PLYMOVENT®	SCHEDA TECNICA	BSAB no. T0.3 Ser. no: SBT Date: Jan-00 Replace:
SBT-6-100, SBT-6-W-100, SBT-6-125, SBT-6-W-125, SBT-10-100, SBT-10-W-100, SBT-10-125, SBT-10-W-125	© Copyright 1997: All rights reserved. All information within this printed matter may not be reproduced, handed over, copied, xeroxed or translated into another language in any form or means without written permission from PlymoVent AB. PlymoVent AB reserves the right to make design changes.	

Sliding Balancer Track System



Intended for vehicles with low level, side exhaust pipes.

Area of use:

SBT is used in fire and rescue stations where there is one vehicle parked behind the exit door waiting an emergency call. The distance from door to vehicle-exhaust being a maximum of 10 m. The exhaust being sideward.

Method of Operation.

An automatic, pneumatic controlled exhaust gas extraction system, specially designed for fire and rescue vehicles with low level, side exhaust pipes. The system is used to remove the poisonous petrol and diesel gas fumes direct at the emission source, the exhaust pipe.

When the vehicles are on their way out of the station, the extraction hose, connected to the exhaust by a special device called a GRABBER®, moves along with the vehicle.

Poisonous diesel gases pass from the GRABBER® , up the extraction hose and into the ducting and extraction fan before escaping to the atmosphere.

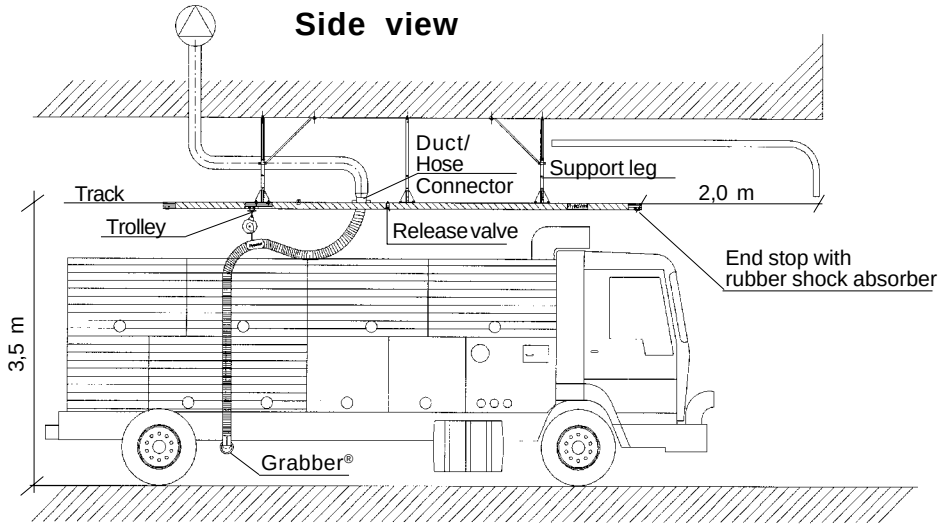
As the vehicles drive out through the doors, the trolley moves over a release valve on the track, which releases the air pressure in the GRABBER® allowing it to disconnect the exhaust pipe.

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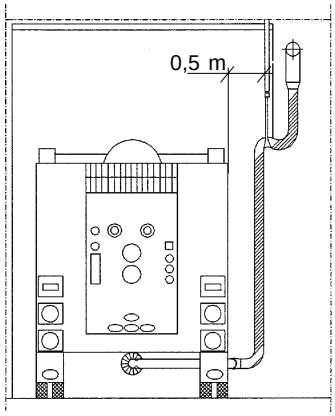
The SBT system consists of a special and easily visable extraction hose assembly with a unique pneumatic exhaust connection called the PlymoVent Grabber®. This resembles a glove which, when filled with compressed air, makes a total seal around the exhaust pipe.
The extraction hose has an inbuilt safety disconnect coupling and a Manual Fill Deflation Valve. It is suspended on a balancer block, safety hole hang from a special trolley, running inside an aluminium profile above and to the side of the vehicle.
The aluminium profile, track, is designed to the three (3) section principle of which two (2) sections have open areas, one on the underside and one on the overside. The overside open area is used for positioning the support legs, duct and exhaust hose connector and the release valve.

The underside open area is used for positioning the end stops and for the sliding the trolley. Upon an alarm call the hose assembly and the trolley move along with the vehicle, the trolley slides under a release valve immediately releases the air pressure in the Grabber®. The trolley travels to the rubber shock absorber at the exit end, taking up the kinetic energy from the trolley and the hose assembly. On the return of the vehicle to the station, the Grabber® is connected to the exhaust pipe and activiated by simply pressing the MFD valve as the vehicle backs through the gate. At the same time the fan automatically starts up and the vehicle continues to its rest position.

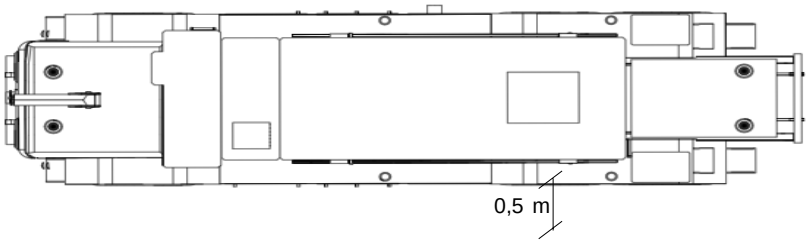
Side view



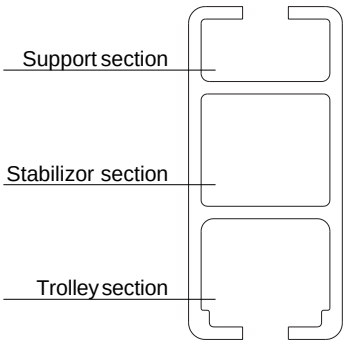
End view



Overview



Track section



Advantages

- Aluminium profiles; Light and strong
- End stops with rubber shock absorbers; to take up kinetic energy from the trolleys.
- Adjustable release points depending on the speed of the call-out vehicle.
- Pre-fitted extraction hose with easily seen black/yellow markings.
- Unique pneumatic exhaust pipe connector "GRABBER®"; to suit different sizes of exhaust pipe. 100 % tight against diesel exhaust fume leaks on startup.
- Safety disconnect coupling; Fail safe system, easily reconnectable.
- Automatic start-stop of fan by exhaust gas start-up detector. Reduces electric costs in installation whilst giving 100 % security that fans start or stop when vehicles start or stop.