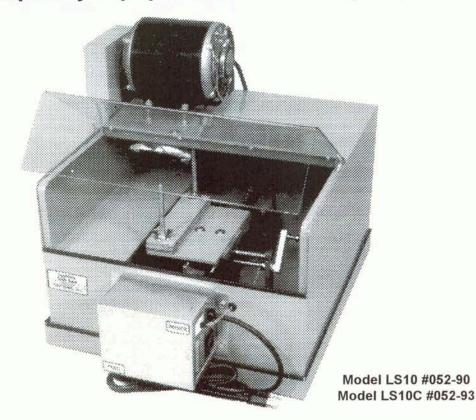
LORTONE Lapidary Equipment

Operators Manual



LS10 / LS10C Slab Saw

The LS10 is ideal for quickly and professionally producing small slabs. The durable 1/3 HP motor will easily cut most rock and non-metallic materials. It's quiet, fully enclosed, and comes equipped with a powerful screw-feed and a threaded cross-feed vise. Oil coolant required.

- ♦ Compact Design.
- Power Screw-Feed.
- ♦ Clear Hinged Hood.
- ♦ Sturdy Welded Steel Frame.
- ♦ Quality 10" Blade (LS10C only).
- ♦ Overload Protected 1/3 HP Motor (LS10C only).

SETUP

- Check to make sure you have received the following parts:
 If any parts are missing, please contact your dealer or the factory immediately.
 - (1) LS10 Saw.
 - (1) Belt Guard with mounting screws.
 - (1) Drive Belt.
 - (1) Accessory Package containing:
 - (1) 2 1/4 x 1/2 Motor Pulley.
 - (1) Blade Dressing Stick.
 - (1) Operators Manual & Warranty Card.
 - (1) 10" Diamond Blade (included only with LS10C).
 - 1/3 HP Drive Motor (included only with LS10C).
 Note: the motor for this unit is shipped separately.

Read these instructions before assembly or use.

IMPORTANT

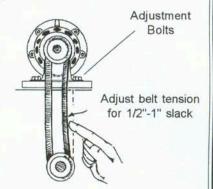
Failure to follow instructions can result in damage to the machine or injury to the operator.

Remove the saw from its packing and place on a sturdy, flat, level surface.

MOTOR INSTALLATION

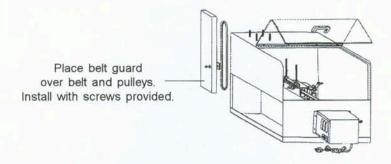
This saw requires a 1/3 HP, 1750 RPM motor with a size 48 frame.

- Place motor pulley on the motor shaft. Tighten set screw securely.
- Install belt and adjust motor to align belt.
- Raise or lower the motor on the mounting bolts as required to obtain the correct belt tension.
 Do not overtighten the belt as this can lead to excessive noise and premature bearing wear.



BELT GUARD INSTALLATION

- Place belt guard over the belt, motor pulley, and frame.
- Install the two mounting screws and tighten securely.



BLADE INSTALLATION

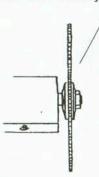
This saw requires a 10" diameter blade with a 5/8" arbor hole.

- Remove the Arbor nut and the outer blade flange. Install the blade carefully.
- Replace the outer flange and arbor nut and tighten securely. Do Not Overtighten

ELECTRICAL CONNECTION

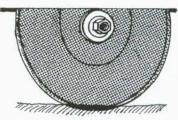
- Make sure all Switches on the Control Box are in the OFF position (toward saw).
- Make sure the hood is closed.
- Plug the Motor Cord into the outlet on the Control Box.
- Plug the Saw Power Cord into a grounded outlet.

Install Blade & Outer Flange and Tighten Arbor Nut securely.



COOLANT

- We recommend LORTONE Cutting Oil Part # 086-10 for optimum results.
- Use a neutral petroleum base oil with a high flash point and no additives.
- ❖ Add approximately 1 1/3 gallons of coolant until the bottom 1/4"-1/2" of the blade is covered.



Coolant 1/4" - 1/2" on Blade

CAUTION

Do not run saw without proper coolant.

Do NOT use Kerosene or other flammable solvents.

Do NOT use water or water soluble oils.

Failure to follow these instructions can result in damage to the machine or serious injury to operator.

Use of these coolants will void the warranty.

BLADE CARE & DRESSING

- YOU MUST DRESS THE BLADE PRIOR TO INITIAL USE.
 This removes the protective paint from the cutting edge of the blade.
- Clamp a Blade Dressing Stick in the vise and, with the hood closed and saw running, make several cuts through the stick. Repeat as needed.
- Dress the blade frequently. Dull or glazed blades will quickly dish or warp. Note: Dished or warped blades are not covered under warranty.

OPERATION

- * Make sure all Switches on Control Box are in the "OFF" position (toward saw) before opening the hood.
- Clamp material securely in vise. Check for looseness of material and re-tighten if neccesary.
- Adjust cross feed and hand tighten the carriage vise lock bolt and knurled nut #481-70. See Fig D. Check to be sure that material will clear the arbor shaft cover and the blade flanges.
- To release carriage, gently pull the half nut lever toward control box. Slide the carriage to the desired position and release the half nut lever. Make sure the lever is fully engaged.
- Adjust the shutoff chain #447-01 for desired length of cut.

To Start Saw:

Note: The "Power" switch operates the motor and supplies power to the "Feed" switch. The "Feed" switch operates the feed motor only and will not work with the "Power" switch in the off position.

- Close hood and make sure both switches are in the "OFF" position.
- Turn "Power" switch to "ON" position to start blade rotation.
- To start power feed, turn "Feed" switch to "ON" position.

CAUTION

Do not operate saw with Hood open.
Turn off both switches and unplug
saw prior to opening hood.
Failure to follow these instructions
can result in serious injury..

While Cutting: IMPORTANT: DO NOT LEAVE SAW UNATTENDED.

- Listen for changes in operating noise. Sudden changes can indicate damaged material or blade.
- Over-heating of the main motor can result in tripping of the safety overload protector. Note: Tripping of the safety overload protector does not shut off the power feed.

 To prevent blade & saw damage, IMMEDIATELY turn off both the "Power" & "Feed" switches. Inspect the machine and blade for damage and correct any problems before continuing.

 When cool, press the red reset button on the drive motor to reset the protector.

At End of Cut:

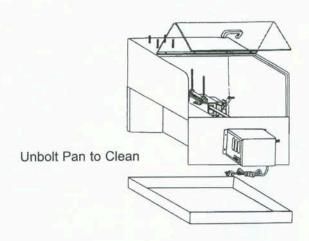
- Push both switches toward saw to "OFF" position before opening the hood.
- Remove slab and inspect material in vise is secure.
- Loosen carriage lock screw and advance the carriage by turning the cross-feed wheel. Each turn advances the cross-feed carriage approximately 1/16 inch (.062).

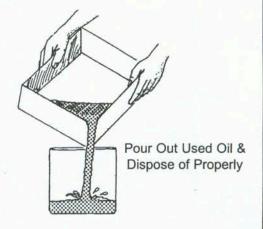
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MODEL LS10 / LS10C

CLEANING & MAINTENANCE

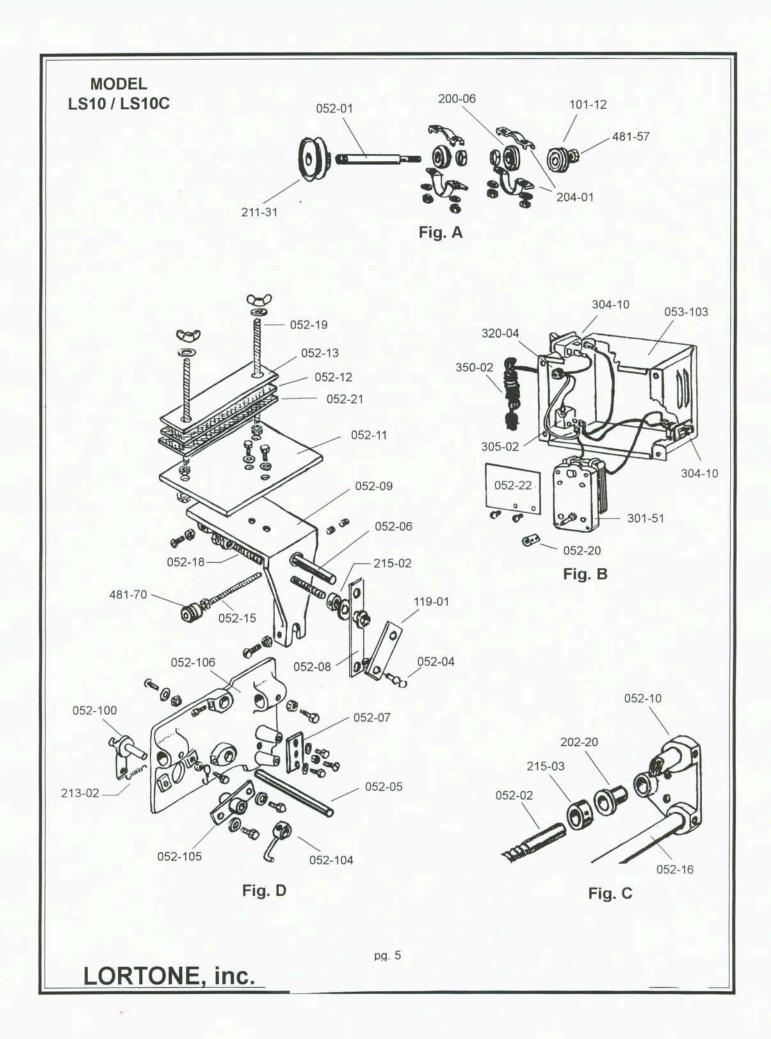
- The saw should be cleaned periodically when sediment builds up to a depth of 1/4".
- Unbolt the saw case from the coolant pan and lift out the case.
- Empty the coolant pan and wipe sludge from the case and power feed screw.
- Reinstall case in coolant pan, attach bolts, and add clean or filtered oil.





PARTS LIST

Item	<u>Description</u>		
052-01	Arbor Shaft	052-105	Half Nut Mounting Plate
052-02	Feed Rod	052-106	Carriage
052-04	Cross Feed Handle	053-103	Control Box (Box Only)
052-05	Lower Cross Feed Rod	070-04	Clamp, Pan
052-06	Upper Cross Feed Rod	101-12	Plated Flange, 2" x 5/8
052-07	Bracket	119-01	Cross Feed Crank
052-08	Cross Feed Support	200-06	Arbor Bearing
052-09	Cross Feed Carriage	202-20	Feed Rod Bushing
052-10	End Plate	204-01	Bearing Strap
052-11	Vise Bottom Plate	210-36	Belt (4L320)
052-12	Vise Pad, Top	211-17	Motor Pulley (2 3/4" x 1/2")
052-13	Vise Top Plate	211-31	Arbor Pulley (4" x 3/4"
052-15	Vise Lock Bolt	213-02	Spring
052-16	Carriage Way	215-02	Carriage Collar
052-18	Cross Feed Bolt	215-03	Set Collar
052-19	Vise Bolt	290-01	Hood Handle
052-20	Feed Rod Coupling	301-51	Power Feed Motor
052-21	Vise Pad, Bottom	304-10	Switch
052-22	Power Feed Support	305-02	Receptacle
052-23	Hood	320-04	Strain Relief
052-100	Half Nut	350-02	Cord
052-101	Saw Case	447-01	Shutoff Chain (21" long)
052-102	Belt Guard	481-57	Arbor Nut
052-103	Coolant Pan	481-70	Knurled Nut
052-104	Half Nut Handle	566-12	Blade Dressing Stick (pkg. of 3)



MODEL LS10 / LS10C 290-01 052-102 210-36 052-23 211-17 0 052-101 Carriage Plate See Fig. C 0-0 Vise Carriage See Fig. D Arbor See Fig. A 447-01 POWER 070-04 Control Box See Fig. B 052-103 pg. 6 LORTONE, inc.

CAUTION!!

Failure to follow these instructions may result in injury to the operator and damage to the machine.

FOR PROPER OPERATION USE <u>ONLY</u> 5-10 wt. PETROLEUM OIL, NON-DETERGENT TYPE, WITH A HIGH-FLASH POINT.

<u>DO NOT USE</u> water, water-soluble oil, solvents, fuels, antifreeze or vegetable oil.

Use of these or other materials will result in substandard performance and damage to the machine and is not covered under warranty. We suggest LORTONE Cutting Oil #086-10.

CAUTION!!