



RAX HYDRAULICS

SERVICE MANUAL

- ❑ Hydraulic Cylinders
- ❑ Pneumatic Cylinders
- ❑ Power Packs

MAINTENANCE INSTRUCTIONS

For Hydraulic Cylinders

Important: Read the complete instruction before you begin the servicing.

Before starting service make sure that the cylinder is disconnected from the hydraulic system and is under no pressure. This can be done by unscrewing connector coupling of hose or the pipe. Drain the remaining oil from the cylinder.

1. Remove cylinder from mounting condition of machine equipment. Start by removing the piston rod end from the piston rod.
2. To remove the cylinder head (Front End Cover (F.E.C.)), unscrew the F.E.C.
3. Pull the cylinder head straight out to separate it from the cylinder tube and the piston rod.
4. Pull the cylinder end straight out to separate it from the cylinder tube.
5. The piston rod is to be pulled out in the same direction as in 1.1.

Always note the way the old sealings are mounted before removing them. The piston rod sealing seals in one direction only and the 'O'-rings must be on the side of the backup rings (If it is in high pressure range).

1. Remove the old sealings and 'O'-rings. Be careful not to damage the seal surfaces.
2. Clean the seal surface and make sure they are not damaged. Even small damages can cause problems.
3. Put the new sealings after removing the old ones. Remember not to use any sharp objects during this operation as they can cause damage on the new sealings. Bare hands together with some grease are the best tools.
4. Make sure the new sealings are located the same way as the old ones.
5. Check the piston rod. Pipe surface finish should not be damaged by handling or at the seals sliding contact areas. If it is found consult the manufacturer.

RE-ASSEMBLY

The cylinders are now to be put together again. This is done exactly the opposite way as explained in 1.1 above.

1. The cylinder end is to be pushed in to the cylinder tube. Use some grease on the O-rings to make the work easier. Put some grease on the sealings inside the cylinder end.
2. Mount and tighten the seven bolts or nuts with washer / or screw the F.E.C. with suitable uniform torque.
3. Push the piston rod into the cylinder tube and the cylinder end / Front End Cover. Be careful not to damage the sealings inside the cylinder end / Front End cover. Use of some grease on the piston sealing will help.
4. The cylinder head (Front End Cover) is mounted on the piston rod and pushed in to the cylinder tube (Pipe). Use of some grease on the sealings is also useful.
5. Mount and tighten the F.E.C. at require torque.
6. At last put the piston rod back in place.

Disclaimer: The contents of this information are subject to change without notice or obligation.

For additional information, please visit our website www.rax.co.in

MAINTAINANCE INSTRUCTIONS

For Pneumatic Cylinders

Important: Read the complete instruction before you begin the servicing.

Before service make sure the cylinder is disconnected from the pneumatic system and is under no pressure this can be done by unscrewing connector coupling of hose / pipe.

1. Remove cylinder from mounting condition of machine equipment. Start by removing the piston rod end from the piston rod.
 - i. To remove the cylinder head (Front End Cover), unscrew the Bolts / Nuts.
 - ii. Pull the cylinder head straight out to separate it from the cylinder tube and the piston rod.
 - iii. To remove the cylinder end (Front End Cover), unscrew the Bolts / Nuts
 - iv. Pull the cylinder end straight out to separate it from the cylinder tube.
 - v. The piston rod is to be pulled out in the same direction as in 1.1 above.

Always note the way the old sealings are mounted before removing them. The piston rod sealing seals in one direction only and the 'O'-rings must be on the side of the backup rings (If it is in high pressure range).

1. Remove the old sealings and 'O' – rings. Be careful not to damage the seal surfaces.
2. Clean the seal surface and make sure they are not damaged. Even small damages can cause problems.
3. Put the new sealings after removing the old ones. Remember not to use any sharp objects during this operation as they can cause damage on the new sealings. Bare hands together with some grease are the best tools.
4. Make sure the new sealings are located the same way as the old ones.
5. Check the piston rod. Pipe surface finish should not be damaged by handling or at the seals sliding contact areas. If it is found consult the manufacturer.

RE-ASSEMBLY

The cylinders are now to be put together again. This is done exactly the opposite way as explained in 1.1 above.

1. The cylinder end is to be pushed in to the cylinder tube. Use some grease on the O- rings to make the work easier. Put some grease on the sealings inside the cylinder end.
2. Mount and tighten the seven bolts or nuts with washer / or screw the F.E.C. with suitable uniform torque.
3. Push the piston rod into the cylinder tube and the cylinder end / Front End Cover. Be careful not to damage the sealings inside the cylinder end / Front End cover. Use of some grease on the piston sealing will help.
4. The cylinder head (Front End Cover) is mounted on the piston rod and pushed in to the cylinder tube (Pipe). Use of some grease on the sealings is also useful.
5. Mount and tighten the F.E.C. at require torque.
6. At last put the piston rod back in place.

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