

## What do you need to know about plug-in couplings on vacuum lifters?



### How should you look after a plug-in coupling?

Plug-in couplings are often used on vacuum lifters for connecting up suction cups. To ensure that these remain in good condition, the couplings need to be sprayed with a small amount of an oil such as W40, then use clean compressed air to blast them out.





This keeps the mechanism moving easily and the coupling is able to close better. This also removes the dirt in the coupling. When applying a blast of air, the only important thing is for the coupling not be sealed completely to enable dirt in the coupling to escape, instead of penetrating into the interior of the device.

Plug-in coupling	Push-fit nipple
	



## How do you detect a leaking coupling?

It is a not infrequent occurrence for a plug-in coupling that is not in use to fail to close properly, and this creates a leakage point on the vacuum lifter. Since no air actually escapes - instead it flows inwards - these leakage points are not easy to detect.

Our test kit helps with this, consisting of push-fit nipples with caps. These push-fit nipples are absolutely leaktight. They are used primarily to seal defective couplings. The same number of dummy push-fit nipples is required as there are couplings on the vacuum lifter. The connecting hoses are removed from all couplings and are replaced by these dummy push-fit nipples. Then the leak test is performed. If the vacuum system is free of leaks, each dummy push-fit nipple is removed in sequence, and the leak test is performed. This means that leaking couplings can be detected quickly.

Test kit 7003-PS-DS3	Test kit 7003-PS-DS7
	

If the test with spray oil and air blast is not successful, replacing the plug-in coupling is the quickest way to remedy the fault.

Another option is to plug the dummy push-fit nipple into the coupling. Usually, this seals the plug-in coupling.

### How can you protect a plug-in coupling from the ingress of dirt?

The best form of protection is to attach a dummy push-fit nipple to any plug-in coupling that is not in use. Then no dirt can enter the coupling which could enter the valve race when the hose is connected up on the next occasion.