FAST & FURIOUS™

Build

BRIAN'S NISSAN SKYLINE GT-R

10



F237FSC010

FANHOME

Fast & Furious Franchise
© 2024 Universal City
Studios LLC. All Rights Reserved.

UNIVERSAL

FAST & FURIOUS™

Build

BRIAN'S NISSAN SKYLINE GT-R

ORIGINAL VERSION
© 2024, Editorial Planeta DeAgostini S.A.U.
Avda. Diagonal, 662-664
08034 Barcelona, Spain
All rights reserved

© 2024 De Agostini Publishing S.p.A

ENGLISH LANGUAGE ADAPTATION
USA Published by De Agostini
Publishing USA, Inc.
299 Park Avenue, New York,
New York 10171

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

DE, AT, NL, HU, PL, CZ, SK, LT, SE, IT
Published by De Agostini Publishing,
S.p.A, Via G. da Verrazano 15,
28100 Novara, Italy

Picture Credits: p. 1-4: Nissan Press Office; p. 5-6: NBCUniversal Archive; p. 7-10: Nissan Press Office.

NISSAN
MOTOR CORPORATION
OFFICIAL LICENSED PRODUCT

Nissan Motor Co., Ltd. trademarks, designs, copyrights and/or other intellectual property rights are used under license.

Printed in Italy

ISSN 2977-1609

ISBN (EE countries): 979-12-209-0811-5

CUSTOMER SERVICES

USA
Email support@usa.fanhome.com

UNITED KINGDOM
Email support@uk.fanhome.com

DEUTSCHLAND
Email support@de.fanhome.com

ÖSTERREICH
Email support@at.fanhome.com

NETHERLANDS
Email support@nl.fanhome.com

POLAND
Kontakt z biurem obsługi klienta:
Tel: 22 307 64 59
E-mail: bok@deagostini.pl

CZECH REPUBLIC
Kontakt na zákaznické centrum SR:
Tel: 246 017 120
E-mail: zakaznicke.centrum@deagostini.cz

SLOVAKIA
Kontakt na zákaznické centrum SR:
Tel: 0220 839 090
E-mail: zakaznicke.centrum@deagostini.sk

The price of this issue includes the magazine and the attached assembly parts.

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 (12 for USA). This product is not a toy and is not designed or intended for use in play. The model is complete in 110 issues.

WARNING
Any reproduction, even partial, of the contents of the magazine is prohibited without permission from the Publisher. The assembly parts 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.

MORE INFORMATION AT

fanhome.com deagostini.com



FANHOME

DeAgostini
COLLECTIBLES

Fast & Furious Franchise
© 2024 Universal City
Studios LLC. All Rights Reserved.

UNIVERSAL



The RB26DETT engine was used from the GT-R (R32), the first of the 2nd-generation Skyline GT-Rs, up to the GT-R (R34) with the red engine cover.

THE RB26DETT ENGINE – A NISSAN MASTERPIECE

To make an engine for the Skyline GT-R that could be invincible in Group A races, it had to be specially designed for the purpose. Advanced tuning enabled additional power to be unleashed from the unit.

The RB26DETT engine was first installed in the Skyline GT-R (R32) that debuted in 1989, was inherited by the subsequent Skyline GT-R (R33) and Skyline GT-R (R34) models, and is representative of Nissan's high-performance engines. The engine's model designation breaks down as follows: RB (RB engine series); 26 (2.6-liter displacement); D (DOHC); E (EGI Electronic Gasoline Injection specification); and TT (twin turbo).

At the time of the engine's debut, it had already surpassed others with its high performance, and it continued to evolve. Although the maximum power output of 280ps did not change due to self-regulation at the time, the maximum torque was increased from 36.0kgm (R32) to 40.0kgm (R34) and the accelerator response was improved. The paint on the cylinder head cover changed from black to "vintage clear red" and was visible in the engine bay of the Skyline GT-R (R34) from 1999.

The Skyline GT-R (R32) was developed with the RB26DETT engine as the source of its high performance with the aim of winning Group A races such as the All Japan Touring Car Championship; the commercial and Group A specifications of the model were developed almost simultaneously. The main feature of this engine is that it combines a 2.6-liter in-line DOHC four-valve engine with a twin turbo. When modified to race specifications, it can deliver 600ps of extreme power.

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 1 20/12/23 12:30

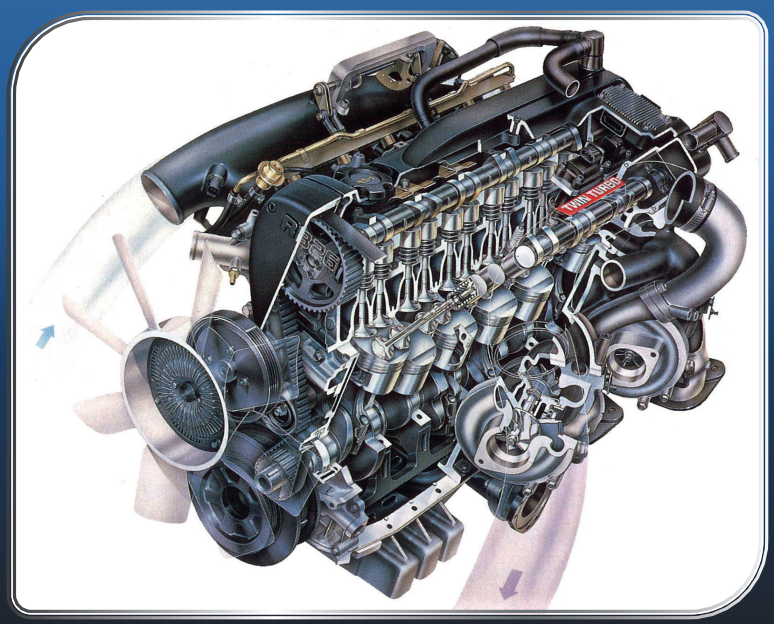
THE RB26DETT ENGINE – A NISSAN MASTERPIECE

BORE AND STROKE

The 2,568cc displacement of the RB26DETT is matched by high revolutions of up to 8,000rpm, while its bore and stroke is 86 x 73.7mm. Coincidentally, the stroke is exactly the same as that of the L24 engine installed in the original Fairlady 240Z (HS30), which had a successful track record competing in races and rallies both in Japan and overseas.

When developing the Skyline GT-R (R32) as a high-performance commercial car, it made sense to align the engine displacement to the Japanese road tax system. At the time, the system separated tax into divisions of 2,000cc, 2,500cc, and 3,000cc. However, the reason that the RB26DETT unit adopted a halfway displacement of just over 2,500cc was closely tied to Group A vehicle regulations. The development team studied the vehicle regulations and chose the displacement with the highest probability of winning the race.

The basic structure of the RB26DETT engine remained the same for the Skyline GT-R (R32), (R33), and (R34). The in-line, six-cylinder cast-iron cylinder block is as large and heavy as you would find in a racing machine when viewed from today's perspective when lightweight aluminum is the norm. Yet its high rigidity was an advantage when tuning for Group A specifications and delivering 600ps. Japanese tuners used this sturdy cast-iron cylinder block as the basis for tuning engines that were used in road-going cars.



The 2.6-liter, in-line six-cylinder, four-valve DOHC RB26DETT was a high-performance engine that attracted attention in Europe by adopting a twin turbo in an era of single turbos, even in Porsches of the time. It was a power plant designed to win Group A races.

RACING COMPONENTS

High-quality, race-specific parts were incorporated from the beginning, since remodeling to Group A specifications required the same components as for commercial cars, including powerful engine parts such as the crankshaft and connecting rod, sodium-enclosed hollow exhaust valve, large-capacity intercooler, and six-series throttle chamber. Although the attention to quality and performance may have seemed excessive for a commercial car, the main priority was to develop a "winning engine."

Sodium-enclosed hollow exhaust valves incorporate metal sodi-



When the Skyline GT-R (R32) entered Group A races, it was unbeatable, securing 29 consecutive wins with overwhelming speed. It is no exaggeration to say that at the heart of this success was the RB26DETT engine.

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 2 20/12/23 12:30

um in the shaft of the exhaust valve – which is exposed to high temperatures of over 1,832°F (1,000°C) – which limits the high temperatures to improve efficiency. The air-cooled capacity intercooler features both cooling performance and a reduction in ventilation resistance. The six-cylinder throttle chamber is a mechanism by which the throttle valves are attached one by one to the six-cylinder manifold; there are only few examples of this in commercial vehicles. The result is an engine that is highly responsive to subtle movements on the throttle.

The key to powering up the turbo was the adoption of a twin turbo. Moreover, it is a ceramic turbo that excels in throttle response due to low rpm. The ceramic turbo was adopted from the Skyline (R31), which featured a turbine rotor made of ceramic with high-temperature heat resistance and low inertia weight in order to reduce turbo lag.

Although it heightened engine response and was effective for commercial models running on public roads, the ceramic turbo could be damaged by high-boost pressure and become contaminated by foreign matter during racing. It resulted in a metal turbo made of an iron nickel alloy being fitted in the Skyline GT-R Nismo (R32), which was the original model developed for Group A specification.

TWIN BALL-BEARING CERAMIC TURBO

In the Skyline GT-R (R34), the turbo also evolved as the vehicle's body was revised. The same ceramic turbocharger was redesigned to be a highly efficient and responsive Garrett C100 GT25 hybrid type twin-ceramic turbocharger that uses ball bearings with less friction on the bearings of the turbo motor. The ceramic turbo originally had a small inertia weight, but by changing the bearing from conventional metal to a ball-bearing type, frictional resistance was reduced by about 50 percent. Transient response in the low- and medium-speed range was improved. In addition, in order to increase the boost pressure from the previous Skyline GT-R

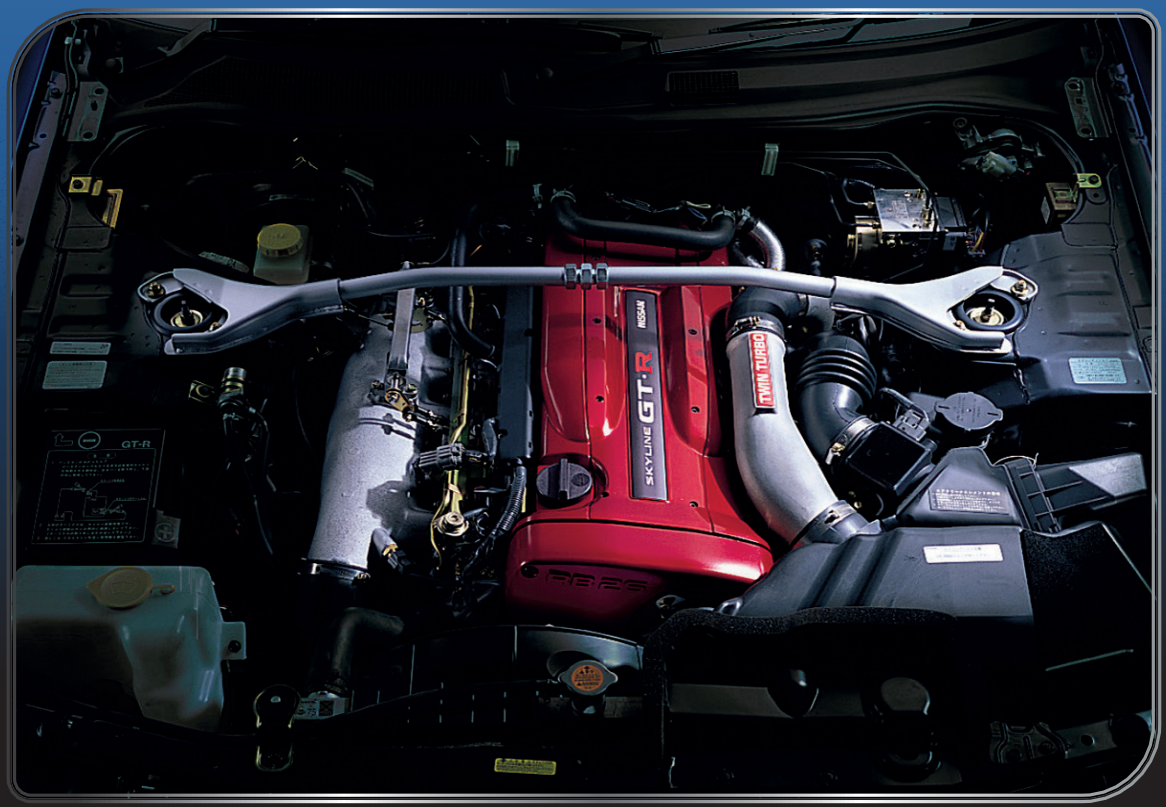
"On the circuit or on the street, this high-performance engine captivates the driver."

(R33)'s 0.85kg/cm^2 to 0.94kg/cm^2, the shape of the turbo compressor wing was revised. This improvement to limit the temperature rise of the turbocharged air resulted in enhanced boost pressure. Furthermore, the profile of the camshaft was changed to a setting that matched the characteristics of the new turbo. The GT-R (R34) V·spec N1 – a motorsport-based model designed for N1 races – adopted a twin ball-bearing metal turbo.

The intake and exhaust systems were also improved. The air-cooled, large-capacity intercooler expands the passage area by thinning the

A six-cylinder engine that can win top-class races is a rarity. The 1991 Skyline GT-R (R32), which was the overall winner of the Spa 24-hour race, was equipped with an engine that produced more than 600ps.

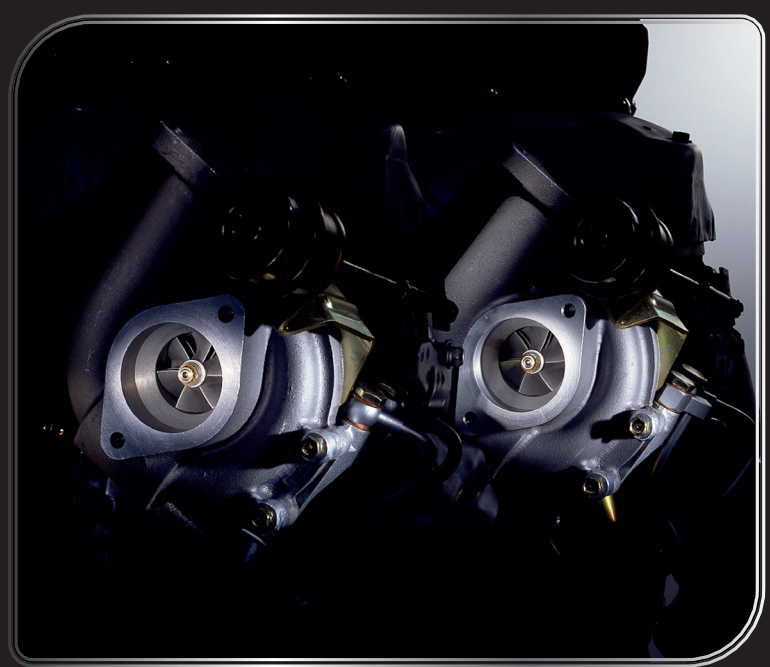




core tube thickness and reducing ventilation resistance. Also, by changing the exhaust outlet from a conventional stainless-steel cast product to a stainless-steel pipe that is thinner and expands the inner diameter, the ventilation resistance and exhaust pressure are reduced. A new stainless-steel, pressure-sensitive exhaust muffler was adopted for the exhaust system. The system has two channels connected by a control valve that opens and closes according to the exhaust pressure. It greatly contributes to an improvement in power by reducing exhaust pressure.

Even now, 30 years after its debut in 1989, the RB26DETT engine has the potential to display even higher performance thanks to the latest tuning technology. It is a masterpiece of an engine that Nissan can be proud of. ♦

The engine covers of the Skyline GT-R (R32) and (R33) RB26DETT unit were black, but the Skyline GT-R (R34) was given a red engine cover. Although the maximum output remained the same, each component was upgraded.



The Skyline GT-R (R34) RB26DETT features an advanced turbocharger incorporating friction-reducing ball bearings. It has become a popular choice of turbocharger for customizing the engines in earlier Skyline GT-R models.

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 4 20/12/23 12:30

ROMAN PEARCE

He supplies humor to the franchise and is one of the most charismatic members of Dom's team. Candid and less audacious than some of his companions, he often finds himself involved in dangerous challenges.



Introduced in *2 Fast 2 Furious* as an old friend of Brian O'Conner's, Roman likes fast cars, and has a tendency to think that he is always less fortunate than the others. At the beginning of the film, he and Brian are distant. Roman resents him for not helping him after his arrest.

Roman has a problem with authority. He does not like being told how to do things. This is especially frustrating because he is placed on house arrest after serving time in prison. He's independent, like Brian, with whom he gradually reconciles.

After proving his skill at the wheel and helping Brian end Carter Verone's criminal

Actor, singer, and model Tyrese Gibson was brought into the *Fast & Furious* universe by director John Singleton. His character Roman Pearce has become one of the most emblematic individuals of the saga.

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 5 20/12/23 12:31

activities in Miami, Roman gets his rap sheet wiped clean by the police. He fantasizes about opening his own workshop, repairing fast cars. Roman returns in *Fast Five* and becomes a member of Dominic Toretto's regular team, along with his friend Tej, whom he met through Brian in *2 Fast 2 Furious*. The pair often share funny and witty dialogue. Ultimately, working with Dom helps him amass an immense fortune that he spends on buying a deluxe Koenigsegg CCXR and a private jet.

THE ADVENTURES OF BRIAN O'CONNER

A cop at the crossroads

Brian goes out to have dinner with Mia one night. As an undercover cop, he convinces himself that it could be good for the case, a way of getting to know more about Dom. But, as she tells him, it feels as if the Torettos are like a magnet for people. Brian cannot avoid feeling strongly attracted to Mia, just as his admiration for Dom gradually grows despite the fact that his colleagues in the police have warned him time and again about the driver's violent past. This time, the police evidence clashes with what he feels in his heart.

CHASED BY A TANK

In *Fast & Furious 6,* a new call from Dom forces him to give up his millionaire lifestyle. Roman is back in action, now driving a Ford Mustang in front of a tank gone haywire, doing a parachute jump in a Camaro, and skidding around a Russian military base at the wheel of a Lamborghini. Despite all this – and as we saw in The *Fate of the Furious* – while his colleagues appear on the list of the 10 most wanted people by the US authorities, he is only ranked number 11, which confirms his constant feeling that the world looks down on him. At least, in the next instalment of the saga, he will be able to get even by participating with Tej Parker in possibly the craziest space trip in history – using a modified Pontiac Fiero as his ship.

Played brilliantly by the actor and singer, Tyrese Gibson, Roman Pearce is an endless source of humor, even in the worst situations. Throughout the saga, the character has matured, becoming more heavily involved in the team's missions and earning the trust and respect of the others. On many occasions, he demonstrated his altruism and bravery by placing himself in danger to save what he regards as his real family. ♦



Without ever losing his sense of humor, Roman's character has shown a remarkable evolution throughout the movies in the saga.

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 6 20/12/23 12:31

THE ALL JAPAN CHAMPIONSHIP RALLY SERIES

Part 1: Domestic racing in the early 1980s

Before 1985, the ultimate contest in Japanese motorsport was the All Japan Championship Rally series. The aim for the new NISMO brand was to create a model to win it.

For Nissan, brand recognition in motorsports needed to be increased worldwide. Full-scale operations of NISMO would begin in 1985, which saw a desire to expand the scope of activities beyond the domestic circuit and rally competitions.

Compared with current racing events, track meetings in the 1980s were not as varied and the requirements for competing vehicles were not as strict. Thus, for ordinary car enthusiasts, the idea of attending a rally where you could enjoy motorsports to see your favorite race-tuned production models was especially popular.

In fact, domestic rallies at the time tended to be prefectural and district competitions held all over Japan. There were also many drivers with no racing experience who were allowed to compete – the events were so popular that hopeful novice competitors were often denied entry.

The pinnacle of domestic racing was the All Japan Championship Rally series. If you won this competition then there's no doubt that a new brand like NISMO would boost the recognition of its name. However, there was no production Nissan model capable of minor race modifications that was suited for domestic rallies. As for the engine, a number of restrictions were in place, from the entrance of clean air to the exit of muffler emissions. It meant that the potential of the base engine was in the balance and would have a big impact on the wins and losses at domestic rallies of the period.



The Fairlady leads the Toyota AE86 Type. Even though the AE86 was the most popular Japanese racing model for many years, it had never won a Japanese title.



When NISMO became fully operational in 1985, it was important to increase its brand awareness. In this respect, the success of the Fairlady Z was pivotal, and thanks to this the NISMO logo went straight to the hearts of rally fans.

The main model competing in the series at the time was the Toyota Levin/Trueno AE86 Type, with a 1,600cc, four-valve DOHC engine. There was also the Mitsubishi Lancer EX Turbo 175A Type, powered by a 1,800cc SOHC turbocharged engine.

NISMO needed a new model with which to challenge in the All Japan Championship Rally series. With this in mind, it began the development of a model that would gain iconic status for motor-racing fans – the Fairlady Z. ♦

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 7 20/12/23 12:31

ELEGANT NEW MODEL BASED ON THE FAIRLADY

The first-generation Silvia (CSP311) was developed as a two-seater sports model to follow the Fairlady 1500 (SP310). In September 1964, just before the Tokyo Olympics, a metallic green "Datsun Coupe 1500" displayed at the Nissan booth at the 11th Tokyo Motor Show was its prototype.

When the model was officially announced in April 1964, its engine was a newly developed 1,595cc R-Type unit, and the car was given the name Silvia. The Fairlady and Silvia were sibling cars that shared ladder-type frames and suspensions, but the open body of the Fairlady was replaced by a two-door closed coupe on the Silvia. As the frame of the Fairlady had been derived from the first-generation Bluebird (P310), it meant that the Bluebird, the Fairlady, and the Silvia were sister cars.



The interior was as stylish as the exterior. The windscreen was wide and open, and the seats were brightly colored, giving it the feel of a European model.

The basic design of the body, with its beautiful lines, was created by Nissan's in-house designer, Kazuo Kimura. It is said to have been reworked and completed on the advice of a German designer and consultant called Albrecht von Goertz. The production was handled by a Nissan-affiliated car body manufacturer, Tonouchi Industry Co (currently Tonox). The mostly handmade body was assembled not by bolting the front wings, but by welding them. For that reason, the front area had no joints.



The prototype was unveiled at the 1964 Tokyo Motor Show. The emblem on the rear of the front wings read, "DATSUN Coupe1500". The elegant style of the model was unlike any other Japanese car, which made it the focus of much attention.

The Silvia's R-Type engine was an OHV unit with an ultra-short stroke specification – the bore and stroke was 87.2mm x 66.8mm. The SU twin carburetor intake manifolds featured lower air resistance, which enabled the maximum output to increase from the Fairlady 1500's 80ps to 90ps. This engine was soon installed

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 8 20/12/23 12:31



The first-generation Silvia was a pioneer of Japanese luxury cars. A couple were pictured alongside the model in the catalog to emphasize the Silvia's image as a speciality car.

in the Fairlady 1600 (SP311) and along with sharing the same chassis, this further cemented the Silvia and Fairlady as sibling models.

The Silvia's suspension was a combination of double wishbone at the front and leaf rigid at the rear. It is worth noting that Nissan's first disk brakes were adopted for the front of this model; the Fairlady 1500 had used drum brakes on all four wheels. With its handmade body and leather-like interior, the Silvia was a luxury car that cost a great deal more than the Fairlady. As a result, only 554 cars were made before production was discontinued in 1968. Its rarity and luxury ensures that it is a legendary car. ♦

TECHNICAL DATA

SILVIA SP311 (1966)

Length:	157in (3,985mm)
Width:	59.5in (1,510mm)
Height:	50.2in (1,275mm)
Wheelbase:	89.8in (2,280mm)
Tread (front):	50in (1,270mm)
Tread (rear):	47.2in (1,198mm)
Vehicle weight:	2,160lb (980kg)
Engine:	R Type (straight four, OHV, SU twin carb)
Total displacement:	1,595cc
Maximum output:	90ps / 6,000rpm
Maximum torque:	13.5kgm / 4,000rpm
Suspension (front/rear):	double wishbone / rigid leaf
Brakes (front/rear):	disk / drum
Tires:	5.60–14-4P

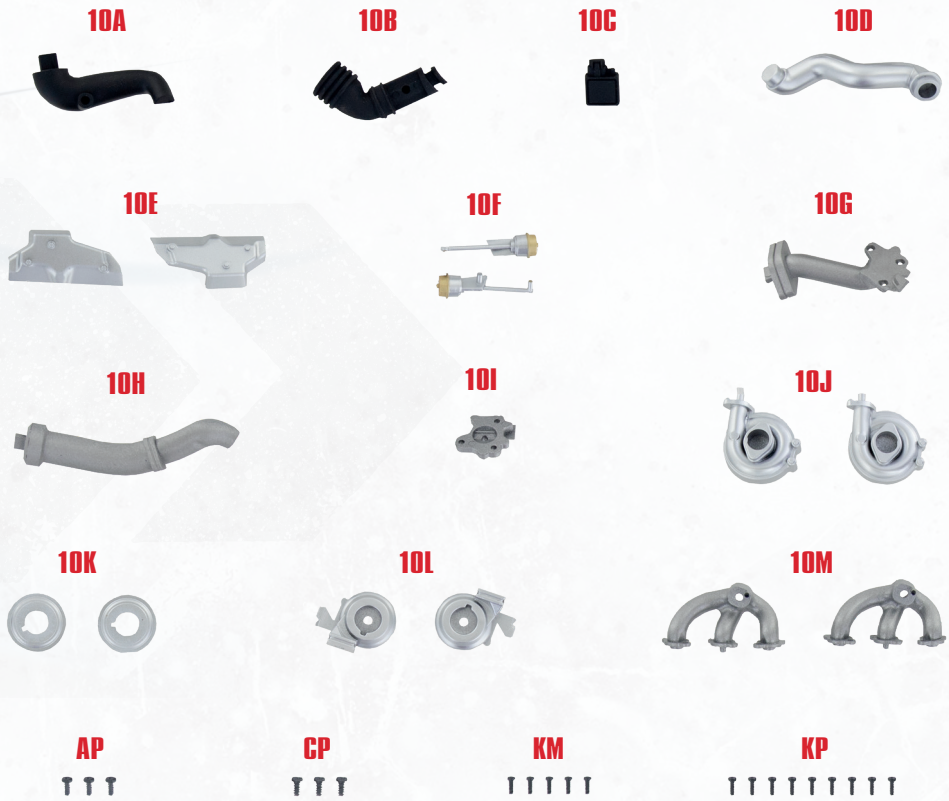


010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 9 20/12/23 12:31

STAGE 10
TURBO SYSTEM (1)

In this issue, we start to assemble the turbo system of our Nissan GT-R. We will attach the air inlet and exhaust outlet ducts, as well as the turbo drive valves, compressors, and turbine casings.

PARTS



10A Air inlet duct 1
10B Air inlet duct 2
10C Air flowmeter
10D Air inlet duct 3
10E Exhaust manifold covers (×2)
10F Turbo drive valves (×2)
10G Exhaust outlet 2
10H Exhaust outlet 1
10I Turbine outlet elbow
10J Compressor housings 1 (×2)
10K Compressor housings 2 (×2)
10L Turbine casings (×2)
10M Exhaust manifolds (×2)
AP Screws 1.7×4mm (×3*)
CP Screws 2.0×4mm (×3*)
KM Screws 1.4×4mm (×5*)
KP Screws 1.4×4mm (×9*)

*Including spares

010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 10 20/12/23 12:31

10.01

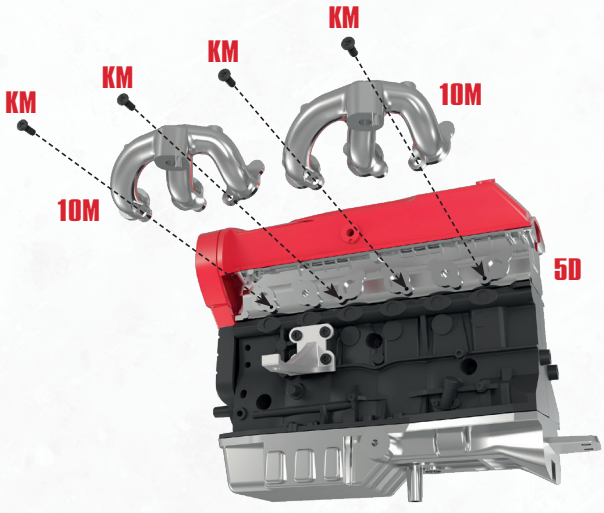
Start the assembly by connecting the air inlet duct 1 10A to the air inlet duct 2 10B.



10.02

Place the air flowmeter 10C into the air inlet duct 2 10B.



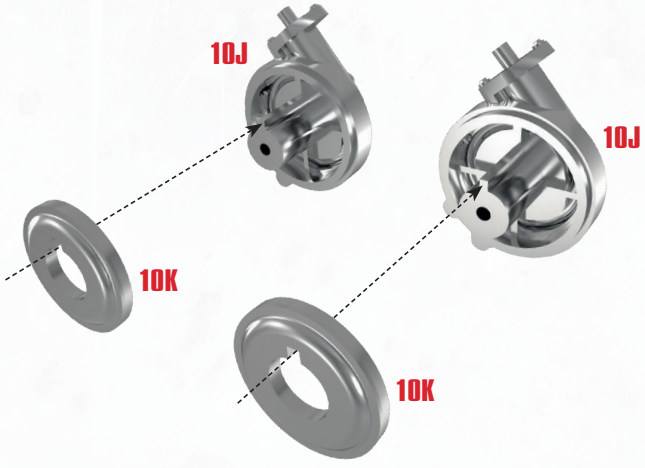


10.03

Retrieve the engine block assembly and attach both exhaust manifolds 10M to the cylinder head 5D using two KM screws for each manifold.

10.04

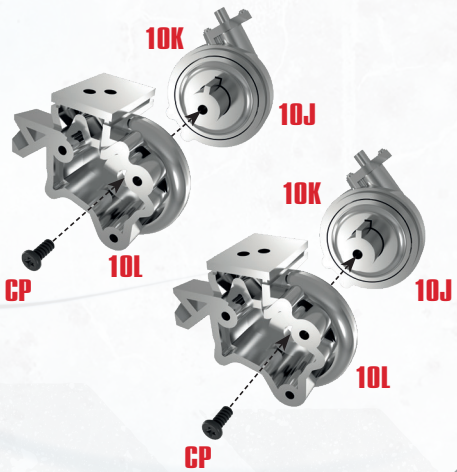
Position a compressor housing 2 10K over a compressor housing 1 10J. Repeat with the other pair of compressor housings.



010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 11 20/12/23 12:32

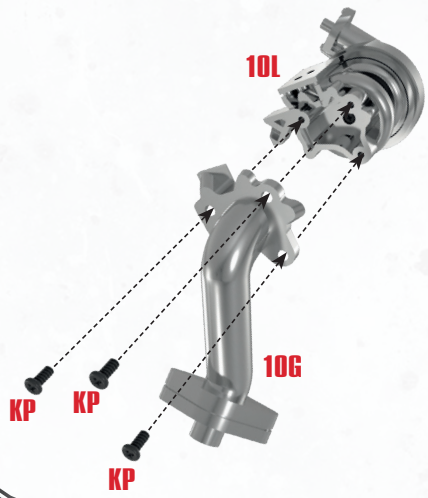
10.05

Attach a compressor housing assembly (10K+10J) to the first turbine casing 10L with a CP screw. Repeat with the other compressor housing assembly and the second turbine casing.



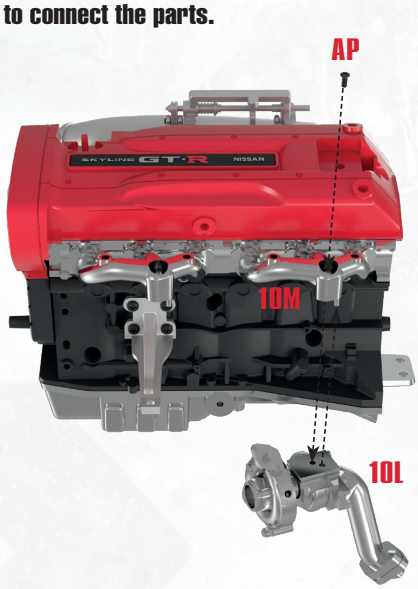
10.06

Take one turbine casing assembly and attach the first exhaust outlet 2 10G to a turbine casing 10L with three KP screws.



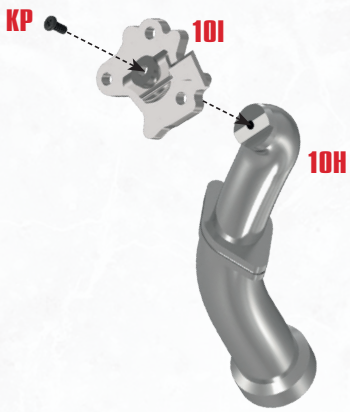
10.07

Fit the turbine casing 10L from the previous step over the pivot on the exhaust manifold 10M as shown in the picture. Use one AP screw to connect the parts.



10.08

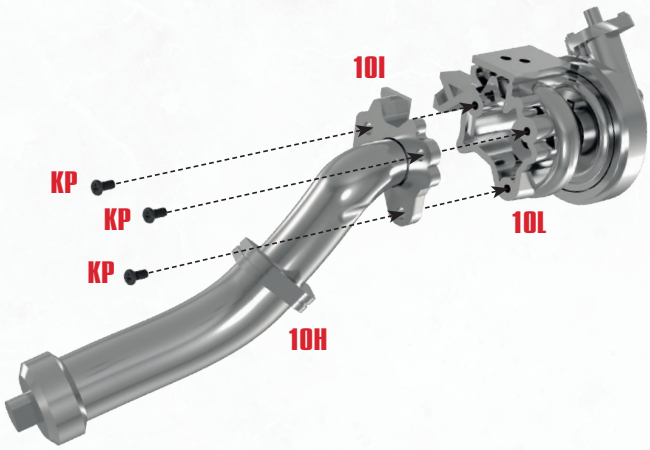
Attach the turbine outlet elbow 10I to the exhaust outlet 1 10H using one KP screw.



010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 12 20/12/23 12:32

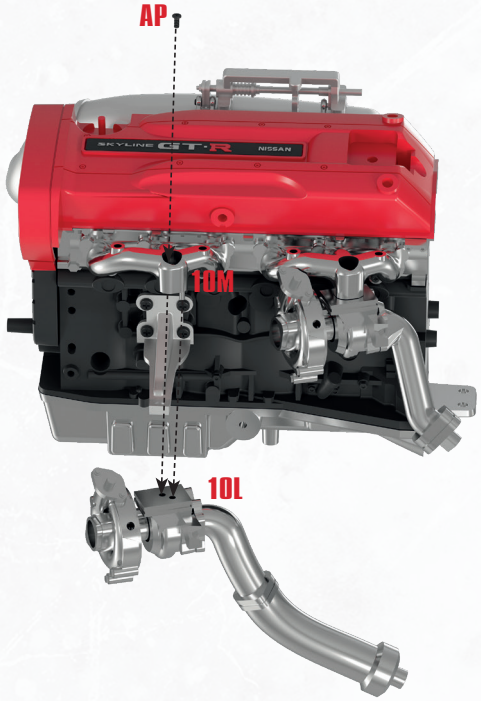
10.09

Position the turbine outlet elbow 10I and the exhaust outlet 1 10H assembly against the other turbine casing 10L. Fix the parts with three KP screws.



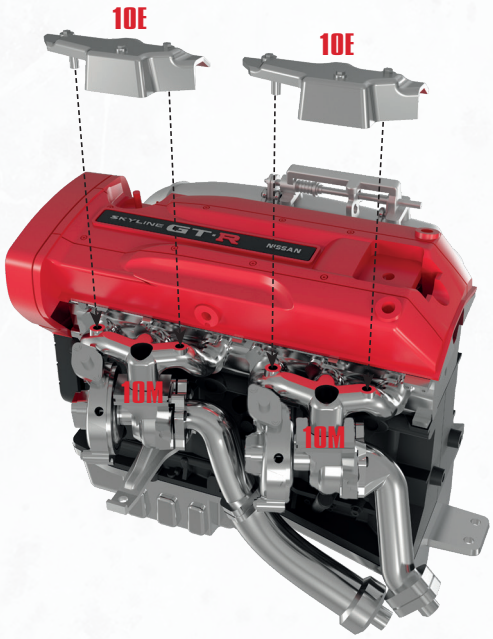
10.10

Position the turbine casing 10L onto the pivot on the exhaust manifold 10M as shown in the picture. Attach it from above with one AP screw.



10.11

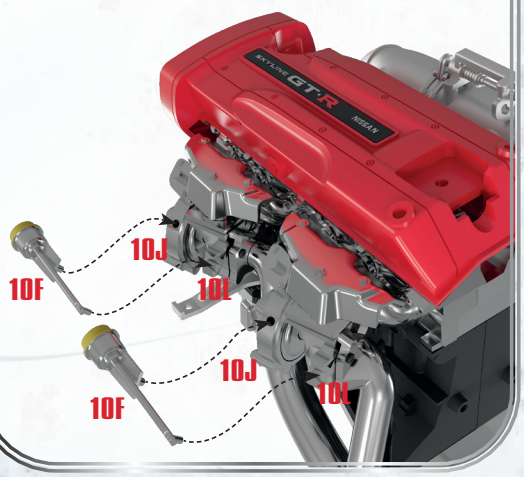
Carefully place the exhaust manifold covers 10E over the exhaust manifolds 10M.

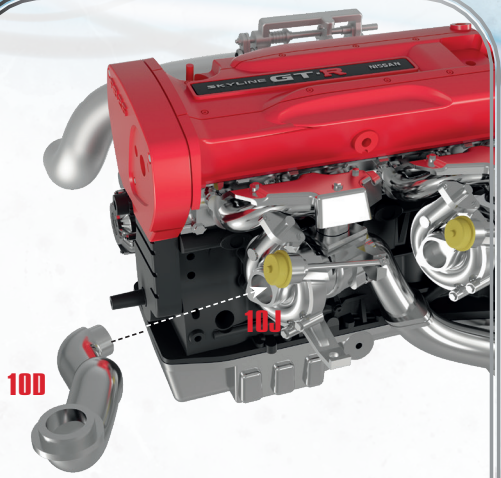


010_FS_FURIOUS_Nissan SkylineD_USA-UK-DE_v1.indd 13 20/12/23 12:32

TURBO SYSTEM (1)

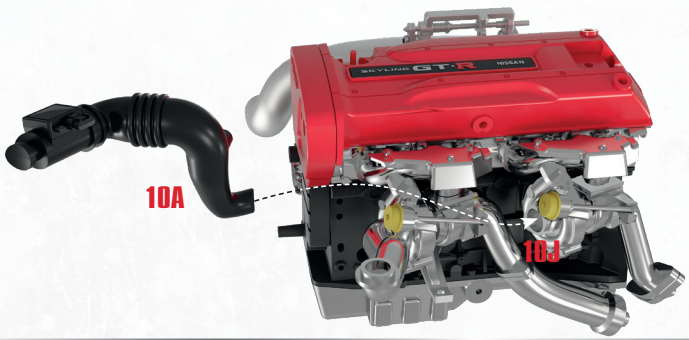
10.12 Insert the pivots on the turbo drive valves 10F into the compressor housings 1 10J and the turbine casings 10L, as shown in the picture.

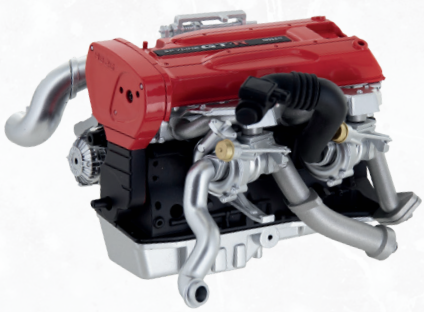




10.13 Insert one end of the air inlet duct 3 10D into the front compressor housing 10J.

10.14 To finish this stage, insert one end of the air inlet duct 1 10A into the rear compressor housing 10J.





Final assembly

FANHOME

Fast & Furious Franchise
© 2024 Universal City
Studios LLC. All Rights Reserved.
UNIVERSAL