

Elevator Specific: Inspection, Maintenance, and Repair with OEM References

Participant Guide

Transit Elevator/Escalator Maintenance Training Consortium

COURSE 304

REVISION INDEX

Any additions, deletions, or revisions are to be listed below.





Revision No.	Date	Section	Description of Change	Revision Author
1	15-Mar-2015		Using Course 219, this new course includes hyperlinks to OEM manuals. Manuals are downloaded from www.transportcenter.org	Amri Joyner



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APPENDIX A





All documentation and video files are hosted and maintained on the Center’s website. Clicking on the logo will take the user to the OEM website.

<http://www.transportcenter.org/images/uploads/publications/>





BRAKES		
OEM	Documentation Links	Notes
 	Brake Maintenance Brake Monitor Adjustment Disc Brake Torque Adjustment Disc Brake Adjustment Drum Brake Adjustment	Online videos: <ul style="list-style-type: none"> • Change and adjust Elevator Machine Brakes
 	Brake Maintenance	

CONTROLLER AND MOTOR STARTER		
OEM	Documentation Links	Notes
 	Preventive Maintenance and Repair Guidelines	



CONTROLLER AND MOTOR STARTER		
OEM	Documentation Links	Notes
 	<p>Motion 2000 Hydraulic Controller</p> <p>Maintaining MCE Controls</p>	
 	<p>PLC Based Traction Controller Adjuster's Manual</p>	
 	<p>Siemens Online Manuals</p>	<p>Online videos:</p> <ul style="list-style-type: none"> • How to adjust the Siemens SIRIUS 3RM1 Motor Starter • How to replace a defective terminal

DOOR OPERATOR		
OEM	Documentation Links	Notes
 	<p>MOVFR Door Operator Installation and Adjustment Manual</p>	<p>GAL website features online installation instructions for car and hatch equipment installation including code and safety issues. Photos, drawings, charts are well-designed.</p>
 	<p>Door Operators GAL to MAC Adjustments</p>	<p>Kone Spares website has a page dedicated to technical resources for elevations here: http://us.konespares.com/elevators.html</p>



DOOR REOPENING DEVICES

OEM	Documentation Links	Notes
 	Pana40® Plus2D / 3D Installation Guide	Sometimes referred to as “light curtains.”
 	LEADINGEDGE® Installation Instructions	Sometimes referred to as “elevator edges” these are also known as “door edge control systems.”

GEARED MACHINES

OEM	Documentation Links	Notes
 	Thrust Bearings Installation	Online videos: <ul style="list-style-type: none"> • Replacing Bronze Gear in Traction Machine • Changing Thrust Bearings • Disassembly and Reassembly of a Hollister-Whitney Traction Machine



GEARLESS MACHINES

OEM	Documentation Links	Notes
 	Gearless Machines Basic Maintenance	



GEARLESS DRIVE SYSTEMS (MRL ELEVATORS)

OEM	Documentation Links	Notes
 	<p>Basic Service for MRLs</p> <p>Installation of MRL</p>	<p>Various configurations of MRLs along with excellent labeled charts are in this document:</p> <ul style="list-style-type: none"> • Gearless Configurations







GOVERNOR – SETTINGS AND ROPES

OEM	Documentation Links	Notes
 	<p>Governor Speed Setting Instructions</p> <p>How to Change the Governor Pull Through</p> <p>How to Set and Reset the Governor</p>	<p>Online videos:</p> <ul style="list-style-type: none"> • How to adjust Hollister-Whitney Governors



HOISTWAY DOOR HANGER AND TRACKS

OEM	Documentation Links	Notes
 	<p>Hatch door assembly for:</p> <ul style="list-style-type: none"> • Single Speed • Two Speed • Three Speed • Center Opening • Two Speed Center Opening 	<p>Online documentation on GAL hatch door hangers is available on the following web page:</p> <p>http://www.gal.com/content/products/downloads/doors/hatchdoorhangers/default.htm</p>






JACK – CYLINDER AND PISTON

OEM	Documentation Links	Notes
 	<p>Installing and maintaining telescopic jacks</p>	
 	<p>Holed jack installation</p>	<p>Online documentation on Canton Elevator installation instructions is available on the following web page:</p> <p>http://www.cantonelevator.com/installation-documents</p>
 	<p>How to maintain packing for hydraulic elevators</p>	<p>Online videos:</p> <ul style="list-style-type: none"> • How to Measure Diameter of a Plunger • How to Install Split Autopak



PUMPING UNIT

OEM	Documentation Links	Notes
 IMO PUMP® 	<ul style="list-style-type: none"> • Install and service dry mounted elevator pumps • General installation, operation, maintenance and troubleshooting manual for three screw and cig series pumps. 	<p>Online videos</p> <ul style="list-style-type: none"> • Hydraulic elevator seal change and bearing replacement <p>Online service manuals for Colfax-IMO Pump products are available on the following web page:</p> <p>http://www.imo-pump.com/servicemanuals.htm</p>



ROPES AND CHAINS – GRIPPER, GOVERNOR PULL THROUGH WEDGE CLAMP, INSPECTION, LUBRICATION

OEM	Documentation Links	Notes
 Hollister-Whitney	Recommended Acceptance Inspection Criteria How to Change the Governor Pull Through How to Set and Reset the Governor Rope Wedge Clamp Installation	Introducing and Installing the Rope Gripper
 Bethlehem Wire Ropes 	Rope Investigation Rope Lubrication Tensioning	
 	Cantilever roping instructions Cantilever governor roping instruction Dual roping instructions	Online documentation on Canton Elevator installation instructions is available on the following web page: http://www.cantonelevator.com/installation-documents

SAFETIES


OEM	Documentation Links	Notes
 		Online videos <ul style="list-style-type: none"> How to install and adjust an Elevator Safety from Hollister-Whitney Elevator

VALVES, MASTER CONTROL

OEM	Documentation Links	Notes
	<ul style="list-style-type: none"> • Maxton Product Tasks & Procedures for Maintenance Control Programs • Troubleshoot Maxton valves (by valve type and model) 	<p>Maxton offers an interactive web site for troubleshooting valves at this location https://maxtonvalve.com/troubleshooting</p> <p>You can download Maxton's Mobile Mechanic App to your smart phone or tablet at this location http://maxtonvalve.com/maxton-mobile-mechanic-app.</p>
	<ul style="list-style-type: none"> • Bucher Lift Control Valve Manual • Bucher 	

Appendix B

Other Online Resources

OEM	Description
<p data-bbox="250 499 545 611"><i>Hollister-Whitney</i> ELEVATOR CORPORATION Hollister-Whitney</p> 	<p data-bbox="602 491 1382 632">Hollister-Whitney maintains a channel on YouTube with instructions for elevator technicians on how to install, adjust, and maintain components. As of April 2015 the following topics were covered:</p> <ol data-bbox="651 667 1295 1220" style="list-style-type: none"><li data-bbox="651 667 1260 701">1. Introducing and Installing the Rope Gripper<li data-bbox="651 737 1295 806">2. Machine Maintenance Procedures for Traction Machines<li data-bbox="651 842 1273 875">3. How to Install and Adjust an Elevator Safety<li data-bbox="651 911 1292 945">4. How to Adjust and Repair Roller Guide Shoes<li data-bbox="651 980 1200 1014">5. How to Adjust an Overspeed Governor<li data-bbox="651 1050 1024 1083">6. Replacing a Bronze Gear<li data-bbox="651 1119 1062 1152">7. Changing a Traction Sheave<li data-bbox="651 1188 1036 1222">8. Changing Thrust Bearings