Honda fourtrax 250 carburetor diagram

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1985 honda fourtrax 250 carburetor diagram. 1986 honda fourtrax 250 carburetor diagram. 86 honda fourtrax 250 carburetor diagram. 2000 honda fourtrax 250 carburetor diagram. 1984 honda fourtrax 250 carburetor diagram. 1987 honda fourtrax 250 carburetor diagram.

First tune-up the engine. You cannot properly adjust engine idle speed until you've performed all of the required maintenance. Be certain to clean or replace the air filter element. Replace the spark plug if it is worn. Spark plug gap should be 0.8 – 0.9 mm (0.03 to 0.04 in). The standard spark plug is NGK DPR8EA-9. Use NGK DPR7EA-9 if you live in a climate with a temperature Below 5°C/41° F. Use NGK DPR9EA-9 if you do mostly high speed riding. Also, change the engine oil and filter. Be certain to check cylinder compression pressure. It's always a good idea to check valve clearance, too. The 4-wheeler might run poorly because of issues not related to setting the idle. How to Adjust Engine Idle Speed 1. Ride the all-terrain vehicle for 10 minutes. 2. The engine must reach normal operating temperature to accurately set idle. 3. Remove the right side cover, if applicable. 4. Connect the tachometer to the spark plug wire. Get this tachometer, it works great. Use a tachometer to set idle. 5. Turn the throttle stop screw in either direction until the desired rpm is achieved. 6. Idle speed RPM for your vehicle is 1400 ± 100 rpm. At idle speed, the engine should run smooth and balanced. If the idle speed is too low it will run irregular and bumpy. It also decreases fuel mileage. A high idle speed will cause harsh engagement in drive and require more brake effort to hold the ATV in place. Excessive idle can damage the engine. Known for its ergonomics and predictable handling, the 1986 Honda FourTrax 250 was among the icons that pioneered the industry's sport-utility segment. This four-wheeler was compact, rugged, and rode like a champ on sand and dirt tracks. With only four years in the market, the TRX250R's cessation in 1989 came as a shock – leaving loyal followers to speculate on the reason behind its production halt. Dubbed "ATV of the Century" by 4-Wheel ATV Action Magazine, the 1986 Honda FourTrax 250 (a.k.a. TRX250) set the bar for current high-performance ATVs. Honda designed this four-wheeler not only to match Suzuki's Quadracer but also for enthusiasts and expert riders seeking to ride the ultimate quad. Not only did the Honda FourTrax TRX250R come to life during the "golden era," but it also largely influenced the evolution of all-terrain vehicles. This guide will cover its specs and features as well as design improvements that made it one of Honda's top ATVs of all time. The Rise of the FourTrax™ The Honda FourTrax 250 (or TRX250R/X) is a sport ATV produced by Honda from 1986 to 1989. The predecessor to the best-selling '88 FourTrax 300, the quad featured a 246-cm3 air-cooled 4-stroke OHC engine and boasted adjustable suspension, 71-mph top-end speed, and close to 20 hp power output. This 250-class machine strengthened Honda's breed of sport/rec-utility vehicles and was responsible for putting the FourTrax name on the map. Lightweight and nimble, the TRX250R entered the ATV scene alongside the TRX200SX and was Honda's response to Suzuki's 1985 Quadracer. Some 1986 Honda FourTrax 250 parts were borrowed from the quintessential ATC250R, including the latter's power mill and rear suspension. But the FourTrax did not copy the "Holy Grail of Racing" all the way through. Instead of a pure-sport design, the TRX 250 had front and rear utility racks. Furthermore, its engine was detuned by reducing compression and making the cylinder porting less aggressive. These changes helped guarantee the reliability of the vehicle despite its added weight. The Entrepreneur's Bread and Butter Having only six of its components purchasable from its manufacturer, the TRX250R was considered a blessing by many parts companies and dealers. In the late '80s, most available aftermarket parts were made for the 250-cc FourTrax, with the rest of the ATVs only coming in second. Because the TRX 250 was used primarily for racing, manufacturers prioritized remaking components that suffered abuse from the said activity or any other type of strenuous riding. Thanks to the 1986 Honda FourTrax 250, businesses supporting the off-roading industry and well-known racing outfits stayed afloat. Highlights Examples of widely re-produced FourTrax parts include its die-cast aluminum clutch basket. This component seemed particularly frail, especially when subjected to power increase (often the case in racing conditions). The initial aftermarket versions of the clutch basket (view on Amazon) were machined steel pieces, changed to billet aluminum in 1991. Another example is the vehicle's framework. The stock chassis (made of mild steel) seemed more suitable for leisurely riding than for competitions, as it was more prone to develop cracks in races. CT Racing was the first outfit to produce stronger, race-appropriate replacement frames for the wheeler. Aftermarket parts made specifically for the FourTrax 250 were widespread not only during its heyday but also until the early 2000s. Numerous manufacturers offered replacements for various TRX250 parts in steel/aluminum and having either stock or altered geometry. While parts were in circulation for a very long period, the actual four-wheeler was not. The Honda FourTrax 250 only lasted four years under the limelight before finally giving way to its larger-displacement, 4-stroke version. 1986 Honda FourTrax 250 Specs & Features Engine There are some discrepancies between the service manual and non-manufacturer resources concerning the 1986 Honda FourTrax 250 carburetor (view on Amazon). In the manual, it is 27 mm but shows as 34 mm in Wikipedia. There is also a noticeable difference in the quad's compression ratio and cooling system information. Online, the powerplant is described as a water-cooled, counterbalanced, reed valve engine. What has not changed is its jetting requirements, which need adjusting from #128 to #122 main jet (1/4 screw in) when riding in altitudes above 5,000 feet (1,500 m). Conversely, information about the four-wheeler's gas mileage is a bit obscure. But since its 300-class sibling can run 25 miles with only its reserve fuel to spare, it's probably safe to assume the same fuel efficiency from the 250-cc FourTrax. Engine Type4-Stroke OHCCylinder ArrangementSingle cylinder, inclined 20°Cylinder Compression12.5 ± 1.0 kg/cm2 (178 ± 14 psi)Carburetion System27-mm dual-valve carburetor x 1 (manual)34-mm Keihin PJ05A/PJ07B, oval-slide x 1 (Wikipedia)Engine CoolingAir cooling (manual); Liquid cooling (Wikipedia)Engine FuelUnleaded gasoline of at least PON 86 or RON 91, containing MTBE (Methyl Tertiary Butyl Ether), < 10% ethanol, or < 5% methanol w/ appropriate cosolvents and corrosion inhibitorFuel Capacity2.6 US gallons (reserve – (0.5 US gal)Bore x Stroke Ratio74 x 57.3 mm (2.9 x 2.3 in)Compression Ratio9.0:1 (manual); 7.5:1, 7.7:1 (Wikipedia)Displacement246 cm³ / 15 in³Valve Clearance Cold Intake0.08 mm (0.003 in)Valve Clearance Cold Exhaust0.08 mm (0.003 in)Horsepower19.3 hp/19.6 PS (14.4 kW @ 7,000 RPM)Maximum Torque19.9 Nm (2.03 kgf-m, 14.7 ft-lb @ 6,000 RPM)Top Speed71 mph (114.3 km/h, Wikipedia)Starter SystemForward kick start mechanismLubricationForced pressure (wet sump)Engine Oil & Quantity2.1 L (2.2 US quarts) – at draining; 2.5 L (2.6 US quarts) – disassemblySAE 10W-40 4-stroke engine oil w/ an API grade of SJ meeting JASO T903 MAAlternatives: SAE 5W, 10W-30, 20W-40, 20W-50 w/out graphite or molybdenum additives Drivetrain Like its 300-class sibling, the Honda FourTrax 250 transfers power to the wheels via a 5-speed semi-automatic transmission inclusive of a reverse gear and a super-low 1st gear (this changed to a six-speed close-ratio manual transmission for succeeding versions). It features a maintenance-free shaft drive directly aligned to the wheels, a ball-and-race-bearing steering system, and a gear-driven counter-balancer that lends to the FourTrax's improved drivetrain efficiency, superb handling, and seamless power delivery. ClutchWet multi-plate, semi-automatic, centrifugal typeTransfer, Transmission Type5-speed constant mesh w/ reverse (manual)6-speed sequential shift, no reverse (Wikipedia)Gearshift PatternLeft-foot-operated return systemForward: N-S/L-1-2-3-4; Reverse: N-RDrive System520 O-ring chain and sprocket (13/39)Primary Reduction Ratio2.407 (65/27)Final Drive Ratio5.684Transfer Gear RatioS/L – 4.083 (49/12)1st – 2.389 43/18)2nd – 1.609 (37/23)3rd – 1.179 (33/28)4th – 0.906 (29/32)Reverse – 5.397 Ignition For its charging system, the TRX250R has a fully transistorized regulator powered by a 12V 12 Ah YTX12-BS battery (view on Amazon) with assembled dimensions stated below (not including wiring harness and mounting accessories). This ignition system aptly complements the vehicle's kick-starter system. Unlike other 4x4s, the FourTrax does not require a different spark plug for the cold climate or extended high-speed riding. However, it may need a trickle charger as current battery formats may have a slightly lower amperage than stock. IgnitionCDI (Capacitor Discharge Ignition)Ignition Timing13° B.T.D.C @ 1,400 RPM ± 100 – idle31° B.T.D.C @ 3.500 RPM – full advanceSpark PlugNGK DR8ES-L or NIPPON DENSO X24ESR-UGap: 0.6–0.7 mm (0.024 – 0.028 in)Tightening Torque: 15-20 Nm (1.5-2.0 kgf-m, 11-14 ft-lb)GeneratorTransistorized, non-adjustable regulatorGenerator Max Output13 – 15V 200 W @ 5,000 RPMFuse20 Amp (main); 15 Amp (receptacle, sub-fuse)Battery12V (12 Ah)/10 Hr, YTX12-BS formatBattery Dimensions (L x W x H)6.00 x 3.44 x 5.12 in (150 x 87 x 130 mm) Tires & Brakes Like most Honda ATVs in the '80s, the FourTrax had Ohtsu® tires (front and rear), which later changed to Dunlop® radials. The stock tires are good all-around knobbies. But if you want improved traction and better cornering capability, ITP Holeshot XCR Sport ATV Tires (view on Amazon) would be excellent replacements. Just avoid going beyond the range of 17-23 kPa (0.17-0.23 kgf/cm2, 2.4-3.4 psi) for front tires and 12-18 kPa (0.12-0.18 kgf/cm2, 1.8-2.6 psi) for rear ones when inflating or airing them down. Front Tire, off-road/road air pressureOhtsu H-trak R/T 101 or Dunlop KT781A AT21 x 7-10, tubeless20 kPa (0.20 kgf/cm2, 2.9-3.0 psi)Rear Tire, off-road/road air pressureOhtsu H-trak P/V 701Z or Dunlop KT885 AT25 x 12-9, tubeless15 kPa (0.15 kgf/cm2, 2.2 psi)Rim Size (F/R)5.5 x 10 DC / 9.25 x 9 DCFront Brake TypeHydraulic-operated, leading/trailing shoeRear Brake TypeCable-operated, leading/trailing shoe Suspension Aside from its generous wheel travel, the quad's suspension system features a remote damper reservoir, compression, and rebound adjustments. Additionally, its caster angle provides a good balance between high-speed stability and steering feel without compromising the vehicle's performance-oriented manners. FrameSemi-double cradleCaster, Trail8°, 42 mm (1.65 in)Toe-in0 ± 7.5 mm (0 ± 0.30 in)Turning Radius1.5 m (5 ft) – unverifiedFront Suspension Type, TravelDual A-Arms w/ 5-way preload-adjustable Showa Shocks, 200 mm (7.9 in)Rear Suspension Type, TravelSingle compression rebound & preload-adjustable Showa shock w/ Pro-Link linkage, 231 mm (9.1 in) Dimensions & Capacities The Honda FourTrax 250's added weight may somewhat adversely affect its reliability. But it is also what makes the quad a sport UTV and lends to its impressive hauling capabilities. As if that were not enough, the wheeler offers a combined rack capacity of 90 Kg and a 5-lb storage compartment found at the back of the rear fender. Length1,875 mm (73.8 in)Width1,080 mm (42.5 in)Height1,020 mm (40.2 in)Seat Height (Unloaded)765 mm (30.1 in)Ground Clearance160 mm (6.3 in)Wheelbase1,235 mm (48.6 in)Track (F/R)800 mm (31.5 in) / 800 mm (31.5 in)Dry Weight212 Kg (467 lbs) – '85 TRX250; 217 Kg (478 lbs) – after '85Rack Capacity (F/R)30 Kg (66.1 lbs) / 60 Kg (132.3 lbs)Vehicle Load Capacity Limit210 Kg (450 lbs)Tongue Weight14 Kg (30 lbs)Maximum Trailer Weight383 Kg (850 lbs) Exterior & Lighting The FourTrax 250 has a steel frame and plastic body panels that are tough and easy to clean. It also comes with footpegs, utility racks, a front brush guard with a tab where you can mount a winch, and a saddle seat. Front handlebar controls include front brake and throttle levers on the right grip and the choke lever, steering lock, and remainder of the switches on the left. Light indicators and the key switch are in the center console. Fuel GaugeStandardIndicator LampsStandardEngine Stop SwitchStandardIgnition Switch / Start ButtonStandardHeadlight Dimmer SwitchStandardHeadlightHi-lo beam, 12V 45/45 W x 2Taillight12V 3.4 W x 2Indicator Lights12V 3 W (reverse, neutral); 12V 3.4 W (engine oil temperature) Improvements Post-1986 The riding community demanded so much from this wheeler right out of the gate that it underwent several changes despite its short 4-year production run. Upgrades initially involved only tires and brakes but eventually touched on drivetrain components and styling. Here are a few of them: Tires evened out to 22 inches for both front and rear.Rear brake changed to hydraulic disc with twin-piston calipers.The engine of the 1987 model year received a connecting rod made 5 mm longer, accompanied by a piston raised the same size.Honda upgraded the cylinder of the 1987 TRX 250R to include a bridged intake.The compression ratio for the 1988 FourTrax increased to enhance its power output and bring it closer to its competition.The 4×4's chassis shed 25 lbs when compared to the previous year's model.Its aluminum swingarm shortened while the frame lengthened – curing the quad's "loop out" problem).The position of the headlights was moved from the handlebars to the front of the hood.Red fenders were made exclusive for the 1988 Honda FourTrax 250s.The 1989 Honda FourTrax TRX250R used a needle bearing in the clutch pressure plate.1986 Honda FourTrax 250 plastics included white for its final year. Consequently, the above improvements largely contributed to the 1986 Honda FourTrax 250's huge success. The quad left such an imprint on Honda's avid following that the firm seemingly resurrected the 4×4 with its production of 2012 Honda FourTrax Recon ES (TRX250TE) models. With their red body panels and black steel racks, these four-wheelers were highly reminiscent of the TRX250R and featured the following: LCD display22-mm CV carburetorChange in engine displacement from 246-cc to 229-ccESP-equipped, automatic-clutch versionsDirect rear drive-shaft Honda FourTrax 250 Price The original price of the '86 Honda FourTrax 250 was $3,697, only increasing by $500 for the remainder of its production period and versions. On the other hand, the quad's resale values could go anywhere from $265 to $2,015. It all depends on the vehicle's overall condition and whether it has been recently serviced or equipped with aftermarket accessories. The table below shows the MSRPs for all FourTrax 250 models: Year – Trim – Model NumberList PriceRetail/Trade-In Values1986 Honda 250 FourTrax (TRX250R)$3,697$265 – $1,5701987 Honda FourTrax TRX250X$4,198$265 – $1,6451988 Honda FourTrax TRX250X$4,198$265 – $1,7051989 Honda FourTrax TRX250RK$4,198$335 – $2,015 It won't be easy to find a TRX 250 in near-mint condition. If there were any existing, I do not think that the owner would let go of such a valuable four-wheeler. Thankfully, you can still stumble on rare finds on Craigslist and other trader sites for less than $1,300. Typically, units for resale or auction are in good shape and running condition. However, expect some cracks in the fenders and other visible cosmetic damage. About Honda Honda Motor Company Ltd. is not only one of the world leaders in automotive, AI, robotics, and energy solutions but also a forerunner of the ATV industry. Founded in 1946 by Soichiro Honda, the 1986 Honda FourTrax 250 maker traces back its roots to building and selling motorized bicycles with surplus engines. Over time, the Japanese firm transitioned from mass-produced piston rings, automation of military aircraft propellers, and race cars to introducing innovations in personal mobility, therapeutic machinery, and hydrogen-powered vehicles. Thanks to its origins, Honda has acquired a wealth of technical expertise that it now utilizes to lead the global market in commuter and dynamic sports motorcycle production. Conclusion – 1986 Honda FourTrax 250 Review Nearly four decades after its final production, the 1986 Honda FourTrax 250 is still sought after in the ATV market. Whatever the reason may be – be it the quad's premature production halt, praiseworthy features, or untapped potential – most off-roaders can agree that its chapter is not closed yet. This classic 4×4 continues to thrill adventurers who are reminded of its prestige and see the four-wheeler for the powerhouse that it is.