



VACGEN

# Assembly Guide

## RLRP/LRP Front Bearing Assembly

### AS0032

#### VGS03-02T32



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Revision	Date	Comment	Initials
1			
2			
3			

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## RLRP/LRP Front Bearing Assembly

Before you start, mark flanges to keep same orientation when reassembling.

NOTE: If you are just replacing the linear bearings on a RLRP, then start at position 4 and miss out position 7, as you do not need to remove the inner tube from the outer completely.

1. (RLRP) Remove the six screws from the rear Rotary Drive that operates the rotation of the inner shaft and pull out to reveal square shaft.
2. (RLRP) Undo connection between Rotary Drive shaft and Inner shaft.  
Note that the shaft cannot be removed at this point, just push back into the port.
3. Remove the 6 screws from the "Linear" Rotary Drive from the Front Housing.
4. Mark the orientation between the Front Housing and the Linear Tube, as this has to go back in the same orientation.
5. Remove the six screws from the Front Housing that joins to the Linear Tube.
6. Pull the chamber off the tube and you will now see the back of the casting housing that holds the bearings.  
IMPORTANT: Note the orientation the housing comes off the shaft, as one bearing is offset for adjustment and this one rolls on the flat of the shaft.
7. At the mounting flange end of the chamber, undo the 3 screws and pull out the bearing core assembly.
8. On the end of the casting housing there are three holes with a grub screw in each hole, remove these to release the pins that hold the bearings.
9. Push the pins and the cam out, noting the washer positions.
10. Replace the bearings.
11. (RLRP) To part the square shaft from the inner tube, rotate the outer tube to reveal a slot at the end of the inner tube, where you can see the square shaft inside.
12. Pull the square shaft out as far as it will go and you will now see the end of the square shaft with a screw and a stop through the slot in the outer tube.
13. Undo the screw with a shortened allen key and remove the screw and stop. The square shaft will now pull out of the outer tube.



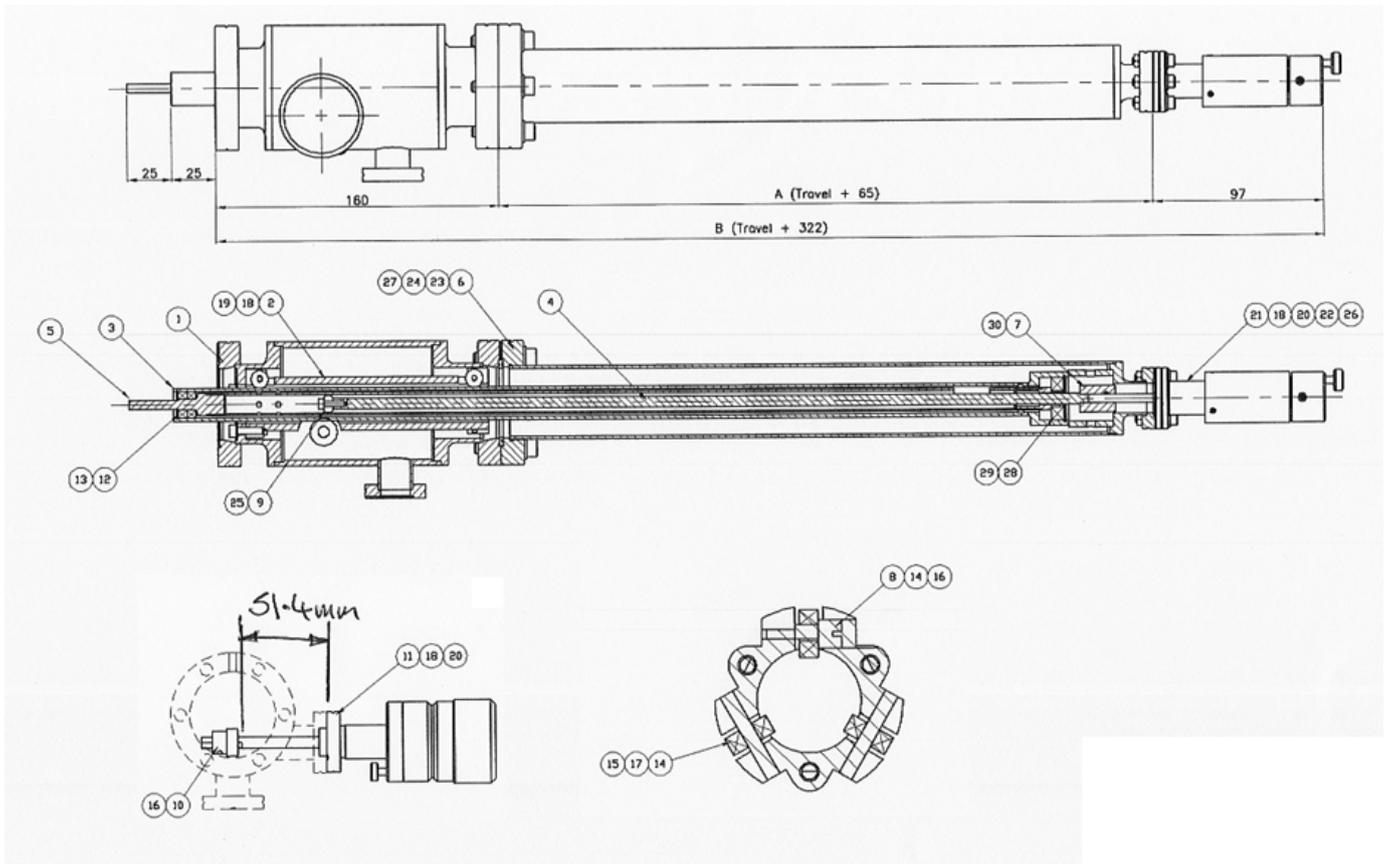
Re-assembled in reverse, noting the following points.

1. Make sure the flanges are bolted up in the same orientation as taken apart. (RLRP)  
Before bolting up fully, fit the "Rotation" rotary drive to the shaft and then bolt up the flange evenly, but loose.
2. When doing up the bolts between the housing and tube, keep moving the inner shaft in and out, making sure it is smooth, noting that the flanges may not pull up square, hence using the joint to make it inline.  
NOTE: This means that the flange faces may not be square to each other.
3. Now do up the "Linear" rotary drive, again turning the drive to check alignment.  
NOTE: This means that the flange faces may not be square to each other.
4. Refit linear drive, noting the rotation play between the gear and the rack. Do up so that there is a very small amount of play between the gear and rack.  
NOTE: This means that the flange faces may not be square to each other.



# DRAWINGS

Bearing Set Part Code: RLPBS



Grub Screw Access Hole