



VIBRATOR SERVICE GUIDE

This documentation can be used as a guide on how to service and maintenance the MVC series plate compactor vibrator assembly.

VIBRATOR ASSEMBLY REMOVAL

Removal of the vibrator housing assembly from the base plate is not necessary for maintenance or rebuilding. Removing the vibrator assembly should only be done if the housing itself is damaged.

1. Remove the belt guard and belt.
2. Remove the water tank for access to the vibrator motor bolts.
3. Remove the four bolts and lock washers securing the vibrator motor to the base plate. * **A heat source may be required to loosen the Loctite on the four bolts that secure the housing to the base plate.**
4. The vibrator can now be removed.

VIBRATOR ASSEMBLY INSTALLATION

1. Clean the mounting surface areas on both the base plate and the vibrator assembly.
2. Clean the four blind hole threads on the base plate to ensure proper Loctite curing.
3. Set the vibrator motor on the base plate.
4. Always use new motor bolts and lock washers.
5. Clean the bolts and apply LOCTITE 271 to the threads of the bolts.
6. Tighten all four bolts to using a two-step torque procedure.
7. Install belts, belt guards and set engine to correct RPM.



VIBRATOR PREVENTATIVE MAINTANENCE

With proper vibrator assembly preventive maintenance the vibrator should provide years of trouble free operation. Refer to the latest owner's manual on the MULTIQUIP website for a service and maintenance guide for your model.

1. Vibrator oil should be checked every 100 hours of operation.
2. Vibrator oil should be change every 200 hours or at least once a year
3. Use only 10W-30 motor oil for vibrator motor lubrication.
4. With the unit on a flat level surface the oil level should be at the bottom of the fill plug located on the side of the vibrator.
5. The vibrator oil level should not be over-filled.
6. Check that all fasteners at tight.
7. Maintain proper engine RPM.

VIBRATOR MOTOR REPAIR

Complete replacement parts are available through MULTIQUIP parts department. However, if damage to the vibrator motor has occurred replacement of the complete vibrator assembly should be considered.

- When replacing bearings, seals, gaskets and O-rings use only OEM service parts.
- The eccentric rotor shaft and bearings should be replaced as a set.

PROPERLY HANDLING VIBRATOR BEARINGS

Bearing life begins with proper handling. The purpose for which bearings are used is as important as careful handling. Incorrect mounting and improper handling are common causes of premature bearing failure. The goals of proper handling are to protect the bearings from potential damage to ensure they will serve their intended use. Guidelines for proper bearing handling are:

- ings and related components clean
- ings free from harmful substances, including foreign particles and moisture.
- oper tools when mounting bearings to shaft.
- nage or distort bearings while mounting.
- orrect quantities and lubrication type, 10W-30 motor oil.
- Is as clean as possible when handling bearings to prevent corrosion.

BEARING FIT TO ROTOR SHAFT

The bearing fit to the rotating eccentric shaft is critical to the life of the bearing and operating of the vibrator motor. The bearings used are a single row deep groove ball bearing type. These bearings used on a rotating shaft stationary housing type application require a tight interference fit of the inner ring to the rotating shaft. Any damage to the shaft bearing surface would require a shaft replacement. Shaft damage will lead to an incorrect fit causing the inner ring of the bearing to creep. Bearing inner ring creep leads to displacement of the inner ring to the shaft resulting in abnormal heat, abraded surfaces and abrasive particles entering the interior of the bearing. For these reasons it is suggested that both bearings and the eccentric shaft be replaced together.

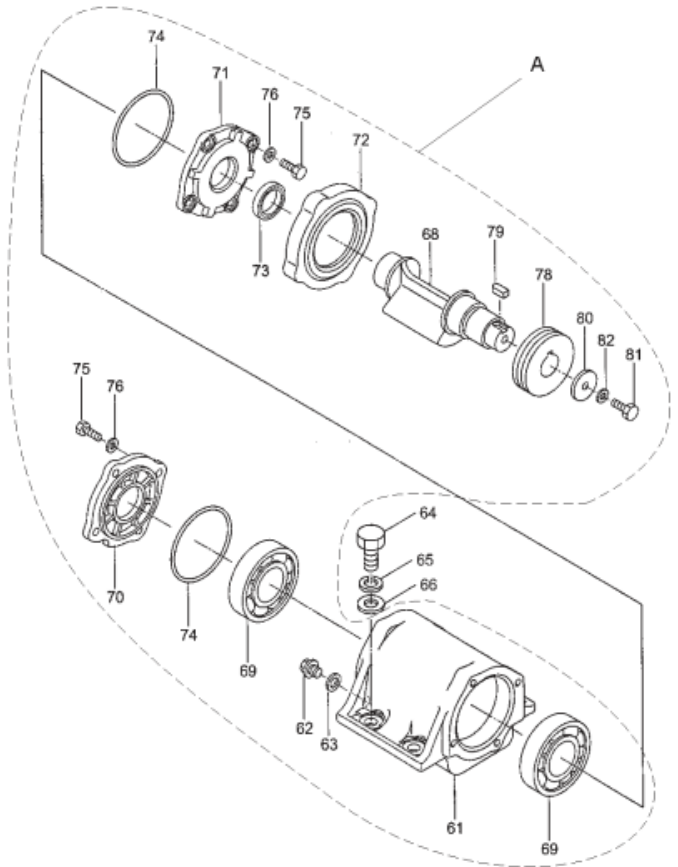
1. Clean the bearing and shaft mating surfaces.
2. Recommended but not required: submerge the bearing into a hot oil bath to increase the bearing temperature to aid in pressing the bearing onto the shaft. **Do not apply direct heat to the bearing or eccentric shaft with a torch.**
3. Apply some lubricating oil to the bearing and shaft mating surfaces prior to installing.
4. Using a press and a tubular fitting tool, carefully press the bearing onto the shaft by its inner ring. Take care to press the bearing on straight for a parallel fit fully onto the shaft.

BEARING FIT TO MOTOR HOUSING

When ball bearings have an interference fit to the rotating shaft the fit of the outer ring of the bearing to the stationary housing is said to be a “loose fit”. Prior to installing the shaft assembly into the vibrator housing a thorough check of the housing should be done.

With both bearings fit onto the shaft, the shaft and bearing assembly will now install into the housing with a slip fit or light tap fit. Lightly oil the outer ring and vibrator housing surfaces prior to installation.

(See next page for MVC-88 parts breakdown)



VIBRATOR ASSY.

| NO | PART NO | PART NAME | QTY. | REMARKS |
|-----|-----------|---------------------|------|---------------------|
| A | 416910030 | VIBRATOR ASSY | 1 | INCLUDES ITEMS W/ # |
| 61# | 416115990 | VIBRATING CASE | 1 | |
| 62# | 953400270 | PLUG 1/4X14 10L | 1 | |
| 63# | 953405260 | PACKING 1/4 | 1 | |
| 64 | 001221635 | BOLT 16X35 T | 4 | |
| 65 | 030216400 | WASHER, LOCK M16 | 4 | |
| 66 | 031116260 | WASHER, FLAT M16 | 4 | |
| 68# | 416338890 | ECCENTRIC ROTATOR | 1 | |
| 69# | 040306211 | BEARING 6211C3 | 2 | |
| 70# | 416338900 | CASE COVER (R) | 1 | |
| 71# | 416338910 | CASE COVER (L) | 1 | |
| 72# | 416338920 | BELT COVER GUARD | 1 | |
| 73# | 060403060 | OIL SEAL TC-35488 | 1 | |
| 74# | 050101000 | O-RING G-100 | 2 | |
| 75# | 001220825 | BOLT 8X25 T | 8 | |
| 76# | 030208200 | WASHER, LOCK M8 | 8 | |
| 78# | 416452720 | PULLEY A1-30-86-20B | 1 | |
| 79# | 951405240 | KEY 7X7X19 R | 1 | |
| 80# | 952404250 | WASHER 11X40X4 | 1 | |
| 81# | 001221025 | BOLT 10X25 T | 1 | |
| 82# | 030210250 | WASHER, LOCK M10 | 1 | |