

TECHNICAL SERVICE Bulletin

Date: 1/17/18

TSB # 18-044

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Vintage McGuire Hydraulic Pump Adjustments

Before Systems, LLC took ownership in 2006, McGuire hydraulic dock levelers used a number of different motor/pump assemblies throughout production. Many of these older units are still in service today; however, due to age and wear, adjustments may be required over time. This TSB provides an overview of adjustments on vintage McGuire hydraulic pumps that can help return units to proper working condition.

Note: <u>Replacement parts are not available for these vintage motor/pump assemblies</u>. If adjustments do not have any effect, other hydraulic system issues may be present or the motor/pump assembly may require replacement. Systems, LLC motor/pump assembly part numbers **M111.374** (1-phase) and **M111.375** (3-phase) directly replace most McGuire pit leveler motor/pump units; contact Technical Services for HEOD applications.

J.S. Barnes/Haldex Units

<u>Shuttle Valve</u> - Controls down-speed of platform. Adjust clockwise to decrease speed, or counter-clockwise to increase speed. If shuttle valve is open too far, velocity fuse may trip and cause platform to stall.

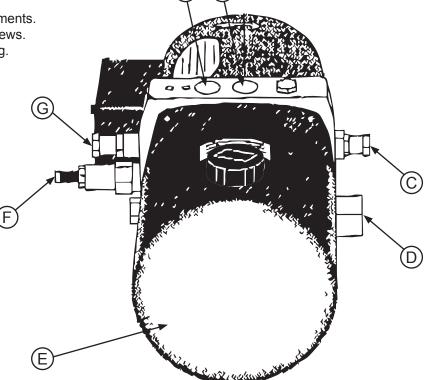
<u>**Primary Relief Valve**</u> - Regulates pump pressure. Clockwise increases system pressure and counter-clockwise decreases system pressure. This valve should not require field adjustment.

<u>Secondary Relief Valve</u> - Controls hold-out of lip. Clockwise increases pressure; counter-clockwise decreases pressure. If lip sags, adjust clockwise just enough to eliminate sagging; lip may fail to yield if set too aggressively.

<u>Sequence Valve</u> - Controls lip extension timing. Adjust clockwise for later lip extension, counter-clockwise for earlier lip extension. When adjusted correctly, lip should extend when platform reaches top of travel.

- Make all adjustments in 1/8 turn increments.
- Caps may be covering adjustment screws.
- Always tighten lock nuts after adjusting.

Item	Description
Α	Lip Cylinder Port
В	Hoist Cylinder Port
С	Shuttle Valve
D	Primary Relief Valve
E	Fluid Reservoir
F	Secondary Relief Valve
G	Sequence Valve





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SPX Fenner/Stone Units

Sequence Valve - Controls lip extension timing. Adjust clockwise for later lip extension, counter-clockwise for earlier lip extension. When adjusted correctly, lip should extend when platform reaches top of travel.

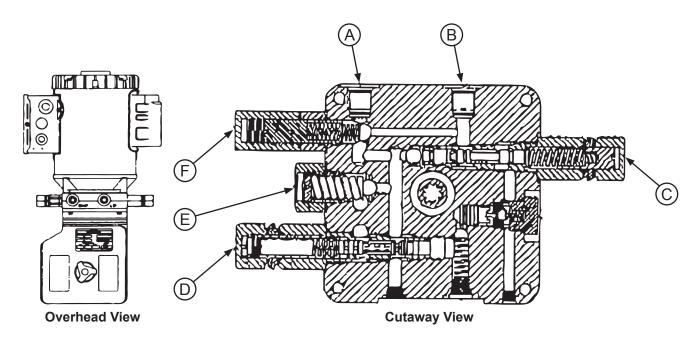
<u>Shuttle Valve</u> - Controls down-speed of platform. Adjust clockwise to decrease speed, or counter-clockwise to increase speed. If shuttle valve is open too far, velocity fuse may trip and cause platform to stall.

Pressure Relief Valve - Regulates pump pressure. Clockwise increases system pressure and counter-clockwise decreases system pressure. This valve should not require field adjustment.

Lip Check Valve - Controls lip retract travel when platform reaches full below-dock. Clockwise increases lip retract travel; counter-clockwise decreases lip retract travel. If lip fails to completely reach keepers after use, adjust counter-clockwise just enough to enable smooth retract travel.

- Make all adjustments in 1/8 turn increments.
- Caps may be covering adjustment screws.
- Always tighten lock nuts after adjusting.

Item	Description
A	Hoist Cylinder Port
В	Lip Cylinder Port
С	Sequence Valve
D	Shuttle Valve
E	Pressure Relief Valve
F	Lip Check Valve



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