

# 2007

# TRX450R / TRX450ER

## PRESS INFORMATION

Honda's race-ready TRX450R—available in both manual- and electric-start versions—has won in and dominated virtually every ATV racing discipline, adding two-time Baja 1000 winner to its list of trophies last year.

### Colour

- **Fighting Red**

## Features & Benefits

### Engine/Drivetrain

- Powerful 450cc liquid-cooled 4-stroke 4-valve Unicam engine is based on the award-winning CRF450R motocross and CRF450X off-road engines.
- Compact, lightweight engine designed specifically for ATV usage is worthy of its CRF heritage.
- Unicam valve train provides the light weight of a compact single-cam drive and an optimum combustion chamber shape for maximum power at all engine speeds.
- Unicam valve train features a carburised single camshaft that directly actuates two 36mm steel intake valves. The camshaft exhaust lobe actuates two 30mm steel exhaust valves via a forked, low-friction roller rocker-arm.
- Electric start version features an electric starter that drives the clutch side of the crankshaft to provide superior lubrication of starter gears, and produce a narrow engine with a short, strong crankshaft.
- Lightweight, compact, internal auto-decompression system ensures easy cold-starting and hot-starting operation.

- Kickstart version incorporates ATV-type forward kick-starting for easier starting and lighter weight.
- Crankshaft made of high-strength, low-carbon steel with carburised main journals for maximum durability at sustained high-rpm operation.
- Magnesium cylinder head cover reduces engine weight.
- Forged three-ring 12: 1 compression slipper piston is lighter than conventional designs, revving quickly while maintaining excellent cylinder sealing and high-rpm power.
- Maximum engine speed is  $9,850\text{min}^{-1}$ .
- Double-carburised connecting rod utilises a big-end needle bearing for maximum high-rpm performance and durability.
- Lightweight NiCaSi cylinder lining provides cooler and quieter operation, and reduced friction for extended engine life.
- Press-fitted steel spark plug pipe fits between forked exhaust rocker arms, further contributing to compact cylinder head design.
- 40mm Keihin FCR carburettor features four rollers on the flat slide, resulting in very light throttle effort, smooth operation, crisp throttle response and excellent rideability.
- Carburettor features a throttle position sensor (TPS) that helps maintain linear response throughout the rpm range.
- Twin-sump lubrication system separates the oil supply for the crankshaft, piston and valve train from the clutch and transmission. This ensures a cool supply of oil to the clutch, eliminates clutch and transmission material contamination of the engine oil, and reduces the amount of circulating oil and the required size of the oil pump.
- Vertically split crankcases feature a built-in oil pump, reducing weight compared to conventional designs.
- Left-side countershaft bearing and axle carrier feature double-row bearings for added durability.
- Exhaust system uses a lightweight stainless steel header and muffler.

- Exhaust system and free-flowing muffler increase performance while maintaining low noise levels.
- High-capacity radiator is lighter weight and has revised fin pitch for improved air flow in all riding conditions.
- Compact, flat radiator fan is lightweight and provides highly efficient cooling.
- Gear-driven balancer reduces vibration and drives the water pump. Eight clutch plates provide the surface area necessary to handle the engine's massive torque.
- Durable five-speed transmission with low ratios designed to match engine power characteristics.
- Transmission ratios designed for both racing applications and trail use.

## **Chassis/Suspension**

- Rider's position features low handlebar, seat and footpegs for improved centre of gravity and rider feel.
- Round-tube steel frame with removable aluminium sub-frame is lightweight and durable.
- One-piece cast aluminium swingarm for light weight, maximum strength and durability.
- Independent double-wishbone front suspension with fully adjustable Showa dampers provides 215mm of travel, and features rear-facing reservoirs for increased durability.
- Pro-Link rear suspension with fully adjustable Showa piggyback damper provides 237mm of travel.
- Dual 174mm front disc brakes with dual-piston callipers and high-pressure front brake lines provide excellent stopping power.
- 190mm rear disc and beefy single-piston calliper provide improved stopping power and increased ground clearance.
- Aluminium brake callipers and brackets front and rear reduce weight.
- Removable aluminium rear grabrail and front bumper for reduced weight.

- Lightweight aluminium wheels reduce unsprung weight for outstanding handling.
- Dunlop radial tyres provide superb traction and cornering ability.
- Durable and lightweight O-ring-sealed drive chain.

## **Additional Features**

- Throttle lever and carburettor feature full-closed detection system.
- Exhaust emissions comply with all local regulations for off-road vehicles.
- Convenient oil-level window allows oil checks at a glance.
- Long, narrow seat designed for superior comfort and performance in all operating conditions. Saddle also easy to remove for convenient maintenance access to air filter.
- Adjustable dual headlights with 30-watt bulbs and large reflectors for excellent visibility and distinctive appearance.
- Headlights shaped for aggressive race-derived look.
- Pivot-access brake callipers for easy pad replacement.
- Engine cases protected by high-impact resin skidplate.
- LED tail/brake light for light weight and aggressive appearance.
- CRF-style clutch and front brake lever.
- Wide footpegs for improved rider control.
- Aluminium shift and brake pedals.
- CRF-style handlebar grips.
- Honda Racing-inspired colours and graphics.
- Optional HRC Racing Kit available.

# Specifications TRX450R / TRX450ER U-type

## Engine

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Type	Longitudinally mounted liquid-cooled 4-stroke 4-valve SOHC single
Displacement	450cm <sup>3</sup>
Bore x Stroke	96 x 62.1mm
Compression Ratio	12 : 1
Max. Power Output	30.6kW / 7,500min <sup>-1</sup>
Max. Torque	40.9Nm / 6,500min <sup>-1</sup>

## Fuel System

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Carburation	40mm Keihin FCR flat-slide carburettor with throttle position sensor (TPS)
Fuel Tank Capacity	12 litres (including 3.1-litre reserve)

## Electrical System

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Ignition System	Capacitor Discharge (AC-CDI) with electronic advance
Starter	Electric/Forward kick

## Drivetrain

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Transmission	5-speed
Final Drive	O-ring sealed chain

## Chassis

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Dimensions	(LxWxH)	1,841 x 1,177 x 1,098mm
Wheelbase		1,275mm
Turning Radius		3.7m
Seat Height		822mm
Ground Clearance		105mm
Dry Weight		168kg

## Suspension

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Type	Front	Independent double-wishbone with fully adjustable Showa dampers; 215mm travel
	Rear	Pro-Link with fully adjustable single Showa damper; 237mm travel

## Wheels

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Type	Front	Pressed aluminium
	Rear	Pressed aluminium
Rim Size	Front	10R x AT5.5
	Rear	9R x AT8
Tyre Size	Front	AT22 x 7 10R
	Rear	AT22 x 10 9R

## Brakes

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Type	Front	174mm dual hydraulic disc with dual-piston callipers and sintered metal pads
	Rear	190mm hydraulic disc with single-piston calliper and sintered metal pads

*All specifications are provisional and subject to change without notice.*