

SERVICE MANUAL BULLETIN

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

SMB-193

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APPLICABILITY				
VEHICLE LENGTH	☐ 30ft.	☐ 35ft.	☐ 40ft.	☐ 60ft. ■ ALL
VEHICLE TYPE	☐ High Floor	■ Low Floor	■ Xcelsior	■ Invero ☐ ALL
FUEL TYPE	☐ Diesel	☐ Trolley Electric	☐ CNG	☐ LNG ■ ALL
	☐ Fuel Cell	☐ Diesel/Electric	☐ Gas/Electric	☐ Battery/Electric
SUBJECT	MAN Axle Lubrication. Models: HONG-1100, HO7-11120, HP-1352, HY-1336, HY-1350 V8-65L & VOK-07.			
SECTION TITLE	PM - PREVENTIVE MAINTENANCE 1 - FRONT AXLE & SUSPENSION 2 - REAR & CENTER AXLE & SUSPENSION			
DETAILS	This Service Manual Bulletin provides new and revised MAN axle OEM information on lubricant change intervals for the axles on your New Flyer vehicles. This bulletin supersedes SMB-113 Jan 04, 2012 and SMB-130 Jan 29, 2014 and adds the following new information: ☐ Oil change intervals expressed as mileage as well as calendar time (whichever occurs first) ☐ Reference to MAN website for latest listing of approved lubricants As this revised and new information is critical to ensure your axles and the manufacturer's warranty are maintained properly, please make this Service Manual Bulletin available to all service personnel. Contact New Flyer Customer Service for additional information on approved oils and oil selection. To identify the axle model number, refer to the Identification Plate on the axle. If you are unsure, please contact your New Flyer Technical Support representative.			

1. MAN AXLE LUBRICATION

1.1. Introduction

MAN approved lubricants are listed on their website. This list is subject to change as new products are approved and added

to the list. Always consult the MAN website for the latest listing of approved oils.

Contact New Flyer Customer Service for additional information on accessing the list of approved oils and oil selection.

OIL CHANGE INTERVALS			
Axle Type	MAN Specification	Moderate Operating Region Intervals	Hot Operating Region Intervals
HY-1350 Rear	M1	36,000 miles (58,000 km) or yearly, whichever occurs first	24,000 miles (38,000 km) or yearly, whichever occurs first
	M2	72,000 miles (120,000 km) or two years, whichever occurs first	48,000 miles (80,000 km) or yearly, whichever occurs first
	M3	90,000 miles (150,000 km) or two years, whichever occurs first	60,000 miles (100,000 km) or yearly, whichever occurs first
	S1	108,000 miles (180,000 km) or every three years, whichever occurs first	72,000 miles (120,000 km) or every two years, whichever occurs first
	S1 (Trolley Applications Only)	Not applicable	36,000 miles (60,000 km) or one year, whichever occurs first
HY-1336 Rear	M1	36,000 miles (58,000 km) or yearly, whichever occurs first	24,000 miles (38,000 km) or yearly, whichever occurs first
	M2	72,000 miles (120,000 km) or two years, whichever occurs first	48,000 miles (80,000 km) or yearly, whichever occurs first
	M3	90,000 miles (150,000 km) or two years, whichever occurs first	60,000 miles (100,000 km) or yearly, whichever occurs first
	S1	108,000 miles (180,000 km) or every three years, whichever occurs first	72,000 miles (120,000 km) or every two years, whichever occurs first

OIL CHANGE INTERVALS			
Axle Type	MAN Specification	Moderate Operating Region Intervals	Hot Operating Region Intervals
HY-1352 Rear	M1	36,000 miles (58,000 km) or yearly, whichever occurs first	24,000 miles (38,000 km) or yearly, whichever occurs first
	M2	48,000 miles (77,000 km) or two years, whichever occurs first	32,000 miles (51,000 km) or yearly, whichever occurs first
	M3	60,000 miles (96,000 km) or two years, whichever occurs first	40,000 miles (64,000 km) or yearly, whichever occurs first
	S1	72,000 miles (120,000 km) or every three years, whichever occurs first	48,000 miles (80,000 km) or every two years, whichever occurs first
HONG-1100 Center	M1	36,000 miles (58,000 km) or yearly, whichever occurs first	24,000 miles (38,000 km) or yearly, whichever occurs first
	M2	48,000 miles (77,000 km) or yearly, whichever occurs first	32,000 miles (51,000 km) or yearly, whichever occurs first
	M3	60,000 miles (96,000 km) or yearly, whichever occurs first	40,000 miles (64,000 km) or yearly, whichever occurs first
	S1	72,000 miles (120,000 km) or yearly, whichever occurs first	48,000 miles (80,000 km) or yearly, whichever occurs first
H07-11120 Rear	M1	36,000 miles (58,000 km) or yearly, whichever occurs first	24,000 miles (38,000 km) or yearly, whichever occurs first
	M2	48,000 miles (77,000 km) or two years, whichever occurs first	32,000 miles (51,000 km) or yearly, whichever occurs first
	M3	60,000 miles (96,000 km) or two years, whichever occurs first	40,000 miles (64,000 km) or yearly, whichever occurs first
	S1	72,000 miles (120,000 km) or every three years, whichever occurs first	48,000 miles (80,000 km) or every two years, whichever occurs first
NOTE: <i>Moderate regions are defined as geographic locations where the average monthly temperature does not exceed 25°C (77°F) for more than two months of the year.</i> <i>Hot regions are defined as geographic locations where the average monthly temperature exceeds 25°C (77°F) for more than two months of the year.</i>			

GREASING INTERVALS			
Axle Type	Component	Interval	Lubrication Type
VOK-07 Front (With Disc Brakes)	King Pins	Six months or 30,000 miles (48,000 km)  DO NOT grease more often.	Fuchs Renolit-LX-OTP2  The LX-OTP 2 grease is the only grease released by MAN for the VOK-07 kingpins. The use of any other grease will void the warranty.
	Wheel Bearings	Not required (Lubed for life)	Not required
VOK-07 Front (With Drum Brakes)	King Pins	Six months or 30,000 miles (48,000 km)  DO NOT grease more often.	Fuchs Renolit-LX-OTP2  The LX-OTP 2 grease is the only grease released by MAN for the VOK-07 kingpins. The use of any other grease will void the warranty.
	Wheel Bearings	Not required (Lubed for life)	Not required
	Brake Camshaft Bearings (S-Cam)	Check when axial or radial endplay is excessive or when wheel hub is removed. Grease or repack as required	MAN Specification MAN 284 Li-H2
	Slack Adjusters	Every 6,000 miles (9,600 km) grease only if nipple is installed	MAN Specification MAN 284 Li-H2

GREASING INTERVALS			
Axle Type	Component	Interval	Lubrication Type
V8-65L Front	King Pins	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2
	Wheel bearings	Inspect at 54,000 miles (87,000 km) and repack only if necessary. Change grease and seals every 150,000 miles (240,000 km)	MAN Specification MAN 284 Li-H2
	Brake Camshaft Bearings (S-Cam)	Check when axial or radial endplay is excessive or when wheel hub is removed. Grease or repack as required	MAN Specification MAN 284 Li-H2
	Slack Adjusters	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2
HY-1350 Rear	Wheel Bearing	Repack wheel bearings and hub cavity with grease whenever the wheel bearings or grease seals are being serviced	MAN Specification MAN 284 Li-H2
HY-1336 Rear	Wheel Bearing	Repack wheel bearings and hub cavity with grease whenever the wheel bearings or grease seals are being serviced	MAN Specification MAN 284 Li-H2
HP-1352 Rear	Brake Camshaft Bearings (S-Cam)	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2
	Slack Adjusters (standard without grease nipple)	Not required (Lubed for life)	MAN Specification MAN 284 Li-H2
	Slack Adjusters (only if equipped with grease nipple)	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2
HO7-11120 Rear	Brake Camshaft Bearings (S-Cam)	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2
	Slack Adjusters	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2

GREASING INTERVALS			
Axle Type	Component	Interval	Lubrication Type
HONG-1100 Center	Brake Camshaft Bearings (S-Cam)	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2
	Slack Adjusters	Every 6,000 miles (9,600 km)	MAN Specification MAN 284 Li-H2