

BUILD THE

MERCEDES-BENZ W 196 R



1:8
SCALE

ixoCOLLECTIONS

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MERCEDES-BENZ W 196 R

Guide to the instructions

This set of step-by-step instructions will enable you to complete the build of your **1:8-scale Mercedes-Benz W 196 R**. The only tool you will need is a screwdriver. Most of the steps involve simply screwing or fitting parts together, and the correct screws needed for each step are clearly labelled on the instructional images.

Please note the following:

- Where left and right elements of the same part are supplied, these are listed as (L) and (R).
- Close-up details of steps are framed in yellow.
- You will not be using every part you receive in your shipment in that build section. Keep any parts that are not used aside for use in a later sequence.
- You will receive extra screws with each shipment in case any screws are lost or broken.
- Screws with codes ending in the letter M drive into metal; those ending in the letter P drive into plastic.
- With M screws, first drive the screw in half-way. Then unscrew it to release the shavings created as the screw cuts its thread. Finally, drive the screw fully into the socket. M screws should be tightened so the head makes firm contact with the fixing surface.

This instruction set is valid for both the Juan Manuel Fangio kit and the Stirling Moss kit. The only differences between these two kits are in the appearance of some parts of the scale models.

- With P screws, do not over-tighten them as they can damage the socket.
- When working with the pre-finished exterior surfaces of the model, work on a soft cloth. This will protect against scratching the paintwork.
- When plugging wires in, ensure the power is switched off.
- Tweezers can be used to fit the PVC cables. In this case, grip carefully around 5mm from the end of the cable. If the end of the cable is too narrow to fit on to the pin, cautiously insert a cocktail stick, being wary not to split the cable.
- Some smaller plastic parts are attached to sprues. You can remove these by hand, or by careful use of a cutting implement such as a scalpel.
- When assembling the wheels of your model, you can choose between regular and easy assemblies. Follow our instructions carefully.



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Model assembly: Enrico Del Prete

Photography credits: Harry Pot / Anefo CC0 (p.3)



MERCEDES-BENZ W 196 R

The Mercedes-Benz W 196 R designed for the 1954 season met all the demands of the new Grand Prix formula decreed by the sport's governing body, the CSI (Commission Sportive Internationale): a capacity of 750 cc with or 2500 cc without supercharger, free choice of gas mixture, a racing distance of 300 kilometres or a minimum of three hours. The streamlined version was completed first because the Reims

D für die Saison 1954 konstruierte Mercedes-Benz W 196 R erfüllt alle Bedingungen der neuen Grand-Prix-Formel der CSI (Commission Sportive Internationale): Hubraum 750 Kubikzentimeter mit oder 2500 Kubikzentimeter ohne Kompressor, beliebige Zusammensetzung des Treibstoffs, Renndistanz 300 Kilometer, mindestens jedoch drei Stunden. Zuerst fertig gestellt wird die Stromlinien-Version, weil das Auftaktrennen in Reims sehr

a Mercedes-Benz W 196 R, conçue pour la saison 1954, répondait à toutes les exigences de la nouvelle formule du Grand Prix décrétée par l'instance dirigeante du sport, la CSI (Commission Sportive Internationale) : une capacité de 750 cm³ avec ou 2500 cm³ sans compresseur, libre choix du mélange de gaz, une distance de course de 300 kilomètres ou un minimum de trois heures. La version simplifiée a été complétée en premier parce que la course de Reims qui

race kicking off the season permitted very high speeds. After that there was also a version with exposed wheels.

Fritz Nallinger was in charge of the project as a whole, ably assisted by Rudolf Uhlenhaut, Chief Engineer of the racing department since 1 September 1936, and after the war also head of the Car Testing department, who influenced the development decisively. And although, yet again, in the case of the W 196 R, the whole was much more than the sum of its parts, every component is worth mentioning: cutting-edge technology in terms of its era, in spite of the fact that, in some cases, there had been precedents in the history of motor sports. This silver masterpiece, of which 14 units including a prototype were built, drove its competitors to despair in the following two years. Its original streamlined body was both expedient and visually appealing. From the European Grand Prix on the Nürburgring in early August 1954 onward, however, an open-wheel (monoposto) version also formed part of the line-up. Its tubular space frame was light and sturdy, its suspension with torsion bars and a new single-joint swing axle at

hohe Geschwindigkeiten zulässt. Danach gibt es noch eine Variante mit freistehenden Rädern.

Mit der Leitung des Projekts betraut ist Fritz Nallinger. Maßgeblich die Entwicklung beeinflusst Rudolf Uhlenhaut, seit dem 1. September 1936 Technischer Leiter der Rennabteilung und nach dem Krieg zudem Leiter der Pkw-Versuchsabteilung. Und obwohl im Falle des W 196 R einmal mehr das Ganze viel mehr ist als die Summe der Teile, ist jedes Element der Rede wert, damalige Technologie vom Besten – auch wenn sich gelegentlich in den Tiefen der Vergangenheit Präzedenzfälle finden. Das Meisterstück in Silber, gefertigt in vierzehn Exemplaren inklusive eines Prototyps, lässt in den nächsten beiden Jahren die Konkurrenz verzagen. Der ursprüngliche Stromlinienaufbau ist zweckmäßig und schön zugleich, allerdings wird ab dem Großen Preis von Europa auf dem Nürburgring Anfang August 1954 eine Version mit frei stehenden Rädern (Monoposto) zur Standardausrüstung. Der Gitterrohrrahmen ist leicht und stabil, das Fahrwerk mit Drehstab-Aufhängung und einer neuen Eingelenk-Pendelachse hinten sowie riesigen turbogekühlten,

débutait la saison permettait des vitesses très élevées. Après cela, une version avec des roues apparentes a également été construite.

Fritz Nallinger était en charge du projet dans son entier, habilement assisté par Rudolf Uhlenhaut, ingénieur en chef du département des courses depuis le 1er septembre 1936 et, après la guerre, également chef du département des essais des voitures, qui a contribué de manière décisive au développement. Et bien que, encore une fois dans le cas de la W 196 R, l'ensemble était bien plus que la somme de ses parties, chaque composant mérite d'être mentionné : c'était la technologie de pointe pour cette époque, bien qu'il y avait eu, dans certains cas, des précédents dans l'histoire du sport automobile. Ce chef-d'œuvre argenté, dont 14 exemplaires y compris un prototype ont été construits, a poussé ses concurrents au désespoir au cours des deux années suivantes. Sa carrosserie aérodynamique originale était à la fois opportune et visuellement attrayante. À partir du Grand Prix d'Europe au Nürburgring au début du mois d'août 1954, une version à roues ouvertes (monoplace) fait également partie de l'équipe. Son cadre spatial tubulaire était léger et robuste, les suspensions avec des barres de torsion et un

the rear as well as the giant, turbo-cooled, and at first centrally arranged Duplex drum brakes were unconventionally good. The eight-cylinder in-line engine with direct injection and desmodromic valve control (1954: 256 hp (188 kW) at 8260 rpm, 1955: 290 hp (213 kW) at 8500 rpm) was installed into the space frame at an angle of 53 degrees to the right to lower the centre of gravity and reduce the frontal area. What's more, meticulous preparations for each individual race harked back to the glorious 1930s while at the same time anticipating the modern Formula One approach. But there was something else as well: so as to have the best cars in the world raced by the best drivers, racing manager Alfred Neubauer hired the – initially reluctant – superstar Juan Manuel Fangio, plus the up-and-coming Stirling Moss in 1955 – a virtually invincible pairing.

The W 196 R's track record was impressive indeed: nine victories and fastest laps, as well as eight pole positions in the twelve Grand Prix races in which it was entered, and, of course, Fangio's world champion's titles in 1954 and 1955. There was little room for improvement.

zunächst innen mittig untergebrachten Duplex-Trommelbremsen unkonventionell gut. Der Reihenachtzylinder mit direkter Einspritzung und desmodromisch gesteuerten Ventilen (1954: 256 PS/188 kW bei 8260/min, 1955: 290 PS/213 kW bei 8500/min) ist im Winkel von 53 Grad nach rechts geneigt in das Rahmenfachwerk eingebaut, um den Schwerpunkt abzusenken und die Stirnfläche zu verkleinern. Dazu kommen die minutiöse Vorbereitung und Durchführung des Projekts Grand Prix im Zeichen des Stuttgarter Sterns, die einerseits an die ruhmreichen 1930er Jahre erinnern und zugleich die Formel-1-Moderne vorwegnehmen. Und noch etwas: Damit das beste Fahrzeug auch vom besten Fahrer gesteuert wird, hat Rennleiter Alfred Neubauer den anfänglich widerstrebenden Top-Lenker Juan Manuel Fangio engagiert, dazu 1955 den vielversprechenden Stirling Moss – ein schier unschlagbares Duo.

Die Bilanz des W 196 R: neun Siege und schnellste Runden sowie acht Pole-Positions in den zwölf Grand Prix, an denen er teilnimmt, sowie die beiden Fahrertitel 1954 und 1955 für Fangio. Viel besser geht's nicht.

nouvel essieu oscillant à un seul joint à l'arrière ainsi que les freins à tambour duplex géants, turbo-cooling et d'abord disposés centralement, étaient exceptionnellement bons. Le moteur à huit cylindres en ligne à injection directe et commande de soupape desmodromique (1954: 256 ch (188 kW) à 8260 tr/min, 1955: 290 ch (213 kW) à 8500 tr/min) a été monté dans le cadre spatial à un angle de 53 degrés vers la droite pour abaisser le centre de gravité et réduire la zone frontale. En outre, les préparatifs méticuleux pour chaque course individuelle rappelaient les glorieuses années 1930 tout en anticipant l'approche moderne de la Formule Un. Mais il y avait aussi autre chose : pour que les meilleures voitures du monde soient conduites par les meilleurs pilotes, le directeur de course Alfred Neubauer a embauché la superstar Juan Manuel Fangio, qui était réticent au début, ainsi que le prometteur Stirling Moss en 1955 – un duo pratiquement invincible.

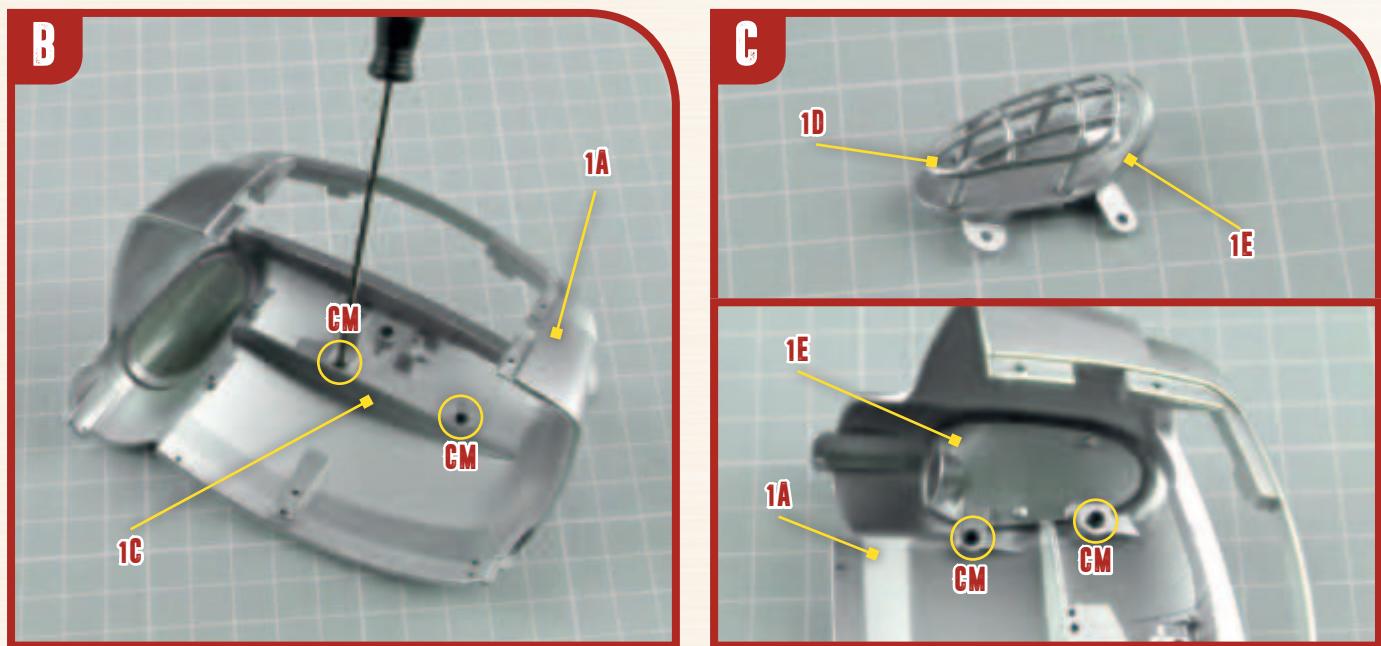
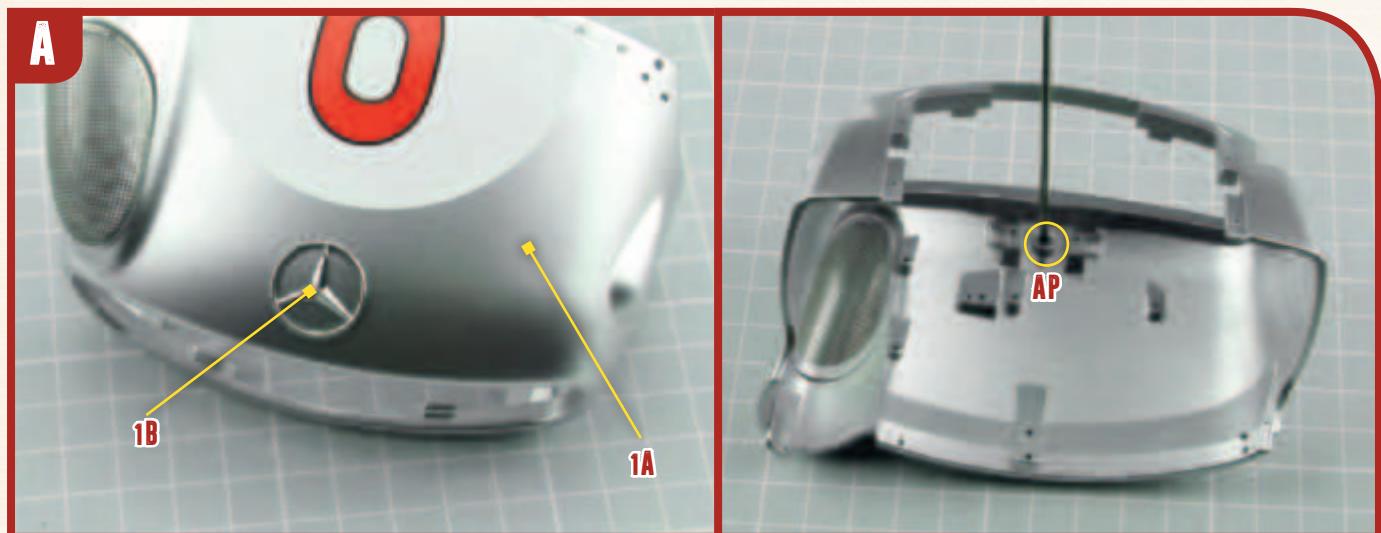
Le palmarès de la W 196 R est vraiment impressionnant : neuf victoires et les tours les plus rapides, ainsi que huit pole positions dans les douze courses de Grand Prix auxquelles elle a participé, et, bien sûr, les titres de champion du monde de Fangio en 1954 et 1955. On ne pouvait guère faire mieux !

Key specs

ENGINE TYPE	M 196 R
ENGINE LOCATION	Front, longitudinally mounted
CYLINDERS	8 in-line
VALVES	16
CUBIC CAPACITY	2496 cc
BORE X STROKE	76 x 68.8 mm
COMPRESSION RATIO	12:1
FUEL FEED	Direct fuel injection
LUBRICATION	Dry sump
ASPIRATION	Naturally aspirated
POWER	290 bhp at 8,500 rpm
TORQUE	247 Nm at 6,300 rpm
BODY	Aluminium body panels
CHASSIS	Steel tubular spaceframe
FRONT SUSPENSION	Double wishbones, torsion bars, telescopic shock absorbers
REAR SUSPENSION	Swing axle, longitudinal torsion bars, telescopic shock absorbers
STEERING SYSTEM	Worm-and-sector
BRAKES	Light alloy drums, all-round
DRIVE	Rear wheel drive
GEARBOX	5 speed, manual
CLUTCH PLATES	Dry, single plate
LENGTH	4,025 mm
WIDTH	1,625 mm
HEIGHT	1,040 mm
WHEELBASE	2,350 mm
WEIGHT	835 kg
TOP SPEED	Over 300 km/h

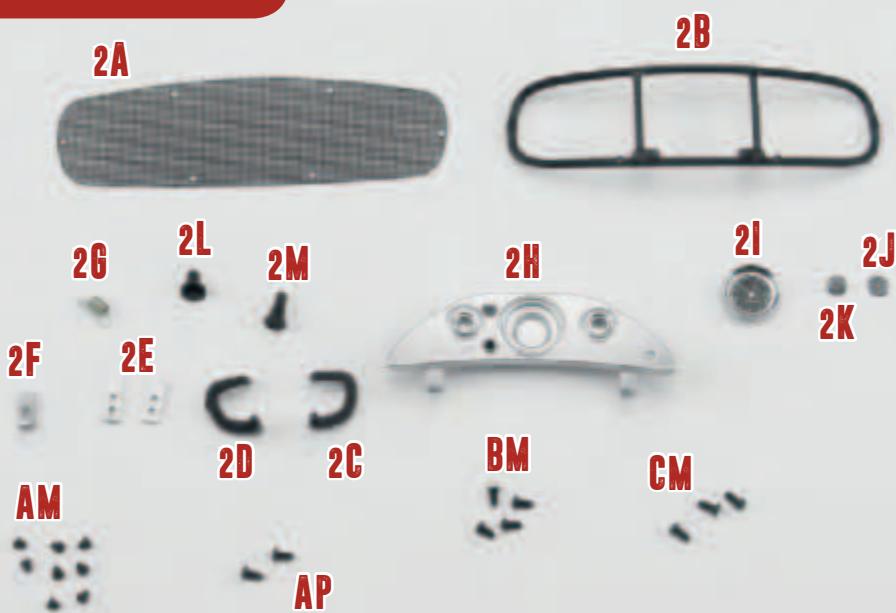


01 PARTS LIST



step by step #02

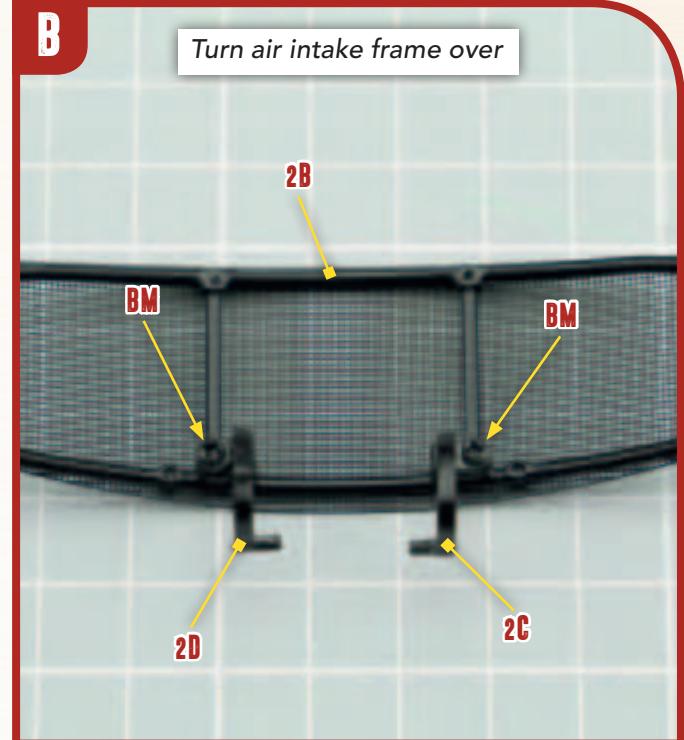
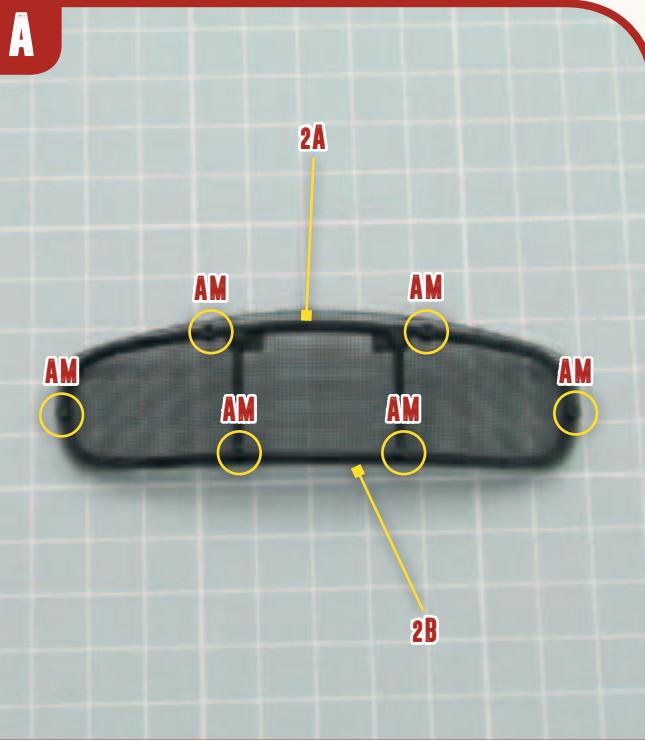
02 PARTS LIST

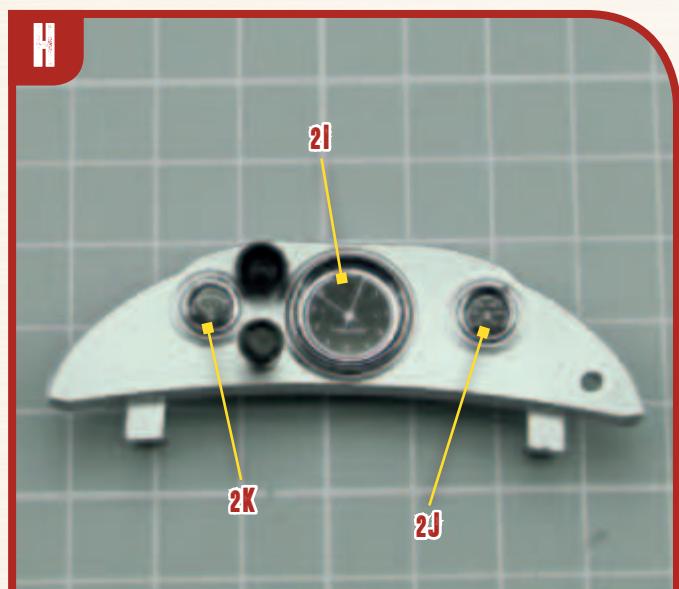
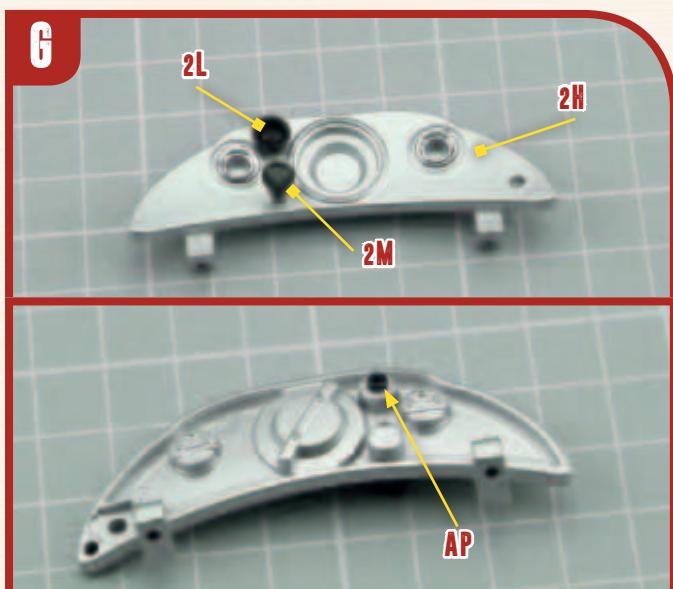
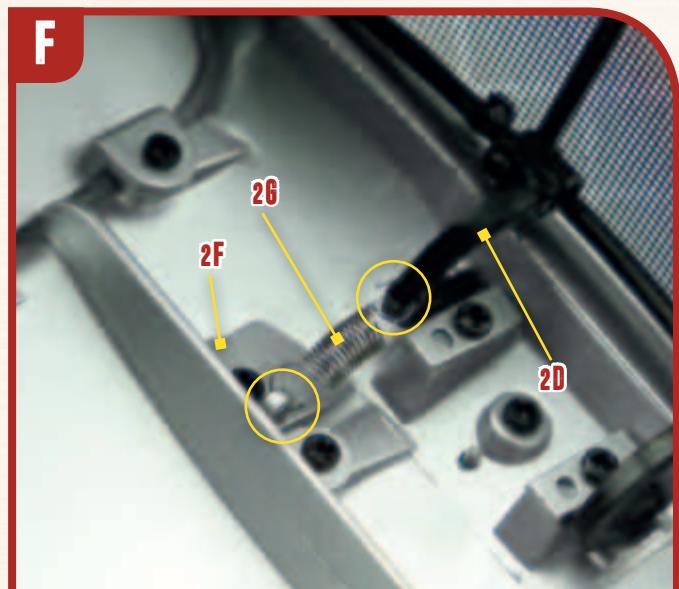
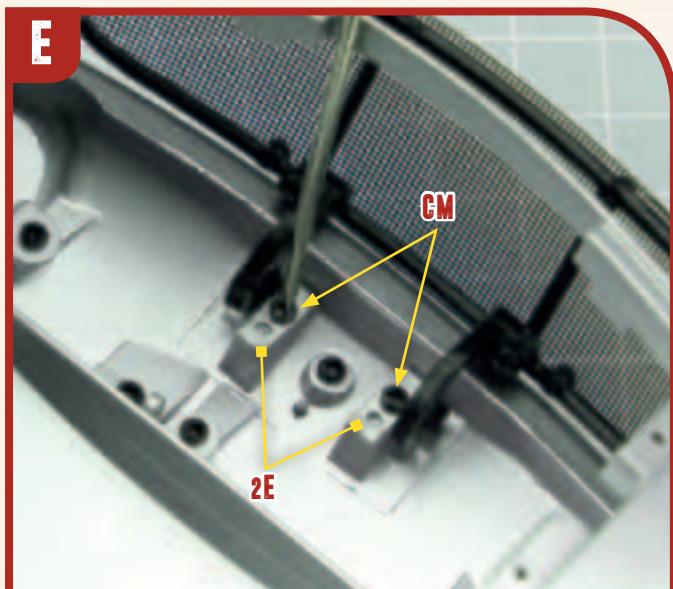
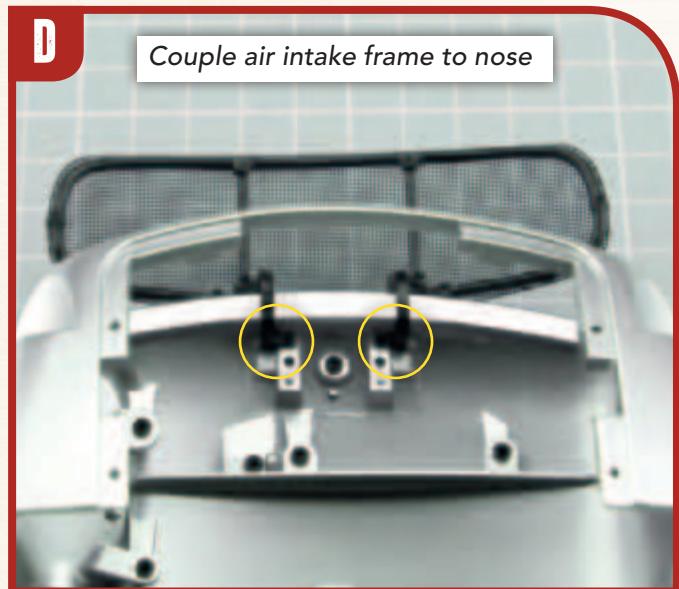
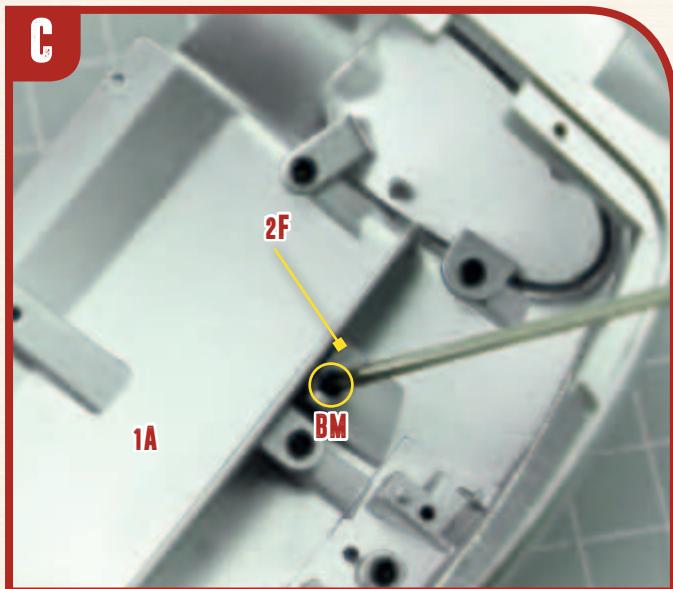


2A Air intake net
2B Air intake frame
2C Hinge (L)
2D Hinge (R)
2E Hinge supports (x2)
2F Bracket
2G Spring

2H Dashboard
2I Tachometer
2J Water temperature gauge
2K Oil pressure gauge
2L Low fuel indicator
2M Cold start injector

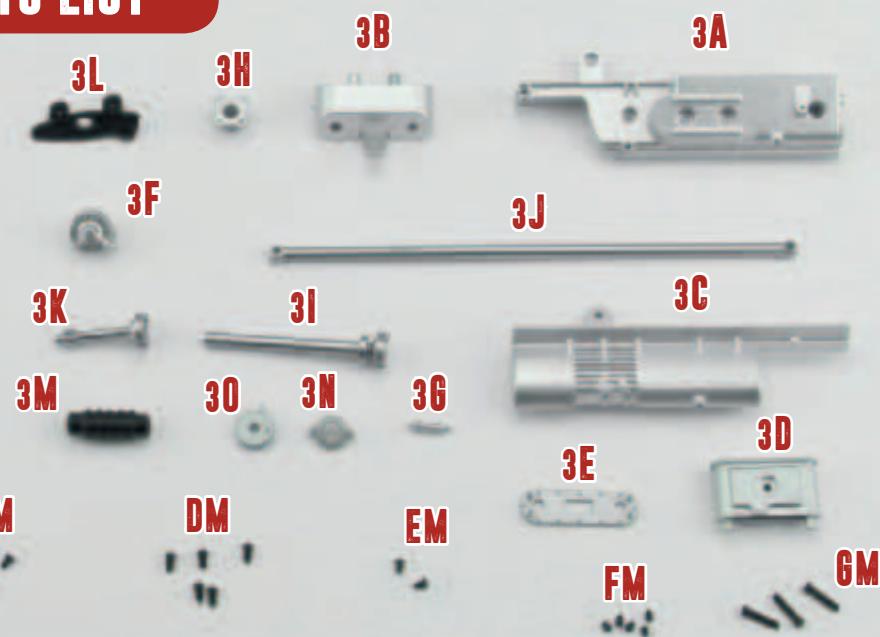
AP 2 screws (1.7x4mm)
AM 8 screws (1.5x2mm)
BM 4 screws (1.7x3mm)
CM 3 screws (1.7x4mm)





step by step #03

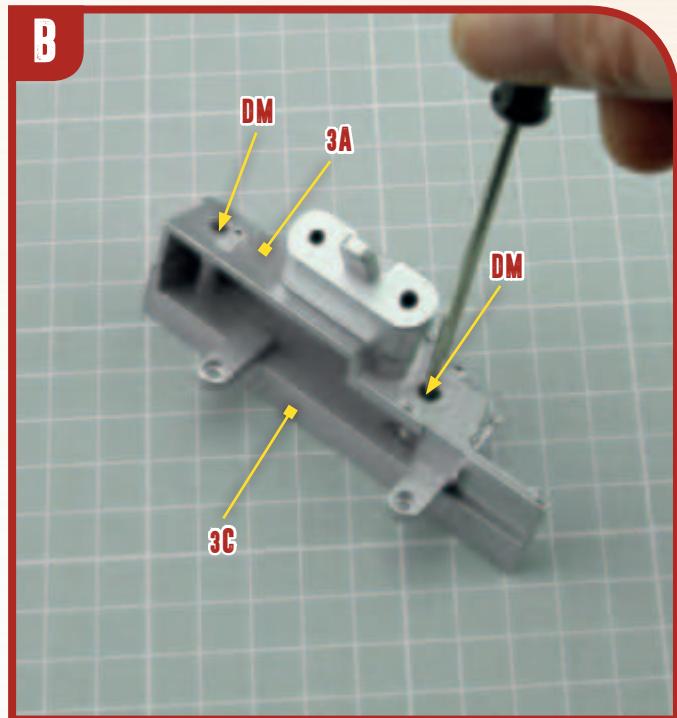
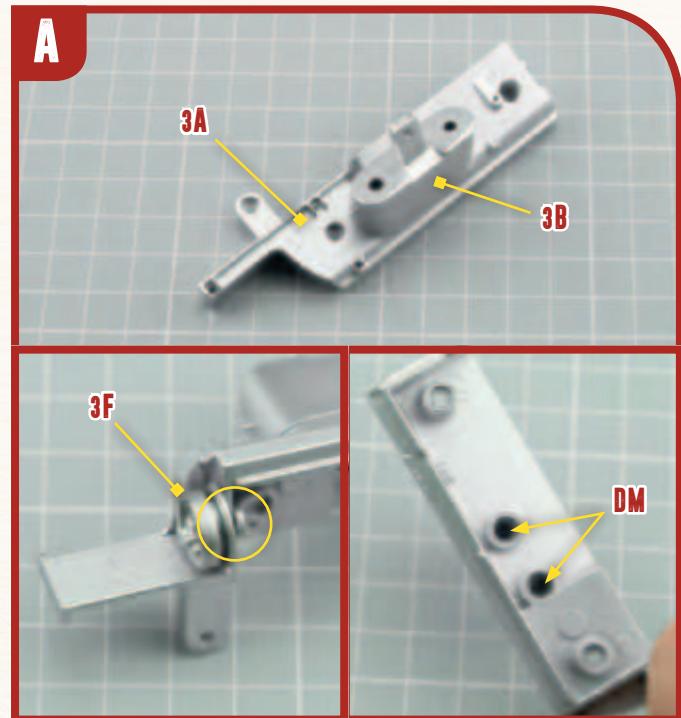
03 PARTS LIST

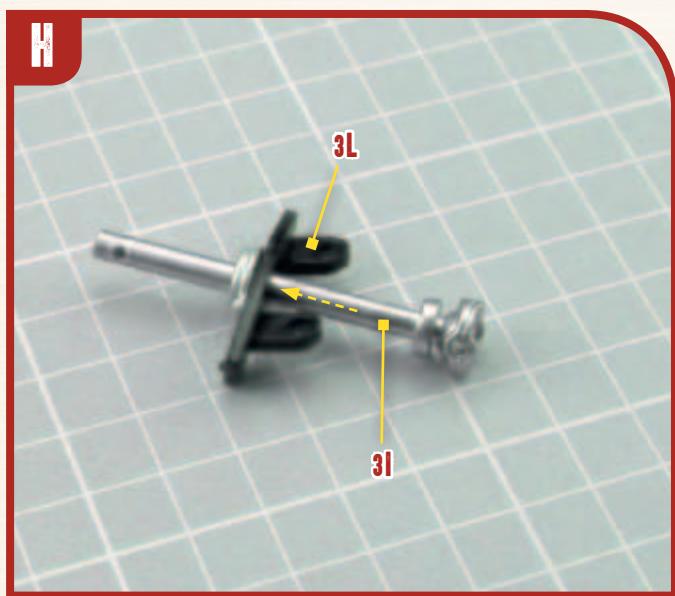
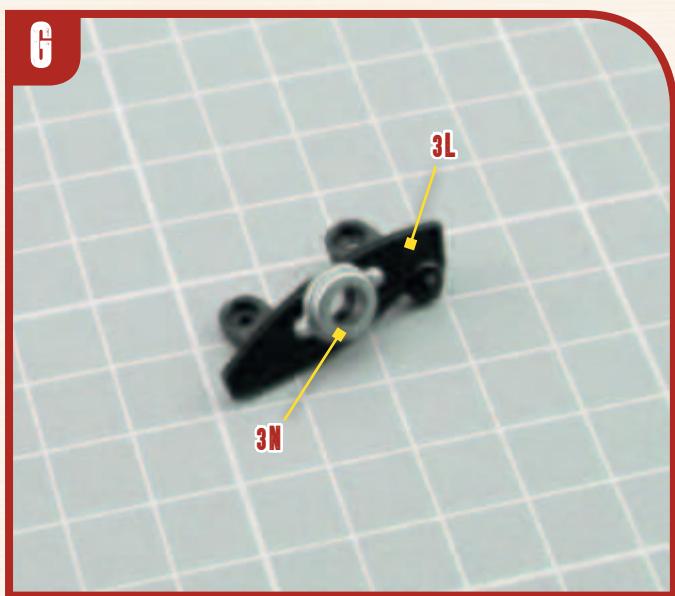
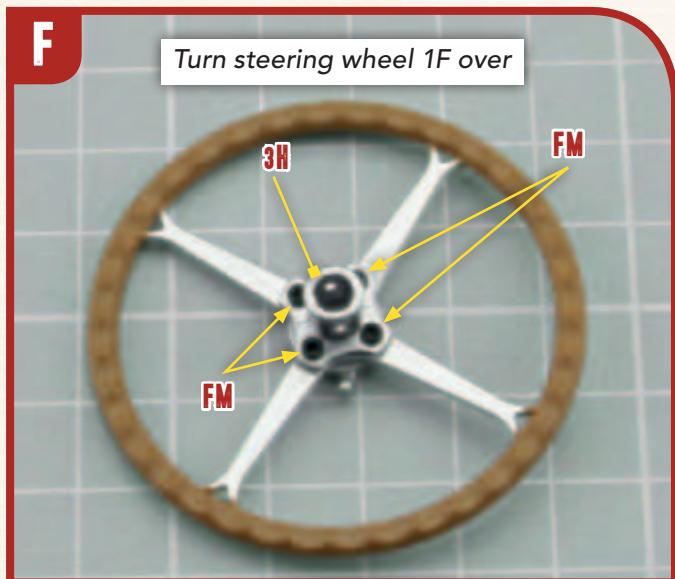
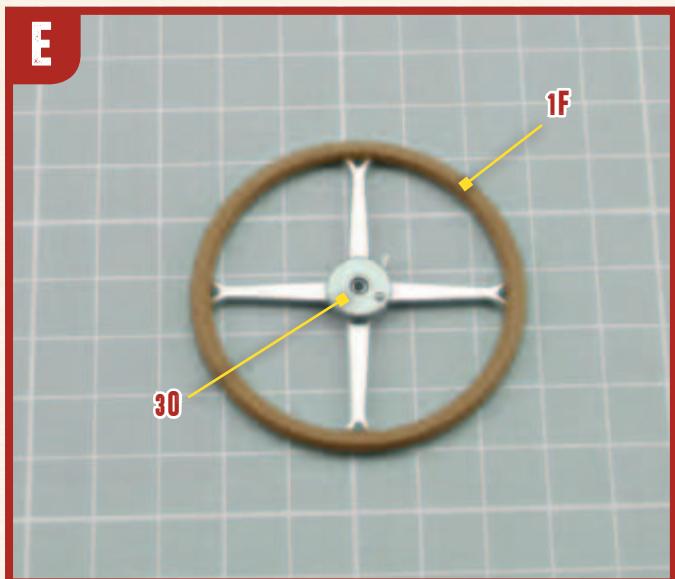
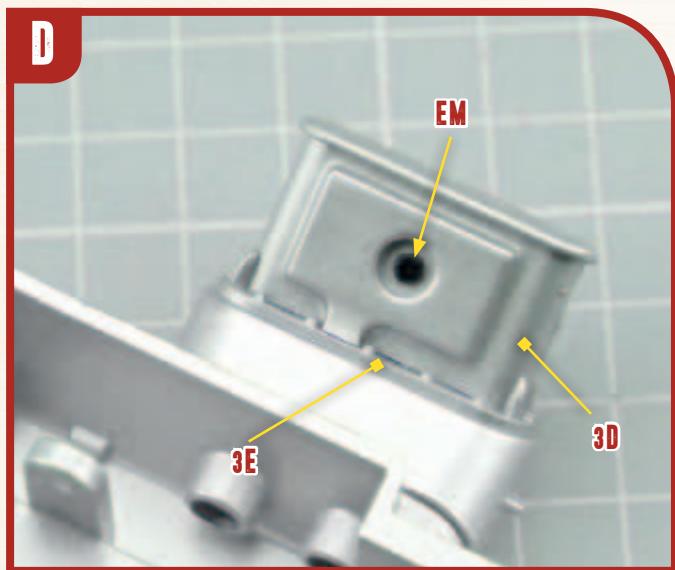
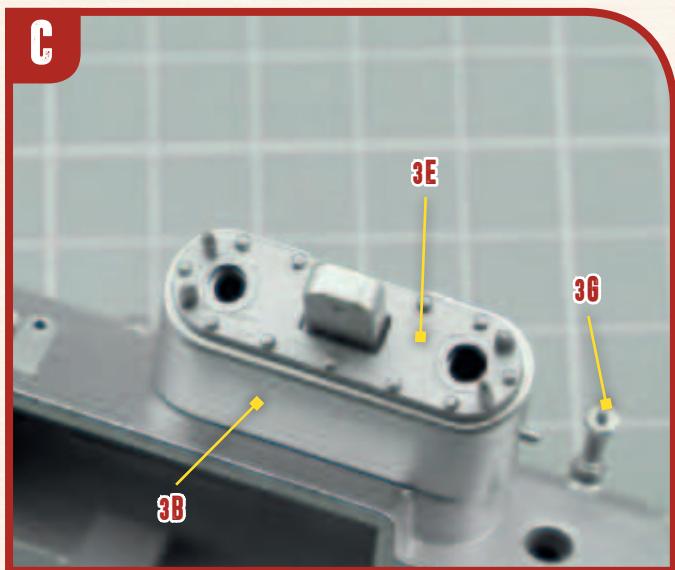


3A Engine lower block (L)
3B Oil pan part A
3C Engine lower block (R)
3D Oil pan part B
3E Oil pan bracket
3F Oil pump
3G Sleeve

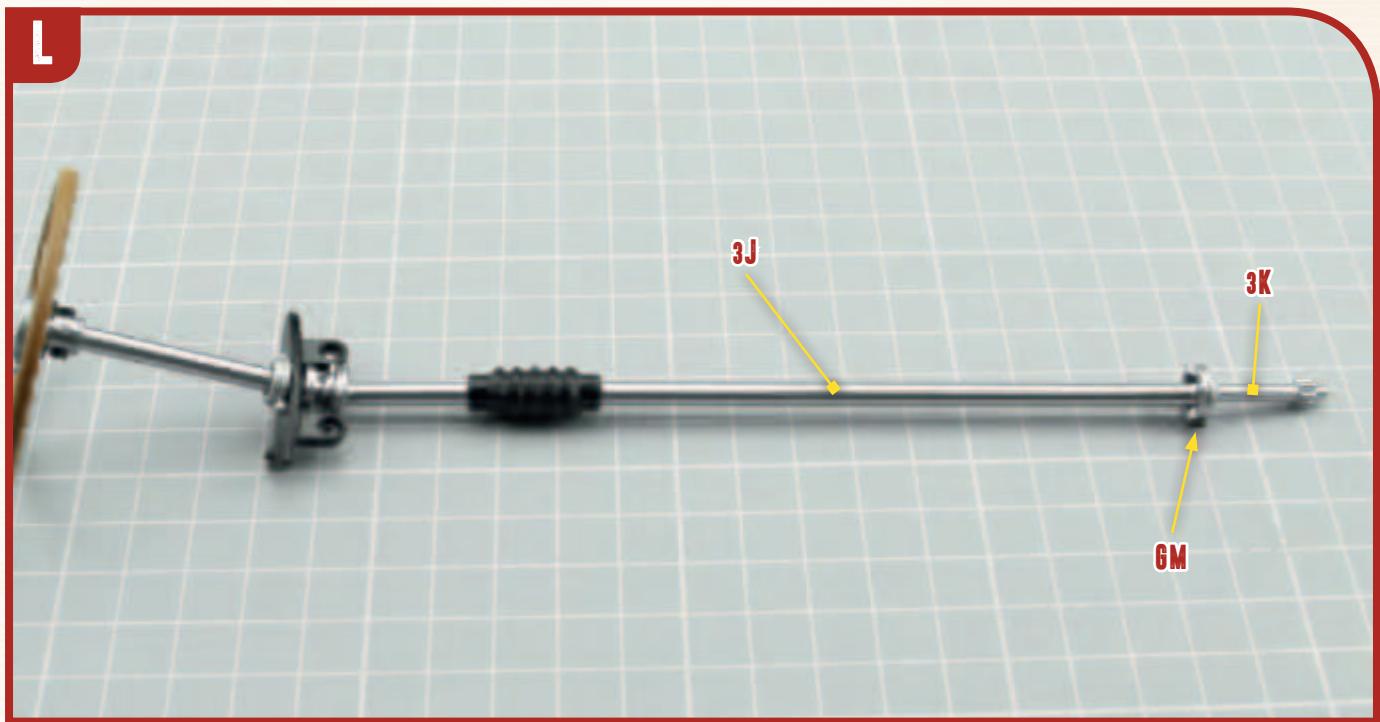
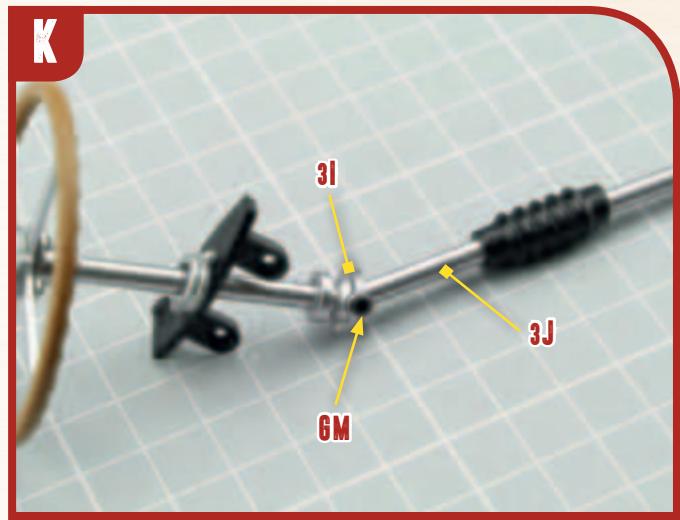
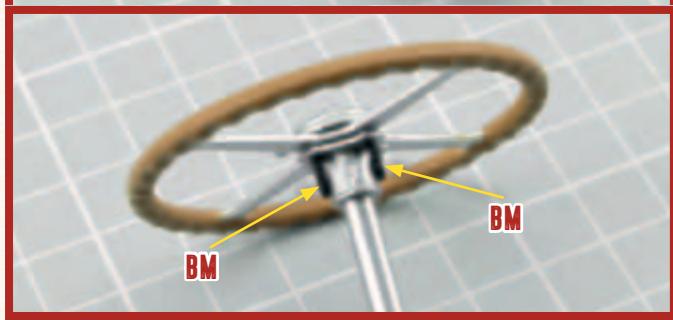
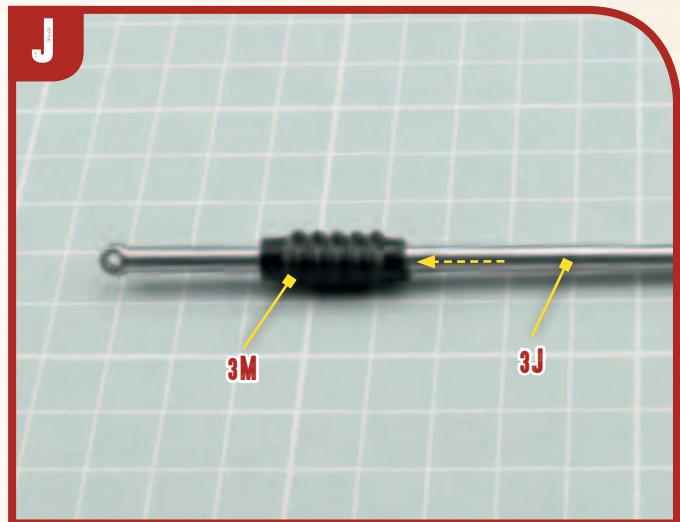
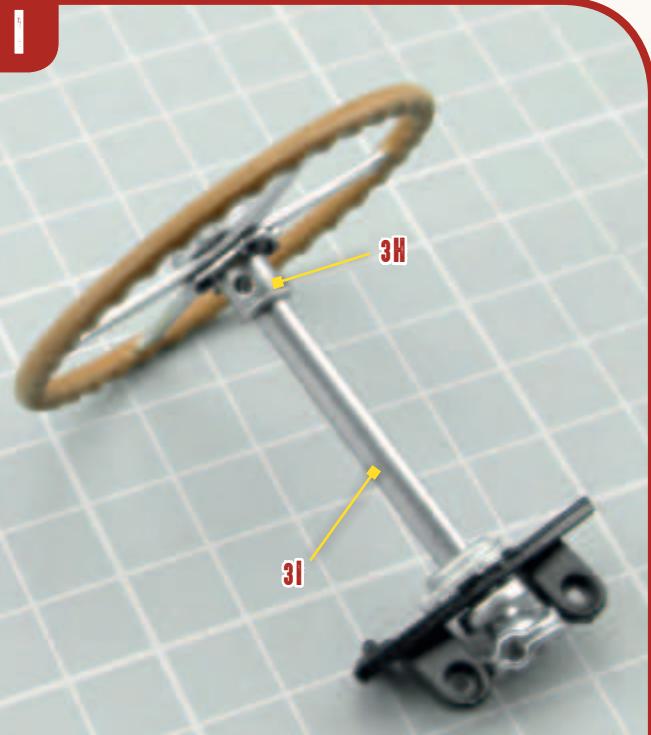
3H Steering wheel fitting
3I Steering column part A
3J Steering column part B
3K Steering column part C
3L Panel
3M Bellow
3N Steering column support

3O Steering wheel detail
BM 3 screws (1.7x3mm)
DM 5 screws (2x4mm)
EM 2 screws (1.5x3mm)
FM 5 screws (1.7x2mm)
GM 3 screws (2x10mm)

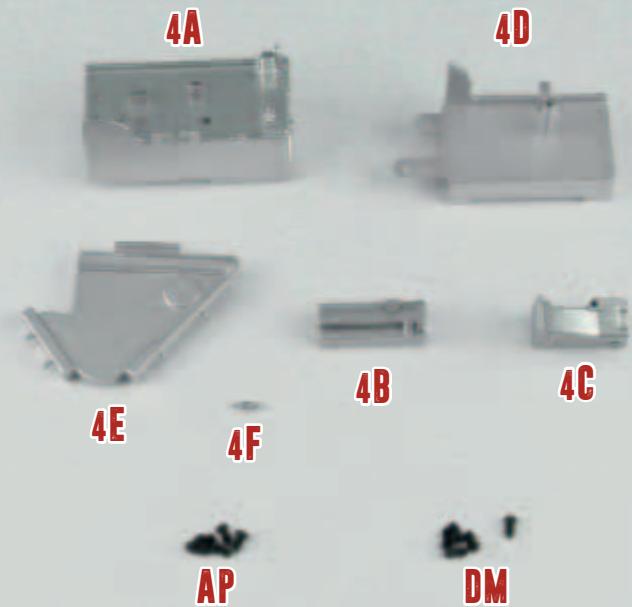




step by step #03

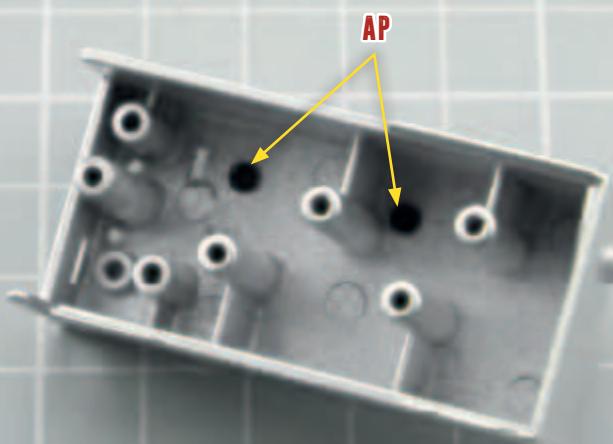
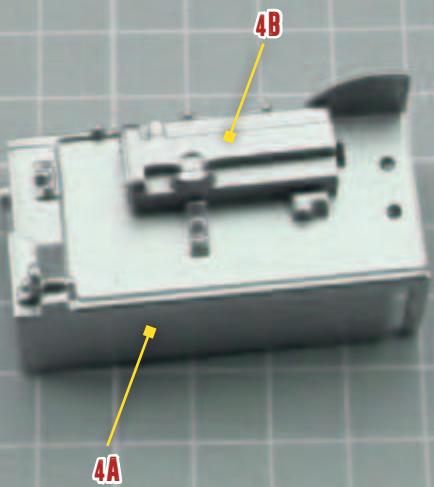


04 PARTS LIST

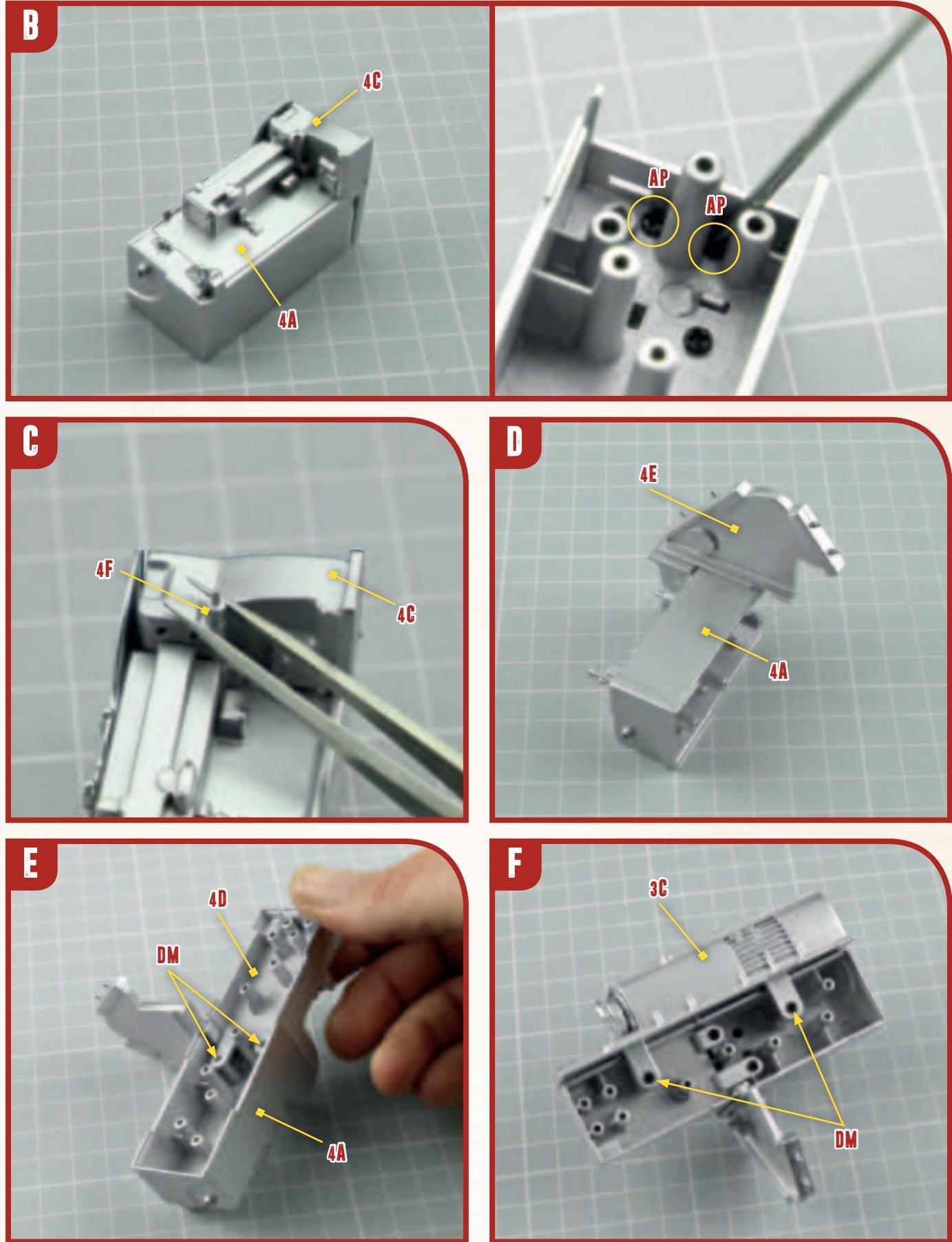


- 4A** Engine upper block part A (L)
- 4B** Engine upper block part B (L)
- 4C** Central gearbox part A
- 4D** Engine upper block part C (L)
- 4E** Central gearbox part B
- 4F** Oil pressure valve
- AP** 5 screws (1.7x4mm)
- DM** 5 screws (2x4mm)

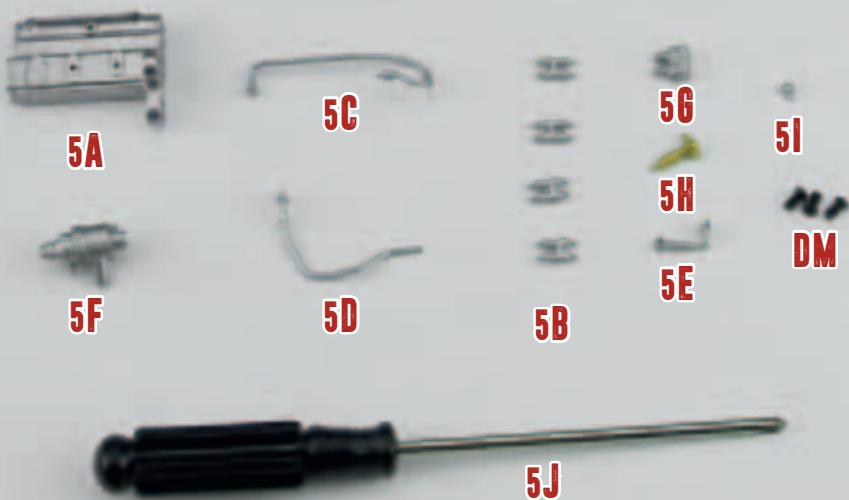
A



step by step #04



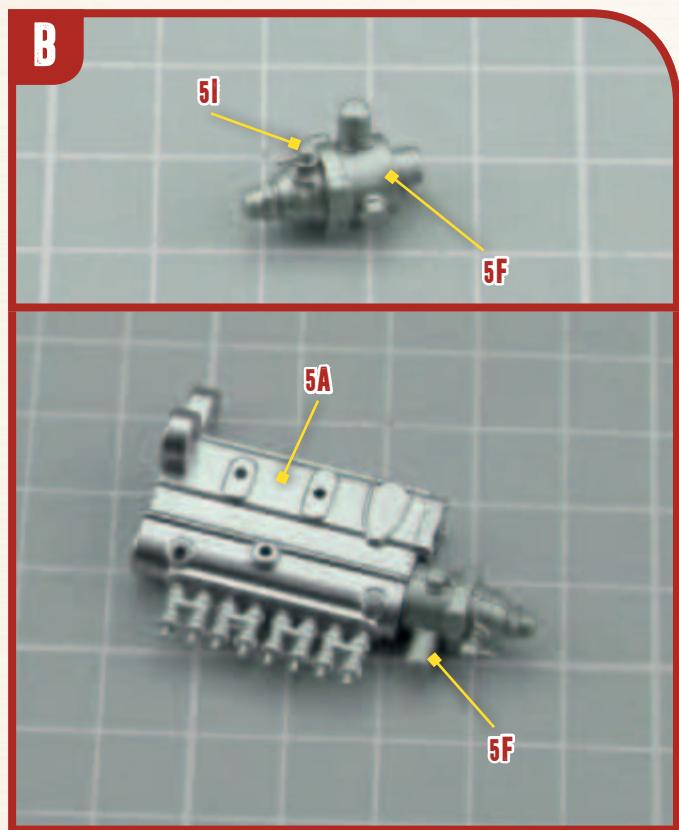
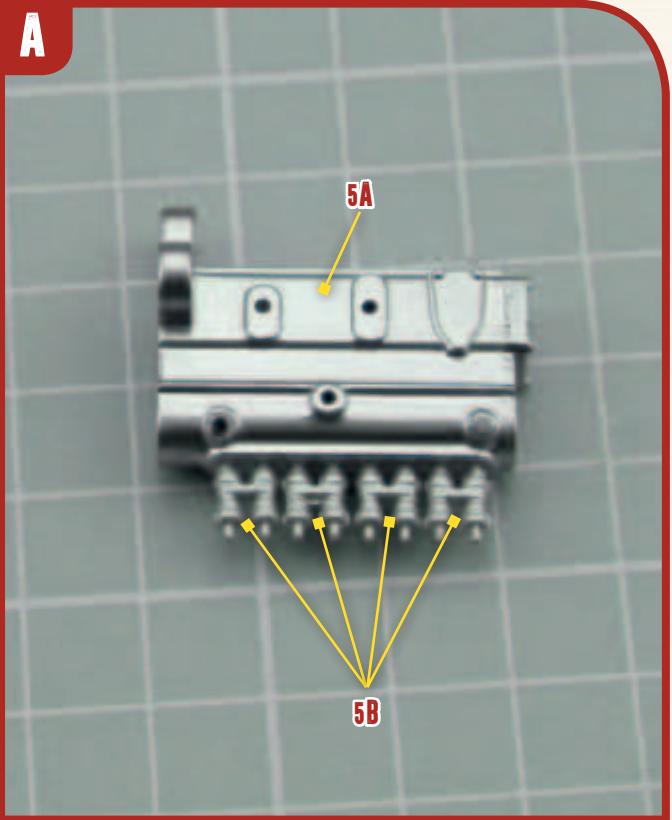
05 PARTS LIST



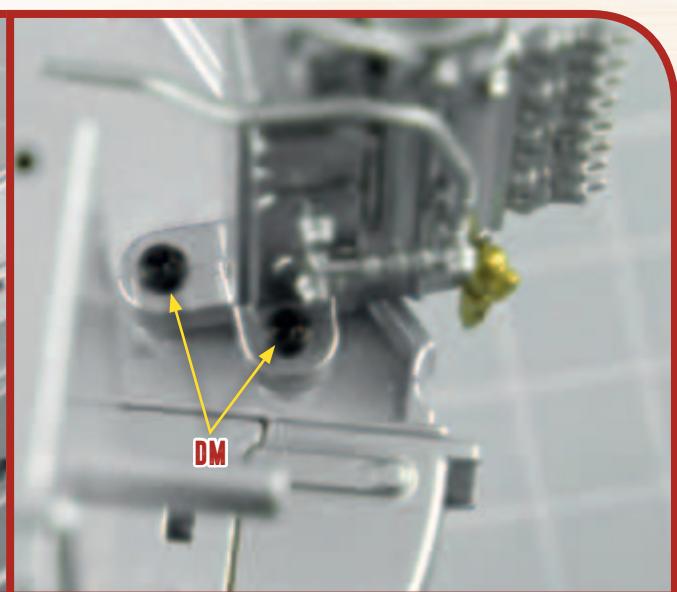
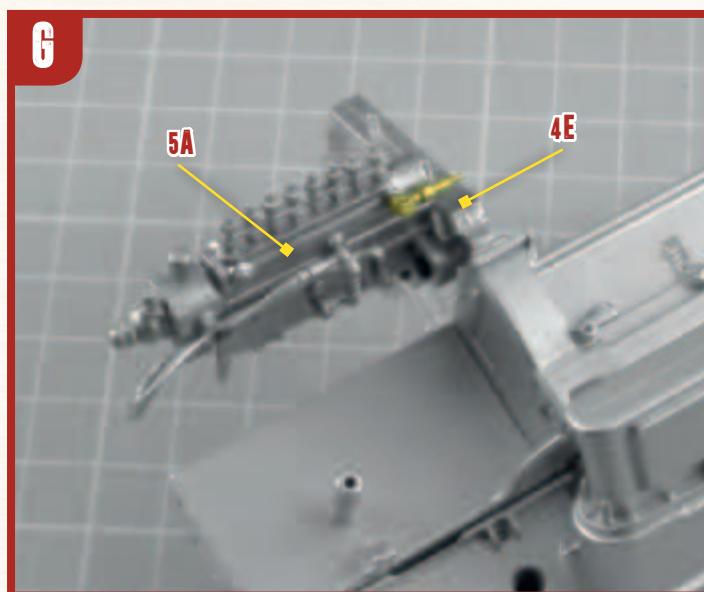
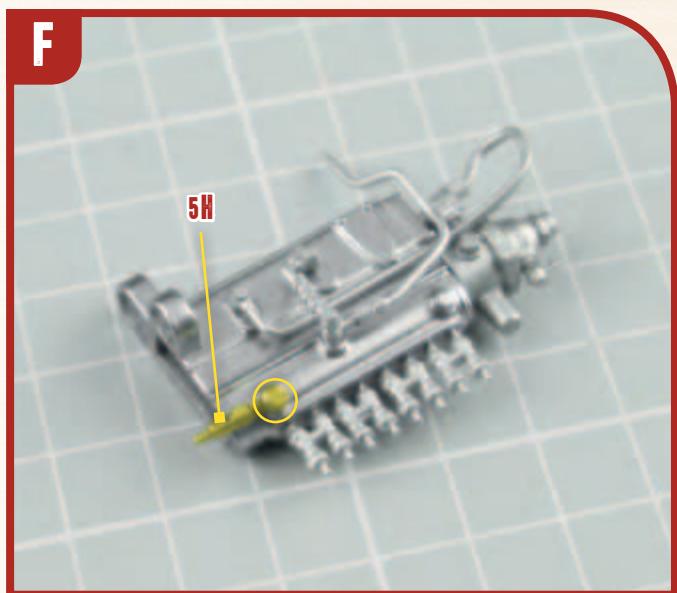
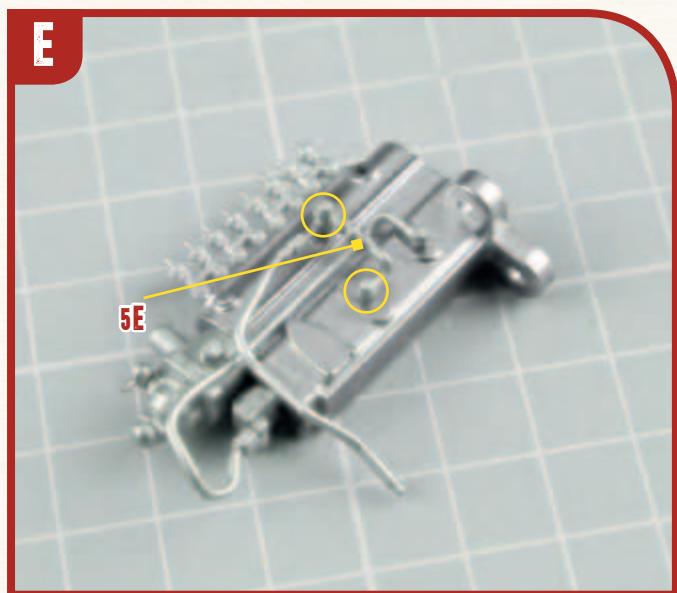
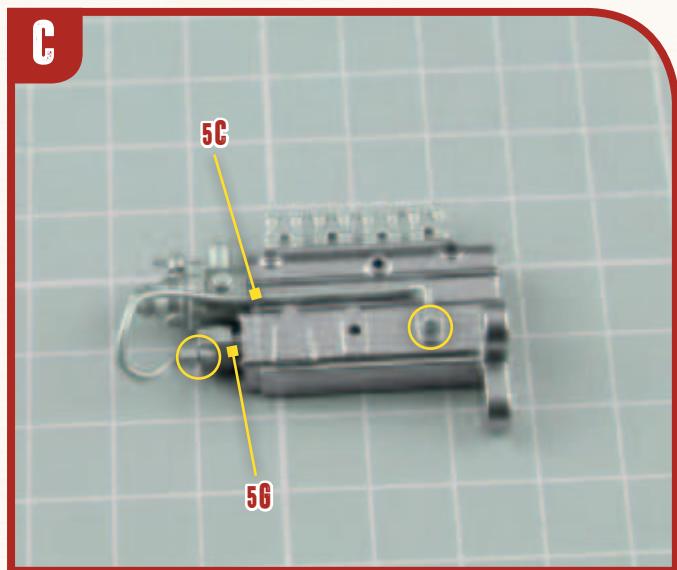
5A Fuel pump body
5B Joints 1 (x4)
5C Pipe 1
5D Pipe 2

5E Joint 2
5F Fuel pump part A
5G Fuel pump part B
5H Joint 3

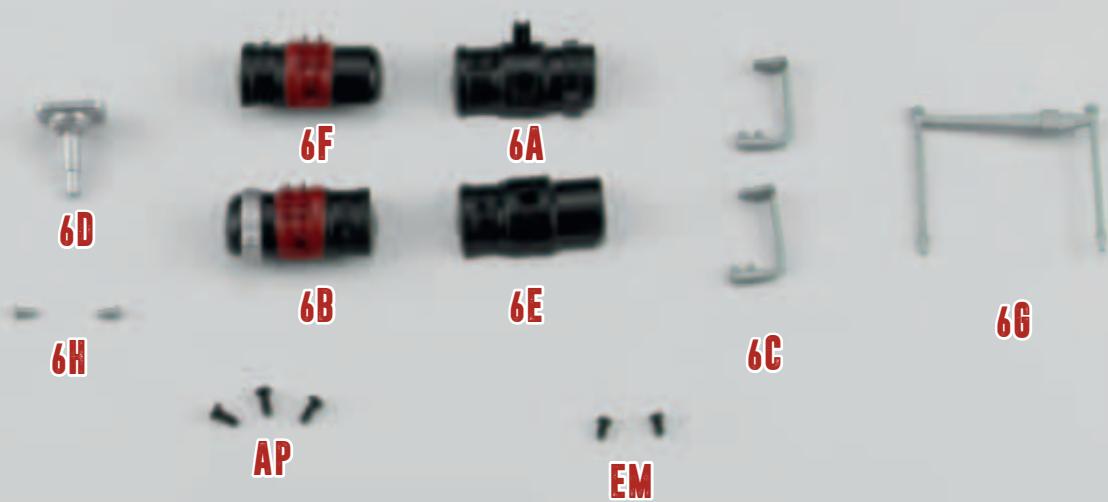
5I Joint 4
5J Screwdriver
DM 3 screws (2x4mm)



step by step #05



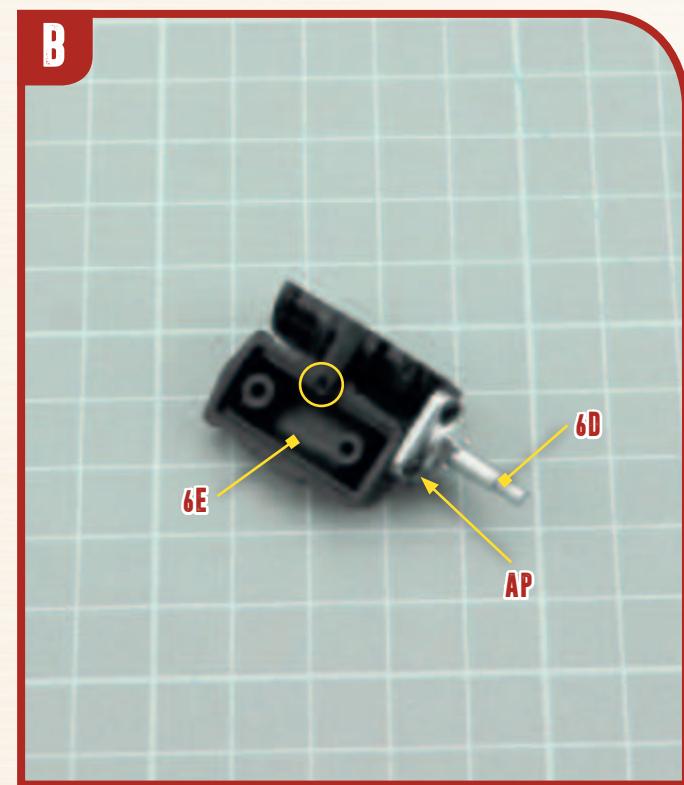
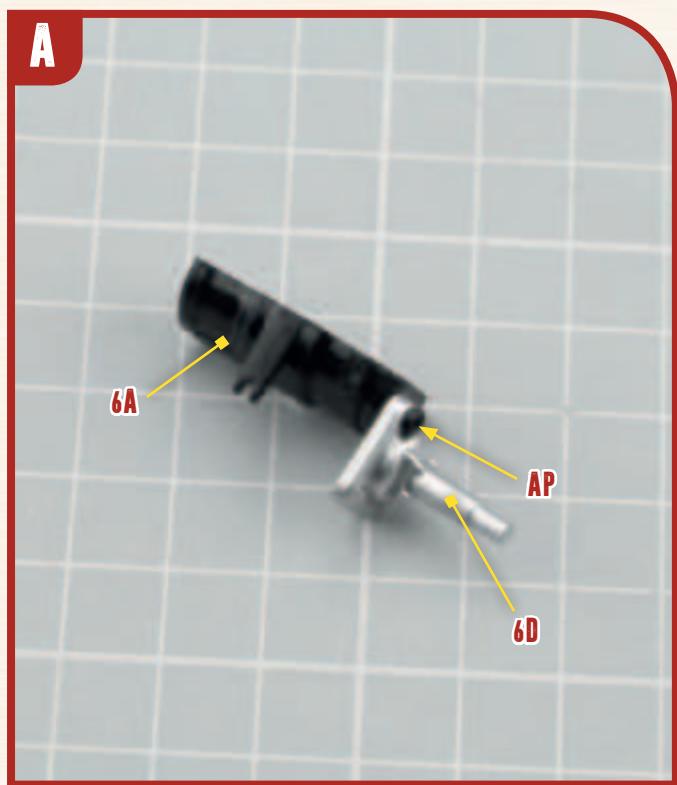
06 PARTS LIST



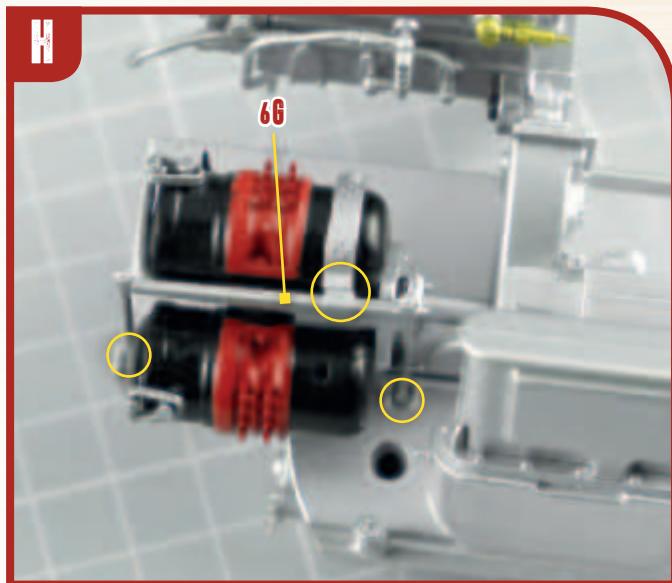
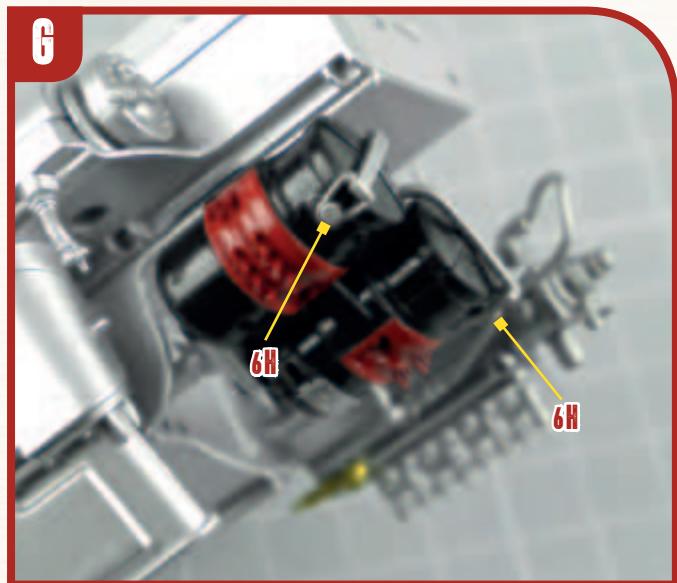
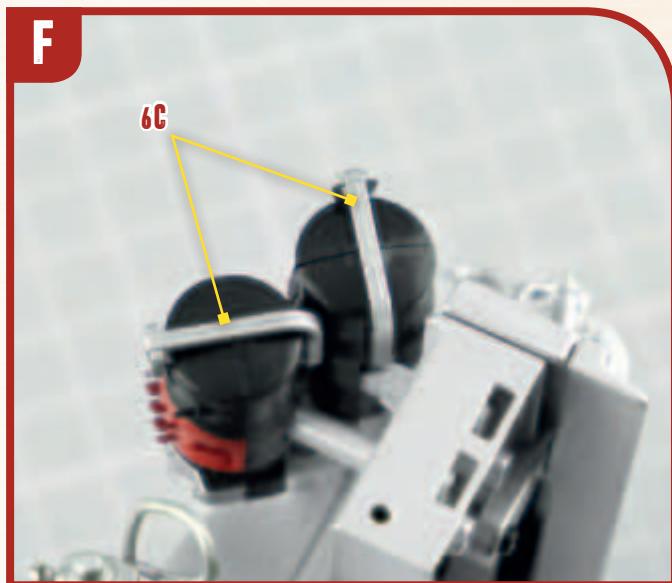
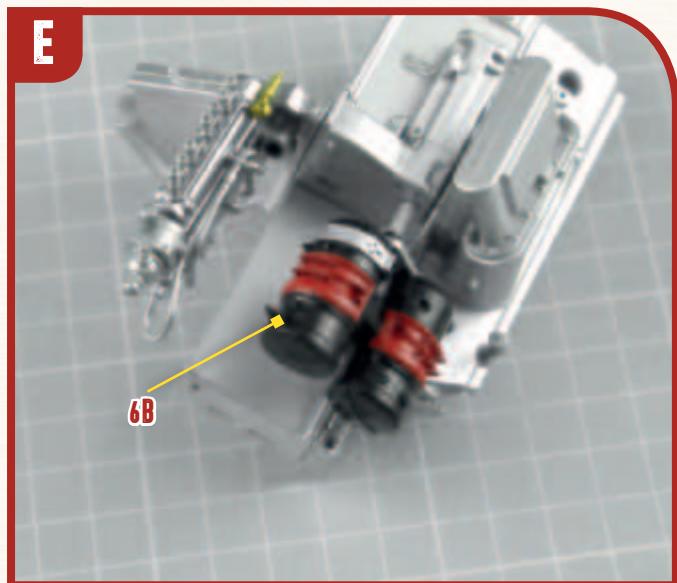
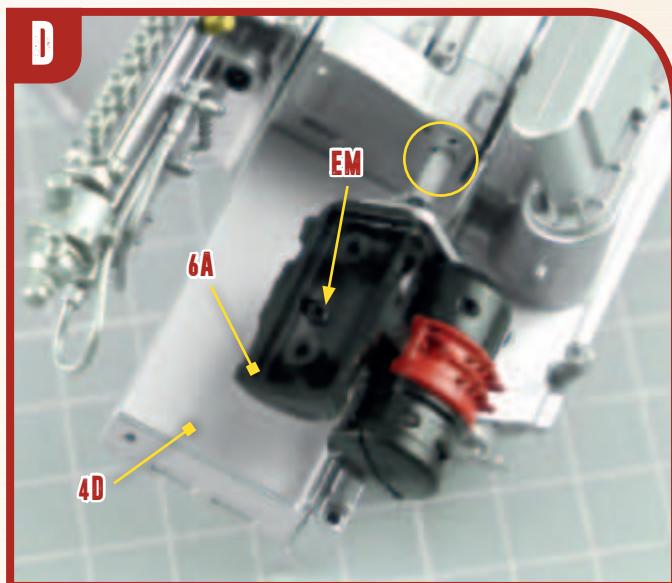
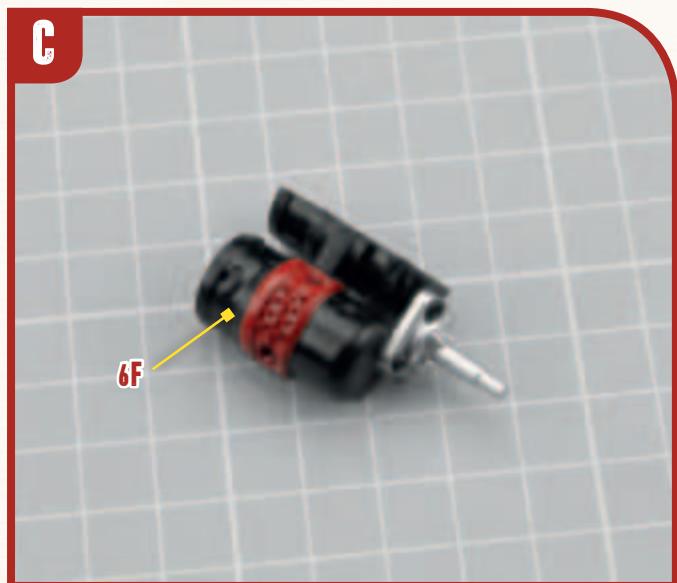
- 6A** Starter part A
6B Starter part B
6C Brackets (x2)
6D PTO shaft

- 6E** Starter part C
6F Starter part D
6G Starter support
6H Pins (x2)

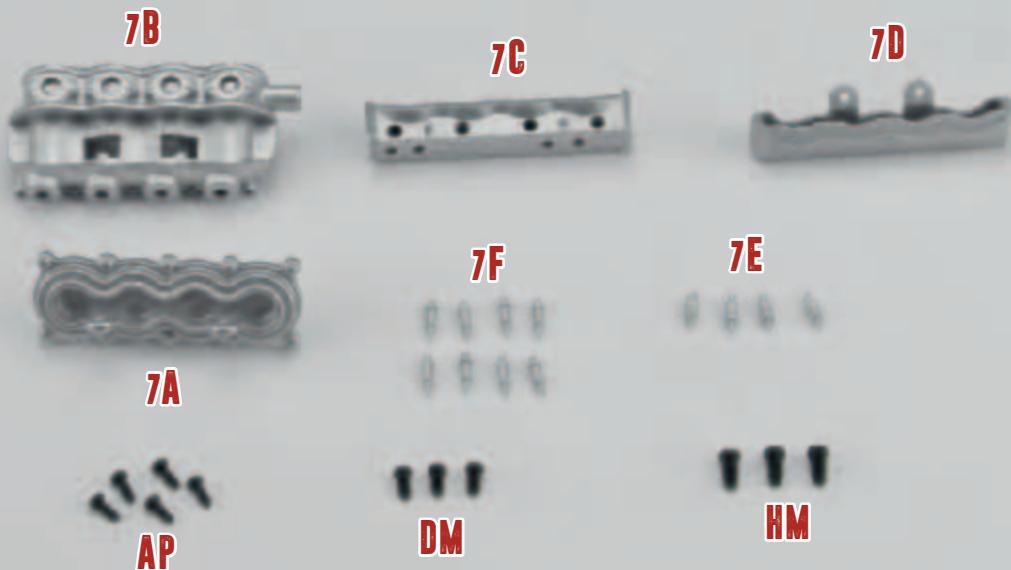
- AP** 3 screws (1.7x4mm)
EM 2 screws (1.5x3mm)



step by step #06



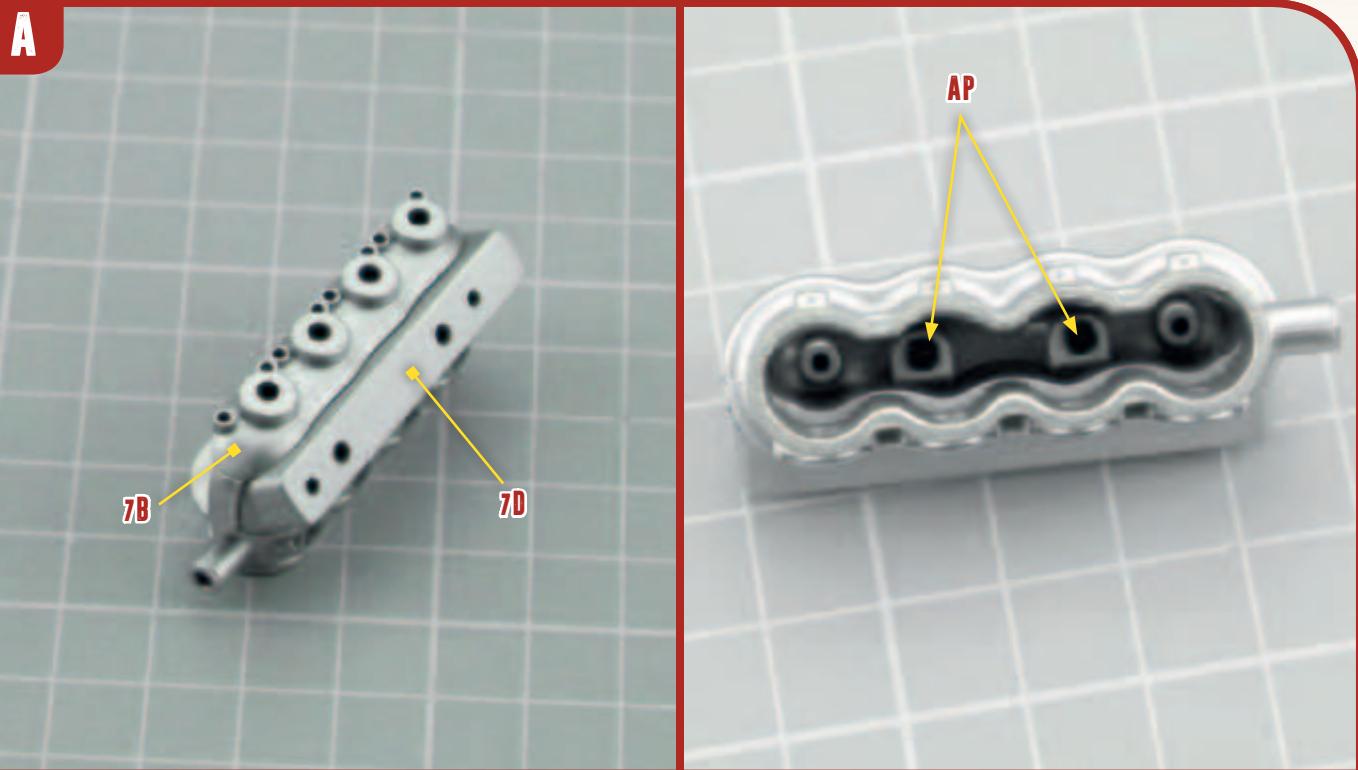
07 PARTS LIST



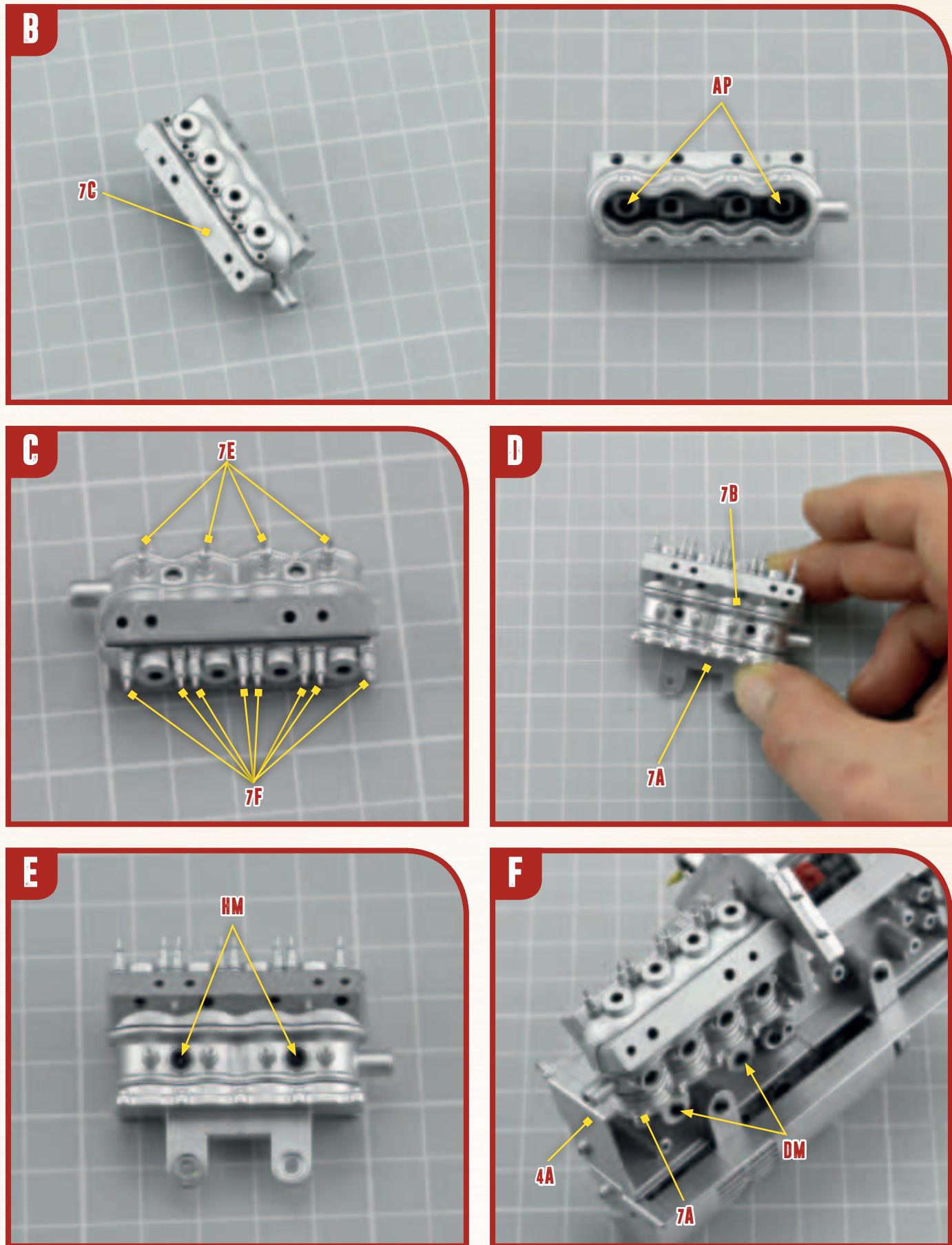
7A Cylinder head base
7B Cylinder head
7C Cover 1

7D Cover 2
7E Fuel injectors (x4)
7F Spark plugs (x8)

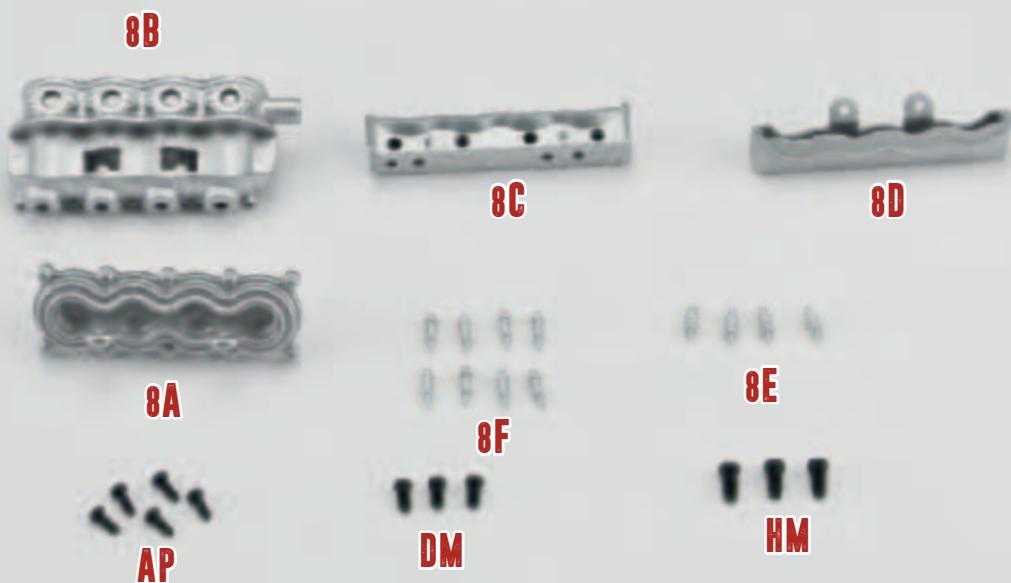
AP 5 screws (1.7x4mm)
DM 3 screws (2x4mm)
HM 3 screws (2.3x5mm)



step by step #07



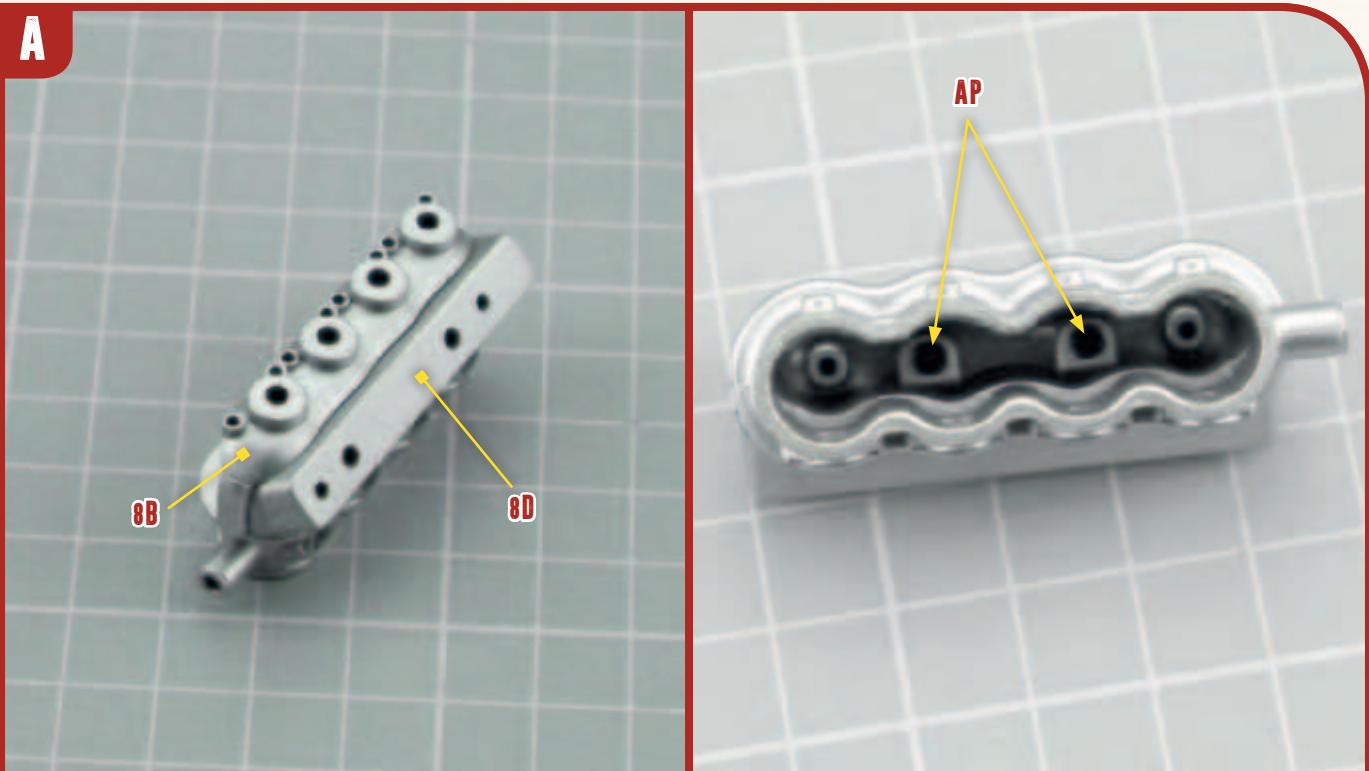
08 PARTS LIST



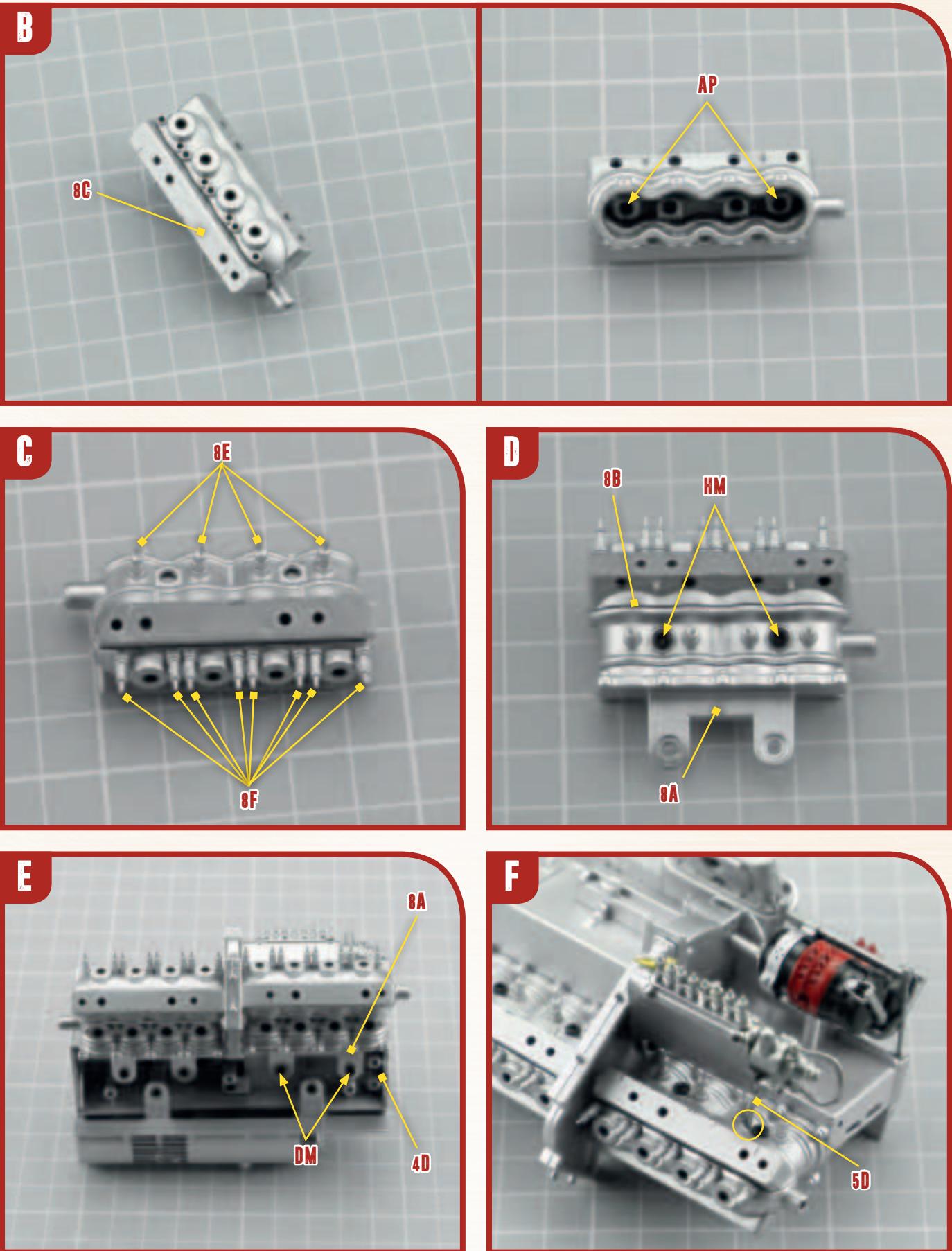
8A Cylinder head base
8B Cylinder head
8C Cover 1

8D Cover 2
8E Fuel injectors (x4)
8F Spark plugs (x8)

AP 5 screws (1.7x4mm)
DM 3 screws (2x4mm)
HM 3 screws (2.3x5mm)



step by step #08



09 PARTS LIST



9A



9B



9C



9D



BP

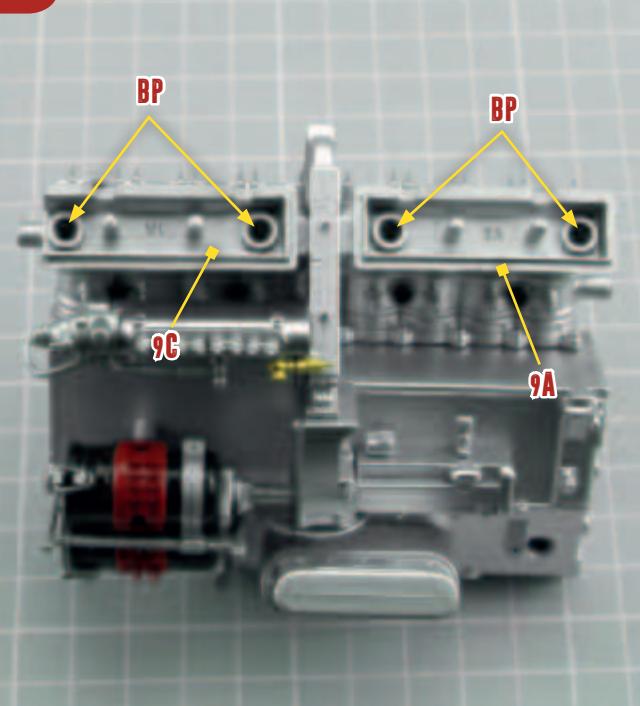
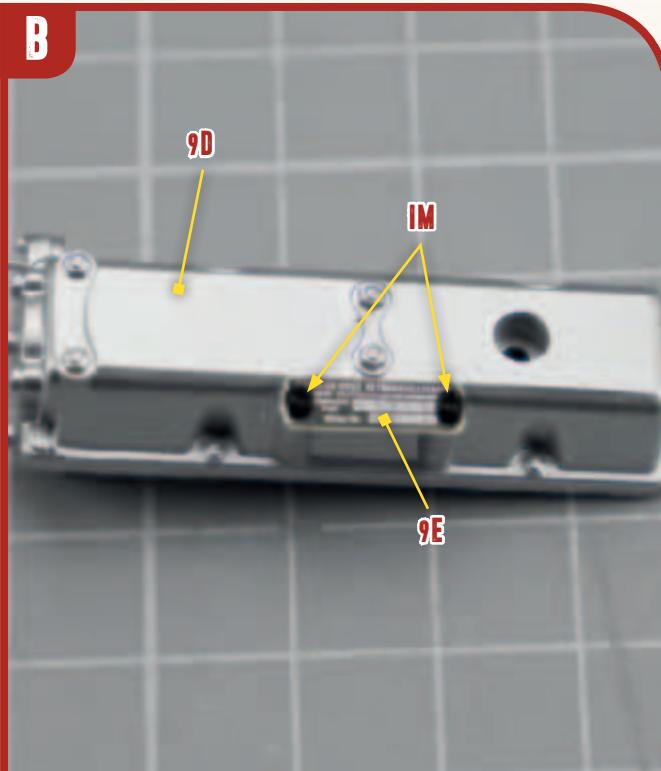


IM

9A Valves cover base 1
9B Valves cover 1
9C Valves cover base 2

9D Valves cover 2
9E Plate

BP 5 screws (2x5mm)
IM 3 screws (1.2x2mm)

A**B**

step by step #10

10 PARTS LIST



10A



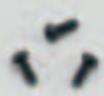
10B



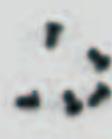
10D



10C



AP



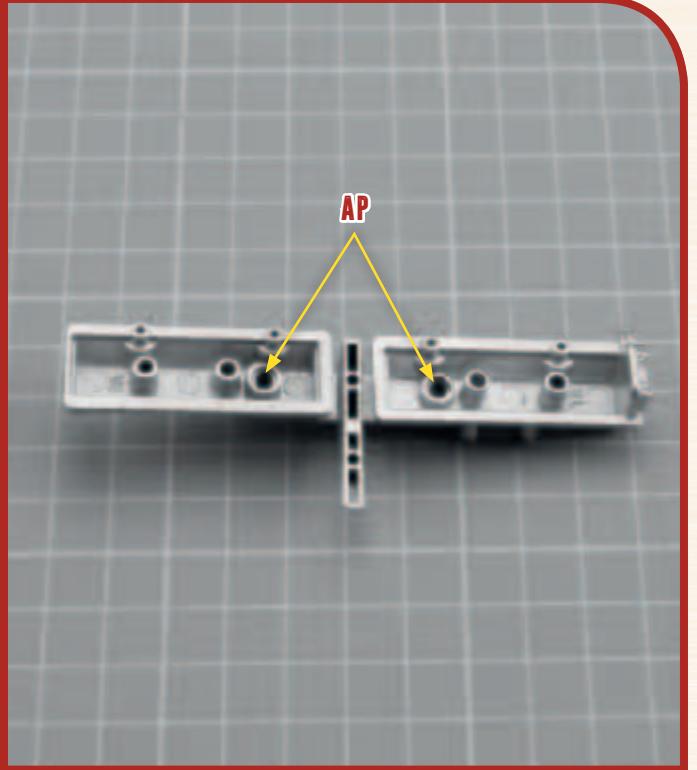
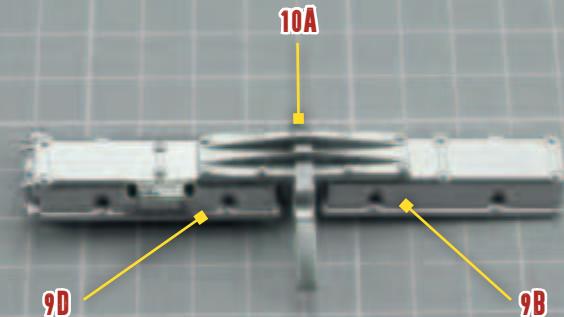
EM

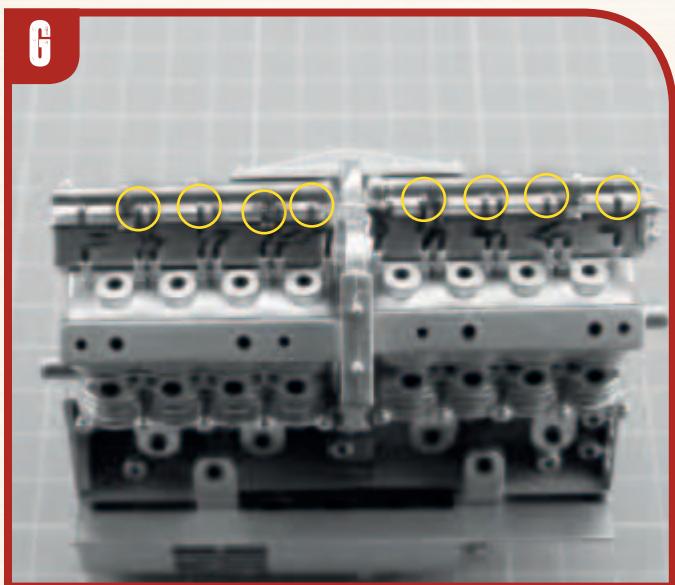
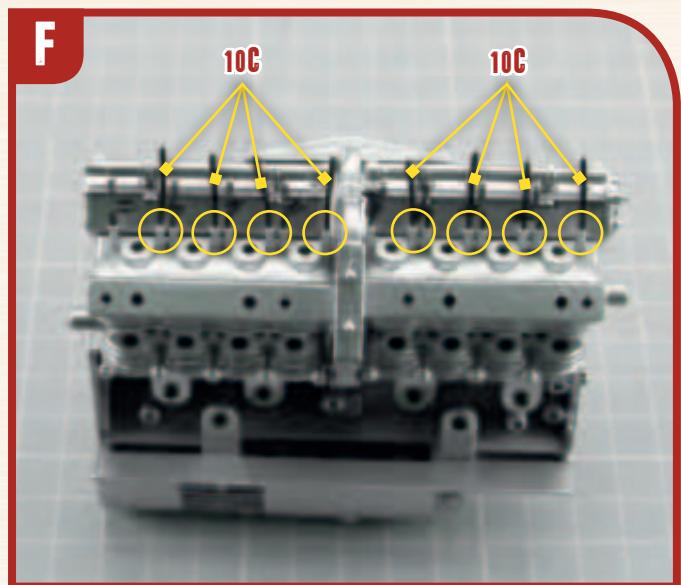
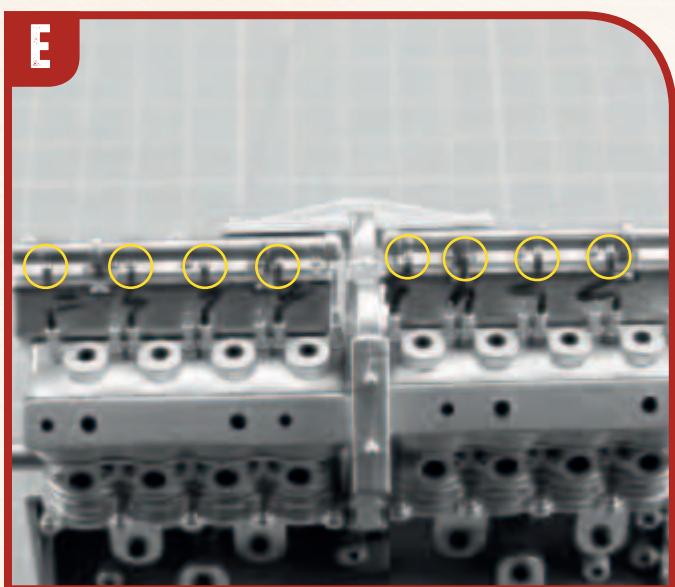
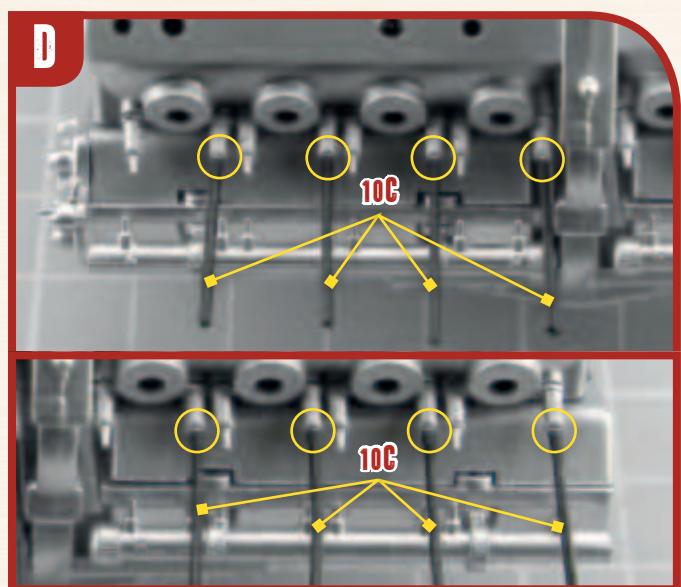
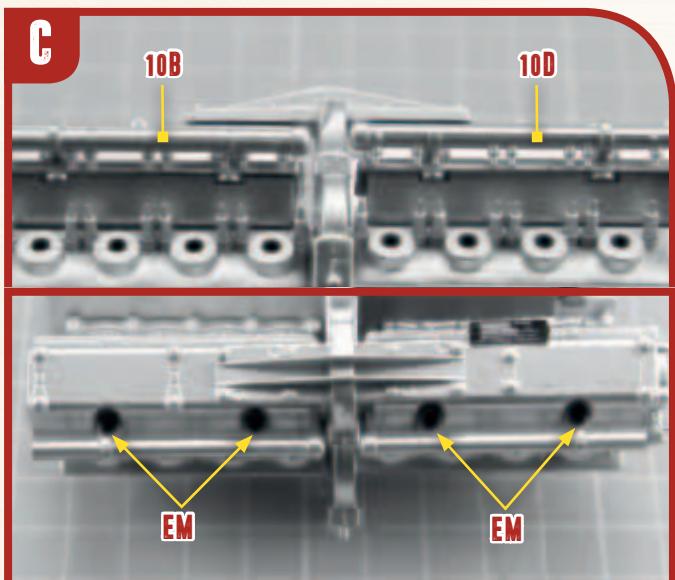
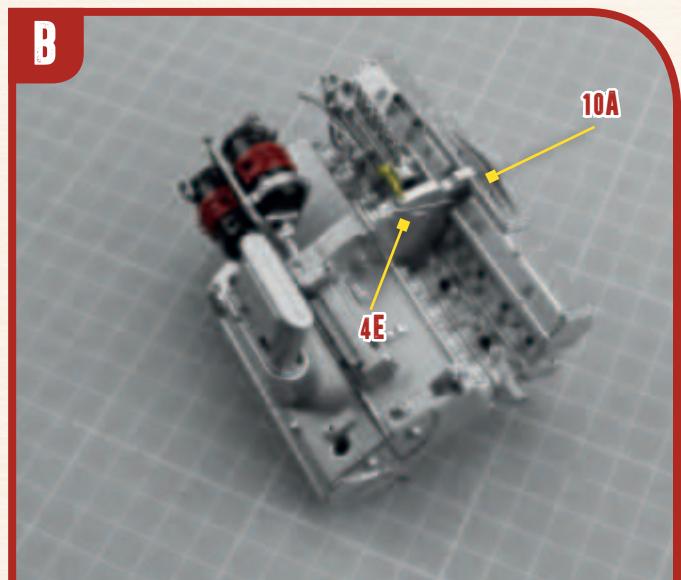
10A Valves covers bracket 1
10B Wires cover 1

10C Wires (x16)
10C Wires cover 2

AP 3 screws (1.7x4mm)
EM 5 screws (1.5x3mm)

A



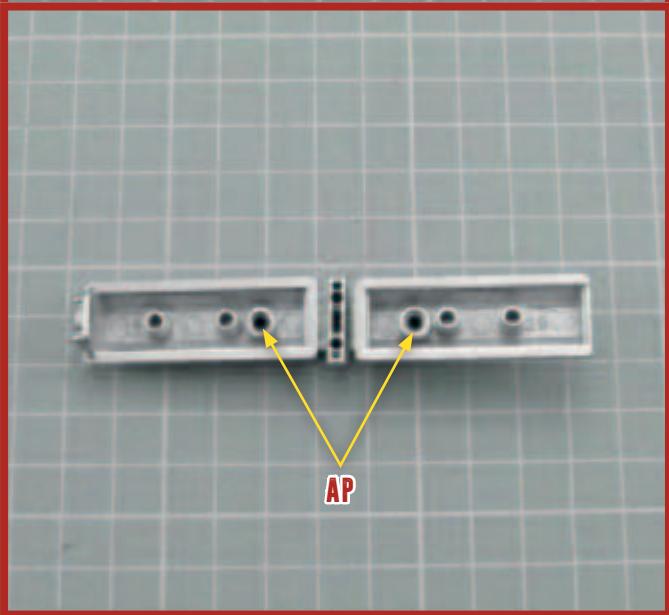
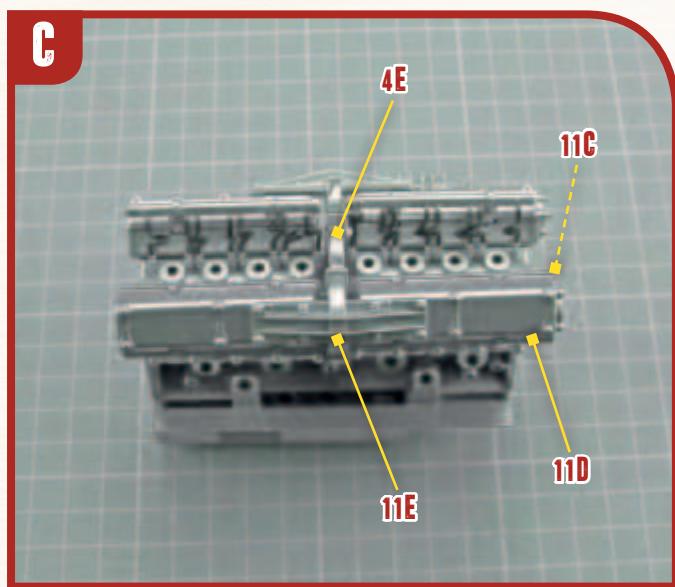
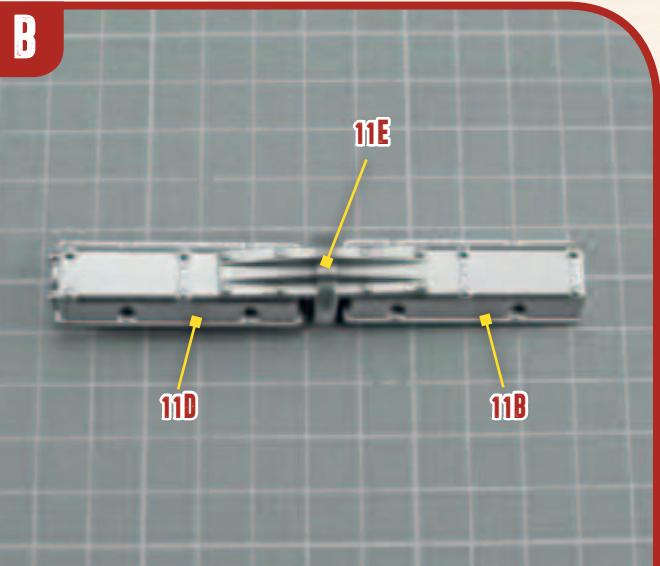
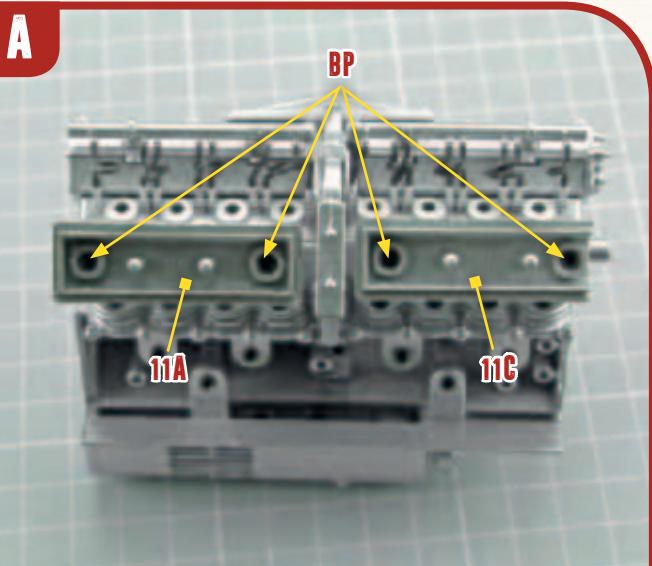


step by step #11

11 PARTS LIST



- 11A Valves cover base 3
- 11B Valves cover 3
- 11C Valves cover base 4
- 11D Valves cover 4
- 11E Valves cover bracket 2
- AP 3 screws (1.7x4mm)
- BP 5 screws (2x5mm)



12 PARTS LIST

REGULAR ASSEMBLY



12A Outer rim

12B Central ring 1

12C Inflation valve

12D Hub 1

12E Spokes 1

12F Spokes 2

12G Jig

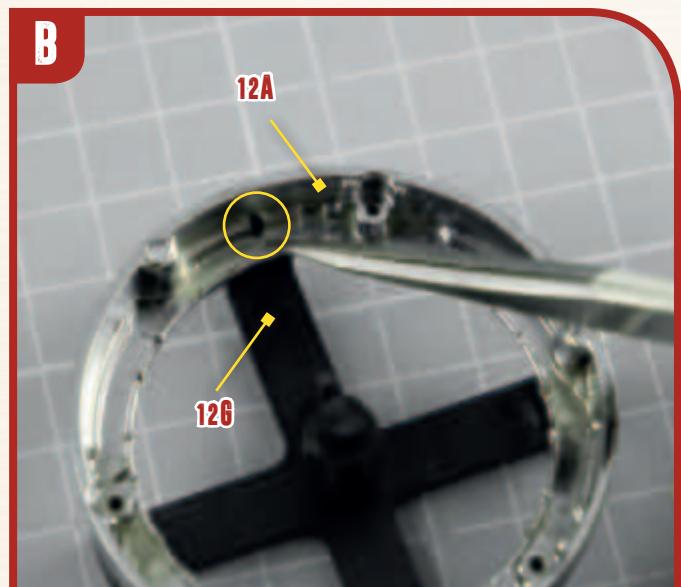
12H Central ring 2

12I Double-sided tape

12J Tweezers

AP 5 screws (1.7x4mm)

CM 4 screws (1.7x4mm)



step by step #12

C

Apply 24 pieces of double-sided tape 12I to 12A's inner profile and tear off their top sheets.



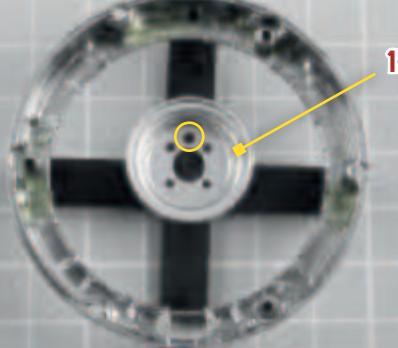
12I
12A



D



12D



E

Insert 1 spoke 12F through a hole in 12D's first level (counting from the bottom).



12D
12F



F

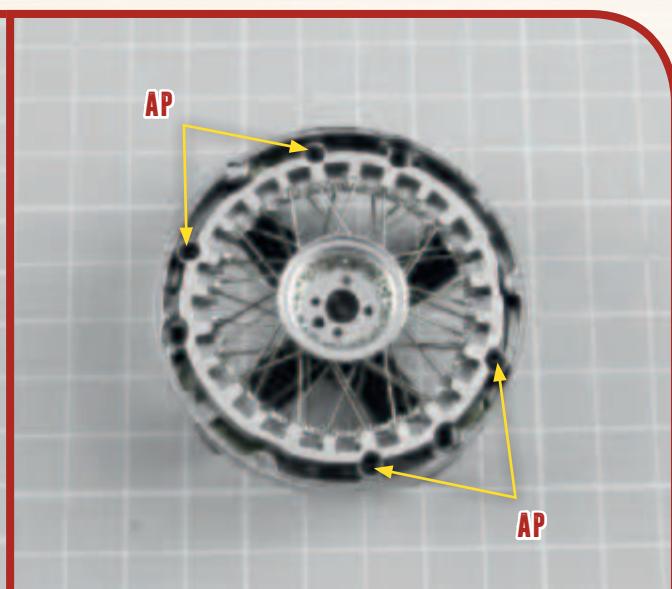
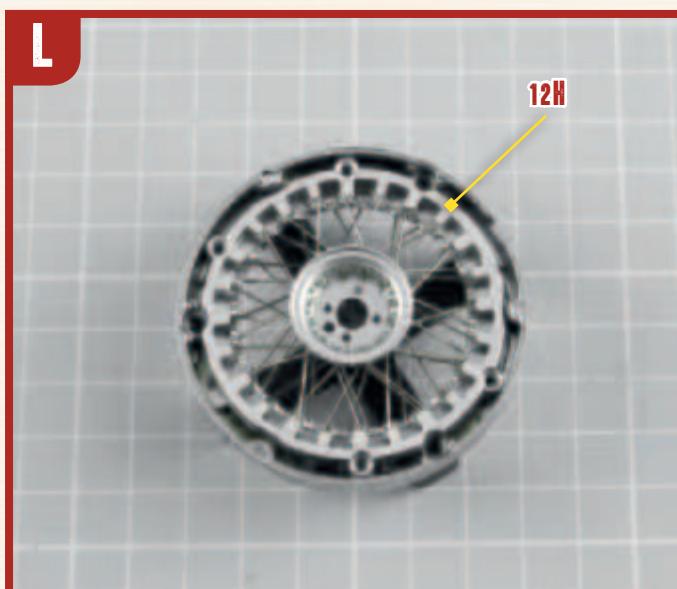
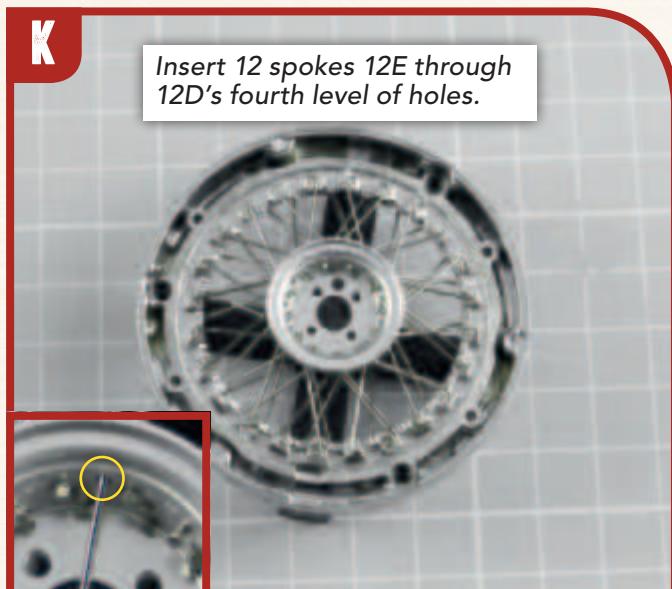
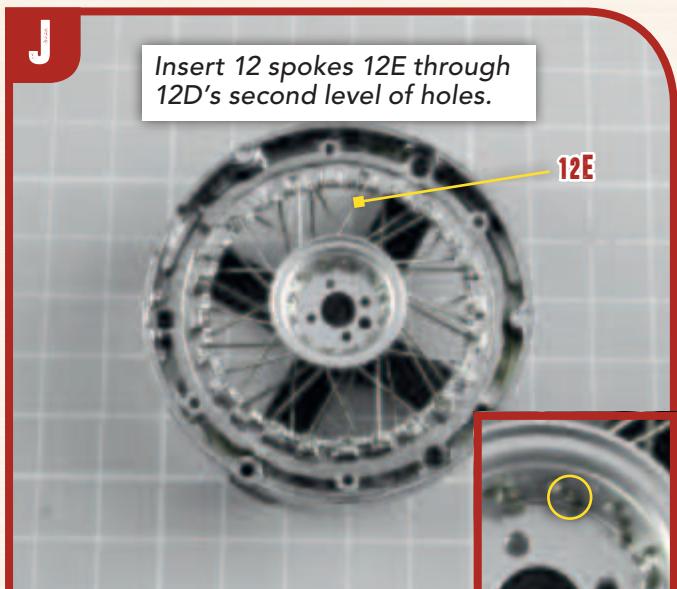
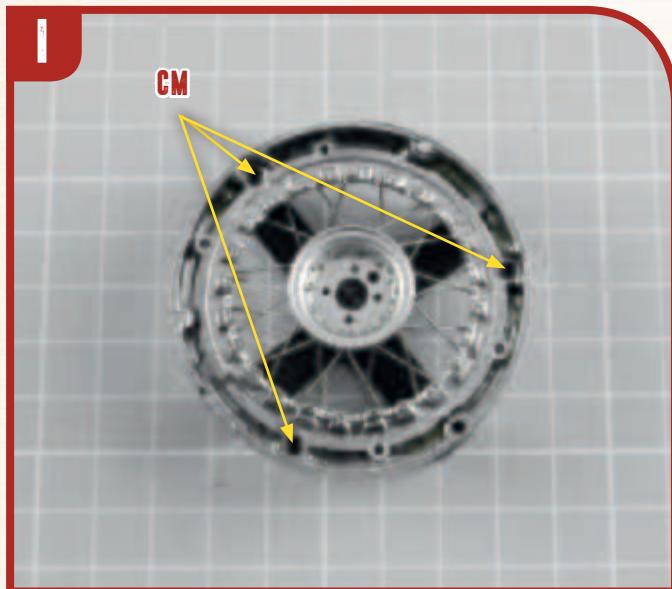
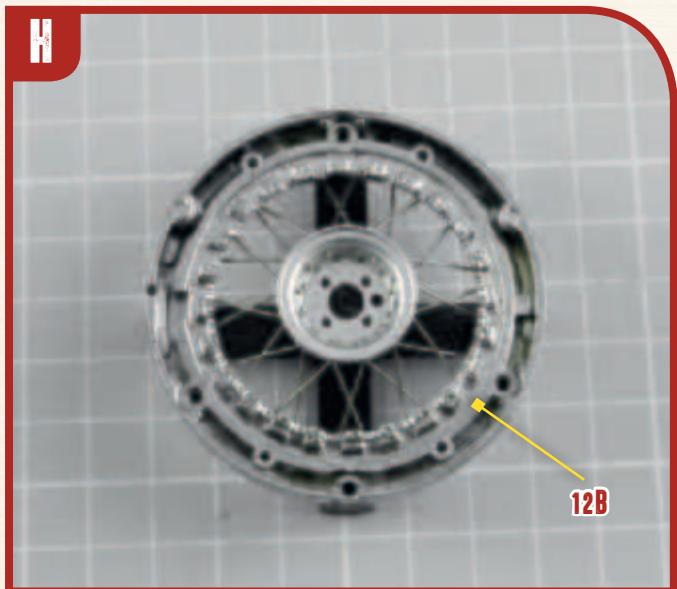
Repeat the process with other 11 spokes 12F.



G

Insert 12 spokes 12F through 12D's third level of holes.



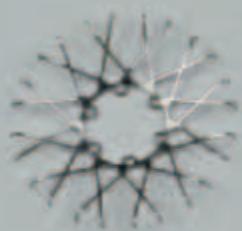


step by step #12B

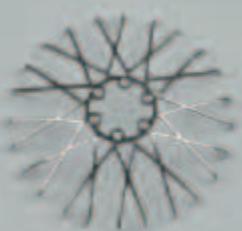
12B PARTS LIST

EASY ASSEMBLY

12FF



12GG



12AA



12CC



12EE



12BB



12DD



12HH



LP



TP



UP



12AA Central ring 1

12GG Spokes 2

12BB Hub 1

12HH Tweezers

12CC Hub 2

12DD Hub 3

LP 5 screws (1.5x3mm)

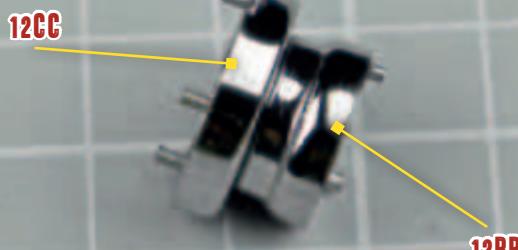
12EE Hub 4

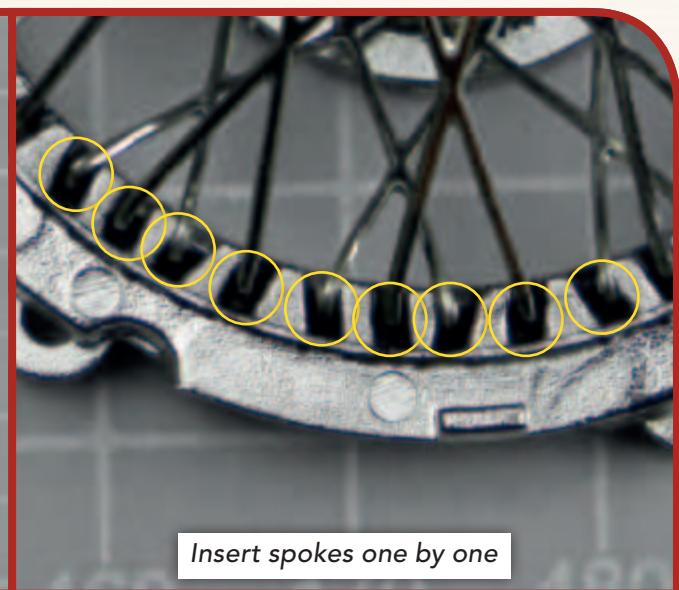
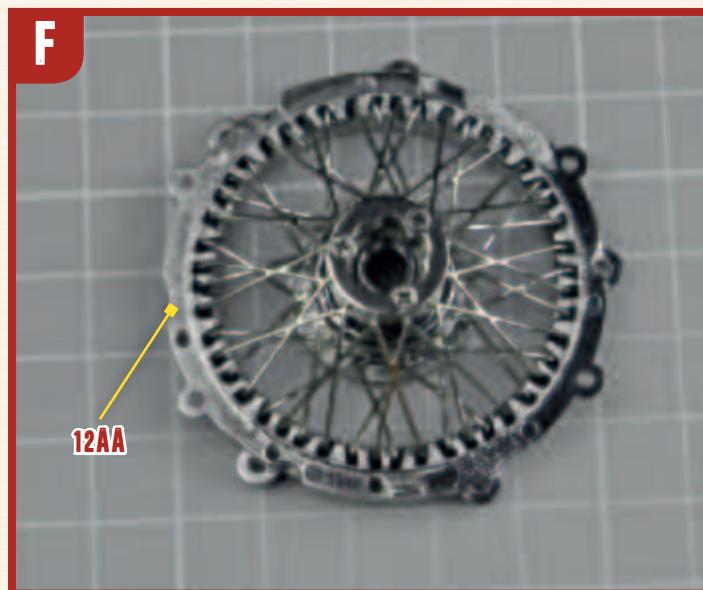
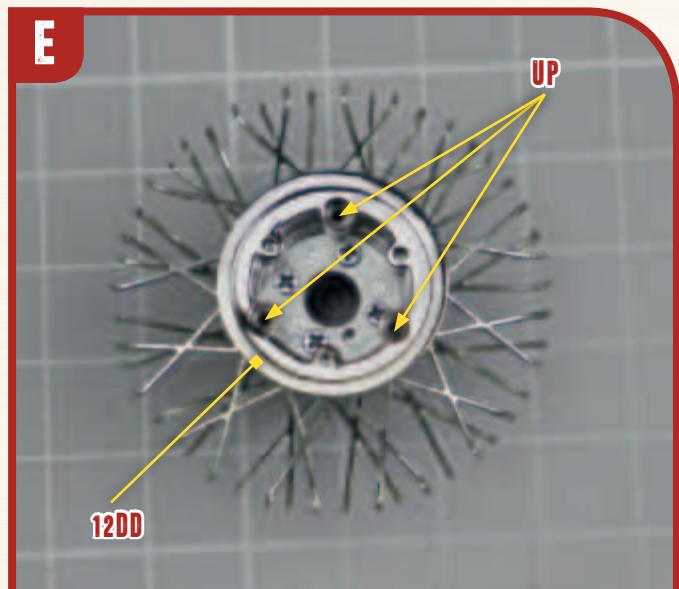
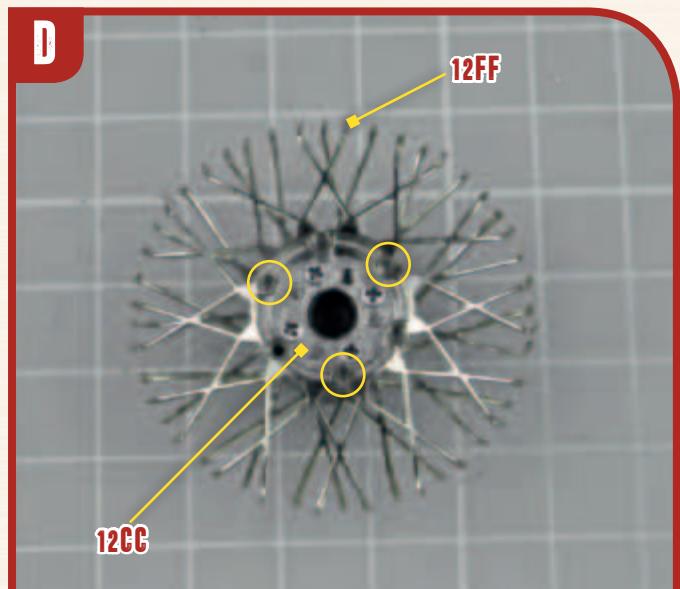
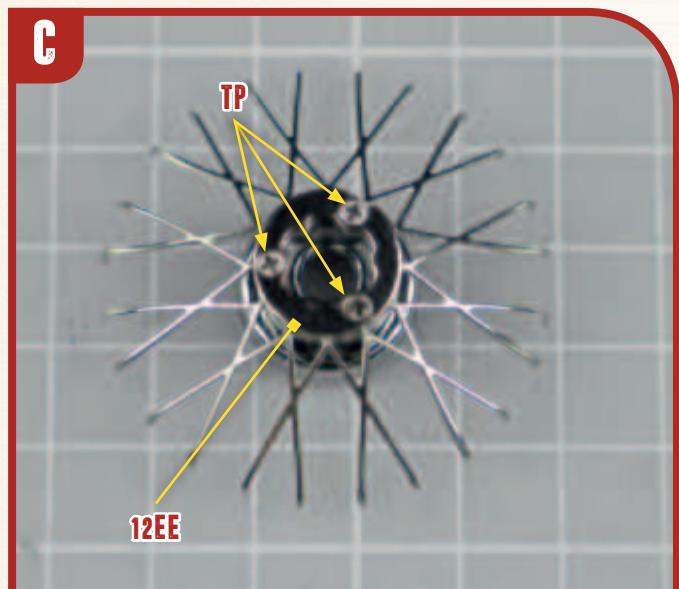
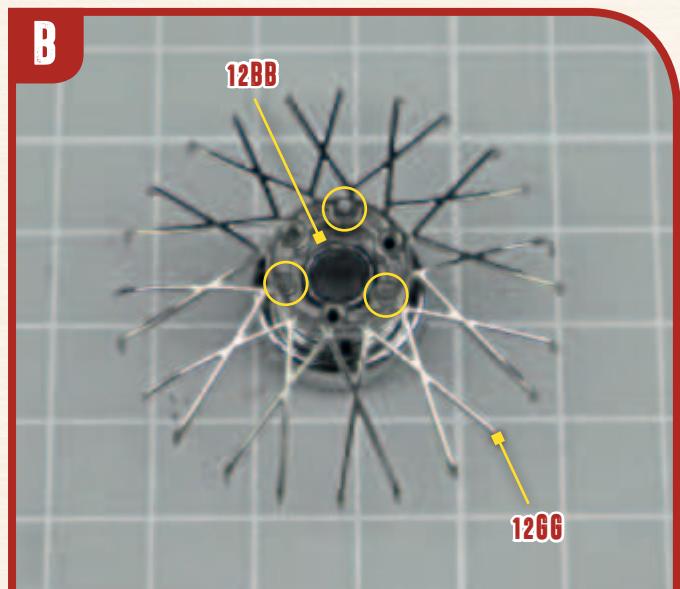
TP 4 screws (1.5x5mm)

12FF Spokes 1

UP 4 screws (1.7x4mm)

A





step by step #13

13 PARTS LIST

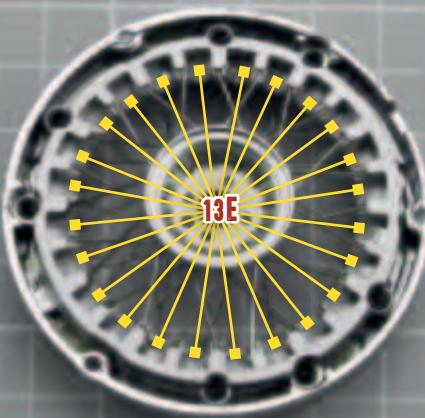
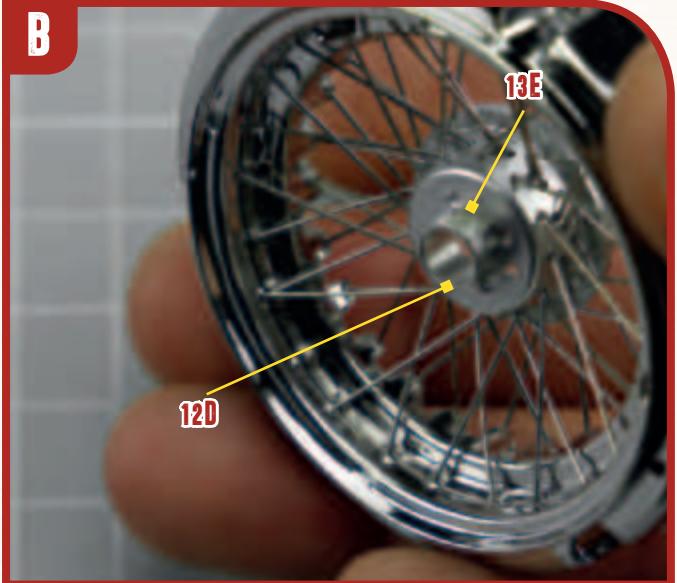
REGULAR ASSEMBLY



- | | |
|-----|--------------------|
| 13A | Inner rim |
| 13B | Central ring 3 |
| 13C | Hub 2 |
| 13D | Spokes 3 |
| 13E | Double-sided tape |
| CM | 4 screws (1.7x4mm) |
| KM | 5 screws (1.5x5mm) |

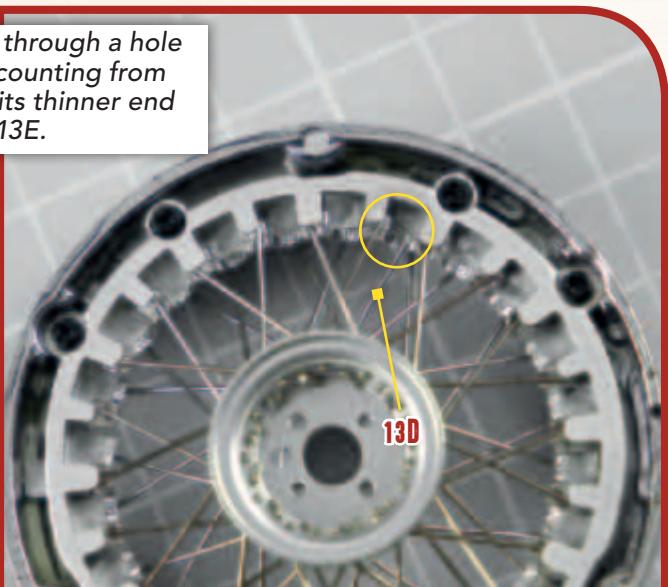
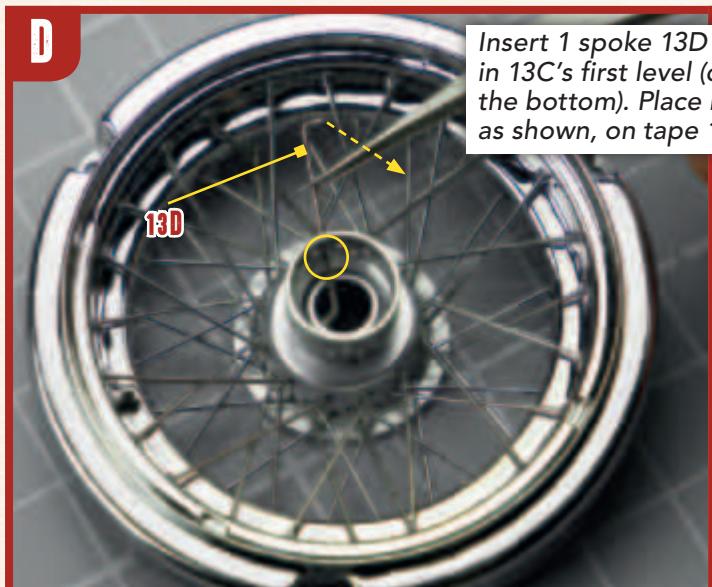
A

Apply 24 pieces of double-sided tape 13E to 12B's inner profile and tear off their top sheets.

**B****C**

D

Insert 1 spoke 13D through a hole in 13C's first level (counting from the bottom). Place its thinner end as shown, on tape 13E.



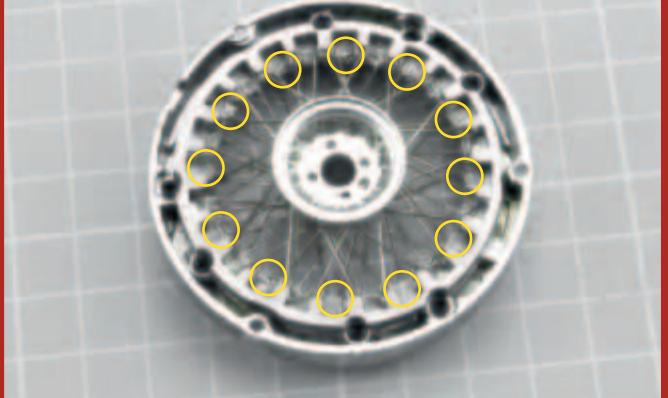
E

Repeat the process with other 11 spokes 13D. Leave one empty spot between the thinner ends of spokes 13D.

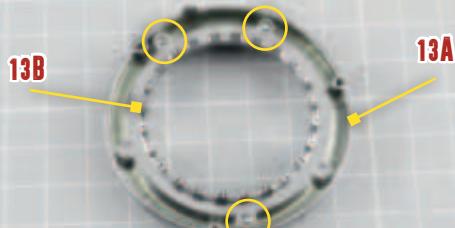


F

Insert 12 spokes 13D through 13C's second level of holes. Place their thinner ends on the empty spots from Step E, on tapes 13E.

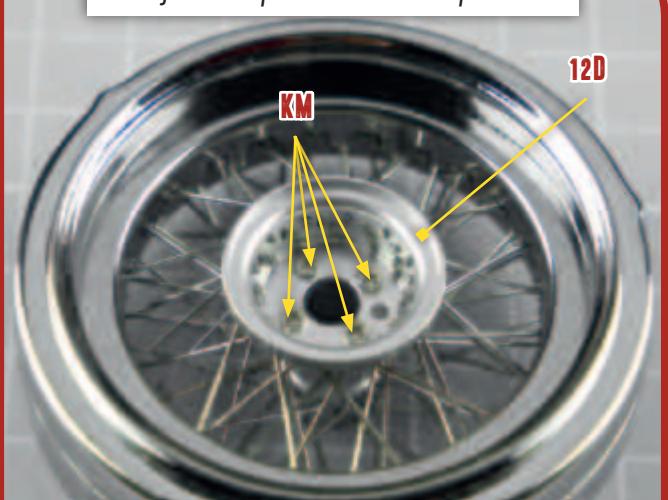


G



H

Tighten or loosen the four KM screws to adjust the position of the spokes.



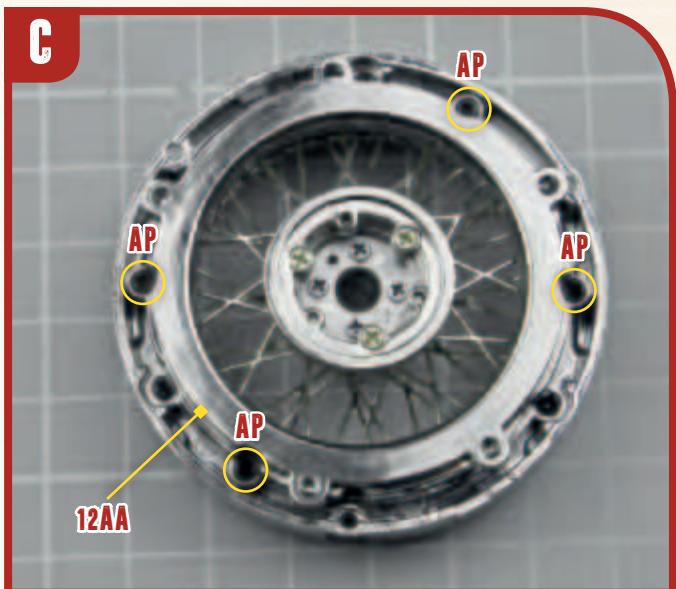
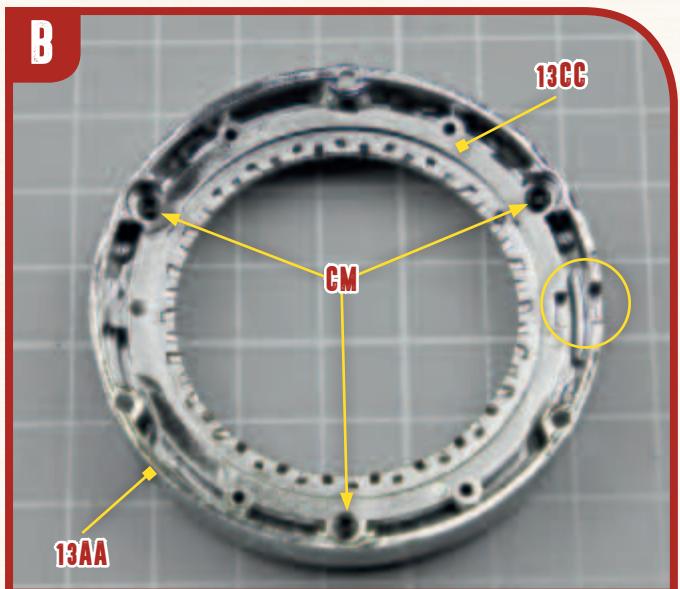
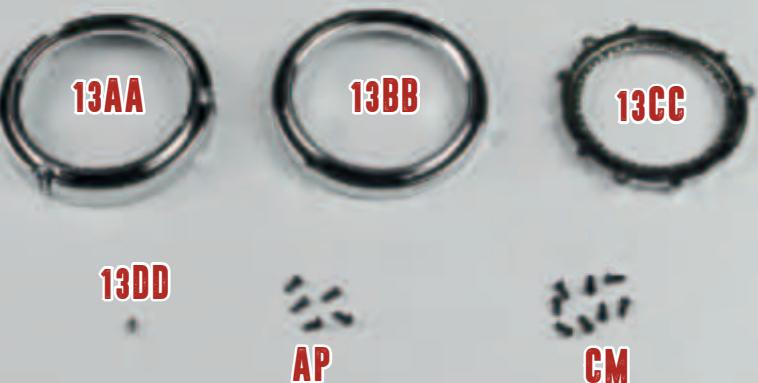
step by step #13B

13B PARTS LIST

EASY ASSEMBLY

13AA Outer rim
13BB Inner rim
13CC Central ring 2
13DD Inflation valve

AP 5 screws (1.7x4mm)
CM 8 screws (1.7x4mm)



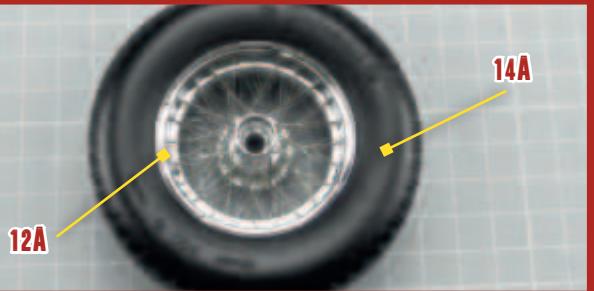
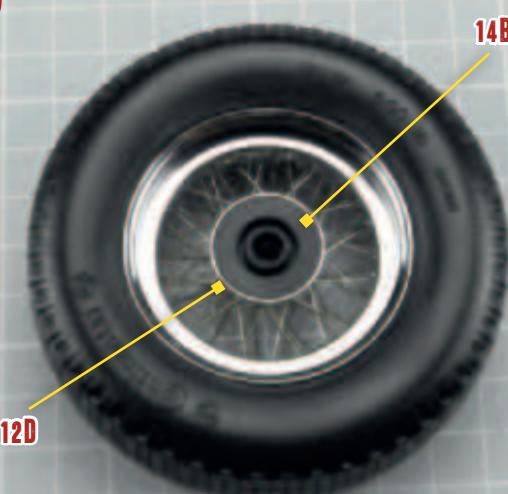
14 PARTS LIST

REGULAR ASSEMBLY

- 14A Tyre
 14B Hub 3
 14C Hubcap
 14D Washer ring

**A**

Soften tyre 14A by placing it in a bowl full of hot water.

**B****C**

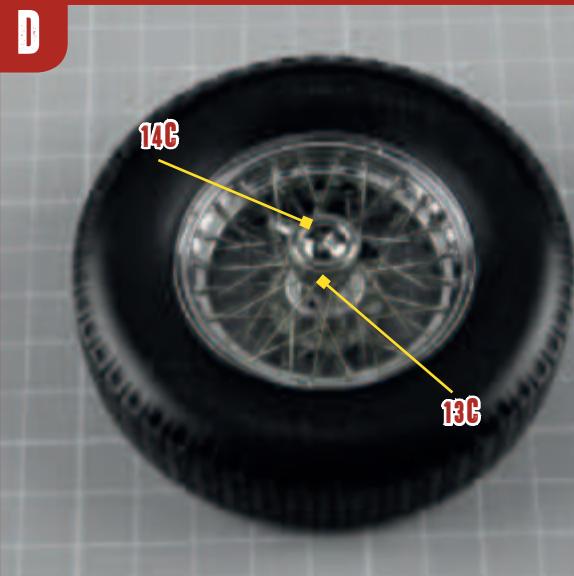
14D

13C

**D**

14C

13C

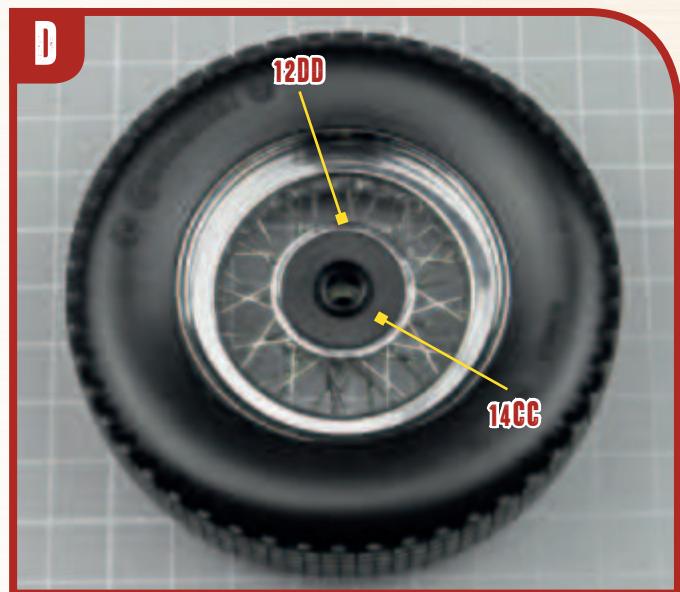
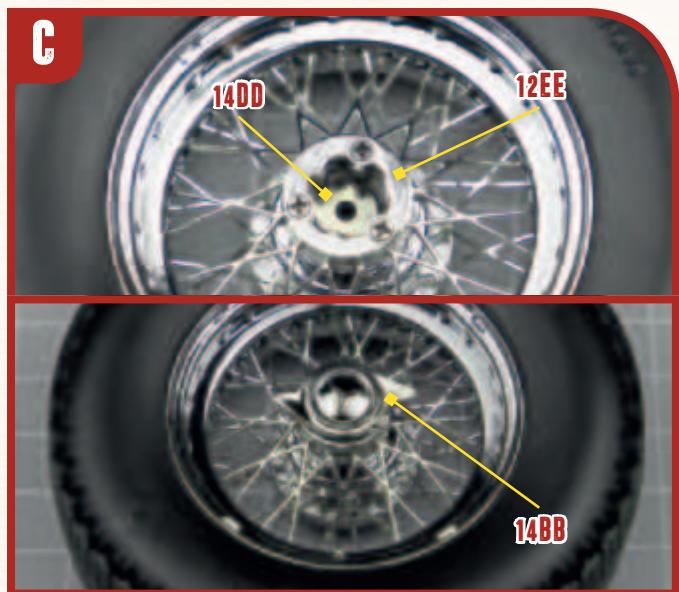


step by step #14B

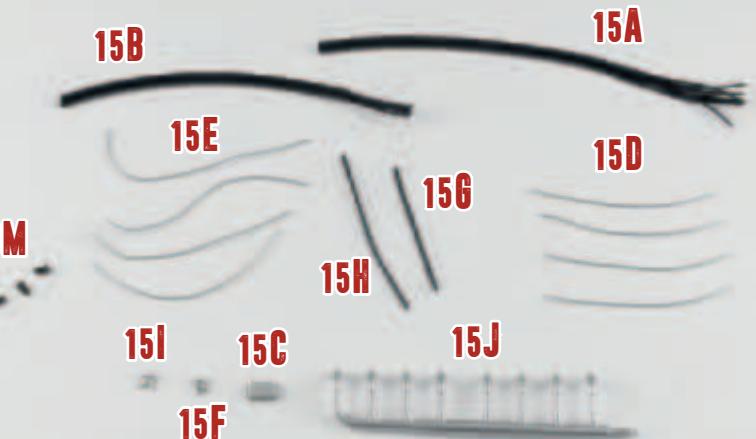
14B PARTS LIST

EASY ASSEMBLY

- 14AA Tyre
- 14BB Hubcap
- 14CC Hub 5
- 14DD Washer ring



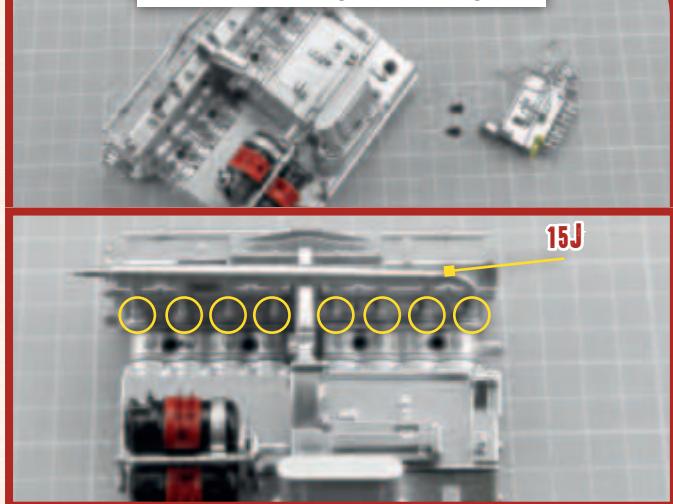
15 PARTS LIST



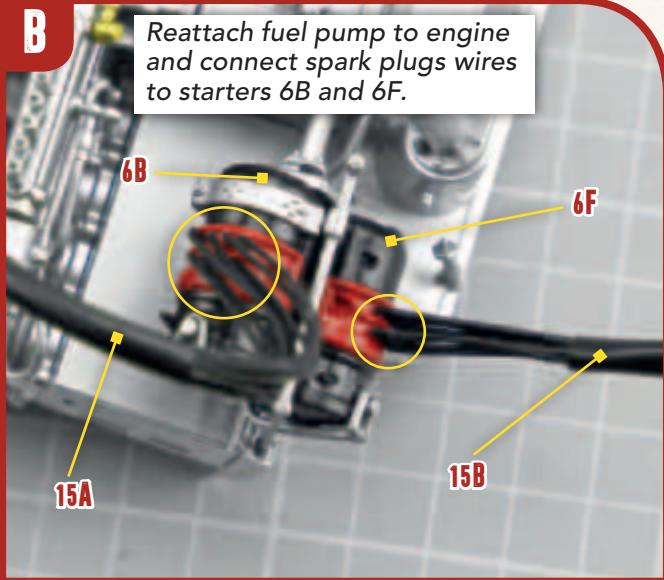
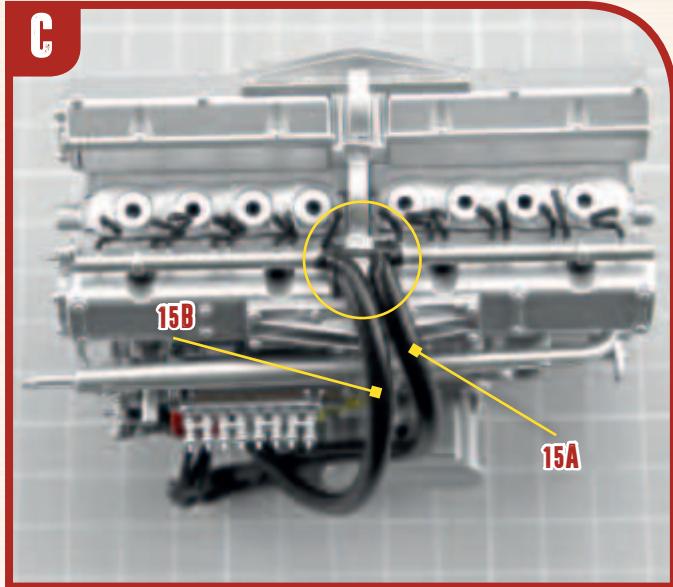
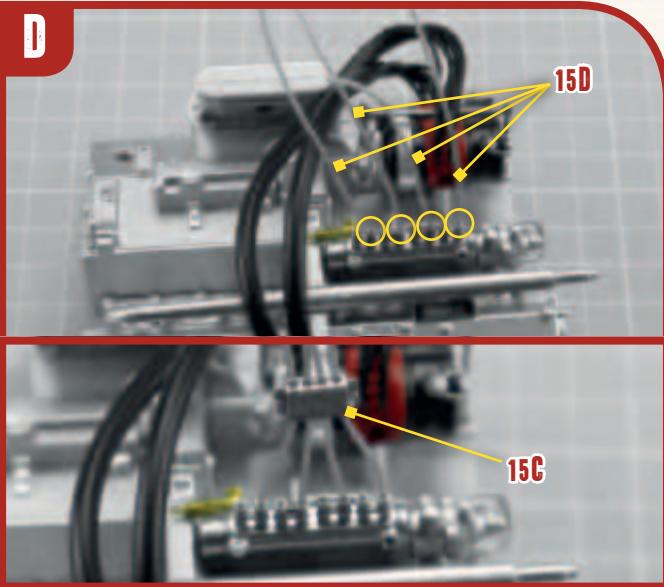
- | | |
|------------|-----------------------|
| 15A | Spark plugs wire 1 |
| 15B | Spark plugs wire 2 |
| 15C | Fuel lines fairlead |
| 15D | Fuel lines 1 (x4) |
| 15E | Fuel lines 2 (x4) |
| 15F | Oil hoses connector 1 |
| 15G | Oil hose 1 |
| 15H | Oil hose 2 |
| 15I | Oil hoses connector 2 |
| 15J | Engine cooling duct |
| DM | 3 screws (2x4mm) |

A

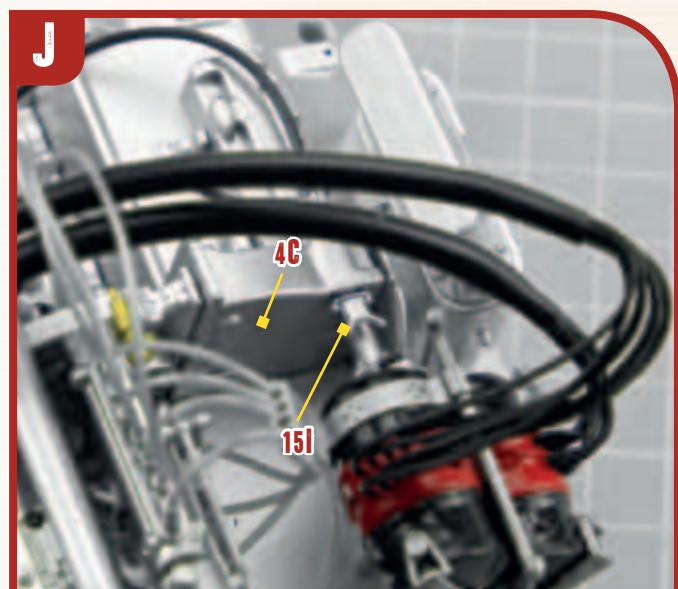
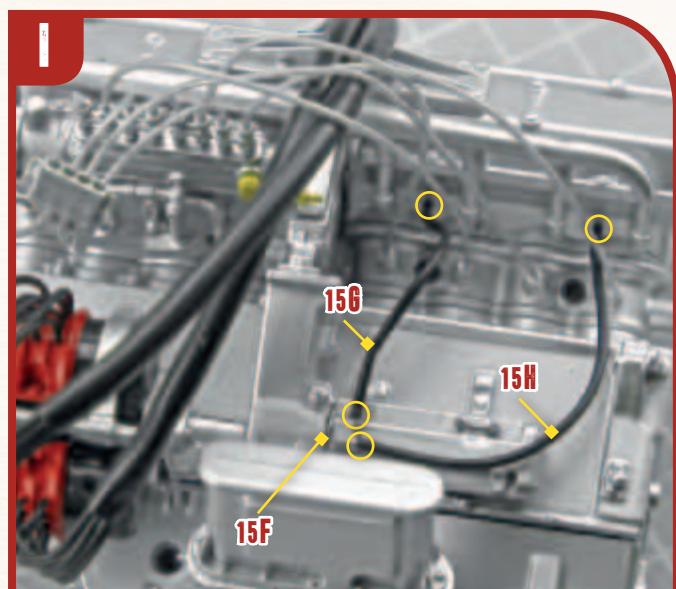
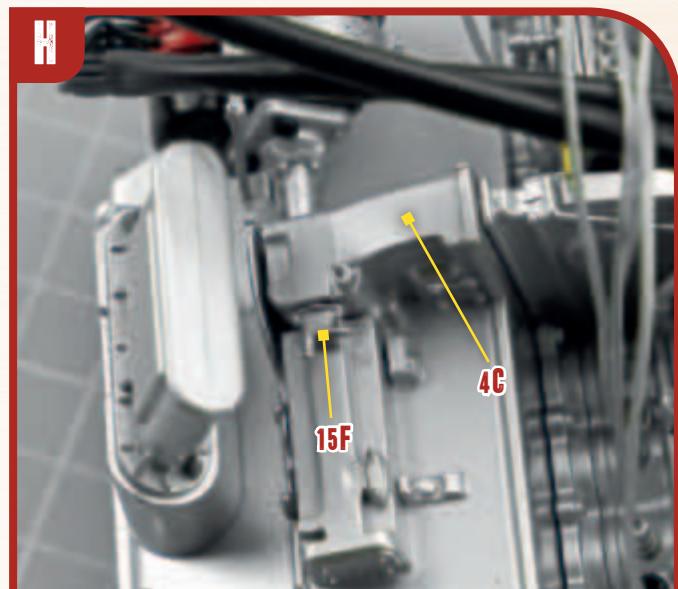
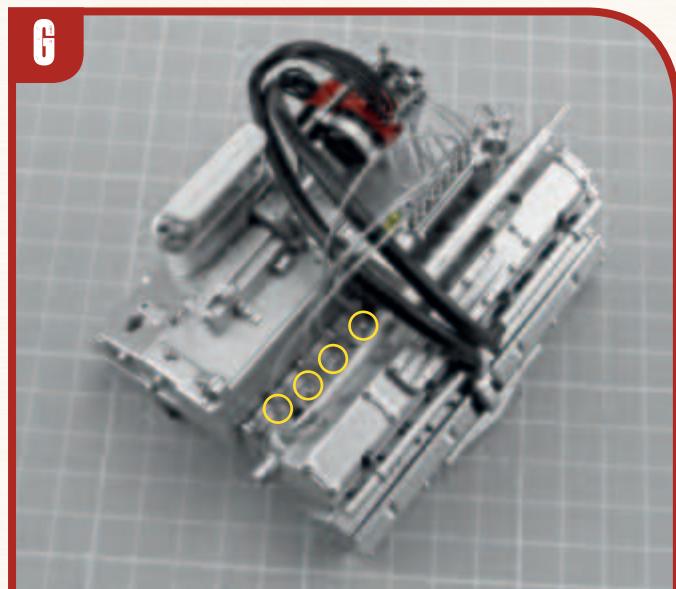
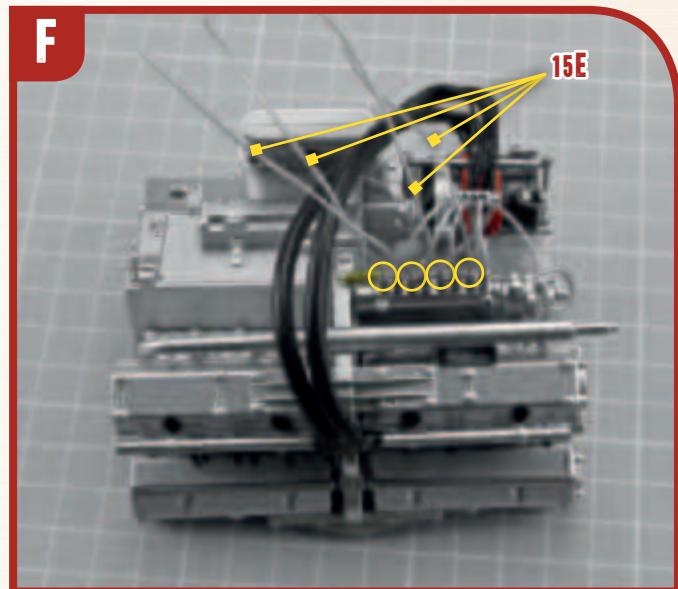
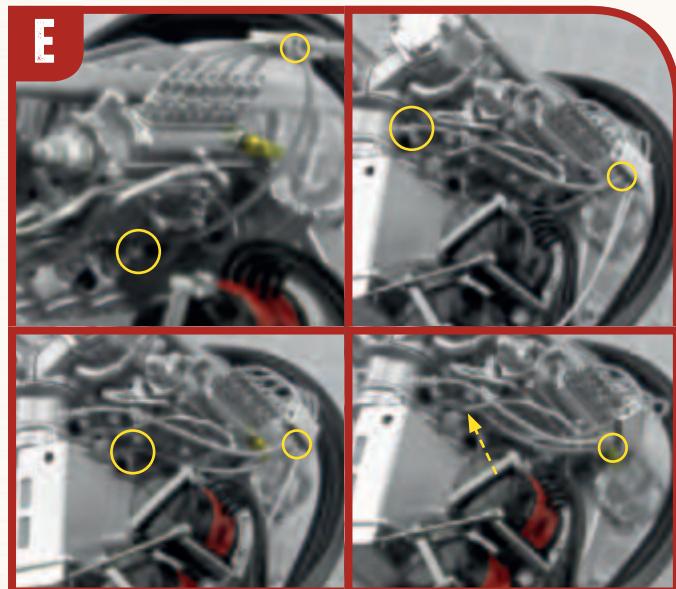
Temporarily remove fuel pump before attaching 15J to engine.

**B**

Reattach fuel pump to engine and connect spark plugs wires to starters 6B and 6F.

**C****D**

step by step #15



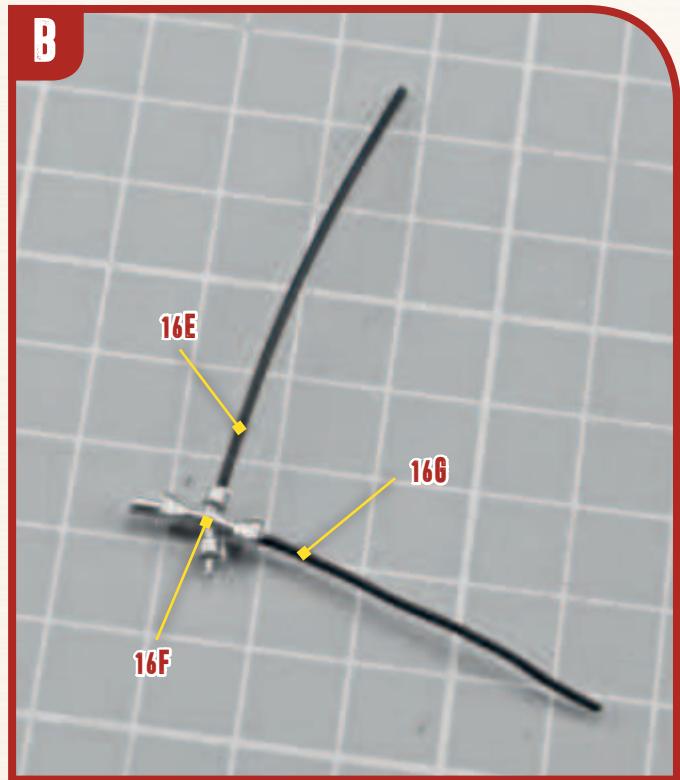
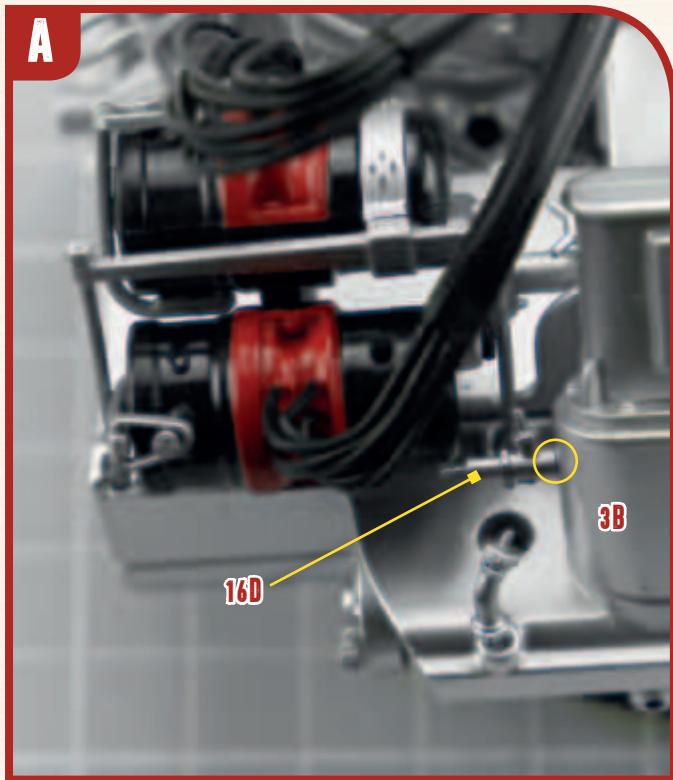
16 PARTS LIST



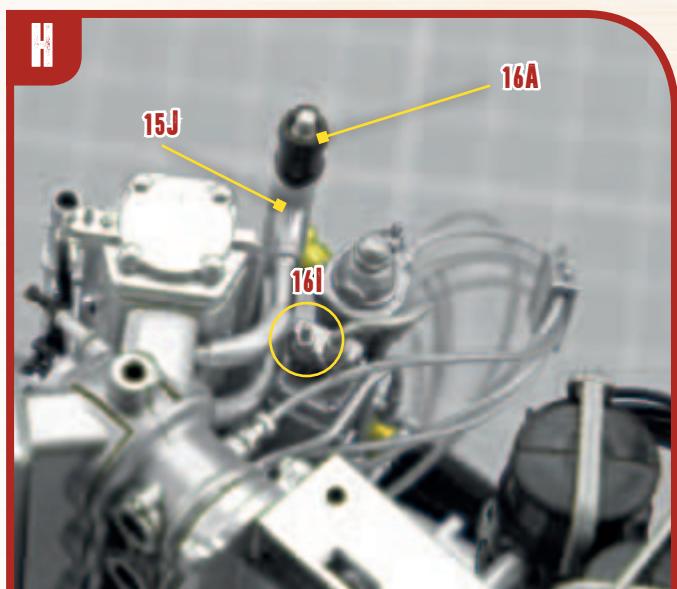
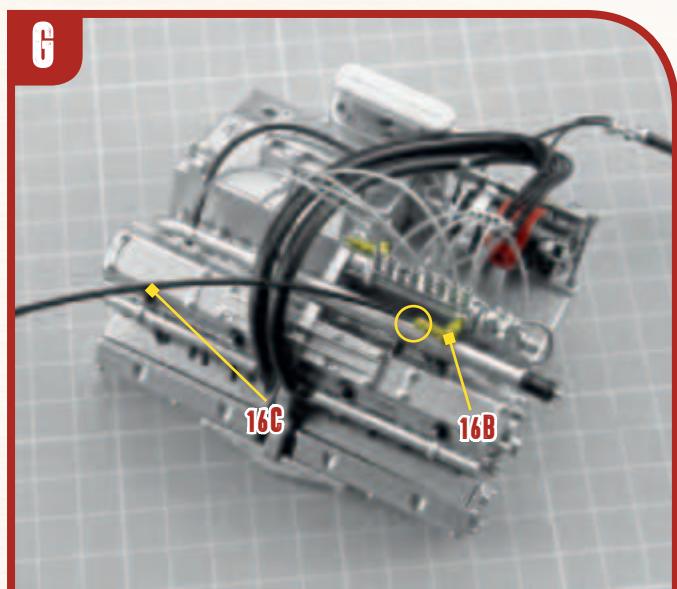
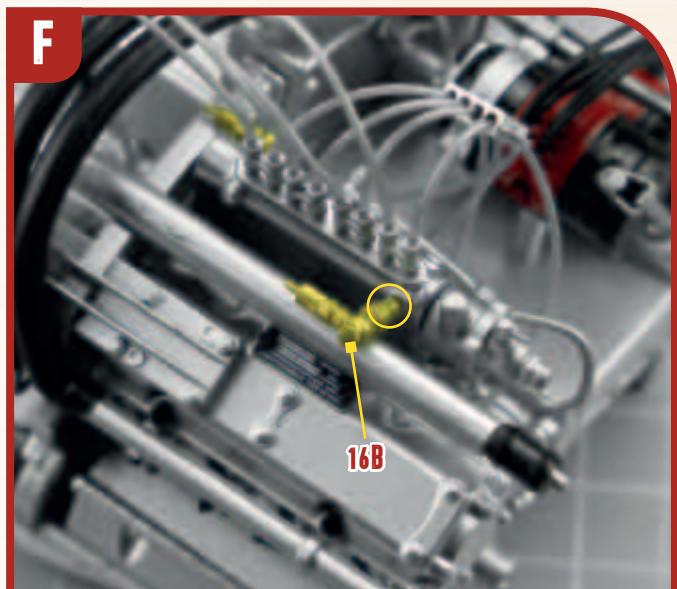
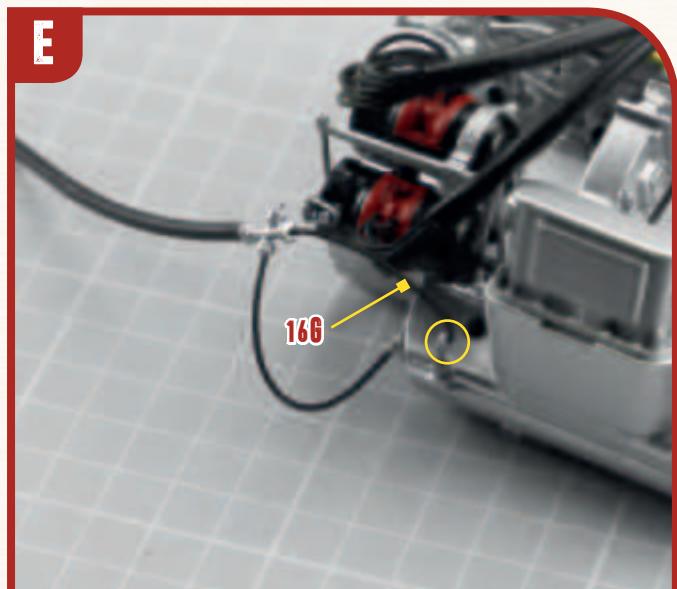
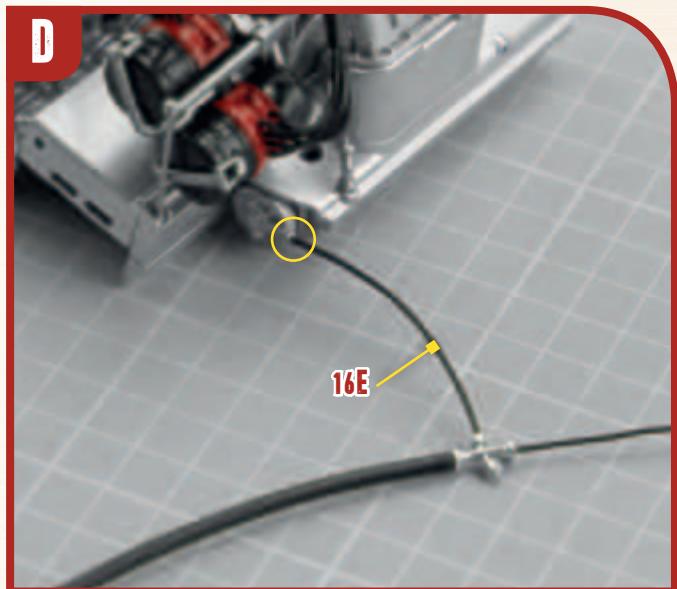
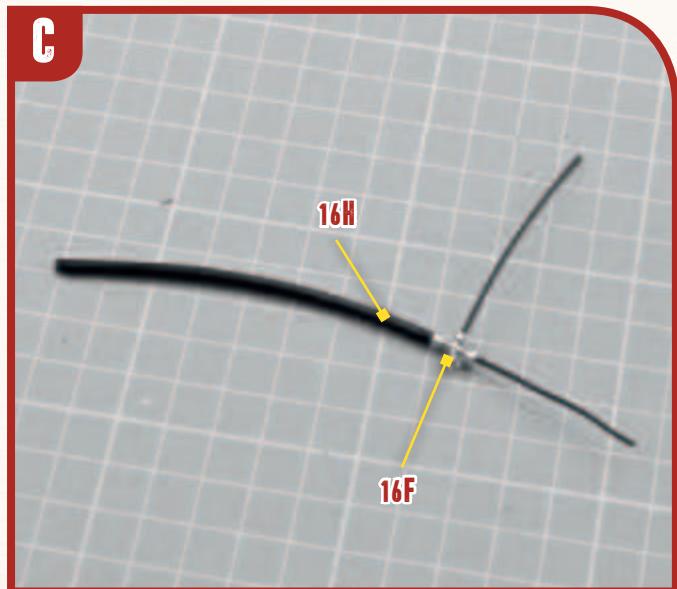
16A Expansion tank connector
16B Fuel pump connector
16C Fuel pump line

16D Oil hoses connector 3
16E Oil hose 3
16F Oil hoses connector 4

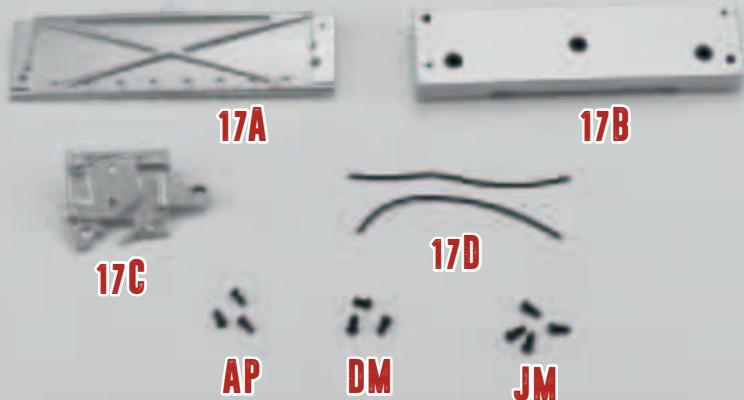
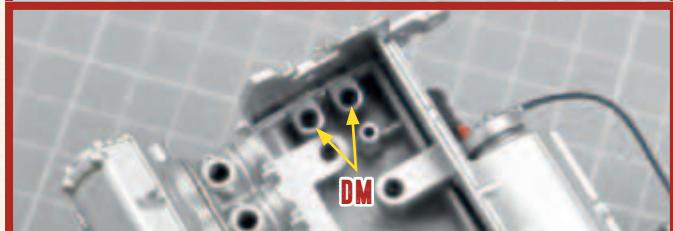
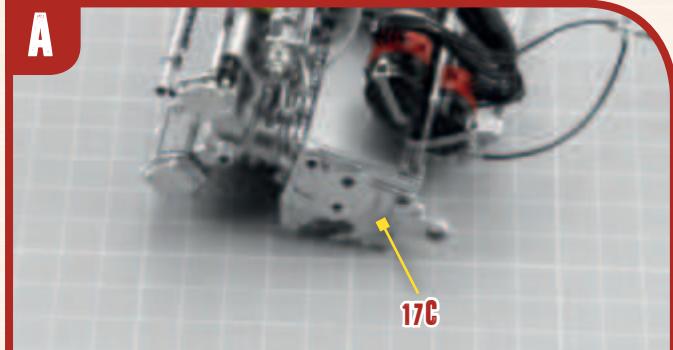
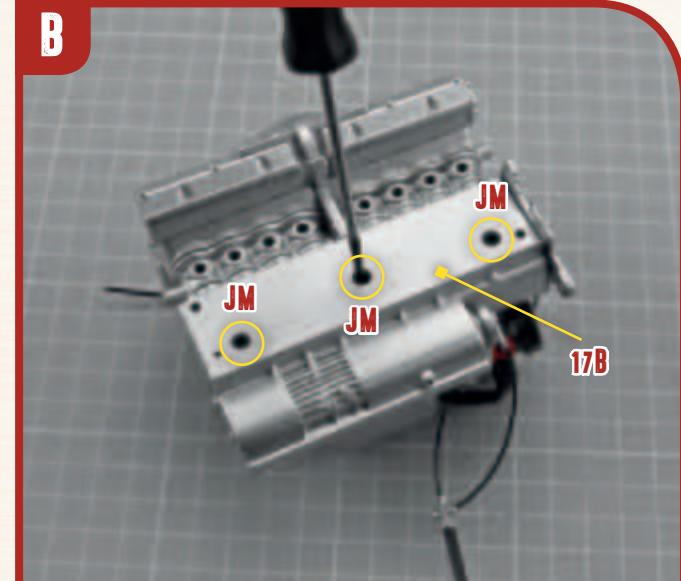
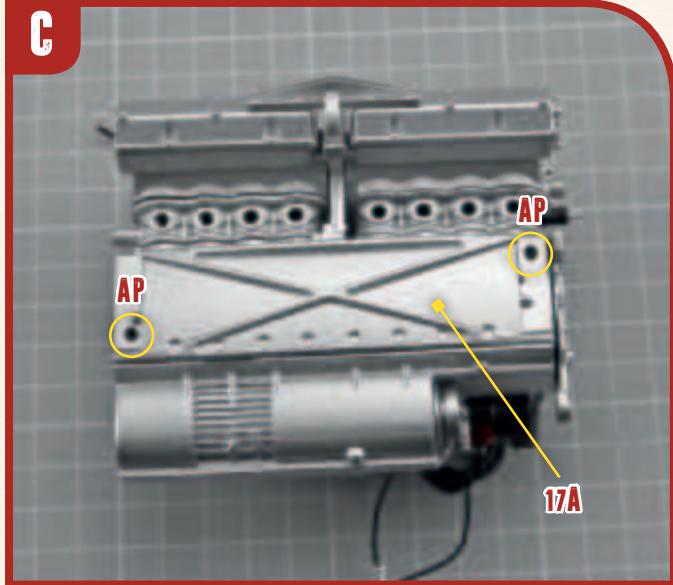
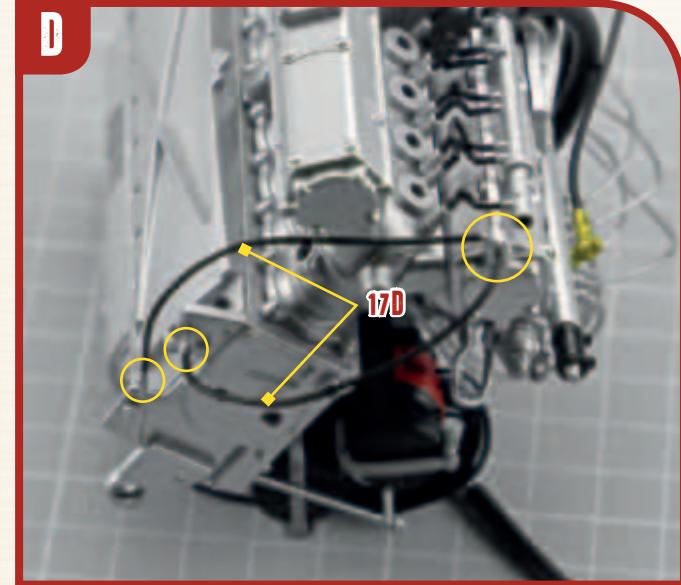
16G Oil hose 4
16H Oil hose 5
16I Detail



step by step #16

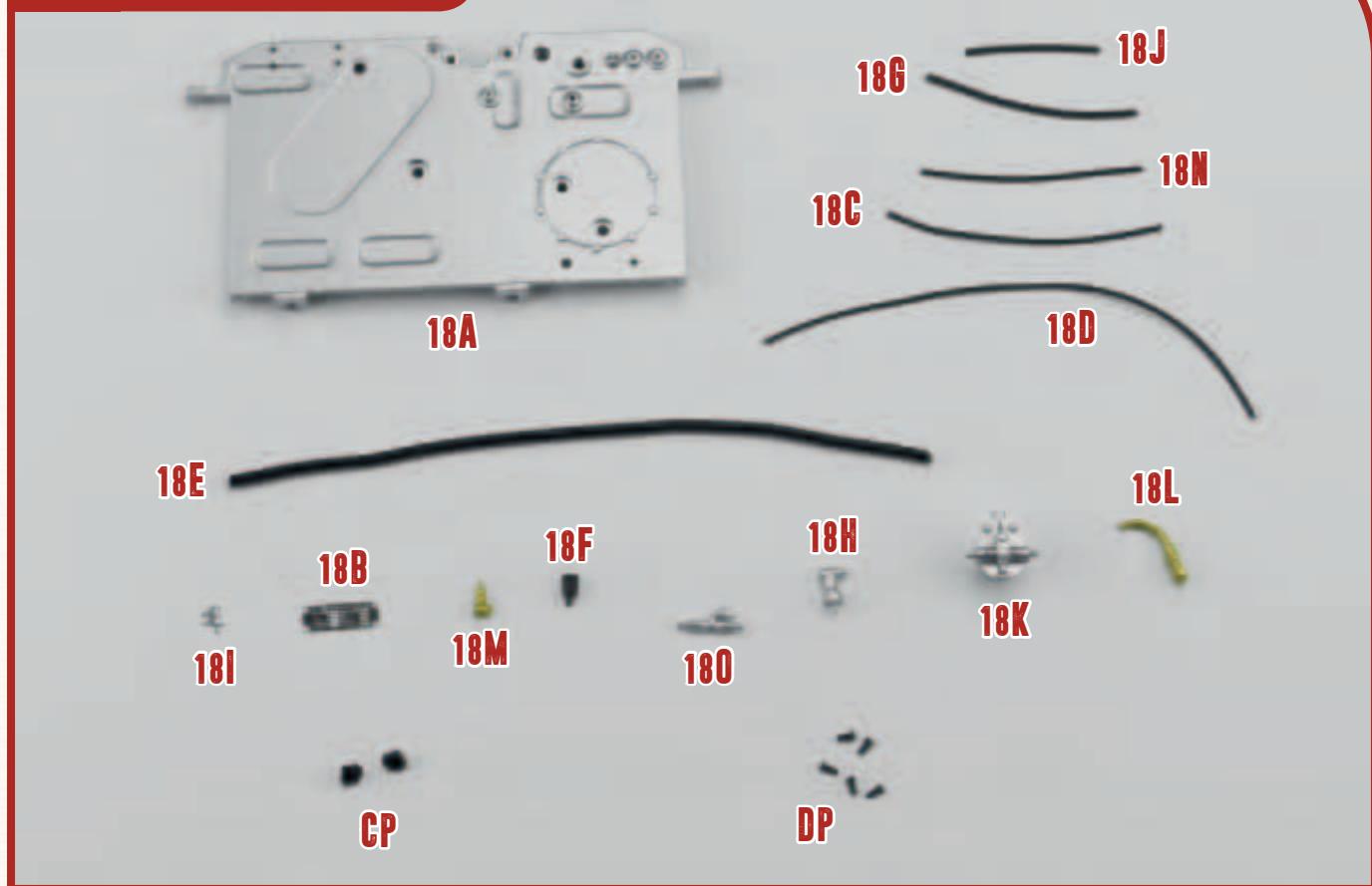


17 PARTS LIST

**A****B****C****D**

step by step #18

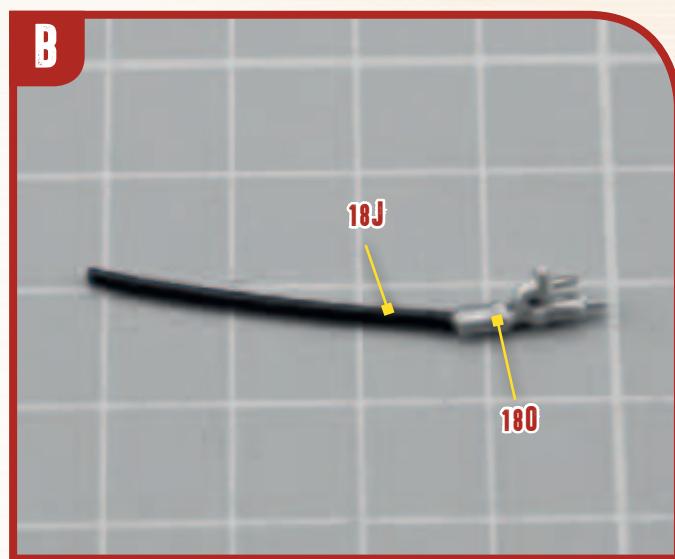
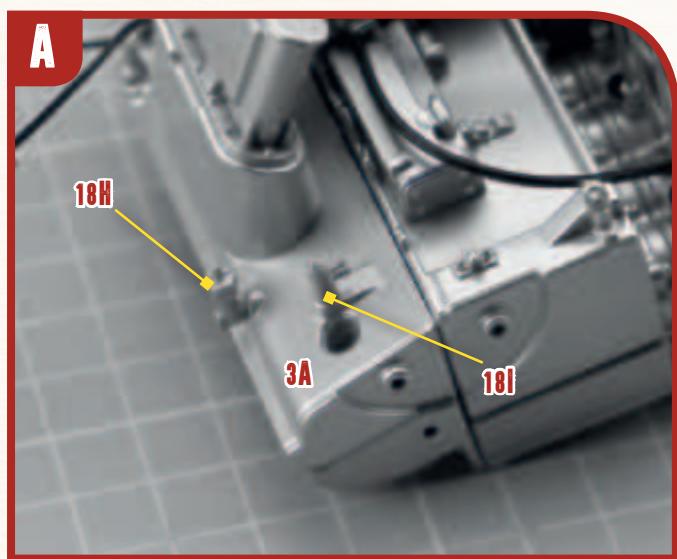
18 PARTS LIST

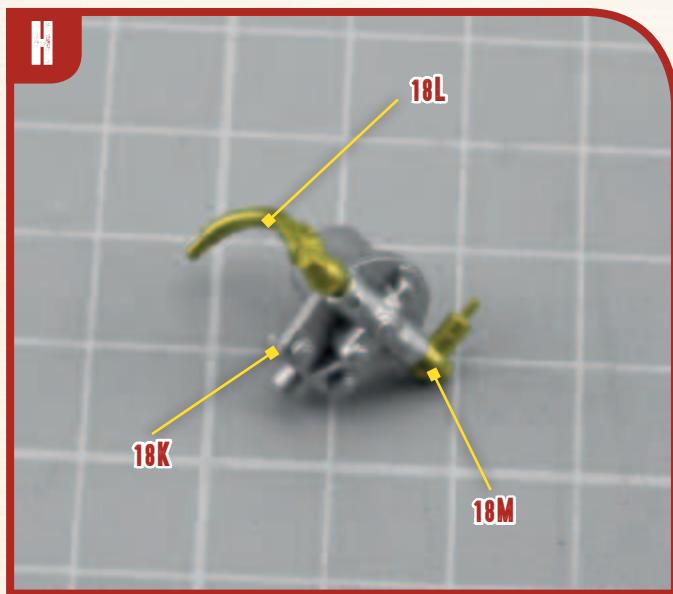
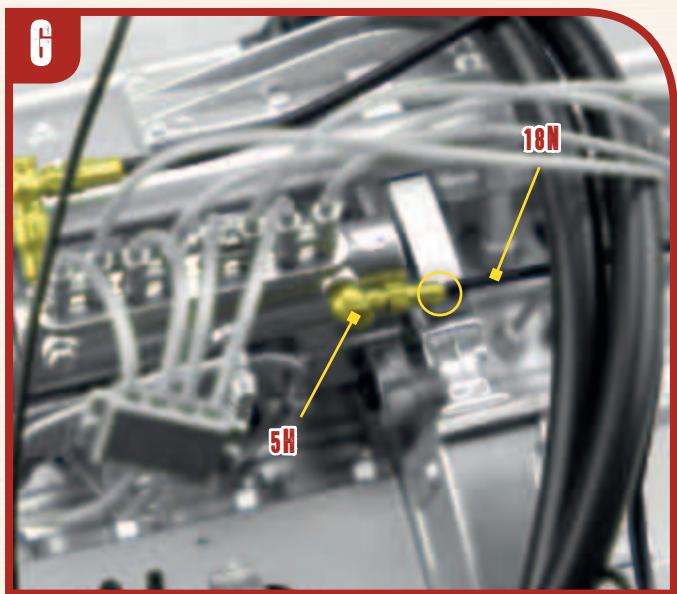
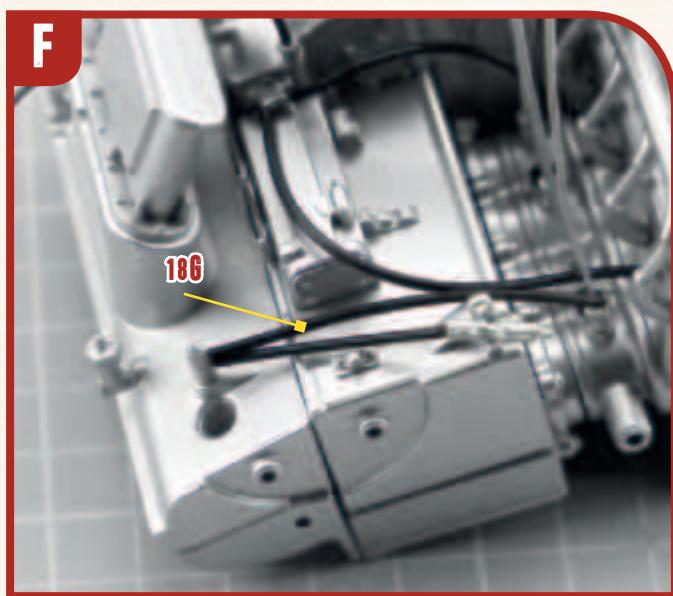
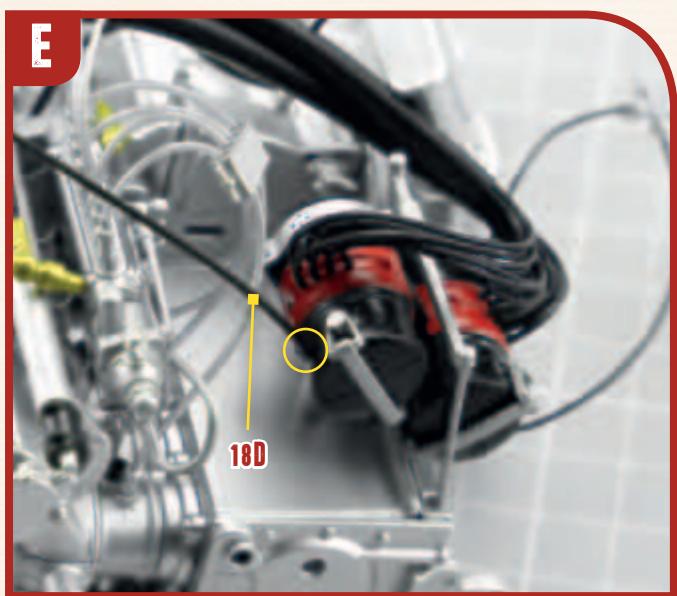
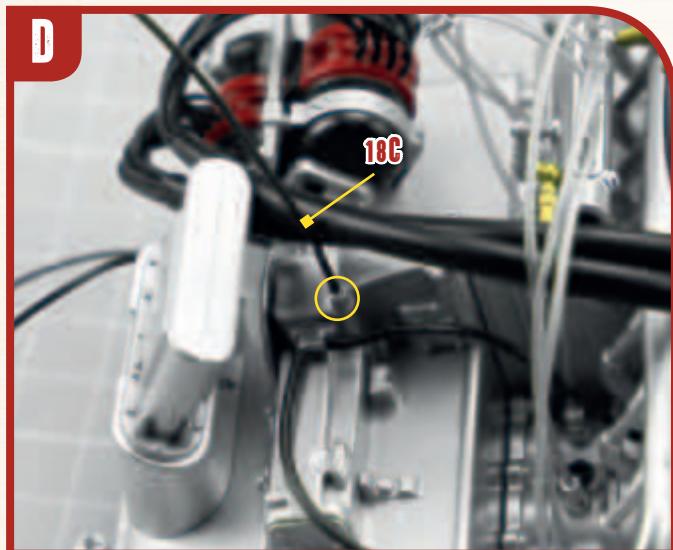
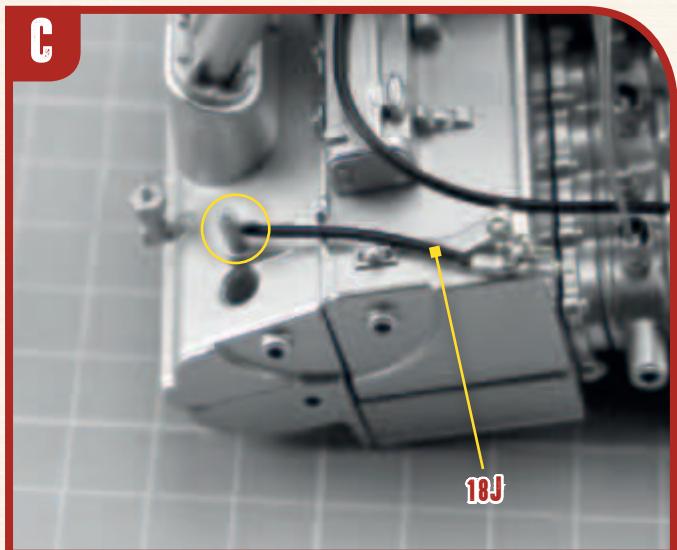


18A Firewall
18B Plate
18C Oil hose 7
18D Starter wire
18E Oil radiator hose
18F Oil radiator connector

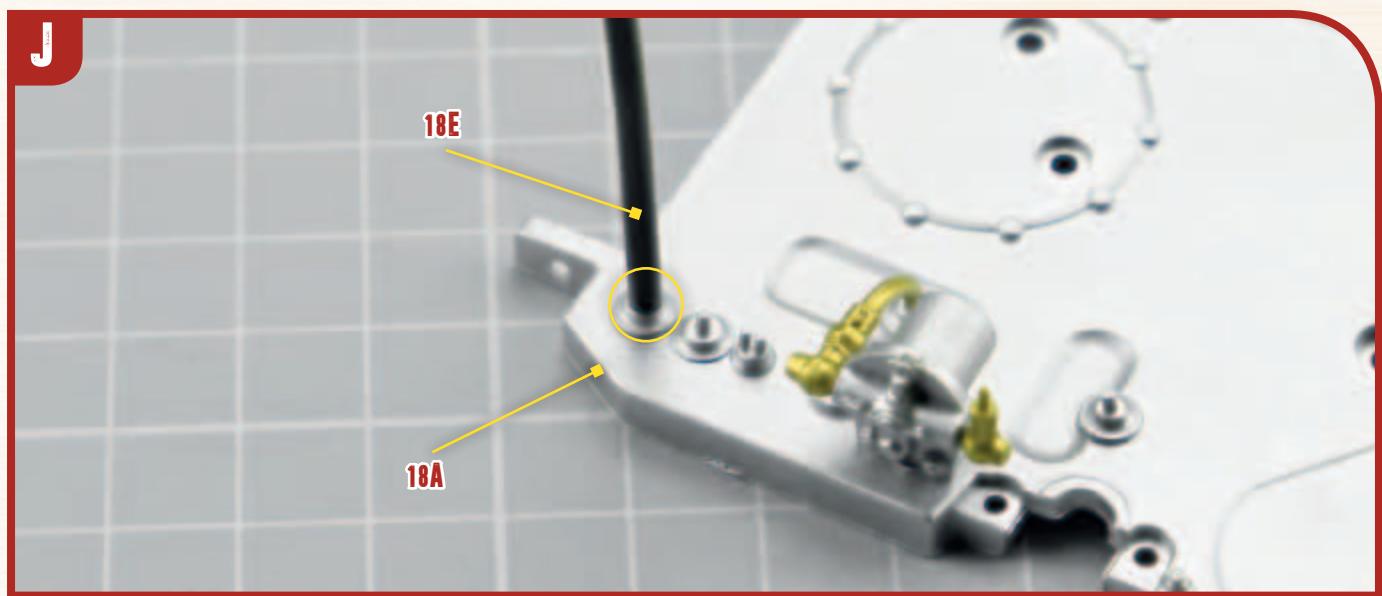
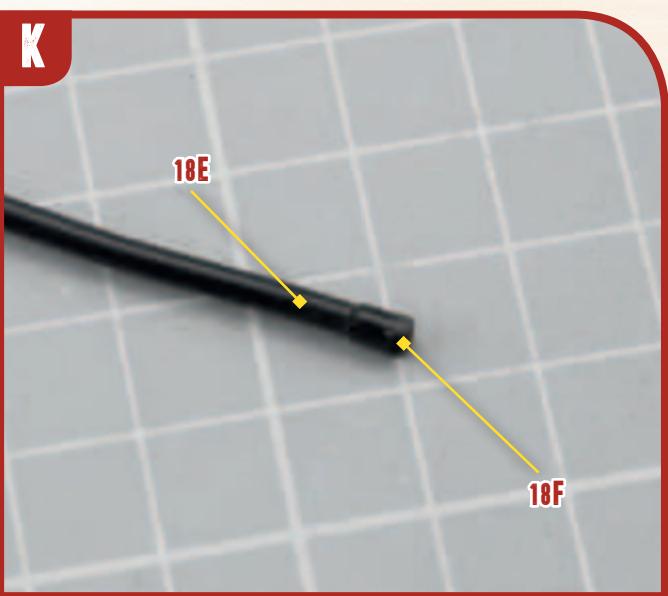
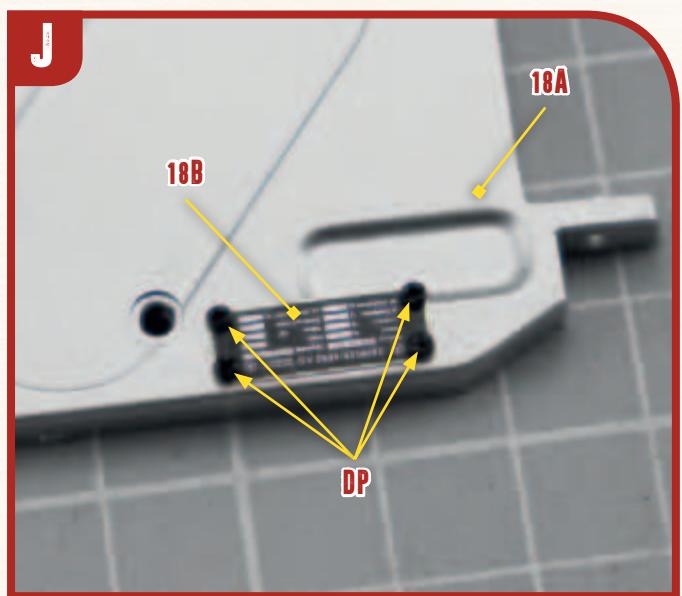
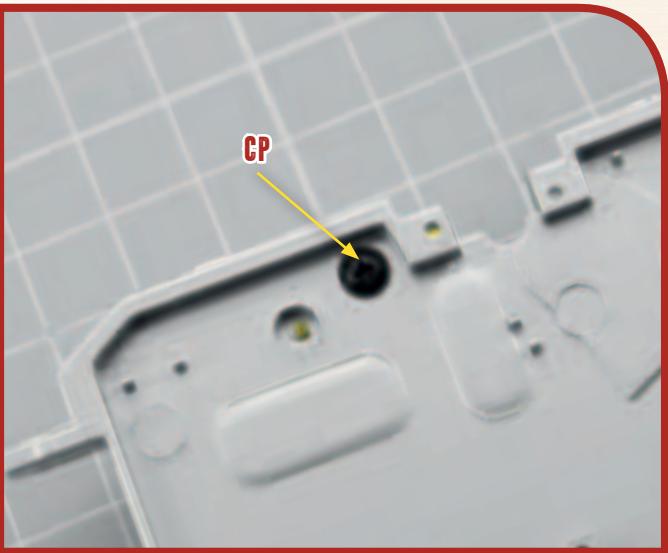
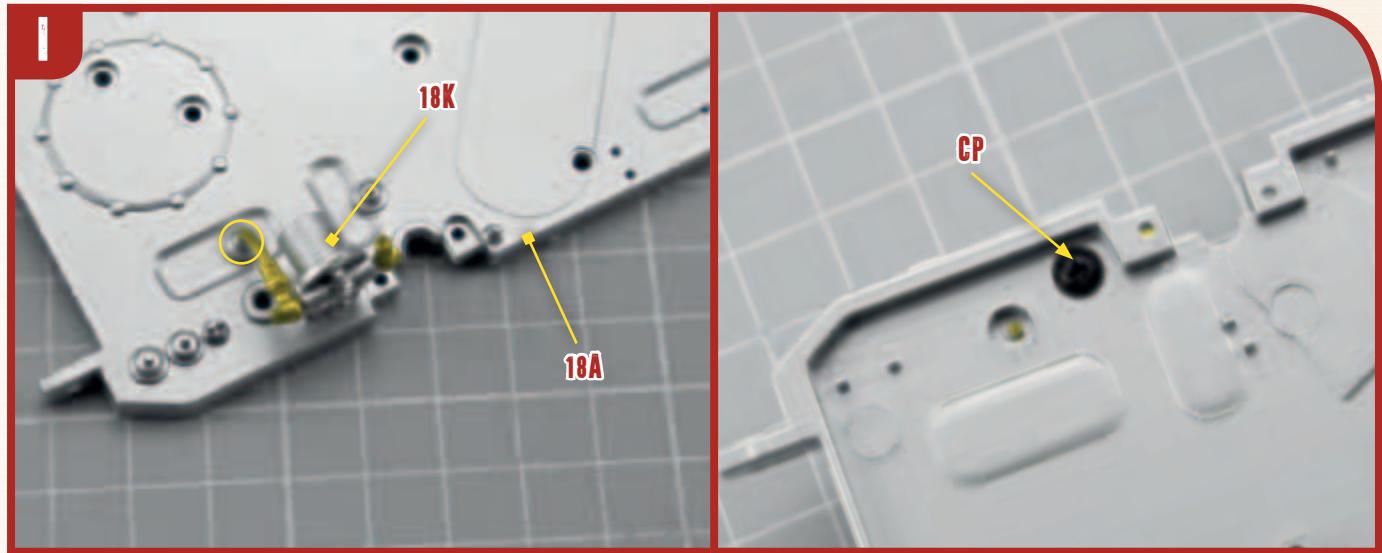
18G Oil hose 8
18H Oil hoses connector 5
18I Oil hoses connector 6
18J Oil hose 9
18K Fuel filter
18L Fuel line 3

18M Fuel lines connector 1
18N Fuel line 4
18O Oil hoses connector 7
CP 2 screws (1.7x3x5mm)
DP 5 screws (1.2x3mm)

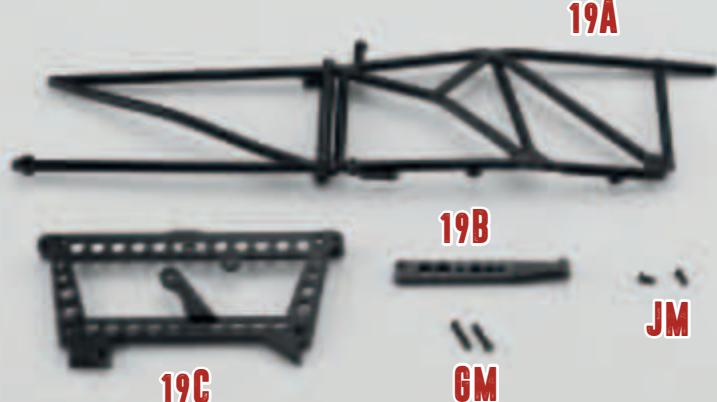




step by step #18

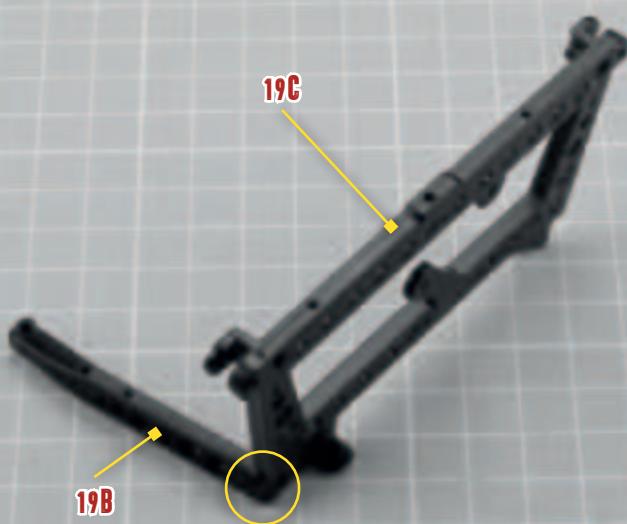
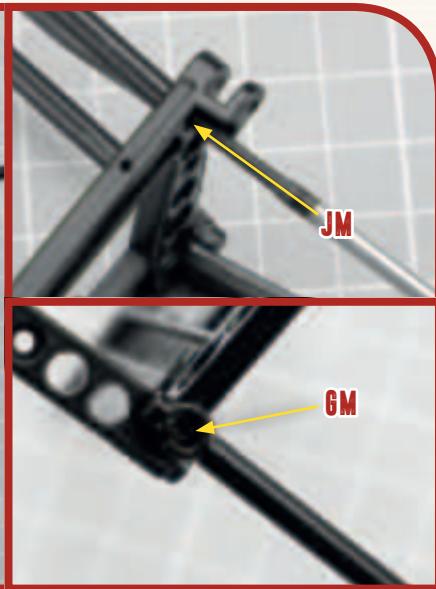
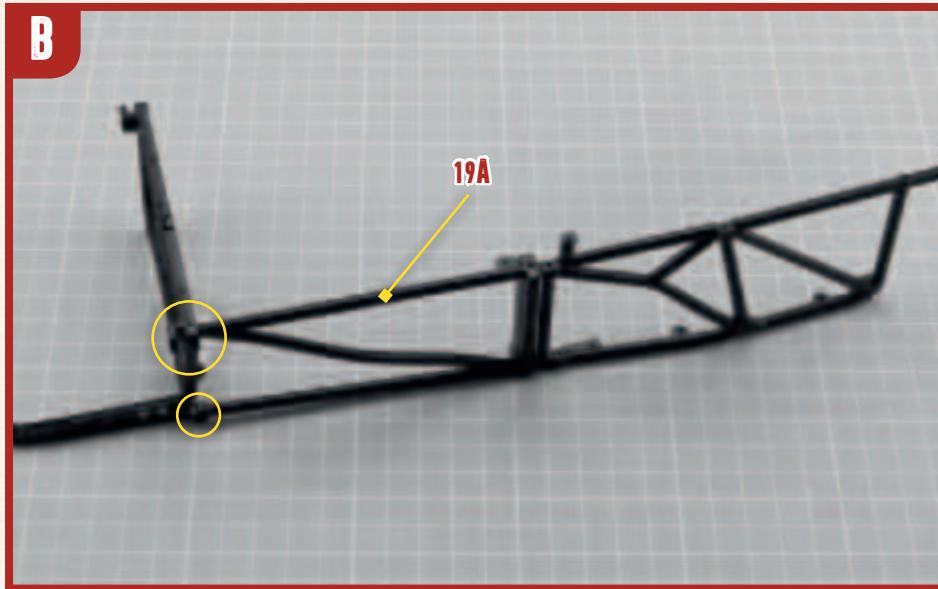


19 PARTS LIST



19A Chassis – left section
19B Radiator support (L)
19C Front suspension support 1

GM 2 screws (2x10mm)
JM 2 screws (2x5mm)

A**B**

step by step #20

20 PARTS LIST



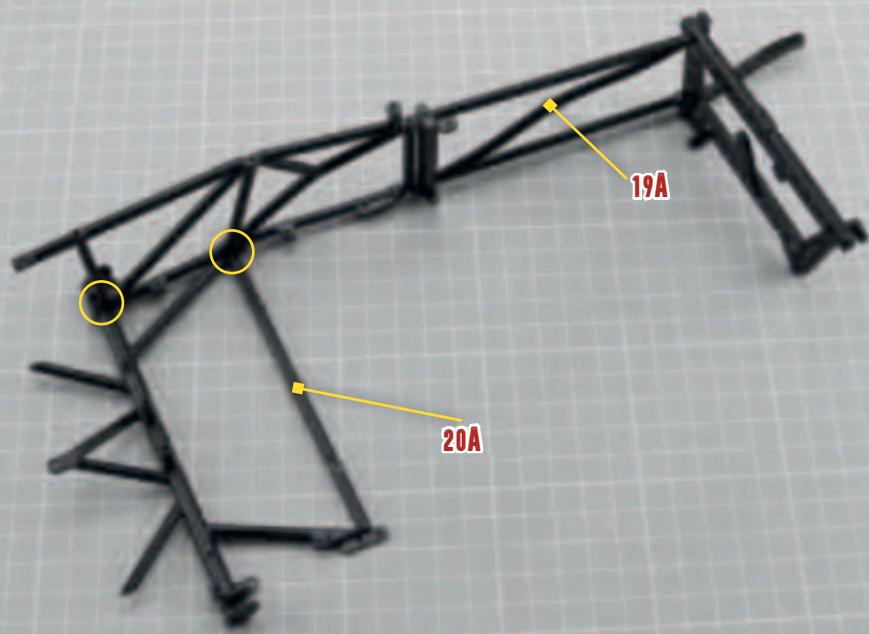
DM

JM

20A Rear axle support

DM 2 screws (2x4mm)
JM 3 screws (2x5mm)

A



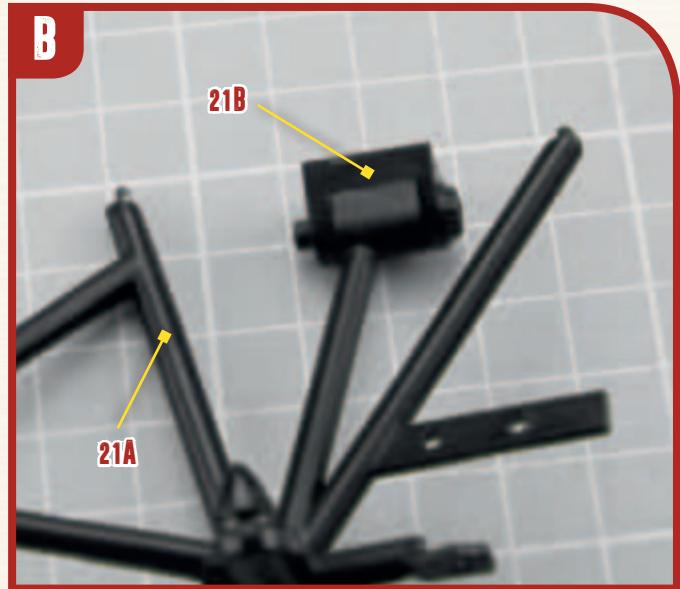
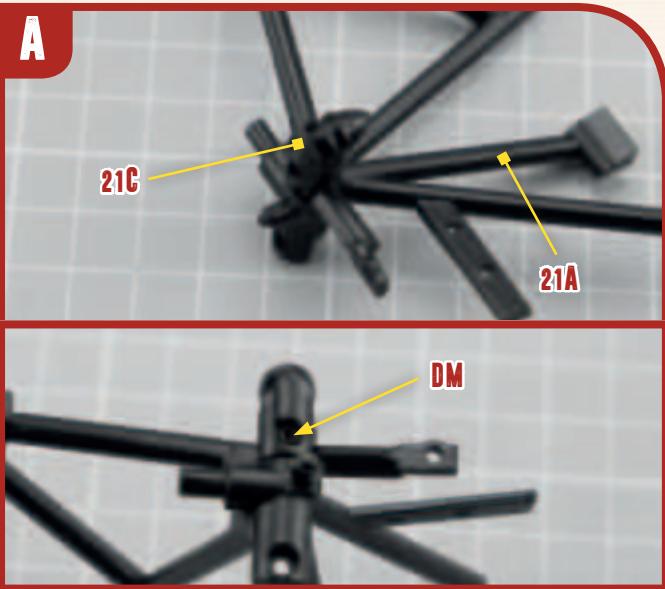
JM

DM

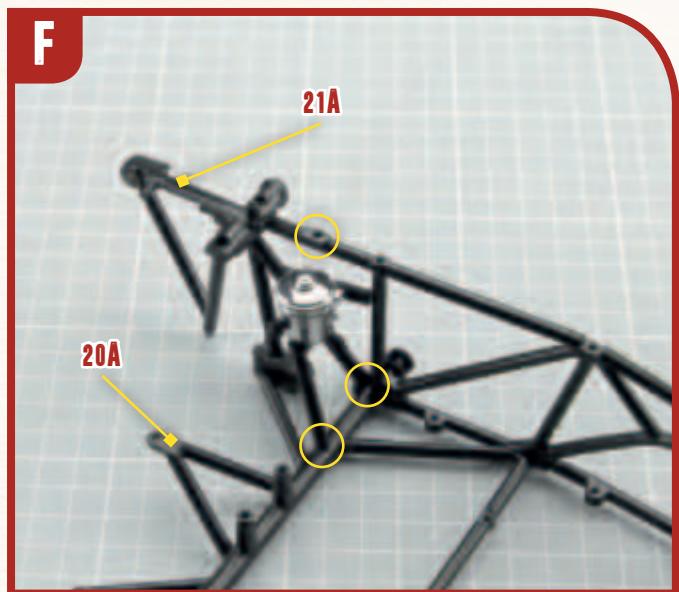
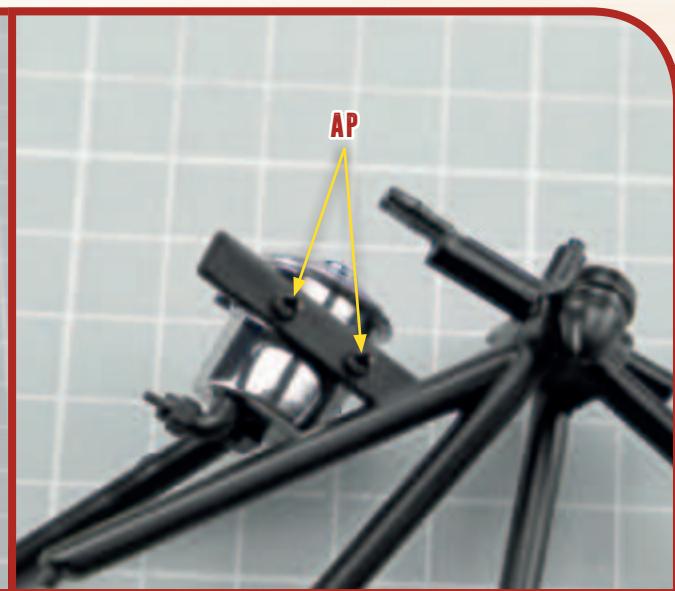
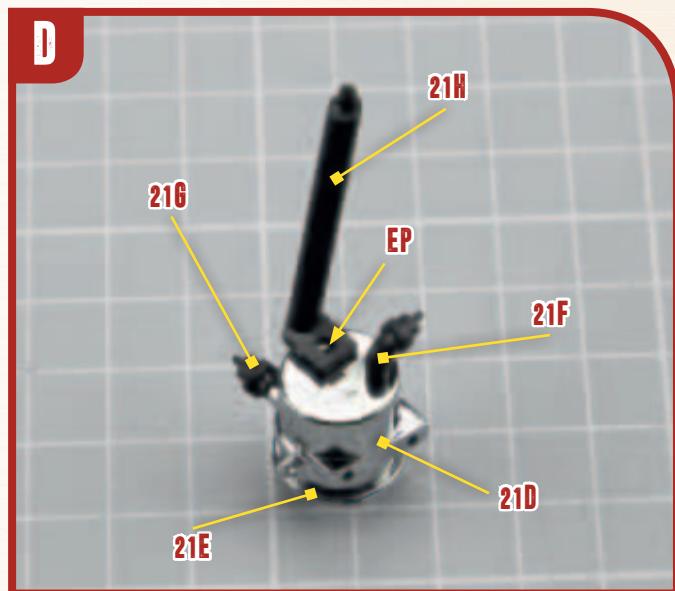
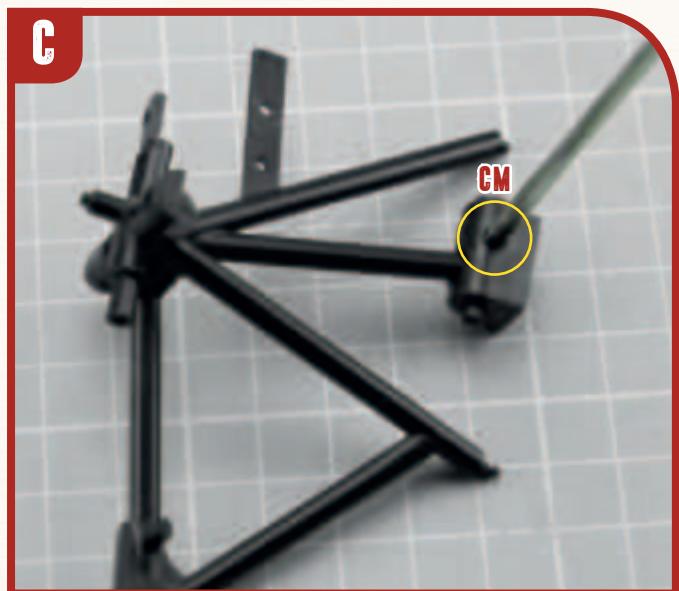
JM

DM

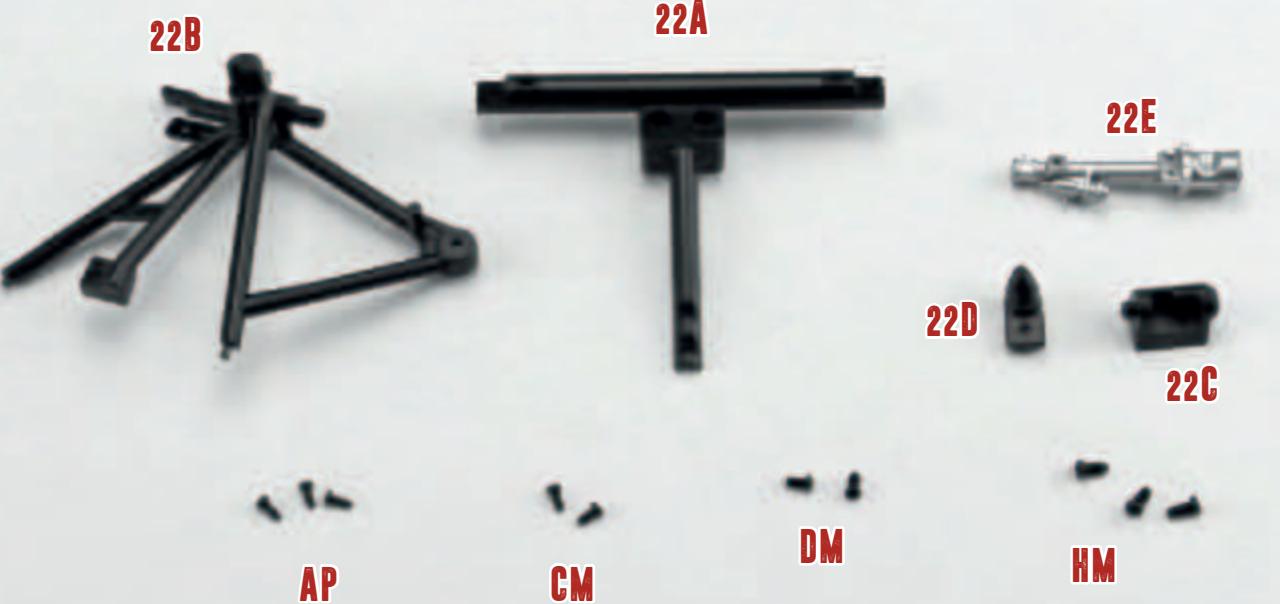
21 PARTS LIST

**21A** Chassis – rear left section**21B** Torsion bar support bushing 1**21C** Suspension lock 1**21D** Compensating reservoir**21E** Reservoir cover**21F** Fuel lines connector 2**21G** Fuel lines connector 3**21H** Reservoir support**AP** 3 screws (1.7x4mm)**EP** 2 screws (2x4mm)**CM** 2 screws (1.7x4mm)**DM** 2 screws (2x4mm)**JM** 2 screws (2x5mm)

step by step #21



22 PARTS LIST



22A Rear crossbeam

22B Chassis – rear right section

22C Torsion bar support bushing 2

22D Suspension lock 2

22E Fuel pump

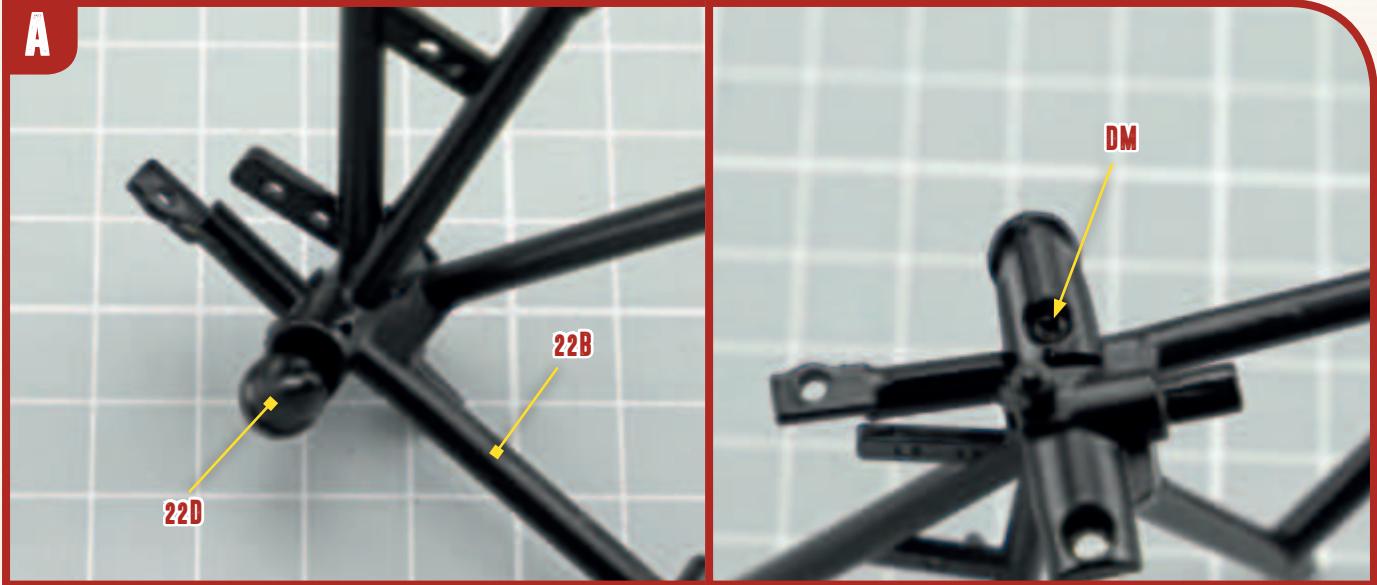
AP 3 screws (1.7x4mm)

CM 2 screws (1.7x4mm)

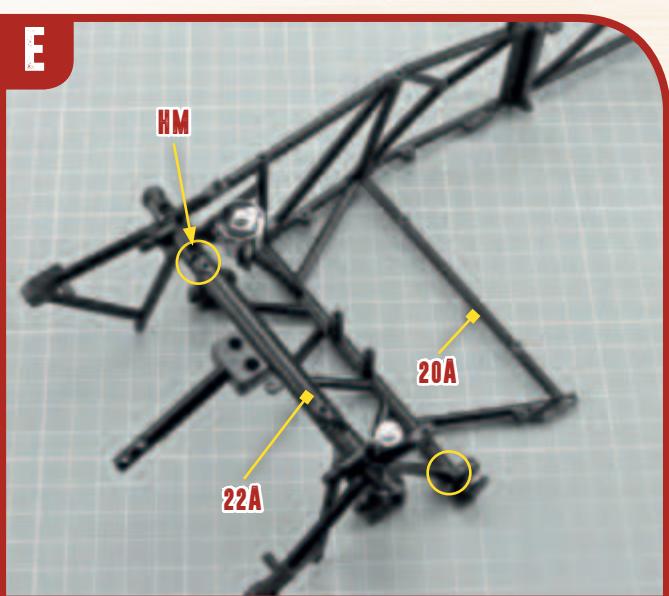
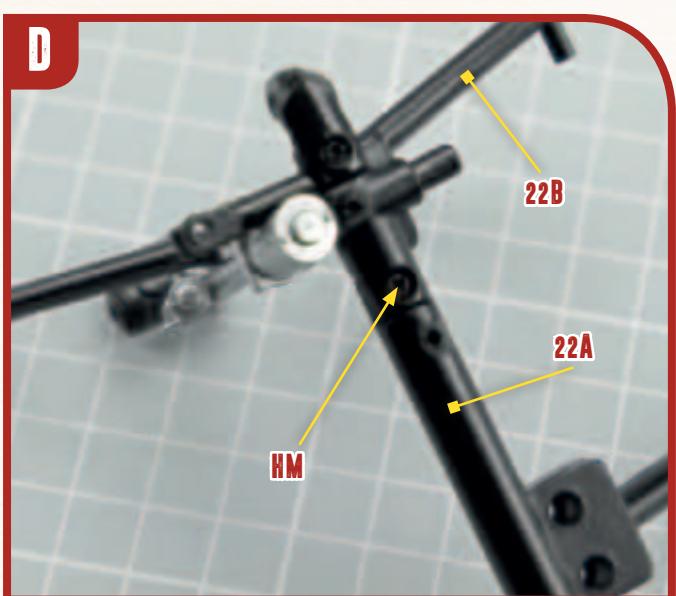
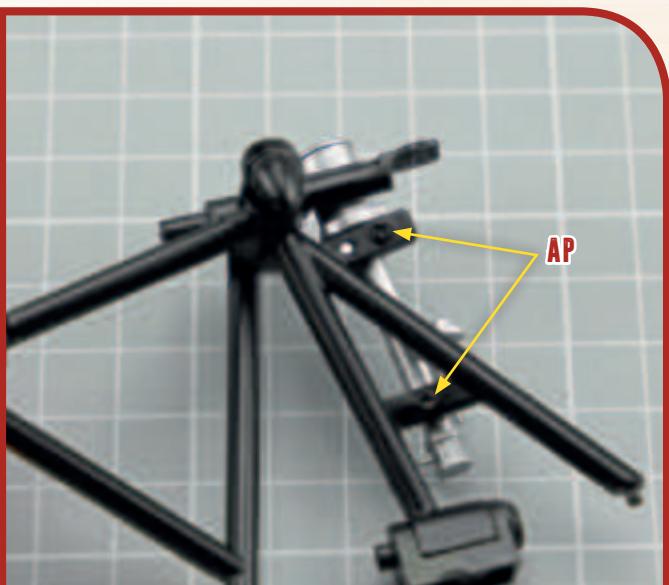
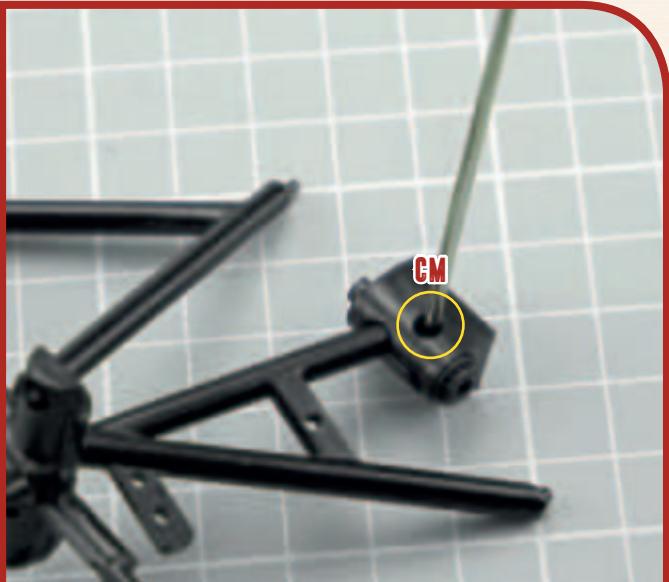
DM 2 screws (2x4mm)

HM 3 screws (2.3x5mm)

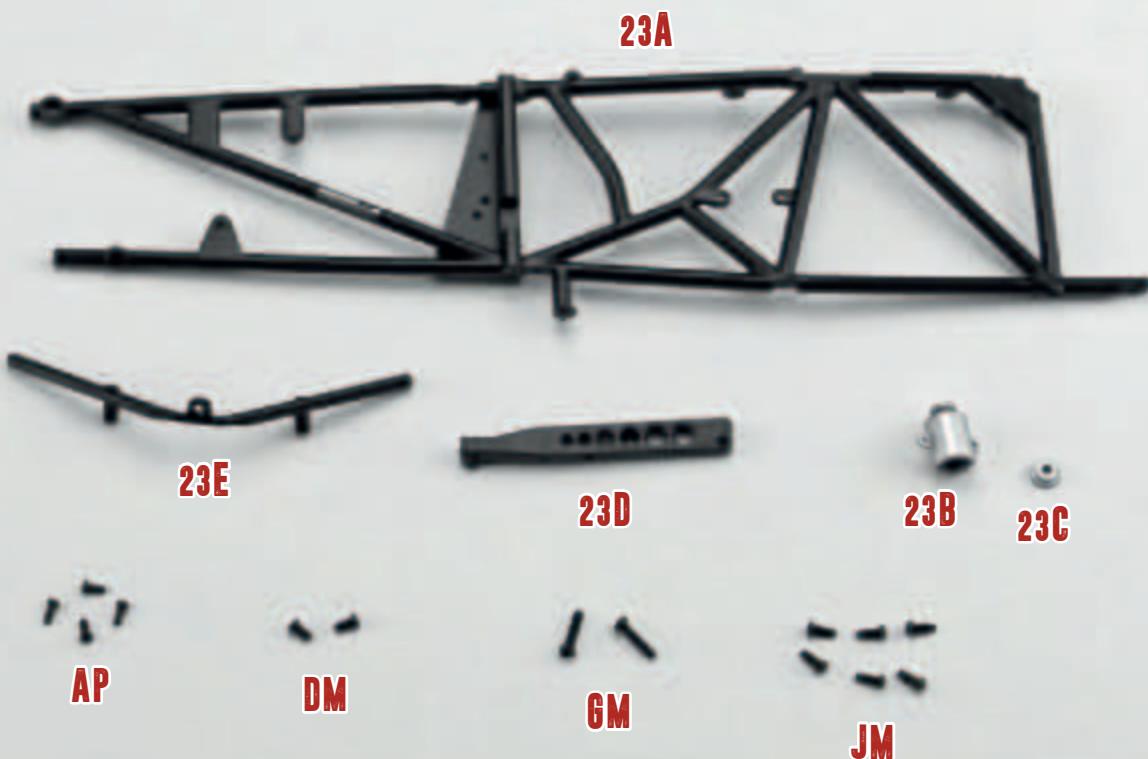
A



step by step #22



23 PARTS LIST



23A Chassis – right section

23B Brake fluid reservoir

23C Reservoir base

23D Radiator support (R)

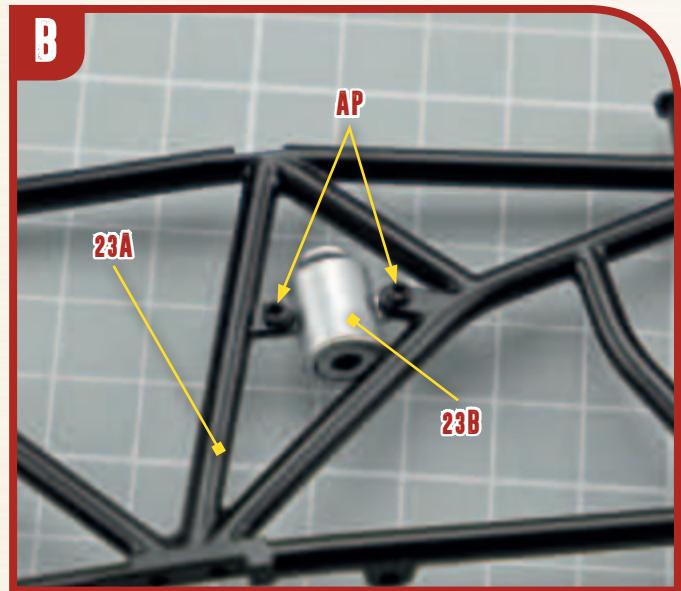
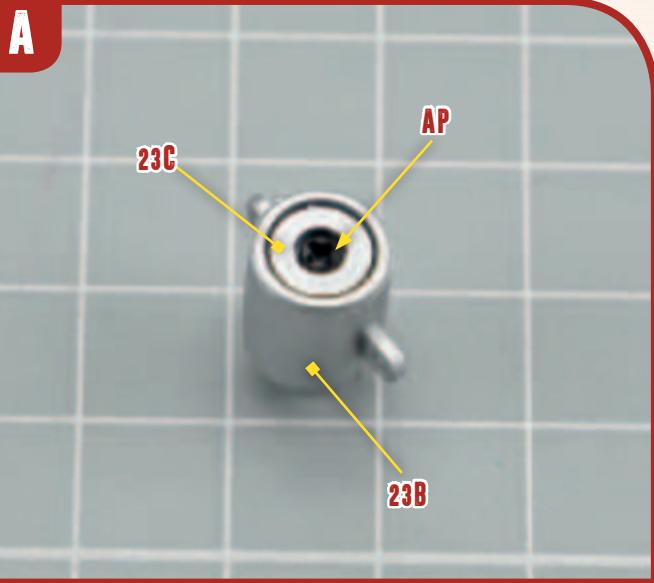
23E Front crossbeam

AP 4 screws (1.7x4mm)

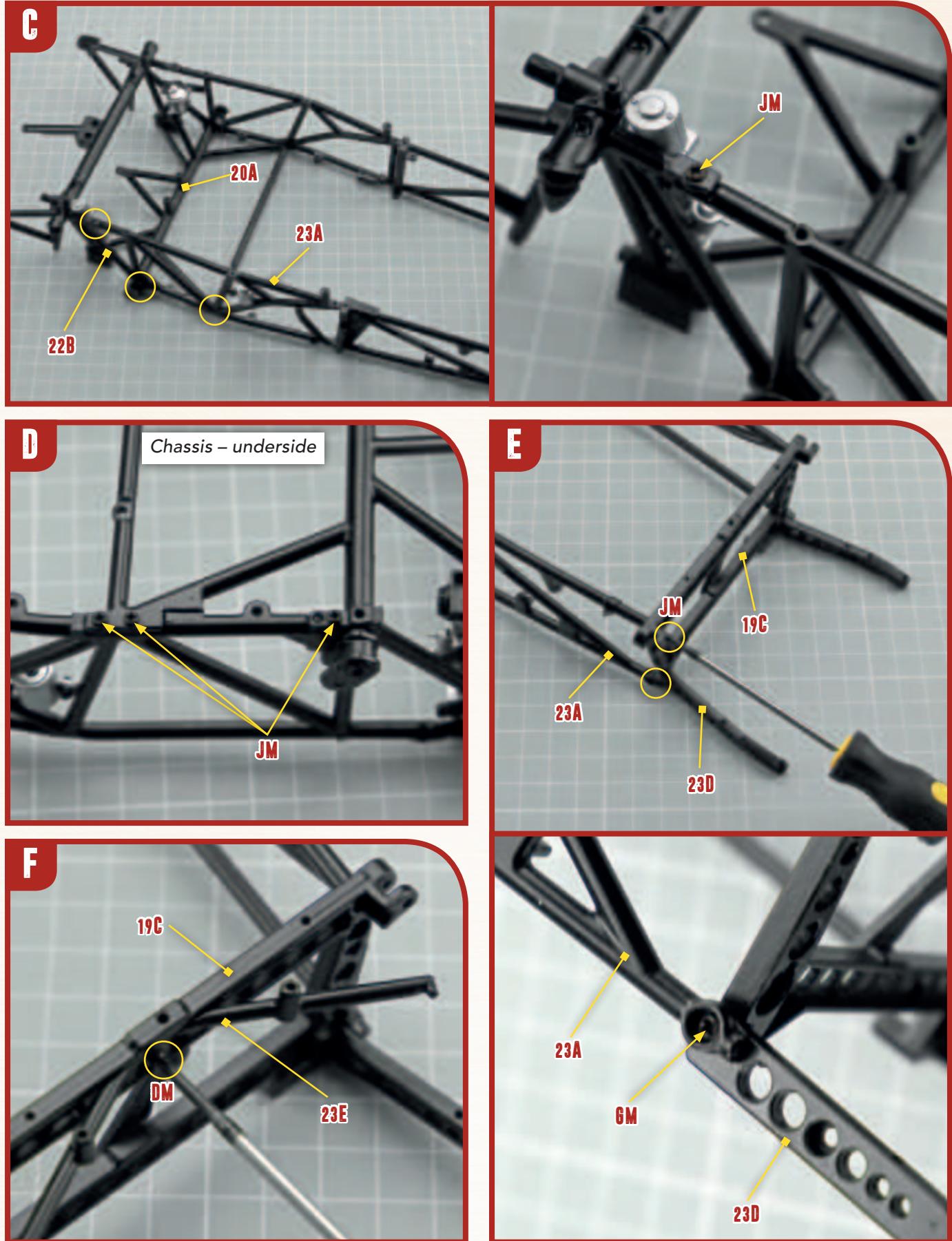
DM 2 screws (2x4mm)

GM 2 screws (2x10mm)

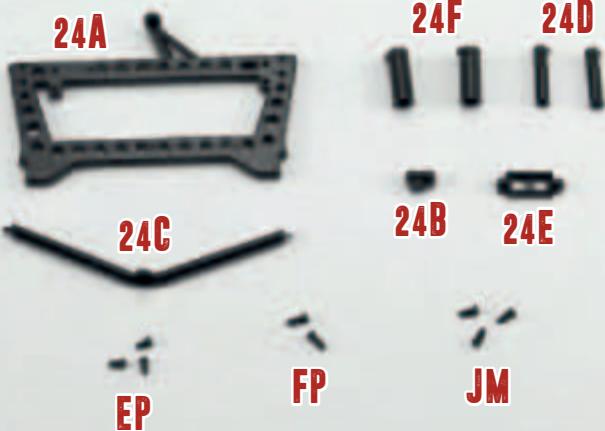
JM 6 screws (2x5mm)



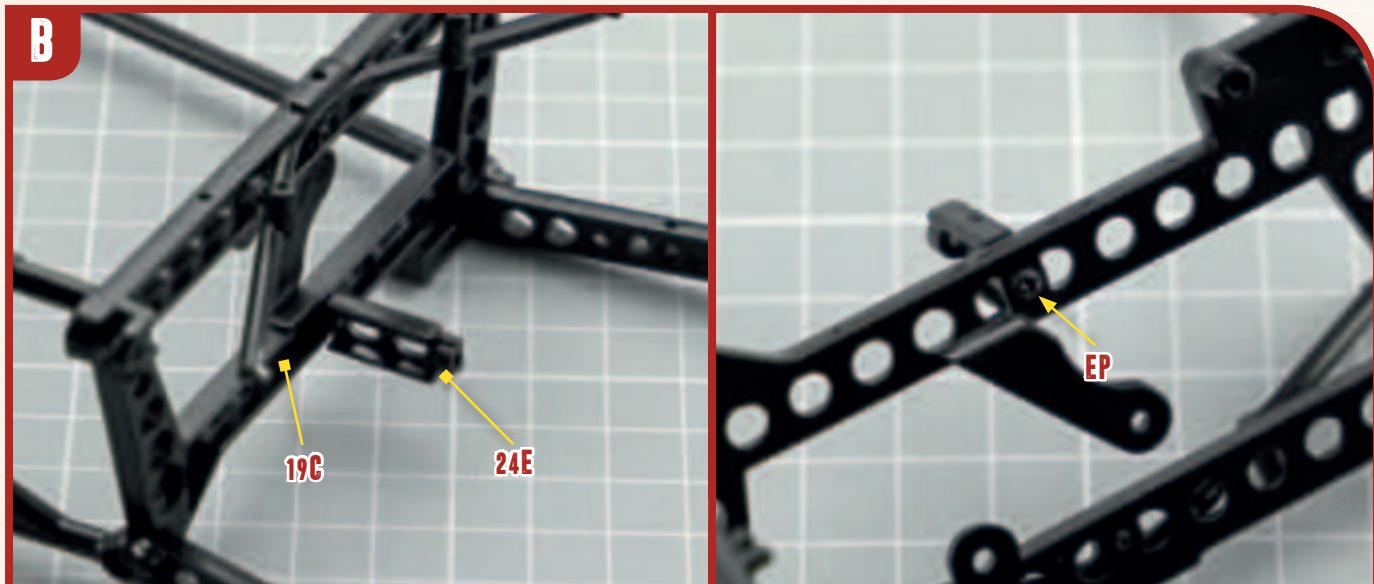
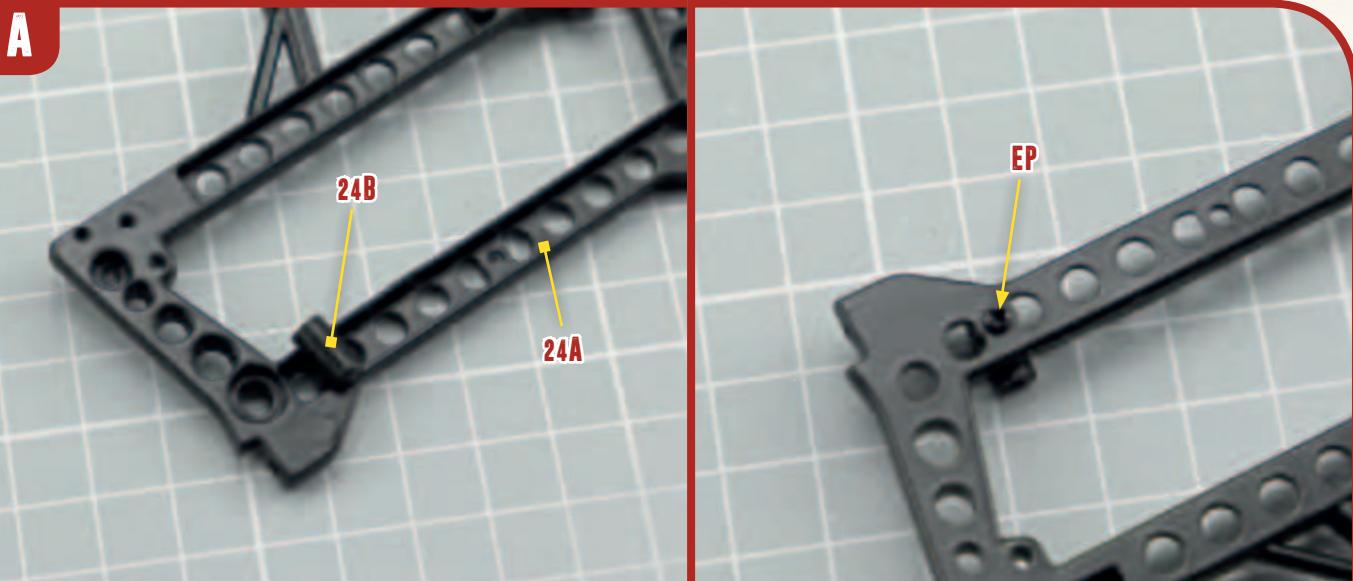
step by step #23



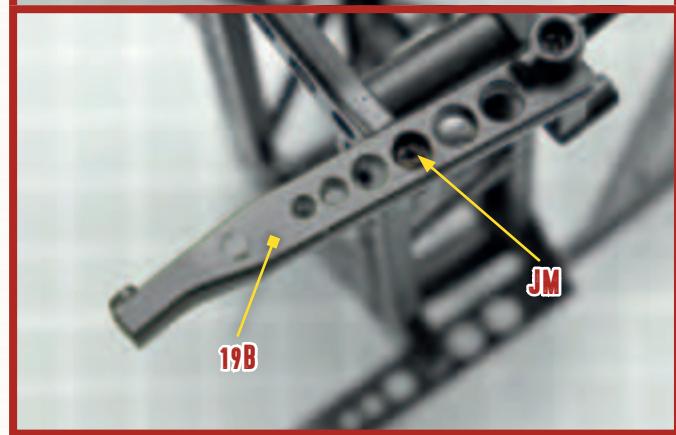
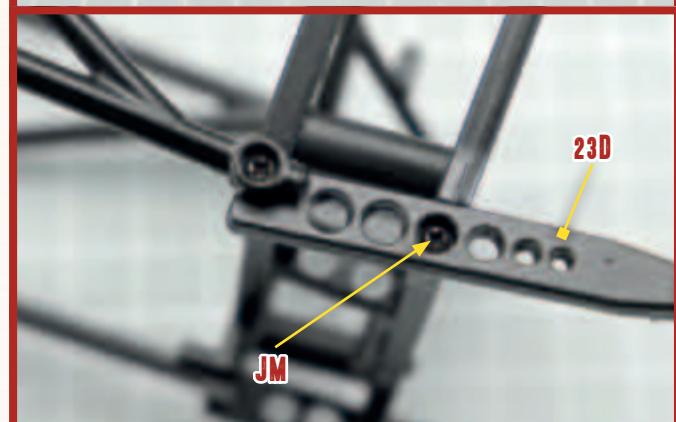
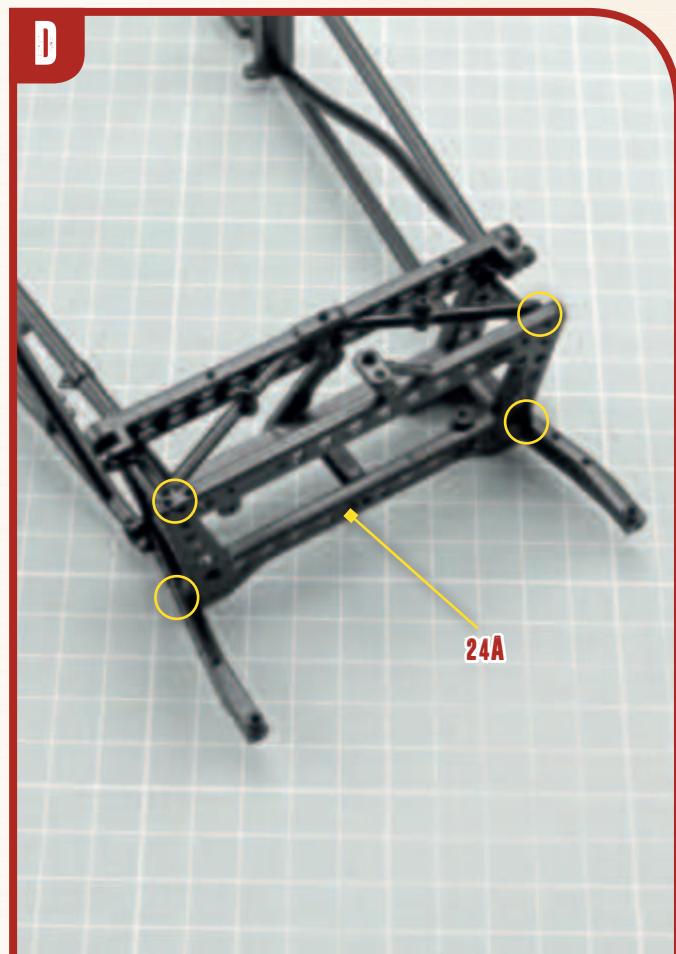
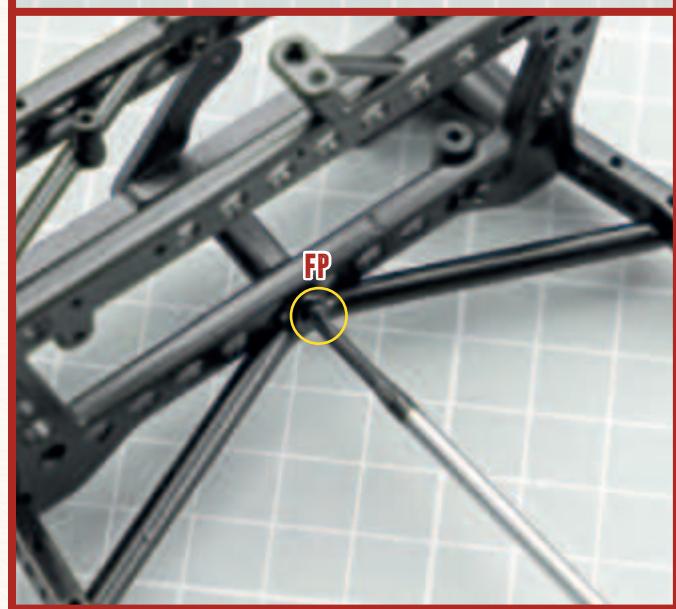
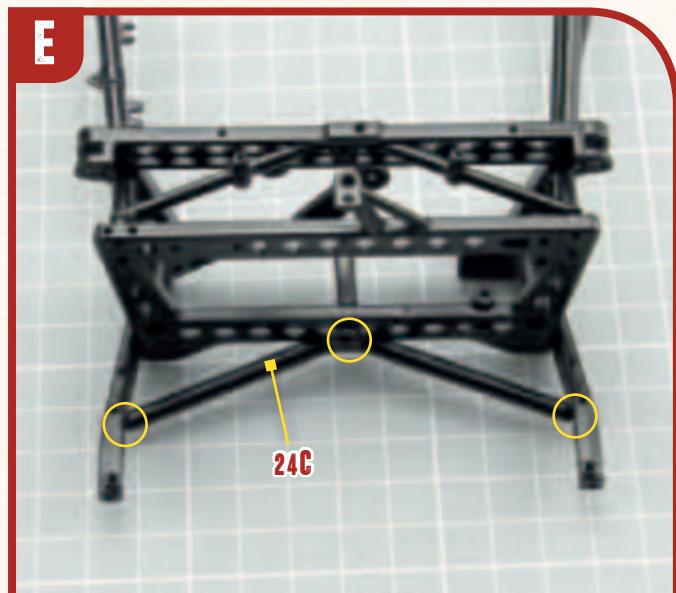
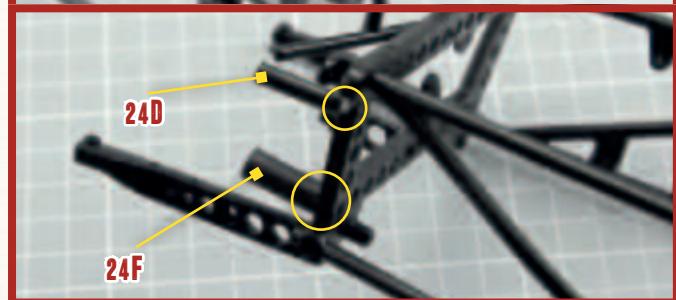
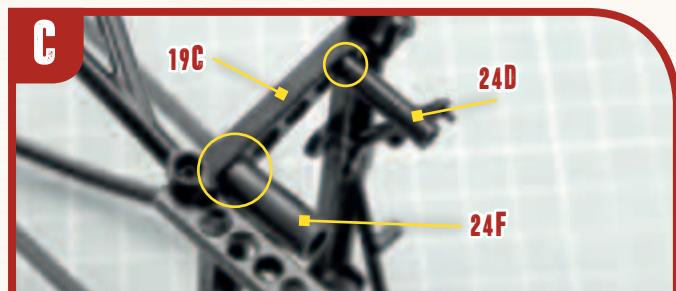
24 PARTS LIST



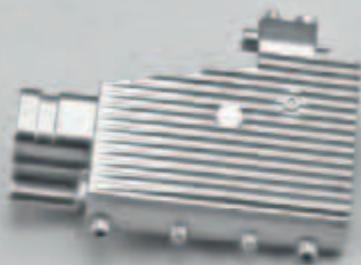
- 24A** Front suspension support 2
- 24B** Steering support
- 24C** Front lower crossbeam
- 24D** Front suspension upper arm axles (x2)
- 24E** Reinforcement panel
- 24F** Front torsion bar support bushings (x2)
- EP** 3 screws (2x4mm)
- FP** 2 screws (2x6mm)
- JM** 3 screws (2x5mm)



step by step #24



25 PARTS LIST



25A



25C



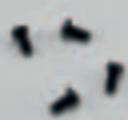
25B



25E



25D



CM

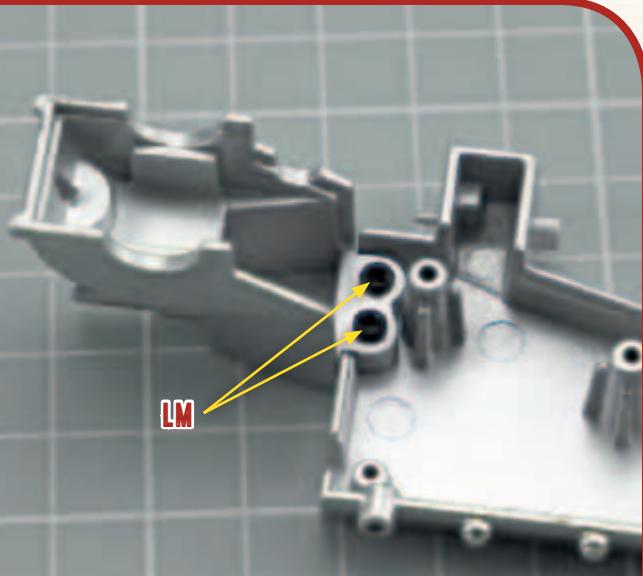
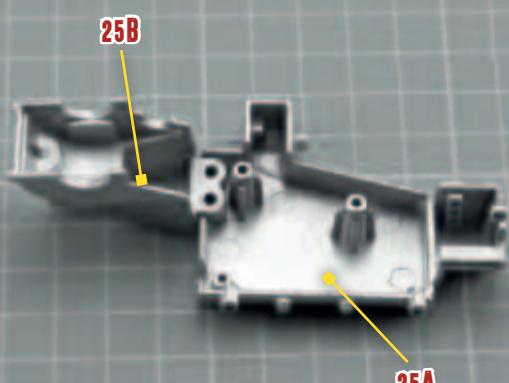


LM

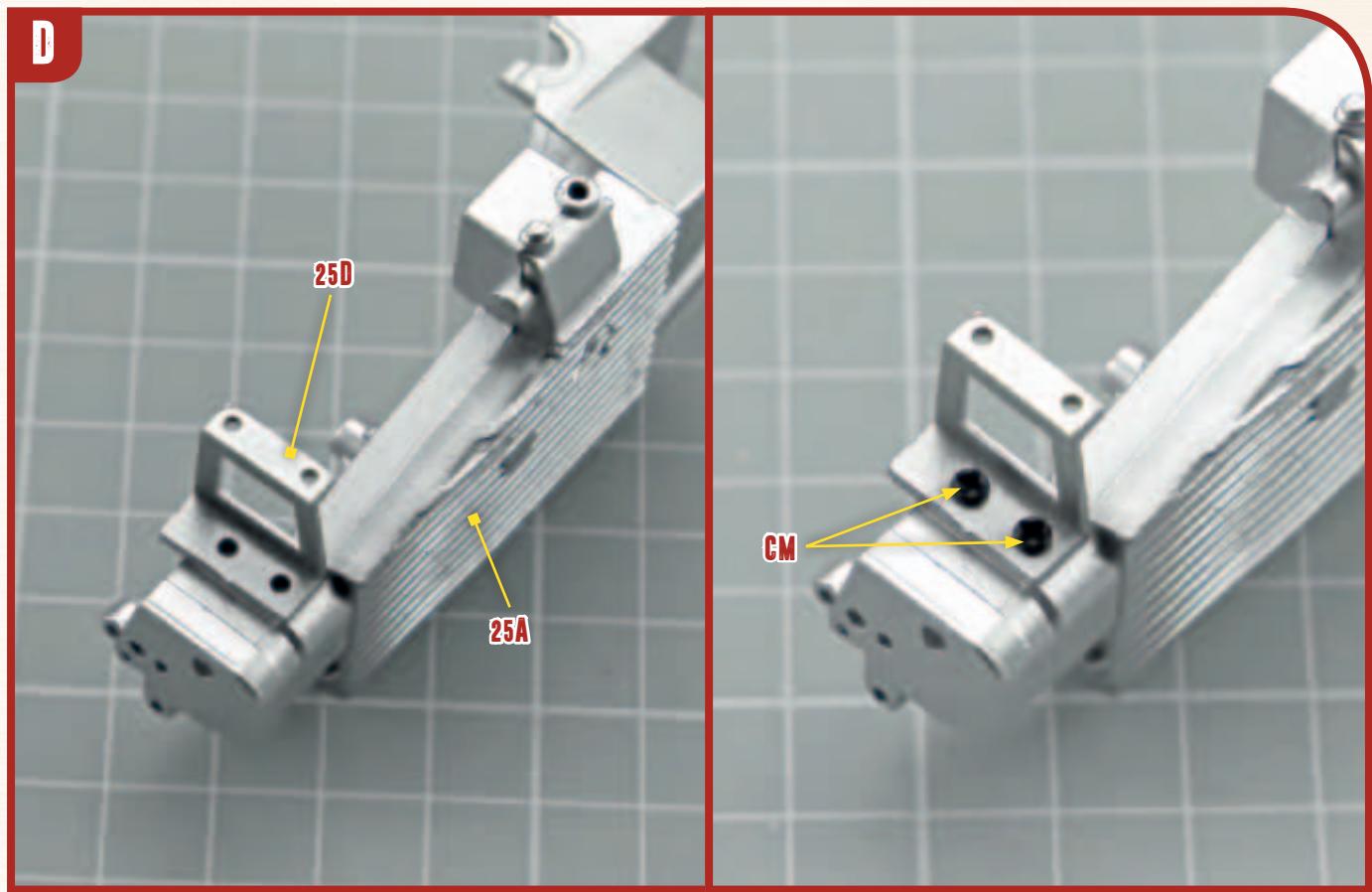
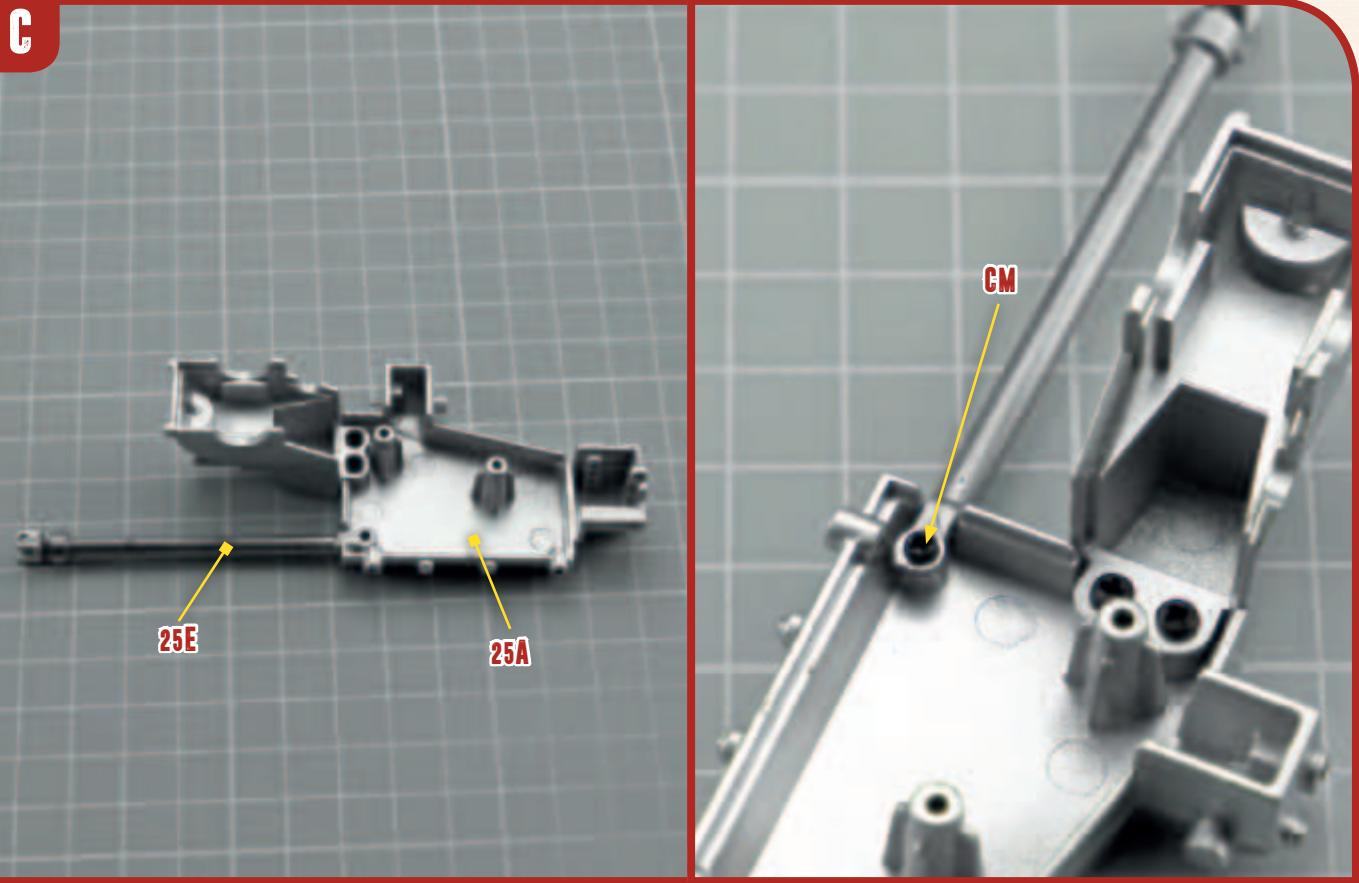
23A Gearbox part A
23B Gearbox part B
23C Gearbox part C

23D Gearbox rear support
23E Rear transmission shaft

CM 4 screws (1.7x4mm)
LM 3 screws (2.3x4mm)

A

step by step #25

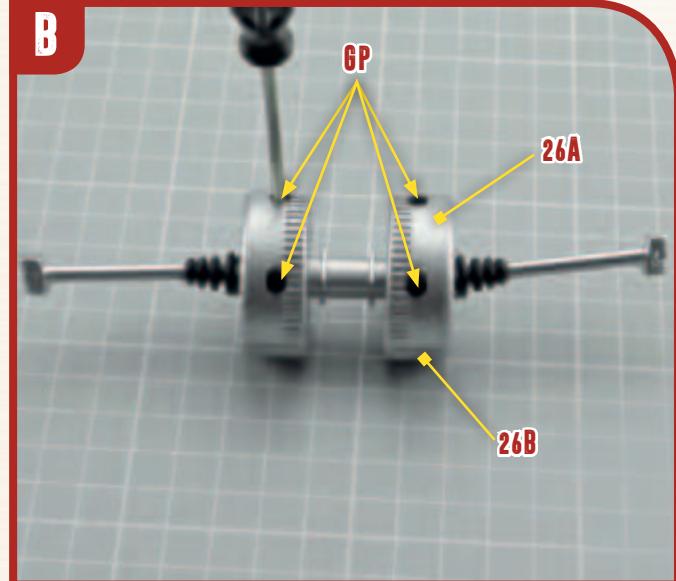
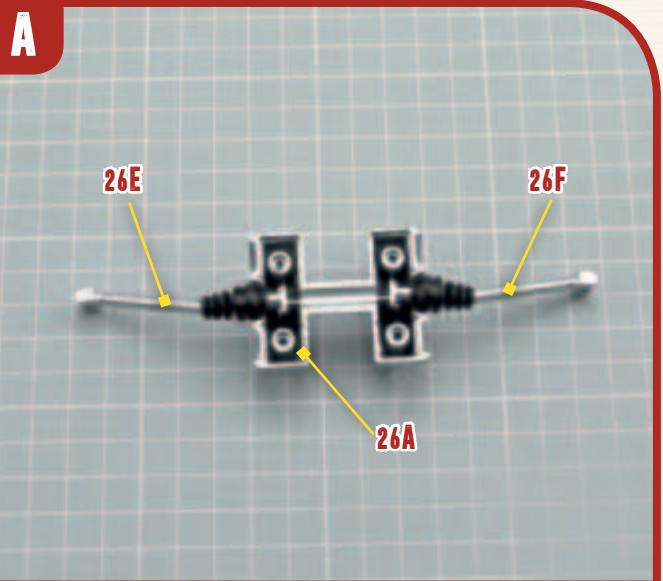


26 PARTS LIST

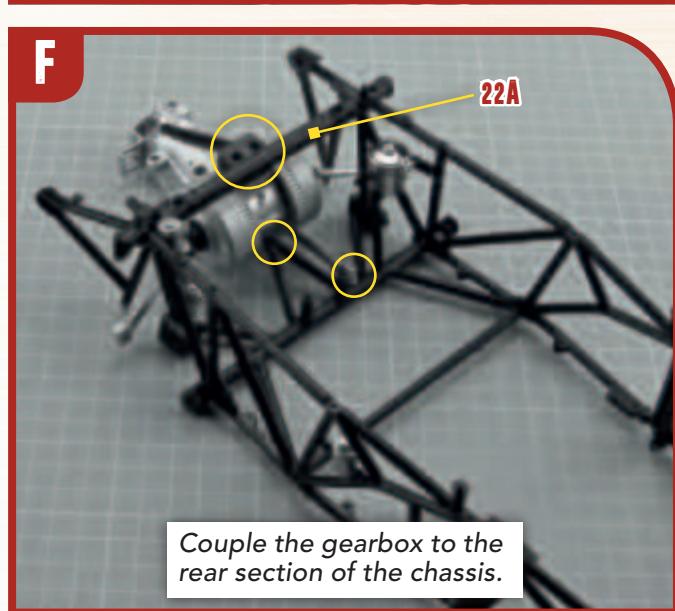
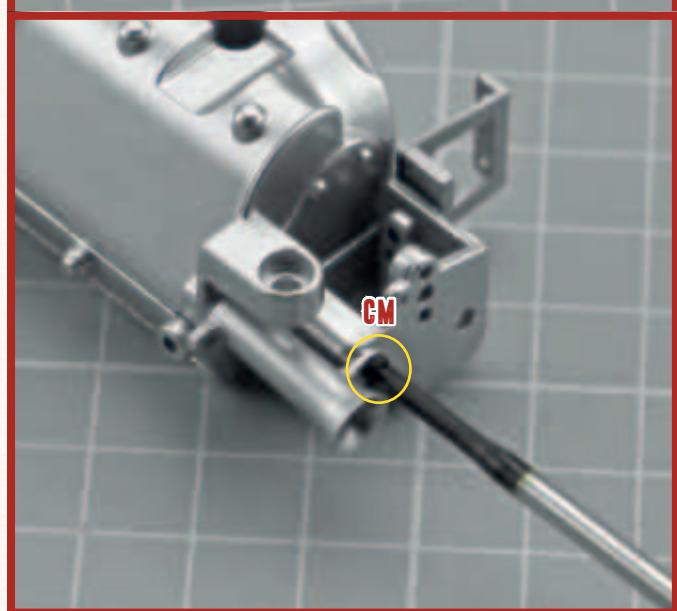
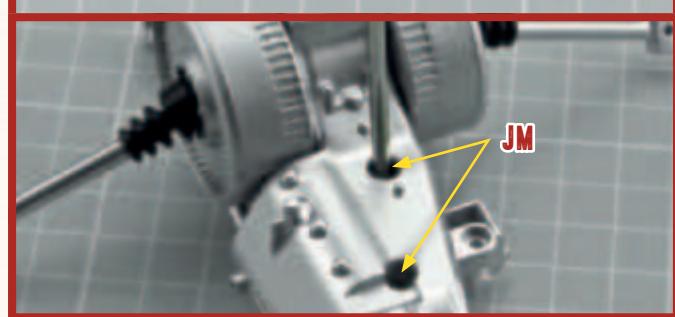
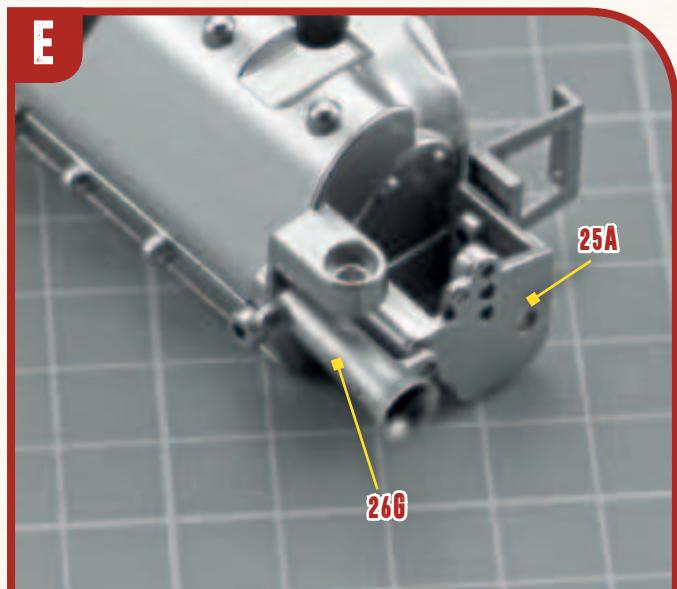
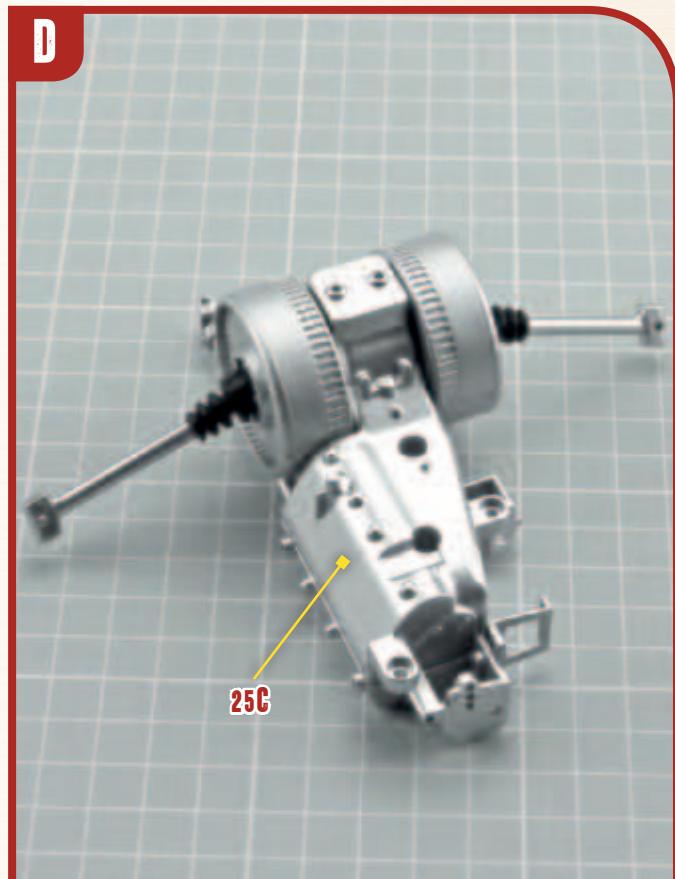
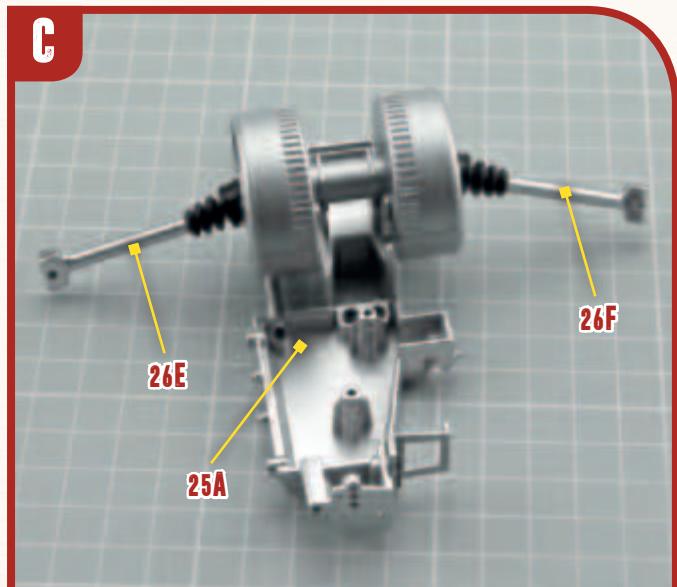


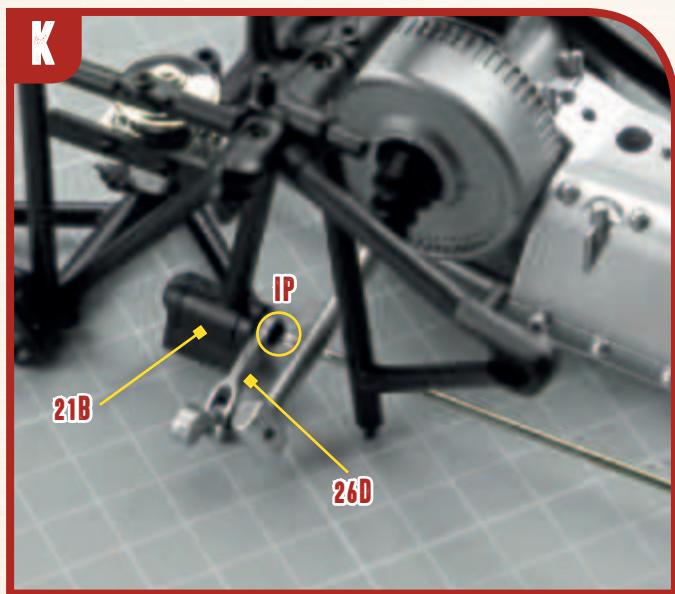
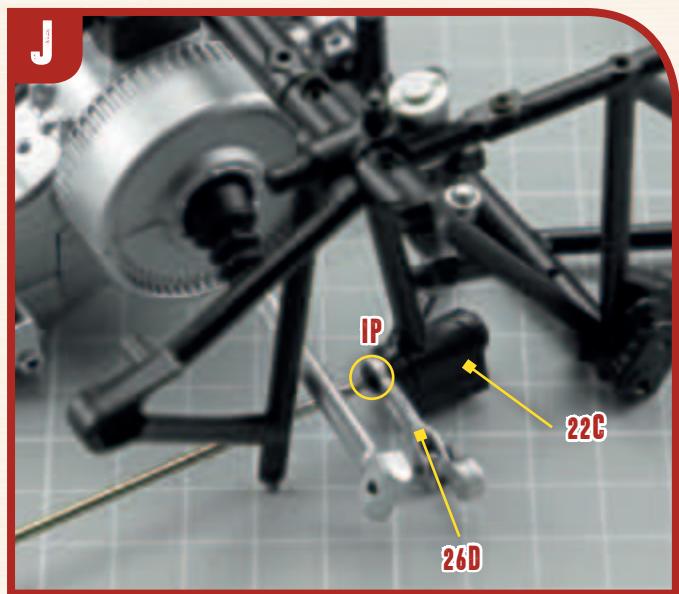
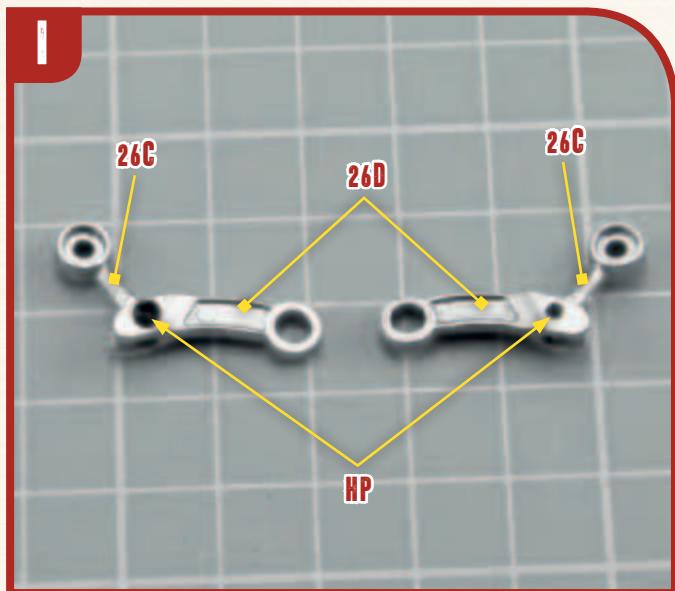
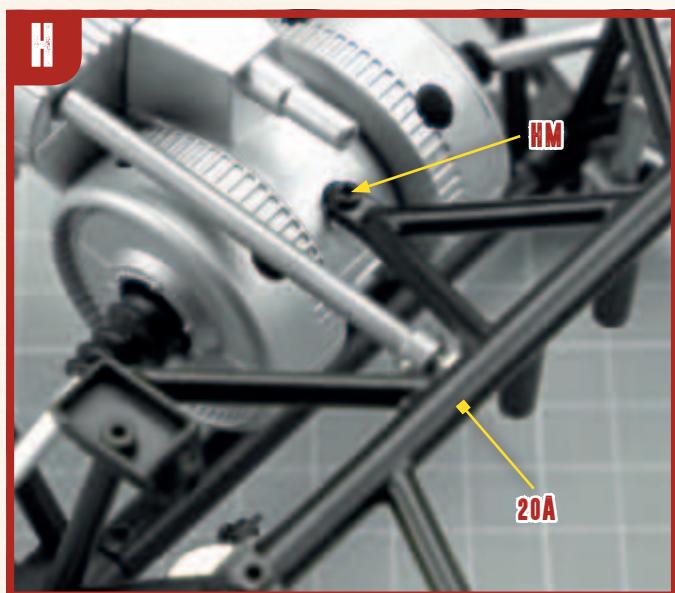
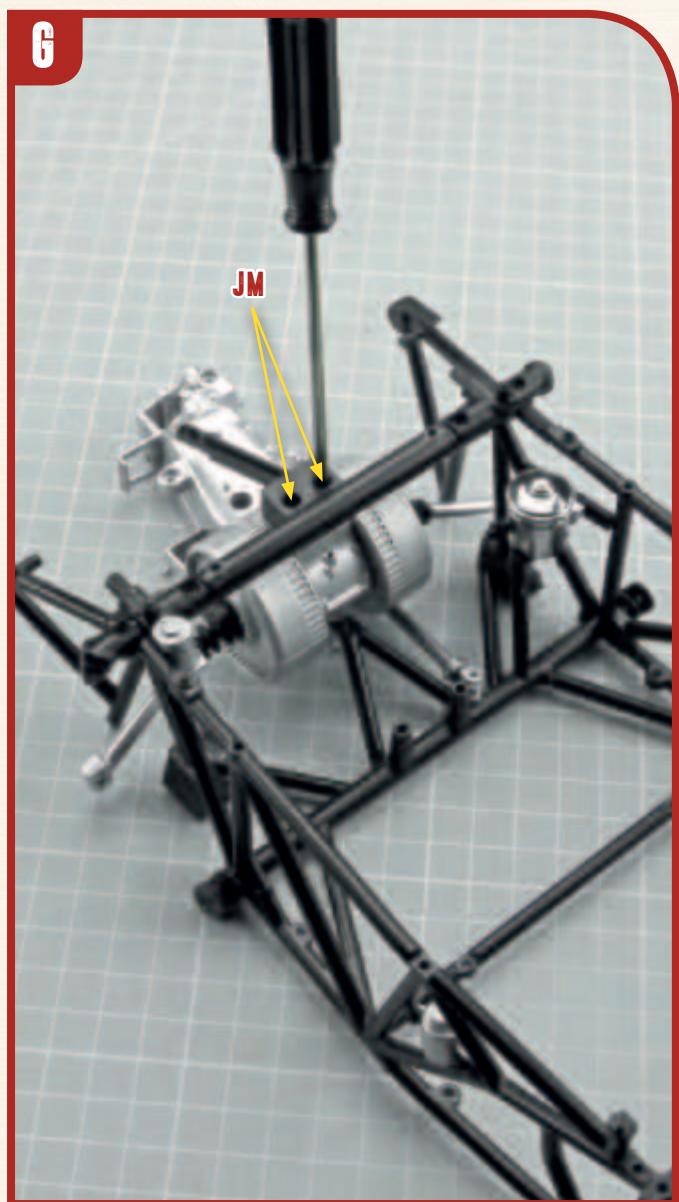
- 26A** Rear brake drums part A
26B Rear brake drums part B
26C Rear suspension levers (x2)
26D Rear suspension arms (x2)
26E Driveshaft (L)
26F Driveshaft (R)
26G External ignition adapter

- GP** 5 screws (2.3x5mm)
HP 3 screws (1.7x5mm)
IP 3 screws (2x4x6mm)
CM 2 screws (1.7x4mm)
HM 2 screws (2.3x5mm)
JM 5 screws (2x5mm)



step by step #26

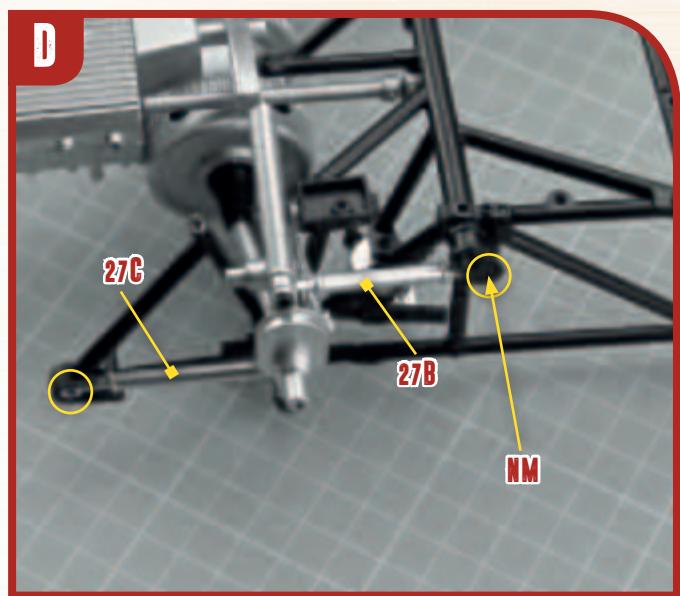
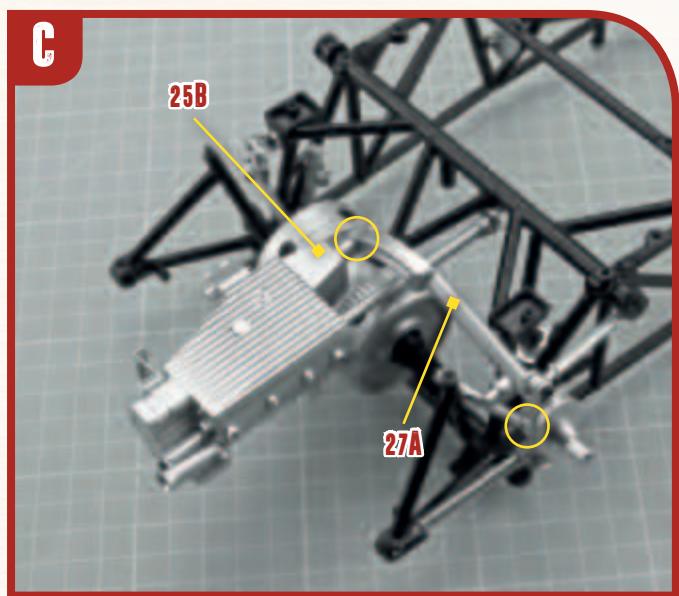
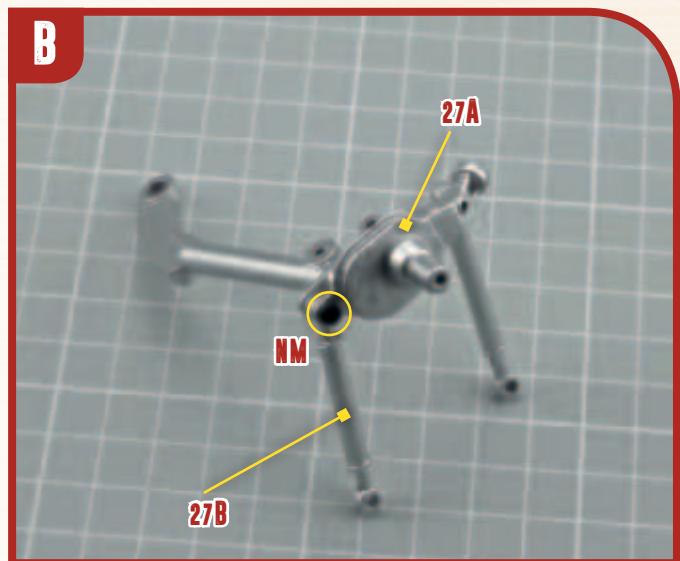
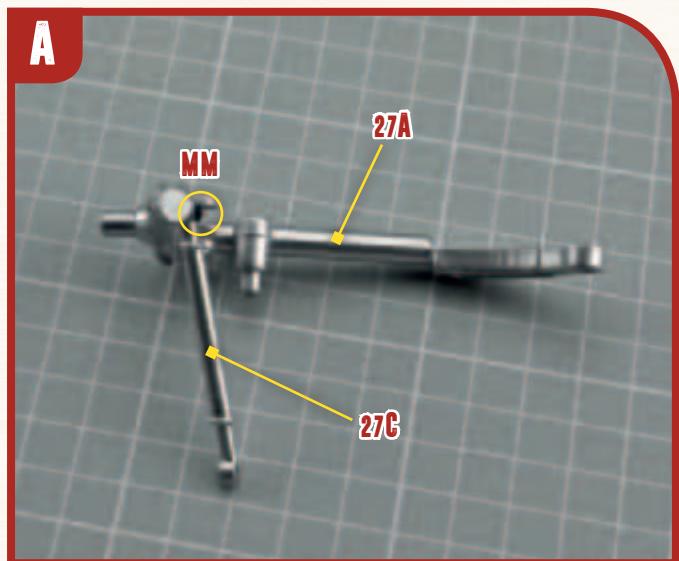


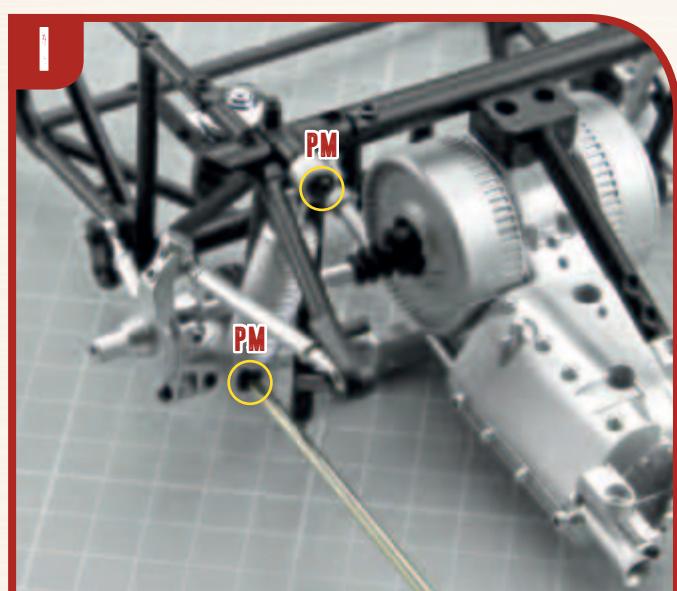
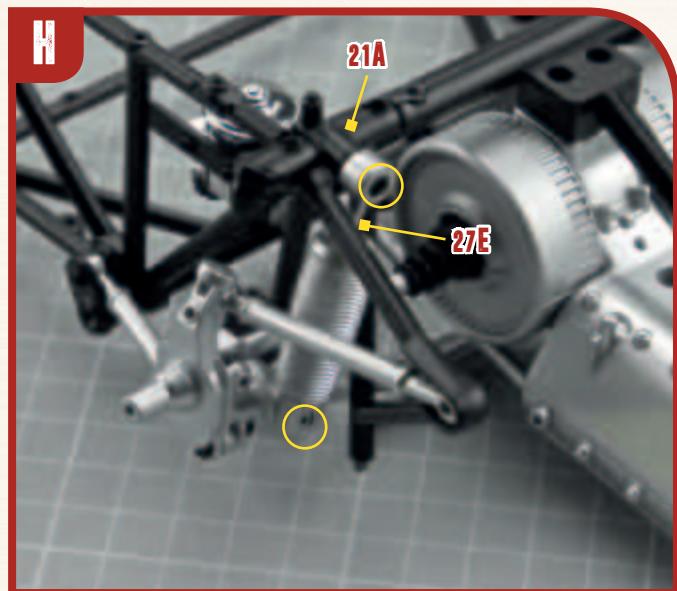
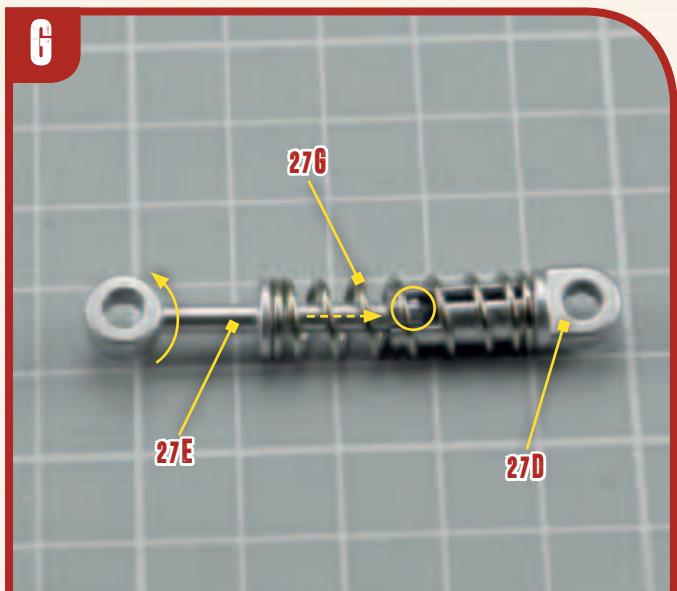
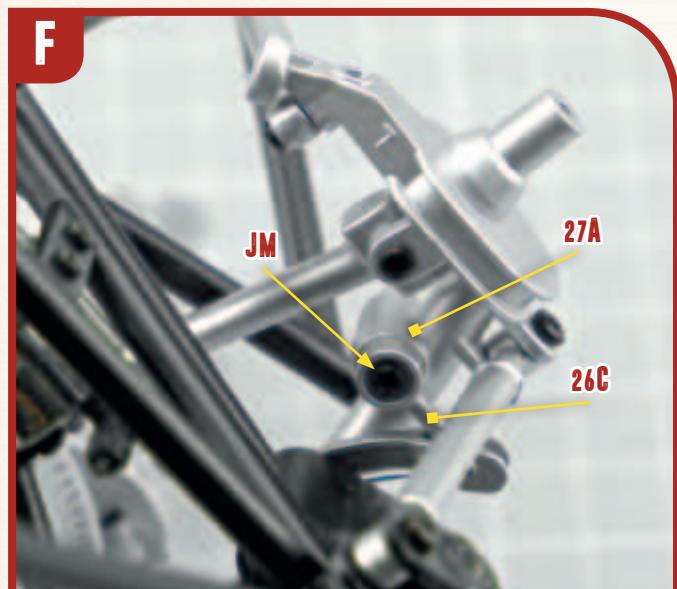
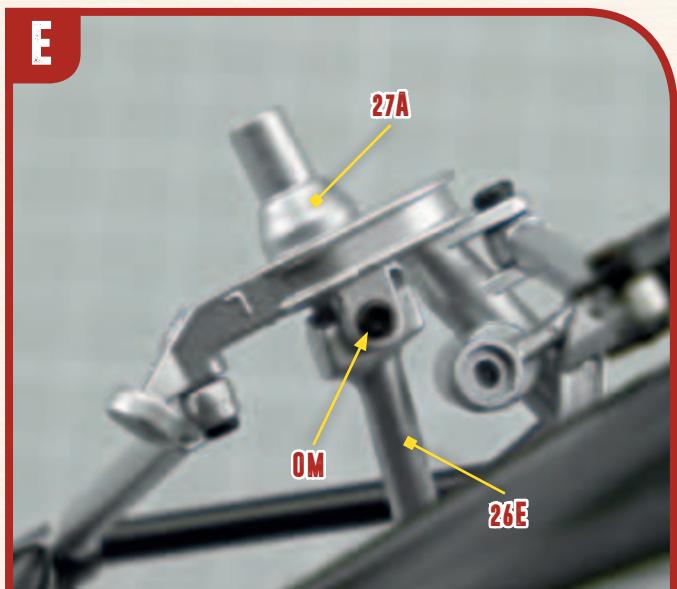


27 PARTS LIST

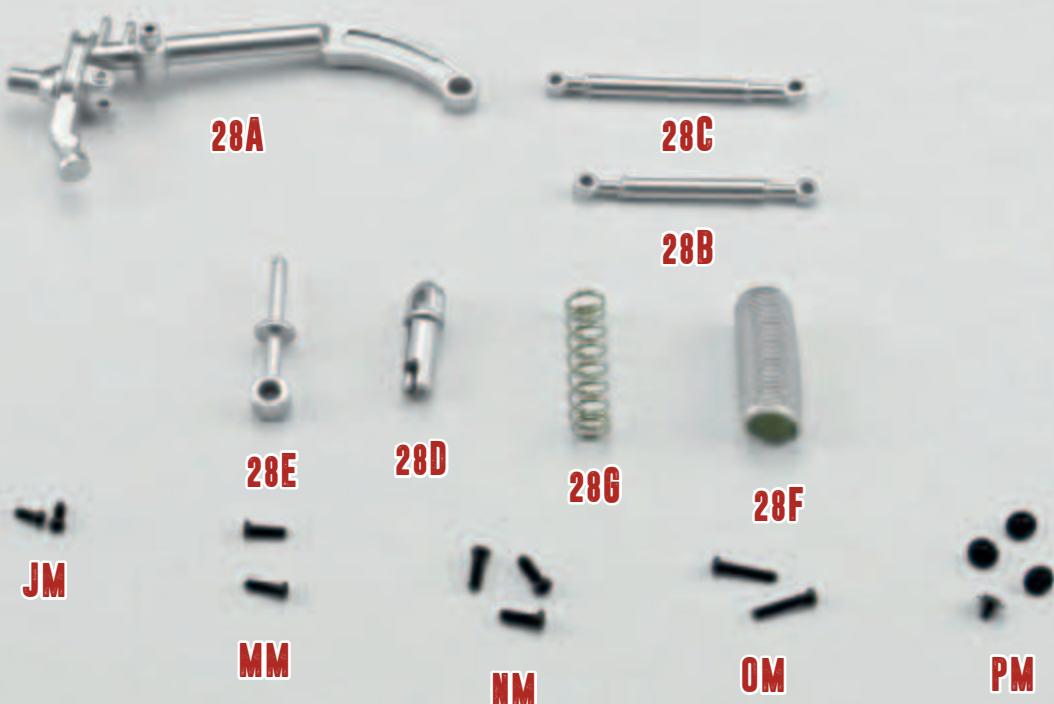


- | | |
|------------|--------------------------------|
| 27A | Rear suspension left wishbone |
| 27B | Rear suspension left lower arm |
| 27C | Rear suspension left upper arm |
| 27D | Shock absorber casing |
| 27E | Shock absorber stem |
| 27F | Shock absorber bellow |
| 27G | Spring |
| JM | 2 screws (2x5mm) |
| MM | 2 screws (2x7mm) |
| NM | 3 screws (2.3x7mm) |
| OM | 2 screws (2x11mm) |
| PM | 3 screws (2x3x6mm) |





28 PARTS LIST



28A Rear suspension
right wishbone

28B Right lower arm

28C Right upper arm

28D Shock absorber casing

28E Shock absorber stem

28F Shock absorber bellow

28G Spring

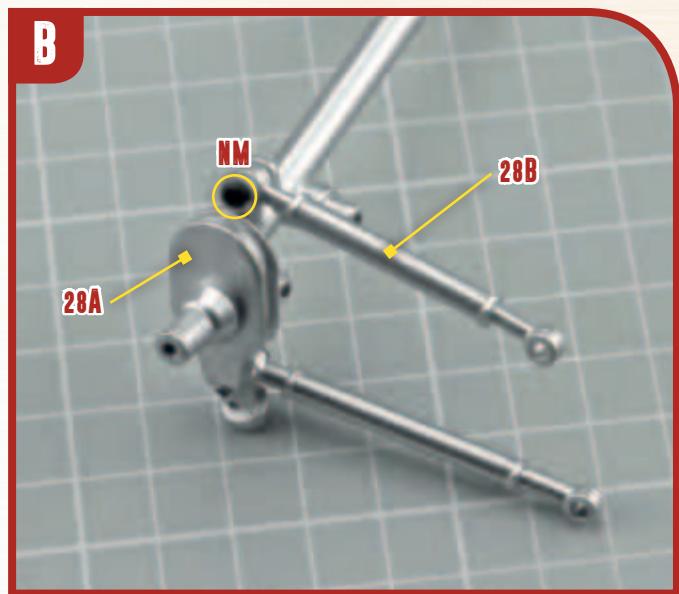
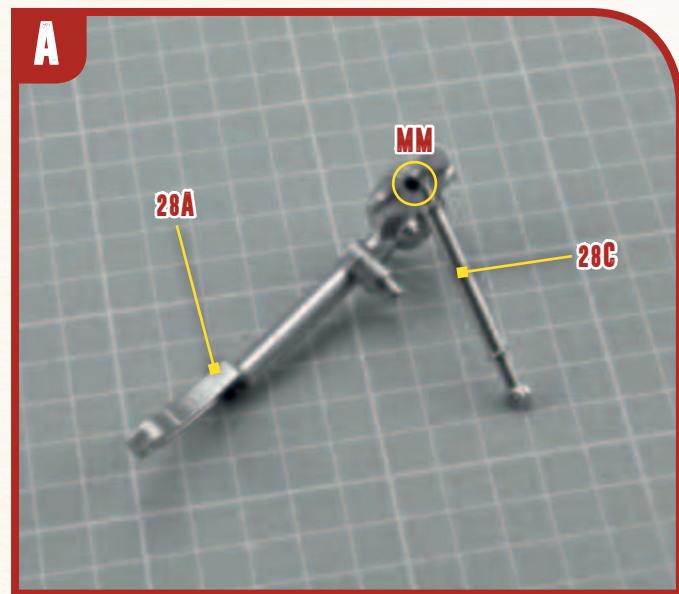
JM 2 screws (2x5mm)

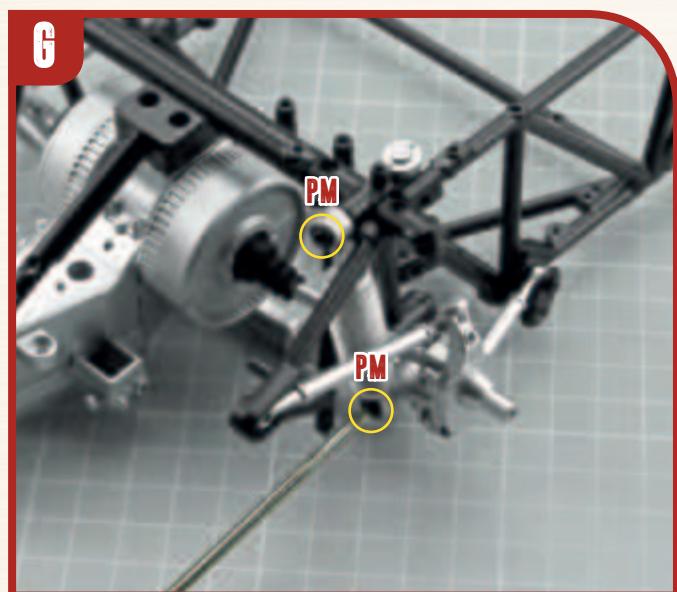
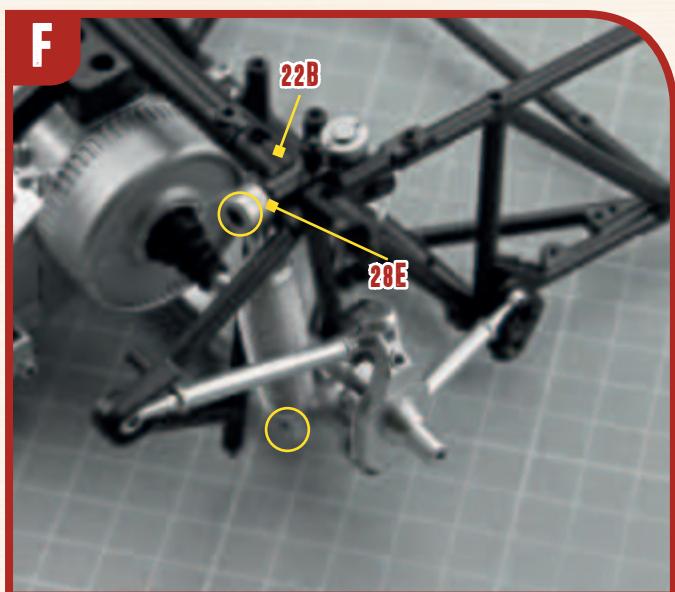
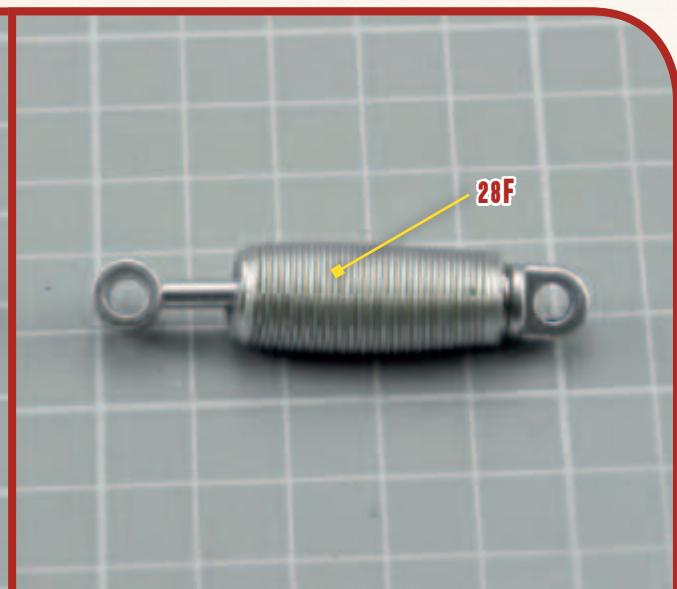
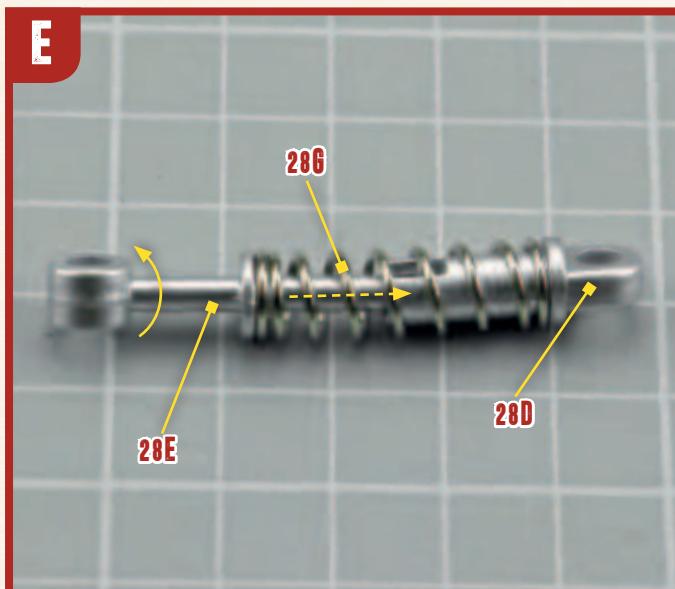
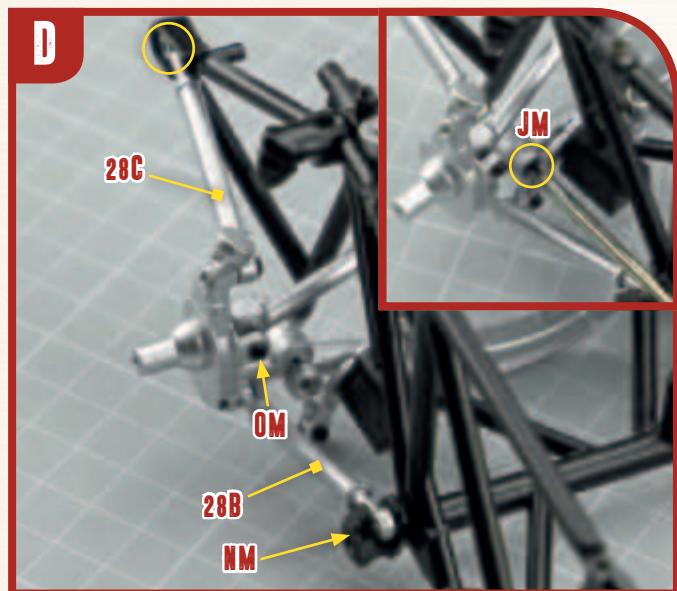
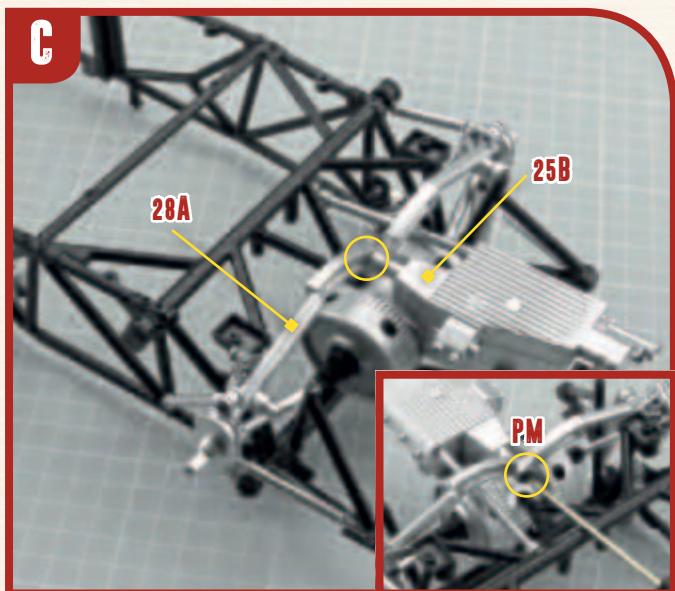
MM 2 screws (2x7mm)

NM 3 screws (2.3x7mm)

OM 2 screws (2x11mm)

PM 4 screws (2x3x6mm)





29 PARTS LIST



29A Rear subframe

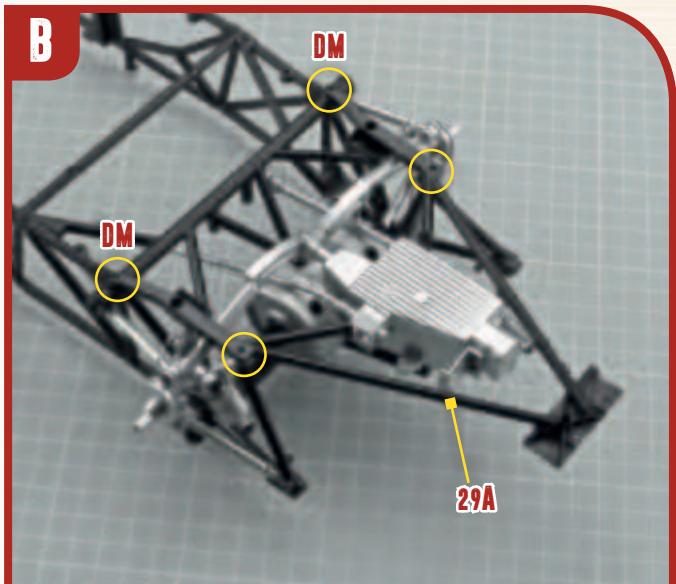
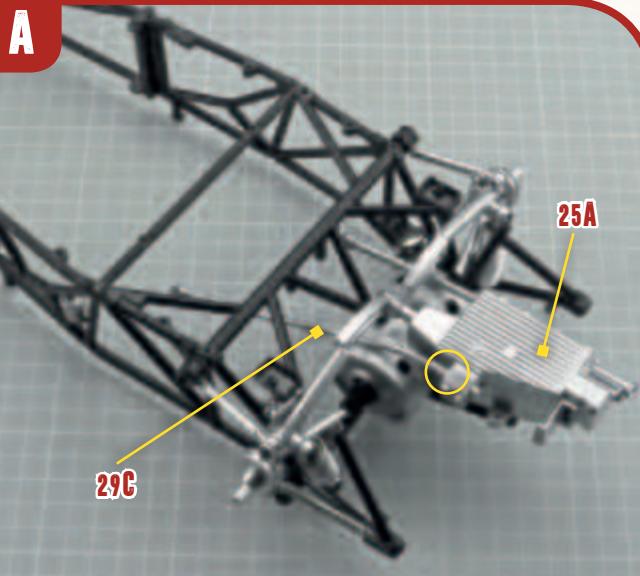
29B Rear subframe tube

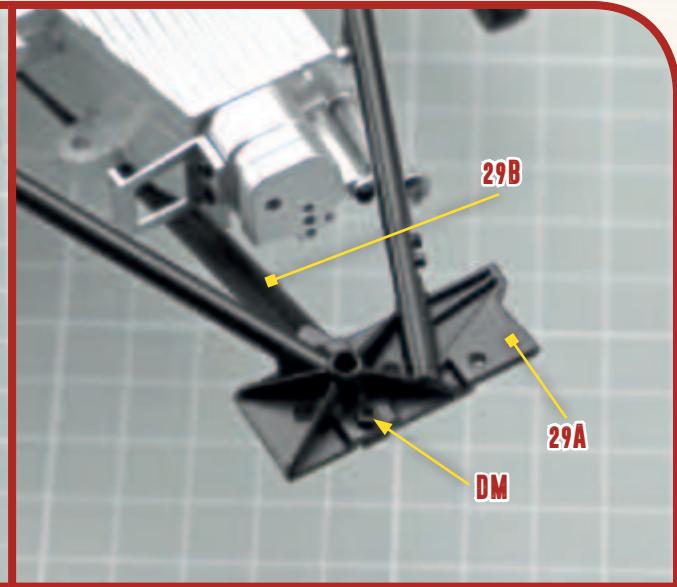
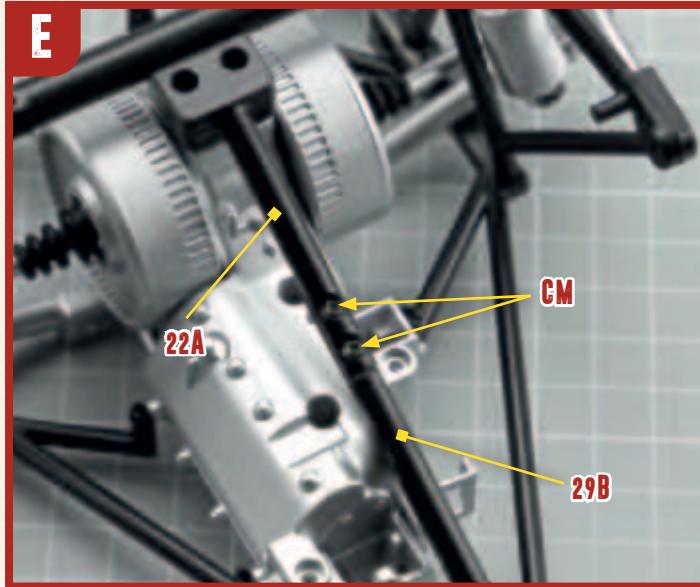
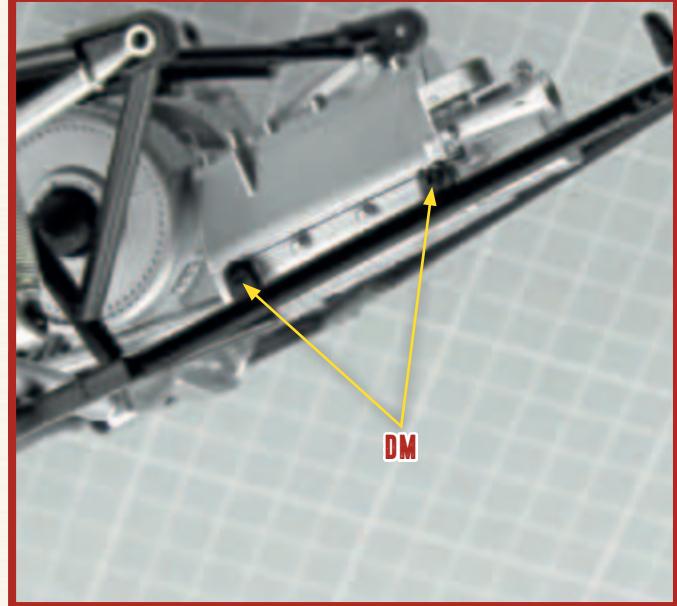
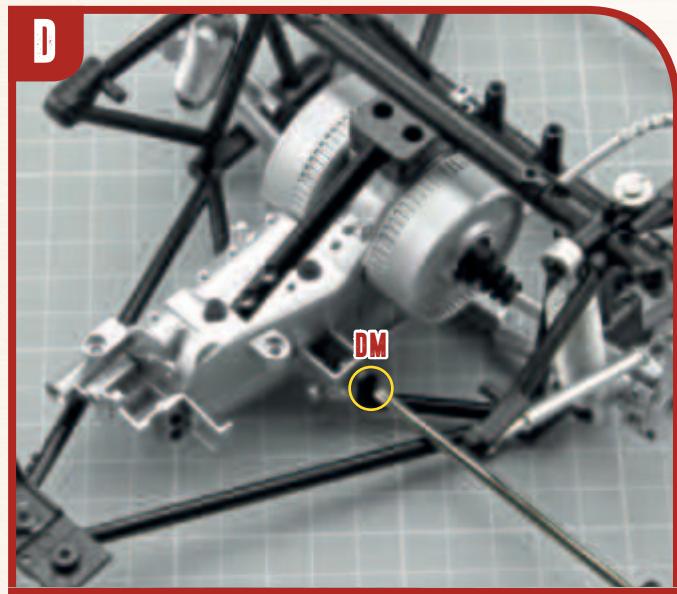
29C Gearbox lever

BP 3 screws (2x5mm)

CM 3 screws (1.7x4mm)

DM 7 screws (2x4mm)



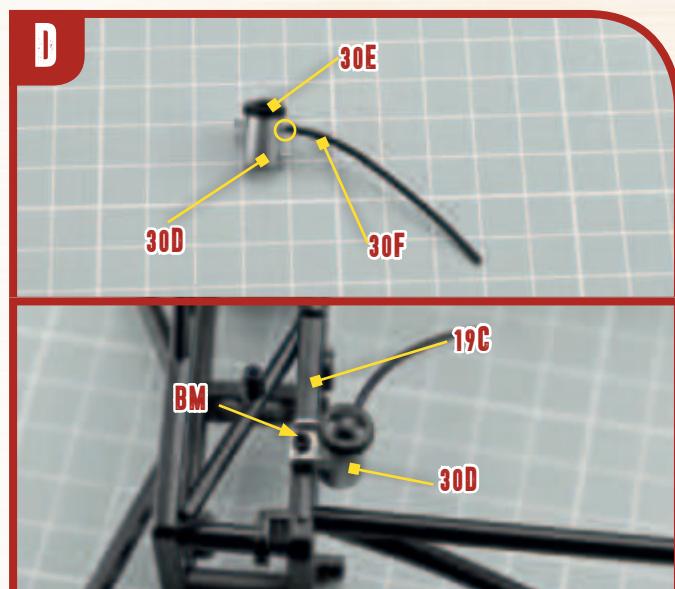
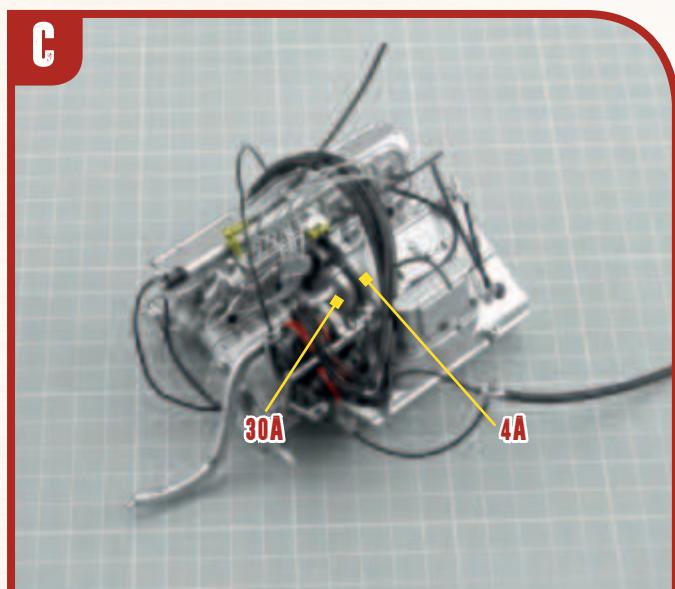
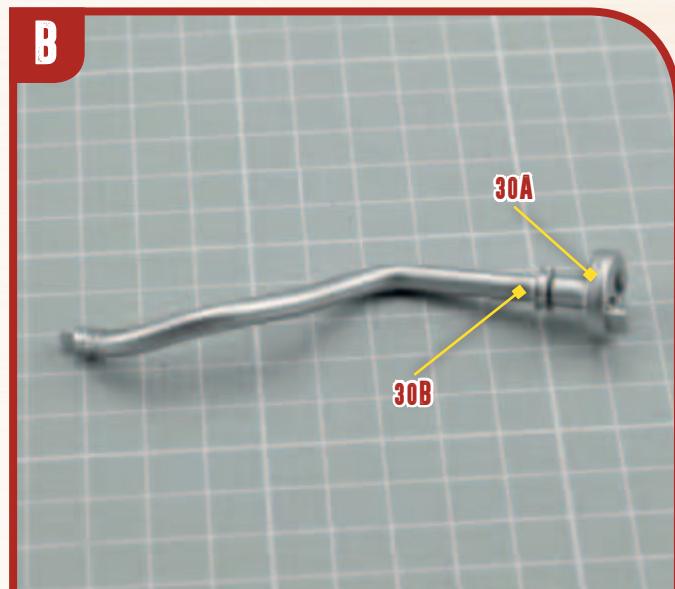
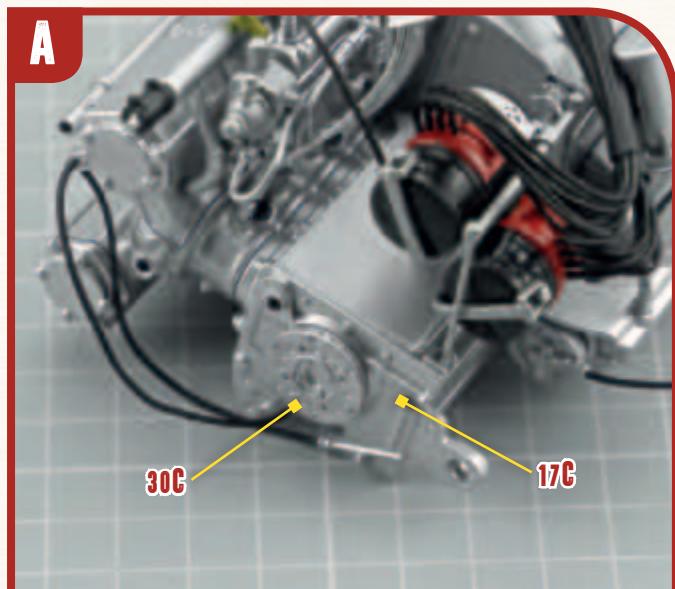


step by step #30

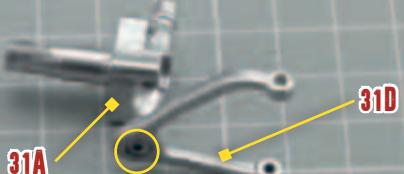
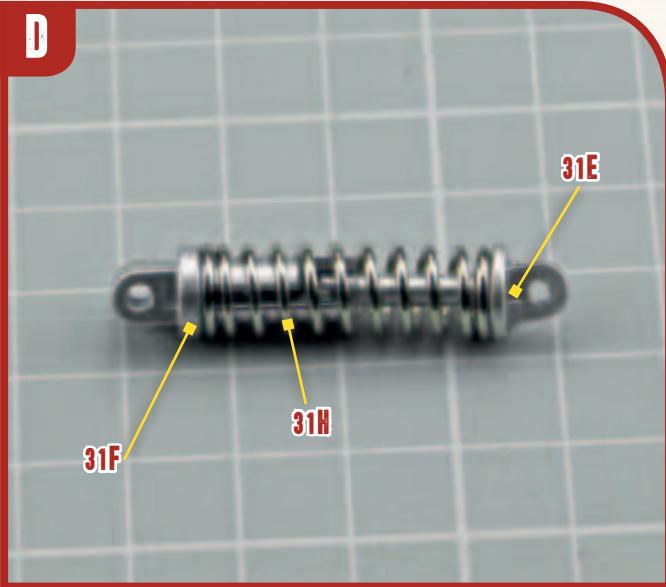
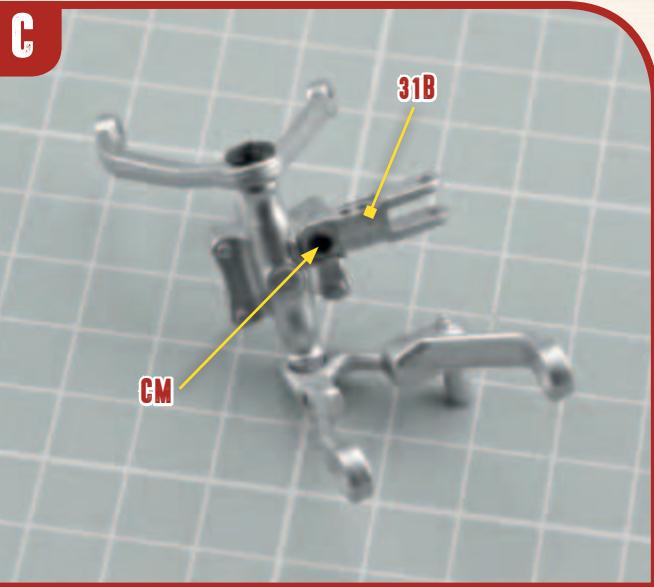
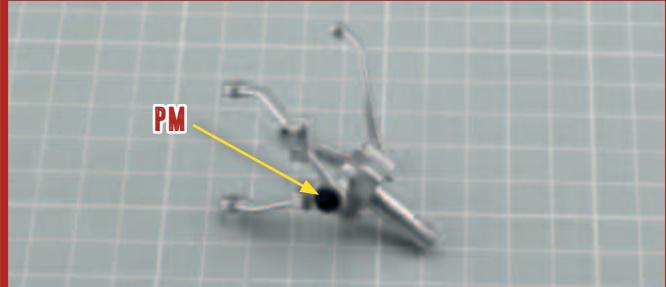
30 PARTS LIST



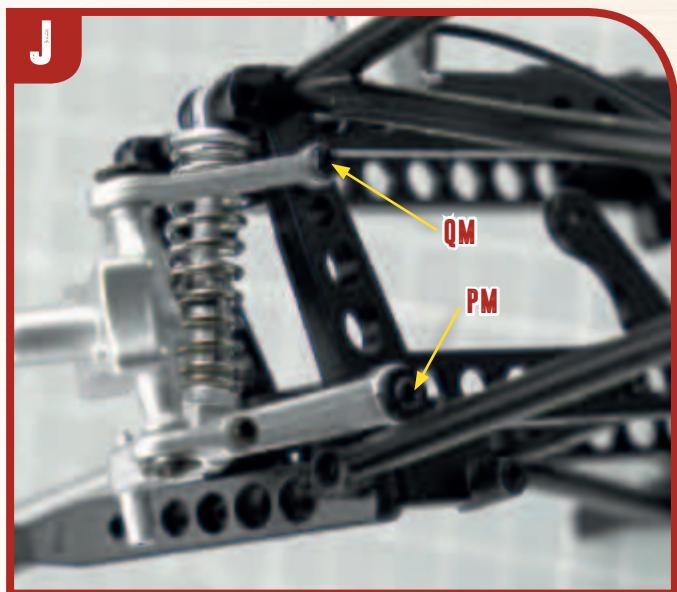
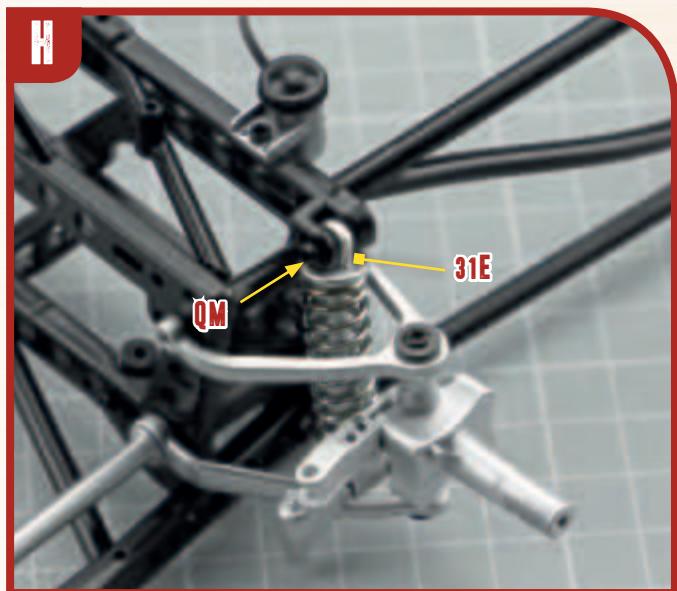
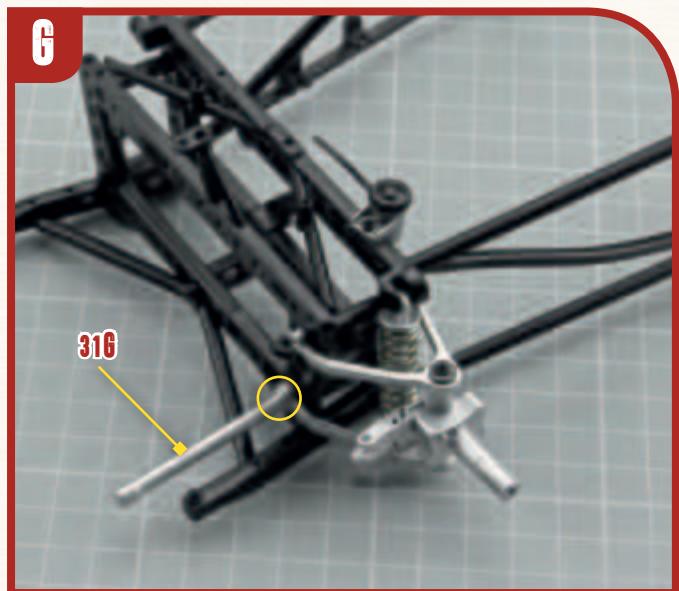
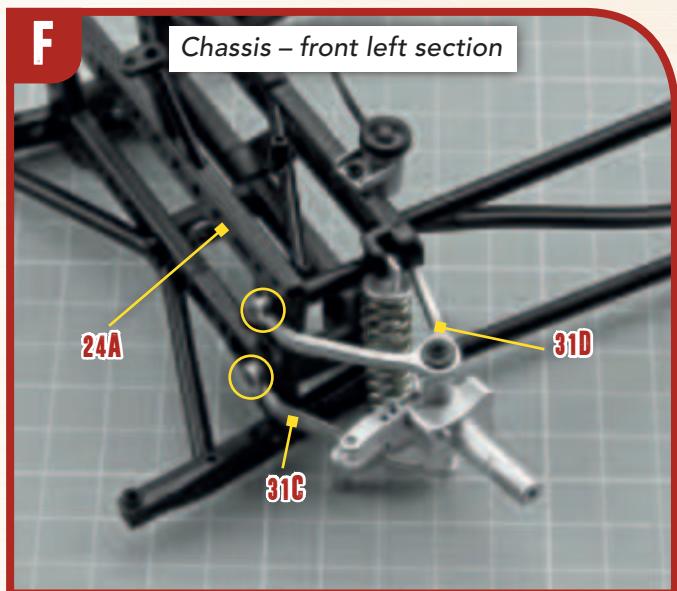
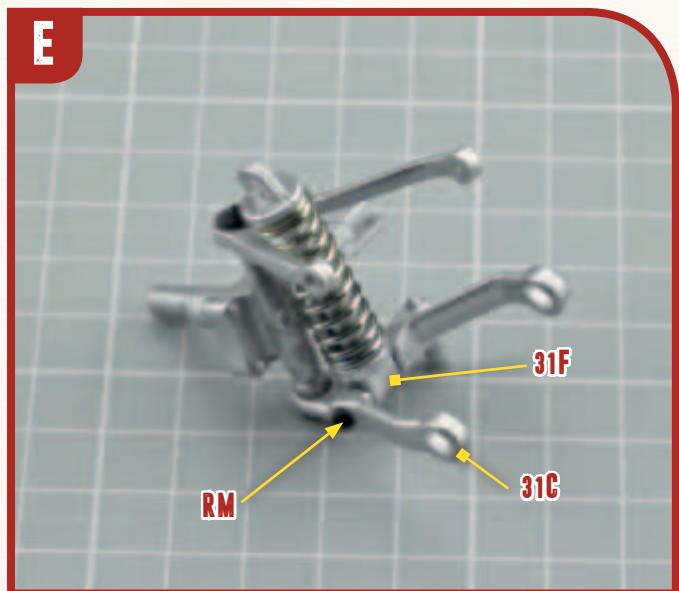
- 30A Water pump
 - 30B Pipe
 - 30C Crankshaft front coupling
 - 30D Fuel pump oil reservoir
 - 30E Reservoir cap
 - 30F Oil hose
- BM 2 screws (1.7x3mm)



31 PARTS LIST

**A****B**

step by step #31

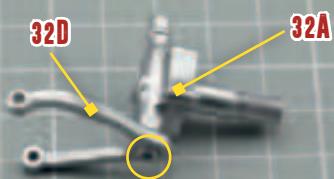


32 PARTS LIST



- 32A** Spindle part A
- 32B** Spindle part B
- 32C** Lower suspension arm
- 32D** Upper suspension arm
- 32E** Shock absorber stem
- 32F** Shock absorber casing
- 32G** Torsion bar
- 32H** Spring
- CM** 2 screws (1.7x4mm)
- PM** 4 screws (2x3x6mm)
- QM** 4 screws (2x8mm)
- RM** 2 screws (2x14mm)

A



B



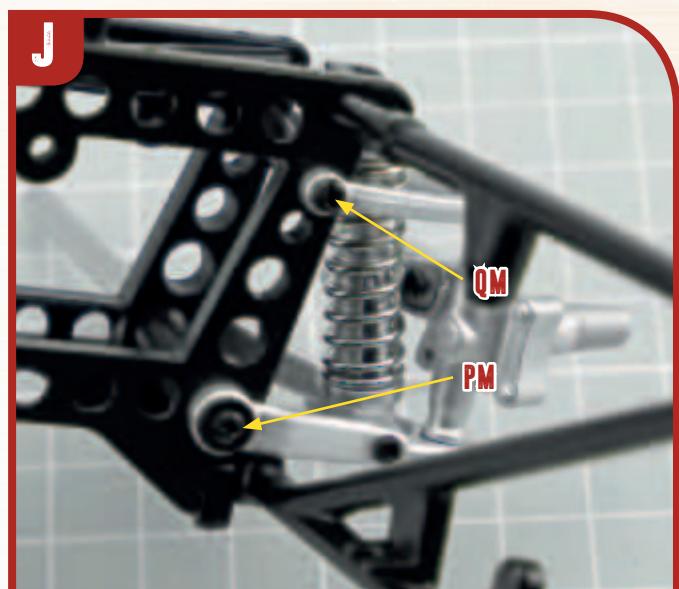
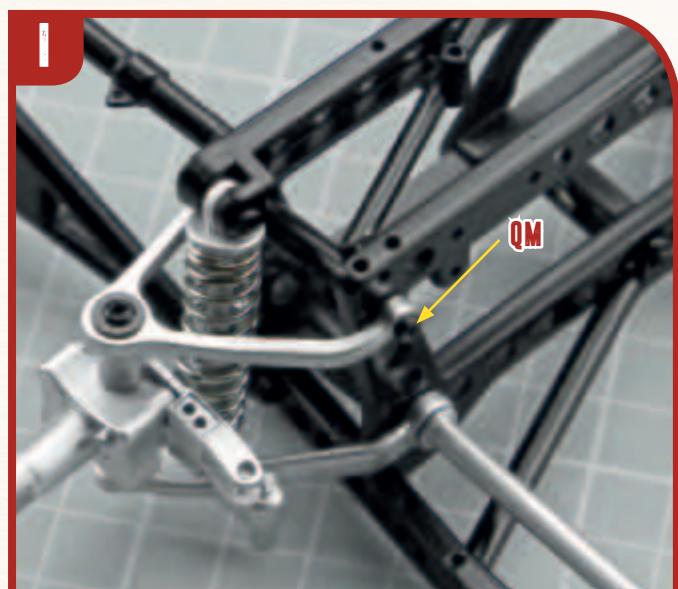
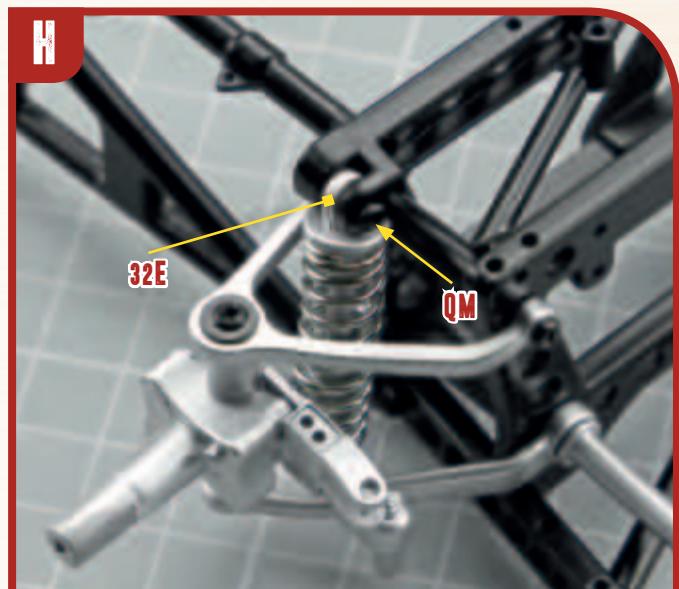
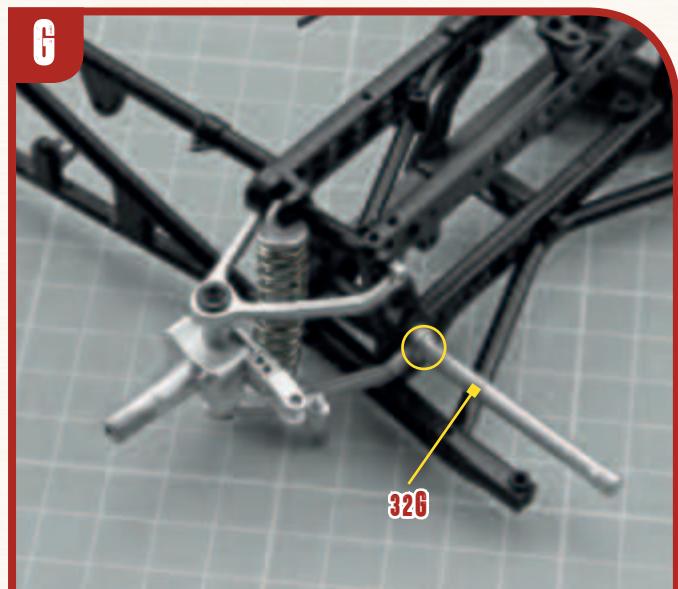
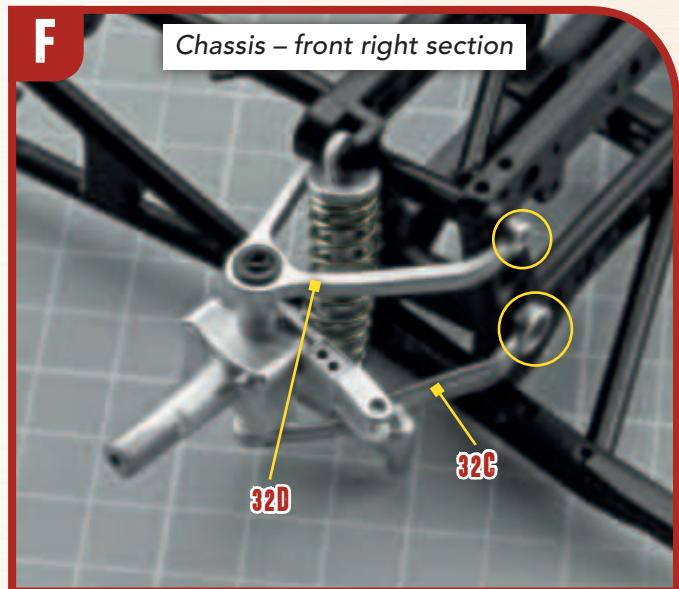
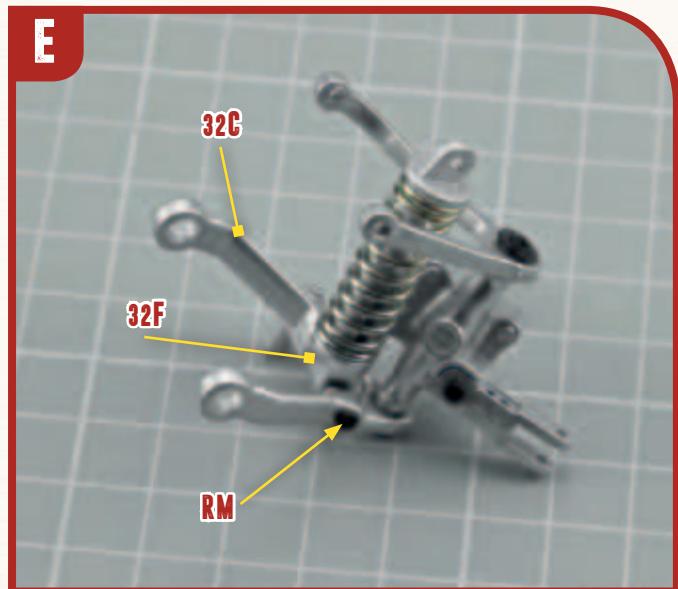
C



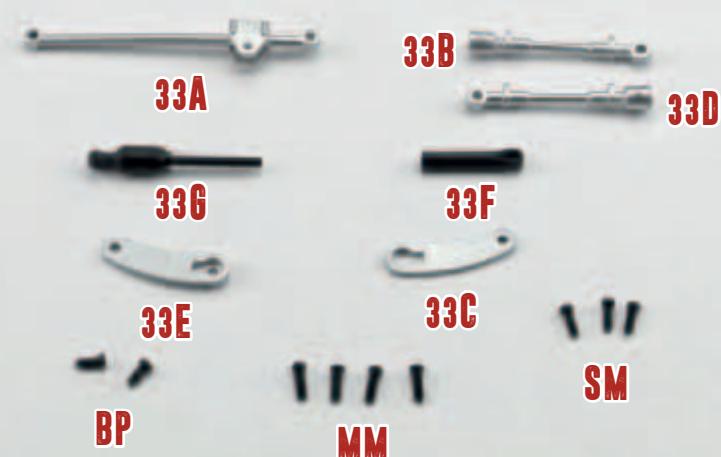
D



step by step #32



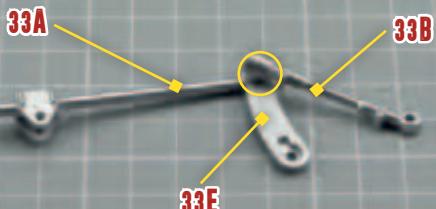
33 PARTS LIST



33A Central steering bar
33B Left tie rod
33C Right plate
33D Right tie rod
33E Left plate
33F Arm 1
BP Arm 2

BP 2 screws (2x5mm)
MM 4 screws (2x7mm)
SM 3 screws (1.7x6mm)

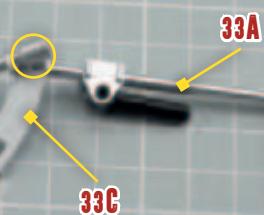
A



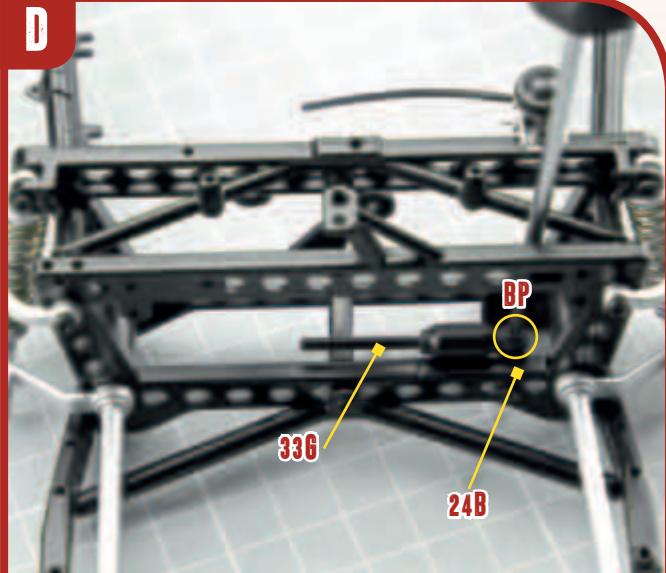
B



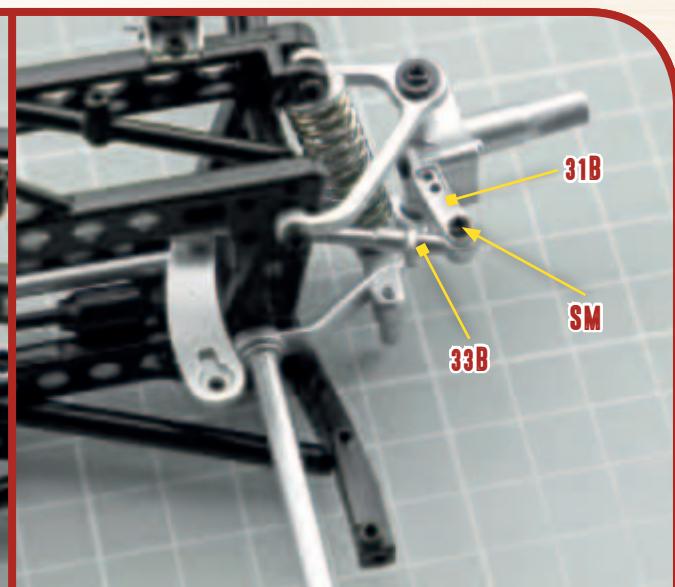
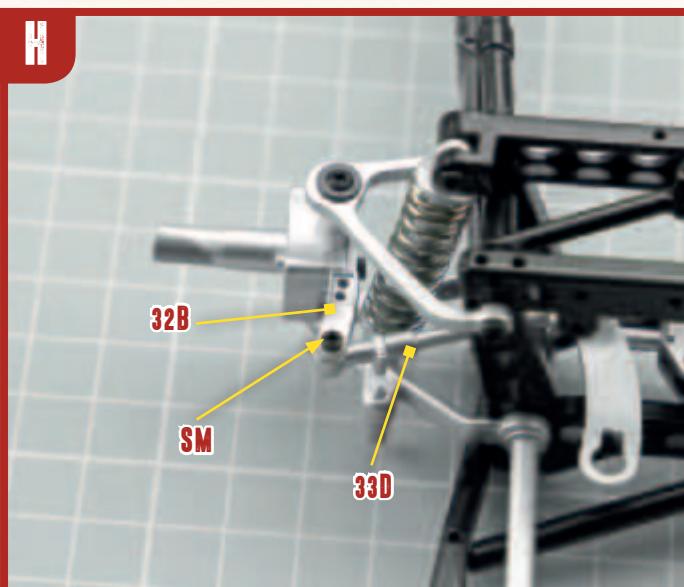
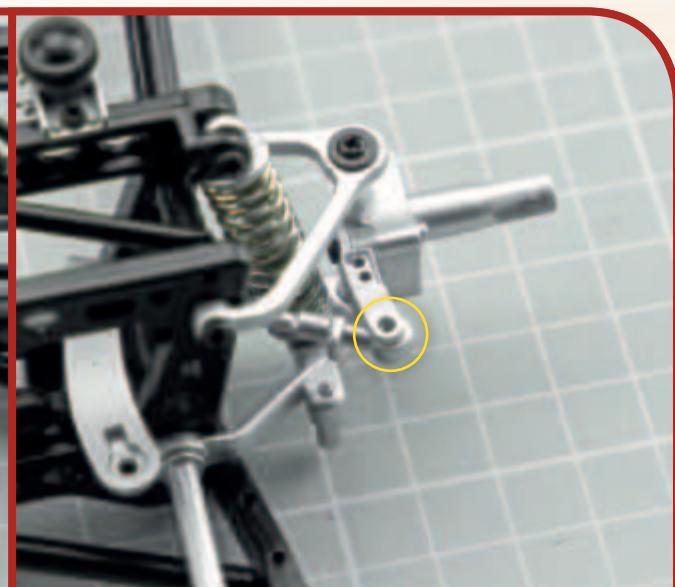
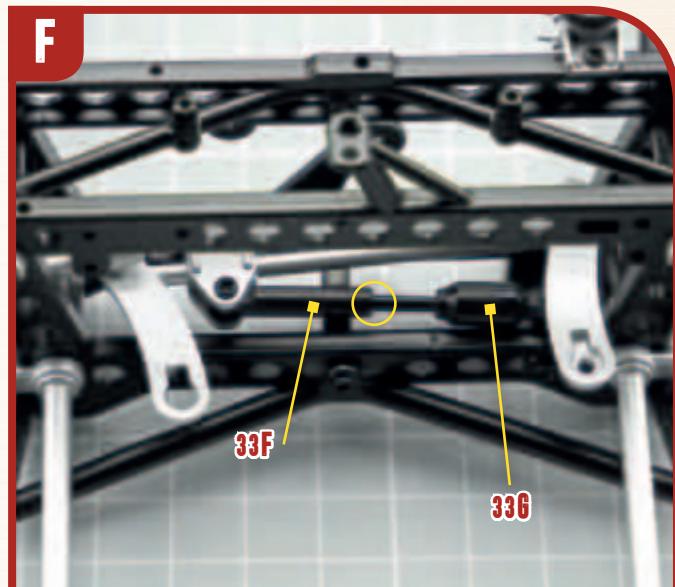
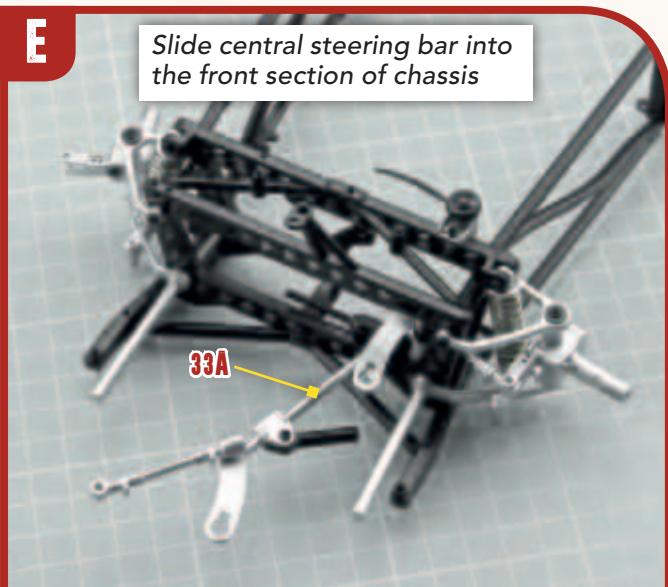
C



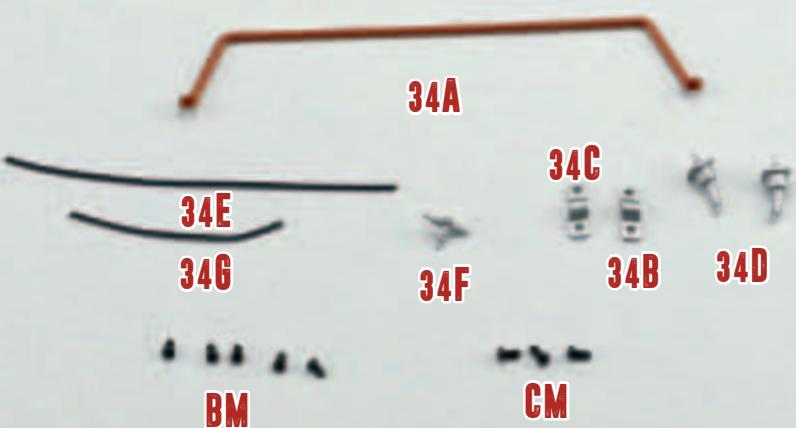
D



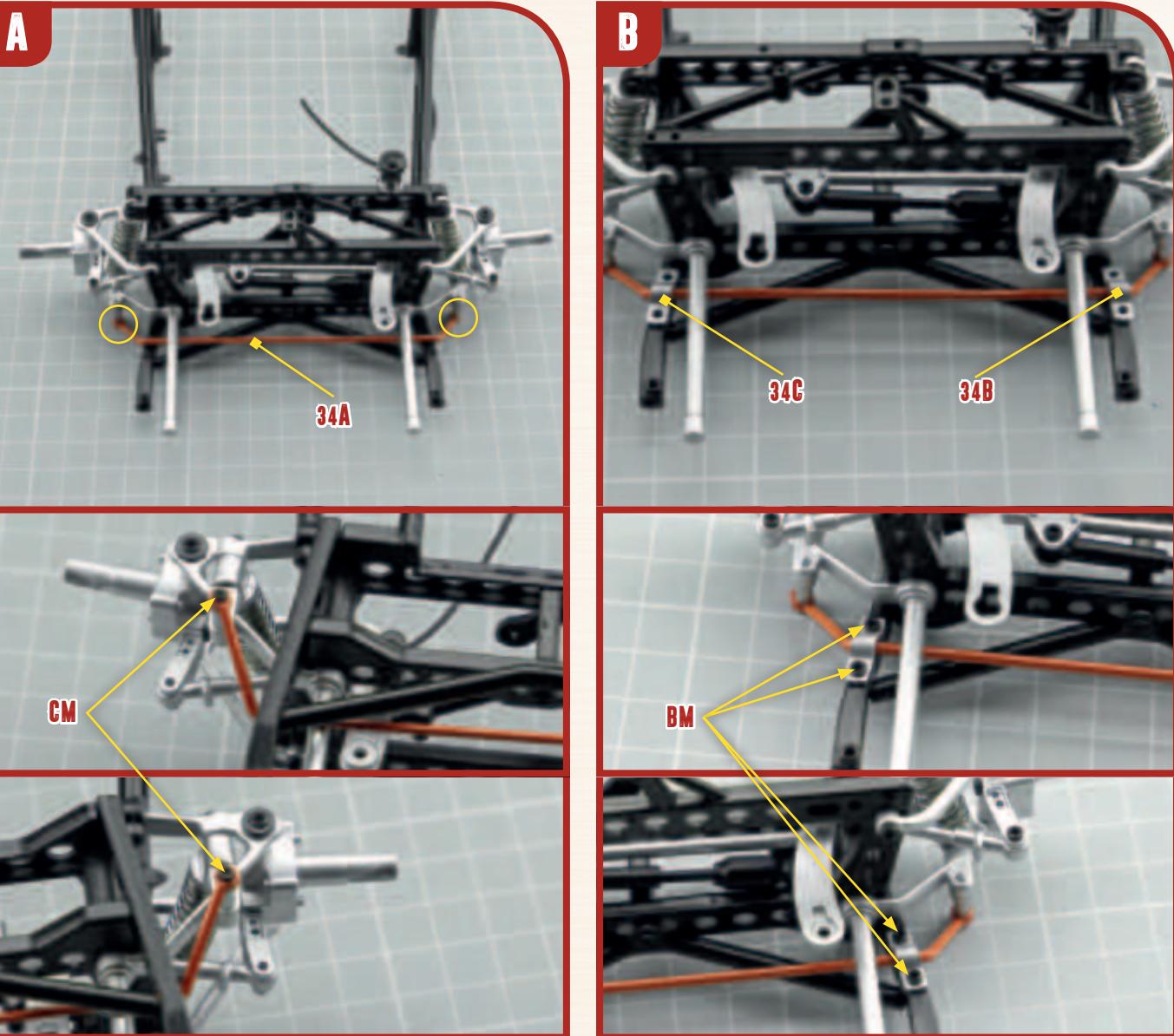
step by step #33



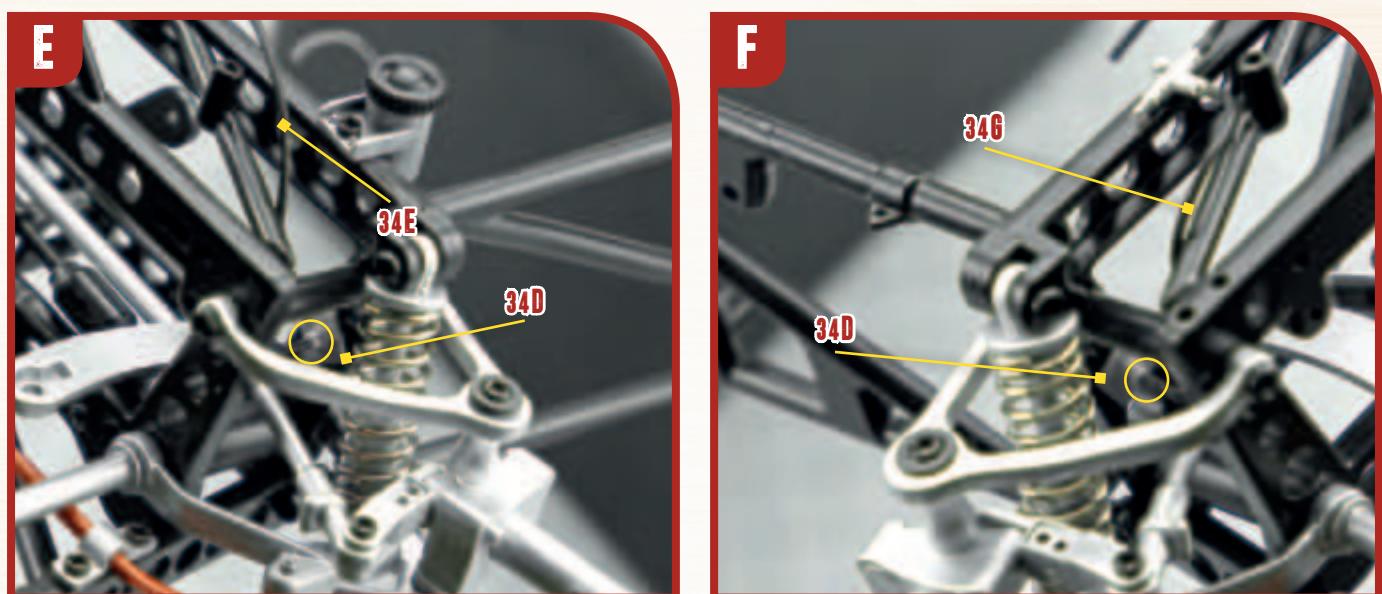
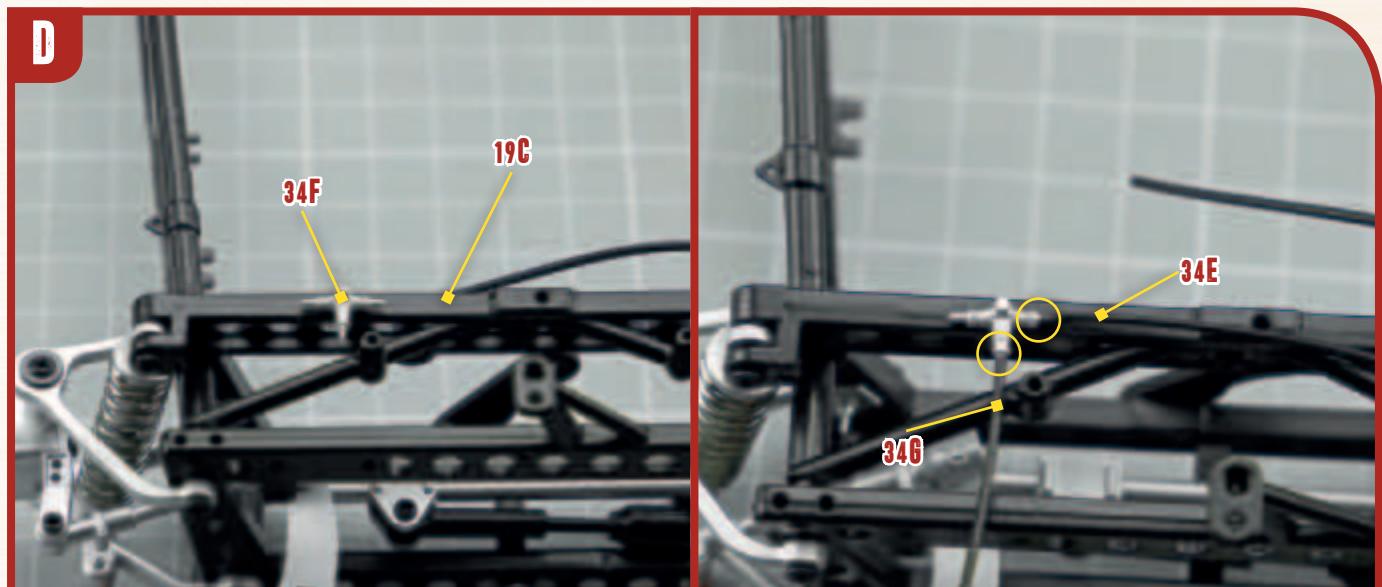
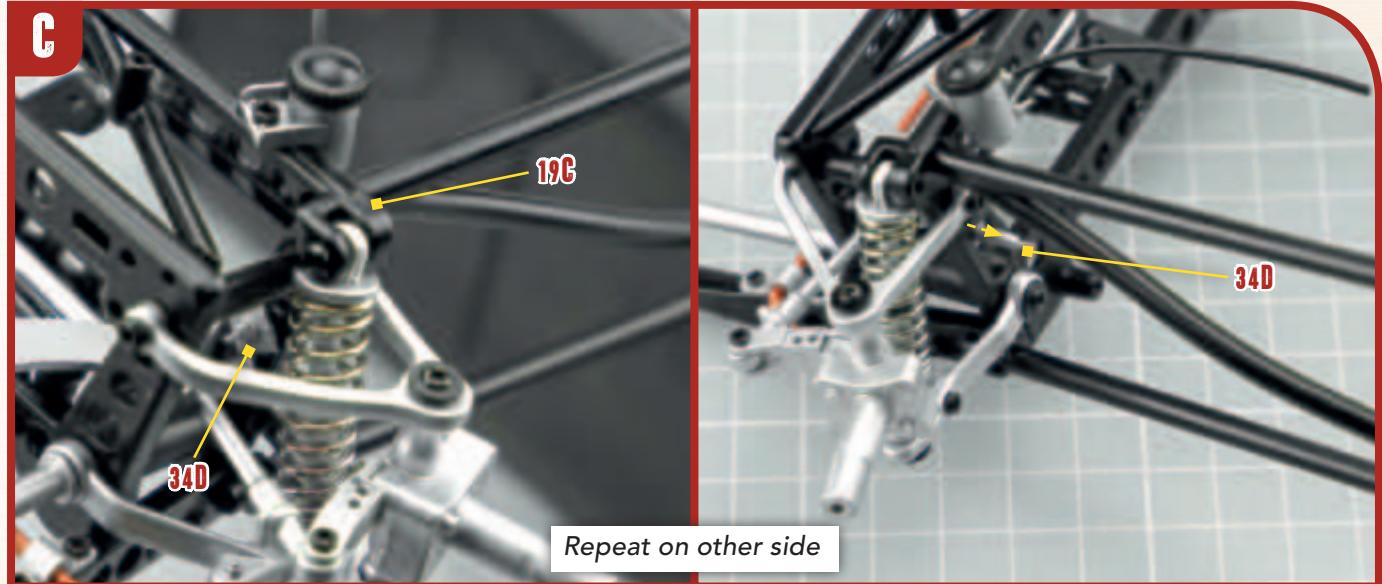
34 PARTS LIST



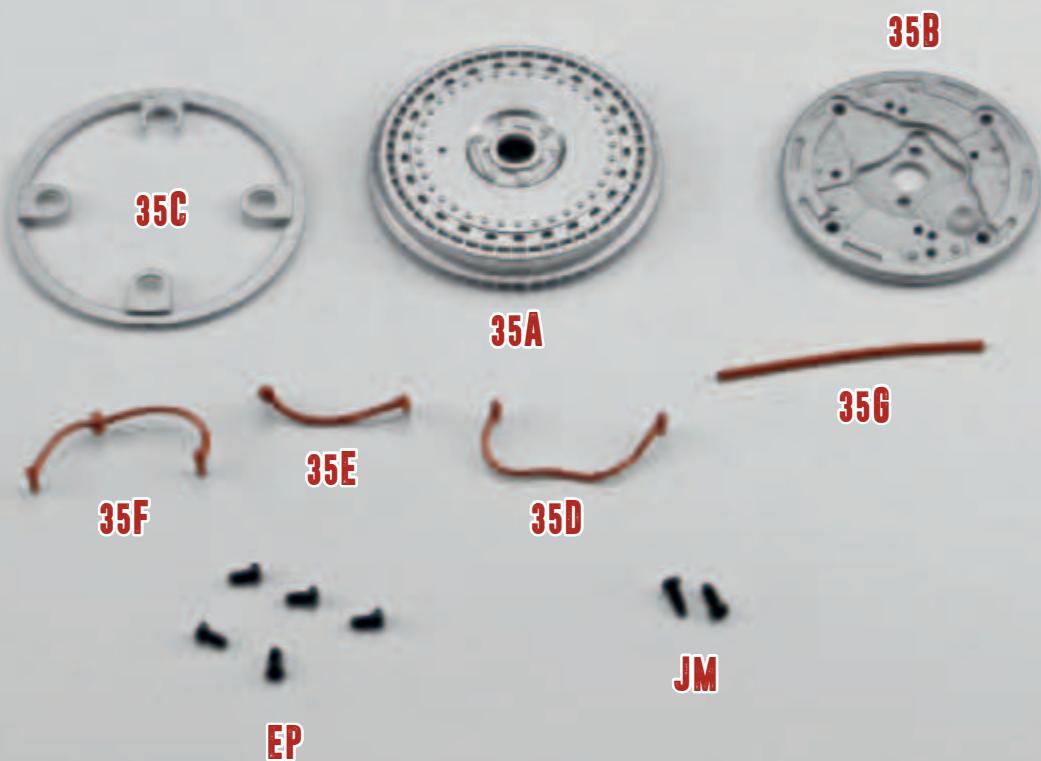
- 34A** Front axle stabilizer bar
- 34B** Left bracket
- 34C** Right bracket
- 34D** Brake cables links (x2)
- 34E** Left brake cable
- 34F** Brake distributor
- 34G** Right brake cable
- BM** 5 screws (1.7x3mm)
- CM** 3 screws (1.7x4mm)



step by step #34



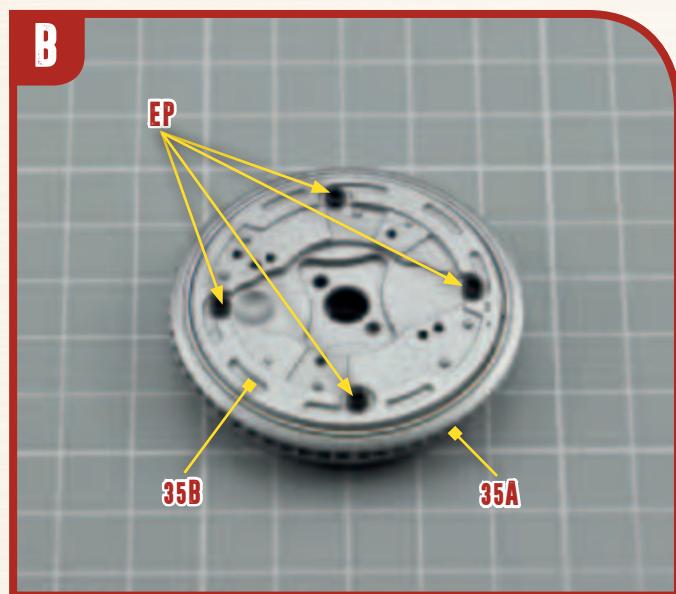
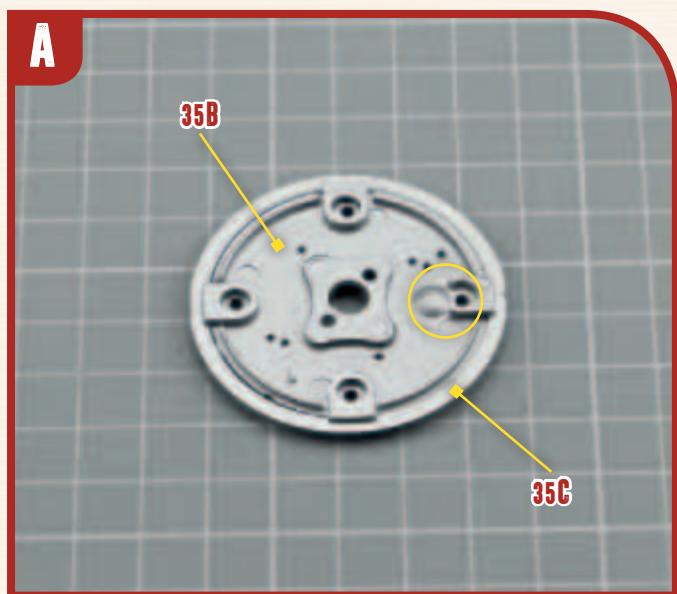
35 PARTS LIST



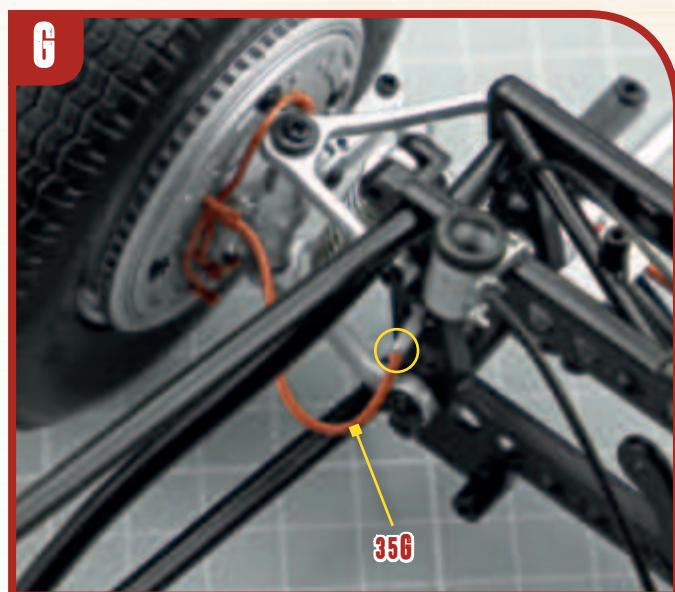
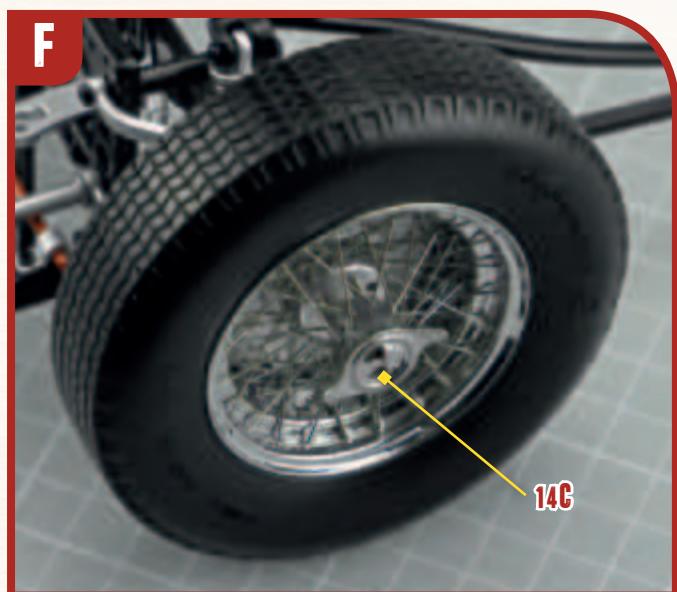
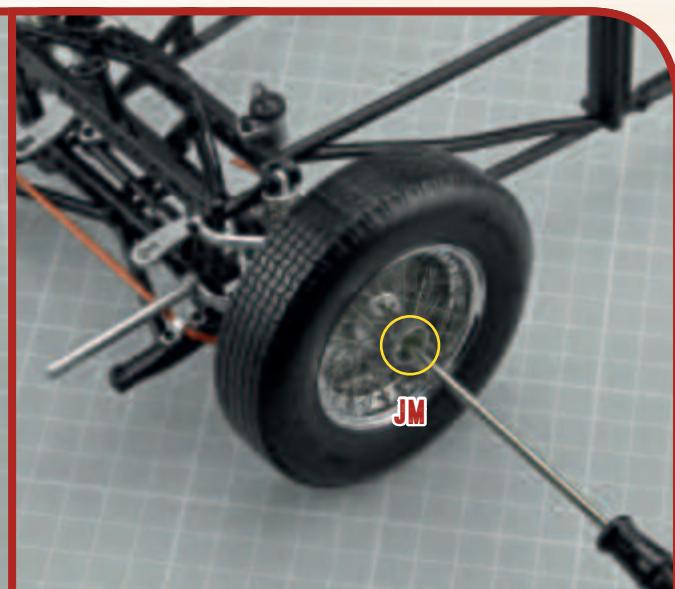
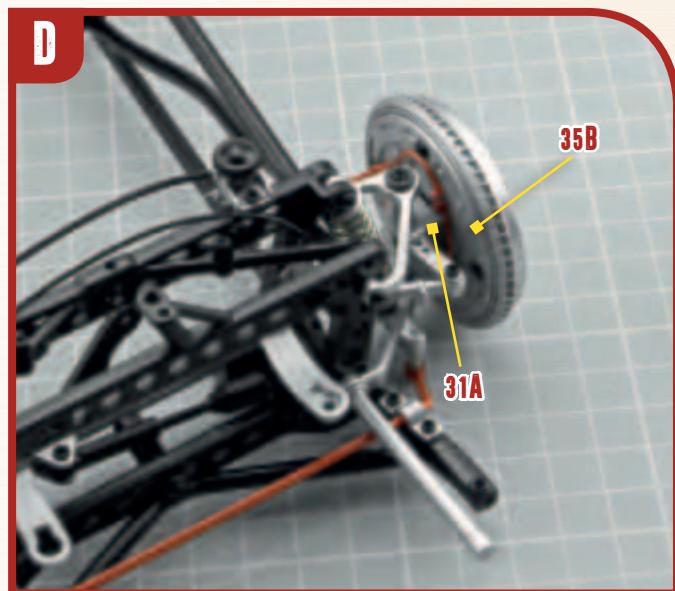
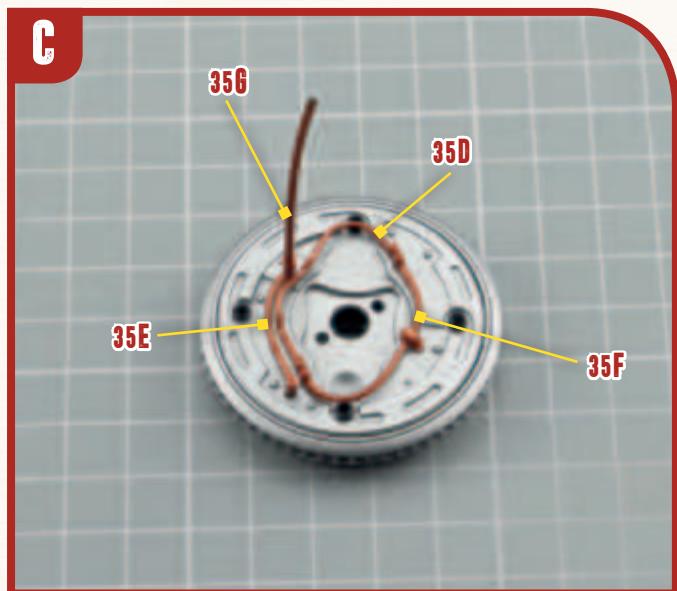
35A Brake drum
35B Brake plate part A
35C Brake plate part B
35D Brake drum cable 1

35E Brake drum cable 2
35F Brake drum cable 3
35G Brake drum cable 4

EP 5 screws (2x4mm)
JM 2 screws (2x5mm)



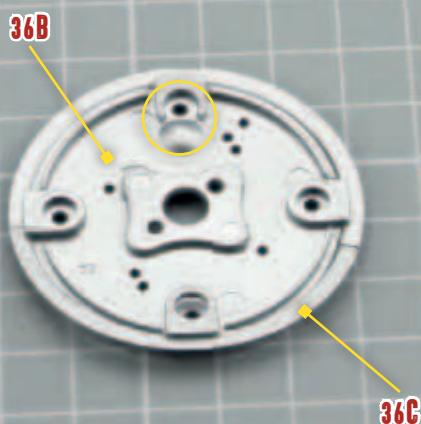
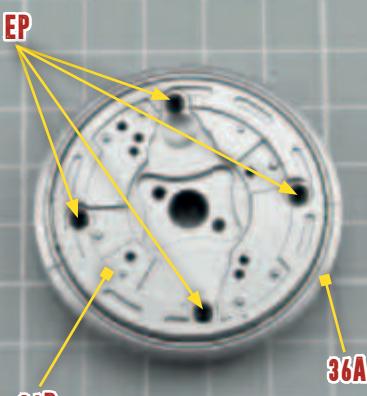
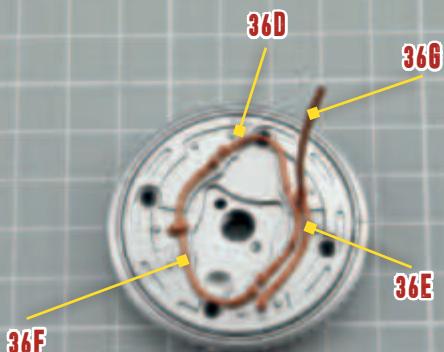
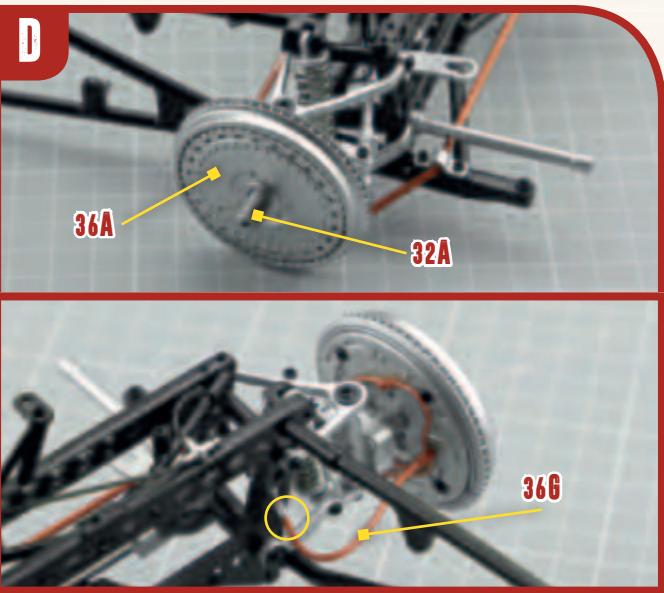
step by step #35



36 PARTS LIST



- 36A** Brake drum
- 36B** Brake plate part A
- 36C** Brake plate part B
- 36D** Brake drum cable 1
- 36E** Brake drum cable 2
- 36F** Brake drum cable 3
- 36G** Brake drum cable 4
- EP** 5 screws (2x4mm)

A**B****C****D**

37 PARTS LIST

REGULAR ASSEMBLY



37A Outer rim

37B Central ring 1

37C Inflation valve

37D Hub 1

37E Spokes 1

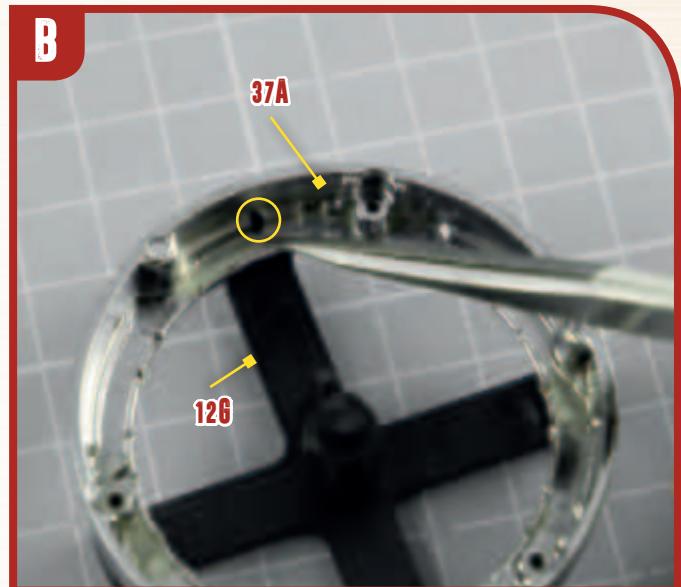
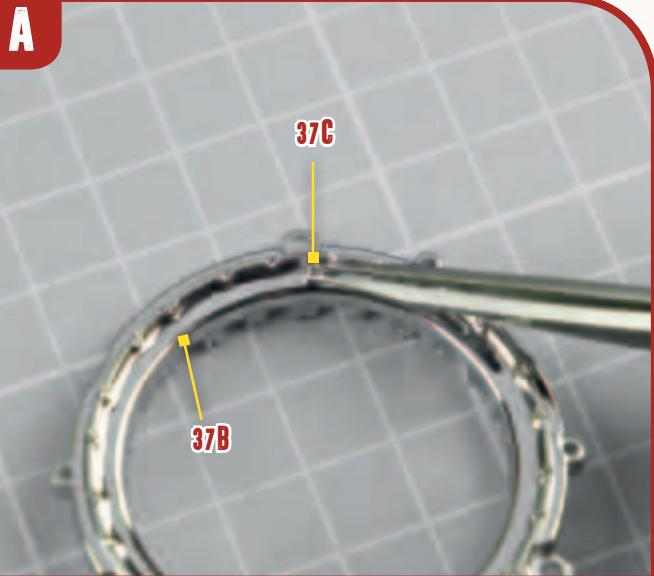
37F Spokes 2

37G Central ring 2

37H Double-sided tape

AP 5 screws (1.7x4mm)

CM 4 screws (1.7x4mm)

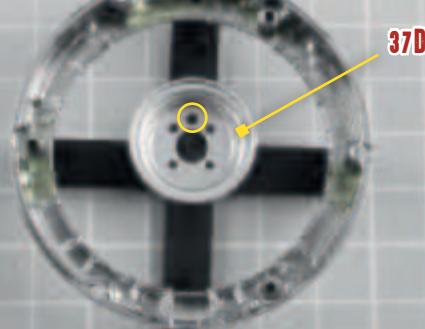


C

Apply 24 pieces of double-sided tape 37H to 37A's inner profile and tear off their top sheets.



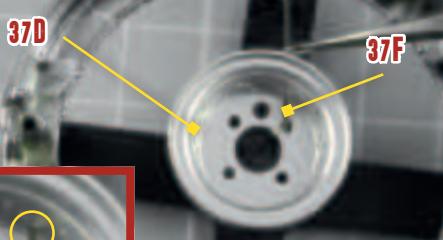
37H
37A

**D**

37D

E

Insert 1 spoke 37F through a hole in 37D's first level (counting from the bottom).



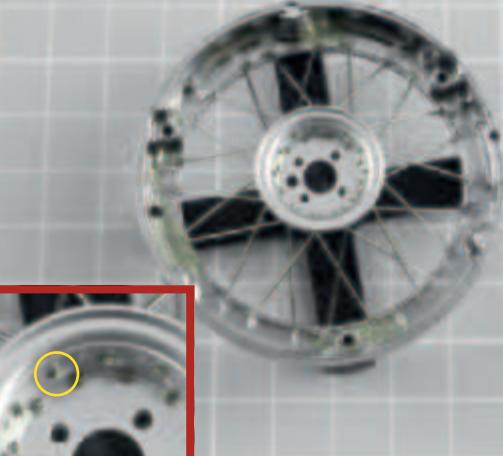
37D
37F

F

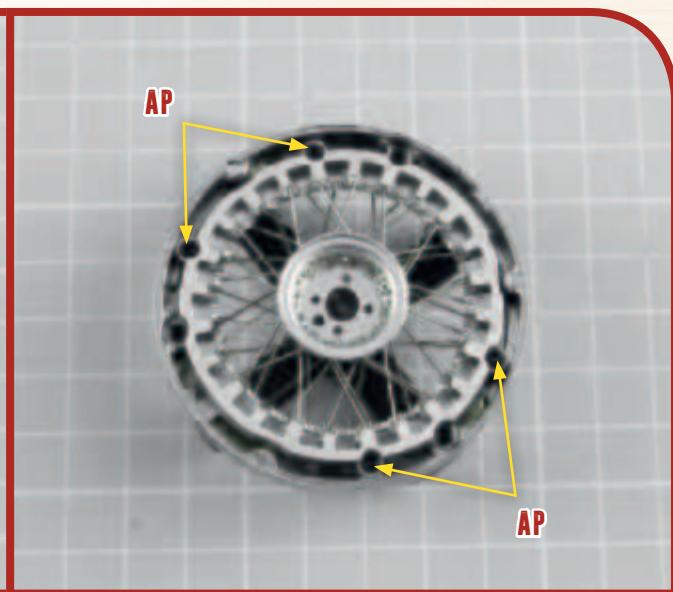
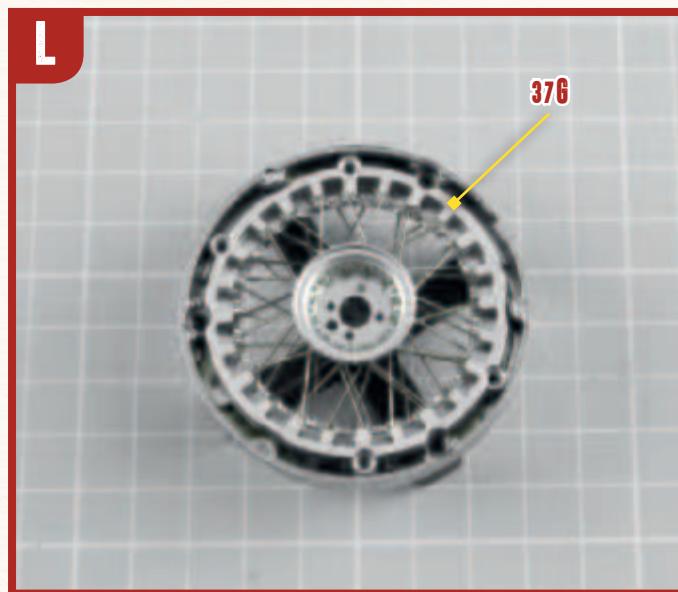
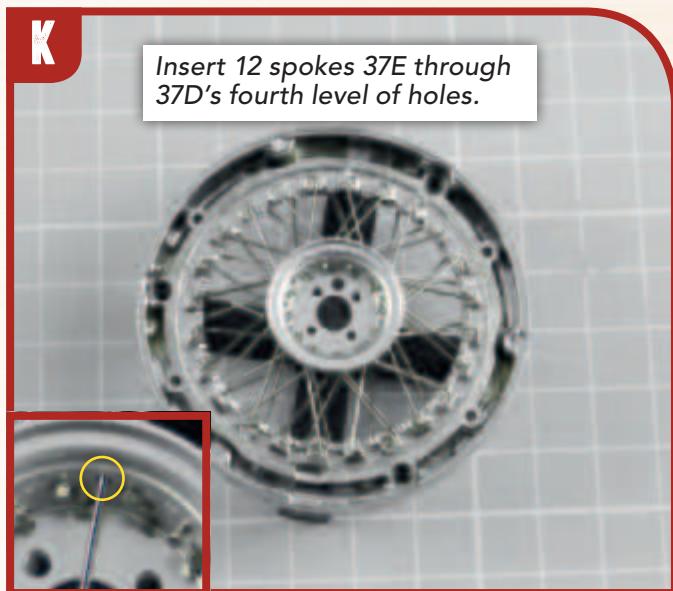
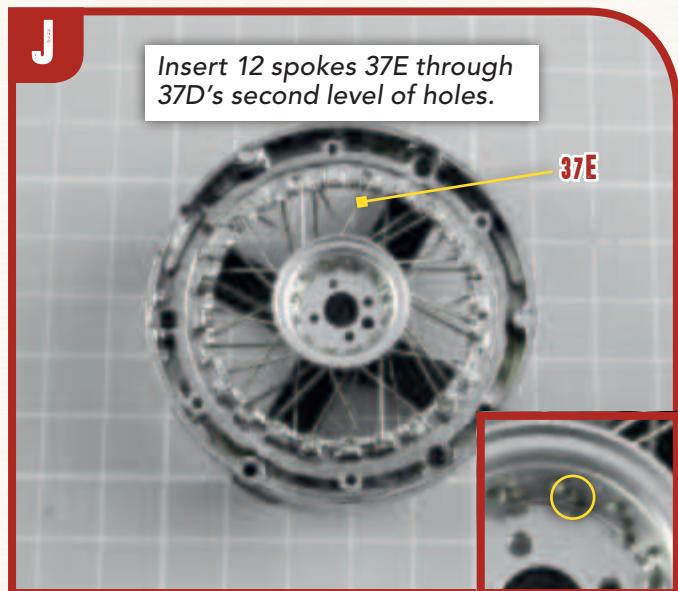
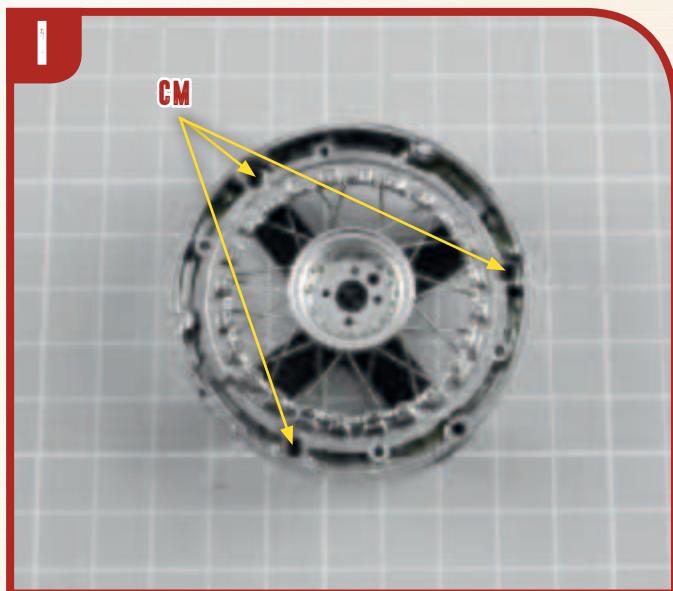
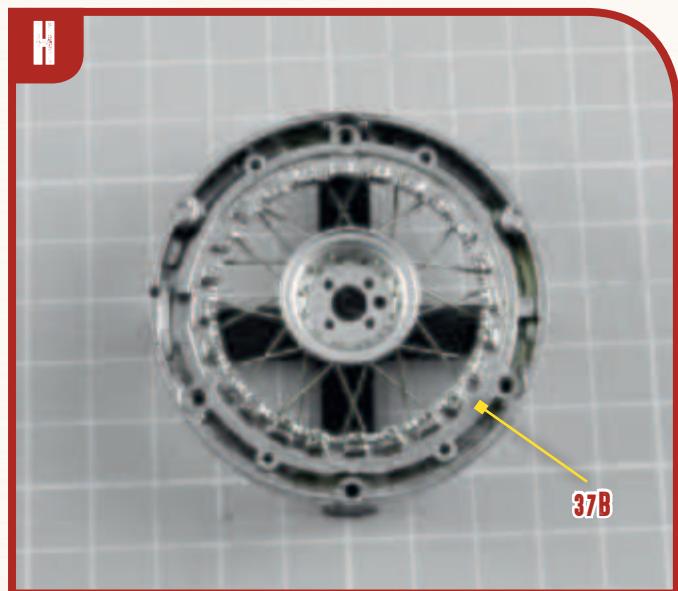
Repeat the process with other 11 spokes 37F.

**G**

Insert 12 spokes 37F through 37D's third level of holes.



step by step #37



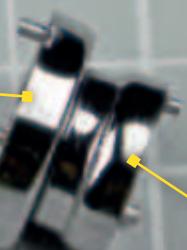
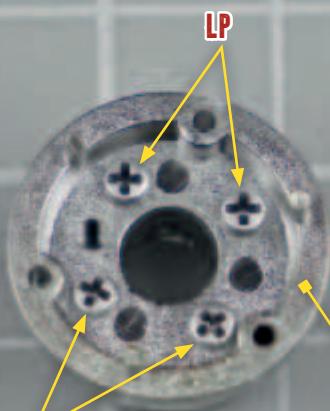
37B PARTS LIST

EASY ASSEMBLY

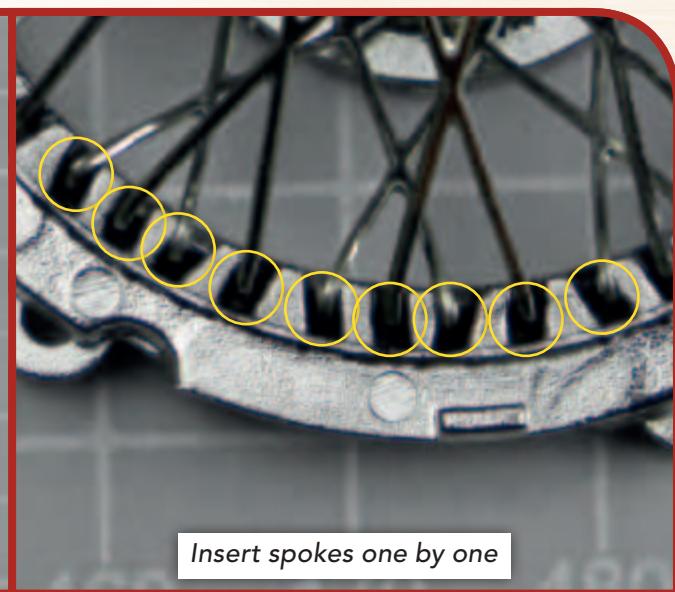
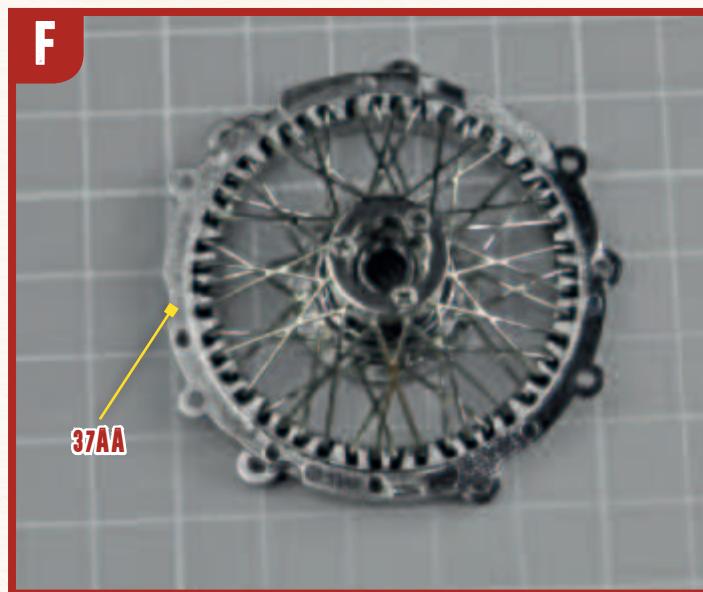
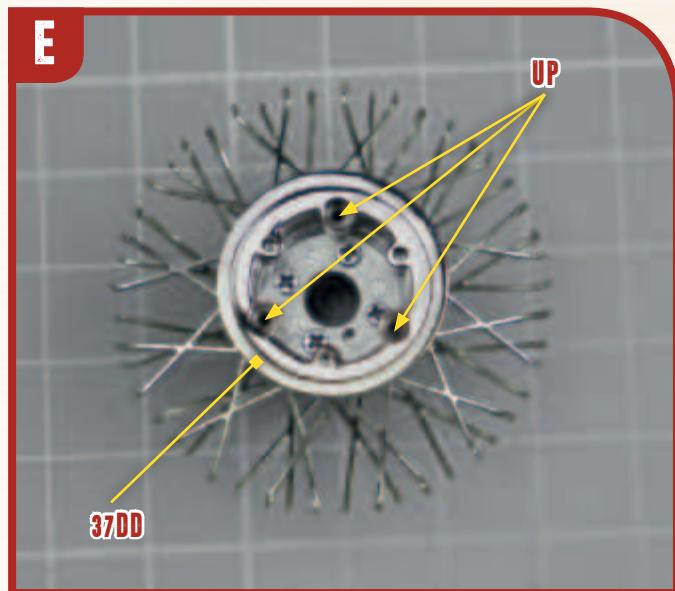
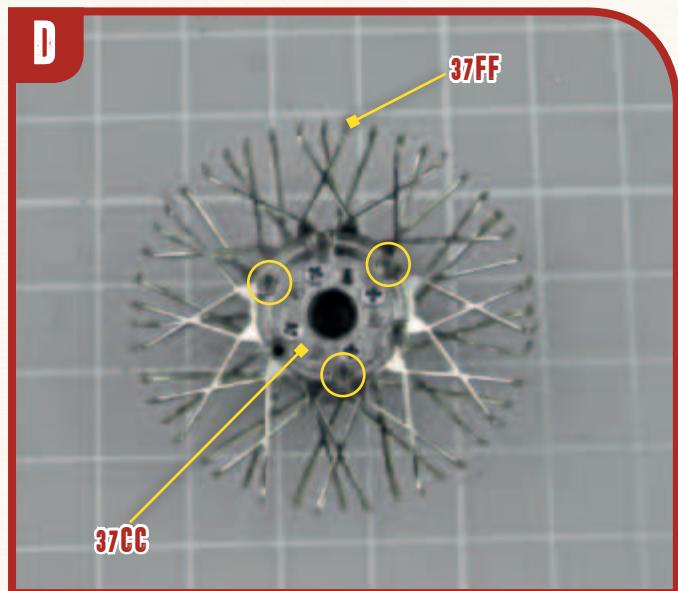
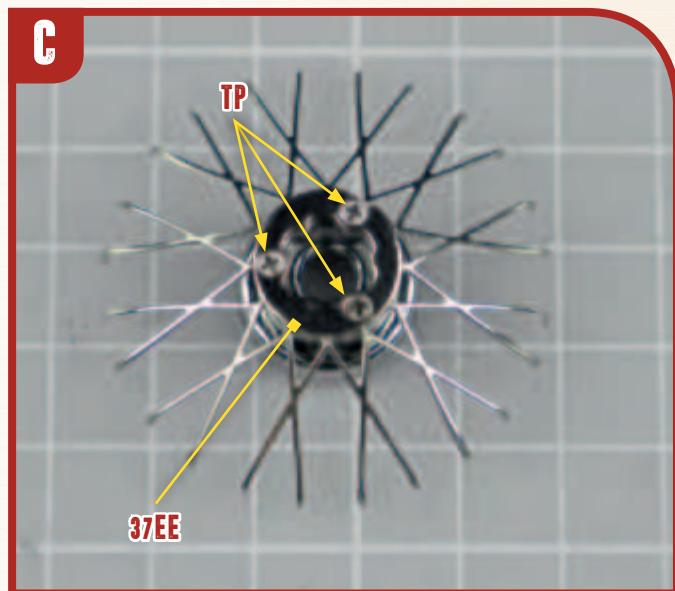
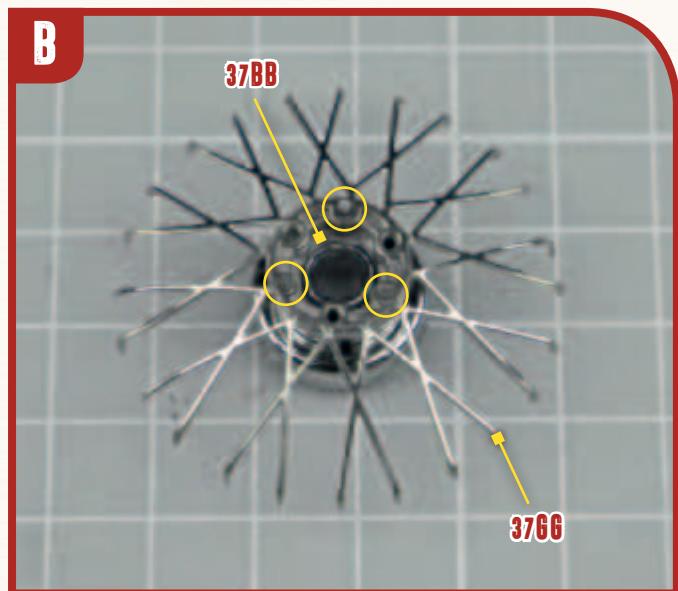
37FF**37GG****37AA****37CC****37EE****37BB****37DD****LP****TP****UP****TWEEZERS FROM STAGE 12**

- 37AA** Central ring 1
37BB Hub 1
37CC Hub 2
37DD Hub 3
37EE Hub 4
37FF Spokes 1

- 37GG** Spokes 2
LP 5 screws (1.5x3mm)
TP 4 screws (1.5x5mm)
UP 4 screws (1.7x4mm)

A**37CC****37BB****LP****37CC**

step by step #37B



38 PARTS LIST

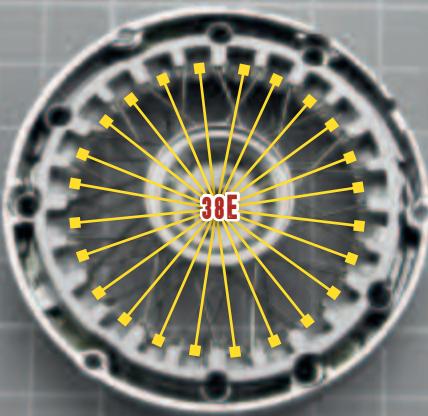
REGULAR ASSEMBLY



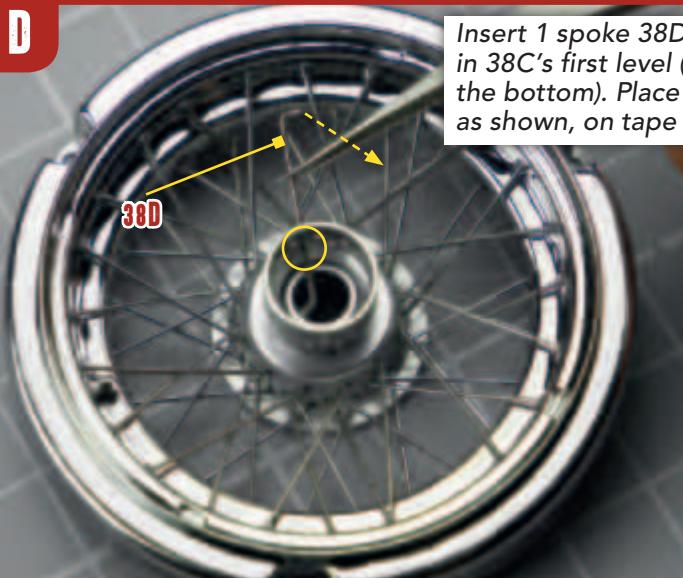
- 38A** Inner rim
38B Central ring 3
38C Hub 2
38D Spokes 3
38E Double-sided tape
CM 4 screws (1.7x4mm)
KM 5 screws (1.5x5mm)

A

Apply 24 pieces of double-sided tape 38E to 37B's inner profile and tear off their top sheets.

**B****C**

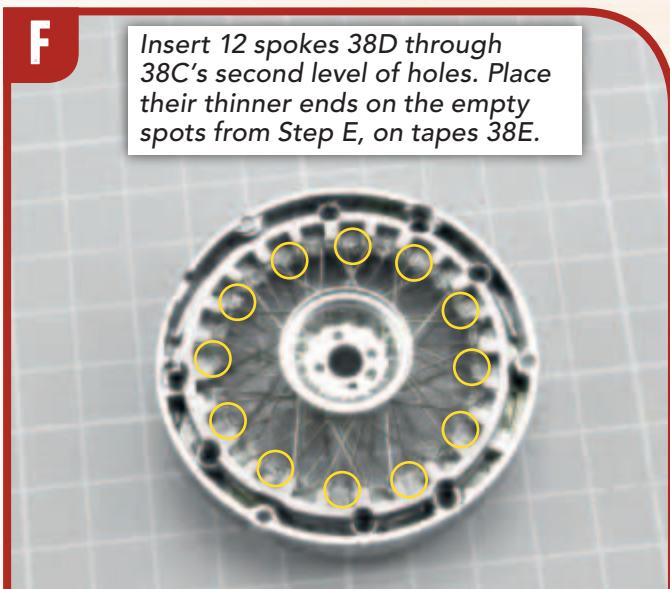
step by step #38



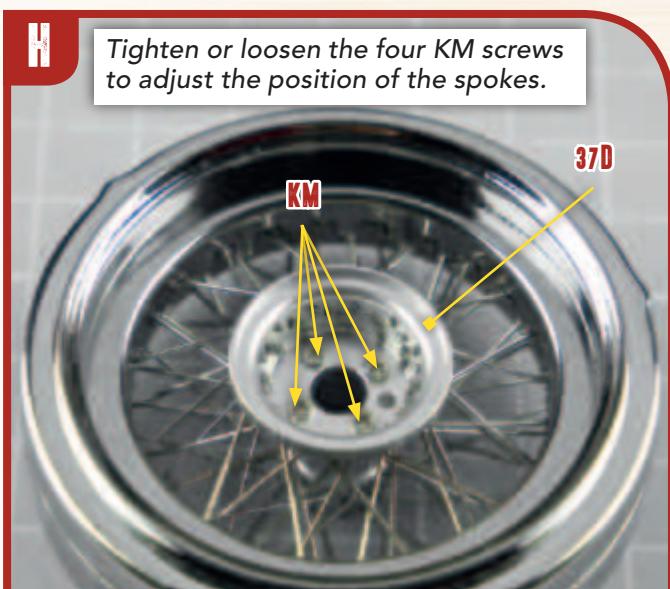
Insert 1 spoke 38D through a hole in 38C's first level (counting from the bottom). Place its thinner end as shown, on tape 38E.



Repeat the process with other 11 spokes 38D. Leave one empty spot between the thinner ends of spokes 38D.



Insert 12 spokes 38D through 38C's second level of holes. Place their thinner ends on the empty spots from Step E, on tapes 38E.



38B PARTS LIST

EASY ASSEMBLY

38AA

38BB

38CC

38DD

AP

CM

38AA Outer rim

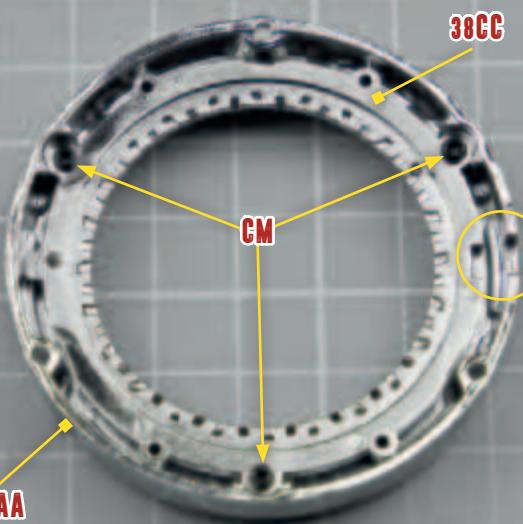
38BB Inner rim

38CC Central ring 2

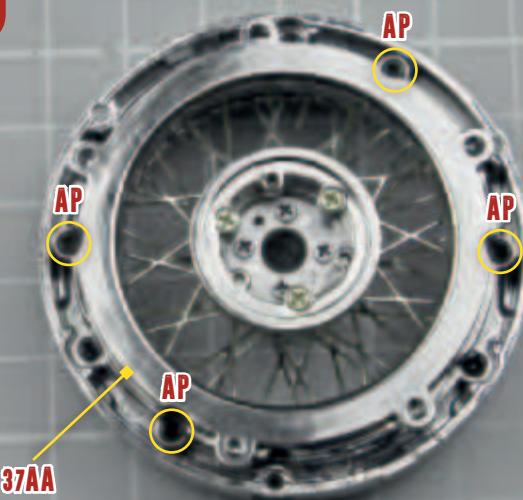
38DD Inflation valve

AP 5 screws (1.7x4mm)
CM 8 screws (1.7x4mm)

B



C



D



E



step by step #39

39

PARTS LIST

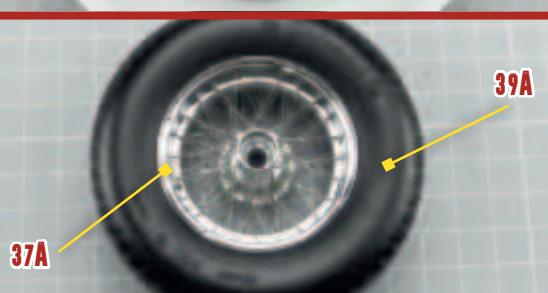
REGULAR ASSEMBLY

- 39A Tyre
- 39B Hub 3
- 39C Hubcap
- 39D Washer ring
- JM 2 screws (2x5mm)



A

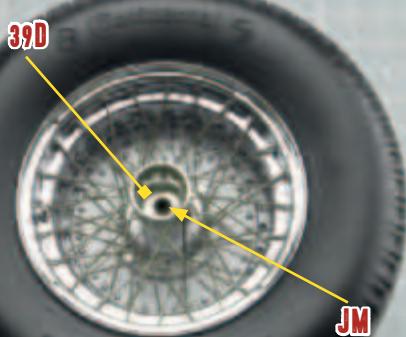
Soften tyre 39A by placing it in a bowl full of hot water.



B



C



Attach front right wheel to brake drum 36A

D



39B PARTS LIST

EASY ASSEMBLY

39AA Tyre
39BB Hubcap
39CC Hub 5
39DD Washer ring

JM 2 screws (2x5mm)



A

39AA

Soften tyre 39AA by placing it in a bowl full of hot water.

B

38BB

39AA

C

39DD

37EE

39BB

D

37DD

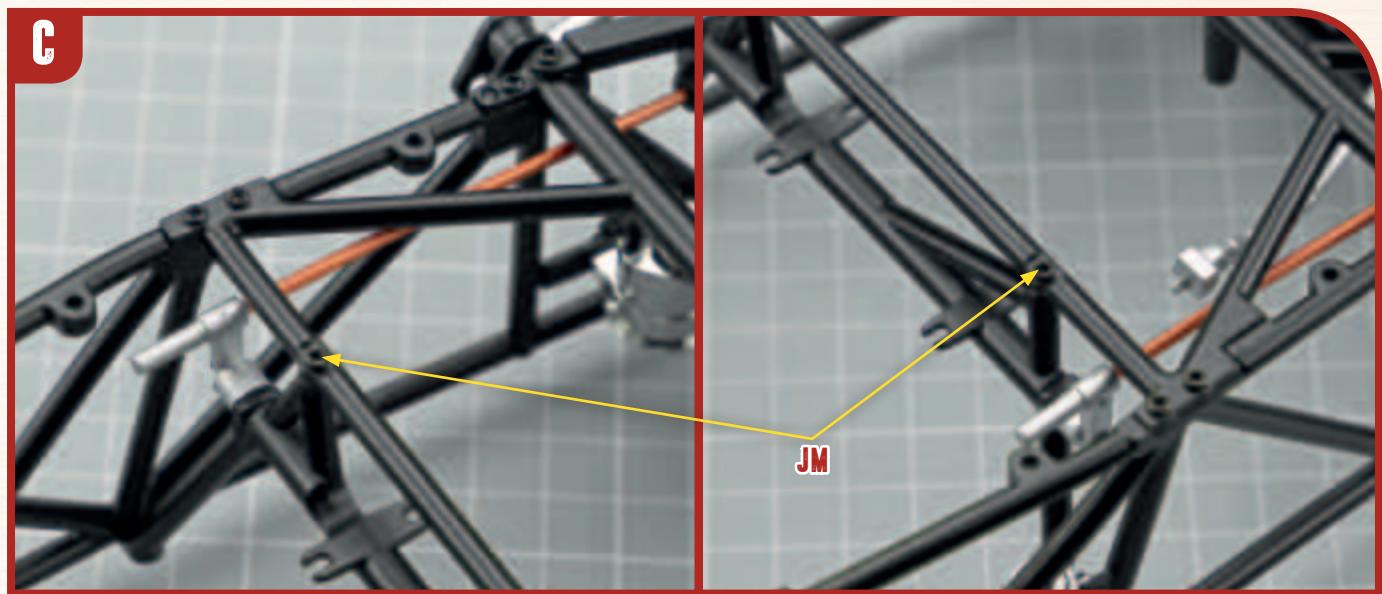
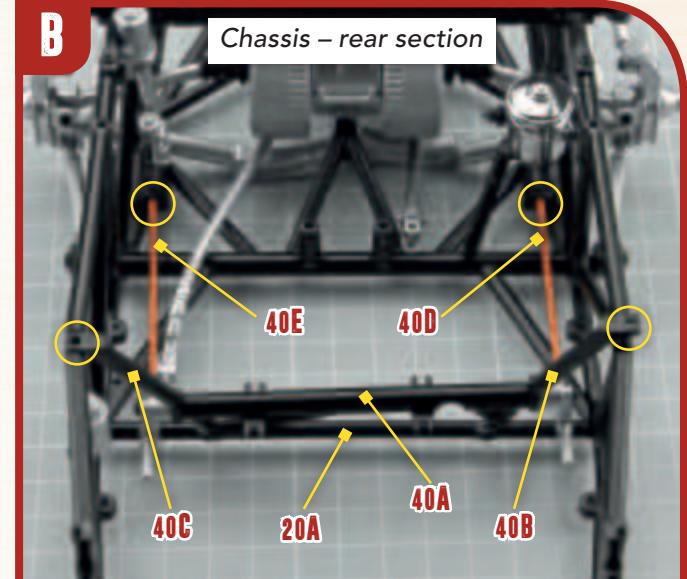
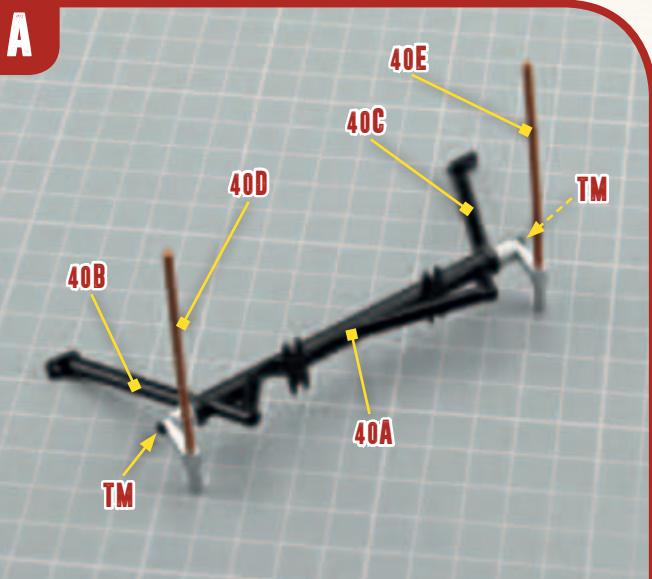
39CC

step by step #40

40 PARTS LIST



- 40A Central crossbeam
- 40B Left tube
- 40C Right tube
- 40D Left rear torsion bar
- 40E Right rear torsion bar
- JM 3 screws (2x5mm)
- TM 3 screws (2x13mm)



41 PARTS LIST

41A



41B



AP



41A Inleft manifold

41B Pipes (x8)

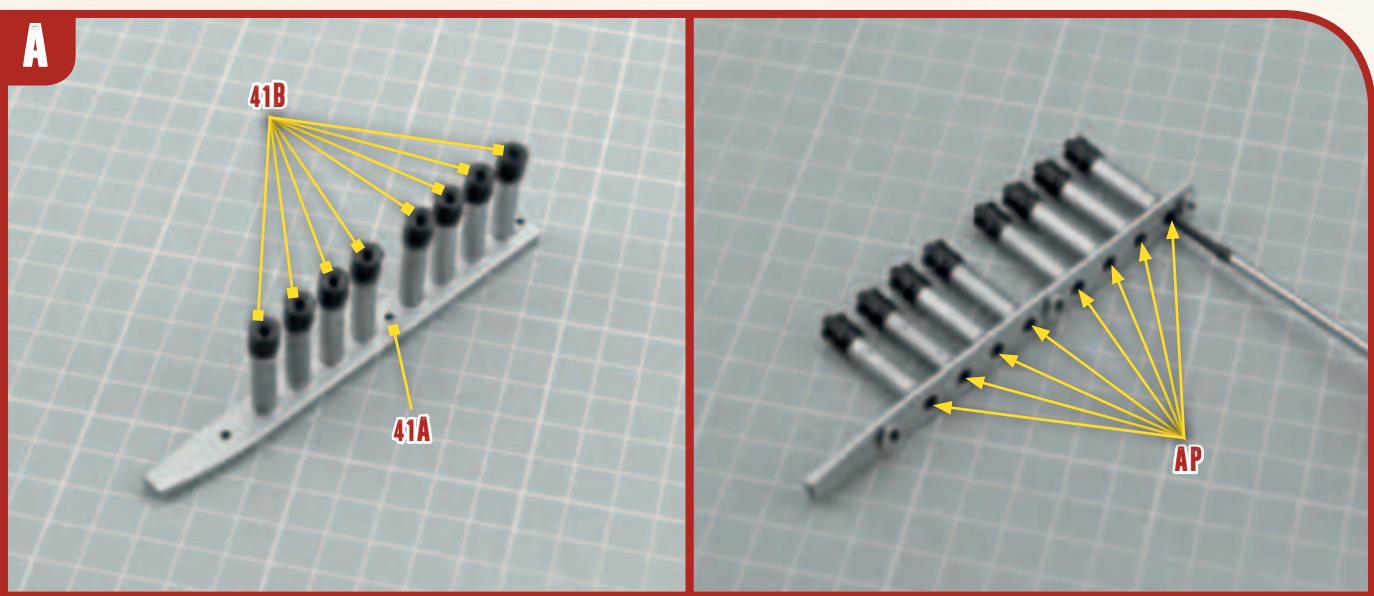
AP 11 screws (1.7x4mm)

A

41B

41A

AP



step by step #42

42 PARTS LIST

42A



42C



42D



BM

BP

HP

42A

Inlet manifold cover

42B

Throttle body

42C

Inlet manifold support

42D

Tube

BM

2 screws (1.7x3mm)

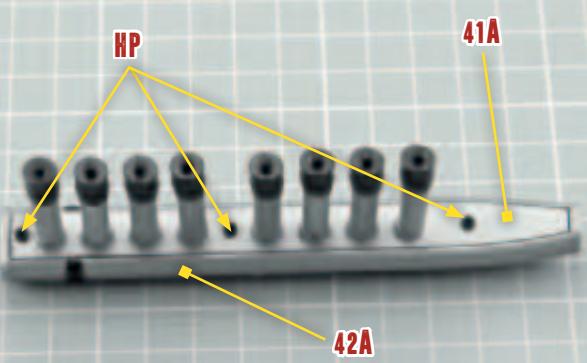
BP

2 screws (2x5mm)

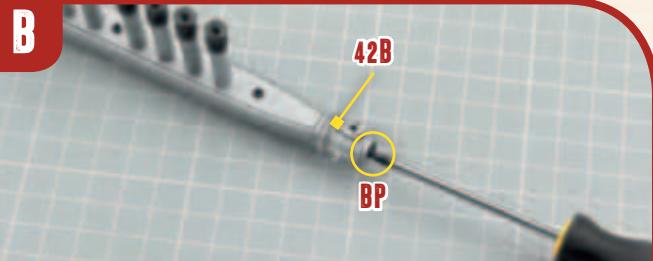
HP

4 screws (1.7x5mm)

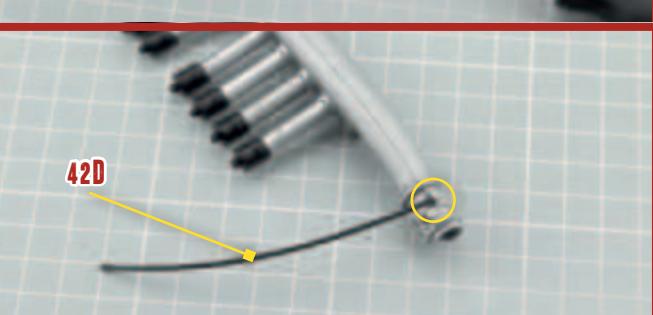
A



B

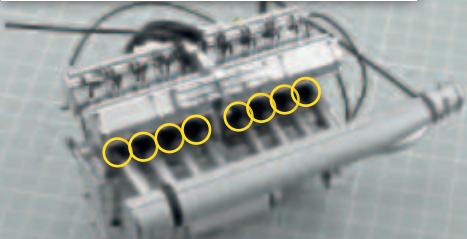


42D

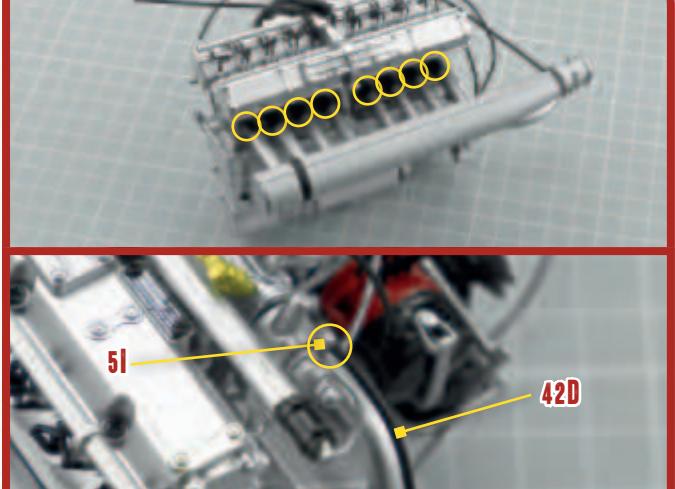


C

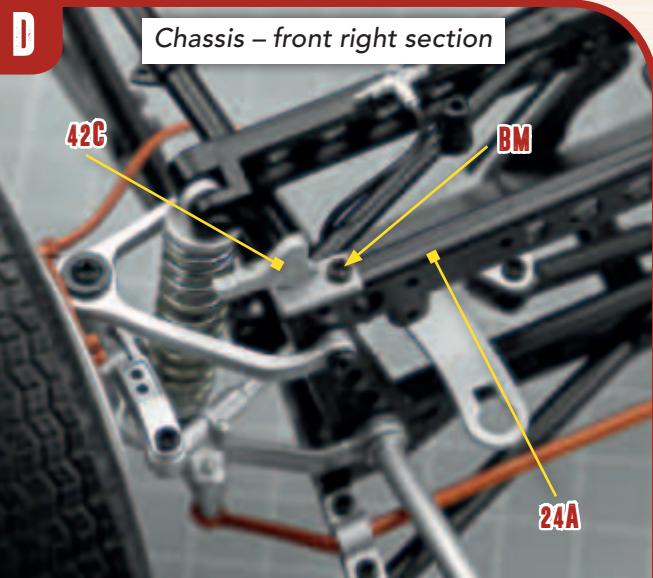
Couple inlet manifold to engine



Chassis – front right section



D

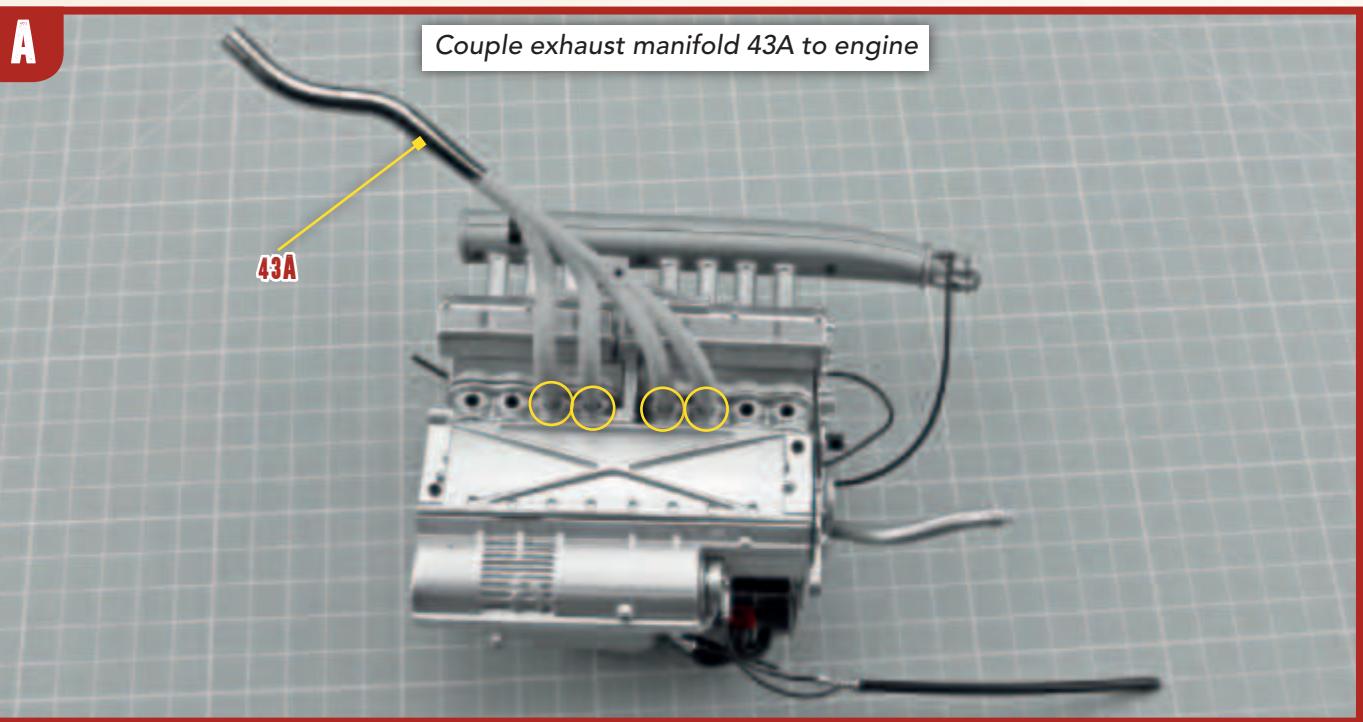


43 PARTS LIST

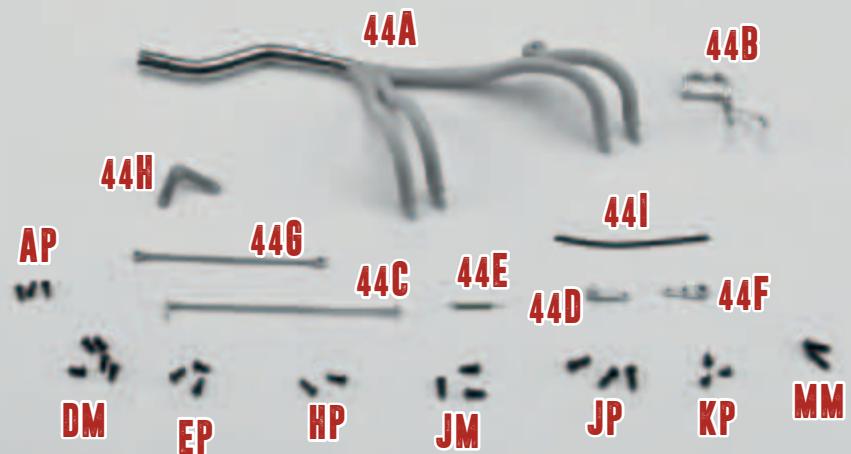


43A

43A Exhaust manifold

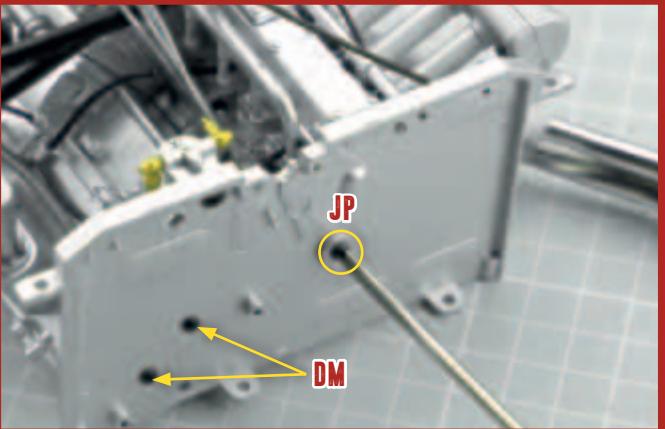
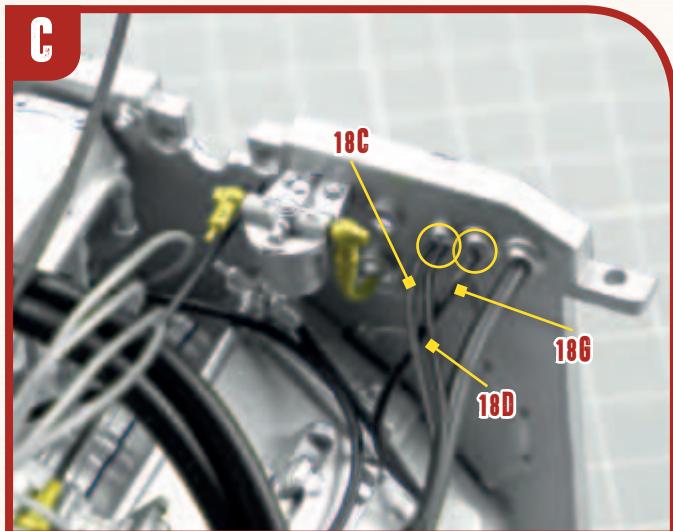
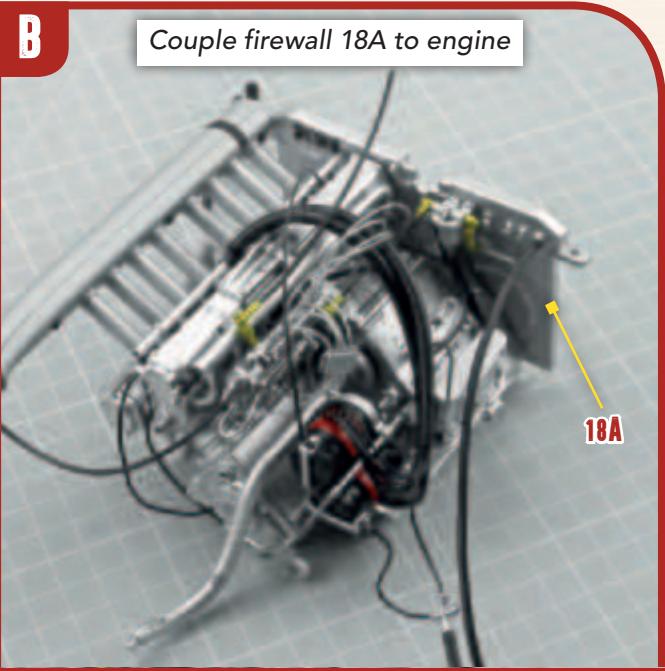
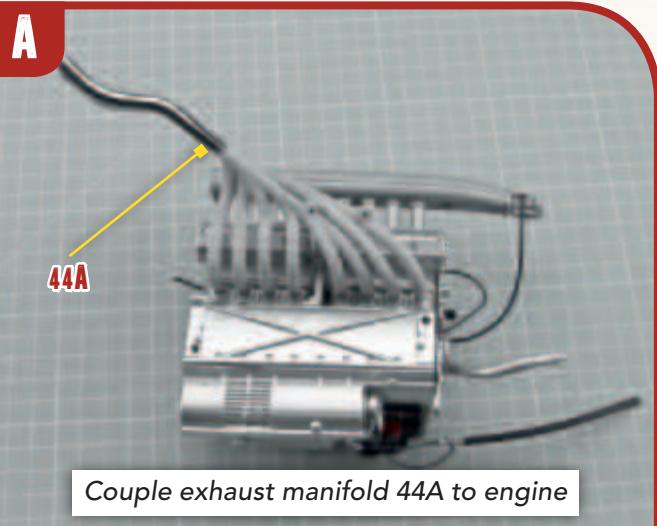


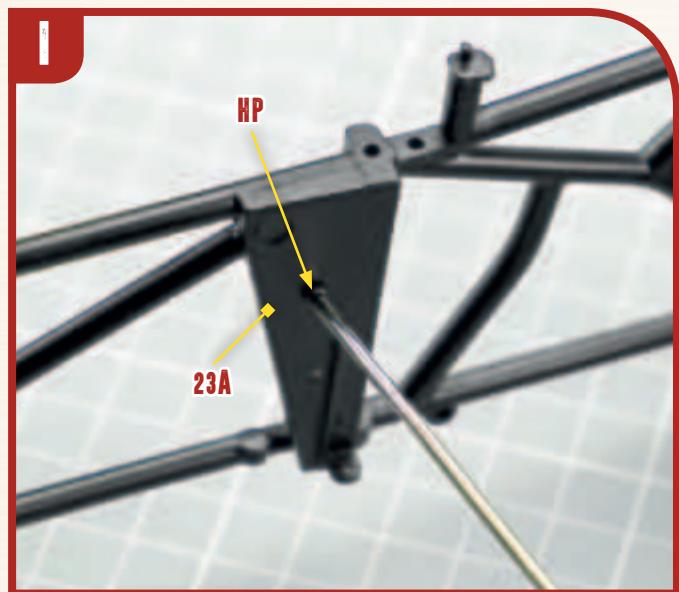
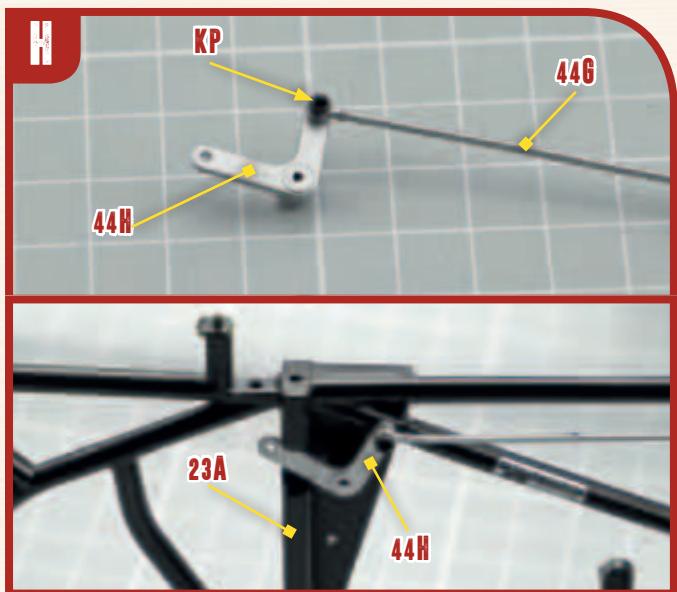
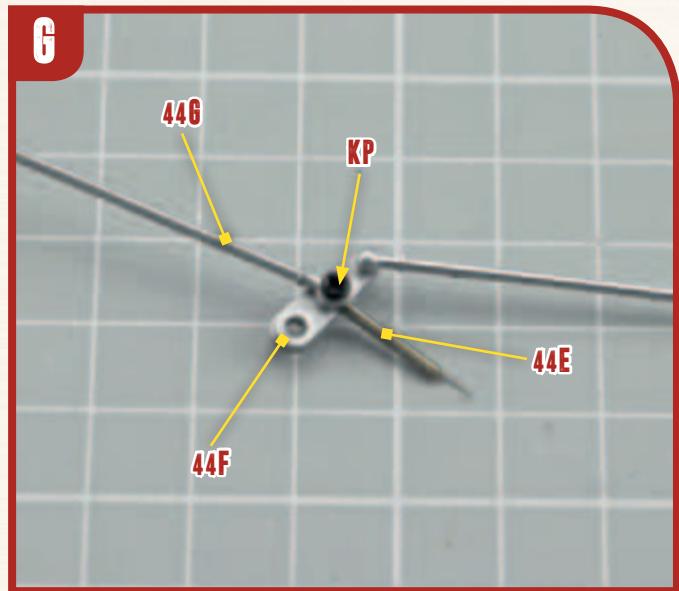
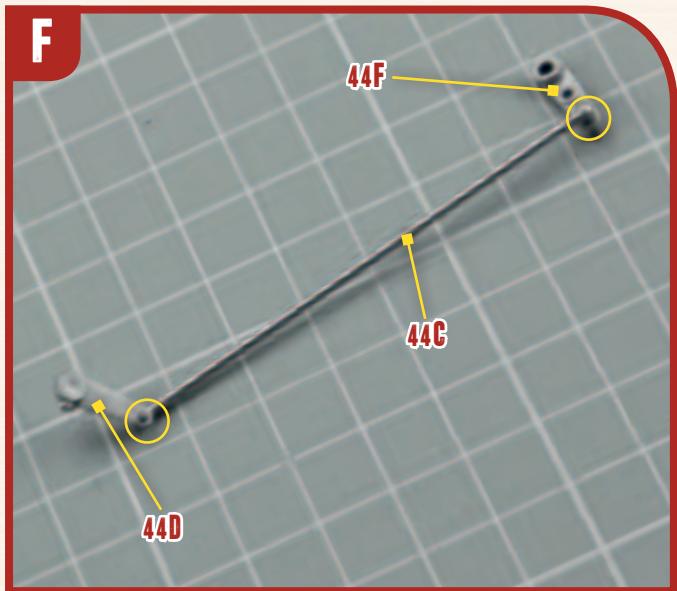
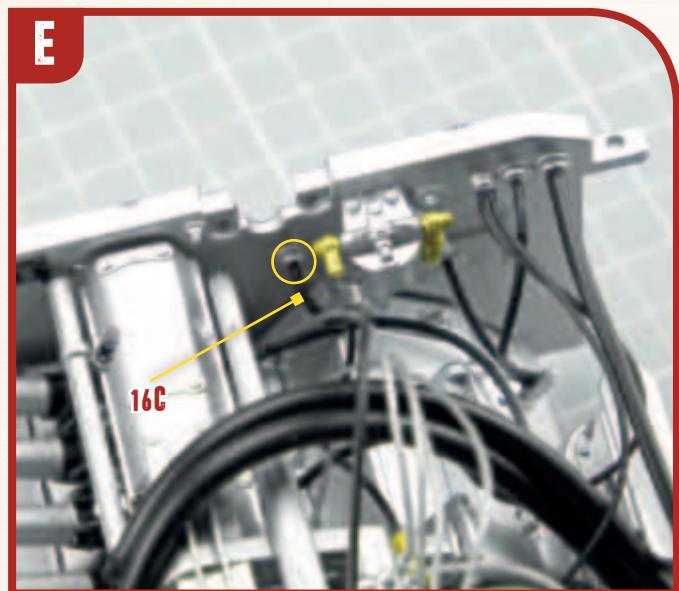
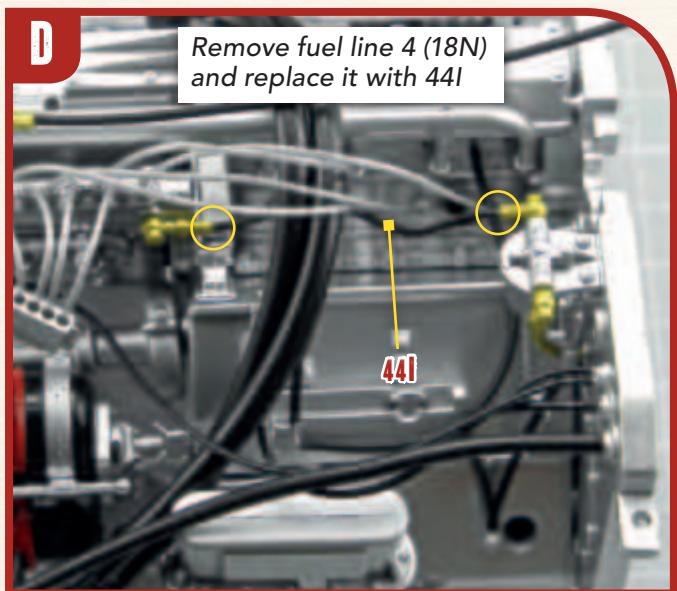
44 PARTS LIST



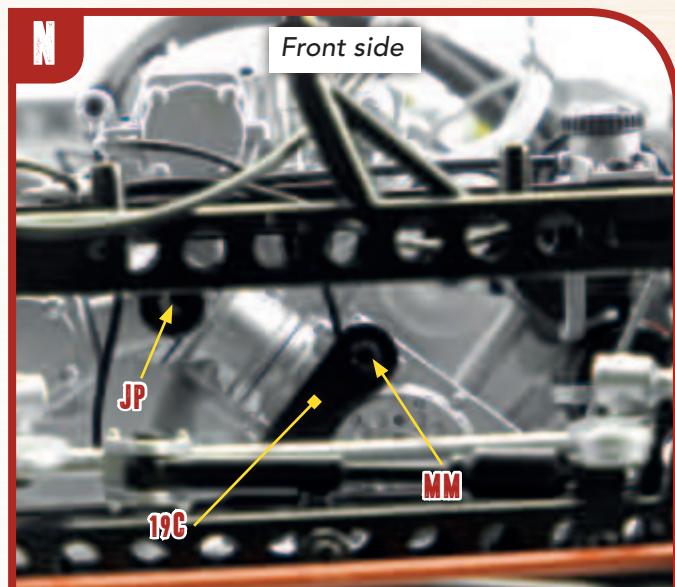
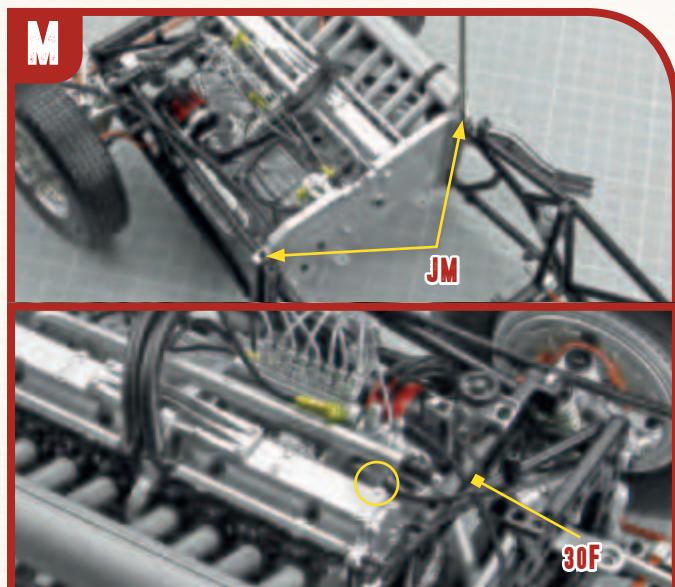
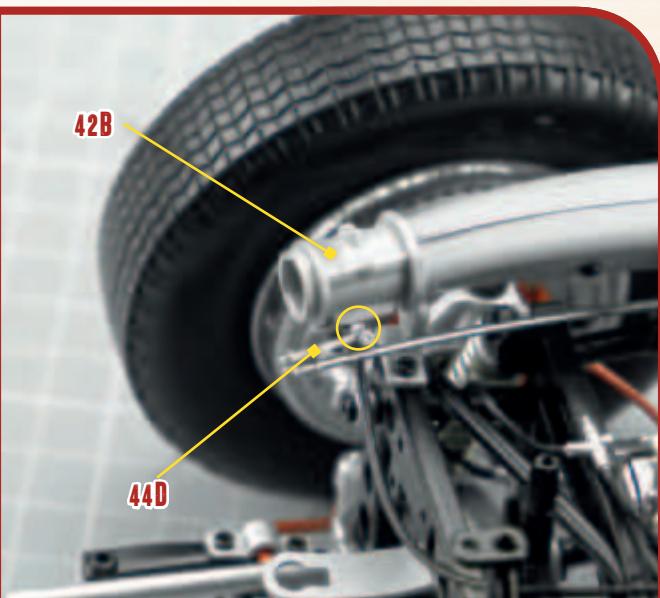
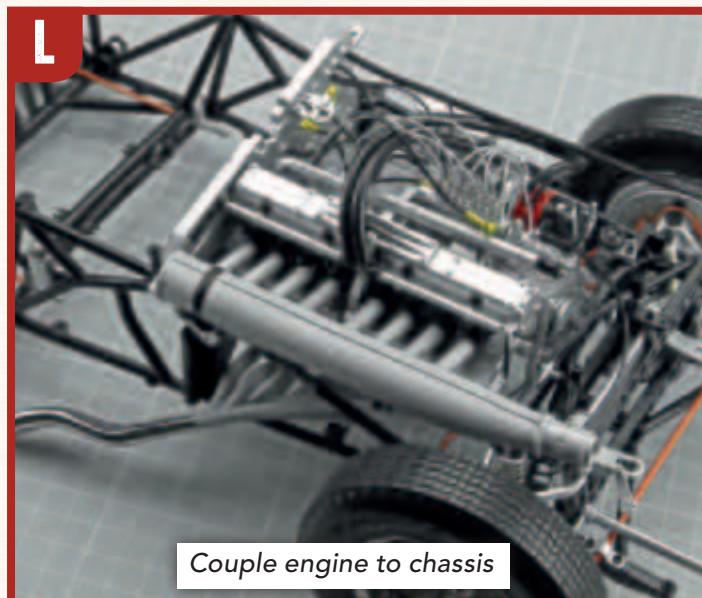
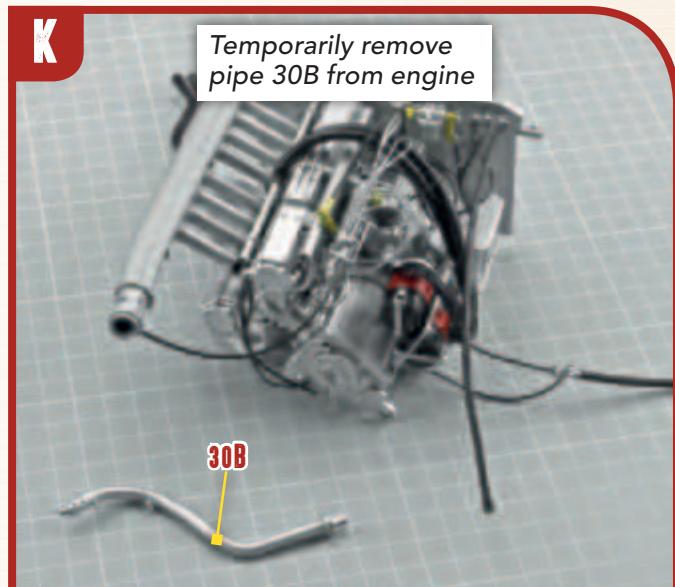
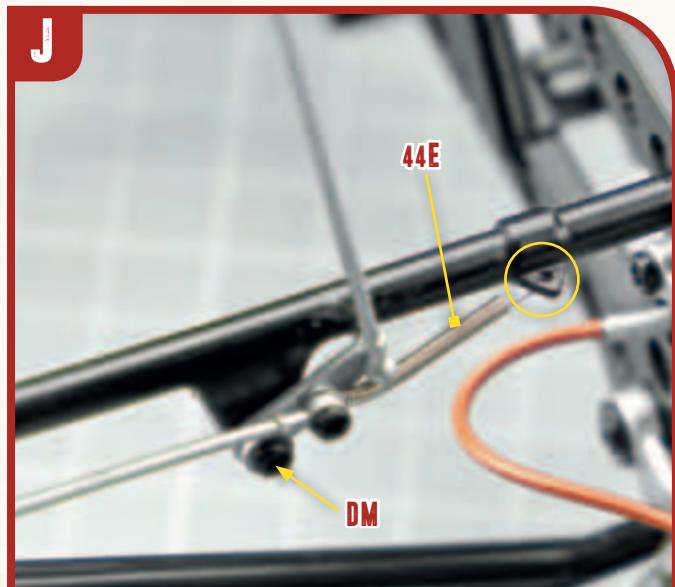
- | | |
|------------|---------------------------|
| 44A | Exhaust manifold |
| 44B | Flange |
| 44C | Accelerator rod 1 |
| 44D | Lever 1 |
| 44E | Spring |
| 44F | Lever 2 |
| 44G | Accelerator rod 2 |
| 44H | Lever 3 |
| 44I | Fuel line 4 (replacement) |

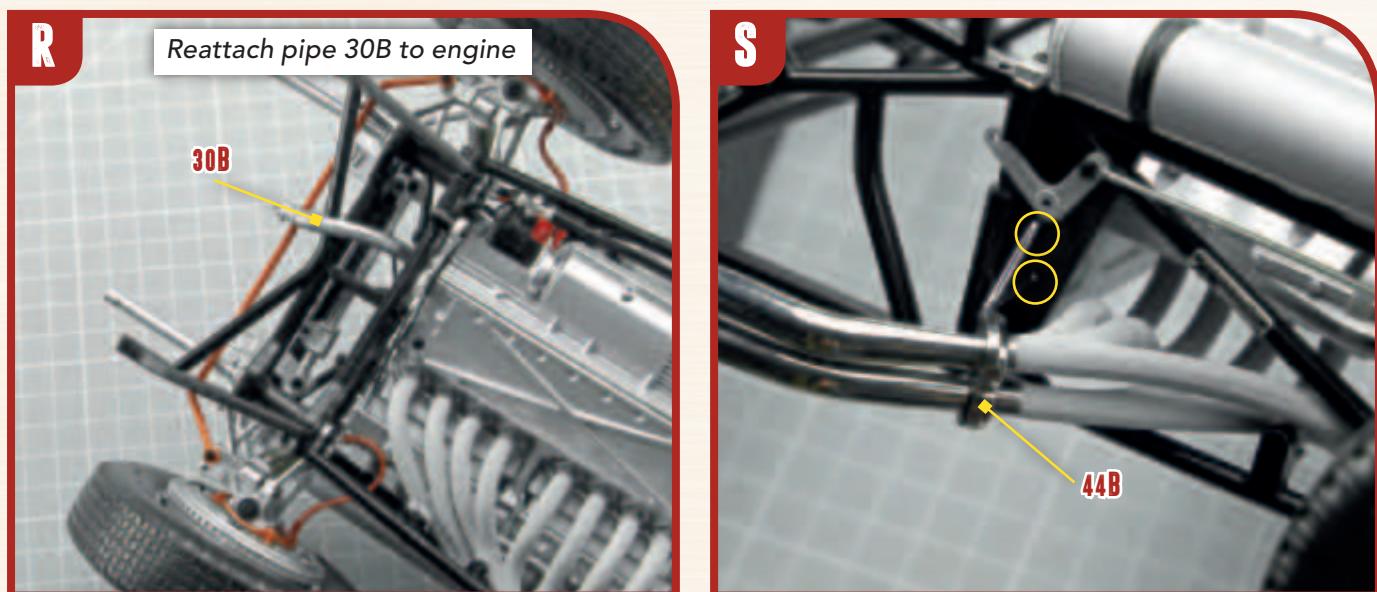
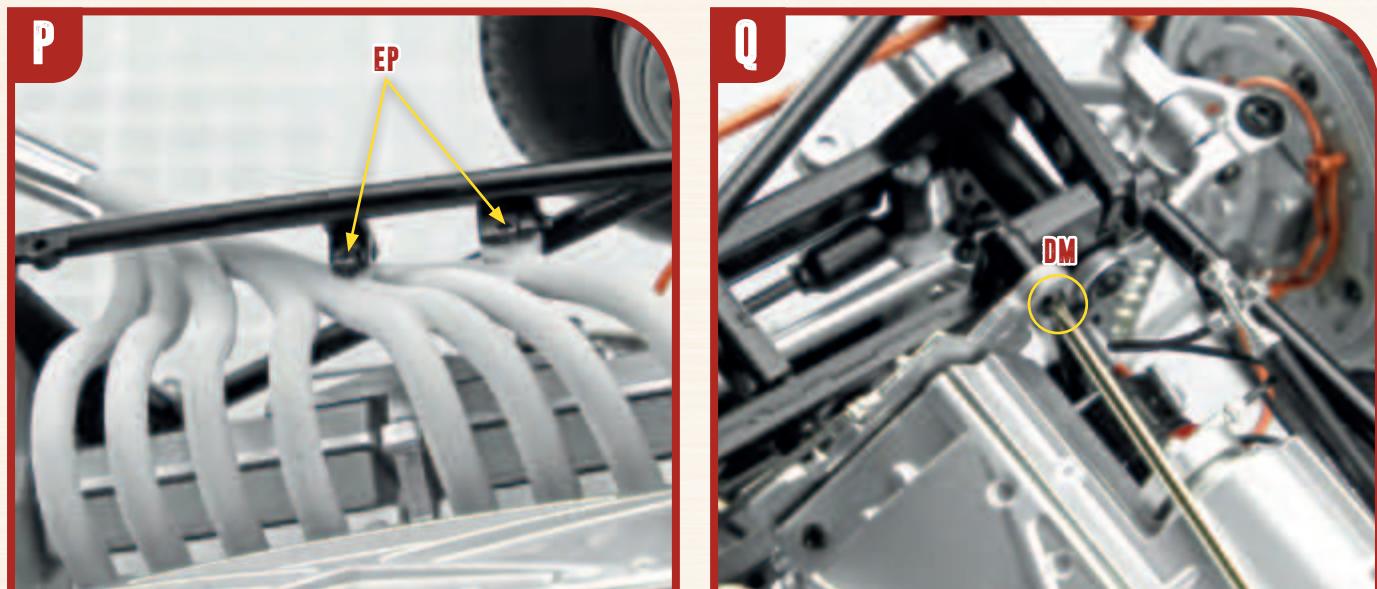
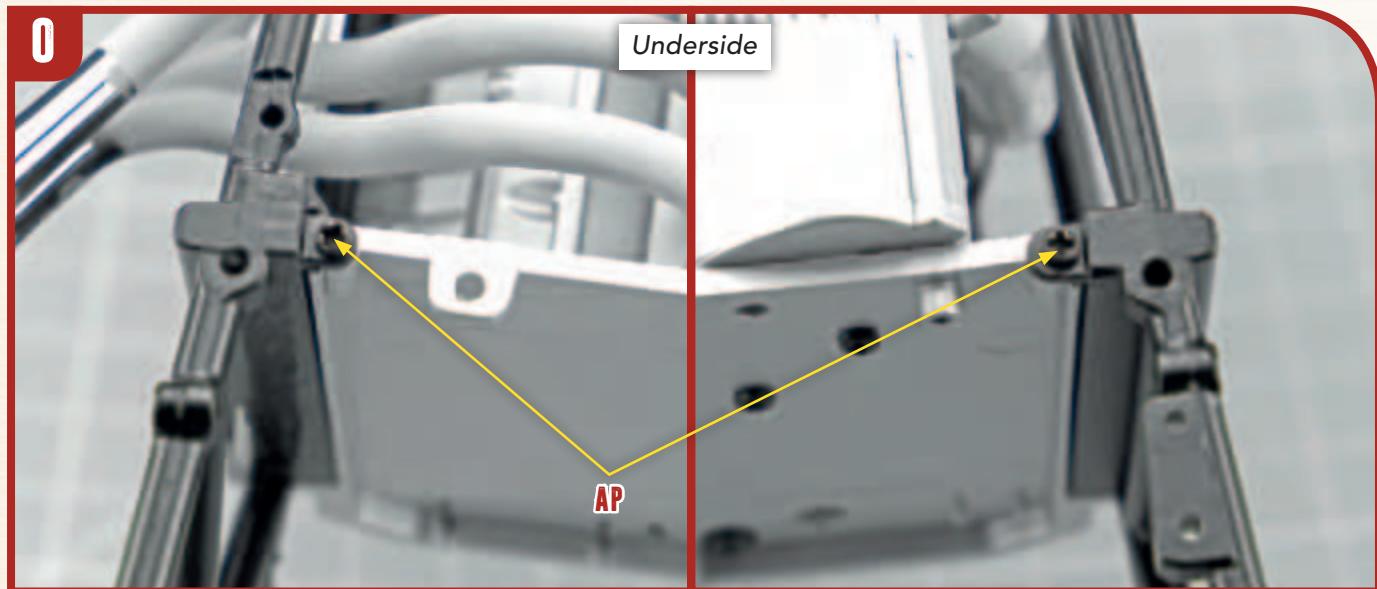
- | | |
|-----------|--------------------|
| AP | 3 screws (1.7x4mm) |
| EP | 3 screws (2x4mm) |
| HP | 2 screws (1.7x5mm) |
| JP | 3 screws (2.3x6mm) |
| KP | 3 screws (1.7x3mm) |
| DM | 5 screws (2x4mm) |
| JM | 3 screws (2x5mm) |
| MM | 2 screws (2x7mm) |





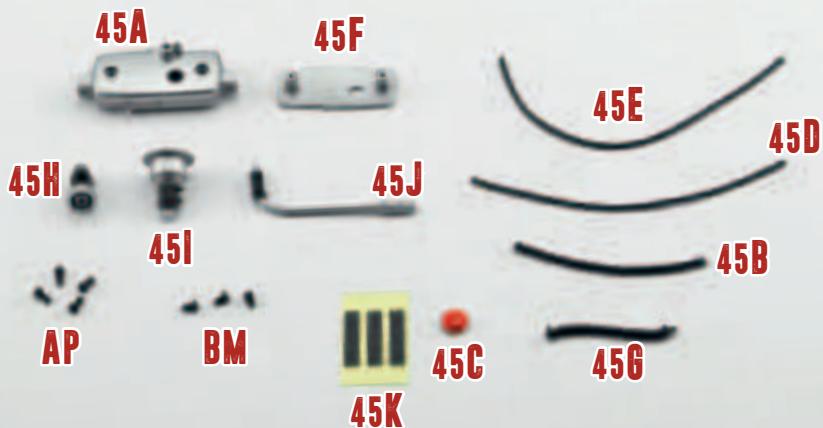
step by step #44





step by step #45

45 PARTS LIST

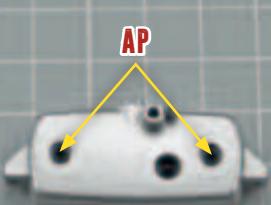


45A	Expansion tank part A
45B	Tube 1
45C	Cap
45D	Tube 2
45E	Tube 3
45F	Expansion tank part B
45G	Pipe 1
45H	Pipe 2
45I	Pipe 3
45J	Pipe 4
45K	Adhesive tape
AP	4 screws (1.7x4mm)
BM	3 screws (1.7x3mm)

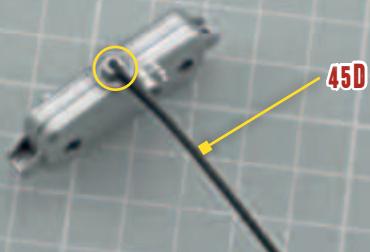
A



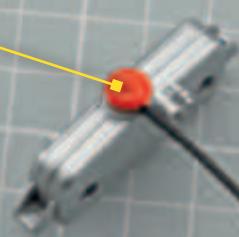
AP



B

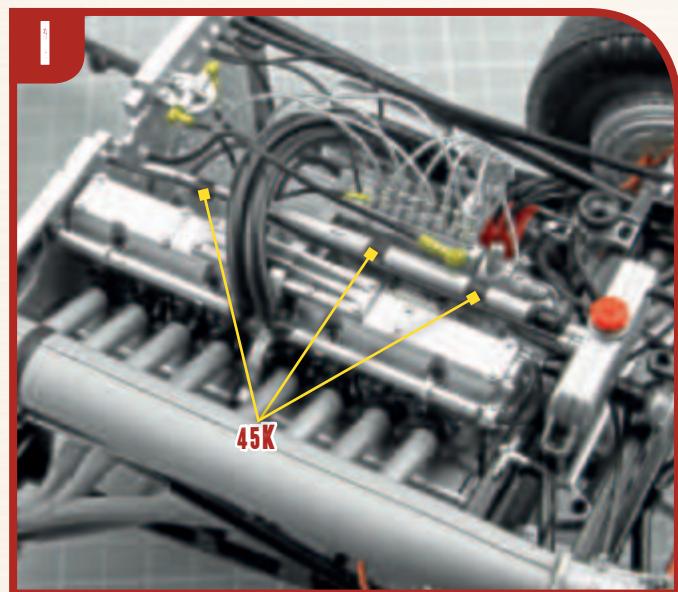
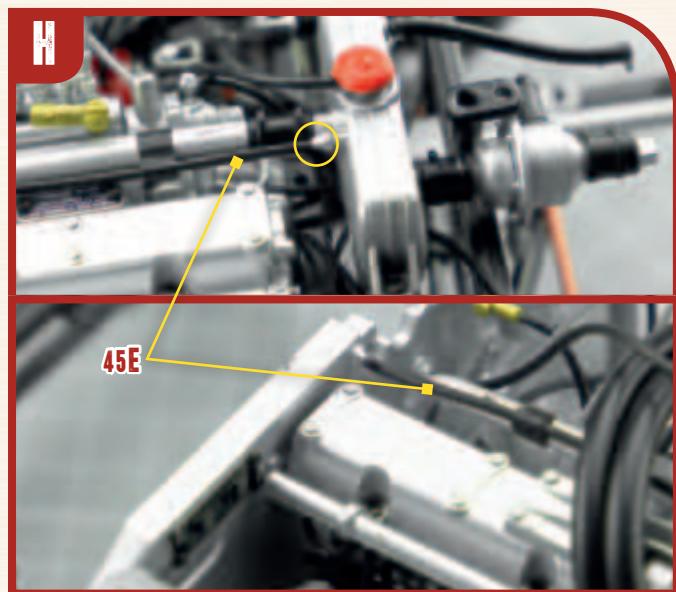
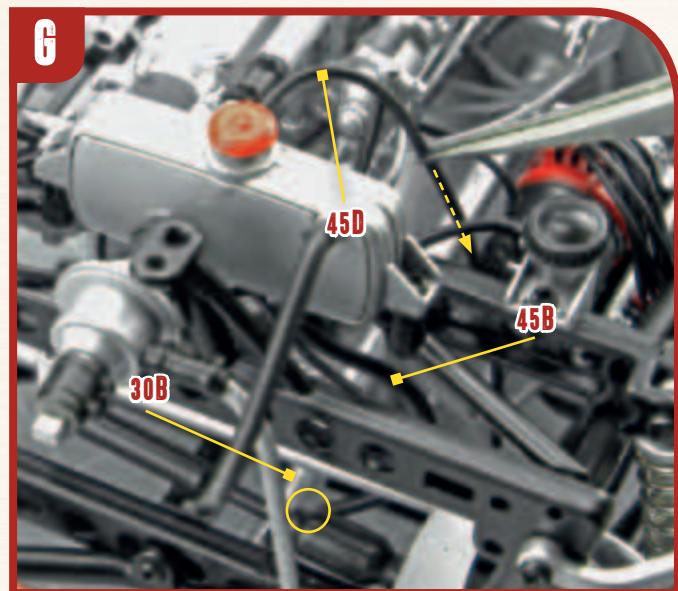
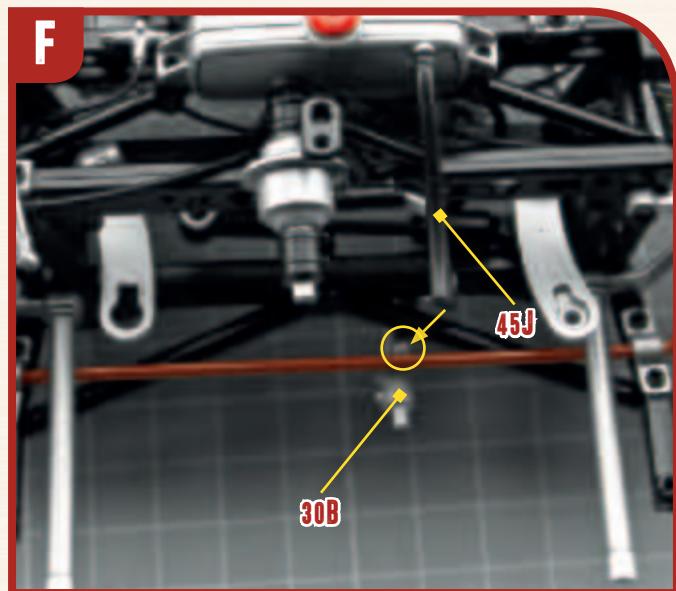
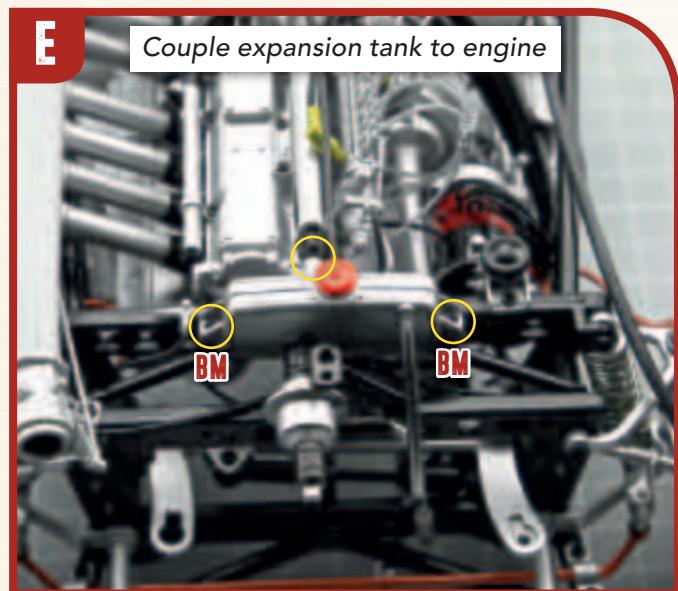


45C



C

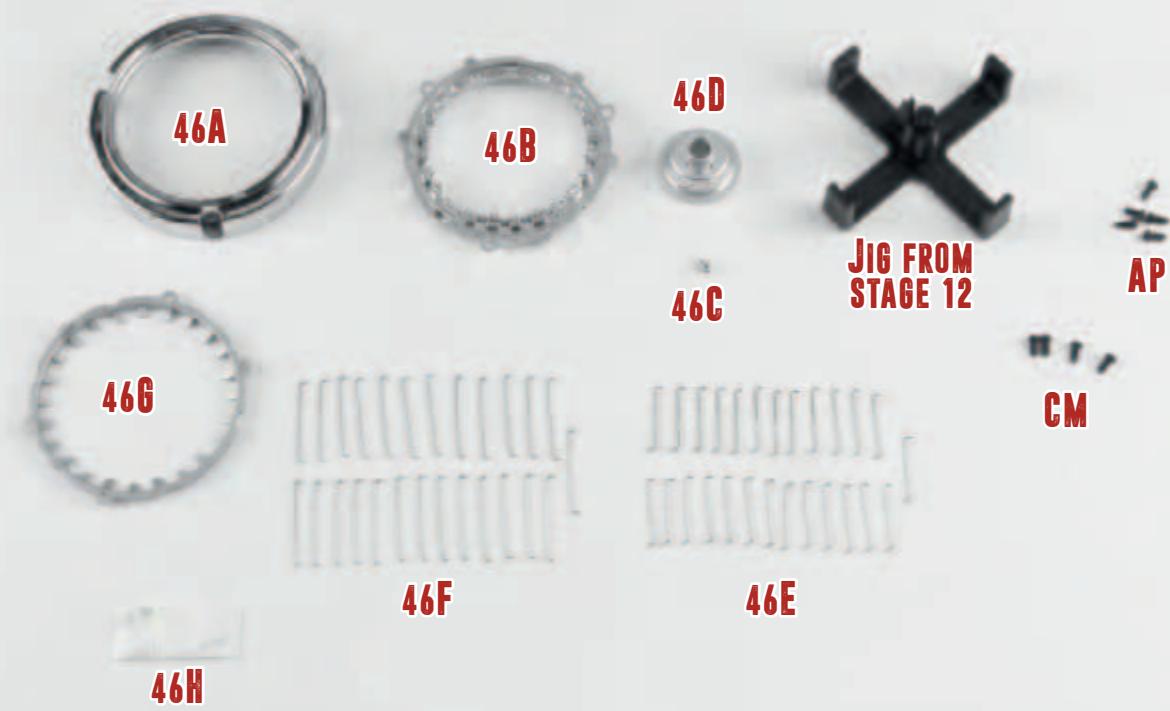




step by step #46

46 PARTS LIST

REGULAR ASSEMBLY



46A Outer rim

46B Central ring 1

46C Inflation valve

46D Hub 1

46E Spokes 1

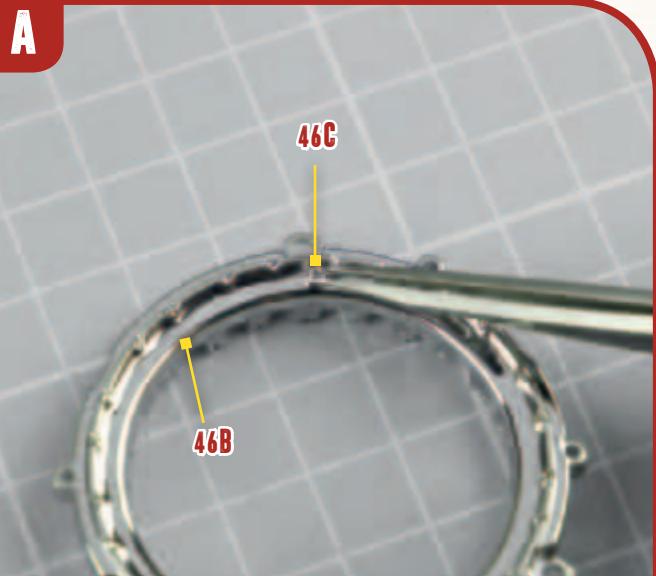
46F Spokes 2

46G Central ring 2

46H Double-sided tape

AP 5 screws (1.7x4mm)

CM 4 screws (1.7x4mm)



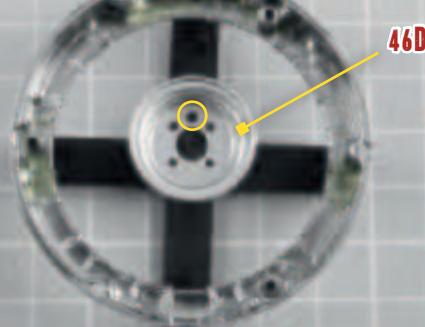
C

Apply 24 pieces of double-sided tape 46H to 46A's inner profile and tear off their top sheets.



46H

46A

**D**

46D

E

Insert 1 spoke 46F through a hole in 46D's first level (counting from the bottom).



46D

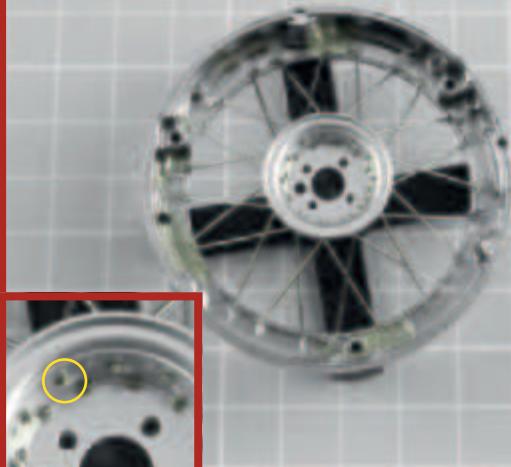
46F

F

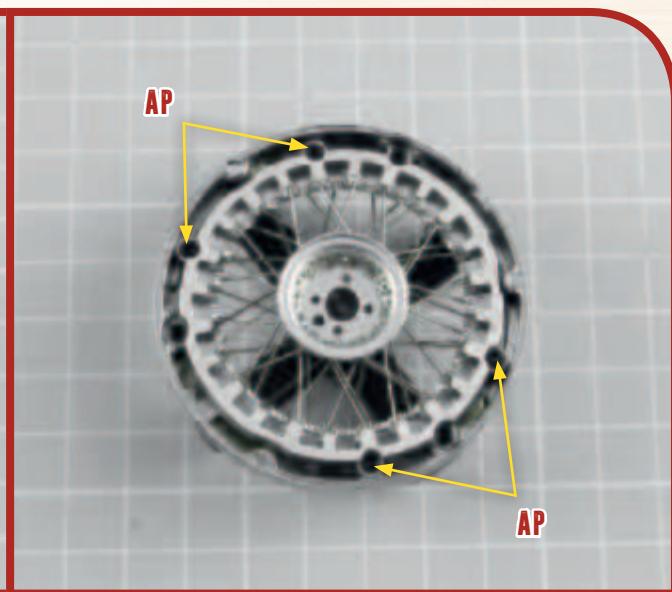
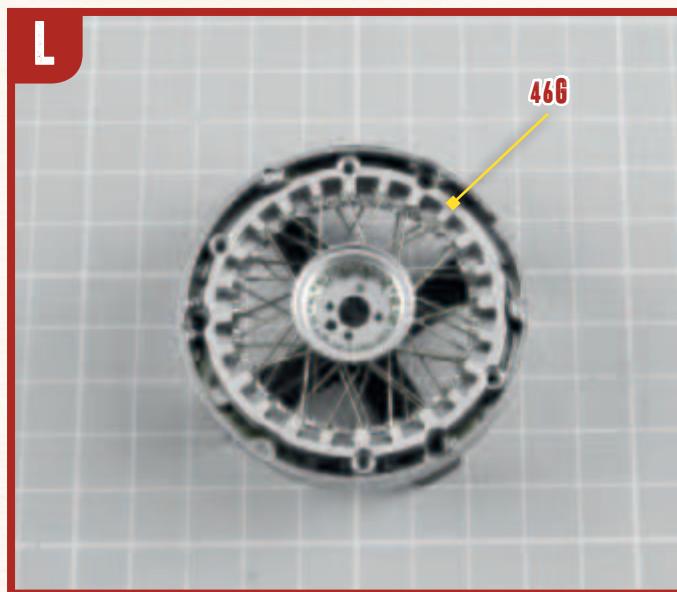
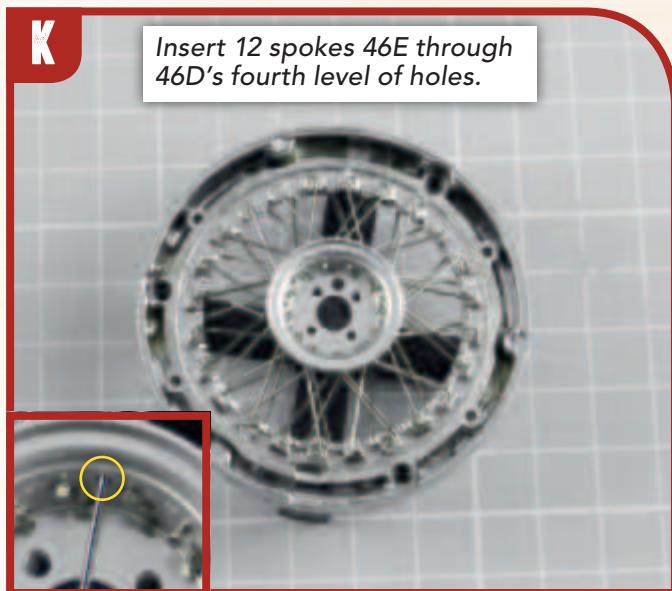
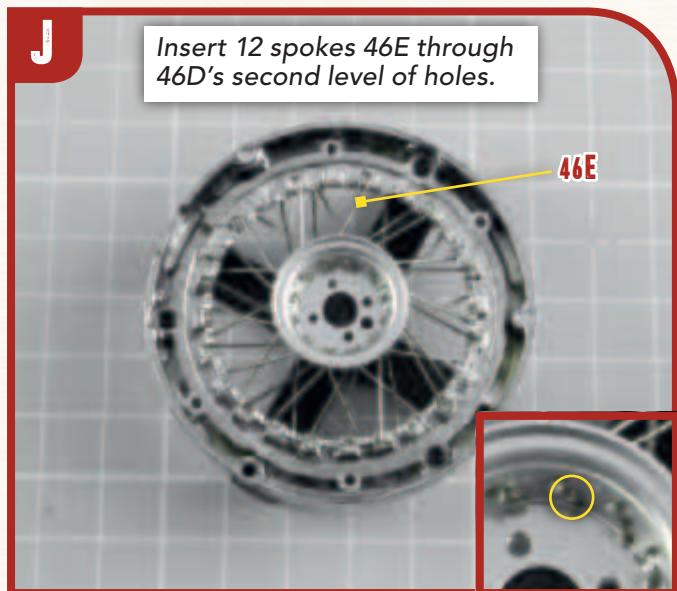
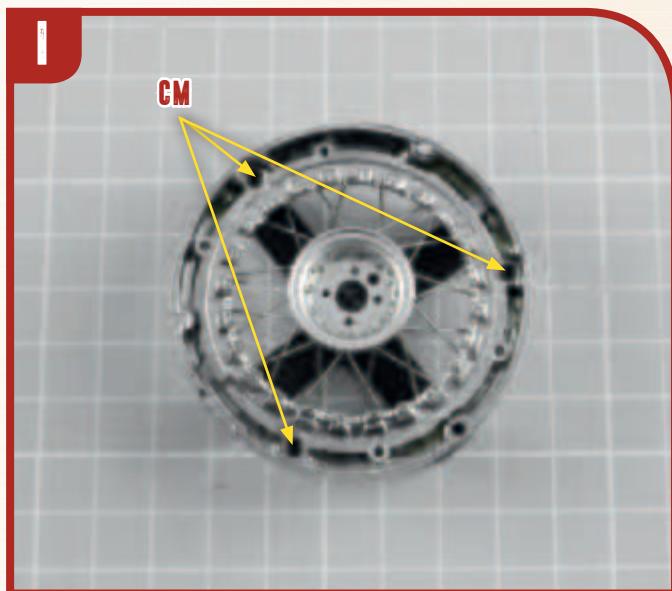
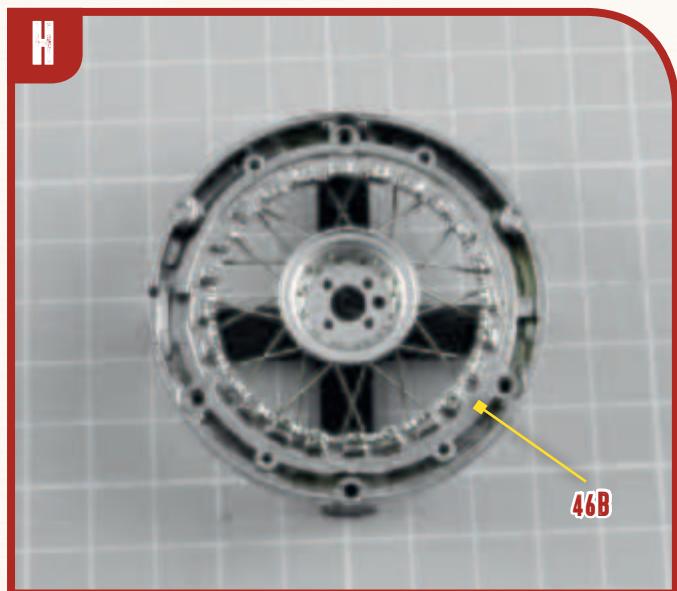
Repeat the process with other 11 spokes 46F.

**G**

Insert 12 spokes 46F through 46D's third level of holes.



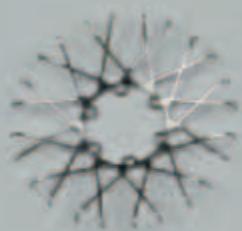
step by step #46



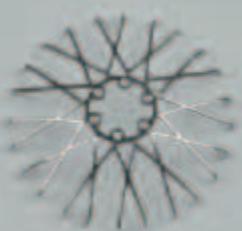
46B PARTS LIST

EASY ASSEMBLY

46FF



46GG



46AA



46CC



46EE



46BB



46DD



LP



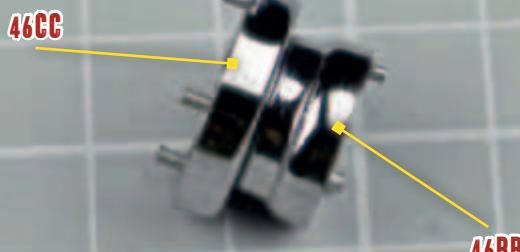
TP

UP

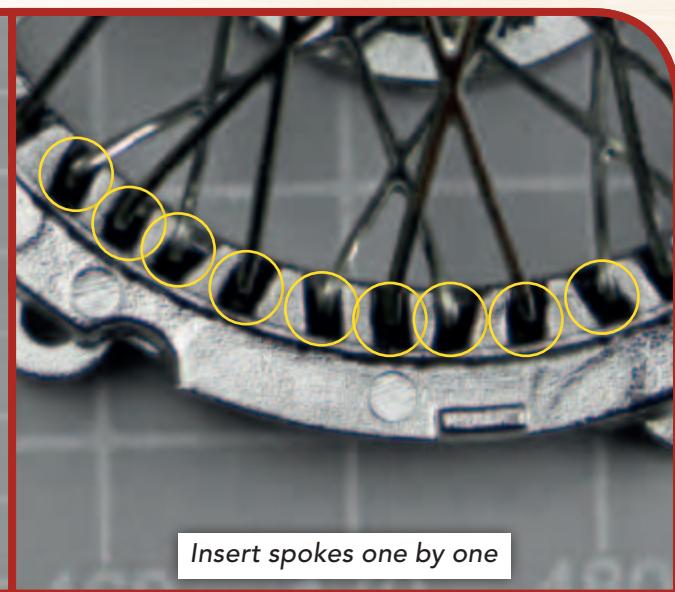
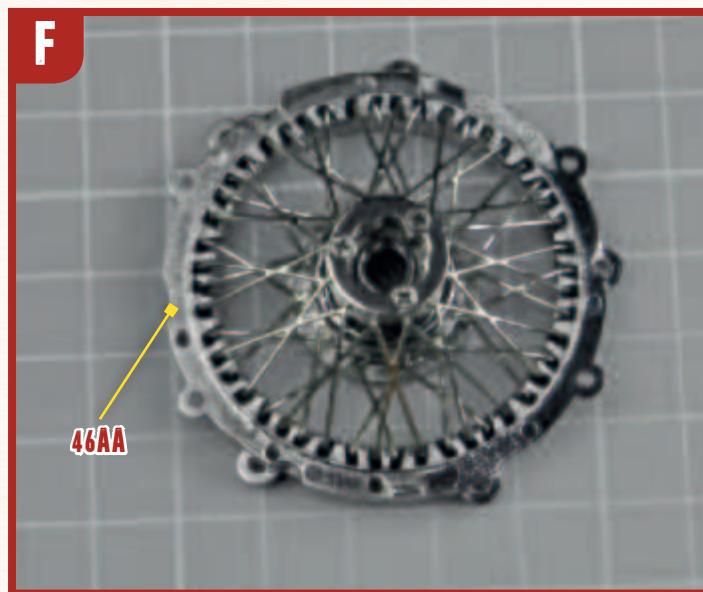
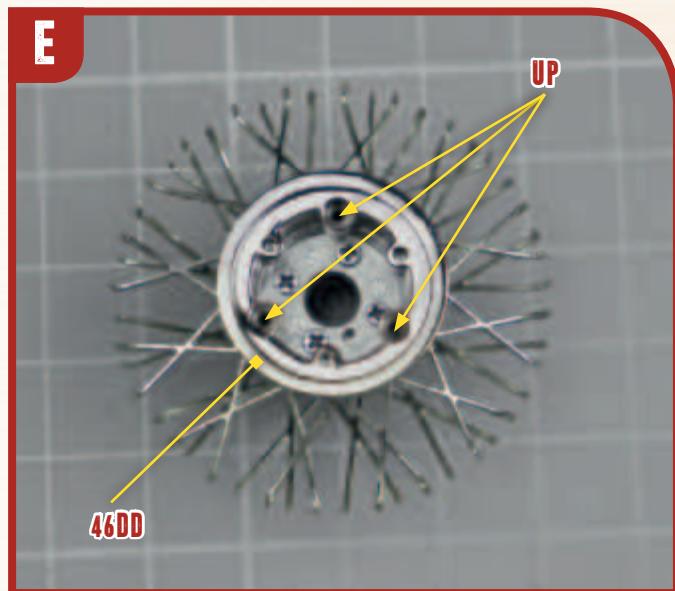
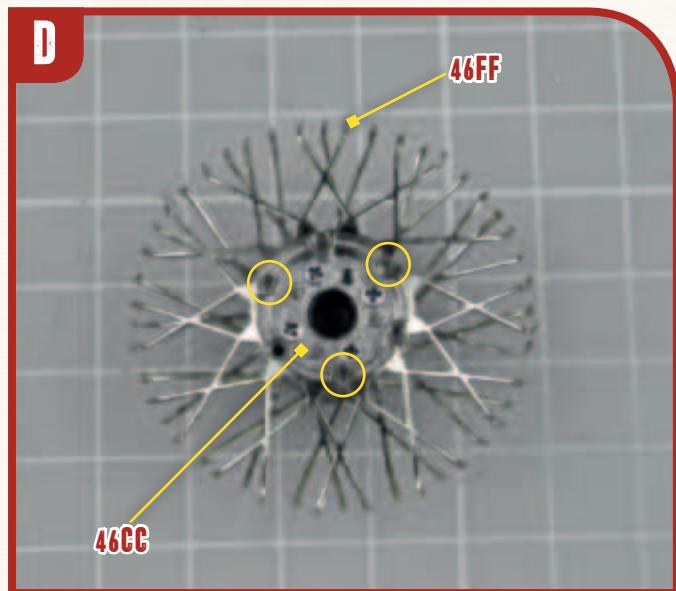
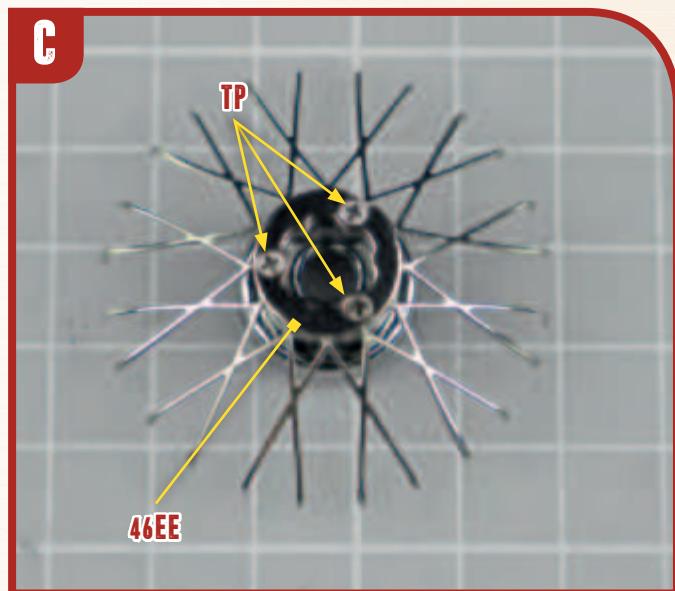
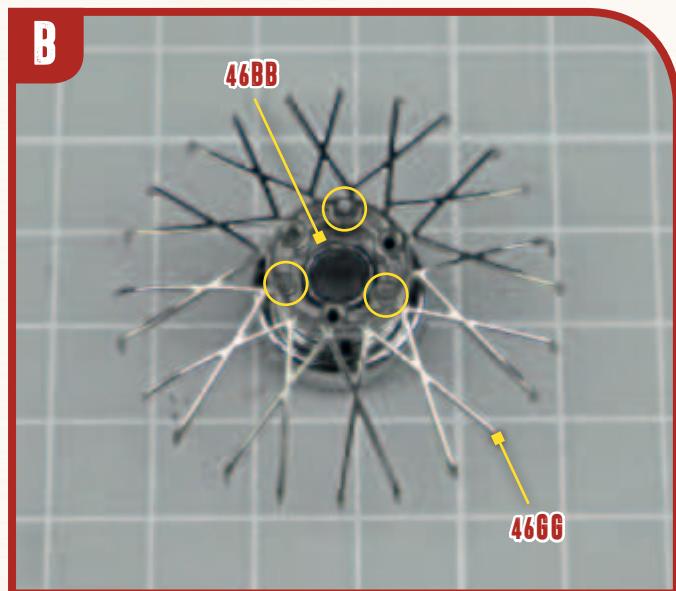
TWEezERS FROM
STAGE 12

- 46AA** Central ring 1
46BB Hub 1
46CC Hub 2
46DD Hub 3
46EE Hub 4
46FF Spokes 1

- 46GG** Spokes 2
LP 5 screws (1.5x3mm)
TP 4 screws (1.5x5mm)
UP 4 screws (1.7x4mm)

A

step by step #46B



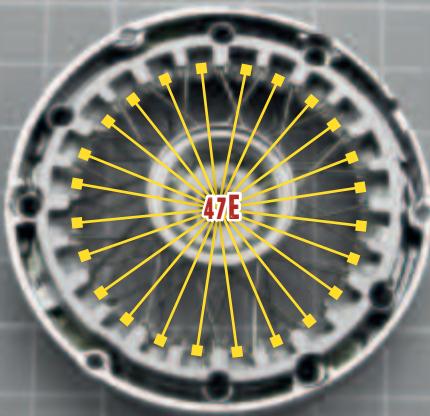
47 PARTS LIST

REGULAR ASSEMBLY

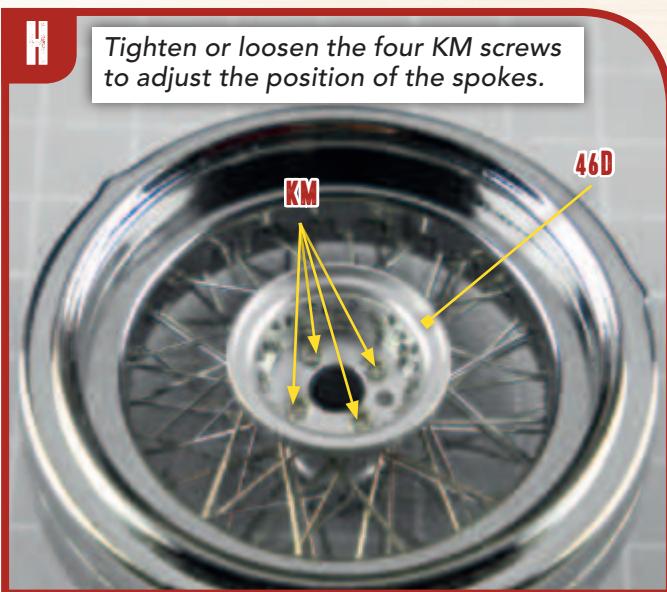
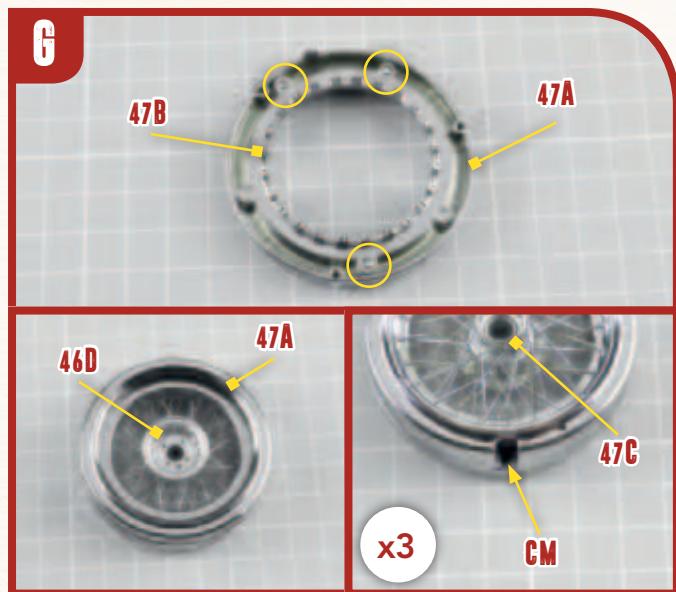
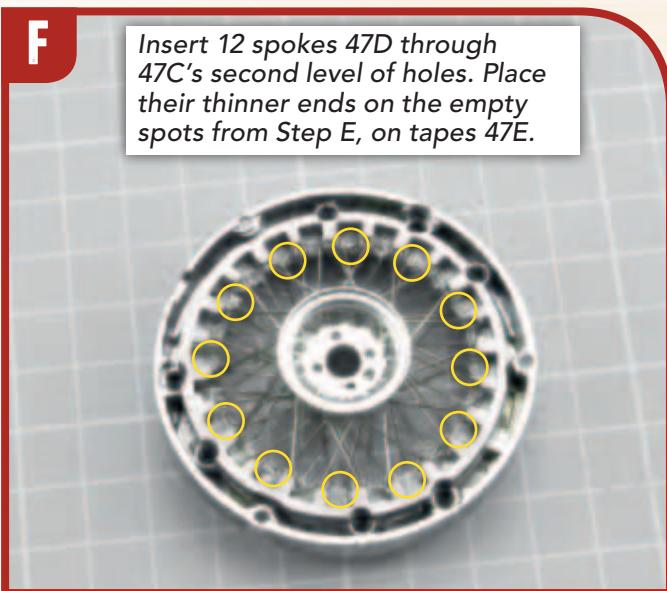
- 47A** Inner rim
47B Central ring 3
47C Hub 2
47D Spokes 3
47E Double-sided tape
CM 4 screws (1.7x4mm)
KM 5 screws (1.5x5mm)

**A**

Apply 24 pieces of double-sided tape 47E to 46B's inner profile and tear off their top sheets.

**B****C**

step by step #47



47B PARTS LIST

EASY ASSEMBLY

47AA

47BB

47CC

47DD

AP

CM

47AA Outer rim

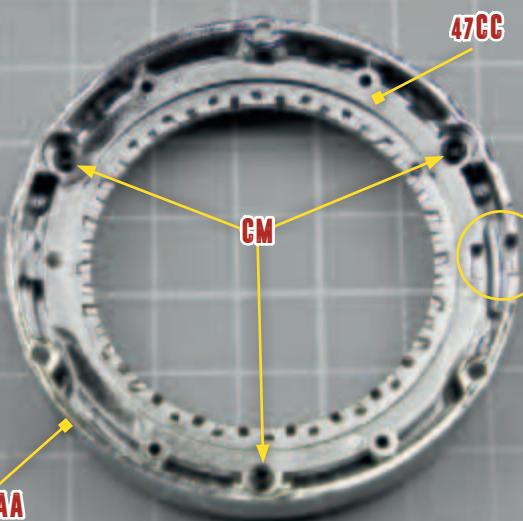
47BB Inner rim

47CC Central ring 2

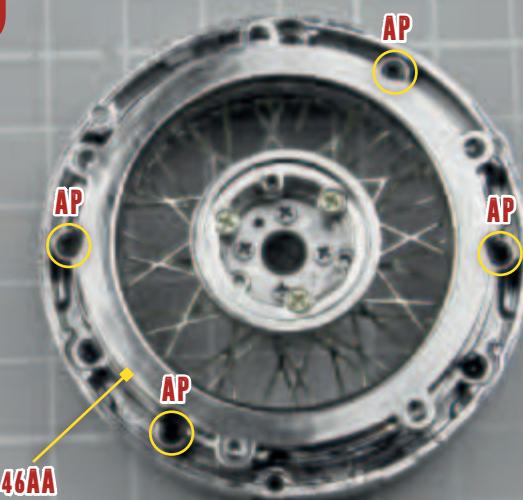
47DD Inflation valve

AP 5 screws (1.7x4mm)
CM 8 screws (1.7x4mm)

B



C



D



E



step by step #48

48 PARTS LIST

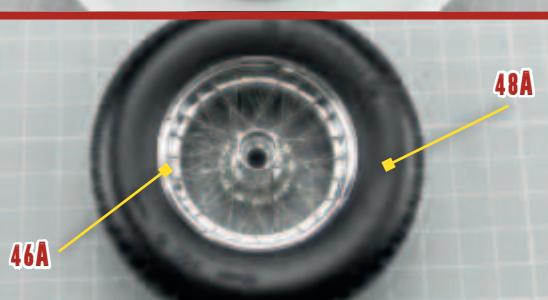
REGULAR ASSEMBLY

- 48A Tyre
- 48B Hub 3
- 48C Hubcap
- 48D Washer ring
- JM 2 screws (2x5mm)



A

Soften tyre 48A by placing it in a bowl full of hot water.



B



C

Attach wheel to rear suspension left wishbone 27A



D



48B PARTS LIST

EASY ASSEMBLY

48AA Tyre
48BB Hubcap
48CC Hub 5
48DD Washer ring

JM 2 screws (2x5mm)

**A****48AA**

Soften tyre 48AA by placing it in a bowl full of hot water.

B**47BB****48AA****C****48DD****46EE****D****46DD****48CC**

49 PARTS LIST



49B



49A



49E



49C

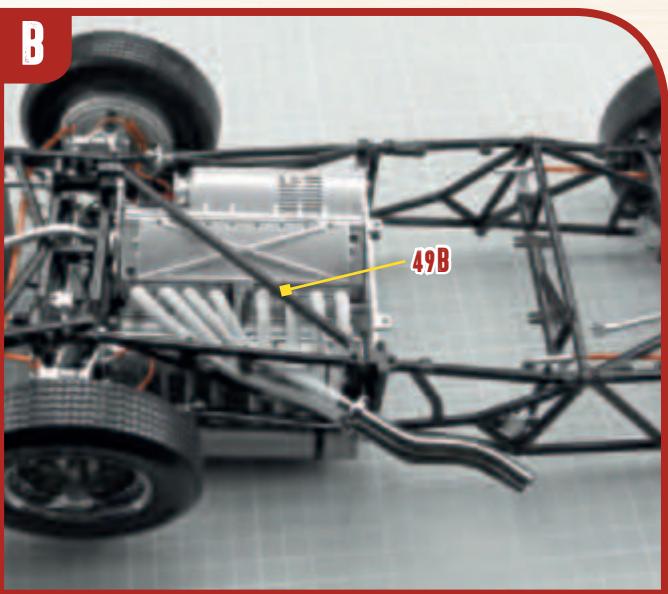
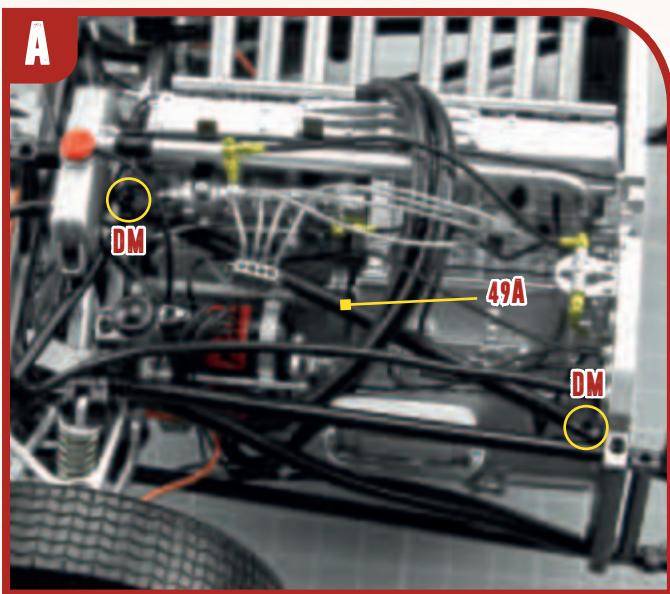
49D

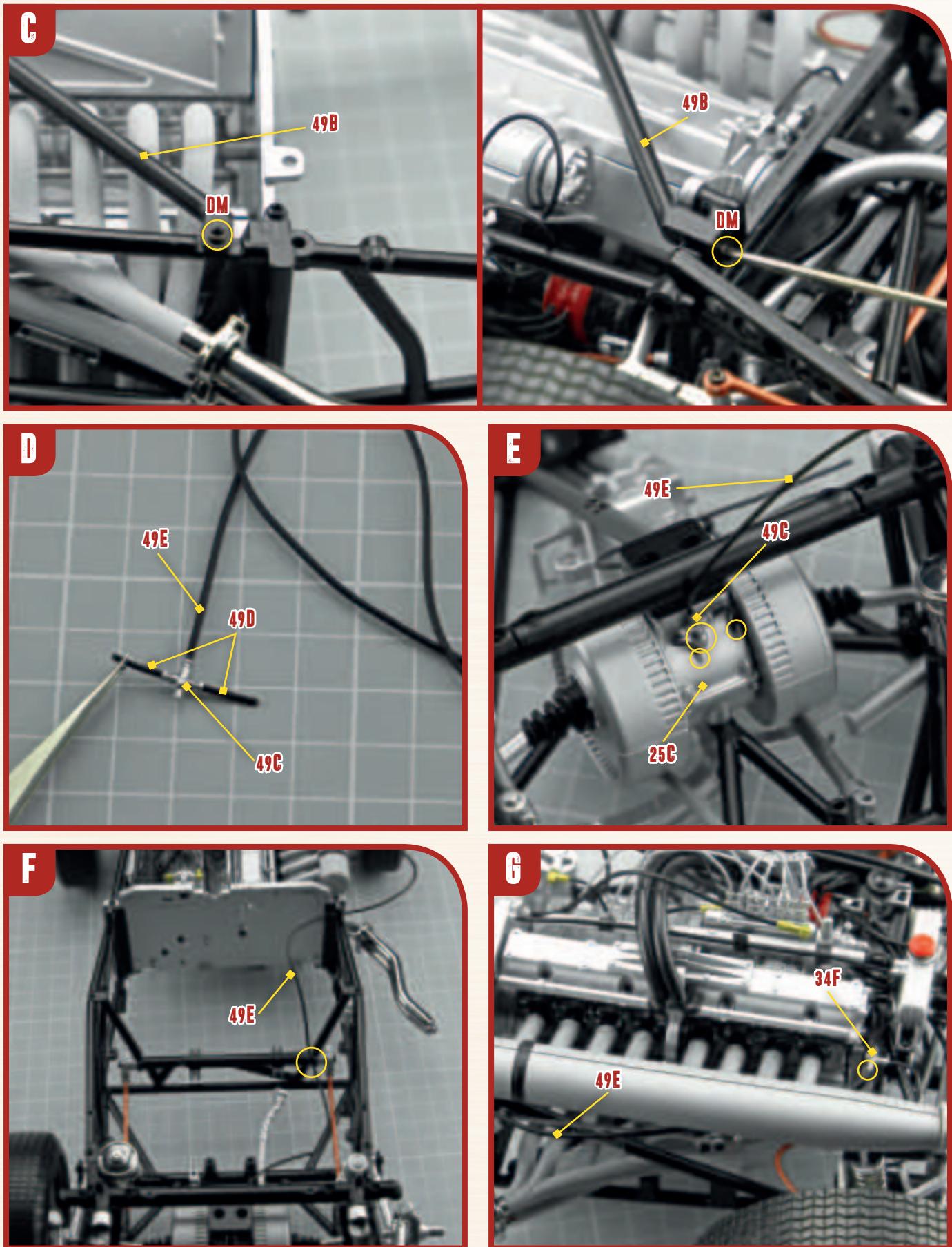
DM

49A Front chassis upper rod
49B Front chassis lower rod
49C Rear brakes distributor

49D Tubes (x2)
49E Rear brakes line

DM 5 screws (2x4mm)





50 PARTS LIST



50A

50E



50B



50C



50E



50D

50F



50G



50H

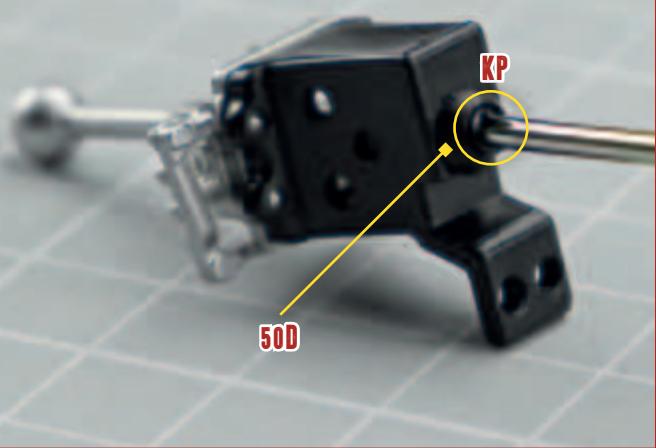
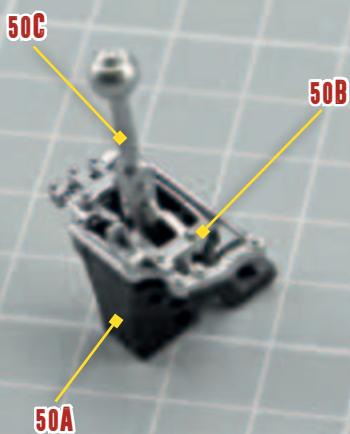


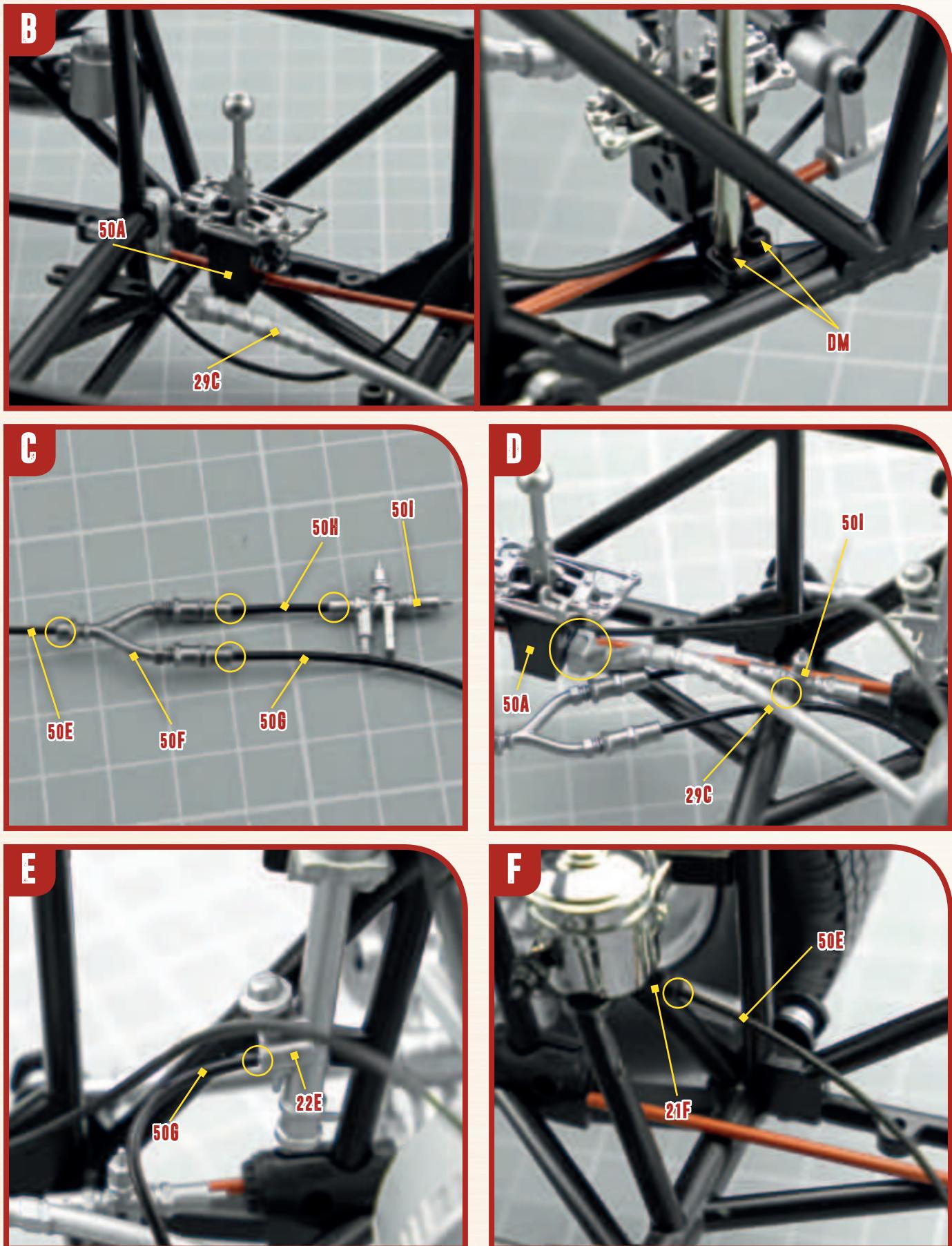
50I

50A Gear lever base
50B Gear lever support
50C Gear lever
50D Washer ring

50E Tube 1
50F Y-shaped pipe
50G Tube 2
50H Tube 3

50I Pipe
KP 2 screws (1.7x3mm)
DM 3 screws (2x4mm)

A



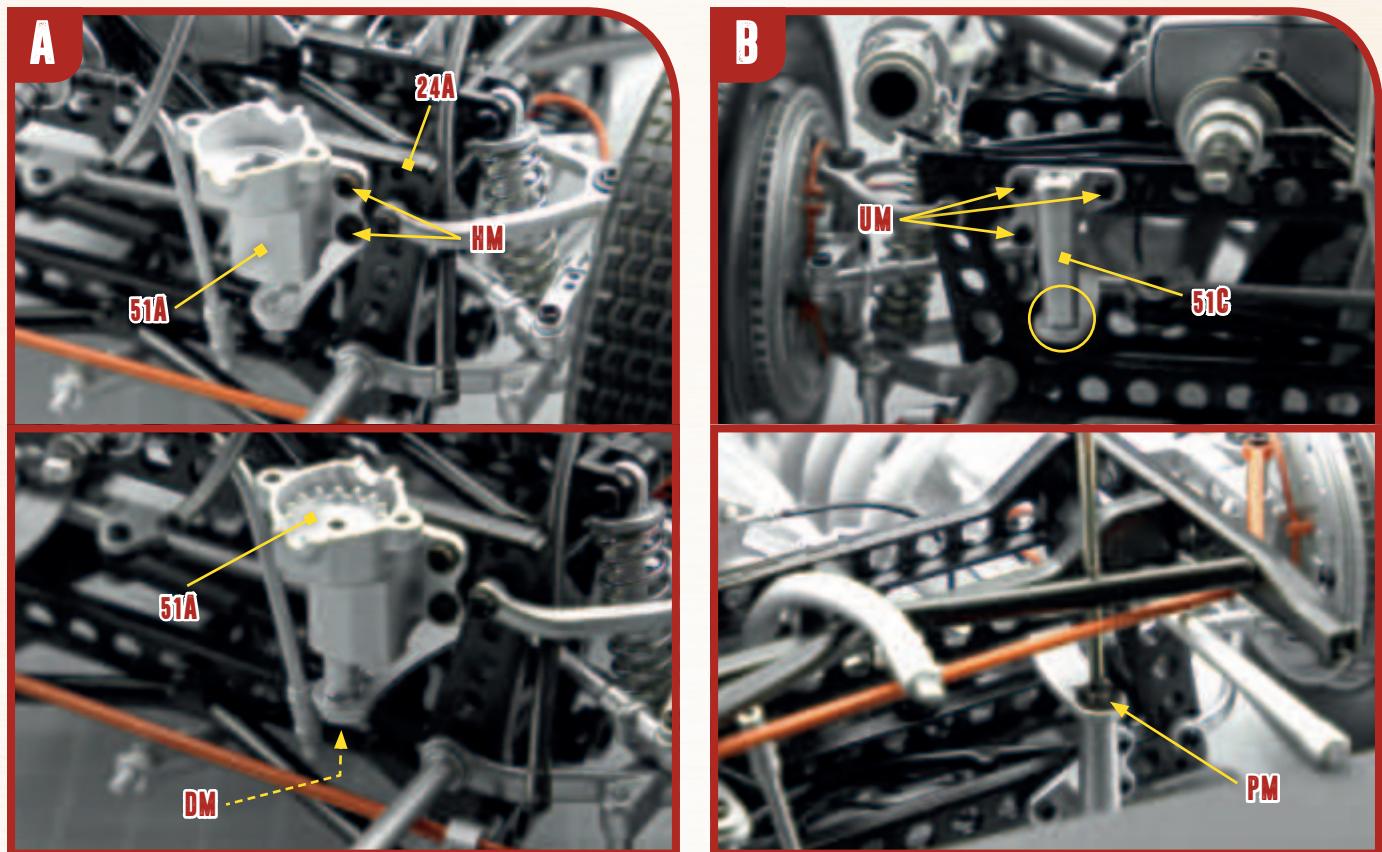
51 PARTS LIST



51A Steering box
51B Steering gear
51C Steering support

DM 2 screws (2x4mm)
HM 3 screws (2.3x5mm)
PM 2 screws (2x3x6mm)

UM 4 screws (1.7x5mm)



52 PARTS LIST



52A



52B



52A

EP

52A Radiator upper cover
52B Radiator frame

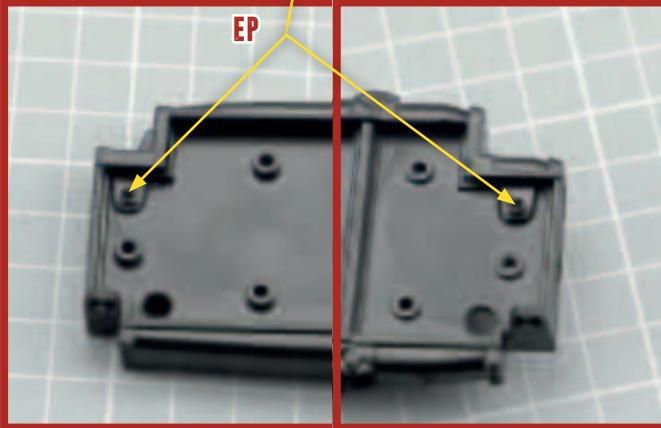
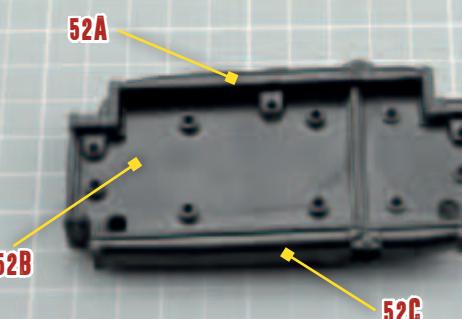
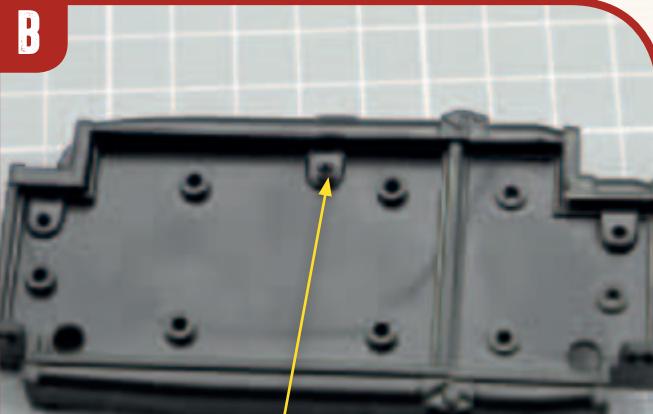
52C Radiator lower cover

EP 4 screws (2x4mm)

A



B



53 PARTS LIST

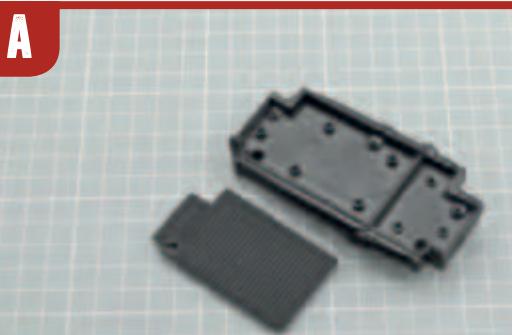


53B



53A

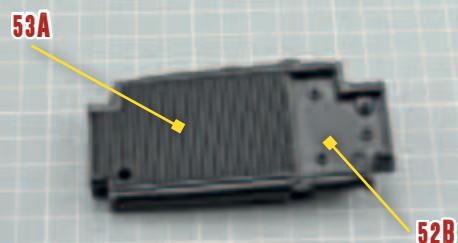
53A Radiator front panel
53B Radiator rear panel



A

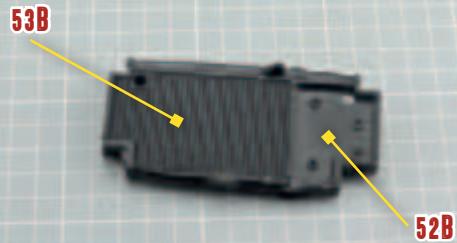


B



53A

52B



53B

52B

54 PARTS LIST



54A



54B



54C



54D



54E

LP

VM

54A Oil radiator front panel

54B Oil radiator rear panel

54C Radiator shock absorber

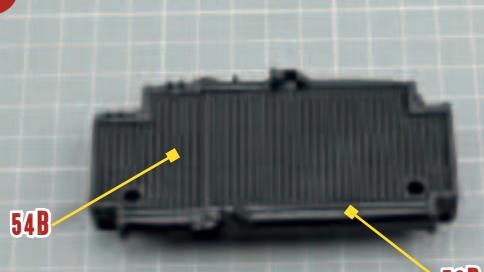
54D Pipe 1

54E Pipe 2

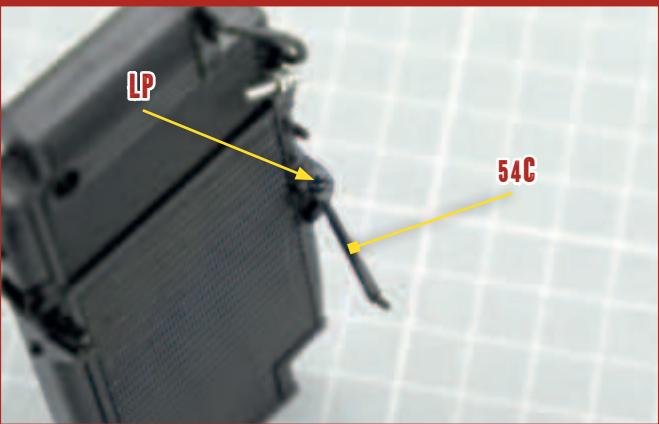
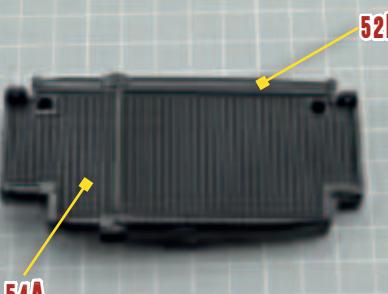
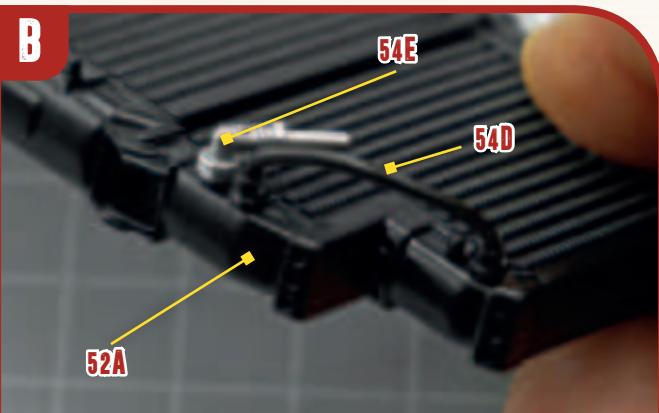
LP 2 screws (1.5x3mm)

VM 3 screws (2x3mm)

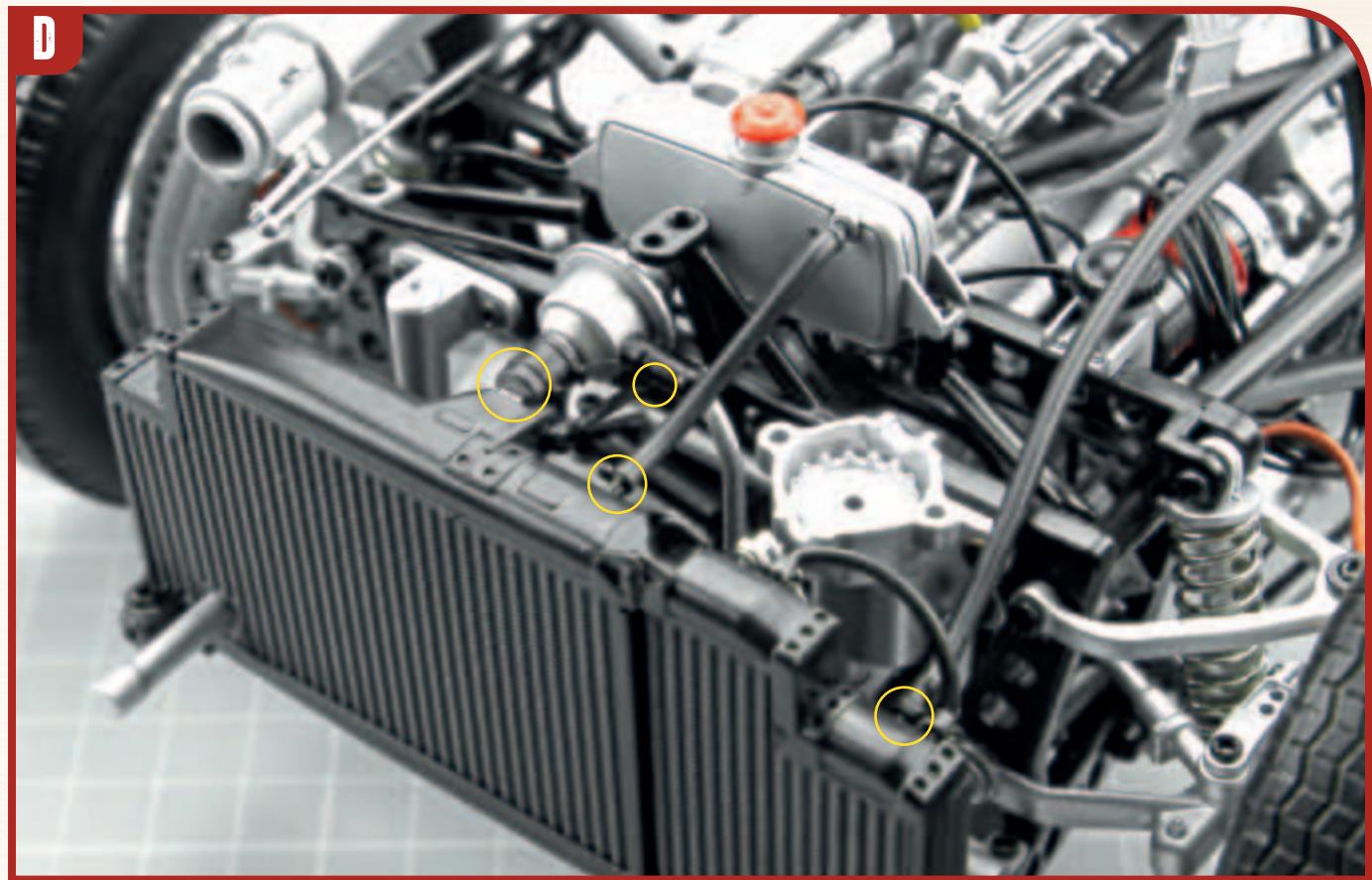
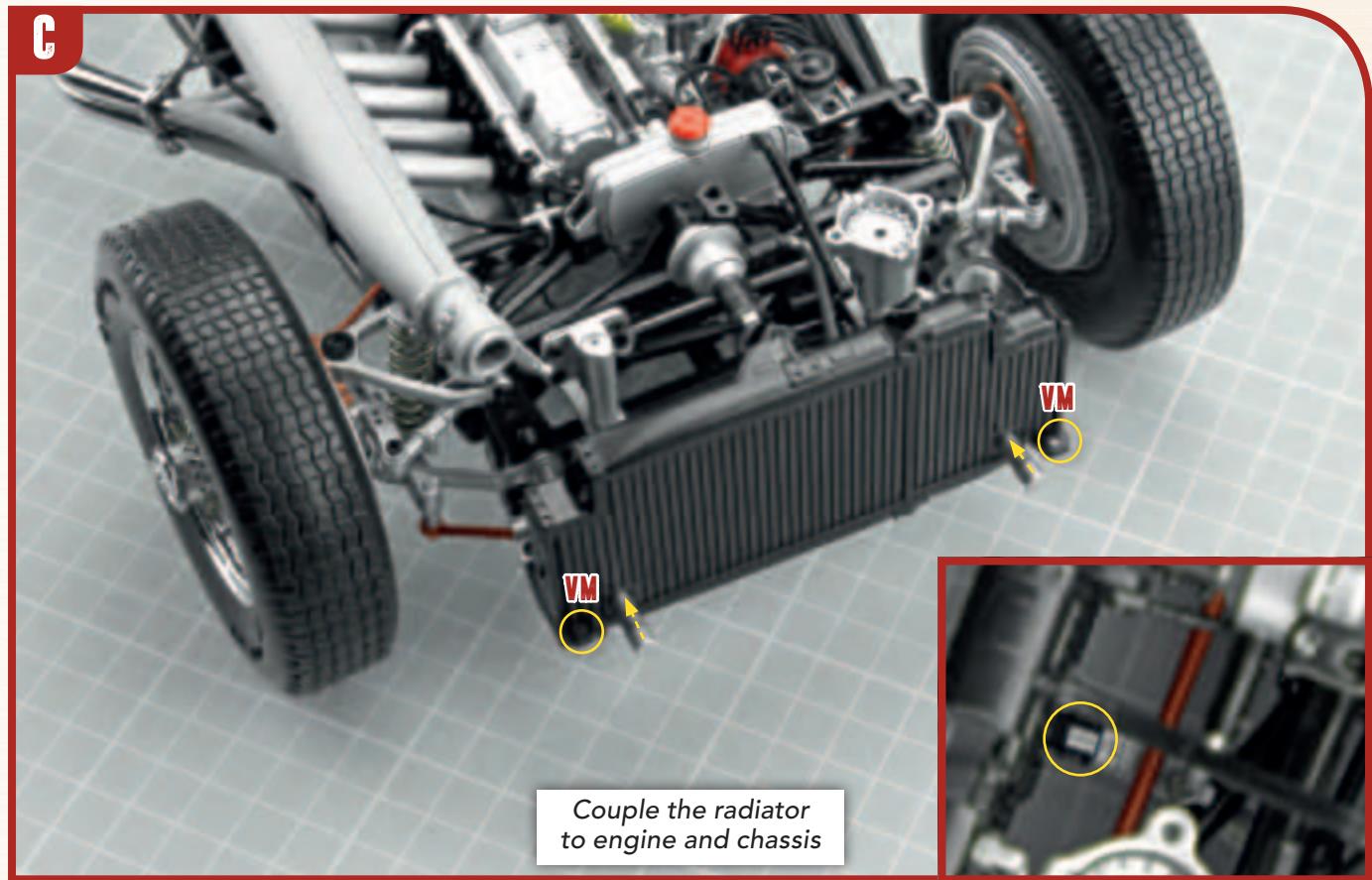
A



B



step by step #54



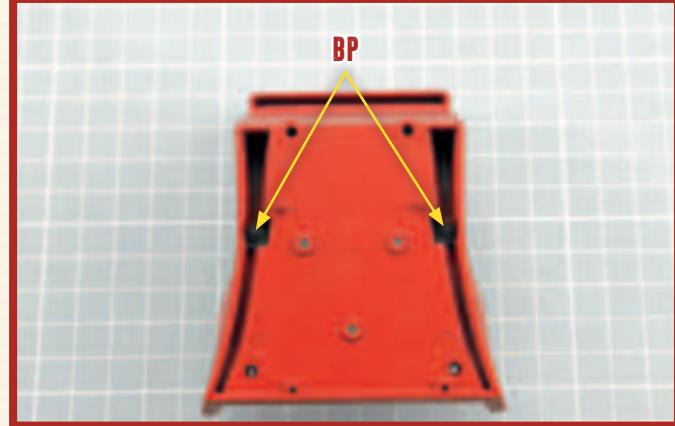
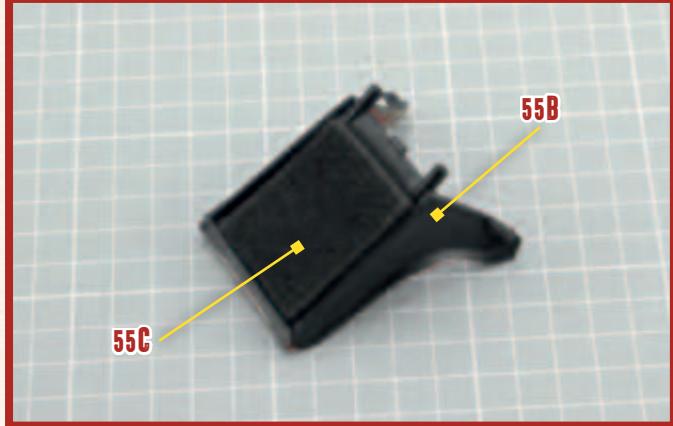
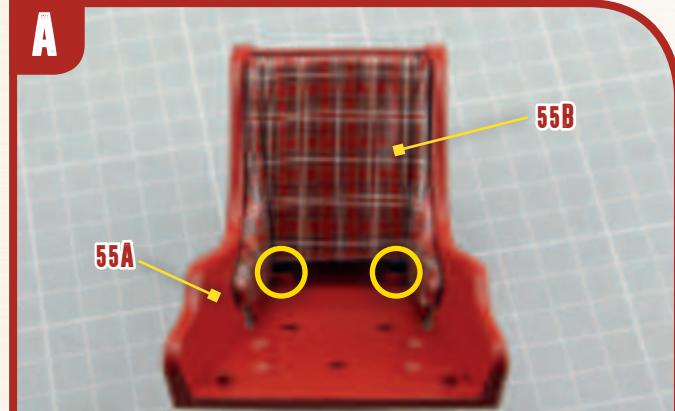
55 PARTS LIST



55A Seat frame
55B Seatback

55C Back padding

BP 3 screws (2x5mm)



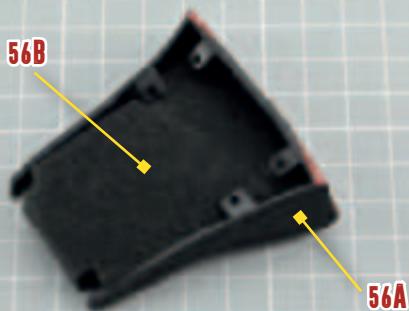
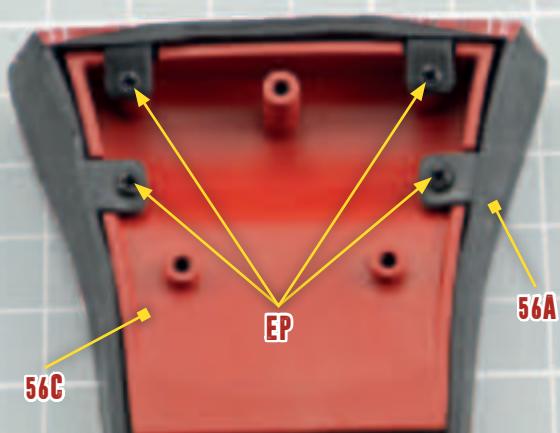
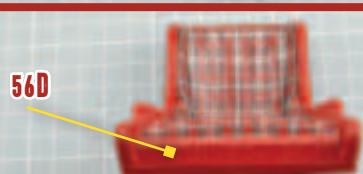
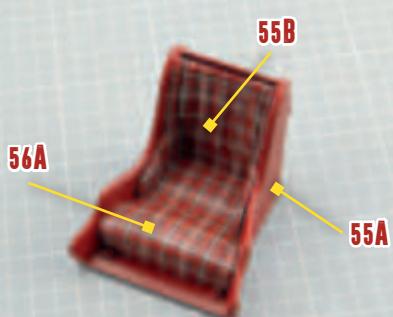
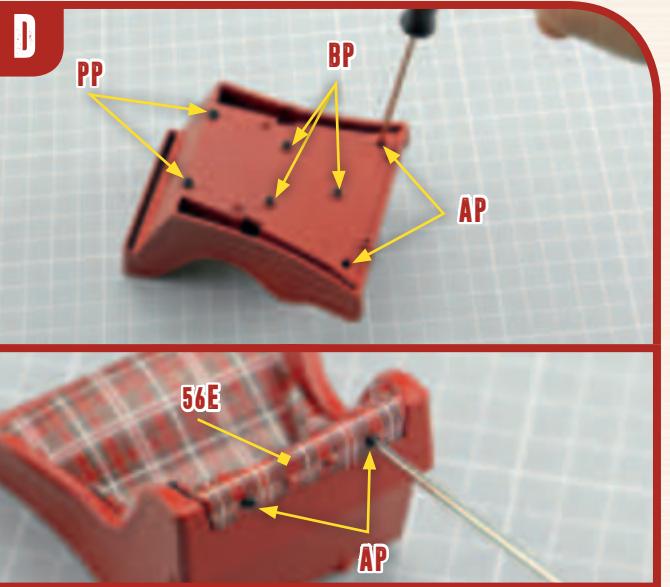
step by step #56

56 PARTS LIST



56A Seat
56B Seat padding
56C Frame part A
56D Frame part B
56E Headrest

AP 5 screws (1.7x4mm)
BP 4 screws (2x5mm)
EP 5 screws (2x4mm)
PP 3 screws (2.6x7mm)

A**B****C****D**

57 PARTS LIST



57A

57C



57B

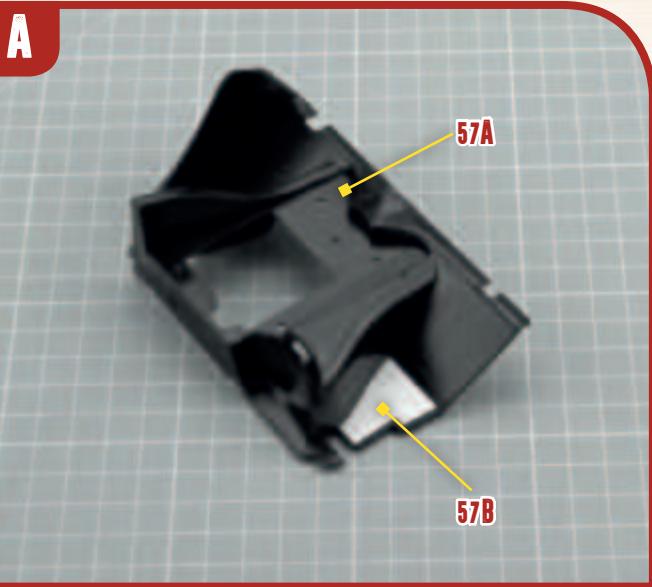


57A Cockpit floor panel

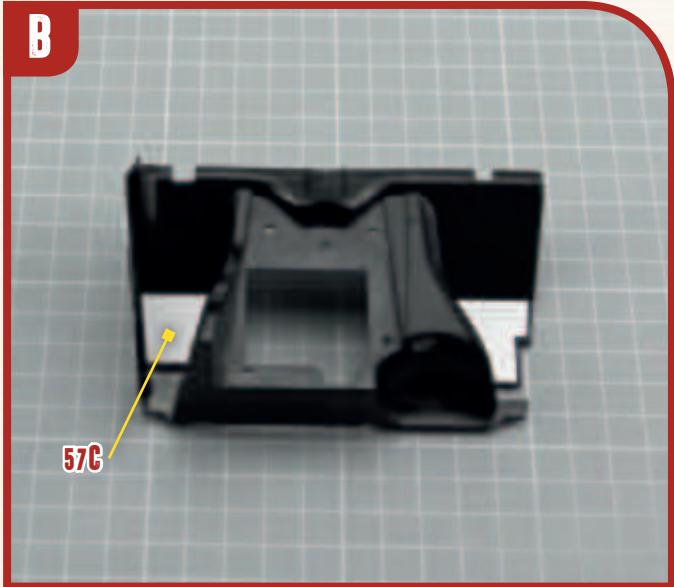
57B Panel 1

57C Panel 2

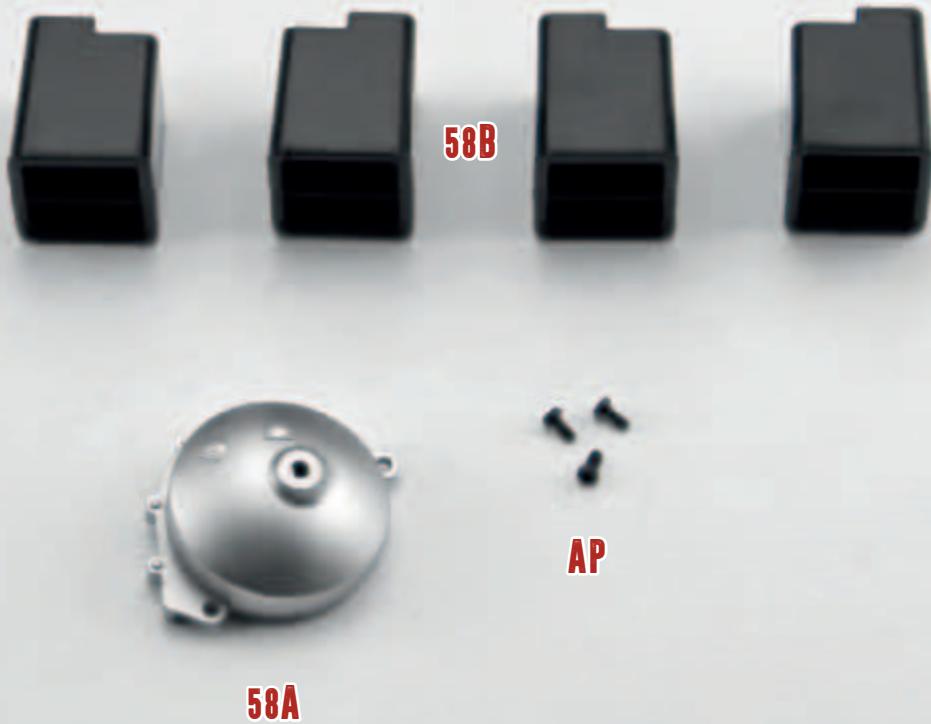
A



B



58 PARTS LIST

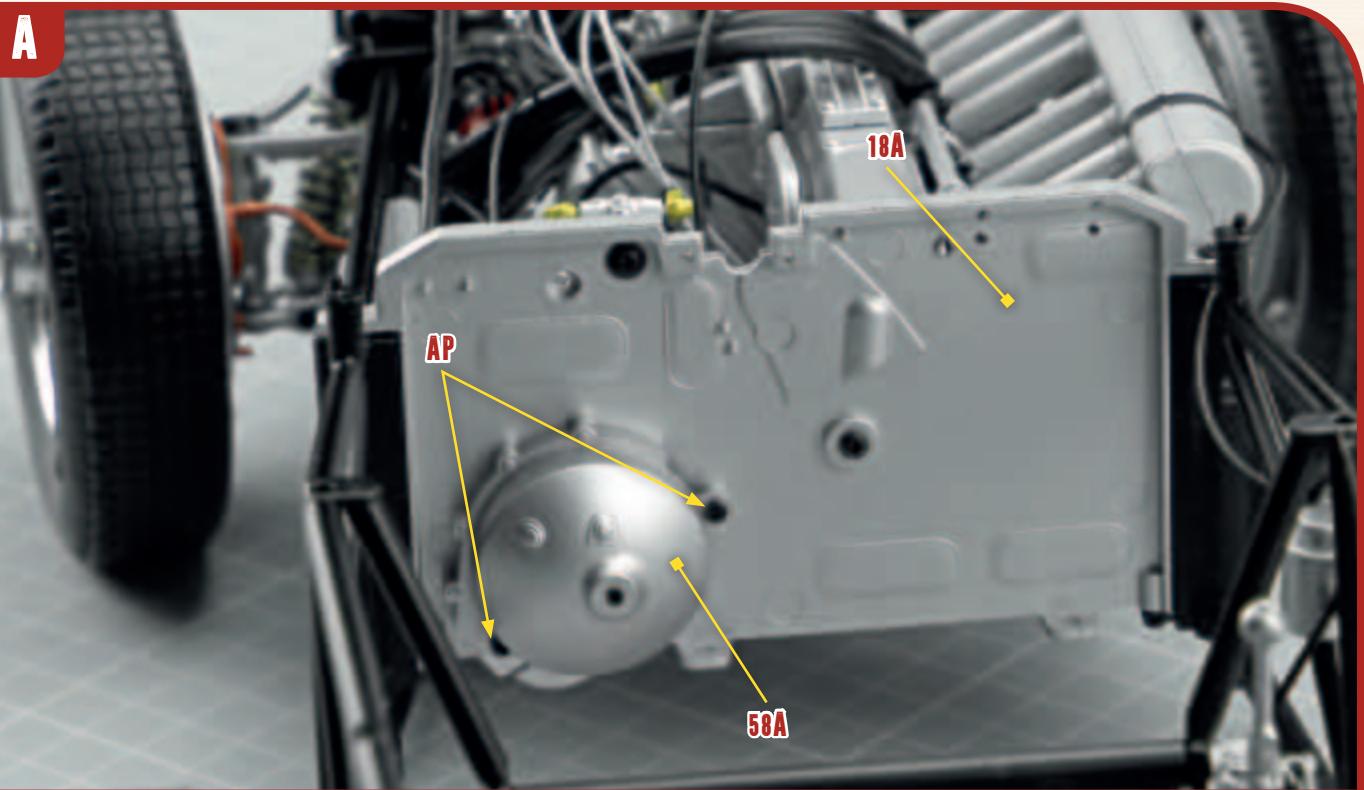


58A Clutch bell housing

58B Model supports (x4)*

AP 3 screws (1.7x4mm)

* You may choose to put supports 58B beneath your model to keep wheels raised.



59 PARTS LIST



59A

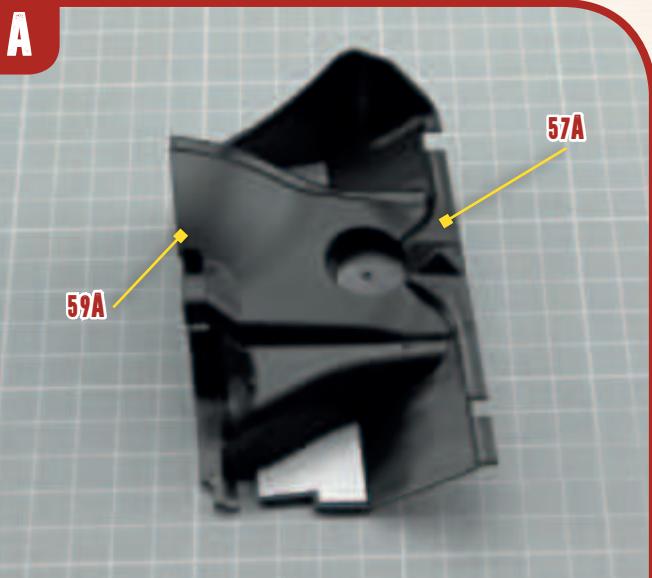


59B

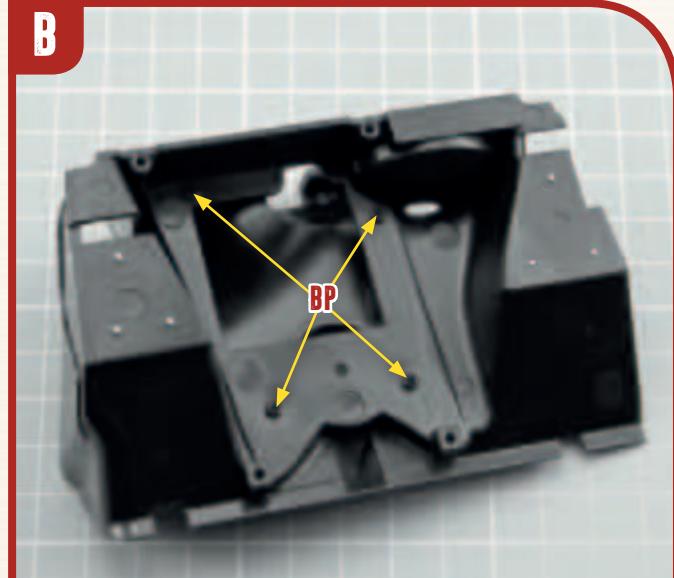
BP

59A Panel 1
59B Panel 2

BP 11 screws (2x5mm)

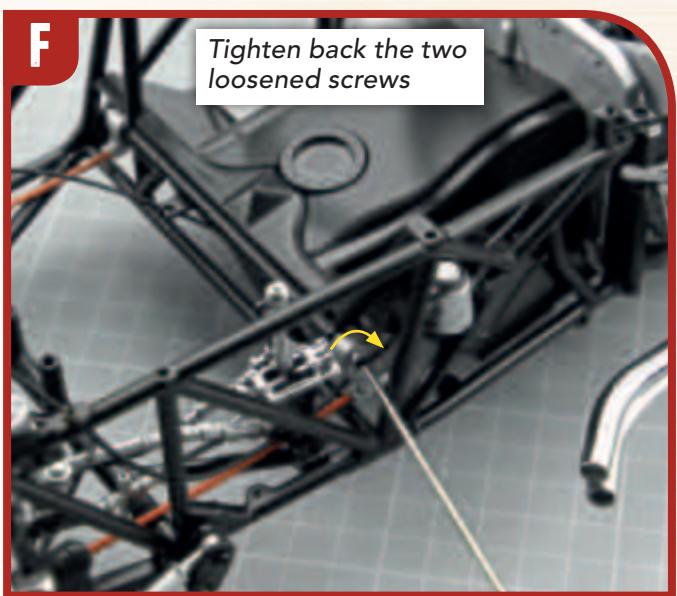
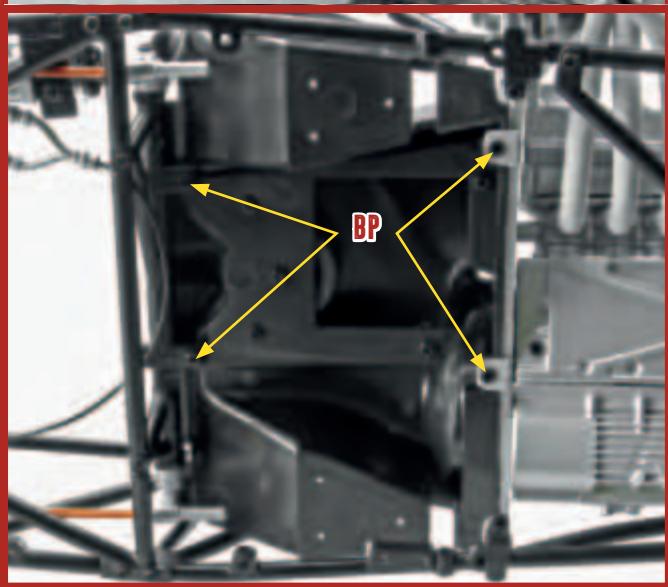
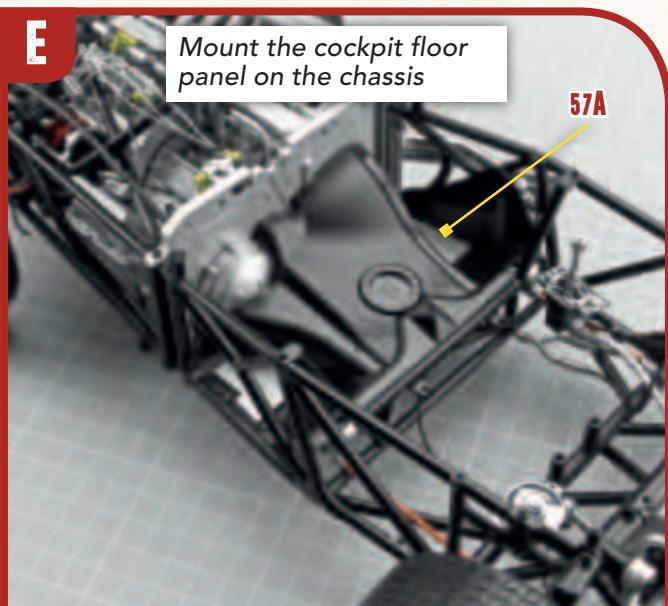
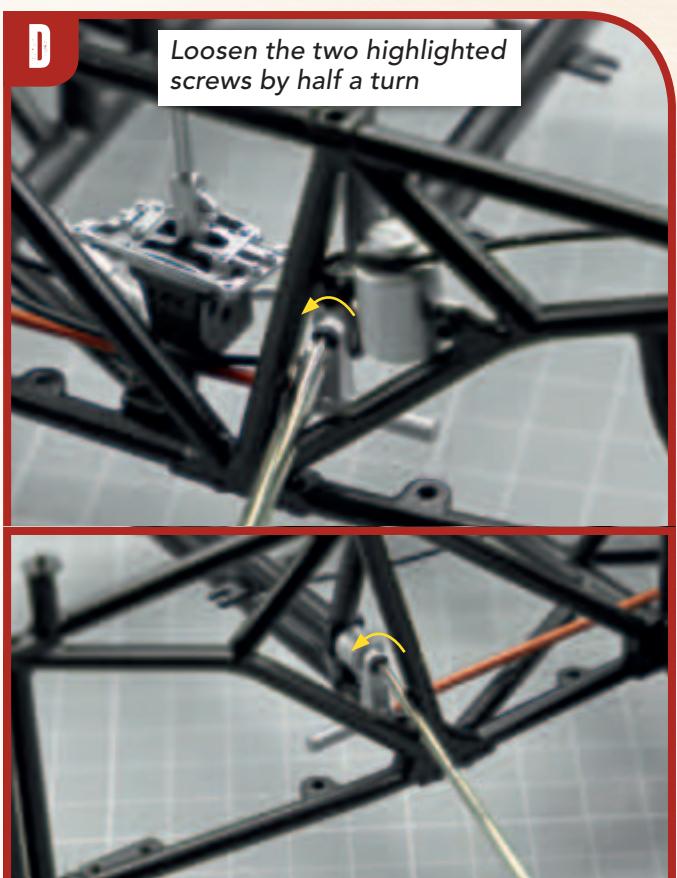
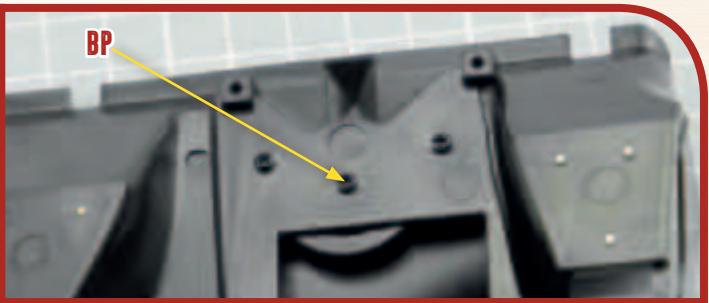
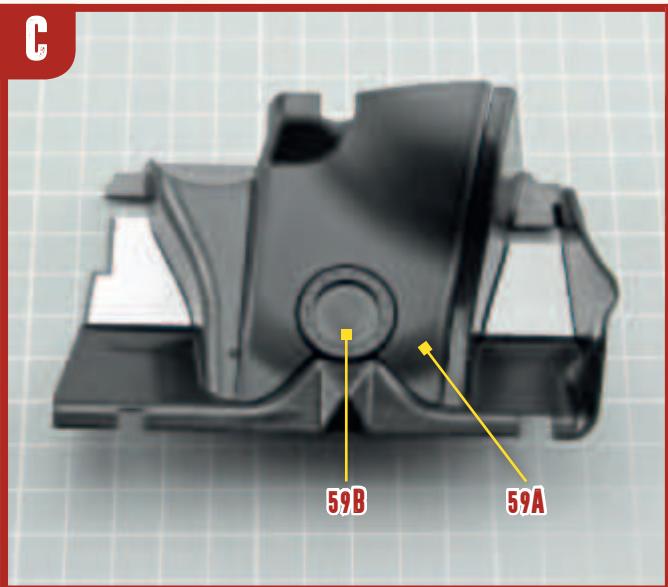


A

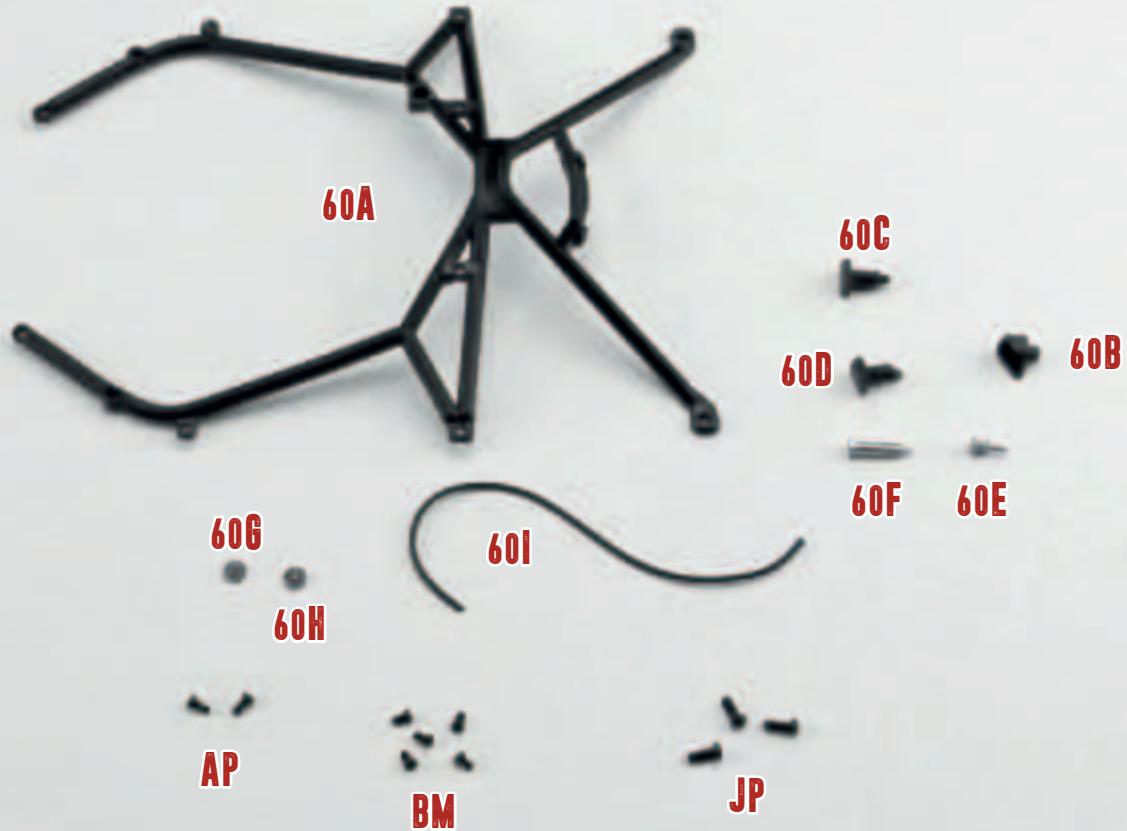


B

step by step #59



60 PARTS LIST



60A Cockpit frame

60B Detail 1

60C Detail 2

60D Detail 3

60E Detail 4

60F Detail 5

60G Oil pressure gauge

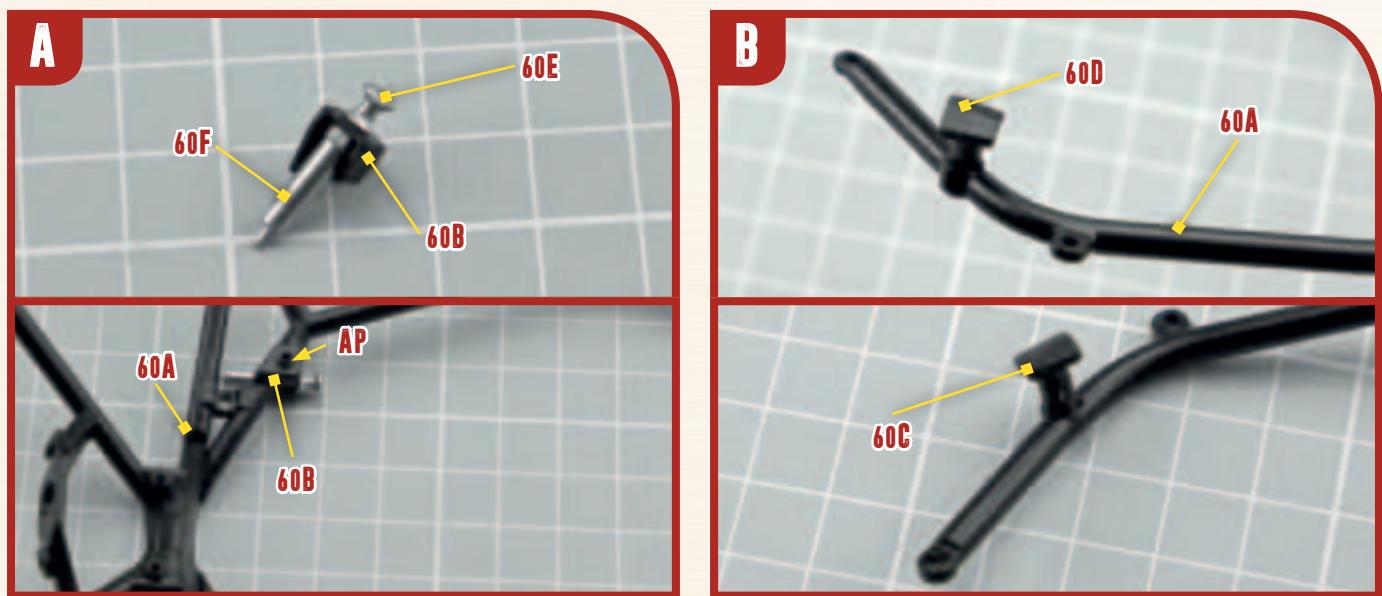
60H Water temperature gauge

60I Tube

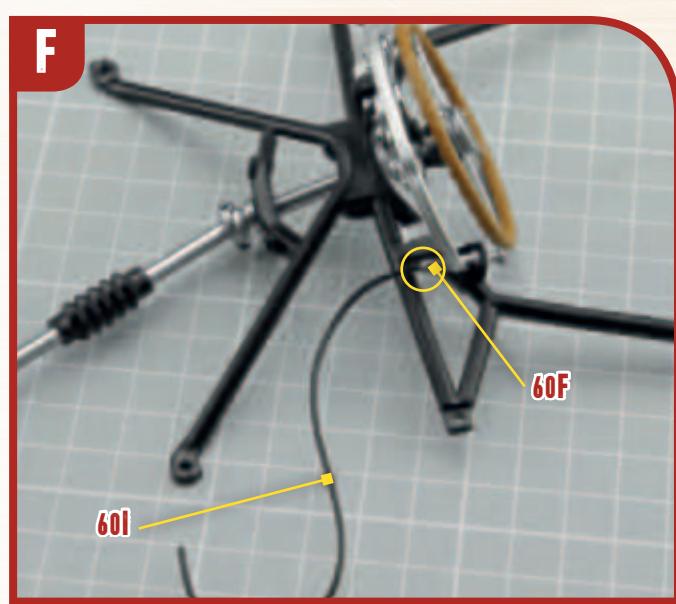
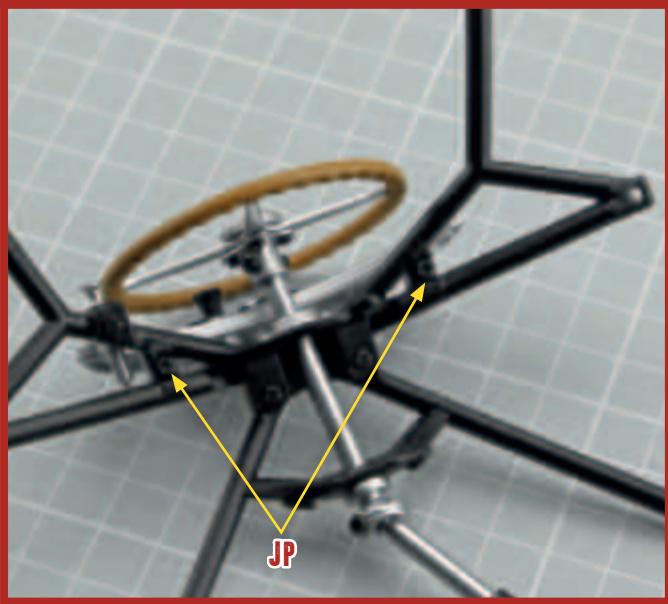
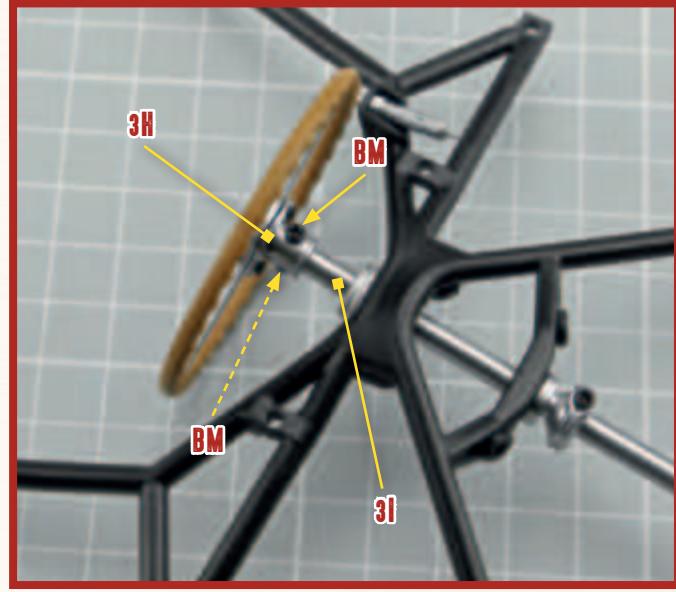
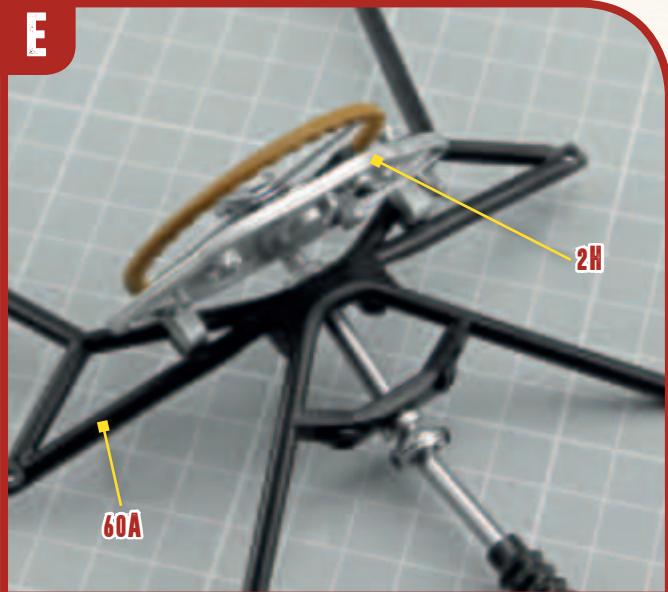
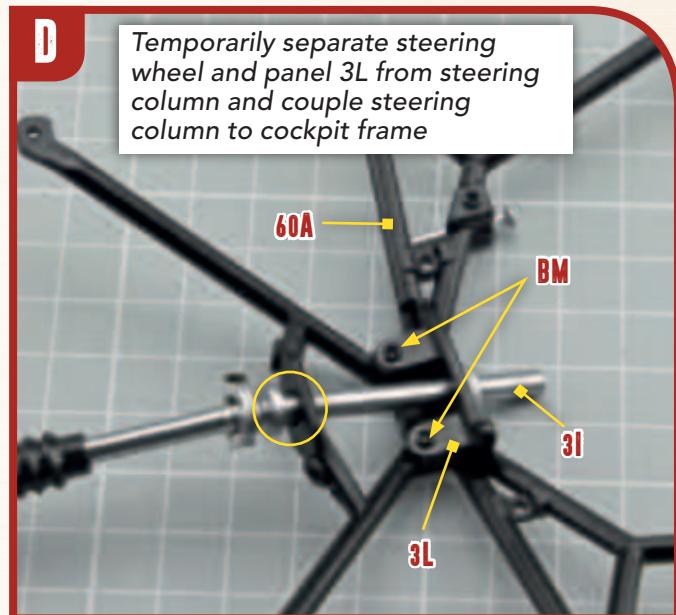
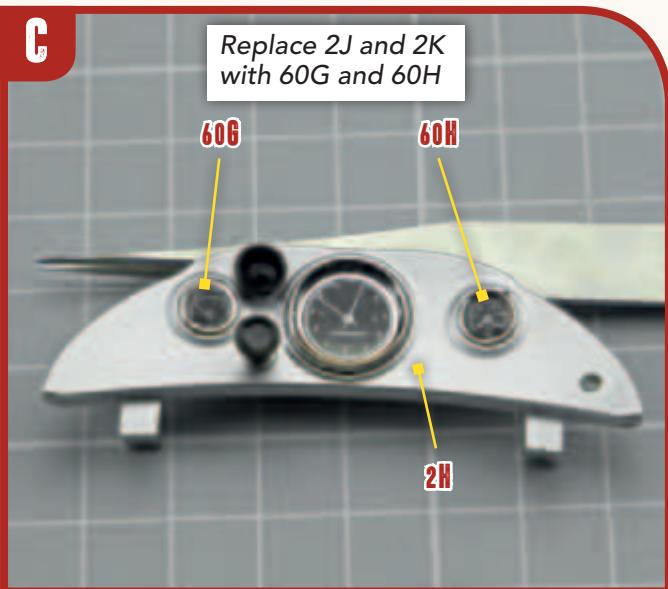
AP 2 screws (1.7x4mm)

JP 3 screws (2.3x6mm)

BM 5 screws (1.7x3mm)



step by step #60

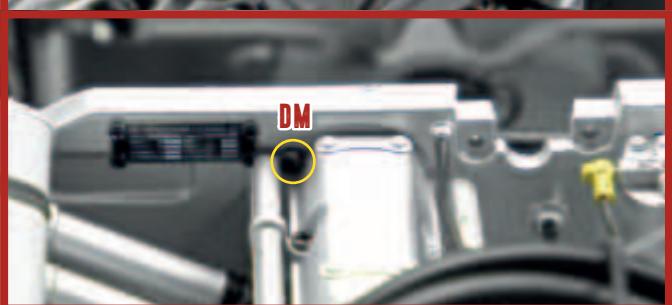
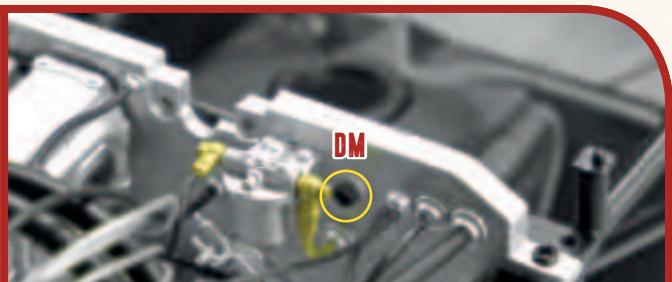
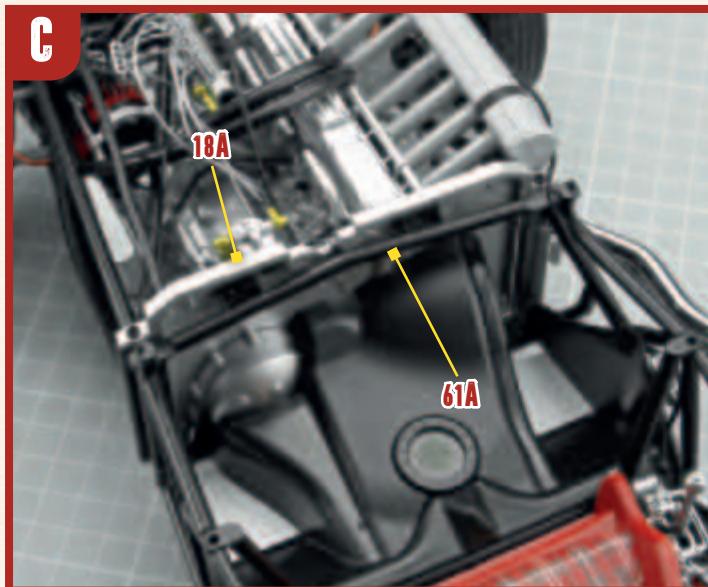
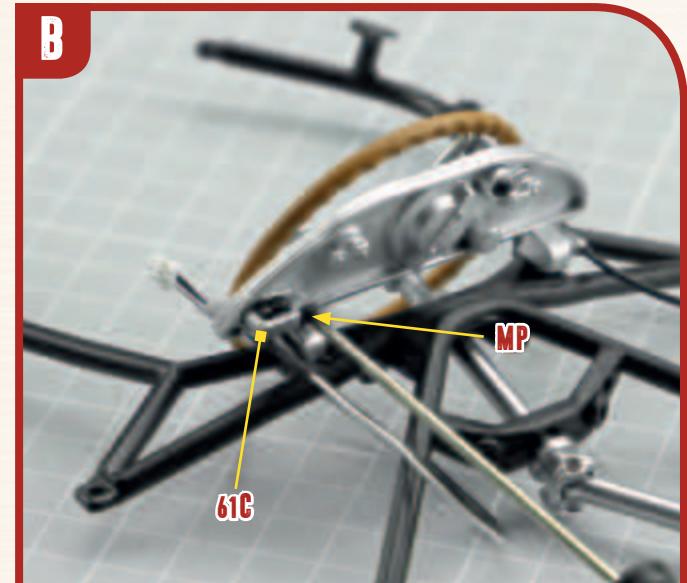
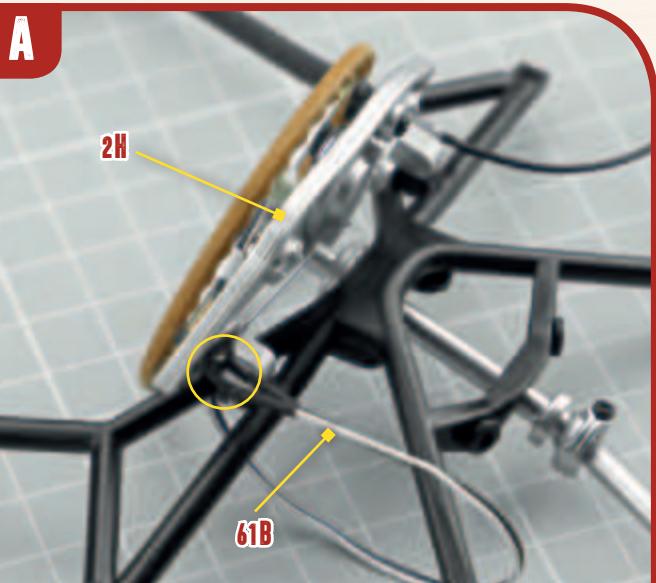


61 PARTS LIST



61A Firewall bar
61B Wire
61C Wire bracket
61D Steering box cover
61E Steering column bracket

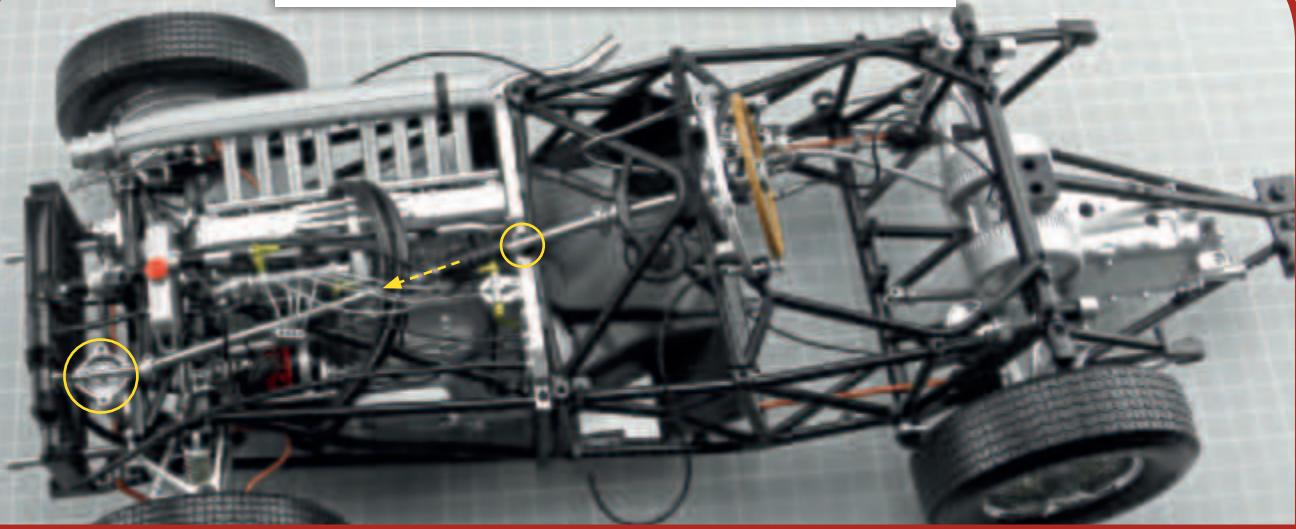
EP 3 screws (2x4mm)
MP 2 screws (2x3mm)
DM 8 screws (2x4mm)
MM 3 screws (2x7mm)
WM 5 screws (2x6mm)



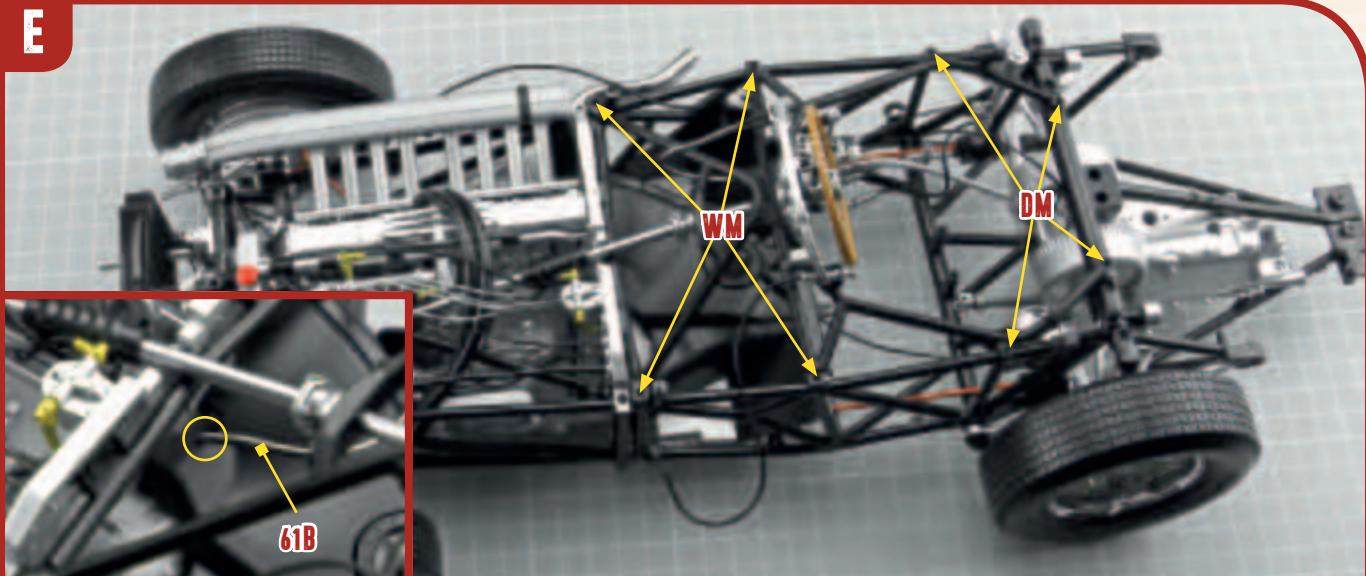
step by step #61

D

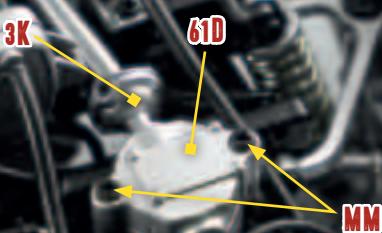
Mount cockpit frame and steering column on chassis



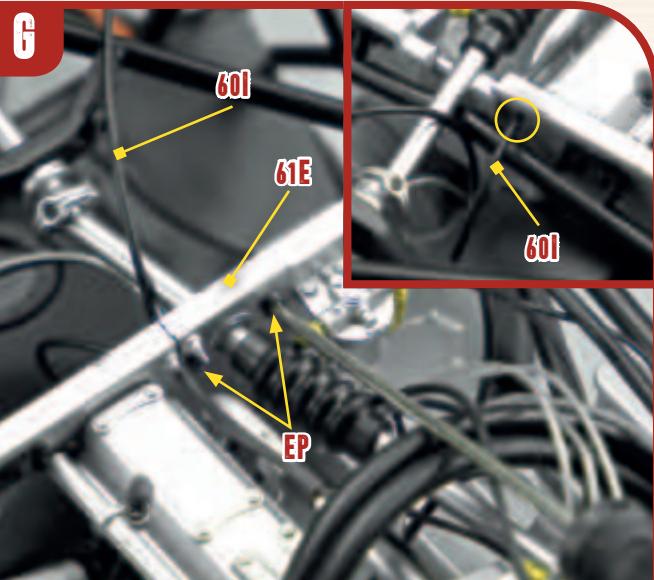
E



F



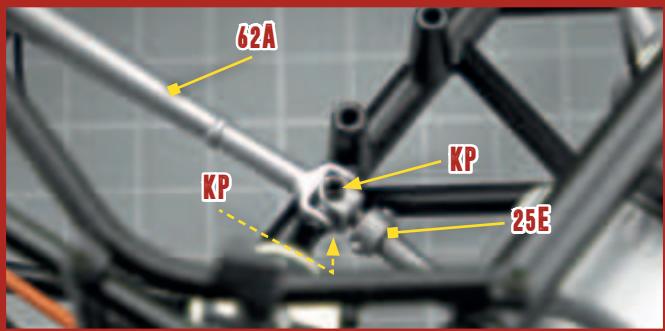
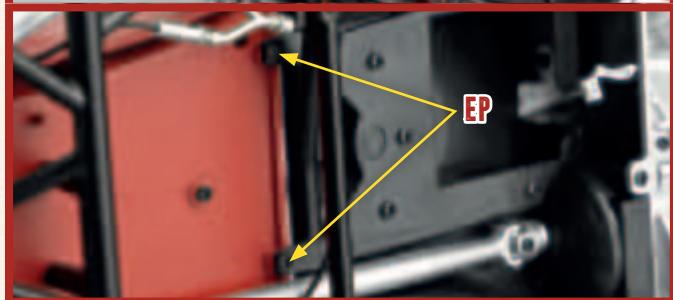
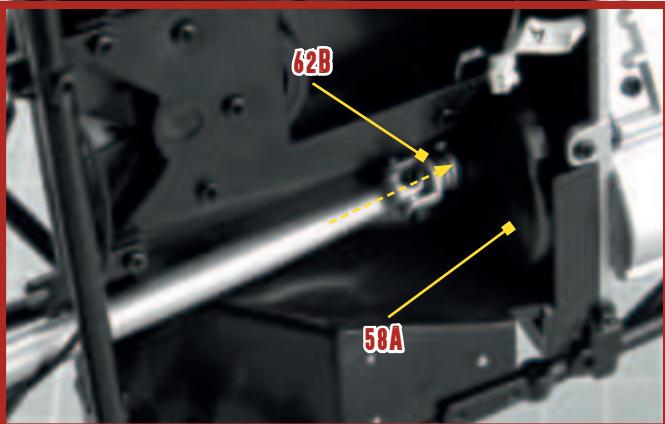
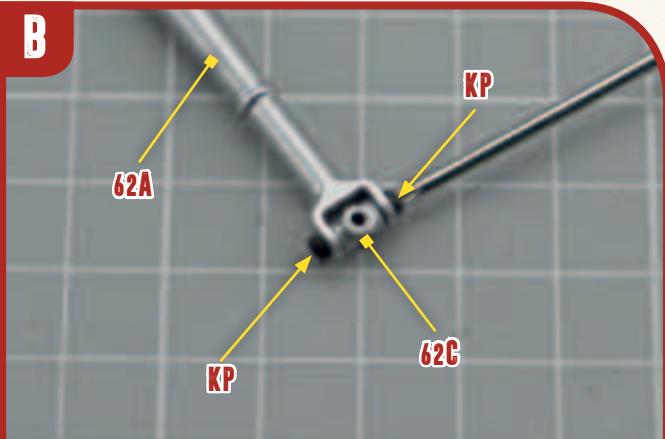
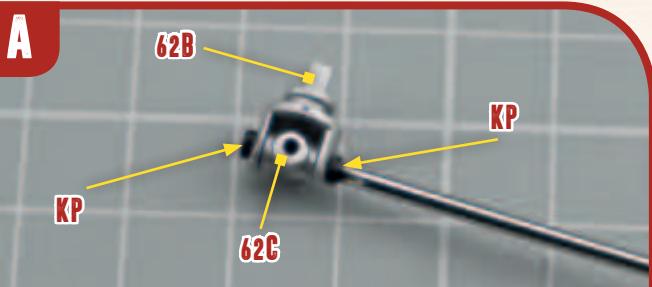
G



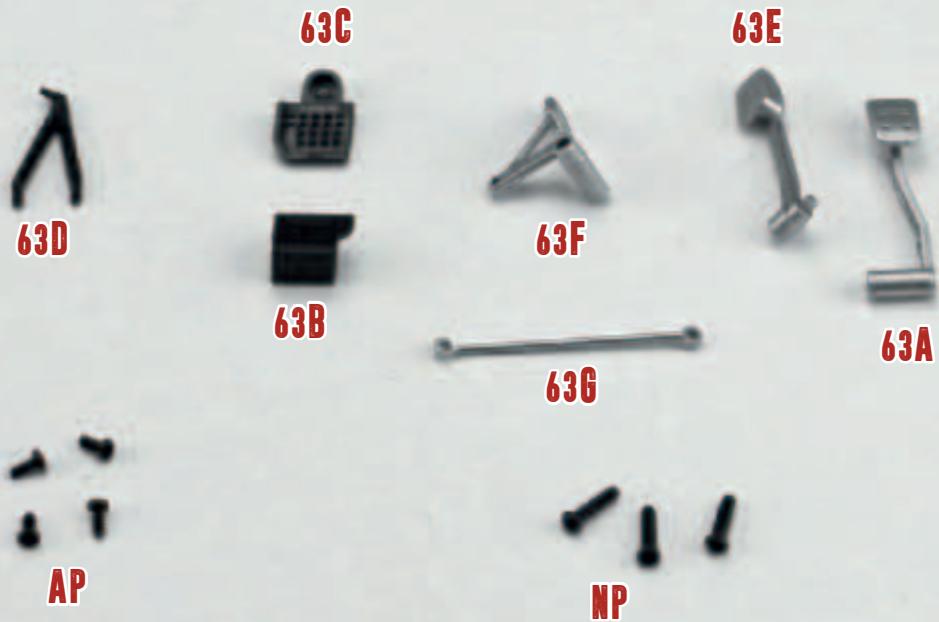
62 PARTS LIST



- 62A** Shaft
- 62B** Joint 1
- 62C** Joints 2 (x2)
- EP** 3 screws (2x4mm)
- KP** 10 screws (1.7x3mm)



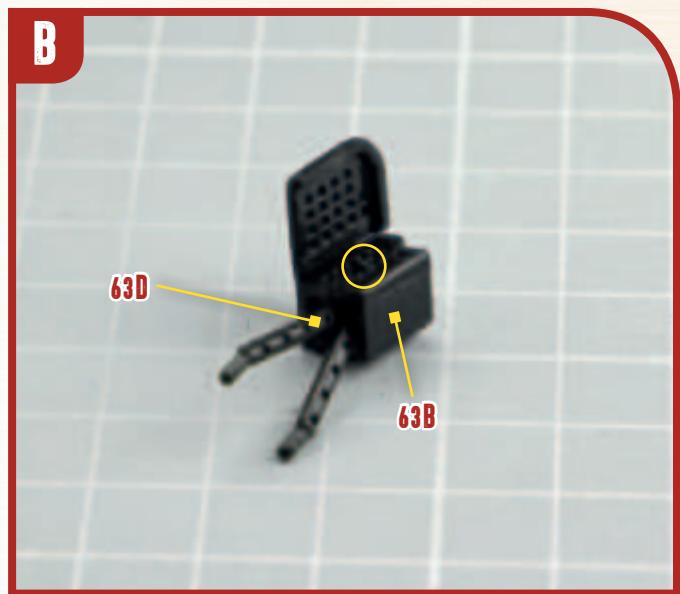
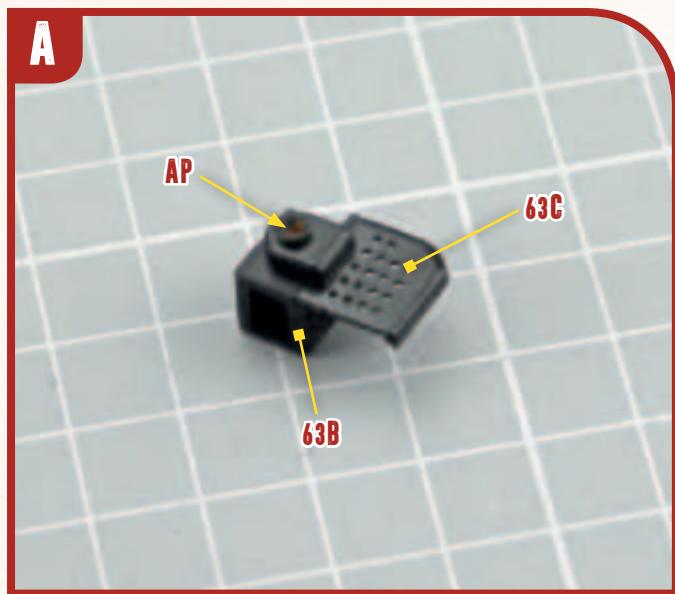
63 PARTS LIST

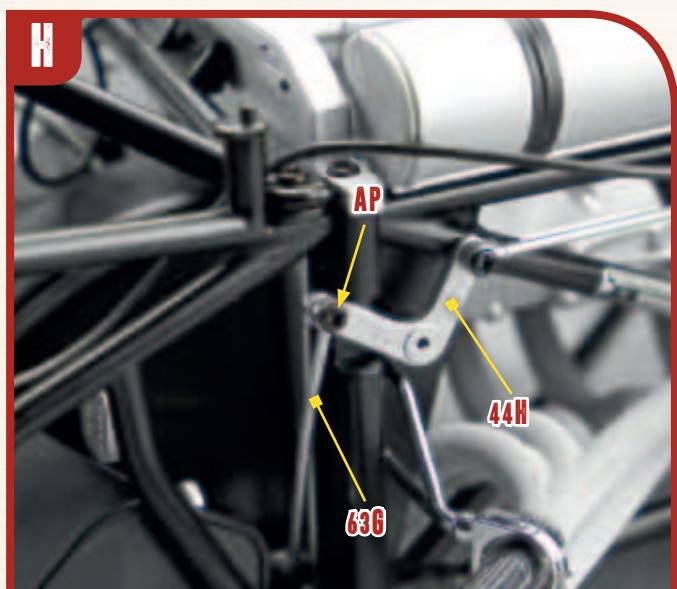
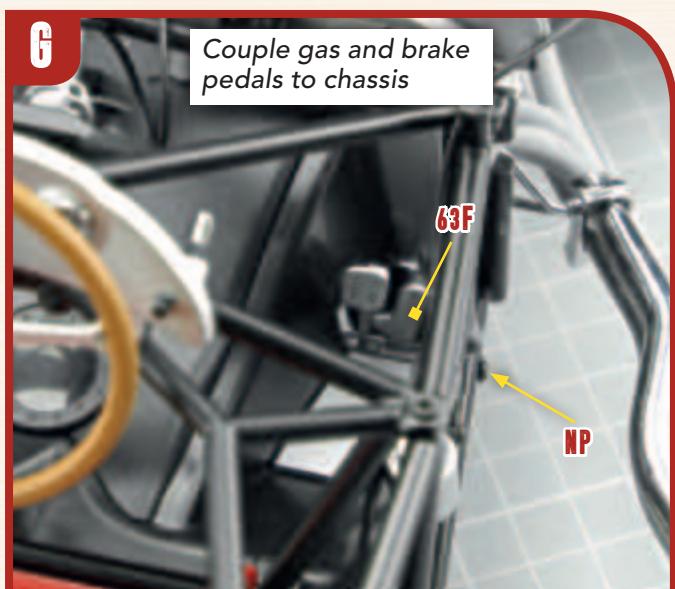
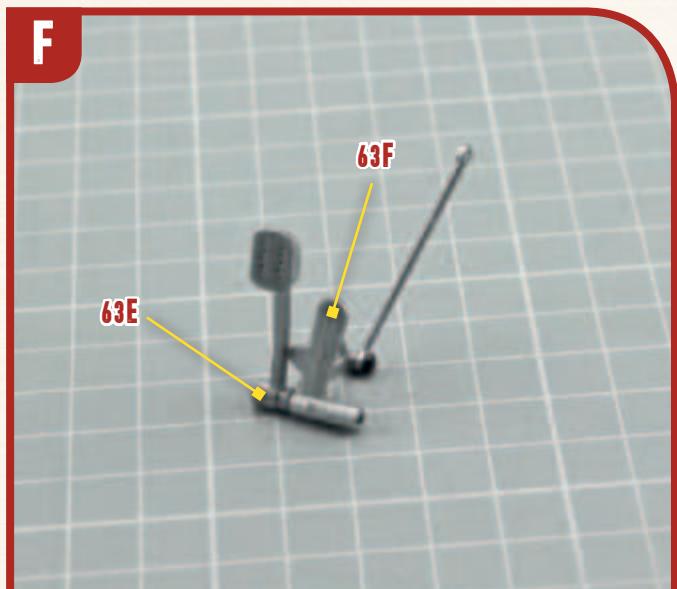
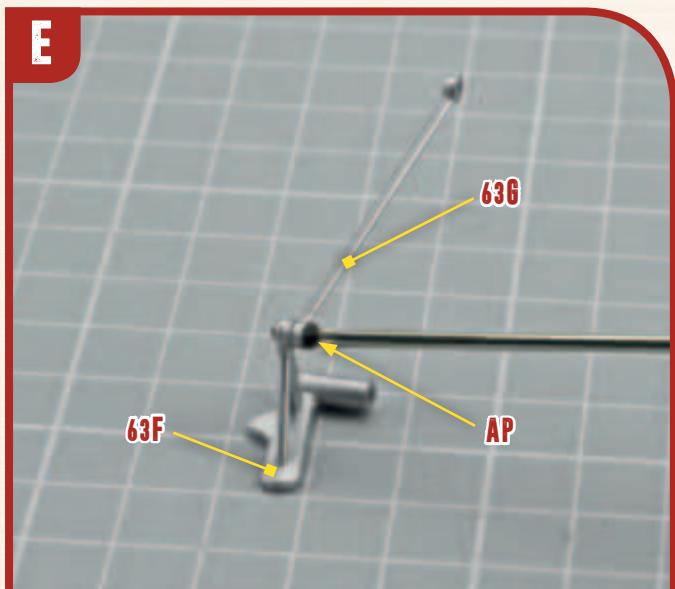
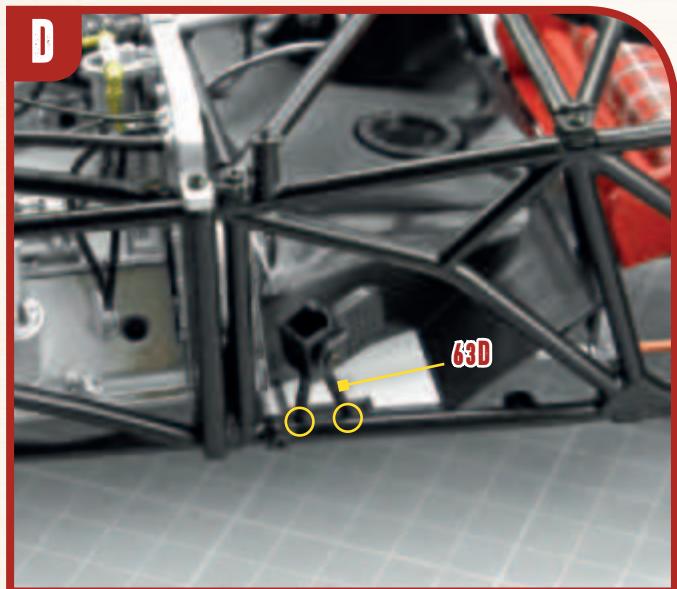
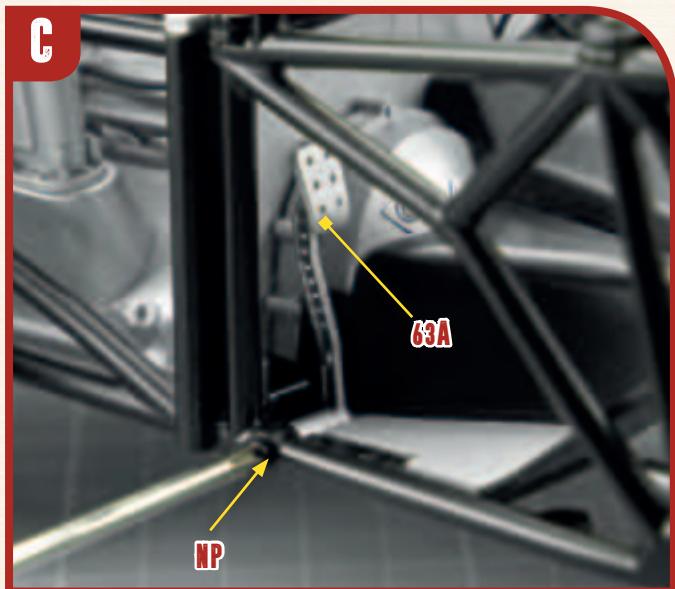


63A Clutch pedal
63B Footrest part A
63C Footrest part B
63D Footrest part C

63E Brake pedal
63F Gas pedal
63G Gas pedal shaft

AP 4 screws (1.7x4mm)
NP 3 screws (2x8mm)



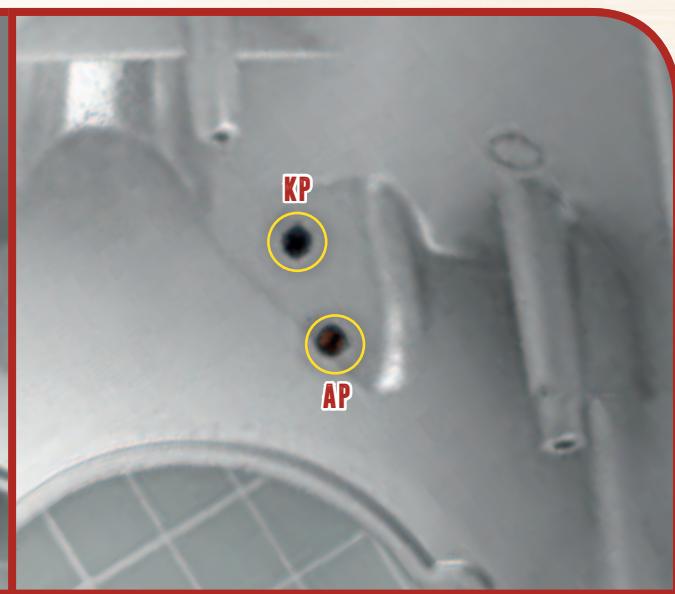
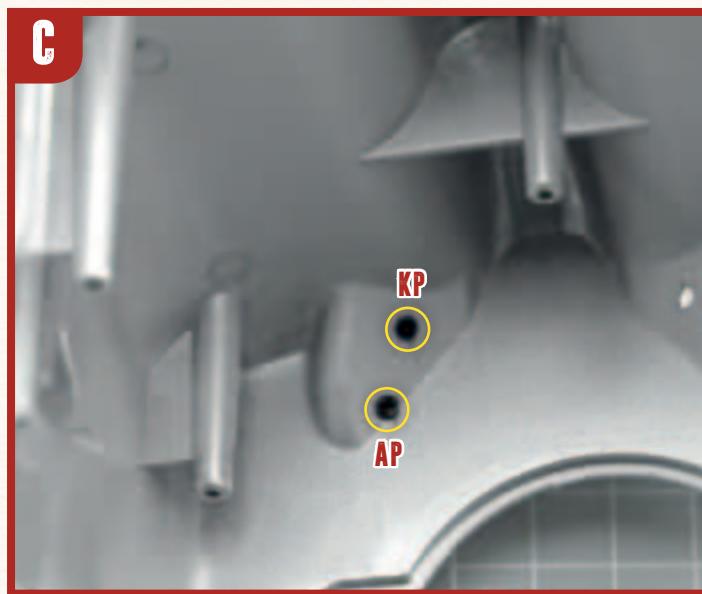
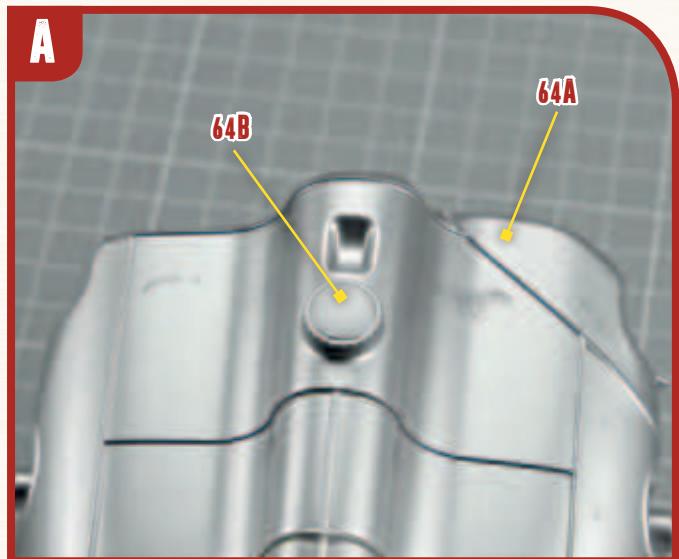


64 PARTS LIST

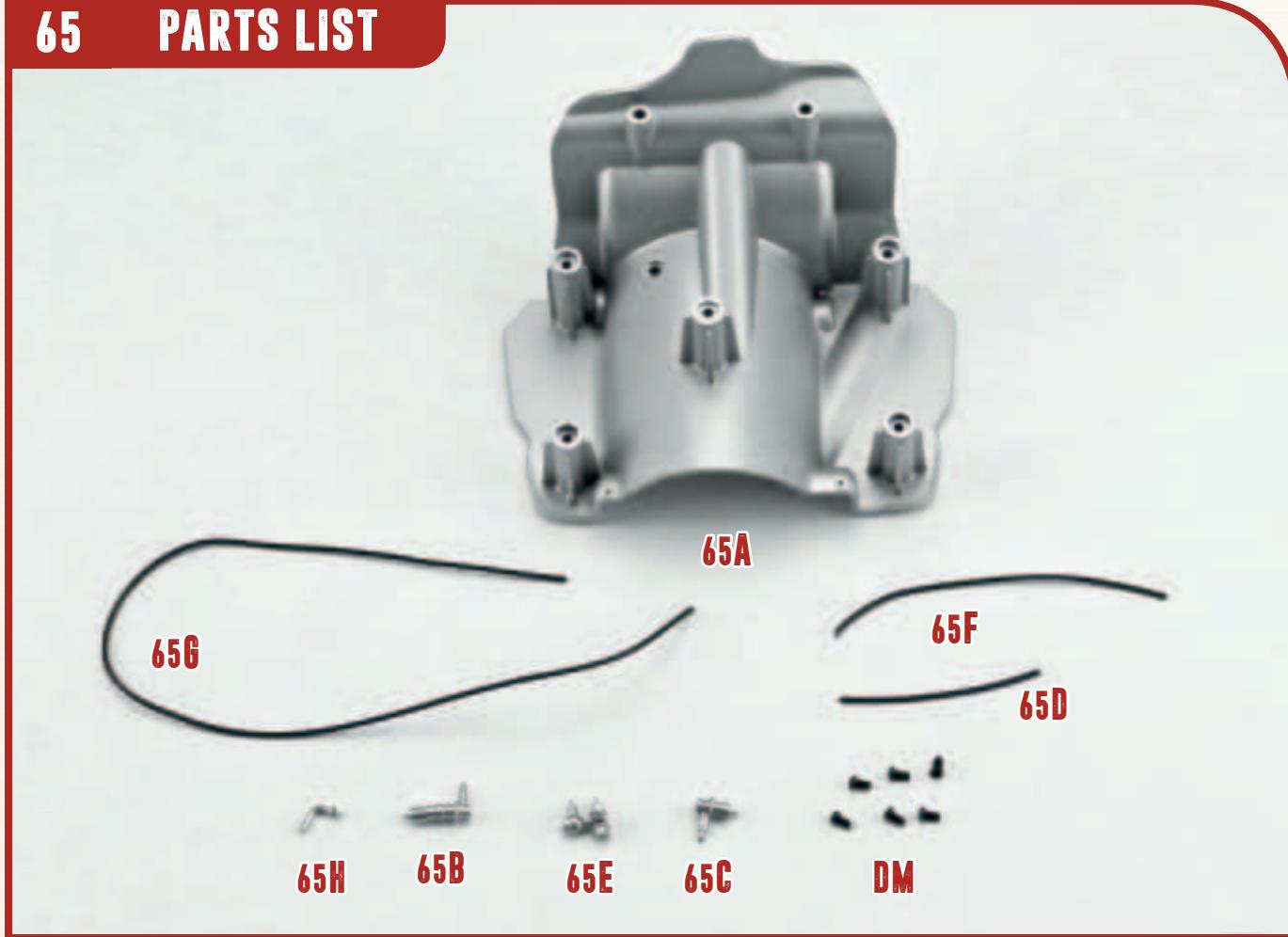


64A Fuel tank body
64B Cap
64C Fuel tank detail 1 (R)
64D Fuel tank detail 2 (L)

AP 3 screws (1.7x4mm)
KP 3 screws (1.7x3mm)



65 PARTS LIST



65A Fuel tank bottom

65B Detail 1

65C Detail 2

65D Fuel line 5

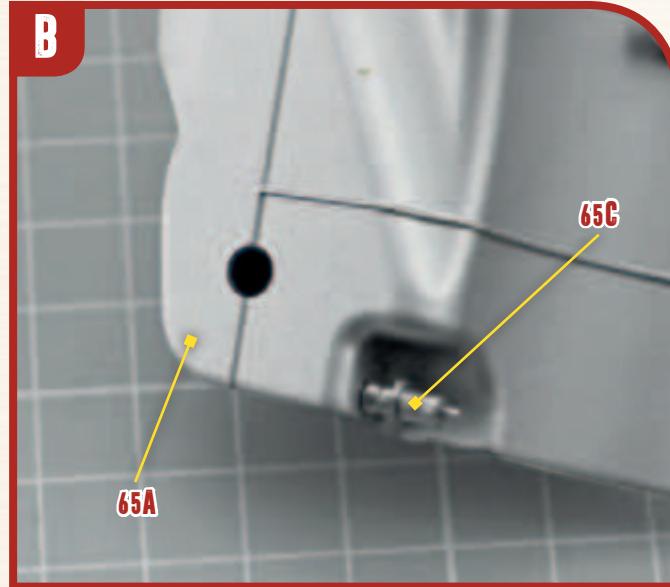
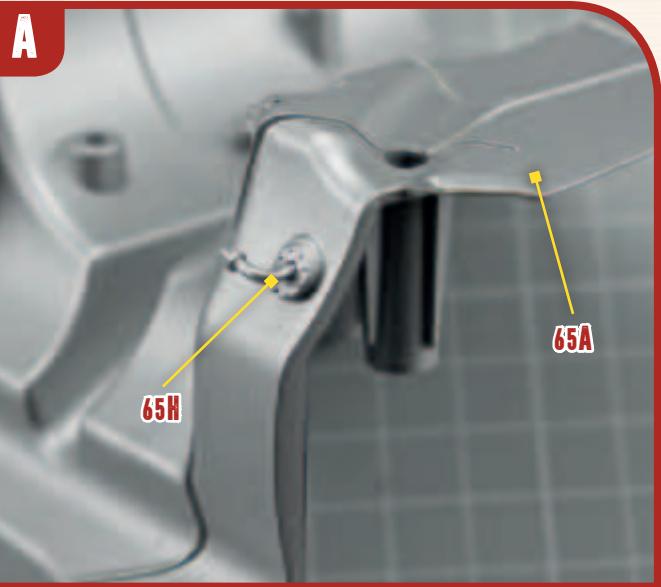
65E Detail 3

65F Fuel line 6

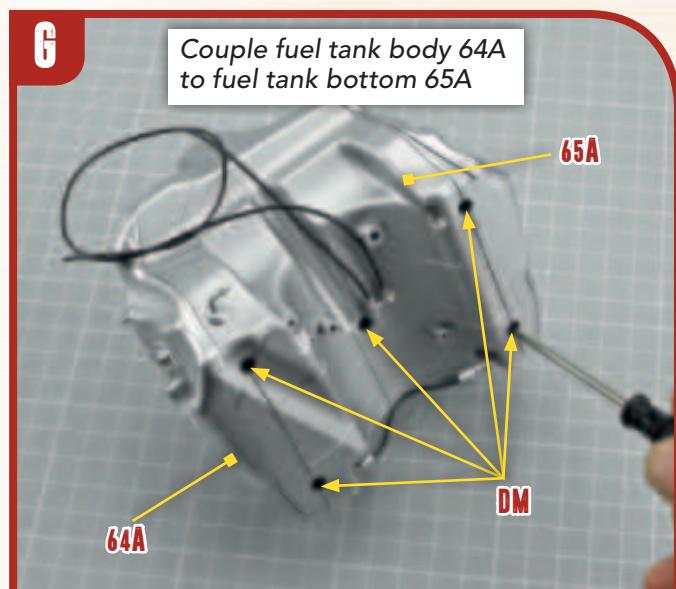
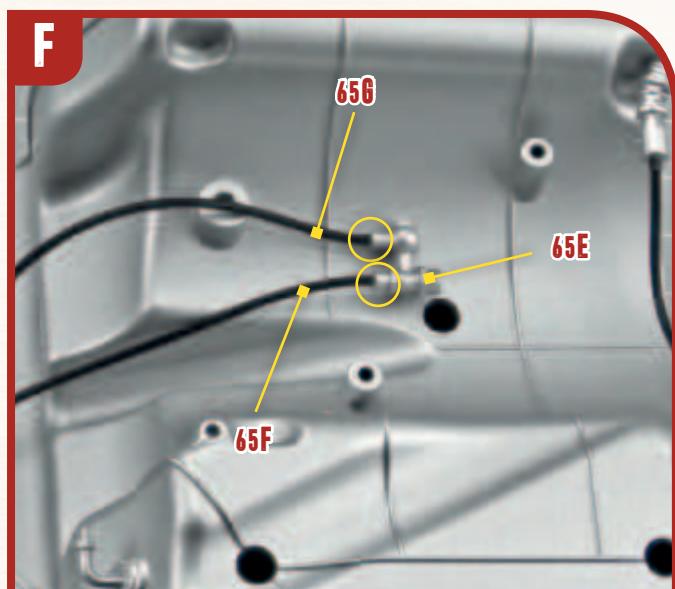
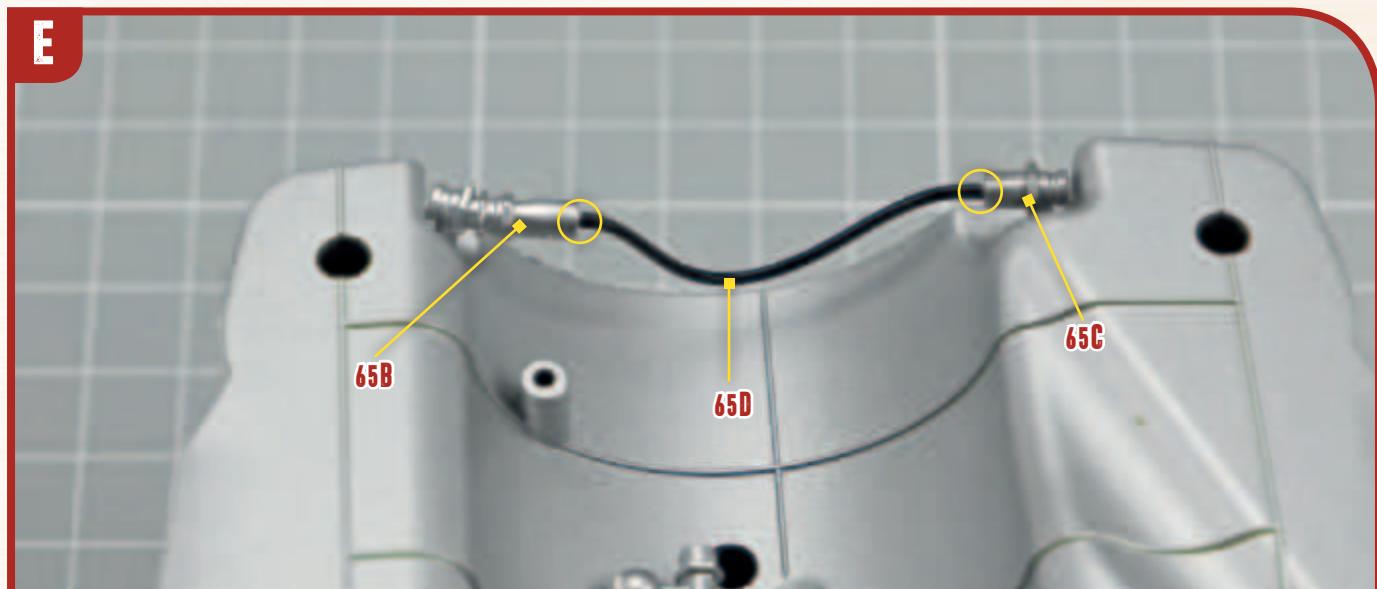
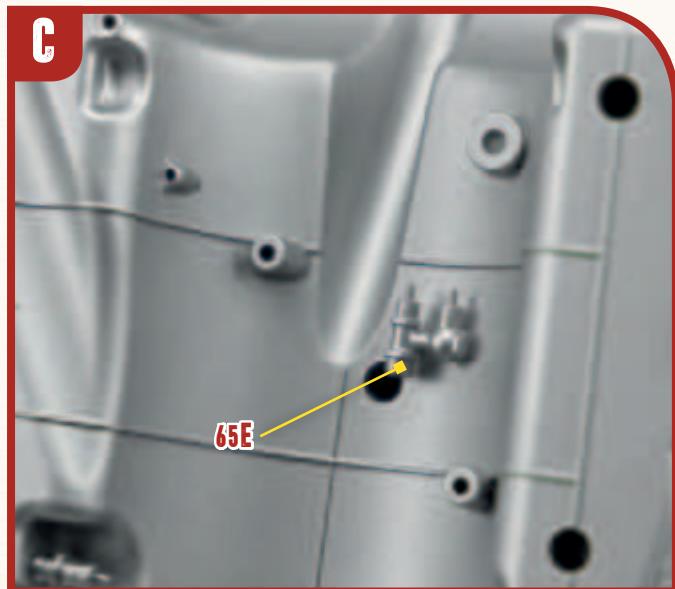
65G Fuel line 7

65H Detail 4

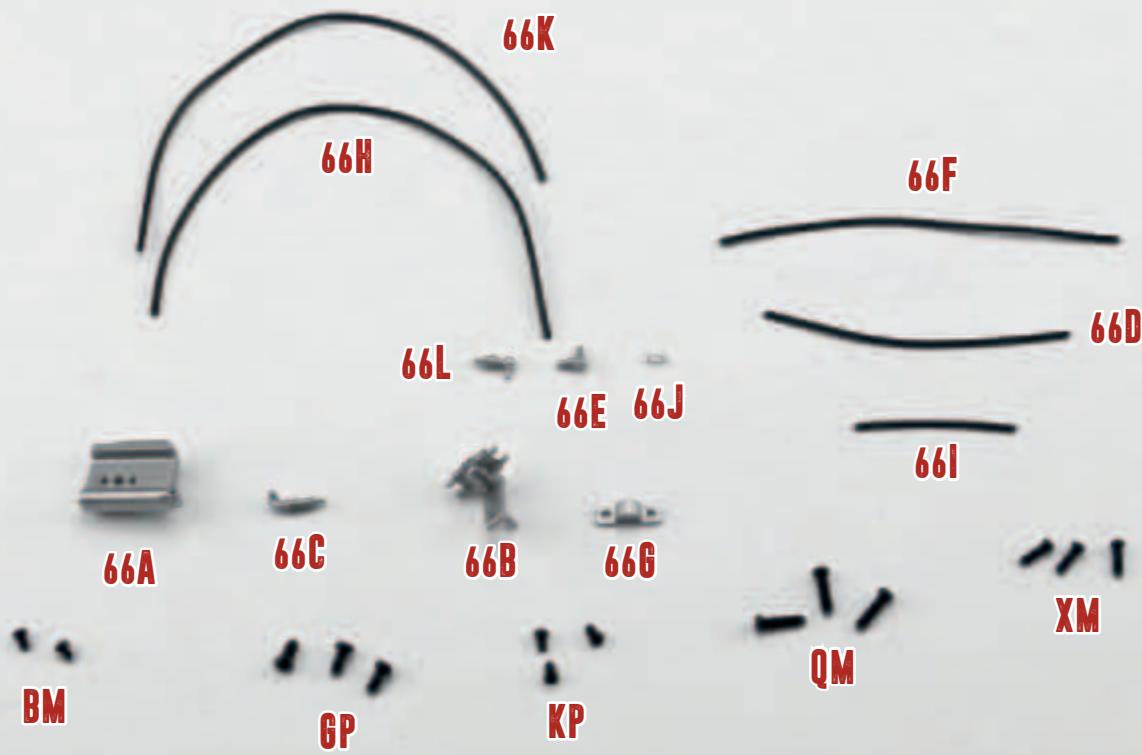
DM 6 screws (2x4mm)



step by step #65



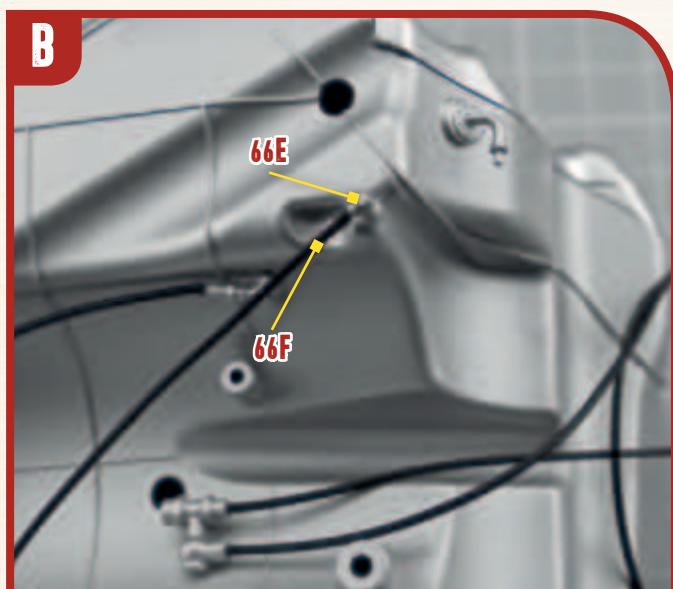
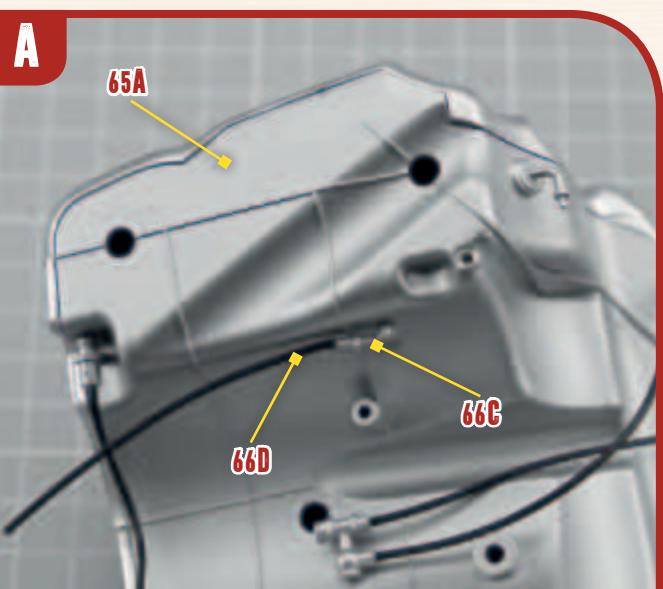
66 PARTS LIST



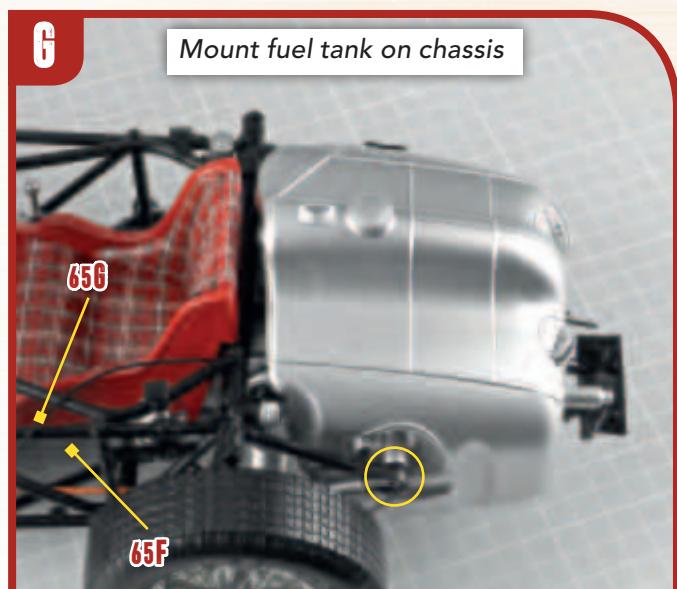
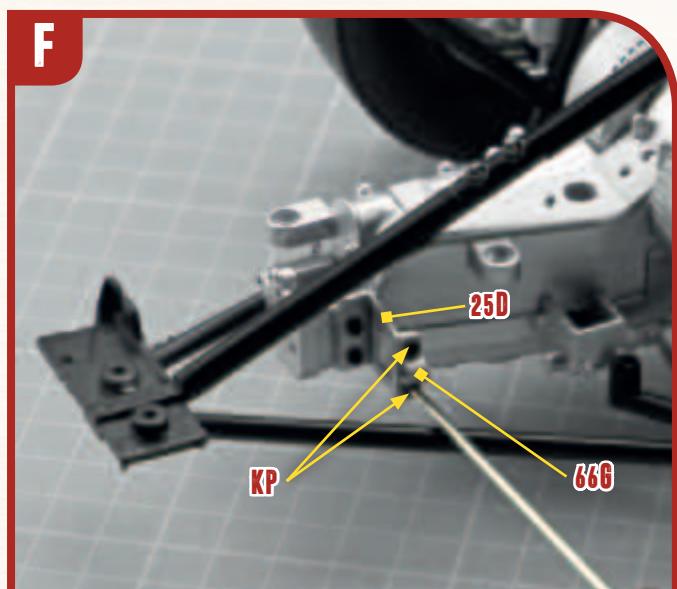
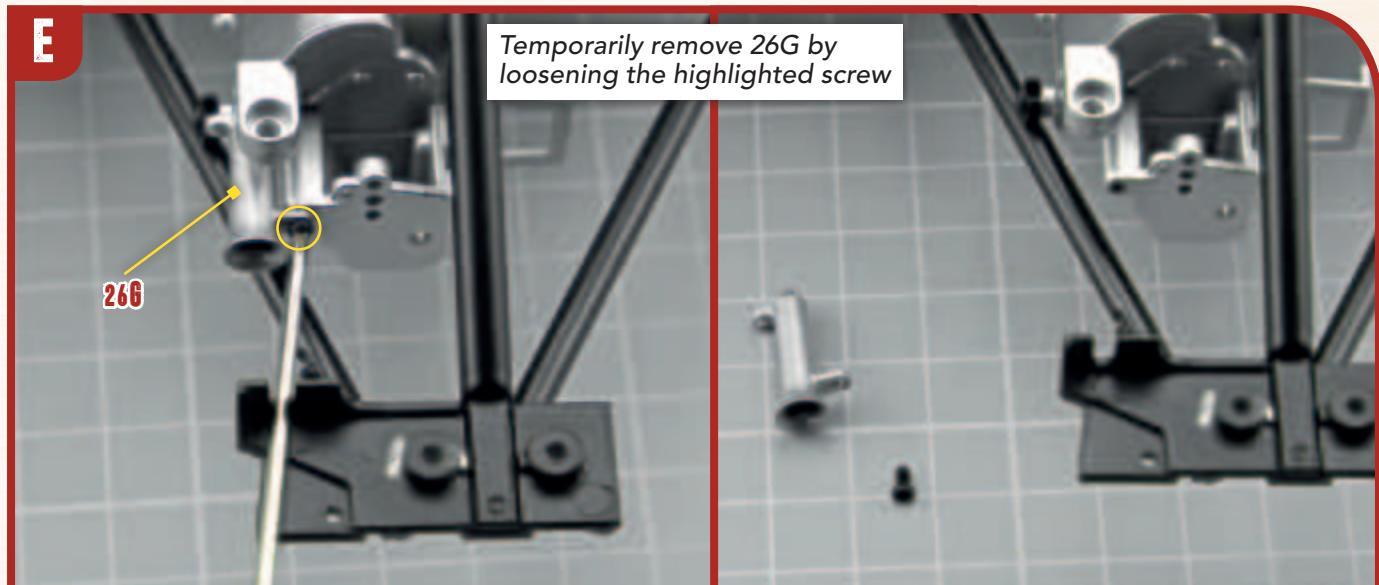
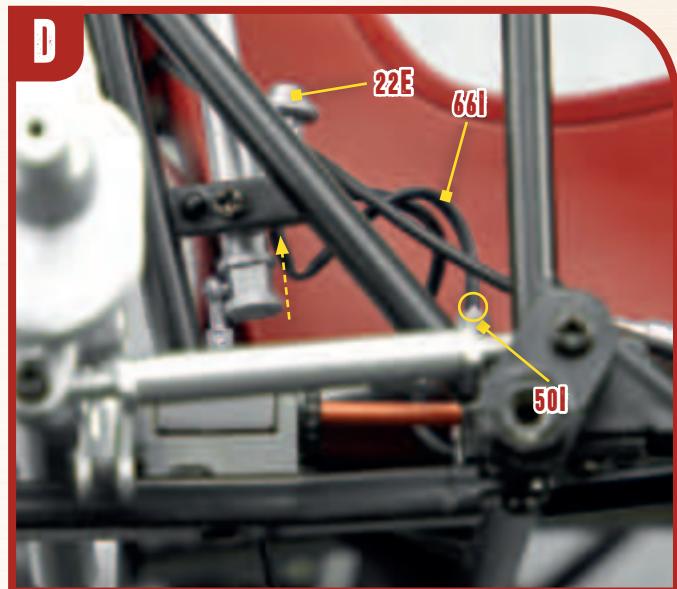
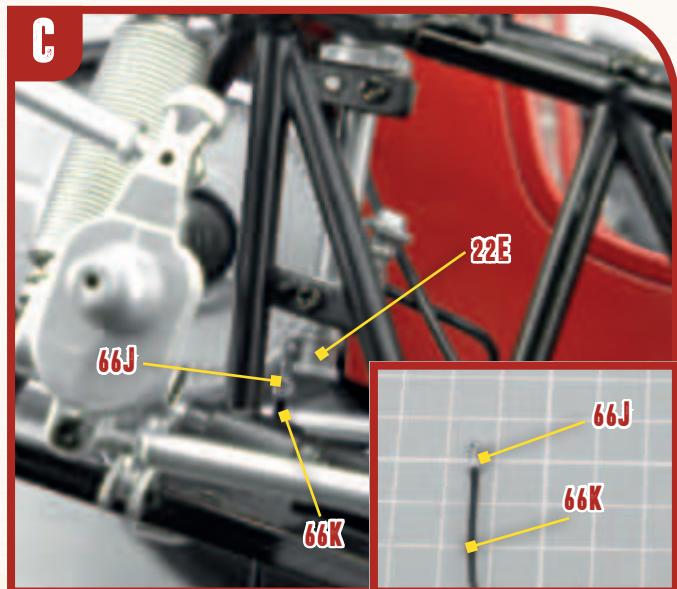
66A Gearbox rear cover
66B Fuel distributor
66C Detail 1
66D Fuel line 8
66E Detail 2
66F Fuel line 9

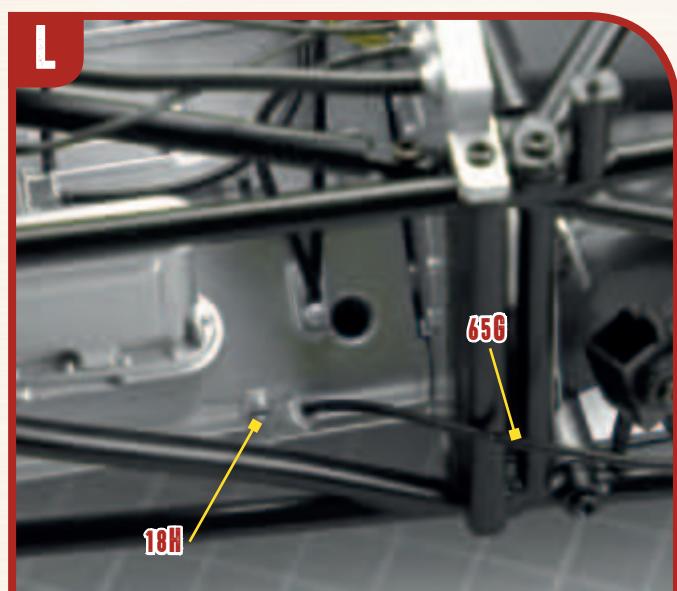
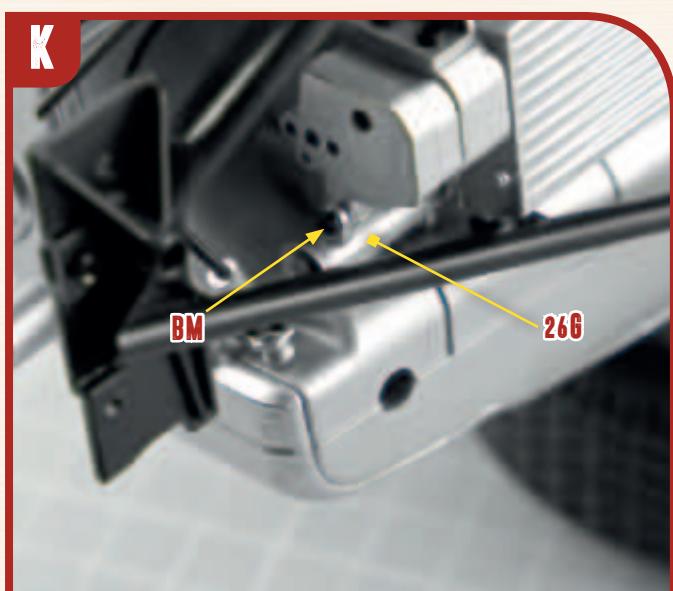
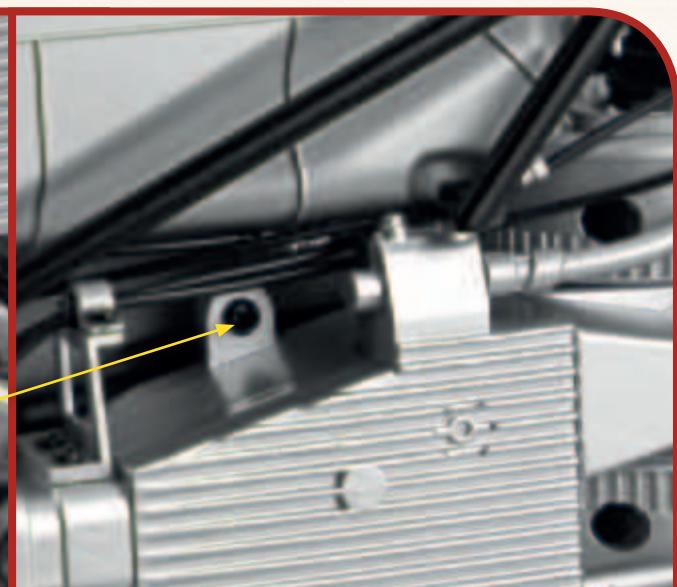
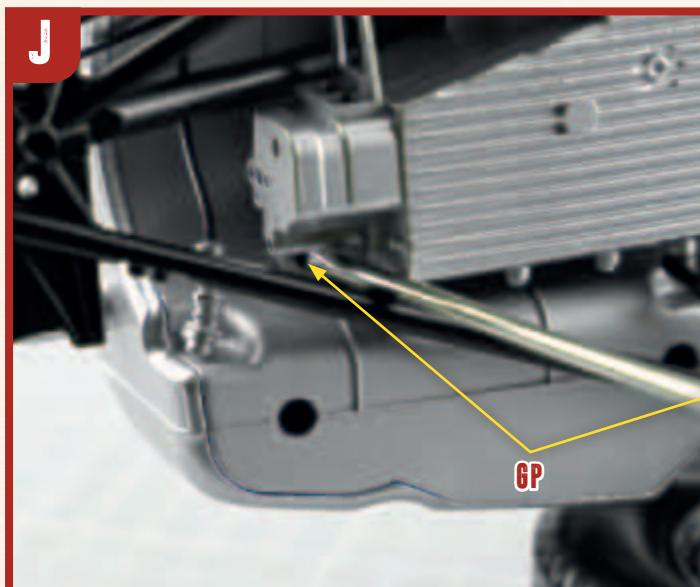
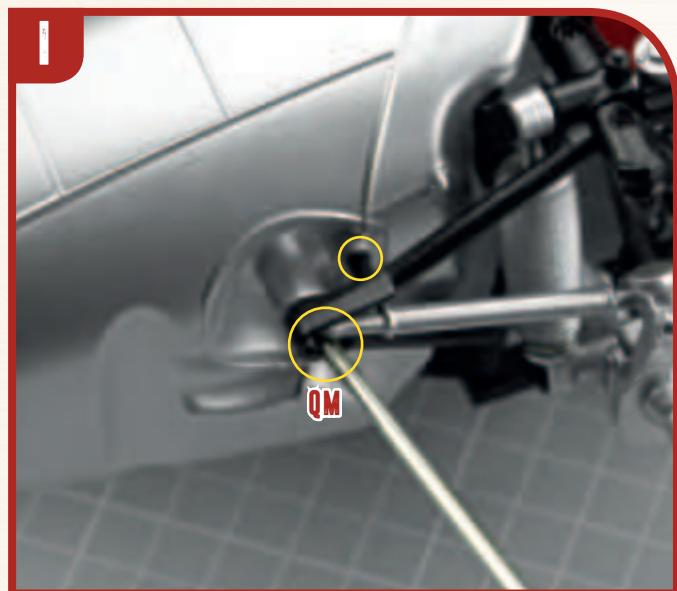
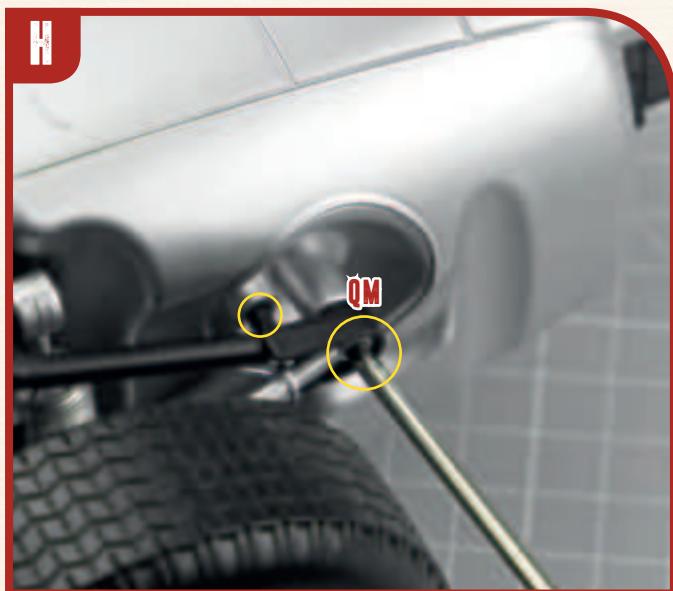
66G Bracket
66H Fuel line 10
66I Fuel line 11
66J Detail 3
66K Fuel line 12

GP 3 screws (2.3x5mm)
KP 3 screws (1.7x3mm)
BM 2 screws (1.7x3mm)
QM 3 screws (2x8mm)
XM 3 screws (1.5x6mm)

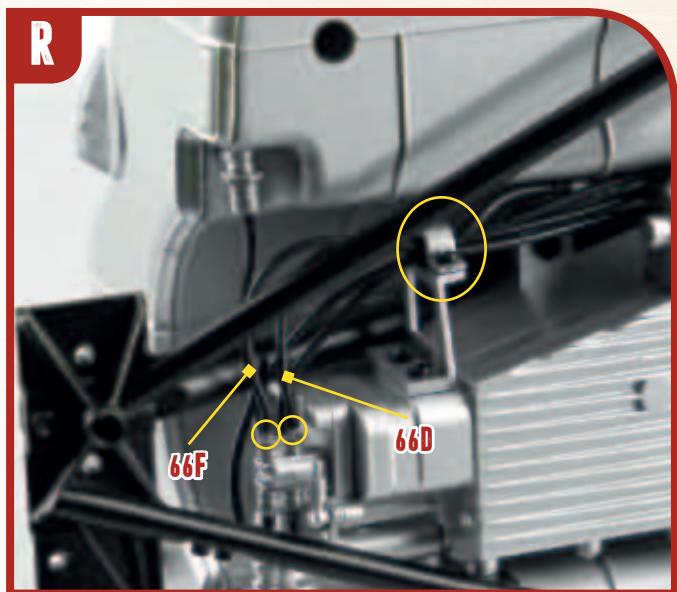
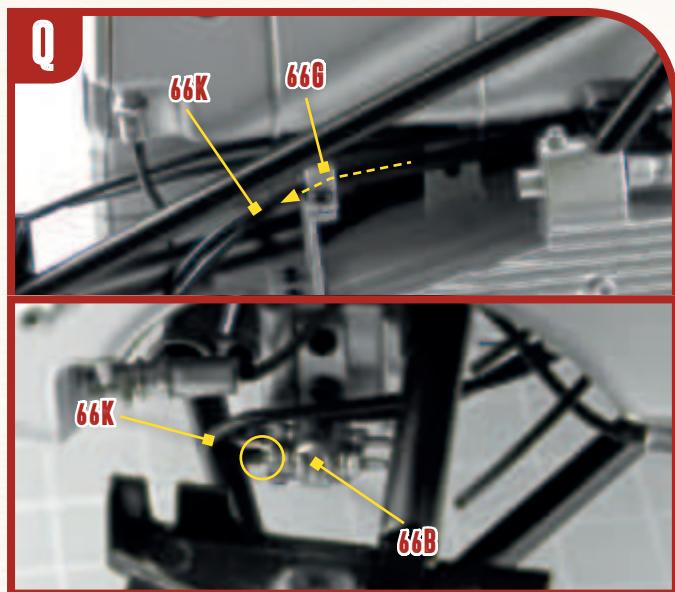
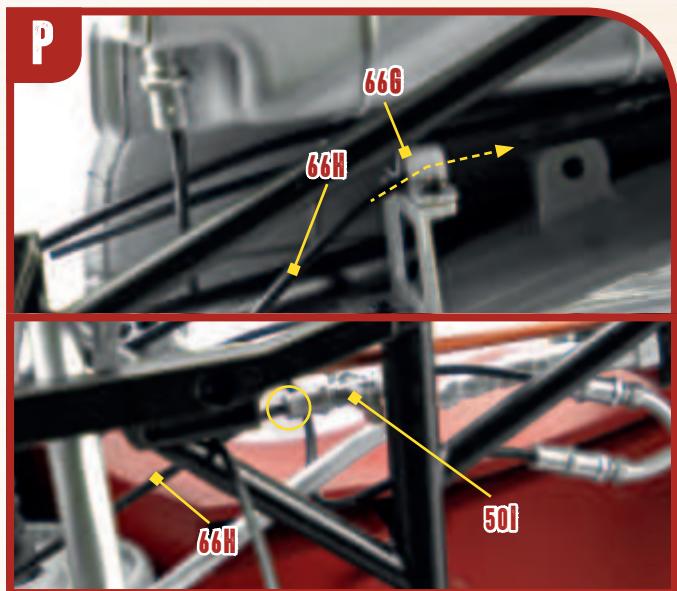
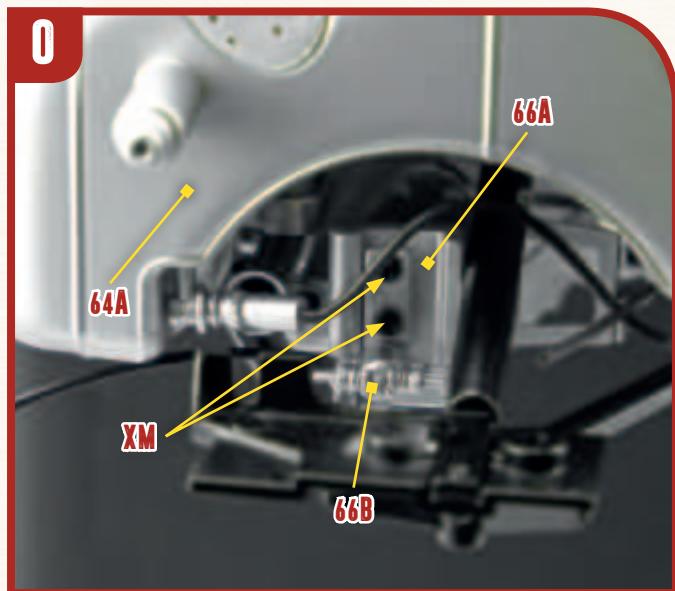
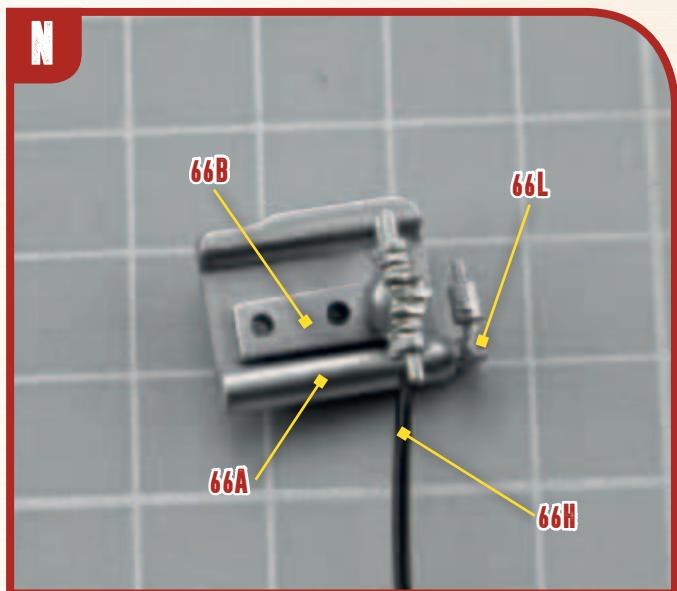
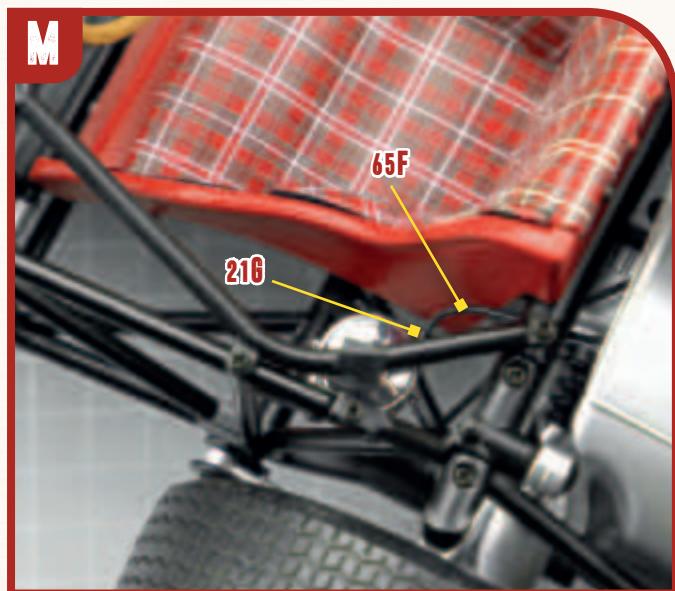


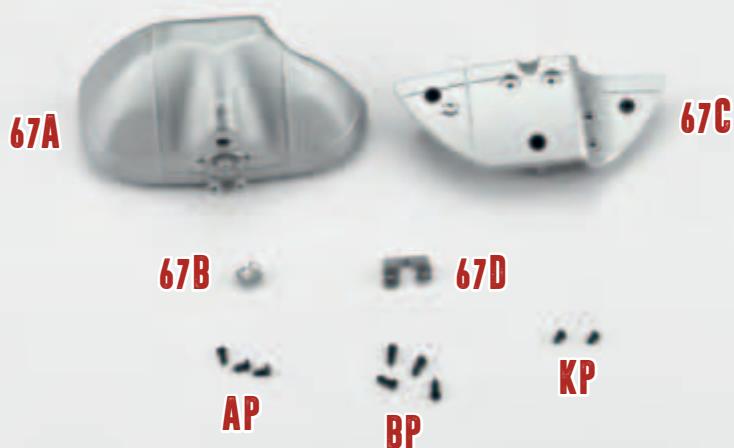
step by step #66





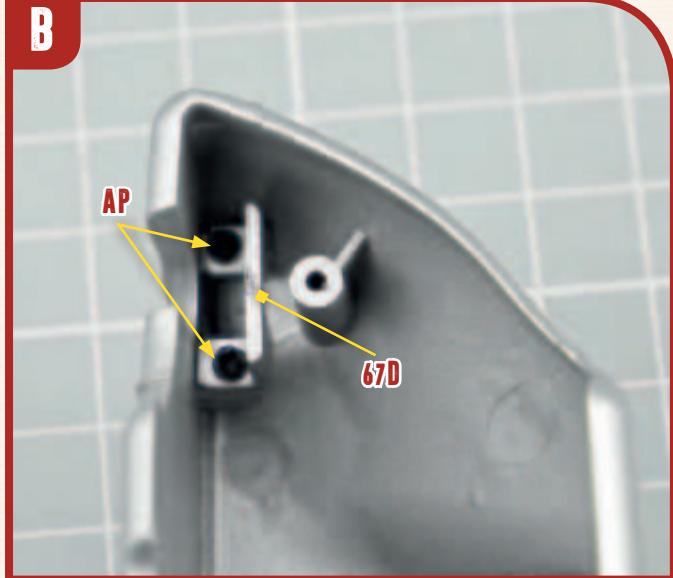
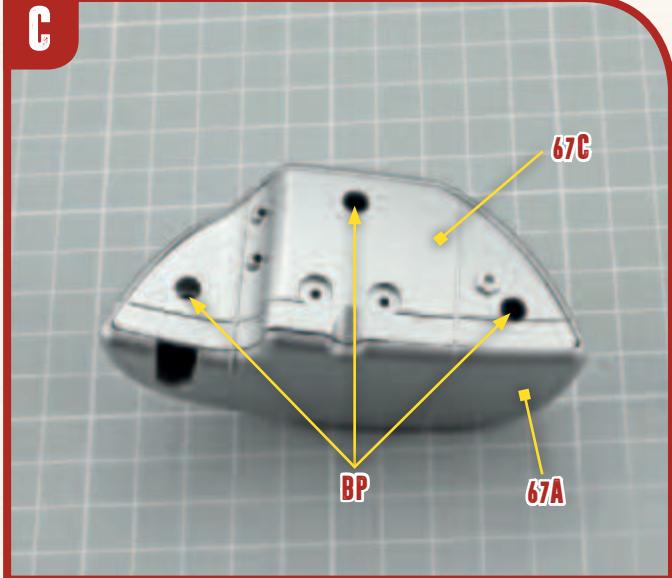
step by step #66



67 PARTS LIST

67A Oil tank body
67B Filler cap
67C Oil tank bottom
67D Bracket

AP 3 screws (1.7x4mm)
BP 4 screws (2x5mm)
KP 2 screws (1.7x3mm)

A**B****C**

68 PARTS LIST

68A

68F

68G

68K **68E** **68K**

68B

68I

68C

68L

68D



68J

68H



AP

HP

OP

68A Shaft part A

68B Shaft part B

68C Detail 1

68D Tube 1

68E Detail 2

68F Bracket 1 (L)

68G Bracket 2 (R)

68H Tubes 2 (x2)

68I Details 3 (x2)

68J Tubes 3 (x2)

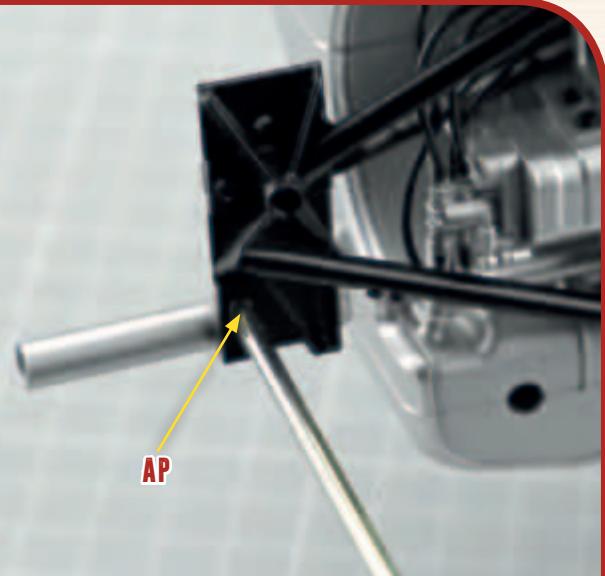
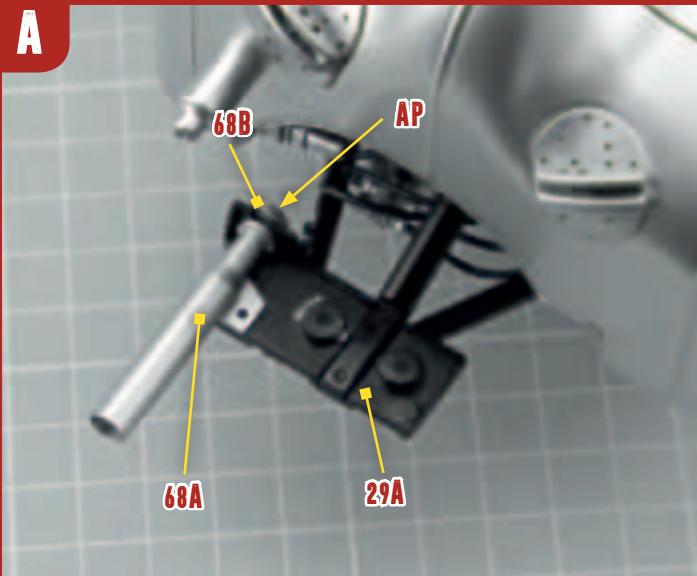
68K Details 4 (x2)

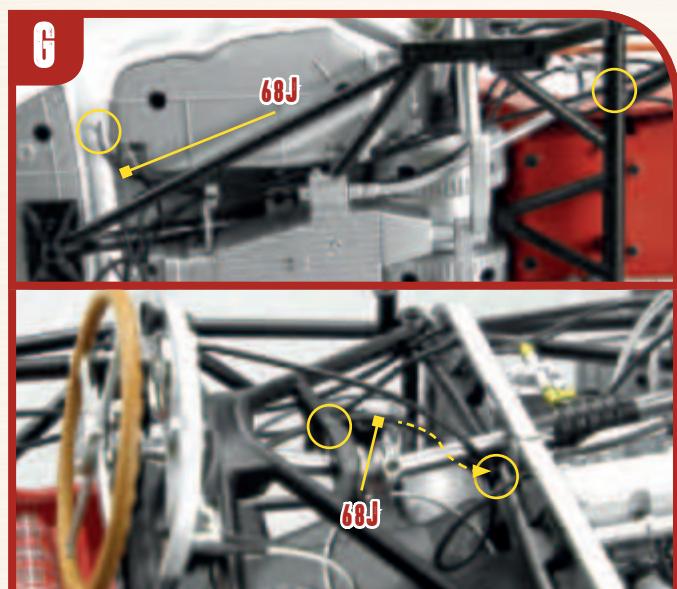
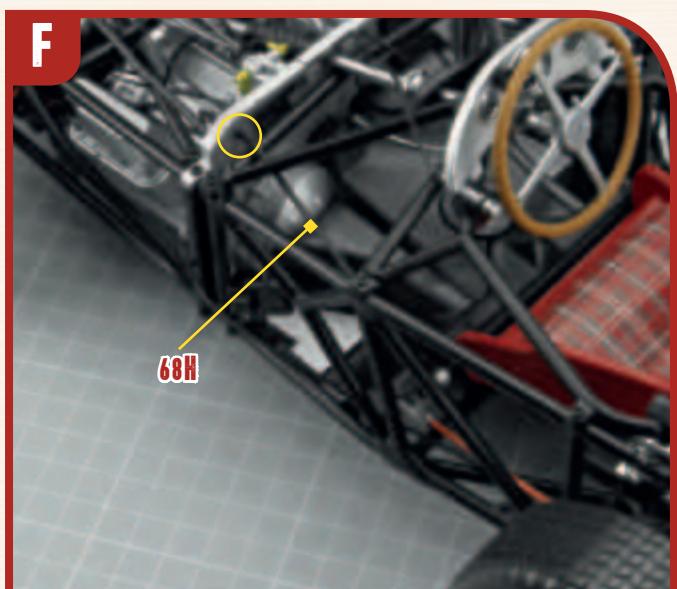
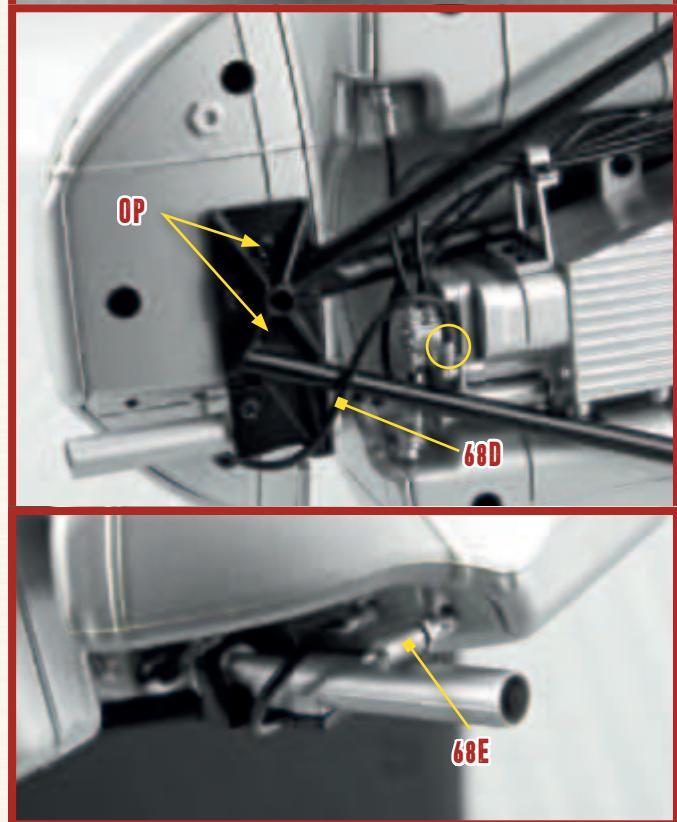
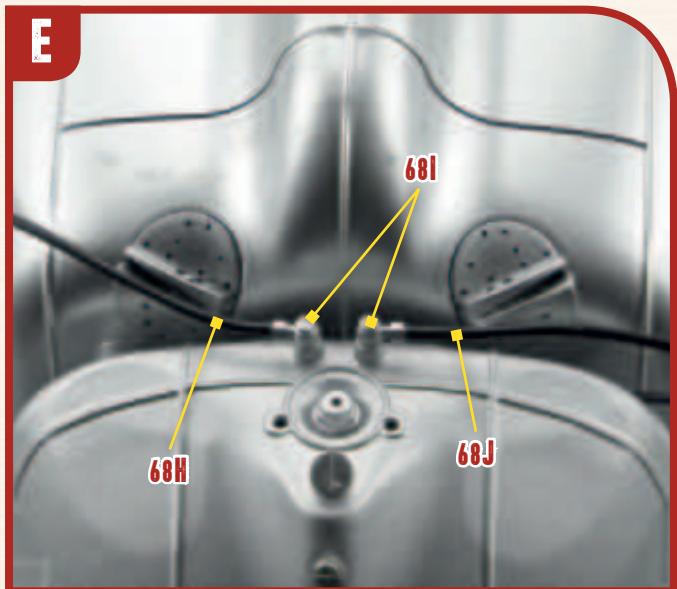
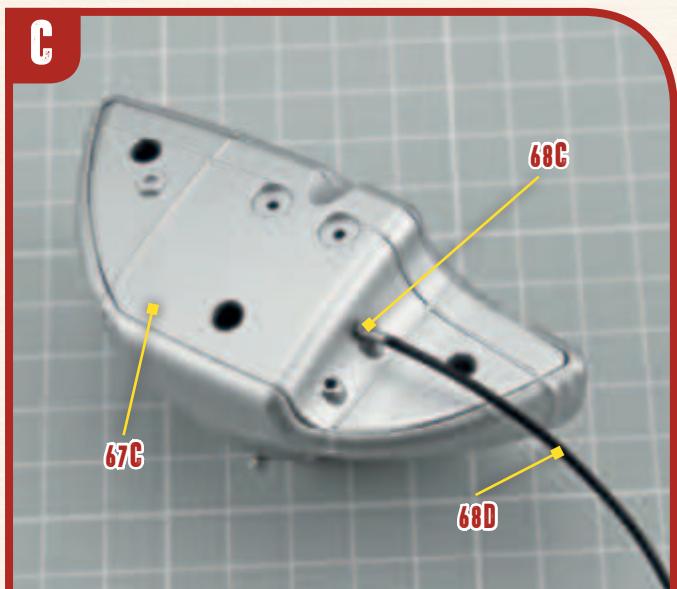
68L Tapes (x2)

AP 4 screws (1.7x4mm)

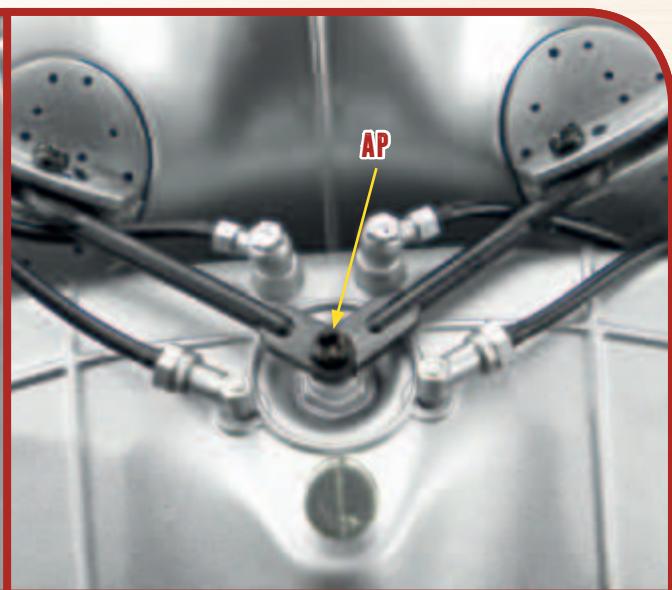
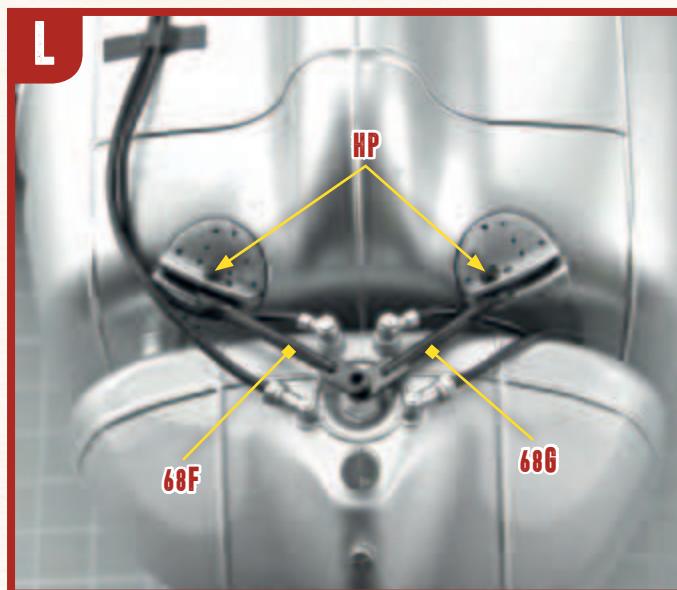
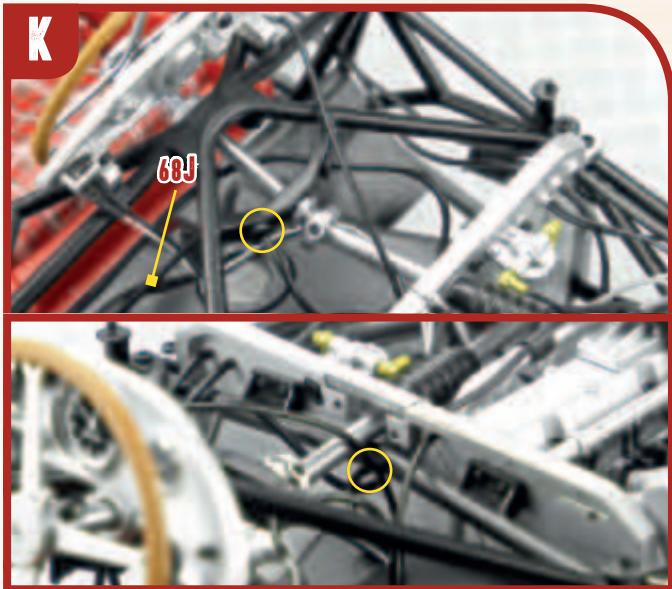
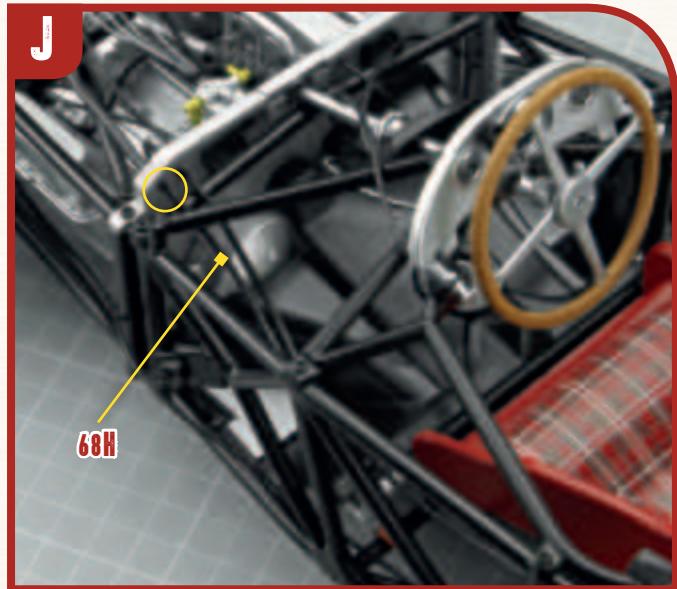
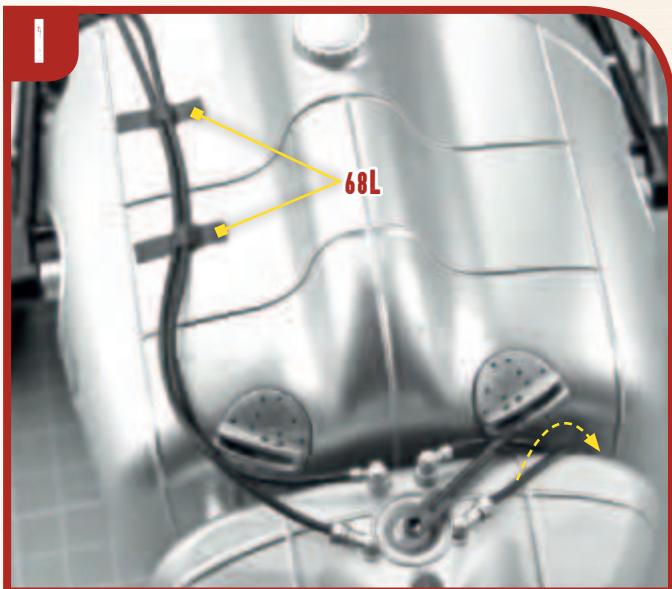
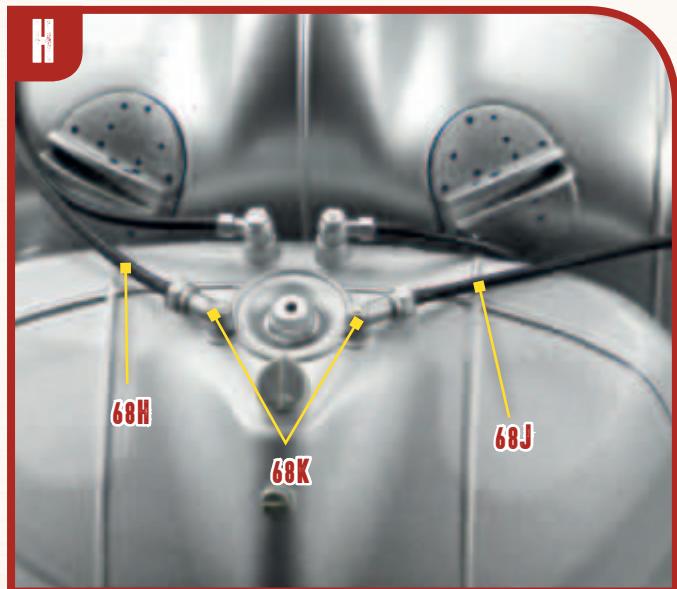
HP 3 screws (1.7x5mm)

OP 3 screws (2x7mm)



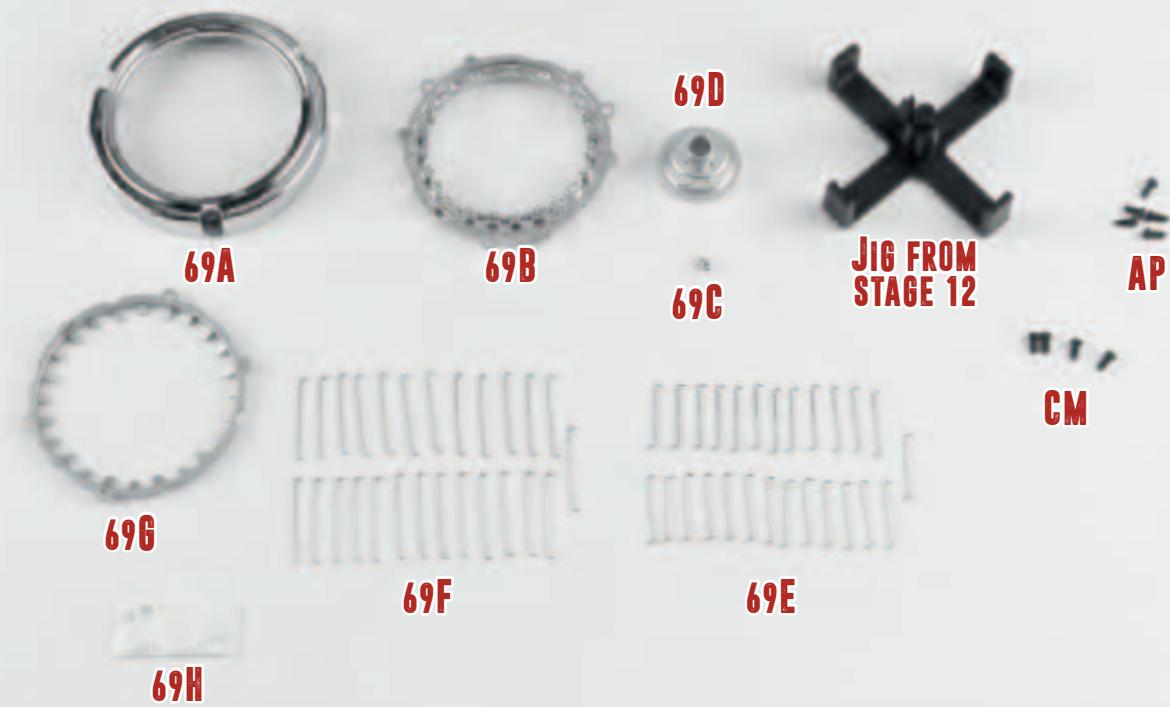


step by step #68



69 PARTS LIST

REGULAR ASSEMBLY



69A Outer rim

69B Central ring 1

69C Inflation valve

69D Hub 1

69E Spokes 1

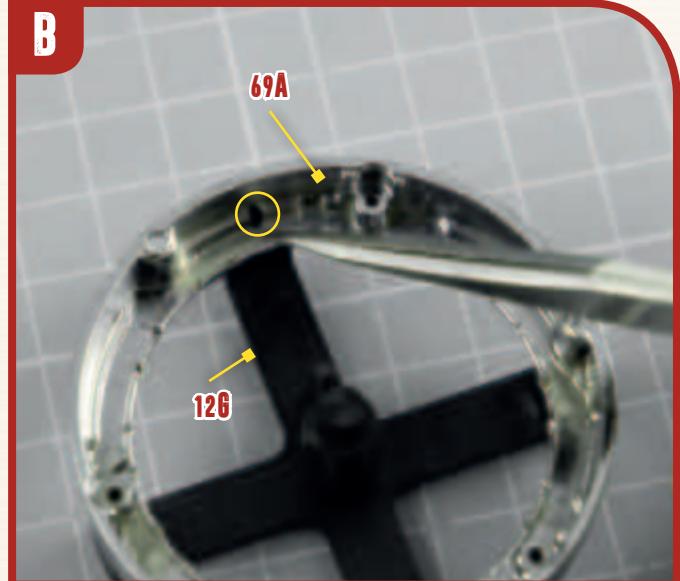
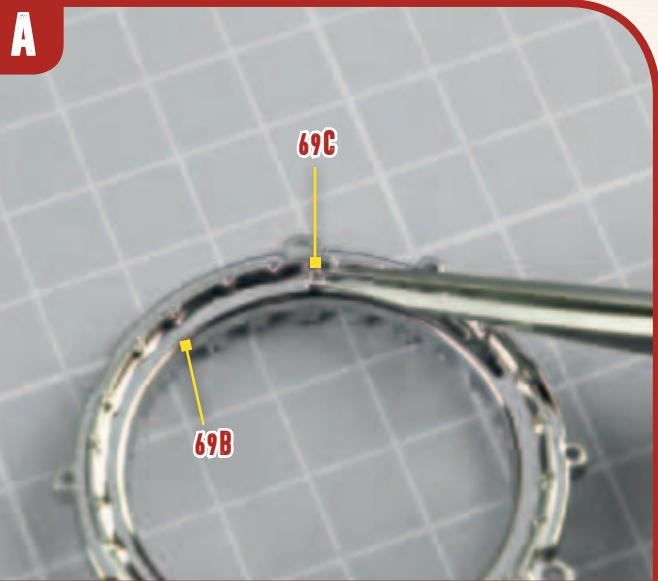
69F Spokes 2

69G Central ring 2

69H Double-sided tape

AP 5 screws (1.7x4mm)

CM 4 screws (1.7x4mm)



step by step #69

C

Apply 24 pieces of double-sided tape 69H to 69A's inner profile and tear off their top sheets.

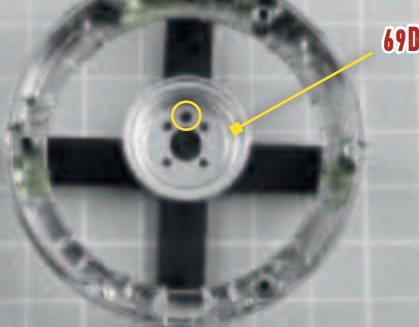


69H

69A



D



69D

E

Insert 1 spoke 69F through a hole in 69D's first level (counting from the bottom).



69D

69F



F

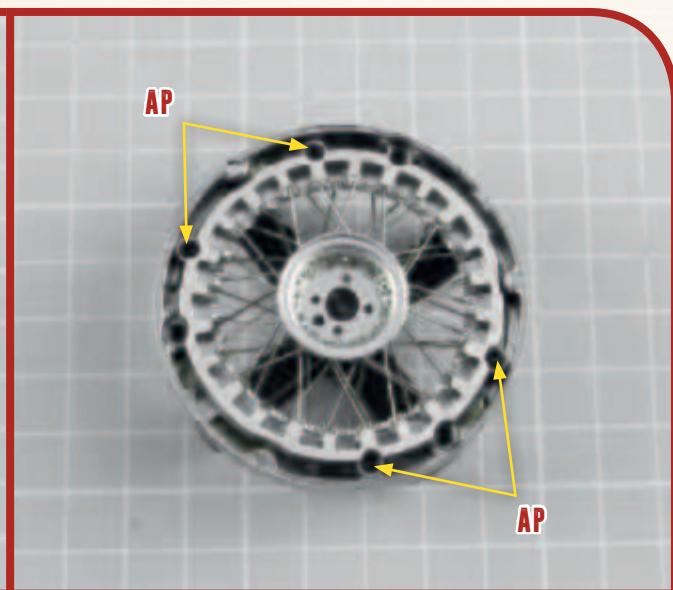
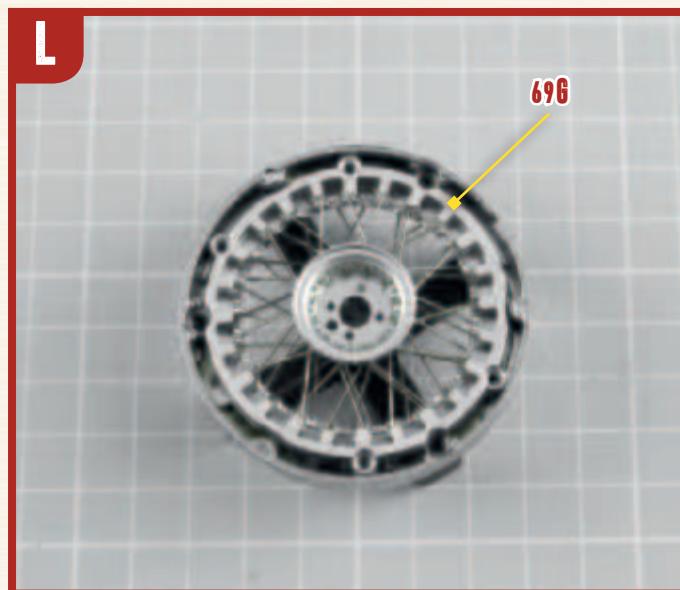
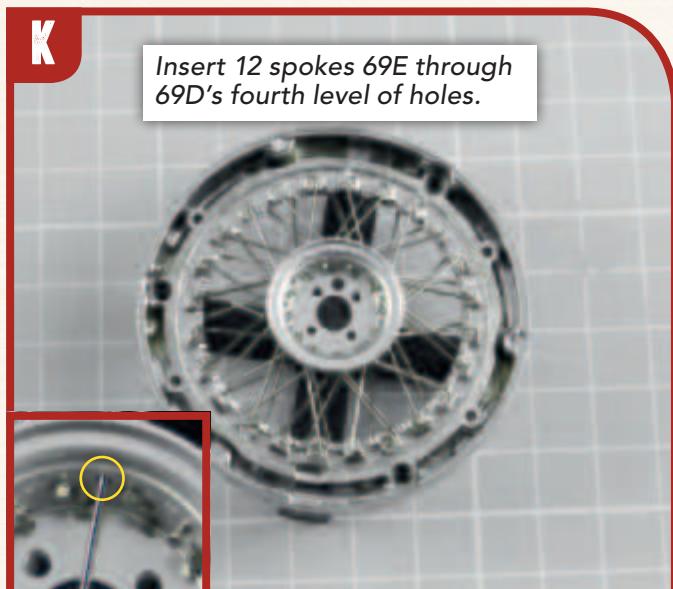
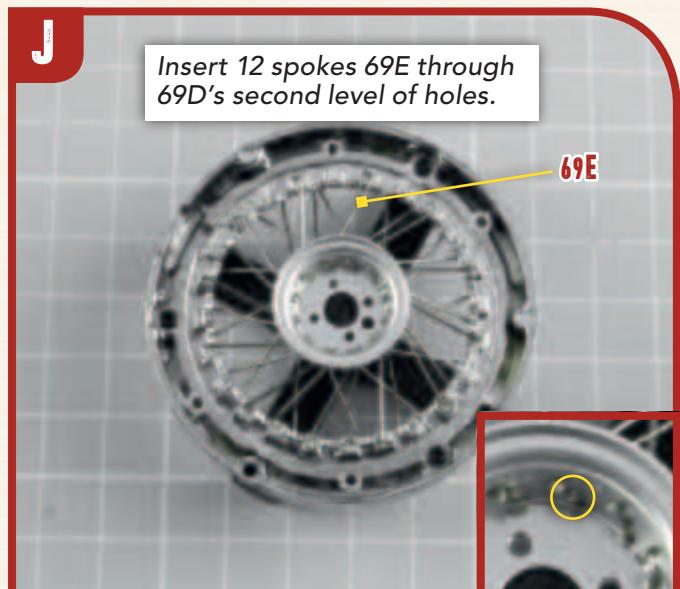
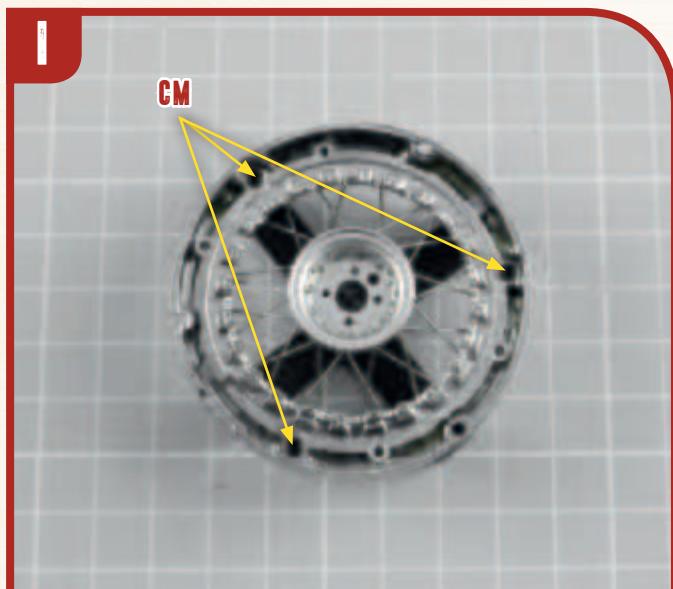
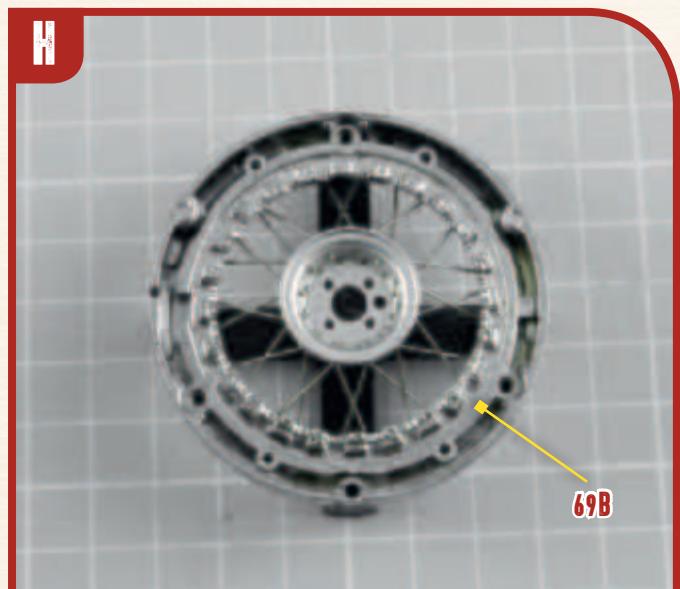
Repeat the process with other 11 spokes 69F.



G

Insert 12 spokes 69F through 69D's third level of holes.

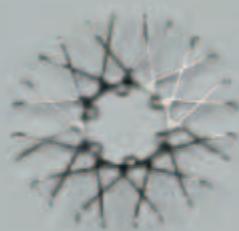




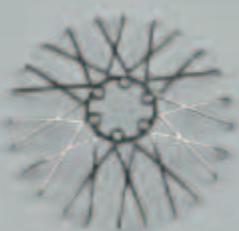
69B PARTS LIST

EASY ASSEMBLY

69FF



69GG



69AA



69CC



69EE



69BB



69DD



LP



TP

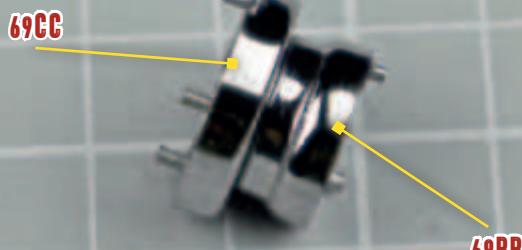
UP

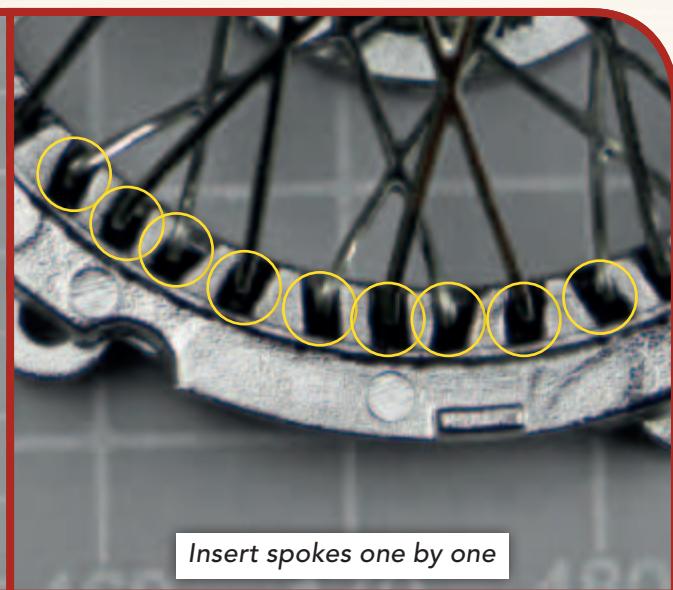
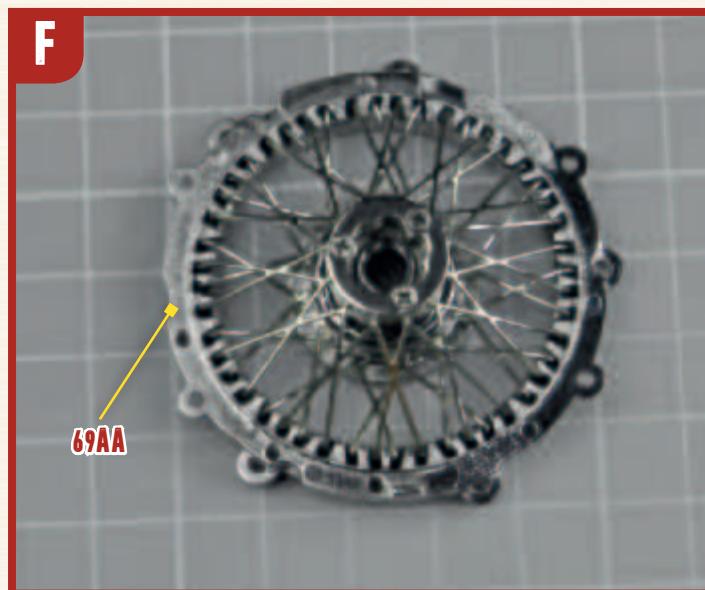
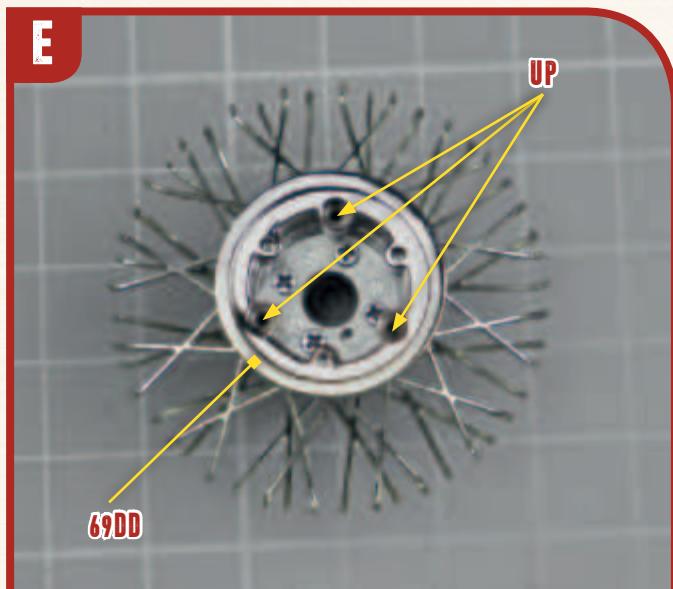
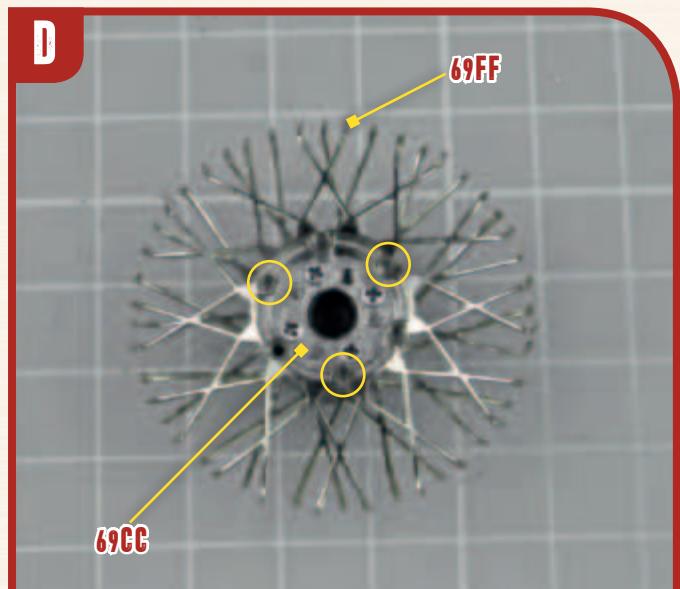
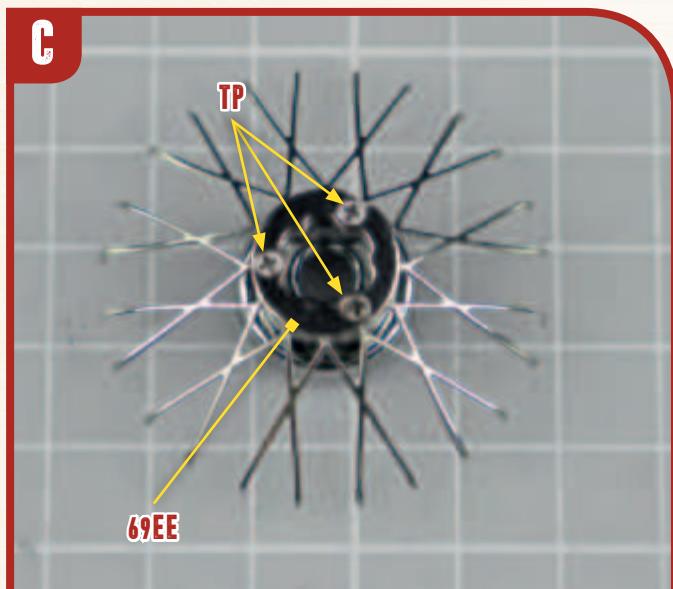
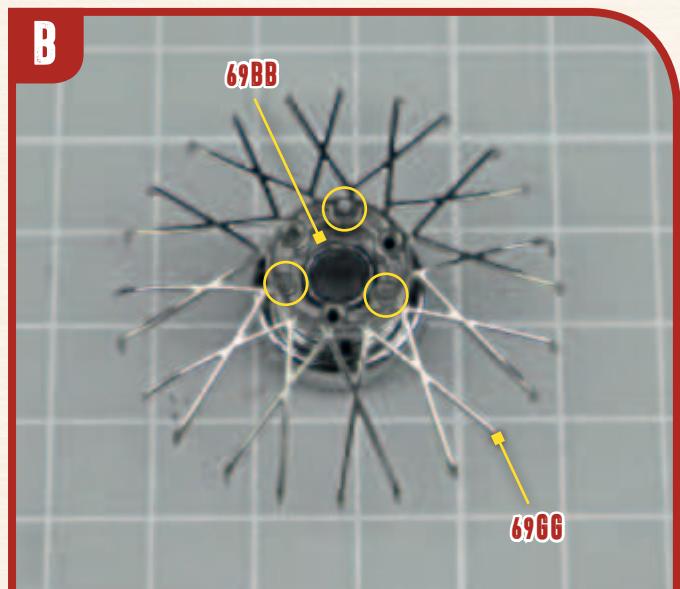
**TWEezERS FROM
STAGE 12**

- 69AA** Central ring 1
- 69BB** Hub 1
- 69CC** Hub 2
- 69DD** Hub 3
- 69EE** Hub 4
- 69FF** Spokes 1

- 69GG** Spokes 2
- LP** 5 screws (1.5x3mm)
- TP** 4 screws (1.5x5mm)
- UP** 4 screws (1.7x4mm)

A





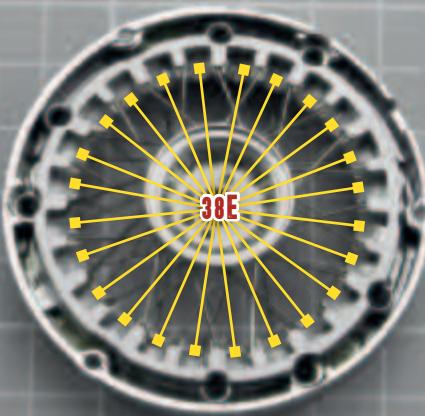
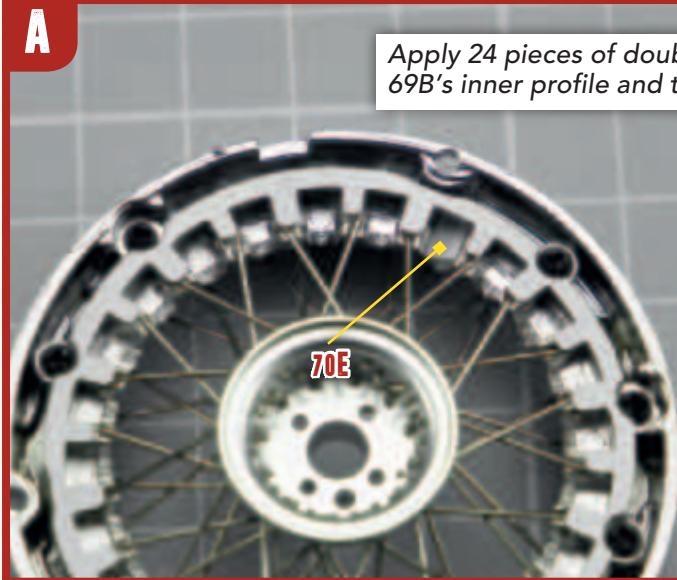
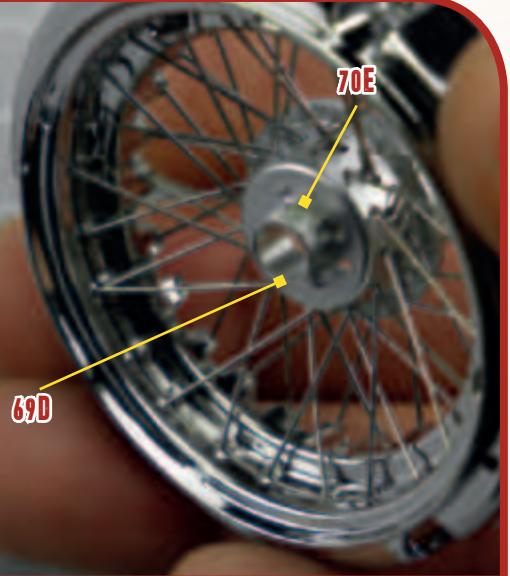
70 PARTS LIST

REGULAR ASSEMBLY

70A	Inner rim
70B	Central ring 3
70C	Hub 2
70D	Spokes 3
70E	Double-sided tape
CM	4 screws (1.7x4mm)
KM	5 screws (1.5x5mm)

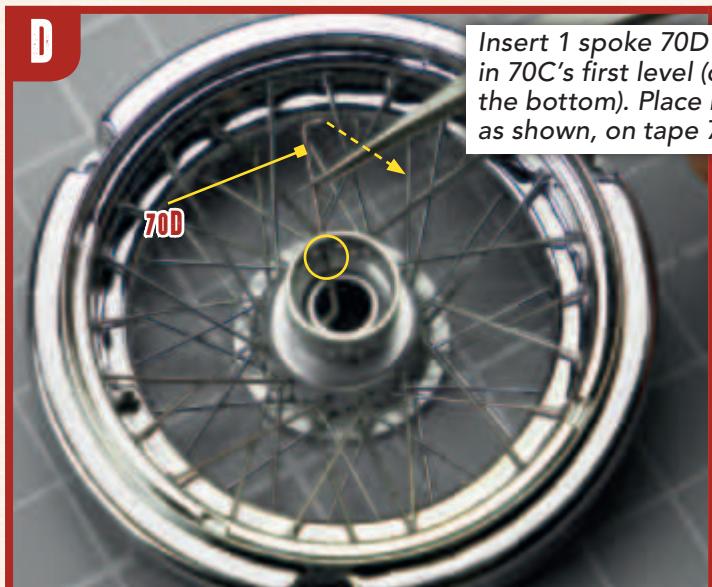
**A**

Apply 24 pieces of double-sided tape 70E to 69B's inner profile and tear off their top sheets.

**B****C**

D

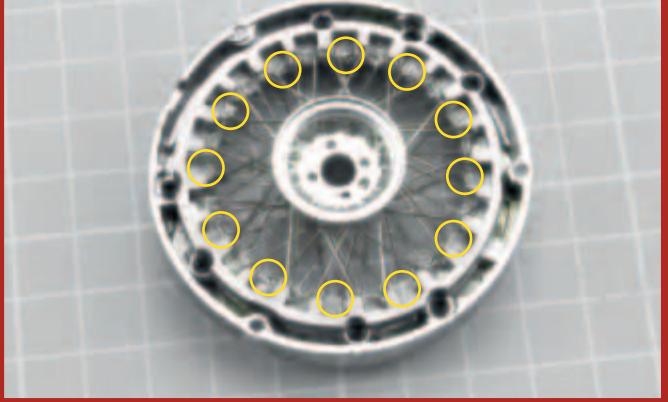
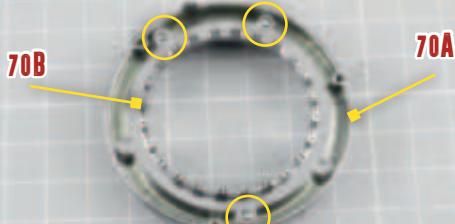
Insert 1 spoke 70D through a hole in 70C's first level (counting from the bottom). Place its thinner end as shown, on tape 70E.

**E**

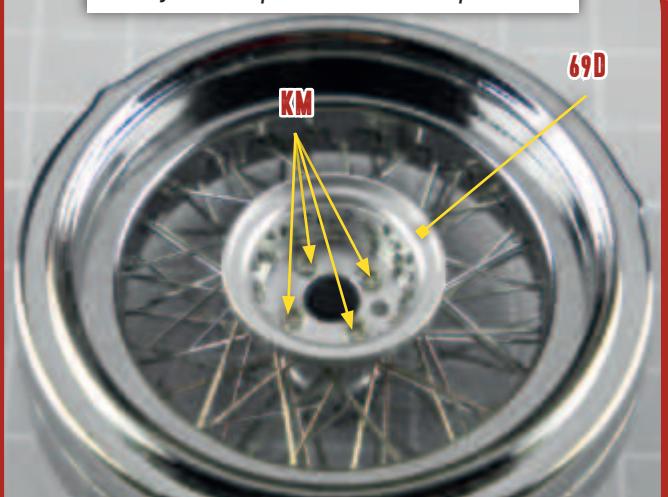
Repeat the process with other 11 spokes 70D. Leave one empty spot between the thinner ends of spokes 70D.

**F**

Insert 12 spokes 70D through 70C's second level of holes. Place their thinner ends on the empty spots from Step E, on tapes 70E.

**G****H**

Tighten or loosen the four KM screws to adjust the position of the spokes.



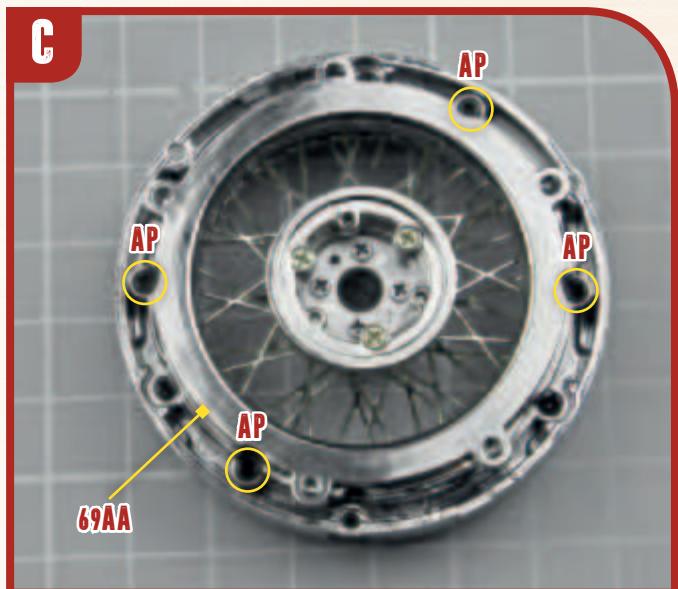
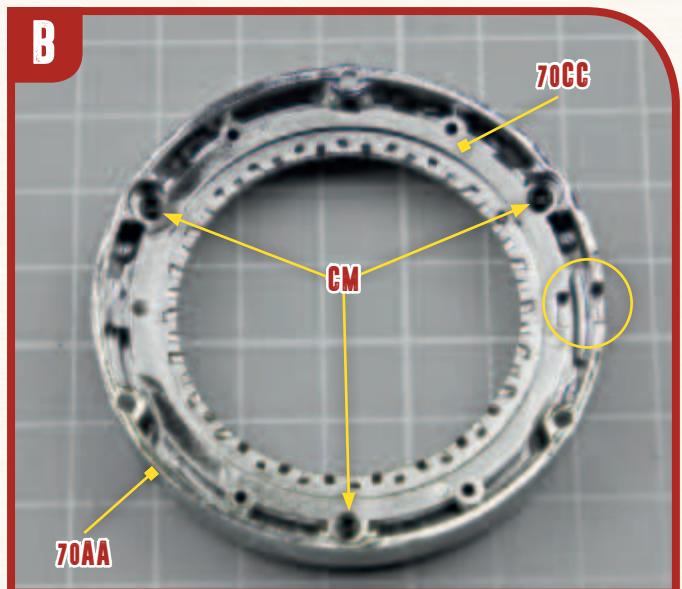
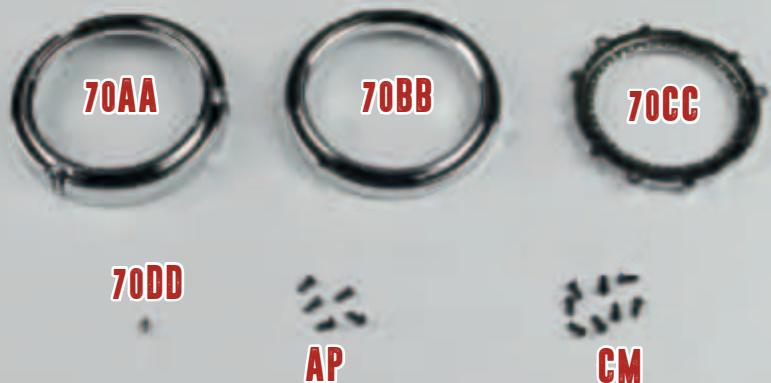
step by step #70B

70B PARTS LIST

EASY ASSEMBLY

70AA Outer rim
70BB Inner rim
70CC Central ring 2
70DD Inflation valve

AP 5 screws (1.7x4mm)
CM 8 screws (1.7x4mm)



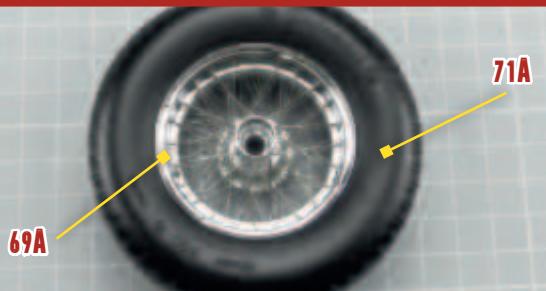
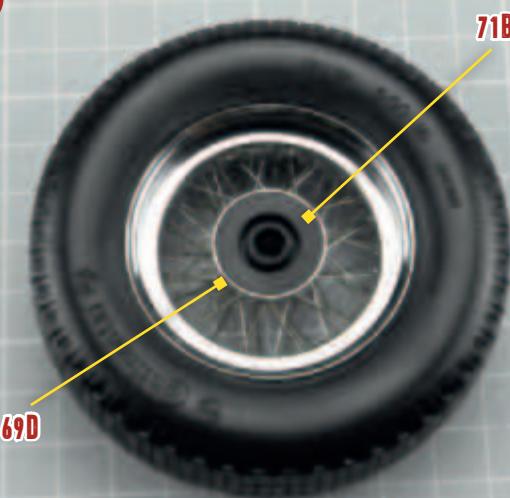
71 PARTS LIST

REGULAR ASSEMBLY

- 71A** Tyre
71B Hub 3
71C Hubcap
71D Washer ring
JM 2 screws (2x5mm)

**A**

Soften tyre 71A by placing it in a bowl full of hot water.

**B****C**

Attach wheel to rear suspension right wishbone 28A

71D

JM

D

71C

step by step #71B

71B PARTS LIST

EASY ASSEMBLY

71AA Tyre
71BB Hubcap
71CC Hub 5
71DD Washer ring

JM 2 screws (2x5mm)



A

71AA

Soften tyre 71AA by placing it in a bowl full of hot water.

B

70BB

71AA

C

71DD

69EE

D

69DD

71CC

72

PARTS LIST



72A



72B

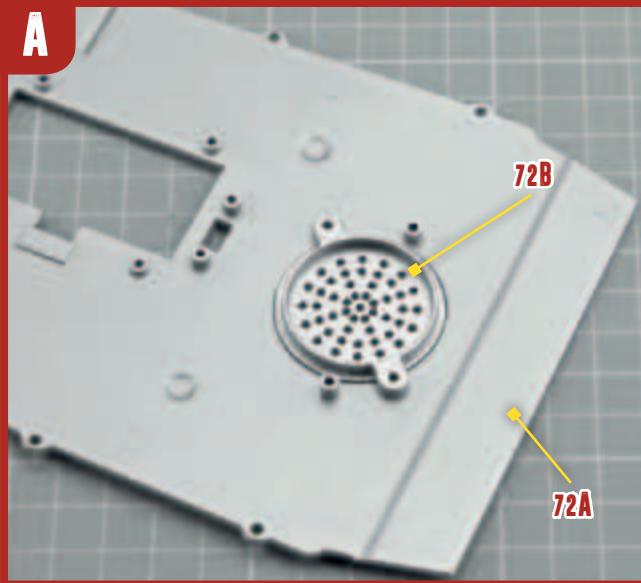
MP

72A Bottom floor panel

72B Speaker cover

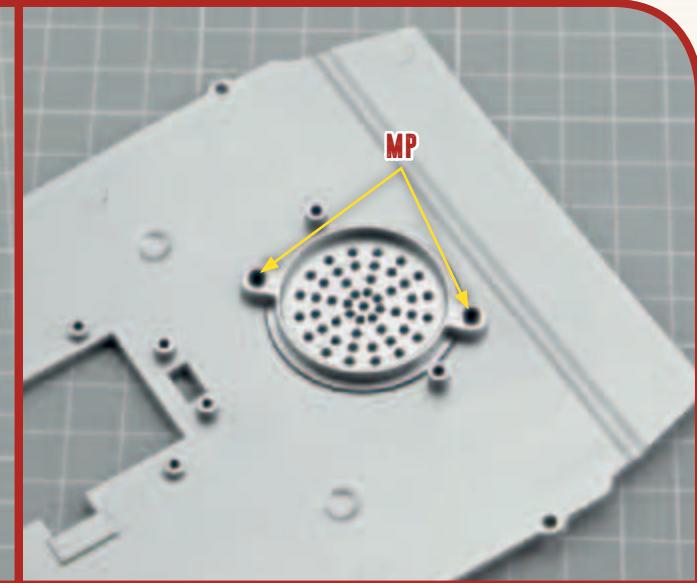
MP 3 screws (2x3mm)

A

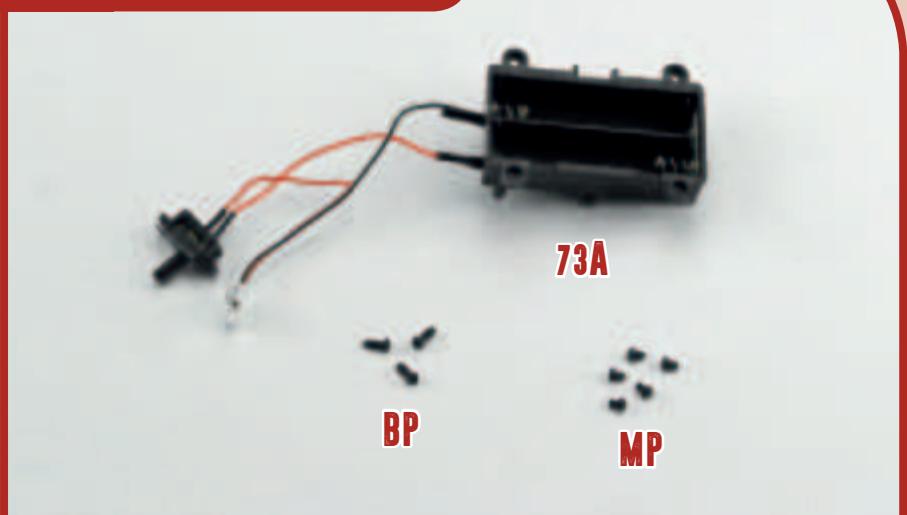


72A

MP

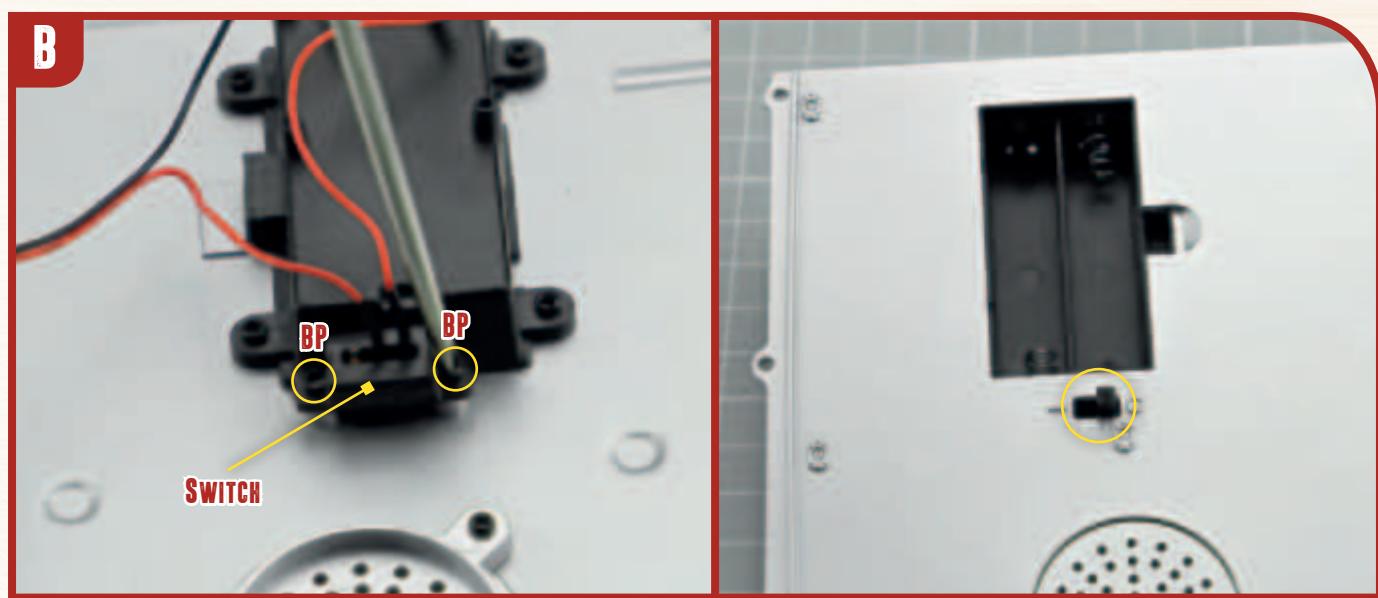
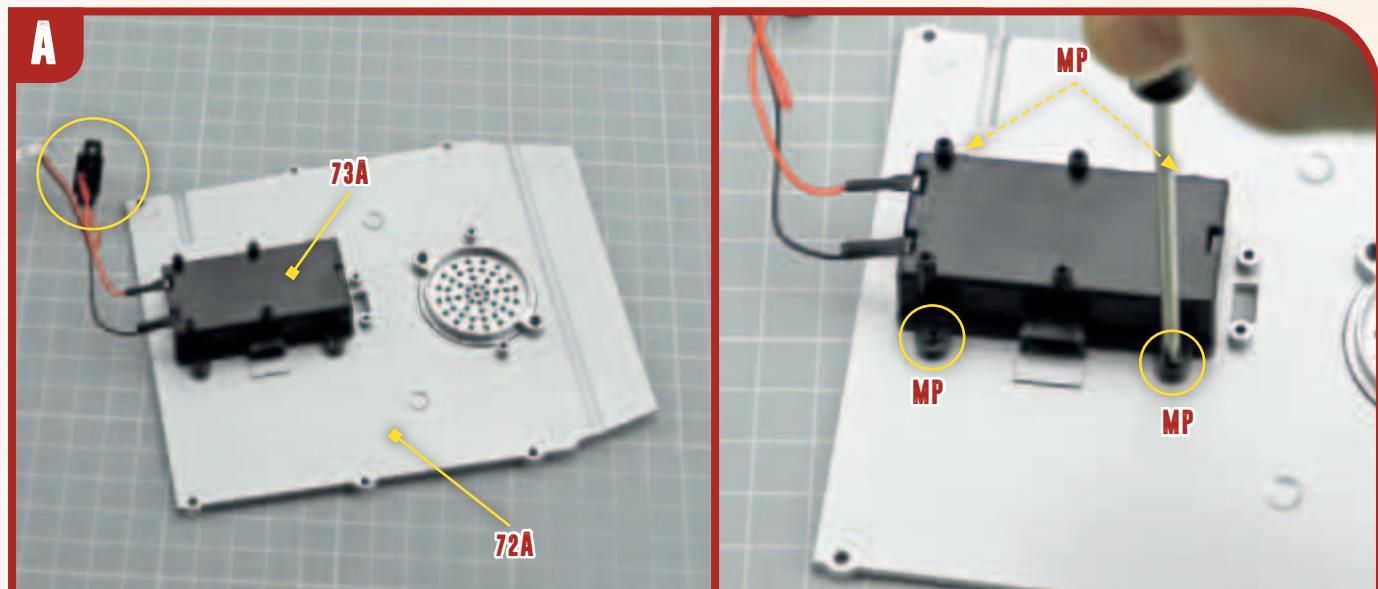


73 PARTS LIST



73A Battery compartment with switch

BP 3 screws (2x5mm)
MP 5 screws (2x3mm)

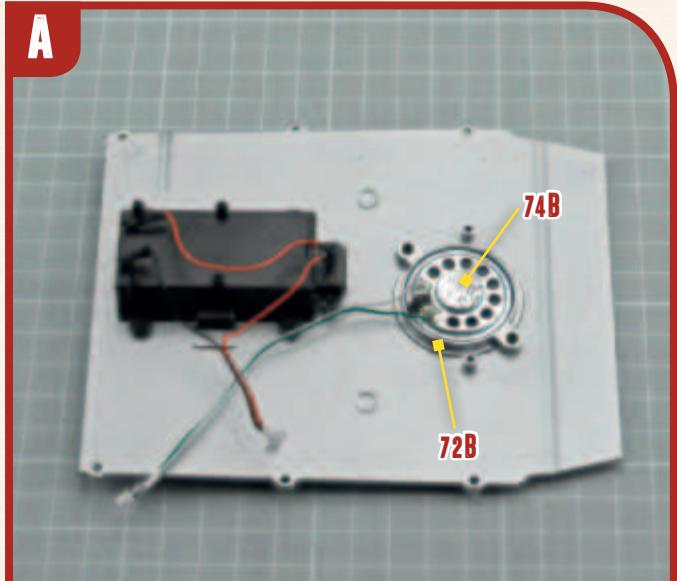
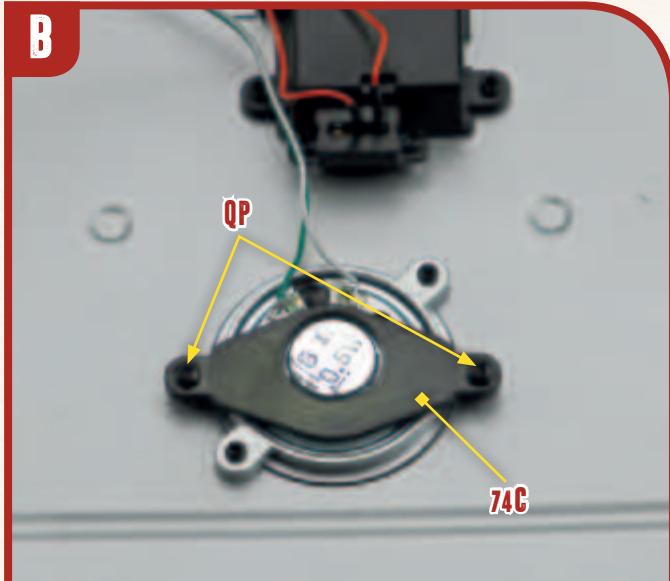
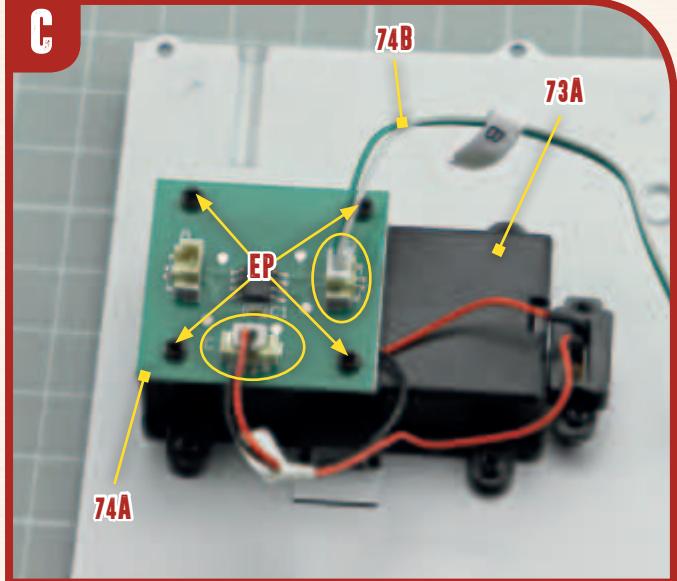
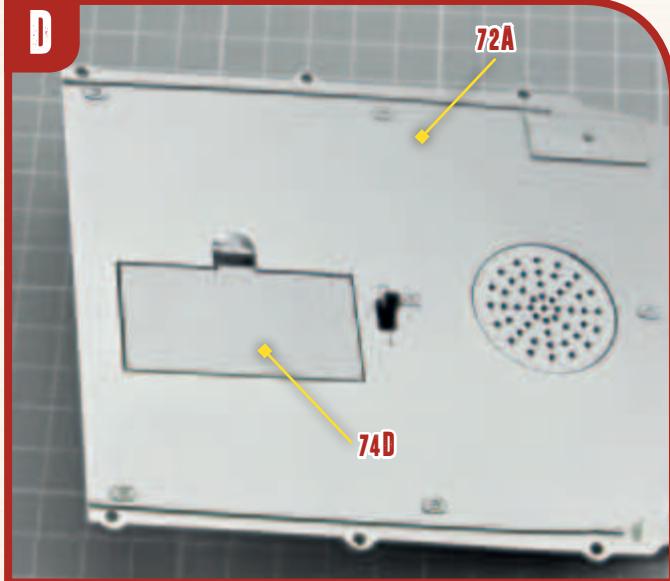


74 PARTS LIST



74A PCB
74B Speaker
74C Speaker support
74D Battery compartment cover

EP 5 screws (2x4mm)
QP 3 screws (2.3x4mm)

A**B****C****D**

75 PARTS LIST

75A

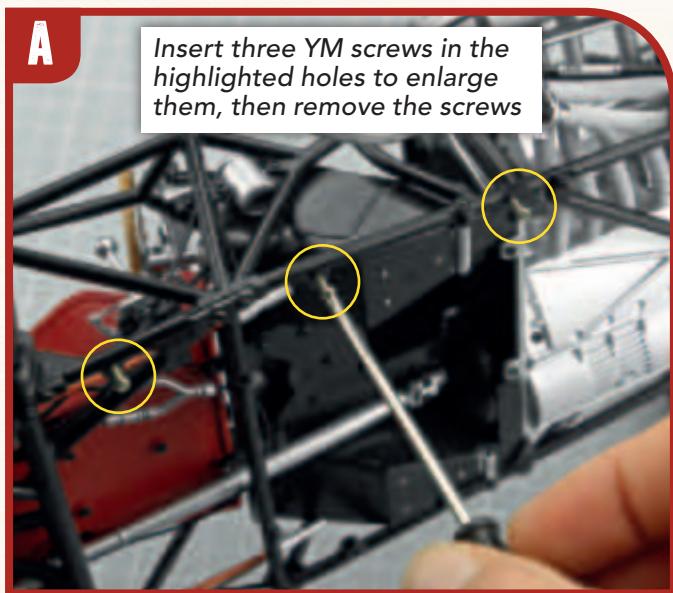
YM

75A Body lower panel (L)

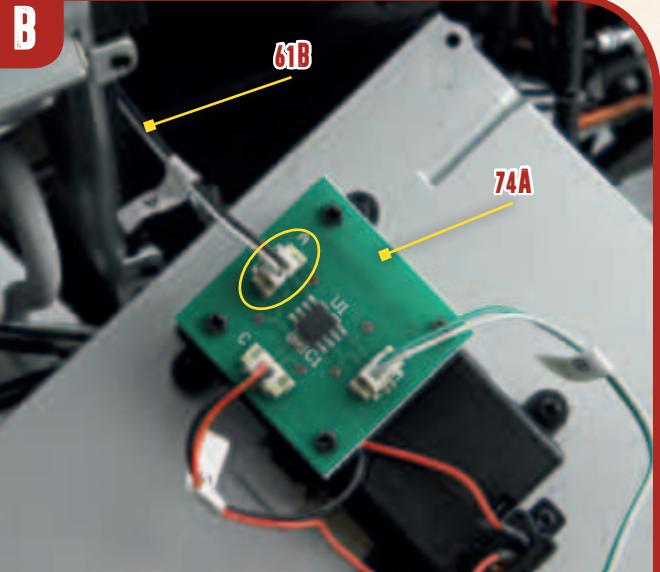
YM 4 screws (2.3x8mm)

A

Insert three YM screws in the highlighted holes to enlarge them, then remove the screws

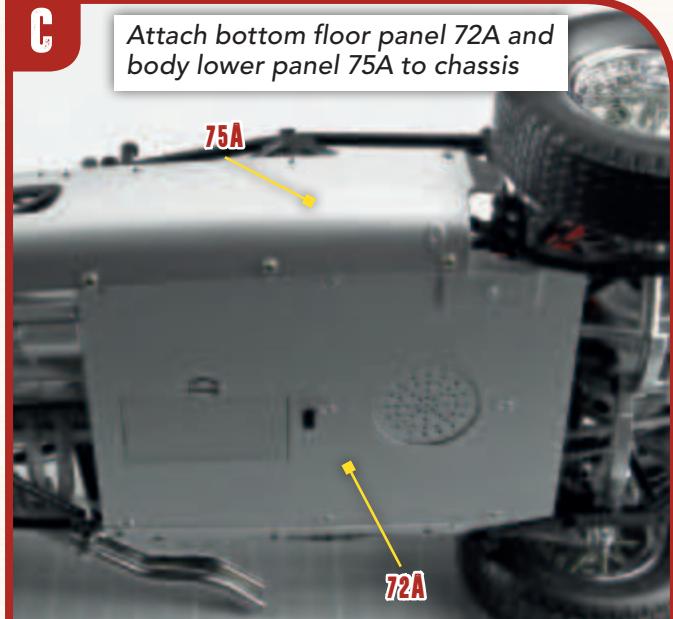


B

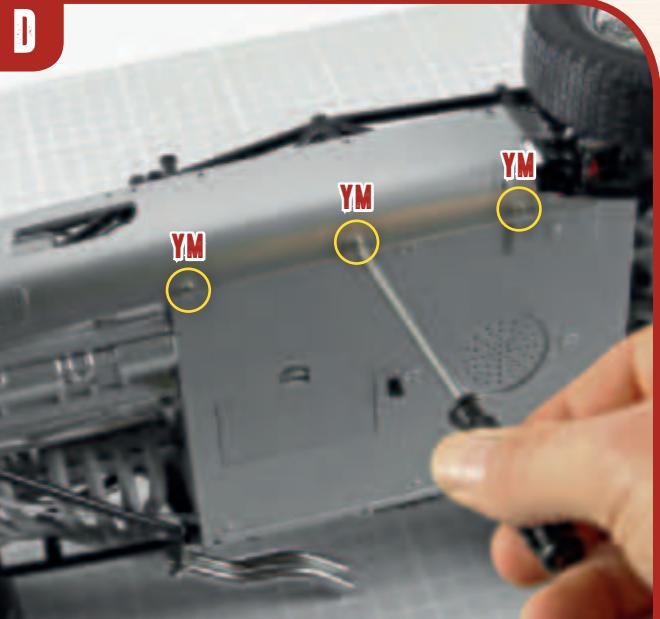


C

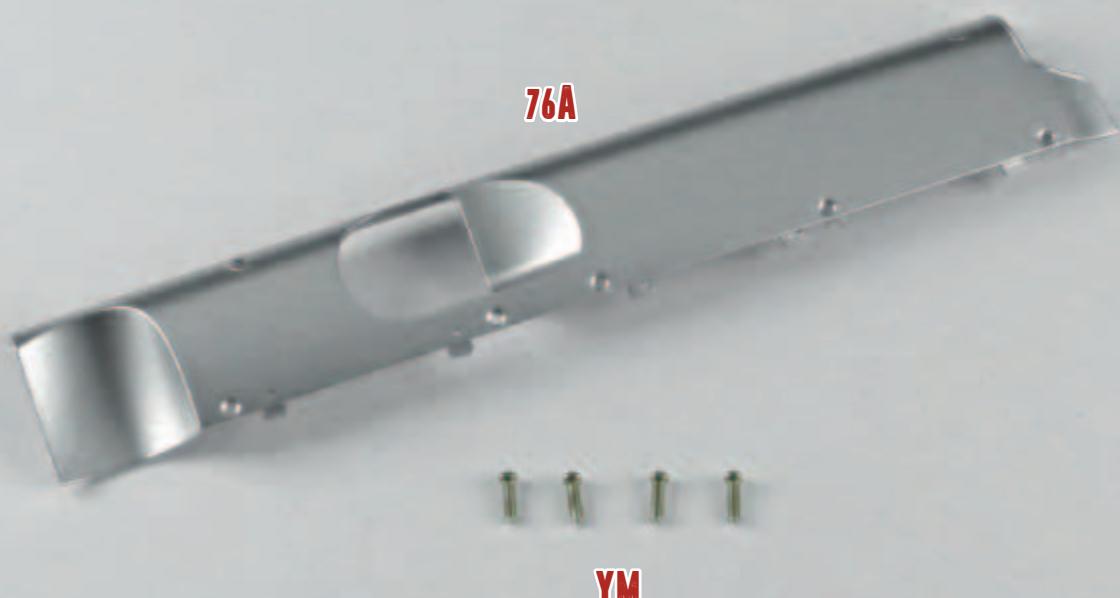
Attach bottom floor panel 72A and body lower panel 75A to chassis



D

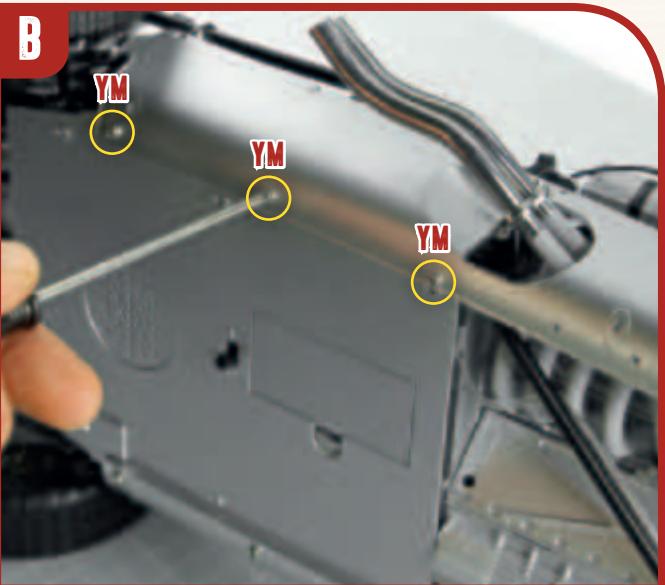
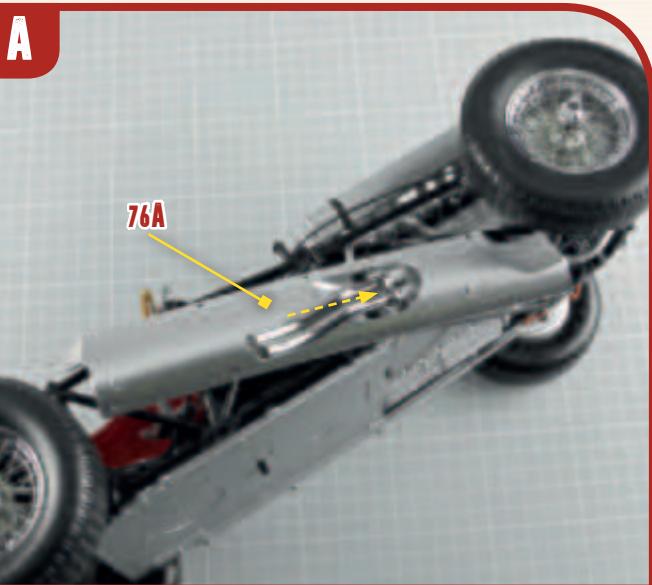


76 PARTS LIST



76A Body lower panel (R)

YM 4 screws (2.3x8mm)



77 PARTS LIST



CM

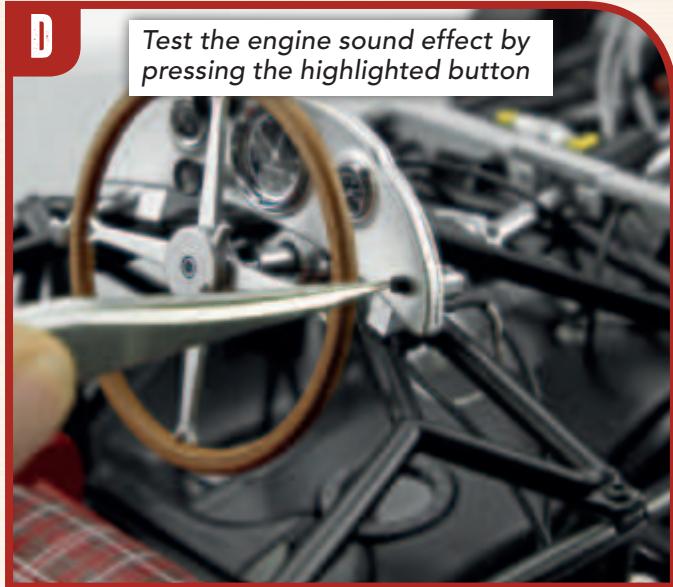
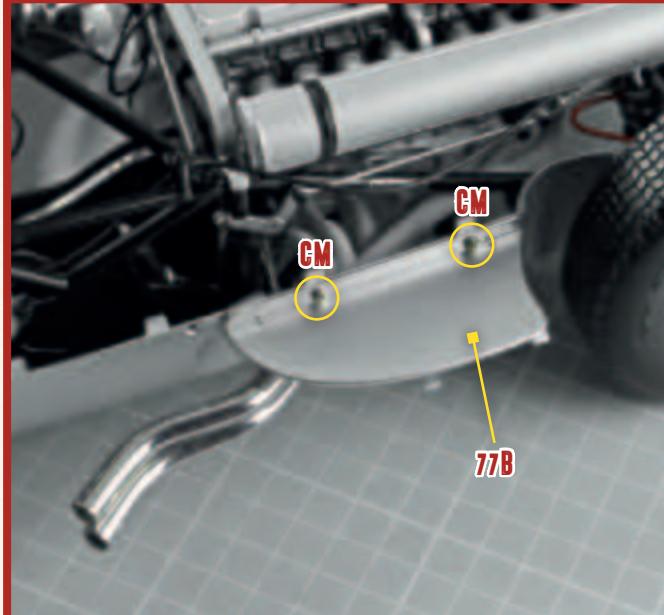
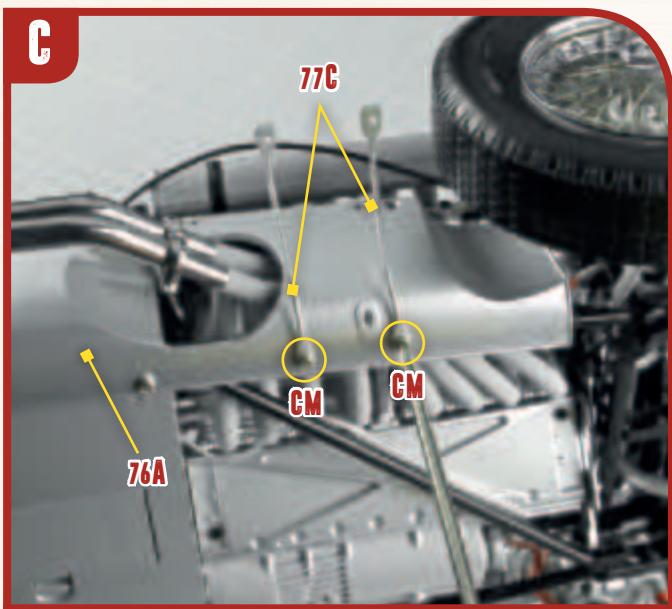
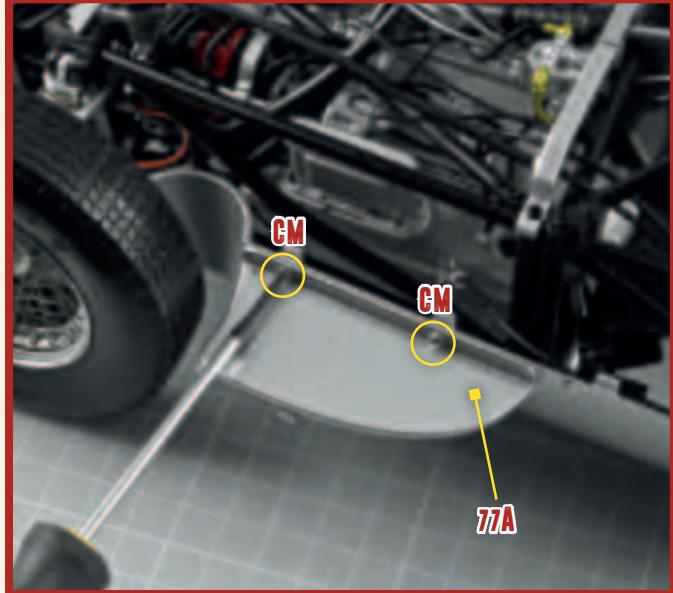
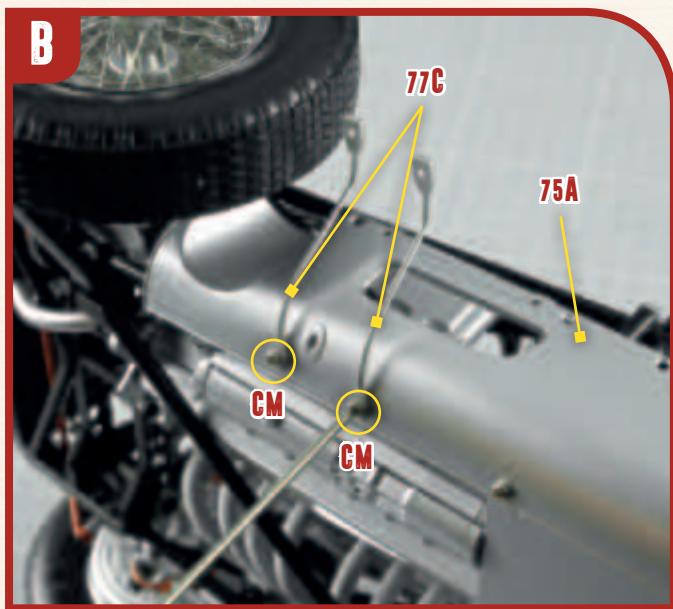
- 77A** Mudguard 1 (L)
77B Mudguard 2 (R)
77C Stretchers (x4)

CM 10 screws (1.7x4mm)

A

Insert two AAA batteries into the battery compartment





78 PARTS LIST



78A



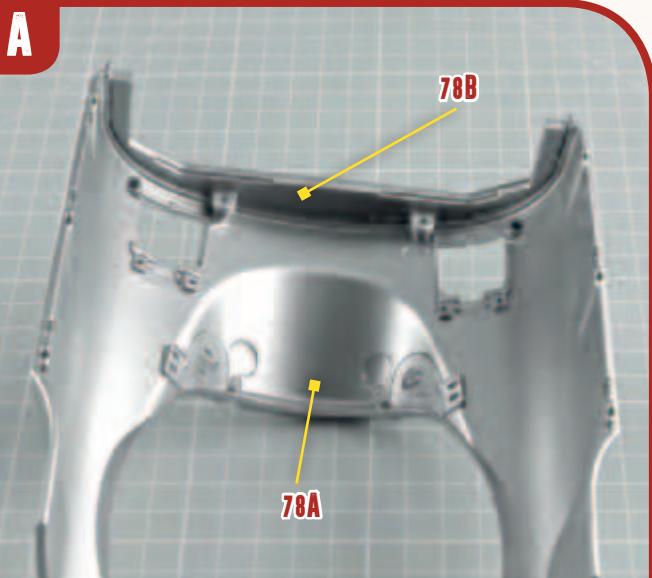
78B

EM

78A Body rear panel

78B Panel support

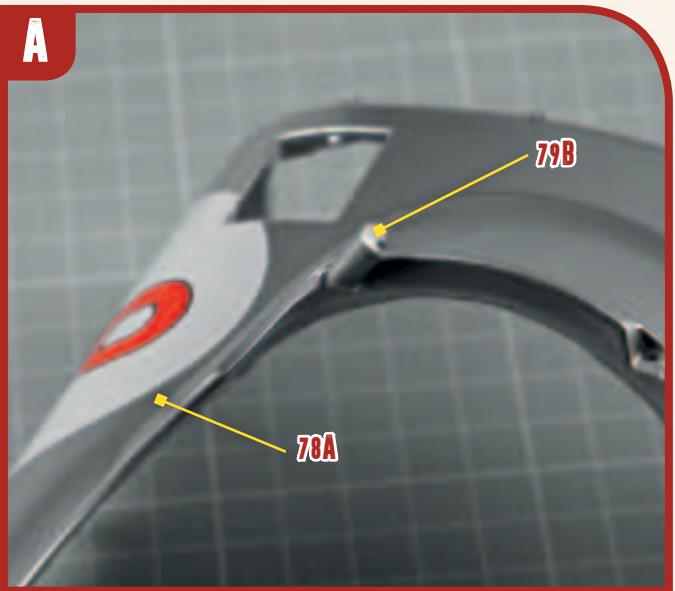
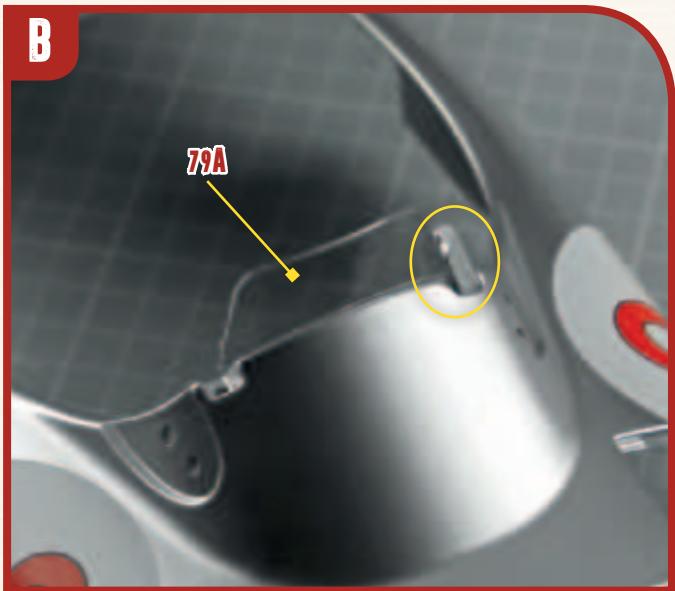
EM 3 screws (1.5x3mm)



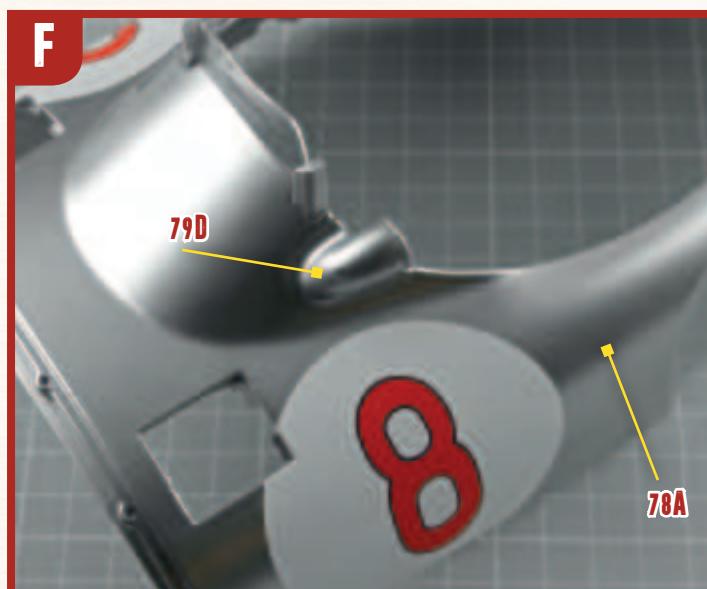
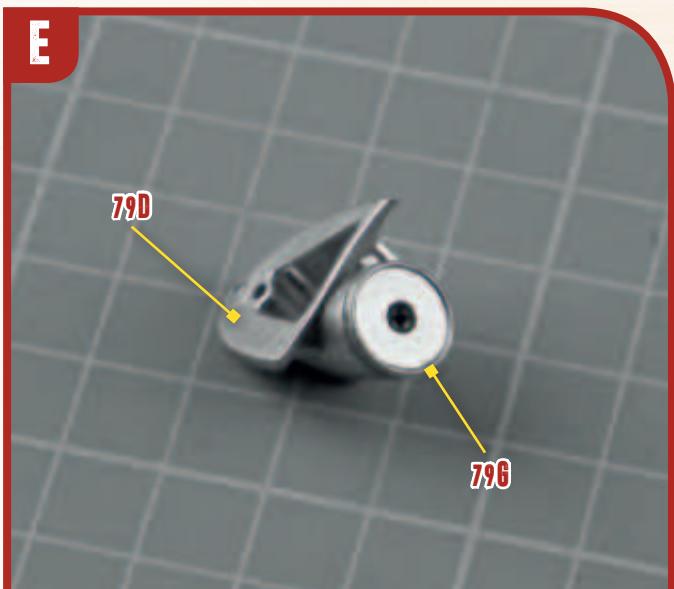
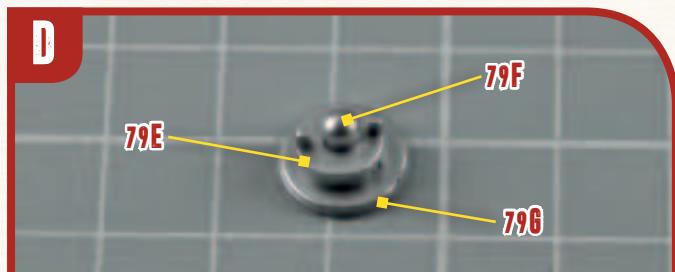
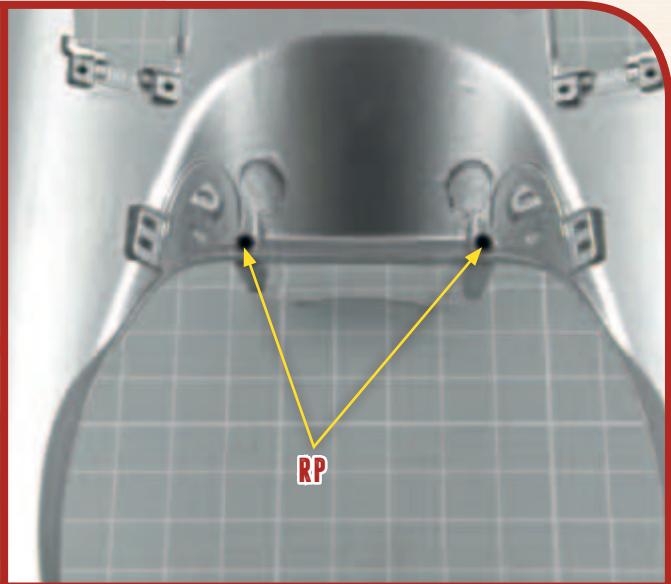
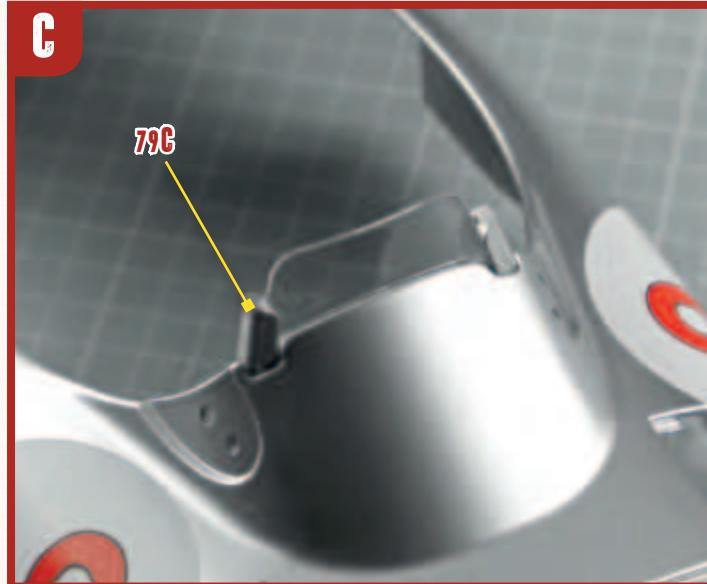
A



B

79**PARTS LIST****79B****79C****79D****79F****79E****79G****BP****RP****SP****79A** Windscreen**79B** Windscreen support 1 (L)**79C** Windscreen support 2 (R)**79D** Left side-view mirror body**79E** Mirror support 1**79F** Mirror support 2**79G** Mirror base**BP** 2 screws (2x5mm)**RP** 3 screws (1.5x5mm)**SP** 2 screws (1.5x4mm)**A****B**

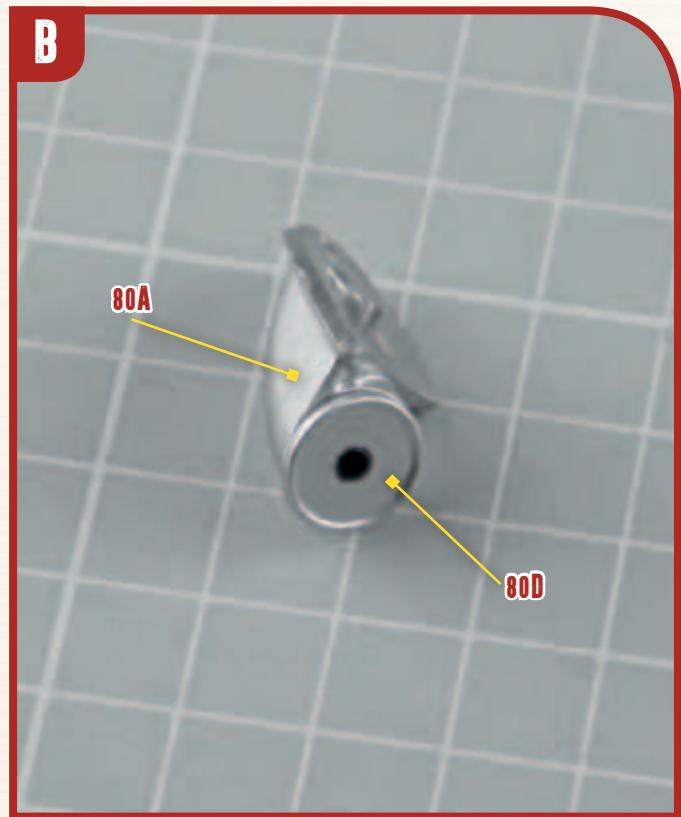
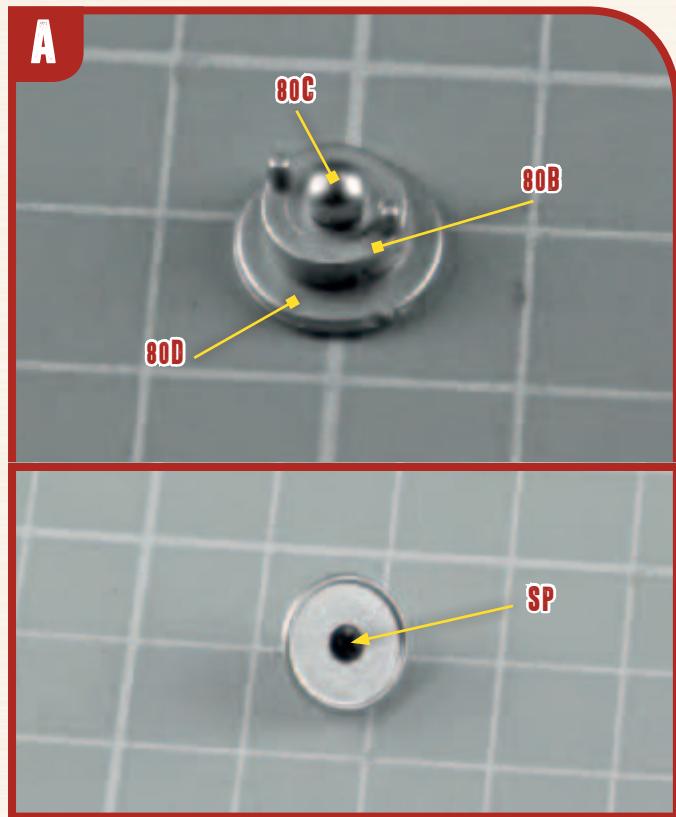
step by step #79



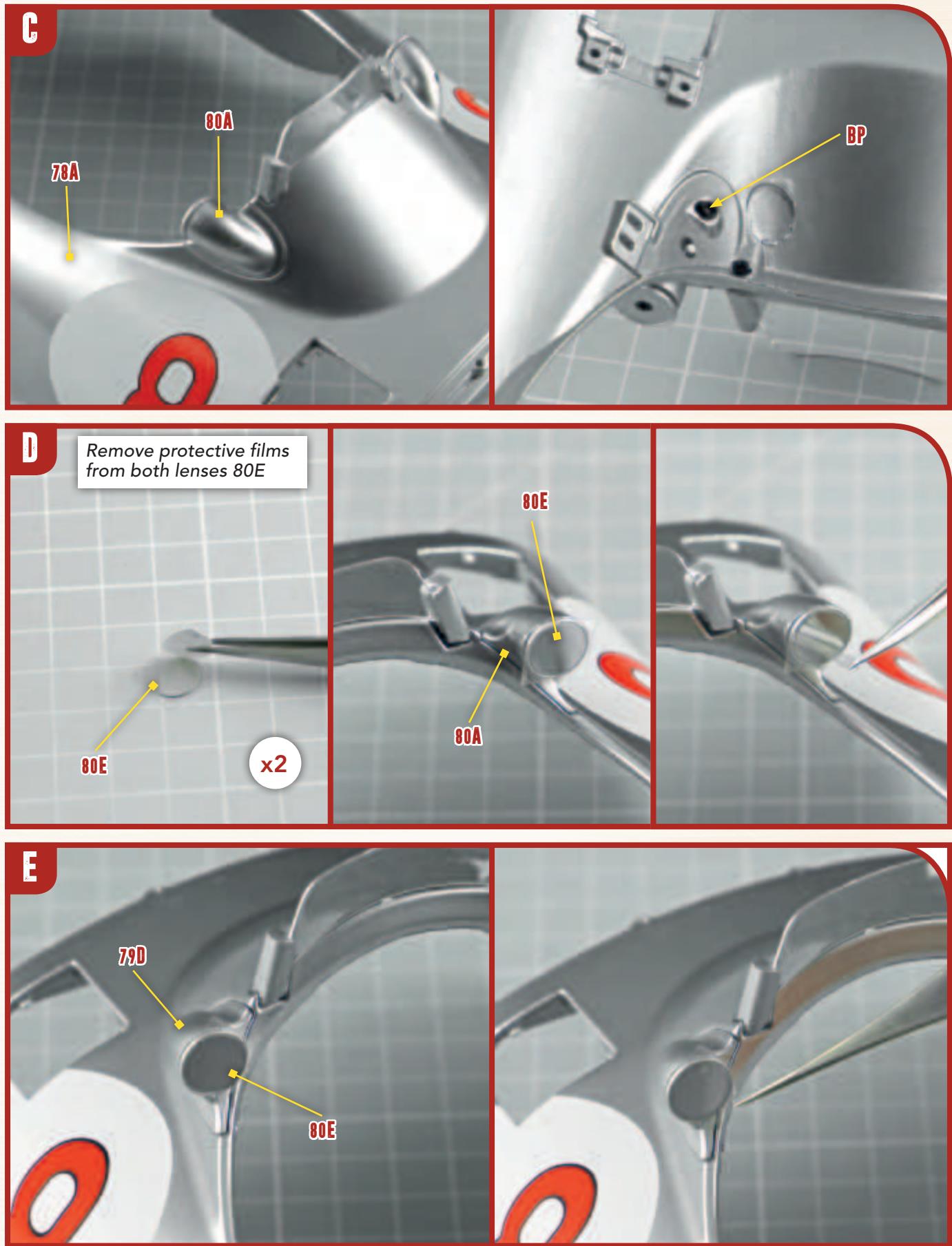
80 PARTS LIST



- | | |
|------------|----------------------------------|
| 80A | Right side-view mirror body |
| 80B | Mirror support 1 |
| 80C | Mirror support 2 |
| 80D | Mirror base |
| 80E | Side-view mirrors lenses
(x2) |
| BP | 2 screws (2x5mm) |
| SP | 2 screws (1.5x4mm) |



step by step #80

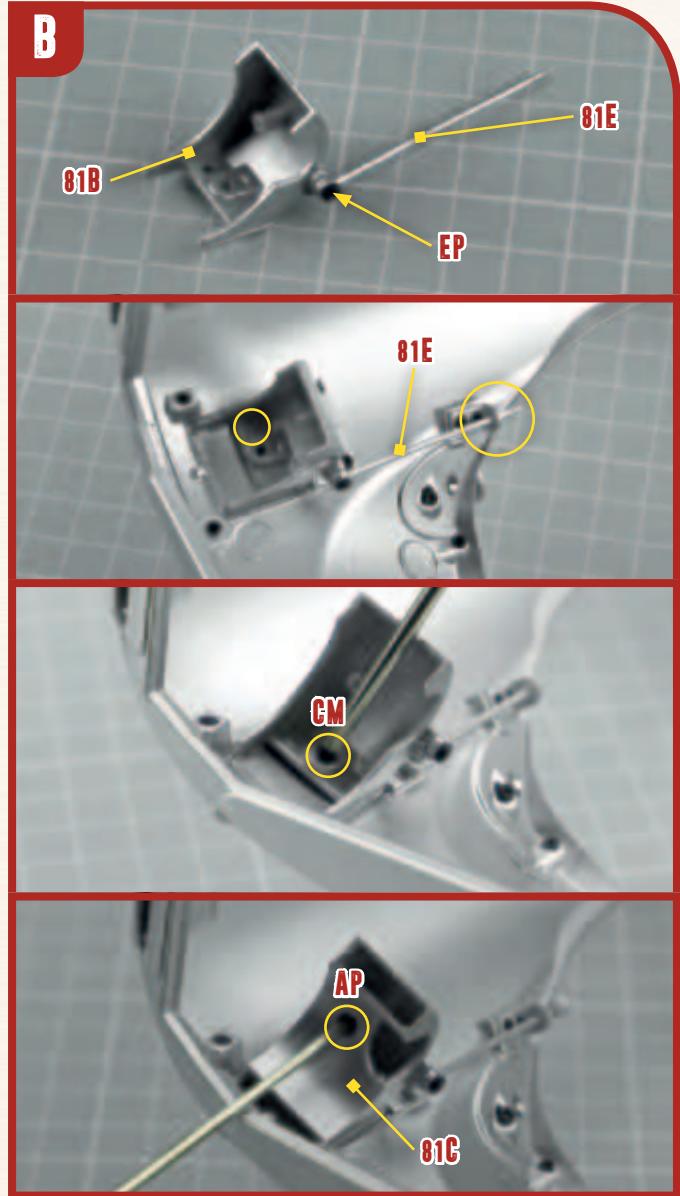
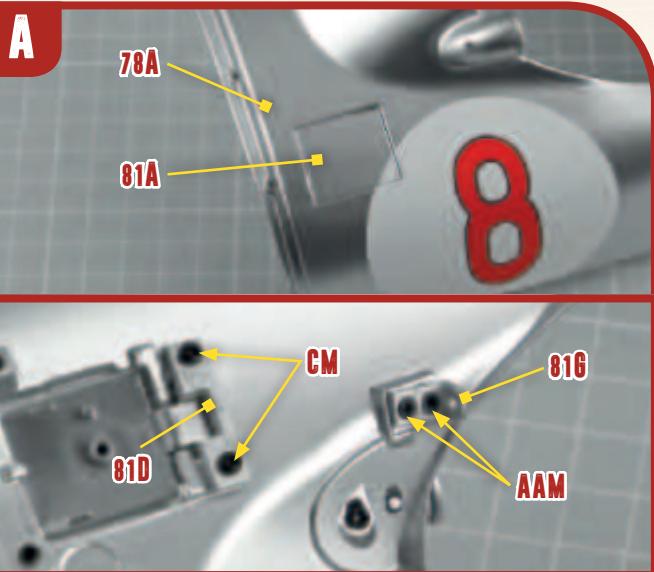


81 PARTS LIST

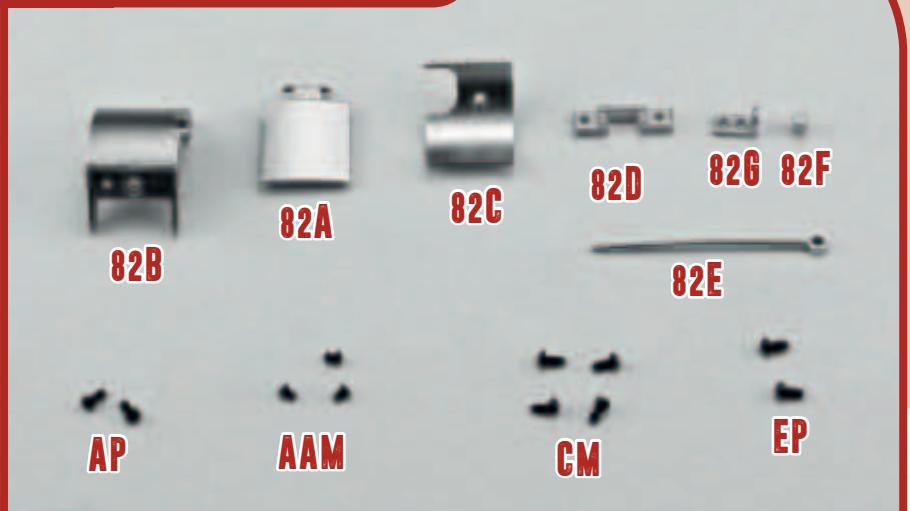


81A Vent hole cover (L)
81B Duct part A (L)
81C Duct part B (L)
81D Bracket 1 (L)
81E Rod
81F Knob
81G Bracket 2

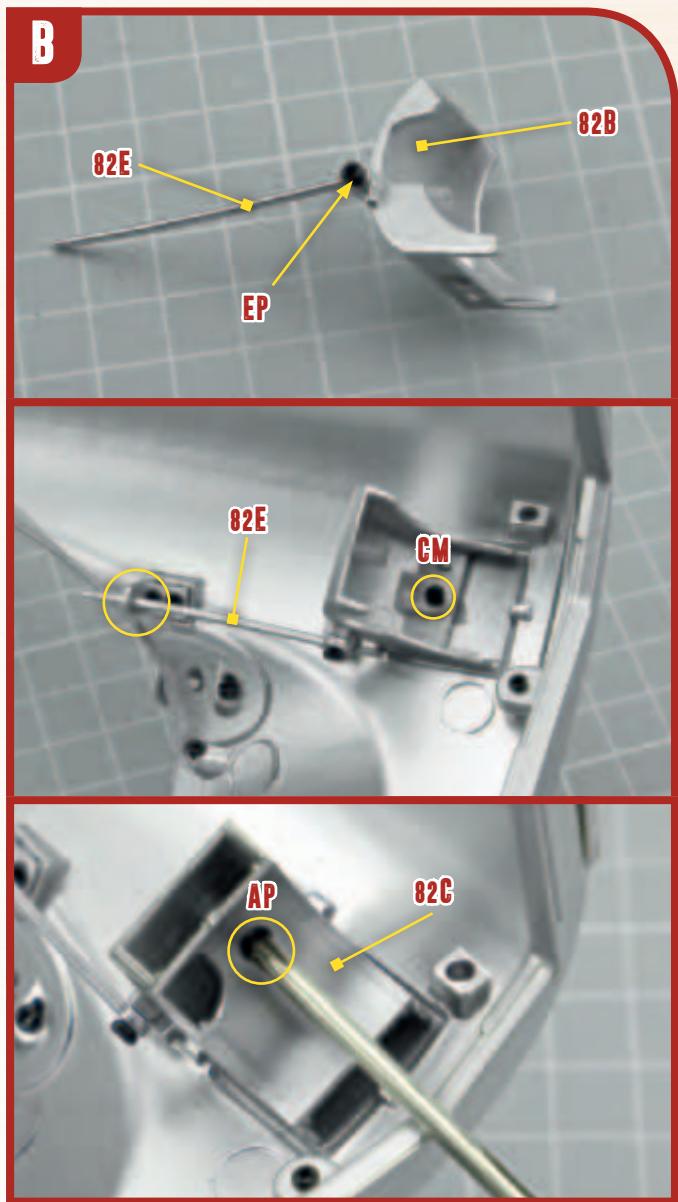
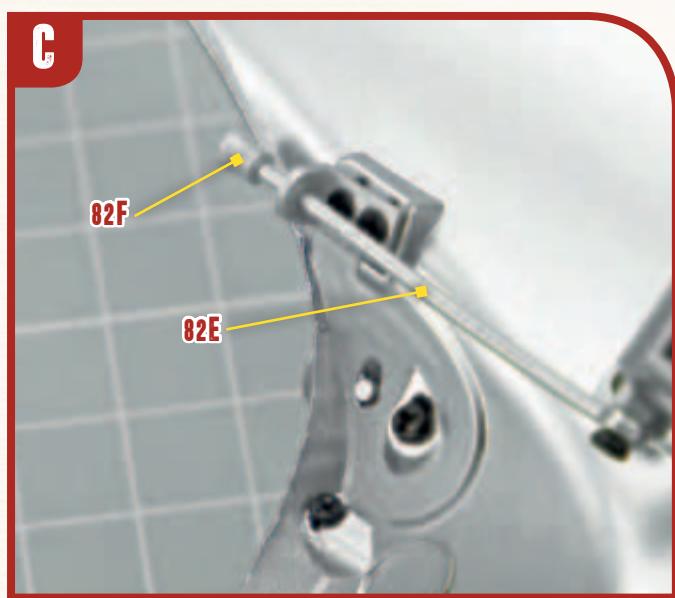
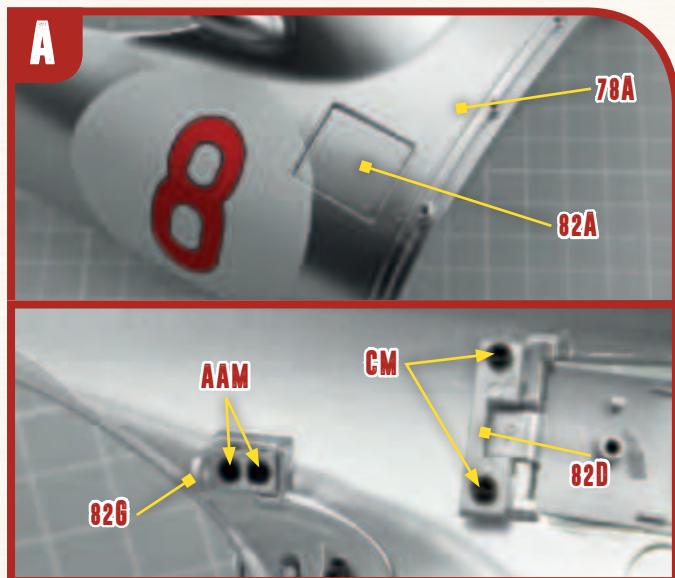
AP 2 screws (1.7x4mm)
EP 2 screws (2x4mm)
AAM 3 screws (1.7x3mm)
CM 4 screws (1.7x4mm)



82 PARTS LIST



- 82A Vent hole cover (R)
 - 82B Duct part A (R)
 - 82C Duct part B (R)
 - 82D Bracket 1 (R)
 - 82E Rod
 - 82F Knob
 - 82G Bracket 2
- AP 2 screws (1.7x4mm)
 - EP 2 screws (2x4mm)
 - AAM 3 screws (1.7x3mm)
 - CM 4 screws (1.7x4mm)



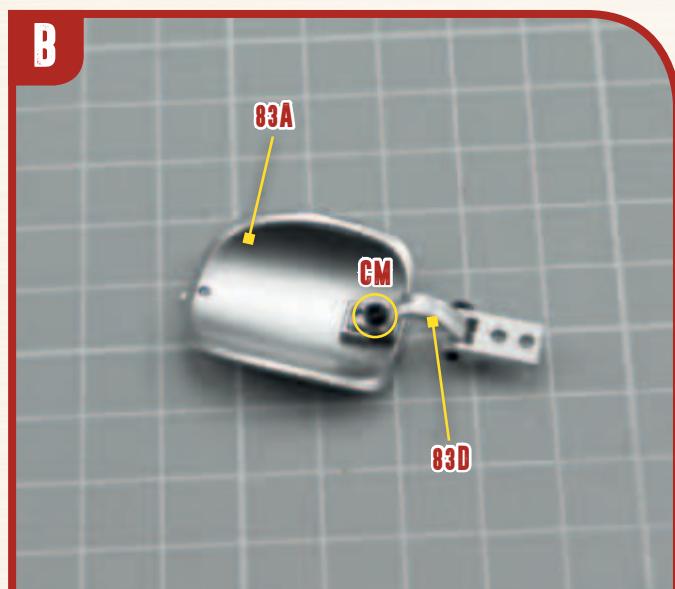
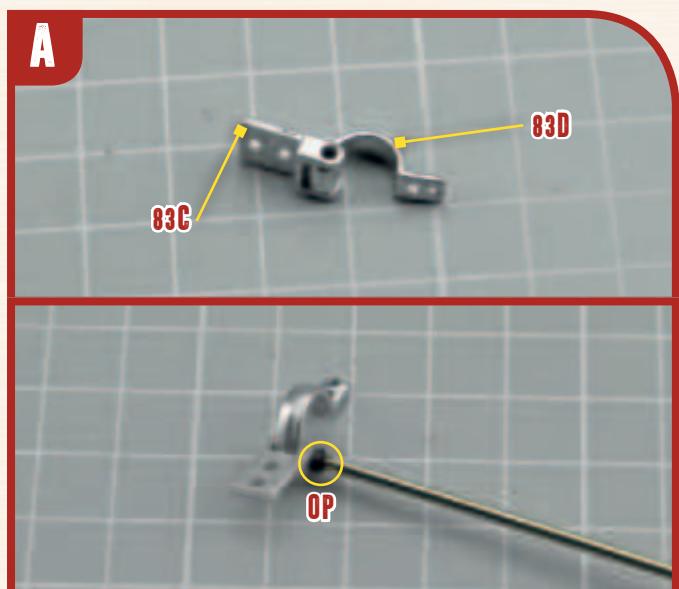
83 PARTS LIST



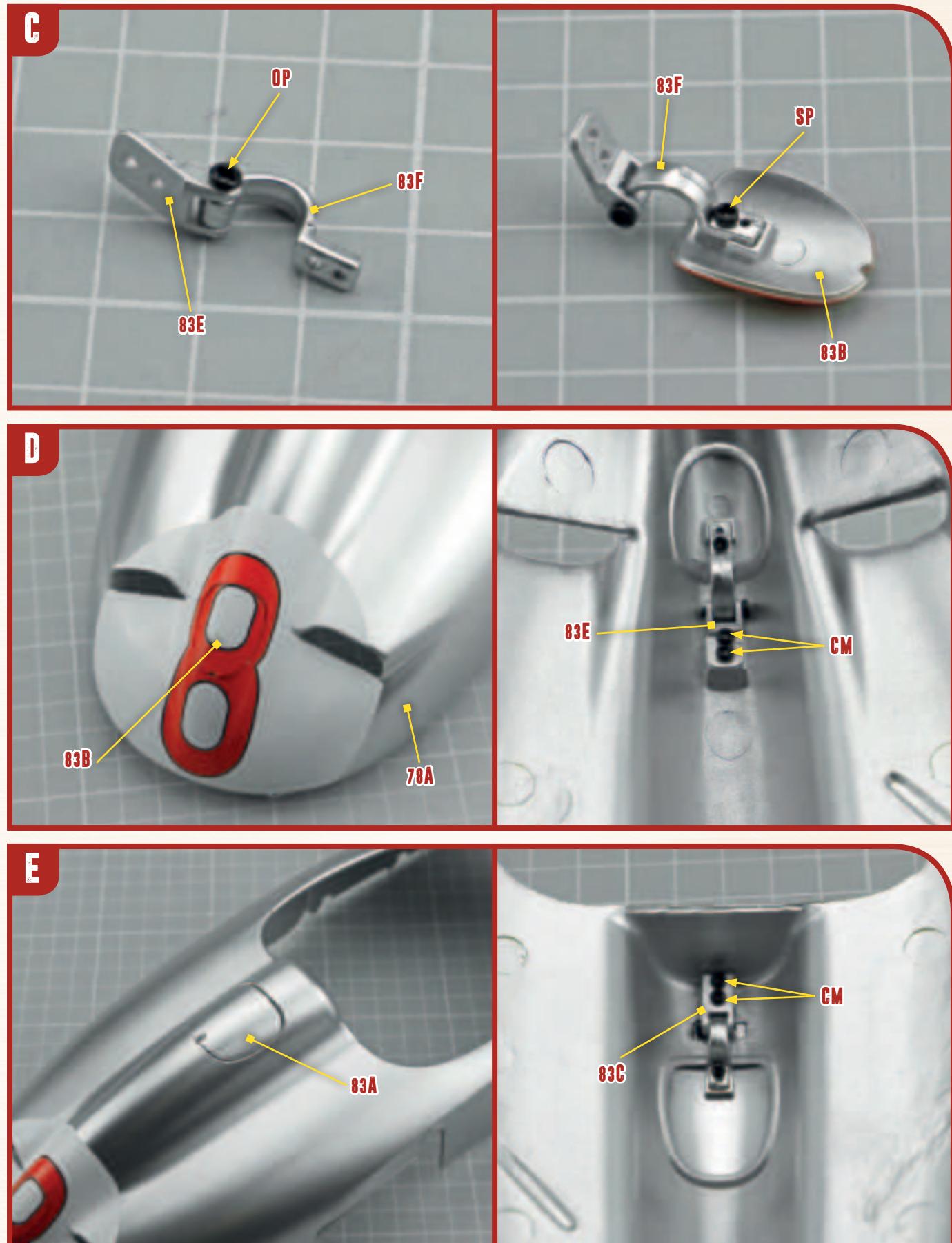
83A Fuel tank cap cover
83B Oil tank cap cover
83C Fuel tank bracket
83D Fuel tank hinge

83E Oil tank bracket
83F Oil tank hinge

OP 3 screws (2x7mm)
SP 2 screws (1.5x4mm)
CM 6 screws (1.7x4mm)
ZM 8 screws (1.7x4mm)

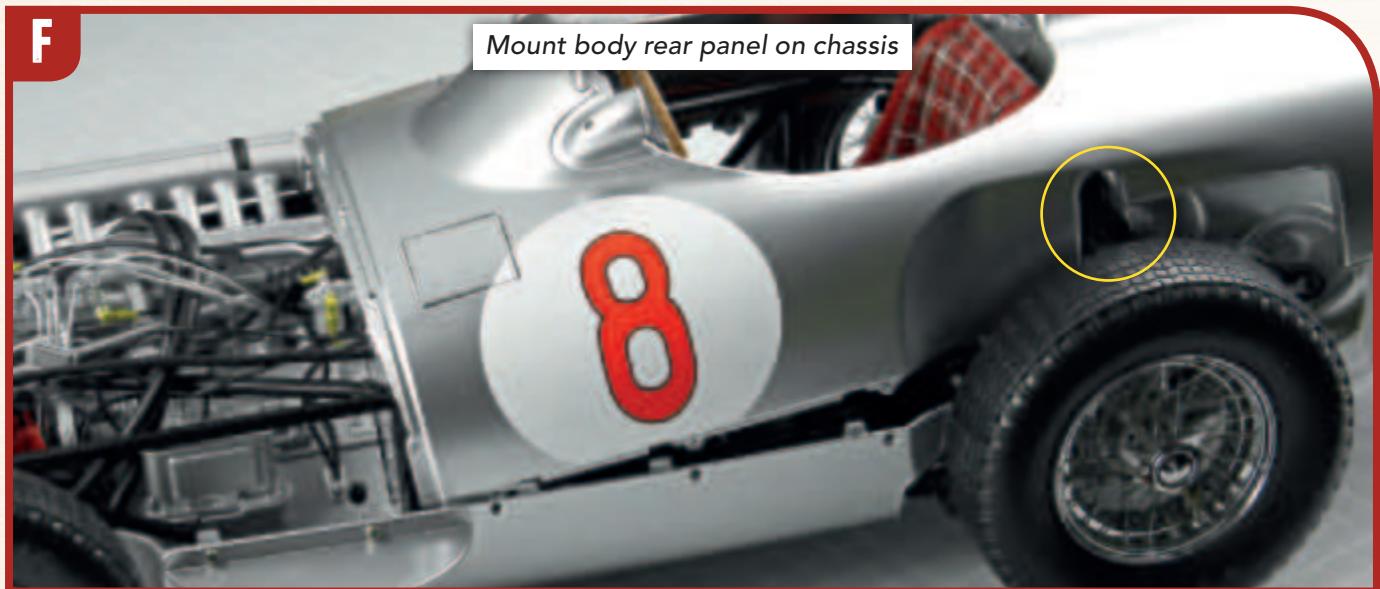
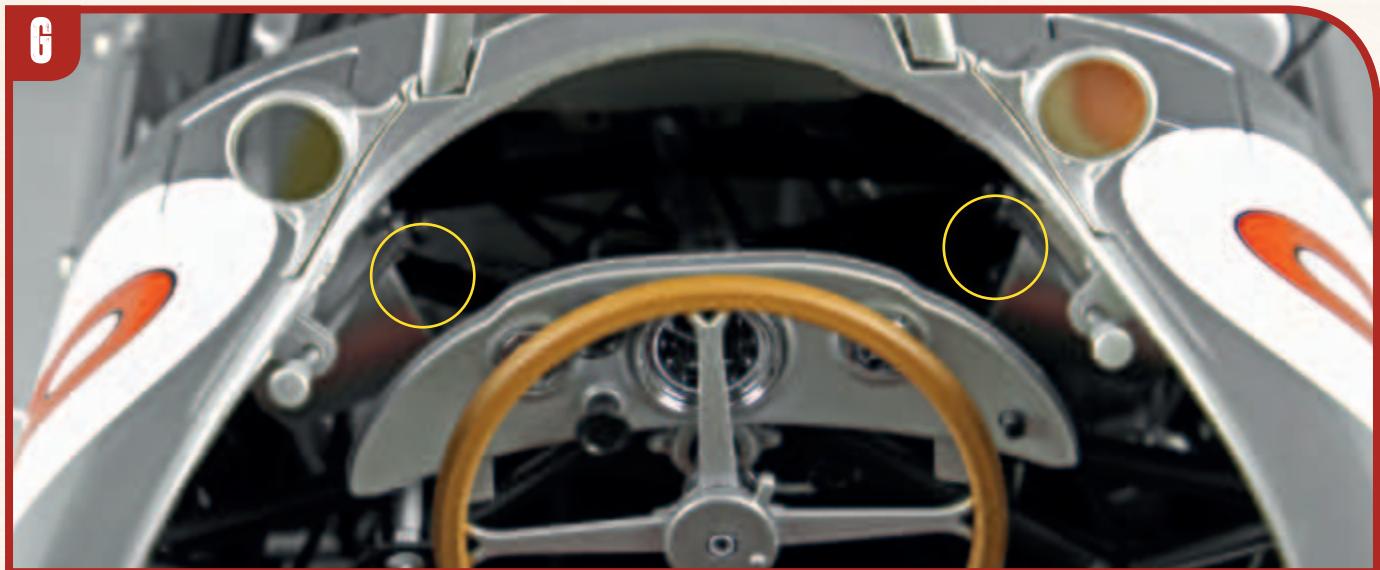
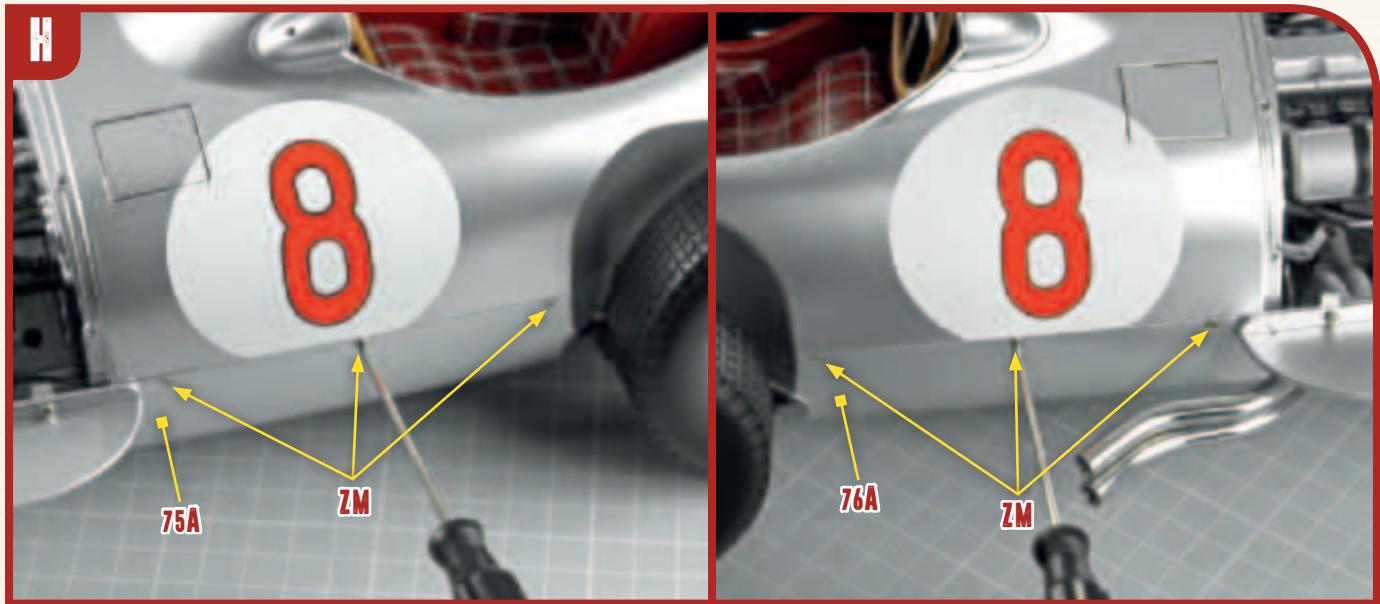


step by step #83



F

Mount body rear panel on chassis

**G****H**

84

PARTS LIST



84A Body front panel

84B Front right wheel arch panel

84C Mounting plate

84D Fixing pin 1

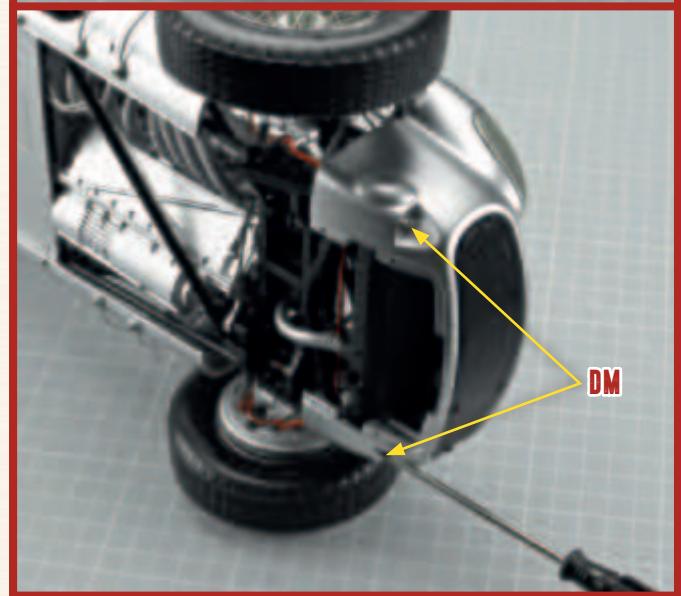
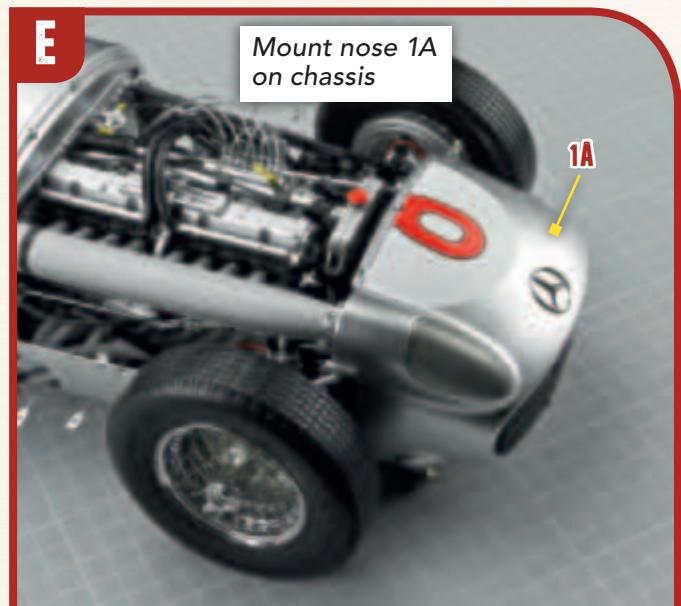
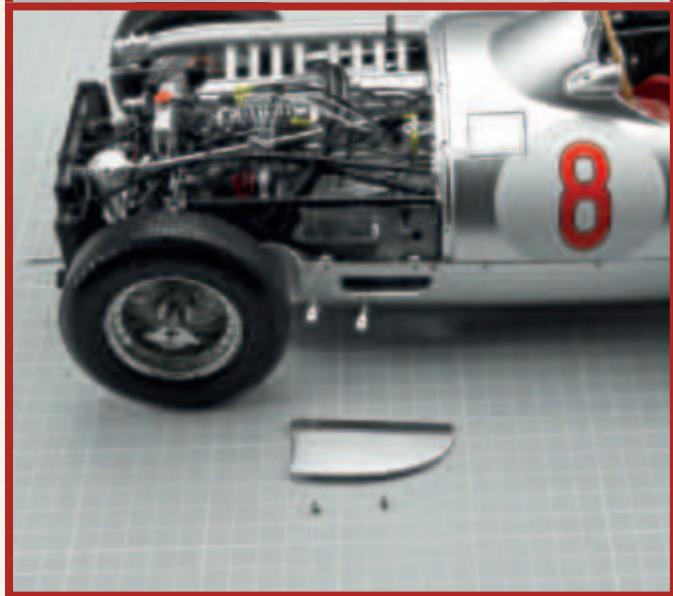
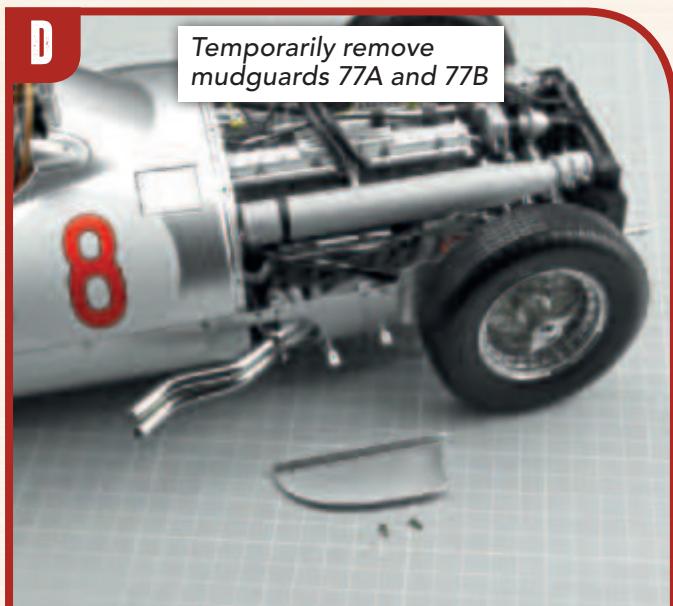
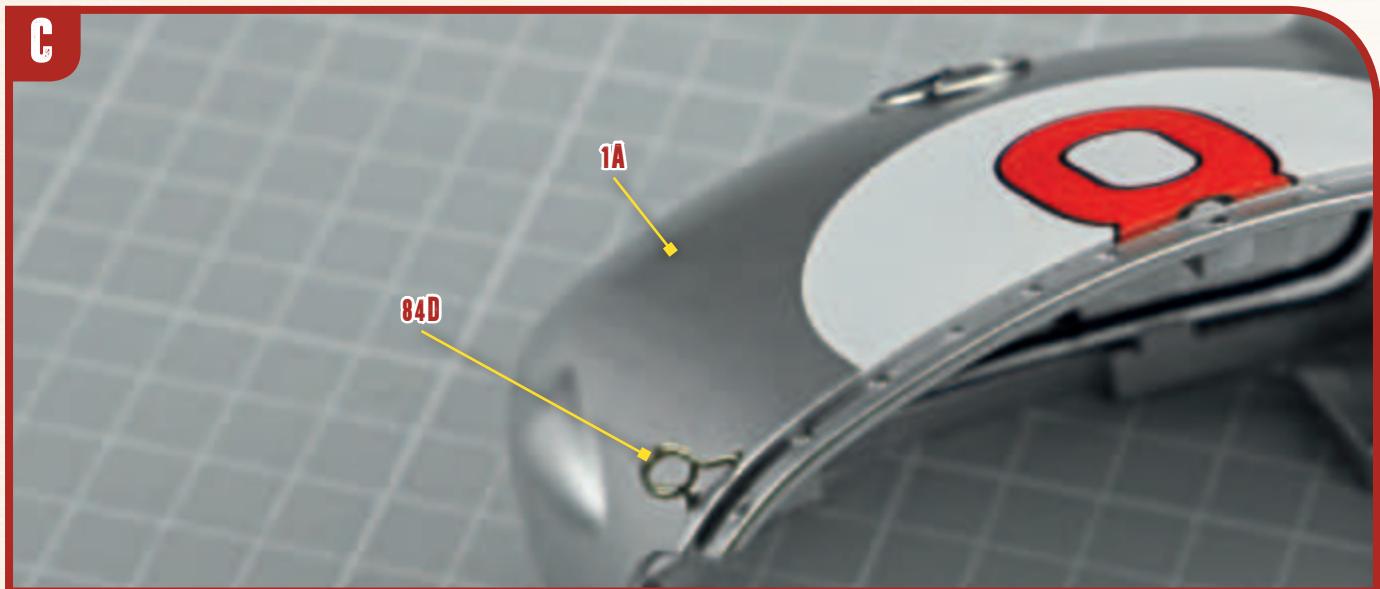
84E Fixing pins 2 (x4)

CM 5 screws (1.7x4mm)

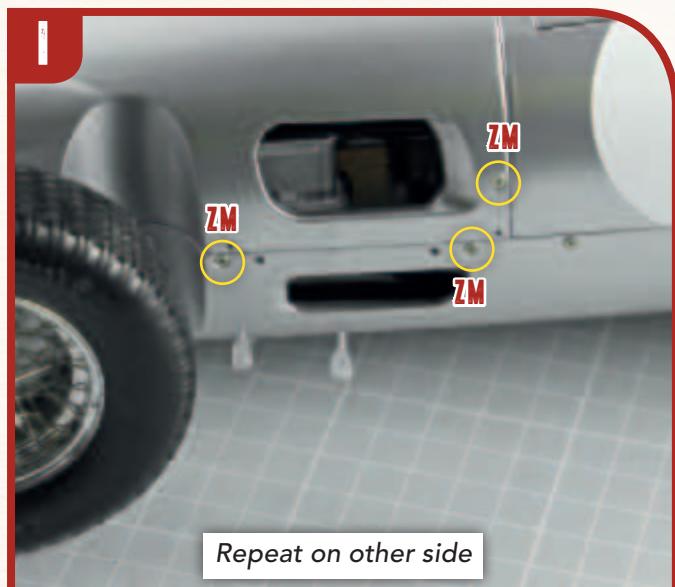
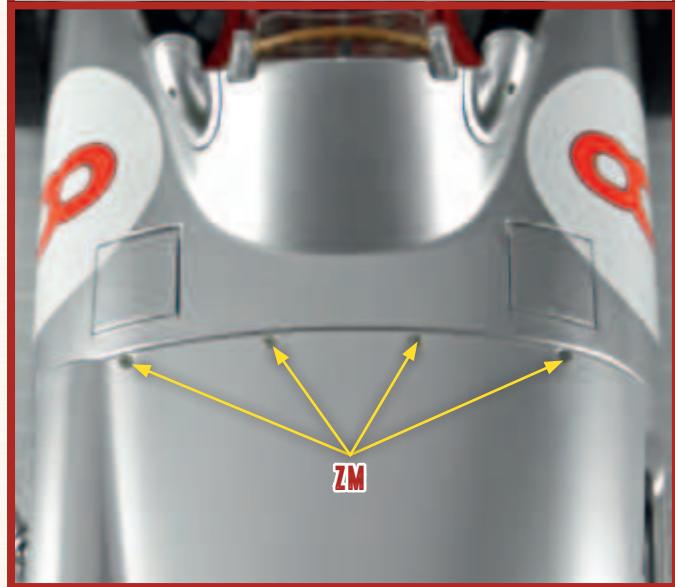
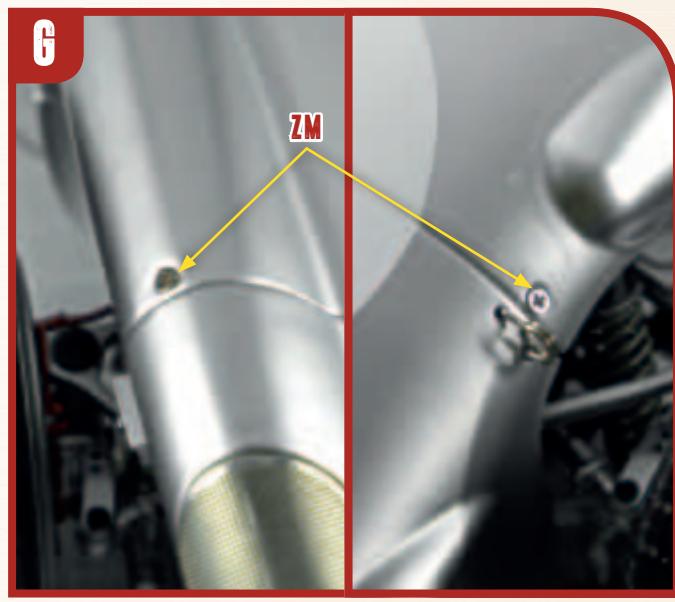
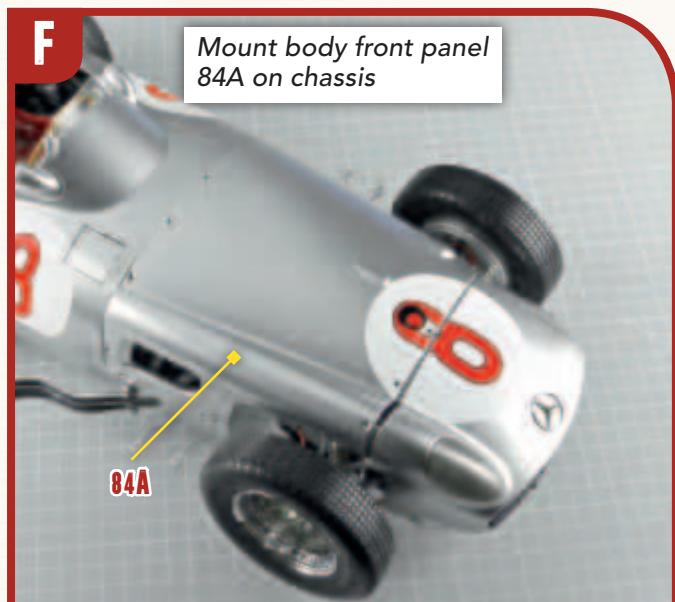
DM 4 screws (2x4mm)

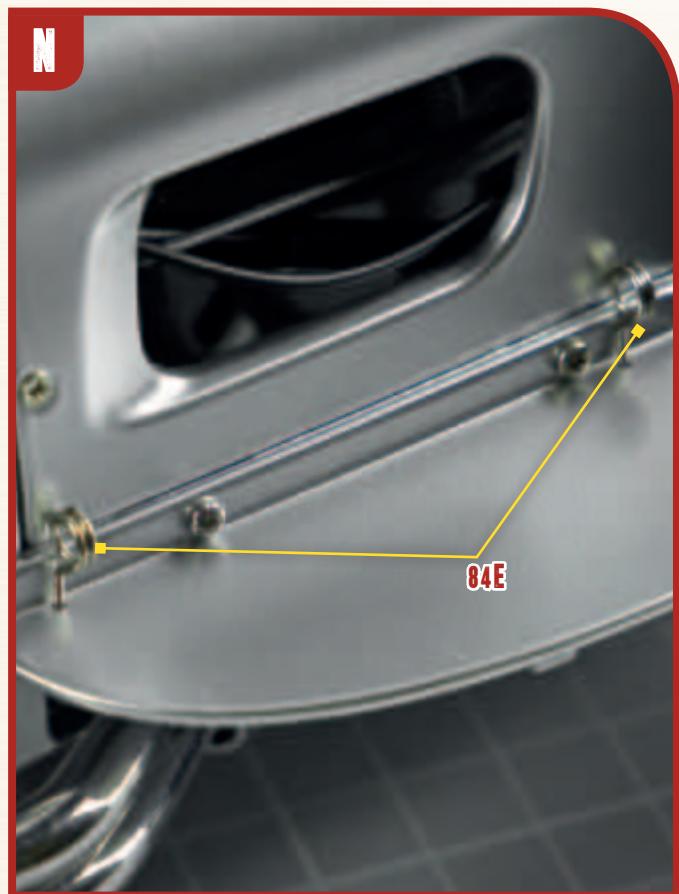
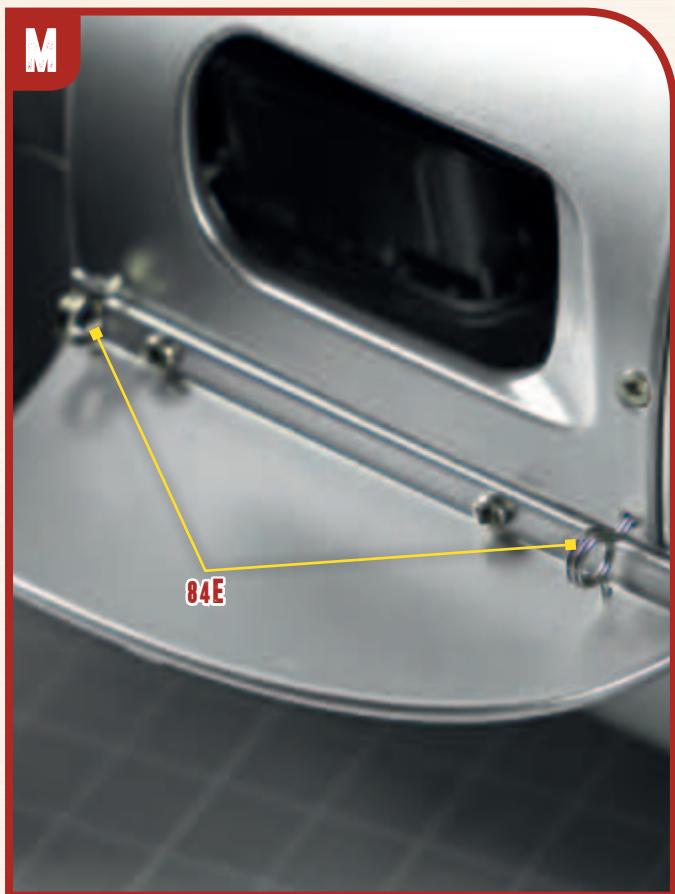
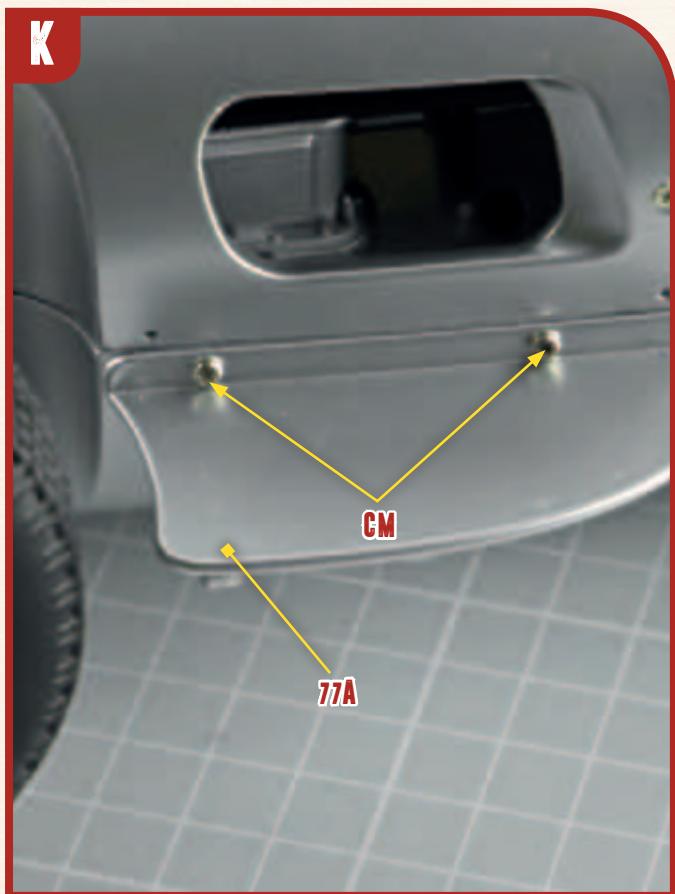
ZM 18 screws (1.7x4mm)





step by step #84



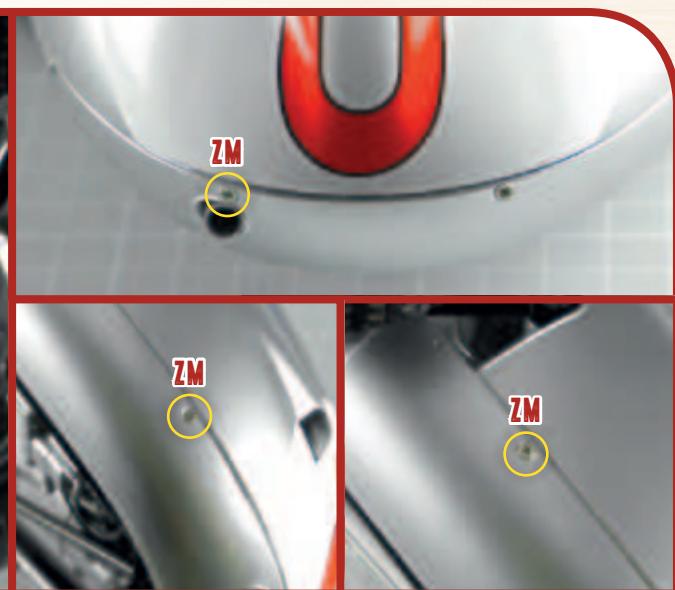
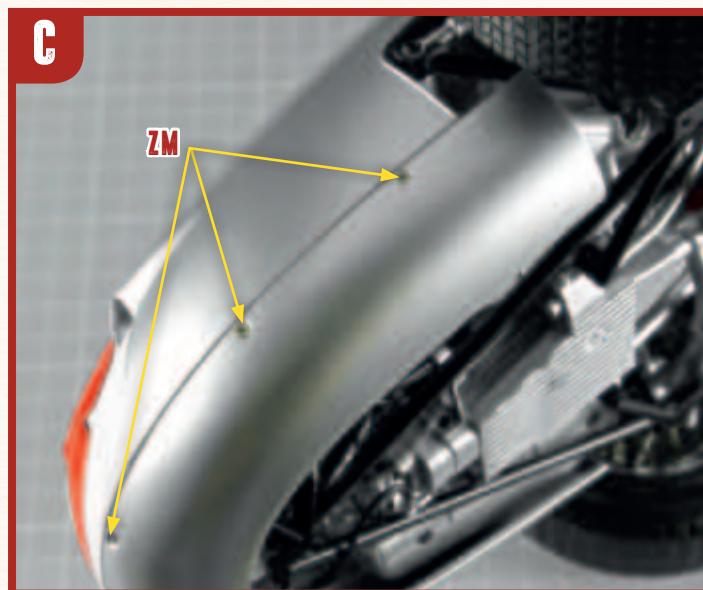
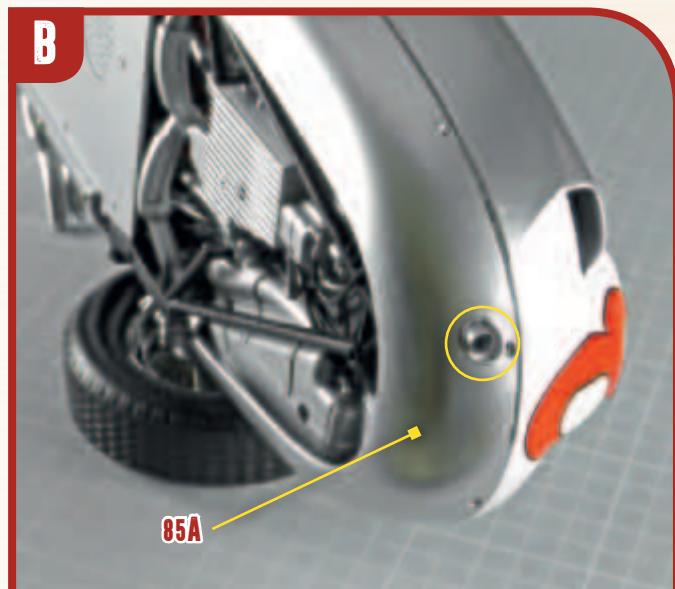
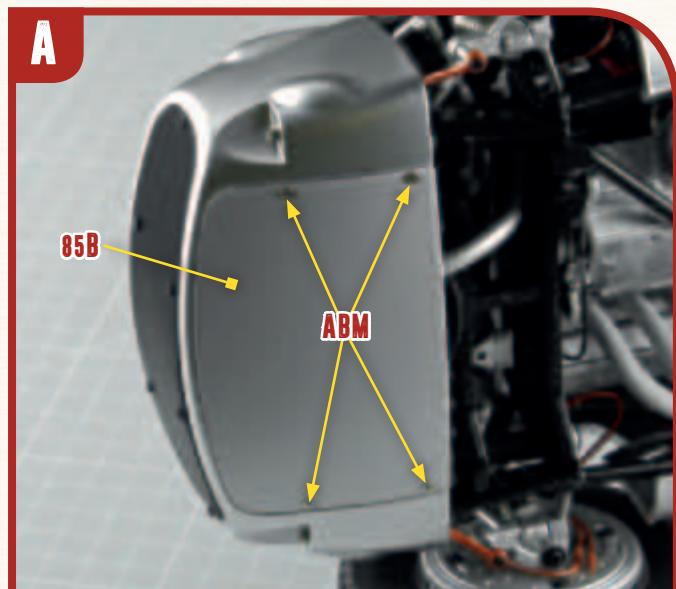


85 PARTS LIST



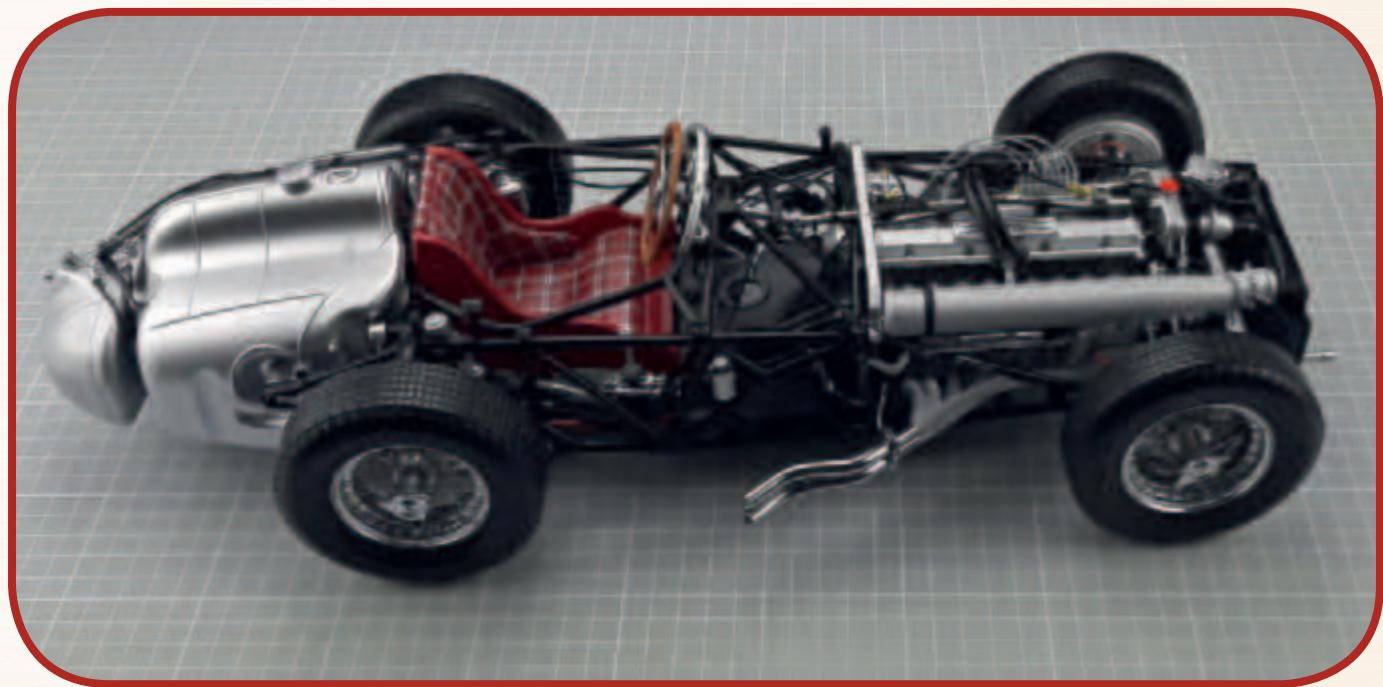
85A Rear bottom panel
85B Front bottom panel

ABM 5 screws (1.7x5mm)
ZM 8 screws (1.7x4mm)

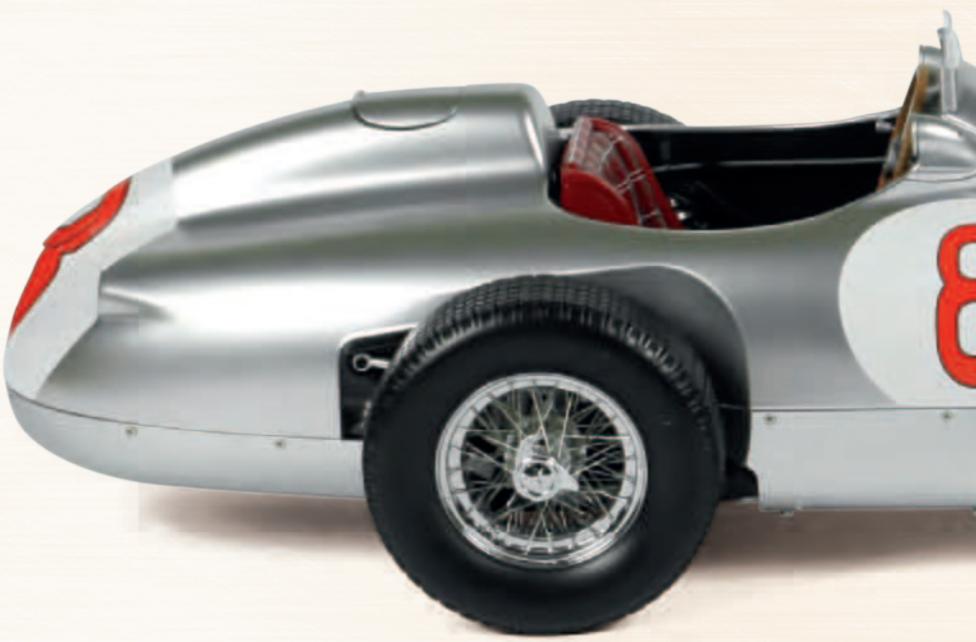




step by step #85









Kit details

Your Mercedes-Benz W 196 R full kit is broken down as follows:

PACK 1	#2, #4-11, #13
PACK 2	#14-26
PACK 3	#27-39
PACK 4	#40-47
PACK 5	#48-60
PACK 6	#61-68
PACK 7	#69-71
PACK 8a	#72-77, #79-83, #85
PACK 8b	#78
PACK 9	#1, #3, #12, #84







ixoCOLLECTIONS