

Nederman



**Nederman MagnaSystem.
Exhaust Extraction Solutions
for Emergency Vehicles**

Nederman MagnaSystem.

Keep your station free from exhaust fumes



Every time a vehicle is started hazardous exhaust fumes and particulate are generated. Both are serious health risks. A Nederman exhaust extraction system

eliminates that risk. The Auto-Start Control System ensures that the fan energizes before the vehicle engine is started. The MagnaSystem automatically releases from the vehicle.

Ergonomic and reliable

The MagnaSystem uses an electro-magnet to attach the exhaust hose and nozzle to the vehicle. When activated, the electro-magnet attaches to an anchor plate on the vehicle, holding the nozzle firmly on to the tail pipe. The extraction unit follows smoothly along the track/rail, as the vehicle exits. When passing the pre-set disconnection point on the track/rail, the electro-magnet is deactivated and the nozzle releases instantly. This prevents stress on the tail pipe and risk of injuries due to slingshot effect at release.

Safe and reliable investment

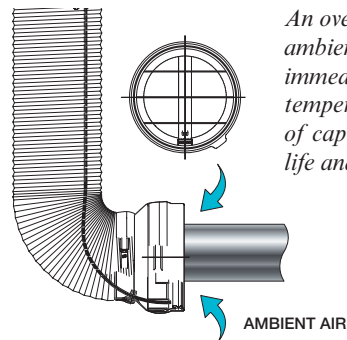
MagnaSystem is the Nederman family of exhaust extraction systems designed specifically for emergency vehicles. Our experience and know-how is a guarantee that MagnaSystem is a secure investment today, and for years to come. Nederman MagnaSystems are installed in over thirty thousand stations globally.



The anchor plate is the nozzle attaching point on the vehicle. It is mounted at a convenient height on the vehicle body enabling you to attach the nozzle while standing up right. The electro-magnet has an ergonomic handle and attaches instantly to the anchor plate on the vehicle.



The tension of a leaf spring in the hose holds the nozzle firmly to the exhaust pipe. The spring also ensures the release of the nozzle when the electro-magnet is deactivated.



An oversized nozzle permits an ambient air mix in the air stream immediately reducing the emission temperature up to 50% at the point of capture. This prolongs component life and prevents burning hazards.

There is a system for every need

Feature	MAGNARAIL The ultimate solution offering outstanding performance	MAGNATRACK HS For high-frequency/high-speed applications	MAGNATRACK S An economical alternative for lower speed and lower usage bays	MAGNATRACK B For stations with less usage demands	MAGNASTACK The reliable solution for vertical exhaust stacks
Serves up to 4 vehicles at a time	●				
Serves 1 vehicle at a time	●	●	●	●	●
Drive-through traffic	●				
Normal exit speed (up to 15 km/h, 10 mph)			●	●	●
High exit speed (up to 25 km/h, 15 mph)	●	●			
Low level tail pipe	●	●	●	●	
High level tail pipe	●	●			●
Vertical stack	●*	●*			●
Automatic return (accessory)	●				

* Also available in HL = high level

Nederman MagnaRail

The ultimate solution offering outstanding performance

MagnaRail is a high capacity system designed to handle large volumes of exhaust fumes.

Up to four vehicles can be attached to the same rail system, each with a designated disconnection point.

The MagnaRail is the ideal solution for a drive-through application for vehicles with either High level or Low level tail pipes. The Suction Rail is

formed in a configuration such that the extrusion serves not only as an exhaust duct, but also as the guide rail that the extraction trolley travels in. The configuration has few parts, is light weight and it snaps easily into the suspensions, all in order to simplify the installation. The rail is available in up to 30m (100ft), increments of 2.5m (8ft) or 5m (16ft).

- Capacity: up to 4 vehicles at a time.
For back in or drive-through vehicles
- High exit speed: up to 25 km/h; 15 mph
- Exhaust pipes: Low level or High level
- Option: Automatic return

Transformer

Primary voltage: 100-230 V, 1-phase AC.
Secondary voltage: 24 V AC.

Bus-bar

Supplies power to the electro-magnet.

Light weight exhaust rail

Makes the installation easy.

Disconnection box

Releases the entire hose assembly from the vehicle in a one-step process; no stress or strain is transferred from the vehicle to the exhaust hose or overhead brackets.

Extraction Trolley

The Extraction Trolley, made out of a light weight composite, serves as the component in the Rail System that travels in the suction rail.

Temp. resistance: for exhaust temperatures up to 600°F; 315°C.

Electro-magnet assembly

Attaches the system to a vehicle.
Includes a manual override switch to de-energize the magnet.

Bracket

Snaps on to the rail.



Shock absorber

A coiled spring hydraulic oil damper absorbs dynamic forces. Permits exit speeds up to 25 km/h; 15 mph.

Balancer

Keeps the hose and nozzle suspended off the floor at all times.

Exhaust hose

Compressible, with integrated cables to the electro-magnet assembly.
Temp. resistance: -40°C to +175°C; -40°F to +350°F.
Exhaust temperatures up to 600°F; 315°C.



Nederman MagnaTrack

Nederman MagnaTrack HS

For high-frequency/high-speed applications

The MagnaTrack HS track system serves one vehicle at a time. MagnaTrack HS is available in lengths from 3.5 m to 18 m; 10 ft. to 60 ft. For vehicles with either High level or Low level tail pipes.

Nederman MagnaTrack S

An economical alternative for lower speed and lower usage bays

MagnaTrack S is an economical alternative to the HS version. The S version serves one vehicle at a time. It is designed to serve emergency vehicles with a fewer runs and lower exit speeds. It is available in lengths from 5.9 m to 11.8 m; 20 ft. to 40 ft.



MagnaTrack HS

- Capacity: 1 vehicle per system
- High exit speed: up to 25 km/h; 15 mph
- Exhaust pipes: High level or Low level tail pipes

MagnaTrack S

- Capacity: 1 vehicle per system
- Normal exit speed: up to 15 km/h; 10 mph
- Exhaust pipes: Low level tail pipes

Guide track

Light weight extruded aluminum.

Transformer

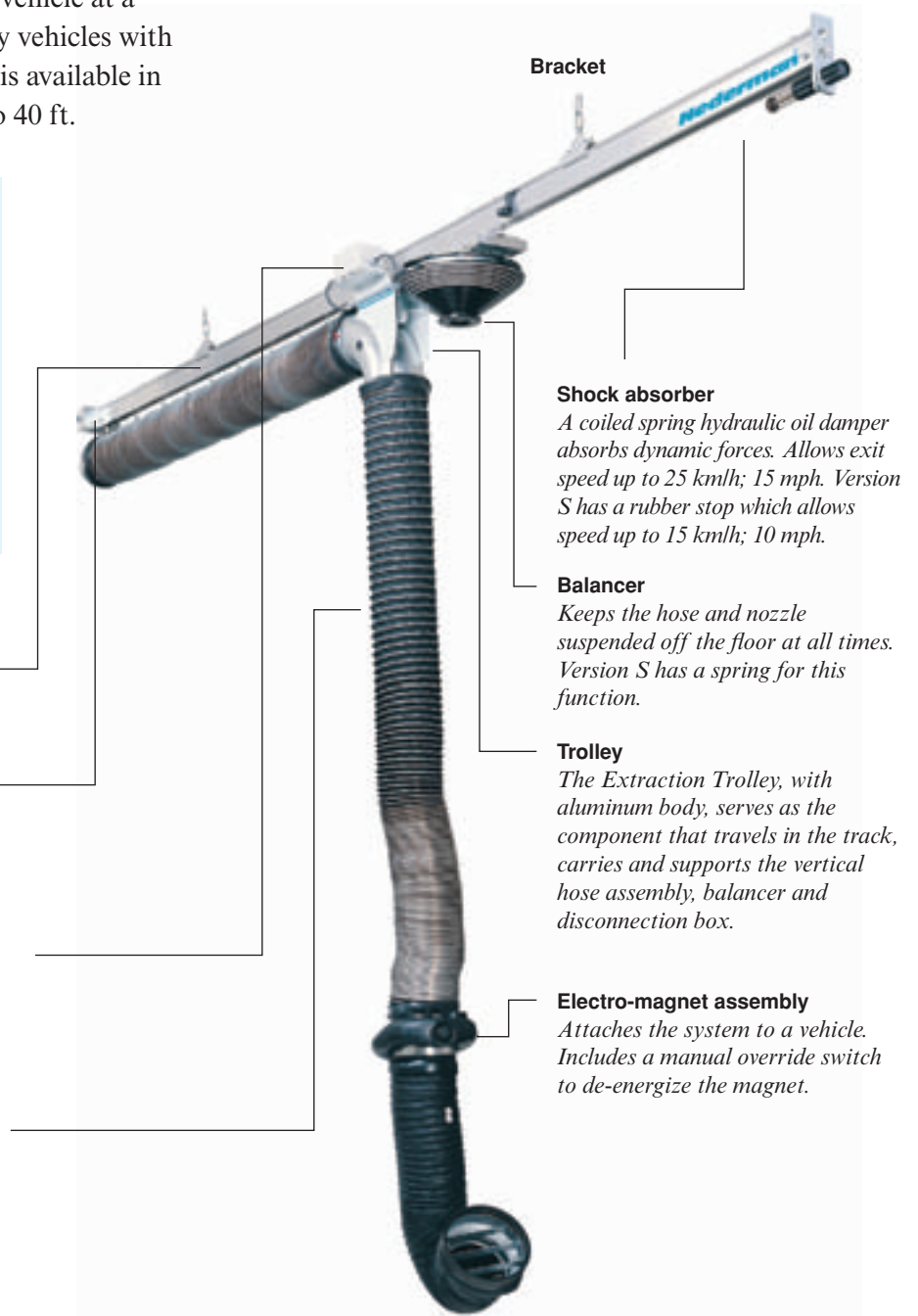
Primary voltage: 100-230 V 1-phase AC.
Secondary voltage: 26 V AC.

Disconnection box

Releases the entire hose assembly from the vehicle in a one-step process; no stress or strain is transferred from the vehicle to the exhaust hose or overhead brackets.

Exhaust hose

Compressible, with integrated cables to the electro-magnet assembly.
Temp. resistance: -40°C to +175°C;
-40°F to +350°F.
Exhaust temperatures up to 600°F; 315°C.



Bracket

Shock absorber

A coiled spring hydraulic oil damper absorbs dynamic forces. Allows exit speed up to 25 km/h; 15 mph. Version S has a rubber stop which allows speed up to 15 km/h; 10 mph.

Balancer

Keeps the hose and nozzle suspended off the floor at all times. Version S has a spring for this function.

Trolley

The Extraction Trolley, with aluminum body, serves as the component that travels in the track, carries and supports the vertical hose assembly, balancer and disconnection box.

Electro-magnet assembly

Attaches the system to a vehicle. Includes a manual override switch to de-energize the magnet.

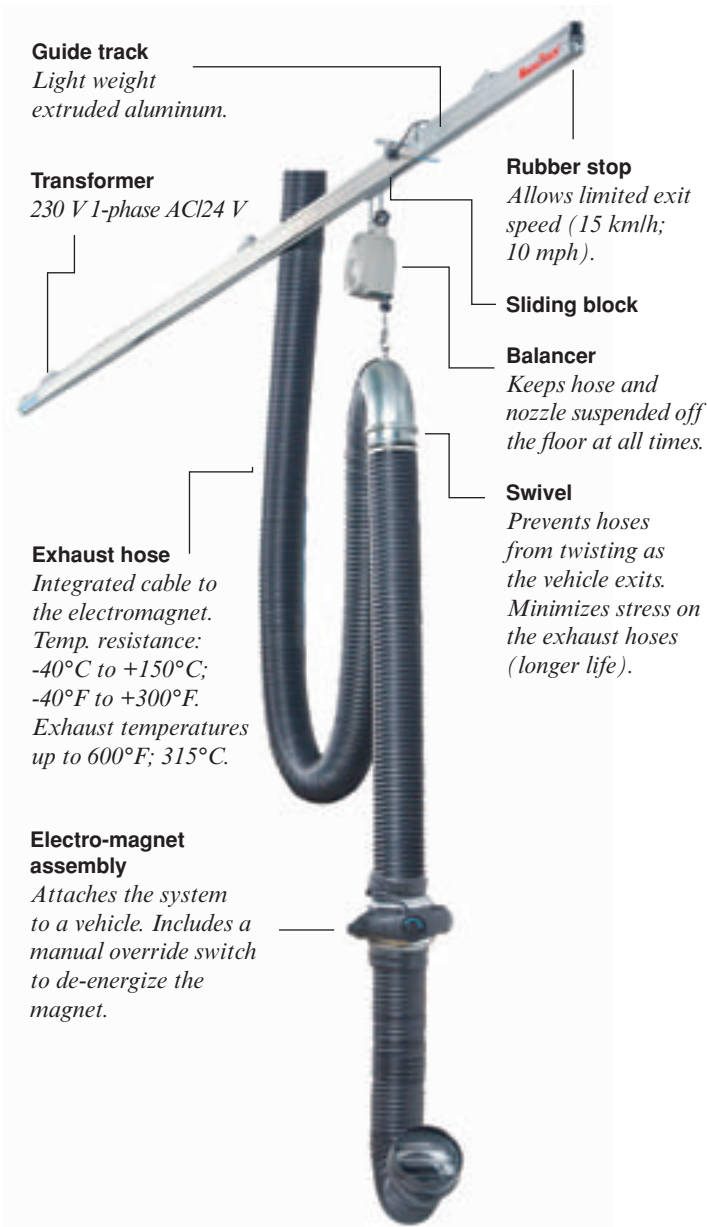
Nederman MagnaTrack B

For stations with less usage demand

MagnaTrack B is a suitable solution when the distance between tail pipe and exit door is no more than 7 m; 25 ft. The free-hanging exhaust hose is equipped with a swivel attached to a balancer, which moves on the guide track.

A switch on the guide separates the entire hose assembly from the vehicle in a one-step process; no stress or strain is transferred from the vehicle to the exhaust hose or overhead brackets.

- Capacity: 1 vehicle per system
- Normal speed exit: up to 15 km/h; 10 mph
- Exhaust pipes: Low-level tail pipes



Nederman MagnaStack

The reliable solution for vertical exhaust stacks

MagnaStack is a 100 per cent automatic exhaust extraction system, based on the same technique as MagnaTrack. The extraction unit, however, is a hood enclosure, which automatically connects with the vertical exhaust stack as the vehicle is backed in to the parking bay. Guide arms position the laterally adjustable hood to the stack. The stack is attached to the hood with an electro-magnet.

As the vehicle moves towards the exit, the horizontal hose and extraction hood follow smoothly along the guide track. At the doorway the electric power is automatically switched off, instantly releasing the exhaust stack from the hood.

- Capacity: 1 vehicle per system
- Normal speed exit: up to 15 km/h; 10 mph
- Exhaust pipes: Vertical stacks



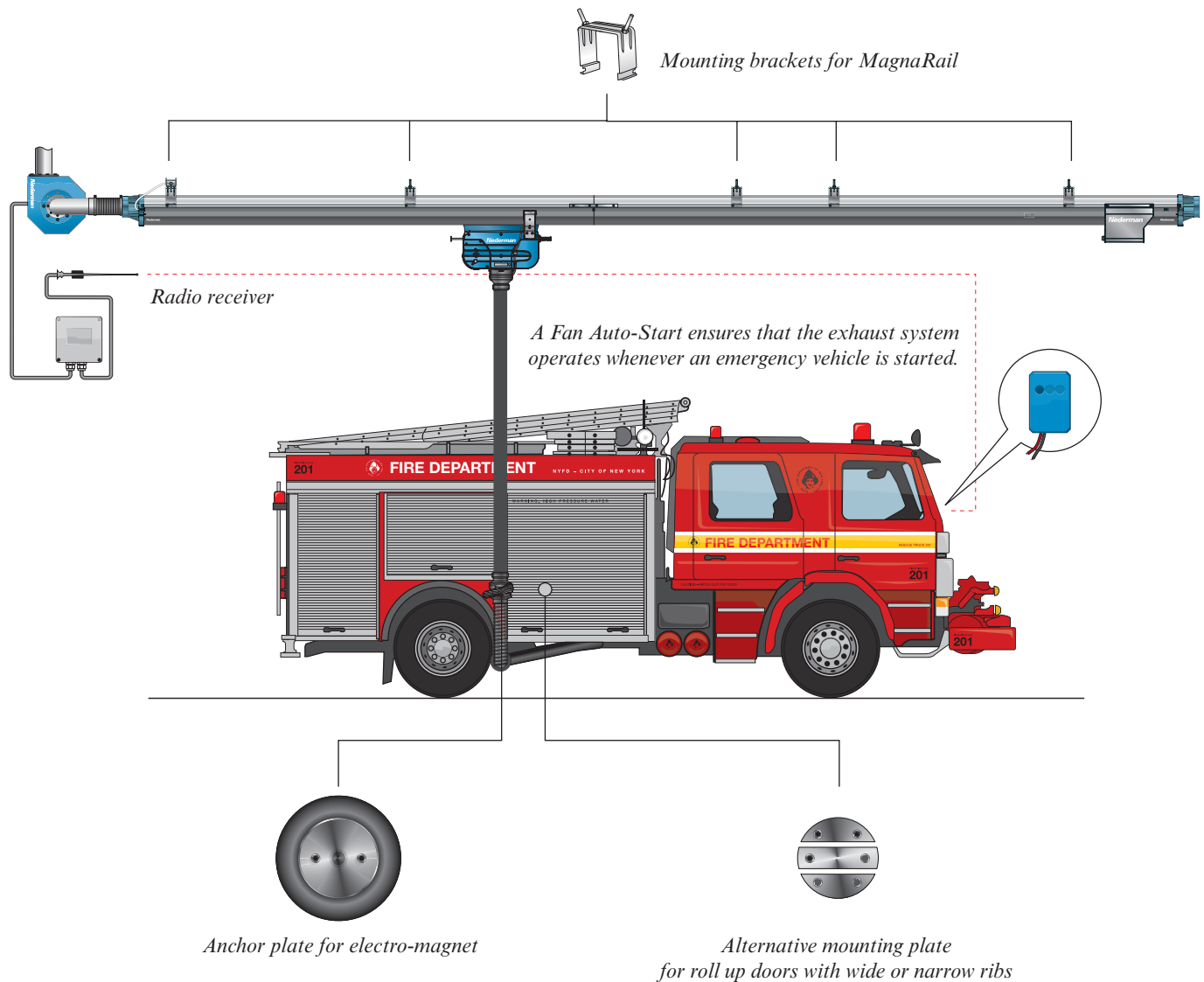
An electro-magnet locks the hood to the exhaust stack.

Guide arms automatically position the hood onto the exhaust stack as the vehicle is backed into its bay.

Accessories for extended functions

A Nederman MagnaSystem can be equipped with a transmitter and radio receiver that starts the exhaust fan when the vehicle is started.

The fan is running two minutes after the vehicle has departed, which ensures complete extraction of hazardous exhaust fumes.



Nederman – a global company with local presence

Nederman is a world leader in developing, manufacturing and marketing products and systems for a better working environment in all kinds of industries.
We have sales companies and distributors in more than 50 countries.

MagnaSystem is the Nederman family of exhaust extraction systems designed specifically for emergency vehicles. The products have been installed in over thirty thousand stations globally. Our experience and know-how is a guarantee that MagnaSystem is a secure investment today, and for years to come.

The Nederman logo consists of the word "Nederman" in a bold, blue, sans-serif font.

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