

SPECIFICATIONS

GENERAL SPECIFICATIONS - STP-36-EIH

Note: *Specifications on units may vary or change without prior notifications due to option selections.*

This section includes a brief description of each of the major (standard) components. The major components illustration in Section 1 can be used to locate and identify the standard components of the unit.

MOBILE OPERATION - This unit has been designed for mobile operation. The driver must never exceed 2 mph (3 km/h) while an operator is in the platform.

PLATFORM - The standard platform fabricated from steel tube and galvanized for corrosion protection. The inside nominal dimensions are 24 in. x 30 in. x 42 in. (0.61 m x 0.81 m x 1.07 m). The platform includes a hinged door with slam latch and safety chain.

PERSONNEL RESTRAINT SYSTEM - A safety belt or harness and a lanyard are required and can be supplied by Time Manufacturing Company at an additional cost. Consult applicable work practices and regulations to choose between a safety belt and a harness. The anchor for the lanyard is attached to the boom tip.

UNIT CAPACITY - The maximum combined capacity, platform load plus cable down load, is 350 lbs. (159 kg). The maximum cable down load is 50 lbs. (23 kg). The platform capacity is 350 lbs. (159 kg) when no cable down load is applied.

SIDE PULL CAPACITY - The boom tip side load capacity is 400 lbs. (180 kg) with the fairlead retracted and 350 lbs. (159 kg) with the fairlead extended.

INDIVIDUAL LOWER CONTROLS - Individual full-pressure controls at the turret actuate all boom functions. The lower control station is equipped with a selector valve to override the upper controls.

SINGLE STICK PLATFORM CONTROL - The Unitol single-stick control consists of a multi-jointed handle which operates the control valve. A safety trigger located on the underside of the single stick handle will not allow boom movement until it is depressed. The control valve is full pressure and full flow. The operator can feather between the three control movements to provide multi-function boom action. An emergency stop control is provided.

HYDRAULIC PLATFORM LEVELING - Platform

leveling is achieved automatically by means of a hydraulic master-slave system. The leveling system can be operated from the upper or lower controls to adjust platform leveling or stow the platform for road travel.

OUTER/INNER BOOM ASSEMBLY - The outer/inner boom assembly includes an outer boom, telescopic inner boom, extension system, and hose assemblies. The outer boom consists of a 6 in. x 8 in. (150 mm x 200 mm) steel section. The 5 in. x 7 in. (130 mm x 180 mm) rectangular fiberglass inner boom is housed within the outer boom. The extension system consists of an extension cylinder, holding valves, and a hose carrier housed inside the boom. The hoses routed through the outer/inner boom assembly are non-conductive and fully contained within the boom assembly. A double acting cylinder with two integral holding valves articulates the outer/inner boom assembly.

COMPENSATED LOWER BOOM - The lower boom consists of a 6 in. (150 mm) square steel section. A double acting cylinder with dual holding valves allows the lower boom to articulate from 6° below horizontal to vertical for a total travel of 96°. A compensation link forms a parallelogram linkage to maintain the outer/inner boom assembly at a constant angle to the turret.

CHASSIS INSULATION SYSTEM (Lower Boom Insert) - The fiberglass insert provides a insulation gap of 12 in. (305 mm) on the unit. The insert is mounted on the steel boom sections, then adhesive is pumped in under pressure to fill all voids. A fiberglass section in the compensation link maintains the 12 in. insulation gap in all boom positions. A stainless steel stud is provided at each end of the insert to shunt the system during electrical testing. The insert is tested per ANSI A92.2.

PINS - Pins are high-strength alloy steel which are chrome plated for a hard finish and corrosion resistance. Pins are bolted in place with a welded pin tab at one end and a pin cap at the other for redundant retention.

CYLINDERS - The outer boom and lower boom use a threaded head-cap design. All cylinders, except the master leveling cylinder, are equipped with integral holding valve(s) that prevent down creep and lock the booms in position in the event of hose failure.

TURRET - The turret wings are designed for strength and rigidity. A bearing cover seals out moisture and prevents foreign materials from obstructing the turret

rotation. The turret plate is machined to provide a flat surface to support the rotation bearing.

ROTATION DRIVE - Rotation is accomplished by a hydraulically driven worm gearbox with a shear-ball rotation bearing. The critical bolts holding the lift to the rotation bearing and the rotation bearing to the pedestal are grade 8 hex head cap screws. These critical bolts are torque seal marked to provide a quick means of detecting any turning of the bolt upon inspection.

MECHANICAL ROTATION STOP - Provides 370° non-continuous rotation with a mechanical stop. Stop location can be set by installer to one of 18 different positions around the truck.

LUBRICATION - Non-lube bearings are used at most points of motion on the aerial device. Only the rotation bearing requires periodic lubrication.

PEDESTAL - The pedestal is fabricated from 12.75 in. (325 mm) round tubing with accommodations for mounting the standard external reservoir. The top plate is 1-1/4 in. (32 mm) thick and machined flat to support the rotation bearing.

HYDRAULIC OIL RESERVOIR - Attached to the side of the pedestal, the hydraulic reservoir is a rotationally molded one piece unit. The reservoir includes a tank top mounted 10 micron return filter with bypass and a separate filler-breather. The reservoir is molded from a semi-transparent material and has fluid level marks molded into the side for easy inspection of the oil level. The oil capacity of the reservoir is 6 gallons (23 l).

HYDRAULIC SYSTEM - The open-center hydraulic system operates at 3 gpm (11.4 lpm) at 2750 psi (190 bars). A minimum flow of 5.5 gpm (20.8 lpm) must be supplied from the main pump to achieve full flow to the lift. Hydraulic oil is not included. This system can be driven by the chassis-engine accessory belt or by the chassis transmission power-take-off. A pressure compensated flow control valve maintains a constant flow rate to the unit as the engine speed varies during mobile operation. A 10 micron pressure line filter is installed after the pump.

PAINT - The complete unit is primed and painted prior to assembly. The standard color is white urethane.

HOSES AND FITTINGS - The hoses routed through the booms are high pressure and non-conductive with swaged hose end fittings. Nylon sleeves are installed over hoses at points of movement. Reusable fittings

can be installed if a hose is damaged.

ENGINE START/STOP - The start/stop circuit has been designed so the lift cannot be operated unless the truck ignition switch is in the "RUN" position and the master control is activated. This feature makes it difficult for unauthorized individuals to operate the lift when the truck is locked. An air cylinder at the upper controls and a toggle switch at the lower controls are provided to actuate the engine start/stop control.

ELECTRICAL INSULATION SPECIFICATIONS

- The outer/inner boom assembly is tested and certified for electrical work at 46 KV and below in accordance with ANSI A92.2 requirements. Aerial devices may be designed and configured for gloving work and tool methods at 46KV and below. The outer/inner boom assembly is fully insulated after 32in. of extension.

CATEGORY D DIELECTRIC TESTING AND CERTIFICATION

- Testing and certification for ANSI A92.2 Category D are available. These aerial devices which are designed and manufactured for work in which the insulating system is not considered as primary insulation, but secondary. These aerial devices are NOT designed for gloving work methods. They are rated at voltage of 46kv.

SLOPE INDICATORS - Slope indicators are required on Versalift units and supplied by Time Manufacturing Co. Slope indicators shall be installed to indicate the level of rotation bearing relative to the ground.

INTERCOM - An intercom system providing continuous two-way communication between the platform and cab. The intercom unit at the platform provides hands free operation. The cab unit includes a volume knob with a "power off" detent position and a push to talk switch. The intercom system is required for mobile operation.

MANUALS - Two Operator's Manuals and two Service Manuals, one Manual of Responsibilities and one EMI Safety Manual are included with each unit.

OPTION SPECIFICATIONS - STP-36-EIH

Below is a brief description of some of the available options for the aerial lift.

TORSION BAR - An over-frame or under-frame torsion bar for the rear axle adds stability to the vehicle and is available as an option. Ballast may be required with the use of a torsion bar. A front axle

under-frame torsion bar is also available for some chassis and can be used in conjunction with the rear torsion bar to reduce the amount of ballast needed.

BACKUP PUMP - An auxiliary hydraulic pump designed to bring the booms down in case the main hydraulic source fails. The backup hydraulic pump is driven by a DC motor, which is powered by the truck-engine battery. The system is connected in parallel with the main pump and is designed for non-continuous operation. An air cylinder at the platform and a toggle switch at the lower controls energize this system.

LIFTING EYE - A lifting eye attachment on the outer boom has a 500 lbs. (227 kg) maximum capacity.

UNITROL 4-FUNCTION CONTROL - The 4-Axis controller option is a full pressure control. Located at the platform, the 4-axis control consists of a single handle control which, through linkage, actuates the interlock section and four individual boom function valves.

BOOM TIP ATTACHMENTS - All boom tip attachments include a 16" extension.

- **Pulling Eye Assembly** – With 1.2 in. I.D. eye.
- **Fixed Fairlead** – Fixed four-way roller fairlead with 1.3 in. capacity. A door allows the cable to be removed without a free end. Includes 1.2 in I.D. pulling eye.

PLATFORM WEATHER SHIELD - Rigid polyethylene panels cover all four sides of the platform, with a rubber floor mat.

IMPACT WRENCH HOLDER - A cradle mounted to the platform designed to hold an electric impact driver.

MATERIAL RAILS - 21 in. (530 mm) wide material storage rails mounted on 3 sides of the platform.

DIMENSIONAL SPECIFICATIONS

Note: All dimensions and angles are nominal based on 40 in. (1.02 m) frame height.

Horizontal Reach	26 ft. 6 in. (8.1 m)
Platform Capacity	350 lbs. (160 kg)
Cable Down Load Capacity	50 lbs. (23 kg)
Total Unit Capacity (Platform plus Cable Down Load).....	350 lbs. (160 kg)
Side Pull Capacity (Fairlead retracted).....	400 lbs. (180 kg)
Side Pull Capacity (Fairlead extended).....	350 lbs. (160 kg)

With 42 in. (1.07 m) Tall Pedestal (Standard)

Height to Bottom of Platform	36 ft. 7 in. (11.2 m)
Working Height.....	41 ft. 7 in. (12.7 m)
Stowed Travel Height	10 ft. 7 in. (3.2 m)
Weight of Lift	2,450 lbs (1111 kg)

Hydraulic System

Operating Pressure	2750 psi (190 bars)
Flow Rate to Lift.....	3 gpm (11.4 lpm)
Flow Rate from Pump (Minimum).....	5.5 gpm (20.8 lpm)
Filtration.....	10 micron pressure and return 100 mesh suction
System Type	Open Center

Boom Action

Outer/Inner Boom Travel	-14° to +75°
Lower Boom Travel.....	-6° to +90°
Inner Boom Extension	116 in. (2.9 m)
Rotation	370° Non-continuous

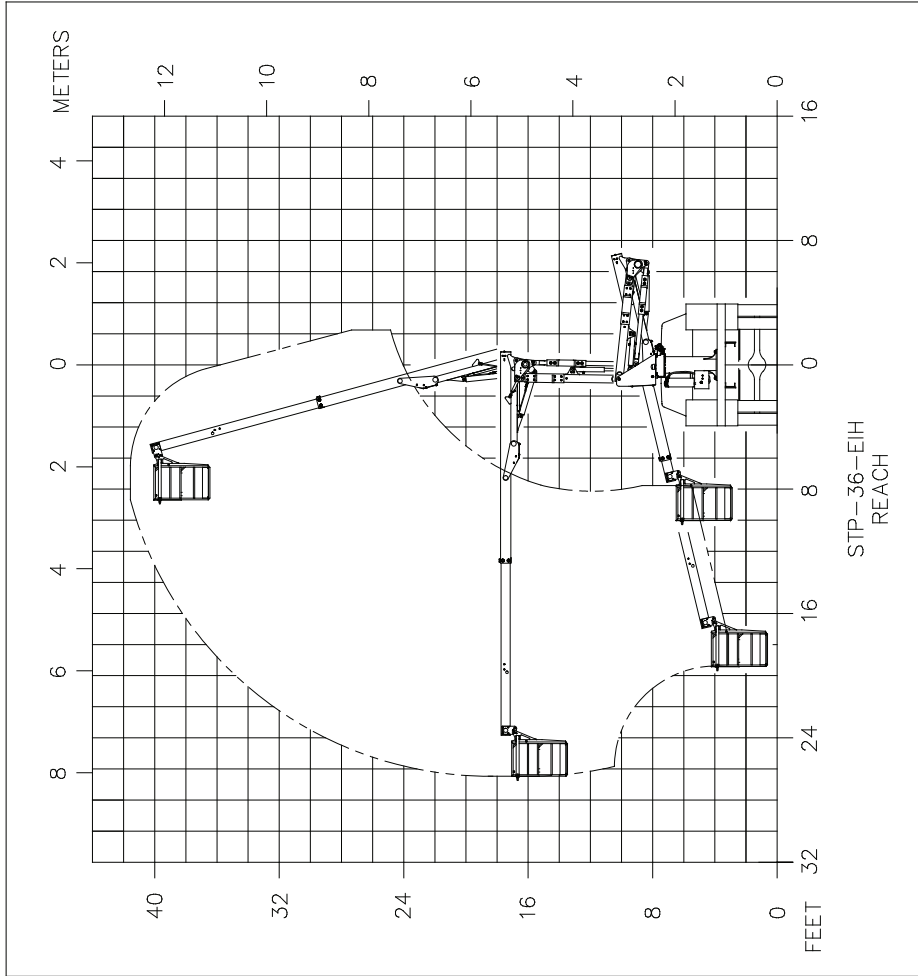
Insulation Gap

Upper Boom fully retracted.....	10 in. (0.25 m)
Lower Boom Insert	12 in. (0.3 m)
Upper Boom extended 32 or more inches.....	42 in. (1.07 m)

Ambient Temperature Range for Structural Integrity -40°F (-40°C) to 125°F (52°C)

SPECIFICATIONS

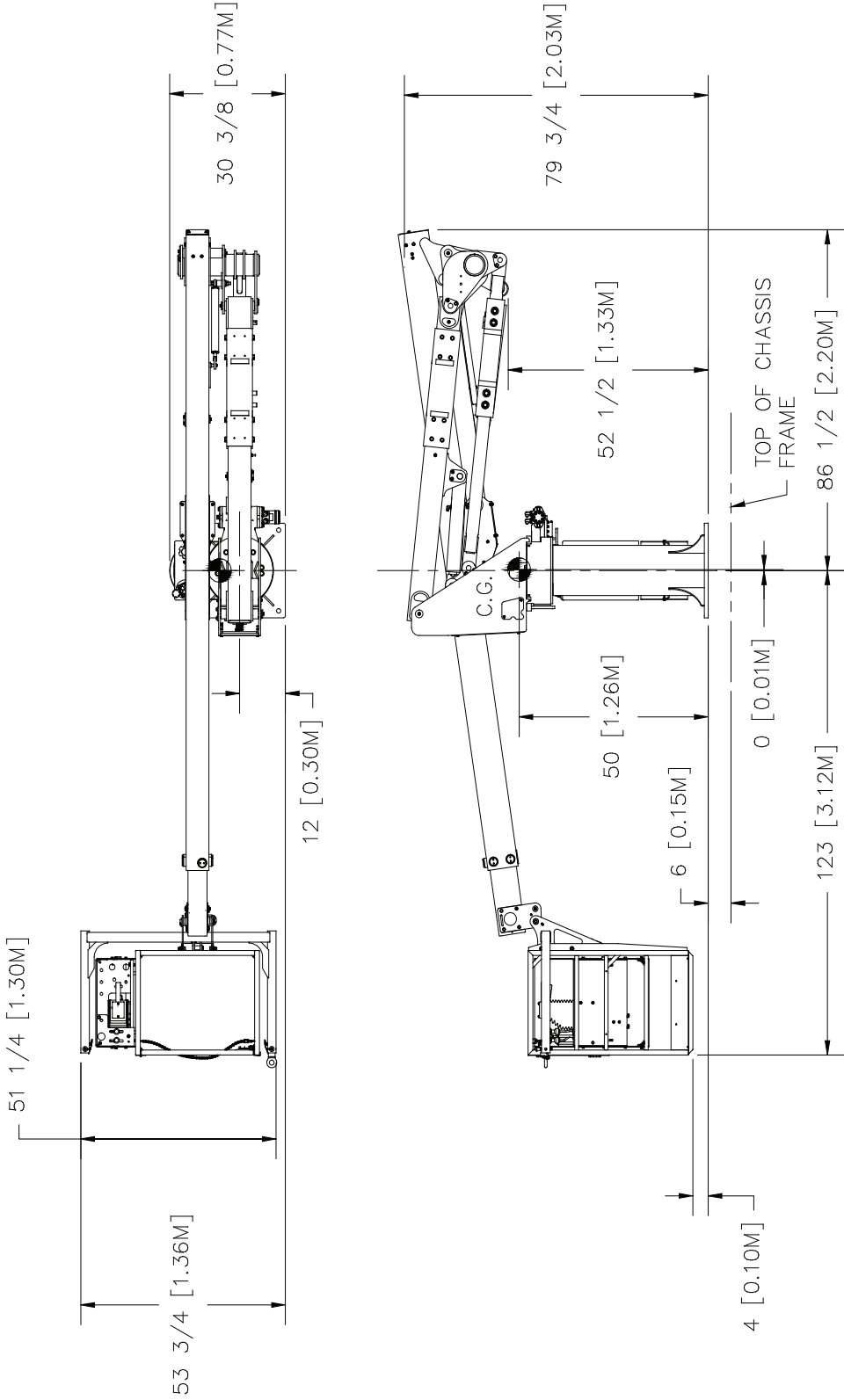
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<p>UNLESS OTHERWISE NOTED: DECIMALS ± 1/16 FRACTIONS ± 1/32 ANGLES ± .01 MACHINED SURFACE FINISHES ± .005 PROJECTION OF VIEWS ALL DIMENSIONS ARE IN INCHES</p>		<p>MANUFACTURING COMPANY WACO TEXAS</p>	<p>DWN. BY DATE DTG 5/16/23</p>	<p>TITLE STP-36-EIH REACH DIAGRAM</p>
		<p>MATERIAL FINISH</p>	<p>SCALE A 1/125</p>	<p>EST. WT. # MANUAL —</p>
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SPECIFICATIONS

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NOTES:
 1. WEIGHT OF LIFT = 2400 LBS, INCLUDING HYDRAULIC FLUID.
 2. ADD 260 LBS (120KG) FOR STANDARD MOUNTING HARDWARE.

UNLESS OTHERWISE NOTED:
 TOLERANCES: FRACTIONS ± 1/16 DECIMALS ± .01 ANGLES ± .005 MACHINED SURFACE FINISHES= 125/10 PROJECTION OF VIEWS © ALL DIMENSIONS ARE IN INCHES THIS PRINT CONTAINS CONFIDENTIAL INFORMATION AND IS SOLE PROPERTY OF TIME MANUFACTURING. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT EXPRESSED PERMISSION OF TIME MANUFACTURING.

TIME
 MANUFACTURING COMPANY
 WACO TEXAS

MATERIAL FINISH

DWN. BY	DTG	DATE	TITLE
SIZE	SCALE	EST WT #	MANUAL
A	1/40	—	—
SHEET	1	OF	1

STP-36-EIH
 OVERALL
 DWG. NO. 1020386-DWG



VEHICLE SPECIFICATIONS

Frame Section Modulus (per frame rail).....	9.25 in. ³ (152 cm ³)
Frame Resisting Bending Moment (per frame rail).....	333,000 in.-lbs.(37,600 N-m)
Cab to Rear Axle Dimension	60 in. (1.52 m)

With Rear Torsion Bar:

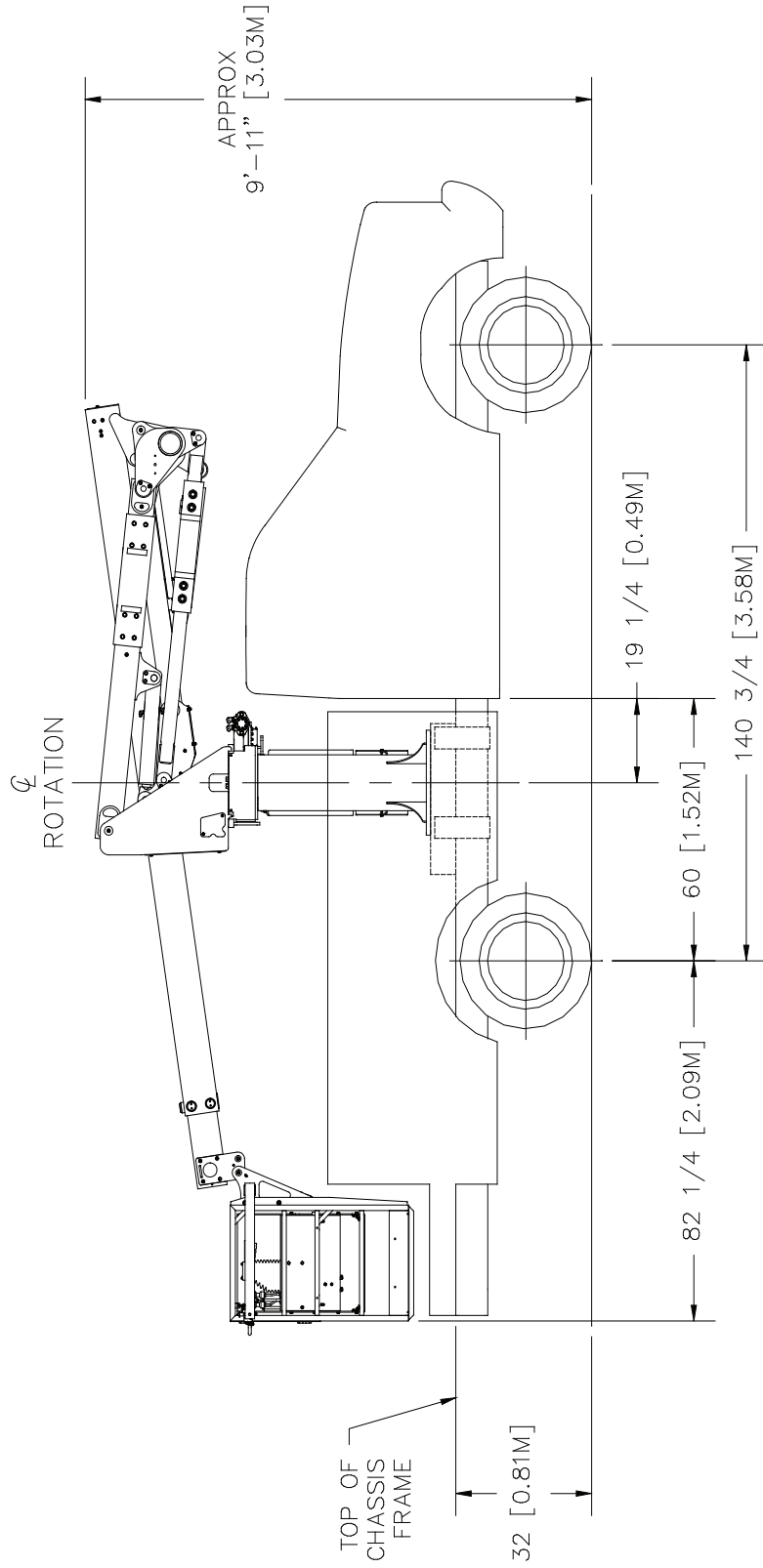
Minimum GVWR.....	17,500 lbs. (7935 kg)
Minimum GAWR (Front)	6,000 lbs. (2720 kg)
Minimum GAWR (Rear)	13,500 lbs. (6120 kg)
Approximate Curb Weight for Stability.....	13,000 lbs. (5900 kg)

NOTES:

1. Actual GVWR and GAWR's should be based on the weight and location of the chassis, body, lift, ballast (if required), accessories, and the desired payload.
2. Recommended GVWR and GAWR's listed above are based on typical installations with a 4x2 chassis. 4x4 and/or crew cab chassis will typically require higher axle ratings.
3. The curb weight for stability will vary based on the rated platform capacity, mounting configuration, frame stiffness, and stability test requirements.
4. To determine the Frame Resisting Bending Moment (RBM), use the formula below:
 - (Section Modulus) X (Yield Strength) = RBM

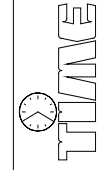
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UNLESS OTHERWISE NOTED:
 DECIMALS: .001
 FRACTIONS: 1/16
 ANGLES: ± .03
 .XX ± .005
 .XXX ± .005
 MACHINED SURFACE FINISHES: Ra
 PROJECTION OF VIEWS: A
 ALL DIMENSIONS ARE IN INCHES

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