



A 1.2 General description

The FRIMOKAR High Suction Road Sweeper is a multi - purpose vehicle desingned expecially for the folloing functions and is capable of being used in all climatic conditions, ranging from the severe heat of the arabian deserts to the extreme cold of the northern regions.

- Sweeping-collecting of debris and liquids.
- Picking up foam after emergencies.
- Sub-surface cleaning of quick-drain asphalt coatings to prevent aquaplaning and frost damages.
- Clearance of flood water.
- Cleaning of cracks in floor prior to repairs.
- Road surface cleaning with optional high pressure water pump and spraying bar.
 - Removal of oil and chemical spillages.
- De-Icing and towing-vehicle for winter-services.
- and many other applications.

This handbook should be carefully studied. In it you will find instructions for the operations and maintenance of the FRIMOKAR suction sweeper.

It is vitally important that your operators and maintenance staff follow this instructions. The vehicle is desingned for a long life and a minimum of wearing parts requirements, by use of "Original Spare Parts" only.



A 2.1 Chassis specification

NR F025745M
148748

Type:	MAN 19.272 FLT/BL
Wheelbase:	3800 mm
Kerb weight:	19000 kg
Front axle weight:	7500 kg
Rear axle weight:	12000 kg
Engine:	D 2865 L
Gearbox:	ZF 16 S 109
Rear-axle:	i = 4,11
Tyres:	front 315/80 R 22,5; rear 295/80 R 22,5
Steering position:	left
Voltage:	24 V

A 2.2 Vehicle specification

GVW incl. acc.:	13140 kg
Front axle load:	6020 kg
Rear axle load:	7120 kg
Overall length:	8000 mm
Overall width:	3260 mm (2500 mm)
Overall height:	3590 mm



A 2.3 Hydrostatic drive and fan system

FRIMOKAR split shaft gearbox with electric switch control, high performance hydraulic motors and pumps for direct drive and fan drive.

Gearbox:	460001	GTMN 102-123 / 116346
Driving pump:	280100	515 D03 0194
Driving motor (front):	280406	207 D03 0118
Driving motor (rear):	280406	207 D03 0119
Fan pump:	280099	514 D06 0014
Pump for sweeping equipments:	280098	530 C12 0065
Lubrication pump:	280020	

Performance (loaded):

Max. speed, 1st stage (slow):	12 km/h
Max. speed, 2nd stage (fast):	41 km/h
Gradability:	22 %



A 2.6 Suction equipment

The vehicle has a high powered radial fan, which is of hydraulic operation.

Fan type:	Radial ventilator ø 900 mm
Fan revolutions:	2800 R.P.M.
Air stream:	20600 m ³ /h
Air speed:	215 km/h (59 m/s)

Driving motor:	280410	214 D03 0056
Fan bearing:	560301	1292650

Suction nozzle - width:	3000 mm
Rear suction nozzle - width:	2500 mm
Wander hose - ø:	6 "



A 2.7 Sweeping equipment

Wide sweep brush - \varnothing x lenght:	\varnothing 380 x 3000
Driving motor:	280318/H
Kind of bristle:	550040 / Poly

Channel brush - \varnothing :	350/650 mm
Driving motor:	280308/S
Kind of bristle:	Steel

Side brushes (Jumbo) - \varnothing x lenght:	-----
Driving motor:	-----
Kind of bristle:	-----



A 2.8 High pressure washing equipment

Waterpump

Type:	285035
Capacity:	152 l/min
Pressure:	120 bar
Coupling:	411201
Driving motor:	280251



A 2.9 Low pressure spraying equipment

Waterpump

Type:	285025
Capacity:	35 l/min
Pressure:	4 bar
Coupling:	512074 / 411131 / 512075
Driving motor:	280608



A 2.10 Debris - container

Type:	SB 85
Volume:	8,5 m ³
Inlet tube:	ø 355

A 2.11 Water tank

Type:	WT 20C
Volume:	2000 l

A 2.12 Hydraulic-oil tank

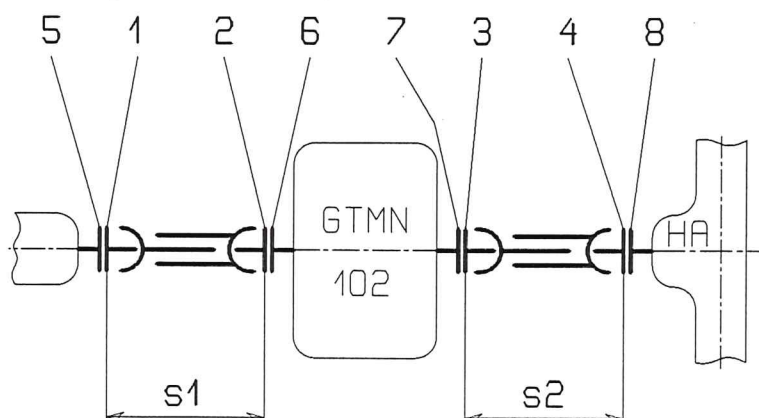
Type:	HT 30
Volume:	300 l

A 2.13 Fuel tank

Type:	FRIMOKAR
Volume:	280 l



A 2.14 Cardanshafts and flanges



VA-No.: 930049
vehicle type: MAN 19.272 FLT/BL
kW / Rpm : 206 kW / 2000 Rpm.

length	front s1	rear s2
s min.	555	1010
s max.	585	1060

	outside - ø	grad. circle - ø	hole - ø	No. of holes	flange type
flange 1	180	150	16	4	70° cross interlocking
flange 2	203,2	184,15	11,1	12	SAE
flange 3	203,2	184,15	11,1	12	SAE
flange 4	180	150	16	4	70° cross interlocking

	flange type	Art.No.	
flange 5	70° cross interlocking		MAN
flange 6	SAE	460258	
flange 7	SAE	460259	
flange 8	70° cross interlocking		MAN

	flange screws	Art.No.	flange nuts	Art.No.
flange 1				
flange 2	7/16" x 1 3/4" NF	107486	7/16" UNF	150704
flange 3	7/16" x 1 3/4" NF	107486	7/16" UNF	150704
flange 4				