1. Safety & Preparations

- Always **de-energize** or turn off power to the motor / drive system before performing any inspection, cleaning, or maintenance.
- Use safe access equipment such as ladders or lifts, and wear appropriate personal protective equipment (gloves, safety glasses).
- Avoid working on a hot or sun-baked surface, or during inclement weather (rain, strong wind).
- Keep a maintenance log (date, component checks, actions taken, observations) for reference and warranty purposes.
- Use only components, lubricants, and replacement parts approved or recommended by Summit Automation or certified installers.

2. Inspection Schedule & Key Areas to Check

Frequency	Components / Areas	What to Look For & Actions
Quarterly / Semiannually	Tracks, guides, exposed mechanisms, sensors	Debris, dirt, foreign objects, alignment issues
Annually	Motor unit, drive belts/chains, limit switches, wiring, fasteners, seals	Check for wear, vibration, corrosion, loose bolts
After heavy use / extreme weather	All exposed surfaces, joint connections, drainage	Look for water intrusion, misalignment, damage
As needed	Electronics (control boards, sensors), replacement parts	Malfunctions, error codes, trouble signals

During inspection, pay attention to:

- Loose or missing fasteners, bolts, brackets
- Obstructions, dirt or grit in tracks or guide channels
- Frayed or worn belts, chains, cables, or linkages

- Corrosion or surface rust on exposed metal parts
- Damage to wiring, connectors, or control housing
- Sensor misalignment or interference
- Excessive vibration, noise or drift during operation
- Seal or gasket condition around motor housings or access panels

3. Cleaning Procedures

Tracks, Guide Channels & Frames

- Gently remove dust, dirt, leaves, or debris from tracks, guide rails, and adjacent frame surfaces. Use a soft brush or vacuum where possible.
- Use a mild soap + water solution and a soft, non-abrasive cloth to wipe down surfaces.
- Rinse thoroughly to remove all residues; dry components carefully to avoid corrosion.
- Avoid high-pressure water jets or aggressive cleaning near seals, joints, or electrical components.
- Ensure drainage paths remain clear (if any water channels are integrated) so moisture cannot accumulate.

Motor, Drive & Control Housing

- Wipe down housing exteriors using a damp cloth (no excess moisture).
- Be cautious not to allow water ingress into motor or control enclosures—ensure covers are sealed tight.
- Use compressed air (low pressure) to blow away dust from vents or heat sinks, but never force water or debris inward.
- Ensure that electronic enclosures, access panels, and seal gaskets are intact and properly seated.

4. Lubrication & Mechanical Maintenance

- Periodically lubricate all moving metal-to-metal points (pivots, hinges, linkages, bearings, rollers) with a light, non-sticky lubricant (dry silicone spray or light machine oil). Avoid excessive lubrication to prevent attracting grit.
- Do not use lubricants with solvents that might harm seals or plastics.
- For belt or chain drives, check for slack, tension, and alignment. Adjust if necessary per manufacturer guidelines.
- Ensure pulley systems or guide wheels rotate freely and smoothly. Replace any component that binds or shows wear.
- Verify proper alignment and parallelism of moving panels or guides to reduce wear and binding.

5. Electronics, Sensors & Control Systems

- Test all control inputs (wall switches, keypads, motion sensors, remotes) periodically to confirm proper response.
- Monitor diagnostic or fault codes via the system interface and consult Summit's troubleshooting resources.
- Inspect wiring runs and connections, checking for abrasion, loose connectors, or damage.
- Confirm limit switches, end stops, and safety sensors are properly positioned and functioning.
- For electronic modules or controllers, inspect for signs of overheating, discoloration, or burn marks.
- Ensure the firmware or software (if applicable) is up to date per Summit's recommendations.

6. Adjustments & Calibration

- Check and adjust travel limits (open / close endpoints) if the system shows signs of overtravel, binding, or hitting stops hard.
- Re-calibrate sensors or motion detectors if they drift or become misaligned.

- For systems with auto-close, anti-pinch, safety reversal, or obstacle detection, periodically test those features to ensure safety mechanisms remain functional.
- Verify smooth ramp-up and deceleration profiles during motion; abrupt starts/stops may signal need for adjustment or wear.

7. Repairs, Replacement Parts & When to Call a Technician

- If you observe persistent noise, vibration, or irregular motion that cannot be corrected with cleaning or adjustment, engage a certified Summit Automation installer or technician.
- For failed motors, burnt circuits, or irreparable electronic modules, replace them with Summit-specified parts.
- Replace worn or damaged belts, chains, bearings, rollers, or linkages promptly to avoid secondary damage.
- If you detect water intrusion into motor housings, control enclosures, or gear assemblies, shut down the system and call support.
- For system-wide malfunctions (loss of power, communication errors, sensor failures), consult Summit's troubleshooting guide or contact support.
- Scheduling periodic professional inspection (e.g. every few years) by a certified installer is advisable to maintain system integrity.

8. Environmental & Usage Considerations

- In coastal or saline environments, increase cleaning frequency to remove salt deposits and reduce corrosion risk.
- After storms or construction work, inspect the system for debris, damage, or shifts.
- Avoid applying any chemicals (paints, solvents, acids) near moving parts, glass, or seals.
- Do not force manual operation of the system unless the manufacturer explicitly allows it—this can damage essential internal components.
- Ensure building movement or structural shifts don't put undue stress on tracks or frames.