

SERVICE MANUAL BULLETIN

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

SMB-178

ISSUE DATE: Jan 05 2018

APPLICABILITY					
VEHICLE LENGTH	<input type="checkbox"/> 30ft.	<input type="checkbox"/> 35ft.	<input type="checkbox"/> 40ft.	<input type="checkbox"/> 60ft.	<input checked="" type="checkbox"/> ALL
VEHICLE TYPE	<input checked="" type="checkbox"/> Xcelsior®	<input type="checkbox"/> MiDi®	<input type="checkbox"/> Invero®	<input type="checkbox"/> ALL	
	<input checked="" type="checkbox"/> Low Floor	<input type="checkbox"/> High Floor			
FUEL TYPE	<input type="checkbox"/> Diesel	<input type="checkbox"/> Diesel/Electric	<input type="checkbox"/> CNG	<input type="checkbox"/> LNG	<input checked="" type="checkbox"/> ALL
	<input type="checkbox"/> Fuel Cell	<input type="checkbox"/> Trolley/Electric	<input type="checkbox"/> Battery/Electric		
SUBJECT	Adjustable Floor Pedal System				
SECTION TITLE	PM - PREVENTIVE MAINTENANCE				
DETAILS	<p>This bulletin provides new PM inspection requirements to be performed at the 24,000 mile (38,600 km) interval, and new installation procedures for the moveable arm on the brake and accelerator assembly installed on your New Flyer vehicle.</p> <p>Refer to PMB-049 for replacement parts.</p> <p>Make this Service Bulletin available to service personnel to inform them of changed information.</p>				

1. Movable Arm Inspection

Inspect the moveable arm for cracks every 24,000 miles (38,600 km), 3 months, or 900 operating hours, whichever occurs first.

 **NOTE:**

This maintenance interval may need to be adjusted to suit the specific operating conditions and geographic location. Exposure to slush, salt, and/or sand will require more frequent inspection. If the unit is subjected to spray or pressure washing, then it will be necessary to relubricate immediately following cleaning.

1. Remove the brake treadle. Refer to your New Flyer Service Manual for removal procedure.
2. With the brake treadle removed, rotate the moveable arm up such that it sits in a nearly vertical position and the steel plate on the underside is easily visible. See “Fig. 1: Moveable Arm Inspection” on page 3.



DO NOT remove the moveable arm assembly unless replacing with maintenance kit. Refer to PMB-049 for kit part number.



Read warnings and follow guidelines printed on Dynaflux chemical containers.

3. While wearing safety glasses and gloves, liberally spray Dynaflux CNF315-16 cleaner onto a clean cloth so as to saturate a small area of the cloth.

4. Use the cloth to clean the exposed surface of the steel plate on the moveable arm. All dirt and grease needs to be removed. Dynaflux cleaner may be applied directly to the plate if needed.



DO NOT loosen screws or remove the steel plate from the moveable arm casting.

5. Allow 5 minutes for the cleaner to evaporate such that the plate on the moveable arm is completely dry and clean.



The red penetrant may stain skin if not protected.

6. While wearing latex gloves and safety glasses, spray a medium wet coat of Dynaflux PHF315-16 penetrant onto the surface of the steel plate.

 **NOTE:**

Avoid excess overspray on nearby components.

7. Allow the penetrant to soak for a minimum of 10 minutes.
8. Saturate an area of a clean cloth with Dynaflux cleaner and thoroughly wipe away the penetrant from the steel plate.

 **NOTE:**

DO NOT spray cleaner directly onto the plate.

9. Allow 5 minutes for the cleaner to evaporate, and then apply an even coat of Dynaflux DNF315-16 developer to the steel plate.

10. Allow the developer to sit for a minimum of 10 minutes.
11. Carefully inspect the plate for any red lines on the plate surface. These red lines indicate the presence and location of cracks in the steel material.
12. If any cracks are found, replace the moveable arm. Refer to 2. "Moveable Arm Replacement" on page 4 of this bulletin for procedure.
13. If no cracks are detected, clean off remaining penetrant and developer from the steel plate, moveable arm, and surrounding area using a cloth and Dynaflex cleaner.



DO NOT remove grease from or apply cleaner to the ball bearing on the moveable arm or the brake plunger.

14. Apply a thin coat of new grease (KA 6705212 / Bendix 246671) to the steel plate.



Use only the grease specified. This is a very specific grease that has been fully tested and approved for this application and cannot be substituted with any other grease.

15. Rotate the moveable arm down to its normal horizontal position such that it rests against the brake plunger.
16. Reinstall the brake treadle. Refer to Section 19 of your New Flyer Service Manual for installation procedure.

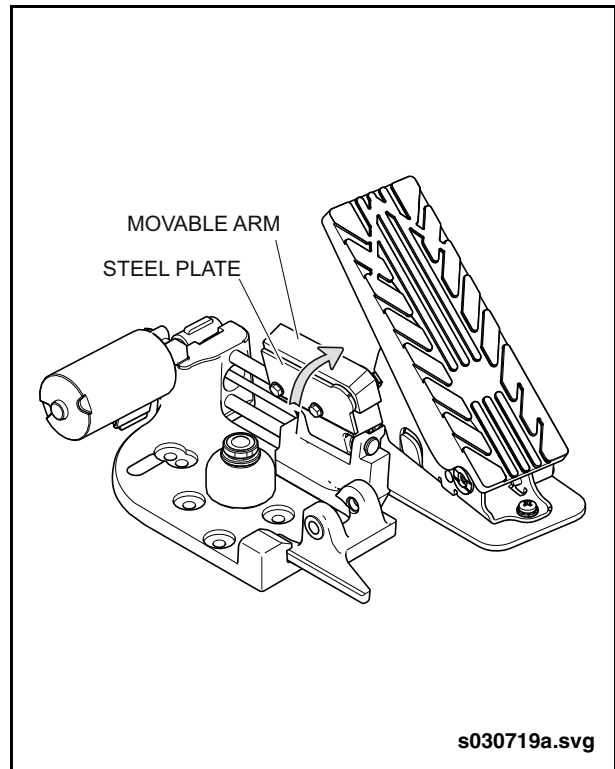


Fig. 1: Moveable Arm Inspection

2. Moveable Arm Replacement

2.1. Removal

1. Remove the brake treadle.
2. Remove the cover by removing the two Philips head screws. See “Fig. 2: Moveable Arm Removal” on page 4.
3. Remove the safety clip from the moveable arm pivot pin.
4. Remove the moveable arm pivot pin by sliding it out of the moveable arm and carrier.
5. Remove the moveable arm.
6. Dispose of the old safety clip, moveable arm pivot pin, and moveable arm. They should not be reused.

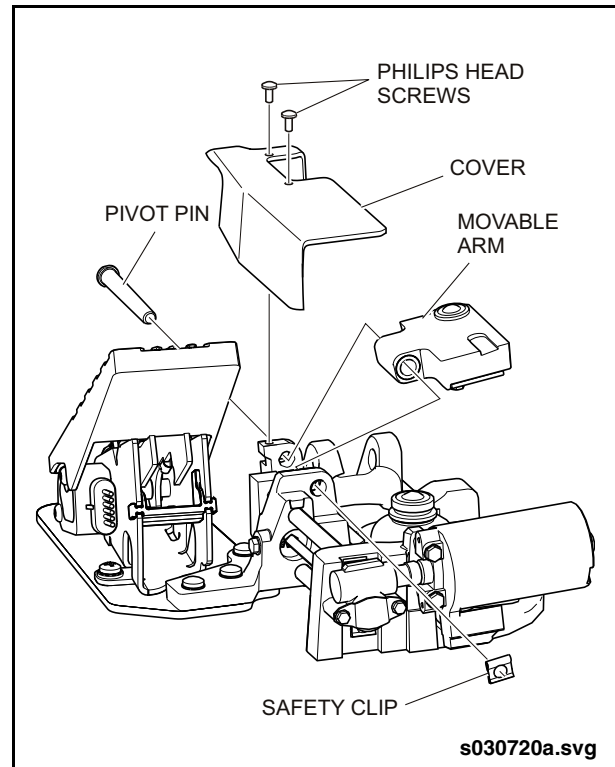


Fig. 2: Moveable Arm Removal

2.2. Installation

1. Align new moveable arm to holes in carrier and insert new moveable arm pivot pin with the head facing the brake treadle as shown.
2. Install a new safety clip to the moveable arm pivot pin. See [“Fig. 2: Moveable Arm Removal”](#) on page 4.

NOTE

When properly engaged, the safety clip will exhibit an audible “snap”.

WARNING

The safety clip must be fully seated around the end of the moveable arm pivot pin. Failure to fully seat and lock the safety clip in place could allow the moveable arm pivot pin to shift and cause a binding condition of the moveable arm. **ALWAYS** check to make sure the safety clip is fully seated and locked over the end of the moveable arm pivot pin.

3. Inspect the safety clip to make sure it is secured correctly to the moveable arm pivot pin as follows: See [“Fig. 3: Moveable Arm Safety Clip”](#) on page 5.
 - a. Pull on the safety clip to ensure it is engaged.
4. Push or pull on the pivot pin to ensure it cannot be removed.

5. Install cover onto carrier using two Phillips head screws
6. Tighten each screw to 31 in-lb. \pm 4.5 (3.5 Nm \pm 0.5)
7. Reinstall the brake treadle. Refer to Section 19 of your New Flyer Service Manual for installation procedure.

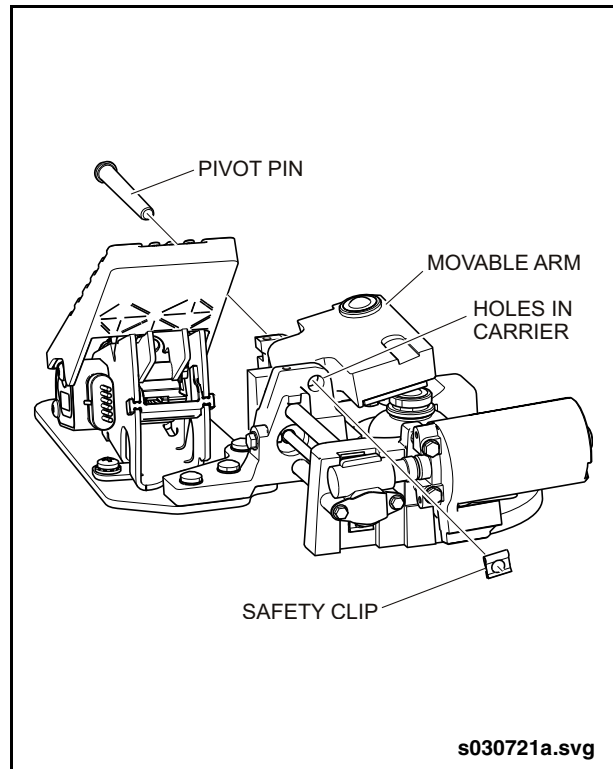


Fig. 3: Moveable Arm Safety Clip