

TB 184

TECHNICAL BULLETIN

TECHNICAL GUIDE – ROUTING OF HYDRAULIC HOSE

For the Attention of: Platform Lift Installers
Platform Lift Service Engineers
Platform Lift Trade Customers
Technical Support Engineers
Technical Trainers

Date: 14th April 2022

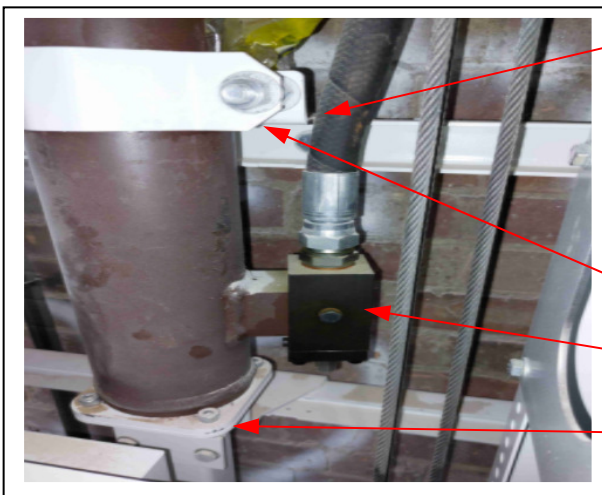
Product: Stannah Midilift Piccolo – with lift travels > 5m (roped 2:1)

Subject: Routing of the hydraulic hose

Originator: Platform Division, Engineering Dept, Gate 1, Stannah Lifts Ltd, Watt Close,
Andover, Hants SP10 3SD

Introduction:

A damaged hydraulic hose has been identified and reported on a recent indirect acting (2:1) Piccolo installation. The hose has subsequently been replaced and some steel components have been relocated in the lift well.



Root Cause:

The root cause of the damage was due to the hose being hard pressed against the steel clamp near the base of the hydraulic ram causing undue stress in the hose.

Ram clamp assembly

Rupture valve

Ram stump



Damage to outer cover and internal steel braid of hose.

Corrective Action:

Engineering Design:

The Midilift Piccolo Installation Guide will be amended so that the vertical dimension from the base of the hydraulic ram to the lower steel ram clamp is relaxed from 300mm to 500mm maximum (ref. Section 11.5). This will allow more room for routing the hydraulic hose.

Installation Engineers:

When installing the hydraulic hose, ensure that it is not forced into position against a hard surface. Excessive strain on the hose should be avoided and the minimum bend radius should not be exceeded (ref Section 15.3 of the Installation Guide).

If necessary, relocate the bottom ram clamp to a higher position (up to 500mm max.) to ensure that the hose connection to the rupture valve is free and not forced.

Service/Maintenance Engineers:

As part of the routine check on the condition of the hydraulic hose on all indirect acting Midilift Piccolos, specific attention should be paid to the base of the ram. If the hose is forced against the steel ram clamp then the clamp assembly should be moved up to avoid hose strain. The hose should be inspected for signs of damage and if necessary replaced.

Reference Documents:

Midilift Piccolo Installation Guide Sections: 11.5, 11.7, 15.3, 15.6

Midilift Piccolo Maintenance Guide Section 5: Recommended Maintenance Schedule – Ram/pipe-work