

Installation Procedure -- Jam Nut Upgrade



Single Post Caliper Brake VC500

In accordance with Nexen's established policy of constant product improvement, the specifications contained in this manual are subject to change without notice. Technical data listed in this manual are based on the latest information available at the time of printing and are also subject to change without notice.

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DANGER

Read this manual carefully before installation and operation.

Follow Nexen's instructions and integrate this unit into your system with care.

This unit should be installed, operated and maintained by qualified personnel **ONLY**.

Improper installation can damage your system or cause injury or death.

Comply with all applicable codes.

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ISO 9001 Certified

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21259-B-1007

NOTE:

Nexen has made a design improvement to our model VC500 caliper brake. We have changed the quantity and type of locking nuts that position the turnbuckle and clevis in order to ensure that their positions do not change due to improper tightening.

Please follow these directions carefully.

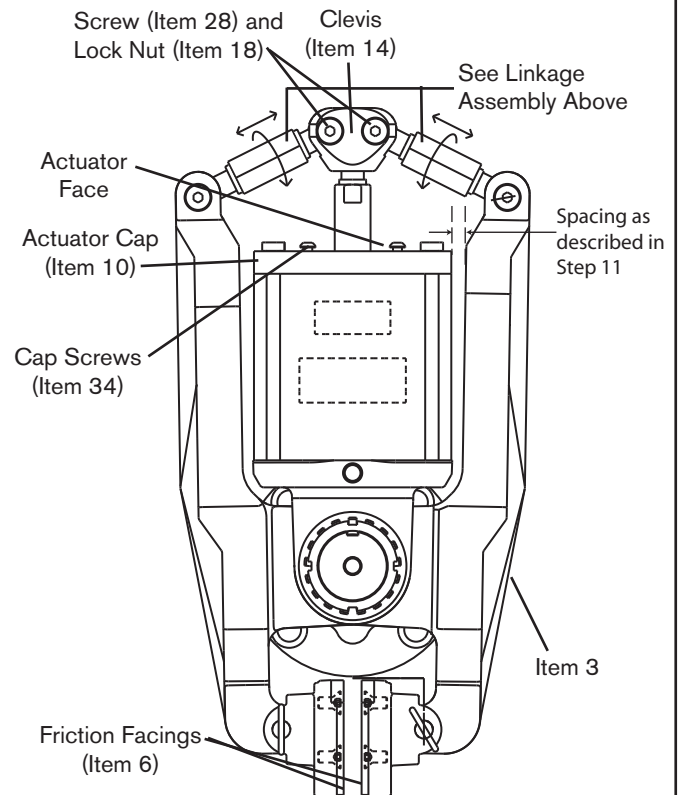
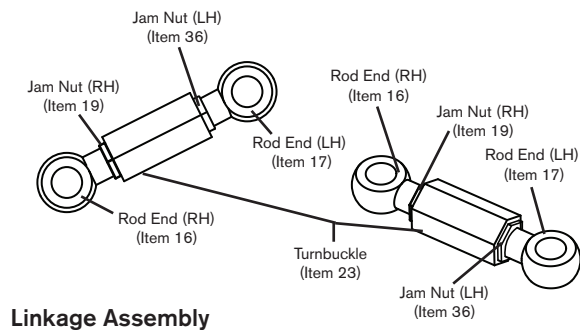
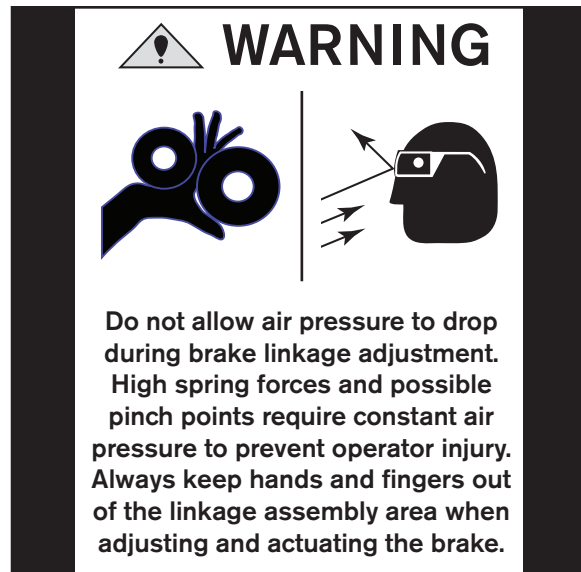
1. If the brake is mounted and clamping on the disc, apply ≥ 4.1 bar (≥ 60 psi) to release the spring actuator force from the linkage. The brake must be disengaged and unloaded for linkage adjustment (See Warning note to the right).

NOTE: Brake shoes and detent pins must be installed in order to perform the following procedure.

2. Remove the brake guard by removing cap screws (Item 34).
3. Remove only the center rod ends (Item 17 & 16) from the clevis (Item 14) by removing the locking nuts (Item 18) and screws (Item 28).
4. Remove turnbuckle (item 23) from rod ends. Replace the right-hand (RH) jam nuts (Item 19) with the upgrade jam nuts. Add the new left-hand (LH) jam nuts (Item 36) to the left-hand rod end (Item 17). Re-install turnbuckle (Item 23) to rod ends. Do not tighten jam nuts at this point. Adjustment may be needed.

NOTE: LH jam nuts (Item 36) will have a paint mark to identify them from the RH thread nuts.

5. Remove the clevis (Item 14) by unscrewing it from the actuator rod. Replace the old jam nut (Item 19) with the upgrade nut (Clevis jamb nut is RH thread).
6. Re-install the clevis to approximately the same position as it was before removal. Do not tighten jam nut, further adjustments may be needed to the clevis.
7. Apply ≥ 4.1 bar (≥ 60 psi) to the spring actuator.
8. With the air pressure applied rotate the clevis (Item 14) until the rear end is 100.9 mm (3.97 in) away from the face of the actuator.



JAM NUT UPGRADE CON'T.

9. Insert the center rod ends (Items 16 & 17) back into the clevis (Item 14) and tighten the locking nuts (Item 18) to 45.2 Nm (435 in-lb).

Once the rod ends are installed, retighten the clevis jam nut (Item 19), apply serviceable thread locker to jam nut and torque to 27.1 Nm (20 lb-ft).

10. Clevis adjustment is now complete.
11. It is critical that the linkage assemblies are both equal length. To ensure this, adjust both linkages by rotating the turnbuckle until the spacing between the arm (Item 3) and the actuator cap (Item 10) is equal -- see drawing for clarification. This will create a starting point for the final facing adjustment.

NOTE: DO NOT assume the thread lengths are equal on the rod ends. Use the actuator cap as a reference to equalize linkage length (as described in step 11).

12. With ≥ 4.1 bar (≥ 60 psi) still applied, rotate the turnbuckles (Item 23) equally until contact is made between the facings (Item 6) and the brake disc. Then, back off 1/4 turn on each turnbuckle.

NOTE: The gap between the brake arm (Item 3) and the actuator cap (Item 10) should be equal on both sides. If not, continue to adjust turnbuckles until both arms are equally spaced and the facings (Item 6) are in contact with the brake disc.

13. Carefully re-tighten the jam nuts (Item 19 and 26) to ensure that no turnbuckle movement is detected. Apply serviceable thread lock and torque jam nuts to 27.1 Nm (20 lb-ft).
14. Apply a serviceable thread lock to the cap screws (Items 34) and reinstall the brake guard (Item 24).

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