



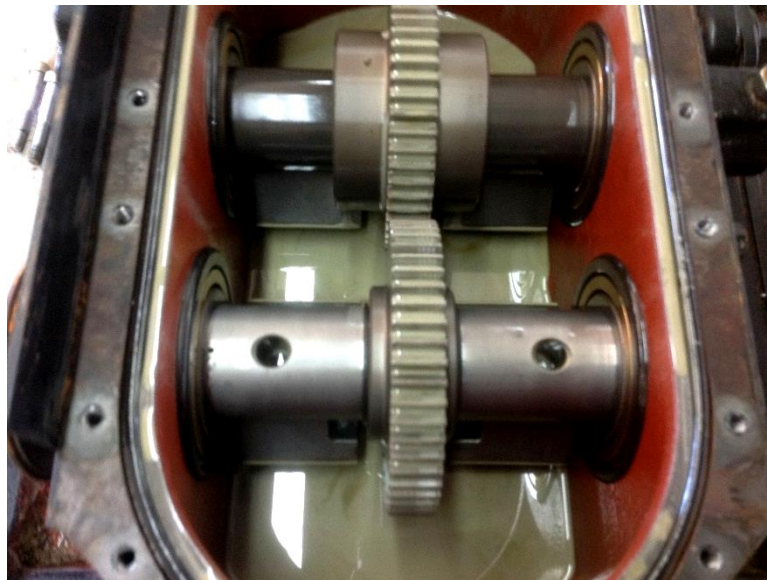
EXCITER VENT OIL CONTAMINATION

The purpose of this document is to inform operators and technical service personnel of the air vent hole for the eccentric in MVH-Series reversible plate compactors. The eccentric assembly box has a vent to equalize the air pressure once the exciter assembly gets to operating temperature. This prevents pressure build up inside the box that could cause oil seals to be pushed out of position. This vent hole has been present since Mikasa introduced the first plate compactors, it is not a new design.

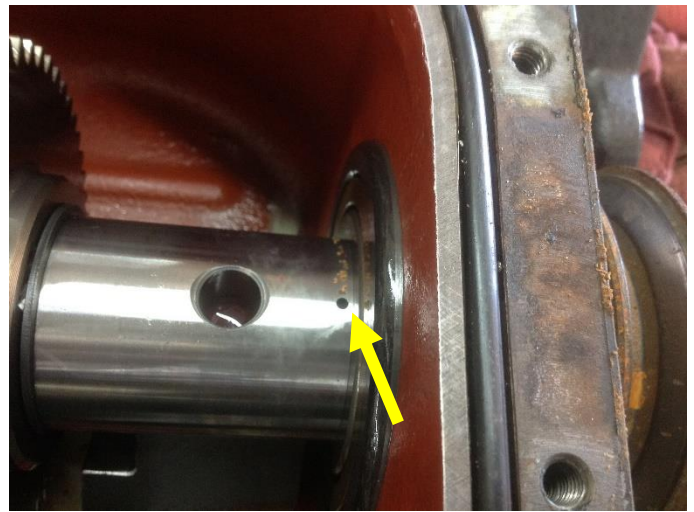
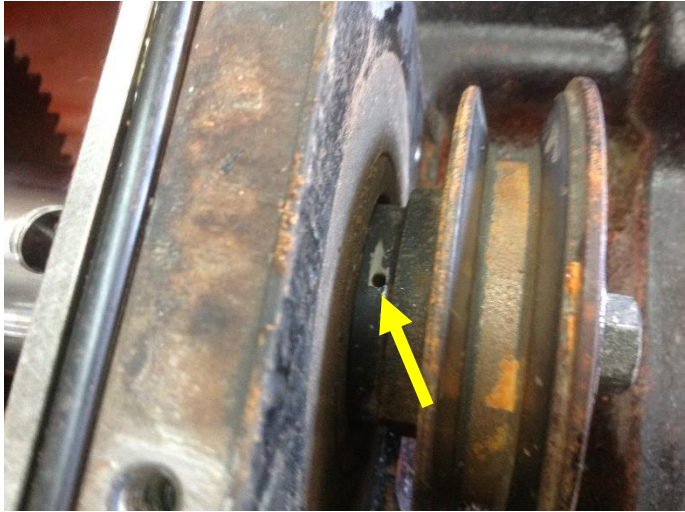
When the plate compactor is turned off and the temperature begins to drop in the eccentric assembly, this will cause outside air to be drawn back into the eccentric case. Generally this is not a problem, however, in cases where the plate is left in a trench that has water in it, the water can be drawn into the eccentric assembly. As the water cools down the exciter case, this cools and reduces the air pressure inside. If the water reaches the level of the vent hole, water can be drawn into the case.

The water then has contaminated the case, the lubrication oil, bearings and shafts. This will oxidize the metal parts preventing them from smooth operation and often binding them from proper movement, which will affect the plates forward and reverse direction travel. Water observed in the eccentric case when oil is changed should be noted in service records. The damage to exciter parts may not be immediately observed in operation.

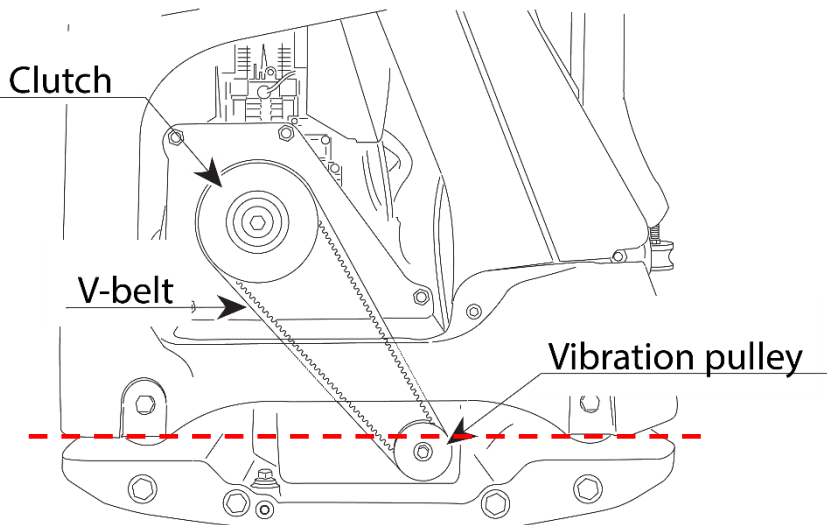
Prevention: Always remove plate compactors from low level trenches or other areas if water can begin to rise and flood the compactor. Following service intervals to check and change eccentric oil can reduce contamination. Increase oil changes in areas that are higher in humidity that brings water into the case.



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External vent hole in the solid shaft is located behind the driven pulley and is located on top of the shaft. The pulley and belt is inside the belt guard and is protected from debris, but not water level that rises above the vent hole and cools the exciter, this draws water into the housing. The vent hole inside the exciter housing, located in the solid shaft, allows air to enter to equalize the internal and external air pressure when the plate is shutdown.



Water level that rises to the level of the red dotted line will be above the vent hole behind the pulley in the solid shaft and water can be drawn into the exciter.

NOTE: When the plate returns from rental, part of the check-in should be, to check the exciter lubrication for signs of contamination. If found milky with water contamination, clean and flush the housing and refill with clean fresh 30W oil to the proper oil level. If in doubt, operate the unit till hot and change the oil again. If this procedure is performed soon enough and the unit has no visible performance issue after operating for a while, the unit can be placed back into service.