

REMOVE AND REBUILD BELLOWS

Easiest method when replacing the bellows is to separate the bottom end from the top assembly.

NOTE:

- (a) It is not necessary to remove the engine from the crankcase.
- (b) It is not necessary to open or remove the crankcase cover.
- (c) When replacing bellows always change out bottom end oil.



WARNING: This unit has several sharp edges! Safety precautions should be followed at all times when servicing this equipment. Consult operations manual for more safety information.



In order to separate the unit, use a lift for support. (see next page for separation details)

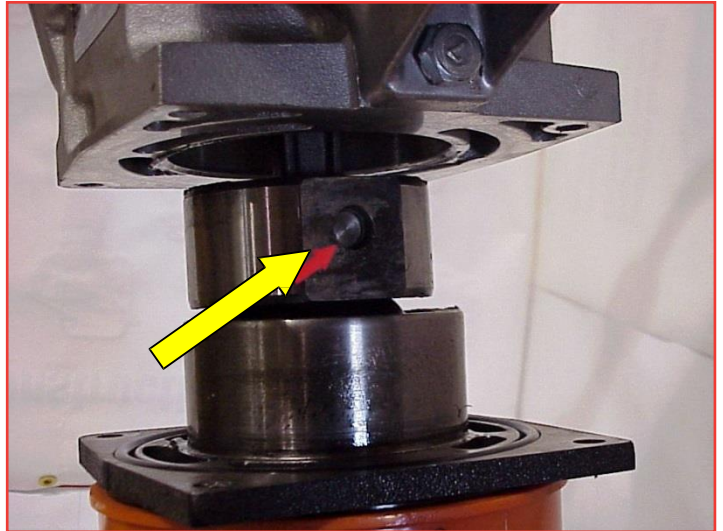


After having the lift support in place use a 17mm wrench and remove the (4) mounting bolts.

Picture used, shows crankcase cover removed which is not necessary for separation.



With the (4) mounting bolts removed, raise the top assembly to access and remove the piston pin.



By removing the piston pin this will allow separation of the top and bottom assembly.
(shown on page one)



Remove top clamp and aluminum lock pin.



After removing top lock pin, remove the cylinder guide. It may be necessary to use pry-bars.

NOTE: When replacing bellows always replace cylinder guide O-rings.



Remove bottom clamp and aluminum lock pin



After removing bottom lock pin, remove bellows from oil reservoir.

NOTE: When replacing bellows always replace oil reservoir O-ring.



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During assembly ensure the aluminum lock pin holes are aligned with the bellows, both on oil reservoir and cylinder guide.

Applying grease will make assembly easier.



Expanding the bellows during assembly makes it easier to insert the cylinder guide.



After inserting aluminum lock pin and assembling clamps ensure the clamps are within the designated grooves on the bellows.



After re-joining the connecting rod to the bottom end, apply Loctite # 221 (red high strength) to the crankcase mounting bolts and torque to spec.

53.9N•m (39.8ft•lb)



NOTE: After replacing the bellows, always add fresh oil to level. Never re-use old oil.