



MODEL G0875Z
7" X 24" 3HP
ENCLOSED CNC MILL
MANUAL INSERT

For Machines Mfd. Since 09/24
and Owner's Manual Printed 03/19

The Model G0875Z is the same machine as the Model G0875 except for the 3 HP spindle motor and 220V 3-Phase power supply requirement. Except for the differences noted in this insert, all other content in the Model G0875 owner's manual applies to this machine.

▲WARNING: To reduce the risk of serious injury, you **MUST** read and understand this insert—and the entire Model G0875 manual, the SIEMENS SINUMERIK 808D Programming and Operating Manual, and the SIEMENS SINUMERIK 808D Diagnostics Manual—**BEFORE** assembling, installing, or operating this machine!

If you have any further questions about this manual insert or the differences between the Model G0875Z and the Model G0875, contact our Technical Support at (570) 546-9663 or email techsupport@grizzly.com.



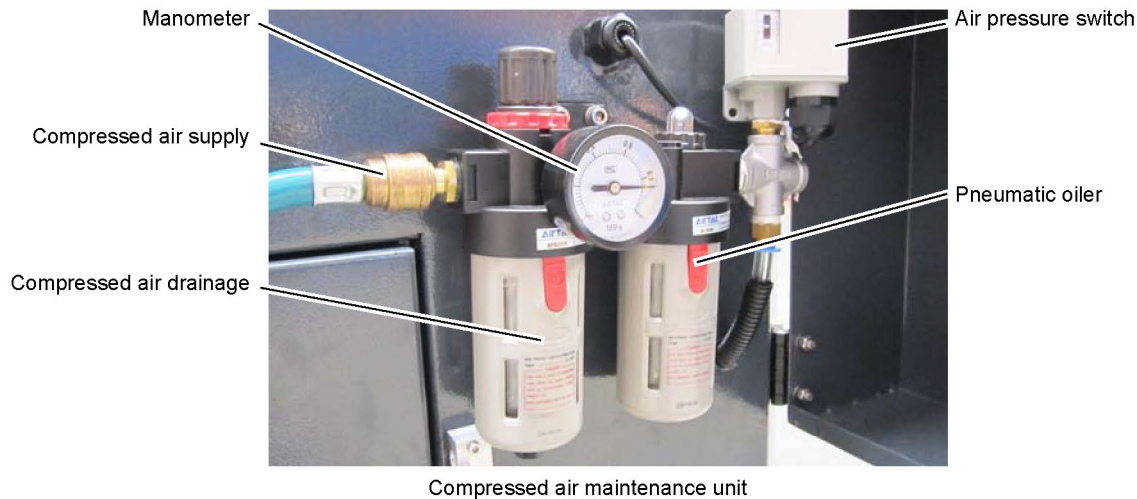
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*****Keep for Future Reference*****

Connecting Air Supply

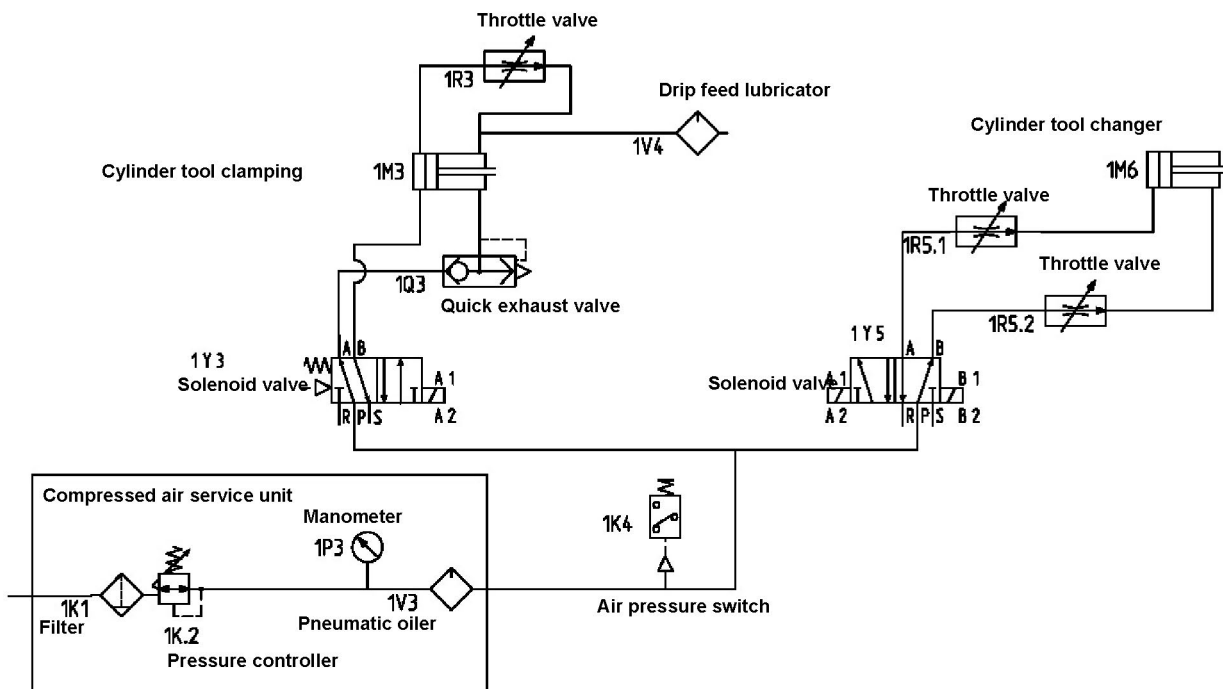
3.3.2 Connection compressed air supply

- ➔ Open the cover and connect the compressed air supply with at least 6.5 bars to the quick-action coupling of the compressed air maintenance unit.
- ➔ Adjust a pressure of 6.3 bars using the set screw of the maintenance unit.



ATTENTION!

In order to ensure a failure-free operation of the machine it is necessary that the required air pressure is continuously applied on the machine at constant quality. In case of insufficient air supply, for instance interruptions occur during tool change.





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0875Z 7" X 24" 3HP ENCLOSED CNC MILL

Product Dimensions:

Weight 1190 lbs.
Width (side-to-side) x Depth (front-to-back) x Height 65 x 42 x 78 in.
Footprint (Length/Width) 65 x 68 in.

Shipping Dimensions:

Type Wood Crate
Content Machine
Weight 1444 lbs.
Length x Width x Height 72 x 46 x 85 in.
Must Ship Upright Yes

Electrical:

Power Requirement 220V, 3-Phase, 60 Hz
Full-Load Current Rating 11.6A
Minimum Circuit Size 20A
Connection Type Cord & Plug
Power Cord Included Yes
Power Cord Length 72 in.
Power Cord Gauge 14 AWG
Plug Included Yes
Included Plug Type L15-20

Motor:

Spindle

Horsepower 3 HP
Phase 3-Phase
Amps 5.4A
Speed 4000 RPM
Type Servo
Power Transfer Belt
Bearings Shielded & Permanently Lubricated

X-Axis

Horsepower 0.55 HP
Phase 3-Phase
Amps 1.2A
Speed 3000 RPM
Type Servo
Power Transfer Direct
Bearings Sealed & Permanently Lubricated

Y-Axis

Horsepower 1 HP
Phase 3-Phase
Amps 2.1A
Speed 3000 RPM
Type Servo
Power Transfer Direct
Bearings Sealed & Permanently Lubricated



Z-Axis

Horsepower	1 HP
Phase	3-Phase
Amps	2.1A
Speed	3000 RPM
Type	Servo
Power Transfer	Direct Drive
Bearings	Sealed & Permanently Lubricated

Coolant Pump

Horsepower	40 Watts
Phase	Single-Phase
Amps	0.45A
Speed	2800 RPM
Type	TEFC Induction
Power Transfer	Direct Drive
Bearings	Shielded & Permanently Lubricated

Main Specifications:

Operation Information

Max Distance Spindle to Column	7-3/8 in.
Max Distance Spindle to Table	11 in.
Longitudinal Table Travel (X-Axis)	14 in.
Cross Table Travel (Y-Axis)	6 in.
Vertical Head Travel (Z-Axis)	9 in.
Position Resolution	± 0.002 in. (0.050mm)
Repeat Position Resolution	± 0.002 in. (0.050mm)
Air Requirement	0.8 MPa (8 Bar)

Table Info

Table Length	24-3/8 in.
Table Width	7 in.
Table Thickness	1-5/16 in.
Table Height (from Floor/Base)	45 in.
Table Weight Capacity	66 lbs.
Number of T-Slots	3
T-Slot Size	7/16 in.
T-Slots Centers	2 in.
X-Axis Rapid Feed Rate	240 IPM
Y-Axis Rapid Feed Rate	240 IPM
Z-Axis Rapid Feed Rate	240 IPM

Spindle Info

Spindle Taper	BT30
Pull Stud	BT30 x 45°
Range of Vertical Spindle Speeds	90 - 3000 RPM
Spindle Bearings (Size & Type)	Angular Contact Bearings

Fluid Capacities

Coolant Capacity	5 Gallons
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Construction

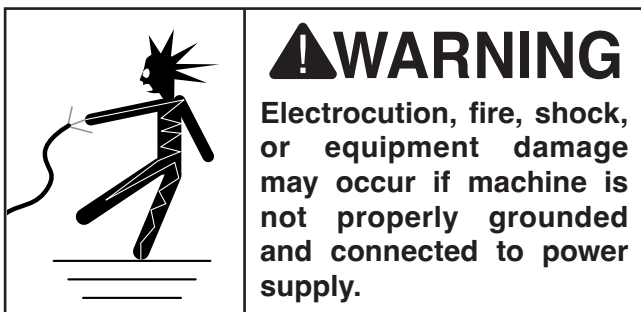
Spindle Housing/Quill	Steel
Table	Cast Iron
Head	Cast Iron
Column/Base	Cast Iron
Base	Cast Iron
Stand	Cast Iron
Paint Type/Finish	Enamel



POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.



Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 220V ...11.6 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

! CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

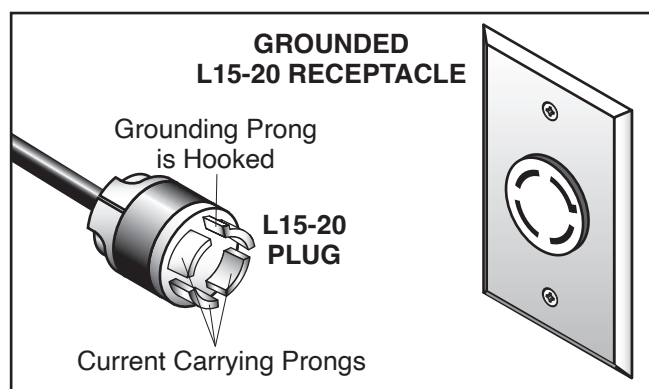
Nominal Voltage208V, 220V, 230V, 240V
Cycle60 Hz
Phase3-Phase
Power Supply Circuit20 Amps
Plug/Receptacle NEMA L15-20



Grounding Requirements

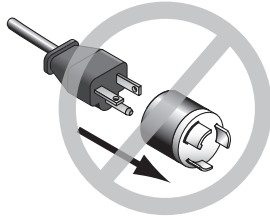
This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!



Typical L15-20 plug and receptacle.

! CAUTION



No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

! WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the machine is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size 12 AWG
Maximum Length (Shorter is Better).....50 ft.



WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance **BEFORE** making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

WARNING

Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved after-market parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You **MUST** follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

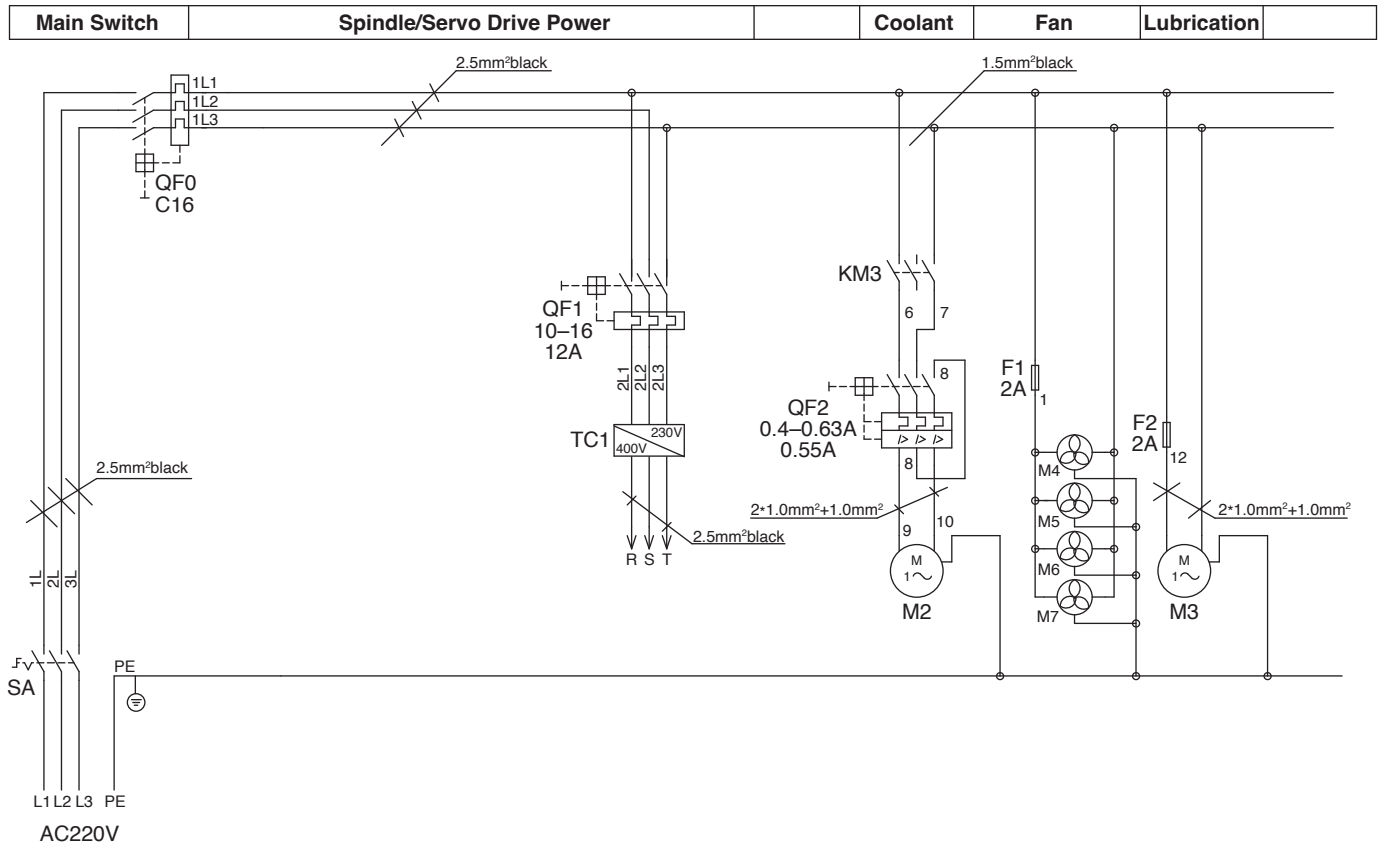
MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

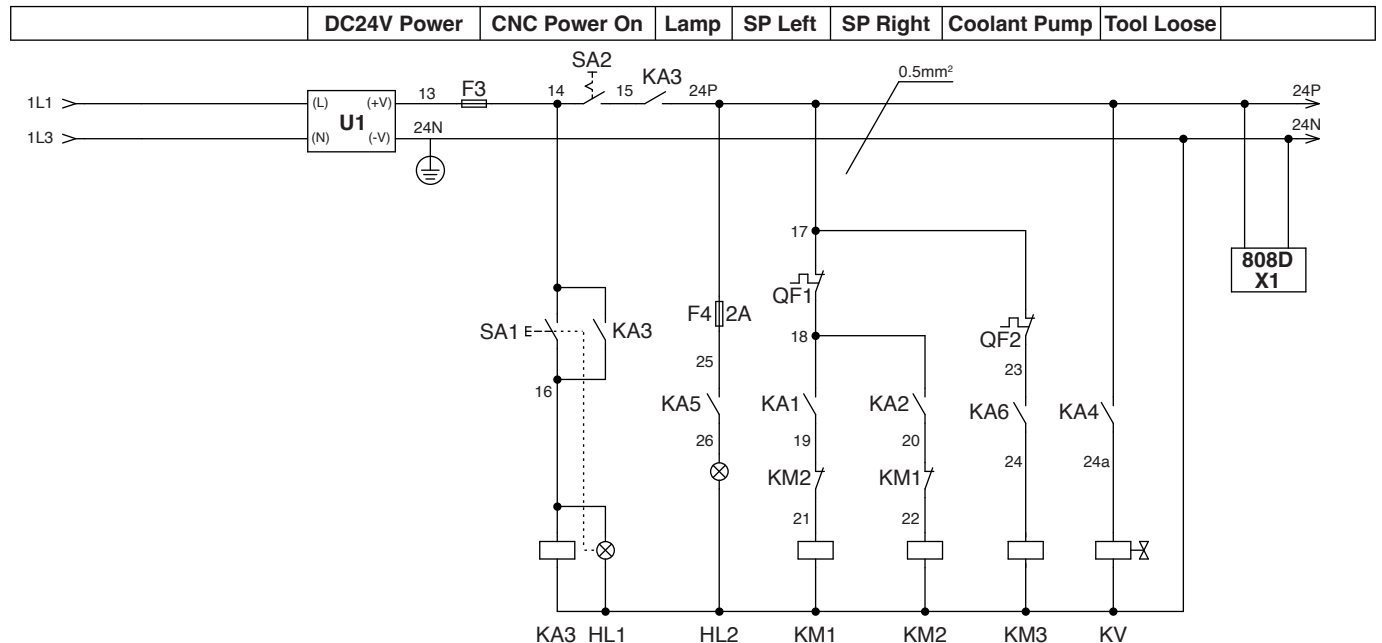
EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.



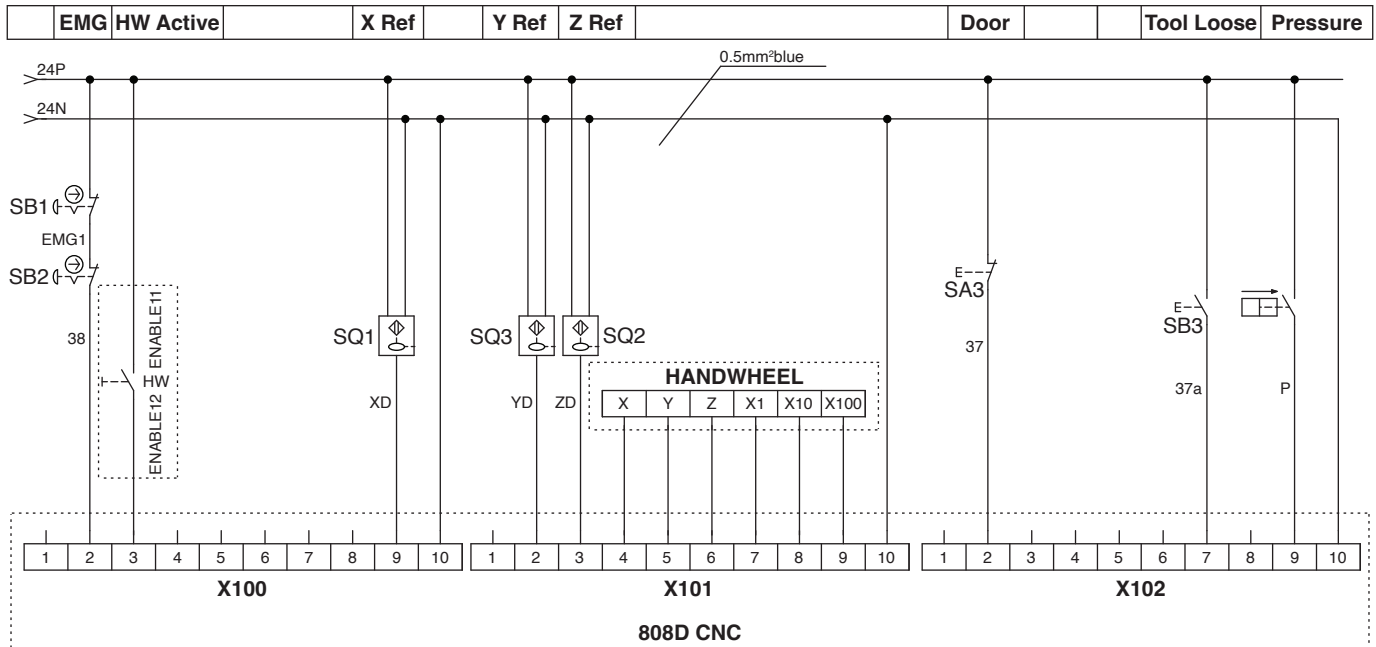
System Wiring Diagram (1)



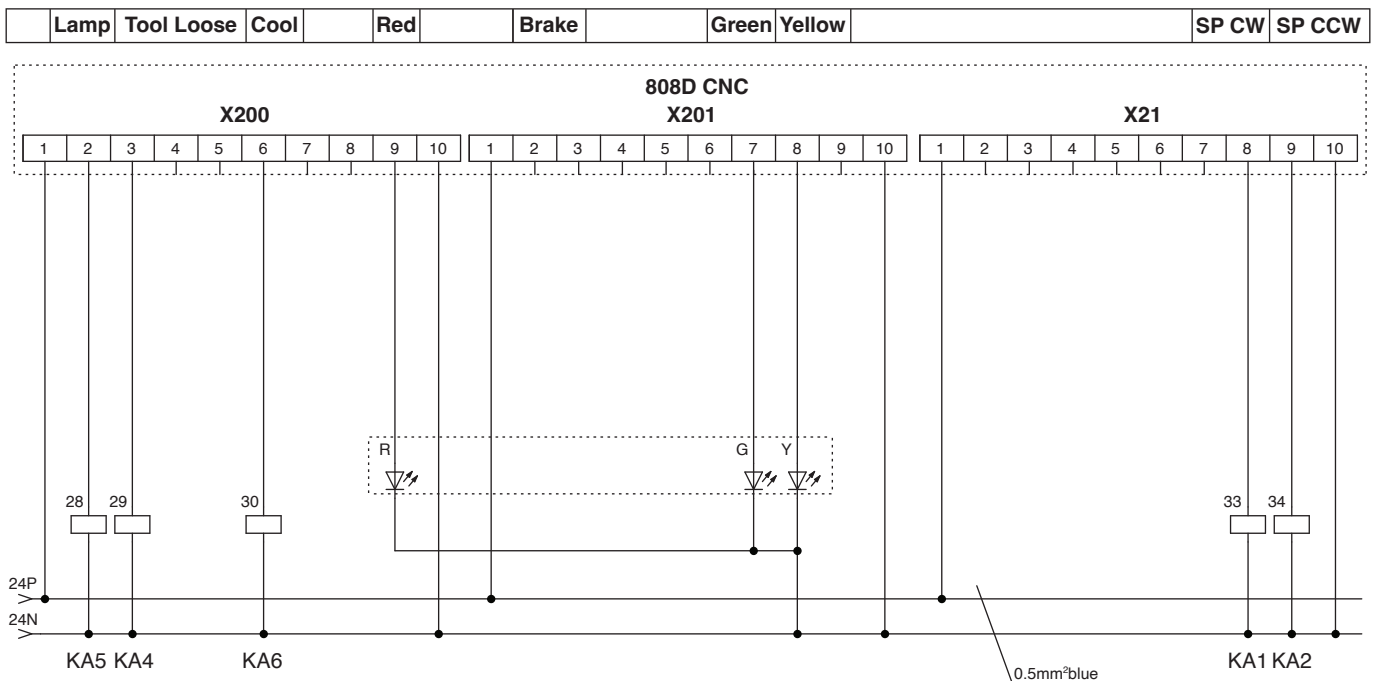
System Wiring Diagram (2)



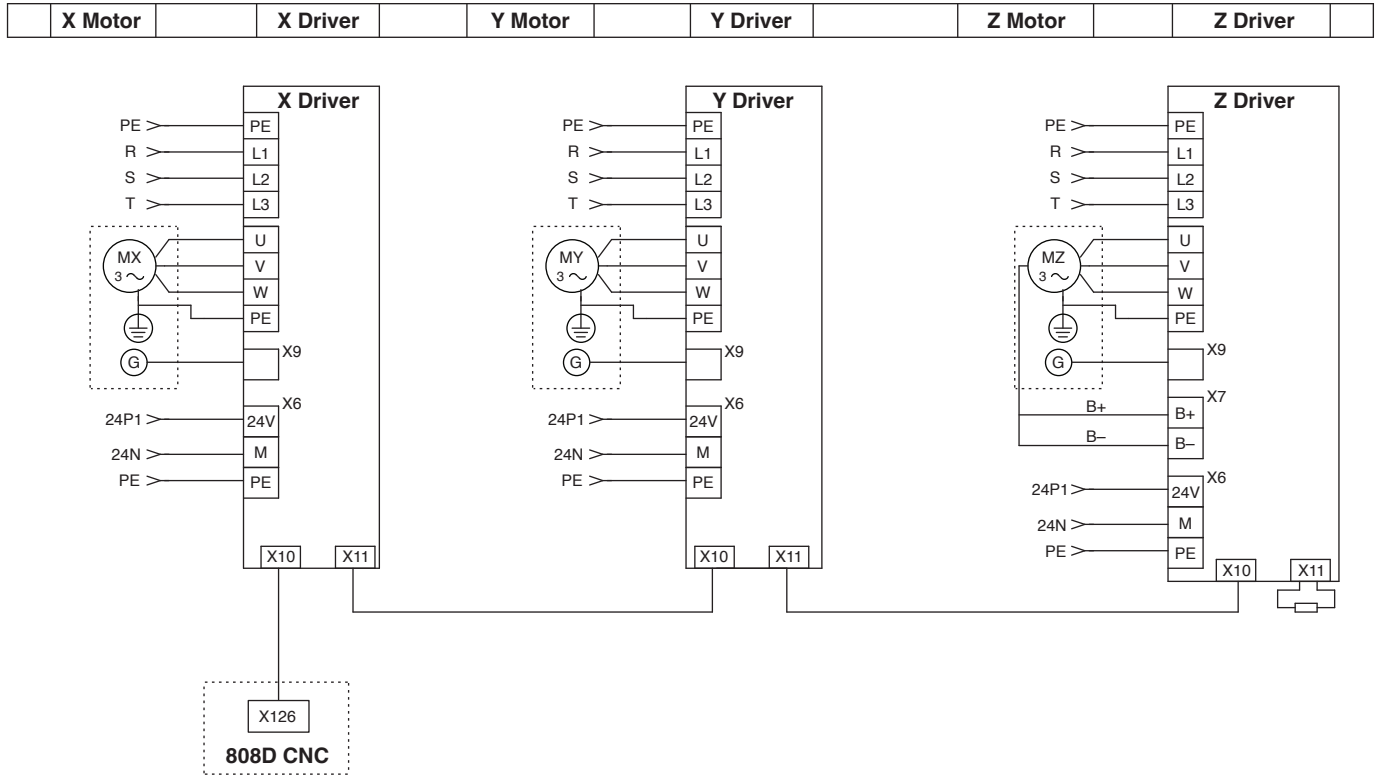
System Wiring Diagram (3)



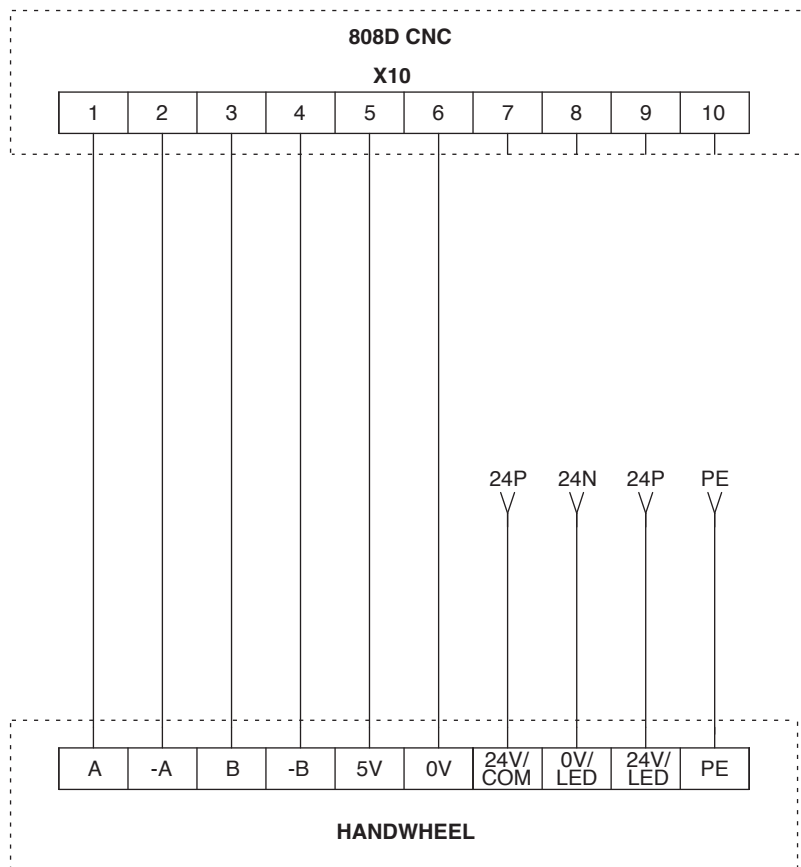
System Wiring Diagram (4)



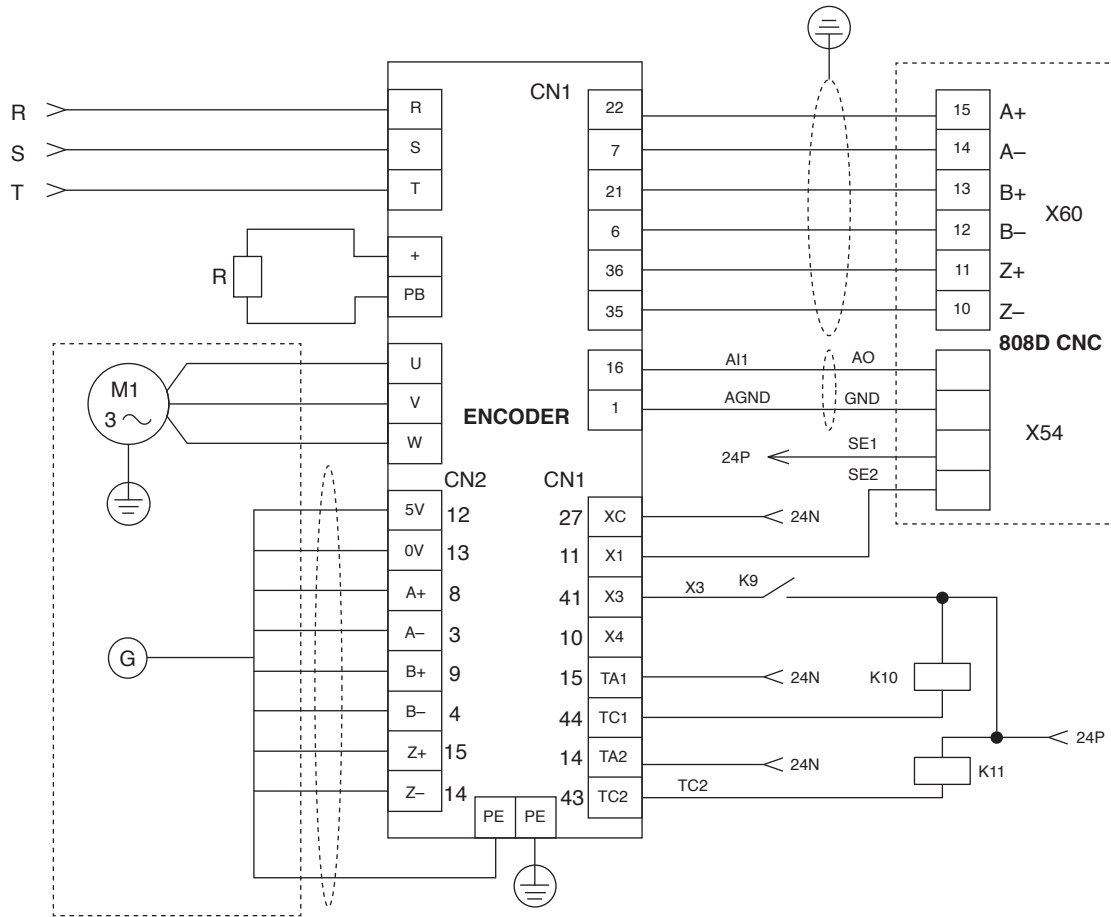
X/Y/Z Motors Wiring Diagram



Handwheel Wiring Diagram



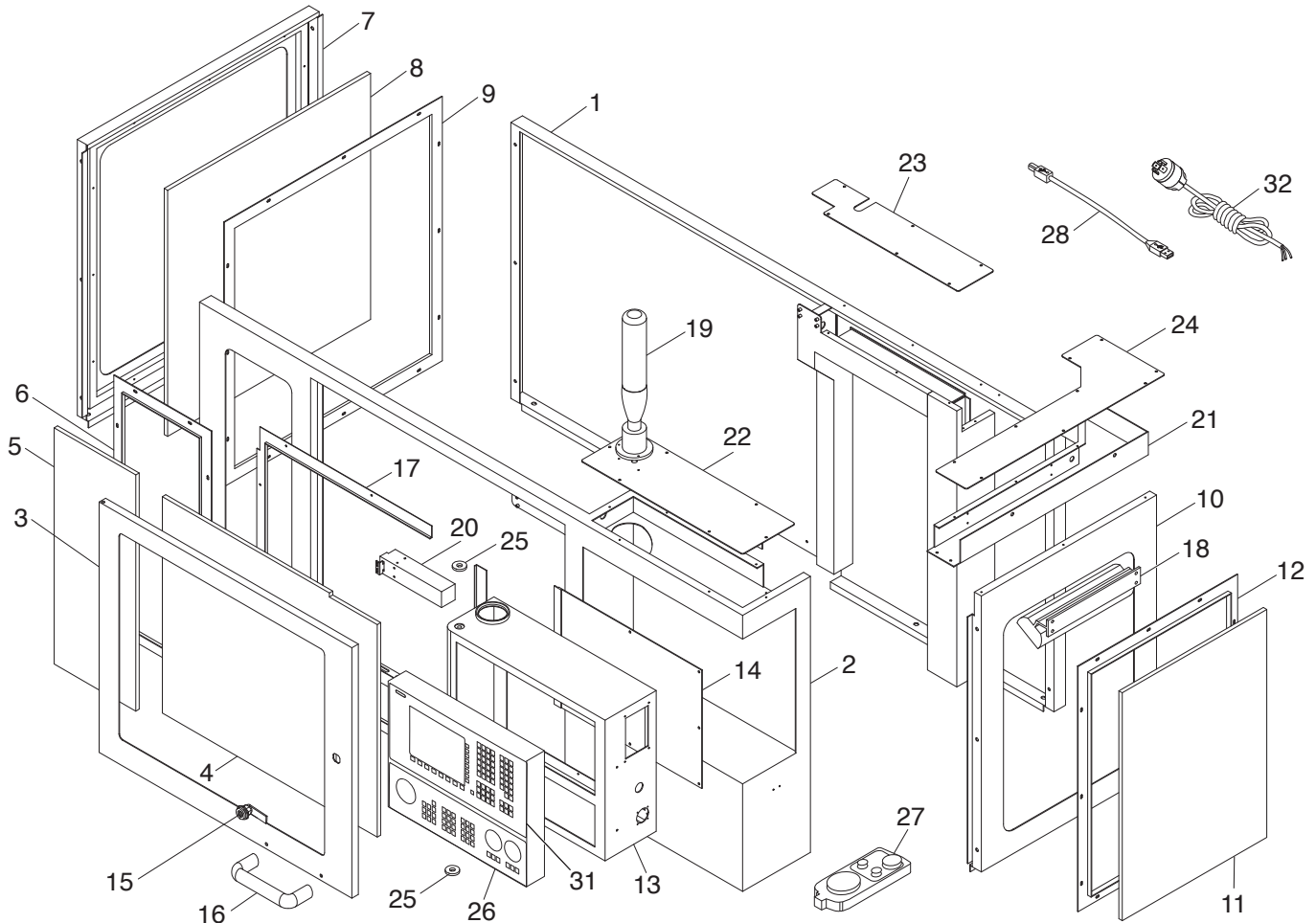
Spindle Motor Wiring Diagram



PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.

Housing

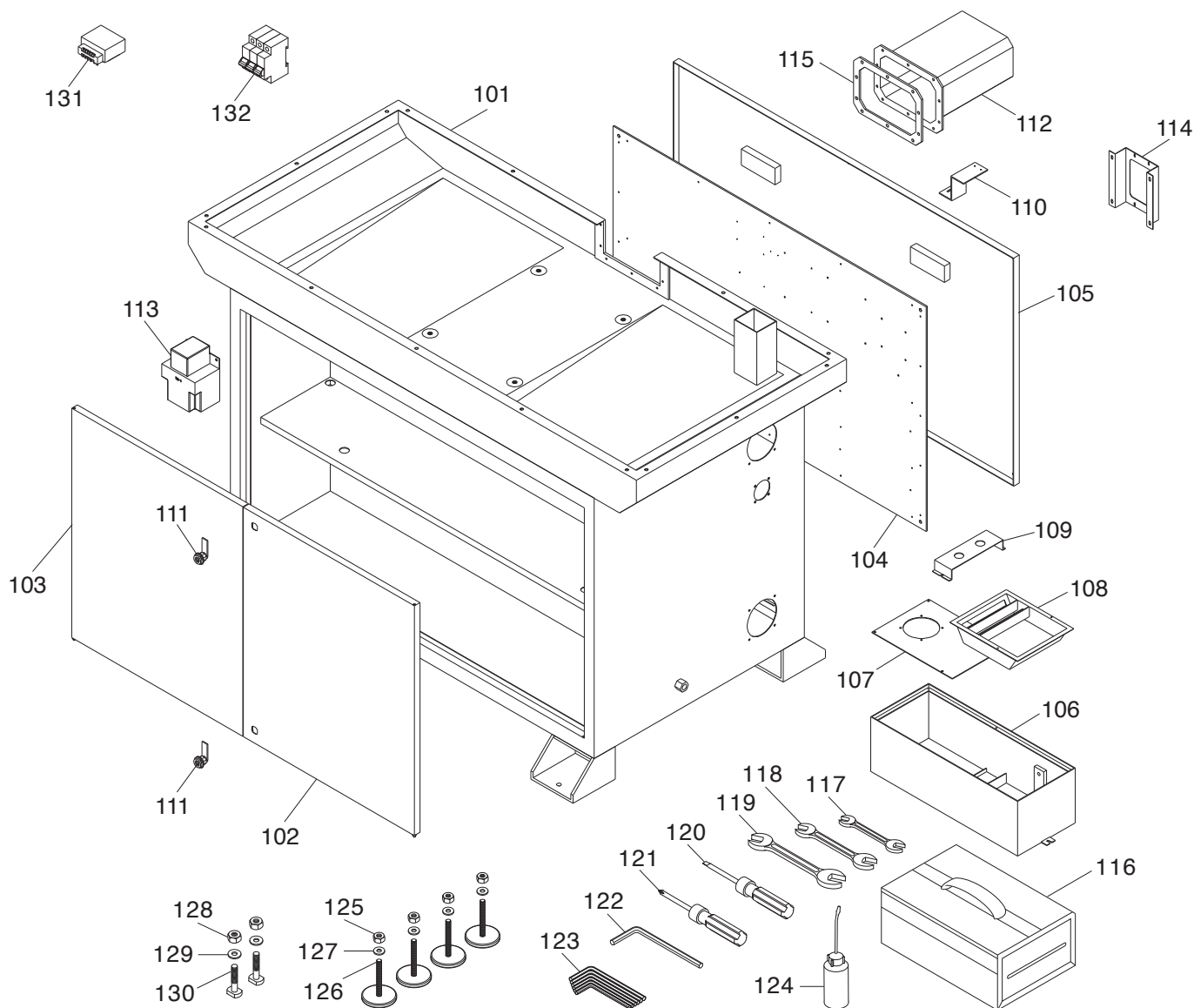


REF	PART #	DESCRIPTION
1	P0875Z001	FRAME (REAR)
2	P0875Z002	FRAME (FRONT)
3	P0875Z003	DOOR
4	P0875Z004	WINDOW (DOOR)
5	P0875Z005	WINDOW (FRONT LEFT)
6	P0875Z006	WINDOW SUB-FRAME (FRONT LEFT)
7	P0875Z007	FRAME (LEFT)
8	P0875Z008	WINDOW (LEFT)
9	P0875Z009	WINDOW SUB-FRAME (LEFT)
10	P0875Z010	FRAME (RIGHT)
11	P0875Z011	WINDOW (RIGHT)
12	P0875Z012	WINDOW SUB-FRAME (RIGHT)
13	P0875Z013	CONTROL CABINET
14	P0875Z014	CONTROL CABINET PANEL
15	P0875Z015	DOOR LOCK

REF	PART #	DESCRIPTION
16	P0875Z016	DOOR HANDLE
17	P0875Z017	WINDOW SUB-FRAME (DOOR)
18	P0875Z018	LED LIGHT
19	P0875Z019	WARNING LIGHT
20	P0875Z020	LIMIT SWITCH
21	P0875Z021	UPPER FRAME CORNER
22	P0875Z022	UPPER FRAME COVER (FRONT)
23	P0875Z023	UPPER FRAME COVER (REAR)
24	P0875Z024	UPPER FRAME CORNER COVER
25	P0875Z025	SPACER
26	P0875Z026	CONTROL PANEL SIEMENS SINUMERIK
27	P0875Z027	HANDHELD CONTROLLER RICHAUTO
28	P0875Z028	CONTROL PANEL CORD
31	P0875Z031	CONTROL SYSTEM SIEMENS
32	P0875Z032	POWER CORD 12G 3W 72" L15-20P



Stand

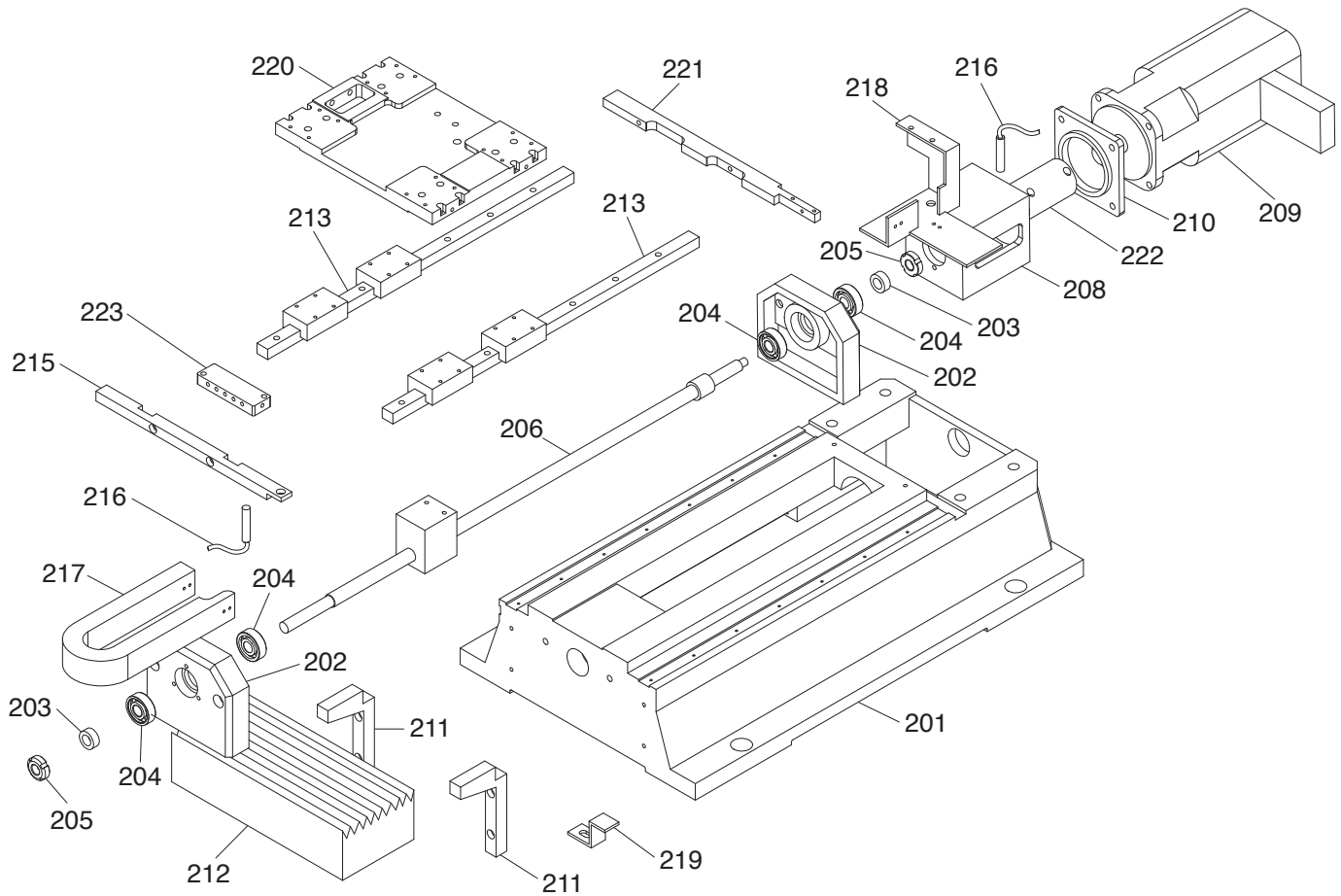


REF	PART #	DESCRIPTION
101	P0875Z101	STAND
102	P0875Z102	LOWER DOOR (RIGHT)
103	P0875Z103	LOWER DOOR (LEFT)
104	P0875Z104	ELECTRICAL BOARD ASSEMBLY
105	P0875Z105	REAR PANEL
106	P0875Z106	COOLANT TANK
107	P0875Z107	COOLANT TANK COVER
108	P0875Z108	COOLANT TANK TRAY
109	P0875Z109	HOSE SUPPORT BRACKET
110	P0875Z110	LIMIT SWITCH BRACKET
111	P0875Z111	DOOR LOCK
112	P0875Z112	Y-AXIS SERVO MOTOR COVER
113	P0875Z113	LUBRICANT PUMP
114	P0875Z114	TERMINAL BRACKET
115	P0875Z115	GASKET
116	P0875Z116	TOOLBOX

REF	PART #	DESCRIPTION
117	P0875Z117	WRENCH 12 X 14MM OPEN-ENDS
118	P0875Z118	WRENCH 16 X 18MM OPEN-ENDS
119	P0875Z119	WRENCH 22 X 24MM OPEN-ENDS
120	P0875Z120	SCREWDRIVER FLAT HEAD 1/4"
121	P0875Z121	SCREWDRIVER PHILLIPS #2
122	P0875Z122	HEX WRENCH 10MM
123	P0875Z123	HEX WRENCH SET 2.5, 3, 4, 5, 6, 8MM
124	P0875Z124	OIL BOTTLE
125	P0875Z125	HEX NUT M12-1.75
126	P0875Z126	FOOT M12-1.75 X 82, D120
127	P0875Z127	FLAT WASHER 12MM
128	P0875Z128	HEX NUT M10-1.5 BLK
129	P0875Z129	FLAT WASHER 10MM BLK
130	P0875Z130	T-SLOT BOLT M10-1.5 X 60 BLK
131	P0875Z131	TRANSFORMER SG-6KVA 230/400V
132	P0875Z132	CIRCUIT BREAKER 16A PL9-C16/3 3P



Base

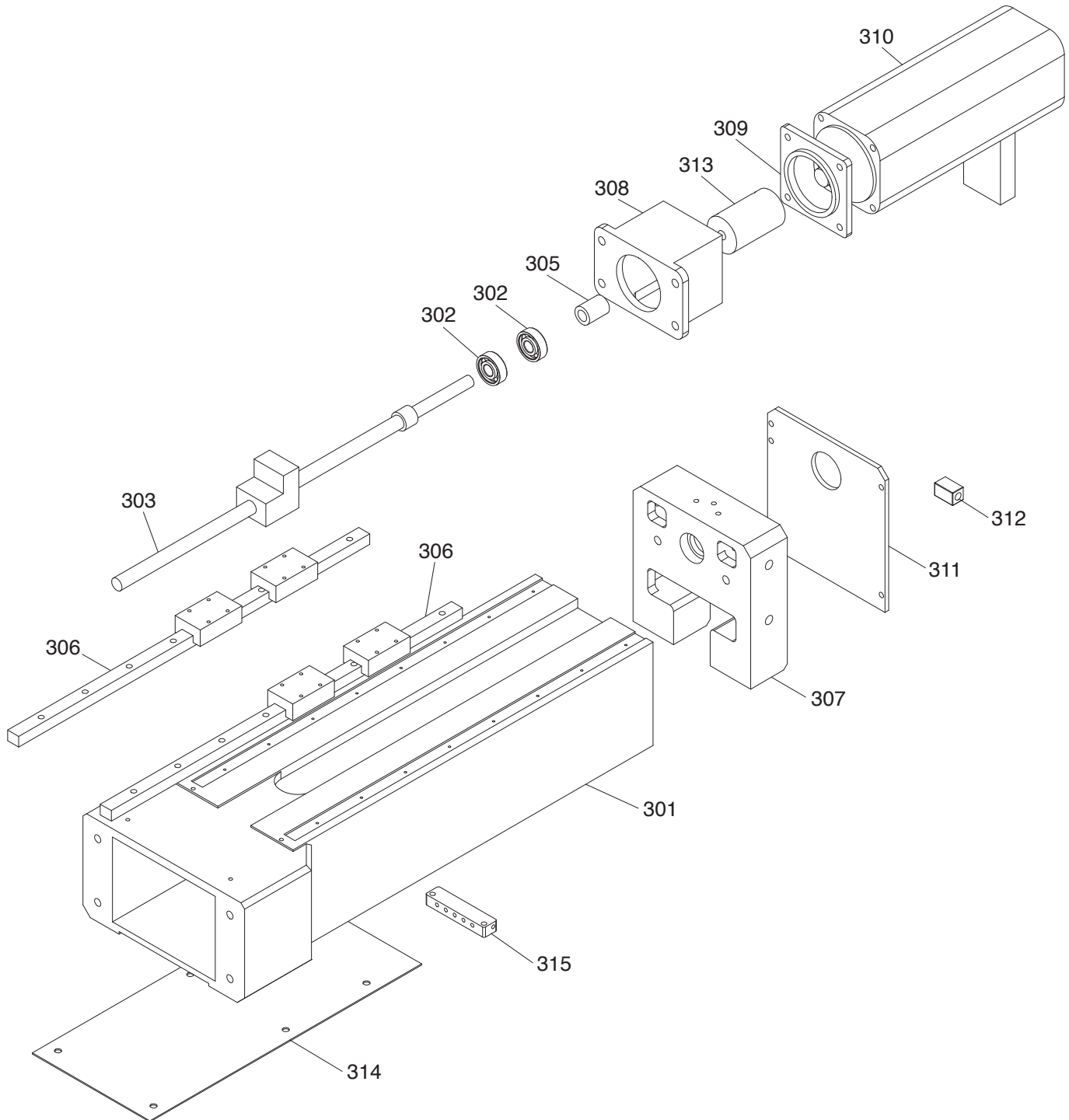


REF	PART #	DESCRIPTION
201	P0875Z201	BASE
202	P0875Z202	CARRIAGE SCALE
203	P0875Z203	BUSHING
204	P0875Z204	BALL BEARING 7201
205	P0875Z205	SPANNER NUT M12-1.75
206	P0875Z206	LEADSCREW W/BLOCK
208	P0875Z208	Y-AXIS MOTOR CONNECTOR
209	P0875Z209	Y-AXIS SERVO MOTOR
210	P0875Z210	FLANGE
211	P0875Z211	GUIDE
212	P0875Z212	SHIELD

REF	PART #	DESCRIPTION
213	P0875Z213	LINEAR GUIDEWAY W/SLIDING BLOCK
215	P0875Z215	Y-AXIS MOTOR CONNECTOR
216	P0875Z216	SENSOR M8
217	P0875Z217	CABLE CARRIER
218	P0875Z218	CHAIN ANCHOR
219	P0875Z219	Y-AXIS SENSOR INDUCTOR
220	P0875Z220	PLATE
221	P0875Z221	Y-AXIS COVER BASE PLATE
222	P0875Z222	COUPLER
223	P0875Z223	OIL SEPARATOR A



Column



REF PART # DESCRIPTION

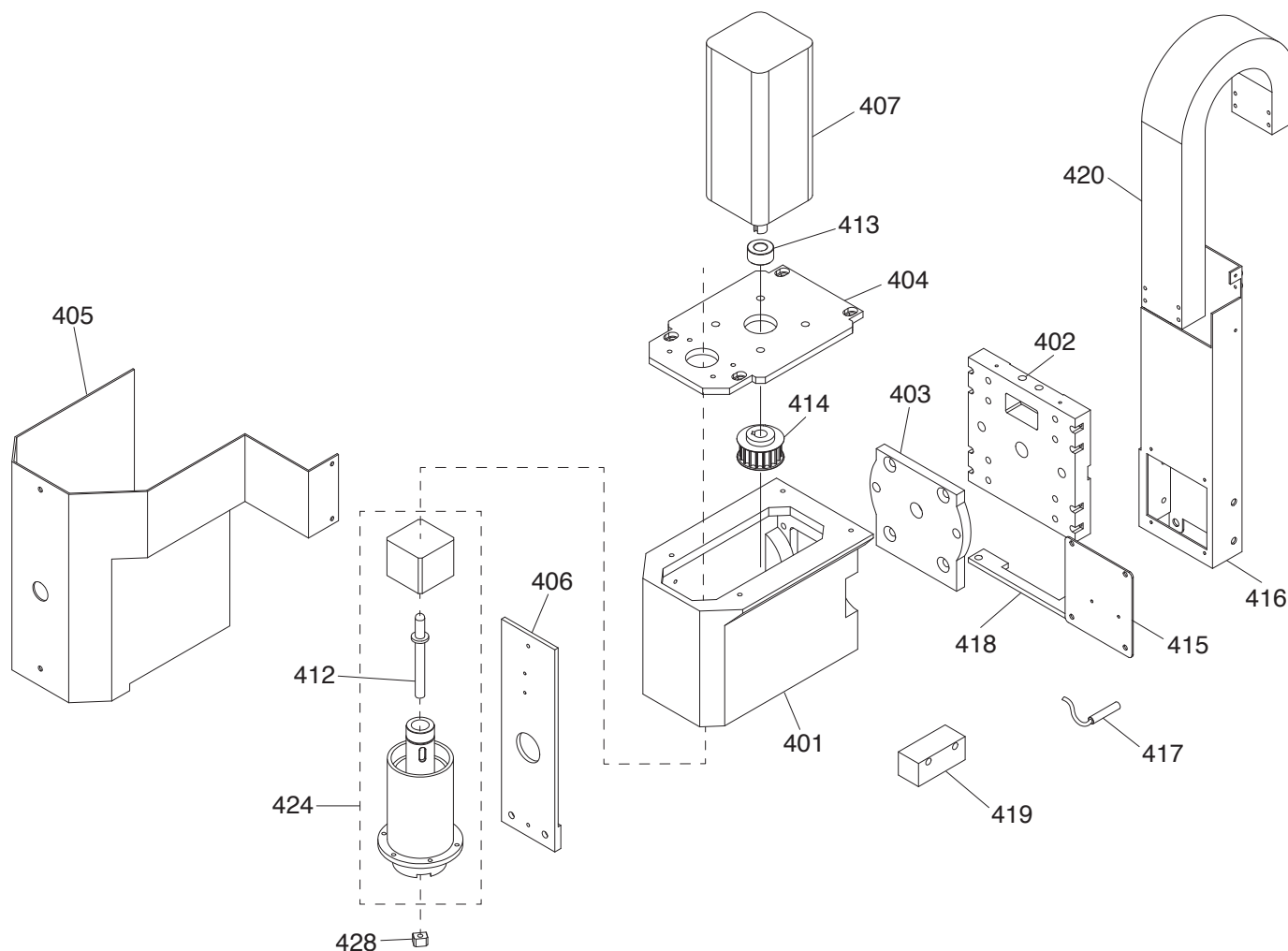
301	P0875Z301	COLUMN
302	P0875Z302	BALL BEARING 7201
303	P0875Z303	Z-AXIS LEADSCREW W/NUT
305	P0875Z305	BUSHING
306	P0875Z306	LINEAR GUIDEWAY W/SLIDING BLOCK EGH15CA
307	P0875Z307	COLUMN COVER
308	P0875Z308	Z-AXIS SERVO MOTOR BASE

REF PART # DESCRIPTION

309	P0875Z309	FLANGE
310	P0875Z310	Z-AXIS SERVO MOTOR
311	P0875Z311	COVER
312	P0875Z312	Z-AXIS LIMIT BLOCK
313	P0875Z313	COUPLER
314	P0875Z314	BASE PLATE
315	P0875Z315	OIL SEPARATOR B



Milling Head

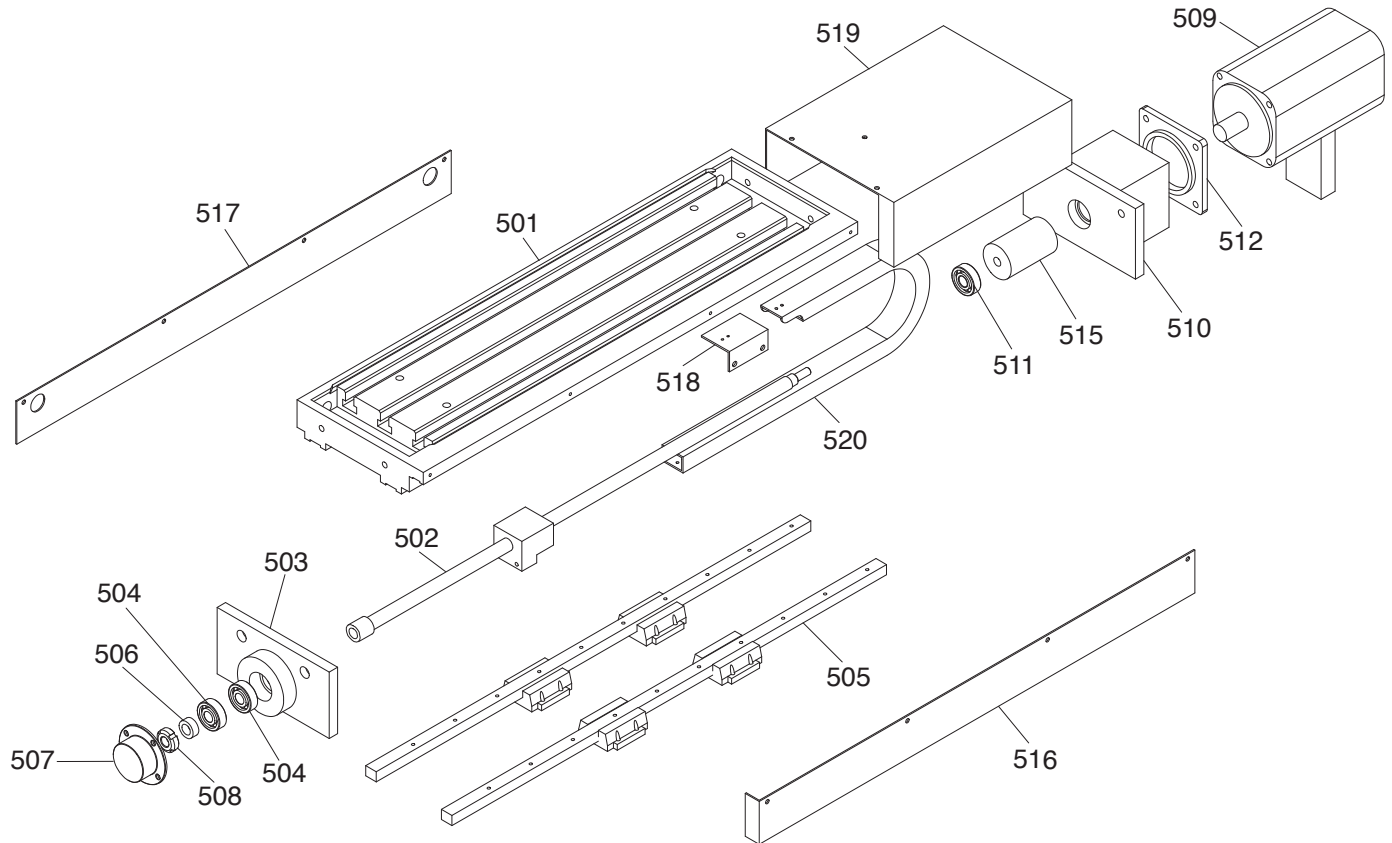


REF	PART #	DESCRIPTION
401	P0875Z401	MILLING HEAD HOUSING
402	P0875Z402	CONTACT PLATE
403	P0875Z403	ROTATING PLATE
404	P0875Z404	HOUSING COVER
405	P0875Z405	SPINDLE COVER
406	P0875Z406	BAFFLE
407	P0875Z407	SPINDLE MOTOR VEICHI 3HP 380V
412	P0875Z412	PRESSURE LEVER
413	P0875Z413	MOTOR SHAFT BUSHING

REF	PART #	DESCRIPTION
414	P0875Z414	MOTOR PULLEY
415	P0875Z415	JUNCTION PLATE
416	P0875Z416	WIRE COVER
417	P0875Z417	SENSOR M8
418	P0875Z418	Z-AXIS COVER PLATE
419	P0875Z419	COOLANT BLOCK
420	P0875Z420	CABLE CARRIER
424	P0875Z424	SPINDLE ASSEMBLY
428	P0875Z428	KEY



Milling Table



REF PART # DESCRIPTION

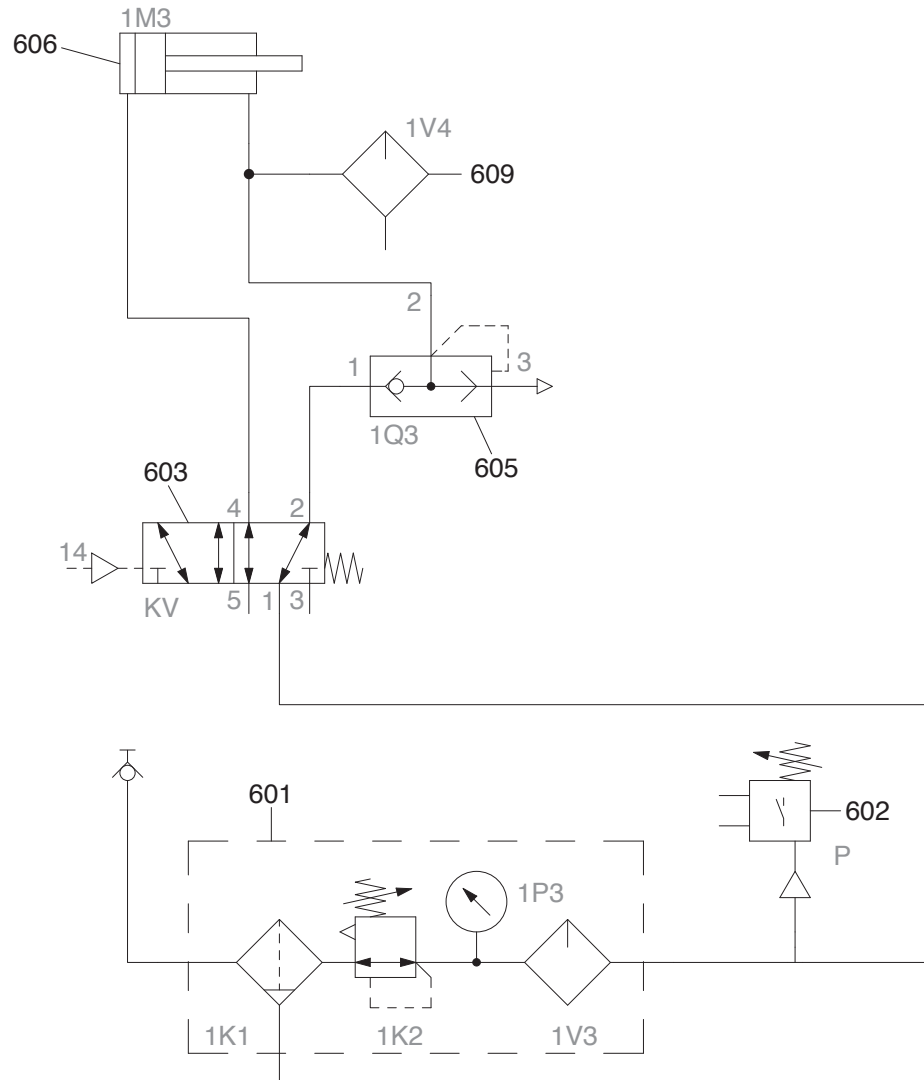
501	P0875Z501	TABLE
502	P0875Z502	TABLE LEADSCREW W/BLOCK
503	P0875Z503	LEADSCREW MOUNT (LEFT)
504	P0875Z504	ANGULAR CONTACT BALL BEARING 7201
505	P0875Z505	LINEAR GUIDE W/SLIDING BLOCK
506	P0875Z506	BUSHING
507	P0875Z507	BUSHING
508	P0875Z508	SPANNER NUT M12-1.75
509	P0875Z509	X-AXIS SERVO MOTOR

REF PART # DESCRIPTION

510	P0875Z510	LEADSCREW MOUNT (RIGHT)
511	P0875Z511	DEEP GROOVE BALL BEARING 6210
512	P0875Z512	FLANGE
515	P0875Z515	COUPLER
516	P0875Z516	TABLE COVER (FRONT)
517	P0875Z517	TABLE COVER (REAR)
518	P0875Z518	WIRE COVER
519	P0875Z519	MOTOR COVER
520	P0875Z520	CABLE CARRIER



Pneumatic System

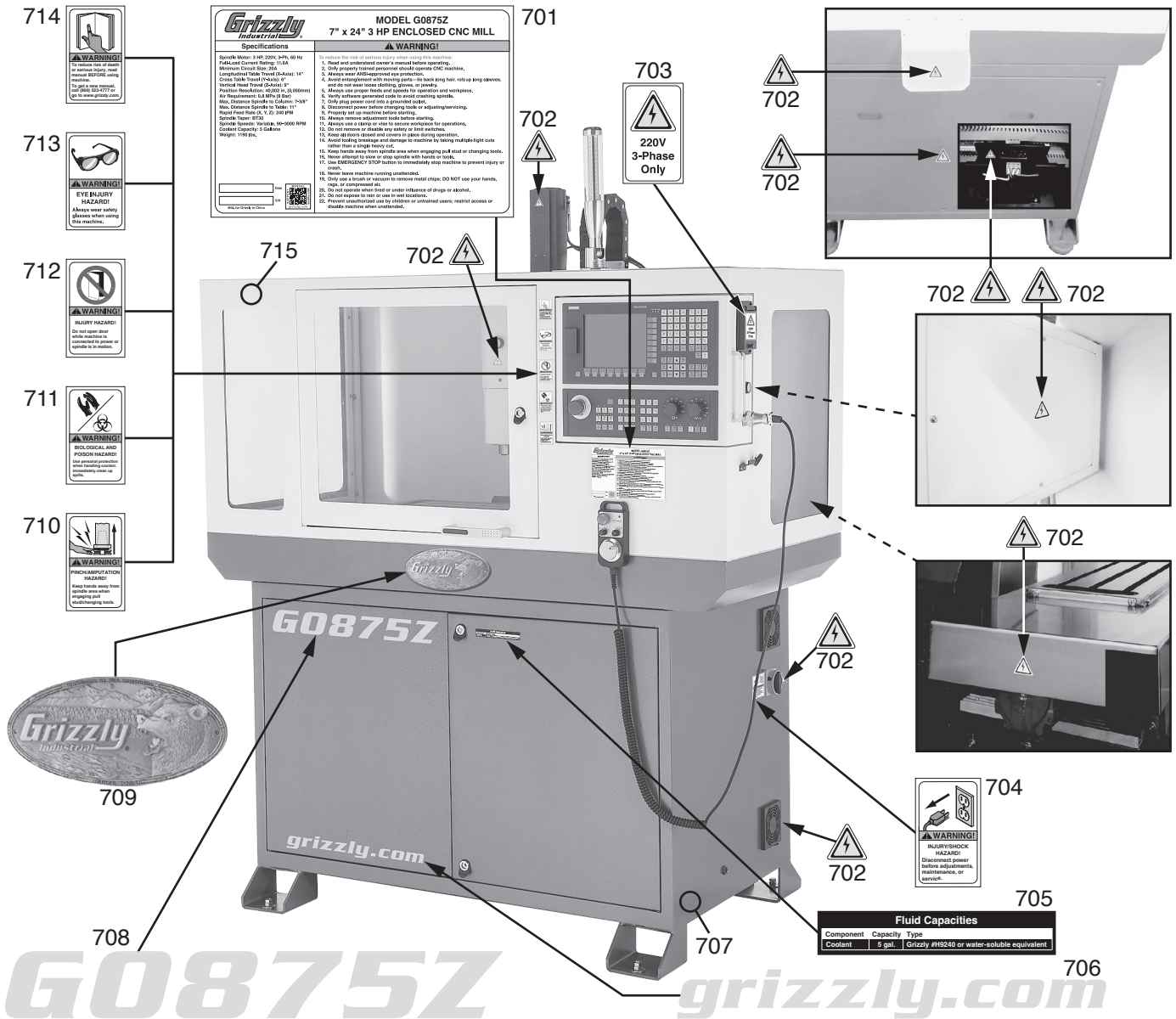


REF	PART #	DESCRIPTION
601	P0875Z601	COMPRESSED AIR ASSEMBLY
602	P0875Z602	PRESSURE SWITCH
603	P0875Z603	WAY VALVE

REF	PART #	DESCRIPTION
605	P0875Z605	QUICK EXHAUST VALVE
606	P0875Z606	CYLINDER TOOL SPANNER
609	P0875Z609	DRIP LUBRICATOR



Labels & Cosmetics



REF	PART #	DESCRIPTION
701	P0875Z701	MACHINE ID LABEL
702	P0875Z702	ELECTRICITY LABEL
703	P0875Z703	220V 3-PHASE ELECTRICITY LABEL
704	P0875Z704	DISCONNECT POWER LABEL
705	P0875Z705	FLUID CAPACITIES LABEL
706	P0875Z706	GRIZZLY.COM LABEL 14.5", BEIGE
707	P0875Z707	TOUCH-UP PAINT, GRIZZLY GREEN
708	P0875Z708	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
709	P0875Z709	GRIZZLY NAMEPLATE-SMALL
710	P0875Z710	PINCH/AMPUTATION HAZARD LABEL
711	P0875Z711	BIOHAZARD LABEL
712	P0875Z712	DO NOT OPEN DOOR LABEL
713	P0875Z713	EYE INJURY LABEL
714	P0875Z714	READ MANUAL LABEL
715	P0875Z715	TOUCH-UP PAINT, GRIZZLY PUTTY

WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.



WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

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

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

For further information about the warranty, visit <https://www.grizzly.com/forms/warranty> or scan the QR code below to be automatically directed to our warranty page.

