

A man with a beard, wearing a blue and white checkered shirt, is sitting in the driver's seat of a vehicle that is completely stuck in a deep, muddy river. The vehicle is almost entirely submerged, with only the roof and the man's head and shoulders visible above the surface. The water is a thick, brownish-green color, indicating it is very muddy. The surrounding landscape is lush and green, with dense vegetation on the banks. The overall scene conveys a sense of being in a remote, off-road location where a standard road has ended.

**RHINO STARTS
WHERE THE ROAD ENDS**



The V.M.B. RHINO: a cross country vehicle that can travel through the roughest, most savage and inhospitable environments under all climatic conditions. The RHINO is built for extreme situations—from snow slopes to swampy areas and other regions either densely foliated or of difficult topography, normally inaccessible for other vehicles.... but not for the RHINO.



The RHINO climbs steep slopes with ease, rides over fallen trees and negotiates its way over rocks and other obstructions effortlessly.

The low pressure country tyres and the unique,

swivel bearing ensure that under the most arduous conditions at least three wheels maintain continuous contact with the ground. The RHINO can thus travel quickly in the most difficult areas. The relatively simple construction and a minimum of moving parts simplifies maintenance and enables it to



be unco... costs a... light en... heavy... The ba... togeth... permit... Beccus... chasis... down i... and the

4 x 4 DRIVE/4 x 4 STEERING

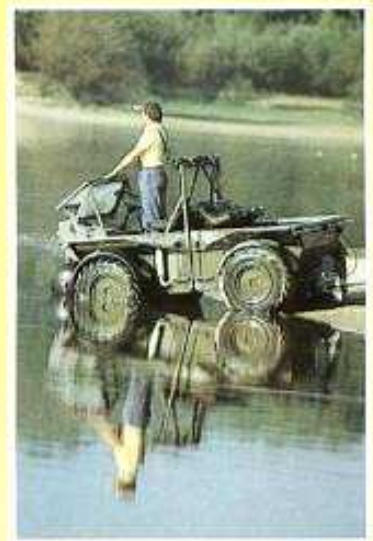


to
undertaken personally so that
are kept to a minimum. The very
engine construction and a minimum of
y components contribute to a low total weight.
basic model weighs no more than 1250 kg. This,
ther with its compactness and manoeuvrability,
it it to be easily transported by helicopter.
use the wheels are driven directly from a closed
is it is impossible that the vehicle becomes bogged
1 in mud: the transmission keeps operating in the mud
the wheels claw a way out.

Some of the
passenger tra

public works equipment as use
grass cut
agricultural equipm
repair or
VMB's technical specialists are alw
and assist you and the RHINO ca
according to

The RHINO is not only at home in rough country but also in water. Its amphibious characteristics are best demonstrated in water levels where the wheels are unable to find a grip. Under these circumstances a screw can be mounted facilitating rapid movement through the water.



The high bottom plate and the far forward positioning of the wheels eliminate the need for a prepared road when entering or leaving the water.

The steering and drive are coupled to all four wheels so that in water the screw turns with the steering.

Steering and pedals are constructed so that the vehicle can be driven in either the sitting or standing position.

The chairs are sprung in such a way that driver and crew can sit comfortably even in very rough terrain. The vehicle is moreover fitted with

a canvas tarpaulin and heated cabin.

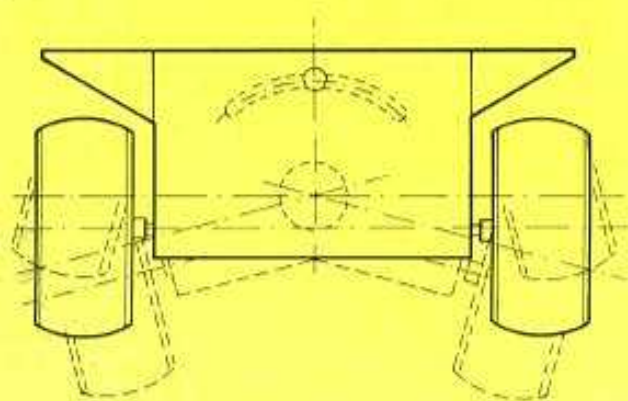


V.M.B. RHINO are specialized in high grade, high technology construction. The possibilities of the RHINO are virtually unlimited in regard to its performance and inherent potential.

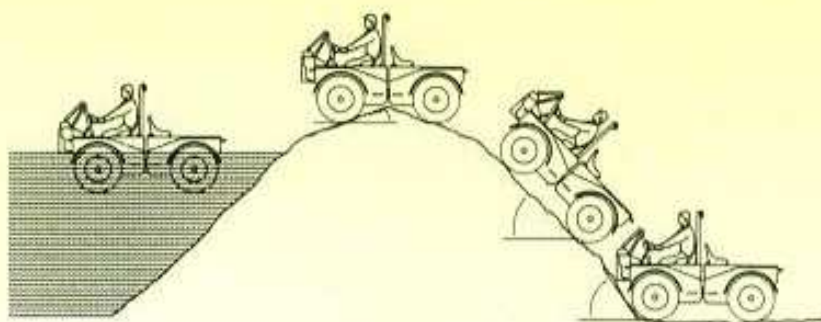
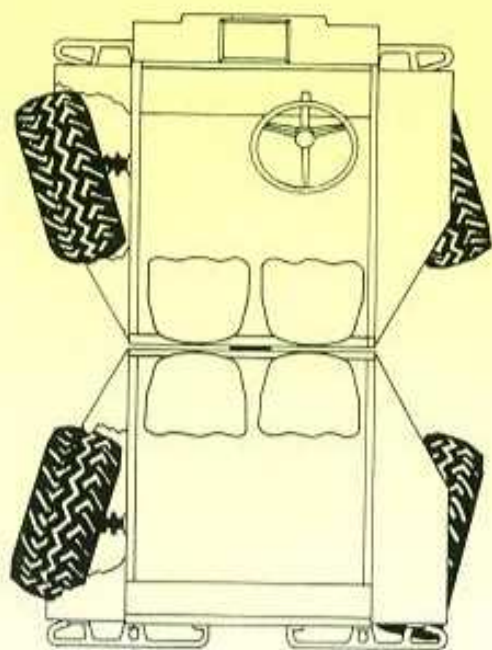


Typical applications are:
 - work in marshlands;
 - logging and pipelaying;
 - forestry uses;
 - road line marking;
 - road side-table;
 - ploughs, noes etc.
 - maintenance of skilifts;
 - available to advise
 - e supplied precisely
 - omers requirement.





The RHINO's unique swivel bearing.
At least three wheels in continuous contact
with the ground under the most extreme
circumstances.



Cross-country vehicle ATV 4 x 4 'Rhino'

Engine

Fiat 4 Cylinder, 4 Stroke gasoline engine, water-cooled, Type Panda, or 4 Cylinder diesel engine, water-cooled with turbocharger.

	Gasoline	Diesel
Performance:	45 PS at 5600 rpm	28 PS at 3600 rpm
Capacity:	900 cc.	800 cc.
Max. turning moment:	6.8 mkp at 3000 rpm	6.0 mkp at 2800 rpm
Consumption:	7 l/h	4.5 l/h
Weight:	72 kg	73 kg
Compression ratio:	1 : 9.2	1 : 23

Drive

4-Wheel drive, fully synchronous transmission from a 2-speed gearbox provided with 2 reverse speeds. Transmission is through a jointed shaft to worm-gear differentials in each front and rear axle hub.

Speed

The speed in the cross-country position is between 2-26 km/h at 4500 rpm and in the normal road position between 3.5-72 km/h at 5480 maximum rpm. The vehicle is supplied with a 2-speed gearbox plus reverse.
-1st gear = 0 to 23 km/h (terrain);
-2nd gear = 0 to 72 km/h (road);
with torque converter.

Brakes

Mechanical-hydraulic combination disc brake system on the front axle; handbrake to the gearbox.

Tyres and wheels

Tubeless low-pressure cross-country type tyres of 0.5 bar max. with a wheelsize of 31x15.5 to 15 mounted on closed aluminium deep bedrim.

Steering

Rack-and-pinion with flexball cable on all four wheels.

Electrical System

12V battery of 66 Ah with 12 V generator having a charging current of 45 A. Ignition via distributor. Front and rear reflectors, high and low beam lamps, warning lights, tail-light, illuminated licence plate, horn, windscreen wipers and washers.

Tank System (gasoline)

50 l fuel tank at the rear, vacuum fuel pump, special carburetter. Consumption 10 l/h max.

Chassis and Body

Two 2 mm sheet metal, waterproof steel hulls joined at a pivoting point and an additional connector to prevent deformation of the swivel bearing.

Dimensions and Weights

Overall length:	2.95 m
Overall width:	2.00 m
Height without cabin:	1.65 m
Height with cabin:	1.95 m
Ground clearance:	0.28 m
Wheelbase:	1.62 m
Axle width:	1.65 m
Turning circle:	9.50 m
Empty weight:	1250 kg
Maximum weight:	1750 kg

Standard Options

Front cabin with wiper/washer combination, roll-back roof and rollbar with 3-point safety belt system. Two special sprung seats. Steering wheel lock, toolbox with tools. Lock-up glove compartment, speedometer and clock, two rear mirrors, handstraps front and back. Airbag allowing the vehicle to roll into the water from extreme heights without drawing water.

Special Options

Override, towing bar, hydraulic pump, screw shaft, 3-position mounting brackets for additional equipment. Electric wrench at rear. Two-persons benchseat. Special civilian options available.

RHINO

VMB VESTA Maschinenbau GmbH & Co KG
Hertzstraße 2
76287 Rheinstetten 2 / WEST GERMANY
Telefon 00 49-72 42 / 8 98
Telefax 00 49-72 42 / 8 90



Cross-country vehicle ATV 4 x 4 'Rhino'

Engine

Fiat 4 Cylinder, 4 Stroke gasoline engine, water-cooled, Type Panda, or 4 Cylinder diesel engine, water-cooled with turbocharger.

	Gasoline	Diesel
Performance:	45 PS at 5600 rpm	28 PS at 3600 rpm
Capacity:	900 cc.	800 cc.
Max. turning moment:	6.8 mkp at 3000 rpm	6.0 mkp at 2800 rpm
Consumption:	7 l/h	4.5 l/h
Weight:	72 kg	73 kg
Compression ratio:	1 : 9.2	1 : 23

Drive

4-Wheel drive, fully synchronous transmission from a 2-speed gearbox provided with 2 reverse speeds. Transmission is through a jointed shaft to worm-gear differentials in each front and rear axle hub.

Speed

The speed in the cross-country position is between 2-26 km/h at 4500 rpm and in the normal road position between 3.5-72 km/h at 5480 maximum rpm. The vehicle is supplied with a 2-speed gearbox plus reverse.

-1st gear = 0 to 23 km/h (terrain);

-2nd gear = 0 to 72 km/h (road);

with torque converter.

Brakes

Mechanical-hydraulic combination disc brake system on the front axle; handbrake to the gearbox.

Tyres and wheels

Tubeless low-pressure cross-country type tyres of 0.5 bar max. with a wheelsize of 31x15.5 to 15 mounted on closed aluminium deep bedrim.

Steering

Rack-and-pinion with flexball cable on all four wheels.

Electrical System

12V battery of 66 Ah with 12 V generator having a charging current of 45 A. Ignition via distributor.

Front and rear reflectors, high and low beam lamps, warning lights, tail-light, illuminated licence plate, horn, windscreen wipers and washers.

Tank System (gasoline)

50 l fuel tank at the rear, vacuum fuel pump, special carburetter. Consumption 10 l/h max.

Chassis and Body

Two 2 mm sheet metal, waterproof steel hulls joined at a pivoting point and an additional connector to prevent deformation of the swivel bearing.

Dimensions and Weights

Overall length:	2.95 m
Overall width:	2.00 m
Height without cabin:	1.65 m
Height with cabin:	1.95 m
Ground clearance:	0.28 m
Wheelbase:	1.62 m
Axle width:	1.65 m
Turning circle:	9.50 m
Empty weight:	1250 kg
Maximum weight:	1750 kg

Standard Options

Front cabin with wiper/washer combination, roll-back roof and rollbar with 3-point safety belt system. Two special sprung seats. Steering wheel lock, toolbox with tools. Lock-up glove compartment, speedometer and clock, two rear mirrors, handstraps front and back. Airbag allowing the vehicle to roll into the water from extreme heights without drawing water.

Special Options

Override, towing bar, hydraulic pump, screw shaft, 3-position mounting brackets for additional equipment. Electric wrench at rear. Two-persons benchseat. Special civilian options available.

RHINO

VMB VESTA Maschinenbau GmbH & Co KG
Hertzstraße 2
76287 Rheinstetten 2 / WEST GERMANY
Telefon 00 49-72 42 / 8 98
Telefax 00 49-72 42 / 8 90

