# Lion's Explorer Pride of MAN

**CONSISTENTLY EFFICIENT** 

Engineering the Future – since 1758.

MAN



#### MAN LION'S EXPLORER BUS FAMILY

The MAN Lion's Explorer bus bodywork, the successor to the well known Explorer range of bodies, and the only OE-manufactured bus body in South Africa, is designed for African conditions to exacting European standards. The body styling is in line with the MAN Lion's family of City and Intercity buses from Germany.

#### MAN - RELIABLE, AFFORDABLE, INNOVATIVE AND SAFE

With the extensive knowledge gained from the more than 2 500 Explorer bodies delivered to the Southern African market since 1999, and our customers being an extension of our design team, MAN is constantly improving its products.

#### The MAN HB chassis range is:

Reliable – The well tried and tested Trucknology® results in superior reliability, and downtime is minimised due to the extended service intervals.

Affordable – The chassis range makes use of fuel-efficient D08 and D20 common rail engines. Replacement parts are also readily available at competitive prices. Innovative – MAN Trucknology® technology, which has been extensively tried and tested in the TGA range, is incorporated into the MAN HB bus chassis range. Safe – The chassis has many safety features including ABS (anti-lock brakes), ASR (traction control) and EPB (electro-pneumatic brake).

#### **HEART AND SOUL**

The Lion's Explorer bus body range is fitted to the new, futuristic MAN HB bus chassis range, the latest addition to the 100% Trucknology® range from MAN.

#### State-of-the-art driveline

You notice it when you start. You feel it when you accelerate. You experience it on every kilometre you drive. MAN's powerful common rail diesel engines have the torque and economy to match the exceptional reliability. In combination with the various transmissions (manual, automatic and TipMatic) the engines with ratings from 176kW (240hp) to 257kW (350hp) give the MAN HB bus chassis exceptional driving performance. The common rail injection system is quieter and complies with Euro 3 emission standards.

#### THE SIX EXCITING MODELS IN THE MAN HB CHASSIS RANGE

| HB1-240   | 18.240 BB FOCR  | 4x2 chassis with ZF manual transmission               |
|-----------|-----------------|---|
| HB2-240   | 18.240 BB FOCR  | 4x2 chassis with Voith automatic transmission         |
| HB4-310   | 26.310 LL FOCNR | 6x2 chassis with TipMatic transmission                |
| HB4-350   | 26.350 LL FOCNR | 6x2 chassis with TipMatic transmission                |
| HB4BT-310 | 26.310 LL FOCNR | Bustrain (6x2 prime mover) with TipMatic transmission |
| HB4BT-350 | 26.350 LL FOCNR | Bustrain (6x2 prime mover) with TipMatic transmission |

#### THE BODY MODELS AVAILABLE

- MAN Lion's Explorer 12.5m bodywork on MAN HB1 & HB2 chassis
- MAN Lion's Explorer 13.9m bodywork on MAN HB4 (310 or 350) chassis
- MAN Lion's Explorer 13.9m bodywork on MAN HB4 (310 or 350) chassis

#### FEATURES:

- The D0836LFL40 and D0836LOH41 common rail engines deliver 925Nm of torque at 1 200-1 800 rpm and 176kW of power at 2 400 rpm (HB1-240 and HB2-240 chassis models)
- The D2066LF04 common rail engine delivers 1 550Nm of torque at 1 000-1 400 rpm and 228kW of power at 1 900 rpm (HB4-310 and HB4BT-310 chassis models)
- The D2066LF03 common rail engine delivers 1 750Nm of torque at 1 000-1 400 rpm and 257kW of power at 1 900 rpm (HB4-350 and HB4BT-350 chassis models)

#### THE MAN LION'S EXPLORER BODY RANGE INCORPORATES

- Innovative modular designs resulting in customisation options, which meet our customers' individual requirements
- Highest safety standards, complying with all the SABS compulsory standards relating to safety, including body roll-over structural strength, seat strength and anchorage, as well as emergency exit requirements are incorporated
- H7 (high intensity) headlights are fitted as standard to all Lion's Explorer bodies, enhancing safety and night-driving capability



Above: the MAN HB4 chassis.

Above: the MAN HB2 chassis.

Above: the MAN D08 engine

Above: the MAN D20 engine.

# **BUS RANGES**

#### STYLISH DESIGN

With its attractive appearance and styling, the Lion's Explorer creates a striking allround impression. Its design is futuristic, retaining the all-important values of safety and comfort for driver and passengers alike. A curved rubber-glazed windscreen and curved rear-view mirrors allow the driver greater peripheral vision and reduced glare. The front grille design improves airflow for cooling and allows easy access for daily maintenance checks. The body exterior rear panel is uncluttered allowing 'travelling billboard' revenue generating possibilities.

#### SAFETY FIRST

The wider pneumatically operated passenger door has large glass panels for improved driver curb-side visibility and styling. The entrance has adequate passenger handrails and non-slip flooring which will help improve passenger boarding and alighting from the bus. An out-swing step can also be fitted to reduce the first step height to 300mm (optional extra). All doors are interlinked to the park brake as an additional safety feature. In addition to the EBS 5 braking system, a retarder or intarder (depending on the chassis model) is a standard fitment on all MAN HB bus chassis, ensuring that all the chassis braking safety standards are exceeded.

#### TRAVELLING IN COMFORT

The passenger saloon area combines comfort, safety and functional design. Panoramic windows and the use of attractive practical interior finishing materials, create a bright and friendly atmosphere. The many seating options and styles available from our list of recommended suppliers enhance the interior comfort and appearance. The driver's workstation, with its attractive design, is in a class of its own. The controls are logically arranged and within easy reach of the driver, focussing on the central LCD display which incorporates all servicing and diagnostic information. The driver's seat and steering wheel are pneumatically adjustable ensuring the ultimate in driver comfort.













## BUS RA

#### **EXTERIOR FEATURES**

- Body structure in 3CR12
- H7 high intensity headlights
- LED rear lights (including stop/park and indicator lights) are vertically mounted on both sides of the rear dome and duplicated on the top of the dome. Incandescent-type reverse lights are mounted in the rear bumper recess
- The three-piece front bumper is manufactured from moulded glass reinforced plastic (GRP)
- Stone guards and mud flaps are fitted behind all wheels
- The one-piece GRP roof design and styling has integrated rain gutters and improved aerodynamics
- The aerodynamic frontal design of the body reduces 'drag' contributing to improved fuel economy
- The front header box is prepared for the future fitment of destination equipment
- Lockable fuel tank flap
- Acid-protected lockable battery compartment, housing the swingout battery cradle and the chassis tool-kit

- Driver's door
- Passenger entrance door two leaf in-swing door pneumatically operated
- Two rear view mirrors and one interior mirror
- Hübner articulation and bellow system fitted as a standard on all Bustrains

#### **BODY OPTIONAL EXTRAS**

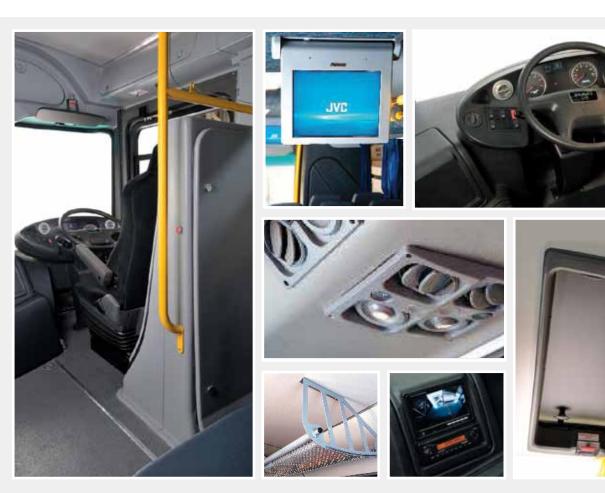
- Additional passenger door, rear of the rear wheels
- Slam type air operated door in lieu of an in-swing type door
- Various underfloor luggage locker configurations are available, each incorporating lockable aluminium doors and interior illumination
- Out-swing step fitted below passenger entrance step assemblyWheelchair lift
- 4-piece flat front mounted windscreen in lieu of the 2-piece curved windscreen
- LED front mounted destination display
- Rear tail-light surrounds in red
- Additional body colour











#### **INTERIOR FEATURES**

- The chassis electrical system is incorporated into the driver's rear partition
- Clearly marked emergency exit windows
- The interior finishes bodyside and ceiling in formica panelling front header box and rear interior panel of moulded GRP panels
- Saloon lighting five flush mounted fluorescent lights and bus stop bell pushes, fitted in alternate ceiling bays
- One down light above the driver and one above the passenger entrance are interconnected to the door opening mechanism
- One ceiling handrail and all partitions of 32mm diameter yellow powder coated tubing
- Windscreen demister blower with vents in front dash
- 3CR12 passenger entrance steps trimmed in Altro floor covering
- Driver's sun visor
- Ceiling insulated with polystyrene
- Passenger saloon floor in 2mm 3CR12 plate bonded to the under frame structure and trimmed in Altro floor covering
- Emergency escape roof hatches

#### **INTERIOR OPTIONAL EXTRAS**

- Perforated parcel racks
- Parcel racks trimmed in vinyl or cloth to match seat trim
- Driver's nearside enclosure moulded GRP type or laminated ply wood GRP with sliding window attached to the driver's rear partition
- Mesh protection for windows on driver's nearside partition
- Interior ceiling of moulded GRP panels with central lighting combo and two grab handles in lieu of formica
- Interior ceiling with GRP eave panels and centre panel in local cloth in lieu of formica
- Bodyside curtains with tie backs
- Various seating options available from our list of recommended seat suppliers
- Saloon heating cove mounted convection heaters
- · Forced draft ventilation with jet vents and reading lights
- Air-conditioning Webasto (HB4-350 only) with jet vents and reading lights
- Roof mounted extractor/ventilation units
- 4-way emergency roof hatch
- Radio/CD and speakers
- Radio/CD/DVD combo and speakers and two flip-down monitors



## TECHNICAL SPECIFICATIONS



MAN Lion's Explorer 12.5m bodywork on MAN HB1 & HB2 chassis.

| Vehicle model                            | MAN Lion's Explorer 12.5m          |
|--|------------------------------------|
| Vehicle dimensions (LE1 & LE2)           |                                    |
| Length                                   | 12 500mm                           |
| Width                                    | 2 600mm                            |
| Wheelbase                                | 6 050mm                            |
| Seating capacity (LE1 & LE2)             |                                    |
| Up to 65 seated passengers               |                                    |
| Vehicle application (LE1 & LE2)          |                                    |
| City/commuter                            |                                    |
| Engine D0836LFL40 (HB1) & D0836L         | OH41 (HB2)                         |
| Model and arrangement:                   | 6-cylinder, in-line diesel engine, |
|  | common rail Euro 3                 |
| Maximum power                            | 176kW @ 2 400 r/min                |
| Maximum torque                           | 925Nm @ 1 200-1 800 r/min          |
| Displacement (cm3)                       | 6 871                              |
| Transmission (HB1)                       |                                    |
| Model and type                           | ZF 6S 1200 BD / Manual             |
| Number of gears                          | 6                                  |
| Transmission ratios                      | 7.72 to 1                          |
| Rear axle ratio                          | 4.0:1                              |
| Transmission (HB2)                       |                                    |
| Model and type                           | Voith DIWA 854.5 / Automatic       |
| Number of gears                          | 4                                  |
| Transmission ratios                      | 6.2 to 0.7                         |
| Rear axle ratio                          | 6.0:1                              |
| Axles (HB1 & HB2)                        |                                    |
| Front axle                               | VOK -08-04                         |
| Drive axle                               | HP-1333                            |
| Suspension                               | Parabolic                          |
| Brakes (HB1 & HB2)                       |                                    |
| Brake system                             | EBS 5                              |
| Brakes type                              | Disc front; Drum rear              |
| ABS/ASR/EPB                              | Standard                           |
| Auxiliary – HB1/HB2                      | Voith 120 Retarder/Intarder        |
| Fuel tank (HB1 & HB2)                    |                                    |
| 300 litres located on the left hand side |                                    |
| Vehicle masses (HB1 & HB2)               |                                    |
|  | 19.000//a                          |
| Manufactures (GVM)                       | 18 000kg                           |
| Manufactures (GVM)<br>Manufactures (GCM) | 19 500kg                           |



MAN Lion's Explorer 13.9m bodywork on MAN HB4 (310 or 350) chassis.

| Vehicle model                            | MAN Lion's Explorer 13.9m          |
|--|------------------------------------|
| Vehicle Dimensions (LE4)                 |                                    |
| Length                                   | 13 900mm                           |
| Width                                    | 2 600mm                            |
| Wheelbase                                | 6 050 + 1 350mm                    |
| Seating Capacity (LE4)                   |                                    |
| Up to 79 seated passengers               |                                    |
| Vehicle Application (LE4)                |                                    |
| City/commuter and intercity              |                                    |
| Engine D2066LF04 (310hp) (HB4)           |                                    |
| Model and arrangement                    | 6-cylinder, in-line diesel engine, |
|  | common rail Euro 3                 |
| Maximum power                            | 228kW @ 1 900 r/min                |
| Maximum torque                           | 1 550Nm @ 1 000-1 400 r/min        |
| Displacement (cm3)                       | 10 518                             |
| Engine D2066LF03 (350hp) (HB4)           |                                    |
| Model and arrangement                    | 6-cylinder, in-line diesel engine, |
| -  | common rail Euro 3                 |
| Maximum power                            | 257kW @ 1 900 r/min                |
| Maximum torque                           | 1 750Nm @ 1 000-1 400 r/min        |
| Displacement (cm3)                       | 10 518                             |
| Transmission (HB4)                       |                                    |
| Model and type                           | ZF 12AS2131 DD / TipMatic          |
| Number of gears                          | 12                                 |
| Transmission ratios                      | 15.86 to 1                         |
| Rear axle ratio                          | 3.364:1                            |
| Axles (HB4)                              |                                    |
| Front axle                               | VOK -08-16                         |
| Drive / tag axle                         | HY-1350-03 / NO-08-08              |
| Suspension                               | Air                                |
| Brakes (HB4)                             |                                    |
| Brake system                             | EBS 5                              |
| Brakes type                              | Discs all round                    |
| ABS/ASR/EPB                              | Standard                           |
| Auxiliary brake                          | ZF Intarder                        |
| Fuel tank (HB4)                          |                                    |
| 400 litres located on the left hand side |                                    |
| Vehicle masses (HB4)                     |                                    |
| Manufactures (GVM)                       | 26 000kg                           |
|  |                                    |
| Manufactures (GCM) 310/350               | 31 000kg/33 000kg                  |



MAN Lion's Explorer Bustrain 22.0m bodywork on MAN HB4BT (310 or 350) chassis.

| Vehicle model                                 | MAN Lion's Explorer Bustrain 22.0m |
|---|------------------------------------|
| Vehicle Dimensions (LE4BT)                    |                                    |
| Length  | 22 000mm                           |
| Width   | 2 600mm                            |
| Wheelbase                                     | 6 050 + 1 350mm                    |
| Seating Capacity (LE4BT)                      |                                    |
| Up to 119 seated passengers                   |                                    |
| Vehicle Application (LE4BT)                   |                                    |
| City/commuter                                 |                                    |
| Engine D2066LF04 (310hp) (HB4BT)              |                                    |
| Model and arrangement                         | 6-cylinder, in-line diesel engine, |
|   | common rail Euro 3                 |
| Maximum power                                 | 228kW @ 1 900 r/min                |
| Maximum torque                                | 1 550Nm @ 1 000-1 400 r/min        |
| Displacement (cm3)                            | 10 518                             |
| Engine D2066LF03 (350hp) (HB4BT)              |                                    |
| Model and arrangement                         | 6-cylinder, in-line diesel engine, |
| ×   | common rail Euro 3                 |
| Maximum power                                 | 257kW @ 1 900 r/min                |
| Maximum torgue                                | 1 750Nm @ 1 000-1 400 r/min        |
| Displacement (cm3)                            | 10 518                             |
| Transmission (HB4BT)                          |                                    |
| Model and type                                | ZF 12AS2131 DD / TipMatic          |
| Number of gears                               | 12                                 |
| Transmission ratios                           | 15.86 to 1                         |
| Rear axle ratio                               | 3.364:1                            |
| Axles (HB4BT)                                 |                                    |
| Front / drive axle                            | VOK-08-16 / HY1350-03              |
| Tag / trailer axle                            | NO-08-08 / NOK-10-Z-03             |
| Suspension                                    | Air                                |
| Brakes (HB4BT)                                |                                    |
| Brake system                                  | EBS 5                              |
| Brakes type                                   | Discs all round                    |
| ABS/ASR/EPB                                   | Standard                           |
| Auxiliary brake                               | ZF Intarder                        |
| Fuel tank (HB4BT)                             |                                    |
| 400 litres located on the left hand side      |                                    |
| Vehicle Masses (HB4BT)                        |                                    |
| Manufactures (GVM)                            | 35 000kg                           |
| <u>, , , , , , , , , , , , , , , , , , , </u> | 310/350: 35 000kg                  |
| Manufactures (GCM)                            |                                    |





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