Maxton Product Tasks & Procedures for Maintenance Control Programs

The information presented herein is for use by skilled hydraulic elevator professionals

8.6.1.2 General Maintenance Requirements:

TASKS

Examinations-visual physical inspection for leaks at pipe connections, gauge ports, adjusters, seals, seats.

Cleaning- Points to be checked and kept clean from debris and contamination within Maxton valves include strainers, solenoid seats, and ball cages. See current product exploded views, access online at https://maxtonvalve.com/repair, or through mobile devices using the Maxton Mobile Mechanic APP.

Lubrication-ISO 32 hydraulic oil in petroleum, vegetable-based, or synthetic forms is recommended for use in Maxton valves. Regular visual inspection of the oil and 5 micron filtration with Maxton TDF system (page 98 of Maxton catalog) or filter cart is recommended.

Adjusting-See valve adjustment procedures (UC4, UC4M, UC4MR, UC1, UC1A, UC2, UC2A, OSV, ILV, EMV10T), access current adjustment procedures online at https://maxtonvalve.com/adjustment-procedures, or through mobile devices using the Maxton Mobile Mechanic APP

Repairing- Use only Maxton OEM parts. https://maxtonvalve.com/repair

Replacing-UC4/4M/MR See Pump Flange Notice (page 79 of Maxton catalog). For trouble free startup and operation, the oil system should be purged and the oil filtered or replaced when a valve replacement takes place. Any leaking ball valves, quick disconnects, and fittings should be replaced.

Maxton recommends serious consideration is given to overhaul (Rebuild) or replacement (VEP/New) of all control valves on a 5 year cycle.

PROCEDURES

8.6.1.6.2 Lubrication

Maxton recommends ISO 32 hydraulic oil for use with our products. ISO 46 & ISO 68 hydraulic oils can be used in Maxton valves (100°F min), but optimal performance is maintained using ISO 32. In all cases the oil should be kept clean and free from debris/contamination to achieve proper valve and system performance.

A clean machine room is the starting point for maintaining a clean system and oil as what is in the machine room is also in the oil. The use of a fixed filtration system (Maxton TDF) or a filter cart on a regularly scheduled servicing program based on use and environmental conditions should be determined and adhered to**.** Other methods to maintain clean oil are applying a filtered air breather and sealing the tank lid preventing entry by contaminants in the air.

Other considerations for maintaining best oil conditions include maintaining optimal oil temperatures, 100°F-130°F, visual inspection and oil analysis testing will determine breakdown of the oil condition. *See page 98 of Maxton catalog for definition of a clean vs. non-clean system.*

8.6.2.1 Repair Parts

Use only Maxton OEM parts to provide proper and intended valve performance. Not all valve rebuilders are using equal quality new OEM parts, process, tooling, or assembly methods, which potentially puts the company installing the product and their customer in harm's way. Any repair or modification to Maxton products by unauthorized repair facilities using non-OEM or used parts voids all warranties and holds Maxton harmless from any liability or damage whatsoever arising out of the subsequent use of the product. Call 775-782-1700, email info@maxtonvalve.com, go online at https://maxtonvalve.com/repair, or through mobile devices using the Maxton Mobile Mechanic APP to purchase repair parts.

8.6.3.11 Replacement of Valves & Piping:

Maxton valves comply with 3.19

8.6.4.16 Stopping Accuracy:

US & DS adjustments fine tunes the floor stop accuracy. Other factors that contribute to accurate stopping accuracy include the placement of switches, excessive packing friction (see MaxGlide product) and the leveling speeds coming to the floor through UL & DL adjusters. Make sure to reference the adjustment procedures for the correct valve provided above in 8.6.1.2., go online https://maxtonvalve.com/adjustment-procedures, or use the Maxton Mobile Mechanic APP.

8.6.4.20.8 Leveling Zone & Speed:

UL & DL adjusters work with speeds along with proper distance of switches to determine proper leveling. Make sure to reference the adjustment procedures provided above in 8.6.1.2., go online https://maxtonvalve.com/adjustment-procedures, or use the Maxton Mobile Mechanic APP.

8.6.5.5.1 Seal Examination & Maintenance:

Look for any oil seepage or leaking coming from the control plate/block or adjusters. If oil is coming from the control plate/block and cannot be stopped by tightening screws the seals should be replaced using the appropriate Maxton seal kit (see product exploded views https://maxtonvalve.com/repair or use our Maxton Mobile Mechanic APP). If an adjuster is leaking and cannot be stopped by tightening then the adjuster seal should be replaced from the appropriate Maxton seal kit (see product exploded views https://maxtonvalve.com/repair or use our Maxton Mobile Mechanic APP). Based on age of the valve, conditions, and time needed to replace the seals required it may be more cost/time effective to order a valve new valve. Call Maxton 775-782-1700, go online https://maxtonvalve.com , or use the Maxton Mobile Mechanic APP to contact and determine best option for the job.

8.6.5.9 Relief Valve Setting & 8.6.5.14.1 Relief Valve Setting & System Pressure:

Maxton Valve Relief Setting Procedure:

a. Land car in pit and install pressure gauge in A port
b. Register up call with a fully loaded car, making note of maximum operating pressure
c. Turn UA and Relief adjuster OUT (CCW) to stop
d. Close the manual shut off valve to the jack
e. Register an up call, observe pressure gauge and turn Relief IN (CW) to increase pressure. Final setting should be in accordance with local code requirement not to exceed 150% of maximum operating pressure.
f. Tighten the lock nut (snug)
g. Restart to check the pressure relief setting. Seal as required
h. Open the manual shut off valve to the jack
i. Readjust UA for proper Up Acceleration. *(Accel 0.04g-0.09g)

Access adjustment procedures about setting using documents online at https://maxtonvalve.com/adjustment-procedures , or through mobile devices using the Maxton Mobile Mechanic APP

5.15 Overspeed Valve:

5.15.2.2 Category 5 Test **Maxton Note**: To achieve accurate settings, OSV adjustments should be conducted with a fully loaded car. Whenever possible, run car to an intermediate floor during adjustments and tests. It may be advisable to adjust for a slightly faster down transition to insure floor stop. Access adjustment procedures about setting using documents online at https://maxtonvalve.com/adjustment-procedures , or through mobile devices using the Maxton Mobile Mechanic APP

3.19.4.7.5 Performance Requirements…relating to overspeed tripping speed, average deceleration rate, and peak deceleration rate requires a measuring device such as the Maxton SafeTach or SafeTach2 to read these rates in the field.

8.6.5.14.5 Pressure Switch:

The pressure switch when required shall be tested for conformance to the requirements of A17.1 3.26.8.