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OPERATING INSTRUCTIONS FOR COREMATIC JUNIOR CORE SAW



All new Corematic Core Saws carry the following guarantees;

Five years on Frames, Covers and Side Panels.

Two years on Motors and Drives.

One Year on Wear Parts i.e. Chain and Wear Strips.

Corematic offers Delivery, Installation, Commissioning and Training of personal with certificates anywhere in South Africa and Africa. Pricing Dependent on location.

INSTALLATION

1. Loosen and remove the four screws as indicated in **FIGURE 1** from the back end of the saw.
2. Line up the Core Tray with the three wholes and secure it with the screws removed in Step 1. Connect the Drainage Hose supplied with the Saw to the Water Gulley. (**FIGURE 2.**) and (**FIGURE 3.**)
3. Connect Hosepipe to the Saw. (**FIGURE 4.**)
4. Connect the machine to the Mains.
5. Remove Split Pin from locking latch. (This locking latch is installed only for the purpose of transport), open the latch and leave it in a safe position. (**FIGURE 5**) and (**FIGURE 6**).

FIGURE 1.



FIGURE 3.

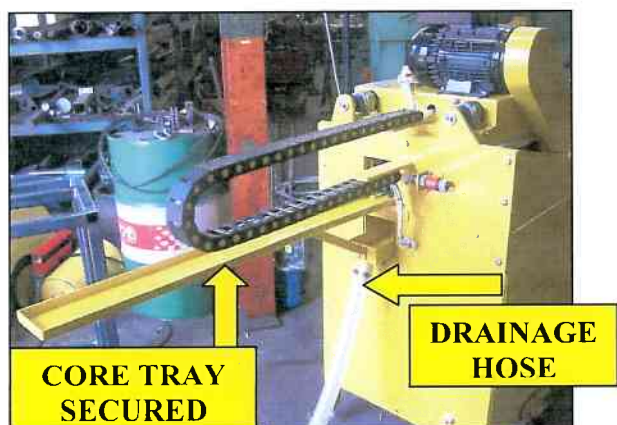


FIGURE 5.



FIGURE 2.

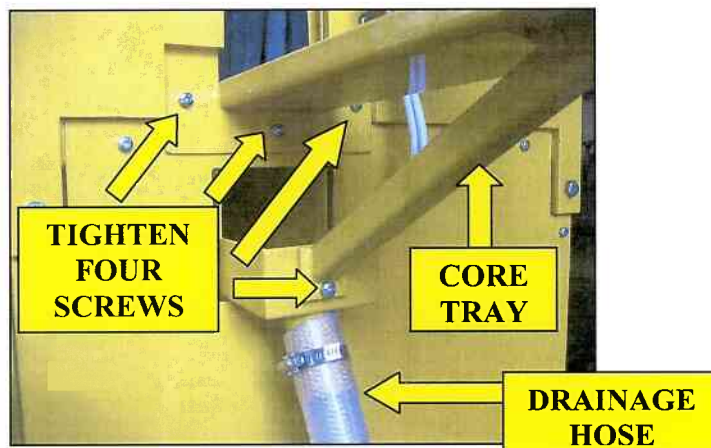


FIGURE 4.

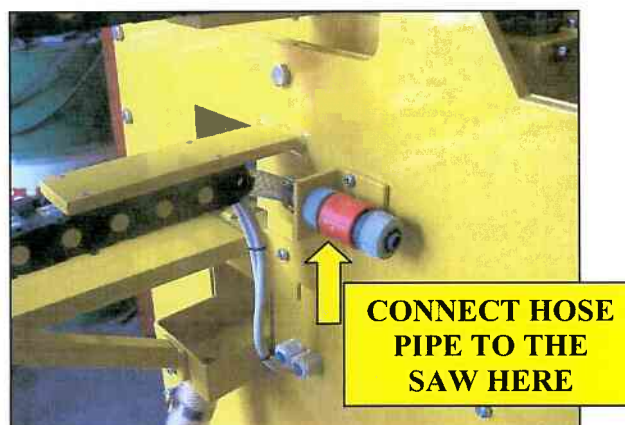


FIGURE 6.





START UP PROCEDURE

1. Turn the Mains on at the wall (220 Volts, Single Phase).

PLEASE NOTE:

IF THE MACHINE IS RUNNING FROM A GENERATOR, PLEASE INSURE THE GENERATOR HAS AN AUTOMATIC VOLTAGE REGULATOR FITTED AND IS WORKING PROPERLY, AS WARRANTY CONDITIONS WILL BECOME VOID IF NO A.V.R IS USED.

2. Turn Water on at the main tap.
3. Pull out the Red Emergency Stop Button. (FIGURE 7.)
4. Adjust the Core Height Guide to suit Core being cut. (FIGURE 8.)
5. Using the Machine's Black Handle, push the Head to the Back End of the Machine. (FIGURE 9.)
6. Place Core to be cut into Core Guide Box and Place it into the Gully. (FIGURE 10.)
7. Turn Water on at the machine's tap, (make sure there is water spraying). (FIGURE 10.)
8. Press Green Start Button. (FIGURE 7.)

CUTTING CORE

9. Using the Handle connected to the Head, Pull the Head towards the front end of the Machine slowly, Cutting through the core, always watching the Amp Meter (Figure 7.). Make sure not to exceed the Amperage limit marked with the red line on the Amp Meter. Exceeding the mark will cause damage to the Motor and Unnecessary Wear to the Blade.
10. Once the Core has been cut through its length, keep pulling the Head until it is up against the Rubber Stop. (FIGURE 9.)
11. Now push the Head towards the Back End of the Machine. The Core in the Core Guide Box will be pushed along with the Head and will be seen at the Back End of the Machine in the Tray. (FIGURE 11.)
12. Insert new Piece of Core into another Core Guide Box and place it in the Gully and repeat Step 9. (Three consecutive Core Guide Boxes can be used until Back End of Tray is full). Split Core can now be replaced into their original place in the Core Tray. The Process can be repeated.

SHUT DOWN PROCEDURE

13. Push the Red Stop Button. (FIGURE 7.)
14. Push the Red Emergency Stop Button In. (FIGURE 7.)
15. Turn Off the Water at the Machine and at the Main Tap. (FIGURE 10.)
16. Make sure all Core Guide Boxes have been removed from the Machine.
17. Turn off the Mains at the wall.
18. Rinse off the Machine with a hose and wipe it clean using a soft cloth.

CHANGING BLADES

19. Push the Red Emergency Stop Button In. (FIGURE 7.)
20. Turn Off the Water at the Machine and at the Main Tap. (FIGURE 10.)
21. Unplug water hose from the Blade Cover. (FIGURE 10.)

22. Open the Blade Cover by releasing the Latch. (FIGURE 12. AND 13.)
23. When the Blade Cover is opened, the Micro Switch (FIGURE 12.) is released. This is a safety devise ensuring that power to the motor is cut off.
24. Remove the old Blade using a 30mm Spanner. (FIGURE 14.)
25. Clean paint out of Blade Shaft Hole to ensure perfect fit on Shaft. (FIGURE 15.)
26. Fit Blade on shaft and ensure Pin is fitted in hole on Blade. (FIGURE 16.)
27. Fit Blade Washer, taking note of the Pin hole. (FIGURE 17.)
28. Fit Blade Locking Nut. (FIGURE 18.)
29. Tighten Blade Locking Nut using the 30mm Spanner. (FIGURE 14.)
30. Close Blade Cover and Lock using the Latch. (FIGURE 12.)

MAINTAINING LINEAR SHAFTS AND BEARINGS

31. It is very important to oil the linear bearings one to two times a week using an oil pump. Insert the Oil pump into the Linear Bearing's Oil Nipple and Pump until the Bearing is full of oil. (FIGURES 19)

FIGURE 7.

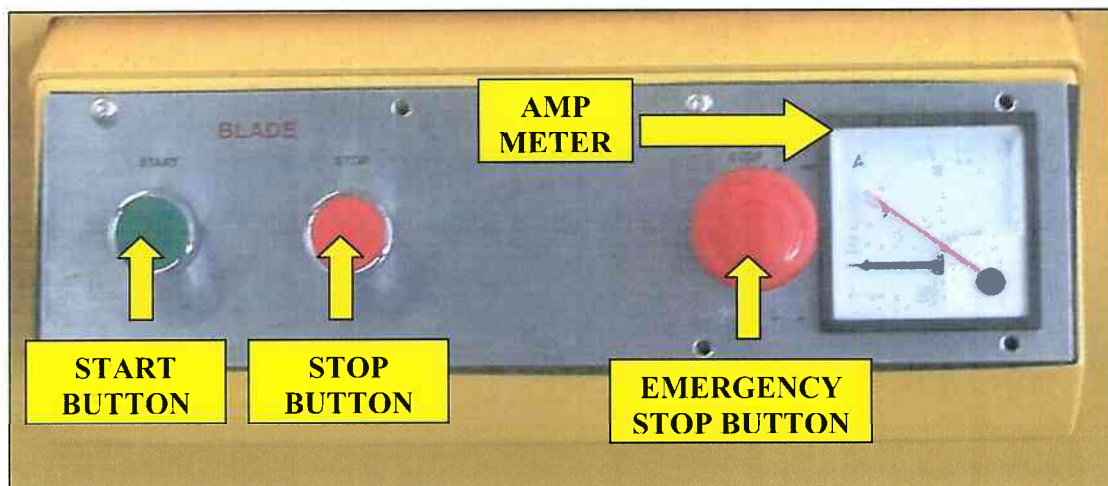
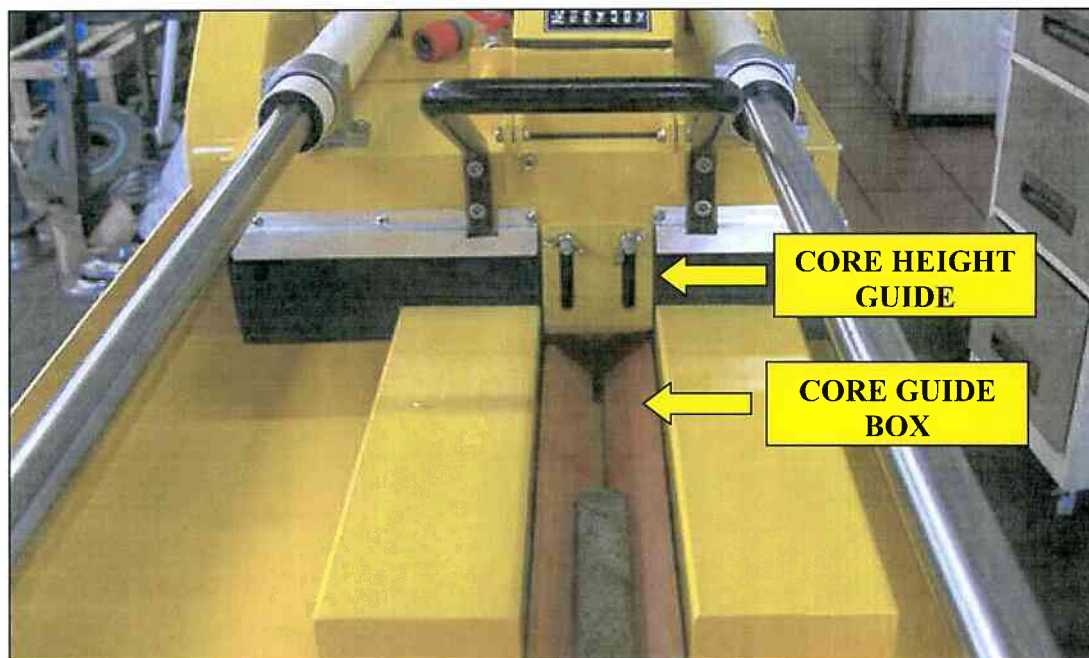


FIGURE 8.



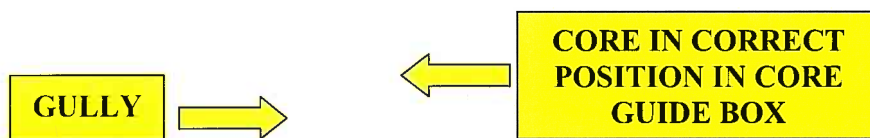


FIGURE 9.

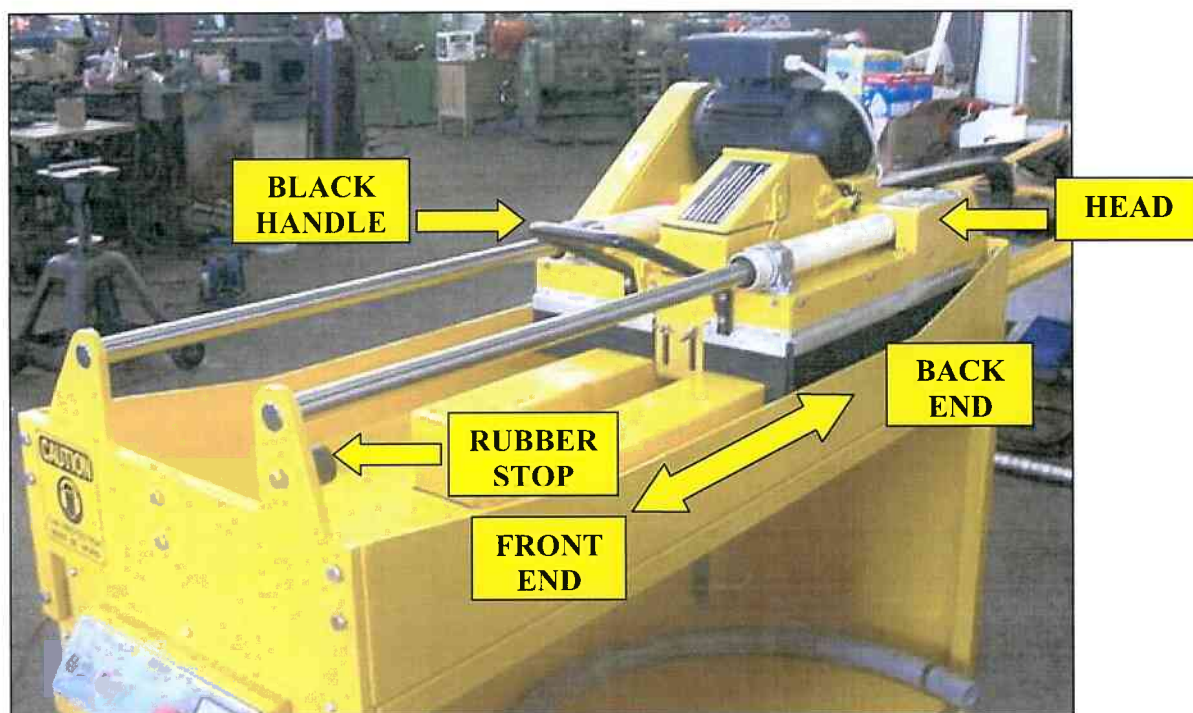


FIGURE 10.

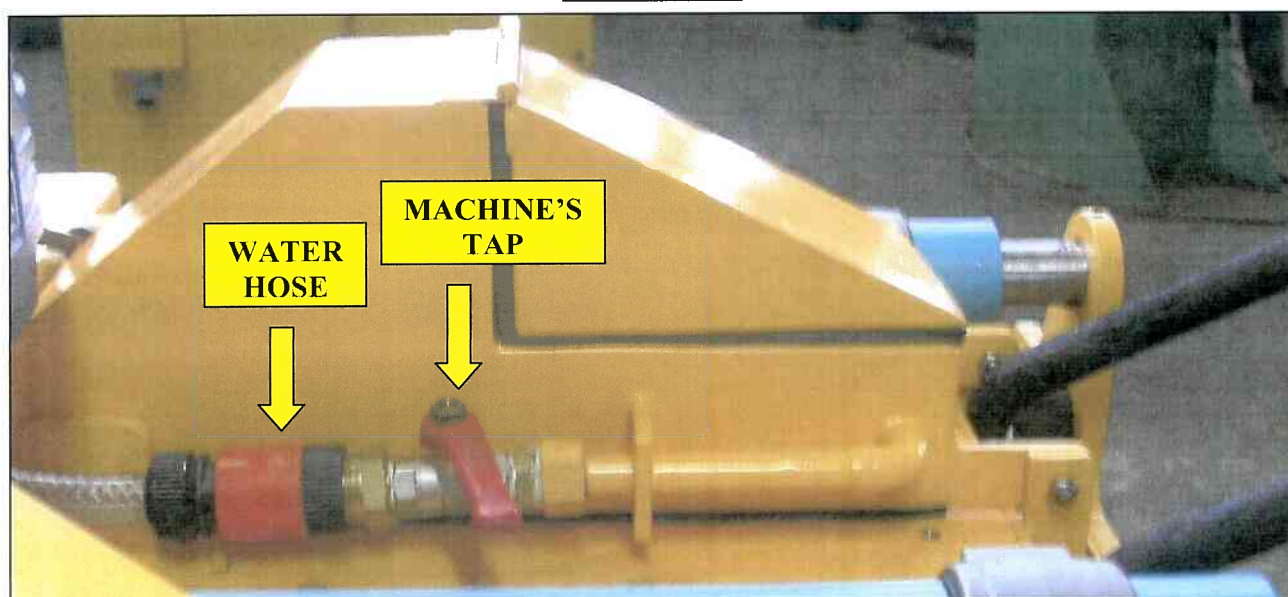


FIGURE 11.



FIGURE 12.

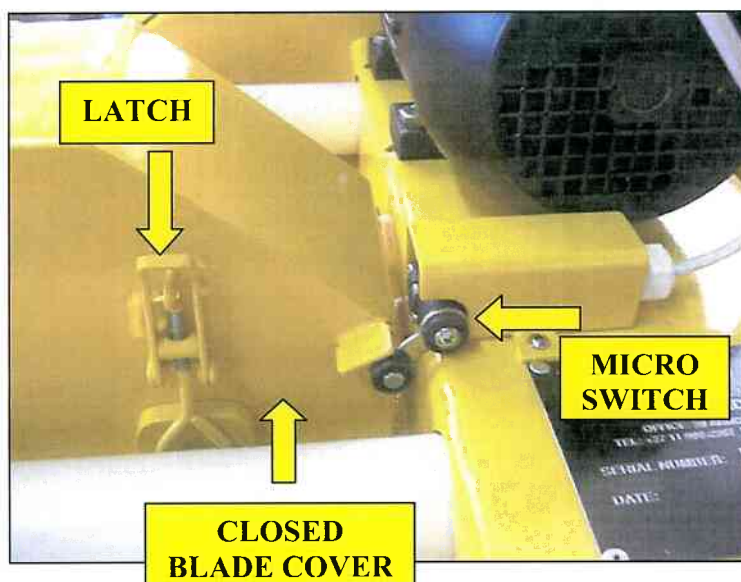


FIGURE 13.

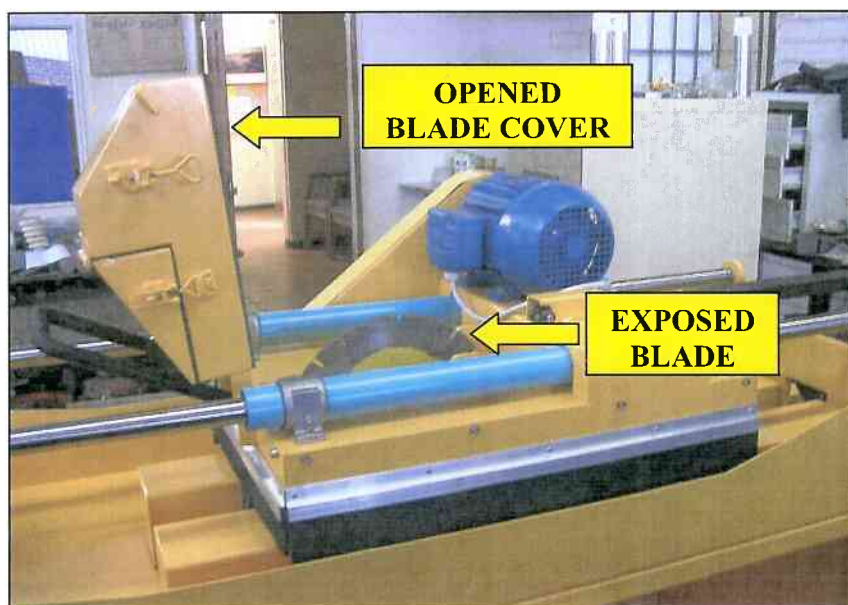


FIGURE 14.

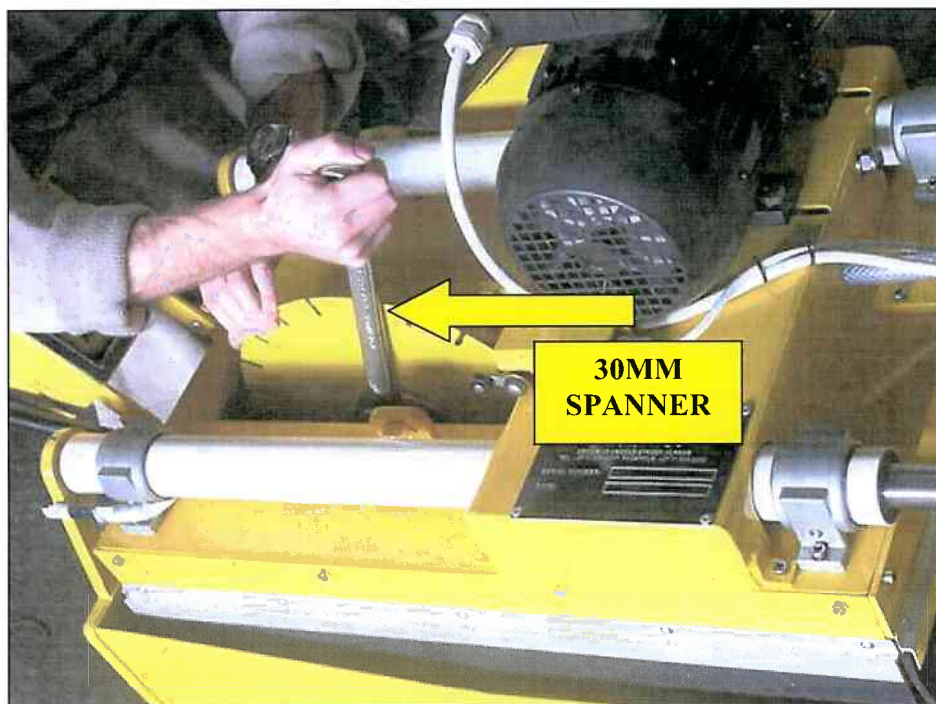


FIGURE 15.



FIGURE 16.

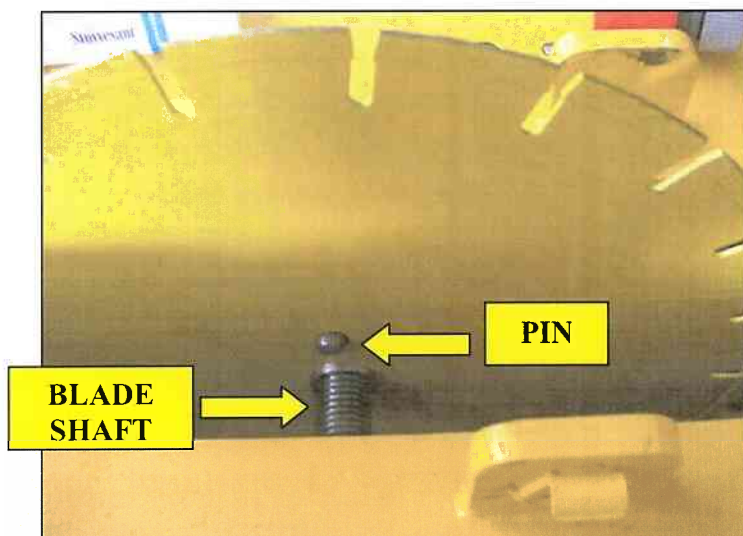


FIGURE 17.

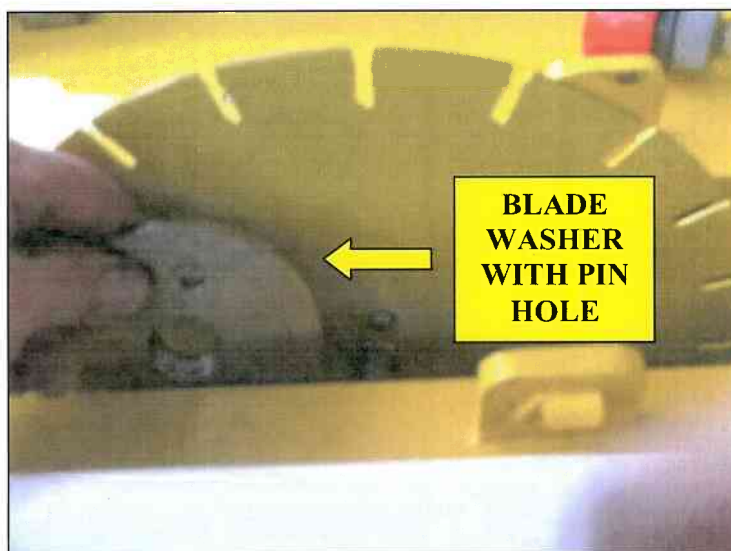
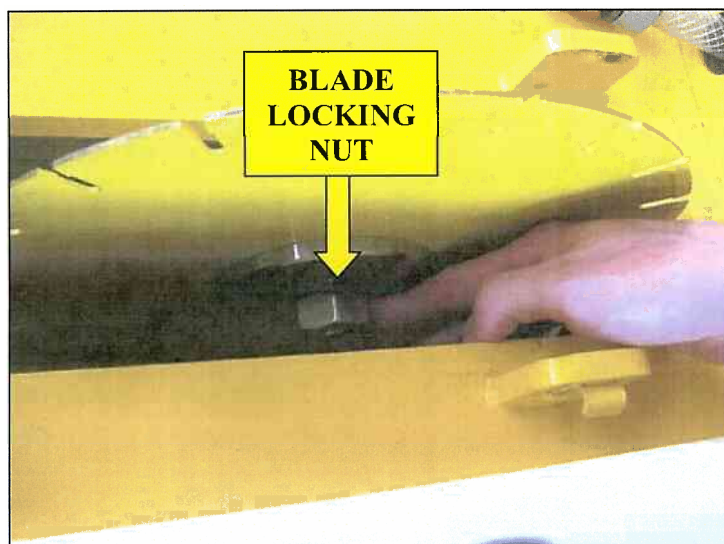
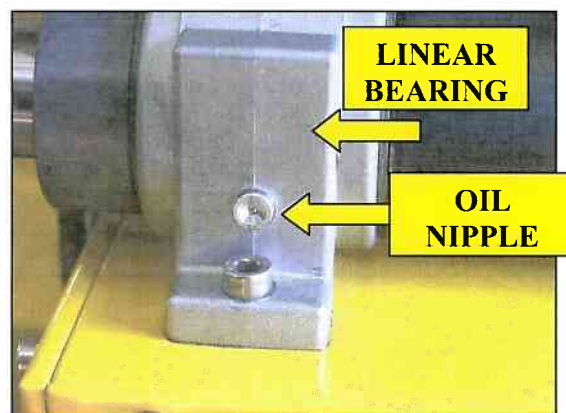
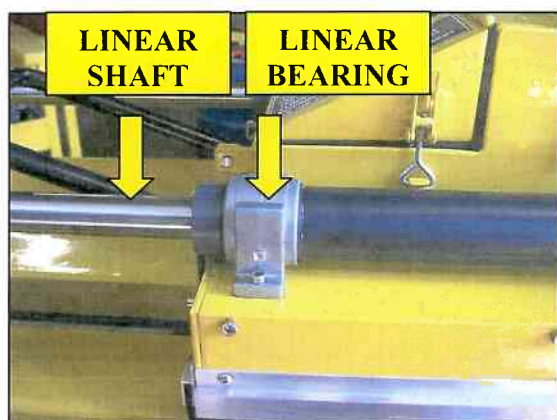


FIGURE 18.

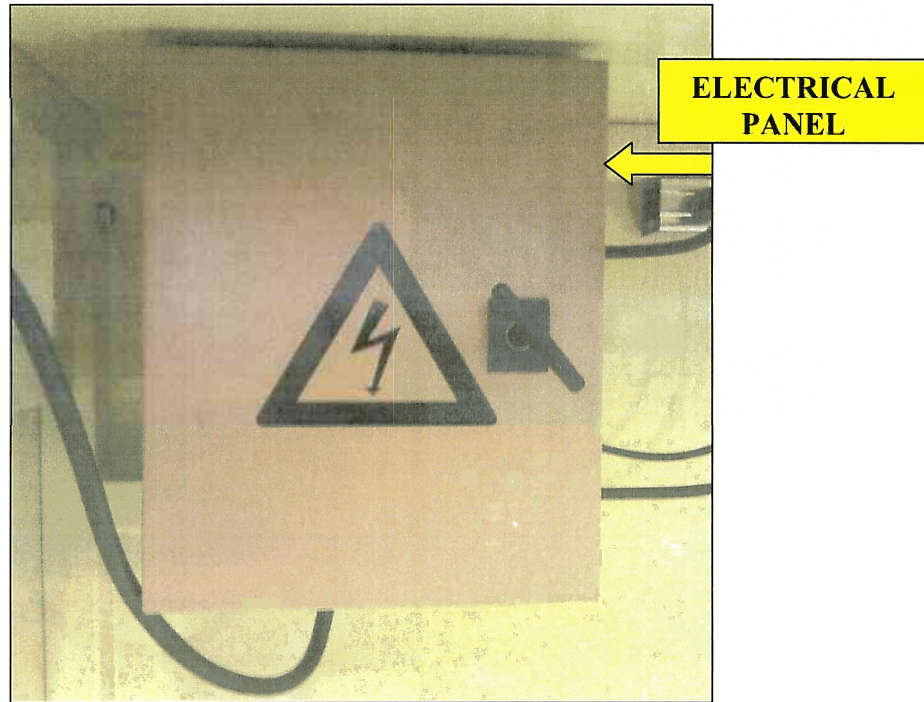


FIGURES 19.**VERY IMPORTANT!**

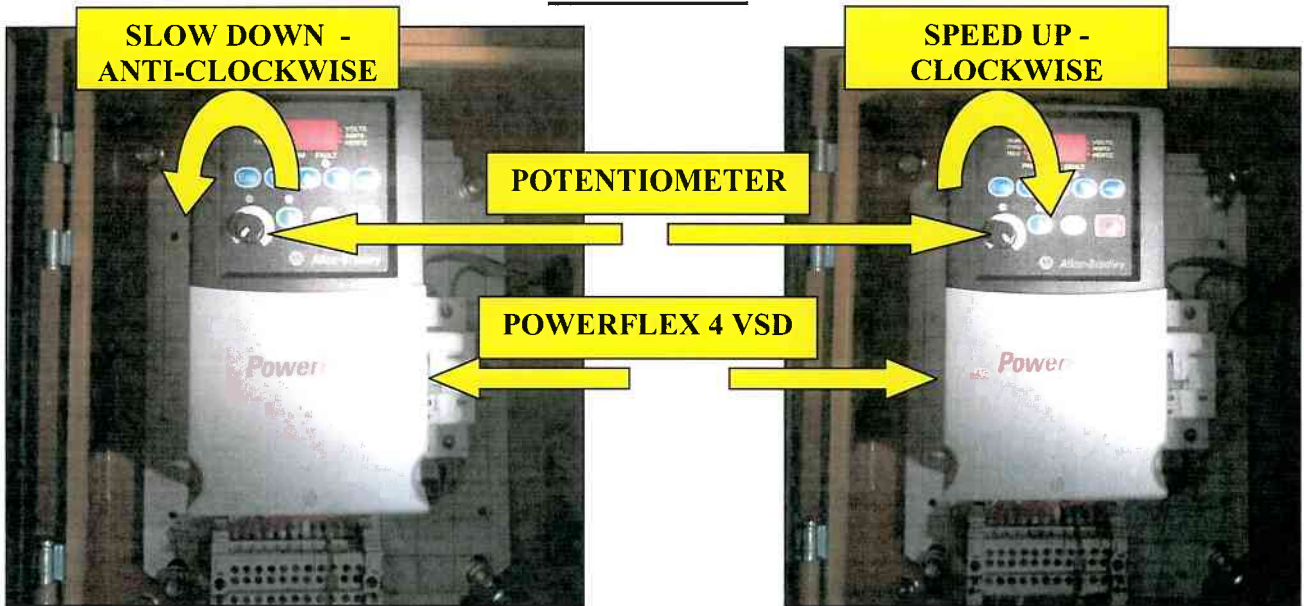
CHANGING THE SPEED OF THE BLADE TO CUT EXTREMELY HARD CORE SUCH AS BANDED IRON ORE

1. To Avoid Electric Shock, unplug the machine from electrical supply.
2. Open the Electrical Panel. (FIGURE 20.)
3. Turn the Potentiometer on the PowerFlex 4 VSD Anti-Clockwise to it's **MOST MINIMUM POSITION**. This will slow the Blade Motor down to 40 Hertz. (FIGURES 21.)
4. Close and Lock the Electrical Panel. (FIGURE 20.)
5. Plug the machine back into the electrical supply.
6. To cut Banded Iron Ore, the Corematic Junior Banded Iron Ore Blades (JBI Blades) should be used.
7. If cutting normal core Repeat the above procedures but turn the Potentiometer Clockwise to it's **MOST MAXIMUM POSITION**. This will speed the Blade Motor back up to 50 Hertz. The use of Corematic Standard Blades should again be used.

FIGURE 20.



FIGURES 21.



PLEASE NOTE:
Only Corematic Blades are to be used on Corematic Saws. Warranty will become null and void should Non Standard Blades be used!

MOTOR SPECIFICATIONS OF 220 VOLT SINGLE PHASE SUPPLY JUNIOR SAWS WITHOUT VSD'S (OLDER MODELS).

1. **ELECTRIC MOTOR:** 220V, 50HZ, 2.2KW, 2 POLE, 2890 RPM, SINGLE PHASE WEG MOTOR
2. **BLADE SPEED:** 2477 RPM.

SPECIFICATIONS OF 220 VOLT SINGLE PHASE SUPPLY JUNIOR SAWS WITH VSD'S (NEW MODELS).

1. **ELECTRIC MOTOR:** 220V / 380V , 50HZ, 2.2KW, 2 POLE, 2810 RPM, THREE PHASE WEG MOTOR
2. **BLADE SPEED AT 50HZ:** 2408 RPM.
3. **BLADE SPEED AT 40HZ:** 1926 RPM.
4. **VARIABLE SPEED DRIVE:** ALLEN BRADLEY POWERFLEX 4, 220V SINGLE PHASE IN THREE PHASE OUT, 2.2KW.

SPECIFICATIONS OF 380 VOLT THREE PHASE SUPPLY JUNIOR SAWS WITH VSD'S (NEW MODELS).

5. **ELECTRIC MOTOR:** 220V / 380V , 50HZ, 2.2KW, 2 POLE, 2810 RPM, THREE PHASE WEG MOTOR
6. **BLADE SPEED AT 50HZ:** 2408 RPM.
7. **BLADE SPEED AT 40HZ:** 1926 RPM.
8. **VARIABLE SPEED DRIVE:** ALLEN BRADLEY POWERFLEX 4, 380V THREE PHASE IN THREE PHASE OUT, 2.2KW.

