



# ***SERVICE MANUAL BULLETIN***

This Service Manual Bulletin is prepared by the Publications Department of New Flyer Industries Canada ULC. Refer to details below.

## **SMB-149**

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<b>APPLICABILITY</b>					
<b>VEHICLE LENGTH</b>	<input type="checkbox"/> 30ft.	<input type="checkbox"/> 35ft.	<input type="checkbox"/> 40ft.	<input type="checkbox"/> 60ft.	<input checked="" type="checkbox"/> ALL
<b>VEHICLE TYPE</b>	<input type="checkbox"/> High Floor	<input checked="" type="checkbox"/> Low Floor	<input checked="" type="checkbox"/> Invero®	<input checked="" type="checkbox"/> Xcelsior®	<input type="checkbox"/> ALL
<b>FUEL TYPE</b>	<input type="checkbox"/> Diesel	<input type="checkbox"/> Electric	<input type="checkbox"/> Diesel/Electric	<input checked="" type="checkbox"/> ALL	
	<input type="checkbox"/> CNG	<input type="checkbox"/> LNG			
<b>SUBJECT</b>	<b>Front &amp; Rear Wheel Bearing Inspection MAN VOK-07-F, V8-65L, HONG-1100, HP-1352-F, HY-1336-F, HY-1350-F</b>				
<b>SECTION TITLE</b>	<b>1 - FRONT AXLE &amp; SUSPENSION 2 - REAR &amp; CENTER AXLE &amp; SUSPENSION</b>				
<b>DETAILS</b>	<p><b>This bulletin provides new OEM information on the procedure for checking for wheel hub bearing play.</b></p> <p><b>This bulletin supersedes all prior information on this subject already provided in your New Flyer Service Manuals. Make this Service Bulletin available to service personnel to inform them of changed information.</b></p>				

## 1. Front Wheel Bearing Inspection

Inspect the wheel hub bearings for excessive play as follows:

1. Raise the vehicle and support the front axle on jack stands.
2. Ensure the brakes are released and the wheels can rotate freely.

### 1.1. Disc Brakes (VOK-07-F)

1. Attach the base of a magnetic dial gauge to any part of the steering knuckle. See "Fig. 1: Wheel Bearing Inspection" on page 2.
2. Align the dial gauge pin perpendicular to the face of the brake rotor and as close as possible to the outer edge of the brake disc. Also ensure that the dial gauge pin is located at either the 6 o'clock or 12 o'clock position.

**NOTE:**

*It is important that the dial gauge pin be positioned at the correct distance from the center of the brake disc in order to obtain an accurate reading. The tip of the gauge should be resting approximately 8.25 to 8.5" (210 to 215 mm) from the center of the disc.*

3. Zero the dial gauge.
4. Grasp the wheel at the top and bottom and rock back and forth while observing the dial indicator reading.

**NOTE:**

*If clearance issues resulted in the dial gauge being positioned somewhere other than the 12 o'clock or 6 o'clock position,*

*then ensure the wheel is grasped at a location that corresponds to the dial gauge. As an example, if the dial gauge was located at the 2 o'clock position, then grasp the wheel at the 2 o'clock and 8 o'clock positions and rock back and forth.*

If total movement exceeds 0.010" (0.25 mm). Replace the wheel hub as an assembly.

**NOTE:**

*The wheel hub is a unitized assembly and has no replaceable components.*

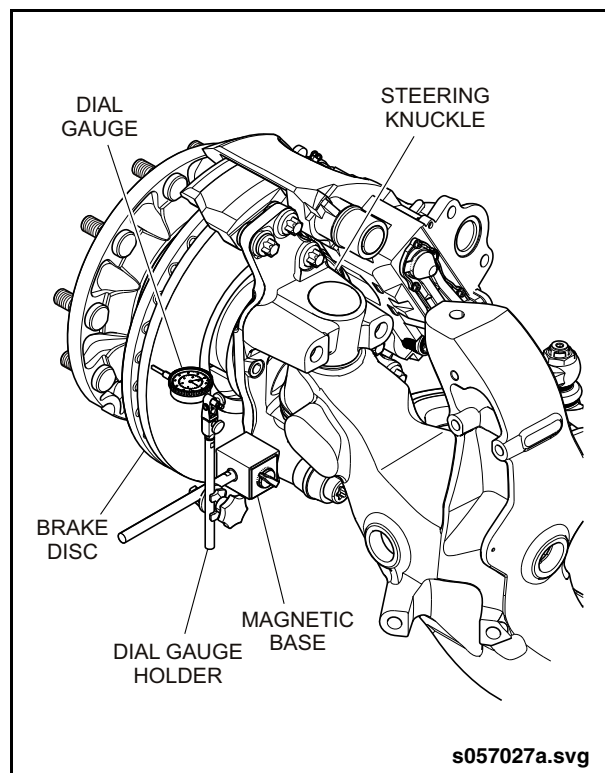


Fig. 1: Wheel Bearing Inspection

## 1.2. Drum Brakes (V8-65L)

1. Attach the base of a magnetic dial gauge to any part of the steering knuckle. See "Fig. 2: Wheel Bearing Inspection" on page 3.
2. Align the dial gauge pin perpendicular to the face of the brake drum with the dial gauge pin resting on the rim of the brake drum. Also ensure that the dial gauge pin is located at either the 6 o'clock or 12 o'clock position.
3. Zero the dial gauge.
4. Grasp the wheel at the top and bottom and rock back and forth while observing the dial indicator reading.

**NOTE:**

*If clearance issues resulted in the dial gauge being positioned somewhere other than the 12 o'clock or 6 o'clock position, then ensure the wheel is grasped at a location that corresponds to the dial gauge. As an example, if the dial gauge was located at the 2 o'clock position, then grasp the wheel at the 2 o'clock and 8 o'clock positions and rock back and forth.*

If total movement exceeds 0.010" (0.25 mm). Replace the wheel hub as an assembly.

**NOTE:**

*The wheel hub is a unitized assembly and has no replaceable components.*

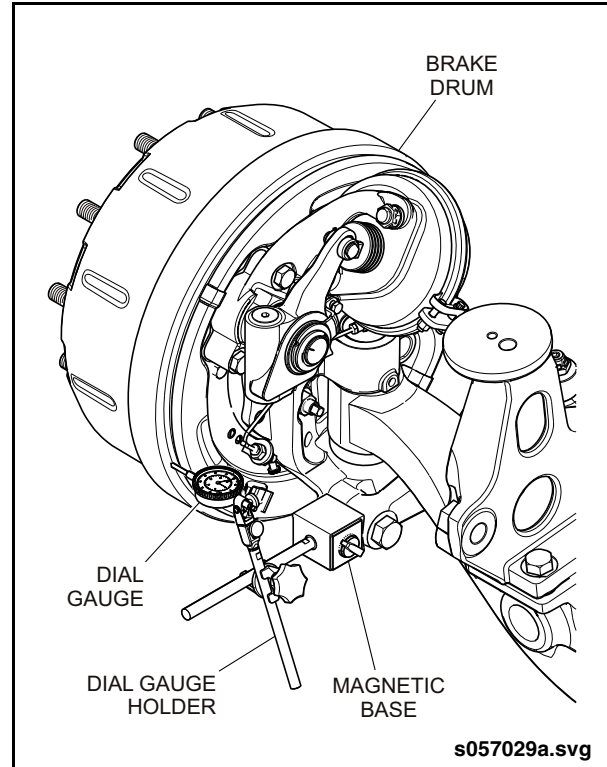


Fig. 2: Wheel Bearing Inspection

## 2. Rear Wheel Bearing Inspection

Inspect the wheel hub bearings for excessive play as follows:

1. Raise the vehicle and support the rear axle on jack stands.
2. Ensure the brakes are released and the wheels can rotate freely.

### 2.1. Disc Brakes (HY-1336-F, HY-1350-F)

1. Attach the base of a magnetic dial gauge to any rigid part of the vehicle structure or axle housing. See "Fig. 3: Wheel Bearing Inspection" on page 4.
2. Align the dial gauge pin perpendicular to the face of the brake rotor and as close as possible to the outer edge of the brake disc. Also ensure that the dial gauge pin is located at either the 6 o'clock or 12 o'clock position.

**NOTE:**

*It is important that the dial gauge pin be positioned at the correct distance from the center of the brake disc in order to obtain an accurate reading. The tip of the gauge should be resting approximately 8.25 to 8.5" (210 to 215 mm) from the center of the disc.*

3. Zero the dial gauge.
4. Grasp the wheel at the top and bottom and rock back and forth while observing the dial indicator reading.

**NOTE:**

*If clearance issues resulted in the dial gauge being positioned somewhere other*

*than the 12 o'clock or 6 o'clock position, then ensure the wheel is grasped at a location that corresponds to the dial gauge. As an example, if the dial gauge was located at the 2 o'clock position, then grasp the wheel at the 2 o'clock and 8 o'clock positions and rock back and forth.*

If total movement exceeds 0.010" (0.25 mm). Replace the wheel hub as an assembly.

**NOTE:**

*The wheel hub is a unitized assembly and has no replaceable components.*

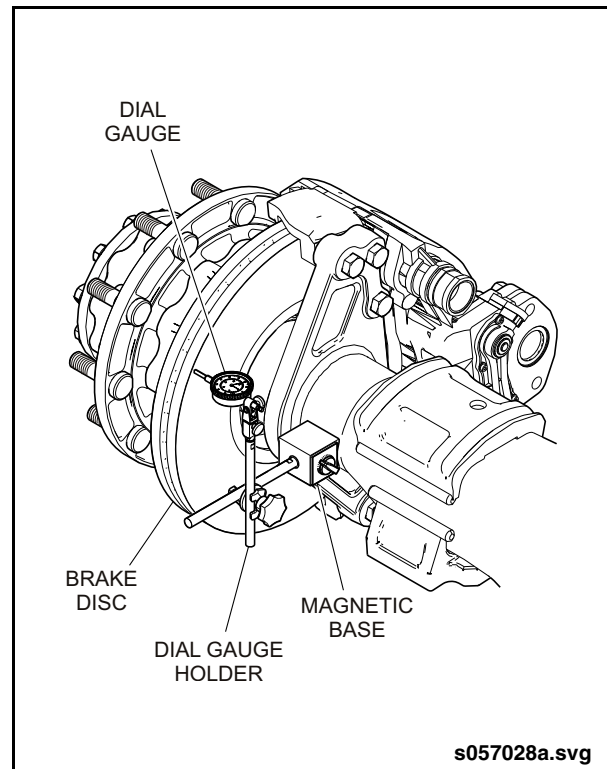


Fig. 3: Wheel Bearing Inspection

## 2.2. Drum Brakes (HP-1352-F, HONG-1100)

1. Attach the base of a magnetic dial gauge to any part of the vehicle frame or axle housing. See “Fig. 4: Wheel Bearing Inspection” on page 5.
2. Align the dial gauge pin perpendicular to the face of the brake drum with the dial gauge pin resting on the rim of the brake drum. Also ensure that the dial gauge pin is located at either the 6 o'clock or 12 o'clock position.
3. Zero the dial gauge.
4. Grasp the wheel at the top and bottom and rock back and forth while observing the dial indicator reading.

**NOTE:**

*If clearance issues resulted in the dial gauge being positioned somewhere other than the 12 o'clock or 6 o'clock position, then ensure the wheel is grasped at a location that corresponds to the dial gauge. As an example, if the dial gauge was located at the 2 o'clock position, then grasp the wheel at the 2 o'clock and 8 o'clock positions and rock back and forth.*

If total movement exceeds 0.010" (0.25 mm). Replace the wheel hub as an assembly.

**NOTE:**

*The wheel hub is a unitized assembly and has no replaceable components.*

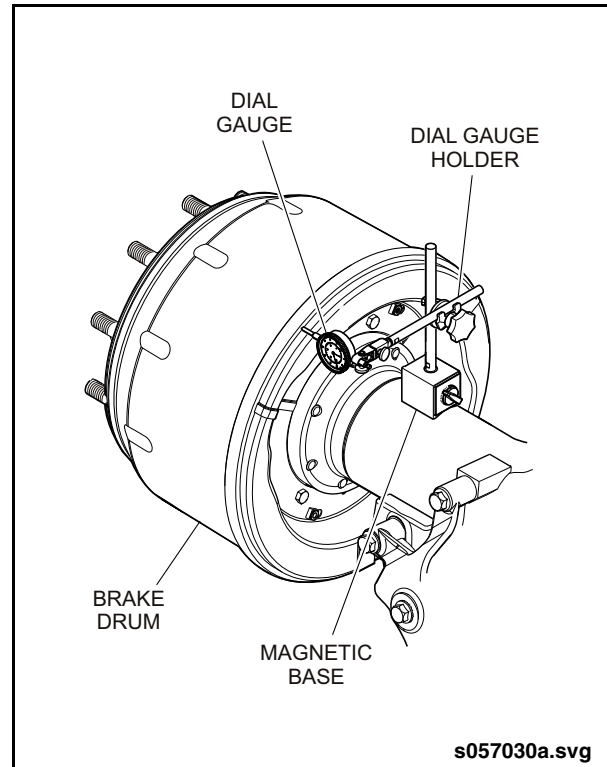


Fig. 4: Wheel Bearing Inspection