



3CPL Speed Lathe Manual

The Crozier Model 3CPL Speed Lathe is a chuck model designed to handle the odd jobs that do not fit in a collet or for small batch jobs.

Standard Features

- 3/4 HP Belt Drive
- 6 inch manual chuck
- 1800 RPM, Single Speed
- Electric Brake
- Cast Housing
- 5C Collets
- 3 Phase / 240 Volts



DESCRIPTION:

The unit is small enough to fit on a table. The chuck is a standard six inch design. The jaws are two piece for doing both ID and OD work. The oversized spindle runs on a double row bearings on the end with the chuck. Power is provided by a 3/4 HP, 3 phase motor. The spindle is stopped by a electric brake on the back of the motor.

SPECIFICATIONS:

Collet

Chuck Type	3 Jaw
Chuck Capacity	6 inches
Chuck Operation	Manual

Spindle

Housing Construction	Cast
Bearing Type	Ball
Front Bearing	Double Row
Rear Bearing	Single Row
Rear Lubrication	Sealed
Standard Spindle Speed	1800 RPM
Maximum Spindle Speed	2400 RPM
Spindle through Hole	1.125 inches
Spindle Brake	Electric

Drive System

Motion	Multi-groove V Belt
Motor Speed	1800 RPM
Motor Horsepower	.75 HP
Motor Phase	Three

General Notes

Electrical	Three Phase/240 Volts/5 Amps
Base Width	20 inches
Base Depth	18 inches
Machine Height	16 inches
Machine Weight	140 lbs.
Shipping Weight	160 lbs.

OPERATION MANUAL:

UNPACKING

The Crozier Model 3CPL Speed Lathe is attached to a wooden pallet. The Speed Lathe is attached to the bottom of the container with four carriage bolts. Remove the bolts from the mounting holes. The Speed Lathe is ready for installation. Check the box for all parts. If any damage is noted call the freight company immediately. The freight company is responsible for the safe delivery of the machine and if immediate notification of damage is not reported, you might not be able to file a claim for damages.

INSTALLATION

The Crozier Model 3CPL Speed Lathe must be secured to a suitable stand at all times.

LUBRICATION

The Crozier Model 3CPL Speed Lathe is designed to operate with sealed bearings. No provision has been made for introducing grease into the bearings. Should it become necessary to change bearings only sealed bearings of electric motor quality C/3 fit with seals or shields on both sides should be used. No bearing spacers are required.

POWER CONNECTION

The Crozier Model 3CPL Speed Lathe input requirement is 240 Volts, three-phase power. Motor rotation is counter-clockwise, looking directly at the shaft. A qualified electrician is required to install the electrical connection. The machine must have a power disconnect placed near the machine. The electrician must run the wire through conduit from the disconnect to the control box. The incoming power is hooked up to the #1, #2, and #3 terminals. Ground is terminal #4. Make sure all connections are tight before energizing the motor.

CHUCK OPERATION

The Crozier Model 3CPL is equipped with a manual 3-jaw lathe style chuck. The chuck operates the same fashion as a regular lathe. Make sure the part is secured in the chuck before starting the motor. Also make sure the chuck key is never left in the chuck for any reason.

BRAKE

The Speed Lathe is equipped with a mechanical brake that is attached to the back of the drive motor. The brake is released on motor start up and is applied when the motor is stopped. If the spindle needs to be turned by hand, there is a brake release lever on the back of the brake.

GENERAL NOTES

As with all equipment proper care should be taken. Safety glasses must be worn at all times while operating the Speed Lathe. It is the responsibility of the end user to determine the suitability of the Speed Lathe in their application.

This machine is a precision machine tool. The components used in its manufacture are of the highest quality and the machined parts are held to very exact tolerances. If you expect the machine tool to last, you must take proper care of it.

The Crozier Model 3CPL Speed Lathe can be cycled on and off as fast as you can do the work.

PARTS LIST:

Part #	Description	Qty	Price
PL4-12	Spindle Housing	1	\$ 800.00
PL4-13	Spindle Pulley	1	\$ 75.00
PL4-21	Woodruff Key	1	\$ 1.75
PL4-24	Snap Ring (196)	1	\$ 6.50
PL4-40	Base	1	\$ 175.00
PL4-45	Drive Belt	1	\$ 25.00
PL4-46	Motor Pulley	1	\$ 75.00
PL4-53	Front Seal	1	\$ 25.00
PL4-54	Front Bearing Cap	1	\$ 125.00
PL4-55	Rear Bearing Cap	1	\$ 125.00
PL4-70	Belt Guard	1	\$ 50.00
PL4-74	Chuck Spindle	1	\$ 400.00
PL4-75	Chuck Back Plate	1	\$ 200.00
PL4-76	Chuck Ring	1	\$ 45.00
PL4-78	Chuck	1	\$ 300.00
PL4-85	Motor Mount	1	\$ 135.00

Part #	Description	Qty	Price
B-100	Bearing-6209ZZ	1	\$ 32.00
B-102	Bearing-5210ZZ	1	\$ 65.00
E-100	Control Box	2	\$ 60.00
E-300	Motor Contactor	2	\$ 75.00
E-577	Power Cord	1	\$ 10.00
E-600	Start Button	1	\$ 25.00
E-601	Stop Button	1	\$ 35.00
E-610	Label-Start	1	\$ 4.00
E-611	Label-Stop	1	\$ 4.00
F-107	Set Screw 5/16-18 x3/8	2	\$ 1.75
F-204	Allen Cap 5/16-18 x1/2	8	\$ 1.75
F-209	Allen Cap 3/8-16 x 1/2	4	\$ 1.75
F-301	Allen Flat 8/32 x 3/4	8	\$ 1.75
N-100	Front Nut	1	\$ 15.00
M-105	Motor	1	\$ 510.00