BUILD THE

BACK TO THE FUTURE™ DELOREAN

ISSUE 23







FANHOME

BUILD THE ICONIC 80s TIME MACHINE IN 1:8 SCALE

UNIVERSAL

BUILD THE

BACK TO THE FUTURE™ DELOREAN

ISSUE 23



CONTENTS

4 **DRIVE TIME**
Add more parts to the engine for your DeLorean, using the illustrated guide.

8 **IN CLOSE-UP: THE ENGINE**
A look at the original movie DeLorean's engine before it was completely restored, courtesy of Alex Abdalla, who worked on the restoration.

10 **A TIME TRAVELLER'S GUIDE**
A stolen case of plutonium puts Doc Brown in danger!

© 2023 Universal City Studios LLC and Amblin Entertainment, Inc. All Rights Reserved.
© 2023 DeAgostini Publishing, S.p.A. All Rights Reserved.

Creative Director: Maggie Calmels
Managing Editor: Ben Robinson
Art Editor: James King
Writer: Kieran Grant

ISSN: 2057-357X
Printed in Italy/Czech Republic

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

UNITED KINGDOM
Published by DeAgostini UK Ltd c/o Royds Withy King, 69 Carter Lane, London EC4V 5EQ.

UNITED STATES
Published by DeAgostini Publishing USA, Inc. 299 Park Avenue, New York,New York 10171.

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 in the USA).
This product is not a toy and is not designed or intended for use in play. The collection is complete in 158 issues. 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.







YOUR CAR PARTS

With this issue you receive more parts for the engine including the distributor, plus fixing screws.



23A DISTRIBUTOR BRACKET



23B DISTRIBUTOR REAR



23C DISTRIBUTOR FRONT



23D ENGINE SIDE BRACKET



23E TRANSMISSION CASE LEFT BRACKET



23F TRANSMISSION CASE RIGHT BRACKET



23G DIP STICK



AM 3 X SCREW

DM 4 X SCREW



AP 3 X SCREW

CUSTOMER SERVICES

UK
Email customer.service@deagostini.co.uk

USA
Email support@usa.deagostini.com

More information
at **fanhome.com**



DRIVE TIME

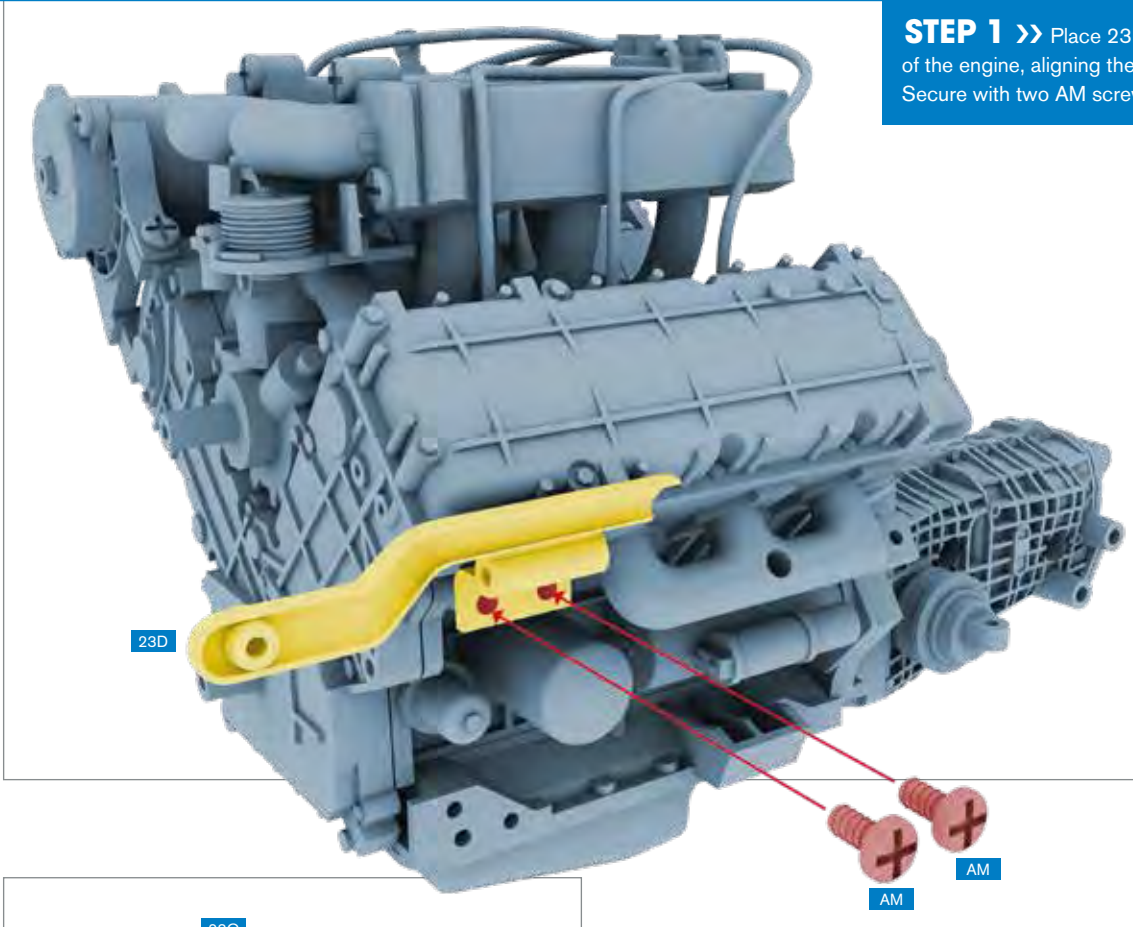
Continuing the engine assembly for your DeLorean.

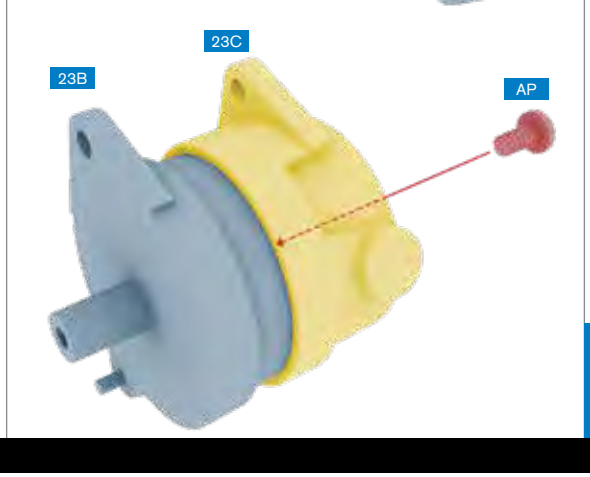
In this issue you will add more details to the engine by following these step-by-step instructions.



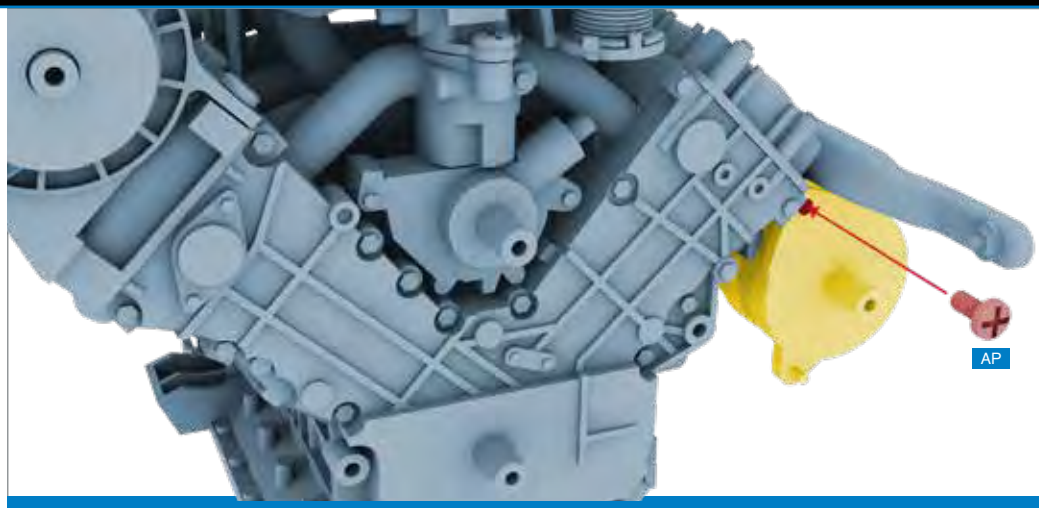
ASSEMBLING THE ENGINE

STEP 1 ›› Place 23D up against the right of the engine, aligning the holes of both. Secure with two AM screws.





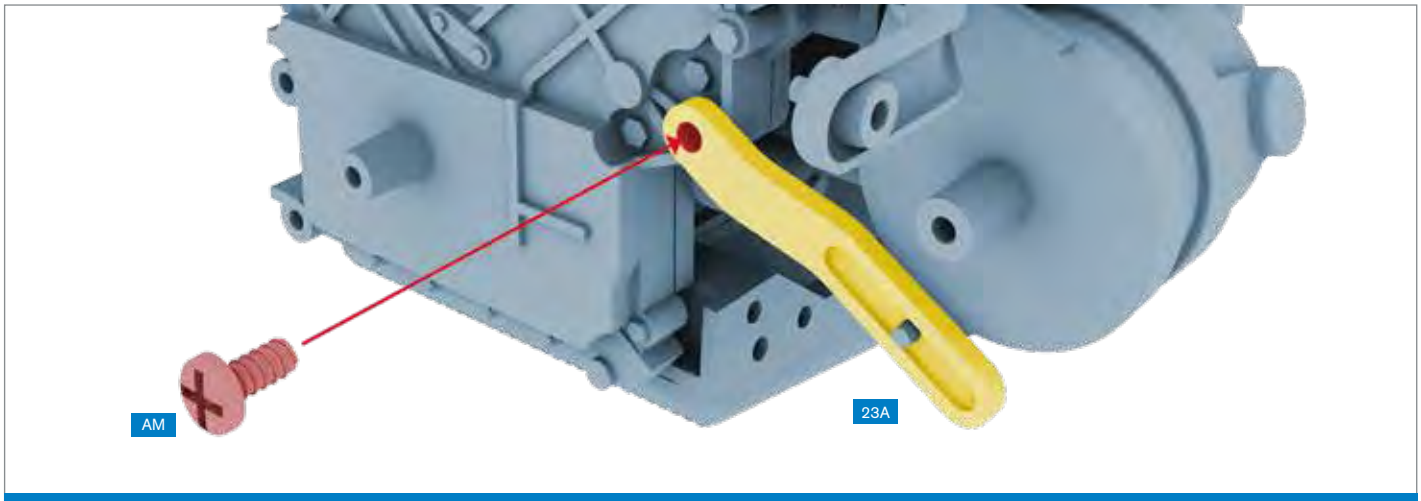
STEP 2 ›› Combine parts 23B and 23C, as shown, and fix them together with an AP screw.



STEP 3 ›› Place the alternator assembly on the right side of the engine, below 23D, and secure the rear with an AP screw.



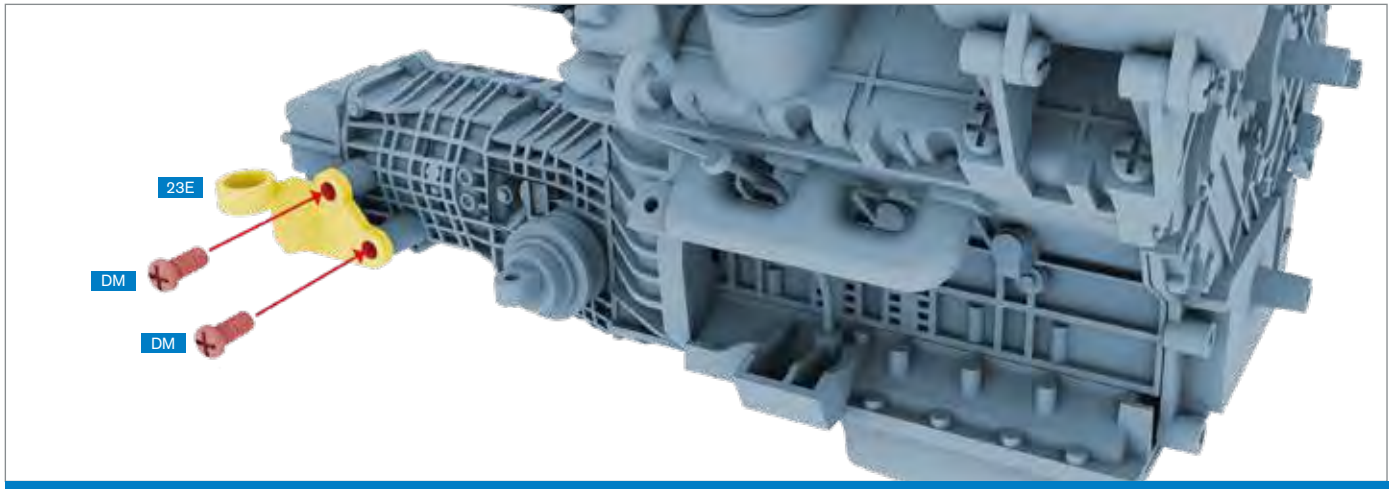
STEP 4 ›› Tighten another AP screw into the rear of the alternator to fix it to the engine.



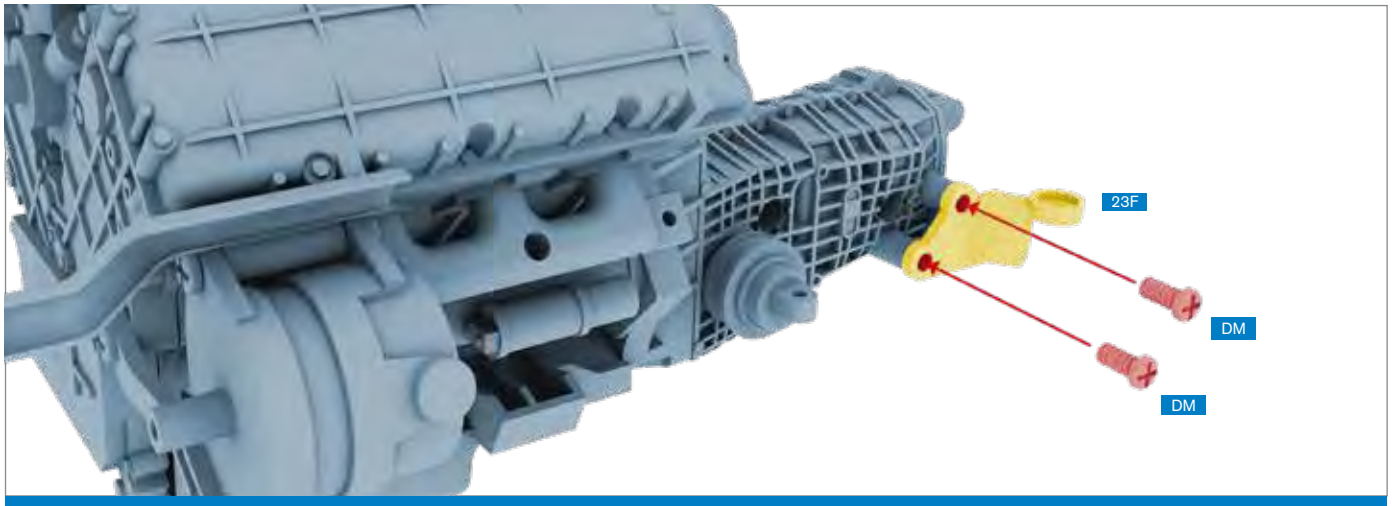
STEP 5 ›› Place part 23A onto the rear of the engine and the alternator, and fix in place with an AM screw.



STEP 6 ›› Pass 23G through the maifolds and into the dipstick hole in the bottom of the engine, as shown.

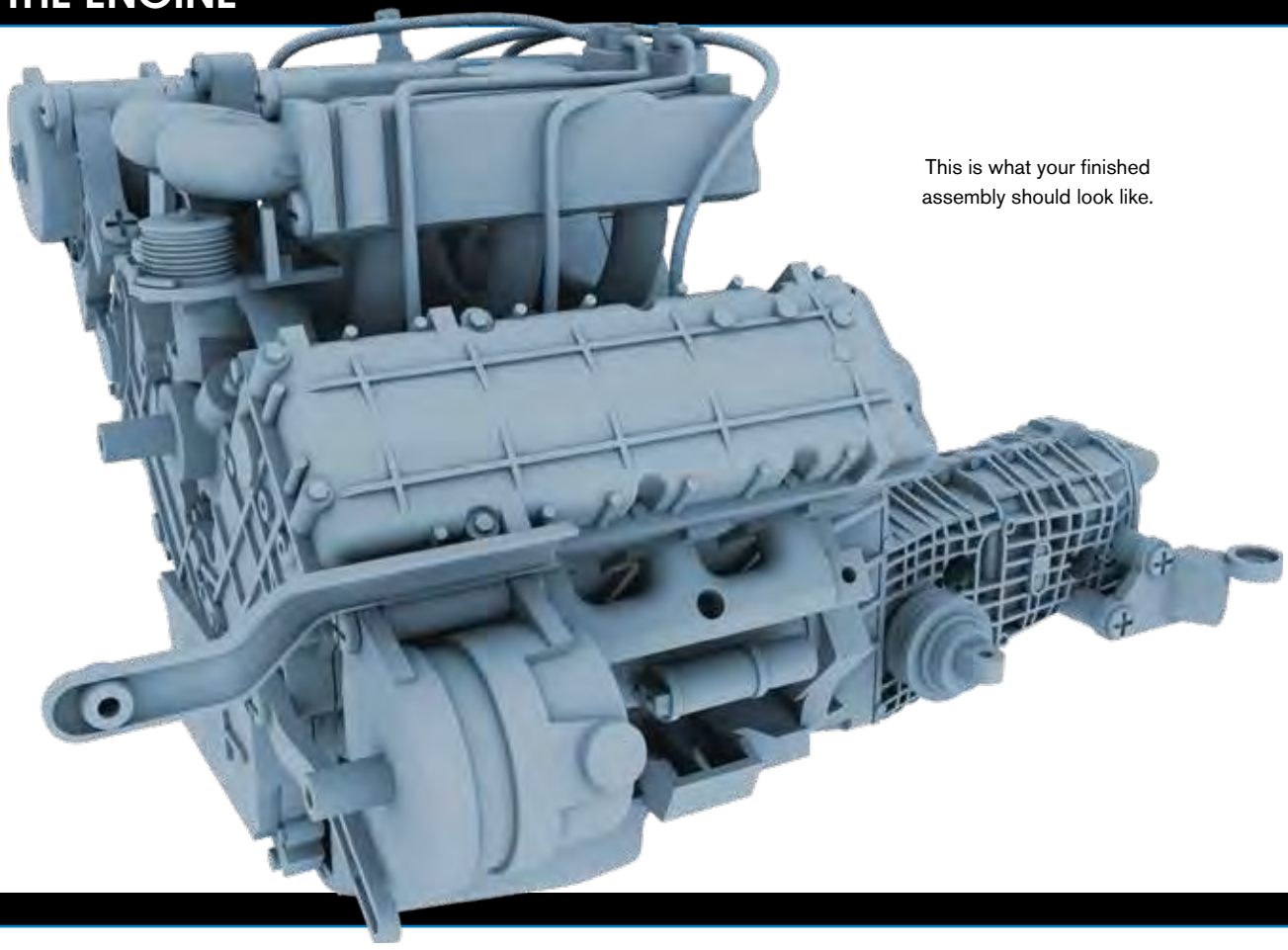


STEP 7 ›› Secure 23E to the left side of the transmission case with two DM screws.



STEP 8 ›› Fit 23F to the right side of the transmission case in the same way as 23E, with two DM screws.

THE ENGINE



This is what your finished assembly should look like.



IN CLOSE-UP: THE ENGINE

As you add to the engine on your DeLorean model, we take a look at the original movie car's engine before its restoration, courtesy of Alex Abdalla, part of the restoration team.





All photos © Joe Walser

TOO DARN HOT

The discoloured sticker on the air filter housing (left) indicated that the engine had overheated at some time in the past, although there was no indication of a problem with the water pump (far left).

The DeLorean Time Machine's engine has an extensive history, but much of it is shrouded in rumour – and most of the rumours surround just how powerful it had to be to get the car up to 88mph. Just the sound of it in the movie was incredible. It sounded like it had the capability to get up to 88mph without even getting out of second gear. Yet, in reality, the engine that was used exclusively in the A-car during production was a stock DeLorean engine that would struggle to get to 88mph even if you had an empty mall parking lot *and* were struck by lightning at the same time.

There was a story that the A-car had a Porsche V8 engine, but in actual fact the engine was a stock aluminium PRV (Peugeot/Renault/Volvo) B28F engine that produced some 130bhp. The throaty engine sounds that we heard in the final film were from a separate V8 engine that were overdubbed during post-production. Taking into consideration power that is lost through the car by the time it gets to the rear wheels, stock DeLoreans have been known to produce only around 100bhp when tested on a dyno.

Bear in mind that the PRV was designed and ultimately produced at a time just after the Iranian oil crisis in the mid-1970s when car manufacturers were forced to implement emissions systems in order to improve fuel consumption and help reduce pollution. As a result, many car engines built in the late 1970s and early 1980s suffered from a reduction in overall horsepower and subsequent performance. When the DeLorean's production run came to a close, plans for a turbocharged version of the PRV were scrapped. Had the company lived on, the DeLorean would have been one of the fastest stock production cars on the market with the inclusion of a turbocharger.

A RELIABLE ENGINE

By the time the PRV engine found its way into the DeLorean in 1981, it had already been mass produced and used in several different European car models for many years. It was proven to be a mechanically reliable engine that was capable of handling performance upgrades in the future, which is one of the main reasons John DeLorean selected it for his car.



NEEDS TLC
Surprisingly, when the DeLorean was examined before restoration, the engine was found to be almost completely original.

Engine reliability issues that affected the DMC-12 were immortalized to comic effect in *Back To The Future*, but the cars' intermittent engine operation was ultimately traced to an electrical problem specific to the DeLorean, rather than a true engine problem. (And sadly, it took a bit more to fix than hitting your forehead on the steering wheel!) Once these – albeit minor – problems were fixed, the DeLorean could be considered a reliable daily driver, much like its European predecessors.

ON EXAMINATION

During the restoration, I was able to take a good look at the engine bay and photograph it extensively. To my surprise, about 99% of what was visible in the compartment was original. The fuel lines, air conditioning hoses, water pump and all electrical connections looked original and untouched. Even the original stock Motorola alternator was still present. The coolant reservoir had been replaced, although it was unclear exactly when. Owners commonly replaced the stock plastic reservoir with a metal aftermarket unit due to the possibility of the original cracking and leaking. Was it replaced during production or while it was on display at Universal Studios?

The original DMC sticker located on top of the air filter housing appeared original but was discoloured brown, indicating that the car had significantly overheated at some point in time, which is not uncommon with DeLoreans. That said, there are many DeLoreans that still retain a tremendous amount of original engine equipment even after almost 40 years.

ADMIRATION

While the DeLorean's PRV engine is considered sturdy and reliable, it definitely had its issues in the early years of manufacturing, and without a doubt it caused problems during the production of the *Back to the Future* trilogy before today's solutions to the problems were well known. I feel sorry for the crew, but admiration for them for finding ways to make this car – which was so problematic in its younger years – into a true performer on screen. The frustrations of the crew were beautifully parlayed in several scenes in the trilogy that even John DeLorean himself found entertaining and approved of. You can be assured that the engine you are assembling is a very accurate replica of the PRV that is still, and forever will be, calling the A-car 'home'. ■





WE HAVE THE POWER: *Wearing protective clothing, Doc Brown takes a plutonium rod from the case and puts it in a lead-shielded chamber in the DeLorean.*

PLUTONIUM

THIS SUCKER'S NUCLEAR?

A case of plutonium, acquired under dubious circumstances, puts Doc's life in peril.

"Officials at the Pacific Nuclear Research Facility have denied the rumour that the case of missing plutonium was stolen from their vault two weeks ago. A Libyan terrorist group had claimed responsibility for the alleged theft – however, officials now blame a simple clerical error... "

Marty isn't around to hear the news report about stolen plutonium on the TV at Doc Brown's place, and he didn't notice, hidden under the bed, the bright yellow case marked 'radioactive' and covered in warning symbols. But he soon knows more than he wants to about the stolen plutonium when Doc unveils the DeLorean and pops a plutonium rod in the engine, explaining that although the car is electric, it needs nuclear power to travel through time. "Doc... you don't just walk into a store and ask for plutonium," says Marty suspiciously. "Did you rip this off?"

Doc explains that he got the plutonium from a group of Libyan Nationalists. "They wanted me to build them a bomb, so I took their plutonium and in turn gave them a shiny bomb case full of used pinball-machine parts!"

Doc's deception seems to have catastrophic consequences when a Volkswagen camper speeds into Twin Pines Mall. "Oh my God! They found me!" Doc shouts. "I don't know how, but they found me! *The Libyans!*" A machine gun chatters and Doc falls lifeless to the ground... ■

> **"I need a nuclear reaction to generate the 1.21 gigawatts of electricity that I need."**
>
> DOC BROWN

QUICK FACTS!

ELEMENTAL

Plutonium is a transuranic radioactive element with the chemical symbol Pu and atomic number 94. It is the heaviest element to occur in nature. Plutonium was discovered in 1940 by scientists at the University of California, but wartime regulations meant that the discovery was kept secret until 1948. Processing plutonium was a major part of the Manhattan Project during World War II, in the quest to develop the first atomic bombs.

NEXT ISSUE...

ENGINE

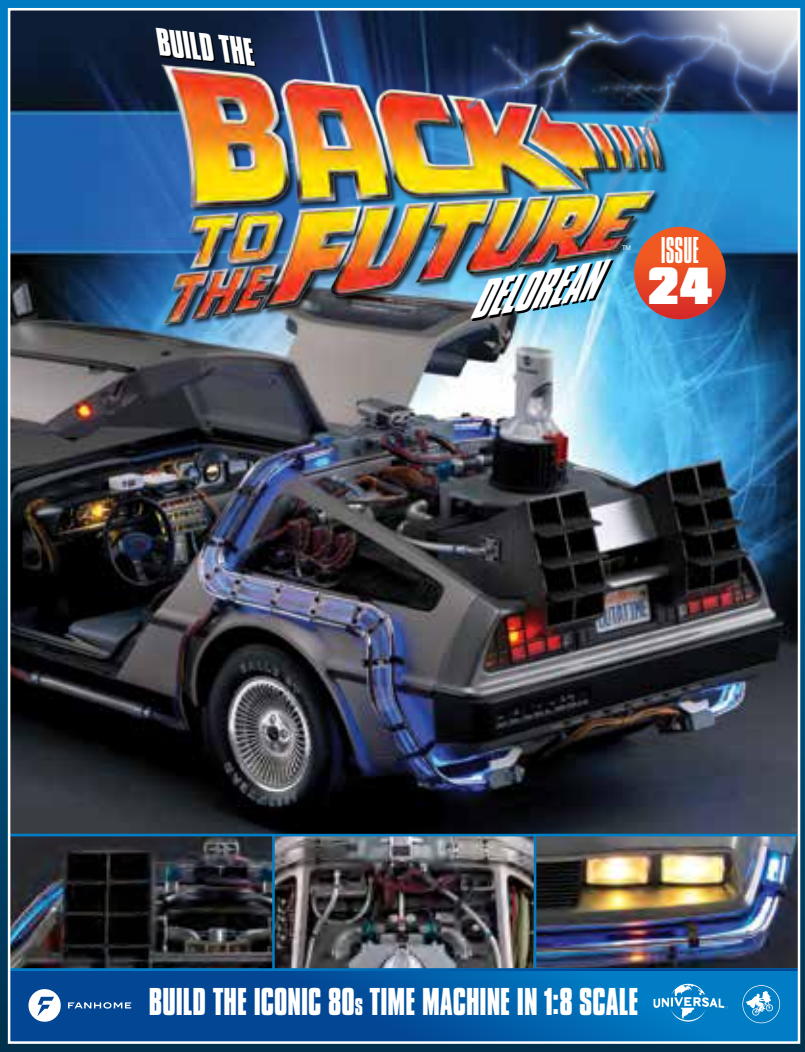
Continue working on the engine for your DeLorean model.

In the next issue you'll receive these parts for your DeLorean, plus detailed step-by-step instructions telling you how to assemble them.

YOUR CAR PARTS...

THE ENGINE





WE'RE GOING BACK! PART I

Joe Walser looks back to the epic, immersive celebrations he helped to create for the 25th Anniversary of *Back to the Future* in 2010.

PICTURE CREDITS: All photos © Universal except where stated.

BUILD THE

BACK TO THE FUTURE™ DELOREAN

FANHOME

UNIVERSAL

F230FSC023