



**CATERHAM®**

**ASSEMBLY GUIDE**

SUZUKI – EDITION 1.2

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SUZUKI – EDITION 1.2

Your feedback and comments are welcome: [assemblyguide@caterham.com](mailto:assemblyguide@caterham.com)

For help and build support enquiries contact: [buildsupport@caterham.com](mailto:buildsupport@caterham.com)

For help and support with IVA and registrations contact: [ivaapplications@caterham.com](mailto:ivaapplications@caterham.com)



## WELCOME TO YOUR NEW CATERHAM KIT

Building your own Caterham is immensely rewarding and satisfying. Of course, it should be remembered that you are building a high performance sports car, not a flat-pack wardrobe, so it will be a little challenging from time to time; but we've set out to make it as easy as possible for anyone, whatever their skill level and help is available should you need it.

But before you do anything else, pop the kettle on or pour yourself a G&T with a slice; and

### **READ THE NEXT THREE PAGES - THEY ARE REALLY IMPORTANT**

No, they will not be very exciting unfortunately, but they are important nonetheless and you will regret it later if you don't.

So there are four important things we need to think about **NOW** before picking up a spanner:

- **This isn't the only guide you'll need**
- **When to apply for an IVA test**
- **Photography (no, really)**
- **Arranging a post build check**

Although we have made this guide as comprehensive as possible, the requirements of IVA change from time to time and even from test centre to test centre. Therefore, it **MUST** be read in conjunction with the 'IVA Checklist Guide', the latest version of which can be **downloaded from the Caterham website**. You'll find the refer-to-IVA-manual symbol in the bottom of each illustration where attention is required. Reading through it now, will save pain later! Don't assume that because you've found a reference to one item relating to that page, it is the only one...

Once you have completed the assembly of your Seven, you are required by law to present it for an 'Individual Vehicle Approval' test (better known as IVA), which is conducted by the Vehicle and Operator Services Agency (VOSA) at a regional test centre.

We **STRONGLY** recommend that you apply for your IVA appointment at least a month before you think you will complete your build, to allow for the application form to be processed at the snail's pace of bureaucracy. Once accepted, your IVA application is valid for 6 months and test dates can be changed up to a minimum of 3 working days prior to your appointment with VOSA (any later and you may incur a charge).

The IVA and Registration application forms, and a guide on how to complete them, are sent out on request when you are midway or nearing completion of your build. Please email [ivaapplications@caterham.com](mailto:ivaapplications@caterham.com) for a copy of your prefilled documents.



VOSA and the DVLA are a suspicious bunch and in order to register your car, you will need to provide proof that it is amateur built. When you apply for registration, you will need to include photos from various stages of you build, which will demonstrate to them that it is an 'amateur build'.

Recruiting a few extras (your kids, your spouse, the cat, etc.) and some props (last year's Xmas tree, a radio from the 1980's and a rusty bike) will all contribute to a more authentic home-garage feel; proving that no professional help (i.e. commercial workshop/garage) was involved in the build. Of course, feel free to have yourself working away on the kit in the photos if one of your 'extras' can be trusted with the camera (not the cat; they never get the exposure right).

Finally, we know you haven't started yet, but we need to tell you about the Post Build Inspection now, due to availability at our service centres and the time it takes to get you a slot. Plan ahead!

What is the Post Build Inspection? This is a free service offered by all Caterham service centres which we wholeheartedly recommend you take up on prior to your IVA test. It ensures that your car is correctly assembled and is road-worthy. All safety and operational aspects of your Seven will be checked, concluding in a road test. This will enable us to advise you of any corrective work that may be required (which we will be happy to carry out for you\*). It is important to note that this is not the same as the IVA test and whilst every effort will be made to ensure your car passes, there is **NO GUARANTEE** of a first time IVA pass.

\*Obviously any additional work is not for free, but we will speak to you first so you can decide whether you want to pay us to do the corrections or you want to do them yourself.

**REMEMBER: Post Build Inspection slots are in high demand at our service centres and there may be a two-month lead time at busy times, so please check on availability and book ahead!**

All our service centres will be able to offer you a Post Build Inspection and IVA service, where they take the car to IVA on your behalf. This tends to increase the likelihood of a first time pass and means you don't need to take a day out to endure the test, which is beyond dull.

That's it, we're ready to start assembly

**ENJOY**



## MY BUILD NOTES

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Download the IVA Checklist Guide: [www.caterhamcars.com](http://www.caterhamcars.com)

Book IVA Test

Take plenty of photos

Arrange post build check

*This was more fun than I ever expected!*

## HINTS & TIPS

When using a torque wrench, listen/feel the click and then stop. It does not need to be any tighter and you might actually weaken the fixing by 'over-torquing' it. Always wind your torque wrench setting back to free when you've finished with it.

John K

A 'nyloc' nut is one with a nylon insert that gets cut by the bolt thread, making it resistant to unwinding itself. This means that they should not be repeatedly re-used.

Chris B

This guide covers optional equipment your car may not have!

Tiago O

Generally, metric Nyloc nuts have a blue nylon insert and imperial ones a white nylon insert.

Grant P

Thread lock is used to stop something coming undone, but it only needs a little drop on the thread to be effective.

Jamie A

When using a spanner, always use the ring end wherever possible. The open end is really only for those times that access is too limited for a ring spanner or socket.

Mick A

Left and right are as viewed from the driver's seat.

Harrison P

Teabag, boiling water, then the milk, in that order.

Simon L

1Nm of torque equals 0.736lbft.

Mick F

It's good practise to keep your work area clean and tidy, as you don't want to damage yourself or your new car!

Lee B

A 'caphead bolt' has a circular head with a hexagonal drive inside it. It is tightened with an allen key or hex drive socket. Capheads are useful where there is limited space around the head for a spanner or socket. They look nice too!

Richard T

A bolt size is described by its thread diameter (e.g. M10=10mm) by the length not including the head (e.g. 65mm).

James A

A 'spring washer' has a split in it and squashes up closed when a fixing is tightened. It is usually used under a bolt head to help resist it coming undone.

John S





Speak to an expert  
[buildsupport@caterham.com](mailto:buildsupport@caterham.com)

# KEY

## SYMBOLS

**1** Item number


**AA**  
**AJ**  
**AM** Fixing item


**S** **R** S Pack / R Pack specific instructions


**Nm** Required torque (where applicable)

**REPEAT** Repeat on other side












 Advice from factory professionals


 Now is a good time to take some photos

 Reminder to apply for your IVA test

 Refer to IVA Checklist Guide

## FIXINGS




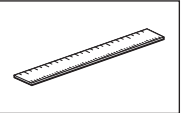
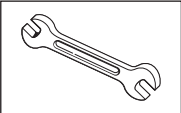
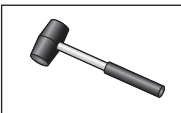

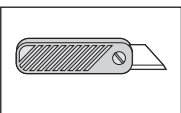

| Pack A   |                                 | CATERHAM    |     | 44   |   |
|--|---------------------------------|-------------|-----|--|---|
|  |                                 | PACK NUMBER |     | 3AC2001A   |   |
| FRONT SUSPENSION DeDION CARS (METRIC)                            |                                 |             |     |  |   |
| This pack may include extra fasteners to cover different options |                                 |             |     |  |   |
| ITEM   | BASIC DESCRIPTION               | PART NUMBER | QTY | USED ON  | ILLUSTRATION  |
| 1  | AA Bolt M12 x 100 Grade 10.9    | BM12X100    | 2   | Lower wishbone rear                                  |  |
| 2  | AB Bolt M12 x 65 Grade 10.9     | BM12X65     | 2   | Lower wishbone front                                 |  |
| 3  | AC Bolt M10 x 65 Grade 10.9     | BM10X65     | 2   | Upper wishbone rear                                  |  |
| 4  | AD Bolt M10 x 60 Grade 10.9     | BM10X60     | 2   | Upper wishbone front                                 |  |
| 5  | AE Bolt M8 x 40 Grade 10.9      | BM8X40      | 4   | Anti-roll bar mounting brackets                      |  |
| 6  | AF Plain Nut M14 x 1.5 thread   | NM14        | 1   | Temporary use to help lock upper wishbone ball joint |  |
| 7  | AG Nyloc Nut M12                | NM12        | 2   | Lower wishbone rear                                  |  |
| 8  | AH Nyloc Nut M10                | NM10        | 4   | Upper wishbone                                       |  |
| 9  | AI Plain Washer M12 Oversized   | WPCM12      | 18  | Lower wishbone                                       |  |
| AK   | Plain Washer 16 Heavy Duty      | W16HD       | 4   | Anti-roll bar mounting brackets                      |  |
| AL   | Plain Washer 12 x 22 Heavy Duty | W12x22      | 2   | Steak pipe   |  |

| ITEM | BASIC DESCRIPTION            | PART NUMBER | QTY | USED ON             | ILLUSTRATION  |
|------|------------------------------|-------------|-----|---------------------|---|
| 1    | AA Bolt M12 x 100 Grade 10.9 | BM12X100    | 2   | Lower wishbone rear |  |

x4 ← (Indicates number of each fixing required)

← (Greyed out area indicates fixings are not required for current step)

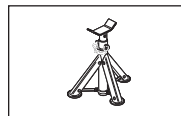
TOOLS

|   |                     |   |                       |   |                  |   |                       |   |                       |   |               |
|---|---------------------|---|-----------------------|---|------------------|---|-----------------------|---|-----------------------|---|---------------|
|    | Adjustable spanner  |    | Drill bit             |    | Instant gasket   |    | Power adhesive        |    | Socket wrench         |  | Tape measure  |
|    | Allen key           |    | Engine hoist          |    | Junior hacksaw   |    | Pozidrive screwdriver |    | Socket wrench (allen) |  | Torque wrench |
|    | Assistance          |    | File                  |    | Latex gloves     |    | Ruler                 |    | Spanner               |  | Torx          |
|    | Axle stand          |    | Flat head screwdriver |    | Loctite          |    | Sanding Drum          |    | Spirit level          |  | Trolley jack  |
|    | Brake cleaner       |    | Foam tape             |    | Long nose pliers |    | Scissors              |    | Spray adhesive        |  | WD40          |
|    | Cloth               |    | Funnel                |    | Mallet           |    | Seal drift            |    | Spray lube            |   |               |
|   | Combination spanner |   | Grease                |   | Masking tape     |   | Side cutters          |   | Stanley knife         |   |               |
|  | Copper grease       |  | Heat gun              |  | Muscle           |  | Silicone              |  | Stepped drill bit     |   |               |
|  | Drill               |  | Hose cutters          |  | Pop rivet gun    |  | Silicone gun          |  | Super glue            |   |               |

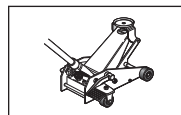
# LET'S GET READY

## PARTS

## TOOLS



x3



## FIXINGS

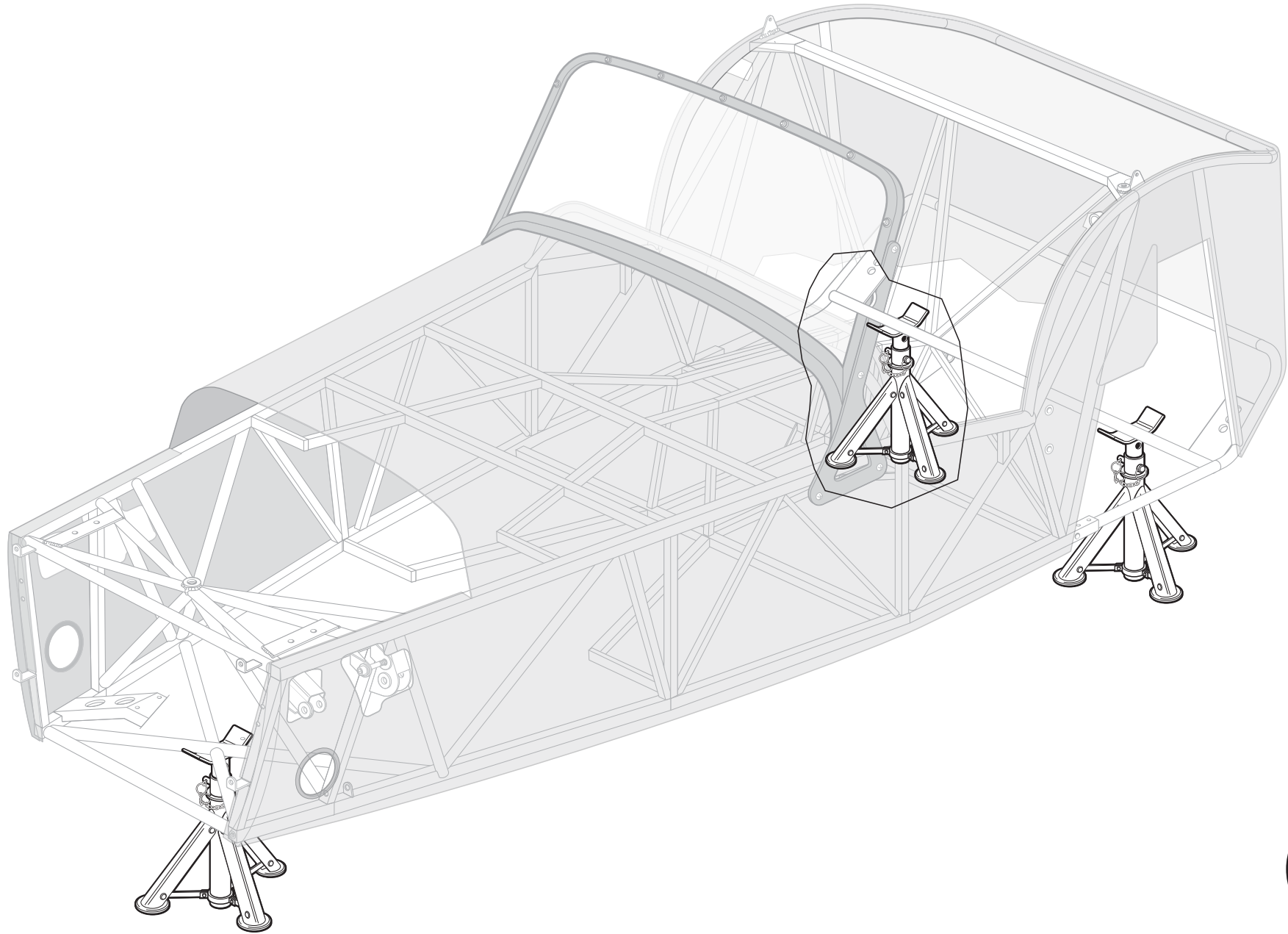
## TIPS

*When deciding how high your axle stands should be (the higher the better for working on), don't forget that a complete car will need to come down off them, so make sure your trolley jack can reach and lift the height you set them too!*

**Mick F**

*Some tape or foam on the top of the axle stands will stop them scratching the chassis.*

**Matt T**



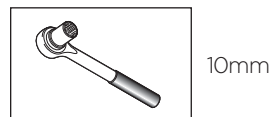


# LET'S MAKE SOME NOISE

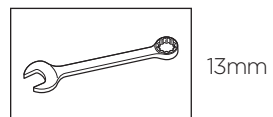
## PARTS

**1** Horn kit (x2)

## TOOLS



10mm



13mm

## FIXINGS

| Pack <b>C</b>    |                                  | <b>CATERHAM</b> |     | 45   |              |
|------------------|----------------------------------|-----------------|-----|--|--------------|
|                  |                                  | PACK NUMBER     |     | 3AC2003A   |              |
| LIGHTING & HORNS |                                  |                 |     |  |              |
| ITEM             | ITEM DESCRIPTION                 | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 1                | Screw 10 x 17<br>Black stainless | F1261           | 6   | Indicator assembly to indicator pack               |              |
| 2                | Screw 8 x 17<br>Black stainless  | F1271           | 2   | Side regulator earth on energy rail                |              |
| 3                | Screw 12 x 17<br>Self tapping    | F1272           | 4   | Rear light cluster upper fixing                    |              |
| 4                | Screw 12 x 17<br>Self tapping    | F1273           | 4   | Rear light cluster lower fixing                    |              |
| 5                | Hex Nut M6                       | N6175           | 2   | Horn bracket to steering rack platform (160Z70310) |              |
| 6                | Plain Washer 16 Heavy duty       | W1614           | 2   | Horn bracket to steering rack platform (160Z70310) |              |
| 7                | Self Nut 16<br>Track 16          | N6370           | 1   | Through steering rack platform & spacer (420)      |              |
| 8                | Plain Washer 16                  | W1613           | 2   | Bolt Headstud                                      |              |
| 9                | Hex Nut 16                       | N6176           | 1   | Horn bolt  |              |

x2

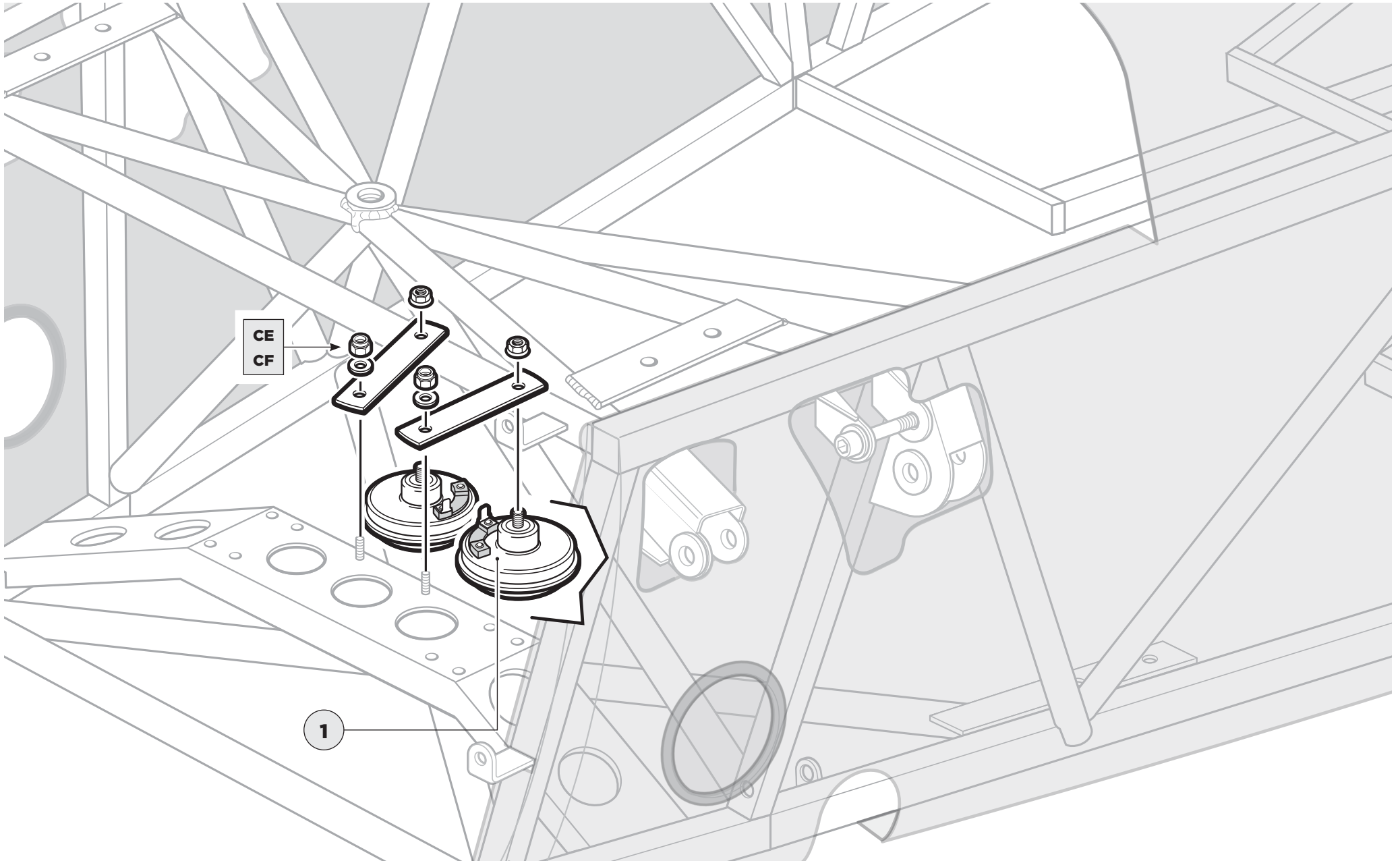
x2

## TIPS

You may need to loosen the 13mm nuts and rotate the horns in order to bring the electrical connectors closer together.

**Rich T**

# LET'S MAKE SOME NOISE

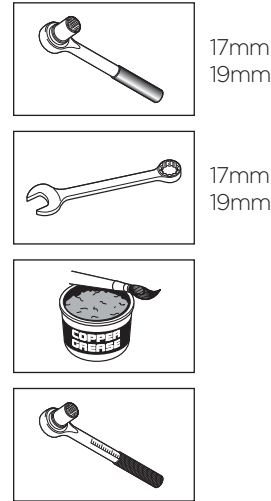


# START WITH THE SUSPENSION WISHBONES

## PARTS

- 1 Lower wishbone (LH & RH)
- 2 Upper wishbone (LH & RH)
- 3 Wishbone bush sleeve (x2)

## TOOLS



## FIXINGS

| Pack A                                |                                   | CATERHAM   |     | 44  |              |
|---------------------------------------|-----------------------------------|--|-----|---|--------------|
| FRONT SUSPENSION DeDION CARS (METRIC) |                                   | This pack may include extra fasteners to cover different options |     |   |              |
| ITEM                                  | BASIC DESCRIPTION                 | PART NUMBER  | QTY | USED ON   | ILLUSTRATION |
| 1                                     | Bush M12 x 100 Grade 10.9         | BM12X100   | 2   | Lower wishbone rear                                     |              |
| 2                                     | Bush M12 x 65 Grade 10.9          | BM12X65  | 2   | Lower wishbone front                                    |              |
| 3                                     | Bush M10 x 65 Grade 10.9          | BM10X65  | 2   | Upper wishbone rear                                     |              |
| 4                                     | Bush M10 x 60 Grade 10.9          | BM10X60  | 2   | Upper wishbone front                                    |              |
| 5                                     | Bush M8 x 60 Grade 10.9           | BM8X60   | 4   | Anti-roll bar mounting brackets                         |              |
| 6                                     | Plain Nut M12 x 1.5 Thread        | NM12F12  | 1   | Temporary use to fit the lower upper wishbone bush part |              |
| 7                                     | Nylon Nut M12                     | NM12F12  | 2   | Lower wishbone rear                                     |              |
| 8                                     | Nylon Nut M10                     | NM10F10  | 4   | Upper wishbone  |              |
| 9                                     | Plain Washer M12 Oversize         | WPM12  | 18  | Lower wishbone  |              |
| 10                                    | Plain Washer M8 Oversize          | WPM8   | 4   | Anti-roll bar mounting brackets                         |              |
| 11                                    | Plain Washer 1/2" x 1/2" Oversize | WPM16  | 2   | Brake pads  |              |

| Pack A                                |                            | CATERHAM   |     | 44   |              |
|---------------------------------------|----------------------------|--|-----|--|--------------|
| FRONT SUSPENSION DeDION CARS (METRIC) |                            | This pack may include extra fasteners to cover different options |     |  |              |
| ITEM                                  | BASIC DESCRIPTION          | PART NUMBER  | QTY | USED ON  | ILLUSTRATION |
| 12                                    | Spring Washer M12          | WSM12  | 2   | Lower wishbone front                                   |              |
| 13                                    | Spring Washer M8           | WSM8   | 4   | Anti-roll bar mounting brackets & upper damper rod nut |              |
| 14                                    | Washer 1/2" Brake pad      | WPM16  | 2   | Brake pads   |              |
| 15                                    | Nylon Nut 1/2" Head height | NM12F12  | 2   | Wing nuts  |              |
| 16                                    | Nylon Nut 1/2" Head height | NM12F12  | 2   | Front brake spring mounting (add track rod)            |              |

x2  
x2  
x2  
x2  
x2  
x2  
x4  
x14

x2

## TIPS

For now, only tighten the nuts/bolts lightly and then torque them up when the car is finished and on the ground. This sets the bushes correctly and ensures the best handling.

**Harrison P**

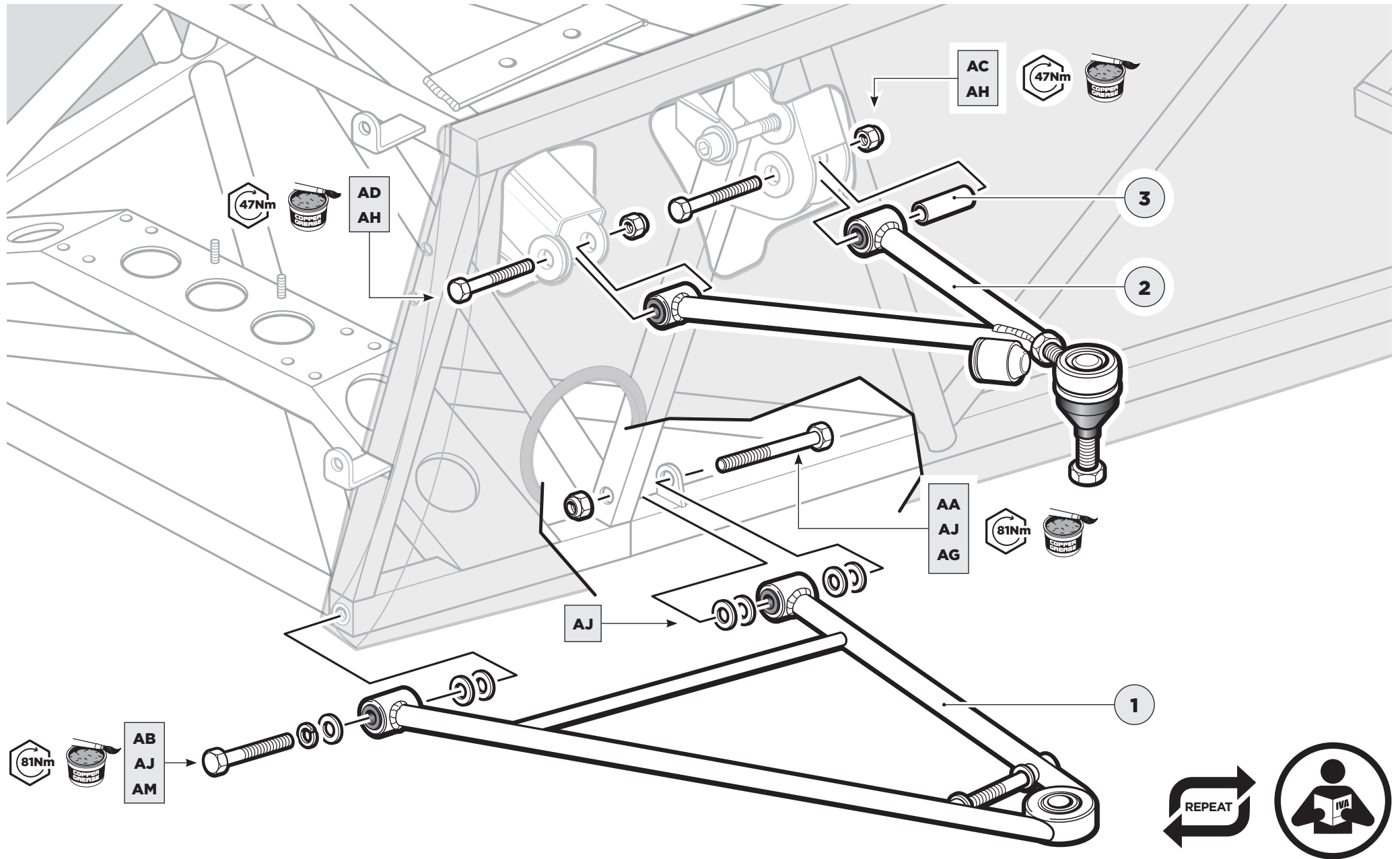
The big washers are chamfered and the chamfered side should be towards the wishbone.

**Alex H**

Leave bolt AD loose for now, as we have to take it back out again to put the headlight bracket on later.

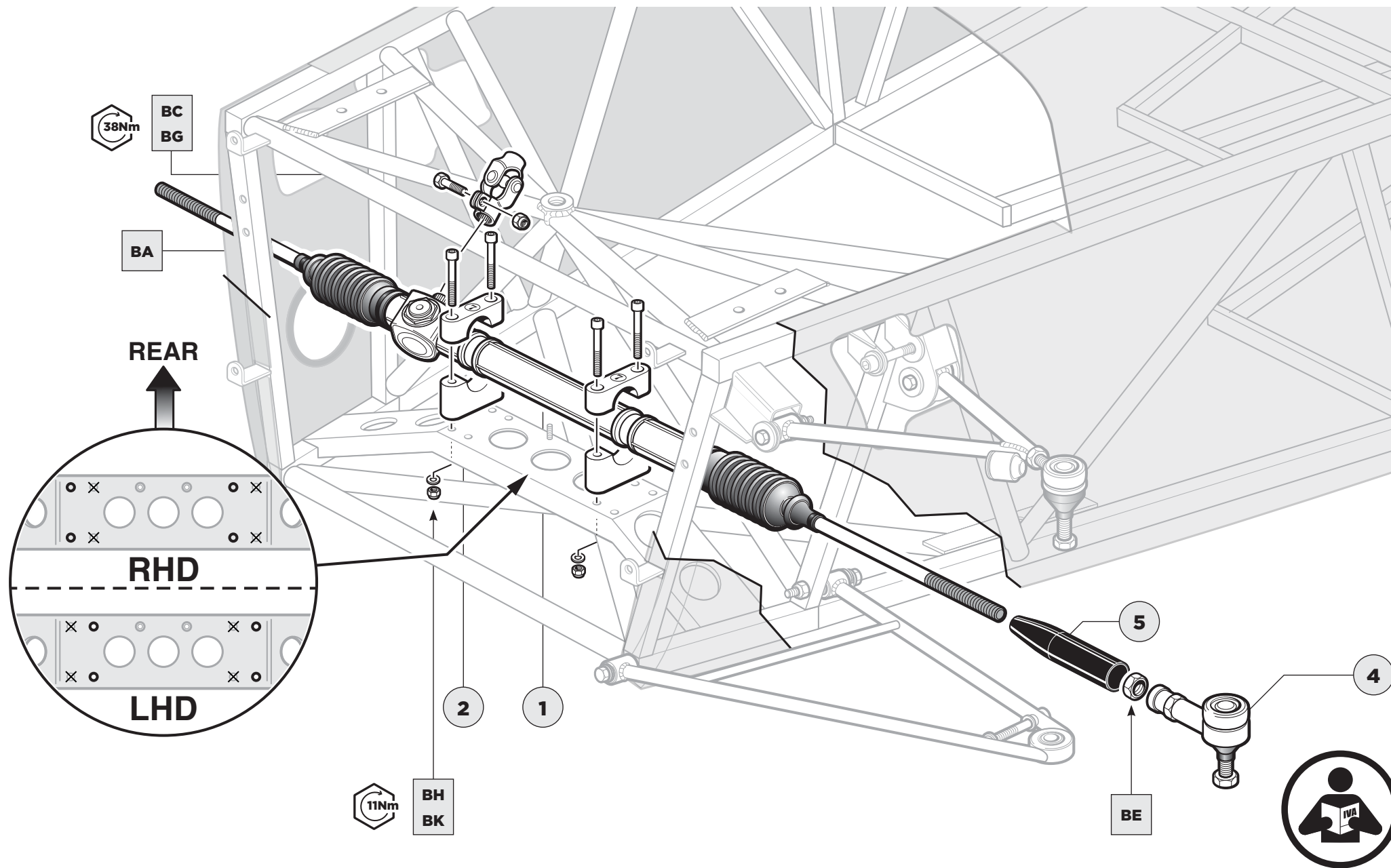
**John K**

# START WITH THE SUSPENSION WISHBONES





# NOW FOR THE STEERING RACK

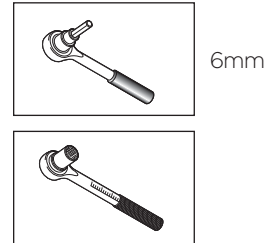


# AND THEN THE DAMPERS

## PARTS

- 1 Spring / damper (x2)
- 2 Bush sleeves (x4)

## TOOLS



6mm

## FIXINGS

| Pack <b>A</b>  |                              | <b>CATERHAM</b> |     | 44   |              |
|--|------------------------------|-----------------|-----|--|--------------|
|  |                              | PACK NUMBER     |     | 3AC2001A   |              |
| FRONT SUSPENSION DeDION CARS (METRIC)                            |                              |                 |     |  |              |
| This pack may include extra fasteners to cover different options |                              |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION            | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 1  | Bush M12 x 60 (Metric)       | 8M12100         | 2   | Lower wishbone rear                                  |              |
| 2  | Bush M12 x 60 (Metric)       | 8M12090         | 2   | Lower wishbone front                                 |              |
| 3  | Bush M12 x 60 (Metric)       | 8M12080         | 2   | Upper wishbone rear                                  |              |
| 4  | Bush M12 x 60 (Metric)       | 8M12070         | 2   | Upper wishbone front                                 |              |
| 5  | Bush M8 x 40 (Metric)        | 8M0800          | 4   | Anti-roll bar mounting brackets                      |              |
| 6  | Plan No 8214 x 1.2 Thread    | 8M0914          | 1   | Temporary use to help lock upper wishbone ball joint |              |
| 7  | Nylon Nut M12                | 8M0712          | 2   | Lower wishbone rear                                  |              |
| 8  | Nylon Nut M12                | 8M0712          | 4   | Upper wishbone                                       |              |
| 9  | Plan Washer M12 (Metric)     | 8M0812          | 18  | Lower wishbone                                       |              |
| 10   | Plan Washer M8 (Metric)      | 8M0808          | 4   | Anti-roll bar mounting brackets                      |              |
| 11   | Plan Washer 12 x 12 (Metric) | 8M0812          | 2   | Brake pipe   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack <b>A</b>  |                       | <b>CATERHAM</b> |     | 44   |              |
|--|-----------------------|-----------------|-----|--|--------------|
|  |                       | PACK NUMBER     |     | 3AC2001A   |              |
| FRONT SUSPENSION DeDION CARS (METRIC)                            |                       |                 |     |  |              |
| This pack may include extra fasteners to cover different options |                       |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION     | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 12   | Spring Washer M12     | 8M0812          | 2   | Lower wishbone rear                                  |              |
| 13   | Spring Washer M8      | 8M0808          | 6   | Anti-roll bar mounting brackets & upper damper mount |              |
| 14   | Washer 12 (Metric)    | 8M0812          | 2   | Brake pipe   |              |
| 15   | Nylon Nut 12 (Metric) | 8M0712          | 2   | Wing stay  |              |
| 16   | Nylon Nut 12 (Metric) | 8M0712          | 2   | Front brake, spring mounting (old track plate)       |              |

Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

Fixings not contained in the pack will be supplied loosely fitted to the chassis and the wishbone

x2

## TIPS

Put the top of the damper on first and be careful not to let it swing into the side of the chassis.

Grant P

The bottom can be a tight fit!

Mick F

You may need to press inwards the side skin to make sufficient clearance for the upper damper bolt. Don't worry, you won't damage your paint in doing this.

James A

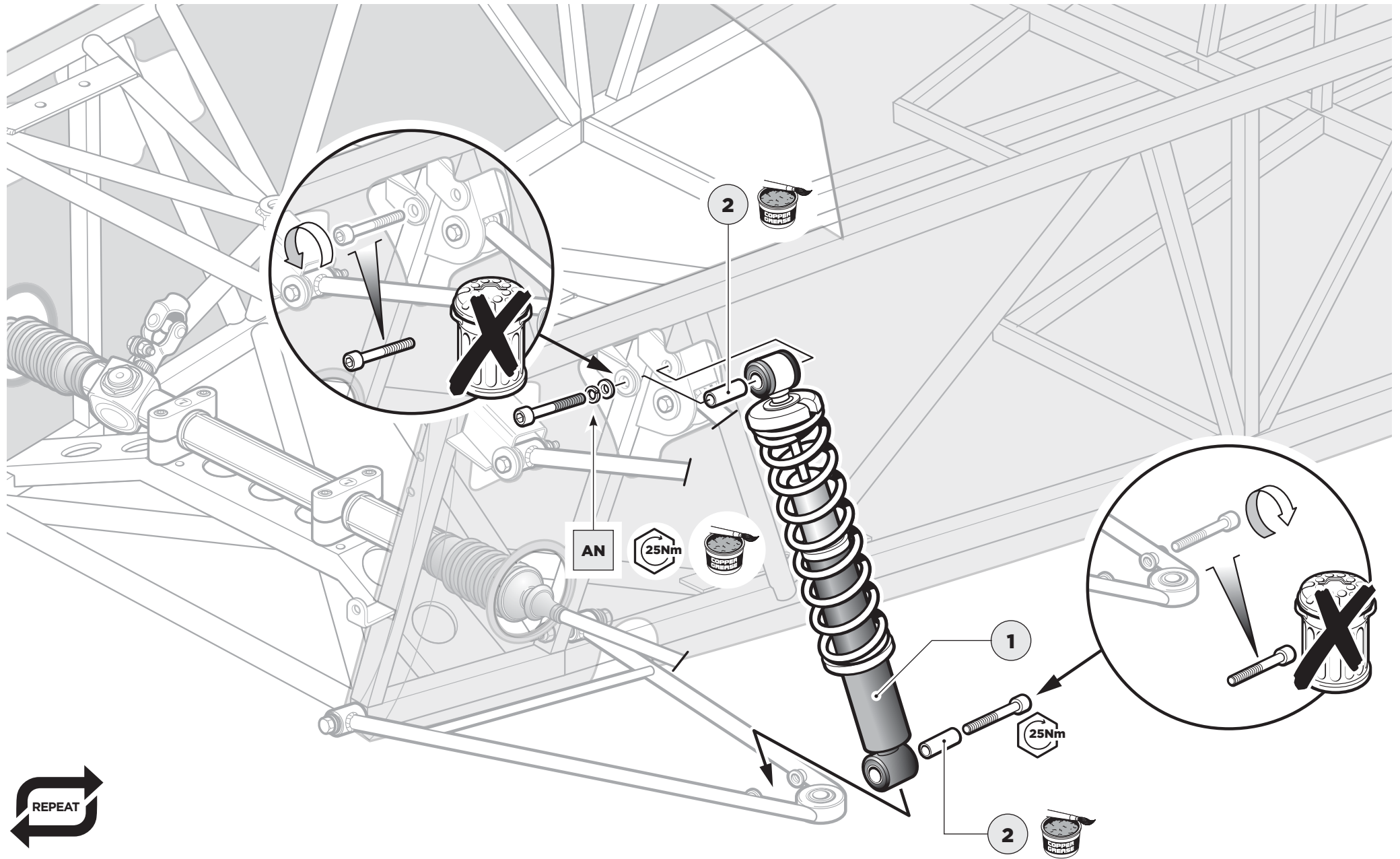
The front damper bush sleeves are identical and can be fitted in either the top or bottom bushes.

Richard T

It is much easier to tighten the top damper bolt using a 6mm ball ended Allen socket.

Lee B

## AND THEN THE DAMPERS



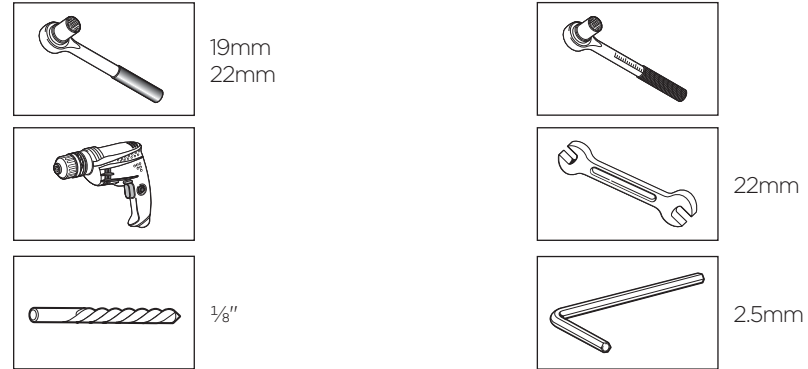


# IT'S TIME FOR THE WINGSTAYS

## PARTS

- 1 Wingstay (LH & RH)
- 2 Front brake & upright assembly (LH & RH)
- 3 Steel wheel hub spacers (x2)
- 4 Screws (x4)

## TOOLS



## TIPS

The drilled hole is for the side repeater earth that we'll fit later. It's easier to drill from the top and down through both sides of the tube, rather than through one side from the bottom (where the earth will be fixed).

**Tiago O**

Put the upright assembly into the lower wishbone spherical joint, then attach the track rod end before tightening the lower upright nut. This will prevent the assembly from turning and contacting the side skin.

**John S**

Some of the fixings required and shown on the drawings, such as the ball joint nut, are already on the part and not in the fixing pack.

**Anthony L**

Use the plain nut to pull the top ball joint home before using a nyloc, otherwise the thread will spin.

**Chris N**

Remove and discard the washer and full nyloc that comes fitted on the back of the stub axle before fitting the wingstay. A half nyloc from the fixings pack should then be fitted but without a washer.

**Rich T**

Hub spacers are only required when using steel wheels.

**Grant P**

## FIXINGS

| Pack <b>A</b>  |                                      | <b>CATERHAM</b> |     | 44   |              |
|--|--------------------------------------|-----------------|-----|--|--------------|
|  |                                      | PART NUMBER     |     | 3AC20001A  |              |
| FRONT SUSPENSION DeDION CARS (METRIC)                            |                                      |                 |     |  |              |
| This pack may include extra fasteners to cover different options |                                      |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION                    | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 1  | AA Stub Bolt 12 x 100 (Metric)       | 8M12100         | 2   | Lower wishbone rear                                  |              |
| 2  | AB Stub Bolt 12 x 60 (Metric)        | 8M12060         | 2   | Lower wishbone front                                 |              |
| 3  | AC Stub Bolt 12 x 60 (Metric)        | 8M12060         | 2   | Upper wishbone rear                                  |              |
| 4  | AD Stub Bolt 12 x 60 (Metric)        | 8M12060         | 2   | Upper wishbone front                                 |              |
| 5  | AE Stub Bolt 10 x 60 (Metric)        | 8M10060         | 4   | Anti-roll bar mounting brackets                      |              |
| 6  | AF Plain Nut M14 x 1.5 thread        | 8M1414          | 1   | Temporary use to help lock upper wishbone ball joint |              |
| 7  | AG Nyloc Nut M12                     | 8M1212          | 2   | Lower wishbone rear                                  |              |
| 8  | AH Nyloc Nut M10                     | 8M1010          | 4   | Upper wishbone                                       |              |
| 9  | AJ Plain Washer M12 (Metric)         | 8M1212          | 18  | Lower wishbone                                       |              |
| 10   | AK Plain Washer M10 (Metric)         | 8M1010          | 4   | Anti-roll bar mounting brackets                      |              |
| 11   | AL Plain Washer 1/2" x 1/2" (Metric) | 8M1010          | 2   | Brake pipe   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

x1

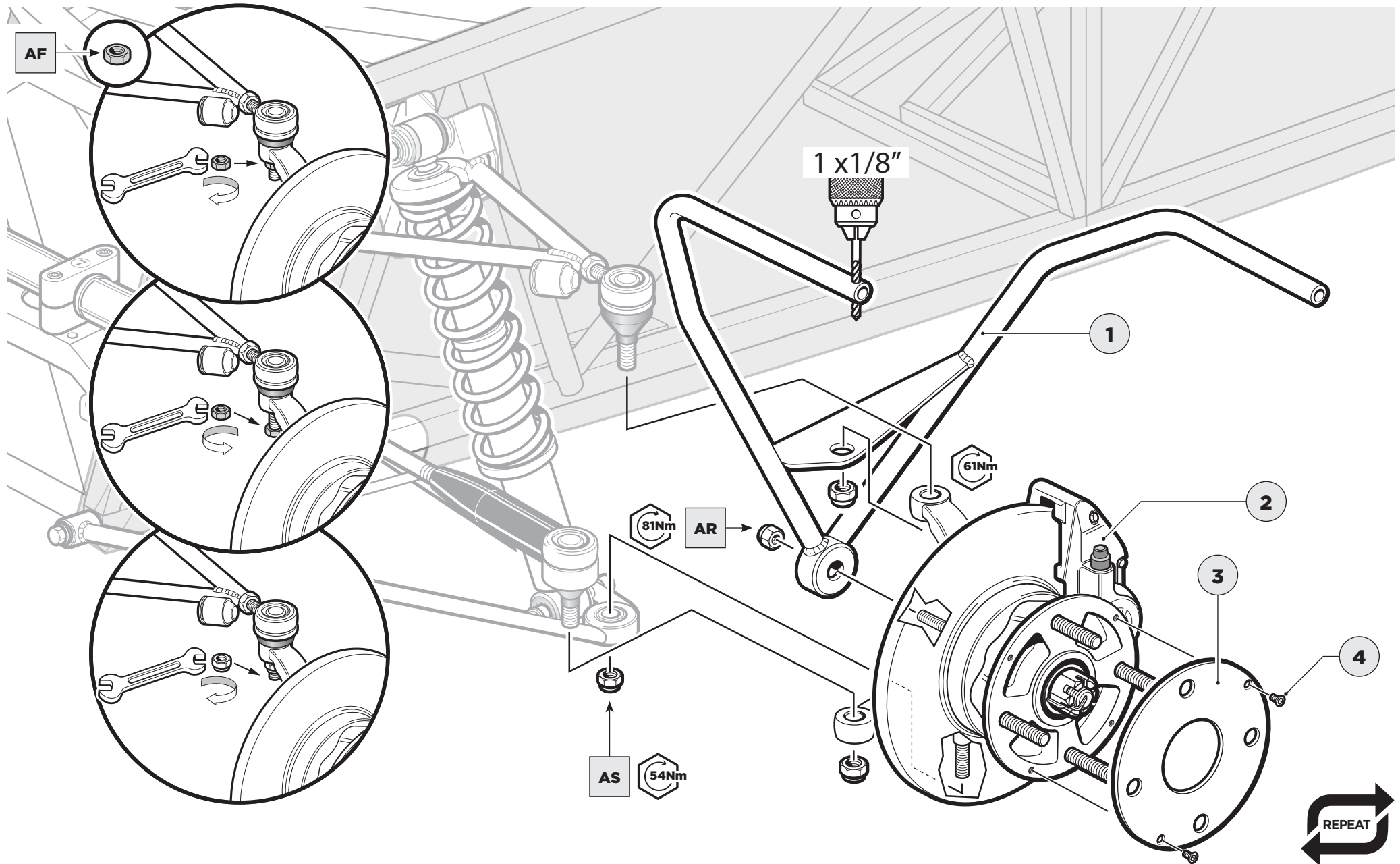
| Pack <b>A</b>  |                            | <b>CATERHAM</b> |     | 44   |              |
|--|----------------------------|-----------------|-----|--|--------------|
|  |                            | PART NUMBER     |     | 3AC20001A  |              |
| FRONT SUSPENSION DeDION CARS (METRIC)                            |                            |                 |     |  |              |
| This pack may include extra fasteners to cover different options |                            |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION          | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 12   | AM Spring Washer 10        | 8M1010          | 2   | Lower wishbone rear                                |              |
| 13   | AN Spring Washer 12        | 8M1212          | 6   | Anti-roll bar mounting brackets & upper damper rod |              |
| 14   | AP Washer 1/2" (Metric)    | 8M1010          | 2   | Brake pipe   |              |
| 15   | AR Nyloc Nut 1/2" (Metric) | 8M1010          | 2   | Wing stay  |              |
| 16   | AS Nyloc Nut 1/2" (Metric) | 8M1010          | 2   | Front brake, upright mounting (std track ONLY)     |              |

Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

x2

x2

# IT'S TIME FOR THE WINGSTAYS





*Now is a good time to take some photos*



Have you applied for your IVA yet?

# LET THERE BE LIGHTS

## PARTS

- 1 Headlight assembly (x2)
- 2 Indicator pod (LH & RH)
- 3 Indicator assembly (x2)
- 4 Headlight bracket (LH & RH)
- 5 IVA trim
- 6 Heat shrink
- 7 Grommet (x2)

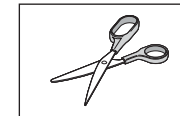
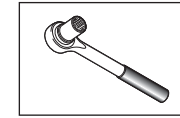
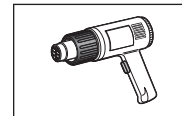
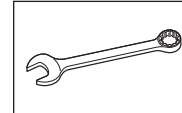
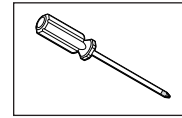
## FIXINGS

| Pack C           |                                 | CATERHAM    |     | 45  |              |
|------------------|---------------------------------|-------------|-----|---|--------------|
|                  |                                 | PACK NUMBER |     | 3ACZ0003A   |              |
| LIGHTING & HORNS |                                 |             |     |   |              |
| ITEM             | BASIC DESCRIPTION               | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1                | Screw 10 x 1" (Self Drilling)   | F1080       | 6   | Indicator assembly to indicator pod               |              |
| 2                | Screw 8 x 1" (Self Drilling)    | F1071       | 2   | Side regulator earth on wing/body                 |              |
| 3                | Screw 12 x 1/2" (Self Drilling) | F1072       | 4   | Rear light cluster upper fixing                   |              |
| 4                | Screw 12 x 1/2" (Self Drilling) | F1073       | 4   | Rear light cluster lower fixing                   |              |
| 5                | Wash Hex 10                     | H0176       | 2   | Horn bracket to mounting rack (part of H00220010) |              |
| 6                | Wash Washer 10                  | H0175       | 2   | Horn bracket to mounting rack (part of H00220010) |              |
| 7                | Self Drill 6" (Self Drilling)   | H00200      | 1   | Through slotting track system at motor (H002)     |              |
| 8                | Wash Washer 10/12               | H0177       | 2   | Self Headlight                                    |              |
| 9                | Wash Hex 10                     | H0176       | 1   | Horn bolt   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 1

x6

## TOOLS



17mm

8mm  
17mm  
24mm

## TIPS

It's very important to read the IVA Guide before starting this job to ensure grommets and sheathing are in the right place. It's very difficult to add them once fitted!

John S

This is the trickiest job on the car, so once done you can breathe a sigh of relief!

Tiago A

Do not attach the econoseal plug onto the headlight wires until they have passed through the upper wishbone bracket. Leave this unplugged from the chassis connector for the time being as you will need to add another wire later on.

Jamie A

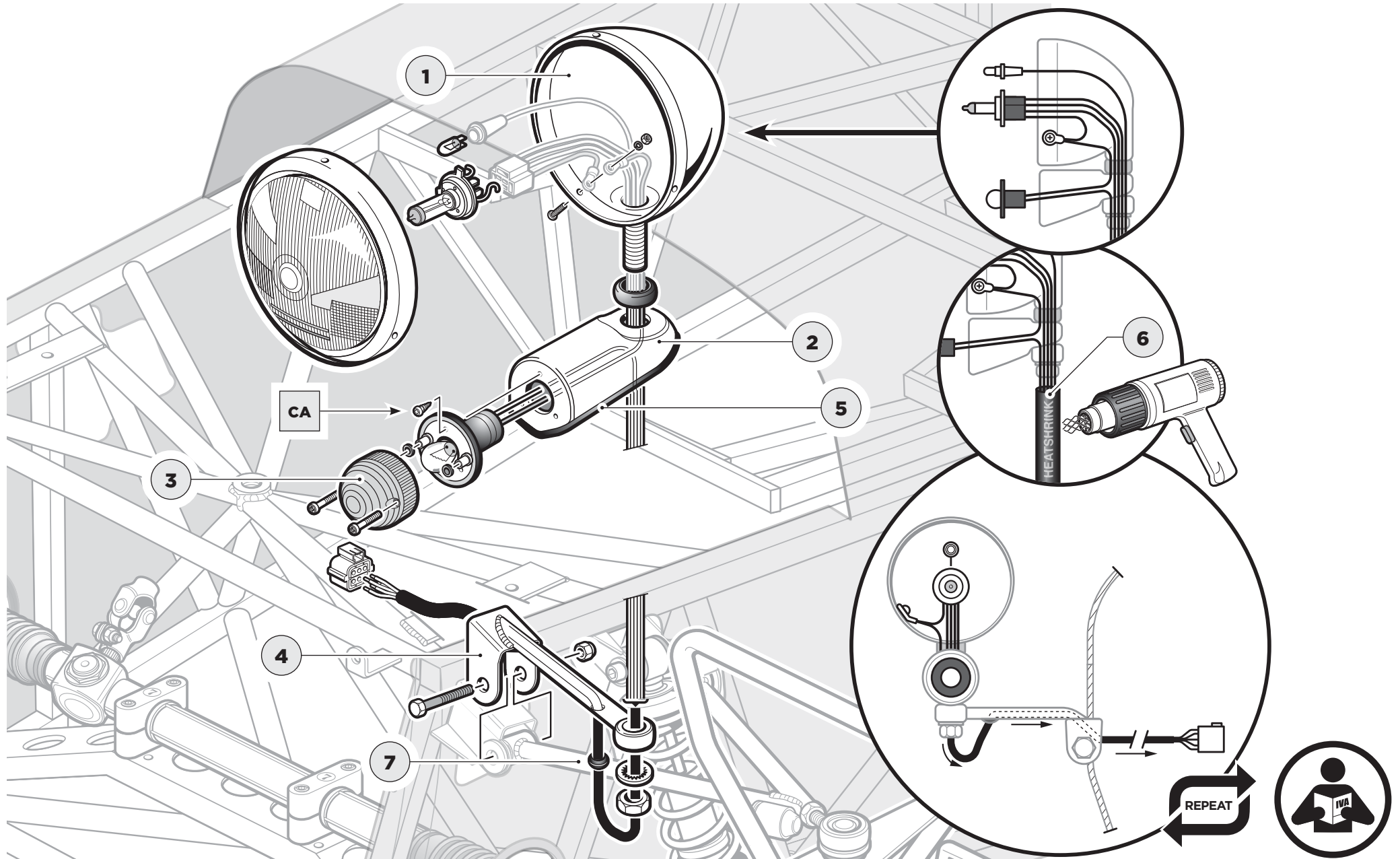
Glue IVA trim all around the edge of the pod before fitting. The smaller side should face outwards.

Chris B

The tab on the headlight bracket ④ hooks under the wishbone bracket on the chassis. The wires exiting the headlight bracket are then fed through the hole in the upper wishbone bracket.

Harrison P

# LET THERE BE LIGHTS

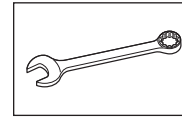


# FITTING THE BRAKE HOSES

## PARTS

- 1 Brake hose kit
- 2 Copper washer (x2)

## TOOLS



13mm (x2)  
9/16"

## FIXINGS

| Pack A                                |                                  | CATERHAM   |     | 44  |              |
|---------------------------------------|----------------------------------|--|-----|---|--------------|
| FRONT SUSPENSION DeDION CARS (METRIC) |                                  | This pack may include extra fasteners to cover different options |     |   |              |
| ITEM                                  | BASIC DESCRIPTION                | PART NUMBER  | QTY | USED ON   | ILLUSTRATION |
| 1                                     | AA Bush M12 x 65 (Lower)         | BA122100   | 2   | Lower wishbone rear   |              |
| 2                                     | AE Bush M12 x 65 (Lower)         | BA122090   | 2   | Lower wishbone front  |              |
| 3                                     | AC Bush M12 x 65 (Upper)         | BA122080   | 2   | Upper wishbone rear   |              |
| 4                                     | AD Bush M12 x 65 (Upper)         | BA122070   | 2   | Upper wishbone front  |              |
| 5                                     | AE Bush M8 x 45 (Lower)          | BA08200  | 4   | Anti-roll bar mounting brackets                                   |              |
| 6                                     | AF Flan Nut M14 x 1.5 Thread     | BA09114  | 1   | Temporary use to fit the shock absorber upper wishbone ball joint |              |
| 7                                     | AG Nylon Nut M12                 | BA09112  | 2   | Lower wishbone rear   |              |
| 8                                     | AH Nylon Nut M10                 | BA09110  | 4   | Upper wishbone  |              |
| 9                                     | AJ Flan Washer M12 (Oval)        | BA08212  | 18  | Lower wishbone  |              |
| 10                                    | AK Flan Washer M8 (Square)       | BA08208  | 4   | Anti-roll bar mounting brackets                                   |              |
| 11                                    | AL Flan Washer 1/2" x 1/2" (Hex) | WA09018  | 2   | Brake pipe  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack A                                |                            | CATERHAM   |     | 44   |              |
|---------------------------------------|----------------------------|--|-----|--|--------------|
| FRONT SUSPENSION DeDION CARS (METRIC) |                            | This pack may include extra fasteners to cover different options |     |  |              |
| ITEM                                  | BASIC DESCRIPTION          | PART NUMBER  | QTY | USED ON  | ILLUSTRATION |
| 12                                    | AM Spring Washer M12       | WA09212  | 2   | Lower wishbone rear                                  |              |
| 13                                    | AN Spring Washer M8        | WA09208  | 6   | Anti-roll bar mounting brackets & upper damper shock |              |
| 14                                    | AP Washer 1/2" Brake steel | WA09218  | 2   | Brake pipe   |              |
| 15                                    | AR Nylon Nut 1/2" (Hex)    | WA09112  | 2   | Wing stay  |              |
| 16                                    | AS Nylon Nut 1/2" (Hex)    | WA09112  | 2   | Front brake, spring mounting (old track)             |              |

Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

x2

x2

## TIPS

The hose will want to curve once fitted. Make sure the curve points towards the rear of the car.

**Khalfani D**

Brake hoses come in packs of 3: 2 front, 1 rear.

**Anthony L**

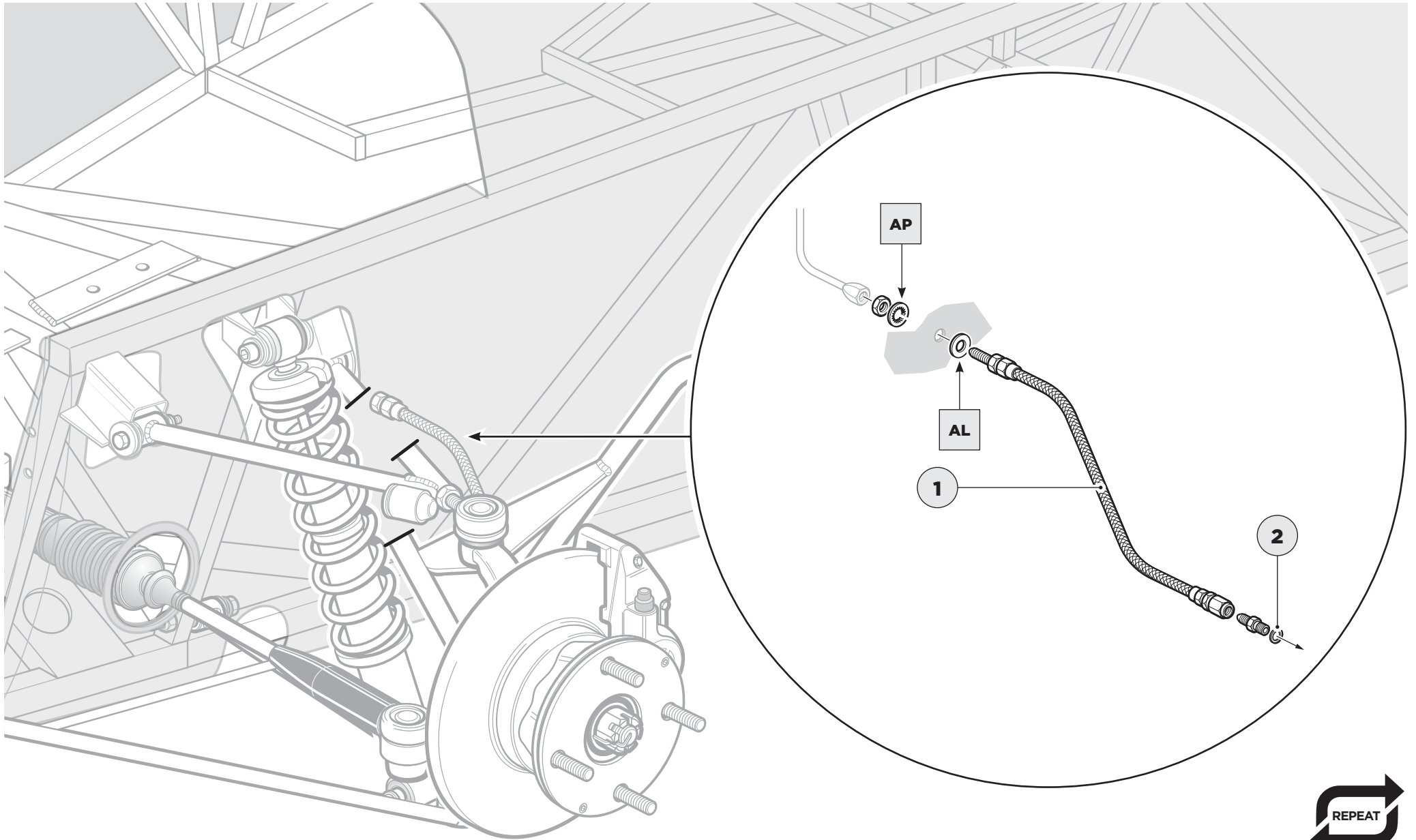
Discard the gold coloured adaptors and fit the grey coloured adaptors which have a step for the copper washer to locate over.

**Simon L**

Do not use the small copper washers supplied with the brake hoses. The correct ones are supplied separately and measure 18mm external diameter.

**Mick F**

# FITTING THE BRAKE HOSES



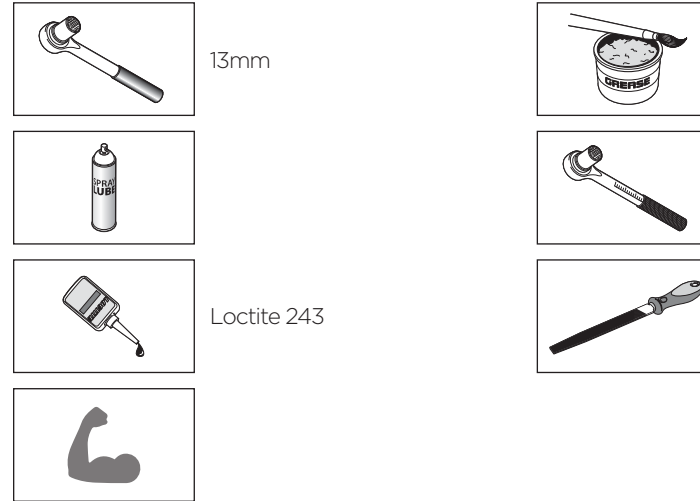


# LAST PART OF THE FRONT SUSPENSION: CONNECTING THE TWO SIDES TOGETHER

## PARTS

- 1 Anti-roll bar
- 2 Anti-roll bar bracket (x2)
- 3 Anti-roll bar rubber (x2)
- 4 Anti-roll bar ball (x2)
- 5 Anti-roll bar dust cover (x2)

## TOOLS



## FIXINGS

| ITEM | BASIC DESCRIPTION           | PART NUMBER | QTY | USED ON                         | ILLUSTRATION |
|------|-----------------------------|-------------|-----|---------------------------------|--------------|
| 1    | Ball MJ2 x 60 (Metric)      | 8M12100     | 2   | Lower wishbone rear             |              |
| 2    | Ball MJ2 x 60 (Metric)      | 8M12000     | 2   | Lower wishbone front            |              |
| 3    | Ball MJ2 x 60 (Metric)      | 8M12060     | 2   | Upper wishbone rear             |              |
| 4    | Ball MJ2 x 60 (Metric)      | 8M12000     | 2   | Upper wishbone front            |              |
| 5    | Ball M6 x 40 (Metric)       | 8M640       | 4   | Anti-roll bar mounting brackets |              |
| 6    | Plain Washer M12 Heavy Duty | 8P148       | 4   | Anti-roll bar mounting brackets |              |
| 7    | Plain Washer M12 (Metric)   | 8P142       | 18  | Lower wishbone                  |              |
| 8    | Plain Washer M12 (Metric)   | 8P142       | 4   | Upper wishbone                  |              |
| 9    | Plain Washer M12 (Metric)   | 8P142       | 2   | Brake pipe                      |              |
| 10   | Plain Washer M12 (Metric)   | 8P142       | 2   | Brake pipe                      |              |
| 11   | Plain Washer M12 (Metric)   | 8P142       | 2   | Brake pipe                      |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| ITEM | BASIC DESCRIPTION | PART NUMBER | QTY | USED ON  | ILLUSTRATION |
|------|-------------------|-------------|-----|--|--------------|
| 12   | Spring Washer M8  | 8P164       | 2   | Lower wishbone rear                                  |              |
| 13   | Spring Washer M8  | 8P164       | 6   | Anti-roll bar mounting brackets & upper damper mount |              |
| 14   | Spring Washer M8  | 8P164       | 2   | Brake pipe   |              |
| 15   | Spring Washer M8  | 8P164       | 2   | Wing stay  |              |
| 16   | Spring Washer M8  | 8P164       | 2   | Front brake, spring mounting (ball track)            |              |

Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

x4

x4

x4

## TIPS

Grease the balls and cups generously.

**Matt T**

Check that the colour of the mounting rubbers matches the colour spot on the bar.

**John K**

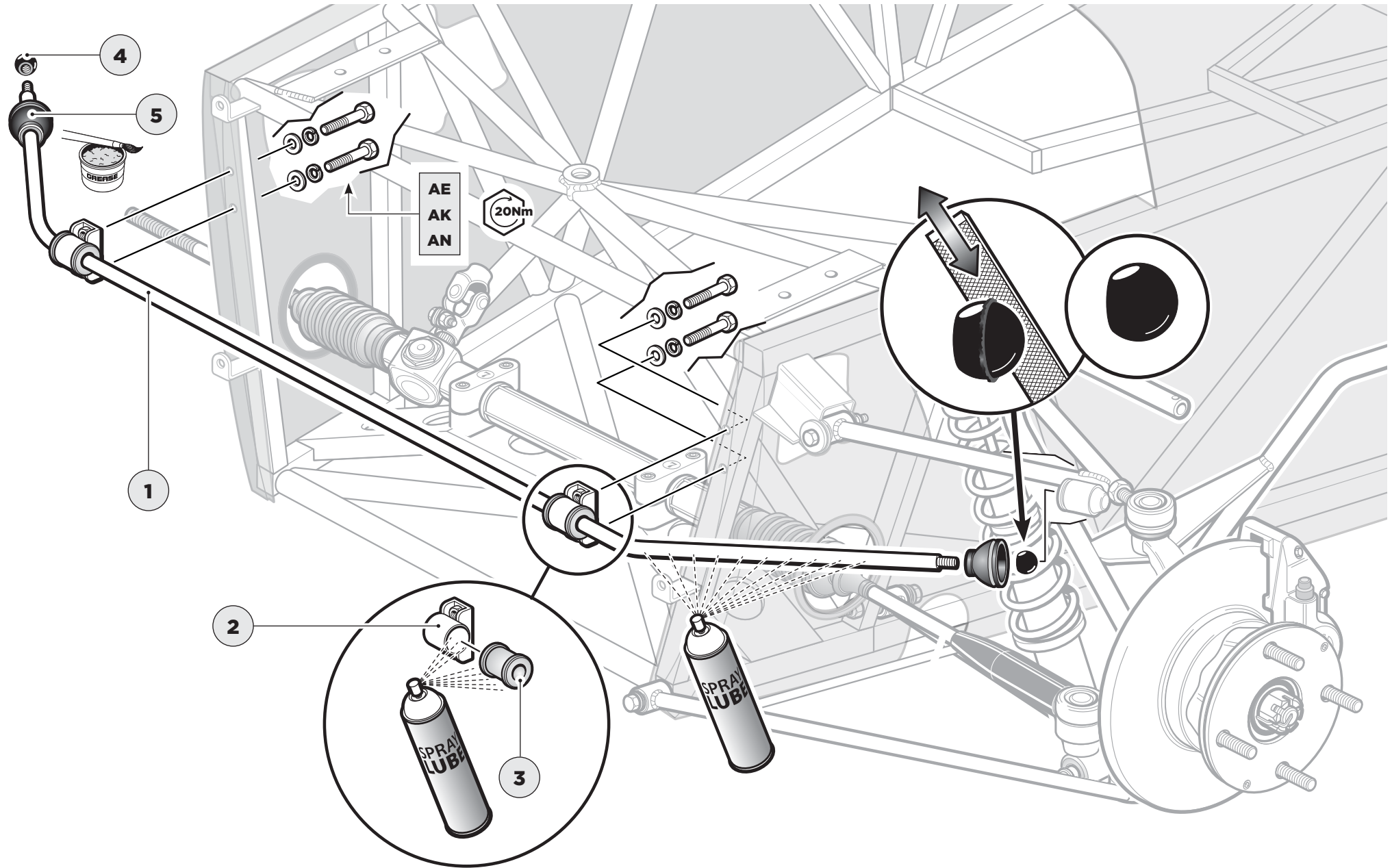
Use the thread lock on the thread of the anti-roll bar, not in the thread of the ball.

**Dan D**

Getting the assembled anti-roll bar fully into both cups on the upper wishbone can be a bit of a fight. It's made of springy stuff, so don't worry that you are bending it.

**Jamie A**

## LAST PART OF THE FRONT SUSPENSION: CONNECTING THE TWO SIDES TOGETHER

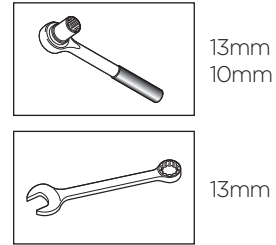


# FITTING THE RADIATOR

## PARTS

- 1 Radiator
- 2 Fan
- 3 Radiator bobbins (x4)
- 4 Fan mounting feet (x4)

## TOOLS



## FIXINGS

| Pack D   |   | CATERHAM    |     | 44  |              |
|--|---|-------------|-----|---|--------------|
|  |   | PACK NUMBER |     | SAC22004A   |              |
| COOLING SIGMA  |   |             |     |   |              |
| This pack may include extra fasteners to cover different options |   |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                       | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | DA Nut M8 x 20 Heavy duty               | 888442      | 1   | Expansion tank bracket to chassis                                     |              |
| 2  | DB Washer 13x5 3/4"                     | 88714224    | 1   | Expansion tank to bracket   |              |
| 3  | DC Radiator 881020 Heavy duty           | 888422      | 4   | SM radiator bracket   |              |
| 4  | DD Nut M8 x 18 with square section      | 88710724    | 4   | Fan brackets to fan   |              |
| 5  | DE Radiator 881020 Heavy duty           | 888422      | 4   | Fan to radiator mounting - 20 1/2"                                    |              |
| 6  | DF Nylon Nut M8                         | NM976       | 8   | 8x Fan to radiator bracket<br>8x SIV radiator bracket                 |              |
| 7  | DG Plain Nut M8                         | NM978       | 8   | Radiator bobbin   |              |
| 8  | DH Nylon Nut 1/4"                       | 8871124     | 1   | Expansion tank bracket  |              |
| 9  | DI Plain Washer 1/4" Heavy duty         | WPH114      | 13  | 8 x SIV rad bracket<br>4 x Fan fittings<br>1 x Expansion tank bracket |              |
| 10   | DJ Plain Washer 1/2" Heavy duty         | WPH216      | 4   | Radiator bobbin back  |              |
| 11   | DK Plain Washer 5/16" x 1/4" Heavy duty | 888117078   | 4   | Radiator bobbin front   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack D   |  | CATERHAM    |     | 44  |              |
|--|--|-------------|-----|---|--------------|
|  |  | PACK NUMBER |     | SAC22004A   |              |
| COOLING SIGMA  |  |             |     |   |              |
| This pack may include extra fasteners to cover different options |  |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                      | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 12   | DL Plain Washer 1/4" x 1/4" Heavy duty | WPH114      | 1   | Expansion tank bracket  |              |
| 13   | DM Spring Washer S16 Heavy duty        | WSP1611     | 9   | 8 x Radiator bobbin<br>1 x Expansion tank                                   |              |
| 14   | DN Hex Cap Screw                       | 88712040    | 6   | 2 x 2 x 20mm hex cap screw<br>2 x 2 x 20mm hex cap screw                    |              |
| 15   | DO Hex Cap Screw                       | 88712038    | 2   | 1 x Engine outlet to top 1/2" hose<br>1 x Engine outlet to bottom 1/2" hose |              |
| 16   | DP Hex Cap Screw                       | 88711625    | 18  | 8 x 20mm hex cap screw<br>2 x 20mm hex cap screw<br>2 x 20mm hex cap screw  |              |
| 17   | DD Hex Cap Screw                       | 88711625    | 6   | Expansion tank small 1/2" piece   |              |
| 18   | DR Hex - Black 1/2" x 1/4"             | 887110110   | 12  | Cooling fan   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

x8

x4

x8

x4

x4

x4

## TIPS

Be careful to tighten the fan gently and with just a nip.

Dan P

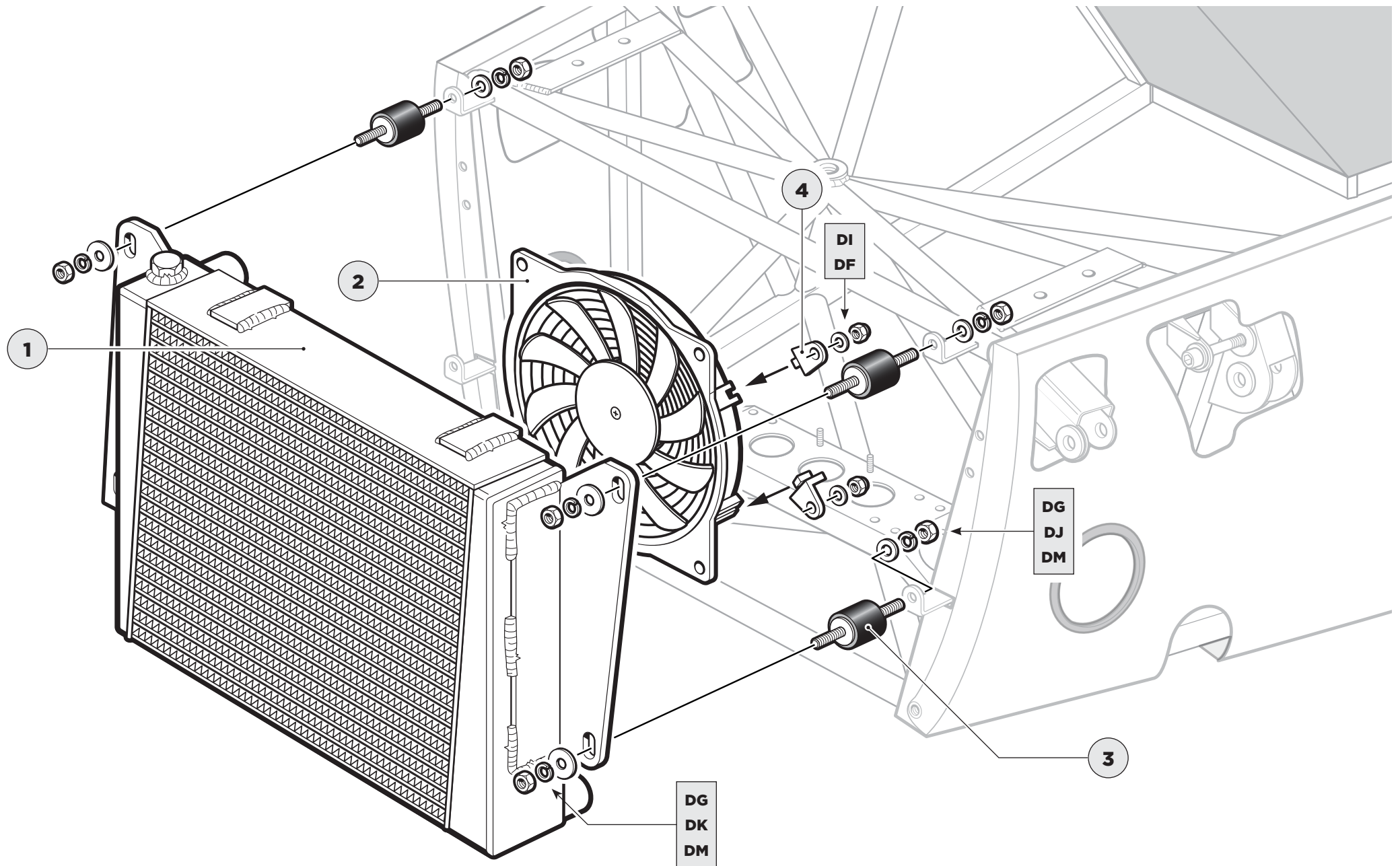
The fan should have a 'flat' section on the rim. This should be at the top and bottom.

Grant P

Be careful when tightening the rubber bobbins as they can twist and split.

James A

# FITTING THE RADIATOR

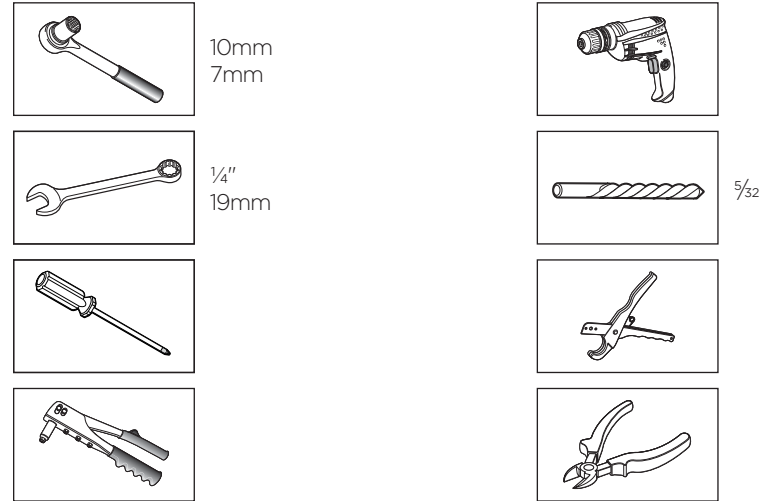


# THINGS ARE HEATING UP

## PARTS

- 1** Heater
- 2** Valve
- 3** Heater cable
- 4** Lower hose 110mm (cut from long length)
- 5** Upper hose 120mm (cut from long length)
- 6** Grommet
- 7** Cable tie
- 8** Cradle clip
- 9** 5/32 rivet

## TOOLS



## FIXINGS

| Pack D   |                                   | CATERHAM    |     | 44        |              |
|--|-----------------------------------|-------------|-----|-----------|--------------|
|  |                                   | PACK NUMBER |     | SAC22004A |              |
| COOLING SIGMA  |                                   |             |     |           |              |
| This pack may include extra fasteners to cover different options |                                   |             |     |           |              |
| ITEM   | BASIC DESCRIPTION                 | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | Expansion tank bracket            | 888440      | 1   |           |              |
| 2  | Expansion tank to bracket         | 888440      | 1   |           |              |
| 3  | Expansion tank bracket            | 888440      | 4   |           |              |
| 4  | Fan brackets to fan               | 888440      | 4   |           |              |
| 5  | Fan to radiator coating - SU only | 888440      | 4   |           |              |
| 6  | 1/4 Fan to radiator               | 888440      | 8   |           |              |
| 7  | Radiator bobbin                   | 888440      | 8   |           |              |
| 8  | Expansion tank bracket            | 888440      | 1   |           |              |
| 9  | 1/4 Fan to radiator               | 888440      | 13  |           |              |
| 10   | Radiator bobbin back              | 888440      | 4   |           |              |
| 11   | Radiator bobbin front             | 888440      | 4   |           |              |

x2

| Pack D   |                        | CATERHAM    |     | 44        |              |
|--|------------------------|-------------|-----|-----------|--------------|
|  |                        | PACK NUMBER |     | SAC22004A |              |
| COOLING SIGMA  |                        |             |     |           |              |
| This pack may include extra fasteners to cover different options |                        |             |     |           |              |
| ITEM   | BASIC DESCRIPTION      | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 12   | Expansion tank bracket | 888440      | 1   |           |              |
| 13   | Expansion tank         | 888440      | 1   |           |              |
| 14   | 1/4 Fan to radiator    | 888440      | 6   |           |              |
| 15   | 1/4 Fan to radiator    | 888440      | 2   |           |              |
| 16   | Expansion tank bracket | 888440      | 1   |           |              |
| 17   | Expansion tank         | 888440      | 1   |           |              |
| 18   | Expansion tank bracket | 888440      | 1   |           |              |
| 19   | Expansion tank         | 888440      | 1   |           |              |
| 20   | Expansion tank bracket | 888440      | 1   |           |              |
| 21   | Expansion tank         | 888440      | 1   |           |              |
| 22   | Expansion tank bracket | 888440      | 1   |           |              |
| 23   | Expansion tank         | 888440      | 1   |           |              |
| 24   | Expansion tank bracket | 888440      | 1   |           |              |
| 25   | Expansion tank         | 888440      | 1   |           |              |
| 26   | Expansion tank bracket | 888440      | 1   |           |              |
| 27   | Expansion tank         | 888440      | 1   |           |              |
| 28   | Expansion tank bracket | 888440      | 1   |           |              |
| 29   | Expansion tank         | 888440      | 1   |           |              |
| 30   | Expansion tank bracket | 888440      | 1   |           |              |
| 31   | Expansion tank         | 888440      | 1   |           |              |
| 32   | Expansion tank bracket | 888440      | 1   |           |              |
| 33   | Expansion tank         | 888440      | 1   |           |              |
| 34   | Expansion tank bracket | 888440      | 1   |           |              |
| 35   | Expansion tank         | 888440      | 1   |           |              |
| 36   | Expansion tank bracket | 888440      | 1   |           |              |
| 37   | Expansion tank         | 888440      | 1   |           |              |
| 38   | Expansion tank bracket | 888440      | 1   |           |              |
| 39   | Expansion tank         | 888440      | 1   |           |              |
| 40   | Expansion tank bracket | 888440      | 1   |           |              |
| 41   | Expansion tank         | 888440      | 1   |           |              |
| 42   | Expansion tank bracket | 888440      | 1   |           |              |
| 43   | Expansion tank         | 888440      | 1   |           |              |
| 44   | Expansion tank bracket | 888440      | 1   |           |              |
| 45   | Expansion tank         | 888440      | 1   |           |              |
| 46   | Expansion tank bracket | 888440      | 1   |           |              |
| 47   | Expansion tank         | 888440      | 1   |           |              |
| 48   | Expansion tank bracket | 888440      | 1   |           |              |
| 49   | Expansion tank         | 888440      | 1   |           |              |
| 50   | Expansion tank bracket | 888440      | 1   |           |              |
| 51   | Expansion tank         | 888440      | 1   |           |              |
| 52   | Expansion tank bracket | 888440      | 1   |           |              |
| 53   | Expansion tank         | 888440      | 1   |           |              |
| 54   | Expansion tank bracket | 888440      | 1   |           |              |
| 55   | Expansion tank         | 888440      | 1   |           |              |
| 56   | Expansion tank bracket | 888440      | 1   |           |              |
| 57   | Expansion tank         | 888440      | 1   |           |              |
| 58   | Expansion tank bracket | 888440      | 1   |           |              |
| 59   | Expansion tank         | 888440      | 1   |           |              |
| 60   | Expansion tank bracket | 888440      | 1   |           |              |
| 61   | Expansion tank         | 888440      | 1   |           |              |
| 62   | Expansion tank bracket | 888440      | 1   |           |              |
| 63   | Expansion tank         | 888440      | 1   |           |              |
| 64   | Expansion tank bracket | 888440      | 1   |           |              |
| 65   | Expansion tank         | 888440      | 1   |           |              |
| 66   | Expansion tank bracket | 888440      | 1   |           |              |
| 67   | Expansion tank         | 888440      | 1   |           |              |
| 68   | Expansion tank bracket | 888440      | 1   |           |              |
| 69   | Expansion tank         | 888440      | 1   |           |              |
| 70   | Expansion tank bracket | 888440      | 1   |           |              |
| 71   | Expansion tank         | 888440      | 1   |           |              |
| 72   | Expansion tank bracket | 888440      | 1   |           |              |
| 73   | Expansion tank         | 888440      | 1   |           |              |
| 74   | Expansion tank bracket | 888440      | 1   |           |              |
| 75   | Expansion tank         | 888440      | 1   |           |              |
| 76   | Expansion tank bracket | 888440      | 1   |           |              |
| 77   | Expansion tank         | 888440      | 1   |           |              |
| 78   | Expansion tank bracket | 888440      | 1   |           |              |
| 79   | Expansion tank         | 888440      | 1   |           |              |
| 80   | Expansion tank bracket | 888440      | 1   |           |              |
| 81   | Expansion tank         | 888440      | 1   |           |              |
| 82   | Expansion tank bracket | 888440      | 1   |           |              |
| 83   | Expansion tank         | 888440      | 1   |           |              |
| 84   | Expansion tank bracket | 888440      | 1   |           |              |
| 85   | Expansion tank         | 888440      | 1   |           |              |
| 86   | Expansion tank bracket | 888440      | 1   |           |              |
| 87   | Expansion tank         | 888440      | 1   |           |              |
| 88   | Expansion tank bracket | 888440      | 1   |           |              |
| 89   | Expansion tank         | 888440      | 1   |           |              |
| 90   | Expansion tank bracket | 888440      | 1   |           |              |
| 91   | Expansion tank         | 888440      | 1   |           |              |
| 92   | Expansion tank bracket | 888440      | 1   |           |              |
| 93   | Expansion tank         | 888440      | 1   |           |              |
| 94   | Expansion tank bracket | 888440      | 1   |           |              |
| 95   | Expansion tank         | 888440      | 1   |           |              |
| 96   | Expansion tank bracket | 888440      | 1   |           |              |
| 97   | Expansion tank         | 888440      | 1   |           |              |
| 98   | Expansion tank bracket | 888440      | 1   |           |              |
| 99   | Expansion tank         | 888440      | 1   |           |              |
| 100  | Expansion tank bracket | 888440      | 1   |           |              |

x4

## TIPS

Remember to remove bungs from heater.

**Jamie A**

You'll know when you have adjusted the cable correctly as the valve will be able to reach both the fully open and fully closed positions.

**Chris B**

It's worth re-tightening the jubilee clips after a couple of journeys.

**John S**

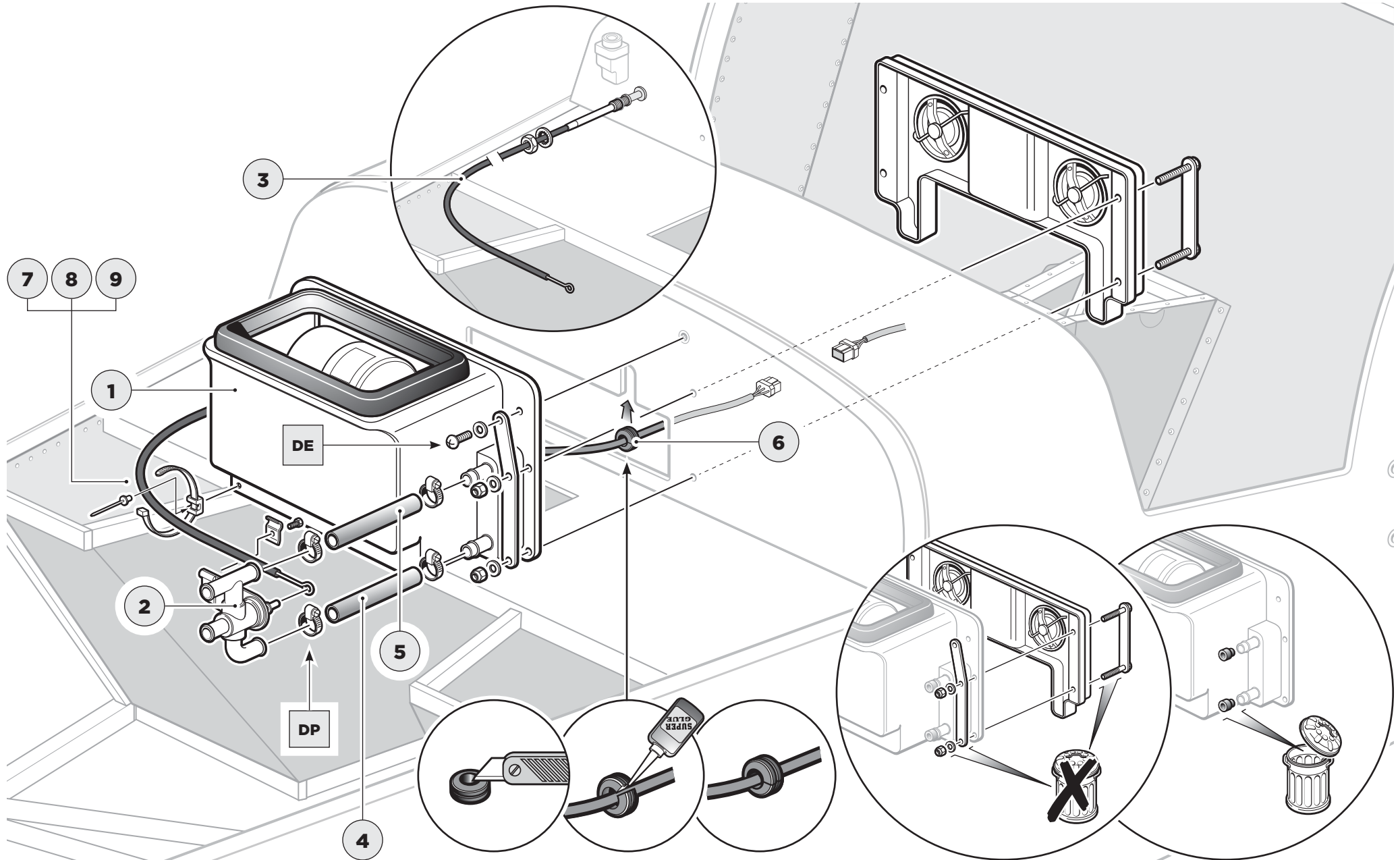
Cutting and gluing the grommet back together is easier than removing the wires from the plug.

**Anthony L**

If you don't have a cradle clip and a rivet to hand, you will find some in the chassis fixture pack (ZCHO1).

**Lee B**

# THINGS ARE HEATING UP



# THE ENGINE GOES IN

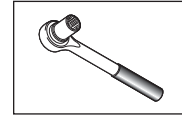
## PARTS

- 1 Engine / gearbox assembly
- 2 Engine mounting rubbers (x2)

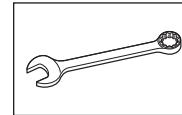
## TOOLS



Engine crane



10mm socket  
13mm socket



13mm



## FIXINGS

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 1   | Bolt 1/2" X 2 1/2" UNF<br>Caphead Bolt with plain section & imperial threaded section | BFCH1/2X2.5 | 2           |         |
| 2   | Bolt M8 X 50 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X50      | 1           |         |
| 3   | Bolt M8 X 45 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X45      | 3           |         |
| 4   | Setscrew M8 X 25<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X25      | 2           |         |
| 5   | Setscrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X20      | 4           |         |
| 6   | Setscrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X20      | 2           |         |
| 7   | Setscrew M8 X 16<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X16      | 3           |         |
| 8   | Setscrew M8 X 16<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X16      | 4           |         |
| 9   | Nut M8<br>With Metric thread & Nyloc locking mechanism                                | NMYF8       | 10          |         |
| 10  | Nut M6<br>With Metric thread & Nyloc locking mechanism                                | NMYF6       | 2           |         |
| 11  | Nut M6<br>Plain nut with metric thread full size                                      | NMPF6       | 2           |         |

Please note: Drawings are not to scale

Page 1 of 2

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 12  | Washer M8<br>Plain Washer Heavy-Duty  | WPHM8       | 13          |         |
| 13  | Split pin 1/16" X 3/4"  | SP1/16X3/4  | 1           |         |
| 14  | Split pin 7/64" X 3/4"  | SP7/64X3/4  | 1           |         |
| 15  | Washer 1/2"<br>Spring Washer Heavy-Duty   | WSH1/2      | 2           |         |
| 16  | Washer M8<br>Spring Washer Heavy-Duty   | WSHM8       | 3           |         |
| 17  | Washer 3/8" X 3/4"<br>Plain Washer Heavy-Duty                                     | WPH3/8      | 6           |         |
| 18  | Washer M8 X 25<br>Plain Washer Heavy-Duty   | WPHM8X25    | 2           |         |
| 19  | Washer M6<br>Plain Washer Heavy-Duty  | WPHM6       | 8           |         |
| 20  | Washer M5 X 20<br>Plain Washer Heavy-Duty   | WPHM5X20    | 1           |         |
| 21  | Bolt 1/2" X 1" UNF<br>Caphead bolt with plain section & imperial threaded section | BFCH1/2X1   | 1           |         |

Please note: Drawings are not to scale

Page 2 of 2

## TIPS

When fitting engine rubbers and mounts, fit as loosely as possible so you can wiggle things to get bolts in.

James A

Tighten gradually once all bolts are in.

Chris N

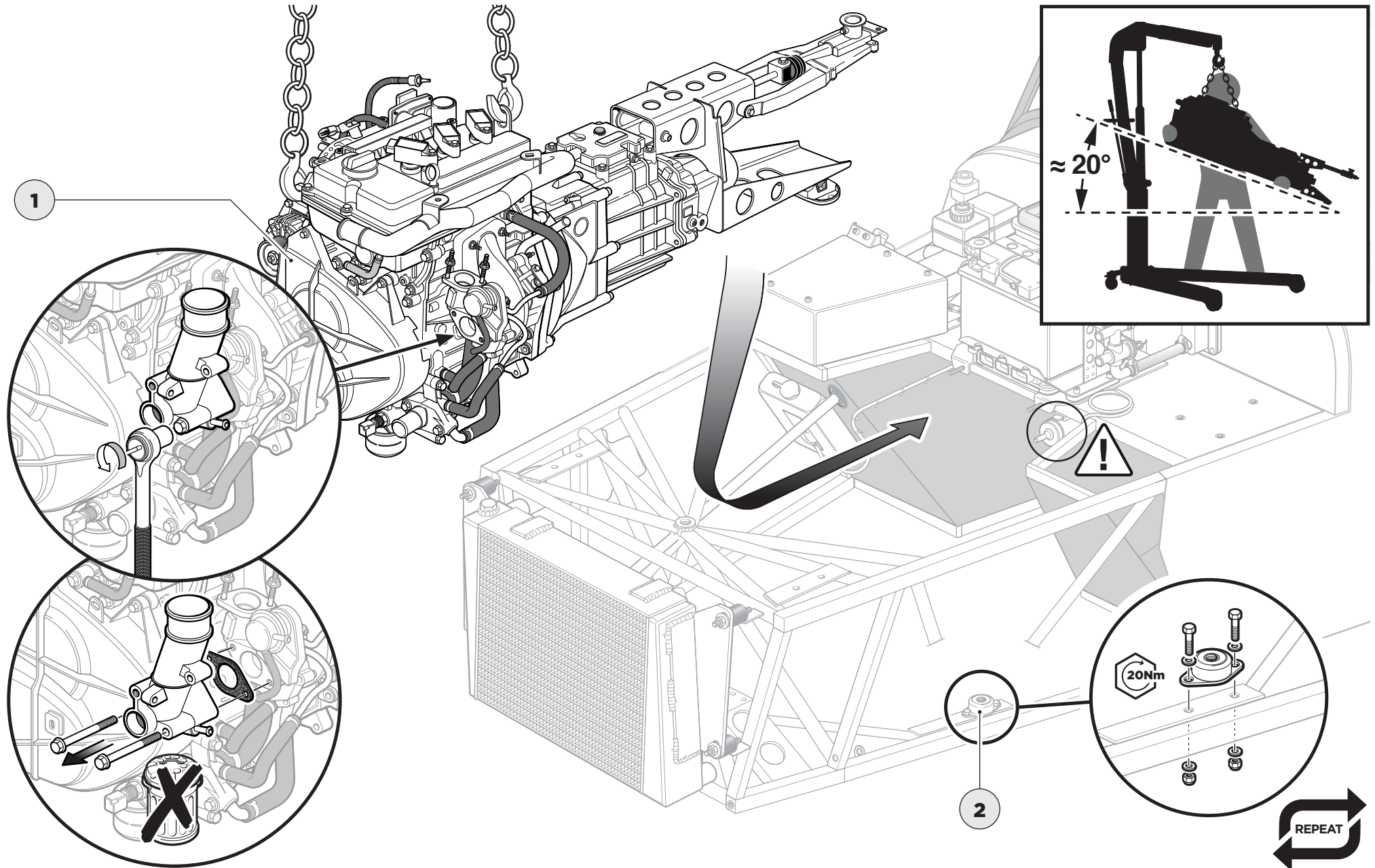
Protect the chassis with soft stuff such as cardboard or folded towels / blankets.

Harry P

Be careful not to damage the fuel purge valve when manoeuvring the gearbox into position.

Lee B

# THE ENGINE GOES IN





# THE ENGINE IS FINALLY IN

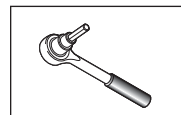
## PARTS

- 1 Engine mounts (x2)
- 2 Turbo inlet housing

## TOOLS



10mm



5mm  
6mm  
8mm  
3/8"



## FIXINGS

### Unmarked bag:

- M6 bolts (x1)
- M8 bolts (x2)
- M10 bolts (x5)

## TIPS

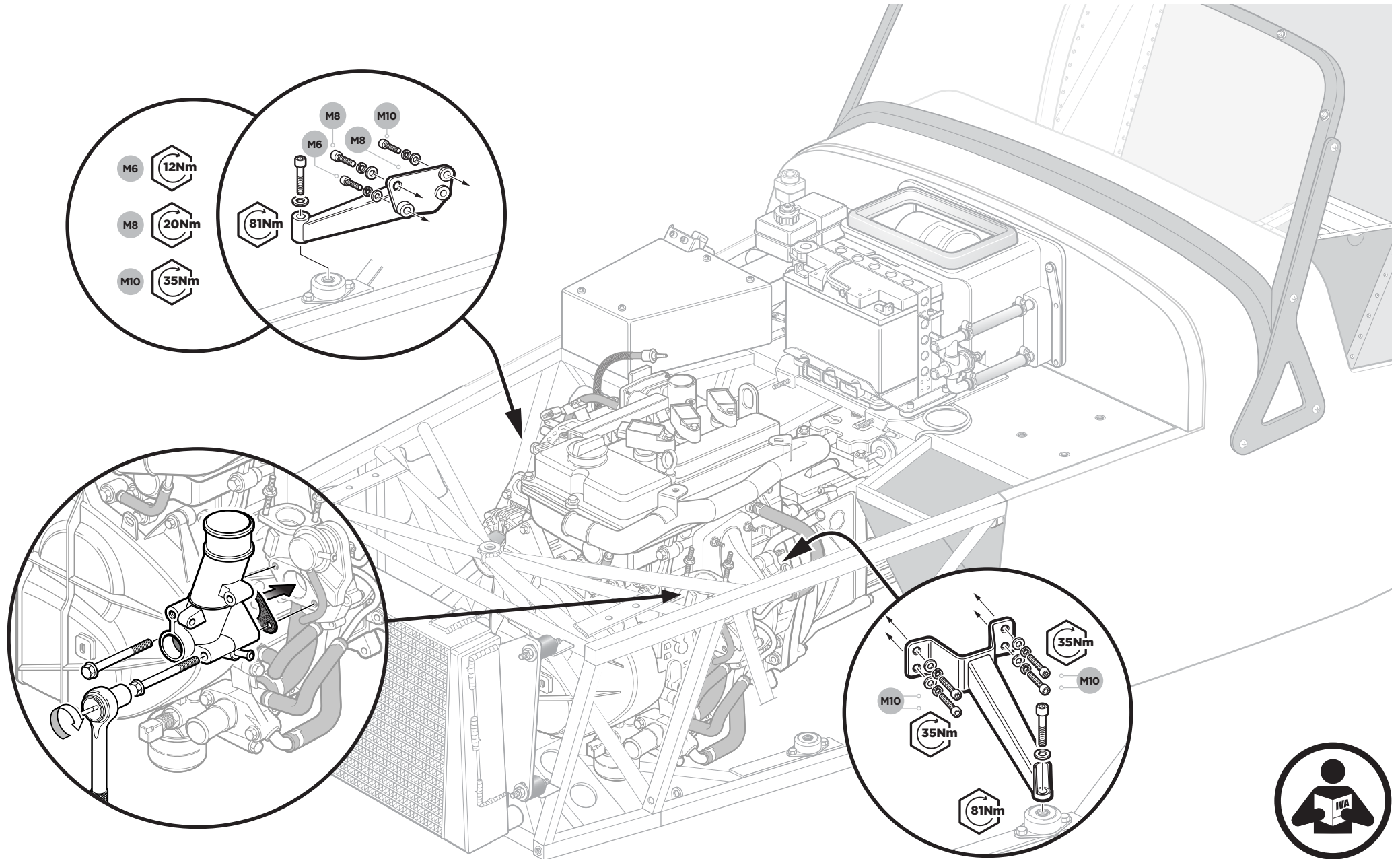
Once the engine is in, the wiring can be connected to the car's loom. It should be self explanatory.

**Chris B**

See IVA guide – how to secure a loom.

**Grant P**

# THE ENGINE IS FINALLY IN



## FINISHING THE GEARBOX

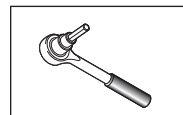
### PARTS

- 1 Gear lever
- 2 Gear lever mount
- 3 Gearbox mount

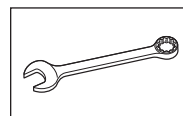
### TOOLS



13mm



6mm



13mm



### FIXINGS

Fixings packed with engine

### TIPS

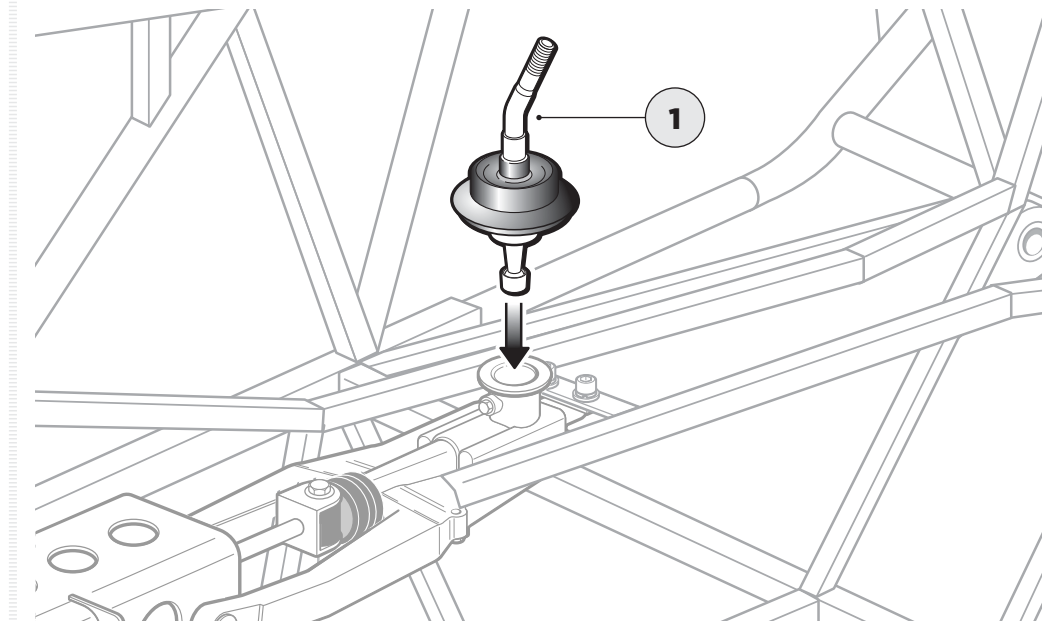
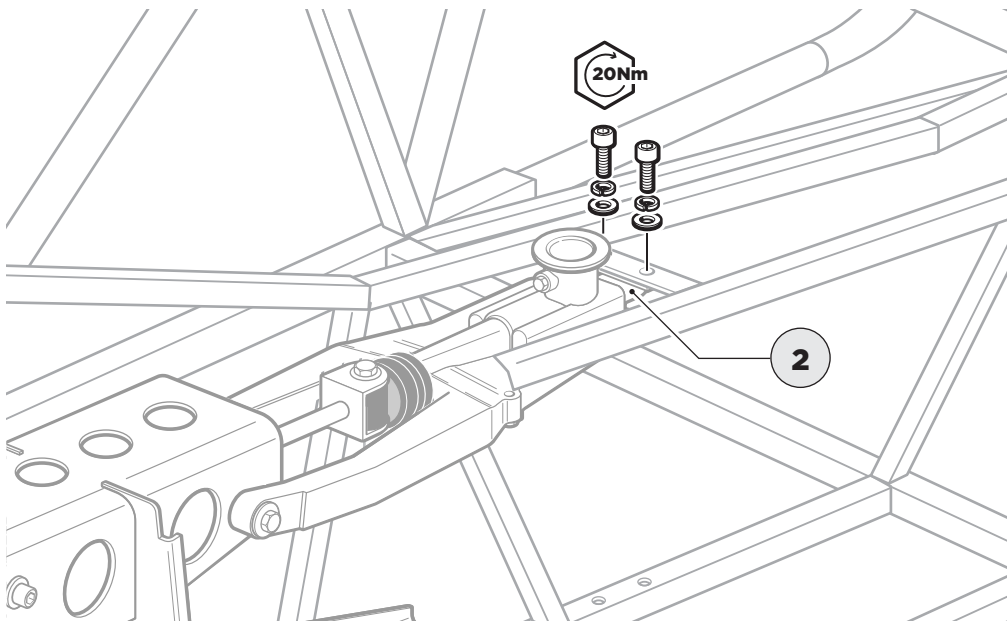
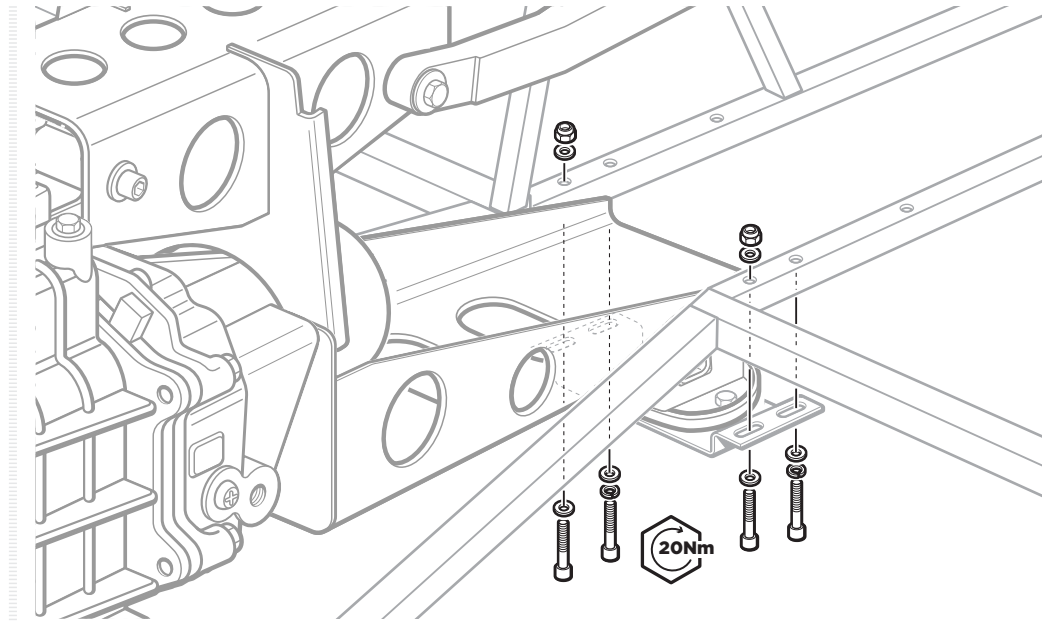
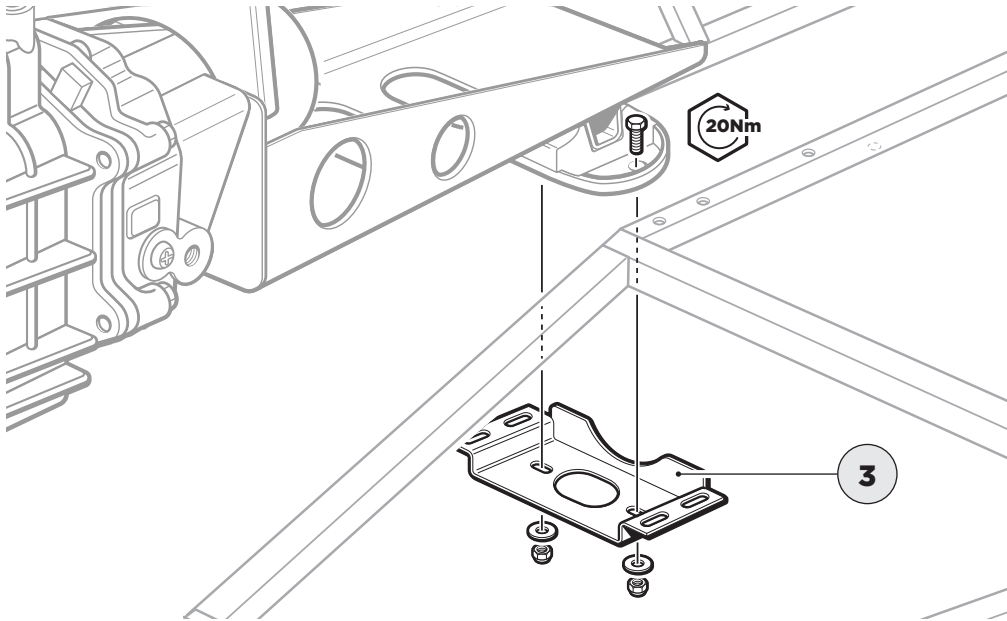
*It can be fiddly to align the gearbox mounting bolts... a bit of patience and perseverance will help.*

**Mick F**

*You will need to unwind the two gear lever housing bolts to allow the gear lever to drop into place. These bolts can then be re-tightened and the plastic cup inserted on top.*

**Chris B**

## FINISHING THE GEARBOX



## FILLING AND CHECKING THE ENGINE AND GEARBOX OILS

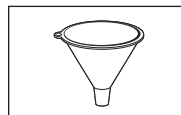
### PARTS

Gearbox Oil (S4 AT 75W-90)

### TOOLS



19mm



### FIXINGS

### TIPS

The engine is supplied pre-filled with oil from the factory, but it is always best to double check the level on the dipstick before starting the engine.

**Lee B**

Remove the 19mm filler plug on the top of the gearbox, add the correct quantity of oil and re-fit the filler plug.

**Harry P**



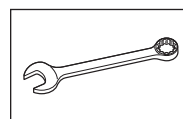
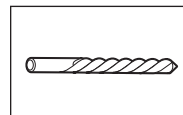
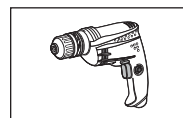
**Suzuki 660cc Turbo Charged Engine**  
Engine oil capacity = 2.35 Litres  
Gearbox oil capacity = 1.25 Litres

## FITTING THE AIRBOX INFO

### PARTS

- 1 Airbox
- 2 Air filter
- 3 Sealing rubber
- 4 Rubber bobbins (x3)
- 5 MAF sensor

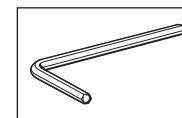
### TOOLS



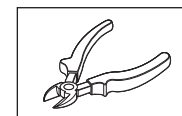
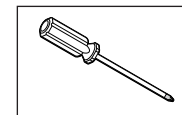
6mm

8mm

10mm



5mm



### FIXINGS

#### fixings packed with airbox:

- Cross head screws (x6)
- Shake proof washers (x6)
- M5 plain washers (x3)
- M5 spring washers (x3)
- M5 plain nuts (x3)
- M6 cap head bolts (x2)
- M6 plain washers (x2)
- M6 nyloc nuts (x2)

### TIPS

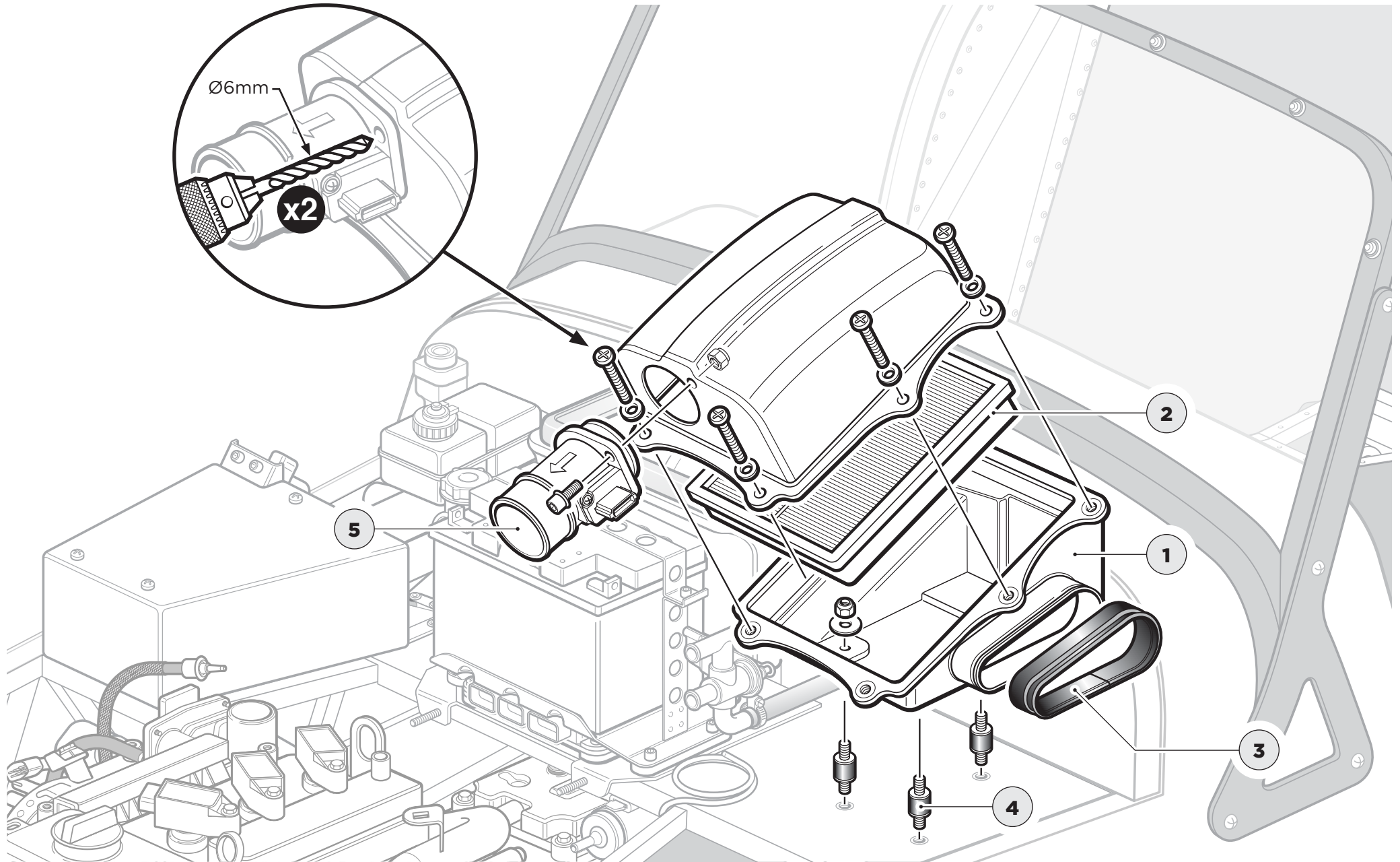
If the MAF sensor is a tight fit then you can enlarge the airbox opening using some sandpaper.

Lee A

The sealing rubber can be hard to push onto the airbox edge, so holding the inside of the inlet tube will prevent it from splitting.

Dan P

## FITTING THE AIRBOX INFO





## FITTING THE EXPANSION BOTTLE

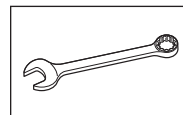
### PARTS

- 1 Expansion bottle
- 2 Expansion bottle cap
- 3 Expansion bottle bracket
- 4 Mounting bar

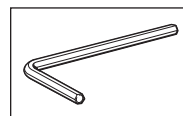
### TOOLS



13mm socket



10mm (x2)  
13mm



3mm

### FIXINGS

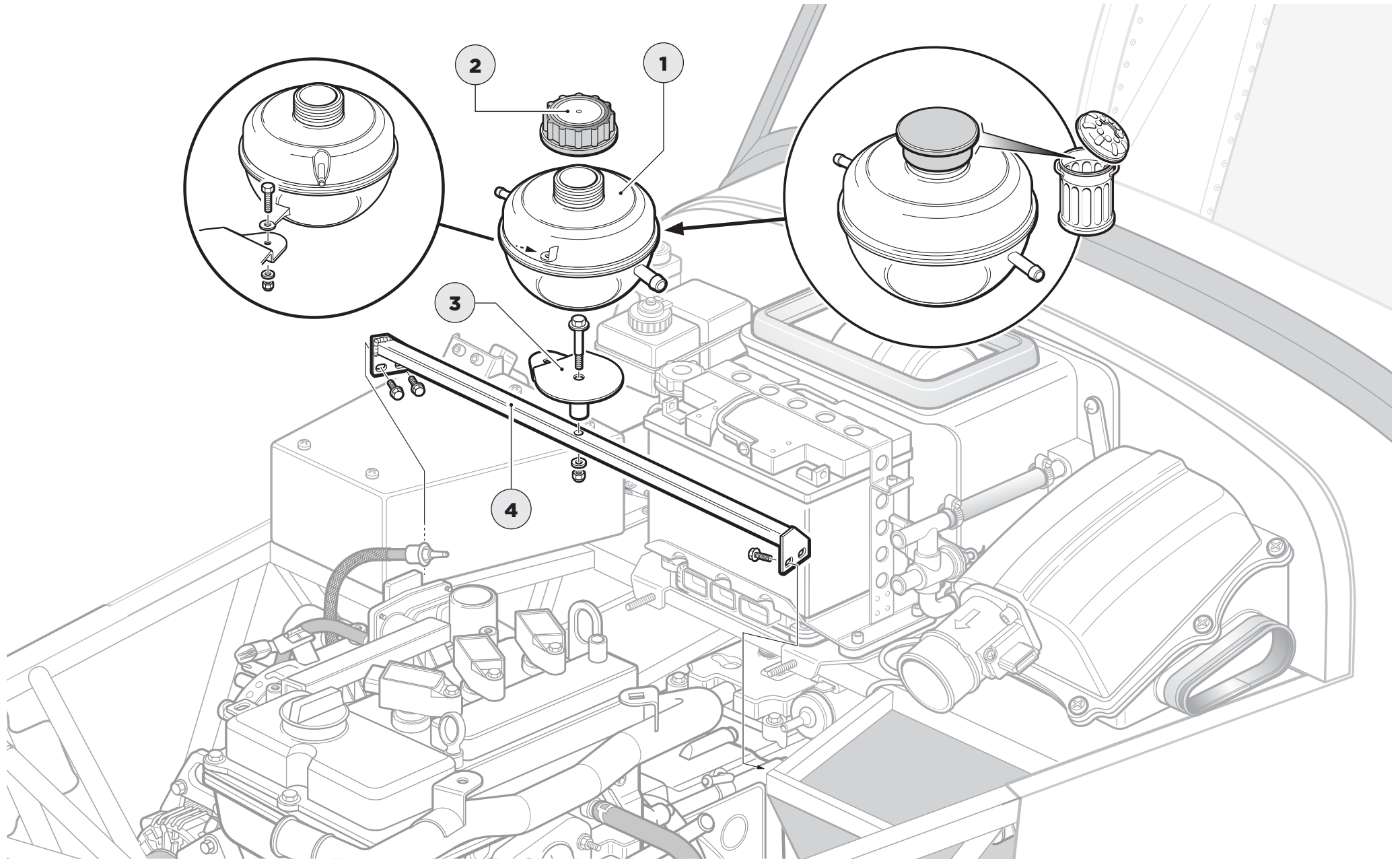
Fixings packed in cooling box

### TIPS

You may find it *easier to assemble these parts on the workbench.*  
**Jamie A**

Simply tighten the bottle cap until it clicks.  
**Chris N**

## FITTING THE EXPANSION BOTTLE

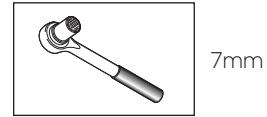


# FITTING THE BOTTOM RADIATOR HOSE

## PARTS

- 1 Bottom radiator hose

## TOOLS



## FIXINGS

| Pack D   |   | CATERHAM    |     | 44  |              |
|--|---|-------------|-----|---|--------------|
|  |   | PACK NUMBER |     | SAC22004A   |              |
| COOLING SIGMA  |   |             |     |   |              |
| This pack may include extra fasteners to cover different options |   |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                       | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | DN Rail Kit 2.00<br>Rear 2.0            | 888440      | 1   | Expansion tank bracket to chassis                 |              |
| 2  | DB Hoseclip 1.50<br>3.5"                | 881442A     | 1   | Expansion tank to bracket                         |              |
| 3  | DC Radiator 881020<br>Rear 2.0          | 888420      | 4   | SM radiator bracket                               |              |
| 4  | DD Rail Kit 2.18 with<br>Square bracket | 881102A     | 4   | Fan brackets to fan                               |              |
| 5  | DE Radiator 881020<br>Fronting 2.0      | 888420A     | 4   | Fan to radiator<br>fronting 2.0 (top)             |              |
| 6  | DF Fan Nut M8                           | 880376      | 8   | 4 x Fan to radiator<br>4 x DV radiator bracket    |              |
| 7  | DG Fan Nut M8                           | 880376      | 8   | Radiator bobbin                                   |              |
| 8  | DH Fan Nut 1.47                         | 881114      | 1   | Expansion tank bracket                            |              |
| 9  | DI Fan Washer 1.47<br>Rear 2.0          | 881114      | 13  | 13 x DV fan bracket<br>1 x Expansion tank bracket |              |
| 10   | DJ Fan Washer 1.50<br>Rear 2.0          | 881115      | 4   | Radiator bobbin back                              |              |
| 11   | DK Fan Washer 1.50<br>Rear 2.0          | 881115A     | 4   | Radiator bobbin front                             |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack D   |                                   | CATERHAM    |     | 44   |              |
|--|-----------------------------------|-------------|-----|--|--------------|
|  |                                   | PACK NUMBER |     | SAC22004A  |              |
| COOLING SIGMA  |                                   |             |     |  |              |
| This pack may include extra fasteners to cover different options |                                   |             |     |  |              |
| ITEM   | BASIC DESCRIPTION                 | PART NUMBER | QTY | USED ON  | ILLUSTRATION |
| 12   | EL Fan Washer 1.50<br>Rear 2.0    | 881115A     | 1   | Expansion tank bracket   |              |
| 13   | EM Spring Washer 1.50<br>Rear 2.0 | 880361      | 8   | 8 x Radiator bobbin<br>1 x Expansion tank  |              |
| 14   | DN Hose Clip 20<br>40mm           | SOT25-40    | 6   | 2 x U shape hose to<br>water rail<br>2 x Top radiator hose<br>2 x Bottom radiator hose |              |
| 15   | DD Hose Clip 21<br>20mm           | SOT23-20    | 2   | 1 x Engine outlet to<br>top 1.5mm<br>1 x Engine outlet to<br>middle 1.5mm              |              |
| 16   | DP Hose Clip 17<br>20mm           | SOT16-20    | 18  | 18 x Radiator bobbin<br>1 x Expansion tank<br>1 x DV Hose                              |              |
| 17   | DD Hose Clip 16<br>15mm           | SOT16-15    | 6   | Expansion tank<br>small 1 piece  |              |
| 18   | DR Hex Bolt 1.50<br>1.50 x 150    | 1019-01015  | 12  | Cowling cap  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

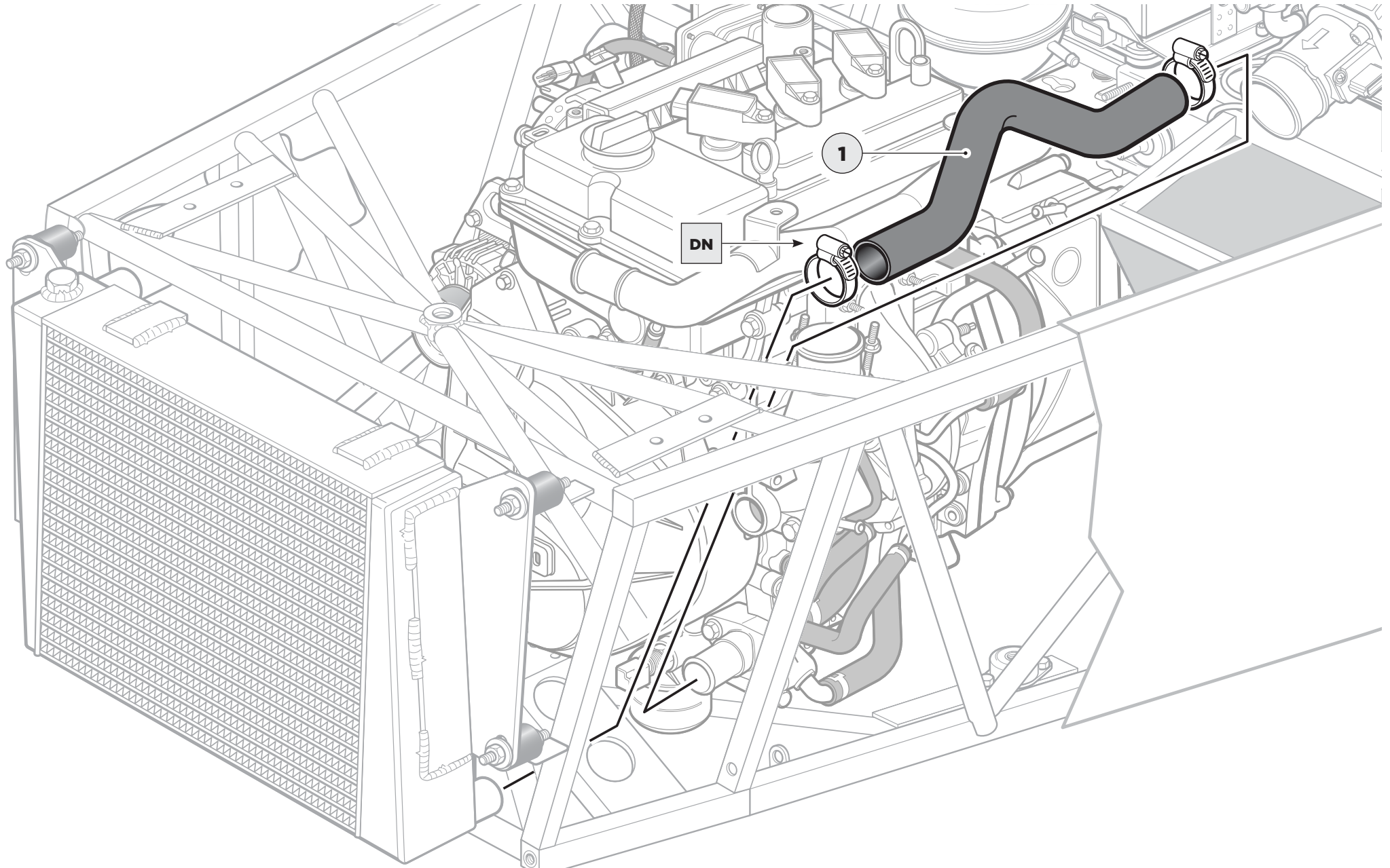
x2

## TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

Grant P

## FITTING THE BOTTOM RADIATOR HOSE

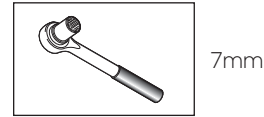


# FITTING THE TOP RADIATOR HOSE

## PARTS

- 1 Top radiator hose

## TOOLS



## FIXINGS

| Pack D   |  | CATERHAM    |     | 44  |              |
|--|--|-------------|-----|---|--------------|
|  |  | PACK NUMBER |     | SAC22004A   |              |
| COOLING SIGMA  |  |             |     |   |              |
| This pack may include extra fasteners to cover different options |  |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                      | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | DN Rad Hose 2 x 20 (Hose 2x)           | 888440      | 1   | Expansion tank bracket to chassis                                 |              |
| 2  | DB Radiator 1.5L (Hose 1.5L)           | 88714424    | 1   | Expansion tank to bracket   |              |
| 3  | DC Radiator 1800 (Hose 1.8L)           | 888420      | 4   | SM radiator bracket   |              |
| 4  | DD Rad Hose 2 x 18 with Square bracket | 88710724    | 4   | Fan brackets to fan   |              |
| 5  | DE Radiator 1800 (Hose 1.8L)           | 88842010    | 4   | Fan to radiator mounting (2) (top)                                |              |
| 6  | DF Fan Nut M8                          | 888195      | 8   | 4x Fan to radiator 4x DV radiator bracket                         |              |
| 7  | DG Fan Nut M8                          | 888195      | 8   | Radiator bobbin   |              |
| 8  | DH Radi Nut 1/2"                       | 8871014     | 1   | Expansion tank bracket  |              |
| 9  | DI Fan Washer 18 (Hose 1.8L)           | 8881914     | 13  | 18 x DV Fan Bracket 4 x 4 Fan Brackets 1 x Expansion tank bracket |              |
| 10   | DJ Fan Washer 18 (Hose 1.5L)           | 8881912     | 4   | Radiator bobbin back  |              |
| 11   | DK Fan Washer 18 (Hose 2x)             | 8881912     | 4   | Radiator bobbin front   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack D   |                                 | CATERHAM    |     | 44  |              |
|--|---------------------------------|-------------|-----|---|--------------|
|  |                                 | PACK NUMBER |     | SAC22004A   |              |
| COOLING SIGMA  |                                 |             |     |   |              |
| This pack may include extra fasteners to cover different options |                                 |             |     |   |              |
| ITEM   | BASIC DESCRIPTION               | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 12   | EL Fan Washer 18 (Hose 1.5L)    | 8881912     | 1   | Expansion tank bracket  |              |
| 13   | EM Spring Washer 18 (Hose 1.5L) | 8881912     | 8   | 8 x Radiator bobbin 1 x Expansion tank  |              |
| 14   | DN Hose Clip 20 (Hose)          | 80725-40    | 6   | 2 x U shape hose to water rail 2 x Top radiator hose 2 x Bottom radiator hose |              |
| 15   | DD Hose Clip 21 (Hose)          | 80723-30    | 2   | 1 x Engine outlet to top 1 hose 1 x Engine outlet to bottom hose              |              |
| 16   | DP Hose Clip 17 (Hose)          | 80719-25    | 18  | 18 hose brackets to top 1 hose 1 x Expansion tank 2 x Fan 1 x DV Hose         |              |
| 17   | DD Hose Clip 18 (Hose)          | 80719-26    | 6   | Expansion tank small 1 piece  |              |
| 18   | DR Hex Bolt 12x15 (Hose)        | 1019-01015  | 12  | Coupling cap  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

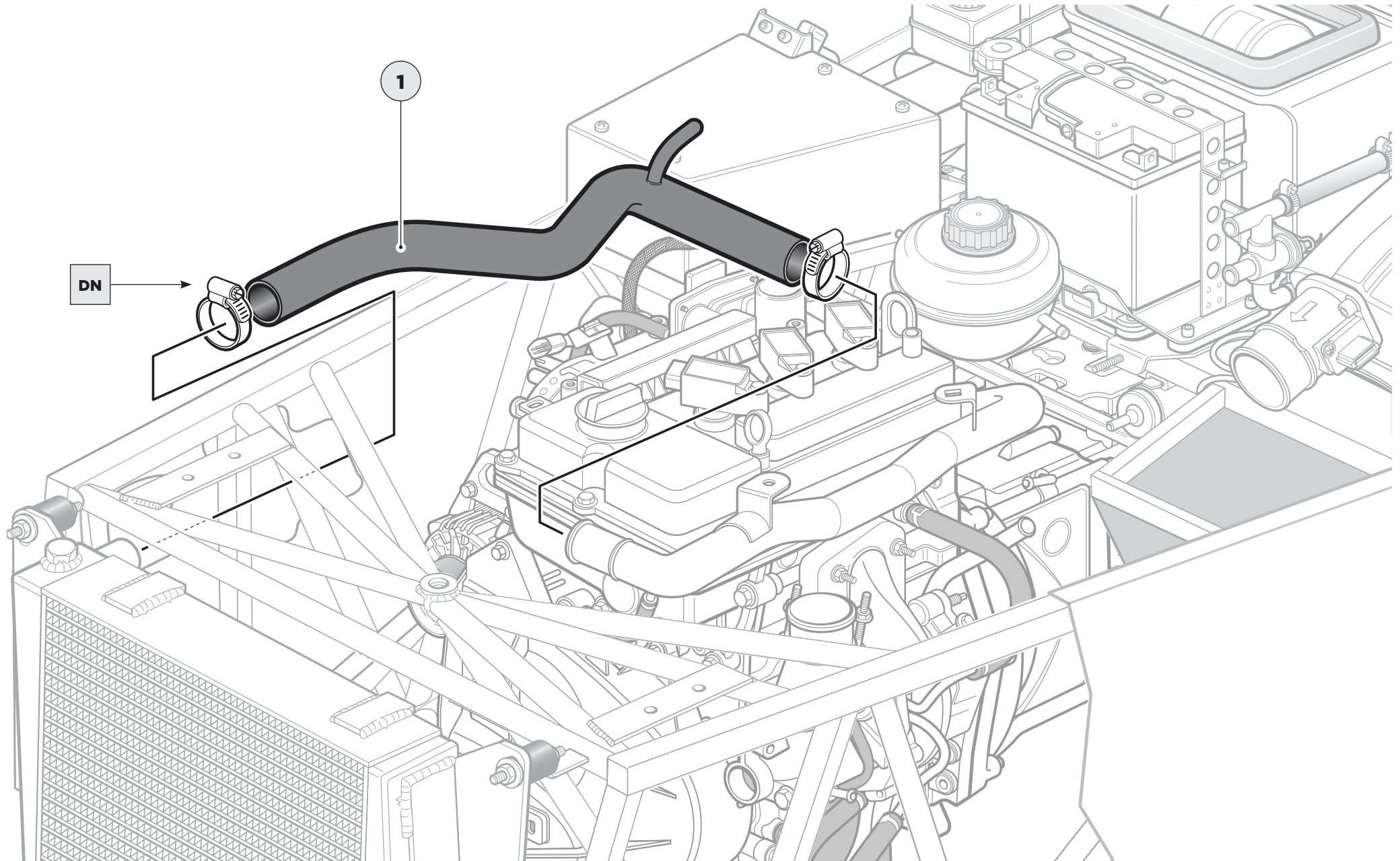
x2

## TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

Grant P

## FITTING THE TOP RADIATOR HOSE

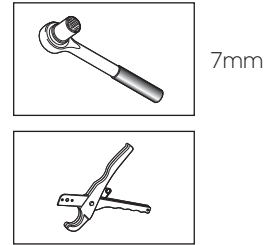


# FITTING THE RETURN HOSE

## PARTS

- 1 Straight plastic joiner
- 2  $\frac{5}{16}$  hose reel

## TOOLS



## FIXINGS

| Pack D   |  | CATERHAM    |     | 44  |              |
|--|--|-------------|-----|---|--------------|
|  |  | PART NUMBER |     | SAC2004A  |              |
| COOLING SIGMA  |  |             |     |   |              |
| This pack may include extra fasteners to cover different options |  |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                      | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | Ball Stud 4.00<br>1/2" x 1/4"          | 888432      | 1   | Expansion tank<br>connected to chassis                                  |              |
| 2  | Ball Stud 1.00<br>1/4" x 1/4"          | 888434      | 1   | Expansion tank to<br>bracket  |              |
| 3  | Ball Stud M3.00<br>1/2" x 1/4"         | 888432      | 4   | SV radiator bracket   |              |
| 4  | Ball Stud M 3.00 with<br>square washer | 921272A     | 4   | Fan track hole to fan   |              |
| 5  | Ball Stud M3.00<br>1/2" x 1/4"         | 888432      | 4   | Fan to radiator<br>coupling - SV only                                   |              |
| 6  | Wash Nut M3                            | M3P10       | 6   | 4 Fan to radiator<br>and SV radiator<br>bracket                         |              |
| 7  | Wash Nut M3                            | M3P10       | 6   | Radiator bobbin   |              |
| 8  | Wash Nut 1/4"                          | M3P11.4     | 1   | Expansion tank<br>bracket   |              |
| 9  | Wash Washer 1/4"<br>1/2" x 1/4"        | M3P11.4     | 13  | 4 x SV reel bracket<br>4 x Fan bracket<br>1 x Expansion tank<br>bracket |              |
| 10   | Wash Washer<br>1/4" x 1/2"             | M3P11.4     | 4   | Radiator bobbin<br>bracket  |              |
| 11   | Wash Washer<br>1/4" x 1/2"             | M3P11.4     | 4   | Radiator bobbin<br>bracket  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack D   |                               | CATERHAM    |     | 44   |              |
|--|-------------------------------|-------------|-----|--|--------------|
|  |                               | PART NUMBER |     | SAC2004A   |              |
| COOLING SIGMA  |                               |             |     |  |              |
| This pack may include extra fasteners to cover different options |                               |             |     |  |              |
| ITEM   | BASIC DESCRIPTION             | PART NUMBER | QTY | USED ON  | ILLUSTRATION |
| 12   | Ball Stud 1.00<br>1/4" x 1/4" | 888434      | 1   | Expansion tank<br>bracket  |              |
| 13   | Spring Washer<br>1/4" x 1/4"  | 1601611     | 9   | 4 x Radiator bobbin<br>1 x Expansion tank  |              |
| 14   | Hose Clip<br>10 - 20mm        | 92125-01    | 6   | 2 x SV hose from to<br>radiator<br>2 x SV radiator hose<br>to radiator return hose |              |
| 15   | Hose Clip<br>20 - 25mm        | 92125-02    | 2   | 1 x Engine coolant to<br>radiator  |              |
| 16   | Hose Clip<br>10 - 20mm        | 92125-01    | 18  | 4 Radiator return<br>to SV hoses<br>4 Radiator hoses<br>to SV hoses                |              |
| 17   | Hose Clip<br>8 - 16mm         | 92125-01    | 6   | Expansion tank<br>small T-piece  |              |
| 18   | Claw<br>1/4" x 1/4"           | 1016-01010  | 12  | Cooling fan  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

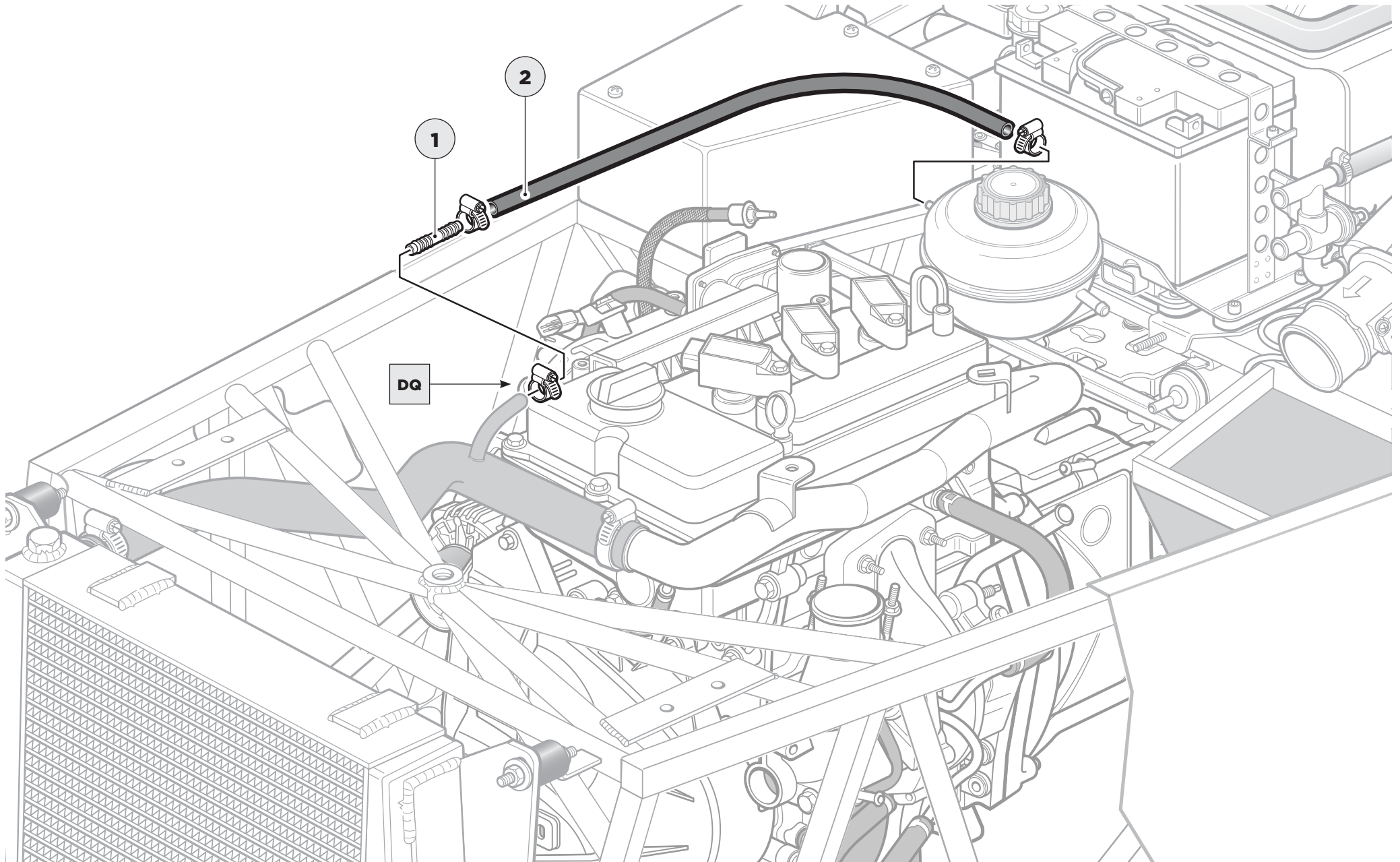
x3

## TIPS

Although the hose is labelled as fuel hose, this is also coolant resistant.  
**Rich T**

The hose reel length supplied is plentiful and will need to be cut to size.  
**Tiago O**

## FITTING THE RETURN HOSE



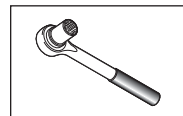


## FINISH THE TURBO PLUMBING AND CONNECT THE FUEL HOSE

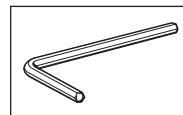
### PARTS

- 1 Turbo casting assembly

### TOOLS



10mm



5mm

### FIXINGS

### TIPS

Make sure that you remove any protective tape covering the exhaust gasket before assembling.

**Anthony L**



## FITTING THE INTERCOOLER

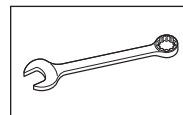
### PARTS

- 1 Intercooler
- 2 Rubber bobbins (x4)

### TOOLS



8mm



8mm

### FIXINGS

#### Unmarked bag:

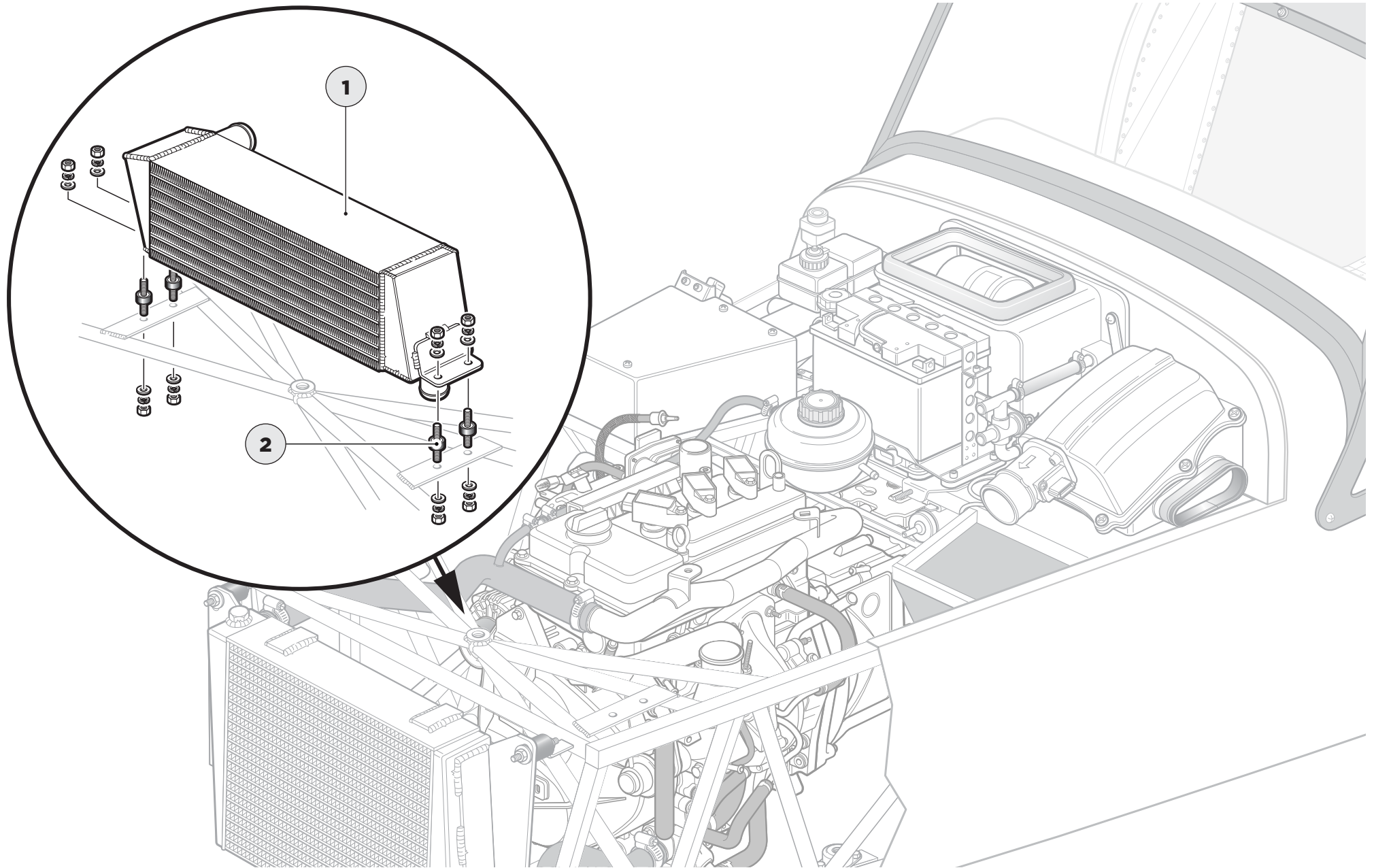
- M5 plain washers (x8)
- M5 spring washers (x8)
- M5 plain nuts (x8)

### TIPS

*Don't overtighten the bobbins as they can twist and split.*

**John S**

# FITTING THE INTERCOOLER



## FITTING THE THROTTLE BODY HOSE

### PARTS

- 1 Throttle body hose

### TOOLS



7mm

### FIXINGS

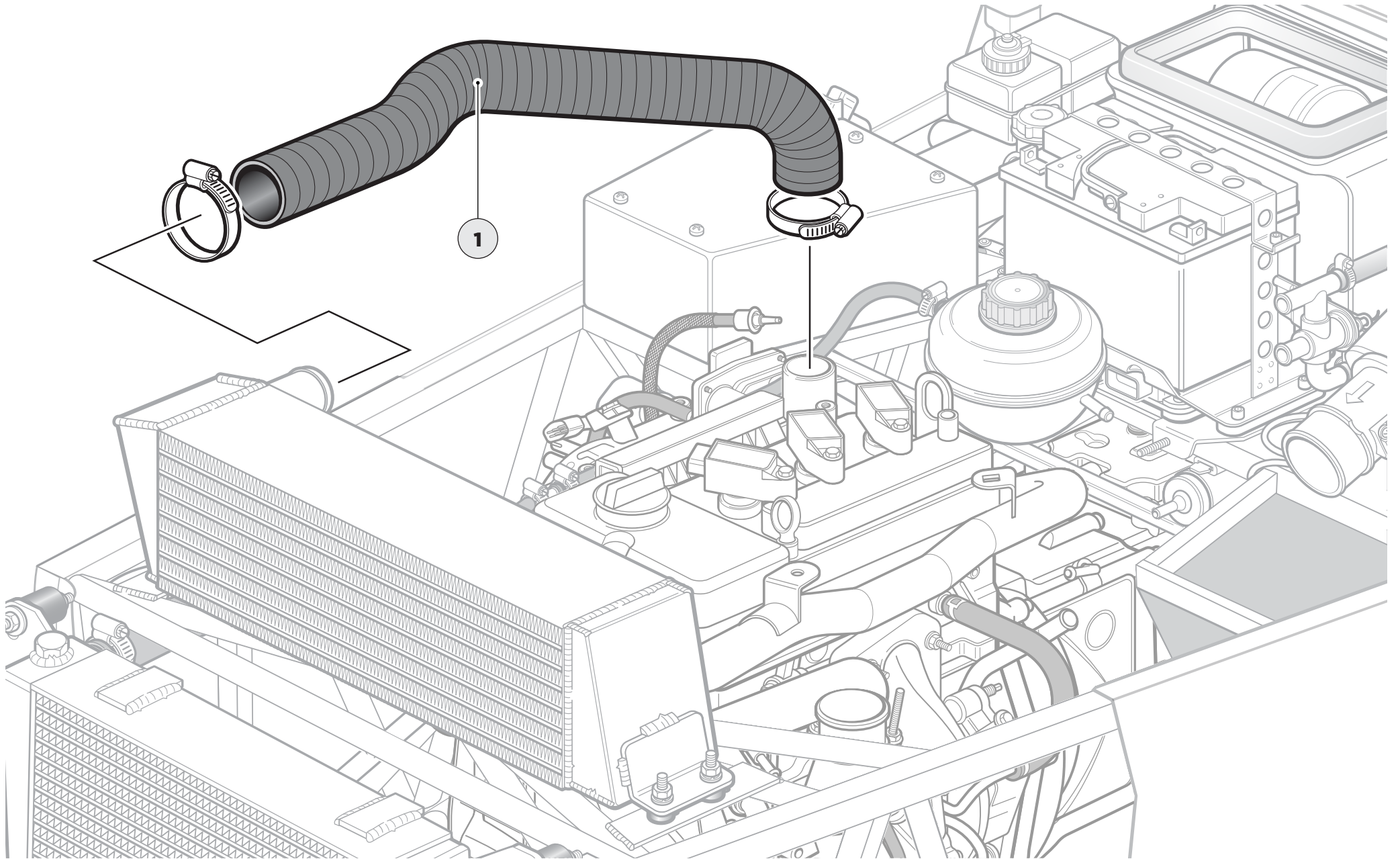
Fixings packed with airbox

### TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

**Grant P**

## FITTING THE THROTTLE BODY HOSE

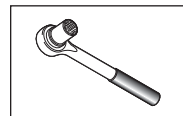


## FITTING THE INTERCOOLER INLET HOSE

### PARTS

- 1 Intercooler hose

### TOOLS



7mm

### FIXINGS

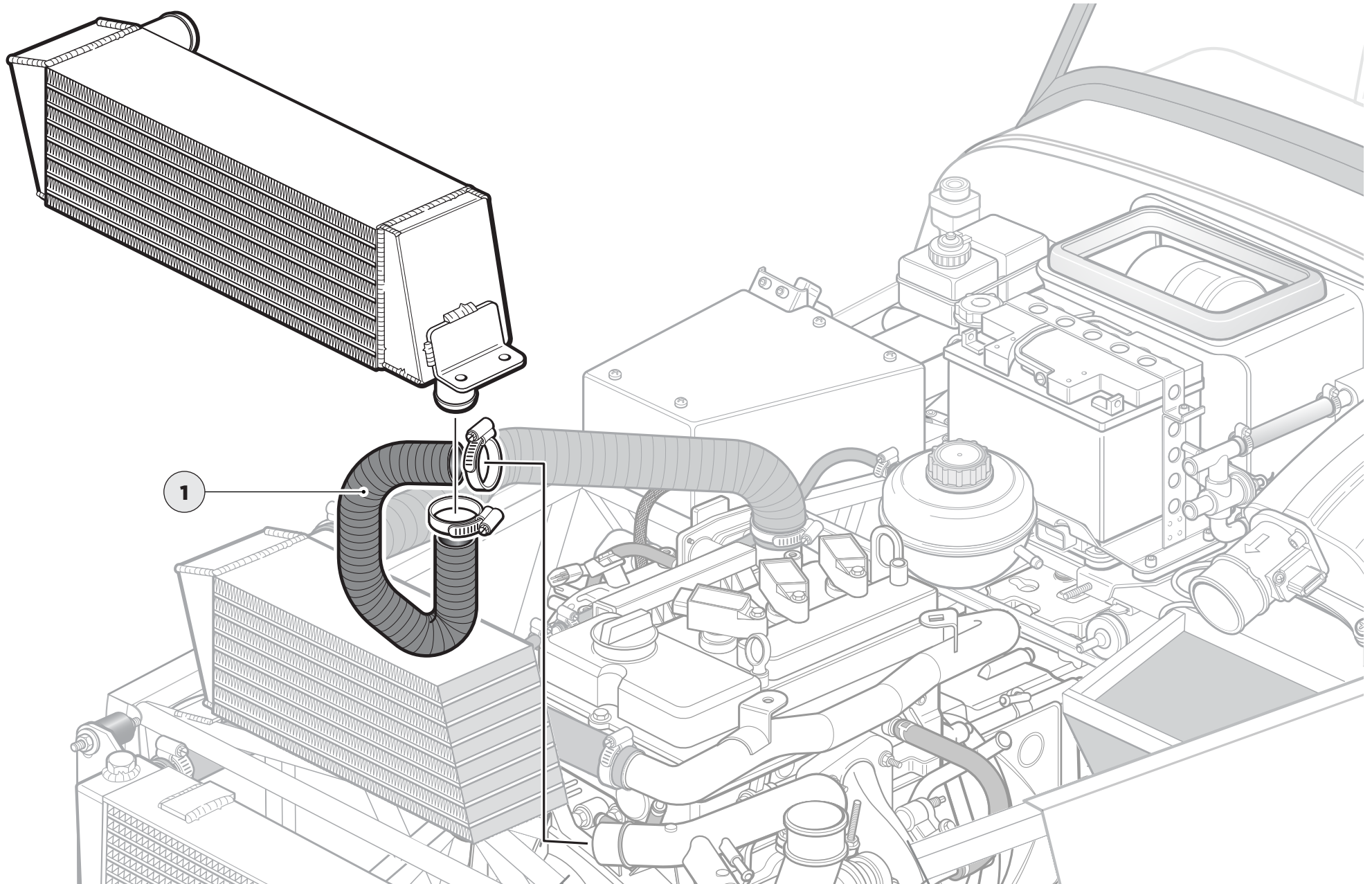
Fixings packed with airbox

### TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

**Grant P**

## FITTING THE INTERCOOLER INLET HOSE





## FITTING THE PURGE VALVE HOSE

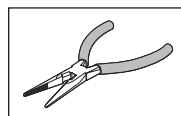
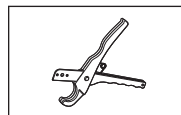
### PARTS

- 1 7.9mm hose reel

### TOOLS



7mm



### FIXINGS

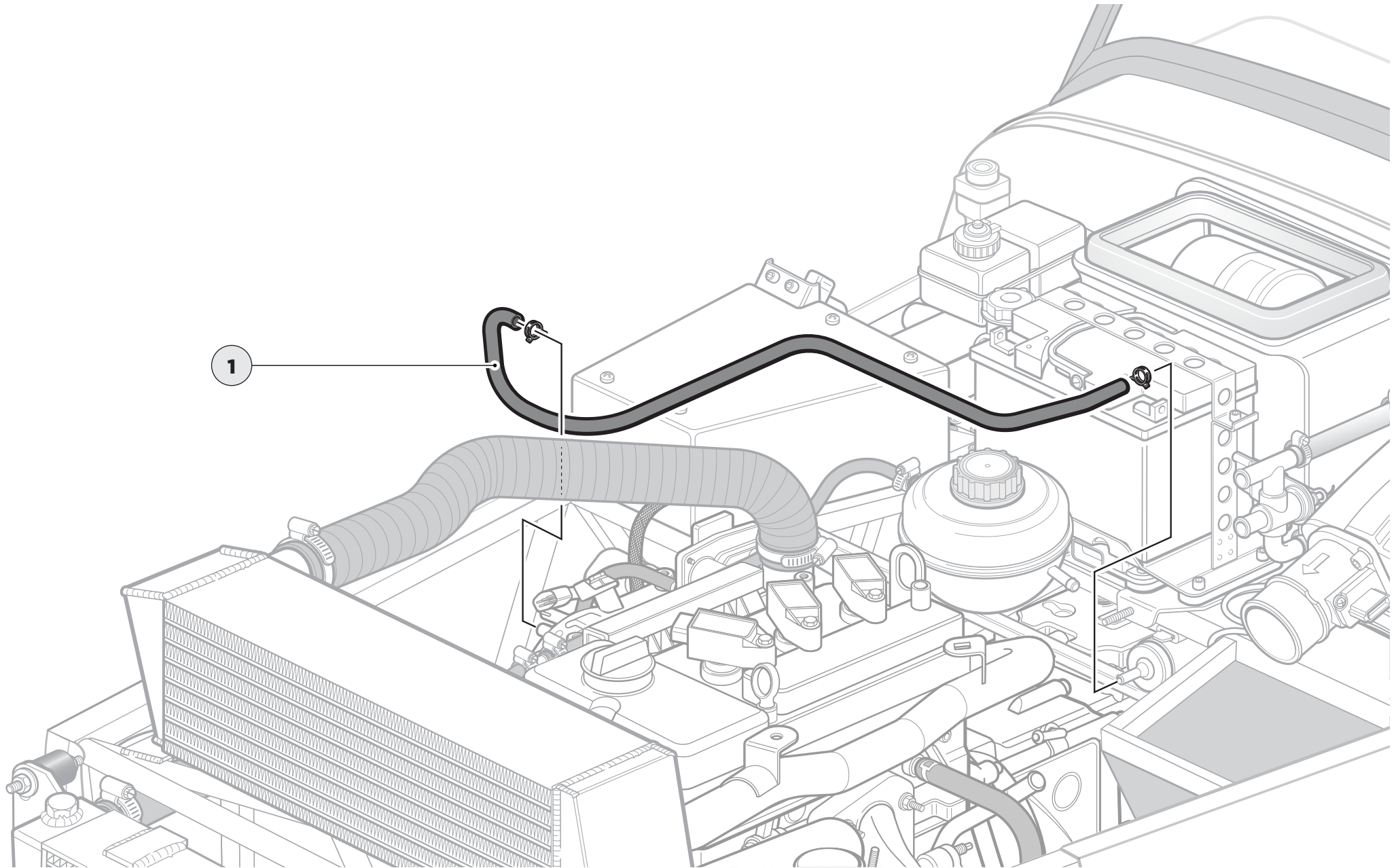
Fixings packed in cooling box

### TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

**Grant P**

## FITTING THE PURGE VALVE HOSE

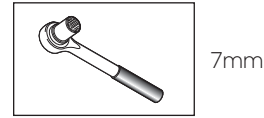


# FITTING THE LOWER HEATER VALVE HOSE

## PARTS

- 1 Lower heater valve hose

## TOOLS



## FIXINGS

| Pack D   |                             | CATERHAM    |     | 44                                     |              |
|--|-----------------------------|-------------|-----|--|--------------|
| COOLING SIGMA  |                             | PART NUMBER |     | PACK NUMBER                            |              |
|  |                             | SAC2004A    |     |  |              |
| This pack may include extra fasteners to cover different options |                             |             |     |  |              |
| ITEM   | BASIC DESCRIPTION           | PART NUMBER | QTY | USED ON                                | ILLUSTRATION |
| 1  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 1   | Expansion tank<br>connected to chassis |              |
| 2  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 1   | Expansion tank to<br>bracket           |              |
| 3  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | SV radiator bracket                    |              |
| 4  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 5  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 6  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 7  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 8  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 9  | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 10   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |
| 11   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 4   | Ball MR X 10<br>square washer          |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack D   |                             | CATERHAM    |     | 44                        |              |
|--|-----------------------------|-------------|-----|---------------------------|--------------|
| COOLING SIGMA  |                             | PART NUMBER |     | PACK NUMBER               |              |
|  |                             | SAC2004A    |     |                           |              |
| This pack may include extra fasteners to cover different options |                             |             |     |                           |              |
| ITEM   | BASIC DESCRIPTION           | PART NUMBER | QTY | USED ON                   | ILLUSTRATION |
| 12   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 1   | Expansion tank<br>bracket |              |
| 13   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 9   | Expansion tank<br>bracket |              |
| 14   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 6   | Expansion tank<br>bracket |              |
| 15   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 2   | Expansion tank<br>bracket |              |
| 16   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 18  | Expansion tank<br>bracket |              |
| 17   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 9   | Expansion tank<br>bracket |              |
| 18   | Ball MR X 10<br>1/8" x 1/4" | 888432      | 12  | Expansion tank<br>bracket |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

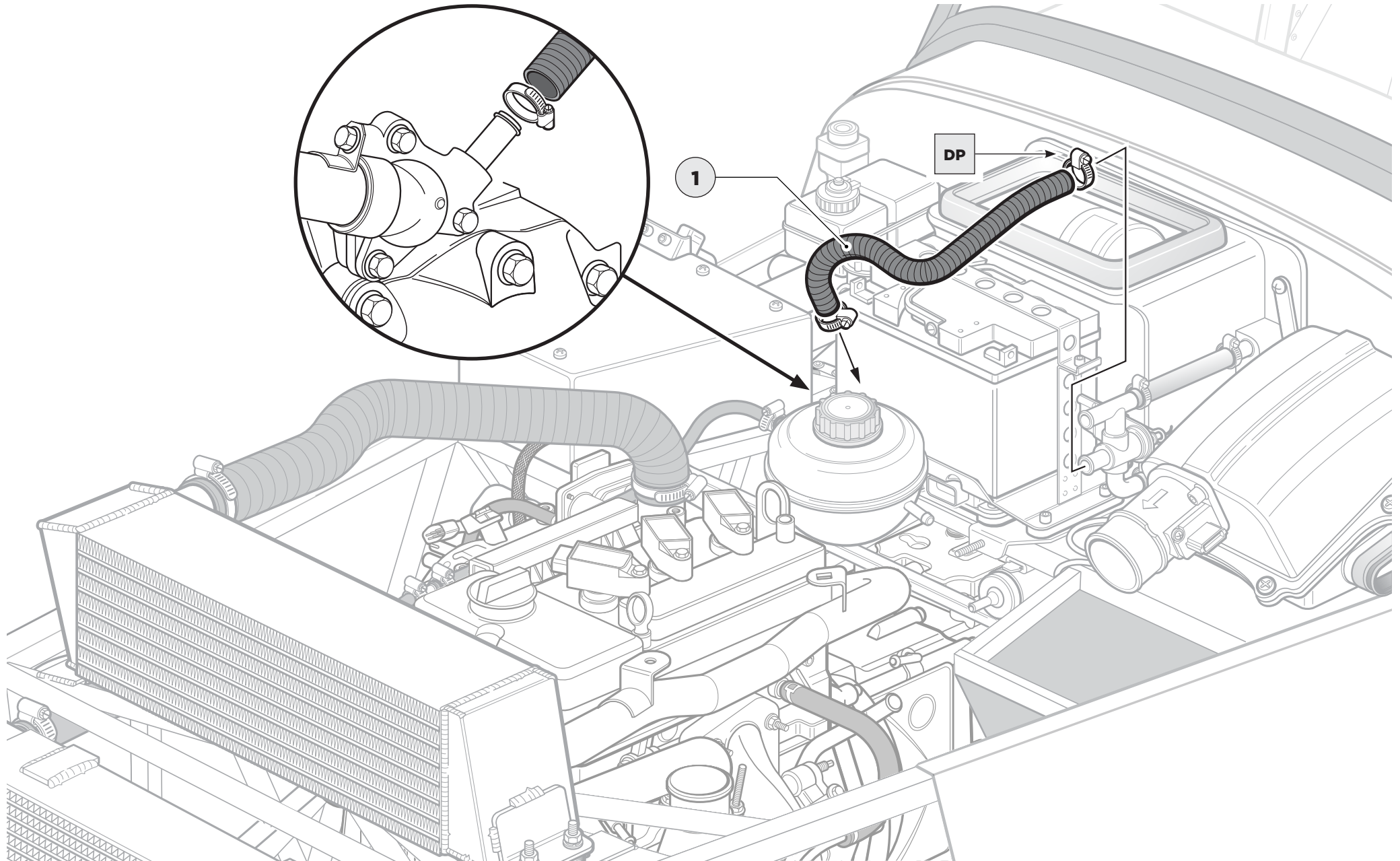
x2

## TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

Grant P

## FITTING THE LOWER HEATER VALVE HOSE

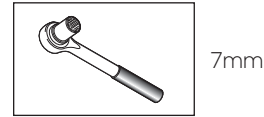


# FITTING THE UPPER HEATER VALVE HOSE

## PARTS

- 1** Upper heater valve hose

## TOOLS



## FIXINGS

| Pack <b>D</b>  |                                     | <b>CATERHAM</b> |     | 44   |              |
|--|-------------------------------------|-----------------|-----|--|--------------|
|  |                                     | PART NUMBER     |     | SAC22004A  |              |
| COOLING SIGMA  |                                     |                 |     |  |              |
| This pack may include extra fasteners to cover different options |                                     |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION                   | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 1  | Ball Nut X 10<br>Metric 8.8         | 888432          | 1   | Expansion tank<br>connected to chassis                                     |              |
| 2  | Ball Nut X 10<br>Metric 8.8         | 888432          | 1   | Expansion tank to<br>bracket   |              |
| 3  | Ball Nut X 10 with<br>square washer | 888432          | 4   | SV radiator bracket  |              |
| 4  | Ball Nut X 10 with<br>square washer | 888432          | 4   | Fan bracket to fan   |              |
| 5  | Ball Nut X 10 with<br>square washer | 888432          | 4   | Fan to radiator<br>coupling - SV only                                      |              |
| 6  | Flare Nut 8.8                       | 888432          | 8   | 4 Fan to radiator<br>and SV radiator<br>bracket                            |              |
| 7  | Flare Nut 8.8                       | 888432          | 8   | Radiator bobbin  |              |
| 8  | Flare Nut 8.8                       | 888432          | 1   | Expansion tank<br>bracket  |              |
| 9  | Flare Nut 8.8                       | 888432          | 13  | 8 x SV radiator<br>bracket & 5 fan things<br>& 1 Expansion tank<br>bracket |              |
| 10   | Flare Nut 8.8                       | 888432          | 4   | Radiator bobbin<br>back  |              |
| 11   | Flare Nut 8.8                       | 888432          | 4   | Radiator bobbin<br>front   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack <b>D</b>  |                              | <b>CATERHAM</b> |     | 44   |              |
|--|------------------------------|-----------------|-----|--|--------------|
|  |                              | PART NUMBER     |     | SAC22004A  |              |
| COOLING SIGMA  |                              |                 |     |  |              |
| This pack may include extra fasteners to cover different options |                              |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION            | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 12   | Flare Nut X 10<br>Metric 8.8 | 888432          | 1   | Expansion tank<br>bracket  |              |
| 13   | Spring Washer<br>Metric 8.8  | 888432          | 8   | 8 x Radiator bobbin<br>& 1 Expansion tank  |              |
| 14   | Flare Nut 8.8                | 888432          | 6   | 2 x SV radiator hose to<br>expansion tank<br>& 2 x SV radiator hose<br>to radiator bobbin                    |              |
| 15   | Flare Nut 8.8                | 888432          | 2   | 1 x Engine cooler to<br>top of SV radiator<br>& 1 x Engine cooler to<br>radiator (SV)                        |              |
| 16   | Flare Nut 17 - 25mm          | 888432          | 18  | 1 x Heater hose to<br>12.8L Series<br>& 1 Expansion tank<br>& 1 x Heater<br>& 1 x Dip Sump<br>& 1 x Silencer |              |
| 17   | Flare Nut 8.8                | 888432          | 8   | Expansion tank<br>small 1-piece  |              |
| 18   | Flare Nut 8.8                | 888432          | 12  | Cooling Fan  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

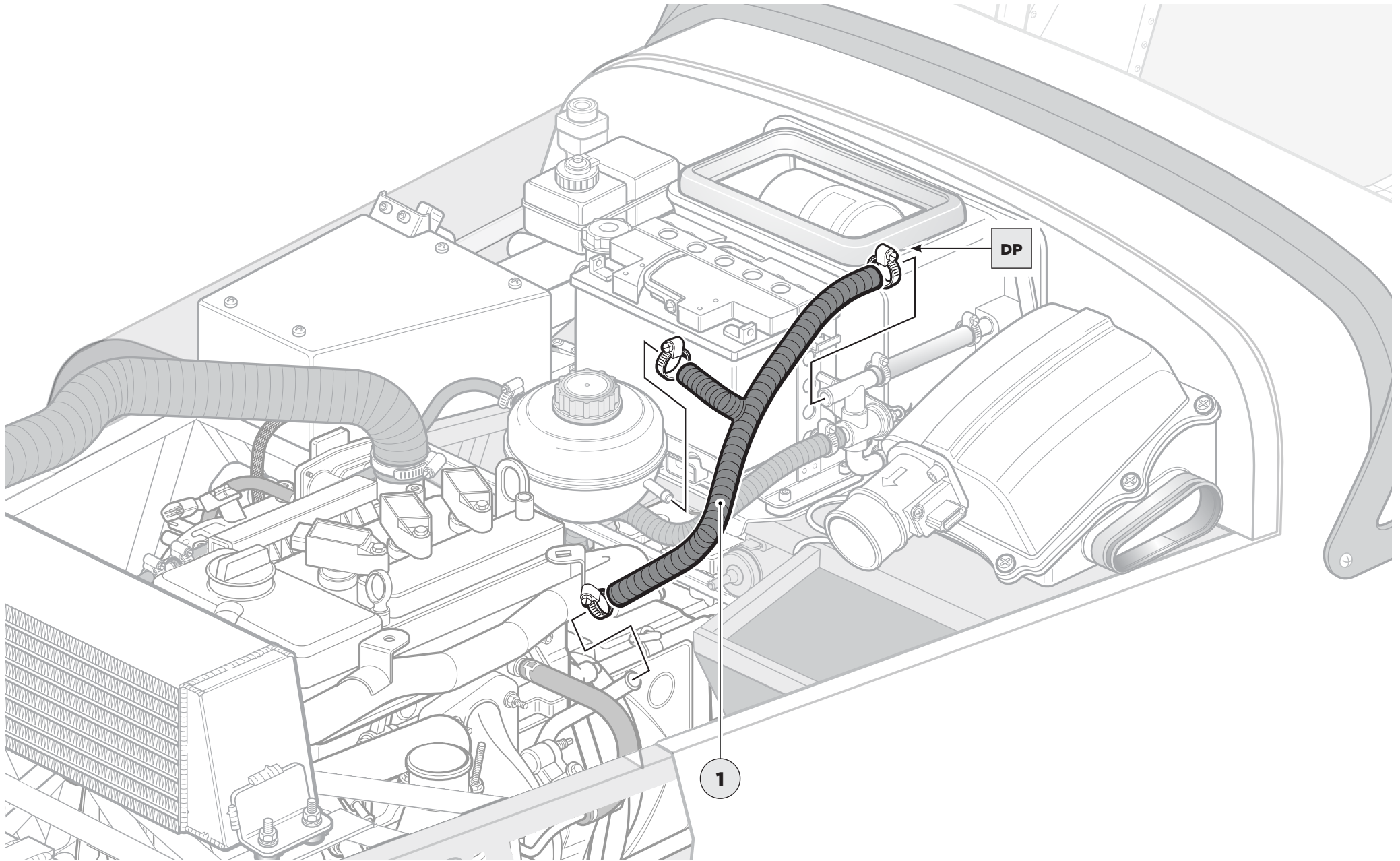
x3

## TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

Grant P

## FITTING THE UPPER HEATER VALVE HOSE



## FITTING THE AIRBOX HOSE

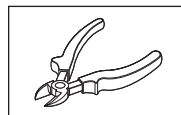
### PARTS

- 1 Airbox hose
- 2 Cable tie

### TOOLS



7mm



### FIXINGS

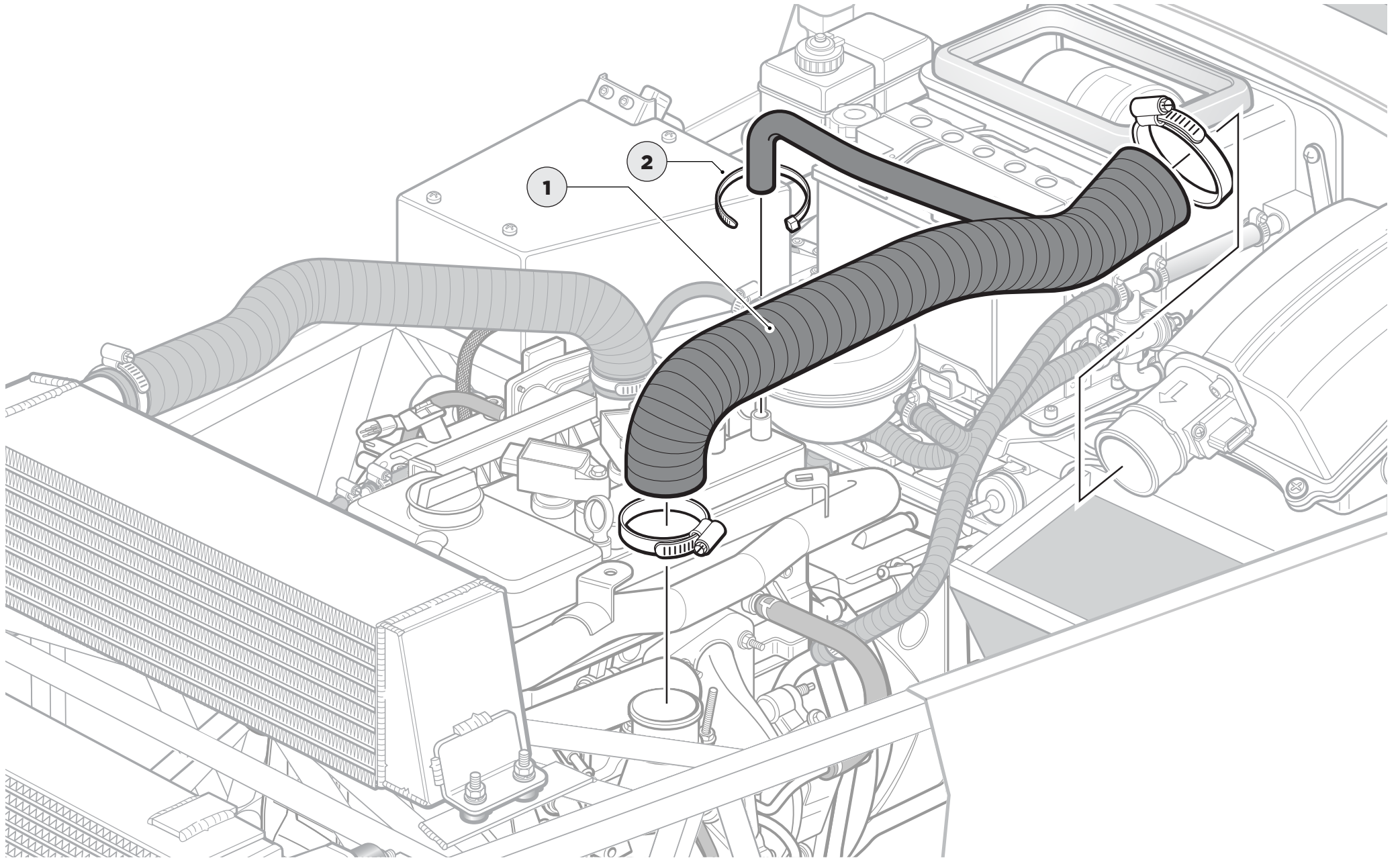
Fixings packed with airbox

### TIPS

If the hose is a tight fit then a squirt of rubber lubricant will help.

**Grant P**

## FITTING THE AIRBOX HOSE



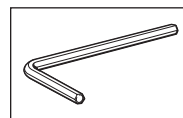


## FITTING THE TURBO SOLENOID PIPES

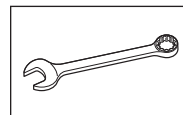
### PARTS

- 1 Solenoid pipes (x5)
- 2 P-clip
- 3 M6 cap head bolt
- 4 M6 plain washer
- 5 M6 nyloc nut

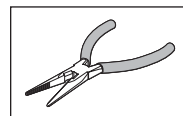
### TOOLS



5mm



10mm



### FIXINGS

Fixings packed with engine

### TIPS

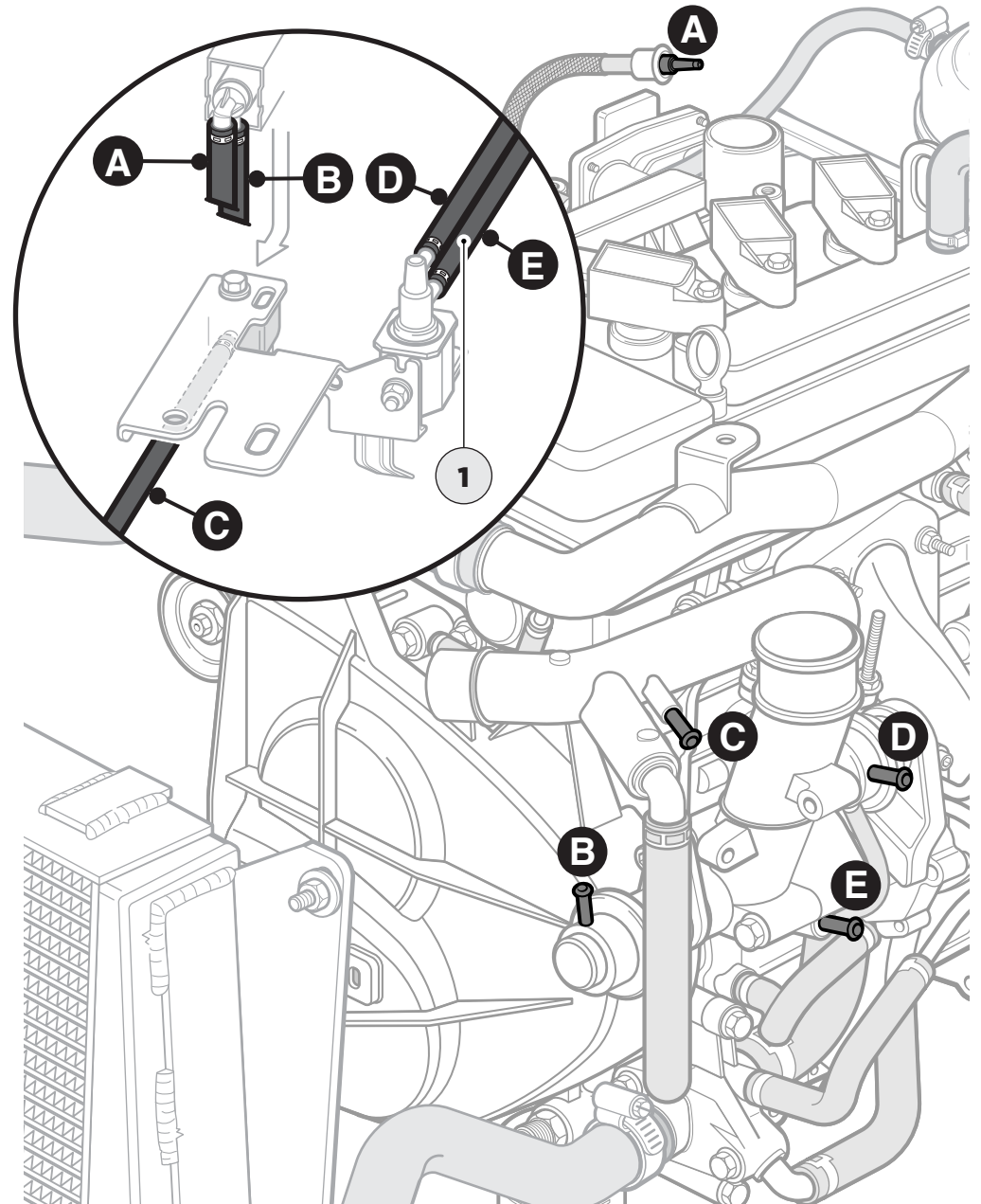
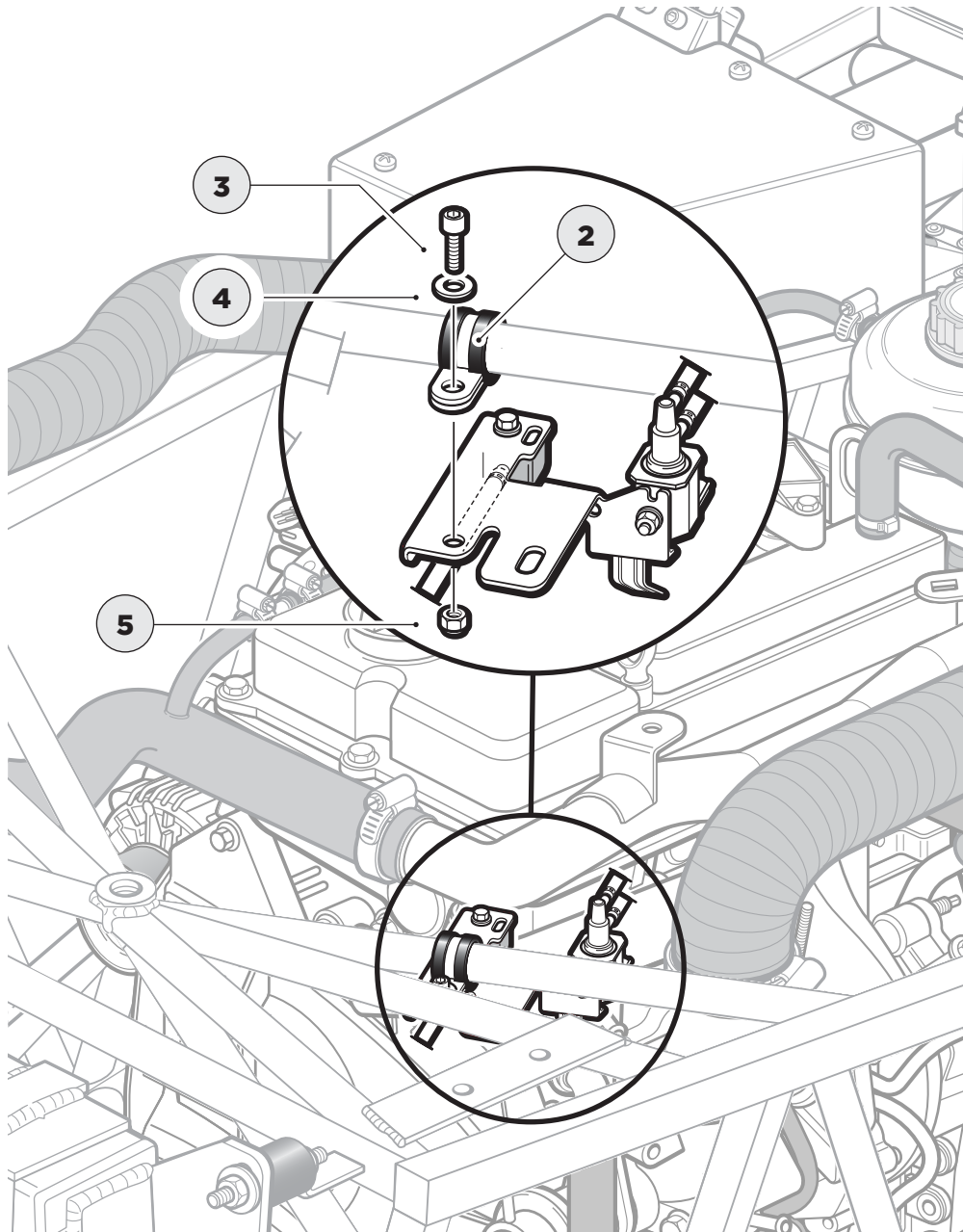
It is very important that these pipes are connected to the correct places so take your time.

Chris N

It is important that these pipes are not restricted or kinked in any way, therefore you should be careful not to overtighten your cable ties.

Lee B

## FITTING THE TURBO SOLENOID PIPES

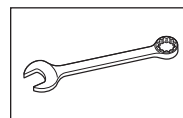


## FITTING THE CLUTCH HOSE

### PARTS

- 1 Clutch hose
- 2 Adaptor
- 3 Banjo bolt
- 4 Copper washers (x2)

### TOOLS



$\frac{9}{16}$   
 $\frac{7}{16}$

### FIXINGS

Fixings supplied in clutch hose kit

### TIPS

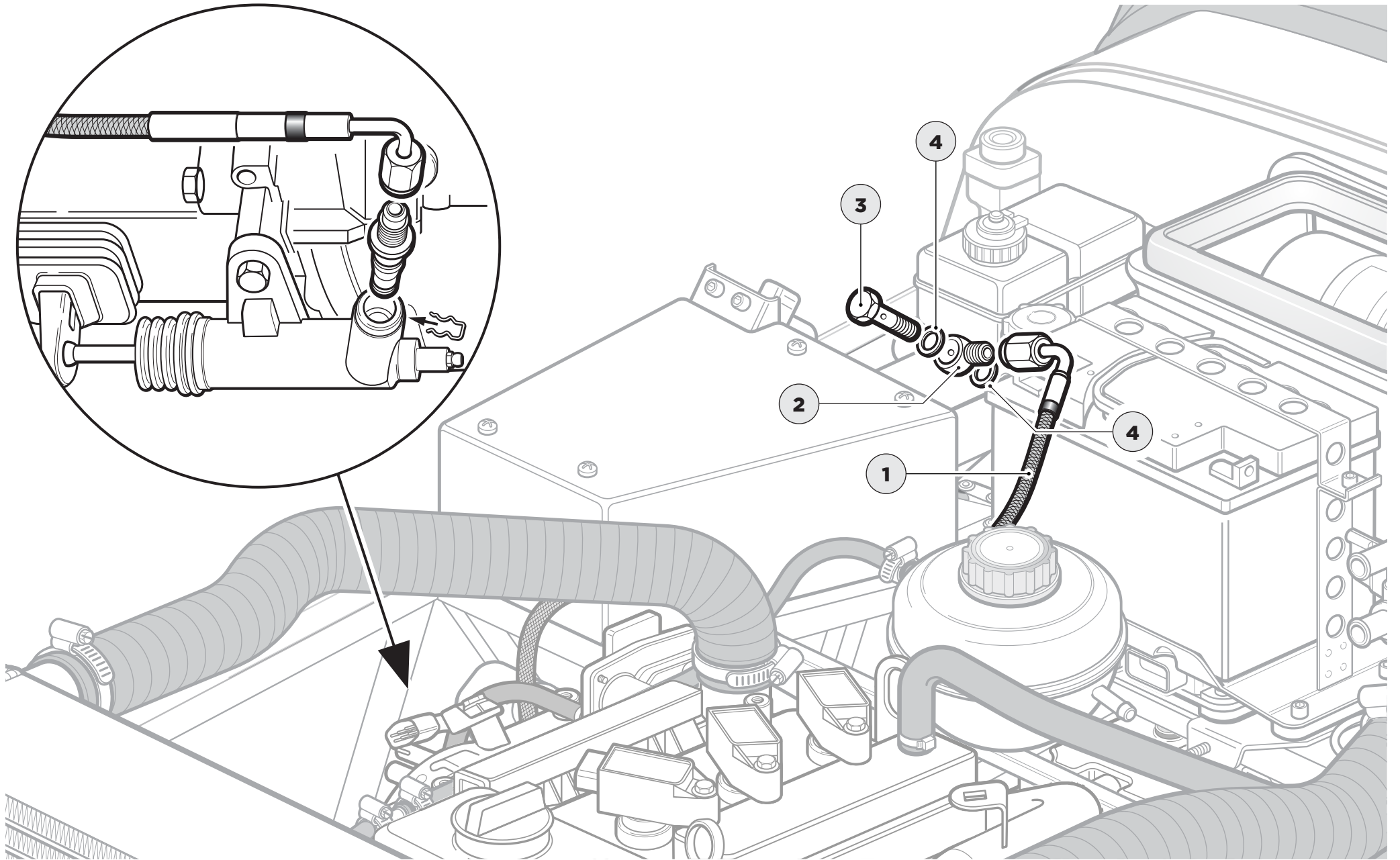
*Once fully tightened, ensure that the hose is not kinked or twisted.*

**John S**

*The locking clip is supplied pre-fitted to the slave cylinder; therefore, you will need to remove this before fitting the adaptor and refitting the clip.*

**Mick F**

## FITTING THE CLUTCH HOSE



# FITTING THE PROPSHAFT

---

## PARTS

- 1** Propshaft

## TOOLS

## FIXINGS

## TIPS

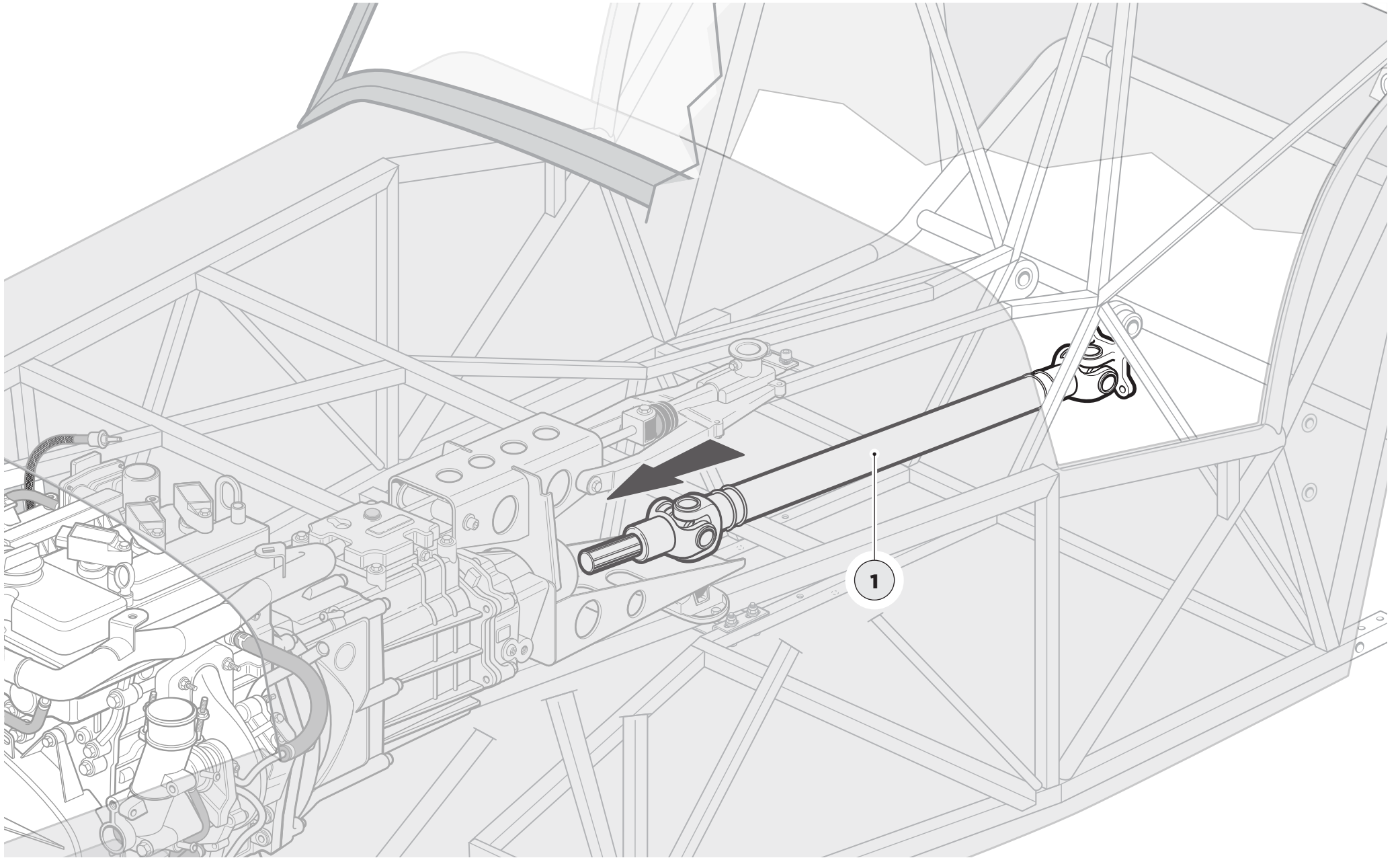
Remove the plastic bung from the tail of the gearbox before attempting to fit the propshaft.

**John S**

Be careful when inserting the propshaft into the tail of the gearbox, as you do not want to damage the oil seal.

**Mick F**

## FITTING THE PROPSHAFT



# ASSEMBLING THE AXLE

## PARTS

- 1** Differential
- 2** Axle
- 3** Copper brake pipe
- 4** Brake pipe clips (x5)
- 5** Oil filler plug & washer
- 6** Oil drain plug & washer
- 7** Breather cap
- 8** Breather spring
- 9** Breather seal
- 10** Differential bolts (x8)

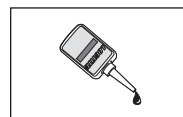
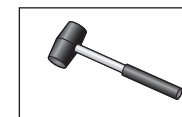
## FIXINGS

Fixings packed with axle

## TOOLS



12mm  
19mm



Loctite 577

## TIPS

It's easier to push the clip bases into the axle brackets, followed by fitting the clip jaws and lastly the brake pipe.

Lee A

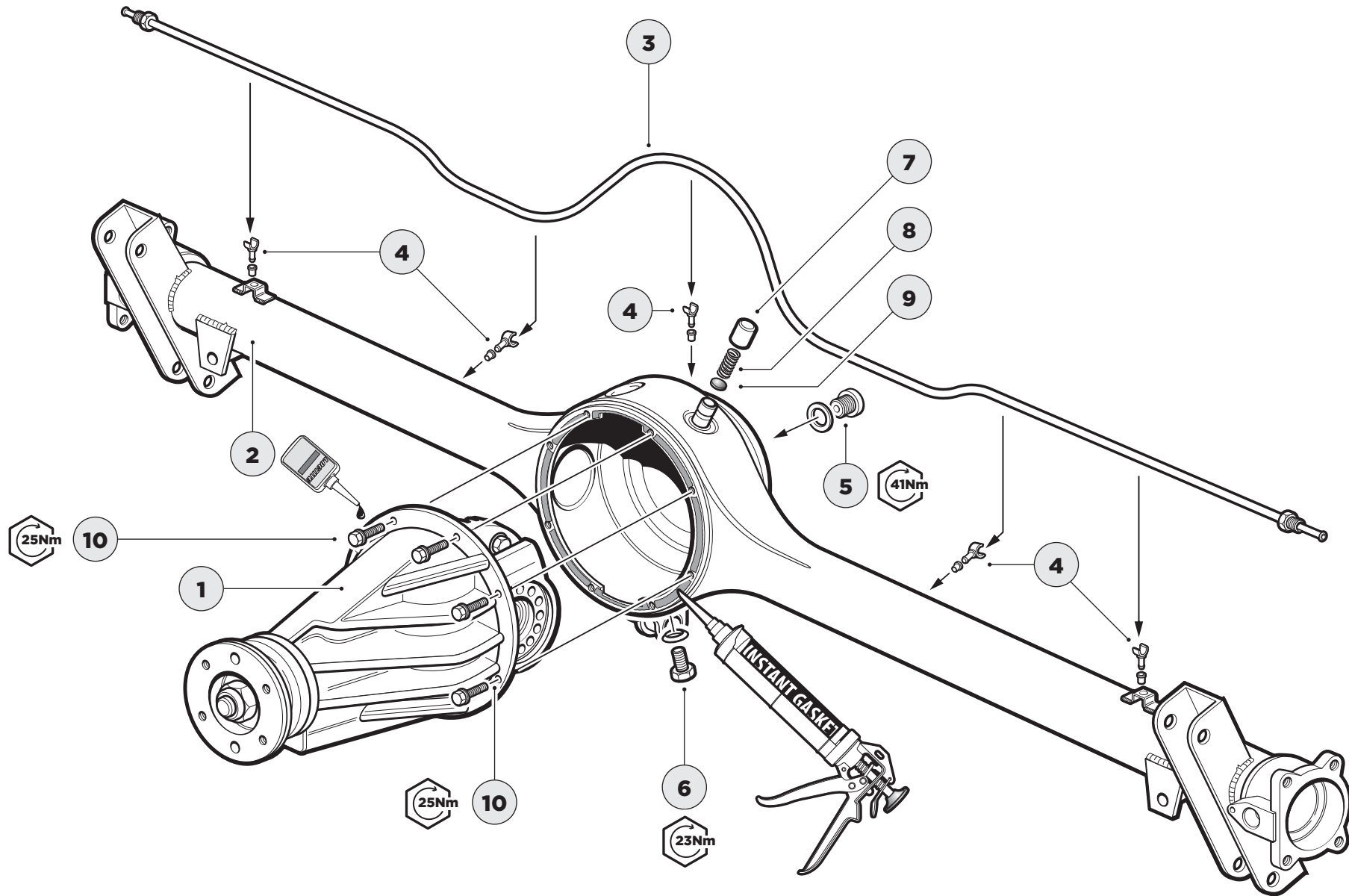
The plastic washer is for the filler plug, not the drain plug.

Chris N

The indentations in the breather cap are designed to fit into the slot in the axle breather. A tap with a mallet will help to get it seated.

John K

# ASSEMBLING THE AXLE



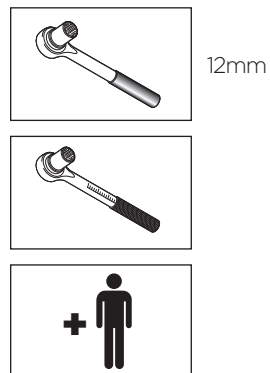


# INSTALLING THE AXLE AND CONNECTING THE PROPSHAFT

## PARTS

- 1 M8 bolts (x4)
- 2 M8 spring washers (x4)

## TOOLS



## FIXINGS

Fixings packed with axle

## TIPS

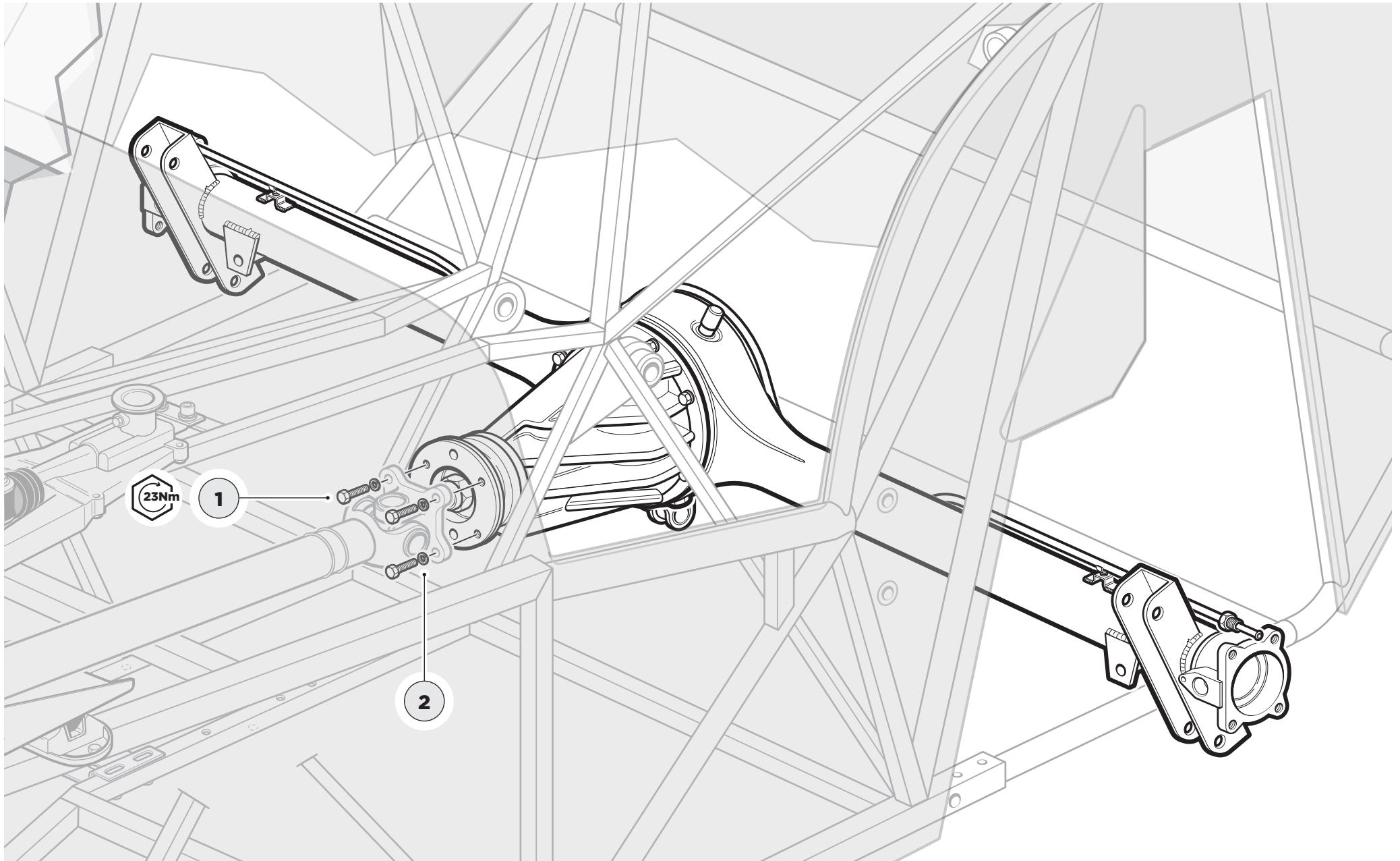
Lifting the axle into the chassis is a two-person job, one laying underneath the chassis and the other feeding the axle in from the left-hand side.

**John S**

The diff is the heaviest part so the axle will always try and rotate downwards.

**Chris B**

## INSTALLING THE AXLE AND CONNECTING THE PROPSHAFT

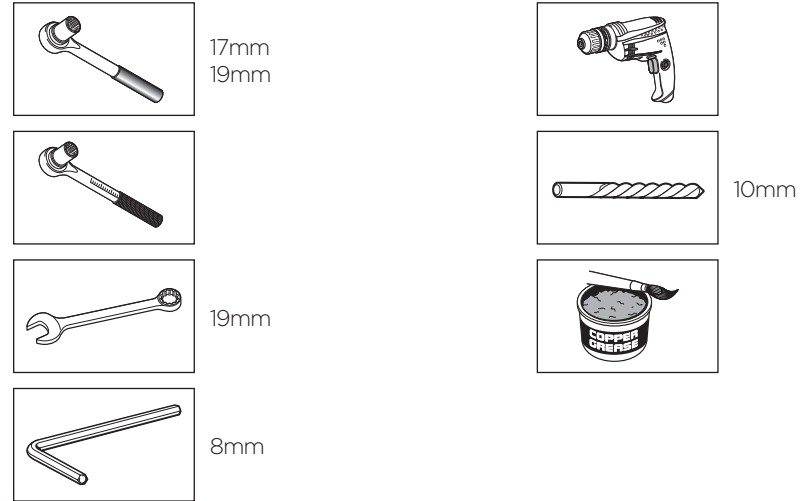


# FITTING THE RADIUS ARMS

## PARTS

- 1 Radius arms (x2)
- 2 Bush sleeves (x2)

## TOOLS



## FIXINGS

| Pack 74  |                                  | CATERHAM    |     | PART NUMBER<br>3G8Z001A                           |              |
|--|----------------------------------|-------------|-----|---|--------------|
| FASTENER PACK - SEVEN 160/165 LIVE AXLE & A-FRAME                |                                  |             |     |   |              |
| This pack may include extra fasteners to cover different options |                                  |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | Bush M12 X 100<br>Grade 10.9     | BM12X100    | 2   | Drop bracket to A-Frame                           |              |
| 2  | Bush M12 X 60<br>Grade 8.8       | 3GZ2002A    | 2   | Drop bracket to chassis                           |              |
| 3  | Bush 12" X 2.314"<br>Grade 10.9  | BF12X2.314  | 1   | A-frame to diff                                   |              |
| 4  | Bush M12 X 120<br>Grade 10.9     | 3GZ2022A    | 2   | Damper  |              |
| 5  | Crowned<br>M12 X 75<br>Grade 8.8 | 3GZ2004A    | 2   | Radius arm to chassis                             |              |
| 6  | Crowned<br>M8 X 45<br>Grade 10.9 | BMC8X45     | 4   | Drop bracket to chassis through ARB mount         |              |
| 7  | Nyloc Nut<br>M12                 | NM12        | 4   | Drop bracket to A-frame & drop bracket to chassis |              |
| 8  | Half Nyloc<br>1/2" LHF           | NF1/2       | 1   | A-frame to diff                                   |              |
| 9  | Nyloc Nut<br>M10                 | 3GZ2023A    | 4   | Damper  |              |
| 10   | Nyloc Nut<br>M8                  | NM8         | 4   | Drop bracket fixings                              |              |
| 11   | Plain Washer<br>M12<br>Form-A    | 3GZ2005A    | 13  |   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack 74  |  | CATERHAM    |     | PART NUMBER<br>3G8Z001A |              |
|--|--|-------------|-----|-------------------------|--------------|
| FASTENER PACK - SEVEN 160/165 LIVE AXLE & A-FRAME                |  |             |     |                         |              |
| This pack may include extra fasteners to cover different options |  |             |     |                         |              |
| ITEM   | BASIC DESCRIPTION                        | PART NUMBER | QTY | USED ON                 | ILLUSTRATION |
| 12   | Plain Washer<br>M12 X 1.5 X 30<br>Form-C | WP1M12      | 2   |                         |              |
| 13   | Plain Washer<br>1/2"                     | WP1/2       | 16  | A-frame spacing         |              |
| 14   | Washer<br>M12 X 1.5 X 30<br>Plain Washer | 3GZ2007A    | 6   | Damper                  |              |
| 15   | Plain Washer<br>M8                       | WP8M8       | 8   | Drop bracket fixings    |              |
| 16   | Stainless<br>Washer<br>3/8" ID           | WSS3/8      | 1   |                         |              |
| 17   | Nylon Washer<br>17 X 5 X 32 X 1mm        | Z201463     | 2   | A-frame                 |              |

Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

## TIPS

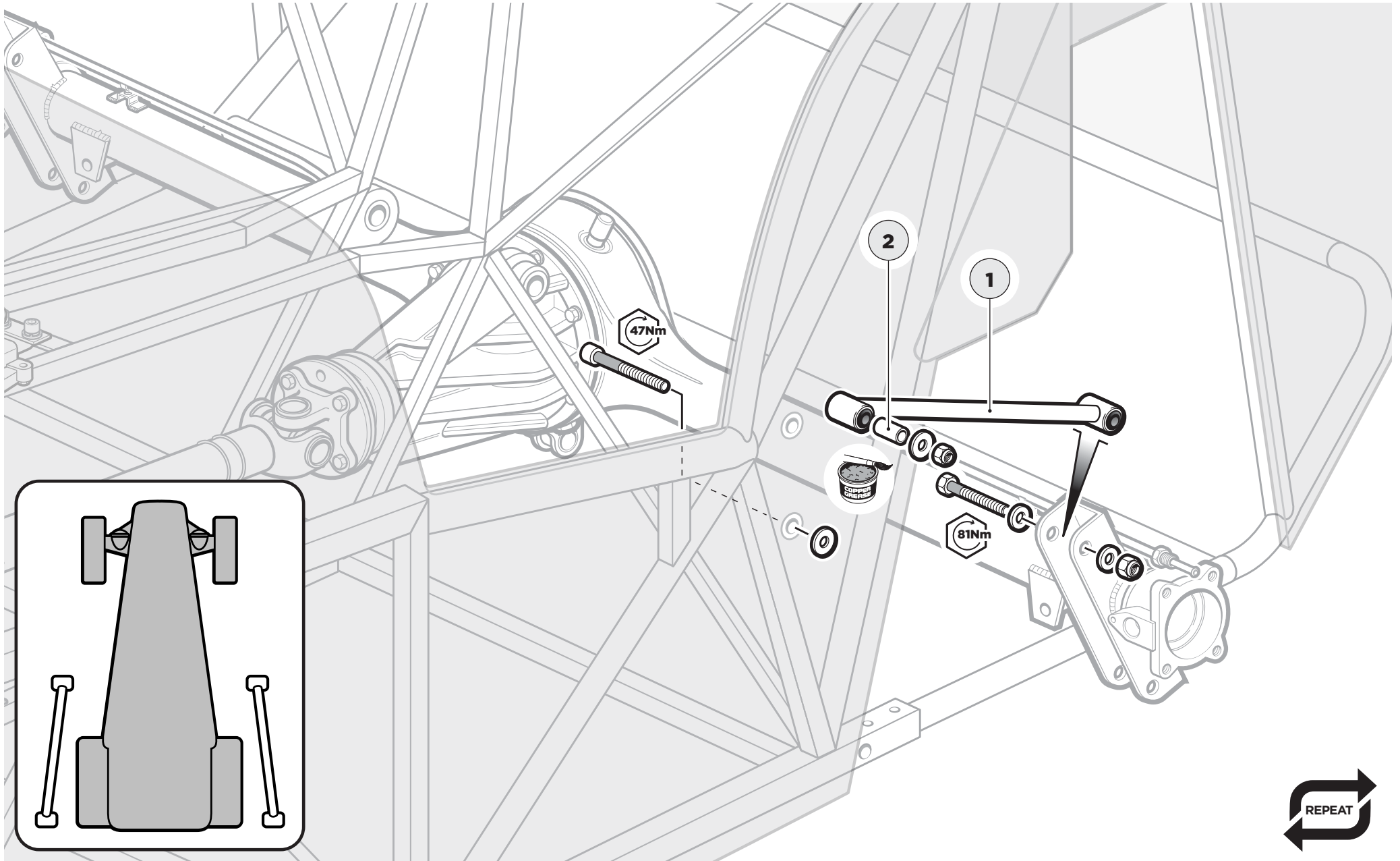
If necessary, run a 10mm drill bit through the chassis bosses to clear any excess powder coat.

Chris B

It is best to torque the rear suspension fixings under load, to prevent the bushes from becoming stressed.

John S

## FITTING THE RADIUS ARMS

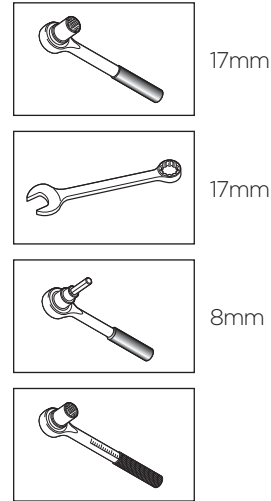


# FITTING THE REAR DAMPERS

## PARTS

- 1 Dampers (x2)
- 2 Damper sleeves (x4)

## TOOLS



## FIXINGS

| Pack 74  |                                  | CATERHAM    |     | PART NUMBER<br>3G0Z001A                           |              |
|--|----------------------------------|-------------|-----|---|--------------|
| FASTENER PACK - SEVEN 160/165 LIVE AXLE & A-FRAME                |                                  |             |     |   |              |
| This pack may include extra fasteners to cover different options |                                  |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | Bolt M12 X 100<br>Grade 10.9     | BM12X100    | 2   | Drop bracket to A-Frame                           |              |
| 2  | Bolt M12 X 60<br>Grade 8.8       | 3G2200A     | 2   | Drop bracket to chassis                           |              |
| 3  | Bolt 1/2" X 2 3/4"<br>Grade 10.9 | BF1/2X2.34  | 1   | A-frame to diff                                   |              |
| 4  | Bolt M12 X 120<br>Grade 10.9     | 3G2202A     | 2   | Damper  |              |
| 5  | Clamped<br>M12 X 75<br>Grade 8.8 | 3G2200A     | 2   | Radius arm to chassis                             |              |
| 6  | Clamped<br>M8 X 45<br>Grade 10.9 | BMCH8X45    | 4   | Drop bracket to chassis through ARB mount         |              |
| 7  | Nylon Nut<br>M12                 | NM12        | 4   | Drop bracket to A-frame & drop bracket to chassis |              |
| 8  | Half Nylon<br>1/2" UNF           | NF1/2       | 1   | A-frame to diff                                   |              |
| 9  | Nylon Nut<br>M10                 | 3G2202A     | 4   | Damper  |              |
| 10   | Nylon Nut<br>M8                  | NM18        | 4   | Drop bracket fixings                              |              |
| 11   | Plain Washer<br>M12<br>Form-A    | 3G2200A     | 13  |   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack 74  |  | CATERHAM    |     | PART NUMBER<br>3G0Z001A |              |
|--|--|-------------|-----|-------------------------|--------------|
| FASTENER PACK - SEVEN 160/165 LIVE AXLE & A-FRAME                |  |             |     |                         |              |
| This pack may include extra fasteners to cover different options |  |             |     |                         |              |
| ITEM   | BASIC DESCRIPTION                        | PART NUMBER | QTY | USED ON                 | ILLUSTRATION |
| 12   | Plain Washer<br>M12 X 1.5 X 30<br>Form-C | WP1M12      | 2   |                         |              |
| 13   | Plain Washer<br>1/2"                     | WP1/2       | 16  | A-frame spacing         |              |
| 14   | Washer<br>M12 X 1.5 X 30<br>Plain Washer | 3G2200FA    | 6   | Damper                  |              |
| 15   | Plain Washer<br>M8                       | WP1M8       | 8   | Drop bracket fixings    |              |
| 16   | Shocksproof<br>Washer<br>3/8" ID         | WSS3/8      | 1   |                         |              |
| 17   | Nylon Washer<br>1/2 X 3/2 X 1mm          | Z2021403    | 2   | A-frame                 |              |

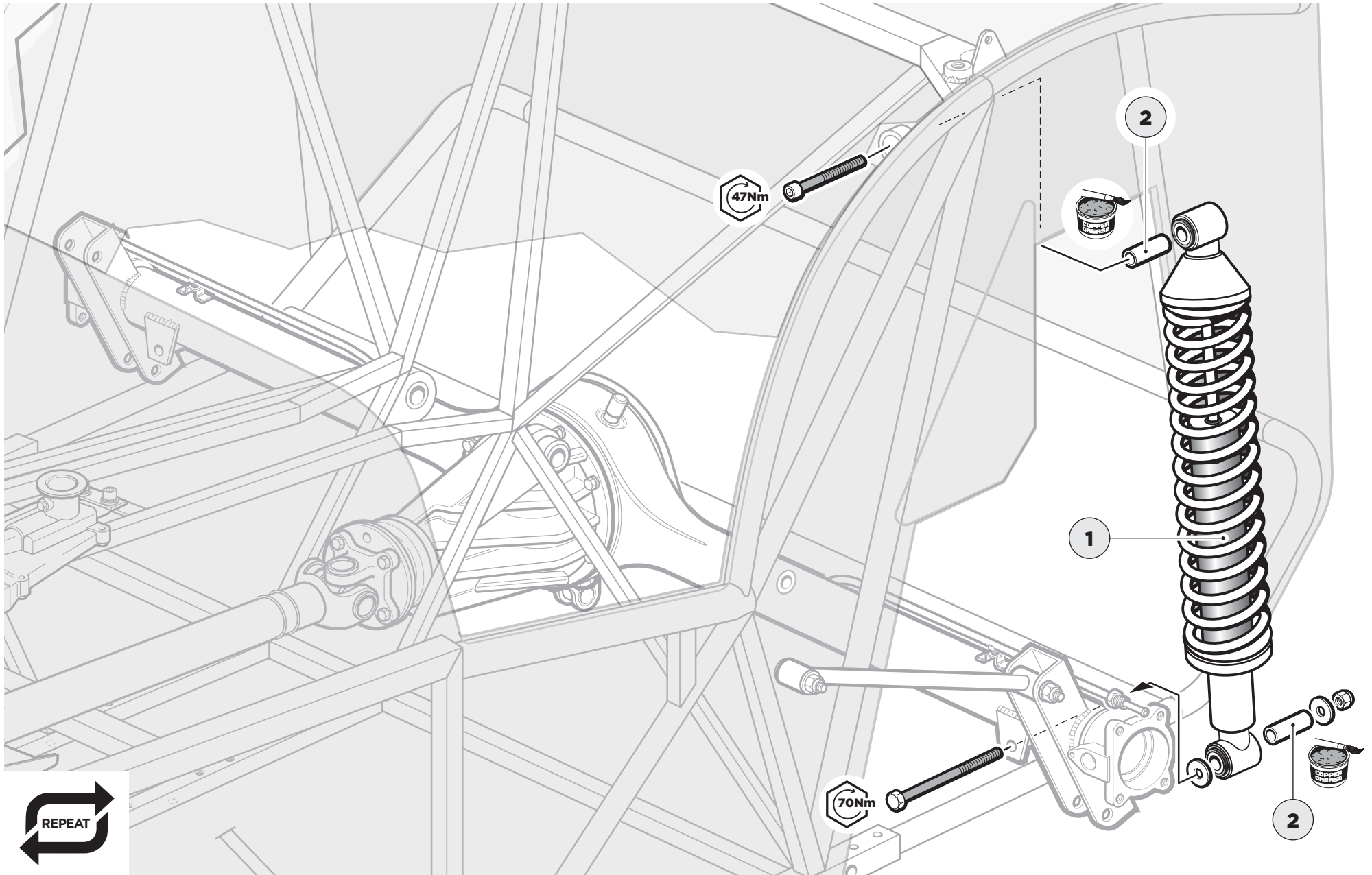
Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

## TIPS

It's easier to fit the top of the damper into the chassis before tackling the bottom.

Lloyd D

# FITTING THE REAR DAMPERS



## FITTING THE HALF SHAFTS

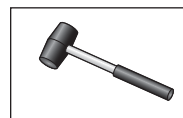
### PARTS

- 1 Half shaft assembly (x2)
- 2 Wheel speed sensor (x2)
- 3 Oil seal (x2)
- 4 Oil seal protector (x2)
- 5 M8 bolts (x8)
- 6 M6 bolts (x2)

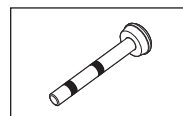
### FIXINGS

Fixings packed with axle

### TOOLS



10mm  
12mm



60mm



### TIPS

The seals should be fitted with the hollow side facing inwards.

**John K**

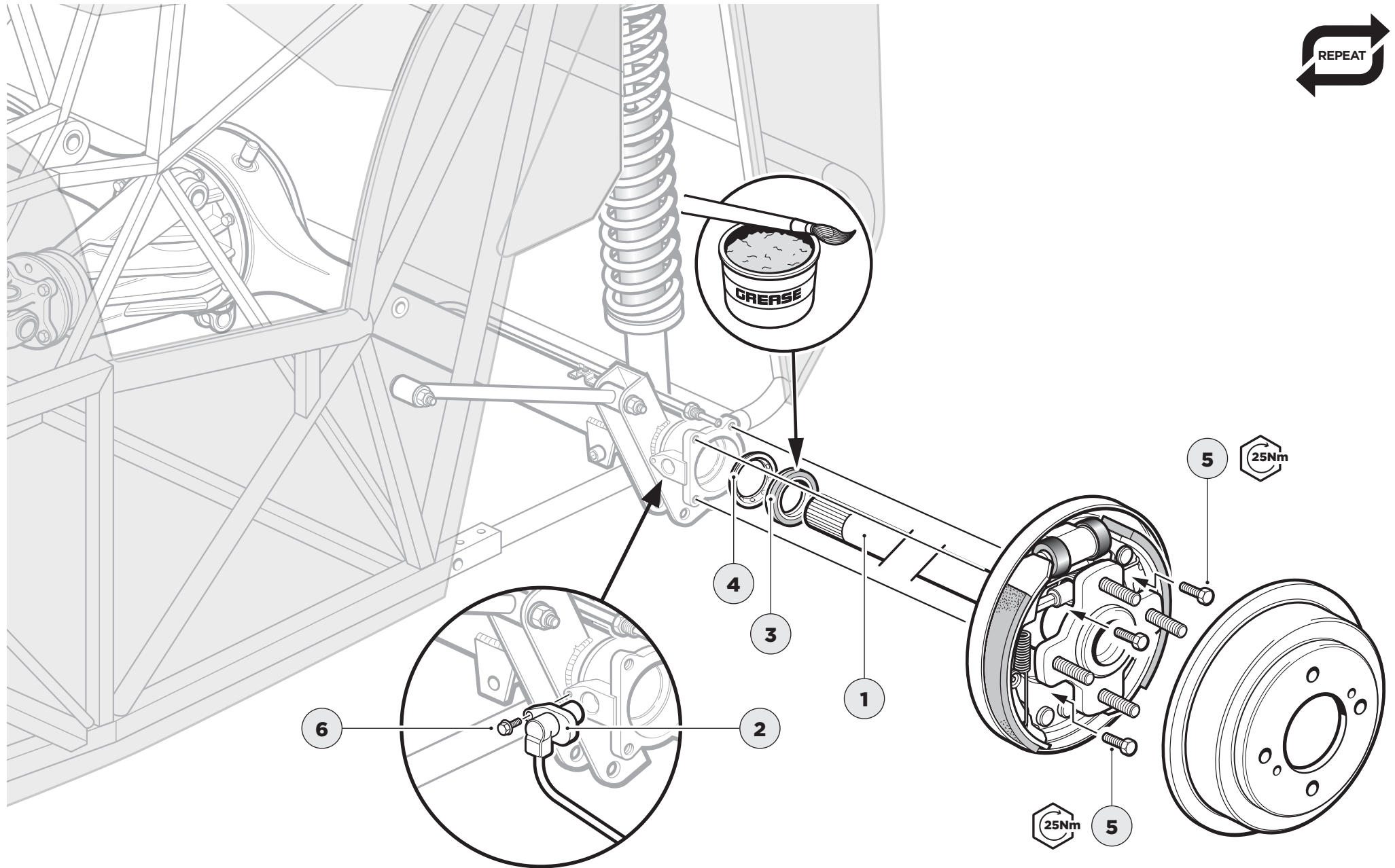
Carefully hit the oil seal into place until it seats against the plastic seal protector.

**Jamie A**

The speedo sensors are handed, as the wires should be facing downwards.

**Lloyd D**

# FITTING THE HALF SHAFTS



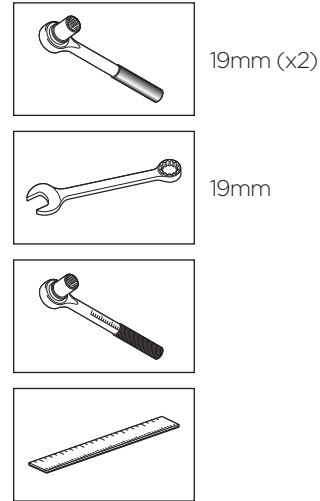


# FITTING THE A-FRAME

## PARTS

- 1 A-frame
- 2 Nylon washers (x2)

## TOOLS



## FIXINGS

| Pack 74  |                                  | CATERHAM    |     | PART NUMBER<br>3G8Z001A                           |              |
|--|----------------------------------|-------------|-----|---|--------------|
| FASTENER PACK - SEVEN 160/165 LIVE AXLE & A-FRAME                |                                  |             |     |   |              |
| This pack may include extra fasteners to cover different options |                                  |             |     |   |              |
| ITEM   | BASIC DESCRIPTION                | PART NUMBER | QTY | USED ON   | ILLUSTRATION |
| 1  | Bush M12 X 100<br>Grade 10.9     | BM12X100    | 2   | Drop bracket to A-Frame                           |              |
| 2  | Bush M12 X 60<br>Grade 8.8       | 3GZ200A     | 2   | Drop bracket to chassis                           |              |
| 3  | Bush 12" X 2.34"<br>Grade 10.9   | BF12X2.34   | 1   | A-frame to diff                                   |              |
| 4  | Bush M12 X 120<br>Grade 10.9     | 3GZ202A     | 2   | Damper  |              |
| 5  | Chassis<br>M12 X 75<br>Grade 8.8 | 3GZ200A     | 2   | Radius arm to chassis                             |              |
| 6  | Chassis<br>M8 X 45<br>Grade 10.9 | BMCH8X45    | 4   | Drop bracket to chassis through ARB mount         |              |
| 7  | Nylon Nut M12                    | NM12        | 4   | Drop bracket to A-frame & drop bracket to chassis |              |
| 8  | Half Nylon 1/2" LHF              | NF1/2       | 1   | A-frame to diff                                   |              |
| 9  | Nylon Nut M10                    | 3GZ202A     | 4   | Damper  |              |
| 10   | Nylon Nut M8                     | NM8         | 4   | Drop bracket fixings                              |              |
| 11   | Plain Washer M12 Form-A          | 3GZ200A     | 13  |   |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack 74  |                                    | CATERHAM    |     | PART NUMBER<br>3G8Z001A |              |
|--|------------------------------------|-------------|-----|-------------------------|--------------|
| FASTENER PACK - SEVEN 160/165 LIVE AXLE & A-FRAME                |                                    |             |     |                         |              |
| This pack may include extra fasteners to cover different options |                                    |             |     |                         |              |
| ITEM   | BASIC DESCRIPTION                  | PART NUMBER | QTY | USED ON                 | ILLUSTRATION |
| 12   | Plain Washer M12 X 1.5 X 30 Form-C | WP1M12      | 2   |                         |              |
| 13   | Plain Washer 10"                   | WP112       | 16  | A-frame spacing         |              |
| 14   | Washer M12 X 1.5 X 30 Plain Washer | 3GZ2007A    | 6   | Damper                  |              |
| 15   | Plain Washer M8                    | WP1M8       | 8   | Drop bracket fixings    |              |
| 16   | Shocksproof Washer 3/8" ID         | WSS3/8      | 1   |                         |              |
| 17   | Nylon Washer 17.5 X 32 X 1mm       | Z201463     | 2   | A-frame                 |              |

Drawings are for illustrative purposes only and are not to scale. Page 2 of 2

## TIPS

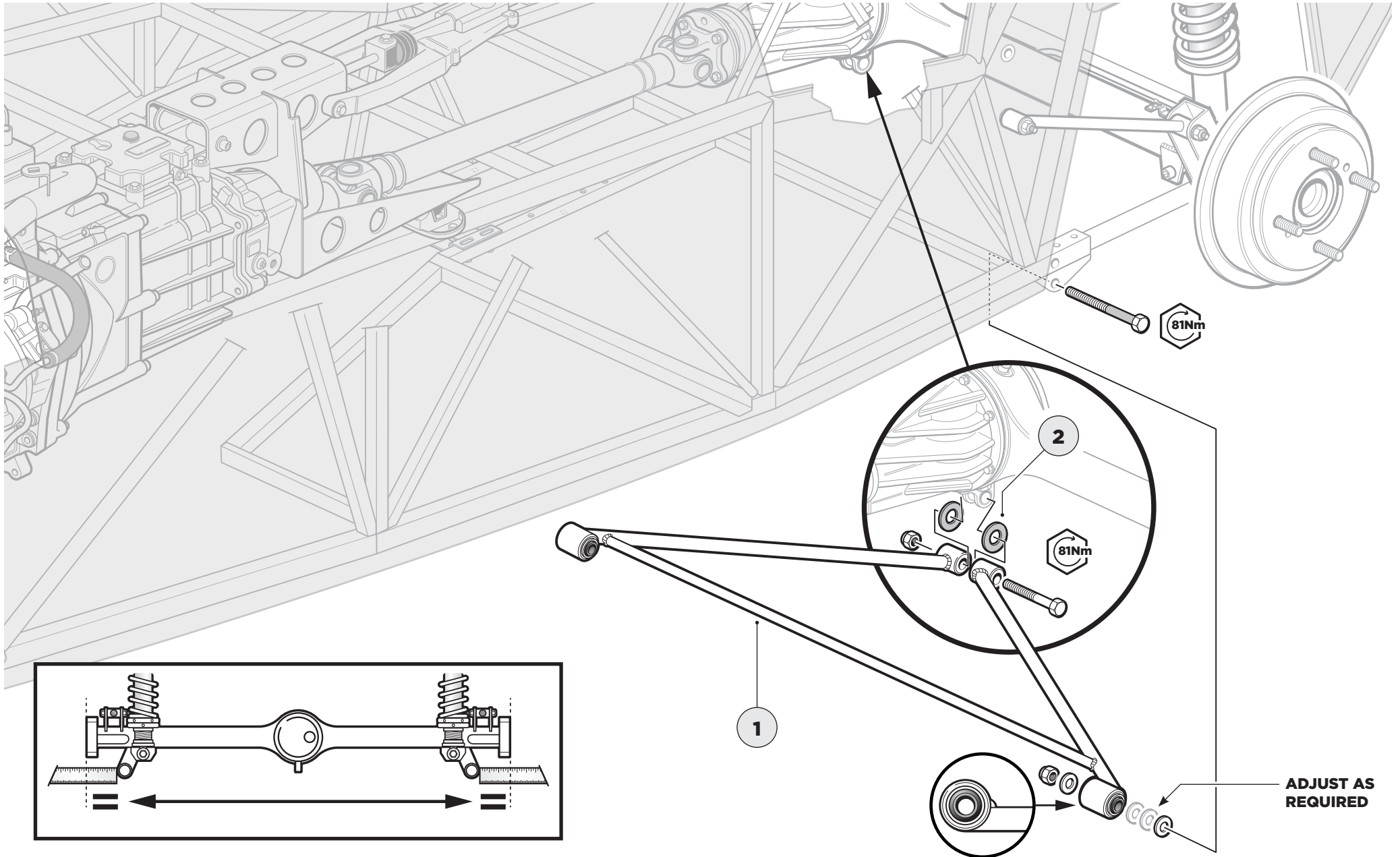
You are aiming to centralise the axle in the chassis, by adjusting the number of spacing washers between the forward bushes and the chassis.

Vincent M

It is best to torque these fixings under load to prevent the bushes from twisting.

Mick F

# FITTING THE A-FRAME



# FITTING THE HANDBRAKE

## PARTS

- 1 Handbrake assembly
- 2 Handbrake clevis pin
- 3 Handbrake clevis
- 4 Clevis pivot
- 5 Clevis pivot bolt
- 6 Cable locking pins (x2)
- 7 Handbrake cable

## FIXINGS

| SERIAL NUMBER   | CATERHAM  | PACK NUMBER |     |         |
|---|---|-------------|-----|---------|
| 49  |   | 30P012A     |     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |     |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |     |         |
| No  | DESCRIPTION   | PART NUMBER | QTY | DRAWING |
| 1   | Bolt 1/2" X 2 1/2" UNF<br>Caphead Bolt with plain section & imperial threaded section | BFCH1/2X2.5 | 2   |         |
| 2   | Bolt M8 X 50 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BMBX50      | 1   |         |
| 3   | Bolt M8 X 45 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BMBX45      | 3   |         |
| 4   | Setcrew M8 X 25<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SMBX25      | 2   |         |
| 5   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SMBX20      | 4   |         |
| 6   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SMBX20      | 2   |         |
| 7   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SMBX16      | 3   |         |
| 8   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SMBX16      | 4   |         |
| 9   | Nut M8<br>With Metric thread & Nyloc locking mechanism                                | NMYF8       | 10  |         |
| 10  | Nut M6<br>With Metric thread & Nyloc locking mechanism                                | NMYF6       | 2   |         |
| 11  | Nut M6<br>Plain nut with metric thread full size                                      | NMPF6       | 2   |         |

Please note: Drawings are not to scale

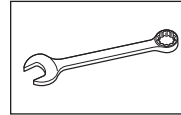
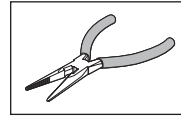
Page 1 of 2

| SERIAL NUMBER   | CATERHAM  | PACK NUMBER |     |         |
|---|---|-------------|-----|---------|
| 49  |   | 30P012A     |     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |     |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |     |         |
| No  | DESCRIPTION   | PART NUMBER | QTY | DRAWING |
| 12  | Washer M8<br>Plain Washer Heavy-Duty  | WPHM8       | 13  |         |
| 13  | Split pin 1/16" X 3/4"  | SP1/16X3/4  | 1   |         |
| 14  | Split pin 7/64" X 3/4"  | SP7/64X3/4  | 1   |         |
| 15  | Washer 1/2"<br>Spring Washer Heavy-Duty   | WSH1/2      | 2   |         |
| 16  | Washer M8<br>Spring Washer Heavy-Duty   | WSHM8       | 3   |         |
| 17  | Washer 3/8" X 3/4"<br>Plain Washer Heavy-Duty                                     | WPH3/8      | 6   |         |
| 18  | Washer M6 X 25<br>Plain Washer Heavy-Duty   | WPHM6X25    | 2   |         |
| 19  | Washer M6<br>Plain Washer Heavy-Duty  | WPHM6       | 8   |         |
| 20  | Washer M5 X 20<br>Plain Washer Heavy-Duty   | WPHM5X20    | 1   |         |
| 21  | Bolt 1/2" X 1" UNF<br>Caphead bolt with plain section & imperial threaded section | BFCH1/2X1   | 1   |         |

Please note: Drawings are not to scale

Page 2 of 2

## TOOLS



10mm (x2)  
13mm (x2)

## TIPS

The clevis pivot does not want to be locked. Doing the fixings up tight and then loosening by 1/4 of a turn is a good guide.

**Grant P**

Connect the handbrake warning light connector onto the upper of the two terminals.

**Dan D**

The handbrake lever bracket should be mounted in the lower of the two holes.

**Anthony L**

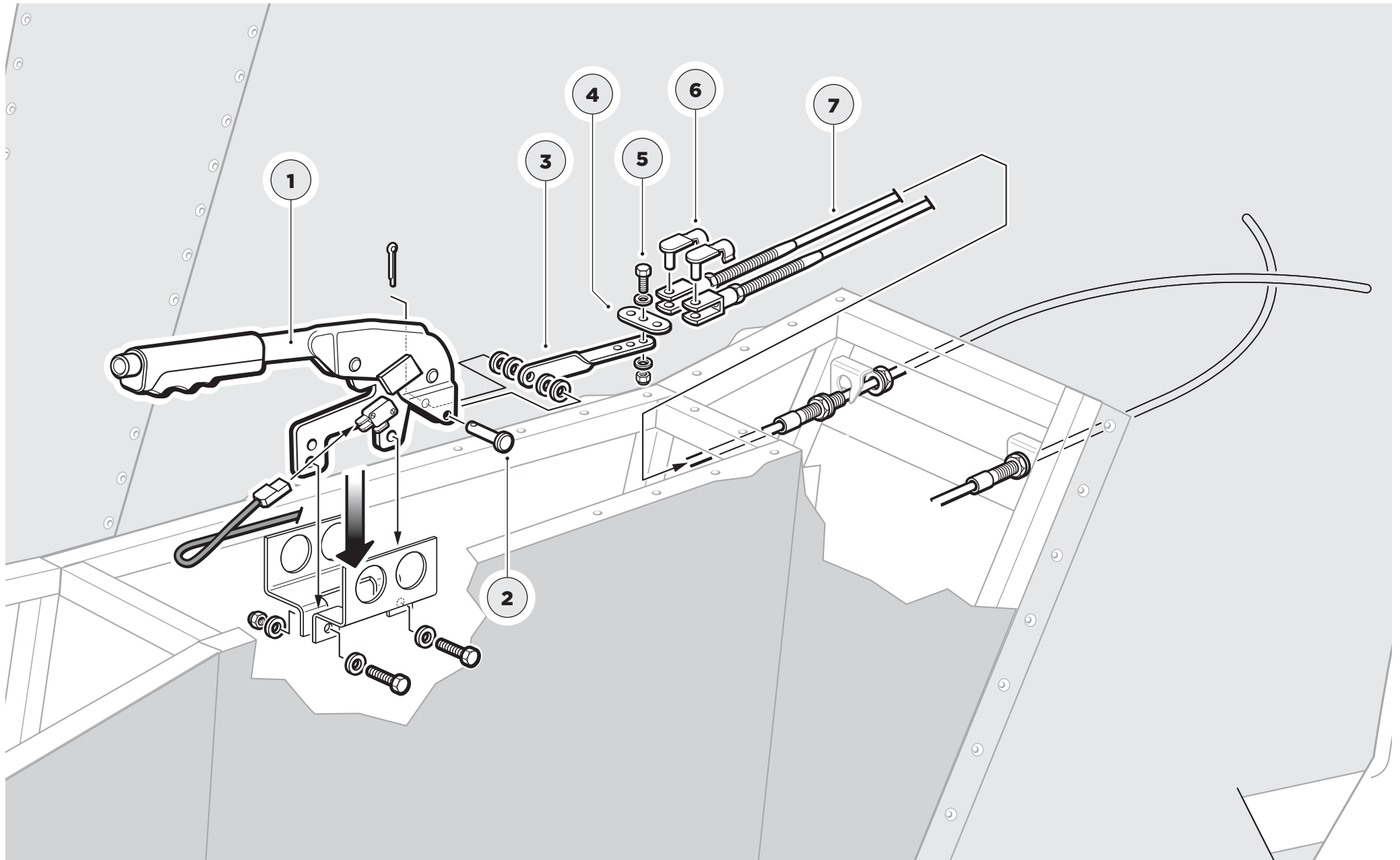
Use pliers to bend the legs of the split-pins once in place, which then holds them loosely in the clevis pins.

**Chris B**

After plugging on the connector, secure any excess wire with a cable tie.

**Dan P**

# FITTING THE HANDBRAKE



## FILLING THE DIFFERENTIAL OIL

### PARTS

- 1 Diff oil (S3 AX 80W-90)

### TOOLS



$\frac{3}{8}$ " Drive

### FIXINGS

### TIPS

You can use the square drive of the ratchet to loosen the filler plug.

**Tiago O**



Differential = 1.3L



*Now is a good time to take some photos*



Have you applied for your IVA yet?



## FITTING THE EXHAUST

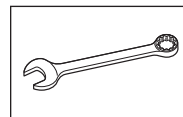
### PARTS

- 1 Catalyst
- 2 Link pipe
- 3 Silencer
- 4 Mounting brackets (x2)
- 5 Bobbins (x2)
- 6 Clamps (x2)
- 7 Lambda sensor

### TOOLS



10mm  
13mm



13mm  
22mm

### FIXINGS

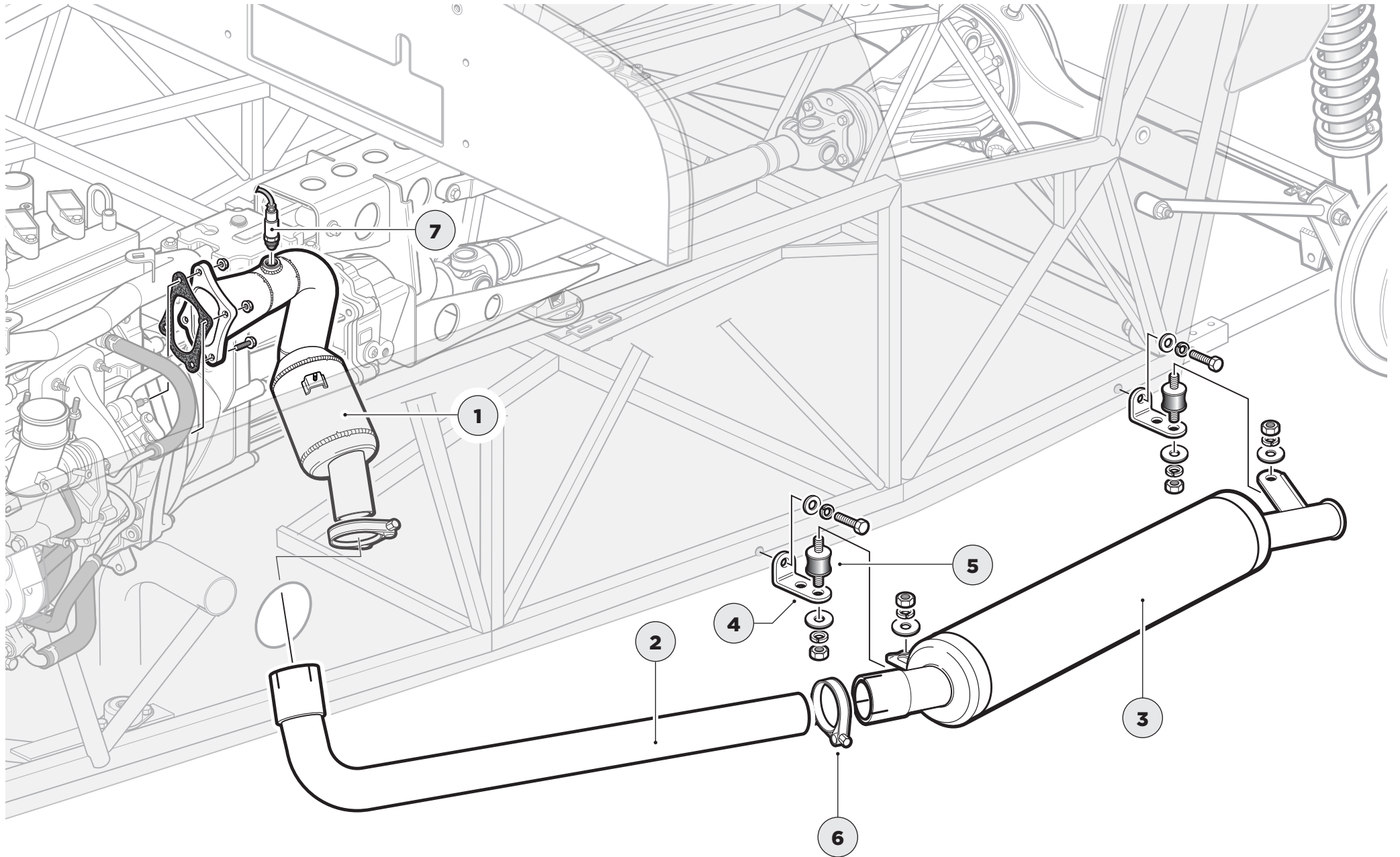
Fixings packed with exhaust

### TIPS

*Don't overtighten the bobbins  
as they can twist and split.*

Harry P

# FITTING THE EXHAUST

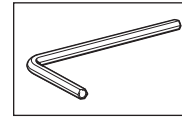


# GIVING IT SOME DIRECTION

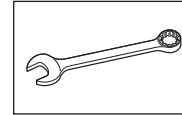
## PARTS

- 1 Lower steering column
- 2 Upper steering column
- 3 Steering column clamp
- 4 Steering column clamp plate
- 5 Grub screw
- 6 Steering column bush

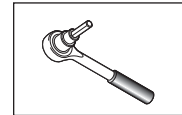
## TOOLS



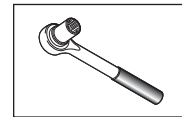
5mm  
4mm



7/16"  
10mm  
13mm



7/32"



11/16"



## FIXINGS

| Pack B   |                                       | CATERHAM        |     | 55                              |              |
|--|---------------------------------------|-----------------|-----|---------------------------------|--------------|
|  |                                       | PACK NUMBER     |     | 34C600008                       |              |
|  |                                       | RELEASED NOV-13 |     |                                 |              |
| STEERING DeDION CARS (METRIC)                                    |                                       |                 |     |                                 |              |
| This pack may include extra fasteners to cover different options |                                       |                 |     |                                 |              |
| ITEM   | BASIC DESCRIPTION                     | PART NUMBER     | QTY | USED ON                         | ILLUSTRATION |
| 1  | BA Locknut 1/2" x 1 1/2" (20 TPI)     | BA202012        | 4   | Rack clamps                     |              |
| 2  | BB Bolt 1/2" x 1 1/2"                 | BF1443 1/2      | 2   | Column clamp                    |              |
| 3  | BC Ball Ball w/ Grub 10.5"            | BMD040          | 2   | Column to rack universal joint  |              |
| 4  | BD Nylon Nut 1" w/Grub                | NF11112         | 1   | Steering wheel boss             |              |
| 5  | BE Plain Nut 1"                       | NF11112         | 2   | Track rod lock nut              |              |
| 6  | BF Plain Nut 1/2" w/Grub              | NF11115         | 1   | Column clamp grub screw locknut |              |
| 7  | BG Nylon Nut M8                       | NM11118         | 2   | Column to rack universal joint  |              |
| 8  | BH Nylon Nut 3/8"                     | NM11118         | 4   | Steering rack clamp             |              |
| 9  | BJ Plain Washer 1/2" x 1 1/2" Chained | WF11112         | 1   | Steering wheel boss             |              |
| 10   | BK Plain Washer 1/2" Heavy Duty       | WF11114         | 6   | Rack clamps and column clamp    |              |
| 11   | BL Spring Washer 1/2" Heavy Duty      | WS11114         | 2   | Column clamp                    |              |

x2  
x2  
x1  
x1  
x2  
x1  
x2  
x2

## TIPS

Check clearance along the length of the steering column to ensure that it does not foul against any components. If necessary, rotate the steering rack.

**Dan P**

Put the clamp in the middle of column with the grooved face of the clamp plate ④ against the column.

**Jamie A**

Once the steering rack is in the correct position, you can go ahead and tighten the rack clamp fixings.

**Harrison P**

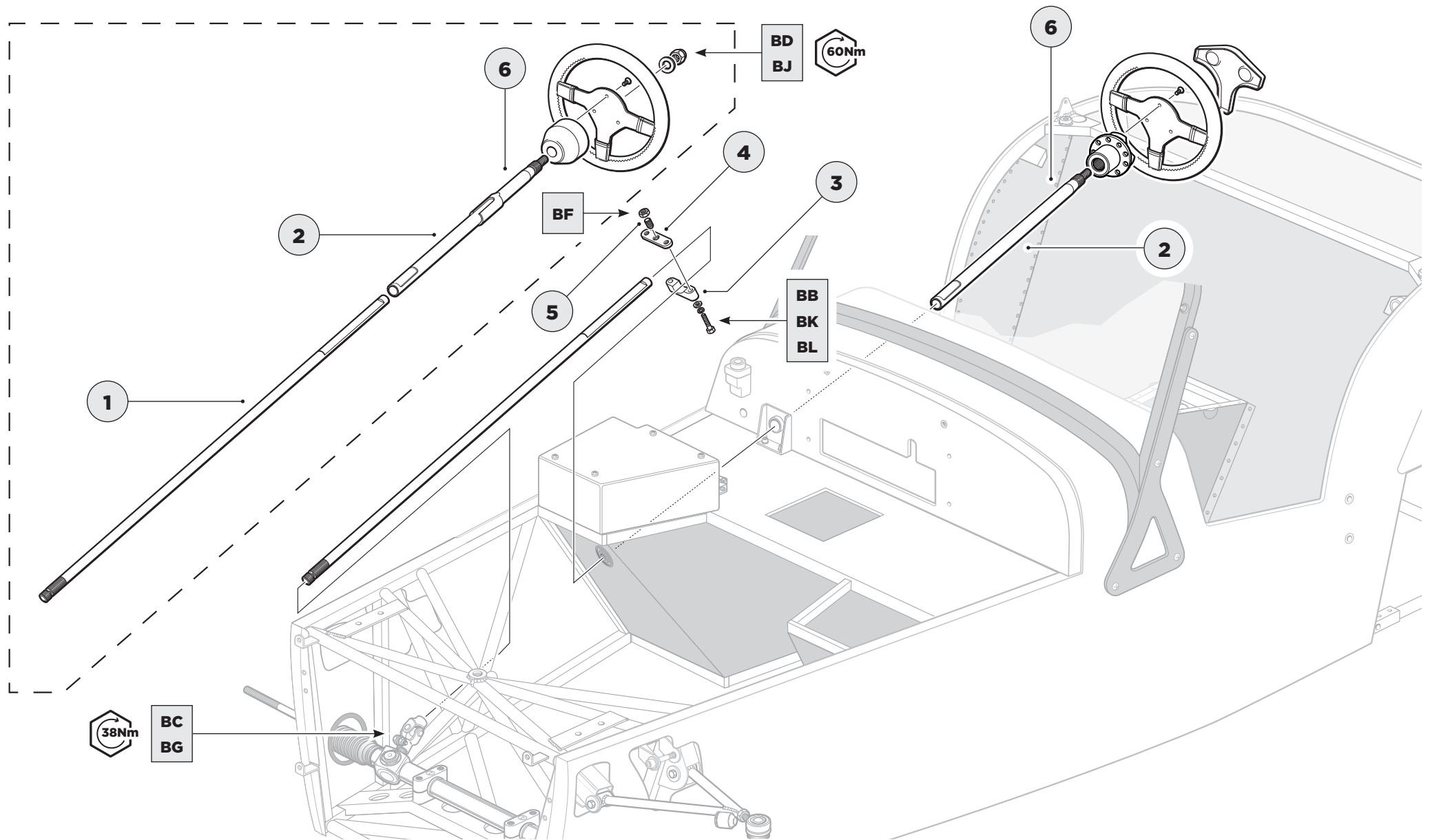
Grease the steering bushes.

**Lee A**

When fitting the steering column clamp, begin by fitting the two clamp bolts, then tighten the grub screw and finally secure it with the locknut.

**Tiago O**

# GIVING IT SOME DIRECTION

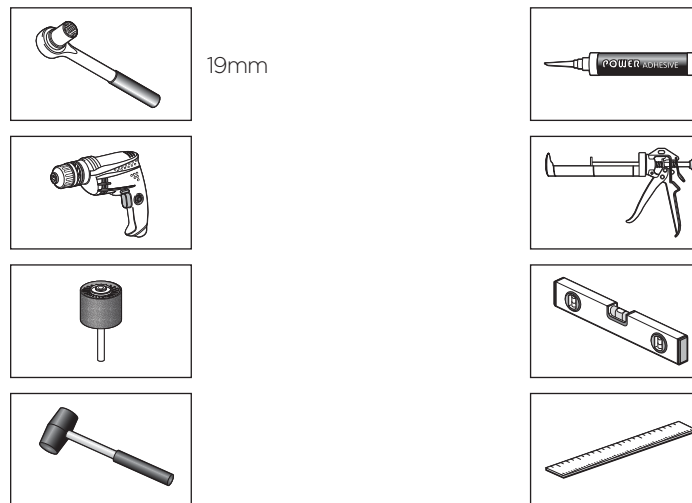


# JUST WING IT

## PARTS

- 1** Cycle wing (x2)
- 2** Wheel (x2)
- 3** Wheel nuts (x8)

## TOOLS



## FIXINGS

## TIPS

Key the wing & wingstay before using adhesive.

**John S**

You may need to bend the arms of the wingstay to make the wing level.

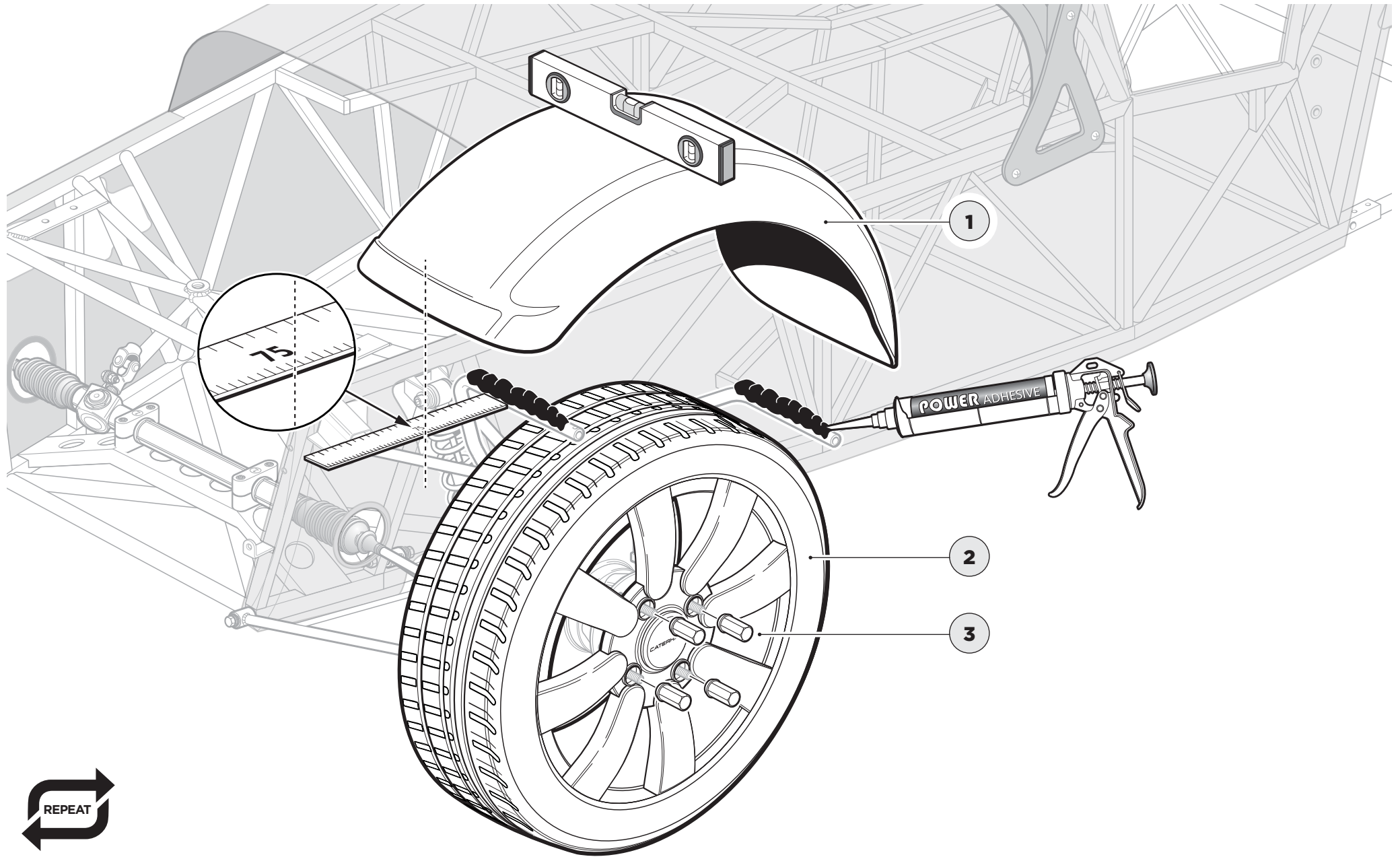
**Anthony L**

Do a 'dry run' first to make sure the wings are level before using power adhesive.

**Chris N**

The distance from the front edge of the wing to the wingstay should be 75mm.

**Lee A**

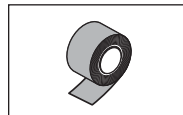


## TAPE IN PLACE FOR 24 HOURS

---

### PARTS

### TOOLS



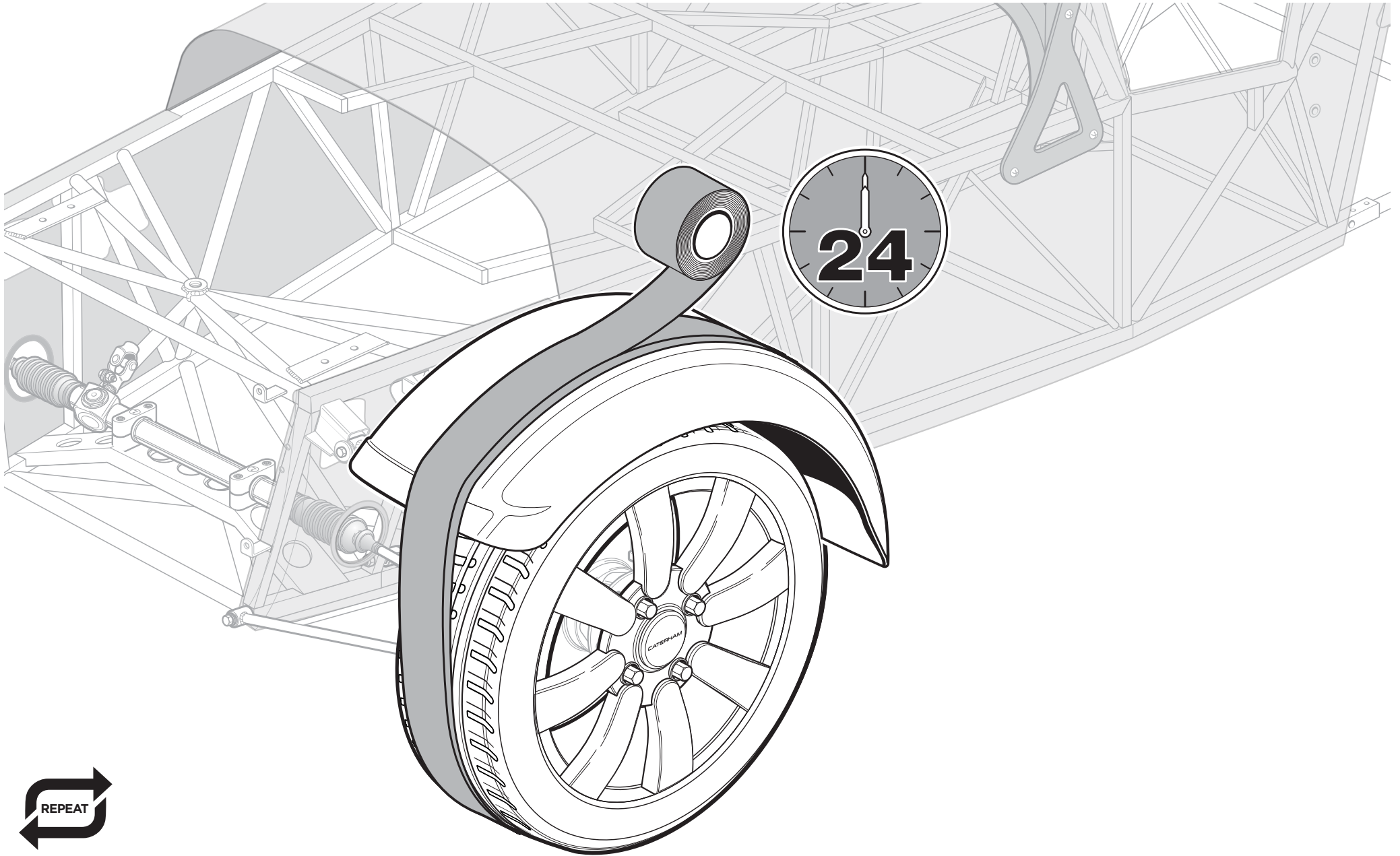
### FIXINGS

### TIPS

Once you are happy with the wing position, apply tape with one hand whilst preventing the wheel from turning with the other.

**Anthony L**

**TAPE IN PLACE FOR 24 HOURS**

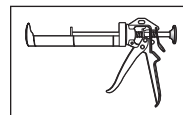
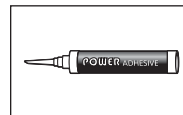




## SOME EXTRA ADHESIVE UNDERNEATH

### PARTS

### TOOLS



### FIXINGS

### TIPS

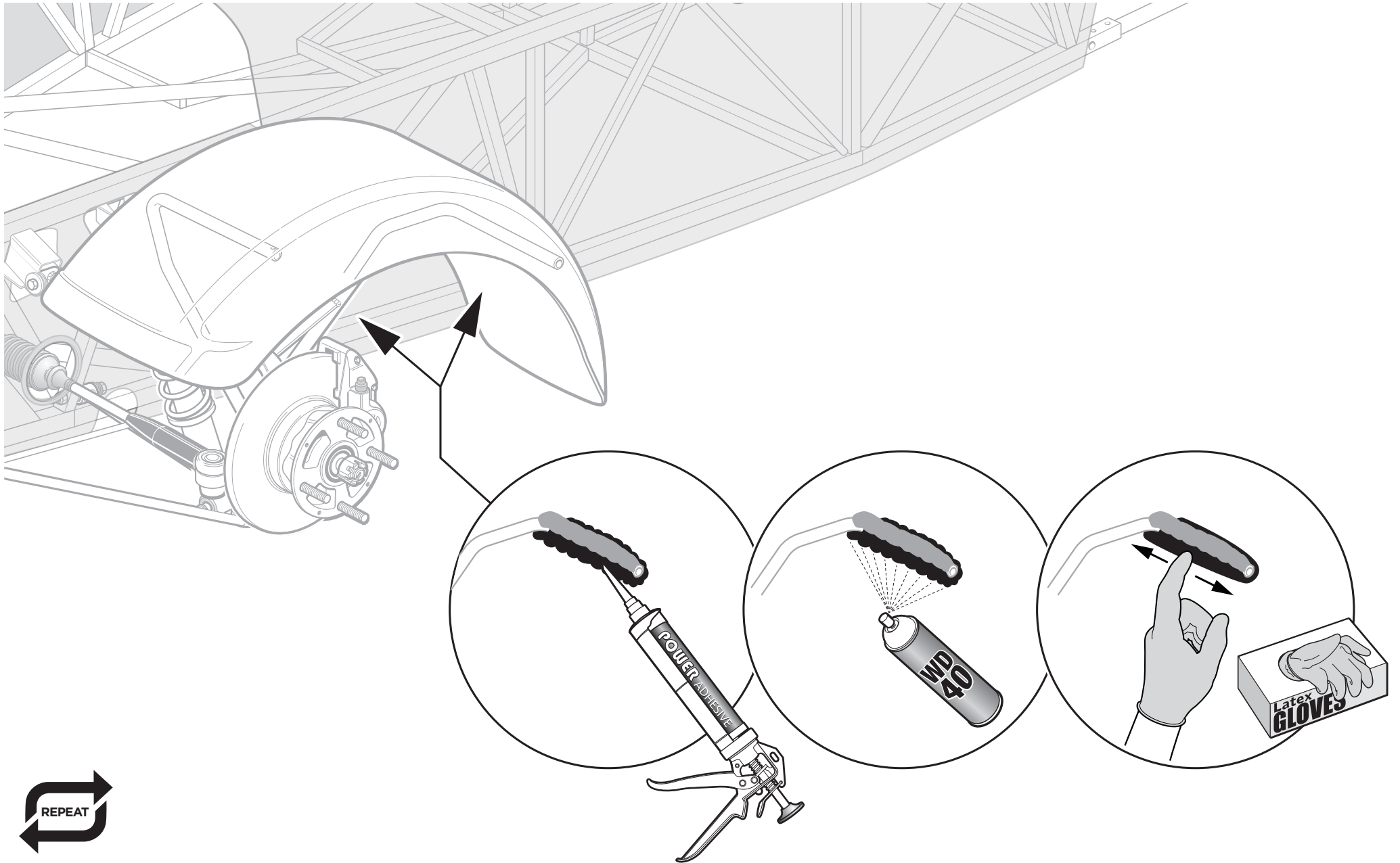
The WD40 will help spread the adhesive.

**Mick F**

Make sure that you do not cover up the wingstay hole which you drilled earlier.

**Anthony L**

## SOME EXTRA ADHESIVE UNDERNEATH

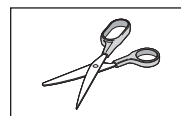
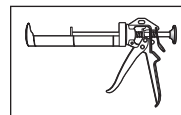
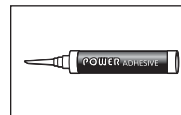


## FINISH WITH TRIM

### PARTS

- 1** Rubber trim

### TOOLS



### FIXINGS

### TIPS

*It's best to test fit and cut to size before sticking.*

**Chris B**

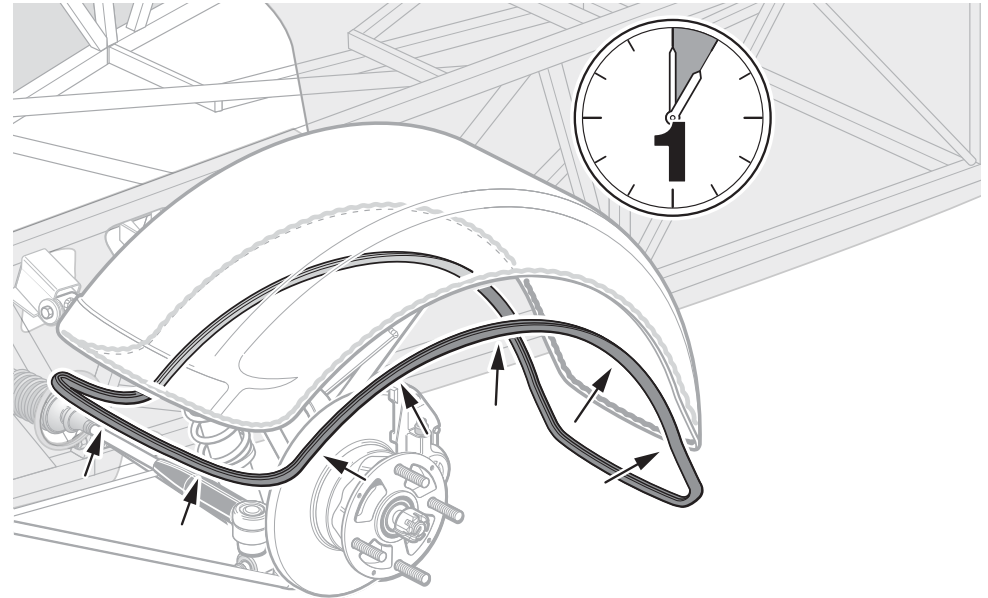
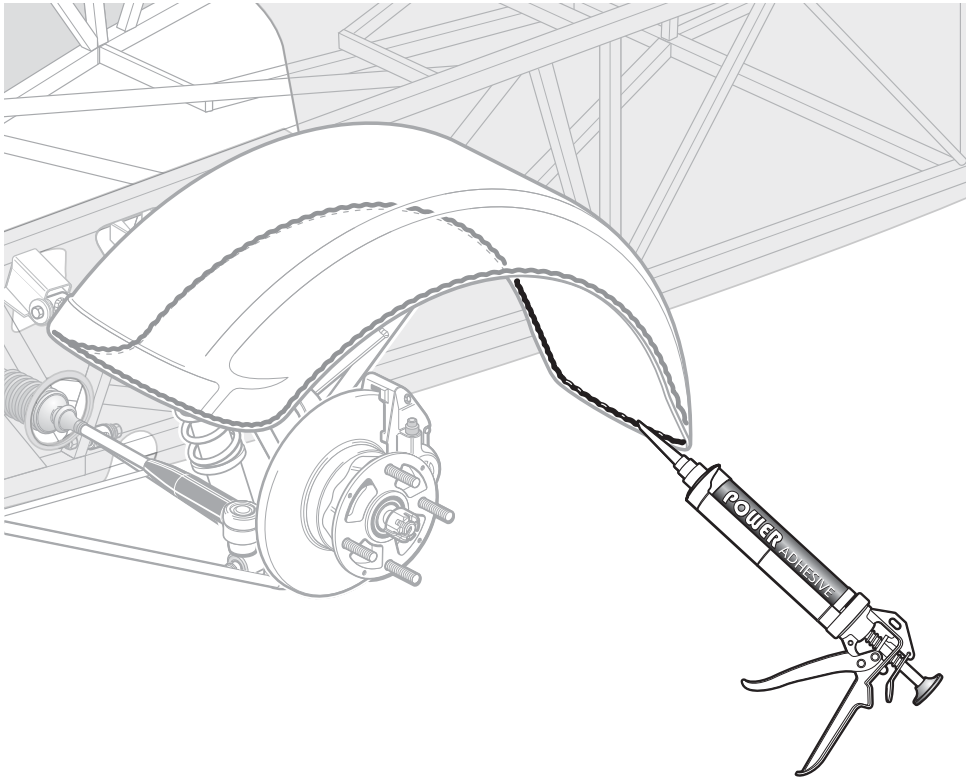
*Fit the wider section on the underside of the cycle wing.*

**Mick F**

*Hide the rubber trim join on the inside of the cycle wing, behind the rear leg of the wingstay. It will look much neater.*

**Rich T**

## FINISH WITH TRIM

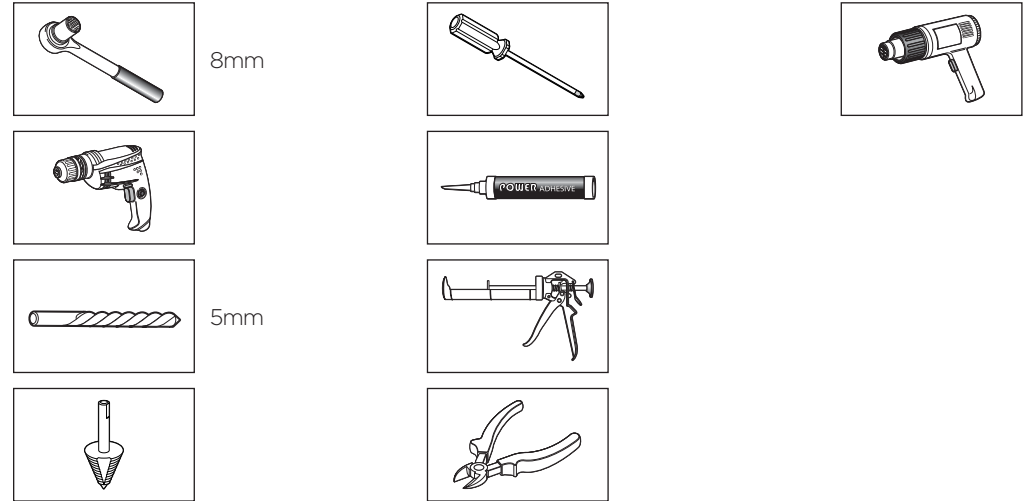


# FITTING THE SIDE REPEATERS

## PARTS

- 1 Side repeaters (x2)
- 2 Cable ties
- 3 Cable tie brackets (x2)
- 4 Heat shrink
- 5 Grommets (x2)

## TOOLS



## FIXINGS

| Pack C           |                                | CATERHAM    |     | 45   |              |
|------------------|--------------------------------|-------------|-----|--|--------------|
| LIGHTING & HORNS |                                |             |     |  |              |
| ITEM             | BASIC DESCRIPTION              | PART NUMBER | QTY | USED ON  | ILLUSTRATION |
| 1                | Screw 12 x 17<br>Self-tapping  | 71262       | 6   | Indicator assembly to indicator post               |              |
| 2                | Screw 8 x 11<br>Black Superfin | 71277       | 2   | Side repeater earth on wingstay                    |              |
| 3                | Screw 12 x 17<br>Self-tapping  | 71272       | 4   | Rear light cluster upper fixing                    |              |
| 4                | Screw 12 x 17<br>Self-tapping  | 71273       | 4   | Rear light cluster lower fixing                    |              |
| 5                | Wash Hex 10                    | 140176      | 2   | Horn bracket to mounting back plate (140221010)    |              |
| 6                | Wash Washnut 10                | 140175      | 2   | Horn bracket to mounting back plate (140221010)    |              |
| 7                | Drill bit 6.5<br>Twist 1.2     | 140170      | 1   | Through-shooting track system & sensor (140221010) |              |
| 8                | Wash Washnut 10                | 140175      | 2   | Drill Headset                                      |              |
| 9                | Wash Hex 10                    | 140176      | 1   | Horn base  |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 1

x2

## TIPS

Trying to feed the wire out from inside the wingstay can be tricky. Do this before fitting the grommet into the wingstay hole.

**Rich T**

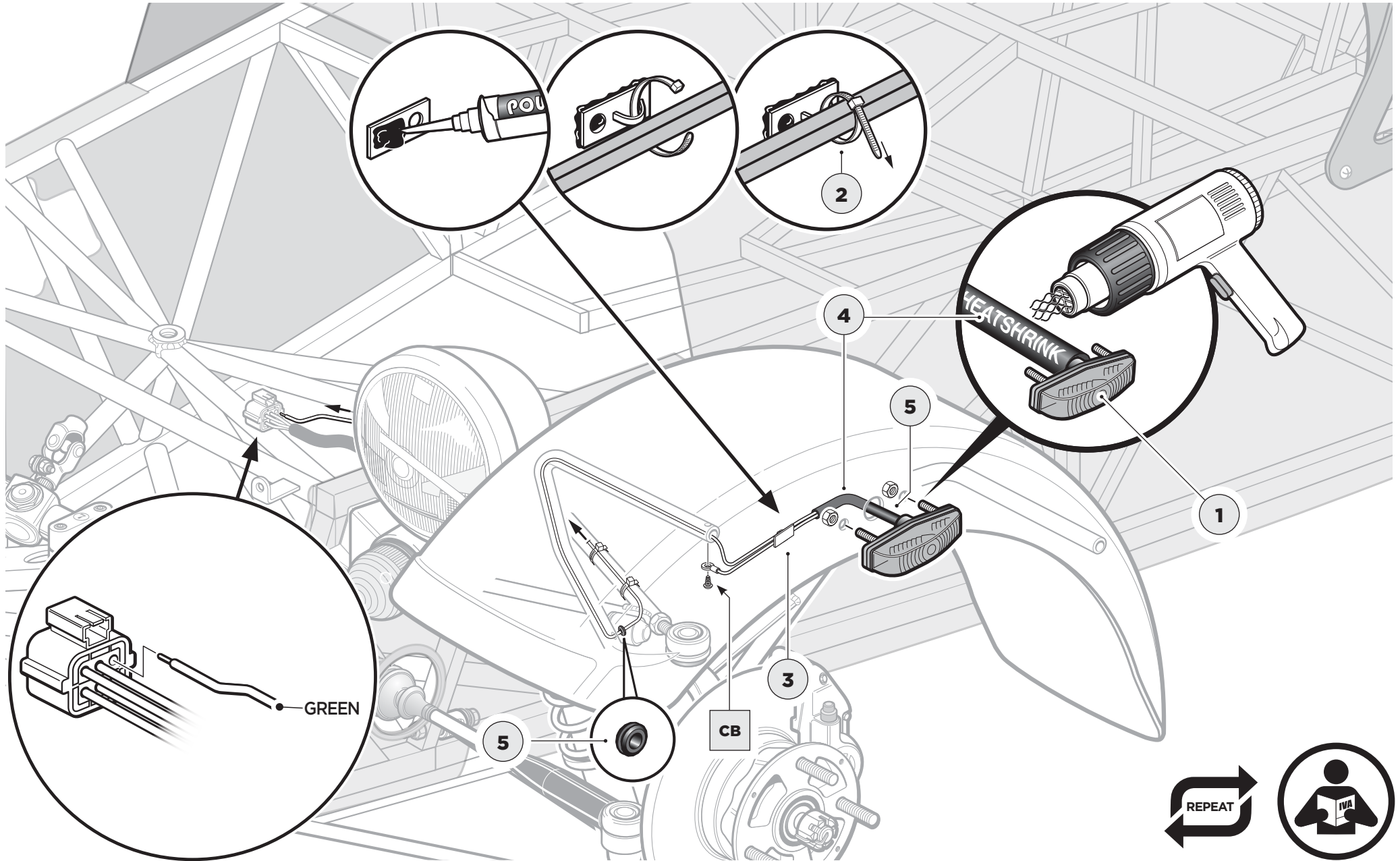
Before securing the wire to the upper wishbone, make sure that the steering can reach full lock without the side repeater wire snagging.

**Tiago O**

The side repeater holes are pre-drilled with smaller pilot holes. Enlarge the outer pilot holes to 5mm and enlarge the centre hole to 13mm, but go slowly as you do not want to damage the paint!

**Jamie A**

# FITTING THE SIDE REPEATERS

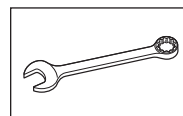
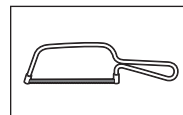
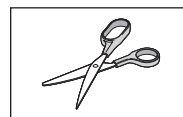


# FITTING THE REAR WINGS

## PARTS

- 1** Rear wing (x2)

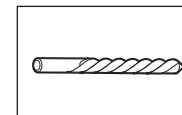
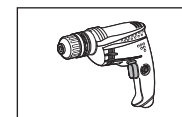
## TOOLS



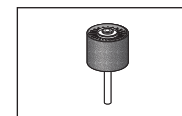
8mm



8mm



8mm



## FIXINGS

| Pack <b>Q</b>  |                                    | <b>CATERHAM</b> |     | 31                         |              |
|--|------------------------------------|-----------------|-----|----------------------------|--------------|
|  |                                    | PART NUMBER     |     | 3AC20017A                  |              |
| REAR WINGS   |                                    |                 |     |                            |              |
| This pack may include extra fasteners to cover different options |                                    |                 |     |                            |              |
| ITEM   | BASIC DESCRIPTION                  | PART NUMBER     | QTY | USED ON                    | ILLUSTRATION |
| 1  | OA<br>Self Drilling<br>M5 X 20     | 5MSK20          | 20  | Rear Wings                 |              |
| 2  | OB<br>Nyloc Nut<br>M5              | N5NFF5          | 10  | Rear wings through<br>boot |              |
| 3  | OC<br>Flare Washer<br>3/16" X 3/4" | WFF516X3/4      | 30  | Wing washers               |              |
| 4  | OD<br>Wing Pin<br>1/4" X 1"        | 7502            | 4   | Between wing and<br>body   |              |

x20

x10

x30

x4

## TIPS

Cut the supplied piping in half and it will be enough for both wings.

**Rich T**

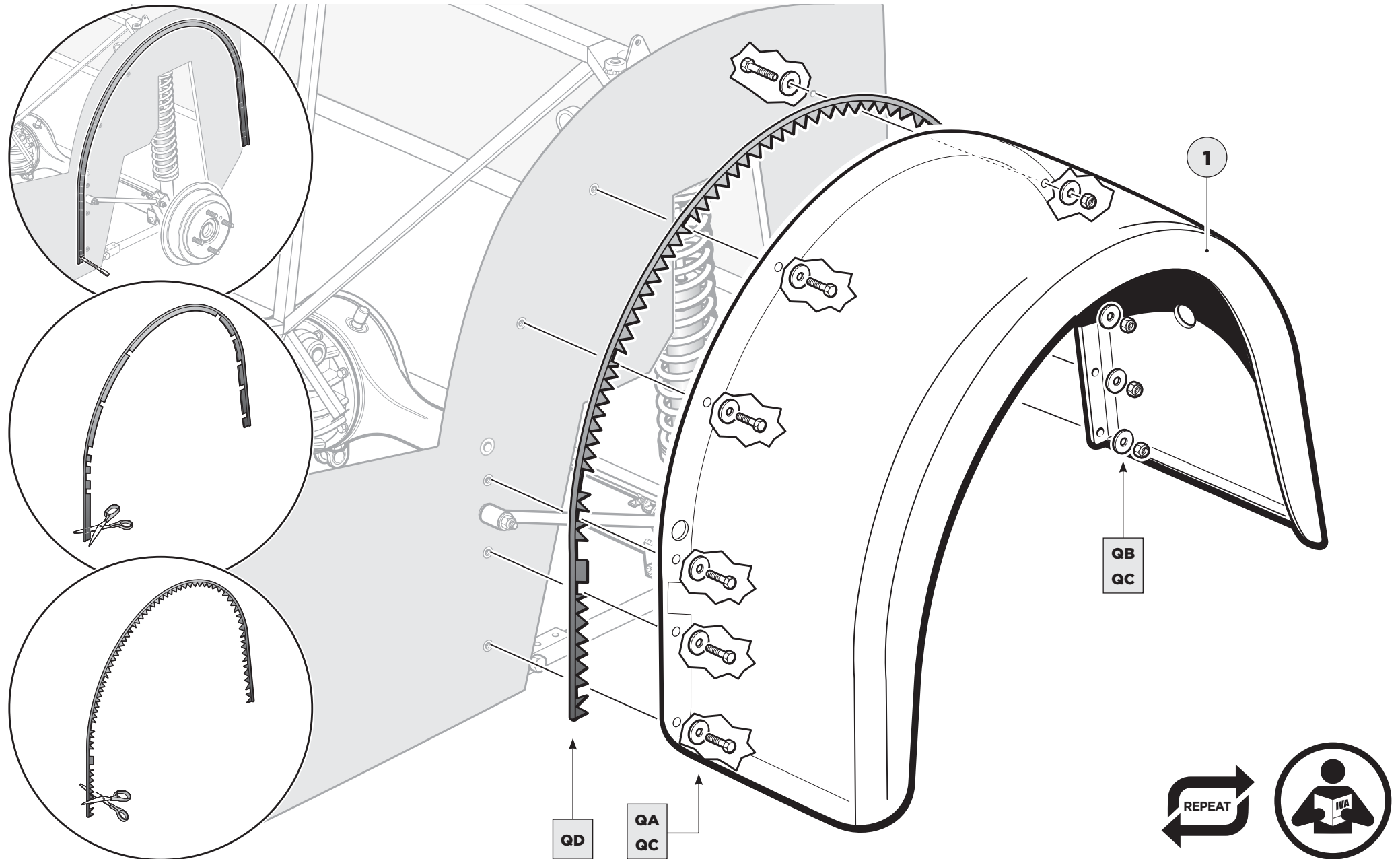
You may need to clear the wing mounting holes with a drill bit.

**Chris N**

A slot will need to be cut to make way for the radius arm. Cut with a hacksaw and neaten with a drum sander.

**Lee B**

# FITTING THE REAR WINGS



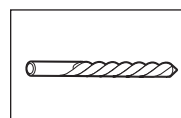
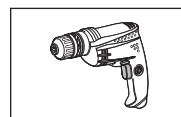
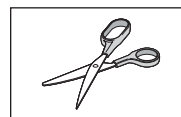


# ADD THE WING PROTECTORS

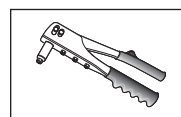
## PARTS

- 1 Wing protector (x2)

## TOOLS



1/8"



## FIXINGS

For stainless steel protectors

| Pack <b>O</b>  |                             | <b>CATERHAM</b> |     | <small>Part Number</small><br>PACK NUMBER<br>3ACZ0016A |              |
|--|-----------------------------|-----------------|-----|--|--------------|
| WING PROTECTORS STAINLESS STEEL<br><small>This pack may include extra fasteners to cover different options</small> |                             |                 |     |  |              |
| ITEM   | BASIC DESCRIPTION           | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 1  | OA<br>Rivet<br>1/8" X 0.51" | 1661-0414       | 30  | Wing protector to wing                                 |              |
| 2  | OB<br>Wing Plug             | 76901           | 2m  | Between wing protector and wing                        |              |
| <small>Drawings are for illustrative purposes only and are not to scale. Page 1 of 1</small>                       |                             |                 |     |  |              |

For carbon fibre protectors

| Pack <b>P</b>   |                                   | <b>CATERHAM</b> |     | <small>Part Number</small><br>PACK NUMBER<br>3ACZ0016A |              |
|---|-----------------------------------|-----------------|-----|--|--------------|
| WING PROTECTORS CARBON FIBRE<br><small>This pack may include extra fasteners to cover different options</small> |                                   |                 |     |  |              |
| ITEM  | BASIC DESCRIPTION                 | PART NUMBER     | QTY | USED ON  | ILLUSTRATION |
| 1   | PA<br>Rivet Black<br>1/8" X 0.51" | 1610-01046      | 30  | Wing protector to wing                                 |              |
| 2   | PB<br>Wing Plug                   | 76901           | 2m  | Between wing protector and wing                        |              |
| <small>Drawings are for illustrative purposes only and are not to scale. Page 1 of 1</small>                    |                                   |                 |     |  |              |

## TIPS

When fitting the wing protector, start with the top hole closest to the body. Whilst holding the wing protector flat against the wing, work your way across the top and then evenly down the sides.

**Chris B**

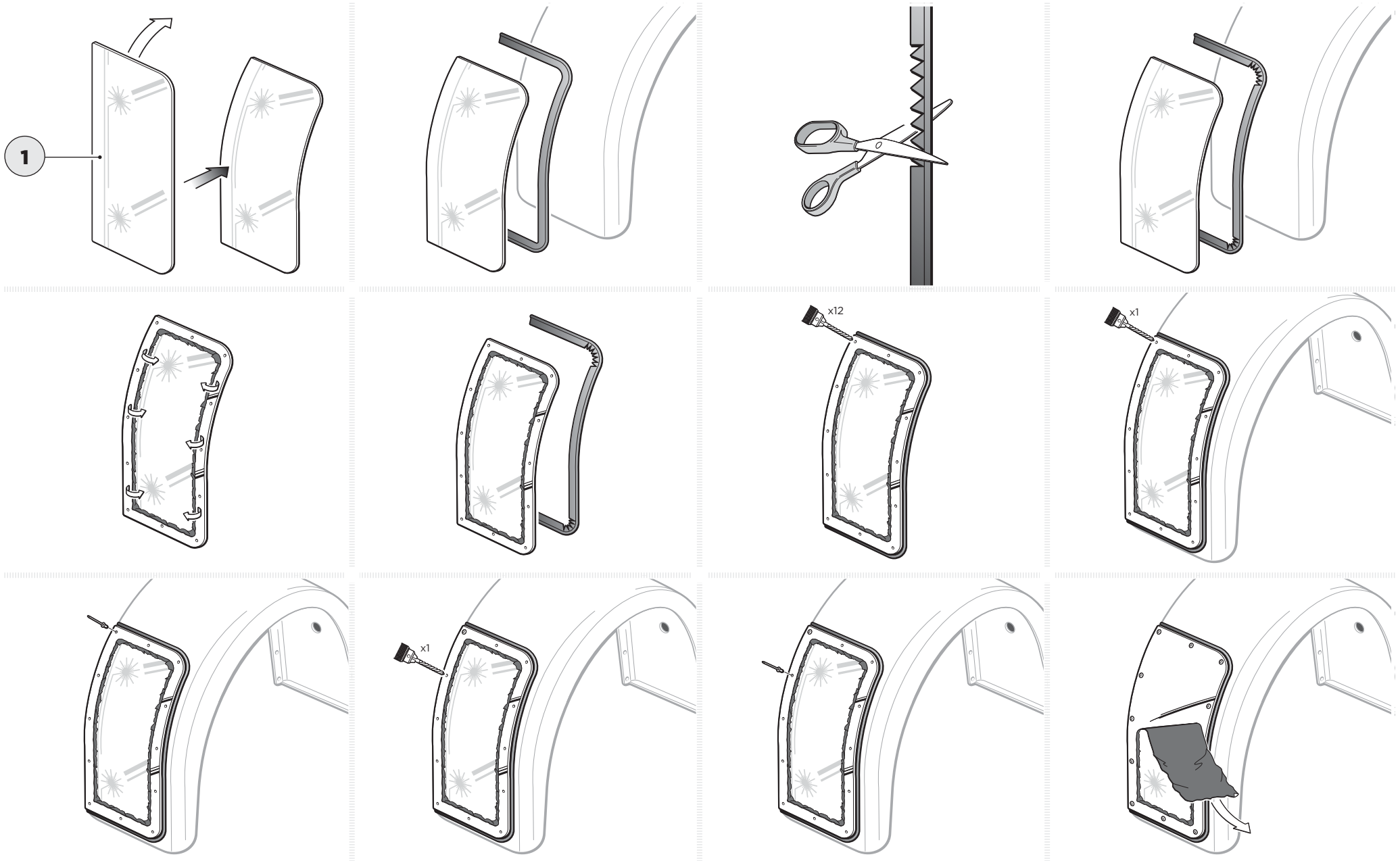
Carbon fibre protectors will not have the protective film shown.

**Anthony L**

Position the wing protector slightly above the bottom edge of the wing, so that the piping will sit flush with the bottom of the wing.

**Harrison P**

# ADD THE WING PROTECTORS

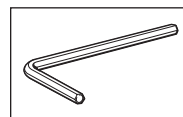


## FITTING THE REAR LIGHTS

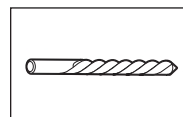
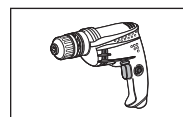
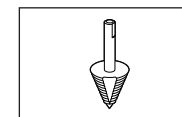
### PARTS

- 1 Light cluster (x2)
- 2 Light housing (x2)
- 3 Rubber gasket (x2)
- 4 Spacer (x4)
- 5 Bolt (x4)
- 6 P-clip (x2)

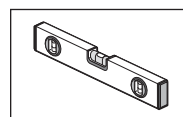
### TOOLS



7/16"



10mm



### FIXINGS

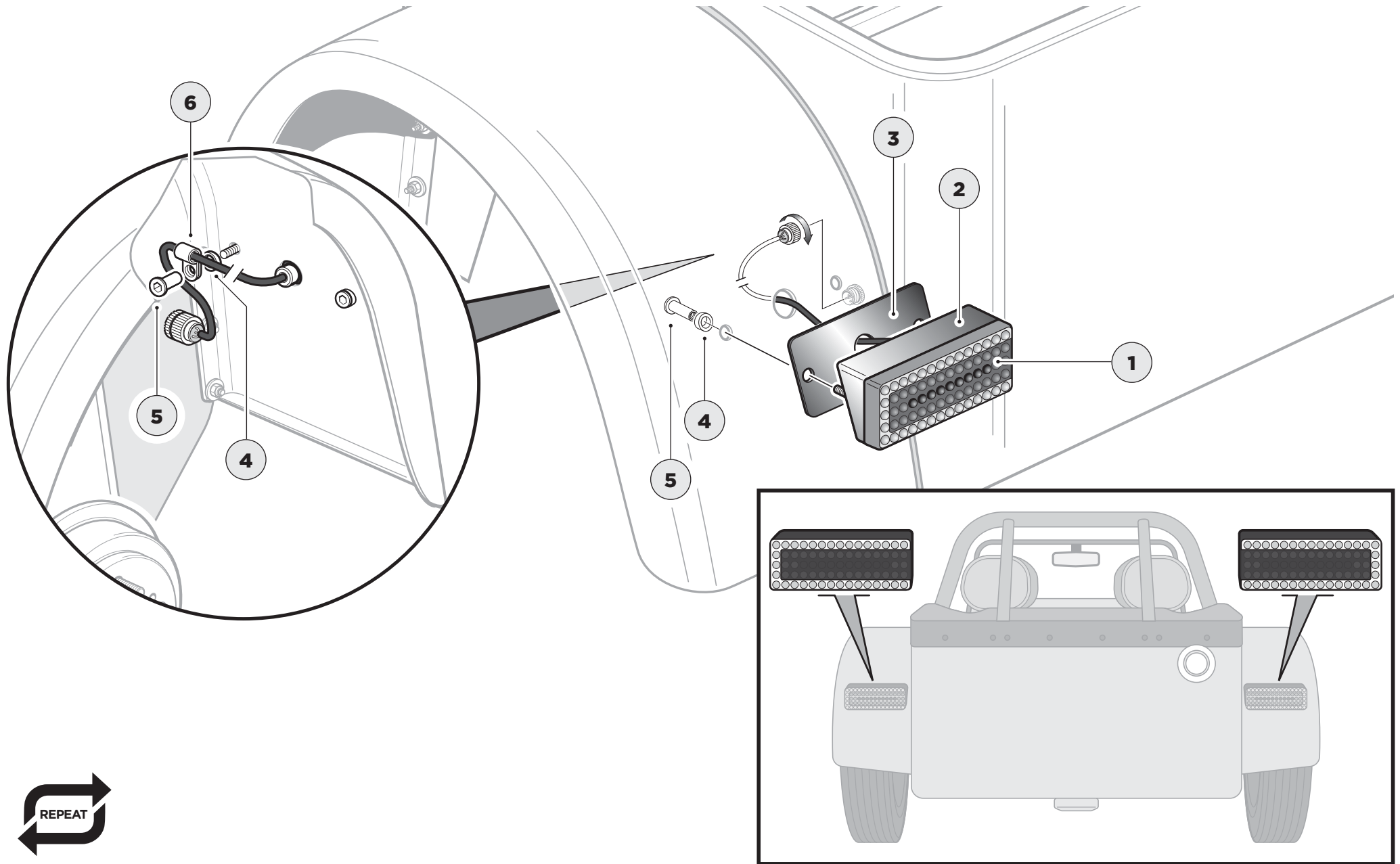
Fixings packed in lighting box

### TIPS

The rear light cluster holes are pre-drilled with smaller pilot holes. Enlarge the outer pilot holes to 10mm and enlarge the centre hole to 32mm, but go slowly as you do not want to damage the paint.

**Tiago O**

# FITTING THE REAR LIGHTS

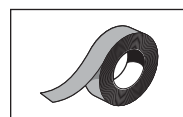
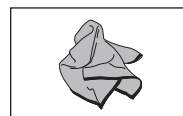
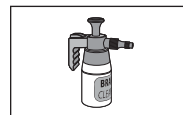
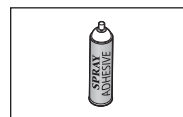


# FITTING THE TUNNEL CARPET

## PARTS

**1** Carpet

## TOOLS



## FIXINGS

## TIPS

Brake cleaner is great for removing any excess glue.

**John K**

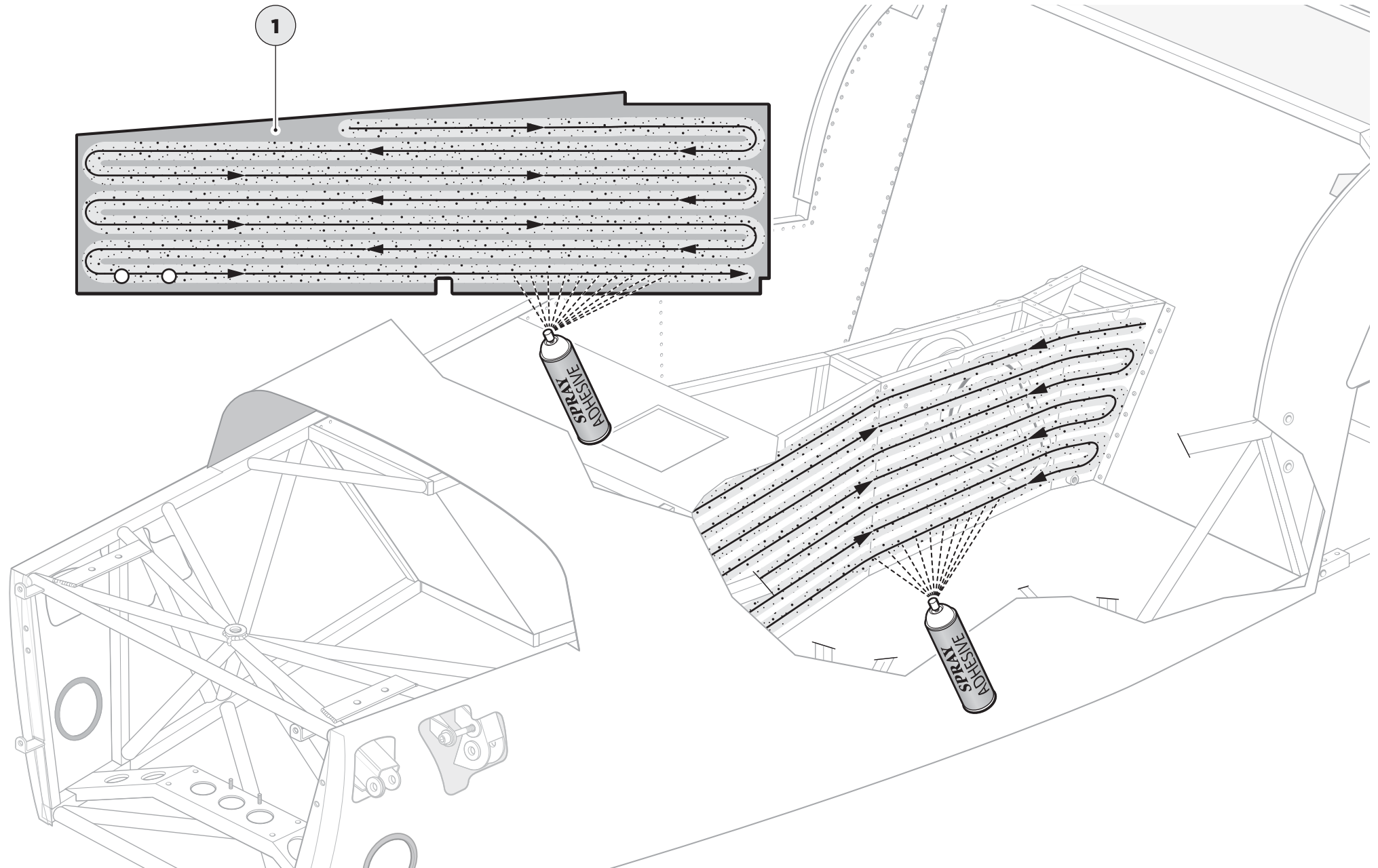
You can use masking tape to prevent glue from getting where it isn't wanted.

**Harry P**

Make sure that you apply glue to both the panel and the carpet, paying extra attention to the edges.

**Lee B**

# FITTING THE TUNNEL CARPET

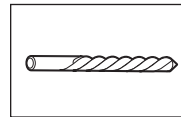
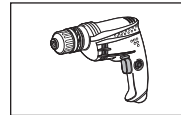
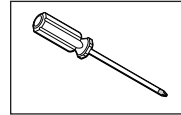
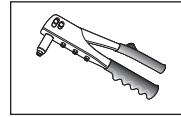


# THIS IS A COVER UP

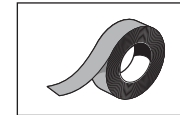
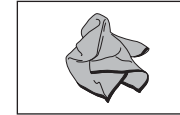
## PARTS

- 1 Tunnel blanking plate
- 2 Boot boards
- 3 Boot carpet
- 4 Fuel filler neck cover
- 5 Grommets (x2)
- 6 Rubber trim

## TOOLS



1/8"  
5/32"  
10mm



## FIXINGS

| SERIAL NUMBER  | CATERHAM                         |                     | PACK NUMBER |         |
|--|----------------------------------|---------------------|-------------|---------|
| 57   |                                  |                     | ZCH01       |         |
| <b>FASTNER PACK – CHASSIS FIXTURE (KIT CAR ONLY)</b>   |                                  |                     |             |         |
| <small>Please note: This pack may include extra fasteners to cover different options</small> |                                  |                     |             |         |
| No   | DESCRIPTION                      | PART NUMBER         | QTY         | DRAWING |
| 1  | Screw 6 x 1/2" Pan Head Post     | PDB                 | 6           |         |
| 2  | Rivet 1/8" X 0.39"               | 1661-0410           | 4           |         |
| 3  | Rivet 1/8" X 0.51"               | 1661-0414           | 4           |         |
| 4  | Rivet 5/32" X 0.47"              | 1661-0512           | 5           |         |
| 5  | Rivet – black 5/32" X 0.47"      | 1610-01015          | 110         |         |
| 6  | Rivet – black 5/32" X 0.59"      | 1610-9931           | 6           |         |
| 7  | Screw 8mm X 1/2" superflange     | 71077               | 4           |         |
| 8  | Screw 10mm X 3/4" superflange    | 71080               | 14          |         |
| 9  | hose clip 9.5mm to 12mm          | SGT 9.5-12          | 2           |         |
| 10   | Setscrew Panhead opzt 5mm X 16mm | 76227               | 2           |         |
| 11   | Cradle clip                      | KR6GS               | 5           |         |
| 12   | Setscrew Panhead Post 5mm X 35mm | SPHMSX35 map sensor | 2           |         |
| 13   | Setscrew Panhead Post 5mm X 16mm | 76227S              | 2           |         |

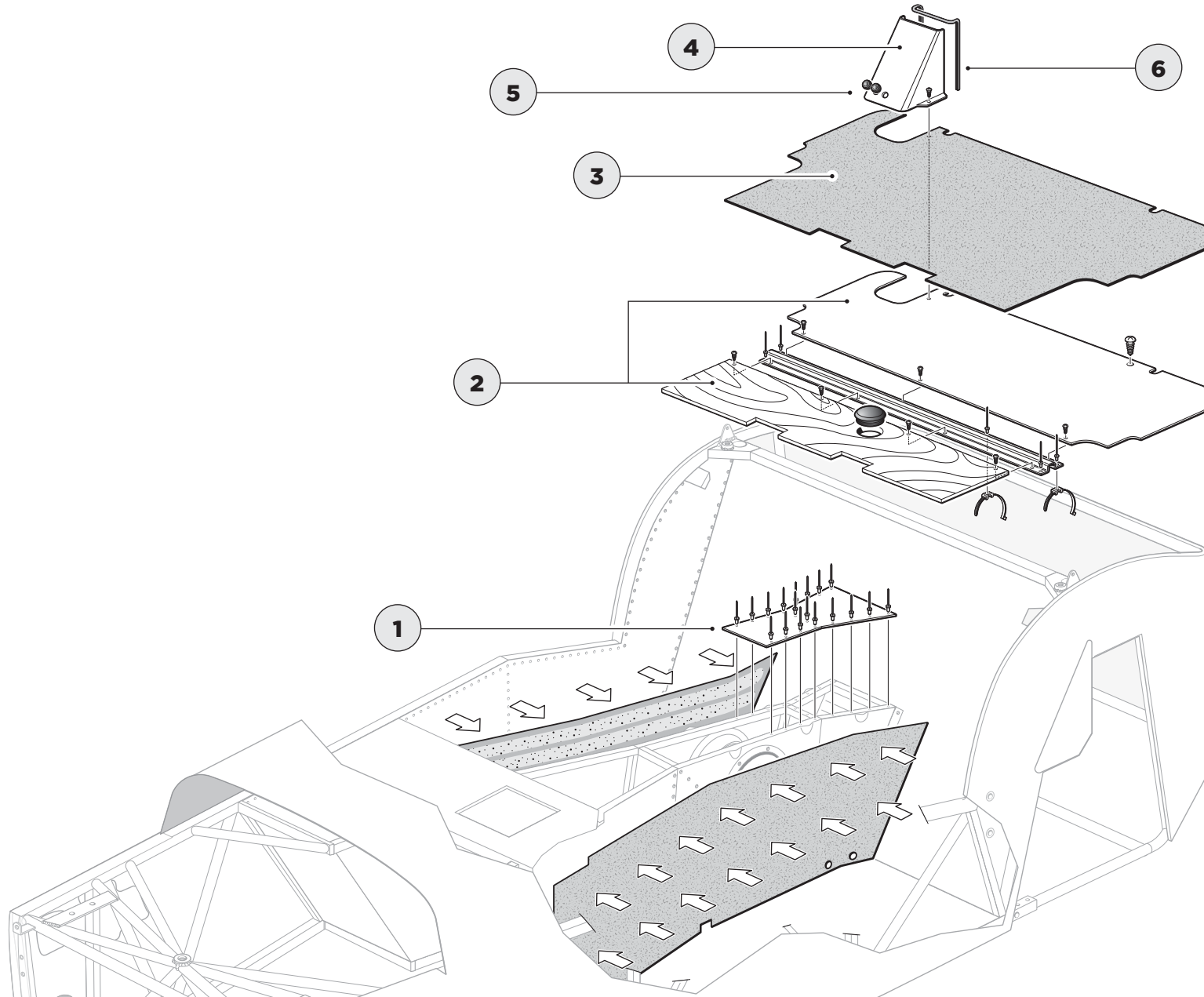
Please note: Drawings are not to scale Page 1 of 1

## TIPS

You will need to drill a pair of holes in the front of the fuel filler neck cover in order to feed through your washer pump wires and washer tube from under the boot floor.

**Tiago O**

# THIS IS A COVER UP



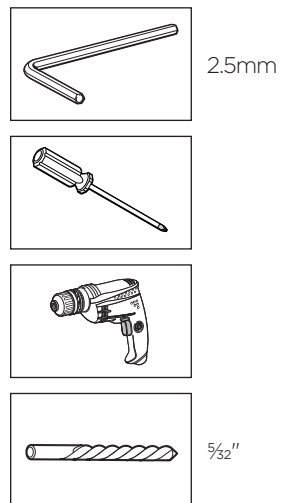


# NOW FIT THE TUNNEL TOP

## PARTS

- 1** Tunnel top
- 2** Gear knob

## TOOLS



## FIXINGS

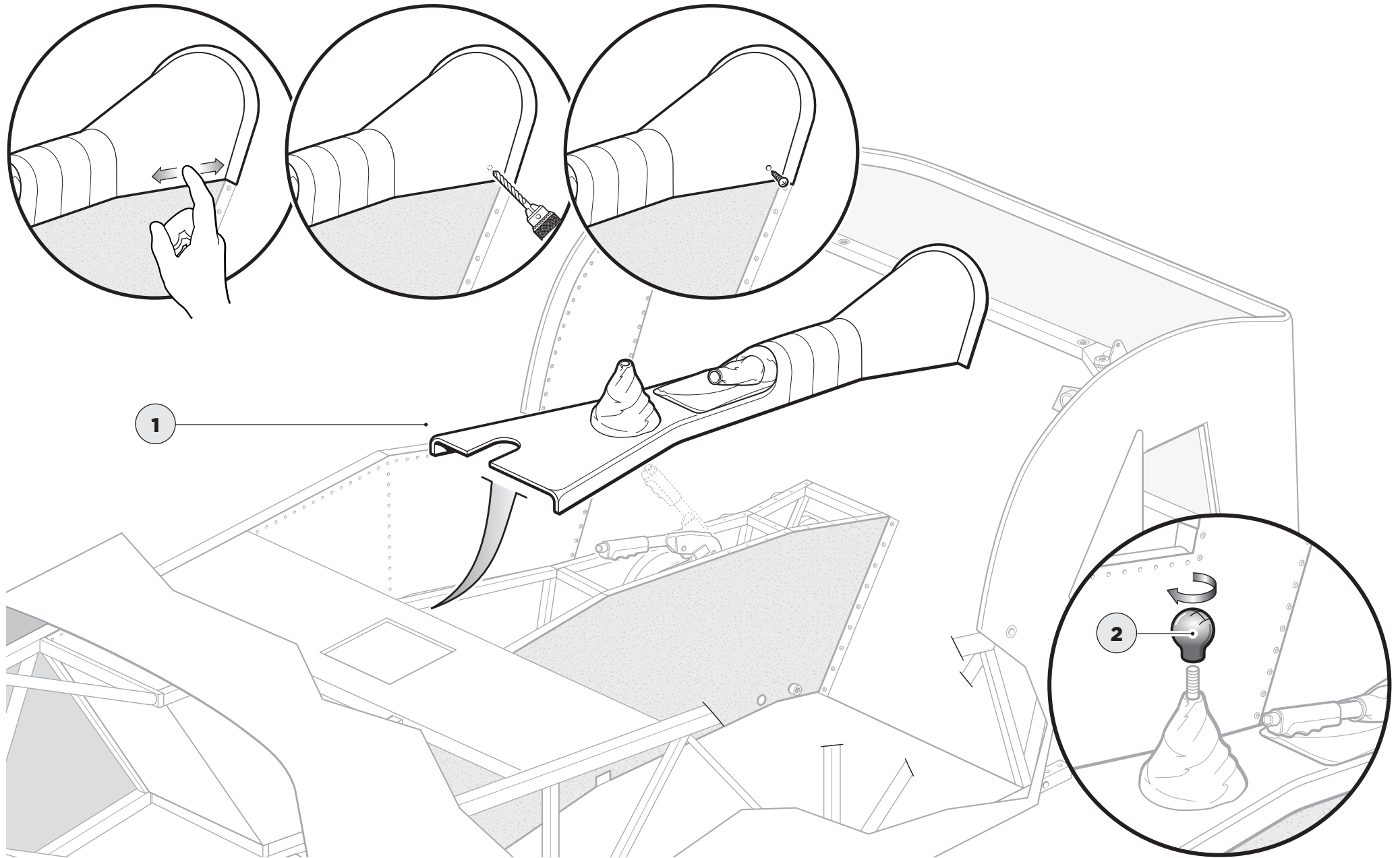
## TIPS

| SERIAL NUMBER   |                                  | CATERHAM            |     | PACK NUMBER |  |
|---|----------------------------------|---------------------|-----|-------------|--|
| 57  |                                  | CATERHAM            |     | ZCH01       |  |
| FASTNER PACK – CHASSIS FIXTURE (KIT CAR ONLY)                                 |                                  |                     |     |             |  |
| Please note: This pack may include extra fasteners to cover different options |                                  |                     |     |             |  |
| No  | DESCRIPTION                      | PART NUMBER         | QTY | DRAWING     |  |
| 1   | Screw 6 x 1/2" Pan Head Post     | PDB                 | 6   |             |  |
| 2   | Rivet 1/8" X 0.39"               | 1661-0410           | 4   |             |  |
| 3   | Rivet 1/8" X 0.51"               | 1661-0414           | 4   |             |  |
| 4   | Rivet 5/32" X 0.47"              | 1661-0512           | 5   |             |  |
| 5   | Rivet – black 5/32" X 0.47"      | 1610-01015          | 110 |             |  |
| 6   | Rivet – black 5/32" X 0.59"      | 1610-9931           | 6   |             |  |
| 7   | Screw 8mm X 1/2" superflange     | 71077               | 4   |             |  |
| 8   | Screw 10mm X 3/4" superflange    | 71080               | 14  |             |  |
| 9   | hose clip 9.5mm to 12mm          | SGT 9.5-12          | 2   |             |  |
| 10  | Setscrew Panhead opti 5mm X 16mm | 76227               | 2   |             |  |
| 11  | Cradle clip                      | KR6GS               | 5   |             |  |
| 12  | Setscrew Panhead Post 5mm X 35mm | SPHMSX35 map sensor | 2   |             |  |
| 13  | Setscrew Panhead Post 5mm X 16mm | 76227S              | 2   |             |  |

Please note: Drawings are not to scale

Page 1 of 1

## NOW FIT THE TUNNEL TOP



# BELT UP

## PARTS

## TOOLS



17mm



## FIXINGS

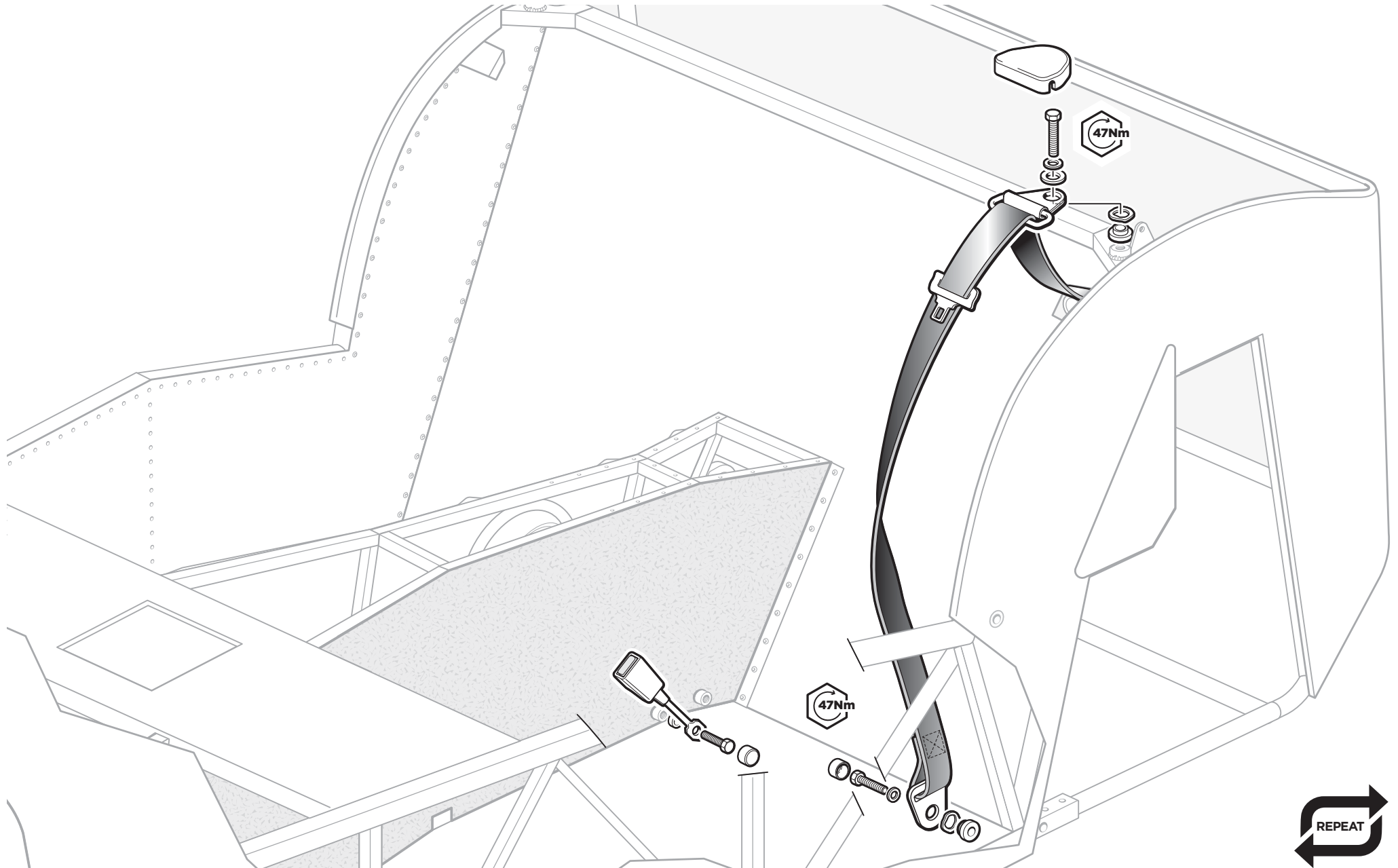
Supplied with seat belts

## TIPS

*These will be loosely fitted already – you'll need to tighten & torque.*

**Chris N**

# BELT UP



# FITTING THE FOUR-POINT HARNESS

## PARTS

- 1 Harness kit (x2)

## TOOLS



17mm



## FIXINGS

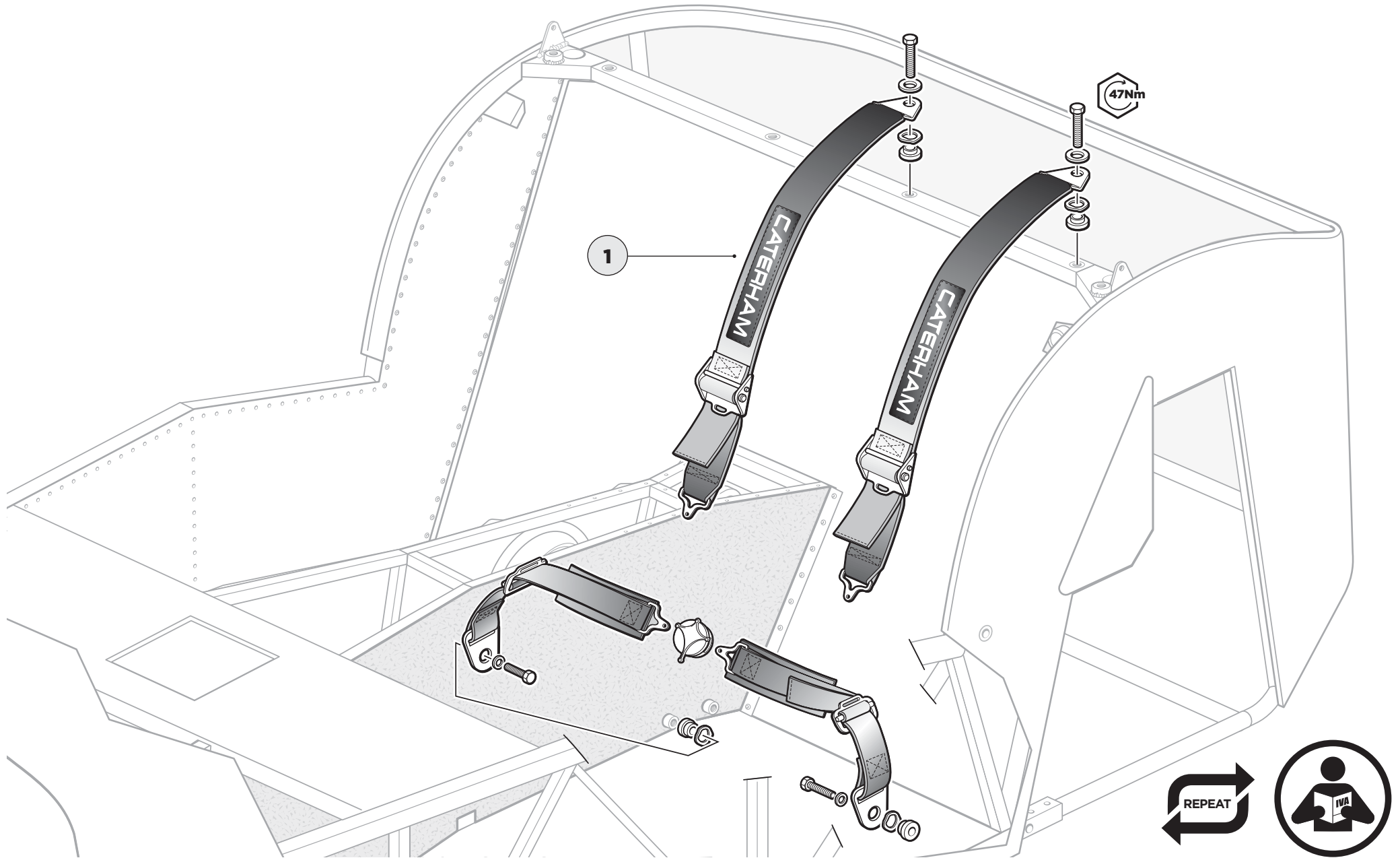
All fixings supplied with the harnesses

## TIPS

The buckle is attached to a lap strap and this should be fitted to the tunnel side.

**Chris N**

# FITTING THE FOUR-POINT HARNESS

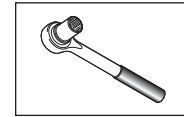


# FITTING THE ROLL OVER BAR

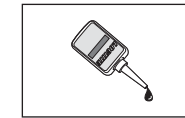
## PARTS

**1** Roll over bar

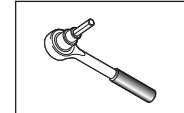
## TOOLS



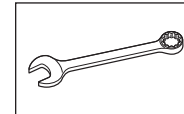
13mm  
17mm



Loctite 243



8mm



17mm



## FIXINGS

| Pack J   |                             | CATERHAM    |     | 47   |              |
|--|-----------------------------|-------------|-----|--|--------------|
|  |                             |             |     | 3AC20010A  |              |
| ROLL OVER & TRACK DAY BAR SERIES 3 METRIC                        |                             |             |     |  |              |
| This pack may include extra fasteners to cover different options |                             |             |     |  |              |
| ITEM   | BASIC DESCRIPTION           | PART NUMBER | QTY | USED ON  | ILLUSTRATION |
| 1  | Nut M10 x 20 Grade 8.8      | BM10080     | 2   | Rear diagonals of roll over bar to mounting brackets | x2           |
| 2  | Set screw M8 x 20 Grade 8.8 | SM8020      | 2   | Roll over bar bracket to chassis                     | x2           |
| 3  | Cap head bolt M10 x 20      | SMCH10X20   | 2   | Roll over bar boss                                   | x2           |
| 4  | Nyloc Nut M10               | NMNF10      | 2   | Rear diagonals of roll over bar to mounting brackets | x2           |
| 5  | Flan Washer M8              | WP8M8       | 2   | Roll over bar bracket to chassis                     | x2           |
| 6  | Spring Washer M8            | WS8M8       | 2   | Roll over bar bracket to chassis                     | x2           |
| 7  | Flan Washer M10             | WP8M10      | 4   | Rear diagonals of roll over bar to mounting brackets | x4           |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 1

## TIPS

You will need to remove the rear dampers in order to install the lower roll over bar mounting bolts.

**Chris B**

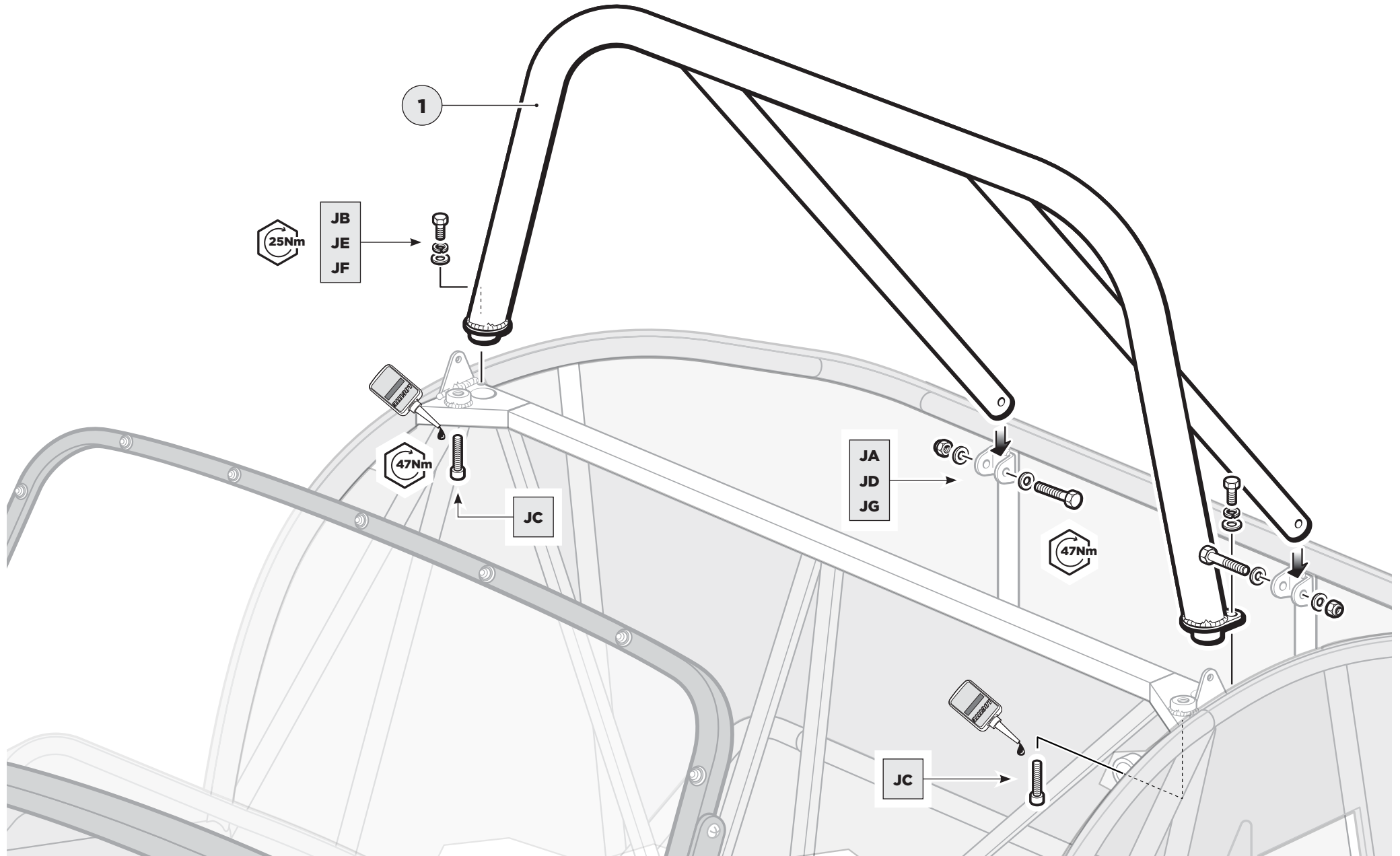
Begin by fitting the cap head bolts from underneath, followed by the small hex bolts and lastly the rear mounting bolts.

**James A**

Fit all the bolts finger tight and then torque at the end.

**Harry P**

# FITTING THE ROLL OVER BAR



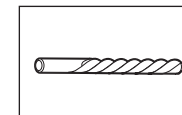
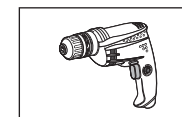
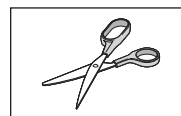
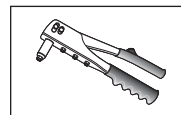
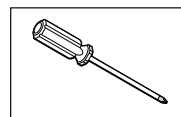


# FITTING THE FUSE BOX COVER AND KNEE TRIM PANELS

## PARTS

- 1 Knee trim panels (LH & RH)
- 2 Fuse box cover
- 3 Velcro

## TOOLS



5/32

## FIXINGS

| SERIAL NUMBER  | CATERHAM                         |                     | PACK NUMBER |         |
|--|----------------------------------|---------------------|-------------|---------|
| 57   |                                  |                     | ZCH01       |         |
| <b>FASTNER PACK – CHASSIS FIXTURE (KIT CAR ONLY)</b>   |                                  |                     |             |         |
| <small>Please note: This pack may include extra fasteners to cover different options</small> |                                  |                     |             |         |
| No   | DESCRIPTION                      | PART NUMBER         | QTY         | DRAWING |
| 1  | Screw 6 x 1/2" Pan Head Post     | PDB                 | 6           |         |
| 2  | Rivet 1/8" X 0.39"               | 1661-0410           | 4           |         |
| 3  | Rivet 1/8" X 0.51"               | 1661-0414           | 4           |         |
| 4  | Rivet 5/32" X 0.47"              | 1661-0512           | 5           |         |
| 5  | Rivet – black 5/32" X 0.47"      | 1610-01015          | 110         |         |
| 6  | Rivet – black 5/32" X 0.59"      | 1610-9931           | 6           |         |
| 7  | Screw 8mm X 1/2" superflange     | 71077               | 4           |         |
| 8  | Screw 10mm X 3/4" superflange    | 71080               | 14          |         |
| 9  | hose clip 9.5mm to 12mm          | SGT 9.5-12          | 2           |         |
| 10   | Setscrew Panhead opti 5mm X 16mm | 76227               | 2           |         |
| 11   | Cradle clip                      | KR6GS               | 5           |         |
| 12   | Setscrew Panhead Post 5mm X 35mm | SPHMSX35 map sensor | 2           |         |
| 13   | Setscrew Panhead Post 5mm X 16mm | 76227S              | 2           |         |

Please note: Drawings are not to scale Page 1 of 1

## TIPS

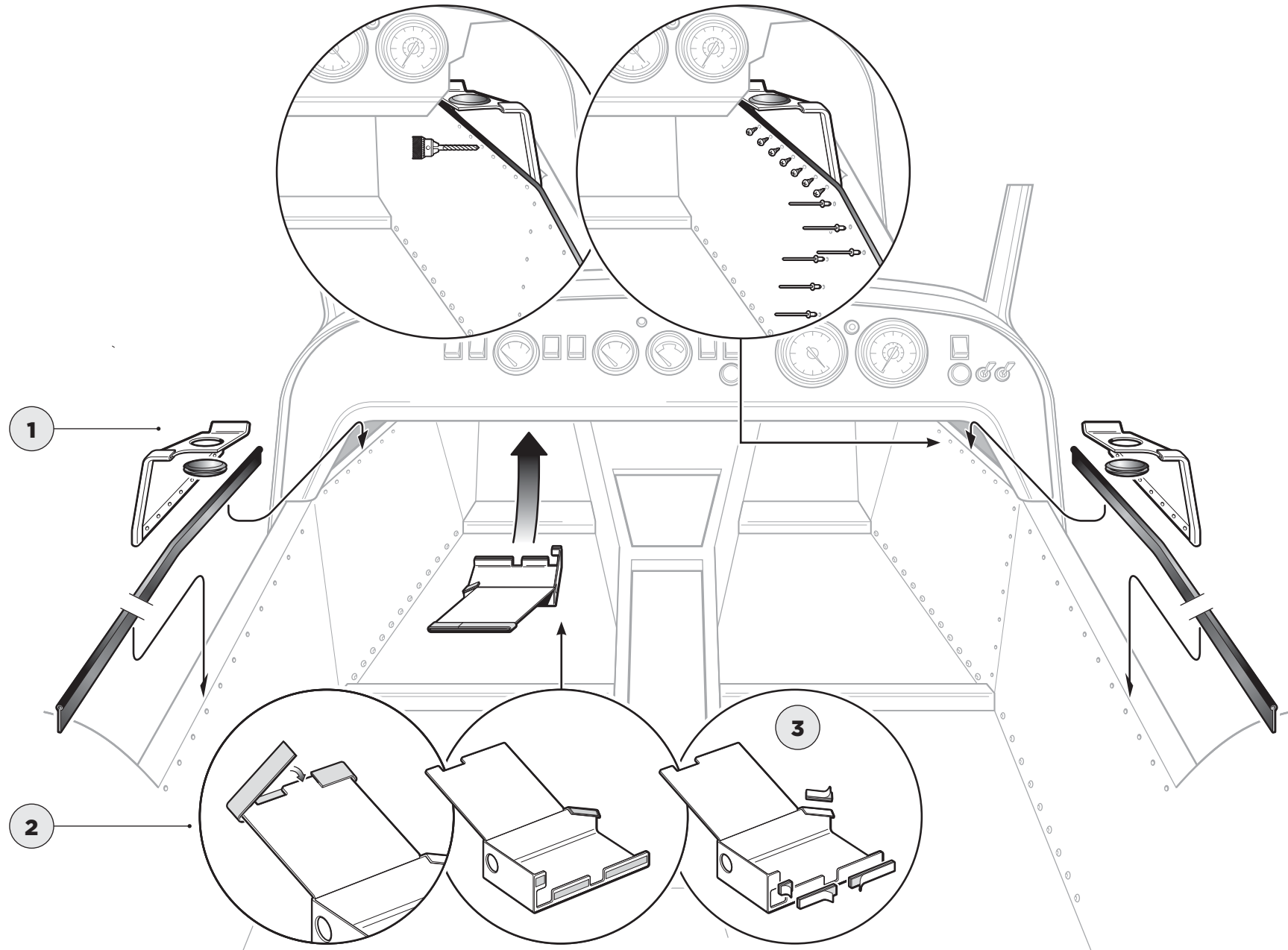
If you're fitting a 12v power socket then you will need to push the outer plastic ring into the fuse box cover before inserting the power socket.

John S

Apply foam tape to the flat section of the fuse box cover and Velcro to the four mounting tabs.

Tiago O

# FITTING THE FUSE BOX COVER AND KNEE TRIM PANELS

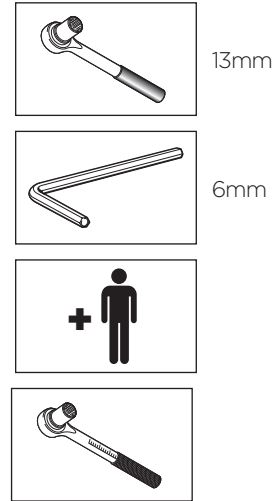


# FITTING LEATHER SEATS

## PARTS

- 1 Seat (x2)
- 2 Seat base (x2)
- 3 Headrest (x2)

## TOOLS



## FIXINGS

| Pack <b>L</b>   | <b>CATERHAM</b>                      |             | 62       |                             |              |
|---|--------------------------------------|-------------|----------|-----------------------------|--------------|
|   |                                      |             | 3AC2012A |                             |              |
| <b>CLOTH/LEATHER SEATS ALL CARS</b>   |                                      |             |          |                             |              |
| <small>This pack may include extra fasteners to cover different options</small> |                                      |             |          |                             |              |
| ITEM  | BASIC DESCRIPTION                    | PART NUMBER | QTY      | USED ON                     | ILLUSTRATION |
| 1   | Clutch Bolt<br>M8 X 20<br>Grade 12.9 | SMCH002     | 4        | Through seat runner & floor |              |
| 2   | Nylok Nut<br>M8                      | N8NY8       | 4        | Under floor                 |              |
| 3   | Plain Washer<br>M8 X 30              | WPH8030     | 4        | Under floor                 |              |

Drawings are for illustrative purposes only and are not to scale. Page 1 of 1

x4

x4

x4

## TIPS

It's best to start by loosely fitting the rear bolts, followed by the fronts. Once all the bolts are located you can fully torque them.

Dan D

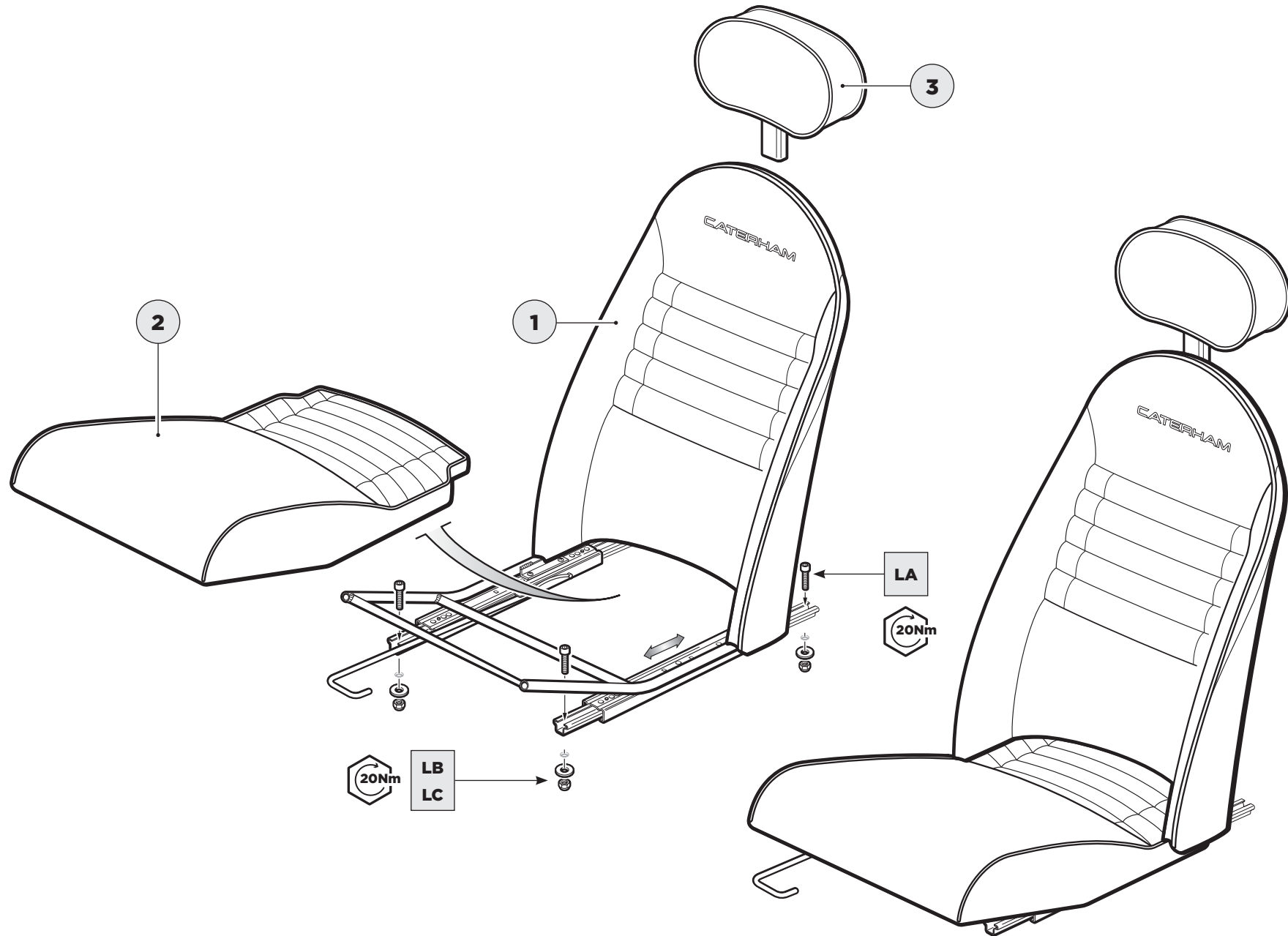
This can be a fiddly job, so patience is key.

Anthony L

You will find it much easier to tighten these bolts using a ball ended socket for the rears, and a short Allen key for the fronts.

Lee A

# FITTING LEATHER SEATS

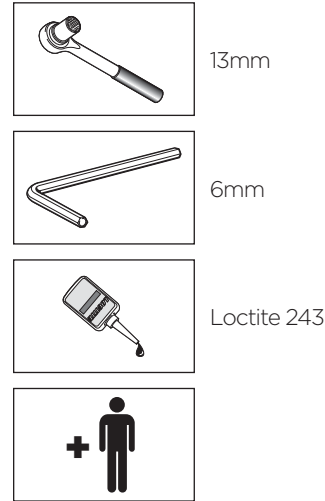


# FITTING THE RACE SEATS

## PARTS

- 1 Seat
- 2 Adjustable runner
- 3 Fixed seat spacer

## TOOLS



## FIXINGS

### For fixed seats

| ITEM | BASIC DESCRIPTION     | PART NUMBER | QTY | USED ON                              | ILLUSTRATION |
|------|-----------------------|-------------|-----|--------------------------------------|--------------|
| 1    | Caphead Bolt M8 X 20  | 8MCH8X20    | 4   | Spacer box section to seat           |              |
| 2    | Caphead Bolt M8 X 20  | 8MCH8X20    | 4   | Floor to mount in spacer box section |              |
| 3    | Spring Washer "SHP"   | WSP8X16     | 8   | Bolt heads                           |              |
| 4    | Washer 5/16" X 1 1/4" | WPS16X14    | 4   | Under floor                          |              |
| 5    | Washer M8 X 18        | WPM8X18X1   | 4   | Spacer box section to seat           |              |
| 7    | Spacer Block Plastic  | TW2         | 3   | Seat spacer                          |              |
| 8    | Spacer Block Plastic  | TW3         | 5   | Seat spacer                          |              |

*Drawings are for illustrative purposes only and are not to scale.*

### For adjustable seats

| ITEM | BASIC DESCRIPTION     | PART NUMBER | QTY | USED ON         | ILLUSTRATION |
|------|-----------------------|-------------|-----|-----------------|--------------|
| 1    | Caphead Bolt M8 X 20  | 8MCH8X20    | 4   | Runner to seat  |              |
| 2    | Caphead Bolt M8 X 20  | 8MCH8X20    | 4   | Runner to floor |              |
| 3    | Washer 5/16" X 1 1/4" | WPS16X14    | 4   | Under floor     |              |
| 4    | Nylon Nut M8          | NM7Y8       | 4   | Under floor     |              |
| 5    | Spacer Block Plastic  | TW2         | 3   | Seat spacer     |              |
| 6    | Spacer Block Plastic  | TW3         | 5   | Seat spacer     |              |

*Drawings are for illustrative purposes only and are not to scale.*

## TIPS

Apply Loctite to the bolts which secure the runners to the seat base.

Chris B

Runners / seat spacers can be fitted to seat before putting in car.

Mick F

Loosely fit the rear bolts to help locate the front.

Harry P

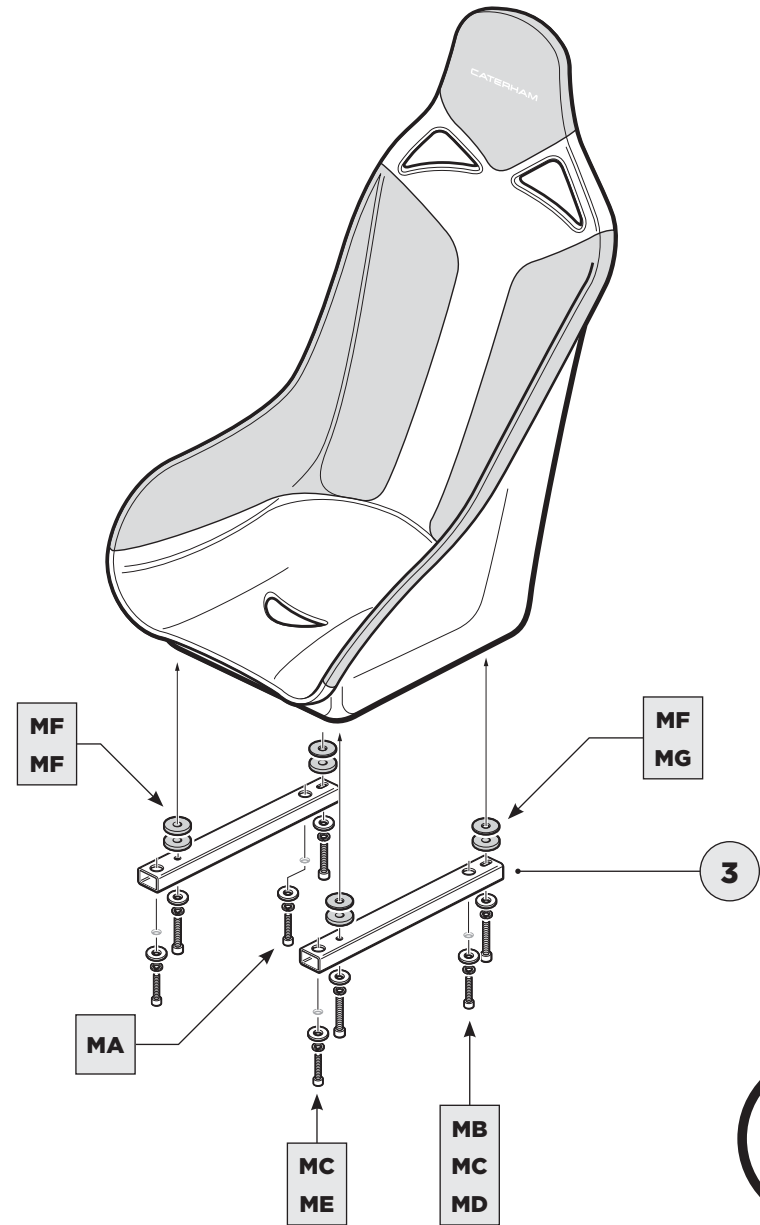
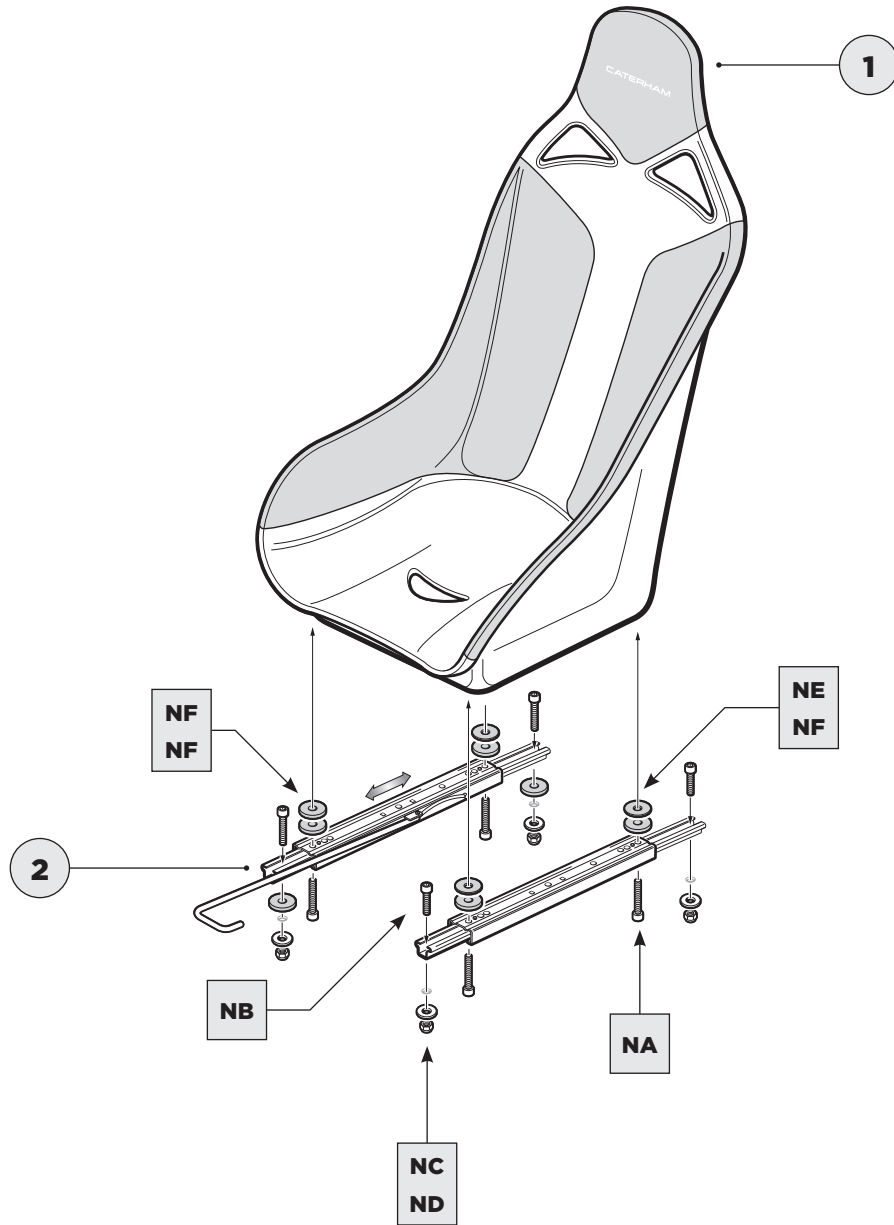
You will need to fit one thin and one thick spacer in each corner between the seat base and the runners, except for the right front corner which will need two thick washers.

Grant P

The fixed position seat is for the passenger side!

Chris N

# FITTING THE RACE SEATS

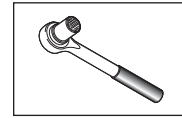


# CONNECTING THE BATTERY - NON MASTER SWITCH

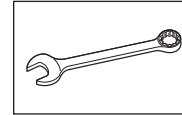
## PARTS

- 1 Starter motor

## TOOLS



10mm  
13mm



10mm (x2)

## FIXINGS

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 1   | Bolt 1/2" X 2 1/2" UNF<br>Caphead Bolt with plain section & imperial threaded section | BFCH1/2X2.5 | 2           |         |
| 2   | Bolt M8 X 50 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X50      | 1           |         |
| 3   | Bolt M8 X 45 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X45      | 3           |         |
| 4   | Setcrew M8 X 25<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SM8X25      | 2           |         |
| 5   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SM8X20      | 4           |         |
| 6   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X20      | 2           |         |
| 7   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X16      | 3           |         |
| 8   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X16      | 4           |         |
| 9   | Nut M8<br>With Metric thread & Nyloc locking mechanism                                | NMYF8       | 10          |         |
| 10  | Nut M6<br>With Metric thread & Nyloc locking mechanism                                | NMYF6       | 2           |         |
| 11  | Nut M6<br>Plain nut with metric thread full size                                      | NMPF6       | 2           |         |

Please note: Drawings are not to scale

Page 1 of 2

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 12  | Washer M8<br>Plain Washer Heavy-Duty  | WPHM8       | 13          |         |
| 13  | Split pin 1/16" X 3/4"  | SP1/16X3/4  | 1           |         |
| 14  | Split pin 7/64" X 3/4"  | SP7/64X3/4  | 1           |         |
| 15  | Washer 1/2"<br>Spring Washer Heavy-Duty   | WSH1/2      | 2           |         |
| 16  | Washer M8<br>Spring Washer Heavy-Duty   | WSHM8       | 3           |         |
| 17  | Washer 3/8" X 3/4"<br>Plain Washer Heavy-Duty                                     | WPH3/8      | 6           |         |
| 18  | Washer M6 X 25<br>Plain Washer Heavy-Duty   | WPHM6X25    | 2           |         |
| 19  | Washer M6<br>Plain Washer Heavy-Duty  | WPHM6       | 8           |         |
| 20  | Washer M5 X 20<br>Plain Washer Heavy-Duty   | WPHM5X20    | 1           |         |
| 21  | Bolt 1/2" X 1" UNF<br>Caphead bolt with plain section & imperial threaded section | BFCH1/2X1   | 1           |         |

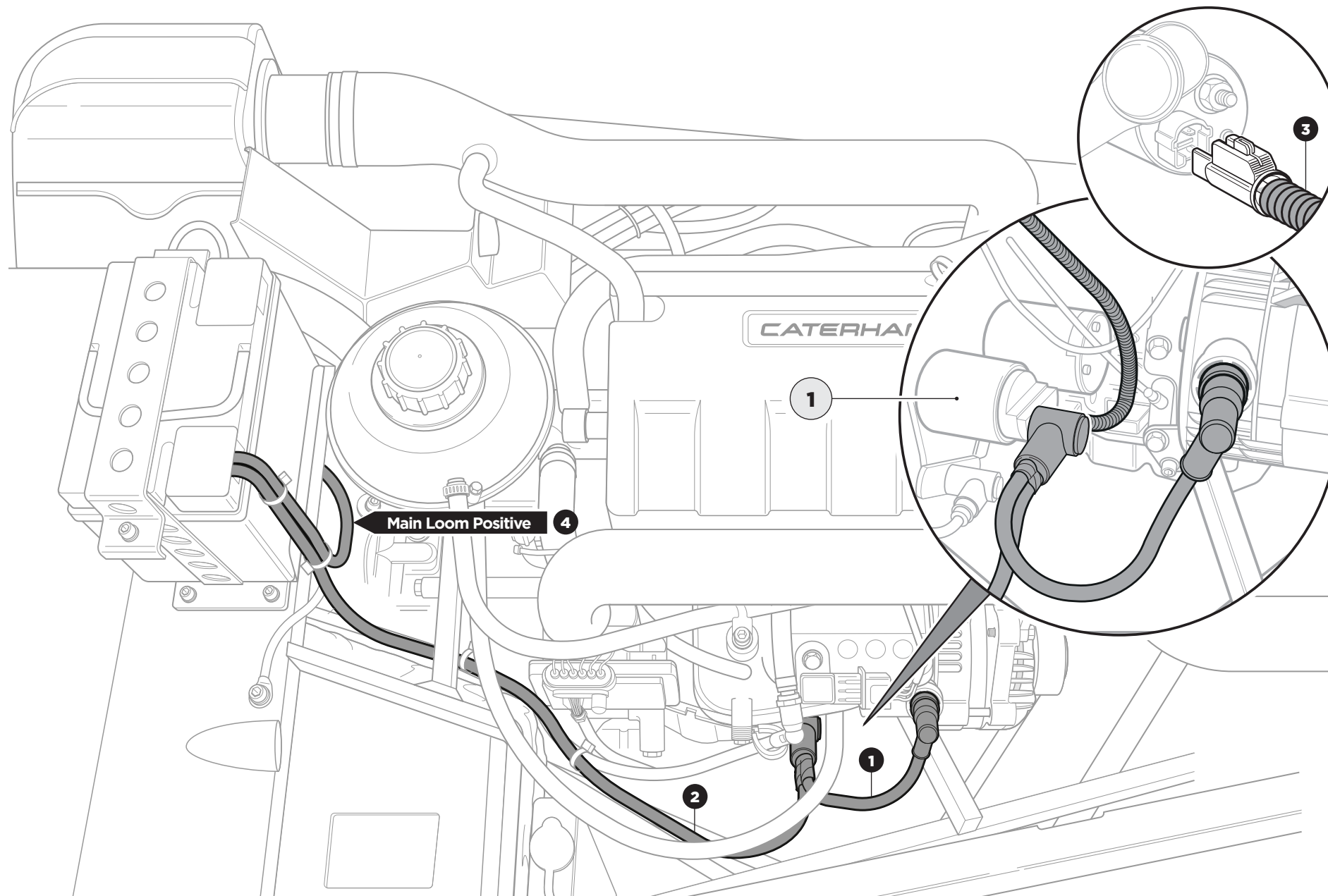
Please note: Drawings are not to scale

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## WIRING KEY

- 1 Starter motor - alternator
- 2 Starter motor - battery positive
- 3 Solenoid trigger wire
- 4 Main loom feed - battery positive

## CONNECTING THE BATTERY - NON MASTER SWITCH



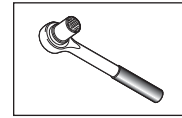


# CONNECTING THE BATTERY - MASTER SWITCH

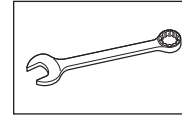
## PARTS

- 1 Starter motor

## TOOLS



10mm  
13mm



10mm (x2)

## FIXINGS

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 1   | Bolt 1/2" X 2 1/2" UNF<br>Caphead Bolt with plain section & imperial threaded section | BFCH1/2X2.5 | 2           |         |
| 2   | Bolt M8 X 50 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X50      | 1           |         |
| 3   | Bolt M8 X 45 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X45      | 3           |         |
| 4   | Setcrew M8 X 25<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SM8X25      | 2           |         |
| 5   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SM8X20      | 4           |         |
| 6   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X20      | 2           |         |
| 7   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X16      | 3           |         |
| 8   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X16      | 4           |         |
| 9   | Nut M8<br>With Metric thread & Nyloc locking mechanism                                | NMYF8       | 10          |         |
| 10  | Nut M6<br>With Metric thread & Nyloc locking mechanism                                | NMYF6       | 2           |         |
| 11  | Nut M6<br>Plain nut with metric thread full size                                      | NMPF6       | 2           |         |

Please note: Drawings are not to scale

Page 1 of 2

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 12  | Washer M8<br>Plain Washer Heavy-Duty  | WPHM8       | 13          |         |
| 13  | Split pin 1/16" X 3/4"  | SP1/16X3/4  | 1           |         |
| 14  | Split pin 7/64" X 3/4"  | SP7/64X3/4  | 1           |         |
| 15  | Washer 1/2"<br>Spring Washer Heavy-Duty   | WSH1/2      | 2           |         |
| 16  | Washer M8<br>Spring Washer Heavy-Duty   | WSHM8       | 3           |         |
| 17  | Washer 3/8" X 3/4"<br>Plain Washer Heavy-Duty                                     | WPH3/8      | 6           |         |
| 18  | Washer M6 X 25<br>Plain Washer Heavy-Duty   | WPHM6X25    | 2           |         |
| 19  | Washer M6<br>Plain Washer Heavy-Duty  | WPHM6       | 8           |         |
| 20  | Washer M5 X 20<br>Plain Washer Heavy-Duty   | WPHM5X20    | 1           |         |
| 21  | Bolt 1/2" X 1" UNF<br>Caphead bolt with plain section & imperial threaded section | BFCH1/2X1   | 1           |         |

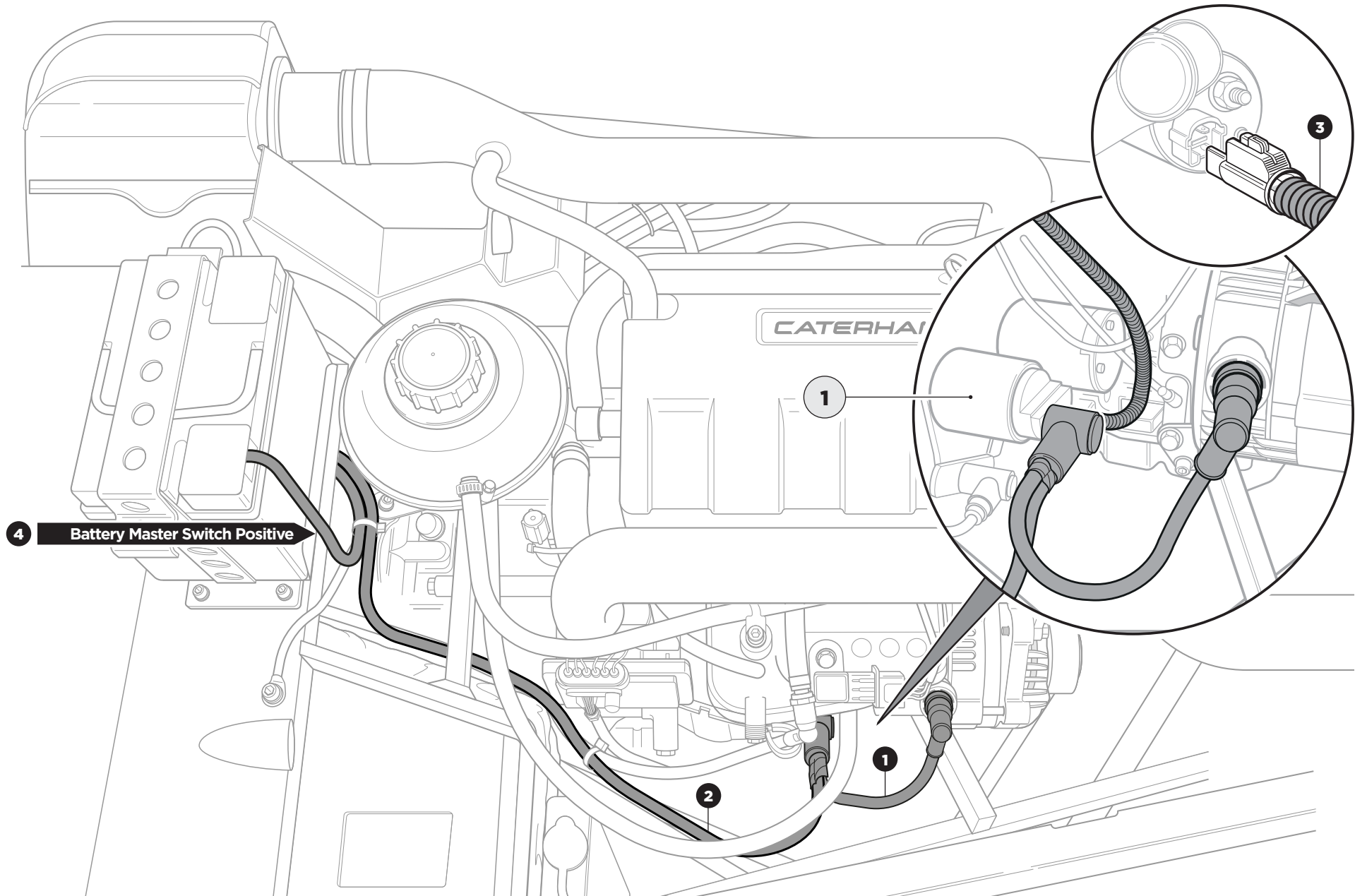
Please note: Drawings are not to scale

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## WIRING KEY

- 1 Starter motor - alternator
- 2 Starter motor - battery master switch
- 3 Solenoid trigger wire
- 4 Battery master switch to battery positive

## CONNECTING THE BATTERY - MASTER SWITCH

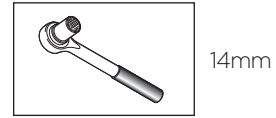


# CONNECTING THE BATTERY EARTHS

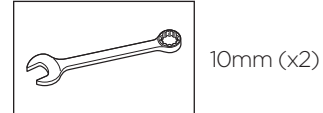
## PARTS

- 1** Earth cables (x2)

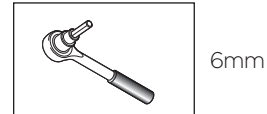
## TOOLS



14mm



10mm (x2)



6mm

## FIXINGS

| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 1   | Bolt 1/2" X 2 1/2" UNF<br>Caphead Bolt with plain section & imperial threaded section | BFCH1/2X2.5 | 2           |         |
| 2   | Bolt M8 X 50 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X50      | 1           |         |
| 3   | Bolt M8 X 45 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X45      | 3           |         |
| 4   | Setcrew M8 X 25<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SM8X25      | 2           |         |
| 5   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section         | SM8X20      | 4           |         |
| 6   | Setcrew M8 X 20<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X20      | 2           |         |
| 7   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X16      | 3           |         |
| 8   | Setcrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section           | SM8X16      | 4           |         |
| 9   | Nut M8<br>With Metric thread & Nyloc locking mechanism                                | NMYF8       | 10          |         |
| 10  | Nut M6<br>With Metric thread & Nyloc locking mechanism                                | NMYF6       | 2           |         |
| 11  | Nut M6<br>Plain nut with metric thread full size                                      | NMPF6       | 2           |         |

Please note: Drawings are not to scale

Page 1 of 2

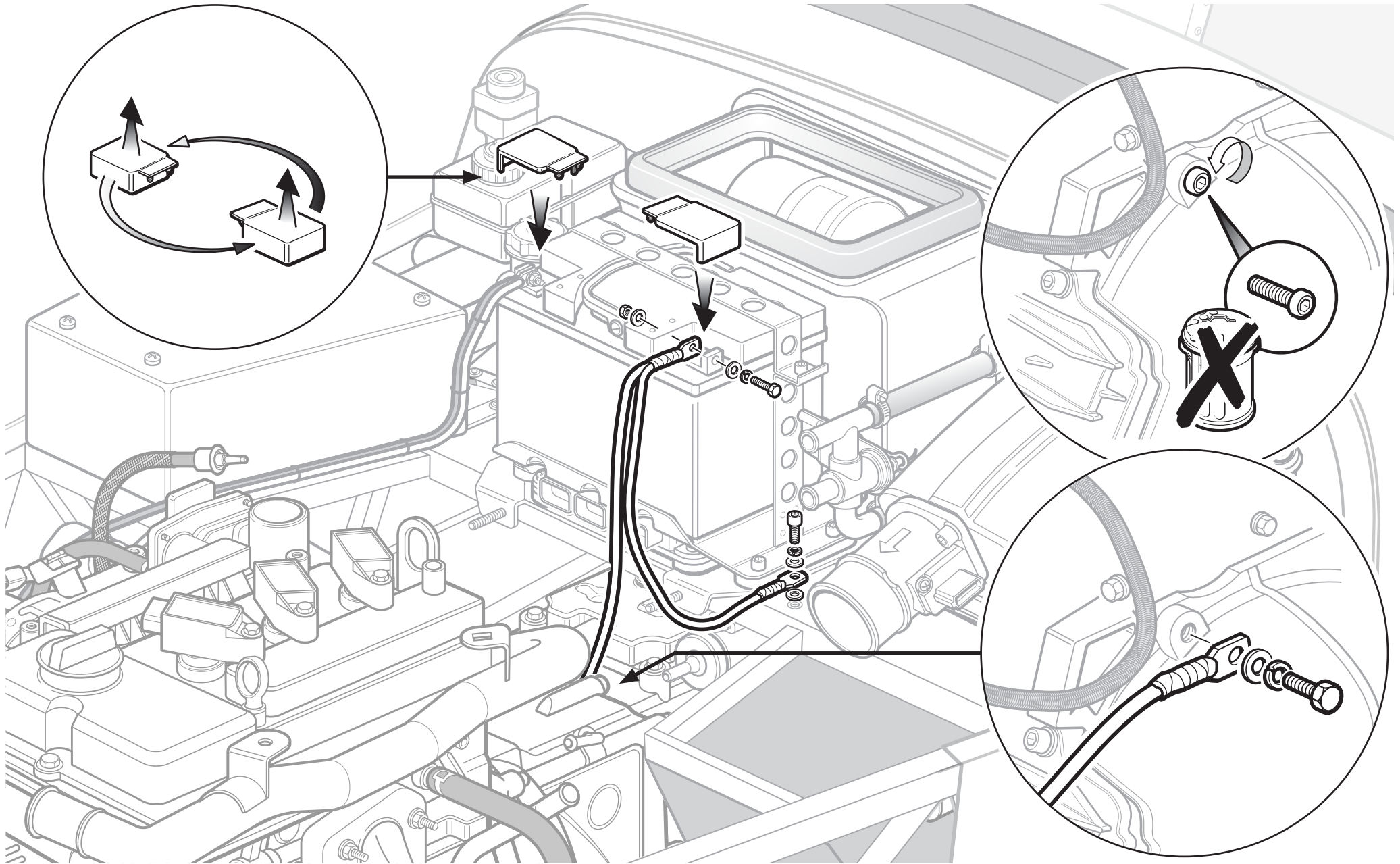
| SERIAL NUMBER   | CATERHAM  |             | PACK NUMBER |         |
|---|---|-------------|-------------|---------|
| 49  |   |             | 30P012A     |         |
| FASTNER PACK - MISCELLANEOUS (METRIC)   |   |             |             |         |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |         |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING |
| 12  | Washer M8<br>Plain Washer Heavy-Duty  | WPHM8       | 13          |         |
| 13  | Split pin 1/16" X 3/4"  | SP1/16X3/4  | 1           |         |
| 14  | Split pin 7/64" X 3/4"  | SP7/64X3/4  | 1           |         |
| 15  | Washer 1/2"<br>Spring Washer Heavy-Duty   | WSH1/2      | 2           |         |
| 16  | Washer M8<br>Spring Washer Heavy-Duty   | WSHM8       | 3           |         |
| 17  | Washer 3/8" X 3/4"<br>Plain Washer Heavy-Duty                                     | WPH3/8      | 6           |         |
| 18  | Washer M6 X 25<br>Plain Washer Heavy-Duty   | WPHM6X25    | 2           |         |
| 19  | Washer M6<br>Plain Washer Heavy-Duty  | WPHM6       | 8           |         |
| 20  | Washer M5 X 20<br>Plain Washer Heavy-Duty   | WPHM5X20    | 1           |         |
| 21  | Bolt 1/2" X 1" UNF<br>Caphead bolt with plain section & imperial threaded section | BFCH1/2X1   | 1           |         |

Please note: Drawings are not to scale

Page 2 of 2

## TIPS

## CONNECTING THE BATTERY EARTHS



## FITTING THE WIPERS AND INTERIOR MIRROR

### PARTS

- 1 Wiper arm (x2)
- 2 Wiper blade (x2)
- 3 Interior mirror

### TOOLS

### FIXINGS

### TIPS

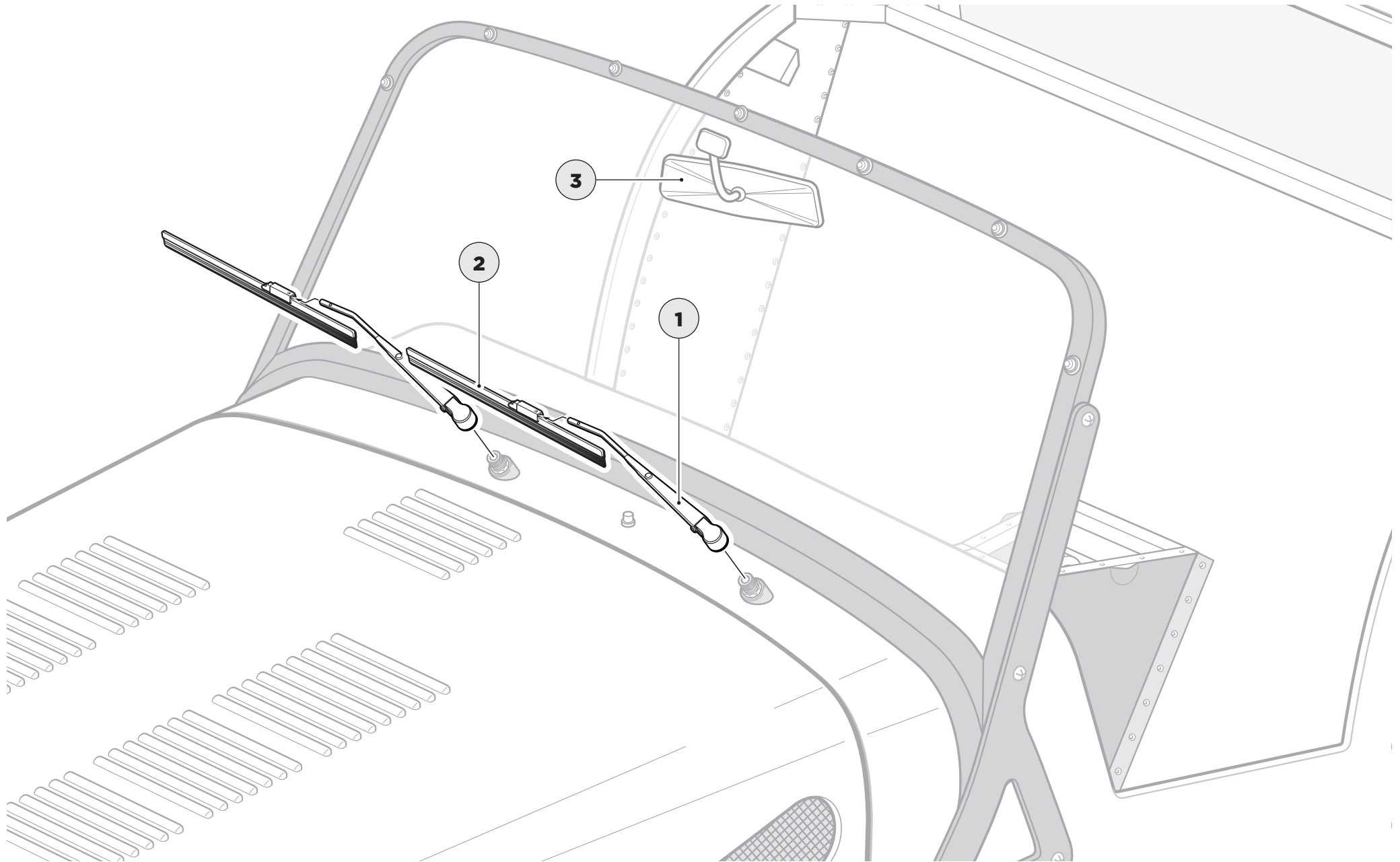
Ensure that the wiper motor is in the parked position before fitting the wiper arms.

**John S**

Now would be a good time to fill the washer bottle with fluid and test the washers and wipers.

**Chris B**

## FITTING THE WIPERS AND INTERIOR MIRROR

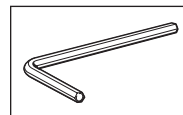
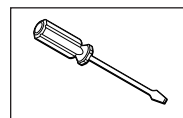


## FITTING THE SIDE MIRRORS

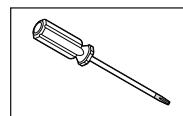
### PARTS

- 1 Mirror head (x2)
- 2 Mirror mount (x2)
- 3 Grub screw (x2)
- 4 Mirror mount stud (x2)
- 5 Fibre washer (x2)

### TOOLS



2.5mm



T20

### FIXINGS

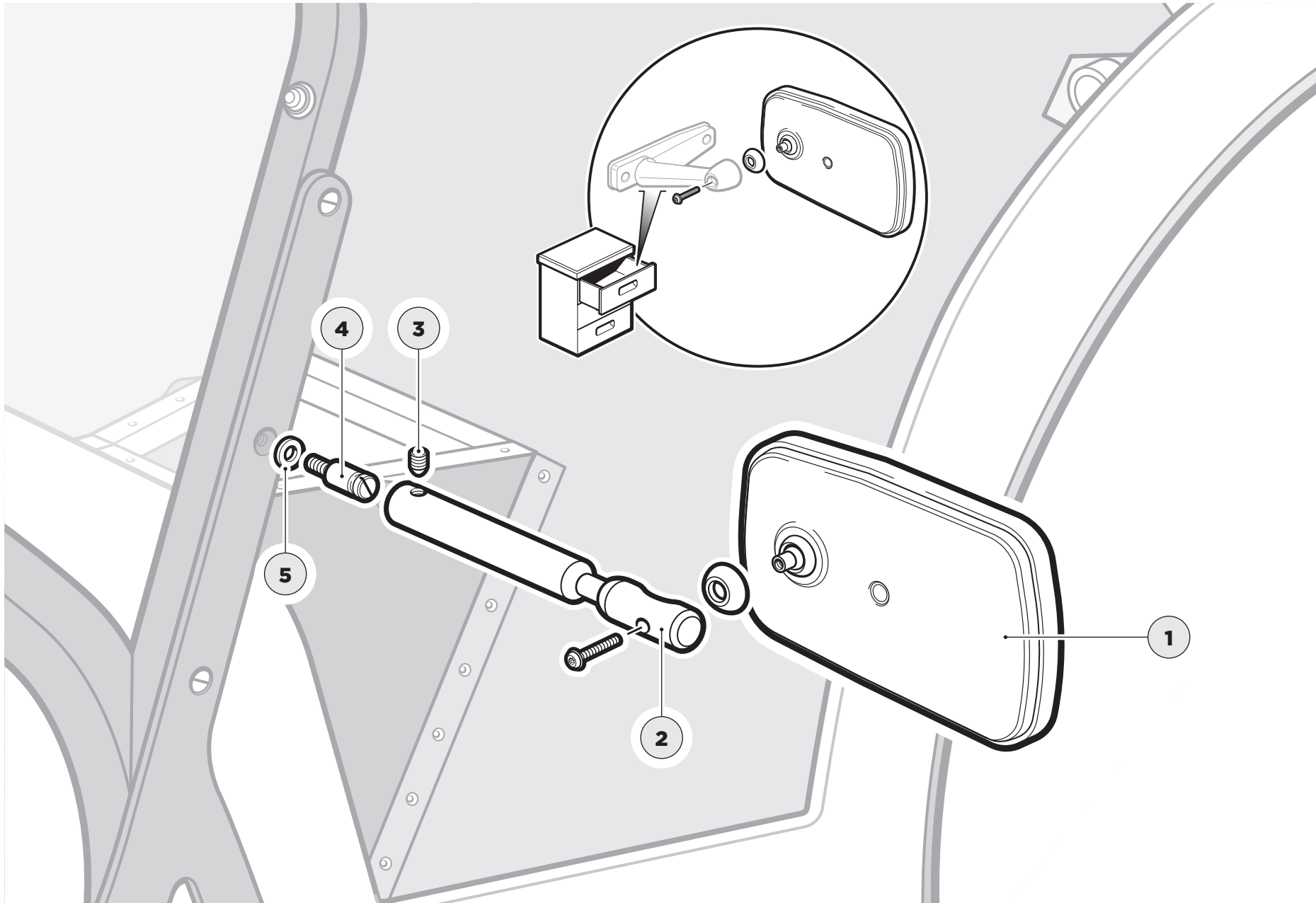
Fixings packed with mirrors

### TIPS

*You will need to pop off the surround and remove the glass from the mirror housing in order to attach the mirror mount.*

**Mick F**

# FITTING THE SIDE MIRRORS



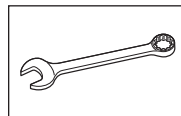


## FILL WITH COOLANT

### PARTS

Coolant concentrate

### TOOLS



17mm

### FIXINGS

### TIPS

The bleed bolt on the top of the radiator will need to be removed before filling the coolant.

**Grant P**

Open the heater valve by pulling the cable which will allow the heater matrix to fill with coolant.

**Lloyd D**

Coolant will flow out of the bleed bolt hole when all the air is expelled.

**Vincent M**



Fill expansion bottle to max mark

## THE LAST FEW STEPS...

Your car is almost complete, but before you can drive triumphantly out of the garage (and legally, as far as the end of your driveway) there are a few important things that need to be done. These are, bleeding the brakes, preparing the engine for its first grand firing-up ceremony (it will feel like that, even if you are doing it on your own) and lastly torquing up the suspension.

**So, on with bleeding the brakes which cannot be explained with a simple diagram unfortunately:**

- 1** Assemble the things you'll need: Brake fluid, both an 8mm and an 11mm spanner, a length of washer hose (or similar clear plastic hose) and a waste fluid receptacle (some form of used bottle is ideal; you won't want to use it again after this)
- 2** Find a volunteer. They need to be able to reach and press the brake pedal whilst responding to your instructions, so although a child could do this job, you may wish to find somebody more inclined to listen to you.
- 3** Fill the brake master cylinder with fresh brake fluid and leave the cap off. **BE CAREFUL NOT TO SPILL ANY ONTO THE PAINTWORK**; if you do, wipe it off immediately. Brake fluid will react with the paintwork causing it to blister and peel.
- 4** Starting at the left rear corner, locate the bleed nipple on the backplate. It will have a rubber cap on it. Remove the cap, remember where you put it, and attach the washer hose to the nipple and put the other end in the waste bottle. This sometimes needs the hose warming up in a cup of hot water to allow it to stretch over the nipple.
- 5** Using the 8mm spanner, 'crack off' the nipple about half of a turn.

- 6** Ask your assistant to pump the pedal a few times. You should see bubbly fluid flowing through the pipe. When the bubbles die down, ask them to hold the pedal down, then tighten the nipple back up. Check and top up the fluid level in the reservoir as necessary.
- 7** Ask them to lift off, then pump it a couple of times, then press the pedal down and hold it down.
- 8** Crack off the nipple again and let the fluid and bubbles flow. It will stop flowing as soon as your assistant has run out of brake pedal travel. Whilst still holding the pedal to the floor, tighten the nipple.
- 9** Repeat steps 7 and 8 until you get 100% bubble free fluid passing through the pipe, remembering to check and top up the reservoir. You will waste quite a lot of brake fluid during this process.
- 10** Once you are satisfied that there are no more bubbles, tighten the nipple and remove the washer hose. You can then clean any residue from the area and refit the dust cover.
- 11** Repeat steps 5-10 for the front calipers, (left then right). The front brake nipples will require an 11mm spanner.
- 12** Although tedious, getting all the air out of the braking system is important and will give you a good, firm brake pedal, which is what you need; not a soft spongy one like you have in a regular car. You may need to repeat the whole process after the first drive or two (or even after the car has had a ride on a trailer); air in the braking system is very good at hiding.
- 13** The clutch system will need to be bled using exactly the same principle as the brake system, however you'll be pleased to learn that it's much quicker to do as there is only one bleed nipple to expel the air from.

Brakes bled and we are ready to fire up the engine. Again, it's easier to explain in writing than draw a diagram. The only thing you'll need for this job is to ensure that you have put some fuel in the car. The shape of the Caterham fuel tank does not lend itself to making use of every last drop, so we recommend an absolute minimum of 10 litres in the tank before trying to start the car. With the tank filled, we are ready for initialisation.

**But before anything else:**

- 1 Reassure yourself the engine is full of oil.
- 2 Disconnect the inertia switch; it's the black thing attached to the engine bay bulkhead under the windscreen that has rubber cap on top and a plug with two wires connecting from underneath. By disconnecting the inertia switch, the fuel pump will not work, so intentionally, the engine will not fire.
- 3 Ensure the gearbox is in neutral, then turn the ignition key and press and hold the start button.
- 4 As the engine cranks over, watch the oil pressure gauge. Keep cranking until the needle starts to climb, then steadies out.
- 5 We now have oil pressure circulating in the engine, which means the engine is ready to be started.
- 6 Reconnect the inertia switch.
- 7 Take a deep breath, mutter 'this is it', cross your fingers and brace yourself.
- 8 Turn the ignition key, press and hold the start button. It will take a few moments for the fuel to get through, so do not expect an instant start.
- 9 All things willing, the engine will start. Hooray! If it stops straight away, don't worry. Try again and once it starts give it a little rev.

# YOUR SEVEN *Adventure* AWAITS

That's it. Your car is complete! Well done – you have built a car; a real live car; not many people can say that. If you remembered to put in gearbox and differential oil, and fill the system with coolant, then a tentative edge out onto the driveway is in order. You'll need to pop the wheels on and lower it from the axle stands and just tighten the suspension first.

**Let's just run through that quickly:**

- i. Put a wheel on and do the nuts up a few turns by hand (to ensure they do not cross-thread).
- ii. Tighten them up the best you can with the wheels off the ground.
- iii. Lower the car from the axle stands, front first; taking care that it doesn't lean back on the axle stands at the back (a helper might be handy).
- iv. Torque the wheel nuts to 65lbft (about 85Nm).
- v. Flick back to the pages where we put the wishbones on and torque as shown
- vi. That's it, you're ready to go!

Take care and good luck with the IVA and registration process.

You will soon be experiencing the sheer pleasure of being a Caterham driver. Once again, enjoy!



# APPENDIX



# FIXING PACKS

| Pack <b>A</b>   |  | <b>CATERHAM</b> |     | SERIAL NUMBER  | <b>44</b>        |  |
|---|--|-----------------|-----|--|------------------|--|
|   |  |                 |     | PACK NUMBER  | <b>3ACZ0001A</b> |  |
| FRONT SUSPENSION DeDION CARS (METRIC)                                   |  |                 |     |  |                  |  |
| <i>This pack may include extra fasteners to cover different options</i> |  |                 |     |  |                  |  |
| ITEM  | BASIC DESCRIPTION                      | PART NUMBER     | QTY | USED ON  | ILLUSTRATION     |  |
| 1   | AA Bolt M12 x 100<br>Grade 10.9        | BM12X100        | 2   | Lower wishbone rear                                  |                  |  |
| 2   | AB Bolt M12 x 65<br>Grade 10.9         | BM12X65         | 2   | Lower wishbone front                                 |                  |  |
| 3   | AC Bolt M10 x 65<br>Grade 10.9         | BM10X65         | 2   | Upper wishbone rear                                  |                  |  |
| 4   | AD Bolt M10 x 60<br>Grade 10.9         | BM10X60         | 2   | Upper wishbone front                                 |                  |  |
| 5   | AE Bolt M8 x 40<br>Grade 10.9          | BM8X40          | 4   | Anti-roll bar mounting brackets                      |                  |  |
| 6   | AF Plain Nut M14 x 1.5 thread          | NMPH14          | 1   | Temporary use to help lock upper wishbone ball joint |                  |  |
| 7   | AG Nyloc Nut M12                       | NMYF12          | 2   | Lower wishbone rear                                  |                  |  |
| 8   | AH Nyloc Nut M10                       | NMYF10          | 4   | Upper wishbone                                       |                  |  |
| 9   | AJ Plain Washer M12 Chamfered          | WPCM12          | 18  | Lower wishbone                                       |                  |  |
| 10  | AK Plain Washer M8 Heavy duty          | WPHM8           | 4   | Anti-roll bar mounting brackets                      |                  |  |
| 11  | AL Plain Washer 3/8" x 3/8" Heavy duty | WPH3/8          | 2   | Brake pipe   |                  |  |

Drawings are for illustrative purposes only and are not to scale.

Page 1 of 2

| Pack <b>A</b>   |                               | <b>CATERHAM</b> |     | SERIAL NUMBER  | <b>44</b>        |  |
|---|-------------------------------|-----------------|-----|--|------------------|--|
|   |                               |                 |     | PACK NUMBER  | <b>3ACZ0001A</b> |  |
| FRONT SUSPENSION DeDION CARS (METRIC)                                   |                               |                 |     |  |                  |  |
| <i>This pack may include extra fasteners to cover different options</i> |                               |                 |     |  |                  |  |
| ITEM  | BASIC DESCRIPTION             | PART NUMBER     | QTY | USED ON  | ILLUSTRATION     |  |
| 12  | AM Spring Washer M12          | WSHM12          | 2   | Lower wishbone front                                 |                  |  |
| 13  | AN Spring Washer M8           | WSHM8           | 6   | Anti-roll bar mounting brackets & upper damper mount |                  |  |
| 14  | AP Washer 3/8" Shake-proof    | WSS3/8          | 2   | Brake pipe   |                  |  |
| 15  | AR Nyloc Nut 1/2" Half height | NFYH1/2         | 2   | Wing stay  |                  |  |
| 16  | AS Nyloc Nut 1/2" Full height | NFYF1/2         | 2   | Front brake, upright mounting (std track ONLY)       |                  |  |

Drawings are for illustrative purposes only and are not to scale.

Page 2 of 2

# FIXING PACKS

| Pack <b>B</b>  |  | <b>CATERHAM</b> |     | SERIAL NUMBER                     | 55           |
|--|--|-----------------|-----|-----------------------------------|--------------|
|  |  |                 |     | PACK NUMBER                       | 3ACZ0002B    |
|  |  |                 |     | RELEASED                          | NOV-19       |
| STEERING DeDION CARS (METRIC)                                    |  |                 |     |                                   |              |
| This pack may include extra fasteners to cover different options |  |                 |     |                                   |              |
| ITEM   | BASIC DESCRIPTION                                | PART NUMBER     | QTY | USED ON                           | ILLUSTRATION |
| 1  | BA<br>Caphead Bolt<br>M6 x 70<br>DIN 912         | BMCH6X70        | 4   | Rack clamps                       |              |
| 2  | BB<br>Bolt 1/4" x 1 1/4"                         | BF1/4X1.1/2     | 2   | Column clamp                      |              |
| 3  | BC<br>Bolt M8 x 40<br>Grade 10.9                 | BM8X40          | 2   | Column to rack<br>universal joint |              |
| 4  | BD<br>Nyloc Nut 1/2"<br>Half height              | NFYH1/2         | 1   | Steering wheel boss               |              |
| 5  | BE<br>Plain Nut 1/2"                             | NFPF1/2         | 2   | Track rod lock nut                |              |
| 6  | BF<br>Plain Nut 1/4"<br>Half height              | NFPFH7/16       | 1   | Column clamp<br>grubscrew locknut |              |
| 7  | BG<br>Nyloc Nut M8                               | NMYF8           | 2   | Column to rack<br>universal joint |              |
| 8  | BH<br>Nyloc Nut M6                               | NMYF6           | 4   | Steering rack clamps              |              |
| 9  | BJ<br>Plain Washer<br>1/2" x 1 1/4"<br>Chamfered | WPH1/2          | 1   | Steering wheel boss               |              |
| 10   | BK<br>Plain Washer<br>1/4"<br>Heavy duty         | WPH1/4          | 6   | Rack clamps and<br>column clamp   |              |
| 11   | BL<br>Spring Washer 1/4<br>Heavy duty            | WSH1/4          | 2   | Column clamp                      |              |

Drawings are for illustrative purposes only and are not to scale.

Page 1 of 1

| Pack <b>C</b>    |   | <b>CATERHAM</b> |     | SERIAL NUMBER   | 45           |
|------------------|---|-----------------|-----|---|--------------|
|                  |   |                 |     | PACK NUMBER   | 3ACZ0003A    |
| LIGHTING & HORNS |   |                 |     |   |              |
| ITEM             | BASIC DESCRIPTION                         | PART NUMBER     | QTY | USED ON   | ILLUSTRATION |
| 1                | CA<br>Screw 10 x 1/2"<br>Black Supaflange | 71080           | 6   | Indicator assembly to<br>indicator pod                        |              |
| 2                | CB<br>Screw 8 x 1/2"<br>Black Supaflange  | 71077           | 2   | Side repeater earth<br>on wingstay                            |              |
| 3                | CC<br>Screw 12 x 1 1/4"<br>Self tapping   | 71079           | 4   | Rear light cluster<br>upper fixing                            |              |
| 4                | CD<br>Screw 12 x 1"<br>Self tapping       | 71078           | 4   | Rear light cluster<br>lower fixing                            |              |
| 5                | CE<br>Nyloc Nut M6                        | NMYF6           | 2   | Horn bracket to<br>steering rack<br>platform<br>(160/270/310) |              |
| 6                | CF<br>Plain Washer<br>1/4"<br>Heavy duty  | WPH1/4          | 2   | Horn bracket to<br>steering rack<br>platform<br>(160/270/310) |              |
| 7                | CG<br>Bolt M8 x 5<br>Grade 8.8            | BM8X50          | 1   | Through steering<br>rack platform &<br>spacer<br>(420)        |              |
| 8                | CH<br>Plain Washer<br>5/16"               | WPH5/16         | 2   | Bolt head/nut   |              |
| 9                | CI<br>Nyloc Nut<br>M8                     | NMYF8           | 1   | Horn bolt   |              |

Drawings are for illustrative purposes only and are not to scale.

Page 1 of 1

# FIXING PACKS

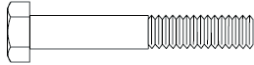

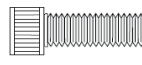




| Pack <b>D</b>  |   | <b>CATERHAM</b> |     | SERIAL NUMBER   | 44           |
|--|---|-----------------|-----|---|--------------|
|  |   |                 |     | PACK NUMBER   | 3ACZ0004A    |
| COOLING SIGMA  |   |                 |     |   |              |
| This pack may include extra fasteners to cover different options |   |                 |     |   |              |
| ITEM   | BASIC DESCRIPTION                       | PART NUMBER     | QTY | USED ON   | ILLUSTRATION |
| 1  | DA Bolt M8 X 50 Grade 8.8               | BM8X50          | 1   | Expansion tank bracket to chassis                                   |              |
| 2  | DB Setscrew 1/4" X 3/4"                 | SF1/4X3/4       | 1   | Expansion tank to bracket   |              |
| 3  | DC Setscrew M8X20 Grade 8.8             | SM6X20          | 4   | SV radiator bracket   |              |
| 4  | DD Bolt M6 X 16 with square section     | 30Z1072A        | 4   | Fan brackets to fan   |              |
| 5  | DE Setscrew M6X16 Panhead Pozi          | SPHM6X16        | 4   | Fan to radiator cowling - SV only                                   |              |
| 6  | DF Nyloc Nut M6                         | NMYF6           | 8   | x4 Fan to radiator x4 SV radiator bracket                           |              |
| 7  | DG Plain Nut M8                         | NMPF8           | 8   | Radiator bobbin   |              |
| 8  | DH Nyloc Nut 1/4"                       | NFYF1/4         | 1   | Expansion tank bracket  |              |
| 9  | DI Plain Washer 1/4" Heavy duty         | WPH1/4          | 13  | 8 x SV rad bracket<br>4 x Fan fixings<br>1 x Expansion tank bracket |              |
| 10   | DJ Plain Washer 5/16" Heavy duty        | WPH5/16         | 4   | Radiator bobbin back  |              |
| 11   | DK Plain Washer 5/16" x 7/8" Heavy duty | WPH5/17X7/8     | 4   | Radiator bobbin front   |              |

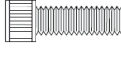


Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

| Pack <b>D</b>  |  | <b>CATERHAM</b> |     | SERIAL NUMBER   | 44           |
|--|--|-----------------|-----|---|--------------|
|  |  |                 |     | PACK NUMBER   | 3ACZ0004A    |
| COOLING SIGMA  |  |                 |     |   |              |
| This pack may include extra fasteners to cover different options |  |                 |     |   |              |
| ITEM   | BASIC DESCRIPTION                      | PART NUMBER     | QTY | USED ON   | ILLUSTRATION |
| 12   | DL Plain Washer 1/4" x 7/8" Heavy duty | WPH1/4X7/8      | 1   | Expansion tank bracket  |              |
| 13   | DM Spring Washer 5/16" Heavy duty      | WSH5/17         | 9   | 8 x Radiator bobbin<br>1 x Expansion tank   |              |
| 14   | DN Hose Clip 30 - 40mm                 | SGT25-40        | 6   | 2 x U shape hose to water rail<br>2 x Top radiator hose<br>2 x Bottom radiator hose                             |              |
| 15   | DO Hose Clip 23 - 35mm                 | SGT23-35        | 2   | 1 x Engine outlet to big T piece<br>1 x Engine outlet to heater inlet   |              |
| 16   | DP Hose Clip 17 - 25mm                 | SGT16-25        | 18  | 6 x Heater inlet/outlet<br>3 x Big T-piece<br>1 x Expansion tank<br>2 x Modine<br>4 x Dry Sump<br>2 x Submarine |              |
| 17   | DQ Hose Clip 8 - 16mm                  | SGT8-16         | 6   | Expansion tank small T-piece  |              |
| 18   | DR Rivet - Black 5/32" X 0.47"         | 1610-01015      | 12  | Cowling flap  |              |

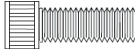
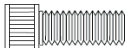

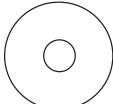



Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

# FIXING PACKS

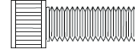

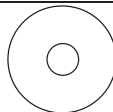



| <b>Pack J</b>   |                               | <b>CATERHAM</b> |     |  | SERIAL NUMBER <b>47</b>  |  |
|---|-------------------------------|-----------------|-----|--|--|--|
|   |                               |                 |     |  | PACK NUMBER<br><b>3ACZ0010A</b>  |  |
| <b>ROLL OVER &amp; TRACK DAY BAR SERIES 3 METRIC</b>                    |                               |                 |     |  |  |  |
| <i>This pack may include extra fasteners to cover different options</i> |                               |                 |     |  |  |  |
| ITEM  | BASIC DESCRIPTION             | PART NUMBER     | QTY | USED ON  | ILLUSTRATION   |  |
| 1   | JA Bolt M10 X 60 Grade 8.8    | BM10X60         | 2   | Rear diagonals of roll over bar to mounting brackets |   |  |
| 2   | JB Setscrew M8 X 20 Grade 8.8 | SM8X20          | 2   | Roll over bar bracket to chassis                     |   |  |
| 3   | JC Caphead Bolt M10 X 20      | BMCH10X20       | 2   | Roll over bar boss                                   |   |  |
| 4   | JD Nyloc Nut M10              | NMYF10          | 2   | Rear diagonals of roll over bar to mounting brackets |   |  |
| 5   | JE Plain Washer M8            | WPHM8           | 2   | Roll over bar bracket to chassis                     |   |  |
| 6   | JF Spring Washer M8           | WSHM8           | 2   | Roll over bar bracket to chassis                     |   |  |
| 7   | JG Plain Washer M10           | WPHM10          | 4   | Rear diagonals of roll over bar to mounting brackets |  |  |
| Drawings are for illustrative purposes only and are not to scale.       |                               |                 |     |  | Page 1 of 1  |  |

| <b>Pack L</b>   |                                    | <b>CATERHAM</b> |     |                             | SERIAL NUMBER <b>62</b>   |  |
|---|------------------------------------|-----------------|-----|-----------------------------|---|--|
|   |                                    |                 |     |                             | PACK NUMBER<br><b>3ACZ0012A</b>   |  |
| <b>CLOTH/LEATHER SEATS ALL CARS</b>                                     |                                    |                 |     |                             |   |  |
| <i>This pack may include extra fasteners to cover different options</i> |                                    |                 |     |                             |   |  |
| ITEM  | BASIC DESCRIPTION                  | PART NUMBER     | QTY | USED ON                     | ILLUSTRATION  |  |
| 1   | LA Caphead Bolt M8 X 20 Grade 12.9 | SMCH8X20        | 4   | Through seat runner & floor |  |  |
| 2   | LB Nyloc Nut M8                    | NMYF8           | 4   | Under floor                 |  |  |
| 3   | LC Plain Washer M8 X 30            | WPH8X30         | 4   | Under floor                 |  |  |
| Drawings are for illustrative purposes only and are not to scale.       |                                    |                 |     |                             | Page 1 of 1   |  |

# FIXING PACKS



| Pack <b>M</b>   |                          | <b>CATERHAM</b> |     | SERIAL NUMBER <b>63</b>               |   |
|---|--------------------------|-----------------|-----|---------------------------------------|---|
|   |                          |                 |     | PACK NUMBER                           |   |
|   |                          |                 |     | 3ACZ0013A                             |   |
| SEATS FIXED TILLET RACING   |                          |                 |     |                                       |   |
| <i>This pack may include extra fasteners to cover different options</i> |                          |                 |     |                                       |   |
| ITEM  | BASIC DESCRIPTION        | PART NUMBER     | QTY | USED ON                               | ILLUSTRATION  |
| 1   | MA Caphead Bolt M8 X 25  | BMCH8X25        | 4   | Spacer box section to seat            |    |
| 2   | MB Caphead Bolt M8 X 20  | SMCH8X20        | 4   | Floor to rivnut in spacer box section |    |
| 3   | MC Spring Washer 5/16"   | WSH5/16         | 8   | Bolt heads                            |    |
| 4   | MD Washer 5/16" X 1 1/4" | WP5/16X1.1/4    | 4   | Under floor                           |    |
| 5   | ME Washer M8 X 18        | WPM8X18X1       | 4   | Spacer box section to seat            |    |
| 7   | MF Spacer Black Plastic  | TW2             | 3   | Seat spacer                           |   |
| 8   | MG Spacer Black Plastic  | TW3             | 5   | Seat spacer                           |  |



Drawings are for illustrative purposes only and are not to scale. Page 1 of 1

| Pack <b>N</b>   |                          | <b>CATERHAM</b> |     | SERIAL NUMBER <b>64</b> |  |
|---|--------------------------|-----------------|-----|-------------------------|--|
|   |                          |                 |     | PACK NUMBER             |  |
|   |                          |                 |     | 3ACZ0014A               |  |
| SEATS ADJUSTABLE TILLET RACING  |                          |                 |     |                         |  |
| <i>This pack may include extra fasteners to cover different options</i> |                          |                 |     |                         |  |
| ITEM  | BASIC DESCRIPTION        | PART NUMBER     | QTY | USED ON                 | ILLUSTRATION   |
| 1   | NA Caphead Bolt M8 X 25  | BMCH8X25        | 4   | Runner to seat          |   |
| 2   | NB Caphead Bolt M8 X 20  | SMCH8X20        | 4   | Runner to floor         |   |
| 3   | NC Washer 5/16" X 1 1/4" | WP5/16X1.1/4    | 4   | Under floor             |   |
| 4   | ND Nyloc Nut M8          | NMYF8           | 4   | Under floor             |   |
| 5   | NE Spacer Black Plastic  | TW2             | 3   | Seat spacer             |   |
| 6   | NF Spacer Black Plastic  | TW3             | 5   | Seat spacer             |  |





Drawings are for illustrative purposes only and are not to scale. Page 1 of 1




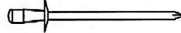









# FIXING PACKS

| <b>Pack O</b>   |                             | <b>CATERHAM</b> |     | <table border="1"> <tr><td>SERIAL NUMBER</td></tr> <tr><td>PACK NUMBER</td></tr> <tr><td>3ACZ0015A</td></tr> </table> |   | SERIAL NUMBER | PACK NUMBER | 3ACZ0015A |
|---|-----------------------------|-----------------|-----|---|---|---------------|-------------|-----------|
| SERIAL NUMBER   |                             |                 |     |   |   |               |             |           |
| PACK NUMBER   |                             |                 |     |   |   |               |             |           |
| 3ACZ0015A   |                             |                 |     |   |   |               |             |           |
| <b>WING PROTECTORS STAINLESS STEEL</b>                                  |                             |                 |     |   |   |               |             |           |
| <i>This pack may include extra fasteners to cover different options</i> |                             |                 |     |   |   |               |             |           |
| ITEM  | BASIC DESCRIPTION           | PART NUMBER     | QTY | USED ON   | ILLUSTRATION  |               |             |           |
| 1   | OA<br>Rivet<br>1/8" X 0.51" | 1661-0414       | 30  | Wing protector to wing  |  |               |             |           |
| 2   | OB<br>Wing Piping           | 76901           | 2m  | Between wing protector and wing   |  |               |             |           |
| Drawings are for illustrative purposes only and are not to scale.       |                             |                 |     |   | Page 1 of 1   |               |             |           |

| <b>Pack P</b>   |                                   | <b>CATERHAM</b> |     | <table border="1"> <tr><td>SERIAL NUMBER</td></tr> <tr><td>PACK NUMBER</td></tr> <tr><td>3ACZ0016A</td></tr> </table> |   | SERIAL NUMBER | PACK NUMBER | 3ACZ0016A |
|---|-----------------------------------|-----------------|-----|---|---|---------------|-------------|-----------|
| SERIAL NUMBER   |                                   |                 |     |   |   |               |             |           |
| PACK NUMBER   |                                   |                 |     |   |   |               |             |           |
| 3ACZ0016A   |                                   |                 |     |   |   |               |             |           |
| <b>WING PROTECTORS CARBON FIBRE</b>                                     |                                   |                 |     |   |   |               |             |           |
| <i>This pack may include extra fasteners to cover different options</i> |                                   |                 |     |   |   |               |             |           |
| ITEM  | BASIC DESCRIPTION                 | PART NUMBER     | QTY | USED ON   | ILLUSTRATION  |               |             |           |
| 1   | PA<br>Rivet Black<br>1/8" X 0.51" | 1610-01049      | 30  | Wing protector to wing  |  |               |             |           |
| 2   | PB<br>Wing Piping                 | 76901           | 2m  | Between wing protector and wing   |  |               |             |           |
| Drawings are for illustrative purposes only and are not to scale.       |                                   |                 |     |   | Page 1 of 1   |               |             |           |

# FIXING PACKS

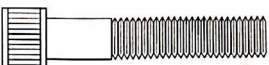
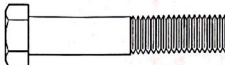
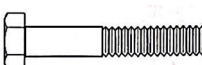
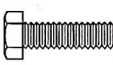

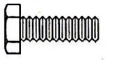


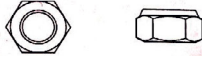


| <b>Pack Q</b>   |                              | <b>CATERHAM</b> |     |                         | SERIAL NUMBER<br><b>31</b>  |
|---|------------------------------|-----------------|-----|-------------------------|---|
|   |                              |                 |     |                         | PACK NUMBER<br><b>3ACZ0017A</b>   |
| <b>REAR WINGS</b>   |                              |                 |     |                         |   |
| <i>This pack may include extra fasteners to cover different options</i> |                              |                 |     |                         |   |
| ITEM  | BASIC DESCRIPTION            | PART NUMBER     | QTY | USED ON                 | ILLUSTRATION  |
| 1   | QA Set Screw M5 X 20         | SM5X20          | 20  | Rear Wings              |  |
| 2   | QB Nyloc Nut M5              | NMYF5           | 10  | Rear wings through boot |  |
| 3   | QC Plain Washer 3/16" X 3/4" | WP3/16X3/4      | 30  | Wing washers            |  |
| 4   | QD Wing Piping 1/4" X 1"     | 76902           | 4m  | Between wing and body   |  |
| Drawings are for illustrative purposes only and are not to scale.       |                              |                 |     |                         | Page 1 of 1   |

| <b>SERIAL NUMBER</b>   |                                  | <b>CATERHAM</b>     |     |   | <b>PACK NUMBER</b> |
|--|----------------------------------|---------------------|-----|---|--------------------|
| <b>57</b>  |                                  |                     |     |   | <b>ZCH01</b>       |
| <b>FASTNER PACK – CHASSIS FIXTURE (KIT CAR ONLY)</b>                                 |                                  |                     |     |   |                    |
| <i>Please note: This pack may include extra fasteners to cover different options</i> |                                  |                     |     |   |                    |
| No   | DESCRIPTION                      | PART NUMBER         | QTY | DRAWING   |                    |
| 1  | Screw 6 x 1/2" Pan Head Pozi     | PD8                 | 6   |    |                    |
| 2  | Rivet 1/8" X 0.39"               | 1661-0410           | 4   |    |                    |
| 3  | Rivet 1/8" X 0.51"               | 1661-0414           | 4   |    |                    |
| 4  | Rivet 5/32" X 0.47"              | 1661-0512           | 5   |    |                    |
| 5  | Rivet – black 5/32" X 0.47"      | 1610-01015          | 110 |    |                    |
| 6  | Rivet – black 5/32" X 0.59"      | 1610-9931           | 6   |    |                    |
| 7  | Screw 8mm X 1/2" superflange     | 71077               | 4   |    |                    |
| 8  | Screw 10mm X 3/4" superflange    | 71080               | 14  |    |                    |
| 9  | hose clip 9.5mm to 12mm          | SGT 9.5-12          | 2   |   |                    |
| 10   | Setscrew Panhead opzi 5mm X 16mm | 76227               | 2   |  |                    |
| 11   | Cradle clip                      | KR6GS               | 5   |  |                    |
| 12   | Setscrew Panhead Pozi 5mm X 35mm | SPHM5X35 map sensor | 2   |  |                    |
| 13   | Setscrew Panhead Pozi 5mm X 16mm | 76227S              | 2   |  |                    |
| Please note: Drawings are not to scale   |                                  |                     |     |   | Page 1 of 1        |












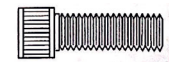


# FIXING PACKS

| SERIAL NUMBER   |   | CATERHAM    | PACK NUMBER |   |
|---|---|-------------|-------------|---|
| 49  |   |             | 30P012A     |   |
| <b>FASTNER PACK – MISCELLANEOUS (METRIC)</b>                                  |   |             |             |   |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |   |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING   |
| 1   | Bolt 1/2" X 2 1/2" UNF<br>Caphead Bolt with plain section & imperial threaded section | BFCH1/2X2.5 | 2           |    |
| 2   | Bolt M8 X 50 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X50      | 1           |    |
| 3   | Bolt M8 X 45 Grade 8.8<br>Bolt with plain section & Metric threaded section           | BM8X45      | 3           |    |
| 4   | Setscrew M8 X 25<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X25      | 2           |    |
| 5   | Setscrew M8 X 20<br>Grade 8.8<br>Hexagonal head & metric full threaded section        | SM8X20      | 4           |    |
| 6   | Setscrew M6 X 20<br>Grade 8.8<br>Hexagon head & metric full threaded section          | SM6X20      | 2           |    |
| 7   | Setscrew M8 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section          | SM8X16      | 3           |   |
| 8   | Setscrew M6 X 16<br>Grade 8.8<br>Hexagon head & metric full threaded section          | SM6X16      | 4           |  |
| 9   | Nut M8<br>With Metric thread & Nyloc locking mechanism                                | NMYF8       | 10          |  |
| 10  | Nut M6<br>With Metric thread & Nyloc locking mechanism                                | NMYF6       | 2           |  |
| 11  | Nut M6<br>Plain nut with metric thread full size                                      | NMPF6       | 2           |  |

Please note: Drawings are not to scale

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| SERIAL NUMBER   |   | CATERHAM    | PACK NUMBER |   |
|---|---|-------------|-------------|---|
| 49  |   |             | 30P012A     |   |
| <b>FASTNER PACK – MISCELLANEOUS (METRIC)</b>                                  |   |             |             |   |
| Please note: This pack may include extra fasteners to cover different options |   |             |             |   |
| No  | DESCRIPTION   | PART NUMBER | QTY         | DRAWING   |
| 12  | Washer M8<br>Plain Washer Heavy-Duty  | WPHM8       | 13          |    |
| 13  | Split pin 1/16" X 3/4"  | SP1/16X3/4  | 1           |    |
| 14  | Split pin 7/64" X 3/4"  | SP7/64X3/4  | 1           |    |
| 15  | Washer 1/2"<br>Spring Washer Heavy-Duty   | WSH1/2      | 2           |    |
| 16  | Washer M8<br>Spring Washer Heavy-Duty   | WSHM8       | 3           |    |
| 17  | Washer 3/8" X 3/4"<br>Plain Washer Heavy-Duty                                     | WPH3/8      | 6           |    |
| 18  | Washer M6 X 25<br>Plain Washer Heavy-Duty   | WPHM6X25    | 2           |   |
| 19  | Washer M6<br>Plain Washer Heavy-Duty  | WPHM6       | 8           |  |
| 20  | Washer M5 X 20<br>Plain Washer Heavy-Duty   | WPHM5X20    | 1           |  |
| 21  | Bolt 1/2" X 1" UNF<br>Caphead bolt with plain section & imperial threaded section | BFCH1/2X1   | 1           |  |



Please note: Drawings are not to scale

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