

MASH DEPLOYMENT GUIDE – Yodock® 2001MB

The Yodock® 2001MB (“2001MB”) is a plastic, water filled, Longitudinal Channelizing Device (“LCD”) used for traffic and pedestrian channelization, road closure, and perimeter security for vertical construction.

The 2001MB has been tested pursuant to the Manual for Assessing Safety Hardware 16 (“MASH 16”) Test Level 2 (“TL-2”) as an LCD.

When assembled as an LCD, the 2001M is eligible for Federal-Aid reimbursement as a MASH 16 TL-2 LCD on the National Highway System.

Features

1. Interlocking Coupler
2. Light Box Recess
3. Fill Cap & Port
4. Drain Hole & Plug
5. Forklift Ports

Specifications

- 6' length
- 18" width
- 32" height
- Empty Weight: 85 lbs.
- Full Weight: 900 lbs.
- Capacity: 100 gallons

LCD

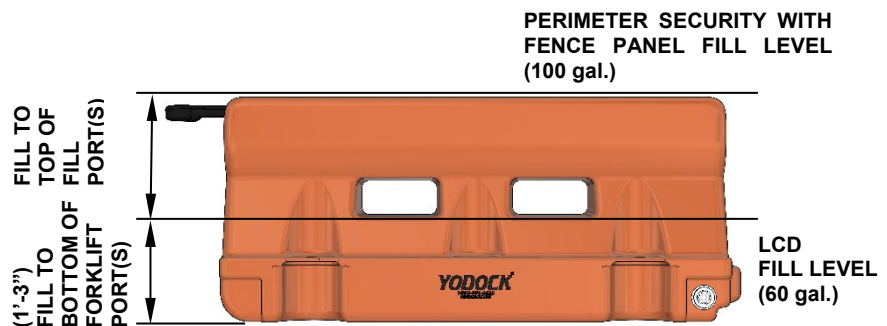
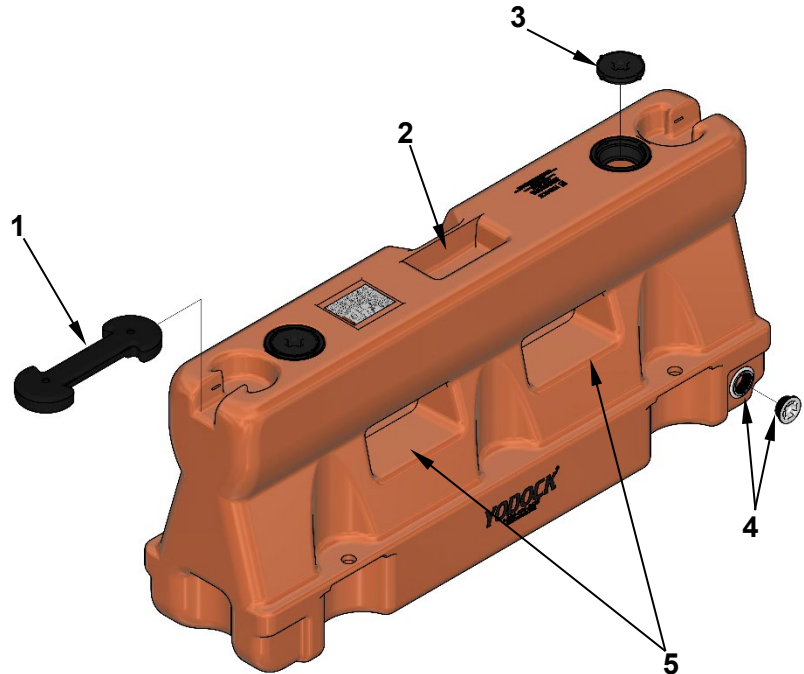
- Ballast Capacity: 60 gal.
- Ballasted Weight: 583 lbs.

Fence Assembly

- Ballast Capacity: 100 gal.
- Ballasted Weight: 900 lbs.

Recommended Tools

- Drain Wrench



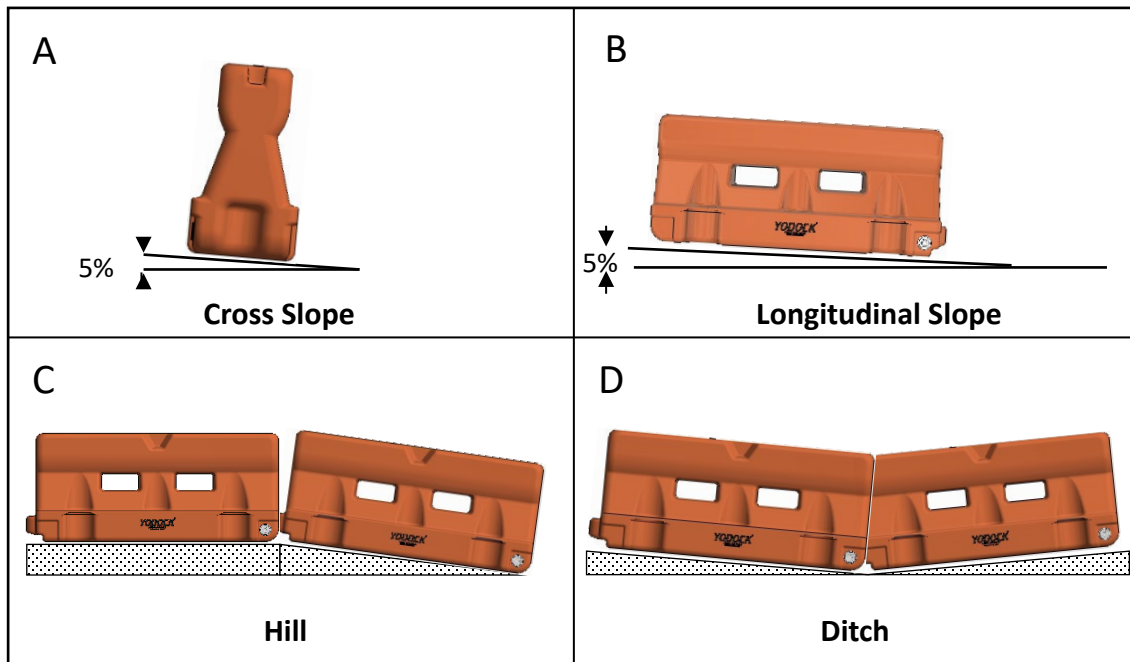
FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE OR CAUSE SERIOUS INJURY TO PEDESTRIANS AND VEHICLE OCCUPANTS.

Longitudinal Channelizing Device (LCD) Deployment

1. Determine the deployment location of 2001MB and follow the instructions of the highway authority or project manager (if available).
2. Deploy the empty barricades in a line and join each unit to the next using an Interlocking Coupler.
3. If a corner connection is required, use the 2001M / 2001MB Corner Connector and join it to the adjacent barricade run using an Interlocking Coupler. *
 - a. Ensure that Connector Pins are securely in place (p. 3).
 - b. Use the Interlocking Coupler to connect each side of the Corner Connector to the separate runs of 2001MB Barricades.

NOTE: It is not required to fill the Corner Connector with water.

4. Ensure that all Drain Plugs are properly secured.
5. If not already done, remove one (or both) Fill Caps.
6. Fill each 2001MB with water to the bottom of the forklift ports, approximately 60 gallons.
7. Attach Fill Caps to prevent water loss and to keep debris out of the barricade.
 - 1) The LCD may be placed on cross slopes up to 5% (3°). – Figure A
 - 2) The LCD may be placed on longitudinal slopes up to 5% (3°). – Figure B
 - 3) The LCD has the ability to conform to a hill up to 5% (3°). – Figure C
 - 4) The LCD has the ability to conform to a ditch up to 5% (3°). – Figure D



Important: MASH deployment for the 2001MB LCD only requires water levels to the bottom of the forklift ports.

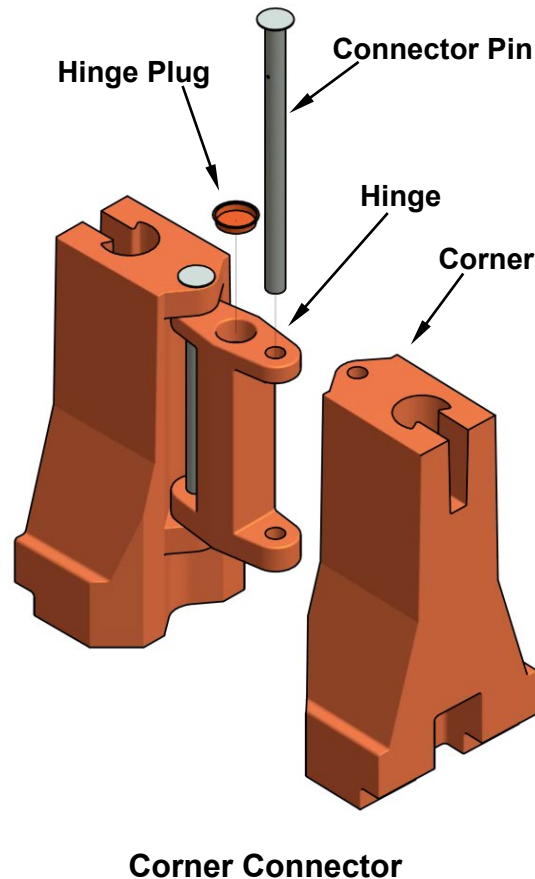
***The corner connector has not been crash tested and is not approved for MASH use.**

2001MB Removal

1. Loosen Fill Caps to facilitate water removal.
2. Remove the Drain Plug at the base of the barricade and drain water completely.
3. After the barricade is empty, attach Drain Plug, Fill Cap, and remove Interlocking Coupler.
4. Empty barricades can now be removed for transport and storage.

Optional Corner Connector Removal

1. Remove the Interlocking Coupler from both sides of the Corner Connector.
2. Slide the Corner Connector away from each barricade run.
3. The Corner Connector can now be removed for transport and storage.



Perimeter Security with Fence Panel Deployment (Not MASH Tested)

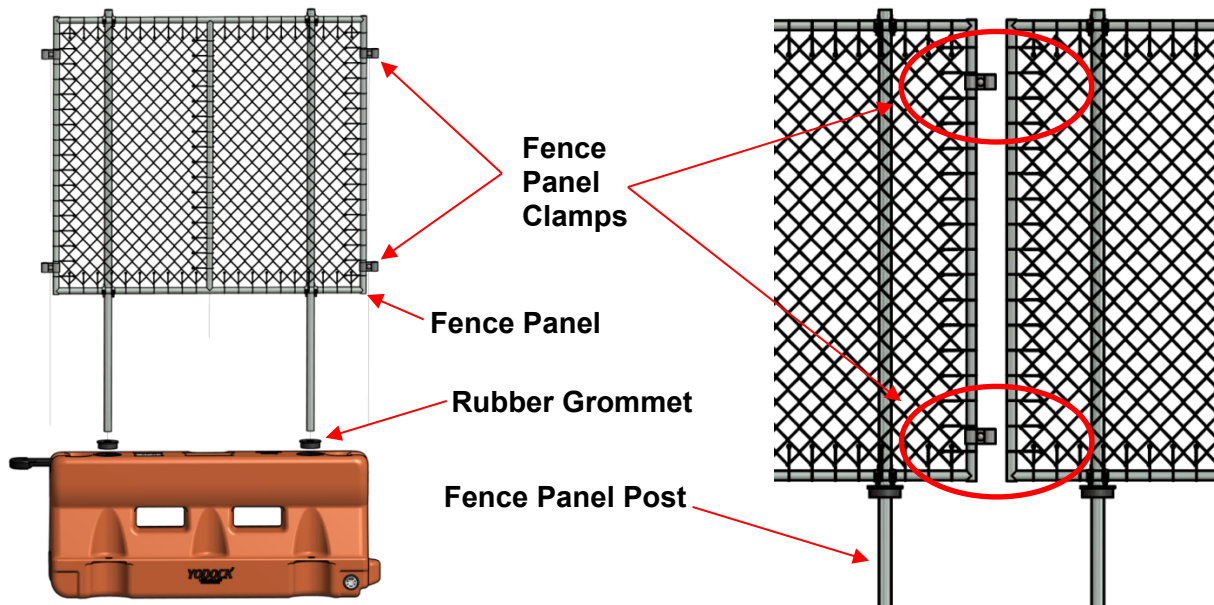


Warning: The 2001MB with Fence Panels should only be deployed on level ground.

1. Position each 2001MB in line with the next using Interlocking Couplers.
2. If a connection is required to make a corner, use the 2001MB Corner Connector and join it to the adjacent 2001MB Barricade run using an Interlocking Coupler (p. 3).
3. Ensure that all Drain Plugs are properly secured.
4. Remove both Fill Caps.
5. **Completely fill each 2001MB Barricade with water to the top of the fill port. Failure to completely fill the barricades could result in unwanted tipping of the system.**
6. Slide Rubber Grommets onto each Fence Panel Post. With two people, lift the Fence Panel on top of the barricade and place the Fence Panel Posts into the Fill Holes. The posts should seat firmly within the post boots at the base of the barricade with the Rubber Grommets snug in the fill holes at the top of the barricade. The chain link mesh should be faced out from the barricade.
7. Interconnect the Fence Panels using two (2) Fence Panel Clamps, each one approximately 12" from the top and bottom of the Fence Panel.
8. **Valtir does not recommend the use of non-permeable panels, banners, or tarps; however, if a permeable privacy screening or debris netting is required, attach to the top and bottom of the Fence Panel Frame to secure all screen grommets.**



Danger: Do not attach privacy, debris or windscreens (or remove if already in place) if wind gusts are expected to exceed 45 mph. Failure to do so may result in the system being blown over and causing property damage, personal injury or death.



Perimeter Security with Fence Panel Removal

1. Remove privacy, wind or debris screens (if attached).
2. Remove Fence Panel Clamps.
3. With the assistance of an additional person or persons (as needed), lift the Fence Panel out of the barricade and place on the ground. Remove and retain each Rubber Grommet.
4. Remove the Drain Plug at the base of the barricade and drain water completely.
5. When barricade is empty, attach Drain Plug, Fill Caps and remove Interlocking Coupler.
6. Empty barricades and Fence Panels can now be removed for transport and storage.

Cold-Weather Environments and Anti-Freeze Recommendations

1. Choose the level of freeze point protection anticipated.
2. Choose your anti-freeze agent from the charts below.
3. Use the appropriate anti-freeze agent for your location when filling the 2001MB.

Chart 1 Anti-Freeze Chemicals - Mix per Section											
Yodock Model		2001MB									
Water Level		To Top of Fill Port					To Bottom of Forklift Port				
Required Freezepoint Protection		20° F	10° F	0° F	-10° F	-20° F	20° F	10° F	0° F	-10° F	-20° F
Dry Material [lbs]	Calcium Chloride (CaCl ₂)	81	122	146	178	195	50	74	89	109	119
	Calcium Magnesium Acetate (CMA)	130	178	219	251	268	79	109	134	154	164
	Magnesium Chloride (MgCl ₂)	73	105	130	146	162	45	65	79	89	99
	Potassium Acetate (Kac)	73	162	203	243	276	45	99	124	149	169
	Sodium Chloride (NaCl ₂)	81	97	170	N/A	N/A	50	60	104	N/A	N/A
Liquid Material [gal]	Ethelyne or Propylene Glycol	17	25	32	38	43	10	15	19	23	26

Chart 2 Anti-Freeze Chemicals - Bulk Mix						
Freezepoint Protection		20° F	10° F	0° F	-10° F	-20° F
Dry Material - Lbs./Gallon	Calcium Chloride (CaCl ₂)	0.8	1.2	1.5	1.8	2.0
	Calcium Magnesium Acetate (CMA)	1.3	1.8	2.2	2.6	2.7
	Magnesium Chloride (MgCl ₂)	0.7	1.1	1.3	1.5	1.7
	Potassium Acetate (Kac)	0.7	1.7	2.1	2.5	2.8
	Sodium Chloride (NaCl ₂)	0.8	1.0	1.7	N/A	N/A
Liquid Material - Volume Mix Ratio	Ethelyne or Propylene Glycol	17%	25%	33%	39%	45%

Note: The two charts are for reference only and do not guarantee freeze prevention.

1. If a spill occurs with a slick mixture, then the affected area must be hosed down with water. Additional measures may be required to prevent skidding.
2. Before an anti-freeze solution is chosen, the user should check local ordinances regarding environmental requirements.

QUESTIONS: For questions, requests, or additional copies, please contact Valtir Rentals at 888.496.3625 or visit Valtir.com.