

Desoutter



Angle Wrench

Types:

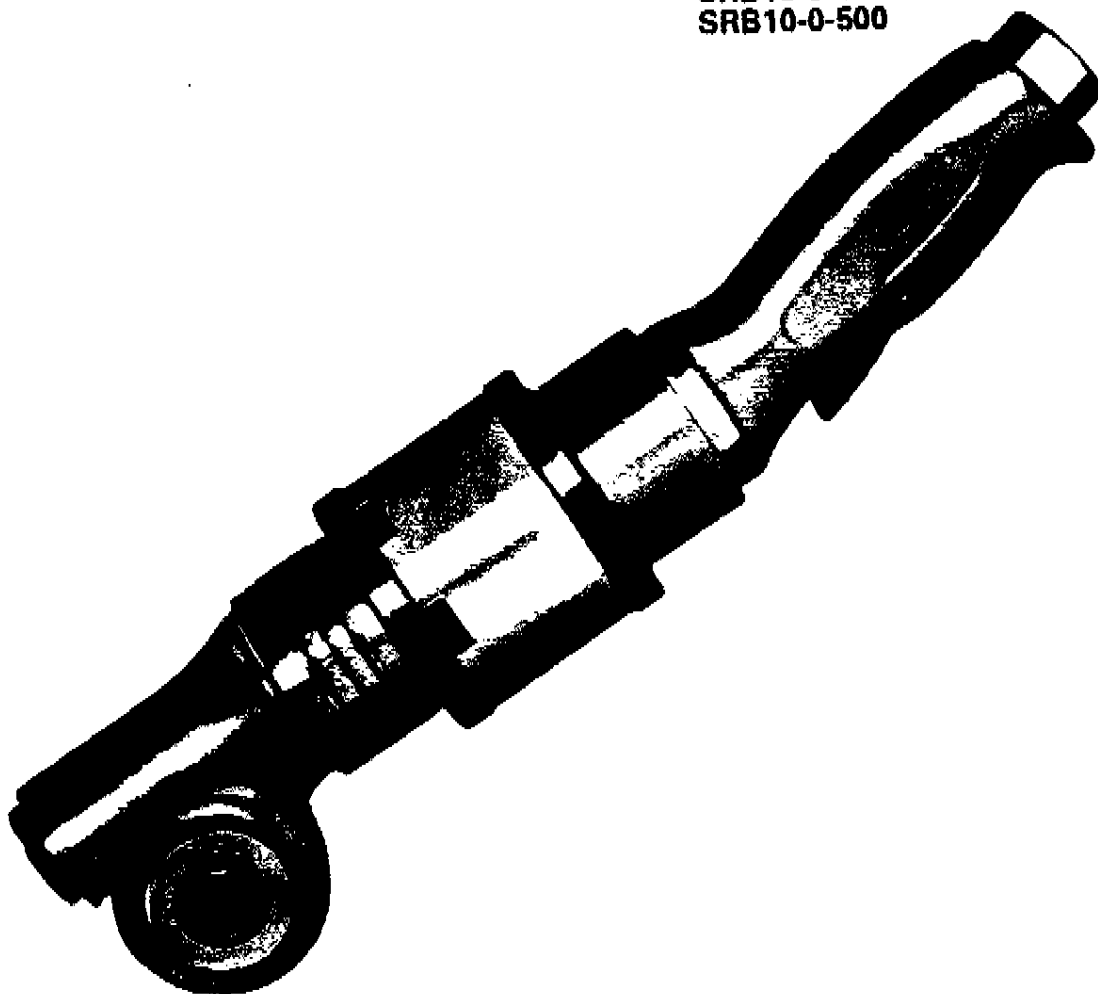
SRB10-0-60

SRB10-0-90

SRB10-0-160

SRB10-0-350

SRB10-0-500



399104
400184
396194
397164
398134

Operating and Service Instructions

SRB10-0-60 SRB10-0-350
SRB10-0-90 SRB10-0-500
SRB10-0-160

Serviceing Instructions

SRB10-0-60 SRB10-0-350
SRB10-0-90 SRB10-0-500
SRB10-0-160

TO DISMANTLE

NOTE: All threads are R.H. unless otherwise stated.

Remove end circlip (40) and slide off silencer assembly comprised of items (41) to (44) inclusive, then remove second circlip (40). Position motor case (39) between clamp blocks 8963 and clamp firmly in a vice. Using spanner 21392, unscrew spanner handle assembly (61) from motor case. Remove the exposed air filter (47) and withdraw shim (48). Unscrew and remove worm box (11) complete with worm planet cage assembly (17). Disengage gear ring (17) from worm box slots and remove it with a drift against bearing cap (27) push out the internal components catching each one as it clears the motor case. Remove motor case from vice and clamp.

Clamp worm box in a soft-jawed vice with worm box cover (3) uppermost. Using special tool 90173, unscrew and remove bearing housing (1) complete with bearing (2). Withdraw the released planet cage assembly (17) from worm box. Slide off spacer (10) from planet cage worm drive end. Press off bearing (18) from planet cage rear spigot thus releasing planet pins (16) and planet wheels (14) complete with rollers (15) which should now be removed. Engage spanner 98123 with flats of worm box cover and unscrew cover. Worm wheel (6) can now be removed, remove thrust washers (5), one from each side of worm wheel. Needle roller bearings (4) can be pressed out of cover and worm box if renewal is required. Remove circlip (9) and pull out thrust washers (5a) together with thrust cage (8).

Dismantle primary planet cage: SRB10-0-60 to 90 only

Hold gear ring (18) in hand and tap splined end of planet cage (22) with a soft-faced hammer to release it from bearing (20). Remove bearing (18) from planet cage rear spindle, thus releasing planet pins (24) and planet wheels (23) complete with rollers (24) which should not be removed. Cir lip (21), SRB10-0-160 only, should be left on planet cage. Press out bearing (20) from gear ring (19).

On SRB10-0-160 only, remove pinion (28) from rotor spindle (32). Hold motor in hand by cylinder (34) and tap rotor spindle with a soft-faced hammer to release clamp washer (29), bearing (30), front bearing housing (31) and cylinder (34). Press off rear bearing housing (36) from rotor spigot. Pin (35) should remain in housing to facilitate assembly. To remove bearing (30), unscrew bearing cap (37) and press out bearing from housing.

Dismantling of spanner handle (61), if required, is obvious with reference to the exploded illustration, but it is recommended that unless new parts are to be fitted, it is not to be disturbed.

TO ASSEMBLE

Assemble motor:

cap (37), assembled to it. Check that pin (35) is in rear bearing housing. Fit rotor blades (33). Coat rotor and blades with oil and assemble cylinder (34), entering pin (35) into its locating hole. Pack the other bearing (30) with grease and sandwich it between front bearing housing (31) and clamp washer (29), then fit the assembly to rotor spindle, hard up against cylinder. Enter motor assembly into case from worm box end, push it in leaving pinion protruding slightly. On SRB10-0-160 only, fit rotor pinion (28).

Assemble primary planet cage: Models 60-90-160

On SRB10-0-160, check that circlip (21) is on planet cage (22), if not, fit it. Pack bores of planet wheels (23) with grease and assemble eight rollers (24) SRB10-0-60/90, or eleven rollers SRB10-0-160, to each one. Fit the planet wheels to planet cage (22) and secure with planet pins (25), cut-outs seating on either circlip (21), or planet cage shoulder. Pack bearing (27) with grease and fit it to planet cage rear spigot to lock and secure planet pins. Press bearing (20) into internal gear (18) so that its outer race is hard up against the seating flange. Pack gear box with grease and fit it to internal gear, bearing (18) hard up against end of internal gear. Engage gearbox with motor pinion and push it into motor case, leaving spindle protruding slightly.

Assemble worm planet cage on all models.

Assemble planet wheels (14), rollers (15), planet pins (16) and bearing (18) to worm planet cage as detailed for similar items to primary planet cage. Assemble spacer (10) to planet cage with its cut-outs seating on planet pins. Place planet cage assembly in a clean container until required for assembly.

Assemble worm wheel:

Press one needle bearing (4) into the worm box (7) and the second bearing (4) into the cover (3) and pack them with grease. Assemble one thrust washer (5) to the inside boss of the worm wheel (6). The outside boss of the worm wheel fit the original shim (59) followed by the second thrust washer (6) rest the worm wheel with grease and fit into the worm box (7) then screw on the covers (3). Tighten the cover using spanner 99123.

NOTE: The end float on the worm wheel (6) should be at a minimum, three sizes of shim (59) are available to achieve this.

Mount motor case between clamp blocks 8963 and clamp firmly in a vice. Pack worm planet cage (17) with grease and insert it into worm box carefully engaging drive with worm gear. Fit gear ring (12) to worm box engaging planet wheels and locating gear ring dogs, in worm box slots. Engage worm box assembly with motor case ensuring that primary planet cage spindle engages with worm planet cage gearbox, tighten and pack it with grease, screw housing (1) into worm box (7) and tighten it with special tool 90173. Insert air filter (47) into motor case, end outward and fit shim (48) against rear bearing housing (36). Screw on handle (61) by hand and final

should be at the bottom with handle angled upwards. Vary shim (48) thickness to achieve the setting.

Relit the silencer assembly circlip (40) to the motor case (39). Ensure that the felt strip (42) and the foam strip (44) are clean and secure in the silencer sleeve (43), slide the silencer assembly onto the motor case up to the first circlip and secure with second circlip.

Spanner handle assembly procedure - fitting new parts.

Fit trigger (49) securing with trigger pin (50) and test for freedom of movement. Fit the valve spindle (53) into the connector (54) and fitting the connector washer (53) insert the assembly into the handle (51). Insert into the handle the ball (55) followed by the spring (56) and secure with the spring retaining cap (57). Operate the trigger and check for correct operation.

OPERATING INSTRUCTIONS

WARNING

- (1) Always disconnect tool from the air supply before attempting any replacement, adjustment, servicing or dismantling.
- (2) Safety goggles and gloves must be used where a danger exists from drill swarf or chippings, sparks of hot metal, grinding grit, sanding dust.
- (3) Ensure that no loose articles of clothing or cleaning material can be caught by the rotating parts of the tool.
- (4) Always allow the tool to stop before removing work or resting tool.
- (5) Ensure that work piece is securely clamped before commencement of machining - Clear all loose items from vicinity.

AIRLINE MAINTENANCE AND LUBRICATION

To obtain maximum efficiency and minimum maintenance of your air tools the following points should be observed. The air supply should be clean, dry and filtered. Select a filter of correct size for the pressure and air flow. Maintain the recommended supply pressure of 6 bar (87 lbf/in²) selecting a pressure regulator with flow and pressure range to suit application.

An automatic airline lubricator adjusted to deliver the correct quantity of oil and selected to suit the required airflow should be included in the tool installation.

When an automatic lubricator is not fitted the tool must be lubricated at least twice a day by pouring a small quantity (5 c.c.) through the air inlet.

Site the filter and lubricator in the supply line as near as possible to the tool.

Desoliter recommended and supply

Oil - Duckhams 'Zetolfo 2' to BS 2676/1965 - Rotor blades Grease - Duckhams Type Q5618 - Gearboxes and bearings Silicone grease Molykote 33 - 'O' rings.