



SAHR Actuator On – Line Operation Stroke Tests

Purpose:

The purpose of this test is to determine if the park brake actuator achieves the correct stroke even when the park brake is engaged. When an incorrect stroke is achieved it will cause the park brake to be inoperable.

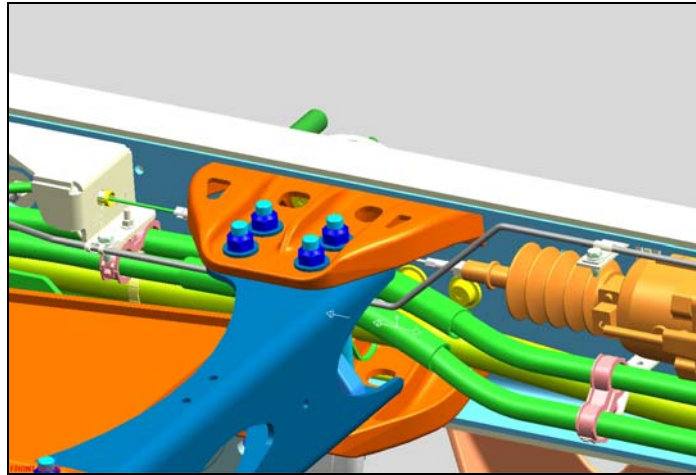


Figure 1 – Park brake actuator and cable

Notes:

- i) This procedure is to check / correct an incorrectly preset drum brake only; it will not correct any other park brake failure modes
- ii) This Test is to be carried out **after** the threaded rod is connected to the actuator and is in the correct position with the lock nut tightened

Target setting / actuator stroke

The correct stroke for the actuator from the “Park Brake Disengaged: position”, i.e. when the actuator shaft is fully extended is 1, 1/4” +/- 1/8” OR 31.75 +/- 3.175mm

Procedure:

In order to verify the park brake settings, the following steps must be taken:

- 1: Starting system status: Cable fully connected, lock nut fastened with park brake disengaged (Actuator shaft fully extended)
- 2: Position stroke measuring device on side of rail in the area indicated in Figure 2 (this area is clear of lines and is the only available area long enough to verify the stroke of the actuator)

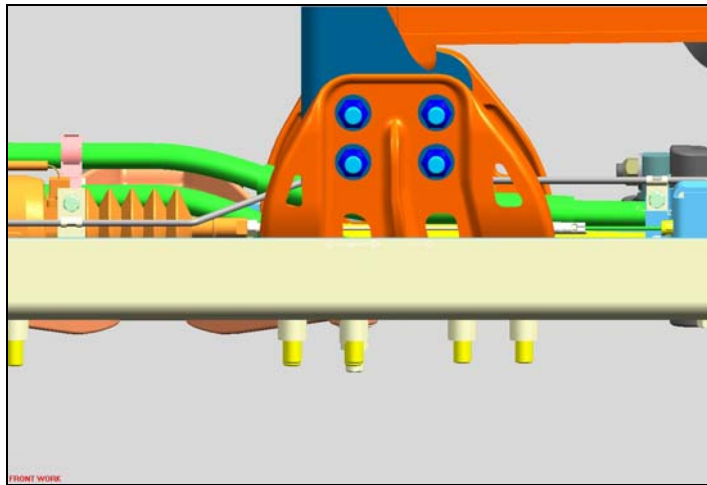


Figure 2 Device location

3: Locate the indicator onto the brake cable so it lines up with the start position on the measuring device attached to the rail.

4: Activate the park brake

5: Check if the indicator is now within tolerance on the measuring device “pass” / “don’t pass” lines. If it is out of tolerance the following two procedures may be followed:

- A) If the indicator shows too much actuator stroke – proceed to step 6
- B) If the indicator shown too little actuator stroke – proceed to step 7
- C) If the indicator shown stroke within tolerance, proceed to step 9

6) Corrective action for too much actuator stroke

6.1) Disengage the park brake

6.2) Locate the adjusting slot underneath the park brake drum, locate the adjusting screw star wheel inside the slot – Figure 3

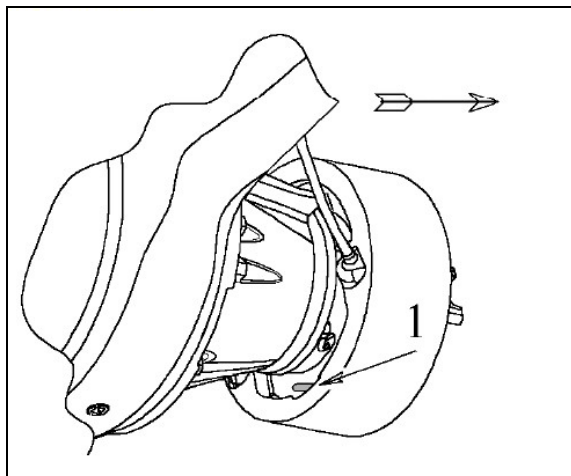


Figure 3- Adjusting slot

6.3) Insert a flathead screw driver through the adjusting slot (Figure 2) and move the teeth downward to expand the brake shoes outward, check stroke achieved.

NOTE – The adjusting screw star wheel will have a paint mark on it that may be used as a reference point for this adjustment.

6.4) Continue expanding the shoes until the correct actuator stroke is achieved, be careful not to over adjust as this will cause the shoes to engage and brake drag will occur, this will overheat and damage the brakes

6.5) If the brakes are over adjusted, proceed to step 7

6.6) If the correct stroke cannot be achieved, proceed to step 8

7) Corrective action for too little actuator stroke

7.1) The vehicle must be taken to heavy repair where the park brake drum has to be removed in order for the shoes to be reset to a position further away from the drum

7.2) Refer to park brake service manual

8) Park Brake malfunctions for a different reason than liner tolerance

8.1) take action accordingly

9) Vehicle actuator stroke check passed

9.1 Disengage brake and proceed

NOTICE – TAKE ALL SAFETY PRECAUTIONS TO ENSURE THAT THE VEHICLE IS SECURELY BLOCKED AND WELL BALANCED SO THAT IT DOES NOT ROLL WHEN PERFORMING THIS PROCEDURE.