

# PARTS & SERVICE NEWS

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Page 1 of 2

**SUBJECT:** ANNOUNCEMENT OF NEW SHIMMING PROCEDURES

**PURPOSE:** To inform the field of the new metal face seal shimming procedures for rear brake assemblies and front brake assemblies.

**APPLICATION:** Komatsu 930E Dump Trucks AFE48-A & Up, A30019, A30026 & Up

**FAILURE CODE:** 2D10Z9

**DESCRIPTION:** Shimming Procedure of (Black Toric Seal) PC0651

## REVISED METAL FACE SEAL GAP INSTRUCTIONS FOR REAR BRAKE ASSEMBLIES

These instructions apply to all rear brake assemblies. The adjustment will provide an 11.0 mm (0.433 inch) nominal seal gap after installation into wheel motor assembly. This adjustment procedure requires use of seal PC0651.

NOTE: *Disregard 930E shop manuals that specify a seal gap of 13.0 mm (0.51 inch).*

1. Refer to Figure 1 and 2. Assemble brake per current applicable procedure, install **ten** 0.51 mm (0.020 inch) thick shims (3) and **one** 0.25 mm (0.010 inch) thick shim (3) at each shim location around seal carrier.
2. After completion of assembly, measure seal gap "D" at 3 equally spaced locations and determine the average dimension.
3. Add 545.34 mm (21.470 inch) to the average dimension determined in step 2.

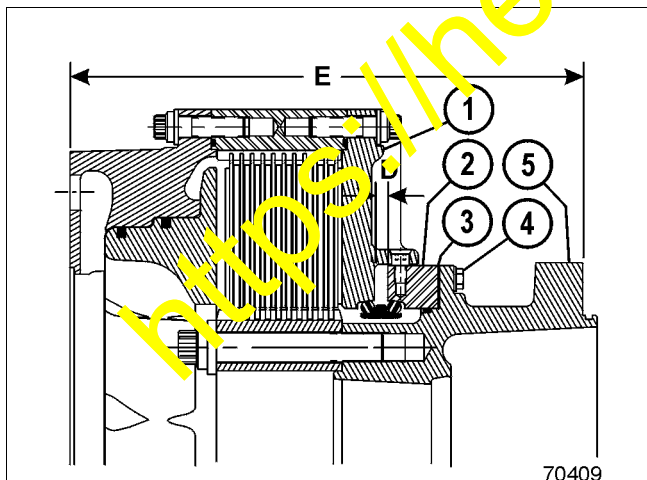


FIGURE 1. 930-1 WHEEL MOTOR SEAL  
GAP ADJUSTMENT

- |                     |                |
|---------------------|----------------|
| 1. Brake Back Plate | 4. Capscrew    |
| 2. Seal Cover       | 5. Hub Adapter |
| 3. Shims            |                |

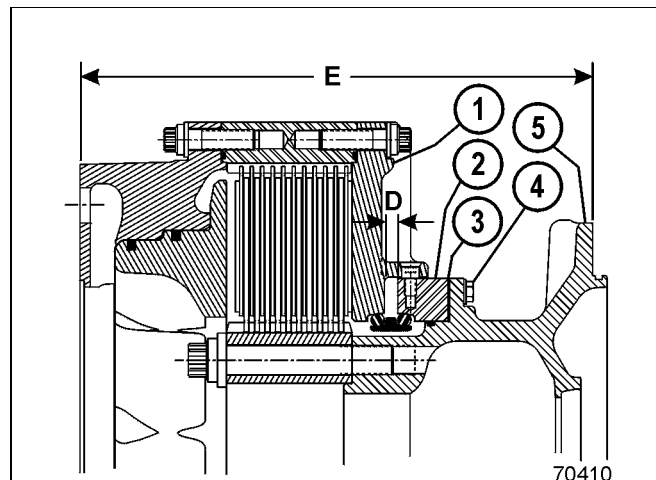


FIGURE 2. 930-2 WHEEL MOTOR SEAL  
GAP ADJUSTMENT

- |                     |                |
|---------------------|----------------|
| 1. Brake Back Plate | 4. Capscrew    |
| 2. Seal Cover       | 5. Hub Adapter |
| 3. Shims            |                |

4. Measure dimension "E" at 3 equally spaced locations and determine the average dimension.
5. Average dimension "E" must be within 0.13 mm (0.005 inch) of the dimension calculated in step 3. Loosen seal carrier capscrew (4) and add / subtract shims in order to increase / decrease "E" to the acceptable range. Quantity and thickness of shims must be the same at each shim location.
6. Tighten capscrews (4) and check dimensions again to verify changes.
7. Complete brake assembly.
8. Install brake assembly into wheel motor. On wheel motor assemblies of 930E-2 (63" rim), measure resulting assembled seal gap "D". Dimension "D" should equal  $11.0 \pm 1.00$  mm ( $0.43 \pm 0.039$  inch).
9. Stamp letter "K" after wheel motor serial number on wheel motor identification plate to identify new seal adjustment.

### REVISED METAL FACE SEAL GAP INSTRUCTIONS FOR FRONT BRAKE ASSEMBLIES

These instructions apply to all front brake assemblies. The adjustment will provide an 11.0 mm (0.433 inch) nominal seal gap after installation. The adjustment requires use of seal PC0551.

NOTE: *Disregard 930E shop manuals that specify a seal gap of 13.0 mm (0.51 inch).*

1. Refer to Figure 3. Assemble spindle, hub and brake per current applicable procedure, then install **nine** 0.51 mm (0.020 inch) thick shims (5) at each shim location around seal carrier. Install shims (5) on either side of speed sensor gear as required in order to align gear with speed sensor.
2. After final installation of wheel bearing shim pack and keeper plate, measure seal gap "D" at 3 equally spaced locations and determine the average dimension. Ideal gap is 11.00 mm (0.433 inch), acceptable gap is  $11.00 \text{ mm} \pm 0.25 \text{ mm}$  ( $0.433 \text{ inch} \pm 0.009 \text{ inch}$ ).
3. Loosen seal carrier capscrew (4) and add / subtract shims (5) in order to increase / decrease "E" to the acceptable range. Quantity and thickness of shims must be the same at each shim location.
4. Tighten capscrews (4) and check seal gap to verify changes.
5. Complete brake assembly.
6. Stamp letter "K" on top of spindle (Figure 4) to identify new seal adjustment.

