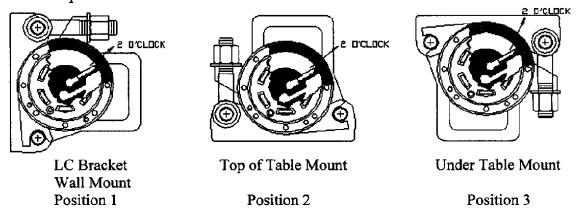
# SVR <u>SILENT</u> HIGH FREQUENCY PNEUMATIC VIBRATORS



Vibco vibrators will start every time just by cracking the air valve, if the vane is positioned as shown below.

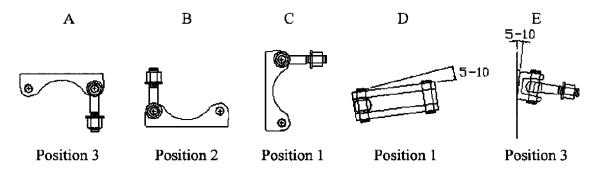
Air hose coming out in a horizontal position: No matter where the foot of the vibrator is located, a line through the exhaust hole and inlet hole (inlet hole on bottom) should be at 2 o'clock position.



To change position, remove all bolts in covers on inlet hose side. Remove bolts from opposite side. Press out cover assembly on inlet hose side. Turn shaft and cover assembly to desired position. Press back into housing and secure with bolts.

Note: Use stud loctite (green) on bolts.

## LC BRACKETS, MOUNTS, AND EASY START POSITION



Mount D and E show LC bracket mounted vertically on a wall and hose of vibrator coming out under vibrator when mounted in LC bracket. To achieve an easy start position, the LC bracket must be tilted 5-10° as shown in D or E above.

#### **CHANGING VANE IN SVR UNITS**

Fig. 1





- 1. Due to the constant pressure and wear from the rotor against the vane, the vane slot in the shaft might shrink slightly and the new vane has to be sanded down with fine emery cloth to fit. The fit should be a slightly push fit.
- 2. An edge at the vane slot opening might also have developed due to the hammering and also due to sand, cement, and other particles in the compressed air (Fig. 1).
- 3. Make sure vane is put in correctly with air canals in vane pointing away from exhaust holes (Fig. 2).



# **LUBRICATION:**

The VIBCO roller (rotating)vibrators have no bearings. However, it is very important to oil the unit through a line type lubricator so that the only moving parts, vane and rotor can move freely. Lack of oil will cause excessive wear of the vane. Use SAE #10 oil or hydraulic oil.

#### TO START:

The SVR vibrator, in principle, operates on a low and high pressure air chamber. To close off these two chambers in the starting moment, it is sometimes necessary to give the unit a quick burst of air. Do this either by crimping the hose and letting it open quickly, or, use a fast opening type valve in the line.

#### TROUBLE SHOOTING:

#### A. No Vibration:

- 1. Air pressure is too low. Raise air pressure. Normal operating pressure is 80-90 psi.
- 2. Air is turned on too slowly. Open valve quickly.
- 3. Vane is stuck. Dirt in air line or swelling due to use of wrong type of oil in lubricator. Disassemble and clean. If necessary file vane until it moves freely up and down in slot.
- 4. Turn unit 180° on mounting position. Force of gravity can in one position make unit hard to start.

## B. <u>Insufficient Vibration</u>:

- 1. Air pressure is too low. Raise air pressure.
- 2. Air is leaking past vane. Caused by dirty air wearing down vane. Disassemble and replace vane.
- 3. Vibrator is not tight in mounting bracket. Retighten bolts.

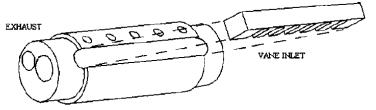
# **DISASSEMBLY INSTRUCTIONS:**

- 1. 7/16" and '4" socket head cap screws remove from cover.
- 2. Insert three of the screws in the three threaded holes, tighten them evenly. This will force out cover. DO NOT TAKE IT OFF UNEVENLY. THIS MIGHT DAMAGE THE PRESS FITS.
- 3. Slide out rotor.
- 4. Remove vane.
- 5. Clean and inspect all parts. Make sure vane slides with a slight drag up and down in slot. If vane is too tight, file slightly; if too loose, replace it.



# TO ASSEMBLE:

1. Be certain all parts are clean. Oil all parts. Make sure the vane is turned correctly when inserted in slot (see figure below). The inlet holes pointing away from exhaust holes.



- 2. Slide in rotor.
- 3. Press on cover. Make sure it lines up with all the holes by inserting the socket head cap screws. If press not available, tighten all the screws <u>EVENLY</u> until cover is forced in place. Secure all the screws firmly.
- 4. Before starting the SVR, after assembly add extra oil at the hose opening to insure sufficient lubrication of all parts.



# **SVR TROUBLE SHOOTING**

PROBLEM	CAUSE	SOLUTION
Won't start	Unit may not be in pre-set position to start.	Check pre-set position per SVR instruction sheet.
	Unit may have seized up during shipping.	Open air valve completely and strike unit sharply on ground.
Air is free flowing through unit.	Vane is worn.	Install vane properly.
Unit is skipping and won't come up to speed.	Wear plate not replaced during repair.	Check for missing wear plate and install if missing.
	Bolt holding cover to shaft not tightened enough.	Tighten shaft bolts.
	End plates not fitting against ends of shaft, while repairing unit.	Check housing and covers for burrs and built up metal. File edges.
Bolts are loosening.	"Loctite" not applied to bolts.	PC/609 (green) "Loctite" must be applied to all bolts.
Slow speed.	Unit not being lubricated properly.	An in-line oil mist lubricator must be used. a light hydraulic oil or dextron transmission oil is recommended.
	End plates not fitting against ends of shaft.	This may be checked visually if wear plate on single bolted end of shaft can be moved, tighten bolts. (Move plate with screwdriver or drive pin).
	Wear plate has turned, blocking exhaust holes.	Loosen bolt and retighten with wear plate in proper position.
	Vane is worn.	Check vane for wear and replace if necessary.



#### SHAFT BOLT TIGHTENING PROCEDURE

- 1. Loosen bolts on inlet hose side slightly.
- 2. Tighten bolt on exhaust cover (be sure wear plate has not turned and blocked exhaust holes).

3. Tighten the two bolts on inlet hose side.

MAINTENANCE:

Every 100 hours

Every 500 hours

Check:

Hose for wear

Vane wear

Bolts through cover

Wear plate wear

are tight

rotor wear

CAUTION: DO NOT CARRY UNIT BY HOSE. USING THE HOSE AS A CARRY HANDLE WILL RESULT IN EXCESSIVE WEAR AND

POSSIBLE FAILURE AND INJURY.

