HYDRAULIC WRECKER CRANE

TW-100

10-ton crane capacity 8-meter outreach
function, the TW-100 performs clearing-up operations — such as transshipping cargos from disabled vehicles, recovering scattered loads, and raising overturned vehicles — swiftly and with less man power.

**Easy dragging operations**

Dragging operations are easily performed by the crane winch. Optional winches for both front and rear are also available.

**Efficient crane operations**

A fully hydraulic telescoping boom, continuous 360° swing, an independent crane cab with simple controls and hydraulic outriggers — ensure that all crane operations are efficient and safe.

**Smooth indoor crane operations**

The compact retractable boom and low-positioned rear outriggers enable the TW-100 to easily perform various indoor crane functions.

**High-speed, comfortable travel**

Mounted on a general-purpose truck chassis, the TW-100 ensures fast travel between jobs for higher working efficiency and a smooth, comfortable ride.
The Hydraulic Wrecking Fork Method

Hydraulic wrecking fork (5,000kg or 10,000kg type)
The box-formed, two-section-type fork is hydraulically raised and lowered by a motor, mounted on the left side. Due to hydraulic control, this method requires less operational time and effort, thus preventing secondary accidents and traffic snarl. The fork length is also adjustable manually.

Axle holder
To be used for holding the front axle of towed vehicles, it supports the axle and is secured by chains.

Frame holder
Used in holding the front end of the chassis frame, and secured by chains. The width of the holder can be adjusted to suit the various sizes of chassis frame.

Axle holder
Frame holder
**The Towing Bar Method**

**Towing bar method**
A towing bar connects the pintle hook at the rear end of the wrecker to the front axle of the towed vehicle, while chains link the rear boom rest of the wrecker to the front axle or front end of the towed vehicle.

**PERFORMANCE AND WEIGHT DISTRIBUTION**

<table>
<thead>
<tr>
<th></th>
<th>L (m)</th>
<th>W (kg)</th>
<th>Wf (kg)</th>
<th>Wr (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>7,800</td>
<td>3,850</td>
<td>21,500</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>8,300</td>
<td>3,700</td>
<td>20,750</td>
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The performance of the wrecker depends on the choice of truck chassis. These above data are for reference only.
CRANE OPERATIONS

Covers a Wide Working Range of up to 10 Tons

Full 360° swing
Driven by a hydraulic motor, the superstructure, including the boom and the crane cab, can rotate in a continuous 360° circle. A hand brake is provided. For added safe travel, a swing lock device secures the superstructure in position.

Hydraulic winch
Driven by a hydraulic motor, the standard crane winch performs line up/down operations by single lever control. A foot brake is provided.
DRAGGING OPERATIONS

Powerful Winches for Faster Hauling

Counterweights for Increased Towing Capacity

Dragging with the boom and standard winch

Dragging a vehicle out of difficult spots such as rivers, ravines, etc. is possible with the TW-100's elevating boom and standard crane winch.

Front winch

Hydraulic motor driven, line up/down operations are controlled by lever from the carrier cab. Two types with single line pull are available - 5,000 kg and 2,000 kg respectively.

Rear winch

Driven by a hydraulic motor, this winch performs line up/down operations by lever control. Three types are available, with a single line pull of 10,000 kg, 5,000 kg or 2,000 kg.

Front boom rest

During towing, when the boom is in a forward position with its movable counterweight at the tip of the top boom, the front boom rest supports the boom for safety purposes. When not in use, the boom rest is stored beneath the boom.

Movable counterweight

The counterweight moves on rails on the upper surface of the boom, and is fixed by pins. For towing, it is set at the tip of the top boom which is stored in a forward position. This maximizes towing capacity by effectively increasing the weight on the front axle to prevent steering loss. For crane operations, it can be stored at the bottom of the base boom. During normal travel, it is set at the tip of the base boom. The counterweight weighs approx. 1,000 kg.

Fixed counterweight

Bolted behind the front bumper, this also prevents steering loss due to weight decrease on the front axle during towing operations.

Revolving step

This is used when adjusting the movable counterweight on the boom. By extracting a lock pin, it can be freely revolved for easy access to the counterweight.

Setting Position of Movable Counterweight