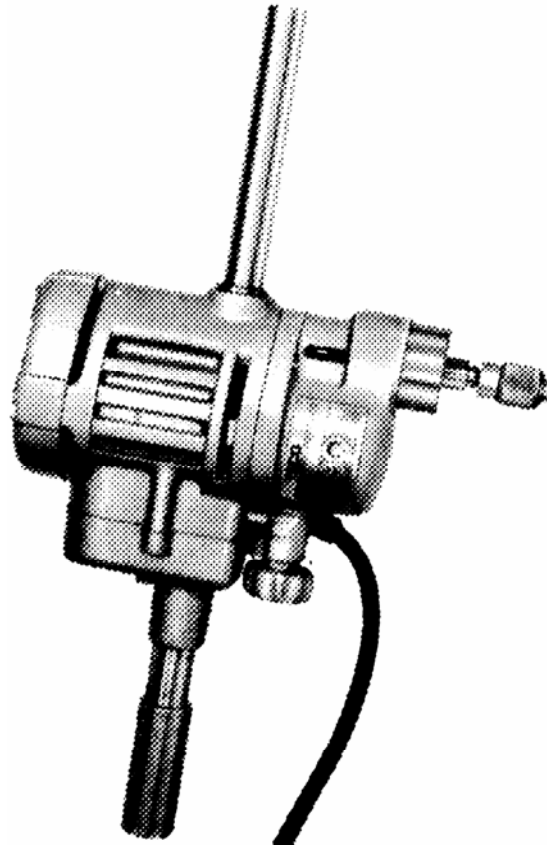




Operating Manual *For* *Model 38-TC-4/1 Rolling Motor*



Elliott Tool Technologies Ltd • 1760 Tuttle Avenue • Dayton, Ohio 45403 U.S.A.
Phone: +1 800 332 0447 • +1 937 253 6133 • Fax: +1 937 253 9189

Elliott Tool Technologies UK Ltd • Broadstone Hill • Old Chalford • Chipping Norton • OXON • OX7 5QL • England
Phone: +44 (0) 1608 672815 • Fax: +44 (0) 1608 672810

OPERATING INSTRUCTIONS FOR TC-4/1

Electrical connection

The operating voltage is given on the machine identification plate. Check that the mains voltage agrees with machine voltage.

Cable

Examine the cable for damage. For machines having Class I insulation (noted on the identification plate) an earth wire is provided in the cable. Connect the yellow/green wire to the earth point in the plug. Check also that the earth wire is securely connected to the machine motor housing - particularly after repairs have been carried out. For double insulated machines, no earth wire is required.

Gear/Speed change

The TC-4 motors encompass speeds of 70/120/195/360/680/1450 rpm.

To change gear:

Wait until the Drill has stopped rotating, pull out gear selector knob (51). Turn the knob either to the left or to the right. A spring loaded plunger engages in a locating hole at each of the 4/5 settings, and the selected speed is indicated by a number appearing in a peep-hole in the gear-drum.

Lubrication

To obtain the maximum life from the gearbox it is necessary to lubricate it every 15 to 20 hours of operation. We advise the use of Esso Fibrax EP 370. A grease nipple is provided on the side of the gearbox and two or three shots with a high pressure gun will suffice. Inferior greases can cause damage!

Maintenance

After 500 operating hours, the drilling machine should be thoroughly cleaned and re-filled with new grease.

Bearings should be cleaned in a solvent, dried and packed with bearing grease. Clean the inside of the motor and switch housing, using dry compressed air or a brush.

Wash the gearbox in a grease solvent and thoroughly dry out. Re-pack the gearbox with Esso gear grease, (half-full).

Overfilling or using the wrong type of grease will cause damage.

Check the wiring connections, especially with Class I insulation machines, making sure that the earth connections are correctly made.

In addition, carry out a high tension test on the armature and field-coil windings.

Guarantee

Motors are guaranteed (parts) for 6 months. The guarantee is valid only if the motor has been used in accordance with proper practice, and if it has not been dismantled by the user.

Repair service

Repairs should only be carried out by authorised specialists.

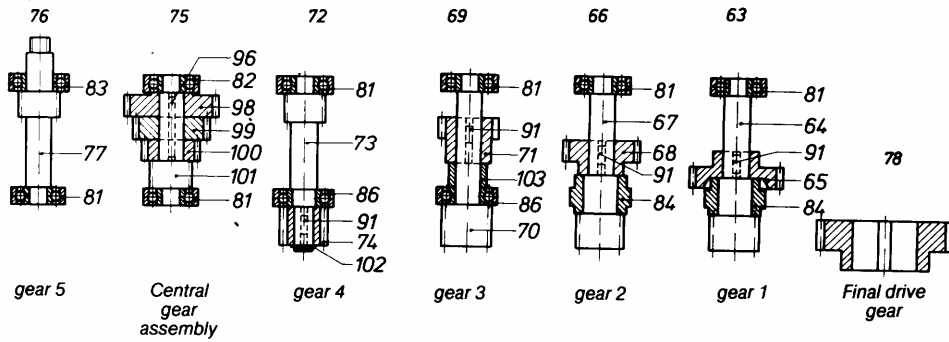
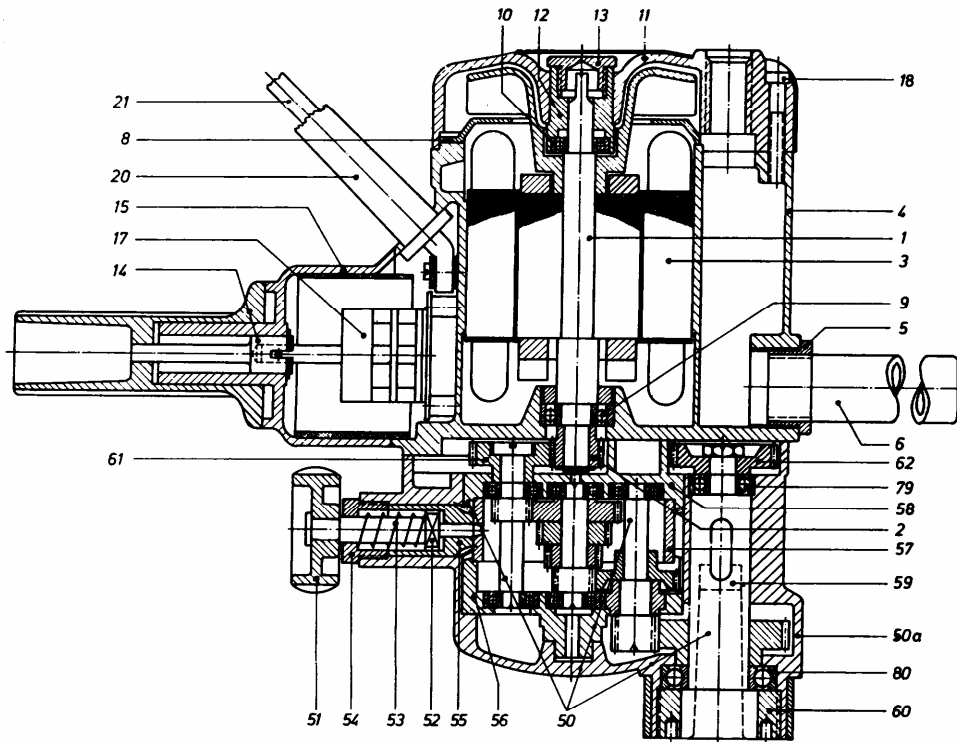
SPARE PARTS LIST FOR TC-4/1

| Item | Quantity | Description | Spare part number |
|---------------|----------|---|-------------------|
| Motor: | | | |
| 1 | 1 | Rotor complete with ball-bearings (state voltage) Type D | 38-D32-I |
| | | Type DL (slow speed) | 38-D32-I-L |
| 2 | 1 | Pinion for rotor, type D | 38-D32-2-18z |
| | | type DL (slow speed) | 38-D32-2-13z |
| 3 | 1 | Stator (state voltage) | 38-D32-3 |
| 4 | 1 | Motor housing | 38-D32-4 |
| 5 | 1 | Bushing for pipe handle | 38-R32-11 |
| 6 | 1 | Pipe handle (R 1" thread) | 38-R32-12 |
| 8 | 1 | Ventilation disc | 38-D32-8 |
| 9 | 1 | Ball-bearing for rotor (pinion end) | 38-D32-9 |
| 10 | 1 | Ball-bearing for rotor (fan end) | 38-R21-13a |
| 11 | 1 | Motor housing cover | 38-D32-11 |
| 12 | 1 | Bearing housing | 38-D32-12 |
| 13 | 1 | End cover | 38-D32-13 |
| 14 | 1 | Switch handle complete with coupling | 38-D32-14 |
| 15 | 1 | Switch handle cover | 38-D32-15 |
| | 1 | Switch handle complete with handle cover, without switch | 38-D32-14/15 |
| 17 | 1 | Reversing switch, 3-pole | 38-D32-17 |
| 18 | 3 | Screw M8 x 50 (motor housing cover) | 38-D32-18 |
| | 4 | Screw M6 x 65 (handle) | 38-D32-19 |
| 20 | 1 | Cable sleeve | 38-R32-21 |
| 21 | 1 | Cable | 38-D32-21 |
| | 1 | Plug, 3-pole | 38-D32-22 |

SPARE PARTS LIST FOR TC-4/1

| Item | Quantity | Description | Spare part number |
|--------------|----------|---|--------------------------------|
| Gear: | | | |
| 50 | 1 | Gear complete, consisting of gear-housing, gear change assembly, drilling spindle, gear drum complete | 38-D32-50 |
| 50a | 1 | Gear housing | 38-R32-50a |
| 51 | 1 | Speed selector knob | 38-R32-51 |
| 52 | 1 | Shaft | 38-R32-52 |
| 53 | 1 | Spring | 38-R32-53 |
| 54 | 1 | Threaded bushing | 38-R32-54 |
| 55 | 1 | Gear change pinion | 38-R32-55 |
| | 1 | Gear change assembly, consisting of items No. 51 to 55 | 38-R32-55K |
| 56 | 1 | Gear cluster drum (lower) | 38-R32-56 |
| 57 | 1 | Gear cluster drum (intermediate) | 38-R32-57 |
| 58 | 1 | Gear cluster drum (upper) | 38-D32-58 |
| 59 | 1 | Drilling spindle | 38-R32-59 |
| 60 | 1 | Bearing retained | 38-R32-60 |
| 61 | 1 | Gear wheel, type D type DL (slow speed) | 38-D32-61-23z 38-D32-61-28z |
| 62 | 1 | Gear (drilling spindle-upper) | 38-D32-62-43z |
| 63 | 1 | Gear assembly 1 | 38-R32-63 |
| 64 | 1 | Gear 1 - pinion and shaft | 38-R32-64 |
| 65 | 1 | Gear 1 - wheel | 38-R32-65 |
| 66 | 1 | Gear assembly 2 | 38-R32-66 |
| 67 | 1 | Gear 2 - pinion and shaft | 38-R32-67 |
| 68 | 1 | Gear 2 - wheel | 38-R32-68 |
| 69 | 1 | Gear assembly 3 | 38-R32-69 |
| 70 | 1 | Gear 3 - pinion and shaft | 38-R32-70 |
| 71 | 1 | Gear 3 - wheel | 38-R32-71 |
| 72 | 1 | Gear assembly 4 | 38-R32-72 |
| 73 | 1 | Gear 4 - pinion and shaft | 38-R32-73 |
| 74 | 1 | Gear 4 - wheel | 38-R32-74 |
| 75 | 1 | Central gear assembly | 38-R32-75 |
| 76 | 1 | Gear assembly 5 | 38-R32-76 |
| 77 | 1 | Gear 5 - pinion and shaft | 38-R32-77 |
| 78 | 1 | Final drive gear wheel | 38-R32-7B |
| 79 | 1 | Ball-bearing for drilling spindle (upper) | 38-R21-15 |
| 80 | 1 | Ball-bearing for drilling spindle (lower) | 38-R32-80 |
| 81 | 1 each | Ball-bearing for gear assembly 1,2,3,4 (upper) | 38-R1-15 |
| 82 | 1 | Ball-bearing for central gear assembly | 38-R1-15 |
| 83 | 1 | Ball-bearing for gear assembly 5 | 38-R21-13a |
| 84 | 1 | Bushing for gear 1 | 38-R32-84 |
| 85 | 1 | Bushing for gear 2 | 38-R32-84 |
| 86 | 1 each | Ball-bearing for gear assembly 3 and 4 (lower end) | 38-R21-13a |
| 87 | 1 each | Ball-bearing for central gear assembly and gear 5 (lower end) | 38-R1-15 |
| | 4 | Screws M8 x 25 (gear housing) | 38-R32-20 |
| | 1 | Key MK3 | 38-R32-89 |

SPARE PARTS LIST FOR TC-4/1



Elliott offers a complete line of precision tube tools, including:

tube

expanders

- Boiler Expanders
- Heat Exchanger Expanders
- Condenser Expanders
- Refinery Expanders

***tube rolling motors
& torque controls***

- Electric
- Pneumatic

tube

cleaners

- Air & Water Driven Motors
(Internal/External Drives)
- Jiffy Guns
("Shoot-Thru" Devices)
- Roto-Jet
(Rotating Flex Shaft)

***additional
products***

- Tube and Joint Testers
- Tube Plugs
(High & Low Pressure)

***retubing
tools***

- Tube Gauges
- Tube Cutters
- Manual Tools
- Spear Type Tube Pullers
- Collet-Type Tube Pullers
- CYCLGRIP Tube Extractors
- Grooving Tools
- End-Prep Tools

***metal working
products***

- Back Chamfering Tools
- Carbide Roller Burnishing Tools
- Diamond Burnishing Tools
- Elliptical Deburring Tools
- Fine Boring Tools
- Internal Recessing Tools
- Magic Vise
- Mechanical Joining Tools
- Roller Burnishing Tools
- Single Blade Reamers



www.elliott-tool.com