

# VENTURE... INTO THE OUTDOORS

The Venture FJ Cruiser is the ultimate adventure-ready scale RC trail truck. Developed from the ground up to be the most advanced and driver-friendly scaler truck available, the HPI Venture is ready for trail driving across mountains, streams and more. It's the perfect trail companion for anyone from weekend ramblers to globe-trotting adventure heroes!

The Venture combines a realistic front-motor position and formed steel chassis rails with a realistic suspension and drivetrain. The Venture chassis is finished with the fabulous look of the celebrated Toyota FJ Cruiser for a fantastic scale off-road experience only HPI can deliver! With a fully licensed replica body that includes front and rear bumpers, mirrors, functional roof rack and swing-away spare tire mount, the Venture brings total scale realism to crawler fans right out of the box. Underneath the body, the steel C-channel chassis rails support a front-mounted motor, transmission and servo, plus a central transfer case that sends power to telescoping driveshafts and solid axles with metal diff covers. Authentically scaled oil-filled shock absorbers and full-lime locked differentials work with the realistically treaded tires for confident driving in all off-road situations.



# **VENTURE VERSIONS**



There are a variety of different colors to choose from for your Venture FJ Cruiser pre-built RTR (Ready-To-Run) crawler truck, or custom build your own truck from the ground up with the Venture SBK Scale Builders Kit!



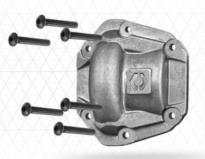
# OFFICIAL REPLICA OF THE TOYOTA FJ CRUISER

The Toyota FJ Cruiser body included with the Venture RTR kit is completely outfitted with a range of fabulous scale items that would be extras on many other scaler trucks. In addition to the officially licensed replica FJ Cruiser body on its own, you'll find a pair of side mirrors, a functional roof rack ready for a range of scale accessories, a working swing-away spare tire mount on the back bumper, working D-ring shackles on the front and rear bumpers, tubular brush guard and mounts for LED lights on the front bumper, and adjustable-width rock rails that help the truck glide over tough obstacles.



## SCALE CHASSIS DESIGN AND LAYOUT

The Venture FJ Cruiser features a formed steel C-channel chassis and cross braces as the foundation for a realistic truck chassis. To make sure the truck has a front weight bias that improves its climbing ability, the 35-turn crawler-spec motor and the transmission are mounted right up front - just like in a real truck! For additional weight up front, the steering servo is also mounted to the chassis next to the motor.



## **ALUMINUM DIFF COVERS**

The Venture FJ Cruiser is packed with awesome scale details - and real metal diff covers are just one of them! Known as the "pumpkin" by most off-roaders, the differentials on each axle on the Venture feature aluminum covers for an instant custom look. You can also customize the diff covers yourself by polishing them or painting them your favorite color!

#### SWING-AWAY TAILGATE

With a functional swing-away spare tire mount on the back bumper, the Venture adds a super cool feature that is unique among all stock scaler trucks! Fitted with a real, ready to use spare tire (the all-new Rockthorn off-road tire on a black CR-10 wheel!), the spare tire mount also helps hold the back of the replica Toyota FJ Cruiser body in place.

#### **FRONT & REAR BUMPERS**



The Venture FJ Cruiser features sturdy front and rear bumpers to protect the replica body and the chassis from the inevitable scrapes and incidents that come with off-road trail driving. The front bumper is fitted with tubular brush guards and holes where you can mount LED lights for night driving. Both bumpers feature functional D-ring shackles so you can use ropes and bungees to strap down scale gear or attach winch



# FUNCTIONAL ROOF RACK

No trail run is complete without a full set of scale overland accessories like a rolled-up tent, sleeping bags and more, and the roof is the perfect place to store that while driving from campsite to campsite. Side and rear rails let you use bungees to hold down your gear for extra scaler points - or use a cargo net for ultimate scale realism!



### **ROCK RAIL SLIDERS**

Robust side bars, known as rock sliders or rock rails, allow the Venture to slide over obstacles that are just a bit too tall for it to completely clear. Stretching from the front to rear wheel openings, they serve to aid off-road performance as well as protect the body from scratches by ground obstacles like rocks and boulders. Although they are the perfect fit for the replica Toyota FJ Cruiser body, they can be adjusted in width to fit other scaler bodies.

#### **ROCKTHORN OFF-ROAD TIRES ON CR-10 WHEELS**

Venture FJ Cruiser features all-new Rockthorn tires with thick, self-cleaning tread blocks for driving on hard-packed dirt, gravel, wet or dry rocks, loose dirt, mud and more. The Rockthorn tires have additional sidewall tread to help get the truck over extra-difficult obstacles like slippery rocks and tree roots. The tires are mounted on great-looking CR-10 1.9" beadlock-style multispoke wheels, which themselves feature center hub caps that hide the wheel nuts for maximum scale realism.





### **BALANCED WEIGHT DISTRIBUTION**

The chassis layout of the Venture FJ Cruiser, with the forward-mounted motor and transmission, plus the chassis-mounted servo (CMS), puts most of the weight at the front end, giving the Venture ultra-realistic driving performance and an advantage over most other scale trucks when hitting the trail.

VENTURE

### **ALL-METAL TRANSMISSION**

The Venture FJ Cruiser is the first RTR scale truck to feature strong metal gears throughout its transmission. With a main gear set taken from the ultrafast and ultra-strong Savage XS Flux, the Venture drivetrain can handle LiPo power up to 3S without any upgrades.



# PERFECT OFF-ROAD TRAIL GEARING

With the transmission drive ratio of 1.53:1, the overall drivetrain ratio is 7.6:1 for a good all-around gearing and a final drive ratio of 30.4:1 out of the box. This will get you up or down most trails and get you started climbing difficult inclines. With pinion gears of 15-28 teeth, you can get final drive ratios of 30.4:1 to 16.2:1. You can easily alter the ratio with an optional 56-tooth spur and pinion gears from 19-32 teeth for final drive ratios of 22.4:1 to 13.3:1.

#### **CENTER TRANSFER CASE**

In addition to the motor and transmission at the front, the Venture FJ Cruiser features a centrally mounted transfer case with a gear ratio of 1.5:1. Whilst putting the maximum amount of weight to the front of the chassis, the central location of the transfer case allows the drivetrain to sit low and down the centerline of the chassis so the driveshafts are perpendicular to the axles for maximum power transfer to the tires.

# LOW ANGLE DRIVESHAFTS

The low angle and central position of the driveshafts allows for maximum power transfer, so as much power as possible reaches the tires. The driveshafts are composite slider-style shafts with universal joints at each end, where they meet the transfer case and axle. At the axles, 13-tooth pinions and 43-tooth ring gears (axle ratio of 3.31:1) sit inside the "pumpkin" or center of the axles. Each differential is equipped with metal diff lockers for pure 4WD traction at all times.

#### **ADJUSTABLE SLIPPER CLUTCH**

An externally adjustable slipper lets you tackle slick rocks and loose surfaces without having to make big changes to the setup of the Venture. Correct adjustment gives you the perfect amount of power and grip by reducing wheelspin - and the easy to reach adjustment nut lets you make quick adjustments on the trail.



#### ADVANCED TRUCK STEERING

The steering system for scale RC trucks is very important - and that's why the Venture FJ Cruiser was designed with the latest advancements in steering and suspension for strength as well as realism. This makes the Venture the most versatile scaler truck on the trail With a Chassis-Mounted Servo (CMS) and Behind The Axle (BTA) steering, plus a functional Panhard bar, you get perfect scale looks with realistic and ideal performance, no matter what terrain you're hitting. Aluminum mounts for the Panhard bar and aluminum steering plates add the strength and durability to give you total confidence on the trail.

#### PANHARD BAR

A Panhard bar on aluminum mounts provides extra scale looks, because it's featured on most off-road trucks and vehicles. The purpose of the Panhard bar is to maintain zero bump steer as the axle rises over bumps and falls into holes and ruts. This helps the Venture FJ Cruiser go exactly where you want it with precise steering control!

#### CMS (CHASSIS-MOUNTED SERVO)

The realistic steering for the Venture FJ Cruiser begins with a Chassis-Mounted Servo. With a strong SS-20WR servo firmly mounted at the front of the chassis, the weight of the servo aids the front weight bias of the Venture. The solid metal steering link also looks like it came out of a real truck, and connects to the tough steering knuckle. The high torque (6.5kg-cm/90 oz-in at 6V) SS-20WR servo is water-resistant so you can take it through water, snow and mud without fear of damage, and if you want to upgrade the steering it's easy to drop in an ultra-powerful servo for maximum off-road steering.



#### ZERO ACKERMANN STEERING

For a super-tight turning radius, the Venture FJ Cruiser features zero Ackermann steering angle. This basically means you have equal steering angles for the front tires when they are steered all the way to the left or right - the maximum amount of steering for the best performance when tackling rugged off-road terrain



#### **BTA (BEHIND THE AXLE) STEERING**

The Venture FJ Cruiser features Behind The Axle (BTA) steering linkage out of the box, so you don't have to do any complicated modifications to get maximum performance on the trail. A tough steel rod connects the two metal-reinforced steering knuckles together behind the front axle. With all of the steering linkage kept out of the way of potential obstacles such as rocks and roots, the truck has a much better approach angle than with standard crawler kit steering designs.



#### MAXIMIZED CLEARANCE ANGLES

The Venture chassis is loaded with potential, making it extremely versatile on the trail and up tough climbing routes. Its capability lies in several factors, including offroad friendly clearance angles from the tire contact points to the bumpers and chassis, as well as good ground clearance thanks to its minimal diff case size.

- Break-over angle: 44.5 degreesApproach angle: 55 deg
- Departure angle: 45.5 deg
- Max climb angle: 49 degMax tilt angle: 28 deg

- Axle articulation: 30 deg
  Ground clearance 68mm capable: (2.7")
- Ground clearance at standard ride height 60mm: (2.4")
- Axle ground clearance 32mm: (1.3")



#### TRAIL-READY SUSPENSION

Good suspension is at the heart of every off-road vehicle, and this principle is evident everywhere you look on the Venture chassis. From the aluminum mounts on the axles to the dual-stage shock absorbers, the Venture FJ Cruiser is packed with advanced features unseen on other scale crawlers - without purchasing optional parts! The Venture can perform on any trail, thanks to adjustable oil-filled shock absorbers and standard-sized 12mm hex hubs to fit a huge range of scale wheels and tires.



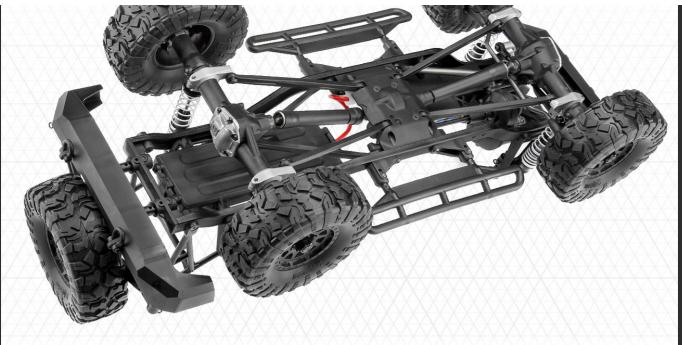
#### **RUGGED ALUMINUM PARTS**

Enhancing the look and style of the Venture chassis are aluminum suspension parts that are a fantastic throwback to truck kits from RC's retro golden age. From the axle covers which have the HPI hex logo on them, to the thick shock and rod link mounts, the real metal parts add a great look to the Venture that other scale trucks can't match! Both Panhard bar mounts are also aluminum, as well as all four hex hubs for the wheels. Each hex hub is also held in place on the axles by steel setscrews for additional security.





https://www.hpiracing.com/en/kit/117165



### **3-LINK SUSPENSION**

The Venture features a sturdy and reliable 3-link suspension front and rear. Two composite fixed links form the lower suspension links front and rear. The upper links consist of an alloy single link for the front, and a Y-shaped composite link at the rear. If you prefer, the rear suspension links can be easily swapped to 4-link suspension with the #117079 Option 4-Link Set.

#### DUAL STAGE COIL-OVER SHOCKS

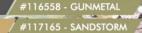
For ultimate trail tuning, the alloy shock absorbers feature dual-stage shock springs. This means the short spring softens the gentle bumps and dips you encounter while driving, and the longer firm spring catches the harder hits, such as when the Venture is descending a steep embankment. HPI designers have found the perfect combination of springs and oils for all-around driving, but you can fine-tune the ride of your truck with different shock oils and springs to make the Venture perform at its best on the trail.

# ADJUSTABLE WHEELBASE

The Venture chassis lets you change the wheelbase from 290mm to 315mm (11.4 to 12.2 inches) by modifying the length of the linkage, which can change the look and driving of the truck. If you fit a different body to customize your Venture, adjusting the wheelbase lets the tires fit in the wheel openings, which helps the truck look perfectly scale.

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315mm: (12.2")





TOYOTA

# SC-3SWP3 CRAWLER EDITION ESC

The Venture FJ is equipped with a highly versatile and fully waterproof HPI SC-3SWP3 Crawler Edition electronic speed controller, which is packed with a full range of adjustments and capabilities. In addition to being able to take power from the included 2000mAh NiMH (nickel metalhydride) rechargeable battery pack, you can swap the battery for a 2S or 3S LiPo (lithium-polymer) battery for extra power and runtime. The Venture on 3S is a beast on the traill

The SC-3SWP3 Crawler Edition also features our HDC Hill Descent Control adjustable electronic drag brake system to make driving down steep declines more controllable at all angles - just like modern luxury offroaders!

#### HIGH TORQUE SS-30MGWR STEERING SERVO

The water-resistant HPI SS-30MGWR steering servo is the ideal companion for the Venture electronics package. This is a high torque servo with up to 8kg-cm holding power at 6V, plus it's water-resistant so it can easily handle splashes and water drops when driving through puddles, snow and mud. Mounted directly to the chassis next to motor, it provides extra weight over the front axle to enhance the front weight bias of the Venture.

- Operating Voltage: 4.8-6V
- 4.8V: Speed: 0.19 sec/60 degrees, Torque: 6kg-cm/83 oz-in
  6V: Speed: 0.15 sec/60 degrees, Torque: 8kg-cm/111 oz-in
- 6V: Speed: 0.15 sec/60 degrees, Torque: 8kg-cm
  Servo Spline: 25T





#### TF-41 2.4GHZ RADIO SYSTEM WITH WATERPROOF RECEIVER

The popular steering wheel & pistol grip HPI TF-41 radio system controls the Venture on its travels, giving you total control of the steering and throttle/brake. The carry handle makes it convenient to take on your trail walks, and the shape of the controller lets you set it on the ground for easy picking it up by the grip. The folding antenna allows it to take up the minimum amount of space in your backpack on the way to the trail. The RF-41WP receiver is fully waterproof, so you don't have to think about what you're driving through. For extra protection, the receiver is encased in a secure receiver box which also allows you to install your own radio set.

TURECENT

# 35-TURN CRAWLER SPEC MOTOR

A sealed, brushed motor with 35 turns provides the perfect mix of speed on the trail and crawling torque for climbing steep embankments and obstacles. It's a standard 540-size motor, so it's easy to change the motor for something else you've got in your collection. Thanks to the all-metal gears in the transmission and standard electronics sizing, you can easily upgrade to a brushless motor and 35 battery for extra speed and wheelspin to get over anything.

#11716

SANDSTOR



EVERYTHING YOU NEED INCLUDED IN THE BOX - CLICK TO WATCH

#### **FEATURES**

- · Factory-assembled & pre-painted electric-powered full-time 4WD 1/10 scale off-road truck
- · Officially licensed replica Toyota FJ Cruiser body Functional roof rack plus side mirrors
- Front bumper features brush guard, light mounts and D-ring shackles
- · Rear bumper features swing-away spare tire mount and D-ring shackles
- Adjustable rock rail side sliders help the truck get over tough obstacles
- Formed steel C-channel chassis rails
- · Front-mount motor and transmission position for ultimate scale realism
- Front weight bias improves climbing traction and provides more realistic driving
- · All-metal gear drivetrain for extreme durability Central transfer case with slider driveshafts to front and rear differentials
- Transfer case prevents motor stall for the best climbing action
- Transfer case also straightens & lowers center driveshafts for more efficient power transfer
- Axles feature small diff case or "pumpkin" size for best possible ground clearance
- Aluminum differential pumpkin cover
- · Locked differentials for superb off-road climbing traction
- 12mm aluminum hex hubs to fit any available crawler wheels
- Shock towers have multiple shock mounting positions to allow for wheelbase options
- BTA (Behind The Axle) steering linkage for improved approach and departure angles Panhard bar for scale looks and optimized geometry with zero bump steer
- · Zero Ackermann high steer knuckle design for improved obstacle clearance and tighter turning radius
- 3-link front and triangulated 3-link rear suspension Oil-filled aluminum coilover shock absorbers (63-90mm stroke)
- Adjustable threaded shock bodies for quick ride height changes
- Dual-stage shock springs
- Aluminum lower link/shock mounts
- · Aluminum panhard mounts
- CMS (Chassis Mounted Servo) realistic steering setup
- Adjustable body mounting to fit any style of off-road body
- · Fully braced rear body mounts
- All-terrain Rockthorn 109mm x 38mm soft S-Compound tires with chunky tread blocks
- Beadlock style CR-10 ten-spoke 1.9" wheels
- HPI 35-turn crawler spec motor provides speed as well as crawling torque
- HPI waterproof SC-3SWP3 Crawler Edition adjustable electronic speed control
- HPI water-resistant SS-20WR steering servo HPI 2.4GHz radio system with carry handle
- HPI waterproof 2.4GHz receiver in protective case
- Full set of ball bearings
- · Includes NiMH battery and charger and 4 AA batteries for radio transmitter

# **SPECIFICATION**

#### DIMENSIONS

- Length: 527mm (20.7")
- Width: 227mm (9")
- Height: 238mm (9.4") with roof rack, 217mm (8.5") without (will vary depending on tire choice and suspension settings)
- Wheelbase: 311mm (12.3")
- Front overhang: 101mm (3.9") • Rear overhang: 135mm (5.3")

#### WEIGHT

- Running weight: 2.4kg (5.3lbs)
- Weight without battery: 2.1kg (4.7lbs) • Body Weight: 0.21kg (7.44oz)
- CAPABILITY

- Break-over angle: 44.5 degrees
- Approach angle: 55 deg
- · Departure angle: 45.5 deg
- Max climb angle: 49 deg
- Max tilt angle: 28 deg · Axle articulation: 30 deg
- Ground clearance 68mm capable: (2.7")
- Ground clearance at standard ride height 60mm: (2.4")
- Axle ground clearance 32mm: (1.3")

#### GEARING

- Drivetrain ratio: 7.6:1
- Transmission gearing: 1.53:1
- Axle gearing: 3.31:1
- Transfer case gearing: 1.5:1



# COMPREHENSIVE INSTRUCTION MANUAL

All HPI Racing kits include a detailed multi-language instruction manual. Exploded diagrams and extensive information about your Venture FJ Cruiser ensures that you have the know-how when it comes to maintaining and upgrading your kit. You can also download a digital version of the manual to your personal electronic device and keep it with you for easy reference on the go



#### DOWNLOAD THE FREE VENTURE POSTERS HERE!

Brighten up your RC workspace with a FREE poster featuring the Venture! Just click here to download it, then print it out or use it as your tablet or computer wallpaper!



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#117255 - VENTURE SBK

#### MYHPI: THE ULTIMATE RESOURCE FOR YOUR VENTURE

Once you've got your Venture, add it to your MYhpi garage to get direct information about what will make your truck grippier, more adjustable and easier to tune. Add your entire HPI collection to your MYhpi garage so you can directly access manuals, videos, tips and help for each of your HPI cars!

#### **CUSTOMIZE YOUR VENTURE**

The best part about scale RC is making your Venture reflect your own personality! Customize your Venture with a huge range of 3rd party options such as the lights, winches and other parts shown in the picture above. The clear FJ Cruiser body is also available separately so you can go all-out to customize your Venture - that's what scale RC is all about Any other 1/10th scale scaler-style body will fit as well, thanks to the adjustable wheelbase and body posts, and the large braces for the rear body posts work great for tall SUV style bodies.

#### **#117165** VENTURE CRAWLER RTR TOYOTA FJ CRUISER – SANDSTORM





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