

**KNOWLEDGE BASE**

Article Type: Instructions

**VFD Installation, for Models, 10,  
12, 16, 22HF, 16HF, 1600 machines****Description:**

Instructions on “How to” properly install a VFD Vibrator in 10, 12, 16 Pit Models, and 22HF, 16HF, and 1600 block machines.

**WARNING**

Never work on, clean or service this unit, control panel or any machine or open or remove any protective cover, guard, grate, door, or maintenance panel until the power or energy sources has been turned off, locked out / tagged out, and all moving parts have come to a complete stop and or blocked to prevent movement. Machinery is dangerous - avoid personal injury and or death by following manufacture, Local, and OHSa safety procedures. Contact Columbia Machine for safety decals, guards, horns and beacons.

*Columbia*

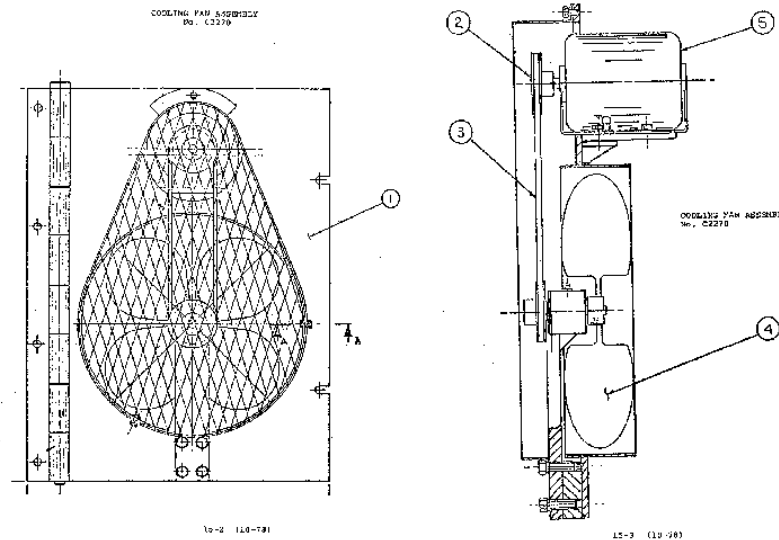
THE TOTAL SOLUTION

# VFD INSTALLATION INSTRUCTIONS



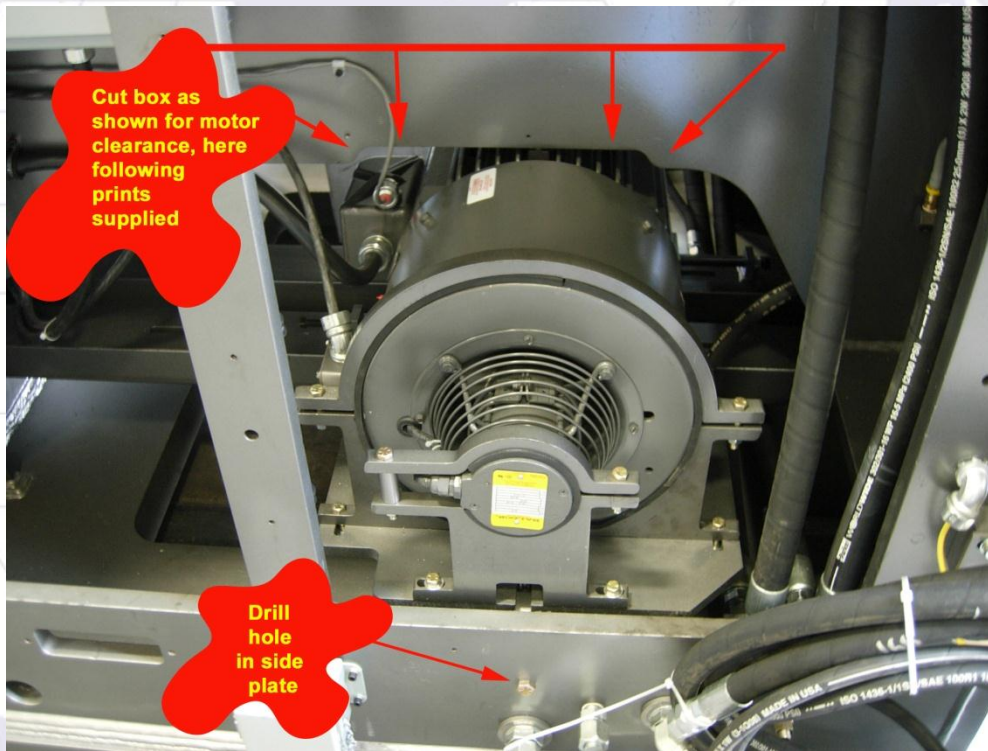
This conversion kit  
covers floor level and  
pit model machines

1. Use lock out and tag out procedures on the machine.
2. Clean machine inside and out.
3. Inspect parts kit for missing or damaged parts. Please report any claims right away by calling 800-628-4065 and ask for Concrete Products parts department.
4. Gather needed tools.
5. Remove side doors/guards for easy access **(must be replaced when done)**. NOTE: *On older machines with the fan installed on side door, the side door must be replaced with vented flat sheet metal allowing air flow to motor. (Shown below)*

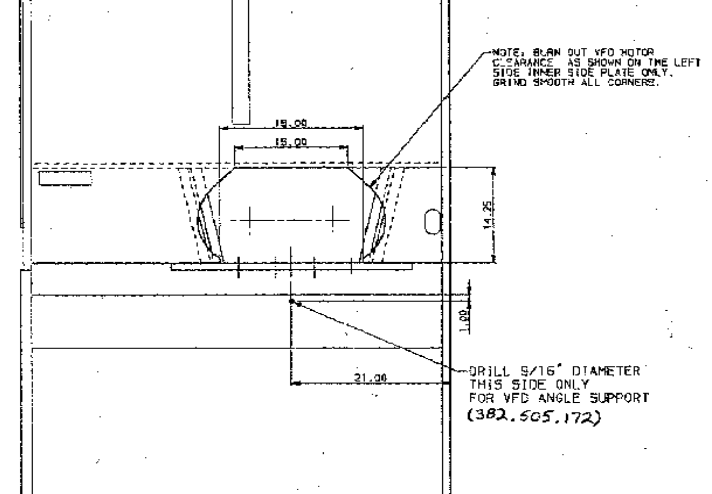




6. Remove old vibrator drive motor: clutch/brake, Warner or hydrostatic drive unit.
7. With old drive system removed, using the prints supplied, modify the box side plate to allow clearance for new motor.



### PIT MACHINE BOX MODIFICATION



LEFT SIDE VIEW

For Dimensions refer to: PRINT # 382.505.170

8. If VFD kit is purchased with motor, the motor will be modified to assembly print for grease fitting and cable locations, plus the cables are pre-installed. (See photo below)

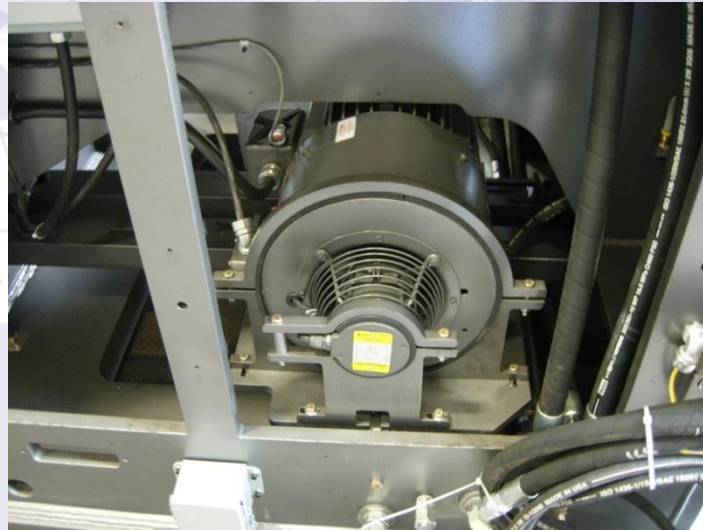
a. If using existing motor please refer to print # 365.2.834 this will cover cable installation; grease fittings location and J-box install.

b. Next, install sheave onto motor loosely before installing motor. Sheave will be aligned when motor is placed in machine using belt tensioning info. PRINT #484.100.104



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9. With machine modified, install motor mounting plate and motor as one unit. (As shown in photo below)



10. Tension belt using belt tension gauge and instruction sheet.
11. Secure cables to inside of machine box, to avoid rubbing on sharp edges.
12. Install electrical panel and cabling.
13. Check all connections and power up panel. Compare parameters on VFD read out to electrical prints.
14. Test run and put machine into production. (not rotation sensitive)