TADANO CARGO CRANE

MODEL : TM-ZE505LGXLH
TM-ZE505LGXLHR

CRANE SPECIFICATIONS

MAXIMUM LIFTING CAPACITY 10,000 lbs. @ 7’ (5-part lines)

CRANE CAPACITY 6,800 lbs. @ 12’ (4-part lines)

BOOM
Five-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction
Retracted length 14.18’
Extended length 51.49’
Extending speed 37.31’ / 29.5 s
Elevation Elevated by a double-acting hydraulic cylinder
Elevation speed 1° to 78° / 12 s
Boom point 2 sheaves

WINCH
Hydraulic motor driven, Spur gear speed reduction, provided with mechanical brake and cable follower
Single line pull 2,000 lbs.
Single line speed 249FPM (@ 4th layer)
Wire rope
   diameter x length 5/16” x 305’
   breaking strength 9,680 lbs.
   construction 7 X 7 + 6 X WS(26)
Hook block 2 sheaves

SWING
Hydraulic motor driven, Worm gear speed reduction, Continuous 360° full circle swing on ball bearing slew ring, Automatic swing lock
Swing speed 2.5 rpm

HOOK STOWING DEVICE
Mechanically stowed beneath boom top portion

Specifications are subject to change without notice.
OUTRIGGERS
Manually extended sliders and hydraulically extended jacks, Integral with crane frame, Power up and down
Easy grab type grips lock and unlock sliders position and double lock pins for storage position.

Extended width
Min. 7’ 2-5/8”
Mid. 9’ 10-1/8”
Full 12’ 5-5/8”

HYDRAULICS
Hydraulic motor Axial piston type for winch and swing
Control valves Multiple control valves with integral safety valve
Recommended hydraulic pump
Pressure : Max. 2,915 PSI capacity
Delivery : Max. 15.8 GPM capacity

ELECTRICAL SYSTEM
Power supply DC12V

SAFETY DEVICES
Anti-two-block with alarm
Hook safety latch
Level gauge
Hydraulic safety valves, check valves and holding valves
Over load alert with load indicator
Load indication
Load moment ratio to rated load indication
Audible warning
External warning lamps

CRANE WEIGHT
Approx. 4,340 lbs. (crane bare)

RADIO REMOTE CONTROLS (Optional) (TM-50Z-5-03396)
Model : RCS-F (Approved by FCC / IC)
Control functions of boom telescoping, hoisting up and down, boom elevating, swing, acceleration, speed mode selection, emergency stop, engine start and vehicle horn
Frequency 40 frequencies in 429 MHz band
Operating power supply
Transmitter 6V DC, Dry battery (AA) x 4
Control unit 12V DC, Vehicle battery
Transmitter weight Approx. 1.26lbs (includes batteries)

NOTE
Max. operating speeds of the crane are performed under the condition that the pump delivery is 15.8 GPM.
### RATED LIFTING CAPACITIES (IN POUNDS)

#### CAPACITY CHART : A

<table>
<thead>
<tr>
<th>Load Radius (ft.)</th>
<th>14.2 ft. BOOM</th>
<th>23.7 ft. BOOM</th>
<th>33.0 ft. BOOM</th>
<th>42.2 ft. BOOM</th>
<th>51.4 ft. BOOM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boom Angle (deg.)</td>
<td>Outriggers Extended</td>
<td>Boom Angle (deg.)</td>
<td>Outriggers Extended</td>
<td>Boom Angle (deg.)</td>
</tr>
<tr>
<td></td>
<td>Full</td>
<td>Min.</td>
<td>Full</td>
<td>Min.</td>
<td>Full</td>
</tr>
<tr>
<td>1</td>
<td>4200</td>
<td>2000</td>
<td>1600</td>
<td>700</td>
<td>950</td>
</tr>
<tr>
<td>(13.5ft.)</td>
<td>(22.9ft.)</td>
<td>(32.2ft.)</td>
<td>(41.5ft.)</td>
<td>(50.8ft.)</td>
<td></td>
</tr>
</tbody>
</table>

#### CAPACITY CHART : D

<table>
<thead>
<tr>
<th>Load Radius (ft.)</th>
<th>14.2 ft. BOOM</th>
<th>23.7 ft. BOOM</th>
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<td></td>
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<td>Boom Angle (deg.)</td>
</tr>
<tr>
<td></td>
<td>Full</td>
<td>Min.</td>
<td>Full</td>
<td>Min.</td>
<td>Full</td>
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<tr>
<td>1</td>
<td>6100</td>
<td>3300</td>
<td>1600</td>
<td>700</td>
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<td>(50.8ft.)</td>
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</tbody>
</table>
NOTE:

1. Rated lifting capacities on this chart show maximum allowable loads with the outriggers properly extended on a firm surface and the crane leveled and mounted on a factory recommended truck. The rated lifting capacities in shade area are based on crane strength and others, on its stability (not to exceed 85% of tipping).

2. The weight of handling devices such as hook block (65lbs.), slings, etc., must be considered part of the load and must be deducted from the rated lifting capacities.

3. The operator must reduce loads to allow for such factors as wind, ground conditions, operating speed and the effects of freely suspended loads such as boom deflection.

4. For boom lengths not shown, use the rated lifting capacity of next longer boom.

5. When outriggers are extended to mid. position, use the rated lifting capacities for outriggers extended to min. position.

6. For boom lengths longer than 33.0 ft., extend outriggers to Full.

7. 42.2 ft. boom means mark on 4th boom section side plate is half visible.

8. Five parts of line is required to lift 10,000lbs. 5 ton 2-sheaves hook and an extra sheave on top of the boom are necessary.
NOTE: The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden condition.
GENERAL DATA FOR SUITABLE TRUCKS

<table>
<thead>
<tr>
<th></th>
<th>CAPACITY; A</th>
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</tr>
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<tbody>
<tr>
<td>Gross Axle Weight Rating(GAWR),front</td>
<td>9,000 lbs. or more</td>
<td>12,000 lbs. or more</td>
</tr>
<tr>
<td>Gross Axle Weight Rating(GAWR),rear</td>
<td>17,000 lbs. or more</td>
<td>21,000 lbs. or more</td>
</tr>
<tr>
<td>Gross vehicle weight</td>
<td>26,000 to 55,100 lbs.</td>
<td>33,000 to 55,100 lbs.</td>
</tr>
<tr>
<td>Cab to Axle / trunnion (CA/CT)</td>
<td>120 to 220&quot;</td>
<td></td>
</tr>
<tr>
<td>Frame Section Modulus(SM)</td>
<td>10 cu. inch</td>
<td>110,000psi</td>
</tr>
<tr>
<td>under crane; (Total of both sides.)</td>
<td>22 cu. inch</td>
<td>50,000psi</td>
</tr>
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<td>Frame Section Modulus(SM)</td>
<td>10 cu. inch</td>
<td>110,000psi</td>
</tr>
<tr>
<td>over rear spring hanger; (Total of both sides.)</td>
<td>22 cu. inch</td>
<td>50,000psi</td>
</tr>
<tr>
<td>P.T.O. torque</td>
<td>115 ft-lbs. Min.</td>
<td></td>
</tr>
<tr>
<td>P.T.O. revolution</td>
<td>Approx. 270 to 2800 rpm</td>
<td></td>
</tr>
<tr>
<td>Width for crane mounting</td>
<td>Approx. 2' 5-1/2&quot; min.</td>
<td></td>
</tr>
<tr>
<td>Frame width range (inside to outside)</td>
<td>Approx. 2' to 3' 1-7/8&quot;</td>
<td></td>
</tr>
<tr>
<td>Frame height (ground to frame top)</td>
<td>Approx. 3' 9&quot; max.</td>
<td>(Height of crane mounting base can be changed by combination of jack floats and crane bases)</td>
</tr>
</tbody>
</table>