FAST & FURIOUS™

41

Build the Legendary

DODGE CHARGER R/T



UNIVERSAL

FANHOME

DODGE

FAST & FURIOUS

Build the Legendary
DODGE CHARGER R/T



United Kingdom
Published by De Agostini UK Ltd c/o Royds Withy King, 69 Carter Lane, London EC4V 5EQ

USA
Published by De Agostini Publishing USA, Inc. c/o Becker, Glynn, Muffly, Chassin & Hosinski LLP, 299 Park Avenue, New York, New York 10171

ISBN: 978-1-4439-5184-5
FFN41: 21 06 16

ISSN 2631-9799 (Print)
ISSN 2732-4583 (Online)

Picture credits: NBCUniversal Archive; FCA Archives

Fast & Furious Franchise © 2021 Universal City Studios LLC. All Rights Reserved.

Dodge, HEMI and related logos, vehicle model names and trade dress are trademarks of FCA US LLC and used under license by Premium and Collectibles Trading Co. Ltd. ©2021 FCA US LLC.

Printed in Poland

CUSTOMER SERVICES
United Kingdom
Call 020 3991 1199 or email support@uk.fanhome.com or ask your newsagent to reserve future issues for you to collect.

USA
Call 1-800-978-1455 or email support@usa.fanhome.com

The price of this issue includes the magazine and the attached pieces for model assembly.

TO OUR READERS
The publisher reserves the right to modify any components as required during the course of the collection. Not suitable for children under the age of 14. This product is not a toy and is not designed or intended for use in play. The collection is complete in 110 parts. Items may vary from those shown.

WARNING
Any reproduction, even partial, of the contents of the magazine is prohibited without permission from the Publisher. the model and the magazine that accompanies it are strictly for private use, and within the family, in accordance with Article L122 - 5 10 of the Code of Intellectual Property. Any reproduction other than that provided for in Article L122 - 5 20 of the Intellectual Property Code is prohibited. The magazine and/or elements of the collection may not be distributed, loaned, resold, rented or exploited for commercial purposes. All rights reserved.

The driving sequences in the Fast & Furious motion pictures were filmed with professional stunt drivers, under carefully-controlled conditions, for entertainment purposes only. No attempt should be made to duplicate any of the racing activities or sequences depicted therein. Universal neither condones nor endorses the use of this or any related product in any manner whatsoever other than in strict accordance with applicable federal, state and local laws and speed limits.



HAN, THE TRUE STORY

"Life is simple: make decisions and don't look back." Han Seoul-Oh's motto is as simple as that. He is one of the best-loved and most emblematic characters in the world of *Fast & Furious*. Silent, calm, impassive most of the time, we saw him travel halfway around the world to help his people and to show how you to make high-performance engines roar.

One fascinating aspect of the *Fast & Furious* franchise is that the films were not released in strict chronological order. This is especially obvious when we try to reconstruct the life stories of some of the characters, as is the case with Han. The first time we had the chance to see him was in the third movie, *The Fast and the Furious: Tokyo Drift*, in which he played an essential part. The film's director, Justin Lin, gave this part to the actor Sung Kang, with whom he had had the opportunity to work in his first movie, a modest production entitled Better *Luck Tomorrow*. When they began working together again, Kang saw that things had changed. "We went from an independent film to a major studio project. It's a completely different world and it's wonderful to be able to share it with friends."

We will begin by discussing his role in the short film *The Outlaws*.

TORETTO'S RIGHT-HAND MAN

In the short *Los Bandoleros* (The Bandits), we see Han arriving at the airport in the Dominican Republic, where he goes with the intention of helping his good friend Dominic Toretto in his plan to obtain fuel for less fortunate people. Shortly after he steps off the plane, he reveals to a female friend of Dom's, called Cara, that he was actually born and raised in the United States, and that he had met Toretto during a stay in Baja (Mexico). Not much more information is offered about the origins of this character, who is always melancholy and reserved.

Calm, cool and collected, Han is a driver who lives each day as if it was his last. A loyal man, he is prepared to do anything for Dom, as Sung Kang explains: "Dom is Han's mentor. He knows that Han will do anything to help him, but he doesn't take crazy risks. Above all he makes sure that no one is going to get hurt."

We see Han and Cara again at the start of *Fast & Furious*, in a 1967 Chevrolet C. After the spectacular fuel tanker heist that the movie opens with, Dom takes the decision to break up the group, aware that the police are hot on their heels. This is when Han talks about the possibility of going to Tokyo, as he is interested in a new type of car racing there.

Actor Sung Kang played the part of Han Seoul-Oh, a key member of Dominic Toretto's team.

SUNG KANG

Sung Kang has managed to carve an important niche for himself in the Hollywood movie industry. This actor and film producer was born in the American town of Gainesville (Georgia), on April 8th, 1972. As a young idealist full of good intentions, he began studying to be an actor in the hope that his performances might help to make this world a better place. After having small parts in *Mystery Men* (1999) and *Pearl Harbor* (2001), Justin Lin gave him his first big chance in the independent film *Better Luck Tomorrow* (2002). Real popularity would arrive four years later, however, in *The Fast and the Furious: Tokyo Drift*, when he played the part of Han, a key character in the *Fast & Furious* franchise. Besides this character, Kang has appeared in many action movies, like *Live Free or Die Hard* (2007), *War* (2007), *Bullet to the Head* (2012) or *Code 8* (2019). He is also a familiar face for television viewers, as he has appeared in a whole host of series, among them *CSI*, *Power* and *Magnum*.

A GREAT LOVE

But for the moment Han does not get to fulfill that wish. In fact, in *Fast Five* he meets up with Toretto again and joins the team recruited to take revenge on the gangster Hernán Reyes. On this occasion, Han works side by side with a determined agent, Gisele Yashar.

The actor Sung Kang was not surprised that Gisele and Han got along so well: "He's the kind of person I would like to emulate in terms of his values."

In the frantic adventures in *Fast Five* and *Fast and Furious 6*, the bond between Han and Gisele grows until they become one of the most powerful couples in the series. Even in the most extreme situations, they help, protect and understand each other … in fact it truly appears as if they are made for one another.. Though some audiences were taken by surprise by the tragic outcome of this strong relationship, it was because of her love for Han that Gisele made the ultimate sacrifice. At the end of *Fast & Furious 6*, during a dangerous chase on an airport runway, Gisele gives her life to save her beloved Han. Devastated, he decides then that, yes, he will fulfill his wish to travel to Tokyo.

THE MASTER OF DRIFTING

The action in *The Fast and the Furious: Tokyo Drift* would take place between the end of the sixth movie and its electrifying post-credits sequence. In this third movie, Han appears as one of the characters that is central to the plot. Living comfortably in Tokyo, he has hooked up with DK, the nephew of a powerful *yakuza*, known as Uncle Kamata. Although his favorite thing to do is to hang around the street-racing scene, dominated there by the drifting technique.

After working together very closely in Toretto's team, Gisele and Han became one of the most popular couples in the saga.





Silent, calm and always enigmatic, Han achieved his dream of settling down in Tokyo, where he would become Sean Boswell's mentor.

When Han discovers that an impulsive driver has arrived in town, Sean Boswell, who without having the slightest idea of drifting dares to challenge DK, he decides to become his mentor and protector. "What's the point of a race," Han asks him. "To see if I'm better than the other guy," Sean replies. "Just proves you're faster, that's all. If I were to race, it would have to be for something important. Or why else do it at all?" Han says.

Easy to spot because of the spectacular orange Mazda RX-7 that he drives, Han runs a bar with several different ambiences, all rather clandestine, where he is very popular. At the back of the place, he has his offices, where he jealously guards some vehicles that he is proud of: from motorcycles mounted on nitrous tanks to extraordinary racing cars.

A PHILOSOPHER AT THE WHEEL

During his training with Han as a drifting driver, Sean can't stop wondering about his enigmatic instructor. For example, how did he manage to establish himself in Tokyo? Han looks at the city seriously from the vantage point of his apartment and answers: "Well, you know those old Westerns where the cowboys make a run for the border? This is my Mexico."

Han shows at all times that he is not just a conventional driver or a simple hustler who wants to get rich quick. And he does so thanks to his profound convictions, which he instills in his protégé, such as the importance of loyalty. "Who you choose to be around lets you know who you are," he tells him solemnly.

But these ideas don't make him at all arrogant. Quite the contrary, Han is an example of simplicity, a young man who reads superhero comics in his spare time.

A SHOCKING TRAGEDY

During *The Fast and the Furious: Tokyo Drift*, DK suspects that Han is keeping part of the money he makes from his business dealings. When he decides to have it out with him, Han jumps in his car and drives off. Thus begins a spectacular car chase through the streets of Tokyo, in which the vehicles use the drifting technique to dodge pedestrians and avoid crashing at the street corners.

Han manages to keep ahead of DK thanks to his driving skills. However, a car unexpectedly crashes into him. The orange racing car flies through the air, catches fire and explodes.

Ever since the release of *The Fast and the Furious: Tokyo Drift*, in 2006, moviegoers thought that Han's tragic end had happened accidentally. However, in 2013, the post-credits sequence of *Fast & Furious 6* would reveal that the crash was no random misfortune, but the work of the ruthless Deckard Shaw, as the start of his revenge for the death of his brother. We saw Han's moving funeral in the first part of *Furious 7*.



DODGE CIRCUIT EV CONCEPT

At the 2009 Detroit Auto Show, the Chrysler Group unveiled a series of electric concept cars with which it was giving notice of its mastery of this new technology, destined for success in the future. Of all of them the Dodge Circuit EV Concept was unquestionably the one that caught the eye.

The Dodge Circuit EV Concept never entered mass production, but it served to demonstrate that the Chrysler Group already had electric technology ready by the end of the first decade of this century.

Towards the end of the first decade of this century, the major automobile manufacturing corporations were beginning to realise that the car industry was going to change radically in the following decade, in which models powered by electric motors fed by rechargeable batteries would begin to gain ground on conventional cars with internal combustion engines. EV (Electric Vehicle) technology was still not ready to be commercialised on a massive scale, but at the 2009 Detroit Auto Show, Dodge showed that in the future electric models could just as easily be sports cars. The Dodge Circuit EV was a compact coupe just 3.9 meters long with a two-passenger interior. With a very aggressive look, similar to the brand's contemporary models, it had an electric motor placed in the middle of the vehicle which powered the rear drive wheels. The motor, fed by a lithium-ion battery pack, produced 268 HP, which made it possible for this concept car, painted a striking tangerine color, to accelerate from 0 to 100 km/h in five seconds and reach a top speed of 200 km/h. The estimated driving range was 240 to 320 kilometres between recharging, making it a car perfectly compatible with any driver's everyday life.



The striking orange color – "tangoreen" – characterized the attractive lightweight bodywork of this concept car, presented by the Dodge brand in 2009.



ATTACHING THE REAR AXLE

In this assembly session you will attach the rear axle with the rear suspension onto the chassis. Then you will assemble and install one of the rear wheels.

PIECES FOR THIS STAGE



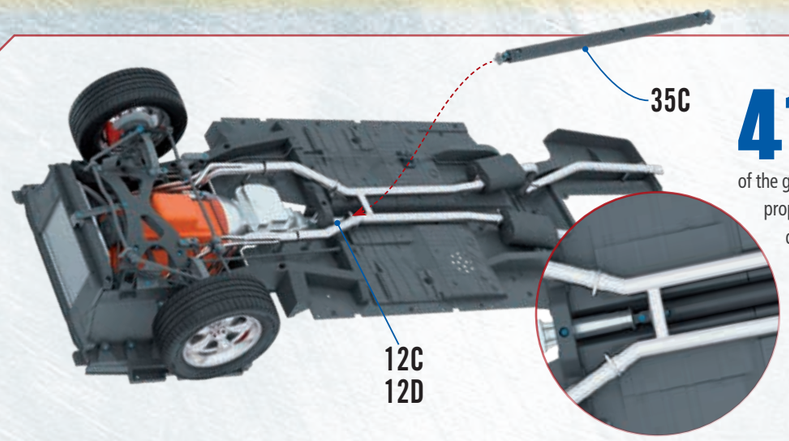
41A Rear left tyre
41B Rim (outside)
41C Tyre valve
41D Rim (inside)
41E Hub cover
41F Washer
HM Screws 2 × 3 mm, (x 4)*
IM Screws 2 × 5 × 5 mm, (x 2)*

* Some of the parts are spares.

Editor's note: The parts shown here may differ slightly from the parts supplied with this issue. This does not affect the quality or the assembly instructions in any way.

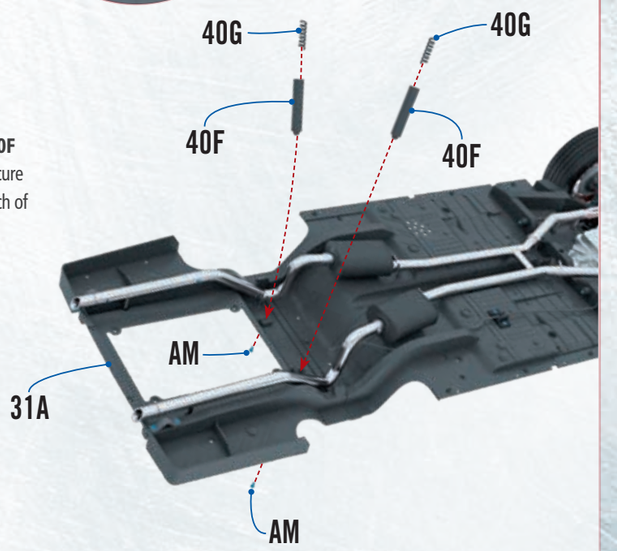
ASSEMBLY AREA

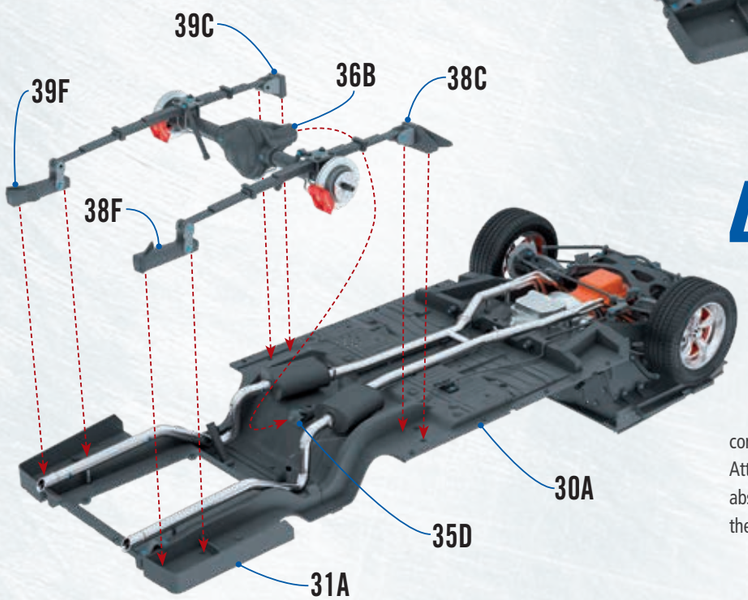




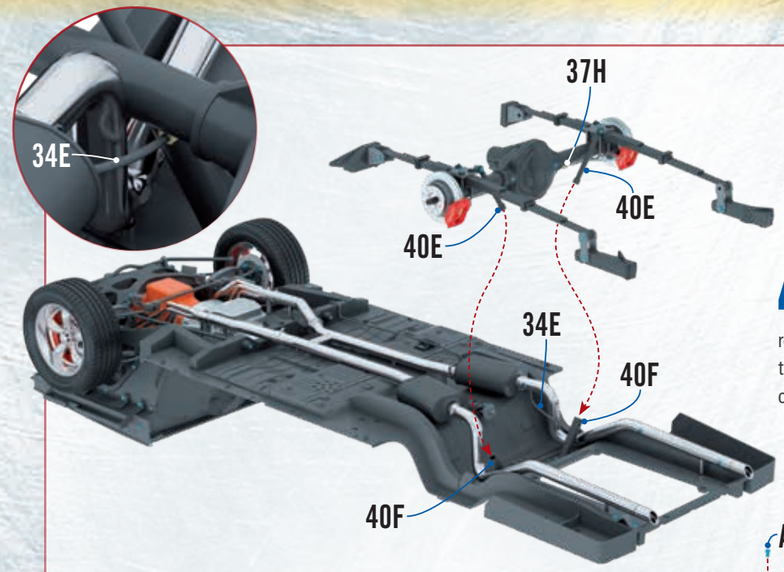
41.1 **GET** the chassis and very carefully put it upside down on your work surface. Find the end of the gear box and insert the locating pin on the prop shaft **35C** (i.e. the end with the smallest diameter), as shown in the illustration. ◄

41.2 **INSERT** the two rear shock absorber cylinders **40F** into the holes indicated in the illustration, then secure with two **AM** screws. Insert a spring **40G** into each of the two shock absorber cylinders **40F**. ►



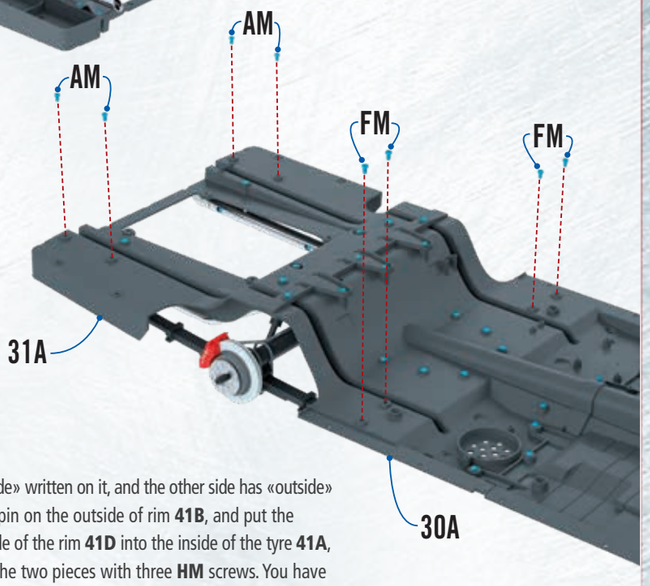


41.3 **TAKE** the rear axle complete with the leaf springs. Align the ends of the leaf springs with the chassis: the two rear spring hangers **38F** and **39F** go above the holes in the rear section of the chassis **31A**, while the front spring hangers **38C** and **39C** line up with the holes in the middle section of the chassis **30A**. Insert the locating pin on the of the prop shaft **35D** into the corresponding hole in the rear differential **36B**. Attention: you will also have to deal with the shock absorbers in this assembly session, as illustrated in the next step. ◄

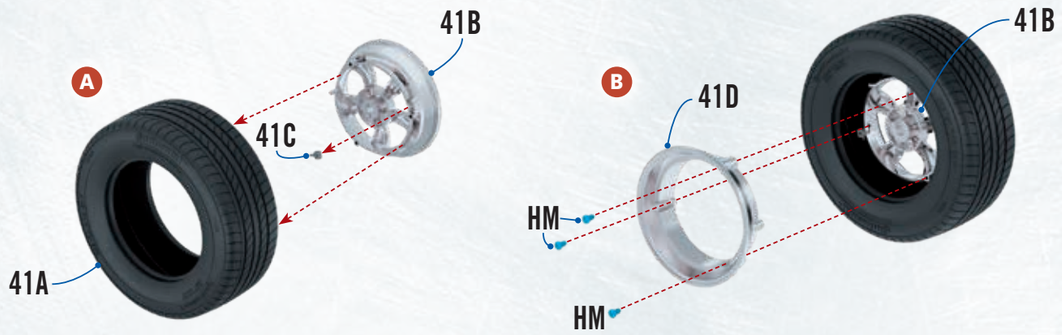


41.4 **AS** you attach the rear axle to the chassis, insert the rear shock absorber pistons **40E** into their respective cylinders **40F**. At this point, you can attach the free end of the rear brake hose **34E** to the pin on the rear brake hose fitting **37H**. ◄

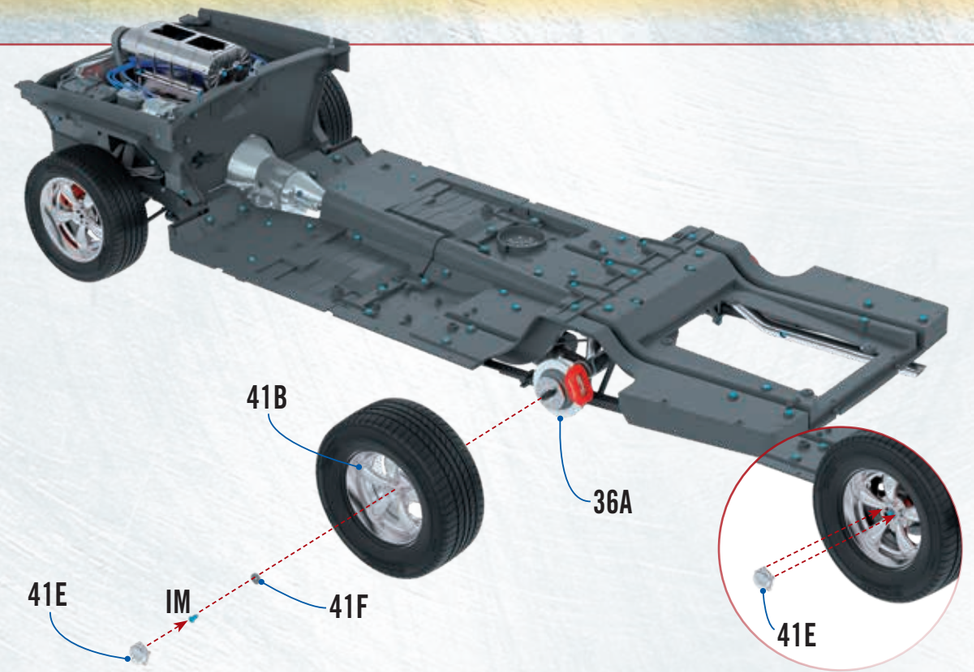
41.5 **TURN** the assembled piece over and insert four **AM** screws into the mounting holes in the rear end of the chassis, then four **FM** screws into the holes in the middle. ►



41.6 **NOTE** that one side of the tyre **41A** has «inside» written on it, and the other side has «outside» on it. Slide the tyre valve **41C** onto the small pin on the outside of rim **41B**, and put the latter on the outside of the tyre. Insert the inside of the rim **41D** into the inside of the tyre **41A**, and align the holes and pins of the two parts of the rim. Secure the two pieces with three **HM** screws. You have now completed the left rear wheel. ▼



Attaching the rear axle



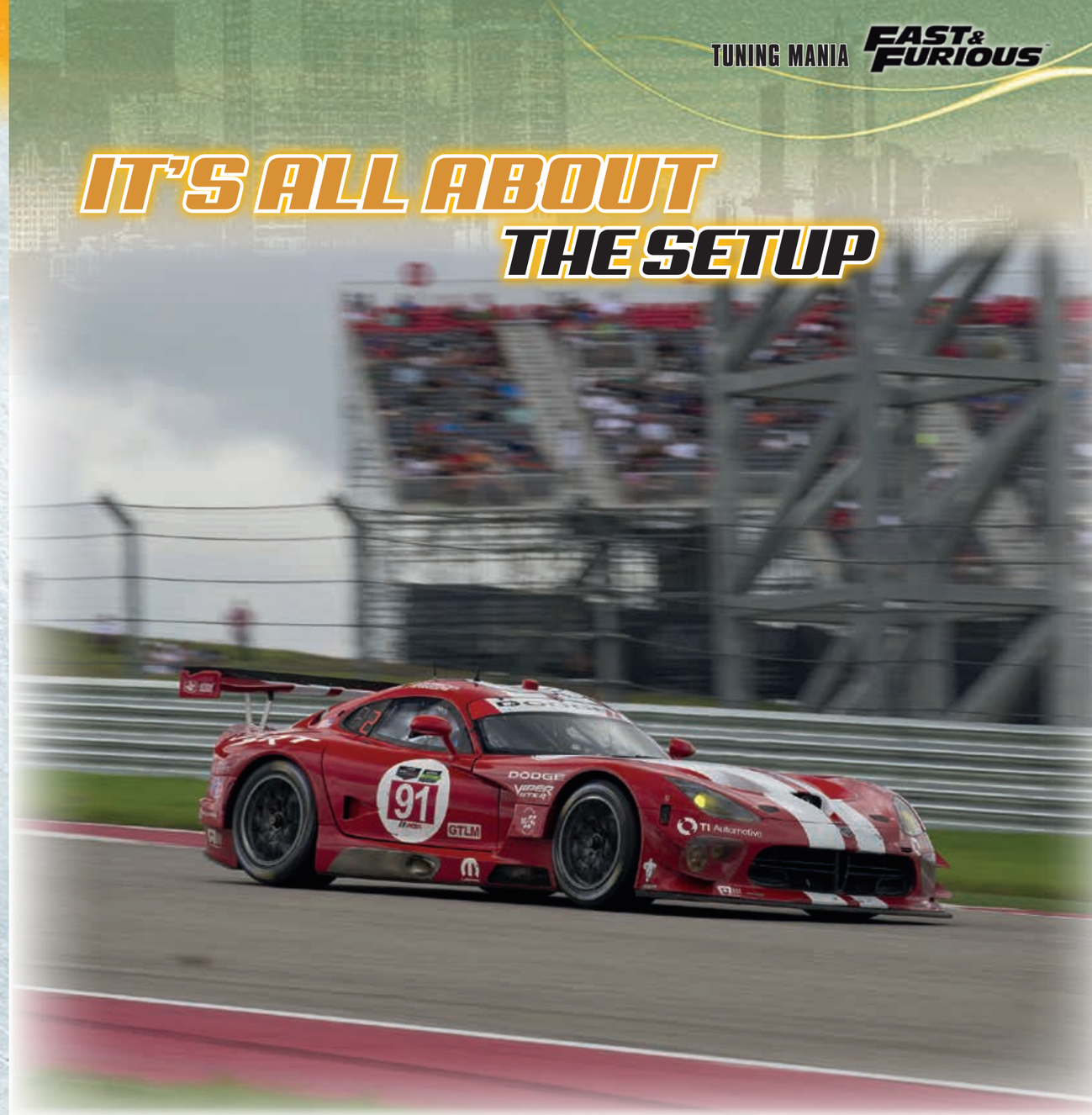
41.7 **SLIDE** the wheel you have just assembled onto the left end of the rear axle, and secure it with a washer **41F** and an **IM** screw. Finally, press the hub cover **41E** onto the centre of the wheel. ▲

STAGE 41 FINAL RESULT



You have now attached the rear axle to the chassis. You have also assembled the left rear wheel and mounted it on your model.

IT'S ALL ABOUT THE SETUP



Now we understand how the suspension works, we can begin to consider the term "setup" and all its implications. Then we can go into detail about specific components designed to improve the handling performance of your car.

When we talk about setting up a car, we refer to the search for a balance that reduces sudden weight transfers produced by dynamic stresses that shift from the chassis to the tyres and from the asphalt to the chassis. Our principal goal is to maximise tyre grip and make the vehicle's behaviour as linear and predictable as possible under different driving conditions.

To obtain this balance, different components and structures are used to perform different functions. Today we are going to look at modifying the geometry of the suspension. Numerous adjustments and calibrations of the suspension and steering components make it possible to set the car up for different road or track conditions by varying the car's handling behaviour.

The correct setup can make a big difference, especially on slow circuits where car control is a key to winning races.

It's all about the setup



When negotiating a curve, the centrifugal forces create a variation in the lateral distribution of the loads. This loading is absorbed by the suspension, especially by the springs: the stiffer they are, the greater the loads that can be absorbed.

In the world of serious competition, each circuit requires different settings. Then there is also the driving style of each driver, which may need to be considered. This is the job of the race engineers and technicians. During the car's setup, it is possible to modify or calibrate different components and parameters. The use of more rigid springs, for example, will result in a variation in the weight transfer to the tyres and a change in the speed of the load transfer.

THE PERFECT SETUP

Technically, modifying any of the adjustable elements of the car's suspension can produce a series of predetermined reactions and behaviours that are repeatable and controllable. Theoretically, if we make an adjustment, we know what effect it will have on the handling of the vehicle. The search for improved handling means looking for predictability of the car's behaviour in as many repetitive driving conditions as possible. This statement is even more relevant as the car's performance increases because it is essential to make it as easy as possible for the driver to use the extra power efficiently. Numerous tests are needed to discover the best setup. To discover which ones are most useful, one of the parameters can be changed after each test. Then figures like the lap times achieved can be used to assess the value of the change.

HEIGHT, SPRINGS AND TRAVEL

To work efficiently, the suspension must be adjusted to work right across its useful range of movement when it is distributing the load to the tyres. Unused suspension travel could be an alarm bell that suggests that perhaps softer springs could be fitted. Or perhaps the suspension could be lowered to lower the centre of gravity and increase grip. Conversely, if the suspension is hitting the stops when cornering, it may not be functioning efficiently. It might be advantageous to fit more rigid springs or to raise the suspension slightly. Ideally, the suspension should only reach maximum compression at the point where the very highest stresses occur.

Toe-in describes the setting of a pair of wheels on an axle in which the front edge of each wheel is inclined slightly inward. If a car has toe-in, it means that the front edges of the wheels are closer to each other than the rear edges. A small amount of toe-in will make the car more stable on a straight road but a little less responsive when turning into the corners.





The caster angle is the amount by which a steered wheel trails behind the vertical axis about which it is steered. A negative caster helps to centre the steering wheel after a turn and makes the front tires straighten quicker.

At the same point, the ground clearance on the side of the suspension that is under load should be at its lowest, but without ever touching the road surface.

Suppose we want to switch to softer springs. In that case, we will have to take into account greater suspension travel and higher ground clearances to ensure the right amount of grip from the tyre. Suspension that is too rigid or too soft can cause a dangerous loss of grip at critical moments. The springs compress and extend due to the load transfers: each stress induced by the driver corresponds to a weight shift equivalent to the intensity of the induced stress. Let's take as an example a braking or progressive deceleration scenario. An increased weight load is transferred from the rear to the front tires. This increase in load, and the speed of transfer of the weight, is directly proportional to the braking intensity.

Another critical item to consider when setting up the car is the vehicle's ground clearance, i.e. the distance between the bottom of the bodywork and the ground. Reducing the height leads to a lowering of the centre of gravity. This has significant advantages in terms of load transfer under different driving conditions, as well as a reduction of pitch and roll effects.

The stiffness of the springs significantly affects the ground clearance. Almost always, in the world of racing, softer springs are installed at the rear. They require more travel from fully decompressed to compressed, which is why the rear of the cars is often higher. Coil spring cushion buffers help you to use softer springs with smaller loads without changing the ground clearance. Ground clearance is always linked to the type of surface of the road or track we will drive on. The more uneven the surface, the higher the ride height must be to avoid damaging compression peaks when the suspension bottoms out.

WEIGHT AND GRIP

When the car is in motion, the suspension has to deal with the dynamic distribution of the load, or the constant transfer of weight between the different wheels. We have to take care not to exceed what is defined as the 'grip threshold' or the limit beyond which the tyres lose grip. Initially, the weight is evenly distributed over the four tyres, with a uniform ground footprint for each wheel. When the vehicle accelerates, the pressure on the rear tyres will increase due to the transfer of weight toward the rear axle. At the same time, the pressure on the front tyres reduces.

Conversely, when braking, we get the opposite effect, i.e. the front footprints increase as the weight transfers forwards, and the rear ones decrease. Similarly, when cornering, the outer tyres experience increased pressure as a result of the lateral transfer of weight, while the footprint on the inner ones decrease. The increase in the footprint increases the ability of the loaded tyres to transmit forces to the ground.

When working on a setup for any circuit or race track, the goal is to achieve the best possible grip in the various conditions that the tyres will encounter. The setup plays a fundamental role, for example, when exiting slow corners, where low speed does not create significant aerodynamic effects. The traction capacity of the car is produced only by the mechanical balance of the vehicle.

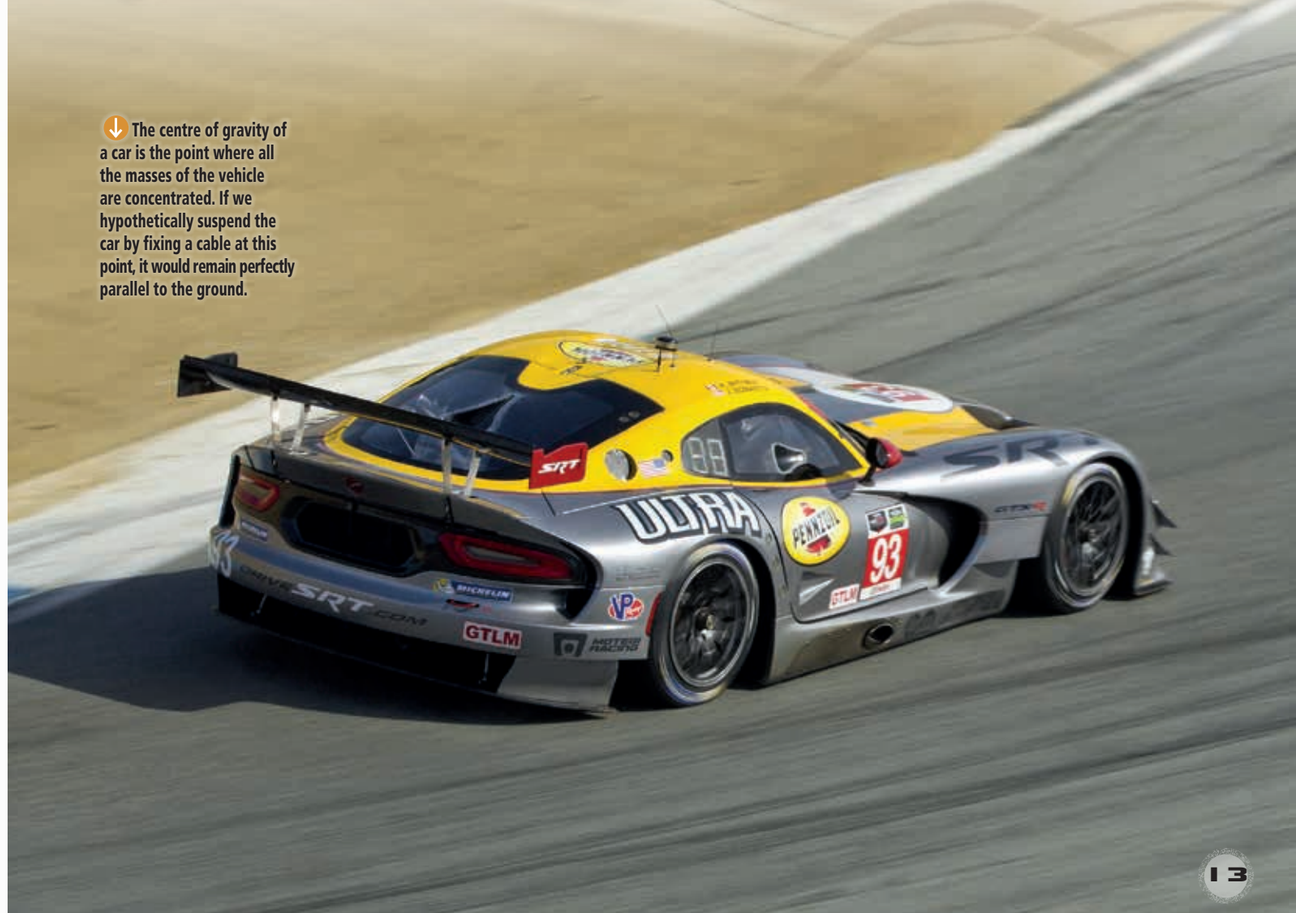
BEAT THE ROLL

The geometry of the suspension determines the roll-centre of the car. It is an imaginary longitudinal point, or axis, around which the car's body will roll when cornering. For example, on a fast right-hand corner, the load will transfer to the left, and the car will try to rotate anti-clockwise around the roll-centre axis. A left-hand corner will produce the opposite effect. The rotation around the axis will be in a clockwise direction. The closer the roll-centre height is to the car's centre of gravity, the less lateral roll will be generated when cornering. To further limit lateral load transfers, we can use anti-roll bars with variable rigidity to adapt to the types of curves we will negotiate. The purpose of connecting the two sides of the car using variable rigidity bars is to limit the chassis' tendency to twist during cornering stresses.

Geometry

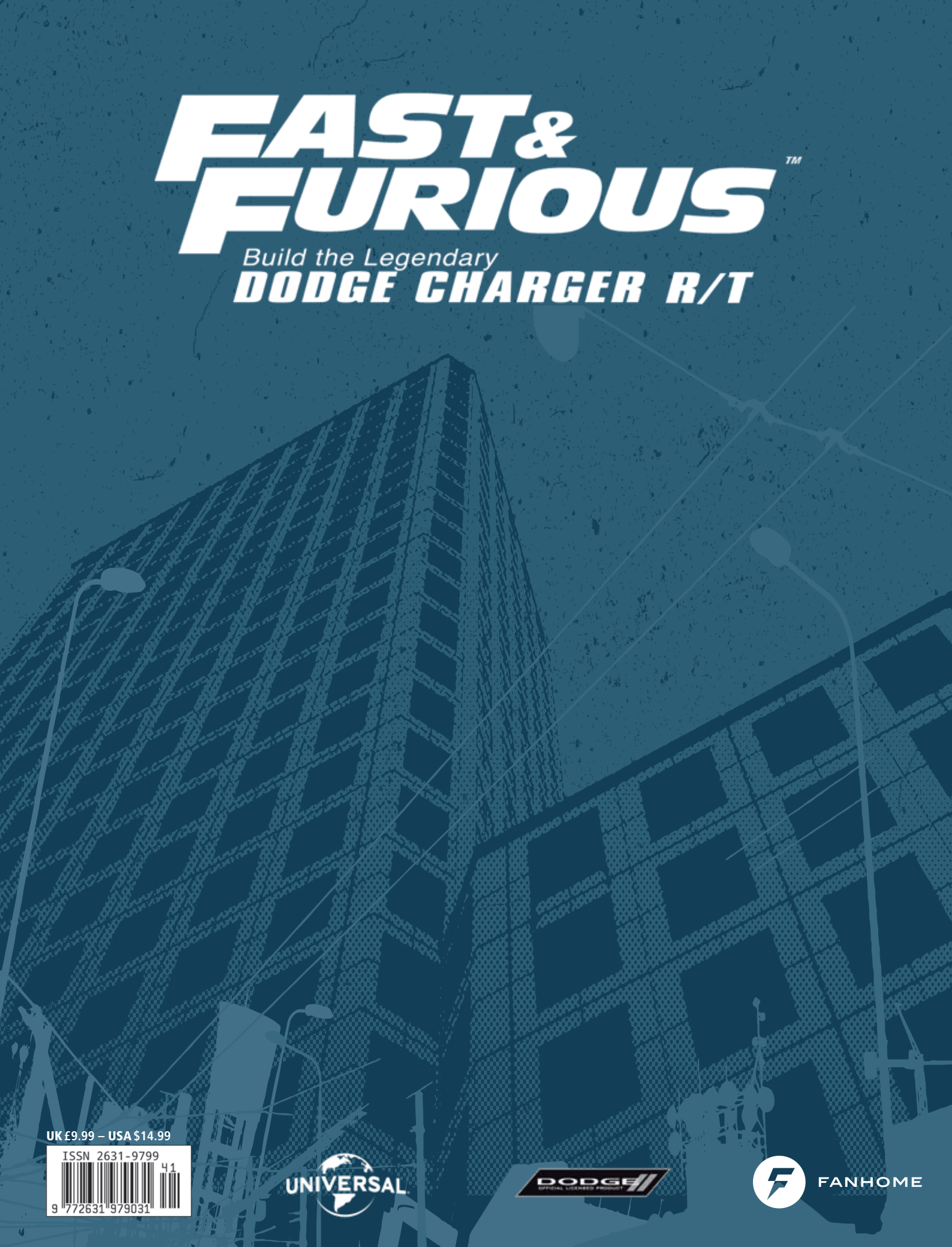
As well as calibrating the separate components, we can also work on the suspension geometry to change the behaviour of the car. The term 'camber' indicates the angle at which the tyre's contact surface touches the ground. It can be positive, negative or neutral. It is modified to obtain greater surface contact for the tire when the wheels are pointing to the left or right. High-speed cornering tends to transfer weight onto the outer part of the tyre footprint and away from the inner part. So not all of the available tyre surface is in contact with the road. Adjusting the camber by inclining the top of the wheels slightly inwards will help the tyre to work across the whole of its contact surface when cornering.

The centre of gravity of a car is the point where all the masses of the vehicle are concentrated. If we hypothetically suspend the car by fixing a cable at this point, it would remain perfectly parallel to the ground.



FAST & FURIOUS™

Build the Legendary DODGE CHARGER R/T



UK £9.99 – USA $14.99

ISSN 2631-9799 41

9 772631 979031

UNIVERSAL

DODGE OFFICIAL LICENSED PRODUCT

FANHOME