

clipper

MASONRY SAWS

Models: BL-24, BL-34 BL-32
BL-54 BL-52

- Operating Instructions
- Maintenance Instructions
- Parts List

CONVEYOR CART 213311

WHEELS (SET OF 4)
200062

NortonParts.com

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MASONRY SAWS

Instructions ■ Parts List Models: BL-24, BL-34, BL-32 BL-54 BL-52

ELECTRICAL CONNECTIONS

DISCONNECT POWER BEFORE WORKING ON SAW.

IMPORTANT — Before connecting the motor lead wires to the power supply, be sure that voltage, cycles and phase shown on motor nameplate correspond to available power supply.

Masonry saw motors that have overload protectors are equipped with a reset button on the motor.

If, after proper electrical connections are made, the motor will not run, press the reset button to close the overload protector switch.

VOLTAGE SELECTION FOR SINGLE PHASE MOTORS - 3 hp single phase masonry saw motors have a dual voltage switch so that 115 volt or 250 volt power supply can be used with no change in wiring.

Wherever possible, use 230 volt power supply for best operation. **IMPORTANT** - Be sure that the dual voltage switch mechanical stop is positioned correctly. When the handle is in the "ON" position, it must point to the correct voltage marked on the switch plate.

A 3 & 5 HP single phase masonry saw motor has an "Off-On" switch only and must be run on 230 volt power supply. 230 volt single phase motors must not be operated on 208 volts or the result will be lack of power, overheating and possible damage to the motor. In the case of network systems of 208 volts, use a booster transformer to raise the 208 volt power supply to 230 volts. Be sure to continue ground through transformer.

VOLTAGE SELECTION FOR THREE PHASE MOTORS:

2, 3, 5 and 7½ HP, three phase masonry saw motors have an "Off-On" switch only and switch wires must be connected properly to 208-220 volt or 440 volt power supply. 208-220 volt three phase motors may be run on 208 volts but will be less efficient.

POWER CONNECTIONS:

Always connect L4 or Green to Ground. Connect power supply wiring to the pigtail leads of the switch. Direct wiring connections is preferred but an extension cord with an electrical plug with 30 AMP minimum capacity may be used (35 AMP for 3 HP, dual voltage.) Connecting wires should be as short as possible and in one piece. In no case should the connecting wire be longer than shown in the following table for 2, 3 & 5 HP, single phase motors:

Wire Gauge	Length of Wire		
	2 HP 115 Volts	3 & 5 HP 115 Volts	230 Volts
#12	25 Ft.	----	50 Ft.
#10	50 Ft.	25 Ft.	100 Ft.
# 8	75 Ft.	50 Ft.	150 Ft.
# 6	----	75 Ft.	----

CAUTION—When wires that are too small gauge or too long are used, loss of power, overheating or possible damage to the motor will result.

GROUND CONNECTIONS

IMPORTANT—Be sure to ground saw properly before operating; such as ground wire connection provided by the power company.

FUSES: Fuse each power line for the motors with a time delay fuse sized to motor name plate amperage.

WATER PUMP (Wet Cutting Models Only) - The water pump electrical cord plugs into the female receptacle at the back of the motor. This receptacle gives single phase power supply of proper voltage for the water pump. Do Not use this receptacle for any other purpose, such as lights.

OPERATION: The best cutting speed and economy can be attained by following the instructions listed in this section and by selection of the right blade for the job. Your local Clipper dealer or Clipper Area Market Manager can provide accurate blade recommendations to meet all cutting requirements.

SAFETY PRECAUTIONS

IMPORTANT—The following safety precautions must be observed:

1. Before mounting any blade on the saw, the blade should be inspected for any damage which might have occurred during shipment or handling.
2. The bladeshaft collars and arbor should be cleaned and examined for damage before mounting blade.
3. When tightening bolt against outside bladeshaft collar, be sure to tighten enough to hold blade firmly without slipping, but *do not overtighten*.
4. Adequate coolant must be used for wet cutting abrasive and diamond blades.
5. The blade must be operated within the specified maximum operation speed.
6. The operator should wear safety glasses.
7. When starting the saw, the operator should stand outside the path of the blade.
8. During cutting, the work piece must be held securely and prevented from twisting or slipping and the blade must not be forced into the material with excessive pressure.
9. Never operate saw with front of blade guard tilted upward.
10. Never use Diamond Blades Dry.

MAINTENANCE: The Clipper Saw requires very little maintenance for long satisfactory operation. The following points must be watched.

V-Belts: The drive belts are made of premium oil and heat resistant construction. They require very little adjustment, but should be tightened after the first few days of running.

1. **CAUTION**—Do not overtighten belts as damage will occur to the belts and bearings, resulting in shortened life. Belts that are too loose will cause undue slippage and short life.
2. When belts require replacement, always use a "matched set" of Clipper Premium V-Belts. Do not replace single belts — always use a matched set.
3. When installing new belts, do not attempt to stretch over pulleys. Loosen motor bolts and slide motor forward to install belts.

MOTOR: The motor is specially designed for masonry sawing. It is totally enclosed and the sealed bearings require no lubrication. The motor is equipped with thermal overload protection.

1. Periodically clean the dirt and sludge buildup from the motor fan, housing and cooling fins.
2. If the motor becomes overheated, the protector shuts off the motor. Turn the motor switch to "Off" and identify the cause of overheating, such as low voltage, long supply cables of insufficient size.

LUBRICATION:

1. Pivot points on foot lever should be oiled every day.
2. Raising screw should be greased every day.
3. Other pivot points should be oiled weekly.

BLADESHAFT BEARINGS: The bladeshaft bearings are permanently lubricated for life.

WATER PUMP: The submersible water pump is equipped with a thermal overload protector and the sealed bearings require no lubrication. For dry cutting, disconnect the pump.

1. Be sure to keep the pump clean — do not allow sediment to cake in pump and clog it.
2. If the pump becomes overheated, the protector will shut off the pump. The pump will not start again until it cools down, which may require about thirty minutes. Pump will start automatically.
3. Keep all lines clean and free running.

ORDERING INFORMATION

1. List model number and serial number of machine.
2. List part number and description of part (not item number).

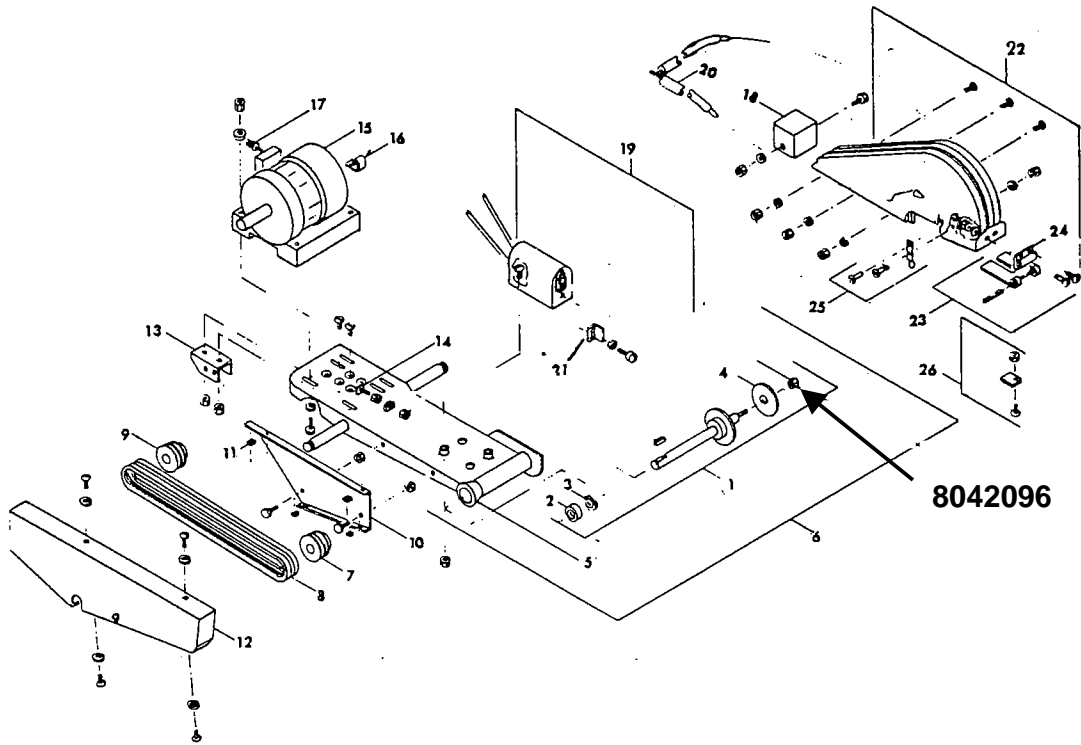


FIGURE II

ITEM NO.	DESCRIPTION	PART NO.
1	BLADE SHAFT REPLACEMENT KIT	217007
2	BEARING	212142
3	LOADING SPRING	212139
4	LOOSE COLLAR	212656
5	CUTTING HD CASTING-INCL. PIVOT BAR	210130
6	CUTTING HD ASSY. INCL. ITEM 1,6 ASSEM.	210216
7	PULLEY (BLADE SHAFT) 14" CAP. BL24, 34, 53	210164
	PULLEY (BLADE SHAFT) 20" CAP. BL32, 52	210254
8	V-BELT (SET OF 2)	210162
9	PULLEY (MOTOR) 14" CAP. BL24, 34, 54	210668
	PULLEY (MOTOR) 20" CAP. BL32, 52	210590
10	BRACKET	212173
11	NUT	210616
12	GUARD	216134
13	CLEVIS	216608
14	ADJUSTING SCREW	050754
15	SEE PAGE 3 FOR MOTORS & MOTOR KITS	
16	CABLE CLIP	200214
17	WATER PUMP CONNECTOR	216579
18	SHIELD (20" CAPACITY ONLY)	210560

ITEM NO.	DESCRIPTION	PART NO.
	SWITCH & WIRING ASSY. BL-24 SINGLE PHASE, DUAL VOLTAGE, 2 HP	210582
	SWITCH & WIRING ASSY. BL-54 & RL-R2 SINGLE PHASE, ON-OFF, 5 HP	219059 212754
19	SWITCH & WIRING ASSY. BL-34, BL-32 SINGLE PHASE, DUAL VOLTAGE, 3 HP	212755
	SWITCH & WIRING ASSY. BL-34, BL-32 SINGLE PHASE, ON-OFF, 3 HP	212756
	SWITCH & WIRING ASSY., THREE PHASE ON-OFF, 2, 3, 5 HP	219059 212754
20	WATER DISTRIBUTION ASSEMBLY	216522
21	STOP BRACKET (DUAL VOLTAGE STOP)	213701
22	BLADE GUARD 14" CAPACITY BL-24, 34, 54 COMPLETE WITH ALL PARTS	210613
	BLADE GUARD 20" CAPACITY BL-32, 52 COMPLETE WITH ALL PARTS	210592
23	BLADE GUARD COVER ASSEMBLY	210595
24	NOSE GUARD HINGE	210168
25	SPRING CLIP ASSEMBLY	210599
26	COVER ADAPTER ASSY. 20" CAPACITY ONLY	210597

LIMITED WARRANTY

NORTON WARRANTS ALL PRODUCTS MANUFACTURED BY IT AGAINST DEFECTS IN WORKMANSHIP OR MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SHIPMENT TO CUSTOMER.

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THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

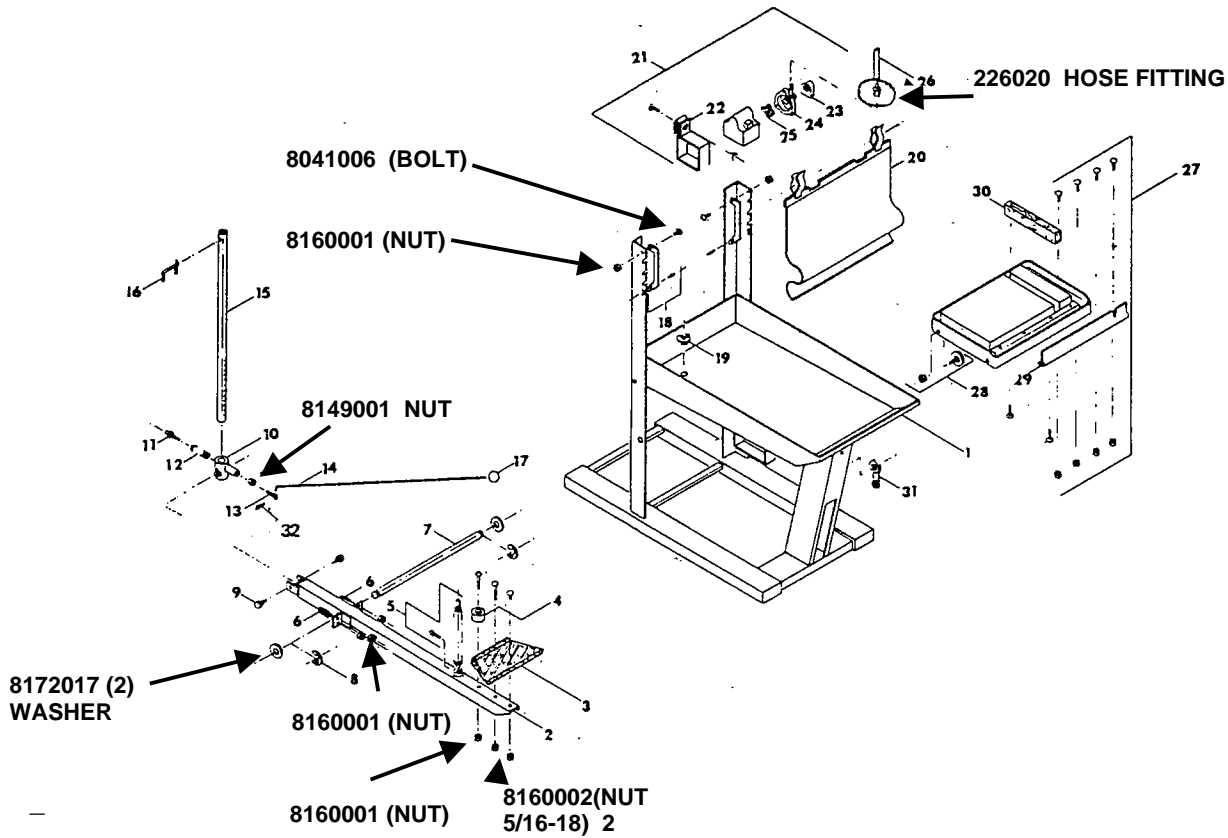


FIGURE 1

ITEM NO.	DESCRIPTION	PART NO.
2	FRAME	216566 OBS 216566
2	FOOT PEDAL LEVER	216567
3	PEDAL	216607
4	BUMPER	210051
5	SPRING ASSEMBLY (INCL. COTTER PIN)	212240 OBS 212240
6	U BOLT	216566
7	PIVOT ROD	216506
8	RETAINING RING	216517
9	SHOULDER BOLT	200315
10	PLUNGER CASTING	200313
11	PLUNGER	200314
12	SPRING	200243
13	ROD END	216509
14	PULL ROD	216511 OBS 216511
15	CONNECTING BAR	216510
16	PIN	210097

ITEM NO.	DESCRIPTION	PART NO.
17	KNOB	216565 OBS 216565
18	LOCK BAR ASSEMBLY (INCL. ROLL PIN)	216520 OBS 216520
19	DRAIN PLUG ASSEMBLY	200298 A 200298
20	WATER CURTAIN ASSEMBLY	219038 210663
21	WATER PUMP ASSEMBLY	214169 216138
		BECKETT LIT. GIANT
22	PUMP CLAMP	212188 OBS 212188
23	INLET SCOOP	211139 OBS 211139
24	IMPELLER HOUSING	211137 OBS 211137
25	IMPELLER	211138 OBS 211138
26	PUMP HOSE	216524
27	CONVEYOR CART	213311 210620
28	SHEAVE ASSEMBLY	200062
29	BACKSTOP	210453 OBS 210453
30	WOOD STRIP	213613 210632
31	BLADE SHAFT WRENCH	212105 OBS 212105
32	COTTER PIN	8197016 OBS 8197016

OBS

	MOTOR NO.	H.P.	BLADE CAPACITY	MOTOR KIT	CUTTING HEAD		FRAME ASSEMBLY
					W/MOTOR & SWITCH	L/MOTOR & SWITCH	
DUAL VOLTAGE	BL-24	2	14	216192	216525	216553	
	BL-34	3	14	216192	216529	216553	
230 VOLT ON-OFF ONLY	BL-32	3	20	216194	216535	216555	216557
	BL-34	3	14	216588	216500	216553	
230 VOLT ON-OFF ONLY	BL-32	3	20	216589	216591	216555	
	BL-34	5	14	216193	216541	216553	
230 VOLT ON-OFF ONLY	BL-52	5	20	216195	216547	216555	

MOTOR KIT— Includes Motor, Switch & Wiring and Motor Pulley single phase only.

CUTTING HEAD— Includes everything mounted on Head either with or without Motors & Switch - wet cutting, single phase only.

FRAME— Includes Saw less Cutting Head & Conveyor Cart - wet cutting.