

# TR-500E/400E

**TR-500E 55 ton capacity (50 metric tons)**  
**TR-400E 45 ton capacity (40 metric tons)**

**Tadano's Wide Product Range for Every Purpose**

**TRUCK CRANES**

<b>TG</b>	<b>TL</b>	<b>TS</b>
		
Max. lifting capacity 40 tons - 90 tons	Max. lifting capacity 16 tons - 30 tons	Max. lifting capacity 7 tons - 15 tons

**ROUGH TERRAIN CRANES**

<b>TR</b>	<b>AR</b>	<b>TW</b>
		
Max. lifting capacity 20 tons - 50 tons	Max. lifting capacity 25 tons	Max. lifting capacity 10 tons

**TRUCK LOADER CRANES**

<b>TM</b>	<b>SL</b>	<b>SS</b>
		
Max. lifting capacity 1 ton - 6 tons	Payload 10 tons	Payload 2 tons - 3 tons

**"SKYBOY" AERIAL PLATFORMS**

<b>AT</b>	<b>AW</b>
	
Max. floor height 8m - 23.0m	Max. floor height 13m - 25m

Tadano offers a wide variety of hydraulic cranes, ranging from versatile truck loader cranes to large, powerful truck-mounted cranes. There are the TG, TL, and TS series truck cranes, the TR series rough terrain cranes, the AR series all terrain crane, the TW series wrecker crane, the TM series truck loader cranes, the SL and SS series selfloaders, and the AT and AW series "SKYBOY" aerial platform.

Note: Continuing technical development requires Tadano to retain the right to make specification, equipment and price changes without notice.

**TADANO**

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# THE TOUGHEST ASSIGNMENTS ARE NOW IN EASY REACH



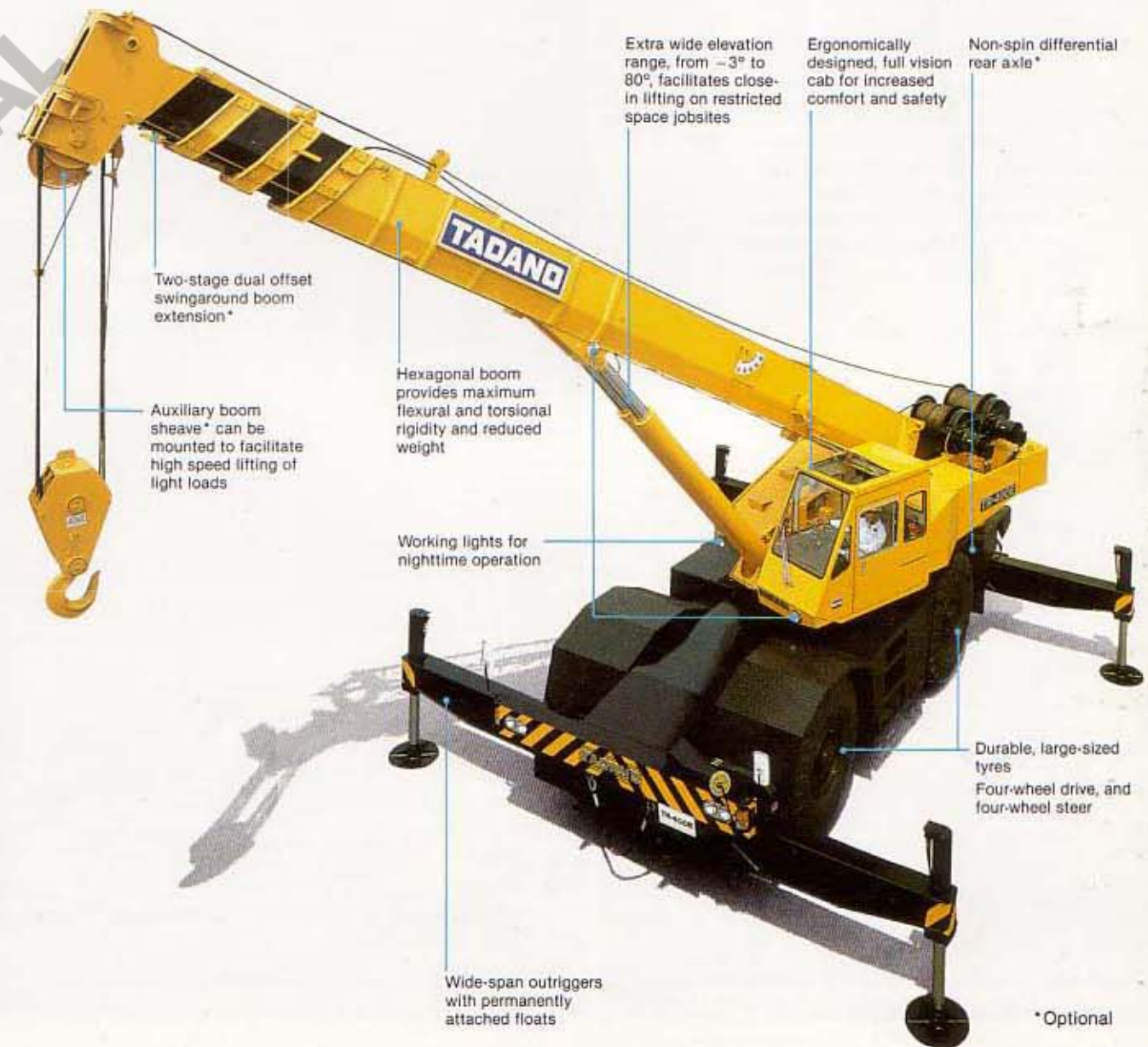
Without the right equipment, tackling rigorous jobs can be an uphill struggle. Tadano's TR-500E/400E are designed from the ground up for extra strength and stability.

The TR-500E/400E, the "Super Hexa" with an ultra-rigid hexagonal boom provide superior lifting capabilities and extra reach. Extra lifting muscle is provided throughout the full circle swing by an exceptionally rigid mono-box construction frame and wide span outriggers.

The most grueling job demands are handled expertly by the winch's Dual system—Automatic fail-safe brake and Free fall operation. In addition, 2-speed winching and "intelligent" winch speed control give an unprecedented degree of winch control. A full vision cab with maximum ventilation and adjustable seating lets you exercise all this power in ideal comfort.

To top these benefits, getting to and from the site will be no sweat at all, thanks to superior steering and manoeuvring capabilities.

Tadano's TR-500E/400E can be taken to the limit, anytime, anywhere. They've got the stamina.

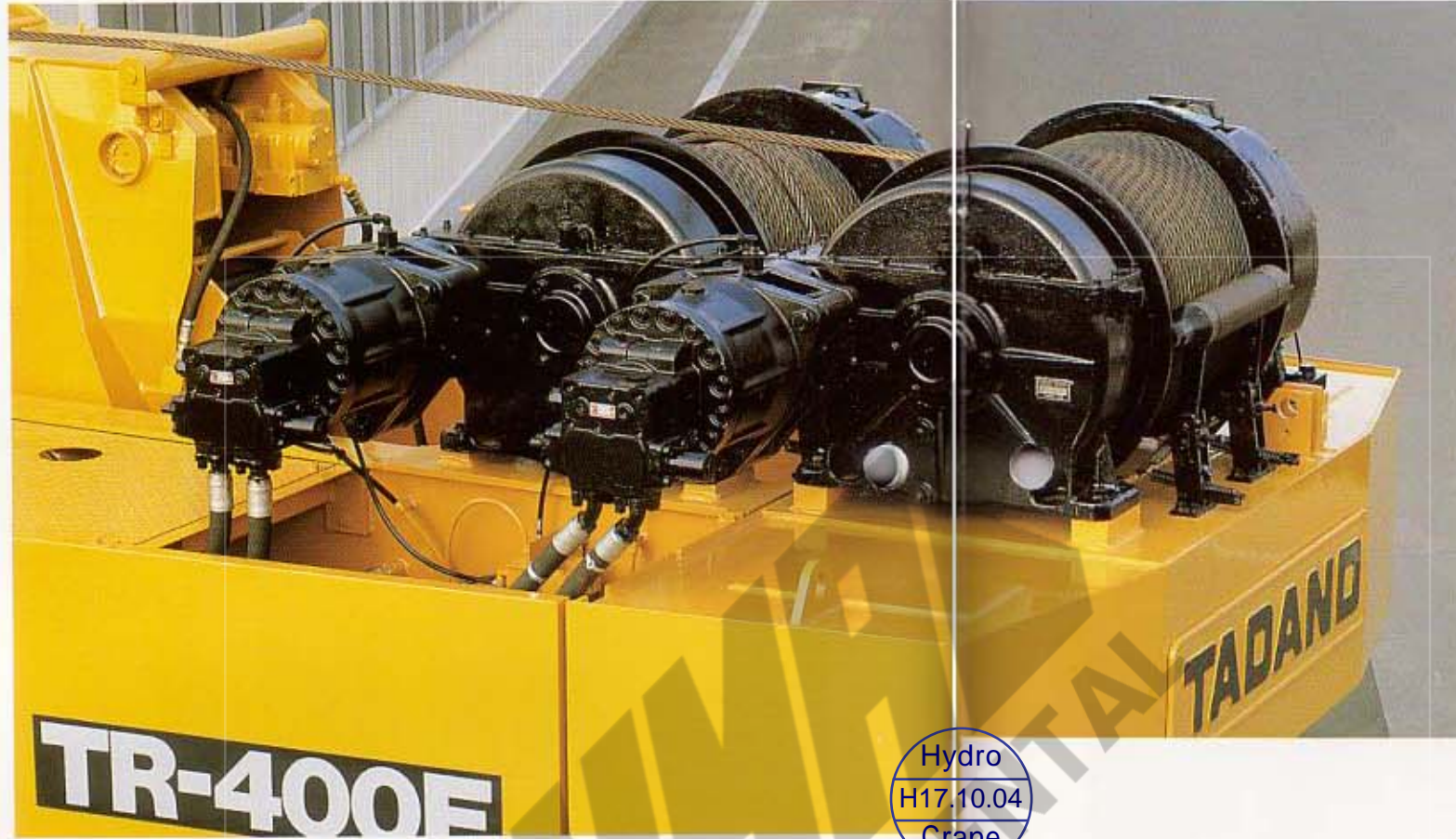


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# THE ULTIMATE WINCHING AND LIFTING PERFORMER

## Dual system—Automatic fail-safe brake and Free fall operation

An Automatic fail-safe brake system and counterbalance valves ensure safe, smooth operation. During normal operation, the brake is applied on the main or optional auxiliary hoist while the winch lever is in the neutral position. And also, the main hoist and the optional auxiliary hoist make it a feature to be switched by hand lever to Free fall operation with a foot brake, which allows the hook to be quickly lowered when the winch lever is in the neutral position. This is convenient when operating over tall buildings.



## "Intelligent" winch speed control

The main and optional auxiliary winch systems feature Tadano's new "intelligent" winch speed control. Employing variable output pumps, a regulator, and a built-in flow control valve, it automatically adjusts hydraulic pressure to match load conditions. The lighter the load, the faster the winching speed—the heavier the load, the slower the winching speed. In this way, "intelligent" winch speed

control allows the crane to select the optimal hoisting speed for each load via single lever action, from 'inching' to high-speed operations.

\*Optional

## Powerful 2-speed winching

Tadano employ a powerful, high-torque 2-motor, 2-drum winching system. The main hoist features a 2-speed boost circuitry that nearly doubles line speed while maintaining high line pull characteristics. The optional auxiliary hoist has its own separate motor and is a single high-speed version of the main hoist unit. To increase rope service life, the hoist drums are grooved and wider in diameter.



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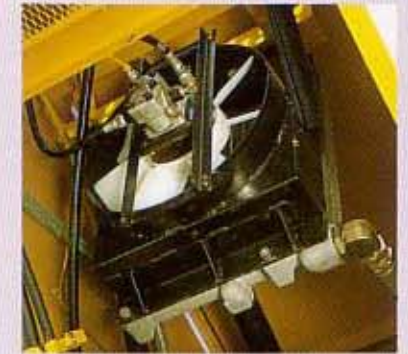
## Wide span outriggers

Both the TR-500E and TR-400E feature wide span, hydraulically-operated double-box construction outriggers. The outriggers can be operated either independently or simultaneously by controls that are mounted in the cab. Situated next to the control switches is a sight level gauge that confirms position at a glance. In addition the floats are permanently attached to the jacks eliminating troublesome mounting chores and permitting rapid set-up.

## MAINTENANCE AND SAFETY FEATURES

### Oil cooler\*

An optional oil cooler is available to ensure that the hydraulic oil is kept at safe temperatures during long hours of operation.



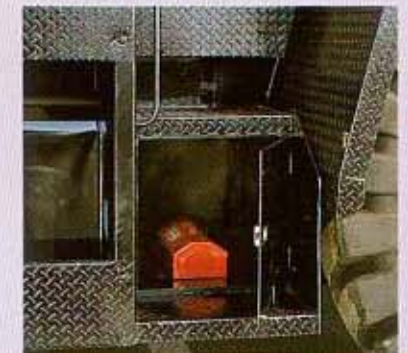
### Overhoist cut-out

A pendant type overhoist cut-out is fitted as standard equipment.



### Tool compartment

The TR-500E and TR-400E come equipped with a tool compartment that is accessible from ground level.

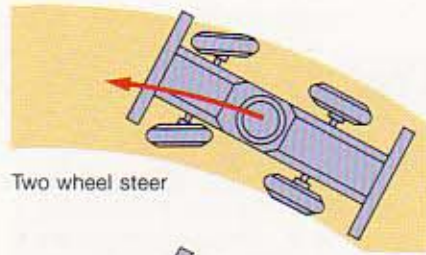


### Oil reservoir

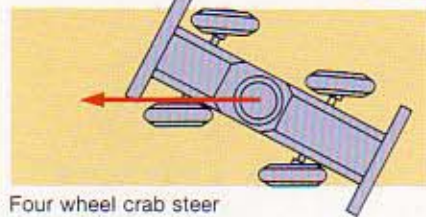
A large capacity oil reservoir is fitted with a sight level gauge. In addition, the return line filters have quick-change replaceable elements that help simplify maintenance.

\*Optional

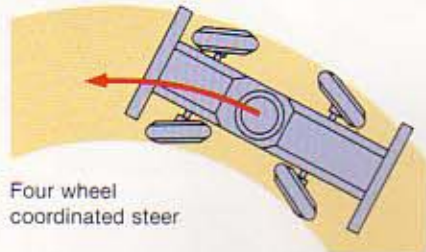
# BUILT FOR TOTAL CONTROL. IN EVERY DEPARTMENT



Two wheel steer



Four wheel crab steer



Four wheel coordinated steer



### Torque converter transmission puts the power on the road

A heavy duty torque converter transmission takes the power from the 185 PS 4-stroke, water cooled diesel engine and puts it on the road. This powershift unit makes gear changing easy and offers 6 forward and 6 reverse speeds—3 speeds for high range and 3 speeds for low range. All speeds are indicated on the speedometer, including those in the low range. Fully-floating axles are employed front and rear.



### Large-sized tyres

The high quality, large-sized tyres are rugged and durable. They provide superior traction in rough terrain yet can stand up to long distance travel to and from the jobsite.

### Non-spin differential\*

Especially useful on rough terrain construction sites, the non-spin differential works by transferring power from the slipping wheel to the wheel on the opposite side, thus maintaining traction wherever possible. It can be fitted as an option to the rear axle.

### Three-way power steering

Whether on or off the road, or on crowded construction sites, greater manoeuvrability lends a crucial working advantage. That's why the TR-500E and TR-400E are equipped with 3-way power steering. A convenient switch inside the cab provides the operator with a choice of steering modes: 1) conventional two wheel front steer, 2) four wheel crab steer, and 3) four wheel coordinated steer. When using the four wheel coordinated steer mode, the minimum turning radius is only 6.5m (to outer tyre centre).

### Full-air acceleration system

The TR-500E and TR-400E feature a full-air acceleration system for enhanced response. In addition, this system automatically increases the air pressure if it falls below the fixed level. When this function is activated, a buzzer and a lamp on the control panel come on until the pressure returns to the normal level. Acceleration by the foot pedal may be overridden by the hand throttle lever, which allows the RPM to be locked at a given speed.

### Responsive braking to match performance

Both the TR-500E and TR-400E have separate service brake and parking brake systems. The service brakes on all four wheels are powerful hydro-pneumatic disc units, while the parking brake system is a spring-operated air released brake which acts on the front propeller shaft. Lightly touching the pedal causes all four wheels to brake simultaneously and ensures reliable braking power. To help prevent rust and freezing, and thereby increase service life, a circuit air dryer is provided as standard equipment.

### On-rubber duties

The TR-500E and TR-400E can pick and carry or shuttle back and forth on the jobsite with a load on the hook. The "on-rubber" operation switch provided in the cab locks the 2nd boom in the retracted position within the base boom. This feature, together with the hydraulic automatic lock-up cylinders for rear suspension, ensures stable pick-and-carry operations.

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\*Optional

