THE MULTIPURPOSE

Today more than ever before, value for money is a major consideration when investing in capital equipment. As everyone in the business knows, it’s becoming necessary to buy one machine with more than one function. With this in mind, Tadano has developed the TW-100, a highly effective combination of general-purpose crane and wrecker.

The multipurpose TW-100 is the ideal choice for a wide range of applications, from crane operations both indoors and outdoors, to recovery, towing, dragging and clearing away wreckage and debris after accidents. What’s more, because it’s mounted on a standard truck chassis, the TW-100 has superior on-the-road mobility, which makes for faster travel between jobs, and a more comfortable ride.

The TW-100, a totally practical and economical way to make the most of your resources — and get the best of both worlds.

- Two section, 4.7 to 8.0m power telescoping boom
- Steady boom elevation from -1° to 65°
- Front boom rest for safe towing operations
- Standard hydraulic winch for both crane and dragging operations
- Powerful hydraulic front winch for faster hauling (option)
- Fixed counterweight to increase towing capacity
CRANE OPERATIONS

LIFTS UP TO 10 TONS, SAFELY AND EFFICIENTLY

With a big 10 ton lifting capacity, a power telescoping boom and many other productive features, the TW-100 delivers a great performance on any jobsite, even indoors. In addition, because it’s mounted on a standard truck chassis, the TW-100 has superior on-the-road mobility which makes for faster travel between jobs, and a more comfortable, less-fatiguing ride.

TWO SECTION, POWER TELESCOPING BOOM
The TW-100 boasts a 2 section 4.7 to 8.0m power telescoping boom which is actuated by a single telescope control lever. The boom is supported by nylon wear pads for smooth extension and reduced wear. For maximum strength and lightness the boom is manufactured from high tensile steel plates with internal and external welds. A powerful, double-acting hydraulic cylinder controls boom elevation from -1° to 65°, and a counterbalance valve ensures smooth lowering and guards against hydraulic hose failure.

EFFICIENT HYDRAULIC WINCH
The standard crane winch features a high starting torque axial piston motor, and performs positive line up/down operations under single lever control. Together with the use of an accelerator pedal, smooth non-stopped speed changes from ultra-low to the maximum are possible. A foot brake is provided.

SMOOTH, CONTINUOUS 360° SWING
Powered by a high torque axial piston motor the superstructure, including the boom and the crane cab, swings continuously through 360° on a precision built sealed ball bearing swing ring. A flow control valve in the circuit ensures a constant swing speed despite load fluctuations, and also facilitates smooth inching operations. A hand brake is provided. For added safety during travel, a swing lock device secures the superstructure in position.
QUICK-SET, WIDE SPAN OUTFRIGGERS

The rigid, double box, welded construction outriggers provide a 4.5m wide blocking base for secure, stable operation. Lock valves are fitted to the vertical jack cylinders. The simple lever control permits simultaneous operation, while the jacks are independently operable. The rear X type outriggers are positioned low, providing unobstructed crane and hauling operations. Midway extension is also possible by the use of lock pins.

COMFORTABLE CAB WITH SIMPLE CONTROLS

The crane cab is operator-oriented for maximum convenience and safety. All instruments and controls are functionally laid out within easy reach of the operator. The reclining seat is fully adjustable and includes a headrest.

Through ventilation is provided by opening side, front and rear windows together with a roof hatch. Wide safety-glass windows ensure all-round vision.

COMPACT DESIGN FOR INDOOR USE

With a compact retractable boom (fully retracted boom length of only 4.7m), low-positioned X type rear outriggers and a low overall height, the TW-100 has total manoeuvrability even indoors and in confined worksites.

FULLY EQUIPPED SAFETY FEATURES

The TW-100 is provided with a Load Meter which shows the hook load, a Load Indicator which shows boom angle and the permissible load for the boom section in use, an over-front indicator and an overhoist alarm to prevent two-blocking. For night-time operation, a spotlight is provided at the front of the operator cab.
THE TOWING OPERATION PROCESS

1. A towing bar connects the pintle hook at the rear of the wrecker to the front axle of the towed vehicle.

2. The crane lifts up the towed vehicle.
DRAGGING OPERATIONS

POWERFUL WINCHES FOR FASTER HAULING

DRAGGING WITH BOOM AND STANDARD WINCH

The boom head has been specially designed to facilitate dragging operations. By elevating the boom at more than 15° and with the use of the standard crane winch, the TW-100 can drag a vehicle out of difficult spots such as rivers, ravines, etc.

FRONT WINCH (OPTION)

A powerful winch with a single line pull of 5,000kg is available as an option to perform dragging operations of heavier vehicles or haul the wrecker itself over very rough terrain. Hydraulic motor driven, line back/forth operations are controlled by lever from the carrier cab. It is also possible to draw out the rope by hand.

REAR WINCH (OPTION)

Fixed at the rear of the wrecker, this hydraulic winch delivers a single line pull of 5,000kg and is available as an option. Line back/forth operations are performed by lever controls located beside the winch. It is also possible to pull out the rope by hand.
The TW-100 is equipped with a towing bar recovery device and supplementary attachments as standard. This lightweight towing bar device, which connects the wrecker and a towed vehicle by using a towing bar, features a big towing capacity and quick set-up time for performing wrecker operations swiftly and safely. In addition, with its big-capacity crane function, the TW-100 can perform clearing-up operations — such as transshipping cargos from disabled vehicles, recovering scattered loads, and raising overturned vehicles — fast, and with less manpower.

REAR BOOM REST
This device is used to lift and support a vehicle while it's being towed. The inner box can be set at two positions, which allows selection of the correct towing position, and is secured by a lock pin. The maximum capacity is 10,000kg. During normal travel, it is also used to support the boom.

PINTLE HOOK
The supporting box can be pin-adjusted at two positions, allowing optimum height selection. The maximum capacity is 7,000kg.

TOWING BAR
The length can be pin-adjusted to provide an optimum towing position.

Chains link the rear boom rest of the wrecker to the front axle or front of the towed vehicle.

PERFORMANCE AND WEIGHT DISTRIBUTION

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The above data are applicable when the TW-100 is mounted on a NISSAN DIESEL TW62P. The performance of the wrecker depends on the choice of truck chassis.