

# SERVICE MANUAL BULLETIN

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

# SMB-142

ISSUE DATE: Apr 08 2015

APPLICABILITY					
VEHICLE LENGTH	□ 30ft.	□ 35ft.	□ 40ft.	■ 60ft.	
VEHICLE TYPE	□ High Floor	Low Floor	□ Invero	■ Xcelsior <sup>®</sup>	
FUEL TYPE	🗆 Diesel	Electric			■ ALL
	□ Diesel/Electric	□ Gas/Electric	Fuel Cell		
SUBJECT	ZF AVN-132 Center Axle Caliper Carrier Bolt Removal				
SECTION TITLE	2 - REAR & CENTER AXLE & SUSPENSION				
DETAILS	This bulletin provides OEM revised information on the removal of the cali- per carrier bolts on the ZF AVN-132 center axle assembly of your New Flyer Vehicle. This information supersedes any 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.				



## 1. Caliper Carrier

#### 1.1. Caliper Carrier Bolt Removal

Refer to "Rear Brake System", "Brake Caliper & Carrier Assembly" for servicing in your New Flyer Service Manual and proceed as follows:

When servicing the ZF AVN-132 center axle caliper carrier, the M16 Hex head bolt located at the center in the caliper carrier cannot be fully removed as it will come into contact with the upper radius rod retaining bracket. See "Fig. 1: Caliper Carrier Retaining Bolt" on page 2.

The axle OEM has approved the reuse of this one bolt if, upon inspection, it is determined not to exhibit signs of stress, corrosion, damage or deformity.

#### Real NOTE:

All other remaining bolts must be replaced with new as outlined in your New Flyer Service Manual.

Upon inspection, if it is determined that the bolt cannot be reused, it will be necessary to remove the radius rod bracket to facilitate replacement of the damaged bolt.



Fig. 1: Caliper Carrier Retaining Bolt

## 2. Radius Rod

### 2.1. Radius Rod Bracket Removal



Ensure that the axle is supported to prevent shifting.

- 1. Remove the two M18 bolts that retain the radius rod to the bracket adjacent to the caliper carrier bolt noting the spacer and washer locations and quantity.
- 2. Remove the opposite two M18 bolts that retain the radius rod to the frame noting the spacer and washer locations and quantity.
- 3. Remove the radius rod from the vehicle.



DO NOT attempt to remove more than one radius rod at a time. Removing two or more radius rods will cause the axle to become unstable.

- 4. Remove the two M18 cap screws and washers retaining the radius rod bracket to the axle.
- 5. Remove the radius rod bracket to facilitate removal of the M16 caliper carrier bolt.
- 6. Remove the M16 caliper carrier bolt

### 2.2. Radius Rod Bracket Installation

- 1. Replace the M16 caliper carrier bolt with a new one.
- 2. Inspect the two M18 cap screws and washers that were removed from the radius rod bracket. If upon inspection, it is determined that these bolts and washers cannot be reused, replace with new.
- 3. Install the radius rod bracket and torque the two M18 cap screws to 325 ft-lb. (440 Nm).
- Install the radius rod in its original location and orientation. Refer to "Center Suspension", "Center Radius Rods" in your New Flyer Service Manual for procedure.