

# CX606 / CX607 POWER FEED FOR MILL/DRILL INSTRUCTIONS



## CX606 / CX607 SPECIFICATIONS

| Motor                | 30W, 90VDC           |
|----------------------|----------------------|
| Amp                  | 0.6Amp               |
| Power Supply         | •                    |
| Table Travel Speed F | Range0 - 15-3/4"/min |

### **CONTROLS**

The CX606/CX607 is designed to be installed on the left side of the CX600 and CX601 table respectively.

The figure below shows the controls of your power feeder.

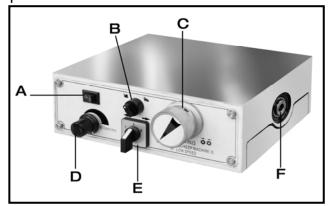


Figure-1 Feeder controls

- **A. ON/OFF SWITCH** turns the power ON or OFF to the power feeder.
- **B. RAPID MOVEMENT SWITCH** moves the work table at maximum/minimum speed in the selected direction.
- C. SHIFT KNOB engages to use the power feed and disengages to use the hand wheel.
- **D. VARIABLE SPEED KNOB** controls the speed of the table movement.

- E. FORWARD/REVERSE SWITCH controls the direction of table movement. When in "0" it disengages the feed.
- F. LEADSCREW CONNECTOR connects the power feed to the table leadscrew.

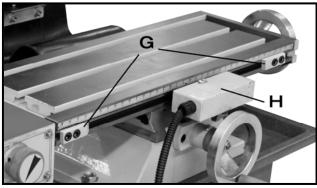


Figure-2 Limit switch and stops

- G. LIMIT STOPS are positioned along side the table to limit the range of table's movement.
- H. LIMIT SWITCH when activated by the limit stops. It cuts power to the power feeder. To reset, position the direction switch to neutral (middle). Disengage the power feed using the shift knob. Use the hand wheel and return the table to the operating range.

#### INSTALLATION

Please read and understand the instructions given in this manual to install your power feeder. Read the entire installation section before you begin installation.

#### TO INSTALL THE POWER FEED:

Remove the nut securing the hand wheel and remove the hand wheel from the left side of the table. See figure-3.

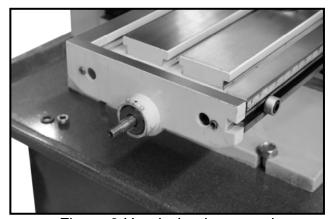


Figure-3 Hand wheel removed

Remove the key from the lead screw. See figure-4.

Remove the cap screws securing the table end plate and remove the end plate. See figure-4.

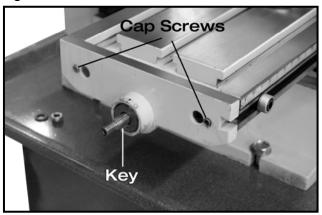


Figure-4 Removing cap screws and end plate

While the end plate is off the table and before installing the power feeder, insert the two T-nuts into the front slot of the table for mounting the table stops in the later step.

Remove the cap screws and remove the bottom cover shown in figure-5.

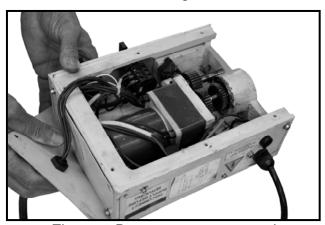


Figure-5 Bottom cover removed

Replace the key in the leadscrew, align the keyway on the power feeder and install the power feeder to the table.



Figure-6 Installing the power feed

Secure the power feed to the table from underneath using cap screws provided. See figure-7.

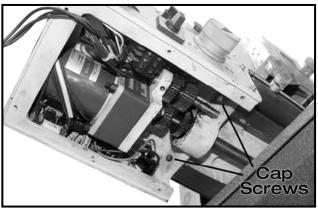


Figure-7 Securing the power feed to the table

Replace the bottom cover using the screws that were removed in the previous step.

Remove the center stop block by removing the two cap screws securing it to the table. See figure-8.

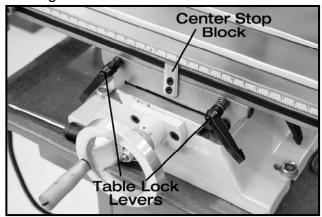


Figure-8 Removing center stop block and table lock levers

Remove the nut on the cross feed hand wheel and remove the hand wheel.

Hold the bracket with the limit switch against the table and mark the table with a marker through the holes on the bracket.

Remove the bracket with the limit switch and use a hammer and a center punch and mark the hole locations for drilling.

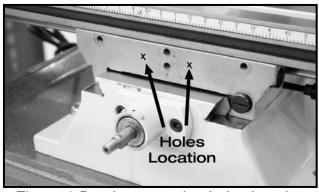


Figure-9 Bracket mounting holes location

Use a 3.3mm /30 drill bit and drill two holes for mounting the limit switch. Once the holes are drilled, tap the holes with a M4-.7 tap drill.

Attach the limit switch to the table and secure it using two cap screws provided. See figure-10.

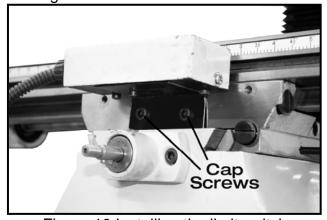


Figure-10 Installing the limit switch

Remove the two round table stops using a proper sized hex wrench. See figure-11.

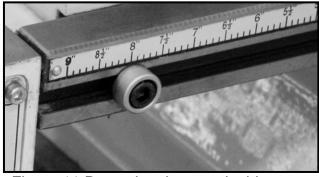


Figure-11 Removing the round table stops

Attach the limit stops to the table slot by securing the cap screws to the T-slot nuts along the table. See figure-12.



Figure-12 Installing the table limit stops

Re-install the table lock levers.

Re-install the cross feed hand wheel.

## MOTOR BRUSH REPLACEMENT

The power feeder is powered by a DC motor that has brushes which will need to be replaced periodically as they need.

#### TO REPLACE THE MOTOR BRUSH:

Remove the four cap screws on the side of the power feed and remove the side cover to access the motor and the motor brushes. See figure-13.

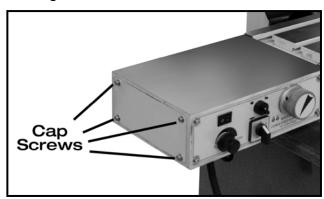


Figure-13 Removing the side cover

Use a proper sized screw driver and remove the motor brush cap from the motor housing. See figure-14.

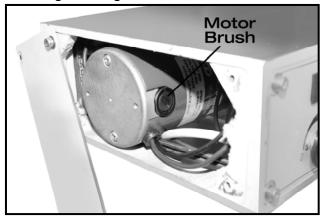


Figure-14 Motor brush

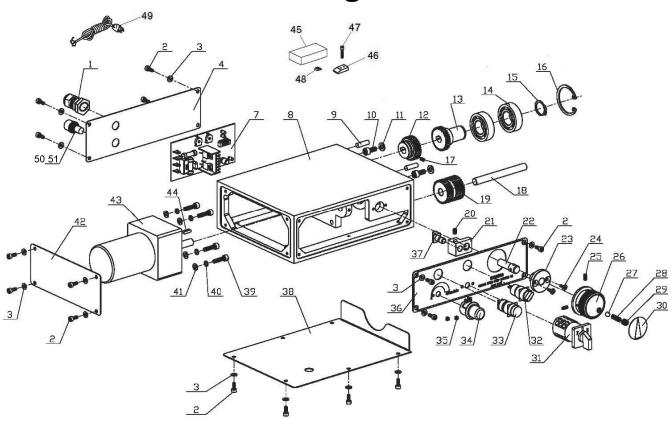
Remove the used motor brush and replace it with a new one.

Replace the second motor brush in the same manner.

Reinstall the motor brush cover.

Reinstall the power feed side cover.

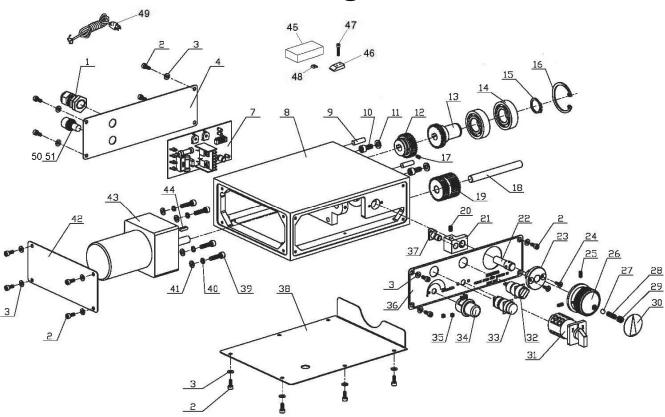
# **CX606 Parts Diagram and List**



| REF | Part#         | Description            | Specs      | QTY' |
|-----|---------------|------------------------|------------|------|
| 1   |               | Strain Relief          | 1/4"LT     | 1    |
| 2   | GB/T70.1-2000 | Cap Screw              | M4X10      | 18   |
| 3   | GB/T848-85    | Flat Washer            | €4         | 18   |
| 4   | WMD20V-04-02B | Back Cover             |            | 1    |
| 7   |               | Ciacuit Board          | i)         | 1    |
| 8   | WMD20V-04-06B | Body                   |            | 1    |
| 9   | GB/T119-86    | Dowel Pin              | B6X22      | 2    |
| 10  | GB/T70.1-2000 | Cap Screw              | M6-1X10    | 2    |
| 11  | GB/T97.1-85   | Flat Washer            | ¢6         | 2    |
| 12  | WMD20V-04-03  | Gear W/spacer          | 40T        | 1    |
| 13  | WMD20V-04-05A | Gear Shaft             | 40T        | 1    |
| 14  | GB/T296-94    | Ball Bearing           | 6004ZZ     | 2    |
| 15  | GB/T894.1-86  | Ext Retaining Ring     | ¢20        | 1    |
| 16  | GB/T893.1-86  | Int Retaining Ring     | <b>⊄42</b> | 1    |
| 17  | GB/T71-85     | Slotted Cone Set Screw | M5X8       | 1    |
| 18  | GB/T119-86    | Shaft                  | B10X95     | 1    |
| 19  | WMD20V-04-09A | Gear                   | 40T        | 1    |
| 20  | GB/T77-85     | Set Screw              | M5X10      | 1    |
| 21  | WMD20V-04-10  | Pivot shift            |            | 1    |
| 22  | WMD20V-04-13  | Transmission Shaft     |            | 1    |
| 23  | WMD20V-04-12  | Hub Back Plate         |            | 1    |
| 24  | GB/T819-85    | PHLP HD Set Screw      | M4X10      | 2    |
| 25  | GB/T78-85     | Cone Set Screw         | M4X10      | 2    |
| 26  | WMD20V-04-11  | Shift Knob             |            | 1    |
| 27  | GB/T308-84    | Steel Ball             | ¢ 6.5      | 1    |

| REF | Part#          | Description                           | Specs            | QTY |
|-----|----------------|---------------------------------------|------------------|-----|
| 28  | GB/T2089-80    | Compression Spring                    | 1X5X18           | 1   |
| 29  | GB/T77-85      | Set Screw                             | M8-1.25X6        | 1   |
| 30  | WMD20V-04-16   | Indicator Plate                       |                  | 1   |
| 31  |                | Direction Switch                      |                  | 1   |
| 32  |                | RAPID SPEED SWITCH                    | KEDU ZH-A3-06    | 1   |
| 33  |                | On/Off Paddle Switch CQC              | LAS1-A           | 1   |
| 34  |                | Potentiometer                         | ED 11 0-8WX14-12 | 1   |
| 35  | GB/T75-85      | Set Screw                             | M5-0.8X5         | 2   |
| 36  | WMD20V-04-15A  | Control Panel                         |                  | 1   |
| 37  | WMD20V-04-14   | Shift Fork                            |                  | 1   |
| 38  | WMD20V-04-08-2 | Bottom Cover                          |                  | 1   |
| 39  | GB/T70.1-2000  | Cap Screw                             | M5-0.8X25        | 4   |
| 40  | GB/T93-87      | Lock Washer                           | ¢5               | 4   |
| 41  | GB/T93-88      | Flat Washer                           | ¢6               | 5   |
| 42  | WMD20V-04-01   | Left Cover                            |                  | 1   |
| 43  |                | Motor 30W 90VDC 0.6A                  | 70JB             | 1   |
| 44  | GB/T1096-79    | Key                                   | 4X14             | 1   |
| 45  |                | Limited Switch Assembly w/bracket     |                  | 1   |
| 46  |                | Limited Stop                          |                  | 2   |
| 47  |                | Cap Screw                             | M6-1X10          | 2   |
| 48  |                | T-Slot Nut                            | M6-1             | 2   |
| 49  |                | Power Cord 16G 3W                     |                  | 1   |
| 50  |                | Fuse 15A 250V 0.18" Fast-Acting glass |                  | 1   |
| 51  |                | Fuse Holder MF528                     |                  | 1   |

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| 50  |                | Fuse 15A 250V 0.18" Fast-Acting glass |                  | 1    |
| 51  |                | Fuse Holder MF528                     |                  | 1    |



#### WARRANTY

#### **CRAFTEX LIMITED 3 YEARS WARRANTY**

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **three years** for parts and 90 days for labour (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras.

Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

#### RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept *collect* shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.

