

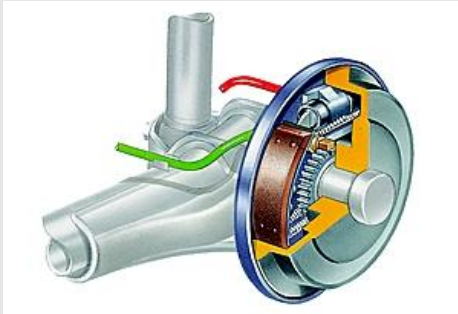
TIPS AND TRICKS

FTE Brake hoses

Application for
All brake hose
models

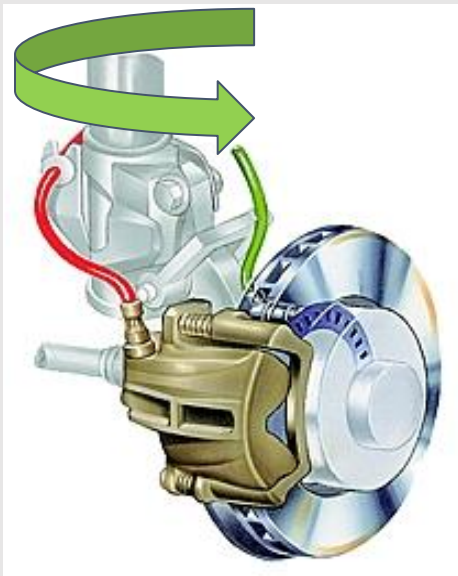


Brake hose definition



Brake hoses create a **flexible connection** between brake lines and wheel brakes. They transmit the hydraulic pressure to the wheel cylinders and brake calipers.

Brake hose characteristics



- Carries high brake pressure fluid to wheel cylinder which is subjected to
 - **High dynamic loads**
 - **Extreme conditions**
- Links the chassis to the moving parts due to the following reasons
 - **Flexible brake hose**
 - **Reinforced flexible rubber hose**
 - **Subjected to twisting & wear climate constraints**



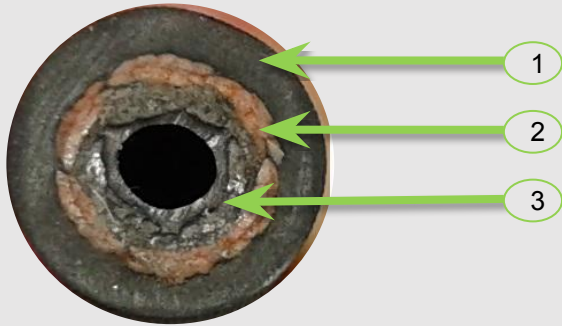
Website
valeoservice.us/en-us



Technical Assistance
1-888-718-2536

valeoservice.us 

Brake hose Construction



Nb	Part
1	Outer rubber (protection against external environment)
2	Synthetic fiber braid (carries pressure)
3	Inner rubber

Brake hose wear sources

Internal wear: mechanical stresses	External wear: environment
Hose flexibility	Climatic Condition
Hydraulic pressure	Cleaning agents
Temperatures <-50°C & >100°C	Rocks, sand & salt

Brake hose signs of wear

Prompt replacement of worn or damaged hoses is necessary to ensure the safety and reliability of the braking system. Additionally, proper installation techniques, including correct routing and secure fittings, will minimize stress on the hoses and reduce the risk of crack formation.



Brake hose: Homologation

Brake hoses must be compliant with following international standards

S	Code Name	Description
1	SAE-J1402 (international homologation)	<ul style="list-style-type: none"> ● Specifies air brake requirements for reinforced elastomeric hose ● Specifies suitable fitting in automotive air brake system <ul style="list-style-type: none"> ○ Frame to axle ○ Tractor to trailer ○ Trailer to trailer ○ Unshielded air lines with air pressure to 1 MPa that are exposed to potential pull or push ● Does not operate under external or internal temperature condition under -40c or above 100c
2	FMVSS 106 (US department of transportation)	<ul style="list-style-type: none"> ● Specifies labeling & performance for motor vehicle <ul style="list-style-type: none"> ○ Brake hose ○ Brake hose assemblies ○ Brake hose end fitting
3	ISO 3996: 1995	<ul style="list-style-type: none"> ● Specifies testing procedures for hydraulic brake hose assemblies ● On hose diameter 3.2 mm or 4.8 mm ● Applied assemblies made of a hose fabricated from cord & synthetic elastomers ● For non-petroleum-base brake fluids the assemblies made of a hose fabricated from cord and synthetic elastomers and assembled with metal end fittings
4	ISO 6120:1995	<ul style="list-style-type: none"> ● Same as ISO 6120:1995 “with petroleum-base brake fluids in accordance with ISO 7308”

