Pack 04
BUILD INSTRUCTIONS

STAGE 21: ADDING THE EXHAUST OUTLETS AND BRACKETS
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES
STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES
STAGE 24: BRAKE FLUID TANKS AND WINDSCREEN WASHER RESERVOIR
STAGE 25: FIXING THE ENGINE MOUNT TO THE CHASSIS
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS
STAGE 27: BUILDING THE DASHBOARD FRAME AND FITTING THE LEFT SUSPENSION
STAGE 28: INSTALLING THE STEERING WHEEL ON THE DASHBOARD FRAME
Advice from the experts

Spare screws are included with each part. Occasionally, you may be instructed to keep spare or unused screws for a later stage. Keep these spares in a safe place and label them correctly.

Please make sure you don’t mix up the screws. They look quite similar, but the threads do vary slightly. Using the wrong screws may damage the parts.

When securing parts together using multiple screws, fit each screw loosely to ensure all the parts are correctly aligned before gently tightening them firmly, but not overtight, in the order in which you placed them.

The screwdriver can be magnetized by stroking it with a magnet (fridge magnet, etc.) enabling it to hold the screws and make assembly easier.

If a screw is tight going into a metal part, do not force it as you may shear the head off. Remove it and put a tiny smear of Vaseline, soap or light oil on the thread. That will lubricate it and make it easier to drive home.

During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.

Left and Right! When building your Porsche 917KH, the left or right hand side refers to each side as you are sitting in the car.

⚠️ WARNING: Some parts are assembled using magnets. These magnets can cause serious injury if they are swallowed. Keep away from children. If you suspect a magnet has been swallowed, seek medical help straight away.
STAGE 21: ADDING THE EXHAUST OUTLETS AND BRACKETS

21A Upper left exhaust outlet
21B Lower left exhaust outlet
21C Exhaust outlet bracket (x2)
21D Upper right exhaust outlet
21E Lower right exhaust outlet

AP Screw 1.7 x 4 mm (x3)
BP Screw 1.7 x 3 x 5 mm (x3)
IM Screw 1.7 x 5 mm (x3)

ASSEMBLY DIAGRAM
STAGE 21: ADDING THE EXHAUST OUTLETS AND BRACKETS

**STEP 1**

Take the engine assembly. Position the **lower left exhaust outlet (21B)** on the connection at the end of the **exhaust manifold (19H)** as shown. Secure the parts together using a **BP** screw.

Firmly press the **upper left exhaust outlet (21A)** onto the **lower left exhaust outlet (21B)**. Check the connection is flush along both edges.

Attach the two parts of the left exhaust outlet by driving an **AP** screw through the top of the upper piece as shown.

Press one of the **exhaust outlet brackets (21C)** over the upper and lower left exhaust outlet (21A/21B) and align the screw hole with the **exhaust pipe bracket (5I)**. Secure it in place using an **IM** screw.
**STAGE 21: ADDING THE EXHAUST OUTLETS AND BRACKETS**

**STEP 2**

In the same manner, place the *lower right exhaust outlet (21E)* on the connection at the end of the *exhaust manifold (20H)* and fix using a *BP* screw.

Press the *upper right exhaust outlet (21A)* onto the *lower right exhaust outlet (21B)*. Once in place, secure the parts together using an *AP* screw.

Push the remaining *exhaust outlet bracket (21C)* in position over the upper and lower right exhaust outlet (21D/21E) and the *exhaust pipe bracket (5I)*. Secure it in place using an *IM* screw.
STAGE 21: ADDING THE EXHAUST OUTLETS AND BRACKETS

STAGE COMPLETE
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

22A Igniter
22B Igniter head
22C Ignition wire connector (x18)
22D Ignition wire (x12) – on a roll

AP Screw 1.7 x 4 mm (x2)

ASSEMBLY DIAGRAM
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

**STEP 1**

Position the **igniter head (22B)** onto the **igniter (22A)** and secure together using an **AP screw**.

Using sprue cutters, detach **14x ignition wire connectors (22C)** by clipping at the points indicated by the red arrows.

Push the thicker ends of the **14 ignition wire connectors (22C)** into the holes of the **igniter head (22B)**.

Fit the **igniter (22A)** onto the **distributor (10H)**. Check its orientation is correct, as shown below.
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

**STEP 2**

Measure and cut 10 cm of ignition wire from the ignition wire roll (22D).

Connect the first 10 cm ignition wire (22D) to the spark plug (13B) and ignition wire connector (22C) shown below. Turn the igniter into position if needed (blue arrow).

**STEP 3**

Cut a second ignition wire (22D) measuring 10 cm in length and attach it to the spark plug (13B) and ignition wire connector (22C) as shown.
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

STEP 4

Next cut the third ignition wire (22D) 12 cm in length and attach it to the spark plug (13B) and ignition wire connector (22C) shown.

STEP 5

The fourth ignition wire (22D) is 12.5 cm in length. Attach it to the leftmost spark plug (13B) and next ignition wire connector (22C) in sequence.

STEP 6

Cut the fifth ignition wire (22D) measuring 12 cm in length and attach it to the spark plug (13B) and ignition wire connector (22C) shown.
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

STEP 7

Now cut a sixth ignition wire (22D) 12 cm in length and attach it to the spark plug (13B) and ignition wire connector (22C) shown.

The first six ignition wires have been fitted onto the engine. Next you'll attach six more onto the remaining spark plugs and connectors.
STEP 8

The seventh ignition wire (22D) is 10 cm long. Cut and then attach it to the spark plug (13B) and ignition wire connector (22C) shown.

STEP 9

For the eighth ignition wire (22D) cut off 10.5 cm then attach it to the spark plug (13B) and ignition wire connector (22C) shown.

STEP 10

Cut 12 cm for the ninth ignition wire (22D) then attach it to the spark plug (13B) at the end and next ignition wire connector (22C) in sequence.
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

STEP 11
The tenth ignition wire (22D) is 11.5 cm long. Cut and then attach it to the spark plug (13B) and ignition wire connector (22C) shown.

STEP 12
For the eleventh ignition wire (22D) cut 10.5 cm in length. Attach it to the spark plug (13B) and ignition wire connector (22C) shown.

STEP 13
The twelfth ignition wire (22D) is 10.5 cm in length. Attach it to the final spark plug (13B) and ignition wire connector (22C), leaving two connectors in the middle.
STAGE 22: FITTING THE FIRST IGNITER AND ATTACHING THE WIRES

STAGE COMPLETE
STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES

23A Igniter
23B Igniter head
23C Ignition wire connector (x17)
23D Ignition wire (x12) – on a roll

ASSEMBLY DIAGRAM
STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES

STEP 1

Position the igniter head (23B) onto the igniter (23A) and secure together using an AP screw.

Using sprue cutters, detach 14 ignition wire connectors (23C) by clipping at the points indicated by the red arrows.

Push the thicker ends of the 14 ignition wire connectors (23C) into the holes of the igniter head (23B).

Fit the igniter (23A) onto the distributor (10H). Check its orientation is correct, as shown below.
**STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES**

**STEP 2**

Measure and cut 7.5 cm of ignition wire from the ignition wire roll (22D).

Connect the first 7.5 cm ignition wire (23D) to the spark plug (9B) and ignition wire connector (23C) as shown. Turn the igniter into position if needed (blue arrow).

**STEP 3**

Cut a second ignition wire (23D) measuring 8.5 cm in length and attach it to the spark plug (9B) and ignition wire connector (23C) as shown.
STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES

STEP 4

Next cut the third ignition wire (23D) 10 cm in length and attach it to the spark plug (9B) and ignition wire connector (23C) shown.

STEP 5

The fourth ignition wire (23D) is 12 cm in length. Attach it to the spark plug (9B) shown and next ignition wire connector (23C) in sequence.

STEP 6

Cut the fifth ignition wire (23D) measuring 8.5 cm in length and attach it to the spark plug (9B) at the end and ignition wire connector (23C) shown.
Now cut a sixth ignition wire (23D) 9 cm in length and attach it to the spark plug (9B) and ignition wire connector (23C) shown.

The first six ignition wires for the second igniter have been fitted onto the engine. Next you’ll attach six more onto the remaining spark plugs and connectors.
**STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES**

**STEP 8**

The seventh ignition wire (23D) is 10.5 cm long. Cut and then attach it to the spark plug (9B) and ignition wire connector (23C) shown.

**STEP 9**

For the eighth ignition wire (23D) cut off 11.5 cm then attach it to the spark plug (9B) at the end and ignition wire connector (23C) shown.

**STEP 10**

Cut 10.5 cm for the ninth ignition wire (23D) then attach it to the spark plug (9B) and next ignition wire connector (23C) in sequence.
STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES

STEP 11

The tenth ignition wire (23D) is 9.5 cm long. Cut and then attach it to the spark plug (9B) and ignition wire connector (23C) shown.

STEP 12

For the eleventh ignition wire (23D) cut 10.5 cm in length. Attach it to the spark plug (9B) and ignition wire connector (23C) shown.

STEP 13

The twelfth ignition wire (23D) is 11 cm in length. Attach it to the final spark plug (9B) and ignition wire connector (23C), leaving two connectors in the middle.
STAGE 23: FITTING THE SECOND IGNITER AND ATTACHING THE WIRES

STAGE COMPLETE
STAGE 24: BRAKE FLUID TANKS AND WINDSCREEN WASHER RESERVOIR

24A V-frame
24B Collar link
24C Brake fluid tank
24D Brake fluid tank
24E Cap (x2)
24F Support
24G Brake fluid hose (x2)
24H Windshield washer reservoir
24I Windshield washer pump
24J Clip
24K Reservoir cap
24L Windshield washer fluid hose
AP Screw 1.7 x 4 mm (x2)

ASSEMBLY DIAGRAM
**STEP 1**

Fit the reservoir cap (24K) onto the windshield washer reservoir (24H). Fit the windshield washer pump (24I) on the side of the reservoir, then connect the washer fluid hose (24L) onto the pins of the pump and reservoir.

With the windshield washer reservoir assembled, fit it on the V-frame (24A) and secure in place using an AP screw.

Push the central pin of the clip (24J) into the hole in the reservoir and the outer pins into the corresponding holes in the V-frame.
**STEP 2**

Take one of the caps (24E) and fit it onto the top of the brake fluid tank (24C). Note this tank has a larger label than the other one (orange arrow).

Fit the collar link (24B) onto the tank as shown. The tank should be located on the left of the collar when looking face on.

Push the remaining cap (24E) onto the top of the other brake fluid tank (24D).

Push the tank into the right side of the collar link (24B), then attach the remaining brake fluid hose (24G) onto the pin at the bottom of the tank.

Now fit the collar link (24B) onto the support (24F) by pushing the pins of the collar through the holes in the support.
Finally, fit the brake fluid tanks in place next to the washer reservoir by pushing the pins on the support (24F) into the corresponding holes of the V-frame (24A). Note the position brake fluid hose once the tanks have been fitted, shown opposite.
STAGE 25: FIXING THE ENGINE MOUNT TO THE CHASSIS

25A Chassis

25B Front engine mount

ASSEMBLY DIAGRAM
STAGE 25: FIXING THE ENGINE MOUNT TO THE CHASSIS

**STEP 1**

Fit the **front engine mount (25B)** on the **chassis (25A)** and fix in place using two **FM** screws.
STAGE 25: FIXING THE ENGINE MOUNT TO THE CHASSIS

STAGE COMPLETE
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

26A Footrest
26B Rod
26C Bottom bracket
26D Throttle pedal
26E Clutch pedal
26F Brake pedal
26G Pedal bracket
26H Master cylinders

26I Tappet (x2)
26J Clutch cable
26K Brake light switch cable
AP Screw 1.7 x 4 mm (x2)
GP Screw 1.2 x 5 mm (x2)
KP Screw 1.2 x 9.5 mm (x2)
IM Screw 1.7 x 3.5 mm (x3)
KM Screw 1.7 x 3 x 5 mm (x3)

ASSEMBLY DIAGRAM
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

ASSEMBLY DIAGRAM
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

STEP 1

Take the **clutch (26E)** and fit the pin on the side into the **bracket (26C)** as shown. Pass a **KP** screw through the clutch then the bracket and drive it into the larger hole of one of the **tappets (26I)**. Make sure the tappet is still able to rotate once fixed.

Fit a **GP** screw through the **throttle pedal (26D)** and fix into the other **tappet (26I)**, again using the larger hole. Make sure the tappet is still able to rotate once fixed.

STEP 2

First, align the **throttle pedal (26D)** with the **pedal bracket (26C)** and fit it in place. Push the **rod (26B)** partway through the hole in the bracket to hold the throttle pedal in place.

Position the **brake pedal (26F)** and the **clutch pedal (26E)** into the **pedal bracket (26C)** one after the other, pushing the **rod (26B)** further through to secure each in turn (blue arrow).
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

**STEP 3**

Take the brake light switch cable (26K) and position the button end in the slot located under the pedal bracket (26C). Fold the cable to the side as shown by the blue arrow.

**STEP 4**

Fit the pedal bracket (26C) on the chassis (25A) then fix it in place using two KM screws.

Make sure the screws are tightened fully so that the button on the switch cable doesn’t stay pressed when releasing the pedal.
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

**STEP 5**

Position the **master cylinders (26H)** on the **chassis (25A)** and, at the same time, insert the two **tappets (26I)** into their respective master cylinder housings (blue arrow).

Secure the **master cylinders (26H)** in place by driving an **AP** screw into them from underneath the **chassis (25A)**.

Fit one end of the **clutch cable (26J)** on the pin protruding from the **pedal bracket (26C)**.
**STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS**

**STEP 6**

Press the **footrest (26A)** onto the **chassis (25A)** using the three lugs as shown. At the same time, pass the **clutch cable (26J)** through the slot in the footrest as shown by the green arrow.

The two images below show how the clutch cable passes through the slot.

**STEP 7**

Take the V-frame with the brake fluid tanks and washer reservoir from stage 24 and align it as shown with the chassis.

Plug the ends of the **brake fluid hose (24G)** nozzles over the pins at the front of the **master cylinders (26H)** (red arrows).
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

STEP 8

Fit the V-frame (24A) on the chassis (25A) as shown.

Carefully turn the chassis over and secure the V-frame to it using two IM screws.
STAGE 26: INSTALLING THE PEDALS AND FOOTREST ON THE CHASSIS

STAGE COMPLETE
STAGE 27: BUILDING THE DASHBOARD FRAME AND FITTING THE LEFT SUSPENSION

27A Dashboard frame
27B Bracket (x2)
27C Windscreen wiper control
27D Horn

IM Screw 1.7 x 3.5 mm (x2)
BM Screw 2 x 4 mm (x4)

ASSEMBLY DIAGRAM
STAGE 27: BUILDING THE DASHBOARD FRAME AND FITTING THE LEFT SUSPENSION

STEP 1
Press the windscreen wiper control (27C) into the dashboard frame (27A) as shown. Fit the horn (27D) in position on the frame then secure using an IM screw.

STEP 2
Take the left front suspension assembly from stage 3. Fit the upper control arm (3A) into the dashboard frame (27A) as shown.

Attach the left front suspension assembly to the frame by fitting the two brackets (27B) over the upper control arm then securing each using a BM screw.

Tip: use a drop of oil on the thread of the screws to make it easier to drive them in.
STAGE 27: BUILDING THE DASHBOARD FRAME AND FITTING THE LEFT SUSPENSION

STEP 3

Retrieve the shock absorber piston assembly and fit the upper bracket (3B) into the socket in the dashboard frame (27A). Fix the bracket using a BM screw.

STAGE COMPLETE
STAGE 28: INSTALLING THE STEERING WHEEL ON THE DASHBOARD FRAME

28A Attachment
28B Support
28C Support
28D Attachment
28E Fire extinguisher pull

AP Screw 1.7 x 4 mm (x3)
IM Screw 1.7 x 3.5 mm (x5)

ASSEMBLY DIAGRAM
STAGE 28: INSTALLING THE STEERING WHEEL ON THE DASHBOARD FRAME

STEP 1

Take the dashboard frame (27A). Fit the support (28B) to it as shown then secure using an IM screw.

Tip: use a drop of oil on the thread of the screw to make it easier to drive it in.

Attach the support (28C) opposite the previous one and fix it to the frame using an IM screw.

STEP 2

Push the fire extinguisher pull (28E) through the hole in the tab of the dashboard frame (27A) until the lip of the pull (red arrow) is flush with the tab.

Tip: use a drop of oil on the thread of the screw to make it easier to drive it in.
STAGE 28: INSTALLING THE STEERING WHEEL ON THE DASHBOARD FRAME

STEP 3

Retrieve the steering wheel assembly from stage 2. Position the end of the steering column (2B) on the support (28B) (blue arrow). Next, fit the attachment (28D) to the support (28C) using two AP screws.

Check that the axle at the end of steering column is oriented correctly (red arrow).

STEP 4

Finally, fit the attachment (28A) over the steering column and secure it to the dashboard frame (27A) using two IM screws.

Tip: use a drop of oil on the thread of the screws to make it easier to drive them in.
STAGE 28: INSTALLING THE STEERING WHEEL ON THE DASHBOARD FRAME

STAGE COMPLETE