

Document Name	Date	Rev.	Page	E-DOC
BLOCK BRAKE ADJUSTMENT	08/24/23	В	1 of 2	E-178

## **BLOCK BRAKE ADJUSTMENT**



Before adjusting the brake system, ensure all applicable safety protocols are observed when taking the car out of service. Confirm the car is securely held in position by the machine and inaccessible to public use. Only adjust one brake at a time, and ensure the other brake has sufficient braking torque to hold the car in position while work is underway.

## PROCEDURE:

- 1. Locate the four guide bolts. Use a 21mm open end wrench to loosen the guide bolts. Loosening the guide bolts unlocks the fixed bolts. Loosen guide bolts enough to ensure they stay loose during adjustment.
- 2. Locate the four fixed bolts. Use a 16mm box end wrench to loosen the fixed bolts. This adjusts the air gap clearance. Adjust the clearance to achieve a 0.008" or .2 mm clearance before adjusting further. When checking clearance with a feeler gauge, ensure the gauge clears the damper pad.
- 3. Locate the four fixed bolts. Use a 16mm open end wrench to turn the fixed bolts counterclockwise. This adjusts the brake clearance.
- 4. Measure the brake clearance while adjusting the brake. Adjust the brake pad so that the air gap is in the range of 0.012-0.016" or 0.3-0.4 mm. The brake air gap changes by approximately 0.004" or 0.1mm every 30 degrees of guide bolt rotation. Use a feeler gauge or dial indicator to confirm the clearance is correct. See Figure 1 for an illustration of dial indicator and feeler gauge use. After adjusting one side, check the other side to ensure the clearance does not shift out of the acceptable range.

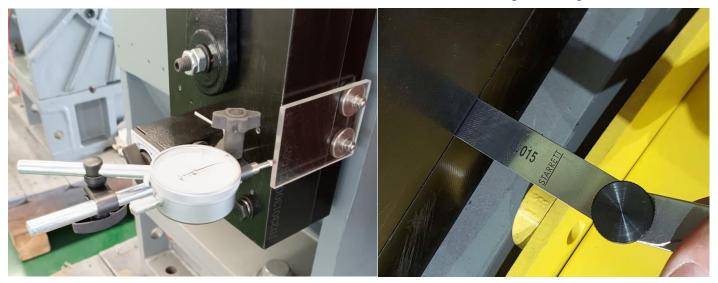


Figure 1: Use of the dial indicator (left) and feeler gauge (right) to confirm pad clearance.

5. Tighten the guide bolts to reconnect the brake and base. When tightening the guide bolts hold the fixed bolts in position. Ensure the fixed bolts are snug before proceeding.



Document Name	Date	Rev.	Page	E-DOC
BLOCK BRAKE ADJUSTMENT	08/24/23	В	2 of 2	E-178

- 6. Check the brake clearance at the corner air gap surfaces, ensuring the brake clearance is within 0.012-0.016" or 0.3-0.4 mm. Keep clearance as uniform as possible throughout all air gap surfaces.
- 7. Check the brake clearance on all brakes after adjustment. If clearance is correct, put the dust shield on to cover the air gap. Dust shields must be on to prevent dust buildup in the brake gap which may cause the brakes to fail.
- 8. Ensure the brake arm bracket can achieve ½" range of motion. If it needs adjustment, loosen the 16mm bracket nuts and retighten as necessary. Ensure the lock nut is engaged to prevent the bracket coming loose after adjustment.
- 9. Confirm the braking force meets all applicable requirements. Check the clearance on all other brakes.
- 10. Observe all applicable safety precautions when returning the car to normal operation.