RACK LOWERING SYSTEM FOR INFLATABLE RESCUE BOAT

1. PRODUCT OVERVIEW

With fire apparatus getting taller and longer, firefighters have turned to electricity and hydraulics to help them get equipment on and off their truck. It is our mission to provide lifesaving equipment mount solutions for the fire apparatus with technology innovation.

Our **Rack Lowering System for inflatable rescue boat** is air cylinder adopted, reliable, affordable, compact and lightweight for easy transportation and storage. It mounts to the roof of an apparatus with system capable of raising and lowering equipment to a convenient height for quick, safe and easy retrieval. A great choice for apparatus with high shelves or departments with shorter personnel.

SAFETY

Muscle strains and “Slip & falls” are two of the most common injuries on the rescue scene. Both of which can occur when trying to retrieve heavy rescue boat or other equipment from the top/side of an apparatus. The more often your personnel’s feet leave the ground, the higher the risk for injury. Preventative steps should be taken to limit the amount of climbing, imbalanced lifting of weight, and unnatural stretching required to retrieve a piece of equipment. To combat this risk of injury, consider installing a **rack lowering system**.

EFFICIENCY

The faster you can get an inflated rescue boat off the apparatus the faster you can get to where it needs to be. **Rack lowering systems** eliminate the slow and manual lifting that’s often involved with getting a heavy, up to 14-foot inflated rescue boat off an apparatus. One firefighter flips a switch then the rack brings the inflated rescue boat down to a shoulder height, ready for a quick unload to use. Utilizing a **rack lowering system**, especially apparatus with high side compartments.

2. OVER-THE-TOP MODELS

Our **rack lowering system** stores the inflated rescue boat horizontally over top of the fire apparatus and lowers it from the stored position to a convenient height for safe & easy retrieval, reducing risk of strains and other common injuries. This keeps the inflated rescue boat up and out of the way until needed, while allowing for

compartments in the side body below and occasionally a larger water tank. Also, the powerful boom often allows for a greater maximum lifting capacity. There are various options to consider when choosing your **rack lowering system**:

- Side drop-down
- Back drop-down

3. KEY FEATURES

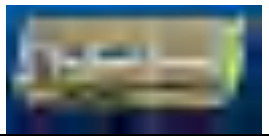
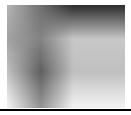
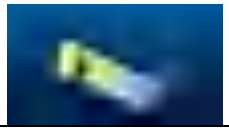
- Model Number(side drop-down): ZISHU-QDXPTJ-CF;
- Rack Dimensions(L*W*H): 2250*1400*850mm;
- Booms lower the inflated rescue boat to a shoulder height and away from side body, so that access to side compartments remains unrestricted;
- Three operation options: emergency manual switch on the rack, wired remote control, and wireless remote control;
- Heavy-duty aluminum booms connect air cylinders to the rack;
- Quick deployment takes 15 to 20 seconds with no physical effort;
- Powered by air cylinder with a maximum load not to exceed 100kg;
- Rack accommodates inflatable rescue boats with lengths of 3.6m/3.8m/4m/4.2m(maximum);
- Available rollover side wall panel with height of 160mm(default)/180mm/200mm/220mm/240mm. Please send us note if other than default;

4. STANDARD EQUIPMENT

FOLD STATUS

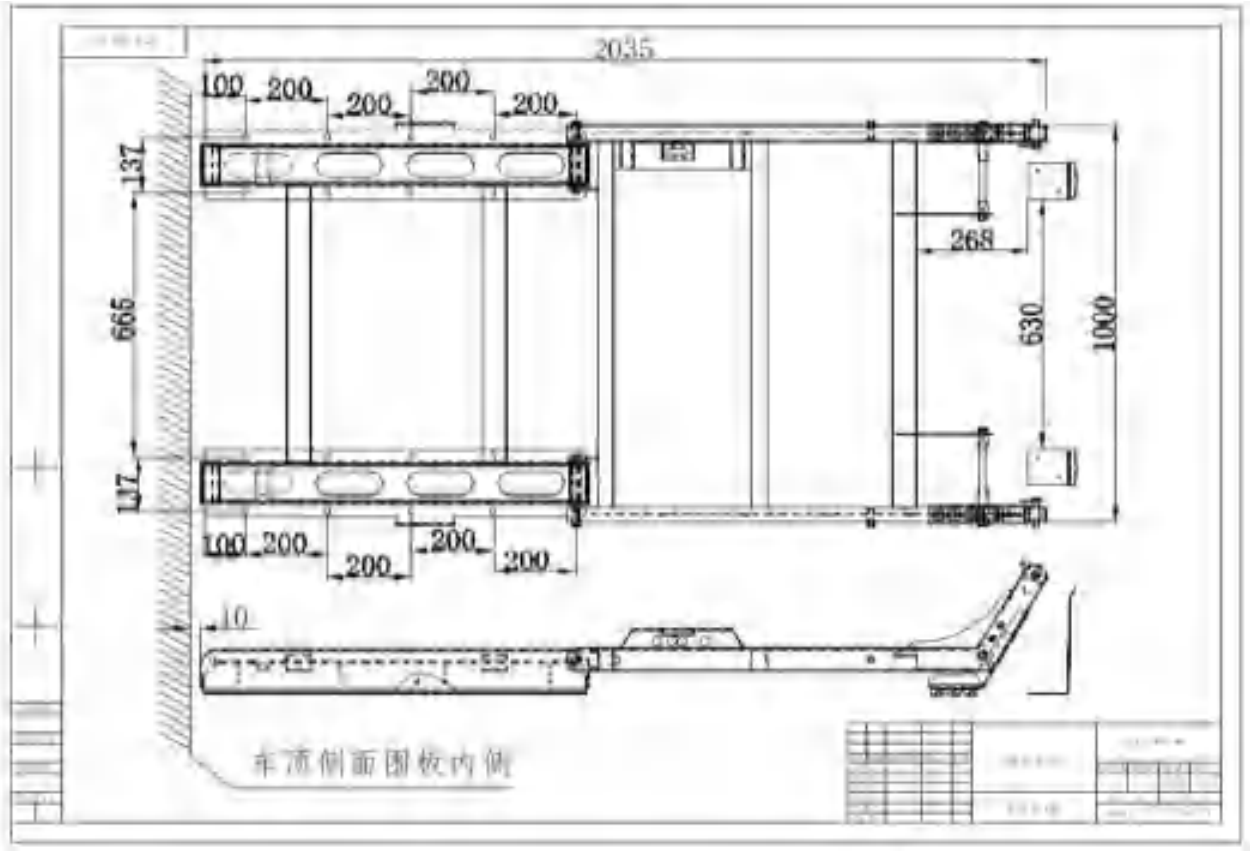
UNFOLD STATUS(EXTENDS OUTWARD BY ABOUT 2 METERS FROM THE ROOF OF APPARATUS)

WHAT'S IN THE PACKAGE

Part Number	Description	Photo	Quantity	Accessories	Note
1	Base		1	M10x65mm*8pcs	Packed with Cellular board
2	Store Fixture #1		1	M6x70mm*2pcs	
3	Store Fixture #2		2	Double U-Bolt Clamp*8pcs	
4	Store Fixture #3		2		
5	Store Fixture #4		1		
6	Wired remote control		1	Remote Control Box*1pcs	
7	Wireless Remote Control		1	Remote Control Holder*1pcs	
8	Air Cylinder		1	Secure Hoop*2pcs	
9	Rack Hold-Down Clamp		2	M8x30mm*4pcs	

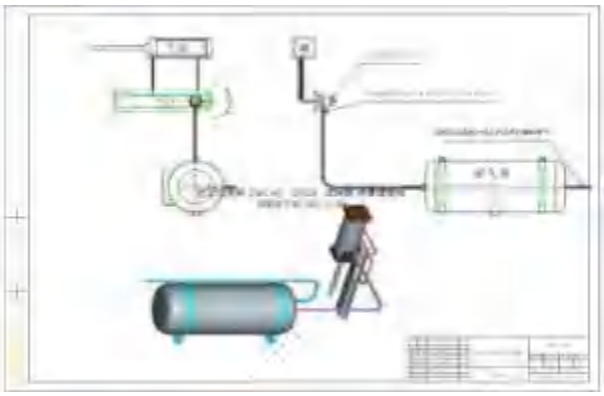
5. GENERAL INSTALLATION INFORMATION

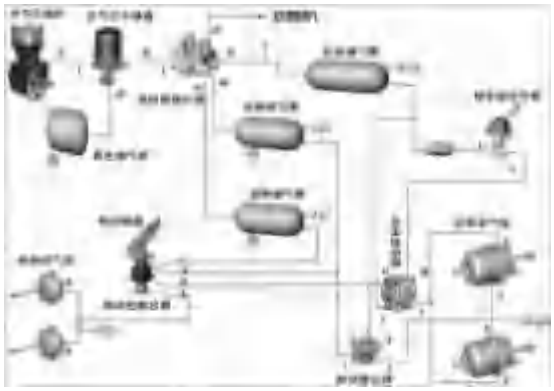
BASE INSTALLATION DIMENSIONS



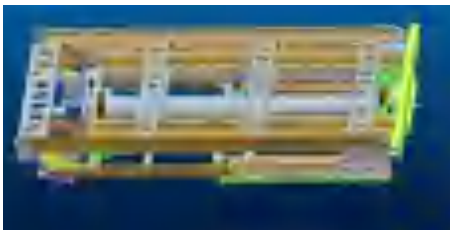
AIR CYLINDER WORKING PRINCIPLE

To enhance driving safety, an independent air supply system has been added. It is separated from the brake system by four circuit protection valves, ensuring that variations in air pressure do not affect the brake system. The air reservoir size is designed for a single round use for the **rack lowering system**. Continuous usage should be initiated after starting the vehicle. (Connect Air-Intake-Port to the #24-other auxiliary air outlets on four circuit protection valves)





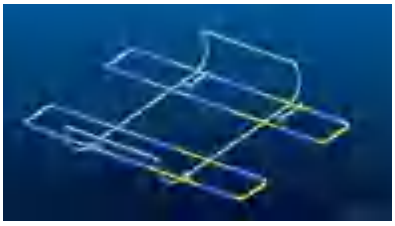
1. PACKING STATUS OF RACK LOWERING SYSTEM



2. STORE FIXTURE #1 INSTALLATION POSITION(ADJUSTED HEIGHT)

3. STORE FIXTURE #2 & #3 JOINT INSTALLATION

4. STORE FIXTURE FINAL INSTALLATION POSITION(USE 8 PCS OF DOUBLE U-BOLT CLAMPS TO SECURE)



5. RACK HOLD-DOWN CLAMP FOR DRIVING SAFETY

6. WIRED REMOTE CONTROL AND AIR SOURCE SWITCH INSTALLATION POSITION

7. EMERGENCY MANUAL SWITCH

8. TURN OFF THE AIR SOURCE WHEN THE EQUIPMENT IS NOT IN USE

9. WIRED REMOTE CONTROL WITH PLACEMENT BOX

10. THERE ARE 4 STIFFENING PLATES UNDER THE BASE