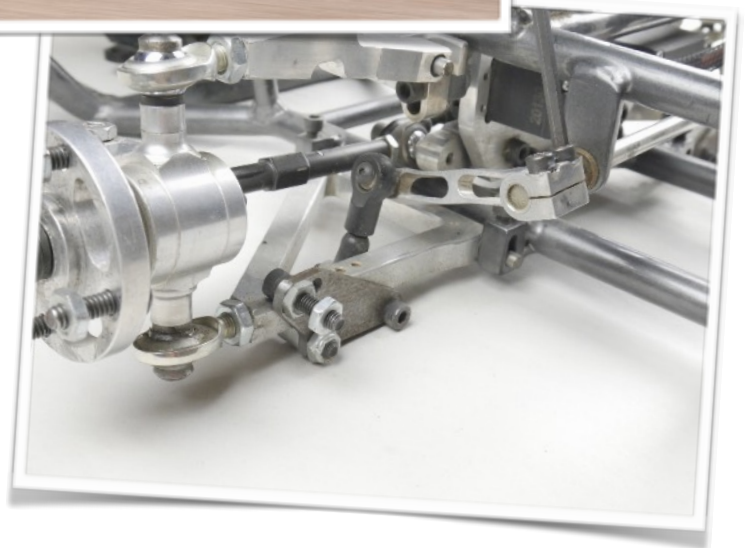
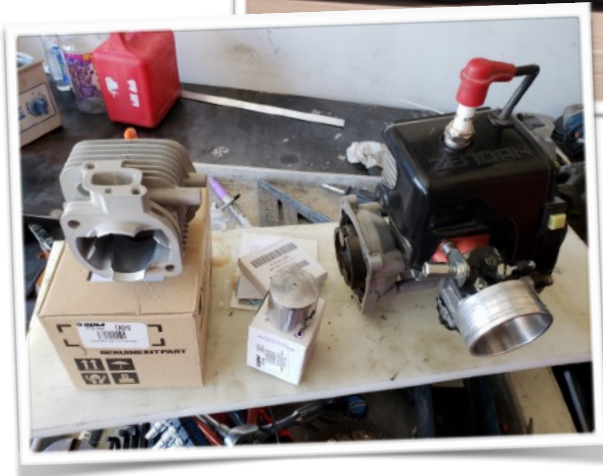


Quarter Scale RC 101



Getting Started

Quarter Scale Buyers Guide

Getting Started

What you need to hit the pavement.

First off we'll assume you'll be starting out with a Stock car chassis class. Limited Sportsman (novice), Sportsman, Grand National, Super Truck, and East Coast Modified (ECM) all are based

off the same style of chassis (stock car aka sportsman). We will hold off on addressing the Sprint Cars, these chassis are different than the sportsman chassis, they share the same style of running gear, power plant, drive train, etc, but the Chassis is different, we do not suggest that some one new to the hobby start with a sprint, unless they have a strong RC

background. Sprint cars, as well as ECM cars are open wheel cars, this type of racing is very exhilarating, however a lot more damage to the car occurs if even minor contact happens.



Buying out a racers program is by far the quickest most economical way to getting started. A vast majority have started just this way, however for the purpose of this article we will list all new from starch racing program.

Race car :

There are currently five manufactures of sportsman chassis. All manufactures are USA based shops, these are all labor of love shops no mass production here.

Duggins MotorSports : Sonic chassis South Carolina

Bobs Motorsports : Lightning chassis and Bullseye chassis Nevada

JR Quarterscale : Vison VX-2 and VX-1 chassis Ohio

WCM : K1EVO2 chassis Indiana

TSR : TNT chassis and TL3 chassis (2019) North Carolina

Across the board all these chassis's have several characteristics in common.

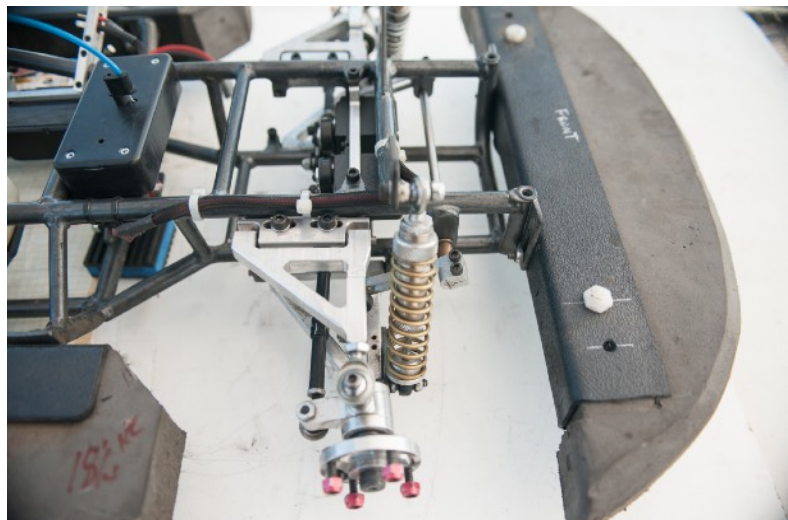
They are tubular frame designed either brazed or welded.

Suspension and drive train components are milled from aluminum.

Belt driven.

Four corner independent suspension.

Power plant is a 23cc spec 2 stroke motor.



"Racers Special"

Most manufactures offer a variant of the "racers special" . The "racers special" for the most part includes the following

~ frame (typically a tubular chromoly 4130 frame either brazed or welded (some MIG some TIG). by far the single most expensive component
Priced from 450-700 hundred dollars

~ suspension and drive components (milled aluminum 7075 and 6061 i.e., A arms , sway bar arms , trailing arms , steering hubs/spindles, steering rack, wheel hubs , axle ,etc) prices range from about 25 dollars to about 100 dollars

~shocks and springs (check with manufactures to see if full set of alternate springs are included or just the four corners) a set is priced from 230-300 dollars

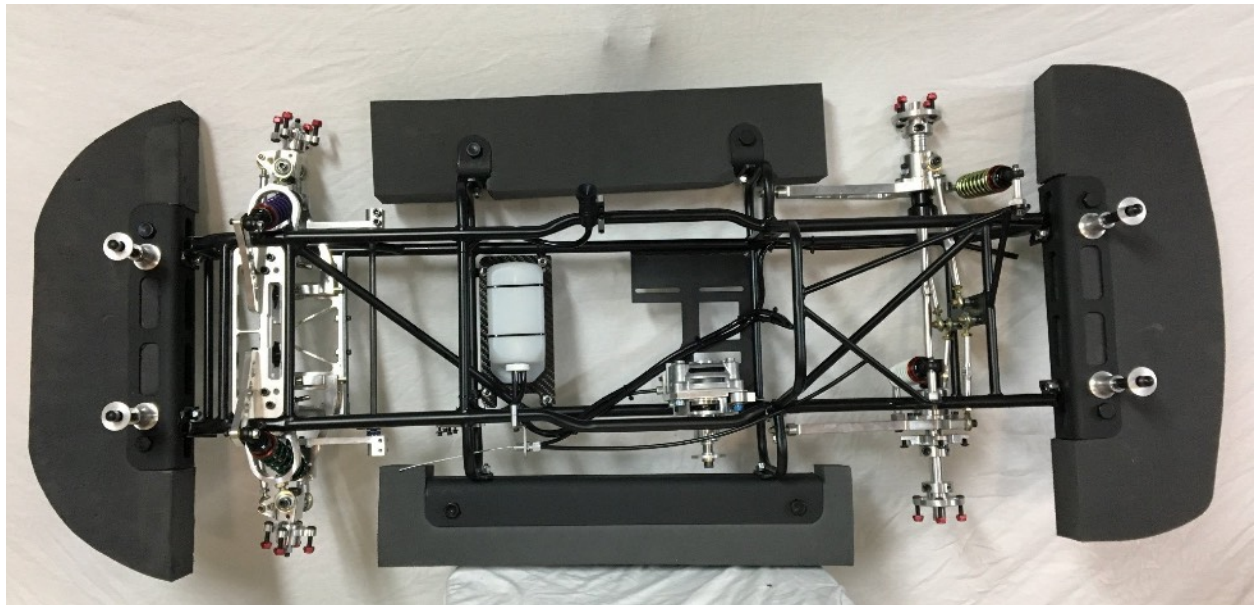
~ bumpers and channels priced from 6 - 14 dollars per ea.



~ clutch bell , housing and brake system priced from 60-120 dollars

~ throttle linkage and brake linkage and servo mounting supports/plates priced 25-65 dollars

~ fuel tank sytem (ie tank , tank mounting , hoses , fuel port) 20 dollars



(pictured is a WCM KIEVO racers special)

**current prices on Racers Specials run from 1875.00 to 2150.00 (please contact the dealer for more accurate information also verify everything that is included in the "Racers Special").

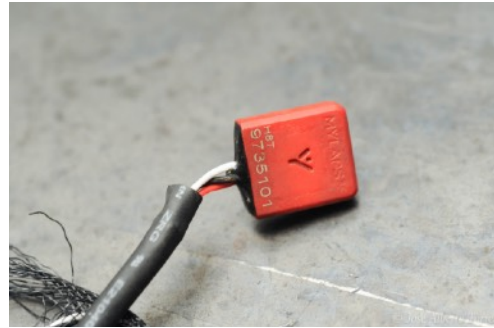
Typically Not included in "racers specials “

Electronics :

~ radio system (i.e. controller , receiver , servos {2ea for steering 1ea high torque for throttle/braking} , battery for on board radio system) get a 2.4 ghz system , avoid out of date 27 MHz or 72 MHz radios . anywhere From 150.00 to 500.00

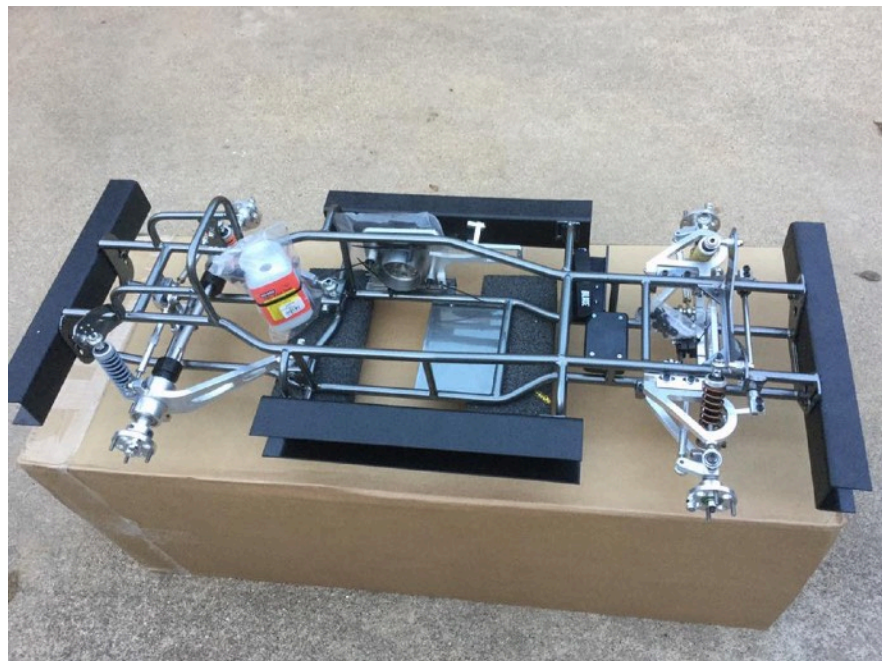


~ transponder (devices used in the timing system on the track) - 95.00 Mylaps transponders are the common system at most tracks



Tires :

~ BRP 2ea Left tires (* 3" wide L20's) 56.00 ea , 1ea Right Front (* 3" wide Dual Band) ea 59.00 and a Right Rear (* 3 "wide 410) 1ea 59.00 , note these compounds are a generalization , please consult local racers to see what compounds and tire circumferences work at your track, also note multiple tires at different circumferences might be needed to help dial in your car



(pictured is a DMS Sonic racers special)

Engine :

- ~Zenoah G230 is the only race legal engine at most tracks (** G240 is an exception at some tracks, primarily in the QSAC WEST club , this engine may or may not be fully legal at all QSAC races please check your rules) Priced from 229.00
- ~ Walbro Carburetor WYK 194 , priced from : 45.00-55.00
- ~ sportsman cup intake adaptor Priced from : 20.00
- ~ Red restrictor plate/block priced from : 11.00 - 25.00
- ~ air filter priced from : 16.00
- ~ resistor type spark plug , (non resistor plugs can have radio interference, trust me I learned the hard wall way) priced from: 4.00-12.00



Gearing :

- ~ pinion gear 18.00-20.00
- ~ spur gear 45.00
- ~ belt 9.00-15.00



note : check with local racers for gearing ratios

Body :

~ currently only WCM and JR Quarter Scale produce bodies

125.00-160.00 also check for shipping cost this is a large item and shipping cost should be factored in

Gas :

~ gas can (1-2 gallon is more than enough you might burn a half gallon on a race weekend if you run lots of practice) 15.00-30.00

~ fuel bottle , these have a nipple designed for the fuel line/port on the race cars 25.00

~ 2 stroke oil 2.00 of oil used for every gallon of gas



~ Gasoline 8.00 to 10.00 per gallon

Tools : basic hand tools Allen drivers screw drivers etc



Battery Charger :

~ depending on type of battery as cheap as 20.00 - 200.00



All in all a new program is in the neighborhood of 3000.00-3500.00 dollars USD

note : most manufactures of cars also offer some form almost ready to race , these cars include , bodies , tires ,gearing , engine , but typically not the Electronics , and they are in the 2600.00-2850.00 range , still bringing in at or just north of 3 grand .

Used racing cars

A good used race car up can range from 750.00 to new car prices , but most land in the 1250.00 to 1500.00range this is dependent on whats included and condition

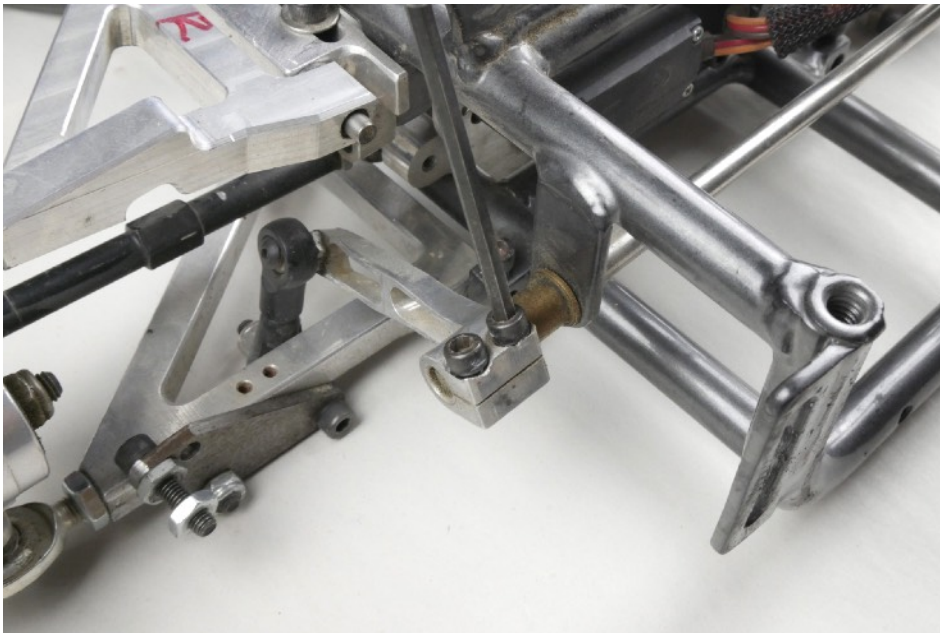
On the low range you ll tend to see older Lightning and Lightning clones , Rockets . Older WCM are also in the lower range price wise, but don't think you ll have to upgrade anytime soon as these cars are more than capable of winning races . As of this writing spring of 2019 there are several deals floating around for used packages at 800 dollars .

What to look for in a used car

: How old is the car , is it still ion production , can you still get parts and support

: stay away from chain driven and or center located spur gear cars , theses tend to be a bit to out dated

: What condition is the frame in ? is the chassis bent , is the underside scraped up excessively , has it been repaired , what quality of repair was made



: is the suspension binding , is it sloppy

: how do the shocks look , are there bent shafts , scratched up shafts , what type of shocks , shocks tend to be the first thing that get swapped out from OEM so its good to know if the shocks that come with the car are original to the car or are other makers and if so are there parts available for theses shocks ?

: out board axles are they straight , are the drive cups in usable condition

: are the rear hubs slipping

: what condition are the bumpers and bumper channels in, does the car have bumpers on all four sides , 4 sides of bumper protection is recommended in the novice classes

: what type of body does it come with , will this meet your needs for your class (fiber tape and shoe goo can save some beat up bodies)

: is the steering mechanism free working , is it sloppy

: does the engine start , is it clean , does it come with the correct restrictor plate for your class , red or blue , does it have the appropriate air filter cup , i.e. sportsman cup , for the right class



: does it include a transponder , will this work with your tracks timing system (contact your local track) some use two wire transponders some three wire

: servos , receivers, transmitters ,

2.4 GHZ radio systems are the modern systems and are preferable

: Tires , are the tires in decent shape , are the tires label and or marked , or are the tires unknown compounds and hosts . I good set of tires will get you on the track and can last over a season , especially in the novice classes. Buying new set of tires about 240. 00 dollars and availability might be of concern depending on what time of the year , off season is quicker to get tires , begin and mid season getting tires in a timely manner might not be possible .

What Spares does this car come with :

: Spur gears , pinion gears , belts

: Fuel bottle

: Heim joints : Have plenty of heim joints , the standard are 10-32 right handed , these are used on shocks, shock towers, as well as one half of the steering links and cross bars, 10-32 left handed are used on the other half of steering links , rear cross bars , and 1/4x28 right handed heims are used on the front A arm to spindle connection points both upper and lower arms , also at the trailing arm to chassis connection points. Heim joints tend to be the first to suffer when collisions and impacts on the race car occur , which is a good thing because they absorb the front of the impact energy saving more expensive components from getting damaged . A heim joint is about 3 to 6 bucks where a spindle or A arm is 25 -60 bucks .

Stick with the economy heim joints they are made of more malleable metals and allow for more bending on impact as opposed to the higher dollar helms that are made of stiffer more brittle metals , they tend to snap off at the base of the thread , making it a bear to extract the broke thread from the base component

hopefully I didn't omit many components , and hope this helps Newbies