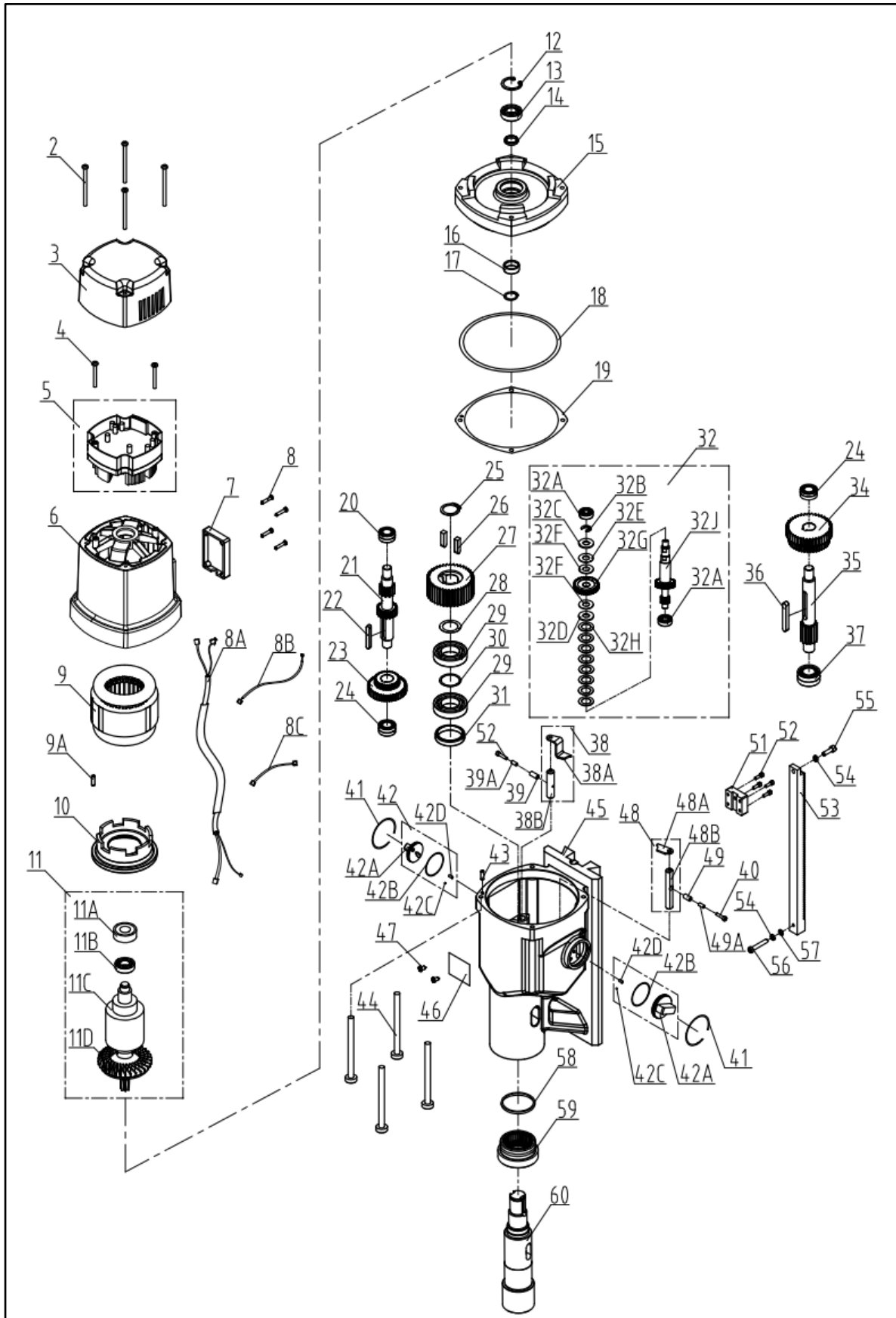
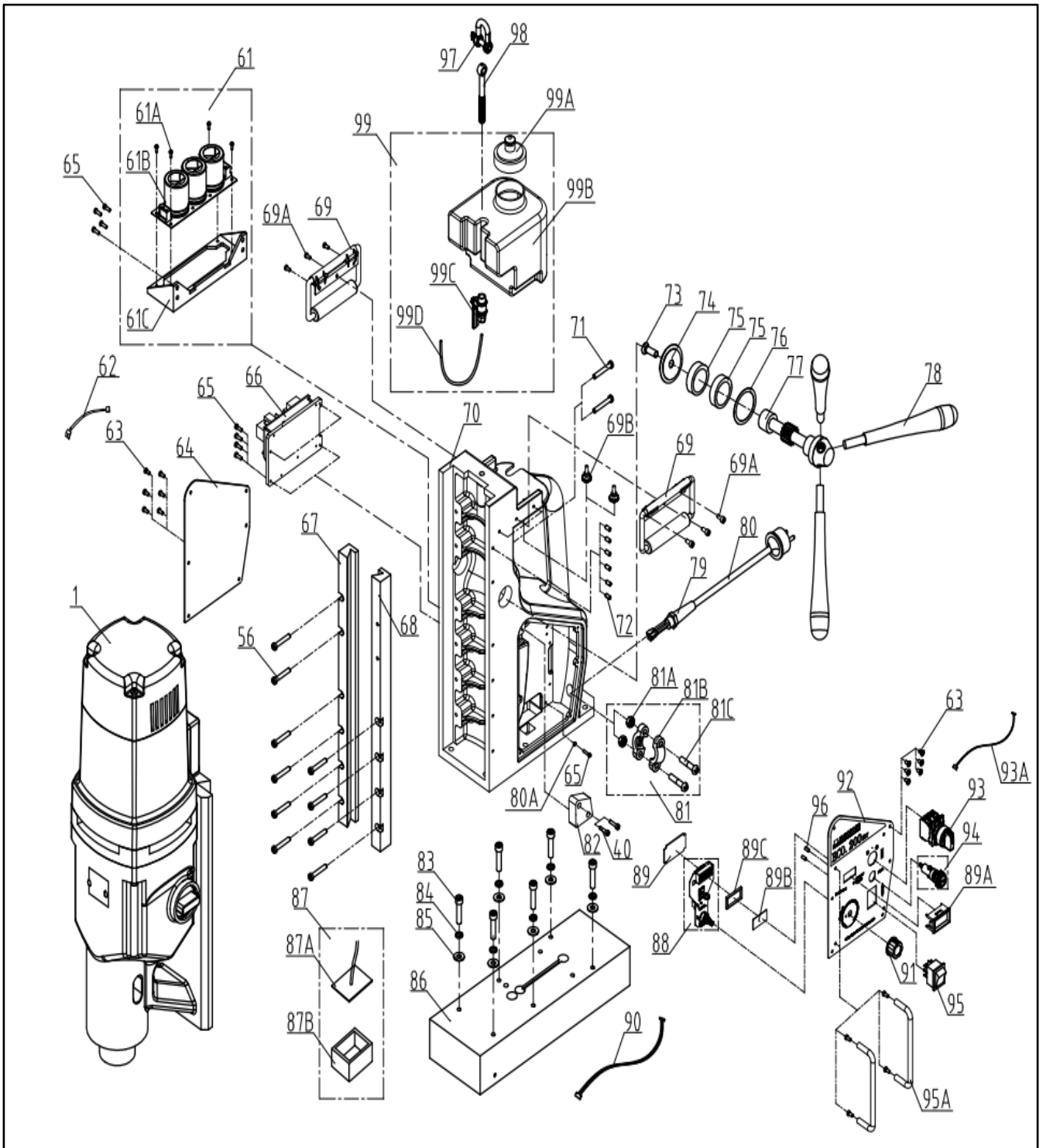
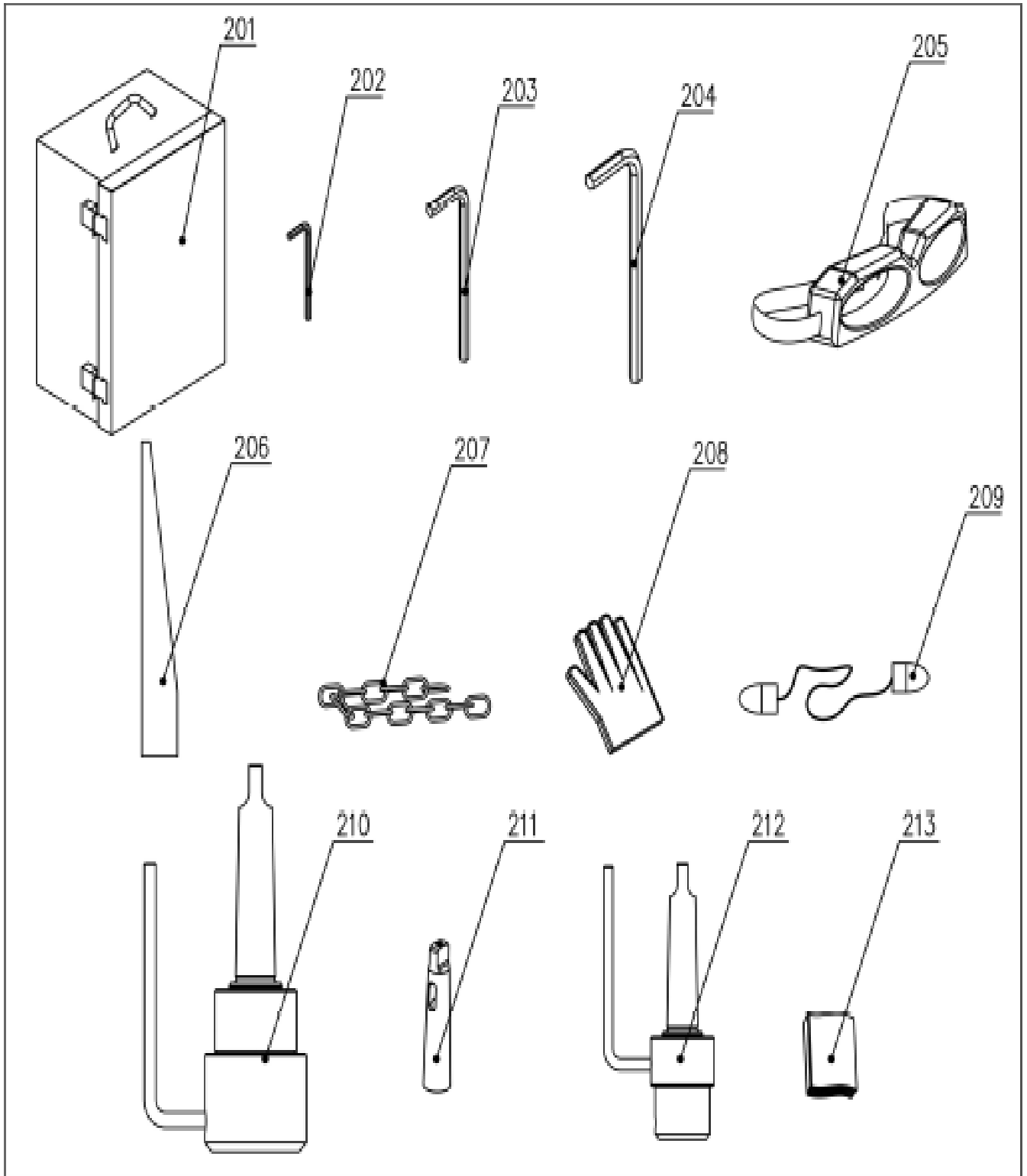


8. Exploded views & spare parts list

8.1 Exploded views







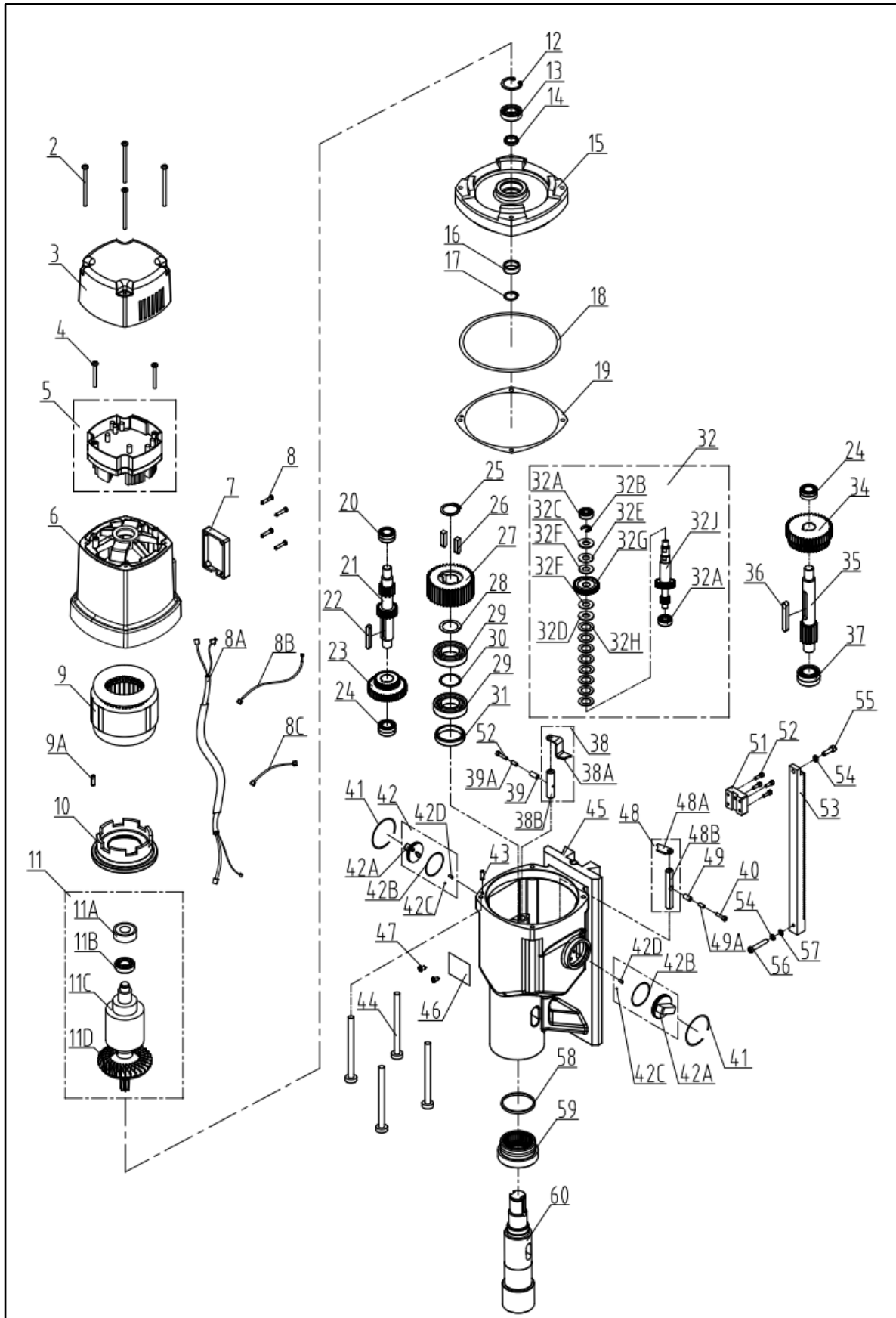
7. Trouble shooting

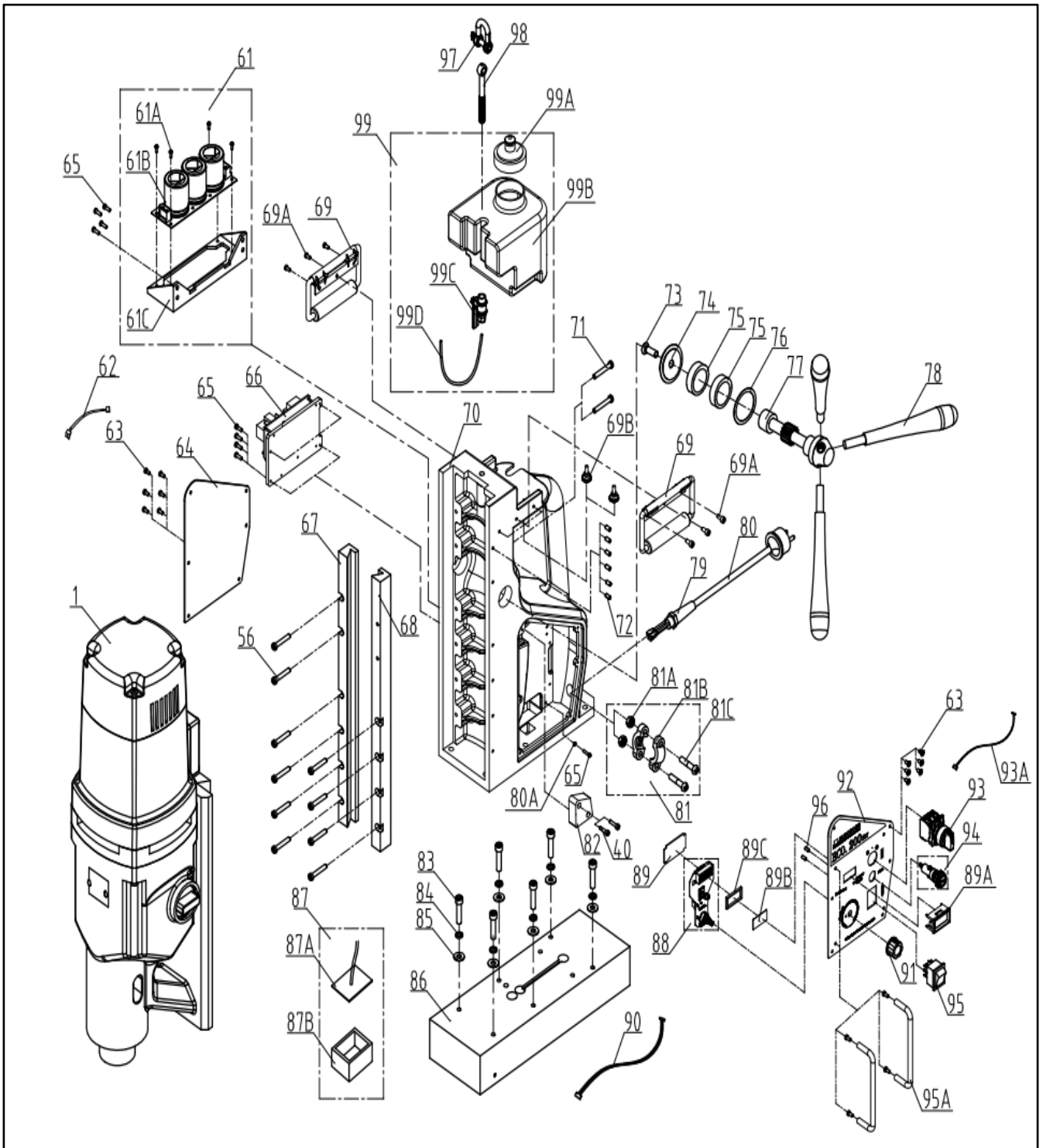
| | |
|---|---|
| Magnet and motor do not function | <ul style="list-style-type: none"> - The magnet switch is not connected to the power supply - Damaged or defective wiring - Defective fuse - Defective magnet switch - Defective control unit - Defective power supply |
| Magnet does function, the motor does not work | <ul style="list-style-type: none"> - Damaged or defective wiring - Carbon brushes are stuck or worn out - Defective magnet switch - Defective On / Off switch - Defective control unit - Defective armature and/or field |
| Falut code:0001 displayed | <ul style="list-style-type: none"> - -Motor overload - -Power protection program activated |
| Magnet does not function, the motor does | <ul style="list-style-type: none"> - Defective magnet - Defective wiring of magnet - Defective control unit |
| Annular cutters break quickly, holes are bigger than the annular cutter | <ul style="list-style-type: none"> - Clearance in the guide - Bent spindle - Shaft extending from the motor is bent - Bent pilot pin |
| Motor running roughly and/or seizing up | <ul style="list-style-type: none"> - Bent spindle - Shaft extending from the motor is bent - Triangular guide not mounted straight - Dirt between spindle and triangular guide |
| Motor starts running when magnet switch is turned on | <ul style="list-style-type: none"> - Damage or defective relay in control unit |
| Motor making a rattling sound | <ul style="list-style-type: none"> - Gear ring (bottom of the armature) worn out - Gear(s) worn out - No oil in gearbox |
| Motor does not start or fails | <ul style="list-style-type: none"> - Damaged or defective wiring - Dirt in sensor control unit - Defective or loose magnet on top of armature - Damaged or defective (sensor) control unit - Damage to armature or field coil |
| Guiding takes a great deal of effort | <ul style="list-style-type: none"> - Guide is set too tight - Guide is dry, needs to be greased - Guide/gear- rack/rotation system dirty or damaged |
| Insufficient magnetic force | <ul style="list-style-type: none"> - Damaged or defective wiring - Bottom of magnet not clean and dry - Bottom of magnet not flat - Workpiece is not bare metal - Workpiece is not clean or flat - Workpiece is less than 6 mm (too thin) - Defective control unit - Defective magnet |

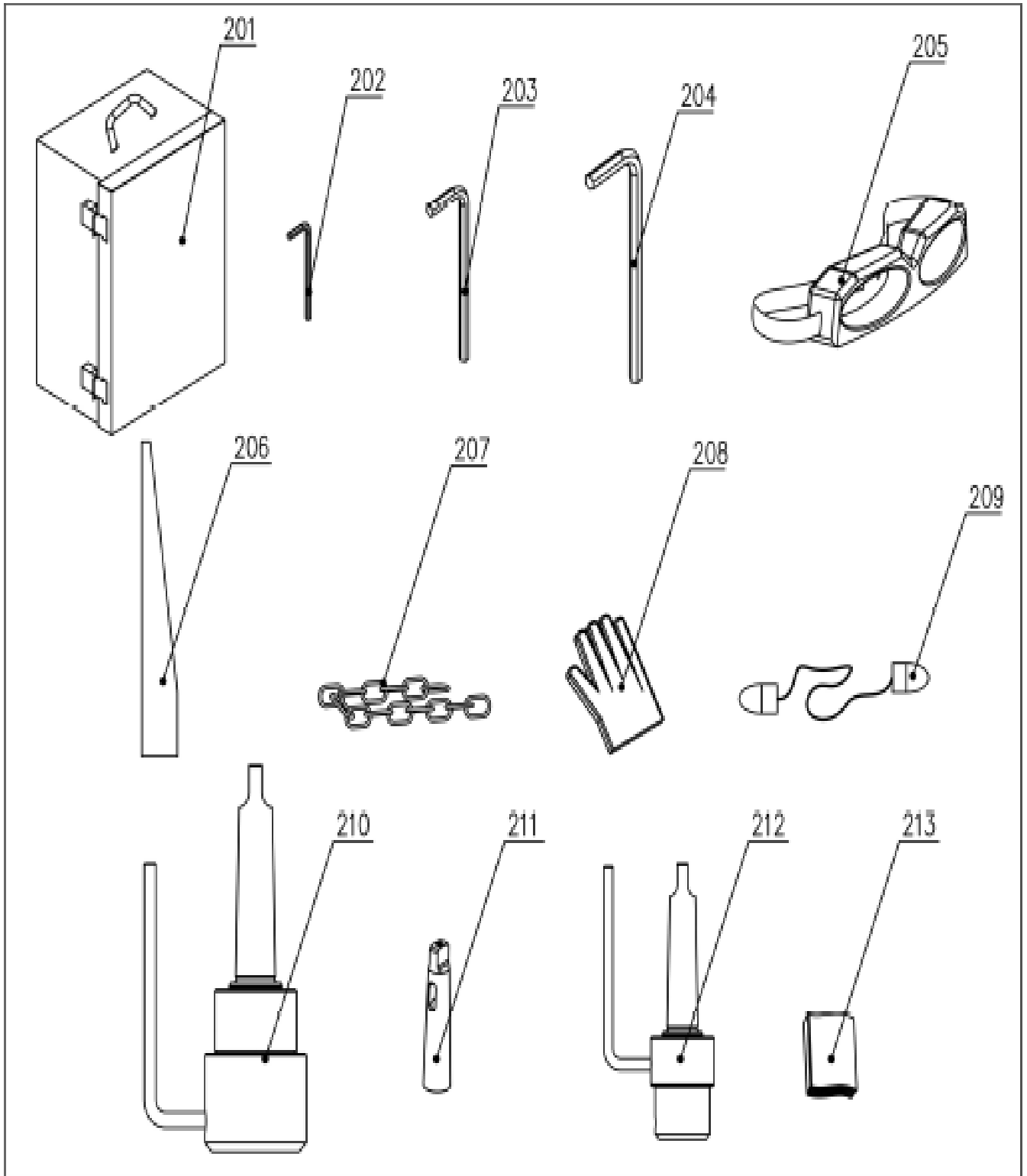
| | |
|--|---|
| Frame under voltage | <ul style="list-style-type: none"> - Damaged / defective wiring - Defective magnet - Motor seriously dirty |
| Fuse blows when magnet switch is turned on | <ul style="list-style-type: none"> - Damaged or defective wiring - Wrong value fuse - Defective magnet switch - Defective control unit - Defective magnet |
| Fuse blows when motor is started | <ul style="list-style-type: none"> - Damaged or defective wiring - Wrong value fuse - Motor running roughly - Defective armature and / or field - Defective control unit |
| Rotation system free stroke too long | <ul style="list-style-type: none"> - Loose or defective gear rack - Defective rotation system |

8. Exploded views & spare parts list

8.1 Exploded views







8.2 Sparepart lists

ECO.200S/T

| No. | Part no. | Description | Qty |
|-----|--------------|--------------------------------|-----|
| 2 | 200.0030 | Screw | 4 |
| 3 | 200.0107 | End-Cover | 1 |
| 4 | 200.0031 | Screw | 2 |
| 5 | 200.0025 | control panel PCB | 1 |
| 6 | 200.0015 | Housing | 1 |
| 7 | 200.0024 | Cable-housing | 1 |
| 8 | 200.0036 | Screw | 4 |
| 8A | 200.1011 | Combo Cable | 1 |
| 8B | 200.0115 | Two-core cable | 1 |
| 8C | 200.1012 | Red and black linecomponents 1 | 1 |
| 9 | 200.0027 | Stator | 1 |
| 9A | 200.0133 | Pin | 1 |
| 10 | 200.0023 | Plastic plate | 1 |
| 11 | 200.1010 | Armature set(220v) | 1 |
| 11A | 200.0046 | Rubber-Bearing | 1 |
| 11B | 200.0070 | Bearing | 1 |
| 11C | 200.0028 | Armature | 1 |
| 11D | 200.0047 | Blades | 1 |
| 12 | 200.0048 | Circlip | 1 |
| 13 | 032.0196 | Bearing | 1 |
| 14 | 200.0049 | Sealant | 1 |
| 15 | 200.0042 | Gearbox cover | 1 |
| 16 | 200.0065 | Rotor iron seal | 1 |
| 17 | 200.0071 | Circlip | 1 |
| 18 | 200.0051 | O-ring | 1 |
| 19 | 200.0128 | Gasket | 1 |
| 20 | 200.0052 | Bearing | 1 |
| 21 | 200.0020 | Gear | 1 |
| 22 | 200.0053 | Key | 1 |
| 23 | 200.0019 | Double row gear 1 | 1 |
| 24 | 200.0054 | Bearing | 2 |
| 25 | 036.0018 | Circlip | 1 |
| 26 | 200.0055 | Key | 2 |
| 27 | 200.0018 | Gear | 1 |
| 28 | 100.0441 | Gasket | 1 |
| 29 | 100.0466 | Bearing | 2 |
| 30 | 200.0056 | Gasket | 1 |
| 31 | 100S.0065 | Sealant | 1 |
| 32 | 200.1002 | Skew gear assembly | 1 |
| 32A | air.0049 | Bearing | 2 |
| 32B | 200.0057 | Circlip | 1 |
| 32C | 200.0058 | Waist gasket | 1 |
| 32D | 200.0059 | Waist gasket | 1 |
| 32E | 200.0060 | Copper gasket | 1 |
| 32G | 200.0022 | Helical-gear | 1 |
| 32H | 200.0062 | Washer | 8 |
| 32J | 200.0017 | Armature-Gear | 1 |
| 34 | 200.0016 | Large double gear 1 | 1 |
| 35 | 200.0021 | 3# Shaft gear | 1 |
| 36 | 200.0064 | Key | 1 |
| 37 | 200.0066 | Bearing | 1 |
| 38 | 200.1003 | S-shaped fork set | 1 |
| 38A | 200.0067 | S-shaped fork plate | 1 |
| 38B | 100S.0017B-1 | Short fork rod finis | 1 |

| No. | Part no. | Description | Qty |
|-----|-------------|---------------------------------|-----|
| 39 | 200.0068 | Screw column | 1 |
| 39A | 200.0131 | Isolation column | 1 |
| 40 | 020.0229A | Screw | 3 |
| 41 | 200.0069 | Stop ring for hole | 2 |
| 42 | 200.1004 | Gear switch assembly | 2 |
| 42A | 200.0029 | rotary knob | 2 |
| 42B | 200.0072 | O ring | 2 |
| 42C | 050.0080 | Positioning bead | 2 |
| 42D | 0025 | locating tab | 2 |
| 43 | 100.0549 | locating tab | 1 |
| 44 | 200.0073 | Lnside hexagonal bolt | 4 |
| 45 | 200.0014 | Gearbox | 1 |
| 46 | 200.0074 | Speed label | 1 |
| 47 | 080.0459 | Label rivet | 2 |
| 48 | 200.1005 | Parallel fork assembly | 1 |
| 48A | 200.0075 | Parallel fork piece | 1 |
| 48B | 200.0017B-2 | Flat fork rod finished product | 1 |
| 49 | 200.0076 | Screw column | 1 |
| 49A | 200.0132 | Isolation column | 1 |
| 51 | 200.0037 | Rack adapter block | 1 |
| 52 | 020.0229 | Screw | 5 |
| 53 | 200.0038 | Rack | 1 |
| 54 | 020.0106C | Spring washer | 2 |
| 55 | 020.0106 | Screw | 1 |
| 56 | 020.0146B | Screw | 11 |
| 57 | 020.0106B | Blackened flat pad | 1 |
| 58 | 100S.0067 | Wool felt | 1 |
| 59 | 100S.0066 | Combination bearing | 1 |
| 60 | 200.0462 | Output shaft | 1 |
| 61 | 200.1006 | Capacitor assembly | 1 |
| 61A | 032T.0019XA | Screw | 4 |
| 61B | 200.0077 | Capacitance | 1 |
| 61C | 200.0045 | Capacitor plate supp | 1 |
| 62 | 200.1013 | Red and black line components 2 | 1 |
| 63 | 020.0101 | Screw | 12 |
| 64 | 200.0082 | Rear-panel | 1 |
| 65 | 020.0327 | Screw | 9 |
| 66 | 200.0026 | Control Board PCB Board | 1 |
| 67 | 200.0039 | Aluminum-rail (left) | 1 |
| 68 | 200.0040 | Aluminum-rail (right) | 1 |
| 69 | 200.0097 | Handle | 2 |
| 69A | 200.0134 | Screw | 6 |
| 69B | 200.0103 | Hand screw | 2 |
| 70 | 200.0094 | Frame | 1 |
| 71 | 200.0078 | Screw | 2 |
| 72 | 020.0301 | Screw | 6 |
| 73 | 020.0081 | Screw | 1 |
| 74 | 050.0030 | Rocker arm cover plate | 1 |
| 75 | 032.0127 | Rocker arm steel sleeve | 2 |
| 76 | 030.0027 | Spacer | 1 |
| 77 | 200.0101 | Rocker shaft | 1 |
| 78 | 020.0314X | Rocker arm handle | 3 |
| 79 | 020.0031 | PG11 anti-bending joint | 1 |
| 80 | 020.0005A | European standard power cord | 1 |

8.3 Wiring diagram

