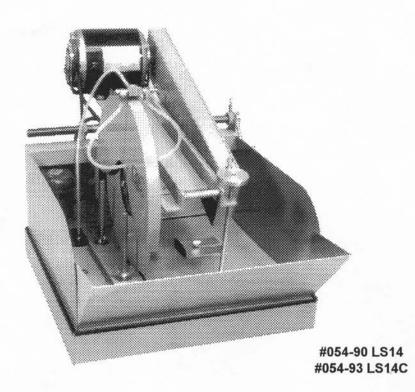
# **LORTONE Lapidary Equipment**

# **Operators Manual**



# LS14 / LS14C Slab Saw

The LS14 is a heavy duty gravity-feed slab saw. Its rigid balance arm matches the rate of cut to the material hardness for long blade life. Ideal for quickly and professionally producing slabs in rock and other non-metallic materials. Designed for use with oil coolant.

- ♦ Front Loading Design.
- ♦ Gravity-Feed Design.
- Welded Steel Frame with Fixed Vise.
- Recirculating Coolant Pump.
- ♦ Quality 14" Blade (LS14C only).
- ♦ Overload Protected 1/3 HP Motor.

### **SETUP**

- Check to make sure you have received the following parts: If any parts are missing, please contact your dealer or the factory. This saw is equipped with a preinstalled motor for correct operation.
  - (1) LS14 Saw.
  - (1) Accessory Package containing:
    - (1) Blade Dressing Stick.
    - (1) Operators Manual & Warranty Card.
  - (1) 14" Diamond Blade (included only with LS14C). Note: Replacement with a different size or weight motor can adversley affect saw performance and safety.

#### **IMPORTANT**

Read these instructions before assembly or use.

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.

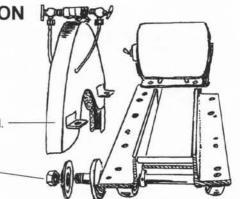
### **BLADE INSTALLATION**

This saw requires a 14" diameter blade with a 3/4" arbor hole.

- Remove the Blade Guard by loosening the two hold-down screws.
- Remove the Arbor nut and the outer blade flange.
- Install the blade carefully on the arbor.
- Replace the outer flange and arbor nut and tighten securely. Do Not Overtighten.

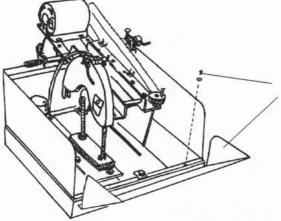
Remove Blade Guard.

Remove Arbor Nut and Flange.



## SPLASH SHIELD INSTALLATION

- Install the splash shield by attaching it to the front of the saw as shown.
- Tighten the hold down screws securely.



Install Splash Shield on front of saw. Tighten hold down screws securely.

#### **ELECTRICAL CONNECTION**

- Make sure the switch on the motor is in the OFF position.
- Make sure the saw arm is down.
- Plug the Saw Power Cord into a grounded outlet.

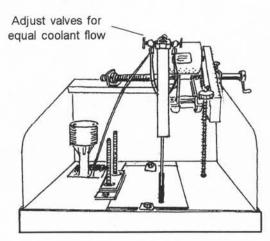
#### COOLANT

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 2 1/2 gallons of coolant. Coolant should be well above the pump intake.
- Adjust the valves to equalize coolant flow to both sides of the blade. Verify that coolant is being fed to both sides of the blade before cutting.

#### 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.



Tighten

#### 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 saw running, make several cuts through the stick. \*
- Dress the blade frequently. Dull or glazed blades will quickly dish or warp. \* Note: Dished or warped blades are not covered under warranty.

#### OPERATION

#### **Trimming**

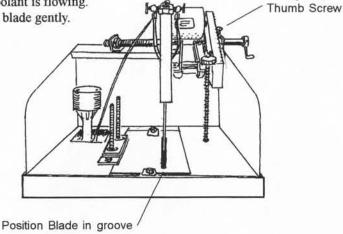
This saw comes with the trim table already installed.

- Make sure the motor switch is in the "OFF" position.
- Adjust cross-feed to position blade in the trim table groove. Check for clearance and tighten cross-feed thumb screw.

Turn saw on and check to make sure coolant is flowing. ٠

Hold slab firmly under blade and lower blade gently.

Do Not Force Blade.



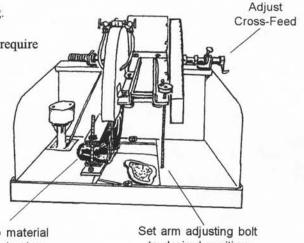
#### Slabbing

- Make sure the motor switch is in the "OFF" position before loading or unloading the saw. \*
- \* Remove the trim table by loosening the vise hold-down bolts and the trim table clips (#054-05).
- Re-tighten the vise hold-down bolts.
- Set the Arm Adjusting Bolt to stop the arm at the desired position.
- Place the rock to the front of the vise and tighten the adjusting bolts securely.
- Adjust the cross-feed for the desired slab thickness.
- \* Tighten the thumb screw on the cross feed shaft.
- Turn saw on and check to make sure coolant is flowing.
- Lower the blade gently onto the rock to start the cut. Do Not Force Blade. NOTE: Certain applications may require adding additional weight (5 lb. maximum) to the arm.



result in an unsafe condition. Failure to follow these instructions

can result in serious injury.



Clamp material firmly in vise

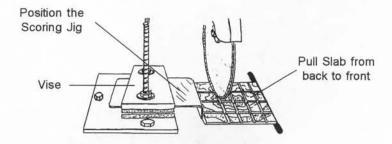
to desired position

#### While Cutting: IMPORTANT: DO NOT LEAVE SAW UNATTENDED.

- Listen for changes in operating noise. Sudden changes can indicate damaged material or blade.
- \* Overloading can result in tripping of the motor safety overload protector. Turn the motor off, 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.

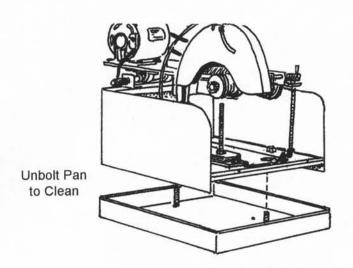
#### Scoring

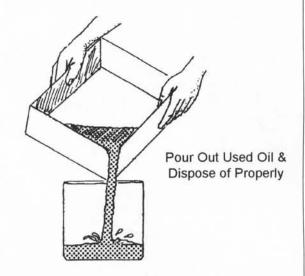
- Make sure the motor switch is in the "OFF" position.
- Install the trim table and tighten the trim table clips.
- Position the Scoring Jig in the vise as shown.
- Set the Arm Adjusting Bolt to stop the blade approximately 1/16" above the table.
- Adjust the cross-feed to the desired position and tighten the thumb screw on the cross feed shaft.
- Turn saw on and check to make sure coolant is flowing.
- Pull the slab from back to front holding it against the scoring jig.



## **CLEANING & MAINTENANCE**

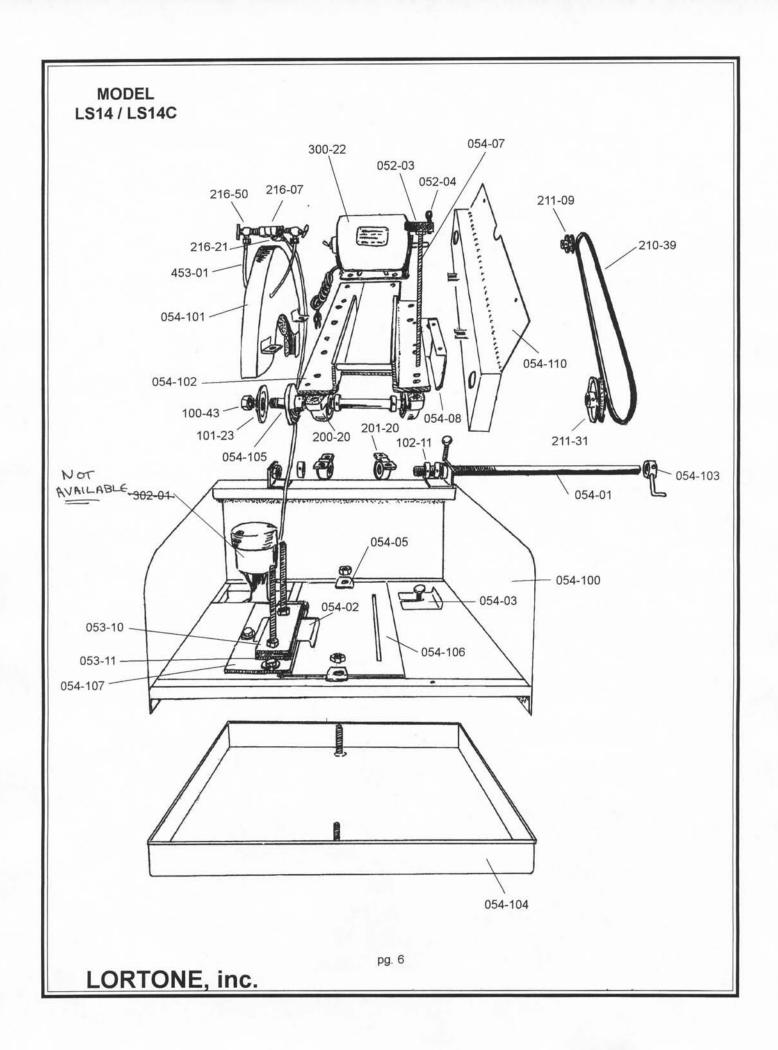
- The saw should be cleaned periodically when sediment builds up to a depth of 1/4".
- Unbolt the saw case from the coolant pan and lift out the case.
- Empty the coolant pan and wipe sludge from the case and pump housing.
- Reinstall case in coolant pan, attach bolts, and add clean or filtered oil.





## **PARTS LIST**

Item	Description	054-106	Trim Table
052-03	Arm Adjusting Wheel	054-107	Vise Bottom Plate
052-04	Handle	054-110	Belt Guard
053-10	Vise Top Plate	100-43	L.H. Jam nut
053-11	Vise Pad	101-23	Plated FLange
054-01	Cross-feed Shaft	215-09	Set Collar
054-02	Scoring Guide, Long	200-20	Arbor Bearing
054-03	Scoring Guide, Short	201-20	Cross-feed bearing with straps
054-05	Trim Table Clip	210-39	Belt (4L440)
054-06	Front Splash Shield	211-09	Motor Pulley (2 1/4" x 1/2")
054-07	Arm Adjusting Bolt	211-31	Arbor Pulley (4" x 3/4")
054-08	Arm Splash Shield	216-07	Tee Fitting
054-100	Saw Case	216-21	Minibarb Female Connector
054-101	Blade Guard	216-50	Water Valve
054-102	Arm	300-22	1/3 Hp Motor with Cord
054-103	Cross-feed handle	302-01	Coolant Pump NOT AVAIL.
054-104	Coolant Pan	453-01	Coolant tubing (40" long)
054-105	Arbor Shaft with Fixed collar	566-12	Blade Dressing Stick (pkg. of 3)



# **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!!**