JR Overhead Doors (2006) Ltd.
Phone: 250-846-9793
Email: info@jroverheaddoors.ca

SafedoorPM - PM Work Plan
TYPICAL DOCK SYSTEM

Dock systems are made with components that need regular inspection, cleaning, lubrication, adjustment, and possibly replacement during the equipment's normal lifecycle. Dock equipment also operates in environments where it is susceptible to damage from transport vehicles and materials handling equipment. Finding and fixing small problems before they become big problems is money well-spent.

Our service technicians use SafedoorPM's powerful mobile app to guide, perform and record PM work on your dock systems. The mobile app's knowledge-base of manufacturers' standards and practices provides technicians with the correct PM workplans for each piece of your equipment, ensuring maintenance is done properly and in accordance with manufacturers' specifications and applicable OHS/OSHA safety law. All PM workplans are transparent and accessible by customers in SafedoorPM's Customer Portal.

Shown below is a SafedoorPM work plan for a typical mechanical dock system with a leveler, vehicle restraint and shelter. All work plans are transparent to customers in SafedoorPM's cloud-based Customer Portal.

Dock Leveler	
Inspection Element	**Standards & Practices**
Maintenance stand	A maintenance stand or rod to lock the dock leveler in the upright position must be available and stored with the dock leveler. Ensure that the maintenance stand can support the weight of the dock plate, and sets securely in the lip latch. 06010-FS-BLG-01
Pit	Remove all debris and clean out the dock leveler pit. Check concrete and angle iron edging for damage or deterioration that could impact the secure mounting of the dock leveler. 06020-FS-BP-01
Frame, shims & mounting	Inspect the mounting of the frame for level and alignment, and check gaps along pit wall for consistent spacing. Shim and adjust as necessary. Carefully inspect all welds and fasteners. Replace or tighten loose, missing, or damaged fasteners and repair welding deficiencies. 06030-FS-BP-01
Deck plate, rear hinges	Inspect the deck plate for damage, warping, and wear. If there is damage that affects or potentially affects the safe operation of the dock leveler (eg. creates binding) then grade a Fail; otherwise use discretion to grade a Pass with recommended Followup Work. Inspect deck hinges for damage, wear, alignment, and missing parts. Lubricate hinges and pins with light oil, tighten fasteners, and replace damaged, missing, or worn parts as necessary. 06040-FS-BLG-01
Lip plate	Inspect the lip plate and lip crown for damage, warping, and wear. If there is damage that affects or potentially affects the safe operation of the dock leveler (eg. creates binding) then grade a Fail; otherwise use discretion to grade a Pass with recommended Followup Work. Inspect lip locks for damage and foreign material, lubricate as needed. Inspect lip hinges for damage, wear, alignment, and missing parts. Lubricate hinges with grease, tighten fasteners, and replace damaged, missing, or worn parts as necessary. 06050-FS-BLG-01

Safety Labeling	Safety warning labels are often supplied by the dock equipment manufacturer, and should be in good condition and properly positioned per manufacturer's instructions, if available. Inspect "Operating Hazards DANGER" placard to ensure it is positioned in plain view of dock leveler operations and is intact and legible. Ensure updated service sticker is placed on equipment. If dock safety warning labels are not present, or if manufacturer's instructions are not available, then it is acceptable to apply warning labels per LODEM industry standards as follows: (1) Operating instructions (2) Toe guard warning label (3) Maintenance support warning label (4) Leveler subframe near driveway warning label (5) Counterbalance system warning label. For more information refer to SafedoorPM Technical Bulletin SAF-DOC-13-001 Mechanical Dock Safety Warning Labels. 06070-FS-BLG-01
Leveler operation	Run the dock leveler five (5) cycles, test all operations and verify full articulation. It should operate smoothly and without any binding or grinding noises. The leveler's path should be free from any obstruction (stationary or moveable). Perform any necessary adjustments including those required to change the speed at which the plate is raised or lowered. 06090-FS-BP-01
Counterbalance assembly, lift mechanism	Inspect counterbalance springs for damage, cracks, and secure anchoring. Inspect lifting arm roller for wear or damage that may prevent proper operation. Repair or replace as necessary. Adjust spring tension so that the deck plate rises with enough force to flip up the lip plate, but is still able to be walked back down into the lowered position. 06100-FS-BLG-01
Snubber spring, limiting chain/strap	Inspect snubber spring, limiting chain and/or limiting strap for damage and wear. Tighten fasteners and replace damaged, missing, or worn parts as necessary. 06110-FS-BP-01
Lip plate actuator	Verify that the lip plate extends fully and that the actuator is operating properly without any binding. Inspect lip spring for damage or stretching. Repair or replace as necessary. Adjust lip assist spring to the maximum tension that still allows the lip to fall under its own weight. Lubricate lip hinge spool assembly as necessary. Tighten fasteners, and replace damaged, missing, or worn parts as necessary. 06120-FS-BLG-01
Hold-down mechanism	Verify that the hold down mechanism is functioning properly and not restricting the movement of the leveler while in motion. Inspect for foreign material in the hold down assembly that may restrict the movement of the leveler. Inspect hold-down strap, pawl, pawl spring, brake assembly, tension spring, and tension strap for wear and damage. Tighten fasteners, and replace damaged, missing, or worn parts as necessary. 06130-FS-BLG-01
Release chain	Inspect chain for proper operation and damaged or missing parts. Inspect chain keep for proper position and anchoring. Repair or replace missing or damaged parts as necessary. 06140-FS-BP-01
Support legs	Inspect legs for free operation, damage, and binding. Inspect chain for damage and length. Repair and replace as necessary. Lubricate pivot points and clean as required. 06410-FS-BP-01
Safety skirt, toe guard	Inspect toe guards for damage, binding, and secure fastening. Repair or replace as necessary. Toe guards are recommended to be marked with a high visibility color such as orange or yellow. 06430-FS-BP-01

Dock Equipment

Inspection Element	Standards & Practices
Wheel chocks	Wheel chocks must be available and stored near the dock leveler. Ensure the wheel chocks are in good condition and remain firmly in place when set. 06900-FS-BP-01
Bumpers, extensions	Inspect for missing, damaged, or worn bumpers. Replace as required. Bumper size and spacing may require adjustment to ensure proper alignment of trailer and dock. A properly adjusted bumper should allow secure docking without damaging the dock, dock seals, and other dock equipment. 06500-FS-BP-01

Dock lights	Check for proper function and secure fastening. 06555-FS-BP-01
Shelter	Inspect shelter for damage, wear, and missing pieces. If applicable, foam filled pads that are damaged or no longer retain their shape to form an adequate seal may be replaced. Rips or tears in vinyl may be repaired with a patch kit or replaced if required. Check that the shelter is securely fastened to the dock opening. Signs of improper alignment may be due to improper bumper sizing. If safety is potentially compromised by any dock shelter component, a Fail grade must be given; otherwise use discretion to grade a Pass with recommended Followup Work. 06650-FS-BP-01

Vehicle Restraint System	
Inspection Element	**Standards & Practices**
Vehicle restraint mounting	Inspect the mounting of the vehicle restraint system for damage, wear, and alignment issues. Adjust as necessary. Inspect the concrete for damage or deterioration that could compromises restraint integrity. Confirm restraint system is securely mounted and carefully inspect all welds and fasteners. Replace or tighten loose, missing, or damaged fasteners and repair welding deficiencies. 06810-FS-BP-01
Vehicle restraint safety labeling	Safety warning labels are often supplied by the vehicle restraint manufacturer, and should be in good condition and properly positioned per manufacturer's instructions. Vehicle restraints should have a label containing the manufacturer's name and vehicle restraint model number. 06825-FS-BP-01
Electrical, control panel, junction box	Inspect wiring, terminations, and terminal strip screws for tightness and corrosion. Clean as necessary. Check for exposed wiring hazards. Inspect enclosure for damage, fit, and proper seal, especially in wet, corrosive, or hazardous environments. Repair or replace enclosure as necessary. 06830-FS-BP-01
Control station	Inspect control station for proper function. Control station must be located in clear sight of the vehicle restraint system. Repair, replace, or relocate as necessary. 06840-FS-BP-01
Hydraulic systems (lines, reservoir, pump, valves)	Clean and inspect hydraulic system components including the reservoir, lines, pump, and valves. Check hydraulic fluid for signs of contamination and proper level, top up as necessary. Fluid should be changed and flushed periodically. Ensure there are no leaks and that the system is functioning properly and holding pressure, bleed hydraulics if required. 06850-FS-BP-01
Arm, Arm Actuator	Inspect arm for damage, warping, and cracked welds. Confirm the arm is operating properly without any binding. Lubricate components as necessary. 06015-FS-BO-01
Vehicle restraint operation	Run the restraint system through a full cycle, testing all operations and verifying full articulation and engagement. It should operate smoothly and without any binding or grinding noises. Per LODEM, an audible alarm should sound when engaging or disengaging the restraint. Perform any necessary adjustments. 06860-FS-BP-02

	PM Intervals
Interval Guidance	**Standards & Practices**
Dock leveler	Loading Dock Leveler PM intervals: Industry best practice is a maintenance interval of 3 months for a standard 8 hour shift of use per day, or 1 month for continuous use. Frequency may be adjusted depending on cyclage, or harsh environments where there is exposure to excessive moisture or potentially corrosive material. 00970-FS-BP-01