enabling the spring housing (511), spring (512), thrust race housing (513) and the outer race (514) to be removed.

Unscrew the end cap (521) (L.H.) and remove complete with the chuck spindle and the sun pinion (522). To remove the sun pinion and the chuck spindle, tap the chuck spindle, springing off the cage and balls (515).

To remove the extension case (529) from the main AFD first place the AFD outer case between a pair of clamp blocks and mount in a vice. Remove the retaining screw (525), unscrew the extension case (L.H.).

To remove the reverse internal gear (524) from the driving dog (527) locate assembly tool (14963) into the reverse internal gear, and the flats on the driving dog in a vice and unscrew.

To remove the end cap wheels (517) unscrew the retaining screws (518) and push out the end cap pins.

To Assemble

With the retaining washer (506) and the retaining screw (525) fasten the driving dog to the AFD. Screw back the extension case on to the AFD (L.H.).

Using the assembly tool screw the reverse internal gear to the driving dog.

Replace the sun pinion and the chuck spindle into the end cap and press on the cage and balls.

Screw back the end cap on to the extension case, (L.H.), and replace items 510 to 514.

Tap on the chuck, making sure the chuck bore and the chuck spindle are clear of grease, and secure with screws.

CONTROL TOP

To Dismantle

Unscrew and remove inlet adaptor (117), with any customer fitted connection. Unscrew end cap (127) exposing valve bush (123) and piston control valve (124). Using a thin wire hook pull out the valve bush with the piston control valve. Separate the valve from the bush and discard all 'O' rings.

The remainder of the dismantling is obvious with reference to the illustration. It is suggested that as each valve is removed it is placed in a container and identified for future use.

To Assemble

Assemble 'O' rings (126) to piston control valve then slide valve into the control valve bush (12). Fit 'O' rings (124) to valve bush and carefully fit the bush/valve assembly into the control top. Screw in end cap (127) and tighten to a torque of 10.8 to 13.5 Nm (8 to 10 lbf/ft).

Refer to the illustration for locating the remaining valves and components noting the following points:

Position a spring (107) on the spigot of each button assembly (112 & 115) and stroke control valve (122) before assembly into control top.

Tighten all valves and plugs to a torque of 8.5 to 9.0 Nm (75 to 80 lbf/in.).

Tighten inlet adaptor (117) to a torque of 31.0 to 38.0 Nm (23 to 27 lbf/ft).

Ensure that 'O' rings (101) are greased before placing in their housings in control top bore. Place assembled control top in an airtight container until required, see General Assembly for details.

MOTOR AND GEARBOX

To Dismantle

As the unit has already been partly dismantled, see General Assembly, it is only necessary to remove the piston (217) and lamp nut (201) then push the internal components out of the motor case (218).

The motor and gear train assemblies can be dismantled using ormal workshop practise when removing bearings from spigots. dentify your gearbox in the illustration and refer to it for order f disassembly.

OTE: Locknut (202) has a R.H. thread all other threads in this area are L.H.

To Assemble

The motor complete (216):- Take the rotor (212) and place the rear bearing plate (210), with grooves to rotor, into position. Press bearing (209) onto the rotor so that there is a 0.038 mm (0.0015in.) 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 (211) over the rotor.

Locate the rotor blades (213) into their slots in the rotor and lubricate. Place the front bearing plate (210) into position, with grooves to rotor.

NOTE: If a new bearing (209) is to be fitted into the front bearing housing (207) make sure that the bearing is 0.25 mm (.010in.) below the housing face out of which pin (208) protrudes.

Press the front bearing housing with its bearing onto the rotor making sure that all location holes are aligned so that the pins can pass through on assembly.

NOTE: This assembly should be pressed on using the inner face of front bearing (209) and taking he reaction on the end face of the rotor rear bearing spigot. The assembly should be pressed on until all the free axial movement between the front and rear bearings is removed.

Locate the rear bearing housing (214) with end cap (215) and check that the rotor is free to rotate.

The gear train:- Refer to the illustration to identify the components in the gearbox and the order of assembly. Grease the bearings and gears on assembly and tighten locknut (203) to a torque of 8.4 to 9.0 Nm (75 to 80 lbf/in).

NOTE: The piston (218) must be tightened onto the motor case (217) FIRST and final clamping carried out by fitting clamp nut (201).

TESTING AFTER ASSEMBLY

Required:

Hand Tachometer with a scale range to suit tool.
Dial Test Indicator (D.T.I.) on Stand.
Mandrit – 51 mm (2in) long by 6.5 mm (0.25in) dia.
Spring Balance – capable of reading over 90 kg. (198.5 lbf.).

Operation Test

Fit clamp blocks to the tool and clamp in a vice with horizontally and control buttons uppermost. If used fit provide thrust resistance. Set a gap of 40 mm (1.5 in.) b stroke control valve and the stroke adjusting screw. Inse drops of oil into the air inlet and connect up the airline.

Fully open the advance and retract regulating screws peatedly press the green manual start button and cycle t a few times, checking that air pressure remains static.

Screw in the advance rate regulating screw to nearly Press start button and at approximately mid stroke close advance rate regulating screw. Allow motor to attain ma free speed, then using the tachometer check that the spe within 5% of that stated on the tool table. On completio advance rate regulating screw and allow tool to complete

The minimum thrust for this tool is 84 kg. (185 lbf spring balance to confirm.

Insert the madrit into the chuck and using the D.T.I., on the mandrit (12.7 mm (0.5 in.) from chuck, check the out' does not exceed 0.15 mm (0.004 in.). If it is out of tolerance, tap side of chuck at high side to resettle it the

Reduce air pressure to 2.06 bar (30 lbs/in²). Press st and adjust advance rate regulating screw so that tool adv slowly and returns. Repeat test several times observing t and retract action is smooth and free from jerks. Test pi valve by alternatively pressing start button allowing tool slightly then pressing stop button to retract. Movement smooth and without hesitation in each direction; when s stop tool in mid stroke by closing the advance rate regul screw. Check for leaks by applying a film of oil around t and control buttons at their joints with the control top. satisfied press the stop button and open the advance rate screw.

Disconnect the airline and remove tool from vice and it is now ready for use.

SETTING DRILLING OPERATION

NOTE: This setting details a unit with a H.C.U., reference to the H.C.U. should be ignored when setting the standard tool.

Set the gap between the stroke control valve and the stroke adjusting screw to equal the depth of drilling required PLUS the distance the drill bit is above the work piece.

Unscrew the hydraulic stroke adjusting screw away from the H.C.U. and adjust the resistance within the H.C.U. to the minimum position.

Fully open the retract rate regulating screw.

Close the advance rate regulating screw.

Connect the air supply and press the manual start button.

Nothing will happen until the advance rate regulating screw is slowly opened, then the drill will gradually advance and approximately 6 mm (0.25in.) from start of advance the drill bit will rotate.

Close the advance rate regulating screw approximately 1.0 mm (0.040in.) before the stroke adjusting screw contacts the stroke control valve.

Set the hydraulic stroke adjusting screw to contact the H.C.U. and lock in position.

Unscrew the advance rate regulating screw; the tool will advance, under the control of the H.C.U. until the stroke control valve is contacted by the stroke adjusting screw at this point the tool will return to the start position and stop.

Carry out a set of trial drillings to determine the ideal advance and H.C.U. settings. Stalling on 'break-through' indicates that the H.C.U. is coming into operation too late or the advance rate is too fast.

SETTING TAPPING OPERATION

NOTE 1: It is important that the advance rate of the tool is set to match the pitch of the thread which is to be tapped. An incorrect advance rate will result in a deformed thread, this will be more noticeable in plastics or light alloy materials.

2: The retract rate should be set to withdraw the tap at a slightly faster rate than it advanced, this will insure a clean withdrawal.

Mount the tool, with the selected tap securely retained in the chuck, above a test block to carry out sample tapping operations.

The end of the tap MUST be at least 14 mm (9/16in.) above the test block, to allow for the tapping head reversing engagement travel. Set the gap between the adjusting screw and the retract valve to equal the tapping depth PLUS the distance the tap is above the work piece.

Set the advance rate adjustment screw 1 turn open and the retract rate adjustment screw 1¼ turns open.

Carry out a trial tapping operation and inspect the finished thread form, adjust as necessary the advance/retract screws and repeat until information in NOTES 1 and 2 are satisfied.

SERVICING REQUIREMENTS

General Notes

Replace as necessary all 'O' rings, seals and bearings.

Use the following lubricants as indicated:-

Oil - ISO VG 15 or equivalent.
Grease - Rocol BRB1200 for bearings.
Grease - Duckhams Q5618 or equivalent.
Silicon Grease - Molykote 33, for 'O' rings.

The majority of threads in this tool are right hand (R.H.) but some left hand (L.H.) threads will be found. All L.H. threads will be noted in the text.

Servicing Tools

In addition to the normal range of workshop tools the following will be required:

	Description		Qty.
75938	Wedges	(pair)	1
60073	Spanner for Bearing Sleeve (2)		1
60053	Spanner for Motor Air Inlet Cap		1
60113	Spanner for Clamp Nut (12)		1
17843	Hexagonal Key $^{3}/_{16}$ in		1
59233	Gearcase Spanner		1
60063	Spanner for Clamp Nut (201)		1
60113	Spanner for Spindle Nut (202)		1

Refer to the Parts Lists for illustrations and item references.

Cleaning

Required: Tank to immerse components.
Good quality clean paraffin.

Soak the components in the tank ensuring full immersion, agitate the component to ensure that any air passages are flushed through. After soaking, remove from the tank and thoroughly dry. Blow through any air passages to remove all moisture. Keep all cleaned components in an airtight container until required.

GENERAL ASSEMBLY

To Dismantle

Slacken crosshead clamping bolt (22) and remove assembly. Remove chuck or tapper as fitted. Protect (18) and clamp in soft-jawed vice, outer case horizonta spanner inserted in bearing sleeve (2), unscrew, under return spring (6) is under compression, outer case (4) top. Allow spring to expand slowly. Remove spring an

NOTE: It is recommended that bearing sleeve (2) protection cap be left on the outer case.

Check that air tube (21) is clear and pull motor a assembly (5) complete with air tube from control top.

Hold the motor and gearbox and remove clamp nut thread. Remove felt ring (8). Remove spring pins (7) a motor and gearbox. Remove cap washer (11). From air clamping ring (10) and 'O' rings (9), discard 'O' rings.

Remove 'O' ring (13) from adaptor (14) and remo discard 'O' ring. Remove and discard 'O' ring (15).

NOTE: Dismantling the control top and the motor a are detailed later in the text.

To Assemble

Fit new 'O' rings (9) to air tube (21). Enter air tube piston of the motor gearbox (5) with clamp ring (10) s of the piston. Assemble clamp ring (10) to the air tube onto its seat in the piston. Secure in position with sprir Fit new felt ring (8) to piston. Assemble piston seal (11 nut (12), slide assembly over the air tube and secure to Fit new 'O' ring (15) to the control top (16) and fit ad control top in a soft-jawed vice, hold motor and gearbc and carefully enter air tube through the control top un by clamp nut. Grease return spring (6) and insert into Fit new 'O' ring (13) to adaptor (14). Slide outer case over motor and gearbox. Hold outer case and agains compression, engage case thread and screw up as far as hand. Finally tighten with 'C' spanner inserted in bearii Remove the assembly from the vice.

Assemble the crosshead assembly onto the airtube using the clamping screw (22).

Refer to the Operation Instructions for setting up a After Assembly and test the tool as detailed.

REQUIREMENTS

Air Supply – Main

A water free and filtered air supply is required, at a pressure of 6 bar (87 lbf/in²), with a flow of 9.4 l/s (20 cu.ft/min); controlled by a pressure regulator selected from the Desoutter Air Line Services Equipment Catalogue.

Air Supply – Remote

The basic requirements are as above but the pressure must be at least 2.7 bar (40 lbf/in²) and the flow requirement when signalling is 0.47 l/s (1 cu.ft/min). The signal duration should be kept to the minimum to reduce air consumption.

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.

Accessories

GUARDS: IT IS RECOMMENDED THAT SUITABLE GUARDS ARE SELECTED, FOR CHUCK AND CONTROL TOP LOCATION, FROM THE DESOUTTER ASSESSORIES CATALOGUE.

Mounting Clamps:- A range of clamps, bases and columns are available. Full details obtained from Desoutter.

Hydraulic Check Unit (H.C.U.):- The tool will function satisfactorily, when drilling a blind hole at the set feed rate. Should it be required to break through the material and possibly through into another hole, feed acceleration will occur with possible drill breakage. To obviate this, the fitment of an H.C.U. is strongly recommended. Request information from Desoutter.

Peck Feed Kits:- The Desoutter Peck Feed Drill System should be used when the depth of the hole to be drilled is five or more times the hole diameter. This helps clear drill chips and avoids excessive overheating of drill bit. Hole size accuracy can be improved and drill bit run-out can be kept to the minimum. Request information from Desoutter.

Multi-spindle Drilling and Tapping Attachments:- A series of 2, 3, 4 and 5 spindle drilling and tapping heads are available. Full details available from Desoutter.

OPERATING

Control Top

The control top (1) contains all the control functions and signal originations for external control.

The controls and locations are identified below and detailed in the Drilling Operation.

Location 2: 'P' port tapped M5, signal point for peck feed circuit.
3: 'O' port tapped 1/8in. BSP, receives external signal to return the feed to start position.
4: Stroke Control Valve.
5: 'M' port tapped M5, signal produced when the motor is running, used for sequence control. By ensuring this signal it can be determined that the drilling cycle has commenced/finished.
6: '1' port tapped 1/8in. BSP, receives external signal to start the tool cycle.
7: Main air inlet port, tapped 1/8in. or ¼in. BSP or NPT.
8: Manual Start Button - Green.
9: Manual Stop Button - Red.
10: Advance Rate Regulating Screw.
11: Retract Rate Regulating Screw (Tapper only).

NOTE: The 'M' port is intended for the operation of pilot valves. It must not be used as a source of air supply for other uses.

Mounting the Tool

The tool must be clamped only in the area indicated on the outer case.

The drill must be at least 6 mm (0.25in.) above the work piece.

WARNING: (1) ALWAYS DISCONNECT TOOL FROM THE POWER SUPPLY BEFORE ATTEMPTING ANY REPLACEMENT, ADJUSTMENT, SERVICING OR DISMANTLING.
(2) ENSURE THAT NO LOOSE ARTICLES OF CLOTHING OR CLEANING MATERIAL CAN BE CAUGHT BY THE ROTATING PARTS OF THE TOOL.
(3) ALWAYS ALLOW THE TOOL TO STOP BEFORE REMOVING WORK OR RESTING TOOL.
(4) ENSURE THAT WORK PIECE IS SECURELY CLAMPED BEFORE COMMENCEMENT OF OPERATION – CLEAR ALL LOOSE ITEMS FROM VICINITY.