Mohawk Resources, Ltd.

MODEL 75-48-F
FLUSH MOUNT

SPECIFICATIONS

HEAVY DUTY PLATFORM TYPE LIFT

1.0 SCOPE

1.1 This specification sets forth the requirements for the purchase of heavy-duty type platform lift(s) to permit lifting vehicles having wheelbase dimensions up to 44 feet, 528 inches when measured from the centerline of the front-most wheel hub to the centerline of the rear-most wheel hub. Installation of this equipment shall require no in-ground posts. Above ground scissors, post, or column type lifts are not acceptable.

1.1.1. Equipment shall be new, furnished with all specified materials for installation when delivered. Used or reconditioned equipment will not be accepted.

1.1.2. Equipment design shall comply with all applicable Federal, State and local safety regulations and codes, and OSHA, ETL, UL, AWS, NEC and ANSI/ALI ATCTV 1998 standards.

1.2 All material thickness and structural dimensions are minimums. Dimensional tolerances, unless noted, are as follows: +/-0.25 inch for dimensions less than ten (10) inches; +/-1.0 inch for dimensions from ten (10) to five (5) feet inclusive, +/- 3.0 inch for dimensions greater that five (5) feet.

2.0 EQUIPMENT

2.1 Complete assembly shall consist of an electro-hydraulic lift unit, a control console to lift and any interconnecting accessories as specified herein

2.1.1 Hydraulic hose, air line and electrical cable shall be supplied with the lift to permit locating the control console ten (10) feet (minimum) from the connections on the lift. Standard length hoses/cables to connect console to lift, are 65' long.

2.1.2 Hydraulic interconnections shall have standard JIC fittings throughout.

2.2 Lifting capacity: 37.5 tons (75,000 lbs.) per lift unit, minimum.

2.3 Minimum lifting height from finished floor level to bottom of tires: 63 inches, minimum. Lifting unit shall permit lifting of vehicle to any height to this full amount with a minimum of 6 locking positions distributed evenly throughout the lifts travel.

2.4 Lifting speed: 60 seconds to full height.

2.5 Platform dimensions.

2.5.1 Platform length: 528 inches

2.5.2 Platform width: 32 inches

2.5.3 Spacing between platforms: 45 inches

2.5.4 Overall width: 109 inches.

2.5.5 Retracted height flush with floor level.

2.6 Lift unit shall conform to ANSI/ALI ALCTV 1998 for Automotive Lifts Safety Requirements for the construction, care, use and UL201.

2.6.1 Support leg joints shall be provided with composite bushings at the cylinder to leg connection and the leg to platform connection, where stresses are at maximum, for extended lift life and easy repair.

2.6.2 Each platform shall be constructed of 0.375 inch thick steel diamond floor plate supported by (2) 4 x 8 x 0.250 inch wall ASTM A-500 Grade B structural steel tubing and a structural steel channel 8" @ 11.5 lb/ft.

2.6.3 Each platform shall have flipable steel plate wheel stops mounted to the front and rear to prevent a vehicle from rolling off the front or rear of the lift when raised.

2.6.3.1 Rear wheel stops shall automatically swing into position as the lift if raised and automatically recede when lowered.

2.6.3.2 Stops shall not reduce the effective length of lifting platforms by more than six (6) stops inches.

2.6.3.3 Wheel stops shall be interchangeable.

2.6.3.4 Stops shall be securely pinned to platform to prevent casual removal by shop personnel.

2.6.3.5 Stop design shall provide for a minimum of 2 inches upward movement to prevent injury to personnel or damage to lift unit in the event of obstruction between lift unit and wheel chock.

2.6.3.6 Removable wheel chocks also provided (Qty: 4).

2.7 Leveling/Anchoring provisions.

2.7.1 The base of each lifting member shall be pre-drilled to accept anchoring bolts adequately sized for the loads imposed during lift operation.

2.7.2 The concrete flooring requirements must require ***no more than 4,000-PSI*** compressive strength.

2.8 There shall be no fixed obstructions between lifting platforms.

2.9 Hydraulic system.

2.9.1 All hydraulic system components shall comply with section 1.1.2 above.

2.9.2 Each hydraulic cylinder shall incorporate a flow check velocity fuse integrally mounted to prevent inadvertent retraction in the event of a major fluid leak.

2.9.3 Hydraulic cylinders shall be mounted to the underside of the lifting platforms away from sources of dirt, grime and damage from falling objects.

2.9.4 All hydraulic hoses shall be of steel reinforced construction and have standard JIC fittings throughout.

2.9.5 The lift shall be driven by a hydraulic power unit assembly of U.S. manufacture, capable of supplying the appropriate PSI and GPM to operate the lift.

2.9.6 In the event of a power failure, the lift shall be able to be lowered from any raised position by operation of a manual pump and valving.

2.10 Safety locks

2.10.1 Steel safety locks with a safety factor of not less then 3:1 shall be mounted one pair to each lifting cylinder and shall allow the lift to be locked at a minimum of six (6) different levels. These locks shall ensure a minimum amount of travel in the event of a hydraulic fluid leak and shall maintain the height of the lift in that situation.

2.10.2 The safety locks shall automatically disengage when the lift "lower" control is operated, and automatically re-engage when the lift "lower" control is released. The safety locks shall be automatically engaged as the lift ascends. This will ensure positive lock engagement when raising the lift in the event of hydraulic failure.

2.11 Control console shall house the following equipment.

2.11.1 Oil reservoir, suction strainer, low-pressure return filter, hydraulic gear pump and manual pump.

2.11.2 Electric motor; 208/230/460 volt, 3 phases, 60 Hz TEFC of U.S. manufacture, 20 HP standard minimums. Motor shall not require rework for replacement.

2.11.3 Electrical enclosures for control components shall be NEMA 12 rated (minimum) and have the following controls mounted on them while still maintaining their sealing ability.

System disconnect
"Raise" and "Lower" controls and "Park" control.
An alphanumeric LED display to identify safe and unsafe operating conditions and assist in trouble shooting problems

2.11.4 The control system shall be tested and approved by the Nationally Recognized Testing Laboratory as established by OSHA to UL 210.

2.12 The control system shall be operated by a Programmable Logic Control (PLC) and lock-out all operations of lift controls if an unsafe condition exists due to insufficient air pressure to operate safety locks; displaced safety tape switch or uneven platform heights. This lock out shall not be able to be reset unless the unsafe condition has been corrected.

2.12.1 The control system shall ensure that lifting platforms differ in height by no more than two (2) inches. If platforms become uneven by a greater amount, the lift shall stop and prohibit further operation until the condition is corrected.

2.12.2 Control system shall be able to be programmed to stop lift a specific height in order to load or unload any accessory jack or stop at a specific height to accommodate individual technicians or low ceiling height.

OPTIONAL EQUIPMENT

2.13 RJ-50 50,000 lb. Capacity electric / hydraulic jack beam.

2.14 Track lighting – 10 individual 40 watt cool white fluorescent lamp units.

2.15 Emergency stop touch tape