

M3000 Installation Sequence – Quick Install Guide

Check off items as completed.

Layout and Site Verification:

- Locate Layout documentation.
- Locate Controller boxes and wiring harnesses.
- Locate Keyed control panels and paddle switches.
- Re-measure the mounting surfaces and correct framing and finishing mistakes. This has to be done BEFORE any hardware is installed.
 - Verify space for head and foot boxes are at least 12" deep
 - Verify space for guides along the sides of the openings are at least 7 1/8" deep
 - Verify conduit routing locations
- Using the Layout Document, place the major sheet metal assemblies on the floor below their install locations.
 - Verify that the system fits the site framing.
- NOTE:** Site framing verification needs to be complete PRIOR TO ANY INSTALLATION.

Headbox Installation

- Install rear anti-rotation brackets to end plates with rivets.
- Attach end plates to end sections with rivets.
- Anchor head section through large pre drilled holes.
- Align next section so top and back edges meet.
- Anchor through four large holes in roller assembly.
- Remove fasteners to pivot the front of roller assemblies downward.

Attaching curtain to tube

- Set tube assembly on top of curtain, weld line up on the tube. The rough unseamed edge of the curtain is the bottom.
- Verify the sides of the tube and the sides of the curtain are lined up.
- Wrap the curtain around the tube until the top curtain edge is aligned with the welded seam on the tube.
- Tape curtain to tube to secure.
- Pop rivet curtain to tube every 12" along the tape.
- Roll curtain around tube completely. Do not let curtain telescope more than 1/2".
- Use tape to hold curtain in rolled position until positioned in head box.
- Insert motor and the end plate assembly into side of tube.

Installing curtain assembly

- Set entire curtain assembly on top of rollers in head box. Curtain should unroll from top of roll.
- Raise the front of roller assemblies to secure curtain.
- Rivet front anti rotation brackets to head box end plates.
- Attach side front bracket on each end plate.
- Remove temporary tape from curtain roll.
- Insert brass bushing into bottom of curtain side pocket, secure with fastener.
- Attach rollers to inside of head box cover end sections.
- Attach head box covers to head box ends with PH #8 screws.

Installing side guide shells and C hangers

- Stage the C hangers and side guide shells per the assembly drawing.
- Install support brackets to side guide shell and lower guide end sections facing foot box.
- Slide a C hanger around outside of shell, align holes.
- Raise shell section adjoining head box, front surface should but against head box end plate.
- Anchor by drilling through large holes in C hangers.
- Install support brackets inside the C channels.
- Install brackets, lead-ins, and limit switch assemblies to lower guides.
- Install lower guides above the support brackets.

Installing guide rods

- Stage guide rod sections per the assembly drawing.
- Fasten rod end plate to rod section next to the foot box.
- Insert rod section next to head box into the bushing inside the curtain side pocket.
- Screw next rod section into first. Apply red Loctite on threaded connecting studs.
- Secure end plate to brackets on side guide shell.
- Install upper guide rails. Do not install upper guide rail section next to foot box, this needs to be open for leading edge attachment.
- Secure tapered roller assemblies across where sections meet.

Attaching side guides to frond head box covers

- Attach through brackets with PH #8 screws

Installing the foot box

- Stage the foot box sections per the assembly drawing.
- Install three bearing assemblies to each end plate.
- Attach end plates to end sections with rivets.
- Raise end section against side guide. Square the corner.
- Anchor through predrilled holes.
- Install remaining foot box sections. Do not use foot box cage mounting holes.
- Install foot box cages using four anchors per cage.
- Pivot front of cage brackets downward.

Installing the foot box drive shaft

- Stage drive shaft sections per the assembly drawing.
- Slide drive shaft sprockets onto sections with motors.
- Attach motor support bracket to foot box shell.
- Attach motor and motor sprockets to support bracket in foot box. Use blue Loctite on set screws.
- Bolt together sections using joiners.
- Lift drive shaft, place inside brackets with ends resting inside bearings on foot box end plates. Center the shaft.
- Wrap two hose clamps around shaft and bearings and tighten.
- Pivot rotating plate of each bracket upward to secure shaft. Reinstall upper screw.
- Anchor securely up through top of the bearing support.
- Align cable reels with leading edge cable attachment point.
- Drill clearance hole for ¼ 20 screw through drive shaft.
- Secure cable reel with screw.
- Align drive shafts with motor sprockets.
- Drill hole for ¼ 20 screw to secure sprockets.
- Install motor sprockets with master link to secure.

Installing the leading edge

- Stage leading edge sections
- Join sections with bolts through joiner plates.
- Set rollers on lower edge of C channel so the double bearings roll on bottom.
- Center leading edge between side guides.
- Use C clamps to hold leading edge in place near head box.

Attaching curtain to leading edge

- Insert curtain flat bars into curtain pocket.
- Set pocket on mounting angle of leading edge and pop rivet together.
- Roll curtain to pull leading edge into head box.
- Fasten bushing clamp to leading edge.

Installing guide cables

- Place leading edge against head box.
- Attach cable to the cable clamping assembly in leading edge.

- Keep cable taut, wrap under cable reel on foot box drive shaft, wrap cable 3-4 times, and insert cable into side slot in reel.
- Keep cable taut, wrap cable 3-4 times around drive shaft, secure with hose clamp.

Install foot box covers

- Attach the leading edge guards in the foot box.

Applying fire caulk

- Apply fire caulk to inside and outside perimeter where it meets the structure above.

Calibrating the system

To prepare for calibration:

- Fully deploy curtain. Curtain should be taut.
- Remove curtain slack by back winding the curtain roll.
- If controller is not connected to the building fire alarm system, then ensure that an end of line diode is installed between the controller F/A terminals.
- Verify main power to the controller is installed.

To calibrate the system:

- Apply main power to the controller.
- Within 4 seconds of applying power, press the Test Deploy Switch on the controller front panel.
- The curtain will retract; recording a count of the distance traveled until the curtain trips the up limit switch.
- The curtain stops inside the housing, calibration is complete.

Testing the installation

To conduct cycle tests:

- Simulate an alarm by closing the alarm circuit.
- Verify the curtain deploys smoothly and the threshold seals along FULL length.
- After curtain is deployed, press the wall rewind switch (egress). Curtain will rewind temporarily and redeploys.
- Set the system in ready state by opening the alarm circuit.

Setting the unit in ready state

When the electrical contractor has wired the diode at the smoke detector or other initiating device, and wired the unit to building power:

- Connect the battery.
- Turn the controller power ON.
- Begin calibration procedure or allow curtain to retract.