



CATERHAM

ASSEMBLY GUIDE

EDITION 1.1

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Your feedback and comments are welcome: assemblyguide@caterham.com

For help and build support enquiries contact Derek Howlett: derek.howlett@caterham.com / 01322 625827

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 just a phone call away.

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 application form and a guide on how to complete it, is contained within an envelope of documents provided with your kit and which is probably acting as a coaster for your g&t at the moment. Take this moment to find it and remove it from the garage and place it somewhere safe (and memorable).



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.

As a guide, the Post Build Inspection through to registration can take around 6 weeks to complete.

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

ENJOY

MY BUILD NOTES

Download the IVA Checklist Guide: 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

1Nm of torque equals 0.736lbft.

Mick F

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

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

Grant P

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

Simon L

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

Harrison P

You can tell if you have 'wide track suspension' car by looking at the front dampers. Wide track has a 25mm long hexagonal spacer between the top spring retainer and the mounting bush.

Matt T

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 diameter (e.g. M10=10mm) by the length not including the head (e.g. 65mm).


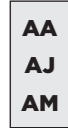








James A

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.





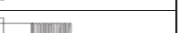


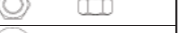

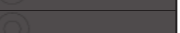
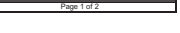

John S

KEY

SYMBOLS

-  Item number
-  Fixing item
-  S Pack / R Pack specific instructions
-  Required torque (where applicable)
-  S3 / S5 chassis specific instructions
-  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

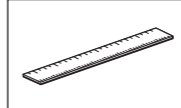

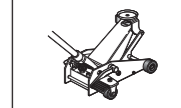

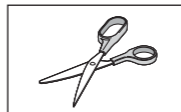


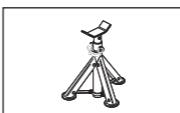
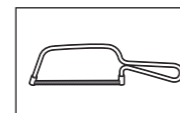
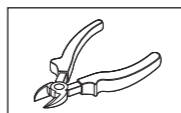
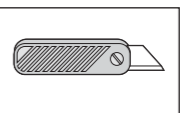
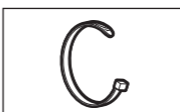
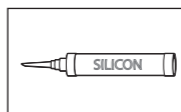
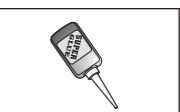
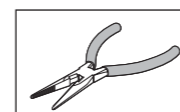
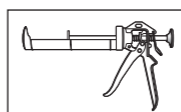

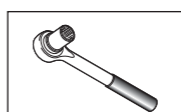

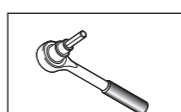
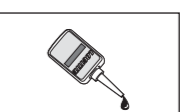
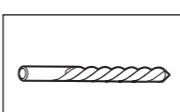

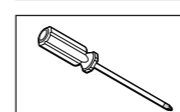
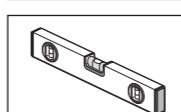
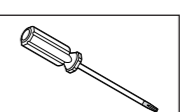
FIXINGS

Pack A CATERHAM					44
FRONT SUSPENSION DeDION CARS (METRIC)					
ITEM	DESCRIPTION	QUANTITY	USED ON	ILLUSTRATION	
1	AA Bolt M12 x 100 Grade 10.9	2	Lower wishbone rear		
2	AB Bolt M12 x 45 Grade 10.9	2	Lower wishbone front		
3	AC Bolt M12 x 45 Grade 10.9	2	Upper wishbone rear		
4	AD Bolt M12 x 40 Grade 10.9	2	Upper wishbone front		
5	AE Bolt M8 x 40 Grade 10.9	4	Anti-roll bar mounting brackets		x4 ← (Indicates number of each fixing required)
6	AF Plain Nut M14 x 1.5 thread	1	Temporary use to help lock upper wishbone ball joint		
7	AG Nylon Nut M12	2	Lower wishbone rear		
8	AH Nylon Nut M10	4	Upper wishbone		
9	AJ Plain Washer M12 Chamfered	18	Lower wishbone		
AK	AK Shim Washers	4	Anti-roll bar mounting brackets		
AL	AL Plain Washers	2	Struts		

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

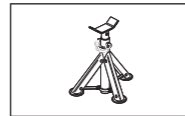
KEY

TOOLS

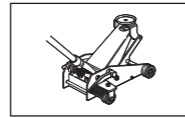
-  Allen key
-  Flat head screwdriver
-  Ruler
-  Spray adhesive
-  Trolley jack
-  Assistance
-  Grease
-  Scissors
-  Spray lube
-  WD40
-  Axle stand
-  Junior hacksaw
-  Side cutters
-  Stanley knife
-  Cable tie
-  Latex gloves
-  Silicon
-  Super glue
-  Combination spanner
-  Long nose pliers
-  Silicon gun
-  Tape
-  Copper grease
-  Muscle
-  Socket wrench
-  Tape measure
-  Drill
-  Pop rivet gun
-  Socket wrench (allen)
-  Thread lock / LocTite
-  Drill bit
-  Power adhesive
-  Spanner
-  Torque wrench
-  Engine hoist
-  Pozidrive screwdriver
-  Spirit level
-  Torx

LET'S GET READY

PARTS



x3



FIXINGS

TOOLS

TIPS

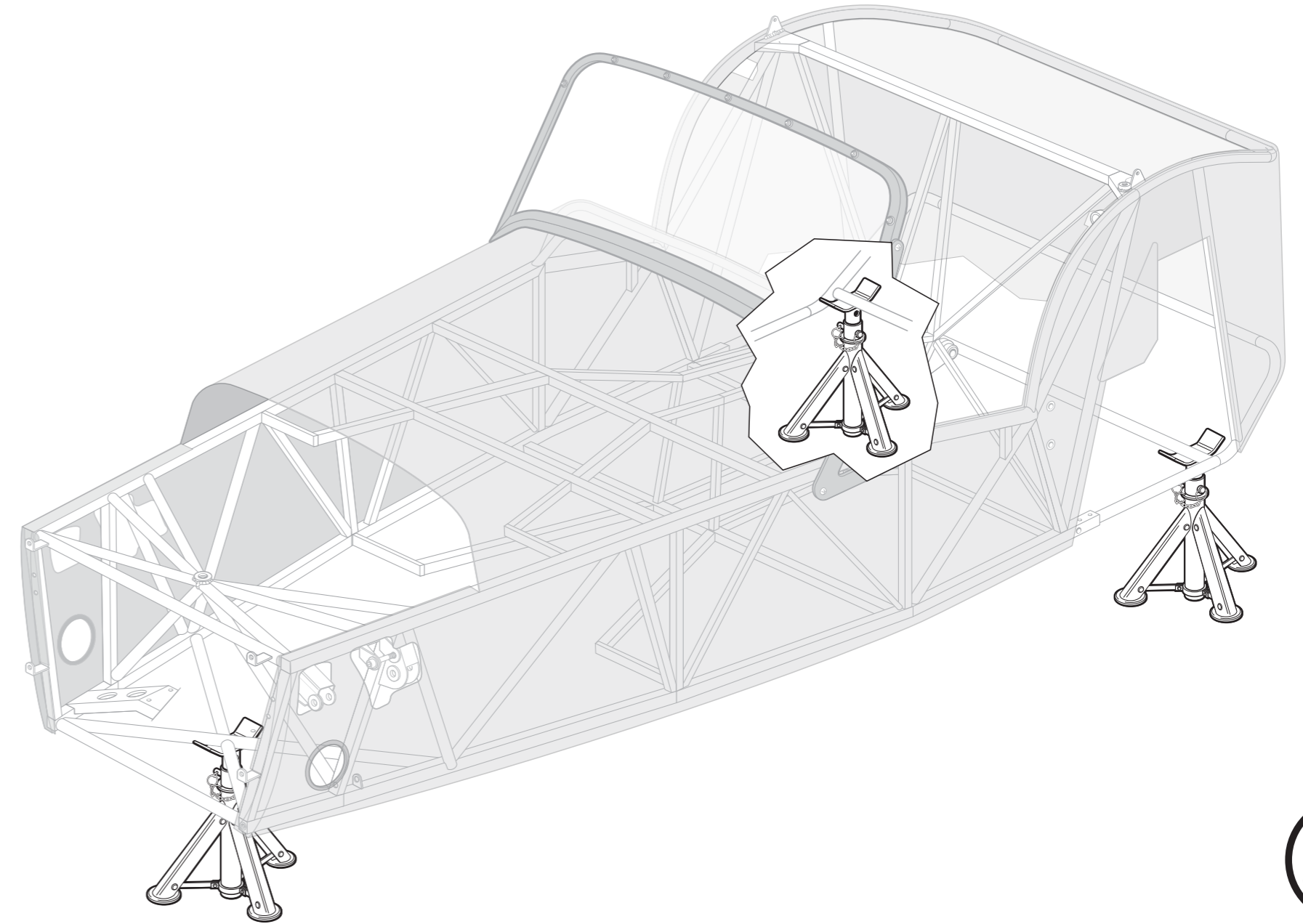
When deciding how high your axle stands should be (the higher the better for working on), don't forget that a complete car will need to come down off them, so make sure your trolley jack can reach and lift the height you set them too!

Mick F

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

Matt T

LET'S GET READY

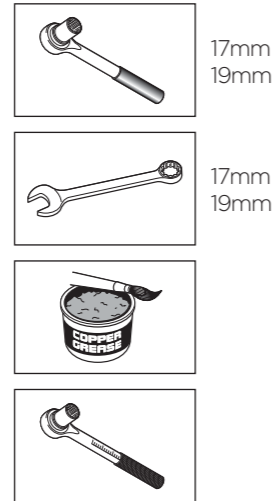


START WITH THE SUSPENSION WISHBONES

PARTS

- 1 Lower wishbone
- 2 Upper wishbone
- 3 Wishbone bush sleeve

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION	
1	AA Bolt M12 x 100 Grade 10.9	BM12X100	2	Lower wishbone rear		x2
2	AB Bolt M12 x 65 Grade 10.9	BM12X65	2	Lower wishbone front		x2
3	AC Bolt M10 x 95 Grade 10.9	BM10X95	2	Upper wishbone rear		x2
4	AD Bolt M10 x 65 Grade 10.9	BM10X65	2	Upper wishbone front		x2
5	AA Bolt M12 x 65 Grade 10.9	BM12X65	4	Anti-roll bar mounting brackets		
6	AC Bolt M10 x 100 Grade 10.9	BM10X100	1	Temporary use to hold wishbone upper ball joint		
7	AG Nylon Nut M10	NM10F12	2	Lower wishbone rear		x2
8	AH Nylon Nut M10	NM10F10	4	Upper wishbone		x4
9	AJ Plain Washer M12 Cheated	W12M12	18	Lower wishbone		x14
10	AA Bolt M12 x 65 Grade 10.9	BM12X65	4	Anti-roll bar mounting brackets		
11	AA Bolt M12 x 100 Grade 10.9	BM12X100	2	Strake plate		

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION	
12	AA Spring Washer M12	WSM12	2	Lower wishbone front		x2
13	AA Bolt M12 x 65 Grade 10.9	BM12X65	4	Anti-roll bar mounting brackets & lower wishbone front		
14	AA Bolt M12 x 65 Grade 10.9	BM12X65	2	Wing nuts		
15	AA Bolt M12 x 65 Grade 10.9	BM12X65	2	Frame brace, wing nuts, mounting and frame		

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

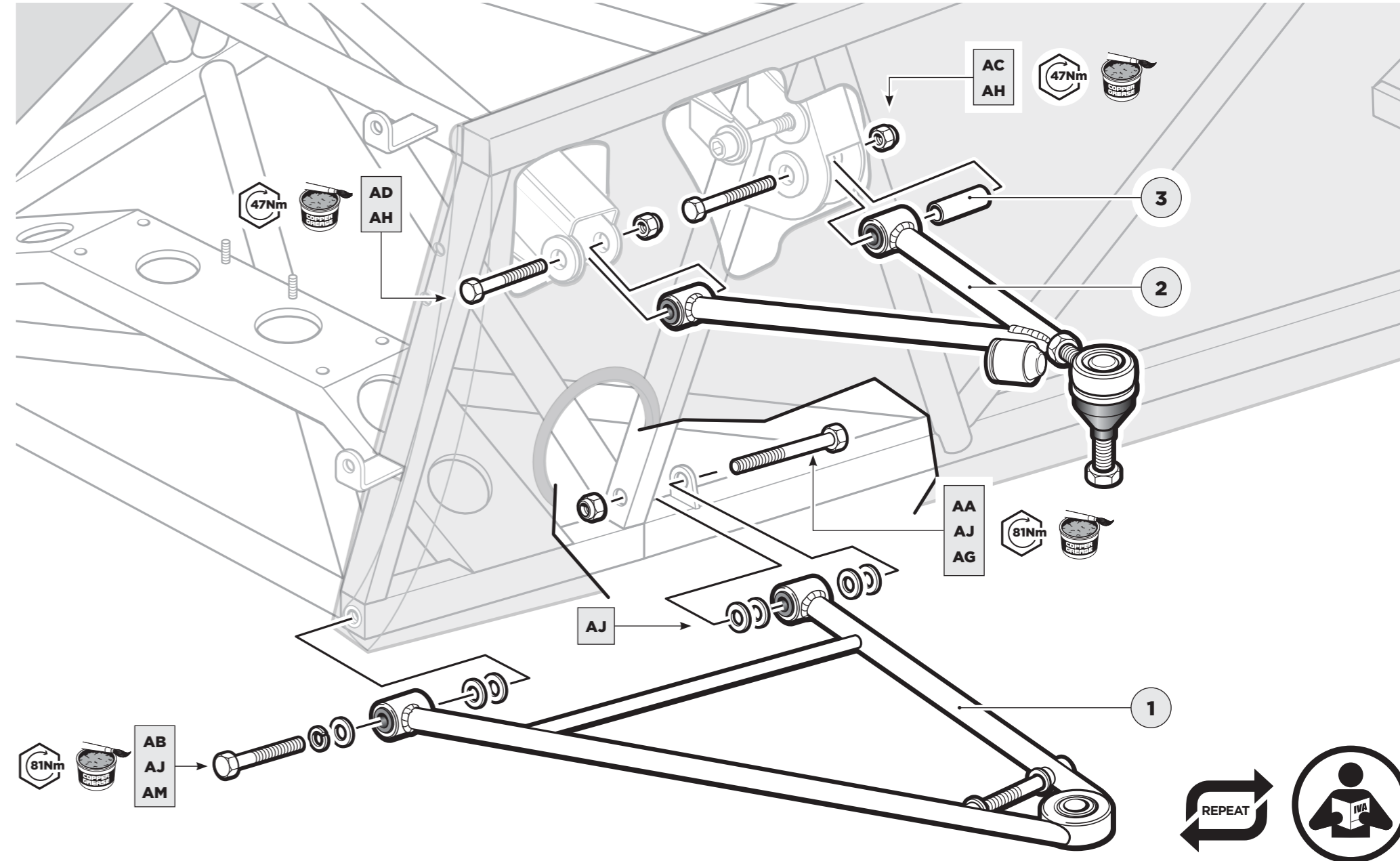
The big washers are chamfered and the chamfered side should be towards the wishbone.

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

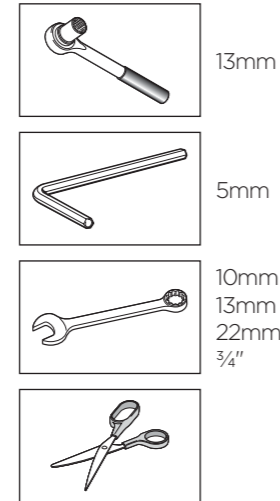


NOW FOR THE STEERING RACK

PARTS

- 1 Steering rack
- 2 Rack clamps
- 3 Column universal joint
- 4 Track rod end
- 5 IVA cover

TOOLS



13mm

5mm

10mm

13mm

22mm

3/4"

TIPS

Finding the right IVA cover isn't obvious because it is effectively a long cap. To use it, you cut the closed end off.

Jamie A

The trackrod end needs to screw on about 12 turns (it will be properly set later when the tracking is done).

Matthew H

FIXINGS

Pack B		CATERHAM		55	
STEERING DeDION CARS (METRIC)					
ITEM	PART DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	BA	Clamp Bar M8 x 10 (M8x10)	4	Rack clamps	
3	BC	Ball MB x 35 (Ball MB)	2	Column to rack universal joint	
5	BE	Plain Nut 10"	2	Track rod lock nut	
7	BG	Nylon Nut M8	2	Column to rack universal joint	
8	BH	Nylon Nut M8	4	Steering rack clamps	
10	BK	Plain Washer 10"	6	Rack clamps and column clamp	

x4

x2

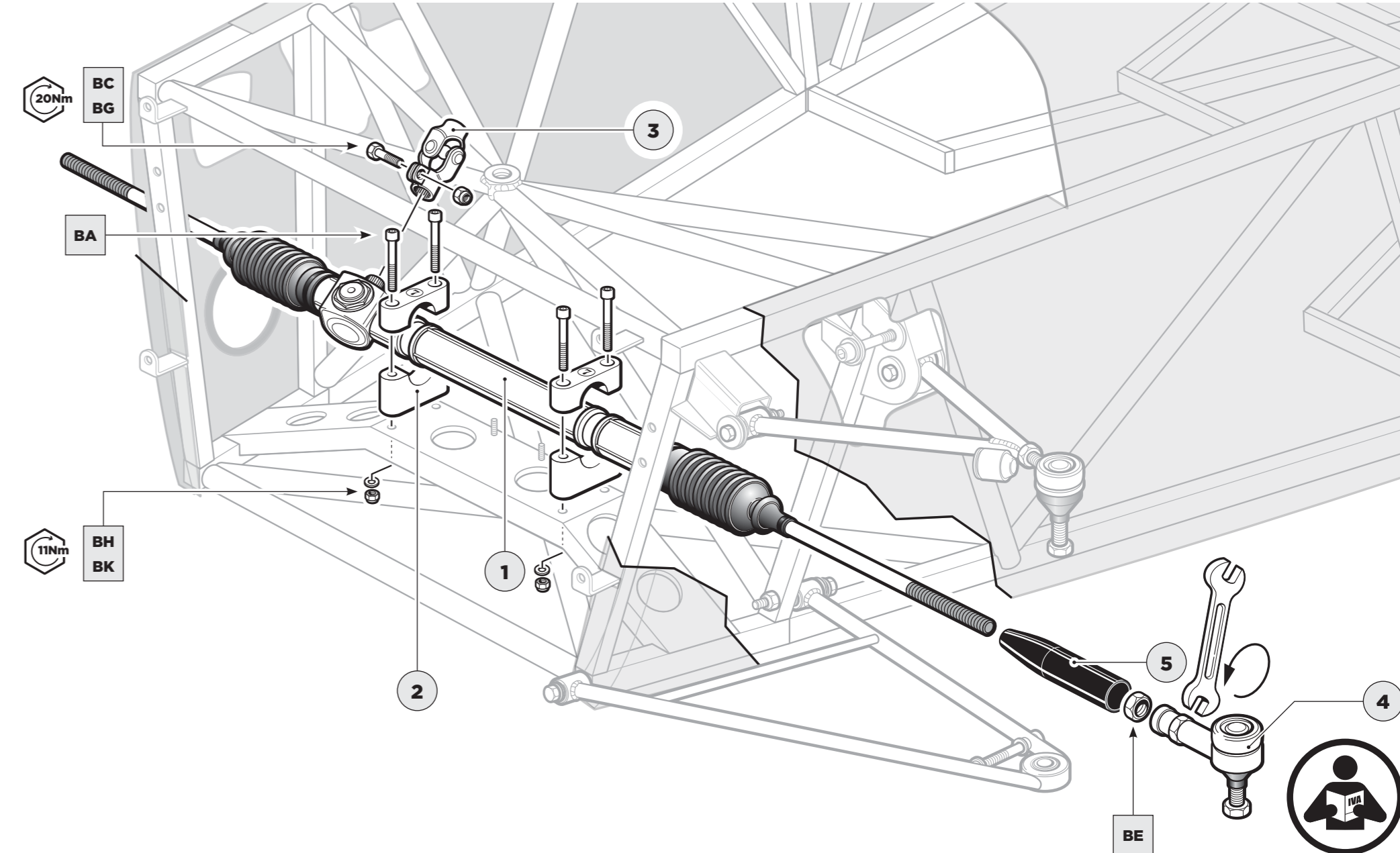
x2

x2

x4

x4

NOW FOR THE STEERING RACK

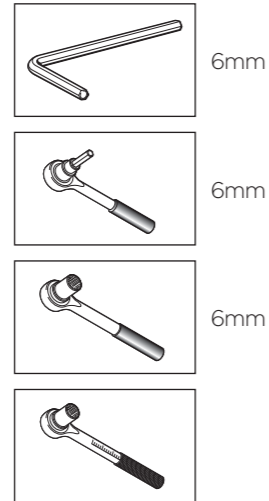


AND THEN THE DAMPERS

PARTS

- 1 Spring / damper
- 2 Lower damper sleeve
- 3 Upper damper sleeve

TOOLS



6mm

6mm

6mm

6mm

FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AA	Ball joint	3842102	2	Lower wishbone	
AB	Ball joint	3842103	2	Lower wishbone	
AC	Ball joint	3842104	2	Upper wishbone	
AD	Ball joint	3842105	2	Upper wishbone	
AE	Ball joint	3842106	4	Anti-roll bar mounting brackets	
AF	Ball joint	3842107	1	Temporary use to hold in place wishbone ball joint	
AG	Ball joint	3842108	2	Lower wishbone	
AH	Ball joint	3842109	4	Upper wishbone	
AI	Ball joint	3842110	10	Lower wishbone	
AJ	Ball joint	3842111	4	Anti-roll bar mounting brackets	
AK	Ball joint	3842112	2	Steering rack	

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AA	Spring washer	3842113	2	Lower wishbone	
AB	Spring washer	3842114	6	Anti-roll bar mounting brackets & upper damper mount	
AC	Spring washer	3842115	2	Steering rack	
AD	Spring washer	3842116	2	Wing stay	
AE	Spring washer	3842117	2	Frame brace, engine mounting and front suspension	

x2

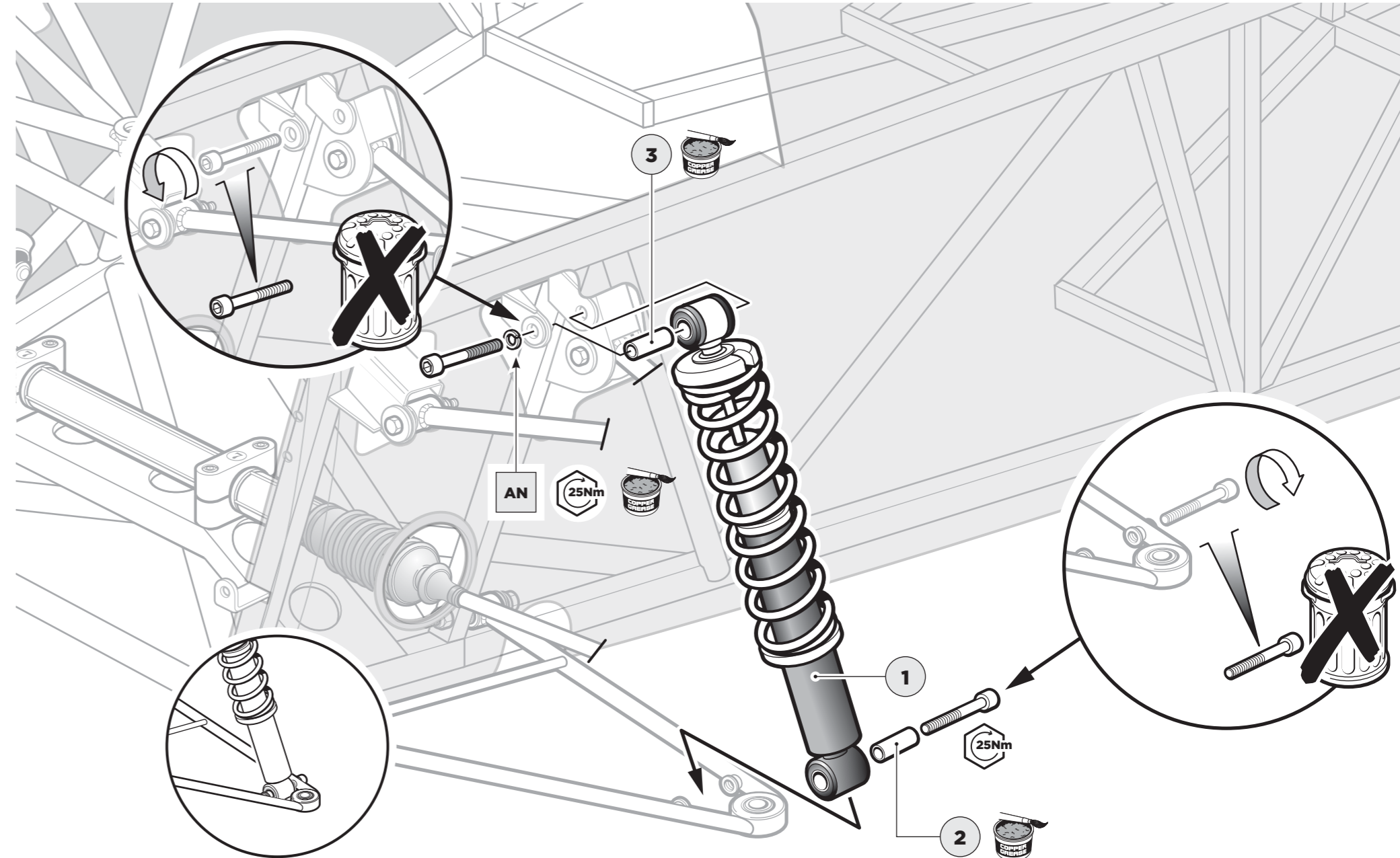
Fixings not contained in the pack will be supplied loosely fitted to the chassis and the wishbone

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

AND THEN THE DAMPERS

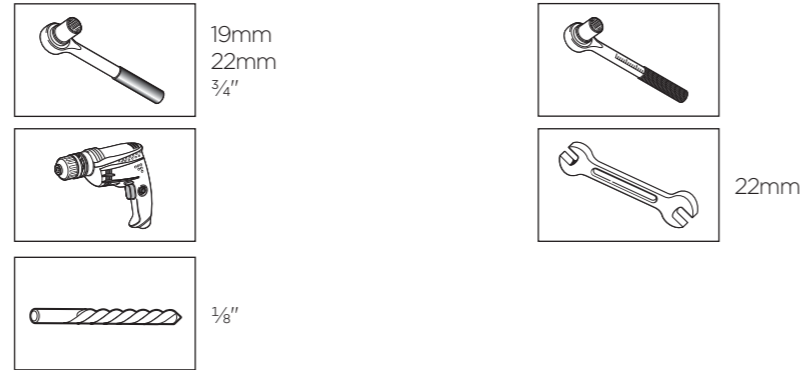


IT'S TIME FOR THE WINGSTAYS

PARTS

- 1 Wingstay
- 2 Front brake & upright assembly

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' into the lower wishbone joint then attach the steering before tightening the bottom nut. This stops it all swinging around hitting the side of the chassis.

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 that comes on the back of the assembly before fitting the wingstay; it's not needed.

Rich T

FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AA	Ball Joint 1.100	BAJ1100	2	Lower wishbone joint	
AB	Ball Joint 1.100	BAJ1100	2	Lower wishbone joint	
AC	Ball Joint 1.100	BAJ1100	2	Upper wishbone joint	
AD	Ball Joint 1.100	BAJ1100	2	Upper wishbone joint	
AE	Ball Joint 1.100	BAJ1100	4	Anti-dive bar mounting brackets	
AF	Plain Nut M14 x 1.5 thread	BNM14	1	Temporary use to help lock upper wishbone ball joint	
AG	Ball Nut M14	BNM14	2	Lower wishbone joint	
AH	Ball Nut M14	BNM14	4	Upper wishbone joint	
AI	Plain Washer 14mm	PNW14	10	Lower wishbone	
AJ	Plain Washer 14mm	PNW14	4	Anti-dive bar mounting brackets	
AK	Plain Washer 14mm	PNW14	2	Steering plate	

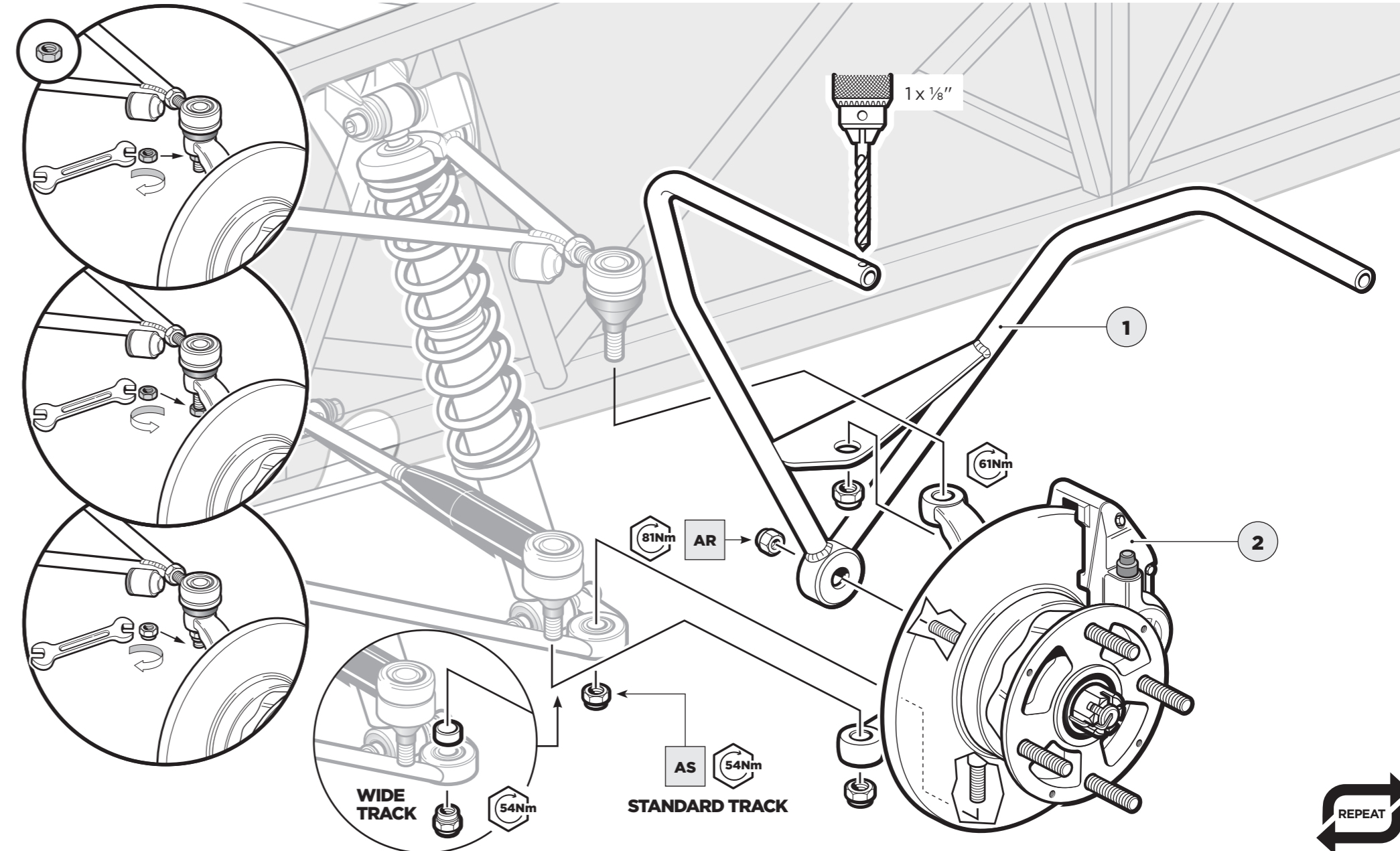
x1

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AS	Nyloc Nut 1/2" (4mm)	NFY112	2	Wing stay	
AT	Nyloc Nut 1/2" (4mm)	NFY112	2	Front brake, upright mounting (old track ONLY)	

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
- 2 Indicator pod
- 3 Indicator assembly
- 4 Headlight bracket
- 5 IVA trim

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	CA	None 10 x 1/2" hex hardware	6	Indicator assembly to indicator pod	
2	CB	None 2 x 1/2" hex hardware	2	Side regulator with coil spring	
3	CC	None 1/2 x 1/2" hex hardware	4	Rear light shroud rubber flange	
4	CD	None 1/2 x 1/2" hex hardware	4	Rear light shroud lower flange	
5	CE	None 1/2 x 1/2" hex hardware	2	Washers to mounting rack	
6	CF	None 1/2 x 1/2" hex hardware	2	Washers to mounting rack	
7	CG	None 1/2 x 1/2" hex hardware	1	Through shroud nut (mounting to chassis)	
8	CH	None 1/2 x 1/2" hex hardware	2	Ball bearings	
9	CI	None 1/2 x 1/2" hex hardware	1	Washers	

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

x6

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!

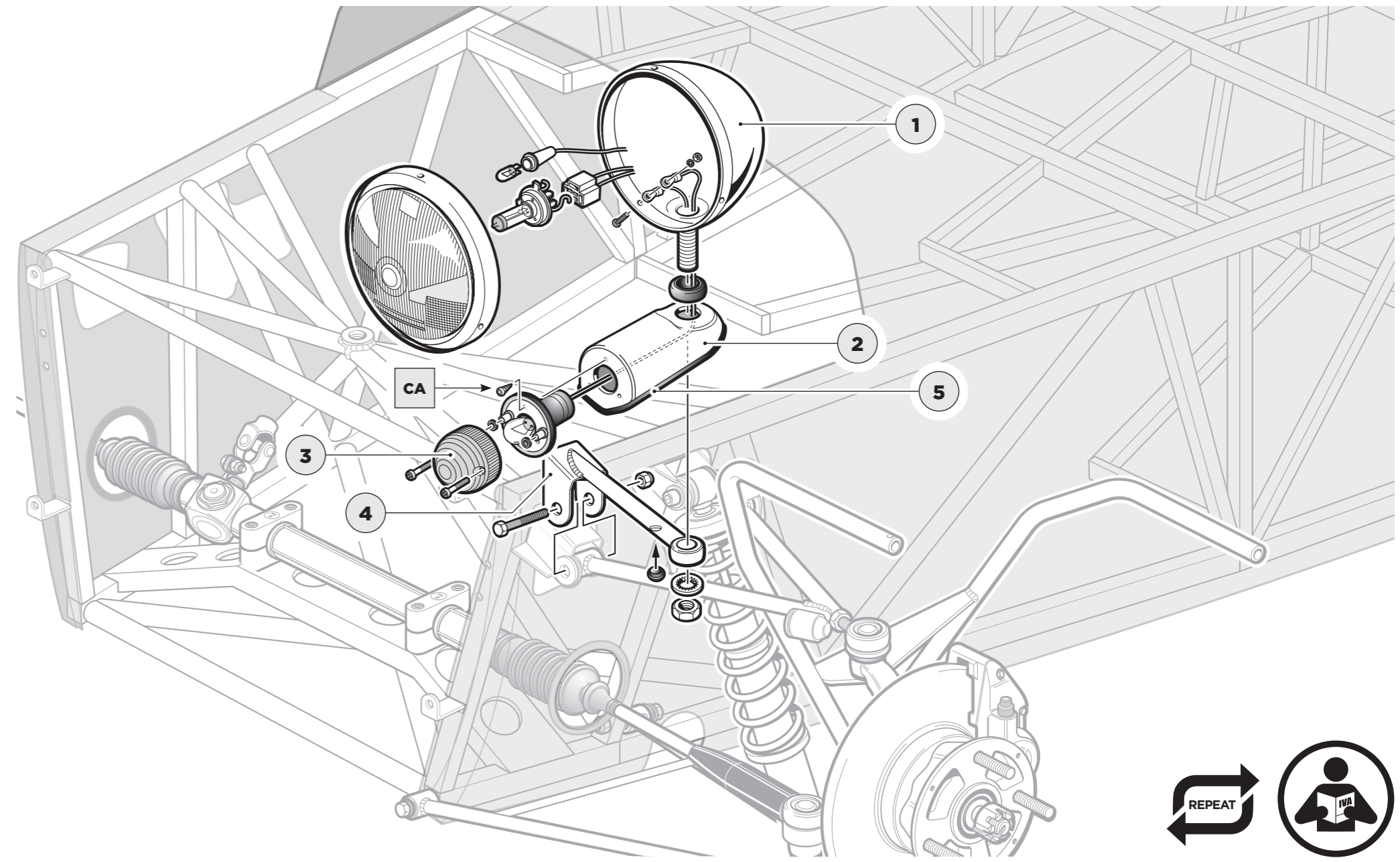
Tiago A
- The wiring for the headlights is attached to the chassis when you receive your kit. The wires go through the hole in the end of the headlight bracket and out of the other hole in order to go up into the headlight and over to the indicator.

Jamie A
- Glue IVA trim all around the edge of the pod before fitting.

Chris B
- The tab on the headlight bracket ④ hooks under the wishbone bracket on the chassis.

Harrison P

LET THERE BE LIGHTS

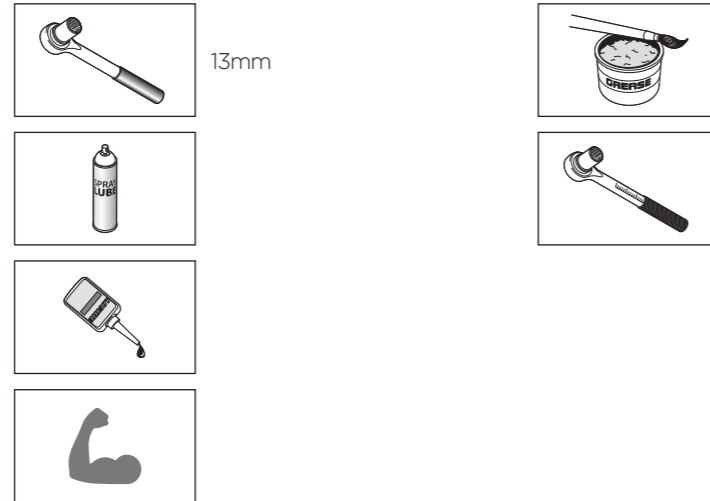


LAST PART OF THE FRONT SUSPENSION: CONNECTING THE TWO SIDES TOGETHER

PARTS

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

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AA	Ball Joint 1.500mm x 1.500mm	BA02102	2	Lower wishbone	
AB	Ball Joint 1.500mm x 1.500mm	BA02102	2	Lower wishbone	
AC	Ball Joint 1.500mm x 1.500mm	BA02102	2	Upper wishbone	
AD	Ball Joint 1.500mm x 1.500mm	BA02102	2	Upper wishbone	
AE	Ball Joint 1.500mm x 1.500mm	BA02102	4	Anti-roll bar mounting brackets	
AF	Ball Joint 1.500mm x 1.500mm	BA02102	1	Temporary use to hold the upper wishbone ball joint	
AG	Ball Joint 1.500mm x 1.500mm	BA02102	2	Lower wishbone	
AH	Ball Joint 1.500mm x 1.500mm	BA02102	4	Upper wishbone	
AI	Ball Joint 1.500mm x 1.500mm	BA02102	10	Lower wishbone	
AJ	Ball Joint 1.500mm x 1.500mm	BA02102	2	Lower wishbone	
AK	Plan Washer 16mm dia	WP048	4	Anti-roll bar mounting brackets	
AL	Shake pin 16mm dia	SP015B	2	Shake pin	

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AM	Spring Washer 16mm dia	WP048	2	Lower wishbone	
AN	Spring Washer 16mm dia	WP048	6	Anti-roll bar mounting brackets & upper damper mount	
AO	Spring Washer 16mm dia	WP048	2	Shake pin	
AP	Spring Washer 16mm dia	WP048	2	Wing stay	
AQ	Spring Washer 16mm dia	WP048	2	Lower wishbone	

TIPS

Use four small cable ties to secure the dust cover.
Mick F

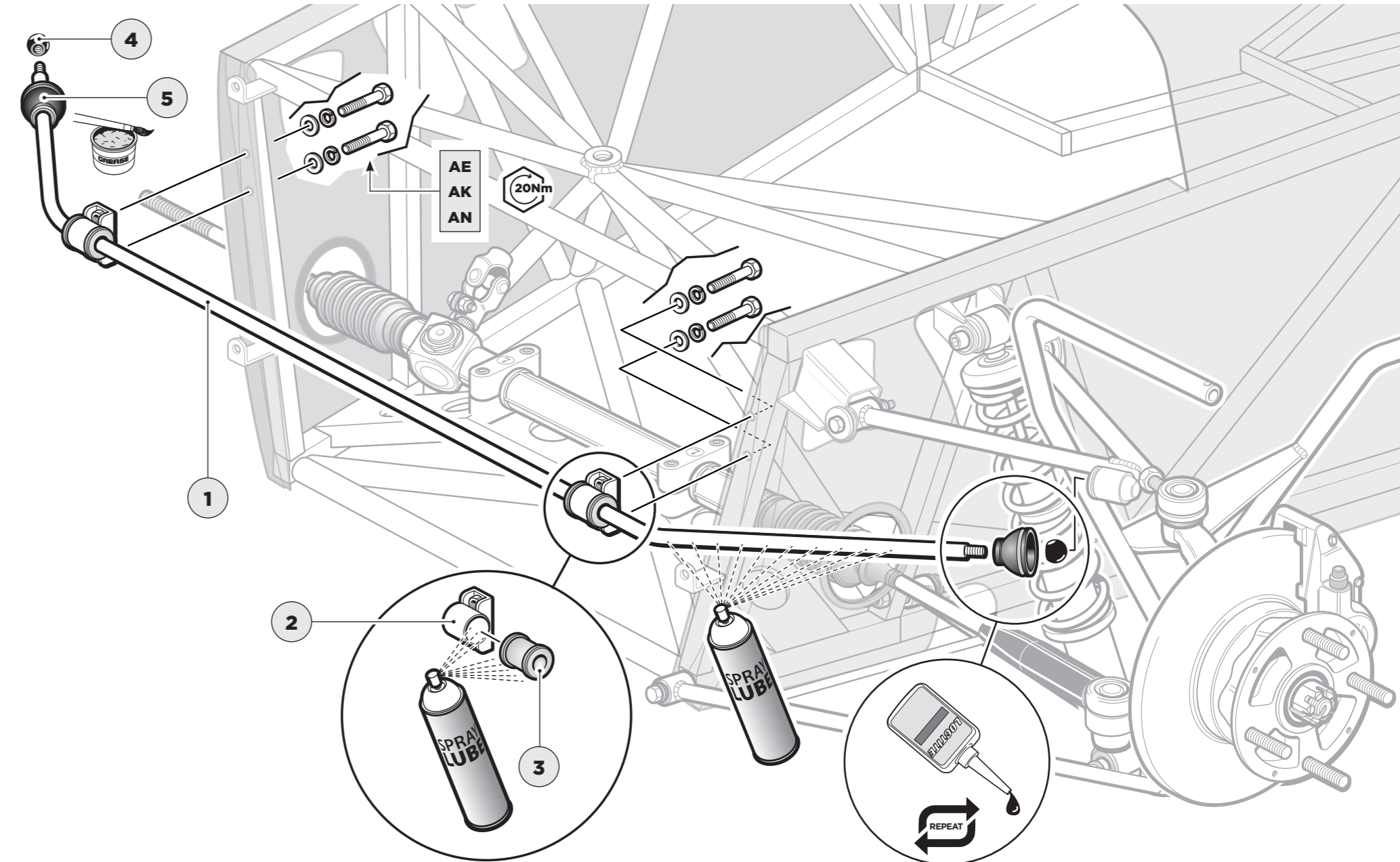
Check that the colour of the mounting rubbers matches the colour spot on the bar.
John K

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

Grease the balls and cups generously.
Matt T

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

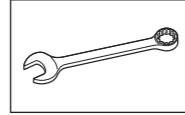


FITTING THE BRAKE HOSES

PARTS

1 Brake hose

TOOLS



13mm (x2)
9/16"

FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AA	Ball joint 1.500 (Metric)	BAJ1500	2	Lower wishbone, front	
AB	Ball joint 1.500 (Metric)	BAJ1500	2	Lower wishbone, front	
AC	Ball joint 1.500 (Metric)	BAJ1500	2	Upper wishbone, front	
AD	Ball joint 1.500 (Metric)	BAJ1500	2	Upper wishbone, front	
AE	Ball joint 1.500 (Metric)	BAJ1500	4	Anti-roll bar mounting brackets, front	
AF	Ball joint 1.500 (Metric)	BAJ1500	1	Temporary use to hold link when adjusting ball joint	
AG	Ball joint 1.500 (Metric)	BAJ1500	2	Lower wishbone, rear	
AH	Ball joint 1.500 (Metric)	BAJ1500	4	Upper wishbone, rear	
AI	Ball joint 1.500 (Metric)	BAJ1500	10	Lower wishbone, rear	
AJ	Ball joint 1.500 (Metric)	BAJ1500	4	Anti-roll bar mounting brackets, rear	
AK	Ball joint 1.500 (Metric)	BAJ1500	2	Brake pipe	

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

x2

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
AA	Spring washer, front	WSPR12	2	Lower wishbone, front	
AB	Spring washer, front	WSPR12	4	Anti-roll bar mounting brackets & upper wishbone, front	
14	AD - Washer 1/2" (DIN 934)	WSD18	2	Brake pipe	
AA	Ball joint 1.500 (Metric)	BAJ1500	2	Wing stay	
AB	Ball joint 1.500 (Metric)	BAJ1500	2	Frame brace, wing mounting and frame	

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

x2

TIPS

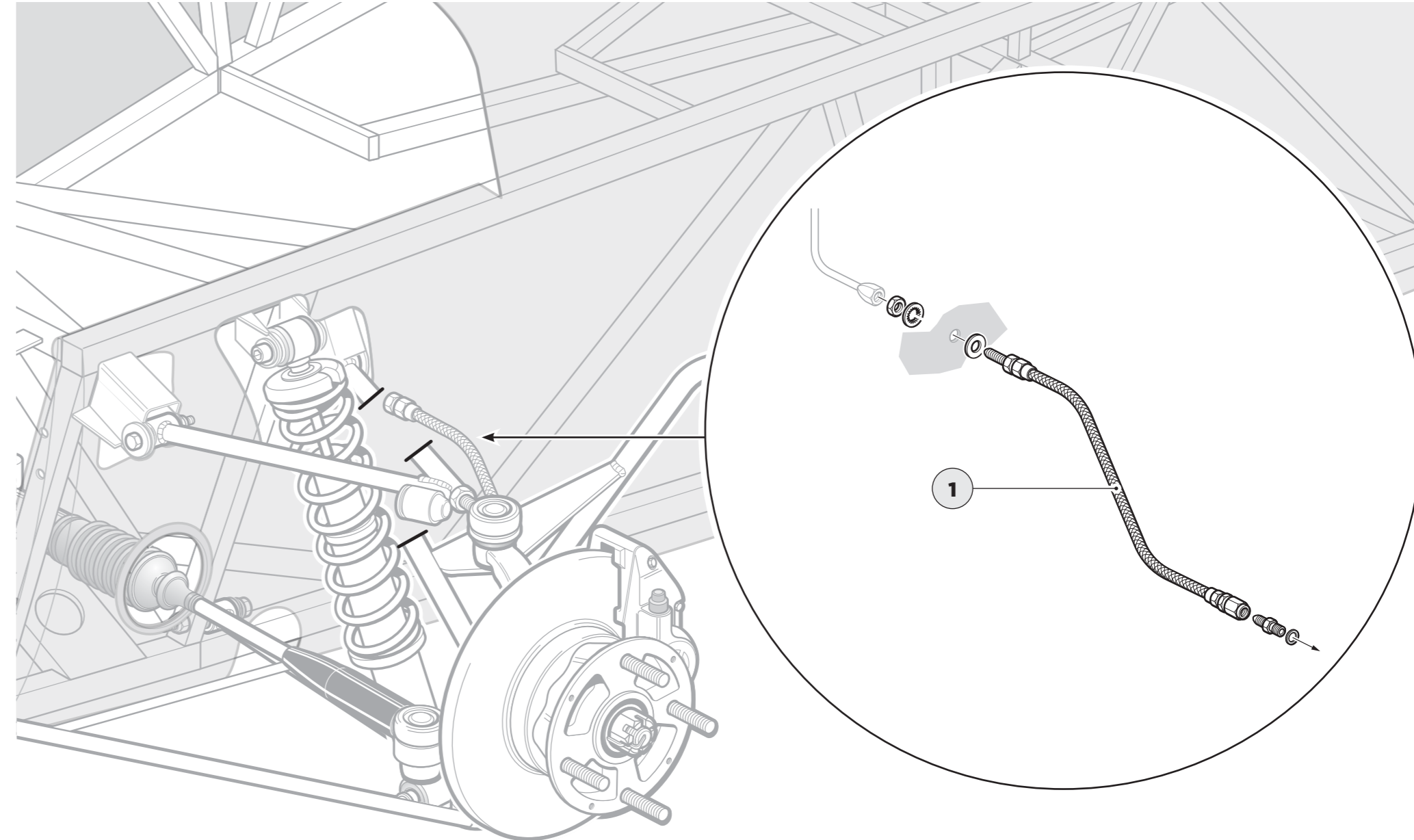
The hose will want to curve once fitted. Make sure the curve points towards the front of the car.

Khalfani D

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

Anthony L

FITTING THE BRAKE HOSES



LET'S MAKE SOME NOISE

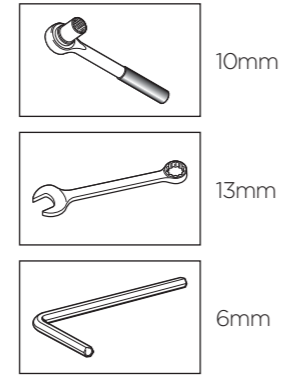
PARTS

- 1** Horn kit (x2)
- 2** Spacer (miscellaneous box)
- 3** Bolt for spacer

FIXINGS

Miscellaneous box

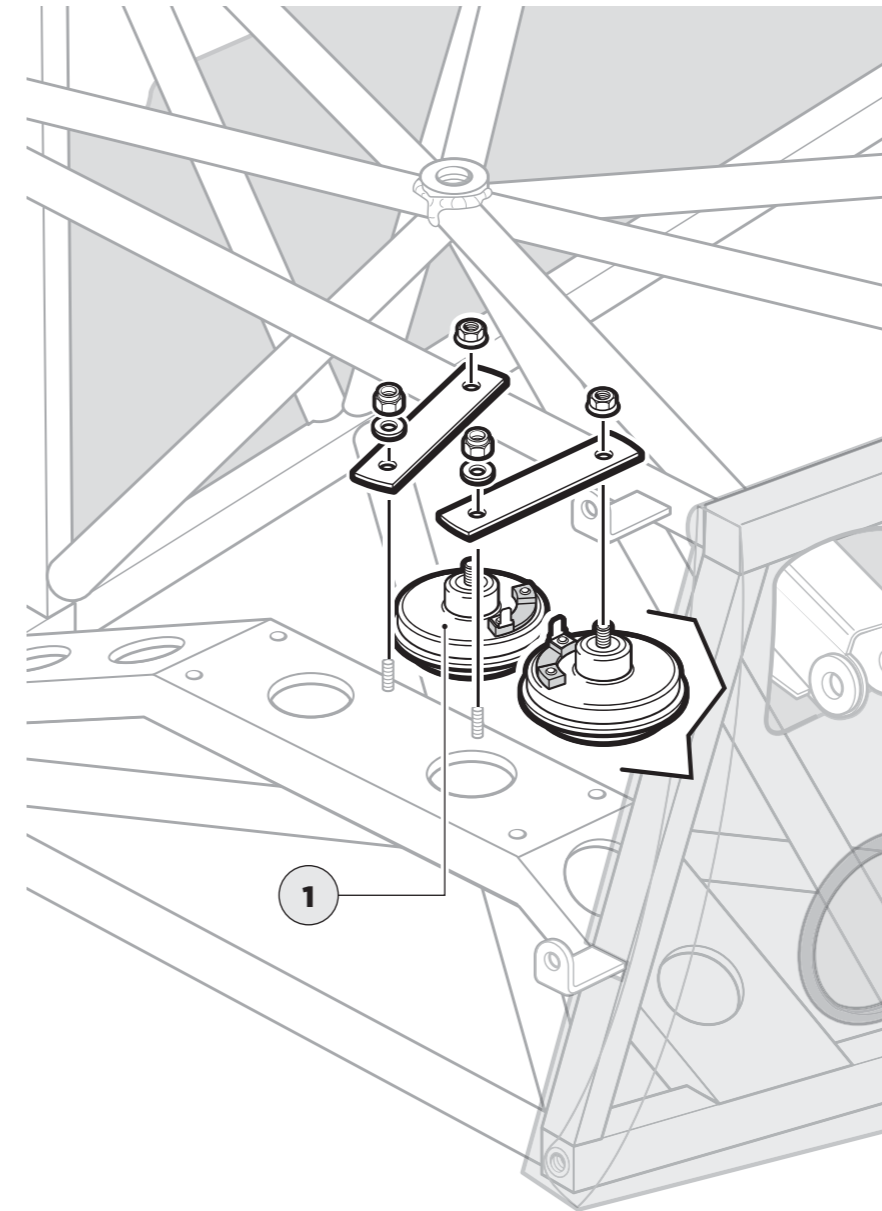
TOOLS



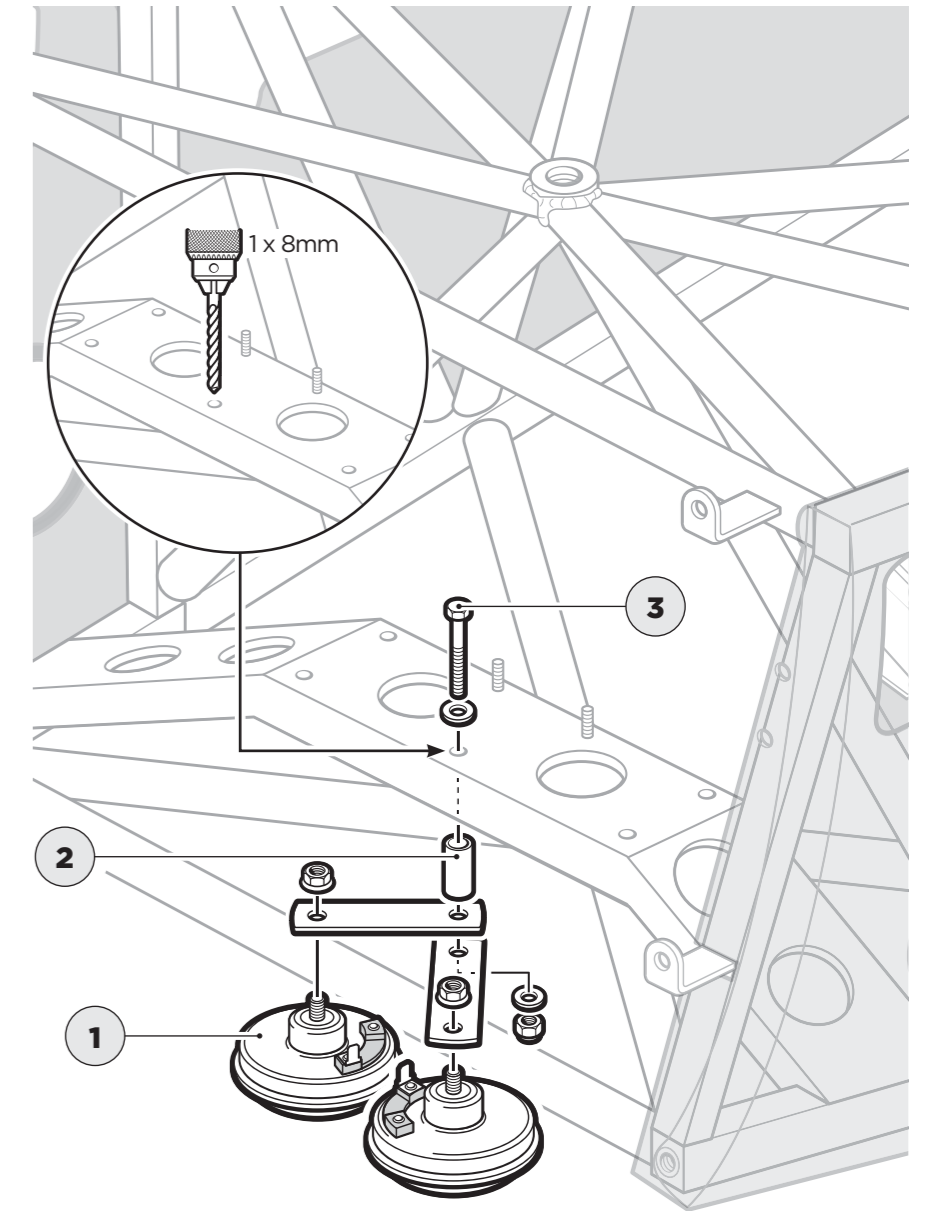
TIPS

LET'S MAKE SOME NOISE

270/310/360



420

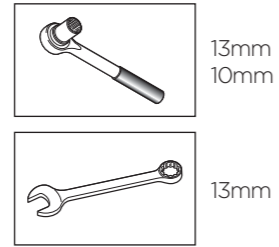


FITTING THE RADIATOR ON THE STANDARD CHASSIS

PARTS

- 1 Radiator
- 2 Fan brackets (x2)
- 3 Fan
- 4 Radiator bobbins (x4)

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Radiator	302107A	1		
2	Fan brackets (x2)	302107B	2		
3	Fan	302107C	1		
4	Radiator bobbins (x4)	302107D	4		

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
5	Expansion tank	302107E	1		
6	Expansion tank bracket	302107F	1		
7	Expansion tank bobbin	302107G	1		
8	Expansion tank bracket	302107H	1		
9	Expansion tank bobbin	302107I	1		
10	Expansion tank bracket	302107J	1		
11	Expansion tank bobbin	302107K	1		

The fan may have four plastic legs or feet that slot into it.
Vincent M

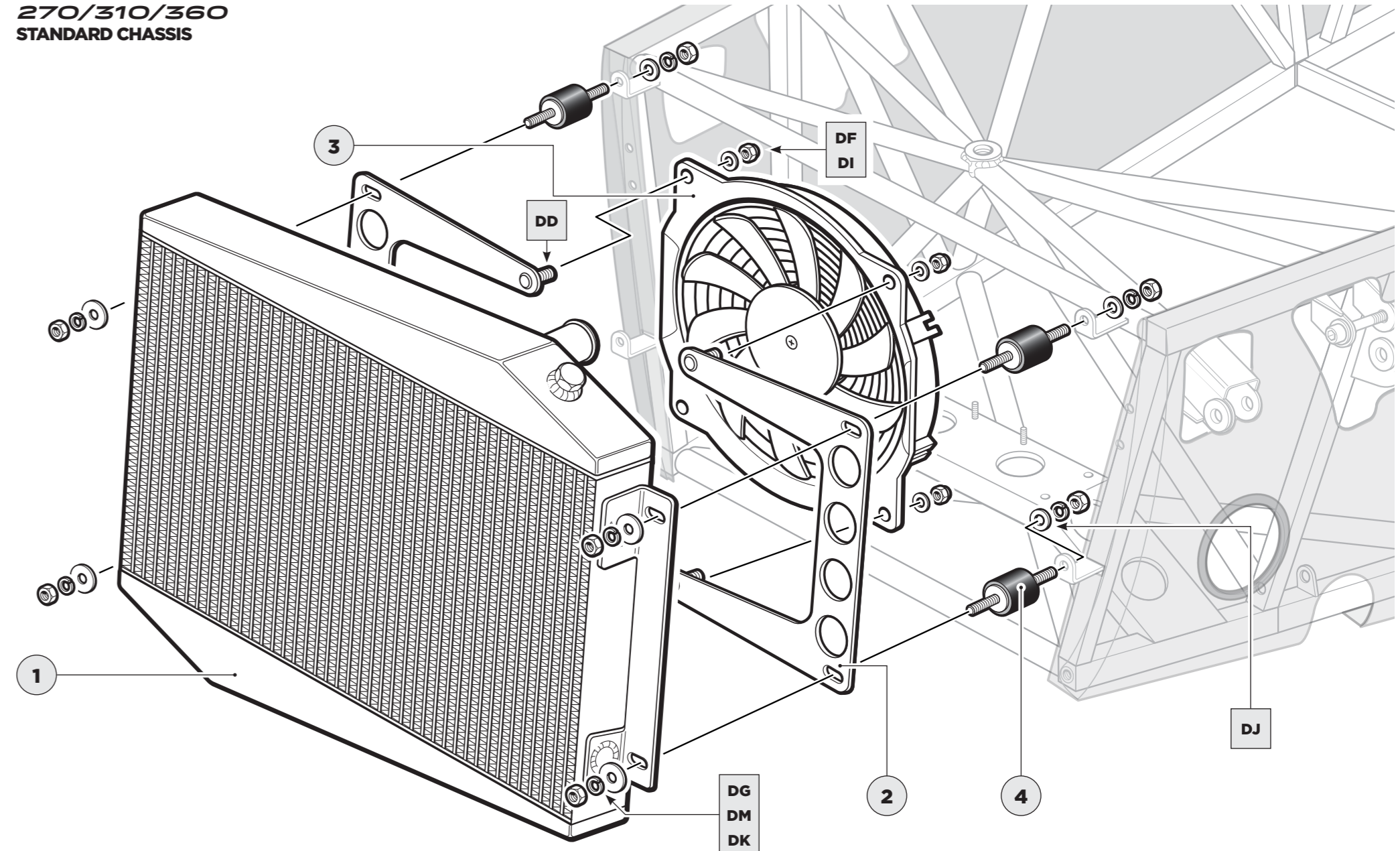
The fan may have a 'flat' section on the rim. This should be at the top.
James S

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

TIPS

FITTING THE RADIATOR ON THE STANDARD CHASSIS

270/310/360 STANDARD CHASSIS

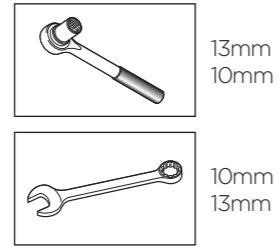


THE RADIATOR MOUNTING FOR THE WIDE-BODIED CHASSIS IS SLIGHTLY DIFFERENT

PARTS

- 1 Radiator
- 2 Fan brackets (x2)
- 3 Fan
- 4 Radiator bobbins (x4)
- 5 Brackets

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Radiator	302107A	1		
2	Fan brackets (x2)	302107A	2		
3	Fan	302107A	1		
4	Radiator bobbins (x4)	302107A	4		
5	Brackets	302107A	2		

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	302107A	1		
2	Expansion tank	302107A	1		
3	Expansion tank	302107A	1		
4	Expansion tank	302107A	1		
5	Expansion tank	302107A	1		
6	Expansion tank	302107A	1		
7	Expansion tank	302107A	1		
8	Expansion tank	302107A	1		
9	Expansion tank	302107A	1		
10	Expansion tank	302107A	1		
11	Expansion tank	302107A	1		

TIPS

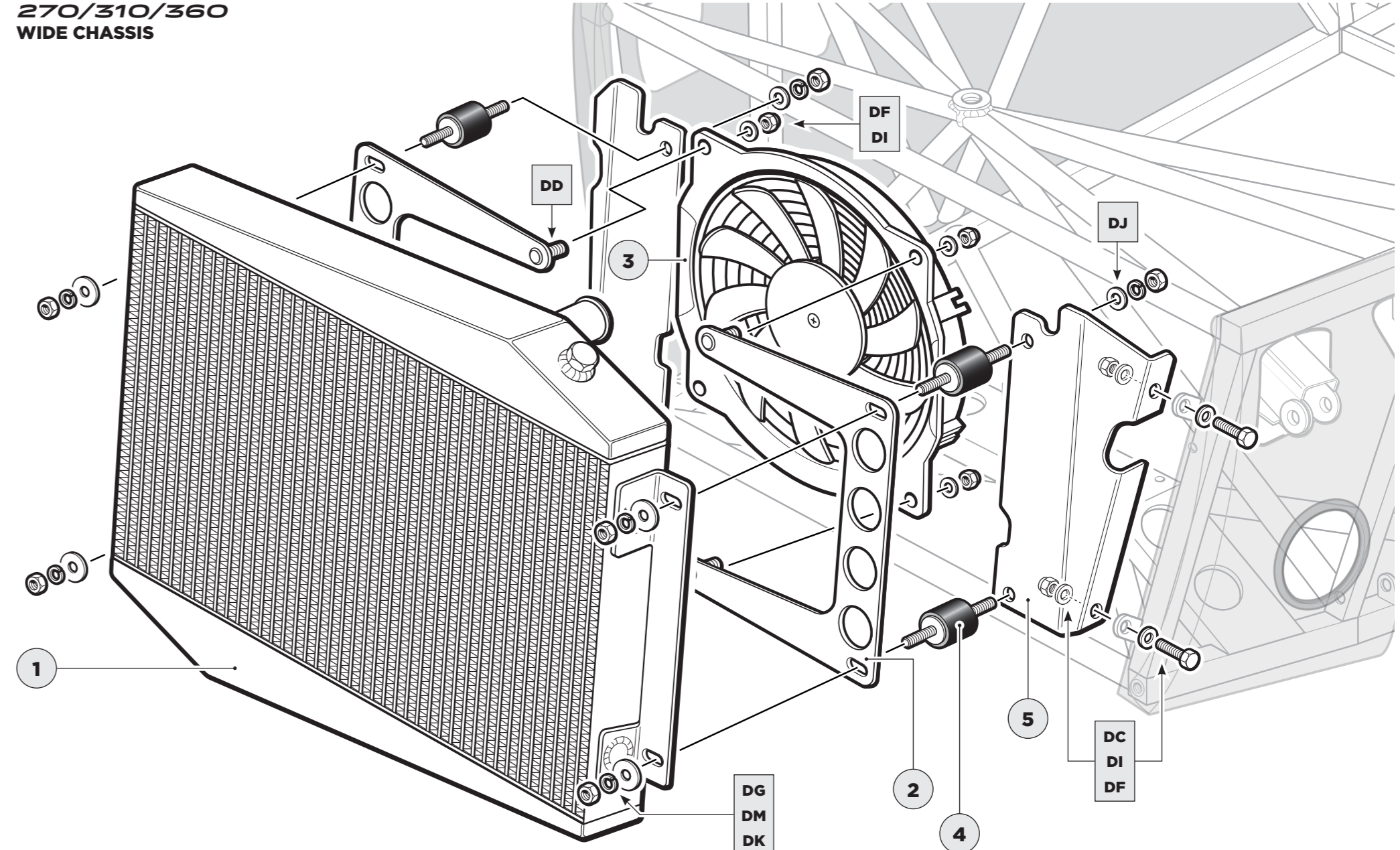
The fan may have four plastic legs or feet that slot into it.
Vincent M

The fan may have a 'flat' section on the rim. This should be at the top.
James S

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

THE RADIATOR MOUNTING FOR THE WIDE-BODIED CHASSIS IS SLIGHTLY DIFFERENT

270/310/360 WIDE CHASSIS

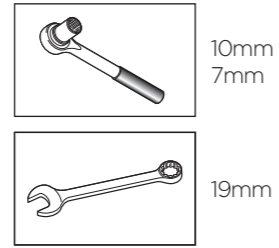


THINGS ARE HEATING UP

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

TOOLS



10mm
7mm

19mm

FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to heater	38C047B	1	Expansion tank to heater	
3	SV radiator bracket	38C047B	4	SV radiator bracket	
4	Fan bracket for SV	38C047B	1	Fan bracket for SV	
5	Fan to radiator coating - SV only	38C047B	4	Fan to radiator coating - SV only	
6	Fan to radiator and SV radiator bracket	38C047B	4	Fan to radiator and SV radiator bracket	
7	Radiator bracket	38C047B	4	Radiator bracket	
8	Expansion tank bracket	38C047B	1	Expansion tank bracket	
9	Expansion tank to heater	38C047B	1	Expansion tank to heater	
10	Radiator to heater	38C047B	4	Radiator to heater	
11	Radiator to heater	38C047B	4	Radiator to heater	

x2

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to heater	38C047B	1	Expansion tank to heater	
3	SV radiator bracket	38C047B	4	SV radiator bracket	
4	Fan bracket for SV	38C047B	1	Fan bracket for SV	
5	Fan to radiator coating - SV only	38C047B	4	Fan to radiator coating - SV only	
6	Fan to radiator and SV radiator bracket	38C047B	4	Fan to radiator and SV radiator bracket	
7	Radiator bracket	38C047B	4	Radiator bracket	
8	Expansion tank bracket	38C047B	1	Expansion tank bracket	
9	Expansion tank to heater	38C047B	1	Expansion tank to heater	
10	Radiator to heater	38C047B	4	Radiator to heater	
11	Radiator to heater	38C047B	4	Radiator to heater	

x4

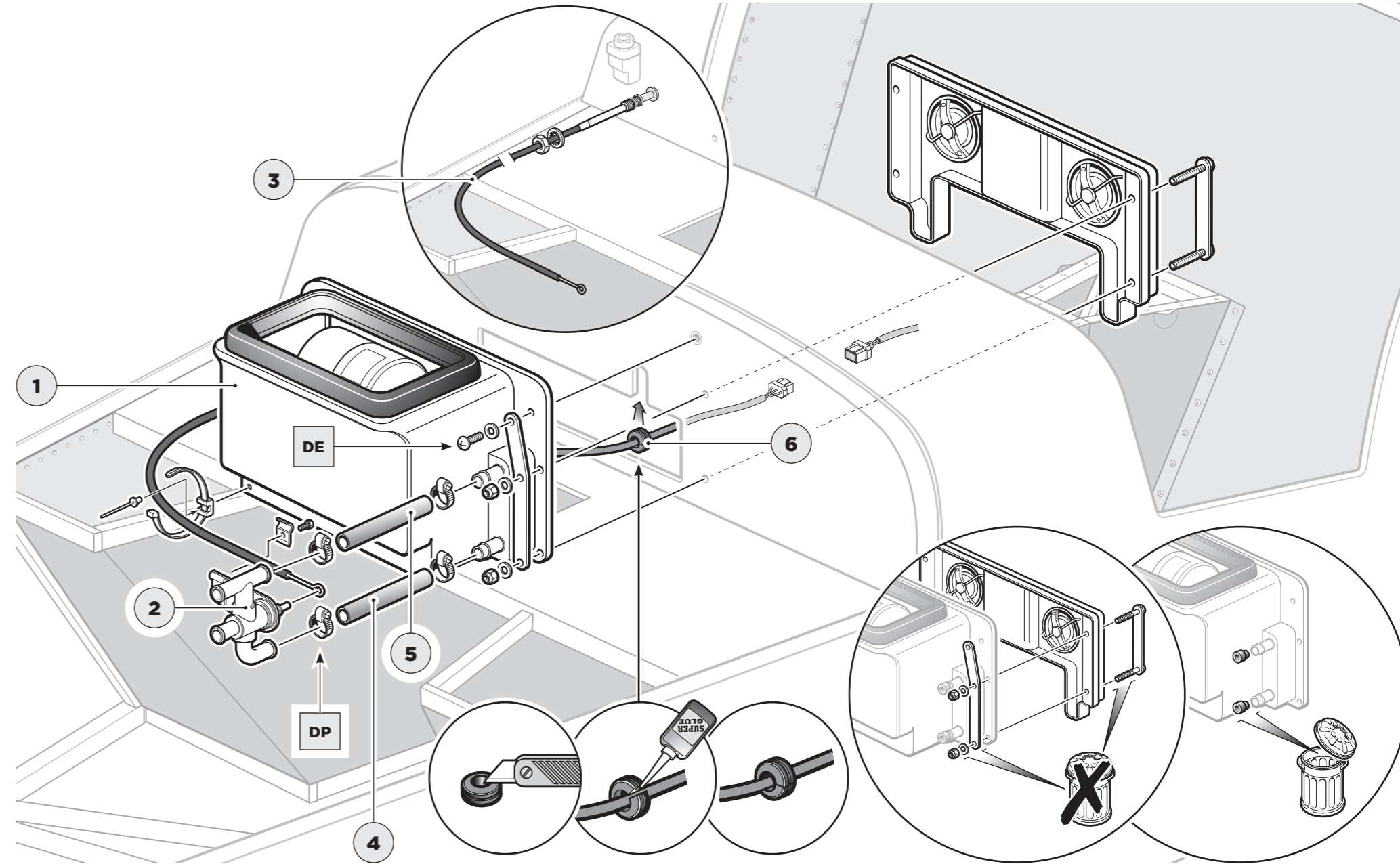
TIPS

Remember to remove bungs from heater.
Jamie A

Use 7mm for jubilee clips but not too tight!
Chris B

It's worth re-tightening the jubilee clips after a couple of uses of car.
John S

THINGS ARE HEATING UP

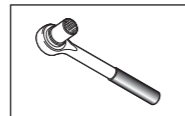
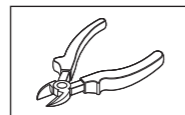
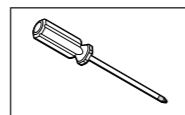


KEEPING THE AIR CLEAN

PARTS

- 1 Air box
- 2 Air filter
- 3 Rubber mounts
- 4 Trim

TOOLS



8mm

FIXINGS

Unmarked bag:

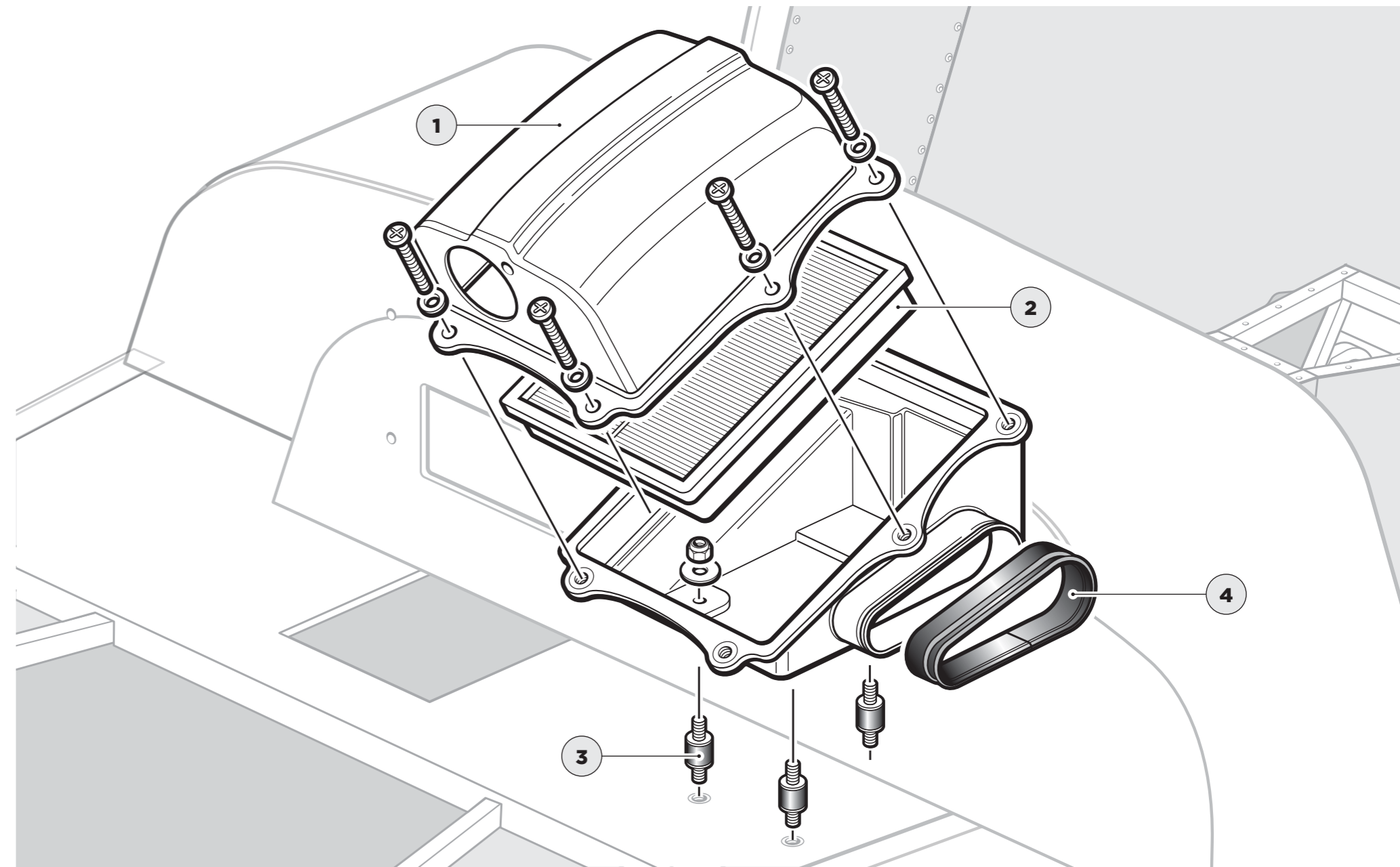
- M5 (x6)
- Spring (x6)
- Flats (x6)
- Nylocs M5 (x3)
- 3/16 washers (x3)
- 3/4 washers (x3)
- Screws (x20)

TIPS

Bobbins are screwed into the car by hand.
John K

The rubber lip of the trim should 'flare out' from the intake hole, not in.
Grant P

KEEPING THE AIR CLEAN

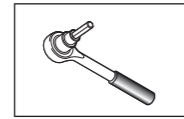


GETTING READY TO PUT THE ENGINE IN

PARTS

- 1** Engine mount
- 2** Starter motor
- 3** Bellhousing

TOOLS



6mm
8mm

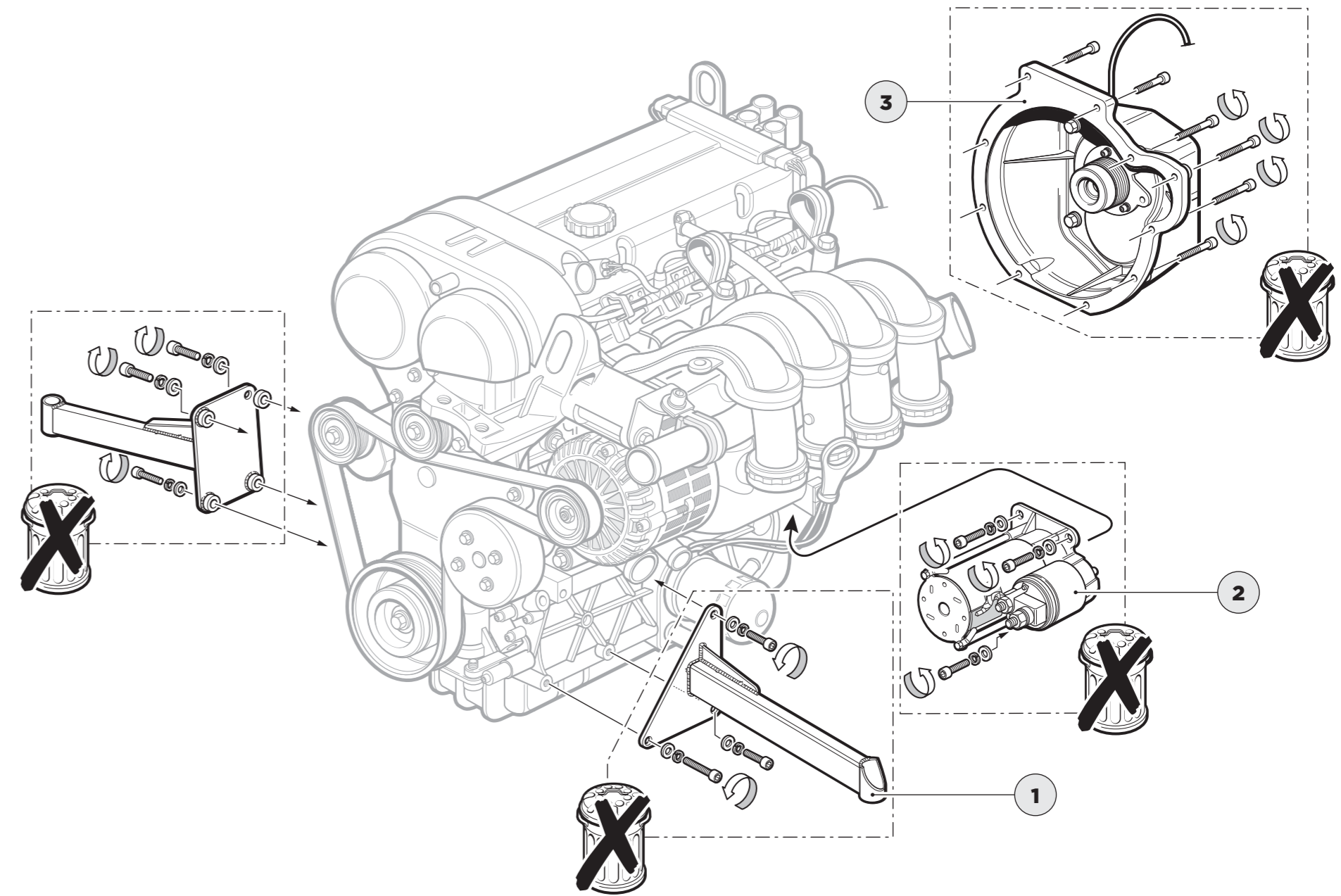
FIXINGS

TIPS

You will need to remove the engine mounts and starter motor but don't throw away the bolts – keep them safe!

Chris N

GETTING READY TO PUT THE ENGINE IN

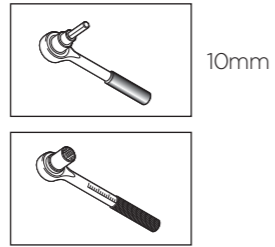


ATTACH THE GEARBOX TO THE BELLHOUSING

PARTS

- 1 Gearbox
- 2 Bell housing

TOOLS



10mm

FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
EA	Engine Mount 2.0L 1.6L 1.8L 2.0L	362112A	1	All Mount	
EB	Engine Mount 2.0L 1.6L 1.8L 2.0L	362113A	1	All Mount	
EC	Castrol Bell 200.2 50 Gearbox Thread	362114A	4	Gearbox	
ED	Castrol Bell 200.2 50 Gearbox Thread	362115A	1	Gearbox	
EE	Castrol Bell 200.2 50 Gearbox Thread	362116A	1	Gearbox	
EF	Castrol Bell 200.2 50 Gearbox Thread	362117A	1	Gearbox	
EG	Castrol Bell 200.2 50 Gearbox Thread	362118A	1	Gearbox	
EH	Castrol Bell 200.2 50 Gearbox Thread	362119A	1	Gearbox	
EI	Castrol Bell 200.2 50 Gearbox Thread	362120A	1	Gearbox	
EJ	Castrol Bell 200.2 50 Gearbox Thread	362121A	1	Gearbox	
EK	Castrol Bell 200.2 50 Gearbox Thread	362122A	1	Gearbox	
EL	Castrol Bell 200.2 50 Gearbox Thread	362123A	1	Gearbox	
EM	Castrol Bell 200.2 50 Gearbox Thread	362124A	1	Gearbox	
EN	Castrol Bell 200.2 50 Gearbox Thread	362125A	1	Gearbox	
EO	Castrol Bell 200.2 50 Gearbox Thread	362126A	1	Gearbox	
EP	Castrol Bell 200.2 50 Gearbox Thread	362127A	1	Gearbox	
EQ	Castrol Bell 200.2 50 Gearbox Thread	362128A	1	Gearbox	
ER	Castrol Bell 200.2 50 Gearbox Thread	362129A	1	Gearbox	
ES	Castrol Bell 200.2 50 Gearbox Thread	362130A	1	Gearbox	
ET	Castrol Bell 200.2 50 Gearbox Thread	362131A	1	Gearbox	
EU	Castrol Bell 200.2 50 Gearbox Thread	362132A	1	Gearbox	
EV	Castrol Bell 200.2 50 Gearbox Thread	362133A	1	Gearbox	
EW	Castrol Bell 200.2 50 Gearbox Thread	362134A	1	Gearbox	
EX	Castrol Bell 200.2 50 Gearbox Thread	362135A	1	Gearbox	
EY	Castrol Bell 200.2 50 Gearbox Thread	362136A	1	Gearbox	
EZ	Castrol Bell 200.2 50 Gearbox Thread	362137A	1	Gearbox	

x4

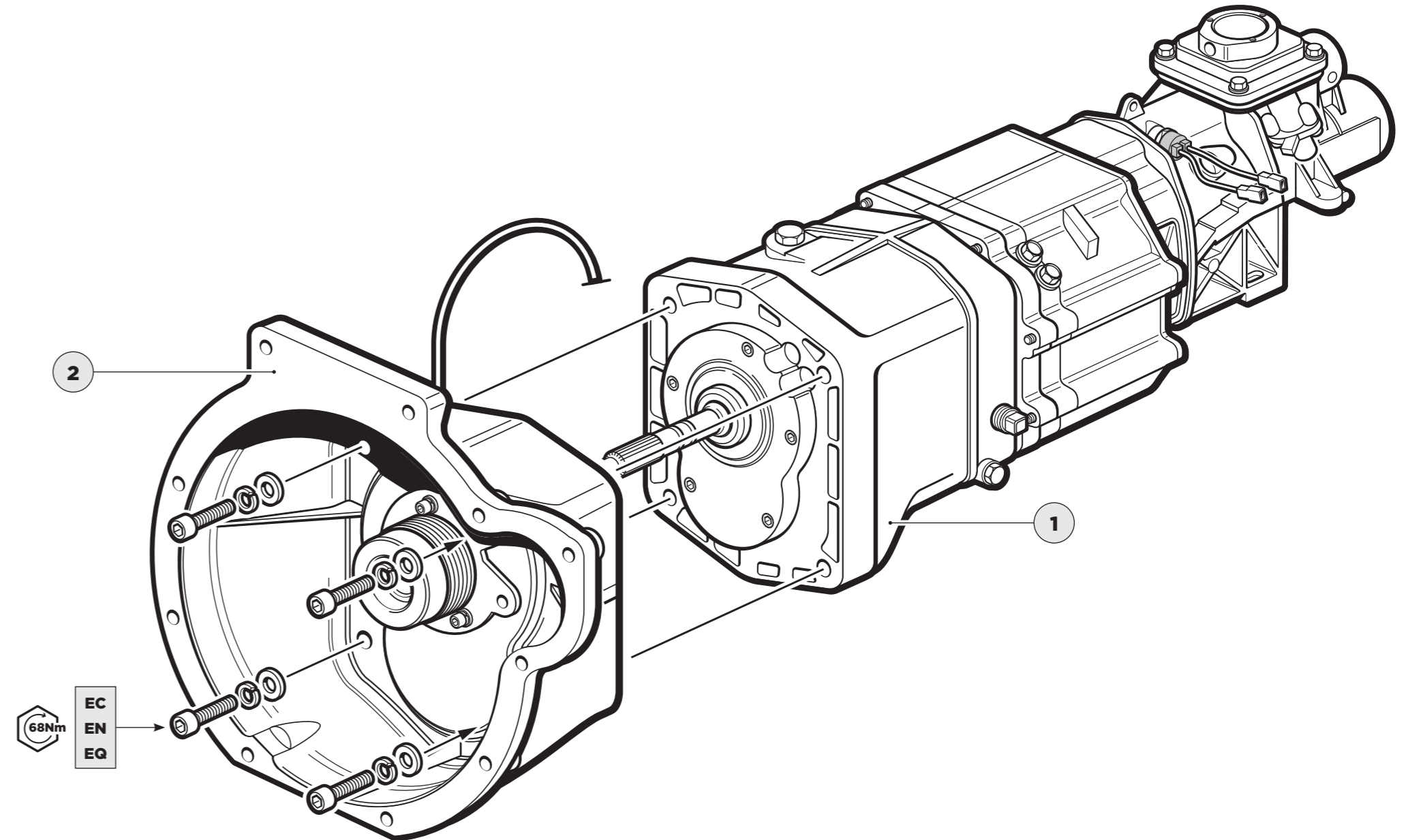
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
EA	Engine Mount 2.0L 1.6L 1.8L 2.0L	362112A	1	All Mount	
EB	Engine Mount 2.0L 1.6L 1.8L 2.0L	362113A	1	All Mount	
EC	Castrol Bell 200.2 50 Gearbox Thread	362114A	4	Gearbox	
ED	Castrol Bell 200.2 50 Gearbox Thread	362115A	1	Gearbox	
EE	Castrol Bell 200.2 50 Gearbox Thread	362116A	1	Gearbox	
EF	Castrol Bell 200.2 50 Gearbox Thread	362117A	1	Gearbox	
EG	Castrol Bell 200.2 50 Gearbox Thread	362118A	1	Gearbox	
EH	Castrol Bell 200.2 50 Gearbox Thread	362119A	1	Gearbox	
EI	Castrol Bell 200.2 50 Gearbox Thread	362120A	1	Gearbox	
EJ	Castrol Bell 200.2 50 Gearbox Thread	362121A	1	Gearbox	
EK	Castrol Bell 200.2 50 Gearbox Thread	362122A	1	Gearbox	
EL	Castrol Bell 200.2 50 Gearbox Thread	362123A	1	Gearbox	
EM	Castrol Bell 200.2 50 Gearbox Thread	362124A	1	Gearbox	
EN	Castrol Bell 200.2 50 Gearbox Thread	362125A	1	Gearbox	
EO	Castrol Bell 200.2 50 Gearbox Thread	362126A	1	Gearbox	
EP	Castrol Bell 200.2 50 Gearbox Thread	362127A	1	Gearbox	
EQ	Castrol Bell 200.2 50 Gearbox Thread	362128A	1	Gearbox	
ER	Castrol Bell 200.2 50 Gearbox Thread	362129A	1	Gearbox	
ES	Castrol Bell 200.2 50 Gearbox Thread	362130A	1	Gearbox	
ET	Castrol Bell 200.2 50 Gearbox Thread	362131A	1	Gearbox	
EU	Castrol Bell 200.2 50 Gearbox Thread	362132A	1	Gearbox	
EV	Castrol Bell 200.2 50 Gearbox Thread	362133A	1	Gearbox	
EW	Castrol Bell 200.2 50 Gearbox Thread	362134A	1	Gearbox	
EX	Castrol Bell 200.2 50 Gearbox Thread	362135A	1	Gearbox	
EY	Castrol Bell 200.2 50 Gearbox Thread	362136A	1	Gearbox	
EZ	Castrol Bell 200.2 50 Gearbox Thread	362137A	1	Gearbox	

x4

x4

TIPS

ATTACH THE GEARBOX TO THE BELLHOUSING



68Nm
EC
EN
EQ

AND THEN THE GEARBOX TO THE ENGINE

PARTS

Pack E		CATERHAM		66	
SIGMA GEARBOX 5 SPEED		PART NUMBER		3E21199F	
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
EA	Caphead Bolt M10 x 10 Grade 12.9	3E21122A	2	All Mount	
EB	Caphead Bolt M10 x 15 Grade 12.9	3E21122B	4	All Mount	
EC	Caphead Bolt M10 x 15 Grade 12.9	3E21122C	4	Starter	
ED	Caphead Bolt M10 x 10 Grade 12.9	3E21122D	4	1 x Bellhousing 3 x Starter Motor	
EE	Caphead Bolt M10 x 15 Grade 12.9	3E21122E	3	Bellhousing	
EF	Caphead Bolt M10 x 15 Grade 12.9	3E21122F	3	Bellhousing	
EG	Caphead Bolt M10 x 15 Grade 12.9	3E21122G	2	Engine Mount RMB Top	
EH	Caphead Bolt M10 x 15 Grade 12.9	3E21122H	2	Engine Mount LMB Top	
EI	Caphead Bolt M10 x 15 Grade 12.9	3E21122I	1	Engine Mount LMB Bottom	
EJ	Caphead Bolt M10 x 15 Grade 12.9	3E21122J	2	Engine Mount RMB Bottom	
EK	Caphead Bolt M10 x 15 Grade 12.9	3E21122K	3	Clutch Slave Cylinder	

x1
x3
x3

Pack E		CATERHAM		66	
SIGMA GEARBOX 5 SPEED		PART NUMBER		3E21199F	
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
EL	Spring Washer M10	3E21123	1	Starter Motor	
EM	Plain Washer M10	3E21124	1	All Mount	
EN	Plain Washer M10	3E21125	4	Starter	
EO	Spring Washer M10	3E21126	3	Starter Motor	
EP	Plain Washer M10	3E21127	3	All Mount	
EQ	Spring Washer M10	3E21128	4	Starter	
ER	Spring Washer M10	3E21129	10	7 Bellhousing 3 Engine Mount	
ES	Spring Washer M10	3E21130	1	Starter Motor	
ET	Spring Washer M10	3E21131	1	Engine Mount	
EU	Spring Washer M10	3E21132	3	Clutch Slave Cylinder	
EV	Washer M10	3E21133	4	All Mount	
EW	Spring Washer M10	3E21134	1	All Mount	

x7

TOOLS

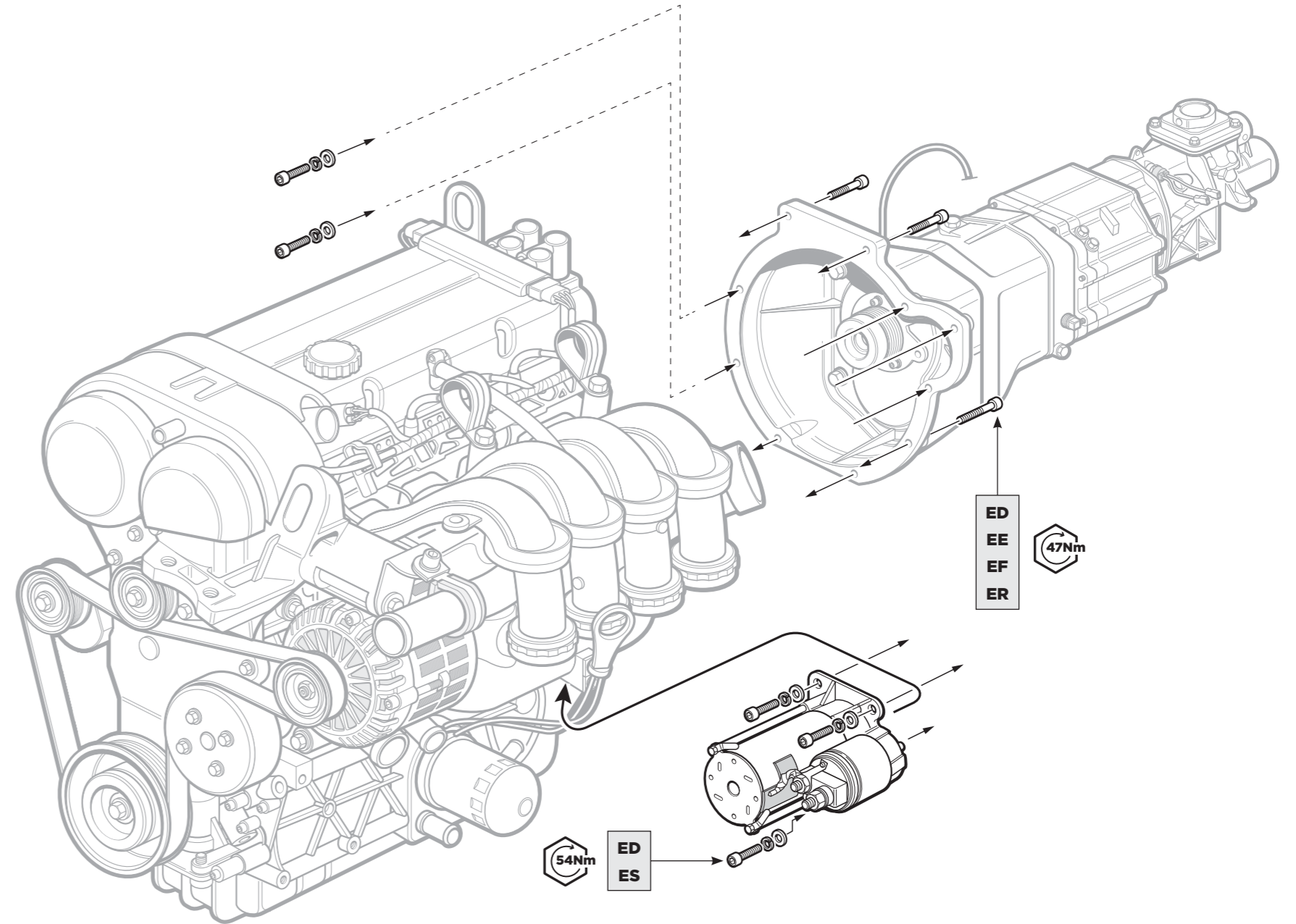


8mm



TIPS

AND THEN THE GEARBOX TO THE ENGINE

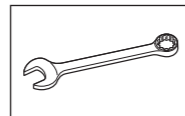
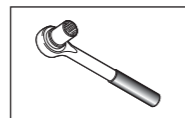
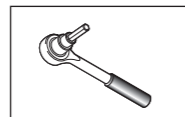


AT LAST, THE ENGINE IS GOING IN

PARTS

- 1 Engine mounts
- 2 Engine rubbers
- 3 Tensioner

TOOLS



6mm
8mm
3/8"

13mm

13mm
15mm



FIXINGS

TIPS

When fitting the engine rubbers and mounts, do them as loosely as possible so you can wiggle things to get bolts in. Tighten it all up gradually once all the bolts are in.

Jamie A

It's 47asNm for the bolts tightened with the 8mm hex socket & 30Nm for the 6mm hex socket.

Grant P

Protect the chassis with soft stuff such as cardboard or folded towels/blankets. Just not your fingers.

Tiago O

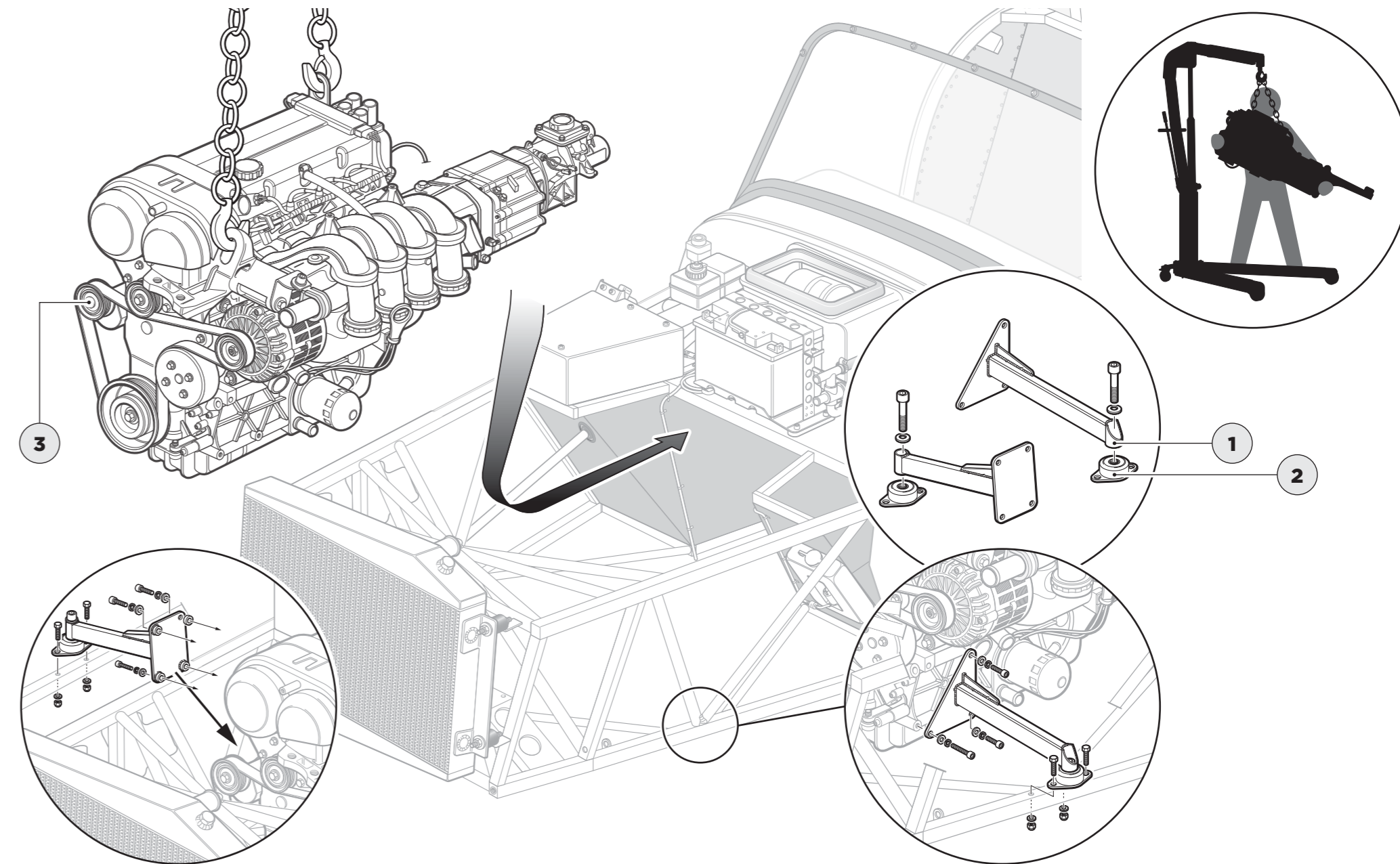
It will fit – keep at it!

Rich T

Removing the tensioner will make things much easier.

James A

AT LAST, THE ENGINE IS GOING IN



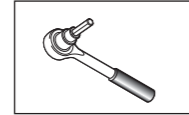
AND THE GEARBOX IS FIXED IN PLACE

PARTS

5 Speed



13mm
22mm



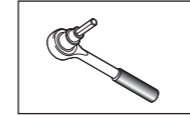
6mm

TOOLS

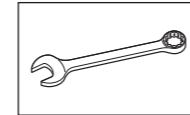
6 Speed



13mm
19mm



6mm



13mm

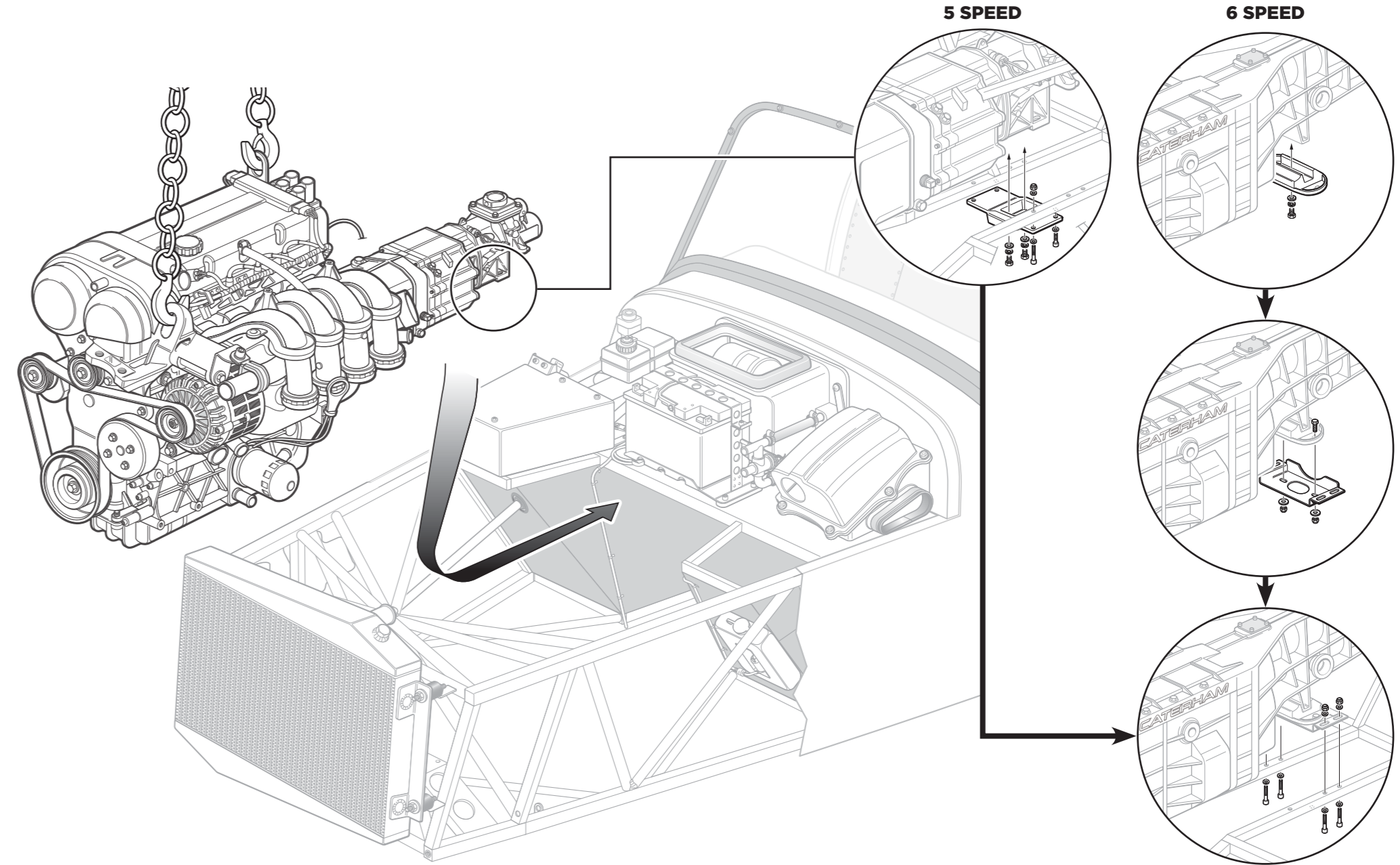
FIXINGS

TIPS

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

Chris B

AND THE GEARBOX IS FIXED IN PLACE



FILLING THE ENGINE AND GEARBOX WITH OIL

PARTS

Engine oil SW-30

Gear oil GL4

TOOLS

FIXINGS

TIPS

FILLING THE ENGINE AND GEARBOX WITH OIL



Ford 1.6L Engine = 3.8 Litres

5 Speed Gearbox = (Pre-Filled)

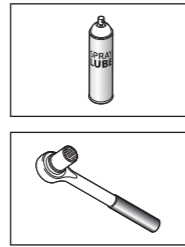
Before Installation. You can double check the oil level by removing the plug on the side. The oil should be to this level.

6 Speed Gearbox = Fill to level of filling point on the side of gearbox

START PLUMBING

PARTS

1 Lower radiator hose



7mm

TOOLS

FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	988002	1	Expansion tank	
2	Expansion tank to bracket	988003	1	Expansion tank to bracket	
3	Expansion tank to bracket	988004	1	Expansion tank to bracket	
4	Expansion tank to bracket	988005	1	Expansion tank to bracket	
5	Expansion tank to bracket	988006	1	Expansion tank to bracket	
6	Expansion tank to bracket	988007	1	Expansion tank to bracket	
7	Expansion tank to bracket	988008	1	Expansion tank to bracket	
8	Expansion tank to bracket	988009	1	Expansion tank to bracket	
9	Expansion tank to bracket	988010	1	Expansion tank to bracket	
10	Expansion tank to bracket	988011	1	Expansion tank to bracket	
11	Expansion tank to bracket	988012	1	Expansion tank to bracket	

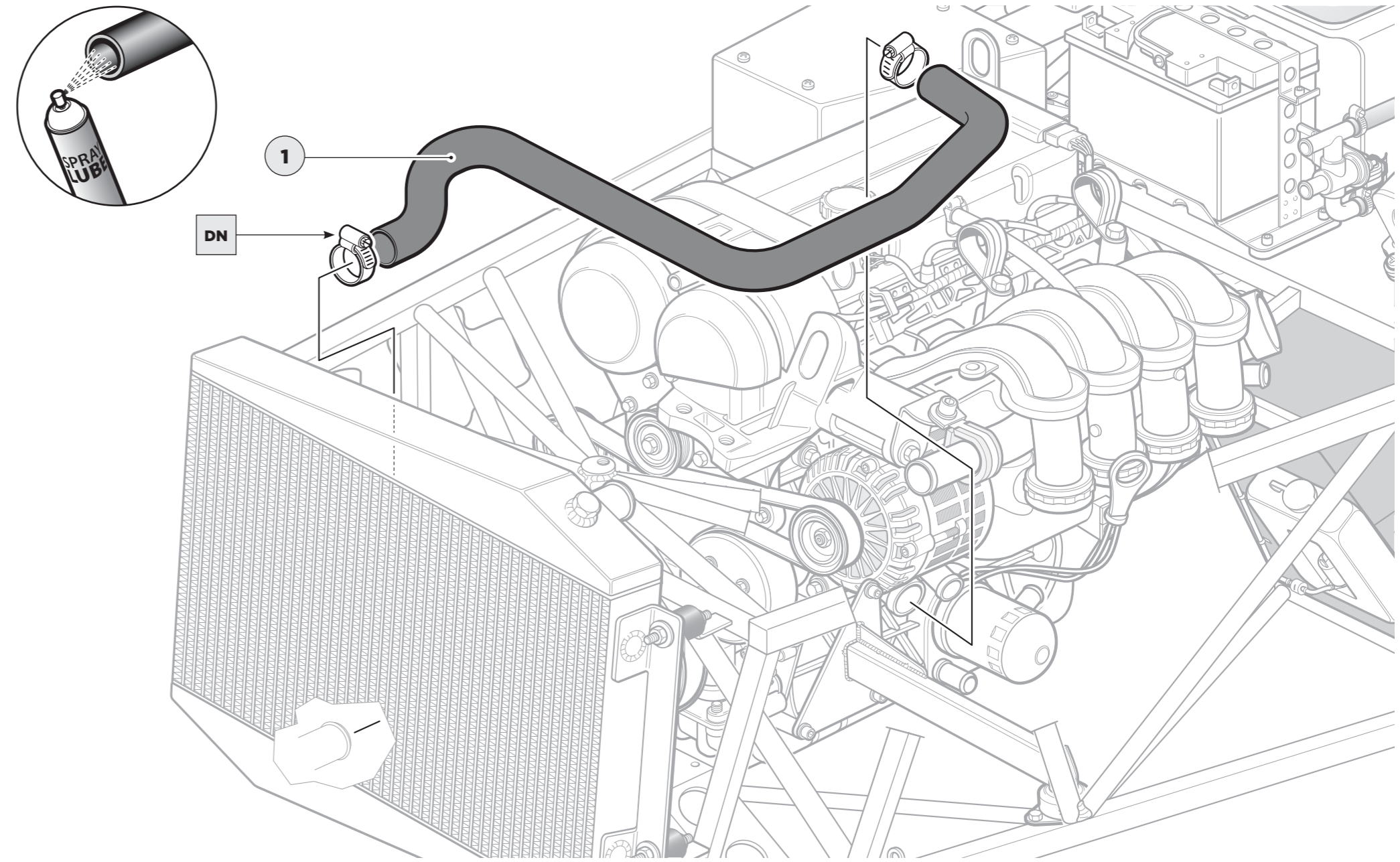
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
14	Hex Clip 20 - 40mm	90725-45	6	2 x 17 shape hose to radiator 2 x Top radiator hose 2 x Bottom radiator hose	
15	Hex Clip 10 - 20mm	90725-46	2	Expansion tank to bracket	
16	Hex Clip 10 - 20mm	90725-47	2	Expansion tank to bracket	
17	Hex Clip 10 - 20mm	90725-48	2	Expansion tank to bracket	
18	Hex Clip 10 - 20mm	90725-49	2	Expansion tank to bracket	
19	Hex Clip 10 - 20mm	90725-50	2	Expansion tank to bracket	
20	Hex Clip 10 - 20mm	90725-51	2	Expansion tank to bracket	
21	Hex Clip 10 - 20mm	90725-52	2	Expansion tank to bracket	
22	Hex Clip 10 - 20mm	90725-53	2	Expansion tank to bracket	
23	Hex Clip 10 - 20mm	90725-54	2	Expansion tank to bracket	
24	Hex Clip 10 - 20mm	90725-55	2	Expansion tank to bracket	
25	Hex Clip 10 - 20mm	90725-56	2	Expansion tank to bracket	
26	Hex Clip 10 - 20mm	90725-57	2	Expansion tank to bracket	
27	Hex Clip 10 - 20mm	90725-58	2	Expansion tank to bracket	
28	Hex Clip 10 - 20mm	90725-59	2	Expansion tank to bracket	
29	Hex Clip 10 - 20mm	90725-60	2	Expansion tank to bracket	
30	Hex Clip 10 - 20mm	90725-61	2	Expansion tank to bracket	
31	Hex Clip 10 - 20mm	90725-62	2	Expansion tank to bracket	
32	Hex Clip 10 - 20mm	90725-63	2	Expansion tank to bracket	
33	Hex Clip 10 - 20mm	90725-64	2	Expansion tank to bracket	
34	Hex Clip 10 - 20mm	90725-65	2	Expansion tank to bracket	
35	Hex Clip 10 - 20mm	90725-66	2	Expansion tank to bracket	
36	Hex Clip 10 - 20mm	90725-67	2	Expansion tank to bracket	
37	Hex Clip 10 - 20mm	90725-68	2	Expansion tank to bracket	
38	Hex Clip 10 - 20mm	90725-69	2	Expansion tank to bracket	
39	Hex Clip 10 - 20mm	90725-70	2	Expansion tank to bracket	
40	Hex Clip 10 - 20mm	90725-71	2	Expansion tank to bracket	
41	Hex Clip 10 - 20mm	90725-72	2	Expansion tank to bracket	
42	Hex Clip 10 - 20mm	90725-73	2	Expansion tank to bracket	
43	Hex Clip 10 - 20mm	90725-74	2	Expansion tank to bracket	
44	Hex Clip 10 - 20mm	90725-75	2	Expansion tank to bracket	
45	Hex Clip 10 - 20mm	90725-76	2	Expansion tank to bracket	
46	Hex Clip 10 - 20mm	90725-77	2	Expansion tank to bracket	
47	Hex Clip 10 - 20mm	90725-78	2	Expansion tank to bracket	
48	Hex Clip 10 - 20mm	90725-79	2	Expansion tank to bracket	
49	Hex Clip 10 - 20mm	90725-80	2	Expansion tank to bracket	
50	Hex Clip 10 - 20mm	90725-81	2	Expansion tank to bracket	
51	Hex Clip 10 - 20mm	90725-82	2	Expansion tank to bracket	
52	Hex Clip 10 - 20mm	90725-83	2	Expansion tank to bracket	
53	Hex Clip 10 - 20mm	90725-84	2	Expansion tank to bracket	
54	Hex Clip 10 - 20mm	90725-85	2	Expansion tank to bracket	
55	Hex Clip 10 - 20mm	90725-86	2	Expansion tank to bracket	
56	Hex Clip 10 - 20mm	90725-87	2	Expansion tank to bracket	
57	Hex Clip 10 - 20mm	90725-88	2	Expansion tank to bracket	
58	Hex Clip 10 - 20mm	90725-89	2	Expansion tank to bracket	
59	Hex Clip 10 - 20mm	90725-90	2	Expansion tank to bracket	
60	Hex Clip 10 - 20mm	90725-91	2	Expansion tank to bracket	
61	Hex Clip 10 - 20mm	90725-92	2	Expansion tank to bracket	
62	Hex Clip 10 - 20mm	90725-93	2	Expansion tank to bracket	
63	Hex Clip 10 - 20mm	90725-94	2	Expansion tank to bracket	
64	Hex Clip 10 - 20mm	90725-95	2	Expansion tank to bracket	
65	Hex Clip 10 - 20mm	90725-96	2	Expansion tank to bracket	
66	Hex Clip 10 - 20mm	90725-97	2	Expansion tank to bracket	
67	Hex Clip 10 - 20mm	90725-98	2	Expansion tank to bracket	
68	Hex Clip 10 - 20mm	90725-99	2	Expansion tank to bracket	
69	Hex Clip 10 - 20mm	90725-100	2	Expansion tank to bracket	

x2

Reminder for later on: nip up the clips once the car has been run.
Grant P

Fit the hose to the larger outlet on the engine.
Mick F

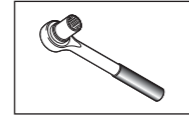
START PLUMBING



AND KEEP PLUMBING

PARTS

1 Upper radiator hose



7mm

TOOLS

FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	888002	1	Expansion tank	
2	Expansion tank to bracket	888003	1	Expansion tank to bracket	
3	Expansion tank to bracket	888004	1	Expansion tank to bracket	
4	Expansion tank to bracket	888005	1	Expansion tank to bracket	
5	Expansion tank to bracket	888006	1	Expansion tank to bracket	
6	Expansion tank to bracket	888007	1	Expansion tank to bracket	
7	Expansion tank to bracket	888008	1	Expansion tank to bracket	
8	Expansion tank to bracket	888009	1	Expansion tank to bracket	
9	Expansion tank to bracket	888010	1	Expansion tank to bracket	
10	Expansion tank to bracket	888011	1	Expansion tank to bracket	
11	Expansion tank to bracket	888012	1	Expansion tank to bracket	

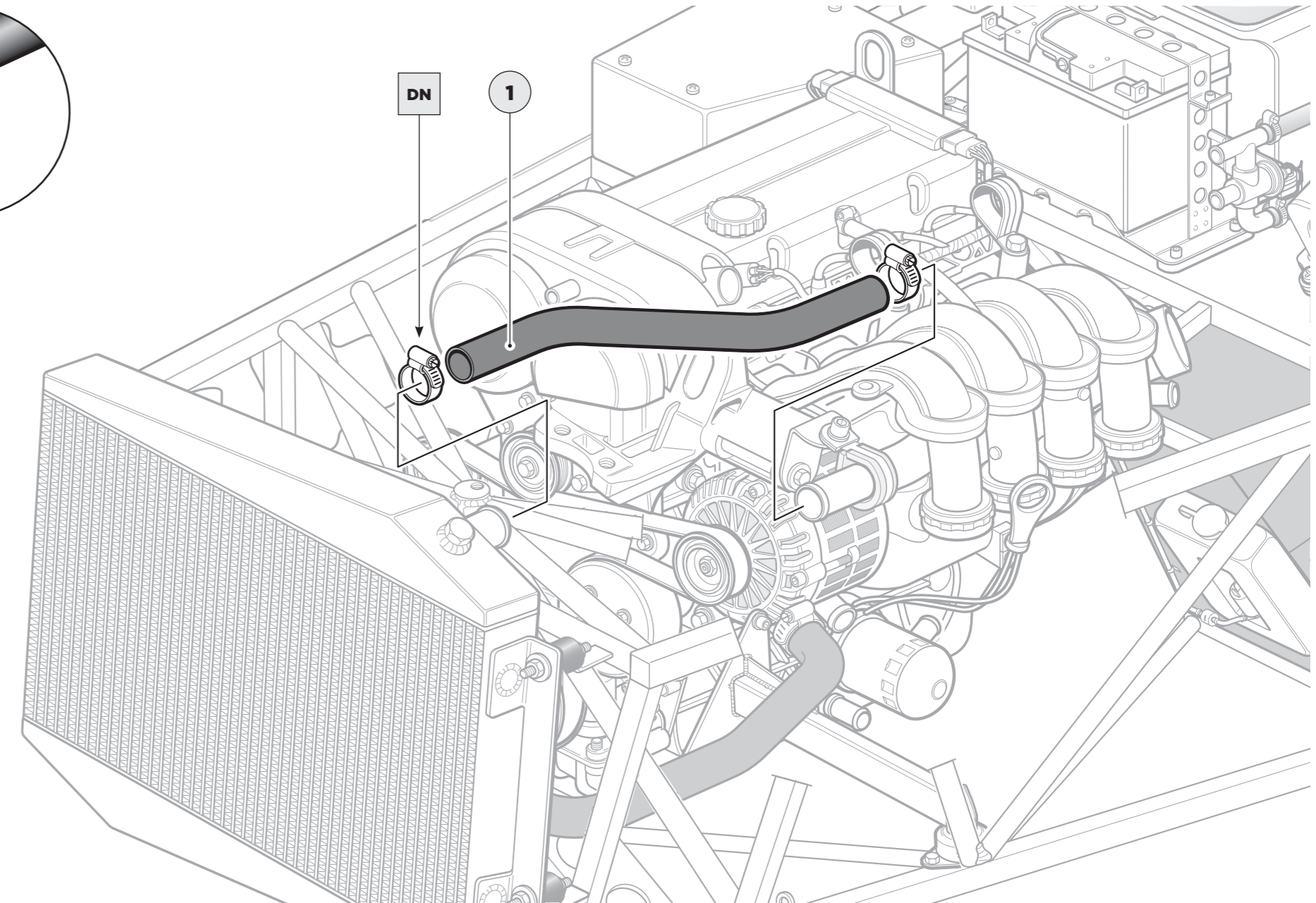
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
14	Upper radiator hose to radiator	90725-05	6	Upper radiator hose to radiator	
15	Upper radiator hose to radiator	90725-06	2	Upper radiator hose to radiator	
16	Upper radiator hose to radiator	90725-07	18	Upper radiator hose to radiator	
17	Upper radiator hose to radiator	90725-08	6	Upper radiator hose to radiator	
18	Upper radiator hose to radiator	90725-09	12	Upper radiator hose to radiator	

x2

TIPS

Reminder for later on: nip up the clips once the car has been run.
James A

AND KEEP PLUMBING





Now is a good time to take some photos



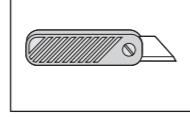
Have you applied for your IVA yet?

A BIT OF SUB-ASSEMBLY - SOME HOSES NEED MODIFYING

PARTS

1 Silicone hoses

TOOLS



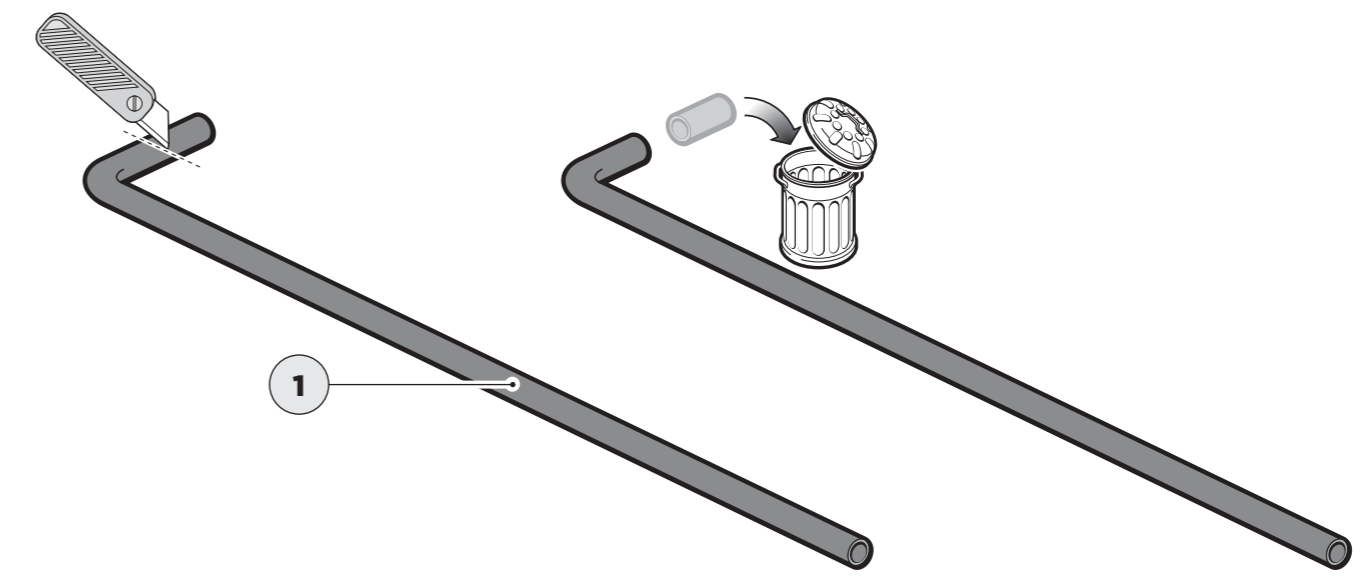
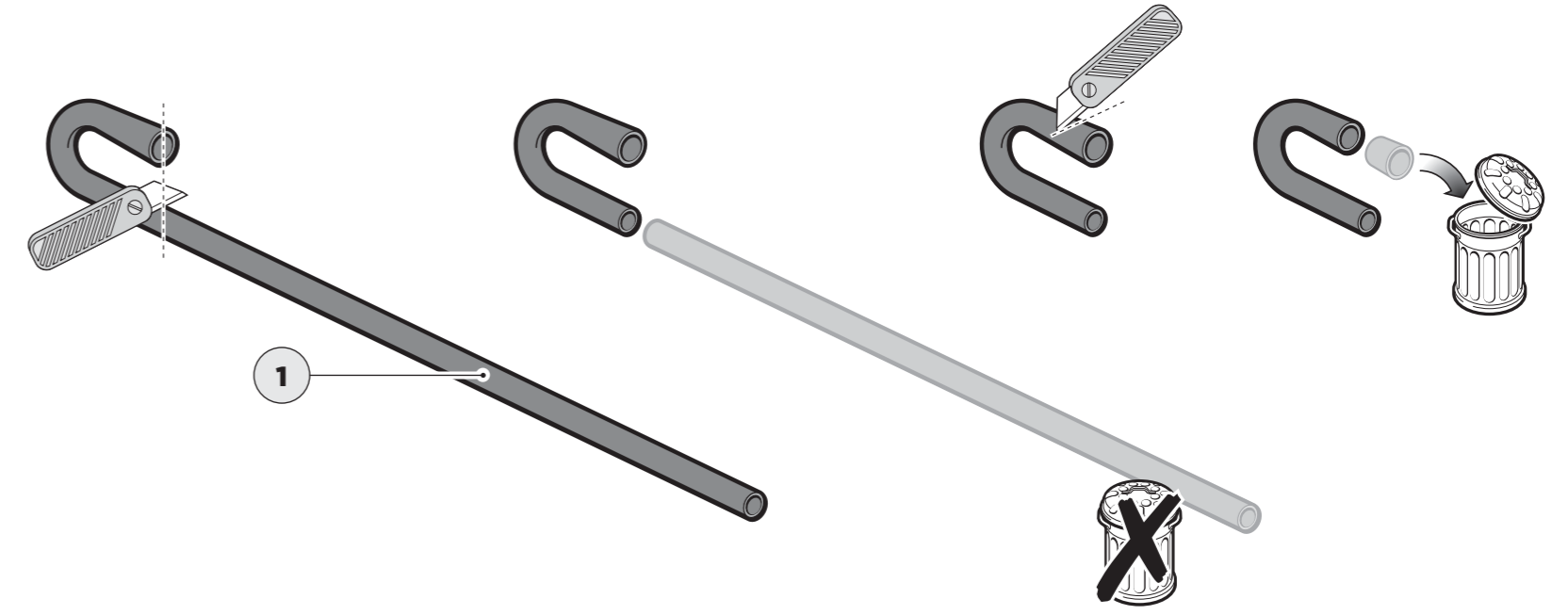
FIXINGS

TIPS

Don't throw away the long piece of hose after cutting.

Rich T

A BIT OF SUB-ASSEMBLY - SOME HOSES NEED MODIFYING

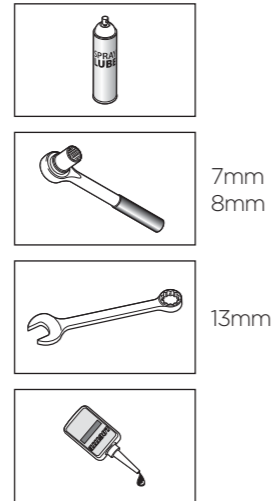


SUB-ASSEMBLY - TEMPERATURE SENSOR

PARTS

- 1** Temperature sender
- 2** Earth tag
- 3** Cooling submarine

TOOLS



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C0002	1	Expansion tank	
2	Expansion tank to bracket	38C0003	1	Expansion tank to bracket	
3	Oil radiator bracket	38C0004	1	Oil radiator bracket	
4	Fan bracket for fan	38C0005	1	Fan bracket for fan	
5	Fan to radiator bracket - 20" fan	38C0006	1	Fan to radiator bracket - 20" fan	
6	Fan to radiator and oil radiator bracket	38C0007	1	Fan to radiator and oil radiator bracket	
7	Radiator bracket	38C0008	1	Radiator bracket	
8	Expansion tank bracket	38C0009	1	Expansion tank bracket	
9	Oil to radiator bracket - 20" fan	38C0010	1	Oil to radiator bracket - 20" fan	
10	Radiator bracket	38C0011	1	Radiator bracket	
11	Radiator bracket	38C0012	1	Radiator bracket	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C0002	1	Expansion tank	
2	Expansion tank to bracket	38C0003	1	Expansion tank to bracket	
3	Oil radiator bracket	38C0004	1	Oil radiator bracket	
4	Fan bracket for fan	38C0005	1	Fan bracket for fan	
5	Fan to radiator bracket - 20" fan	38C0006	1	Fan to radiator bracket - 20" fan	
6	Fan to radiator and oil radiator bracket	38C0007	1	Fan to radiator and oil radiator bracket	
7	Radiator bracket	38C0008	1	Radiator bracket	
8	Expansion tank bracket	38C0009	1	Expansion tank bracket	
9	Oil to radiator bracket - 20" fan	38C0010	1	Oil to radiator bracket - 20" fan	
10	Radiator bracket	38C0011	1	Radiator bracket	
11	Radiator bracket	38C0012	1	Radiator bracket	

TIPS

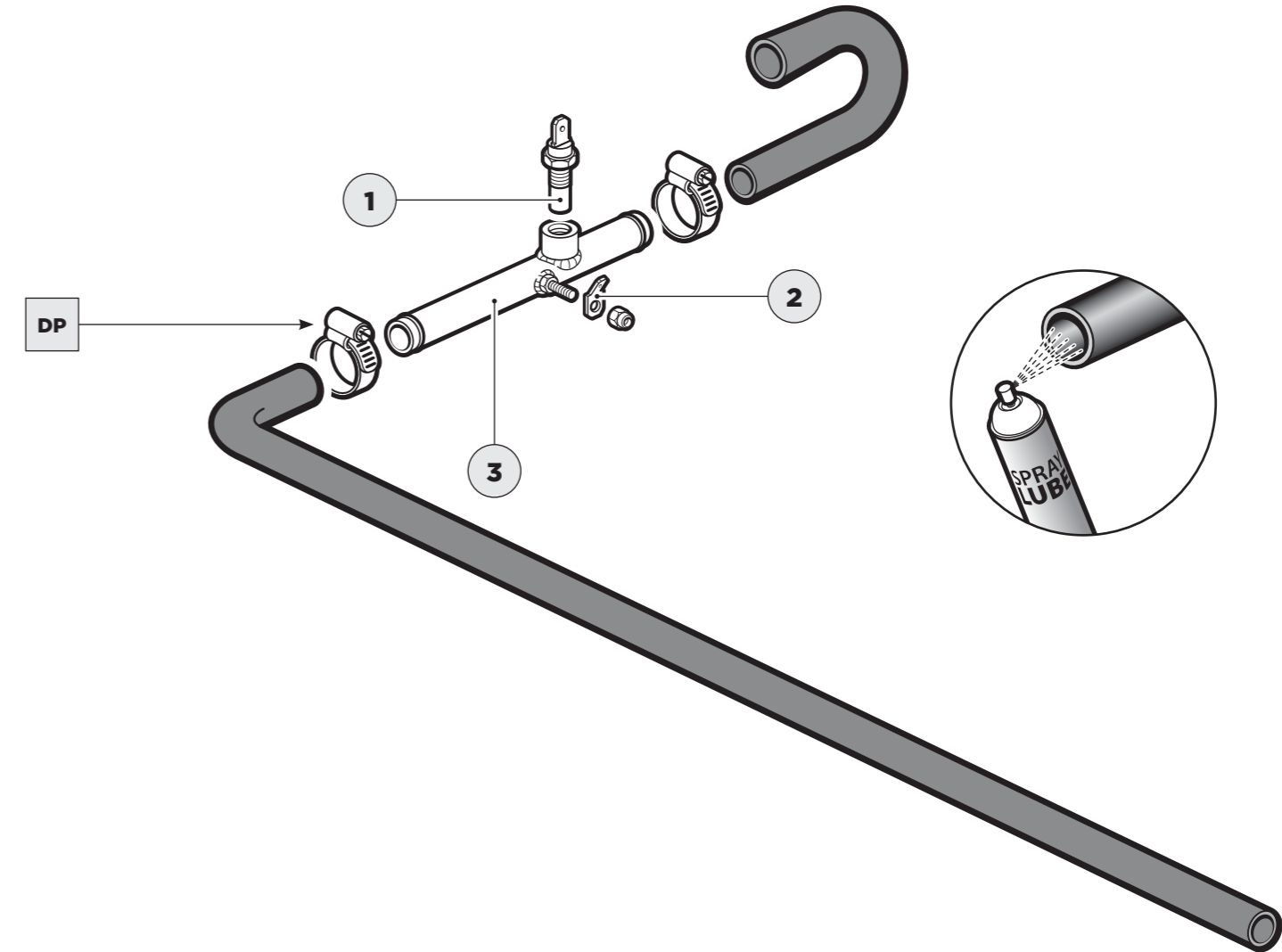
Use a drop of Loctite on the sender.

Tiago O

Be careful not to over-tighten the sender.

Jamie A

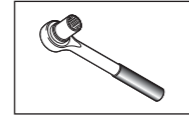
SUB-ASSEMBLY - TEMPERATURE SENSOR



BACK TO THE PLUMBING

PARTS

1 Submarine assembly



7mm

TOOLS

FIXINGS

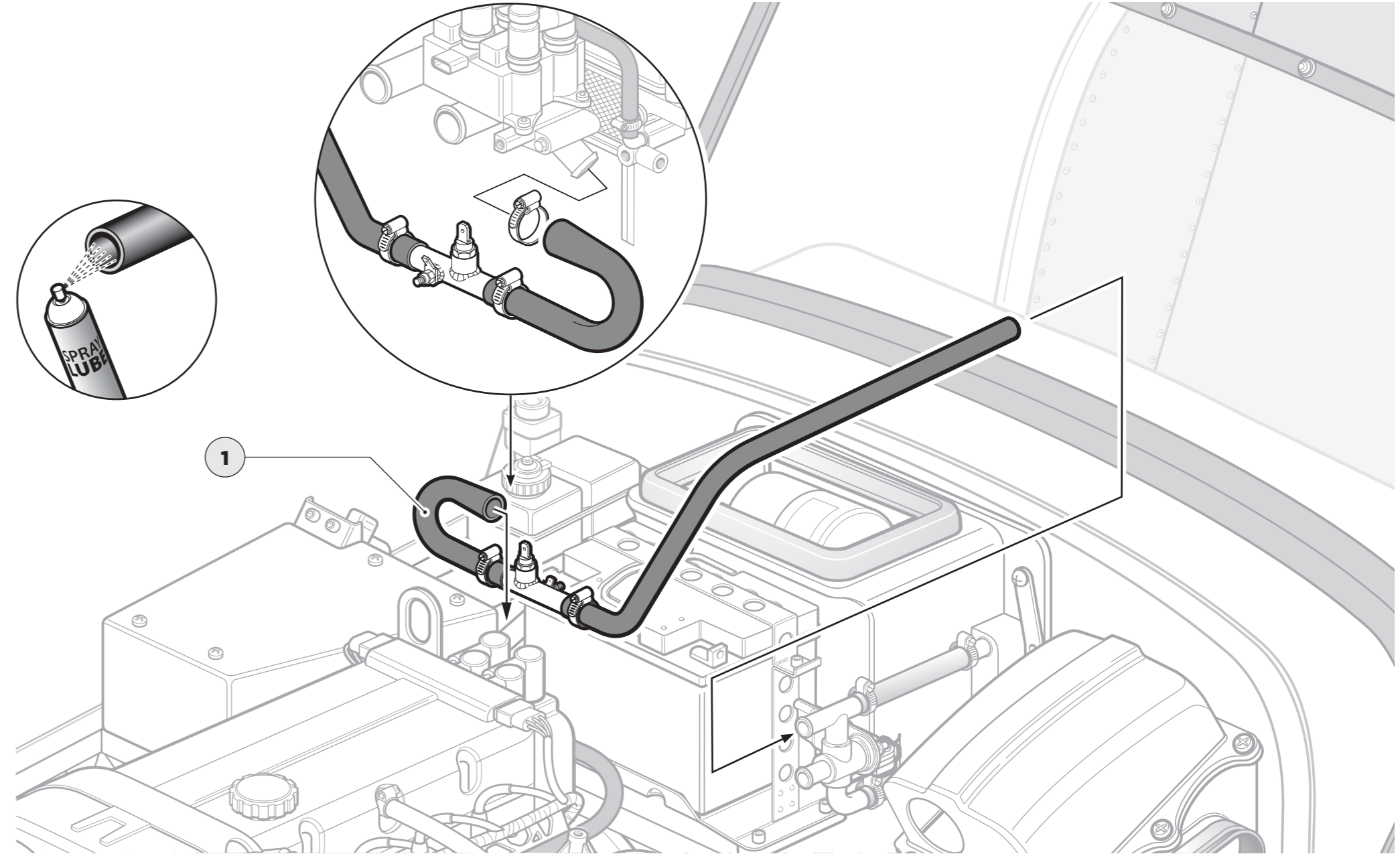
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	80120-01	1	Expansion tank	
2	Expansion tank to bracket	80120-02	1	Expansion tank to bracket	
3	EV radiator bracket	80120-03	1	EV radiator bracket	
4	Fan bracket for fan	80120-04	1	Fan bracket for fan	
5	Pair of radiator mounting - EV fan	80120-05	2	Pair of radiator mounting - EV fan	
6	Pair of radiator and EV radiator bracket	80120-06	2	Pair of radiator and EV radiator bracket	
7	Radiator bracket	80120-07	1	Radiator bracket	
8	Expansion tank bracket	80120-08	1	Expansion tank bracket	
9	Pair of radiator and EV fan bracket	80120-09	2	Pair of radiator and EV fan bracket	
10	Radiator bracket	80120-10	1	Radiator bracket	
11	Radiator bracket	80120-11	1	Radiator bracket	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	80120-01	1	Expansion tank	
2	Expansion tank to bracket	80120-02	1	Expansion tank to bracket	
3	EV radiator bracket	80120-03	1	EV radiator bracket	
4	Fan bracket for fan	80120-04	1	Fan bracket for fan	
5	Pair of radiator mounting - EV fan	80120-05	2	Pair of radiator mounting - EV fan	
6	Pair of radiator and EV radiator bracket	80120-06	2	Pair of radiator and EV radiator bracket	
7	Radiator bracket	80120-07	1	Radiator bracket	
8	Expansion tank bracket	80120-08	1	Expansion tank bracket	
9	Pair of radiator and EV fan bracket	80120-09	2	Pair of radiator and EV fan bracket	
10	Radiator bracket	80120-10	1	Radiator bracket	
11	Radiator bracket	80120-11	1	Radiator bracket	

x1

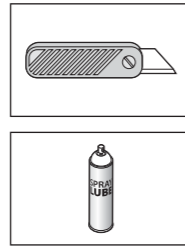
TIPS

BACK TO THE PLUMBING



PARTS

TOOLS



FIXINGS

TIPS

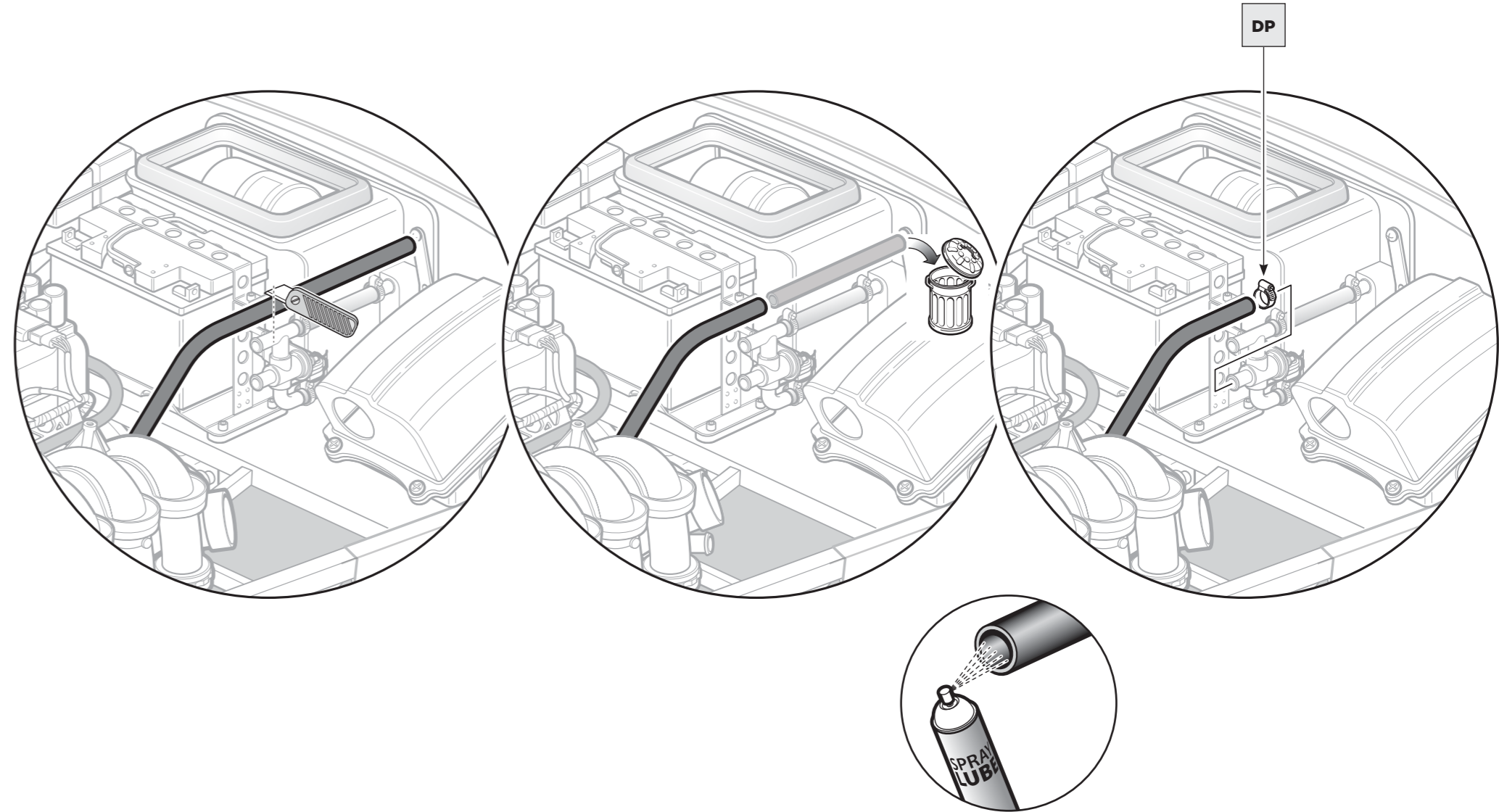
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	EV radiator bracket	38C047B	1	EV radiator bracket	
4	Fan bracket for fan	38C047B	1	Fan bracket for fan	
5	Pin for radiator mounting - 20mm	38C047B	2	Pin for radiator mounting - 20mm	
6	Pin for radiator and EV radiator bracket	38C047B	2	Pin for radiator and EV radiator bracket	
7	Radiator bracket	38C047B	1	Radiator bracket	
8	Expansion tank bracket	38C047B	1	Expansion tank bracket	
9	Pin for radiator and EV radiator bracket	38C047B	2	Pin for radiator and EV radiator bracket	
10	Radiator bracket	38C047B	1	Radiator bracket	
11	Radiator bracket	38C047B	1	Radiator bracket	

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

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	EV radiator bracket	38C047B	1	EV radiator bracket	
4	Fan bracket for fan	38C047B	1	Fan bracket for fan	
5	Pin for radiator mounting - 20mm	38C047B	2	Pin for radiator mounting - 20mm	
6	Pin for radiator and EV radiator bracket	38C047B	2	Pin for radiator and EV radiator bracket	
7	Radiator bracket	38C047B	1	Radiator bracket	
8	Expansion tank bracket	38C047B	1	Expansion tank bracket	
9	Pin for radiator and EV radiator bracket	38C047B	2	Pin for radiator and EV radiator bracket	
10	Radiator bracket	38C047B	1	Radiator bracket	
11	Radiator bracket	38C047B	1	Radiator bracket	

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

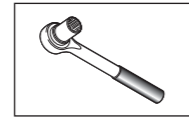
x1



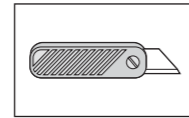
STILL MORE PLUMBING

PARTS

1 U shape hose



7mm



TOOLS

FIXINGS

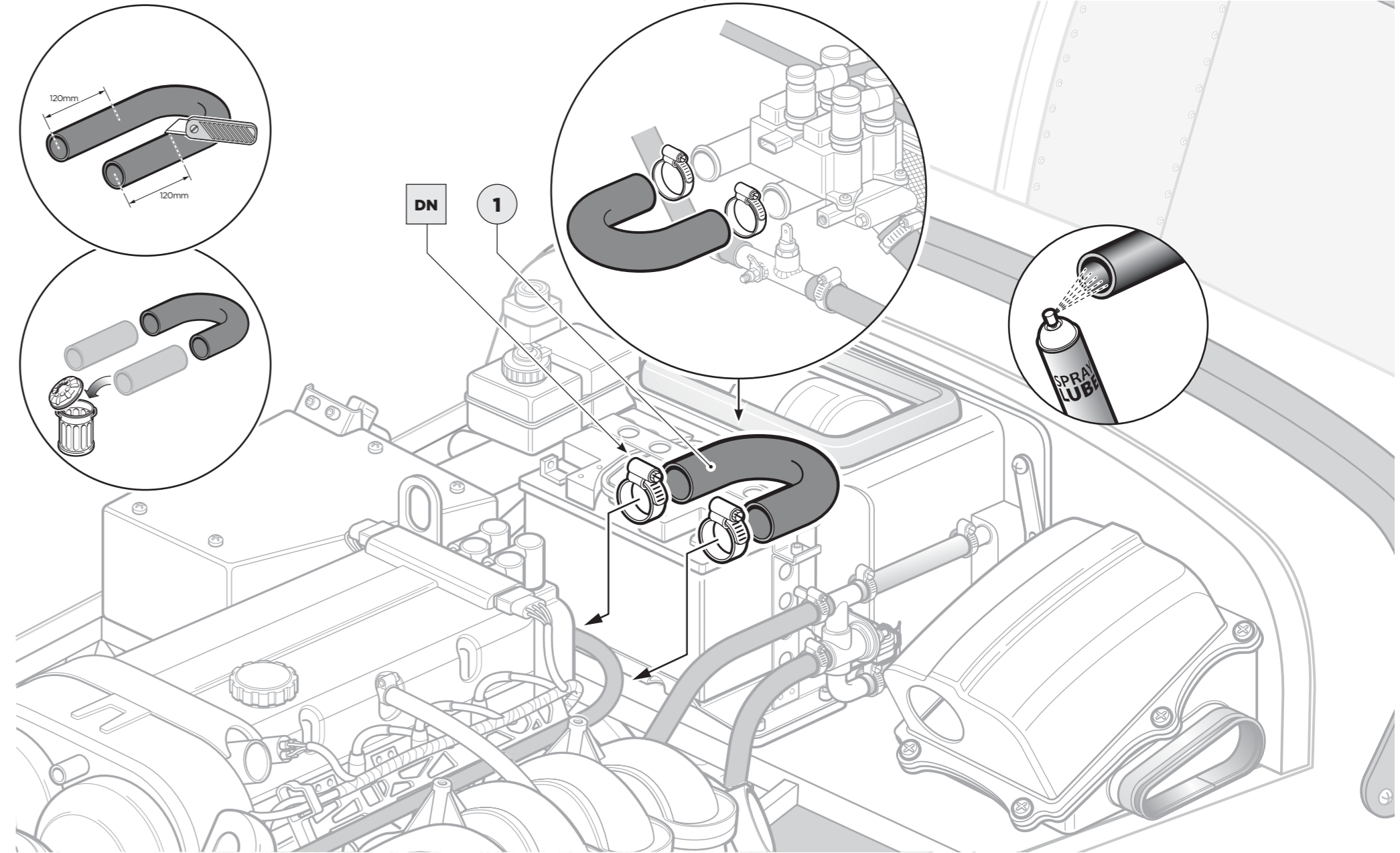
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	880000	1	Expansion tank	
2	Expansion tank to bracket	880001	1	Expansion tank to bracket	
3	2x Radiator bracket	880002	2	2x Radiator bracket	
4	2x Fan bracket for fan	880003	2	2x Fan bracket for fan	
5	2x Fan to radiator mounting - 20" fan	880004	2	2x Fan to radiator mounting - 20" fan	
6	2x Fan to radiator and 20" radiator to expansion tank	880005	2	2x Fan to radiator and 20" radiator to expansion tank	
7	Radiator bottom	880006	1	Radiator bottom	
8	Expansion tank bracket	880007	1	Expansion tank bracket	
9	2x 20" radiator to expansion tank	880008	2	2x 20" radiator to expansion tank	
10	2x Radiator to fan	880009	2	2x Radiator to fan	
11	2x Radiator to fan	880010	2	2x Radiator to fan	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
14	2x U shape hose to radiator	880205-05	6	2x U shape hose to radiator	
15	2x U shape hose to expansion tank	880205-06	2	2x U shape hose to expansion tank	
16	2x U shape hose to expansion tank	880205-07	2	2x U shape hose to expansion tank	
17	2x U shape hose to expansion tank	880205-08	2	2x U shape hose to expansion tank	
18	2x U shape hose to expansion tank	880205-09	2	2x U shape hose to expansion tank	
19	2x U shape hose to expansion tank	880205-10	2	2x U shape hose to expansion tank	
20	2x U shape hose to expansion tank	880205-11	2	2x U shape hose to expansion tank	
21	2x U shape hose to expansion tank	880205-12	2	2x U shape hose to expansion tank	

x2

TIPS

STILL MORE PLUMBING

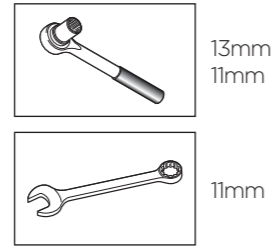


A BREAK FROM PLUMBING TO FIT THE EXPANSION BOTTLE

PARTS

- 1** Expansion bottle
- 2** Expansion bottle cap
- 3** Expansion bottle bracket

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA DA 130 13mm x 1.5mm	DA130130	1	Expansion tank bracket to chassis	
2	DB DB 1/4" 1/4" x 1/4" x 1/4"	DB141414	1	Expansion tank to bracket	
3	DL DL 1/4" 1/4" x 1/4" x 1/4"	DL141414	1	Expansion tank to chassis	
4	DM DM 1/4" 1/4" x 1/4" x 1/4"	DM141414	1	Expansion tank to chassis	
5	DA DA 1/4" 1/4" x 1/4" x 1/4"	DA141414	1	Expansion tank to chassis	
6	DM DM 1/4" 1/4" x 1/4" x 1/4"	DM141414	1	Expansion tank to chassis	
7	DA DA 1/4" 1/4" x 1/4" x 1/4"	DA141414	1	Expansion tank to chassis	
8	DH DH 1/4" 1/4" x 1/4" x 1/4"	DH141414	1	Expansion tank to chassis	
9	DI DI 1/4" 1/4" x 1/4" x 1/4"	DI141414	1	Expansion tank to chassis	
10	DA DA 1/4" 1/4" x 1/4" x 1/4"	DA141414	1	Expansion tank to chassis	
11	DI DI 1/4" 1/4" x 1/4" x 1/4"	DI141414	1	Expansion tank to chassis	

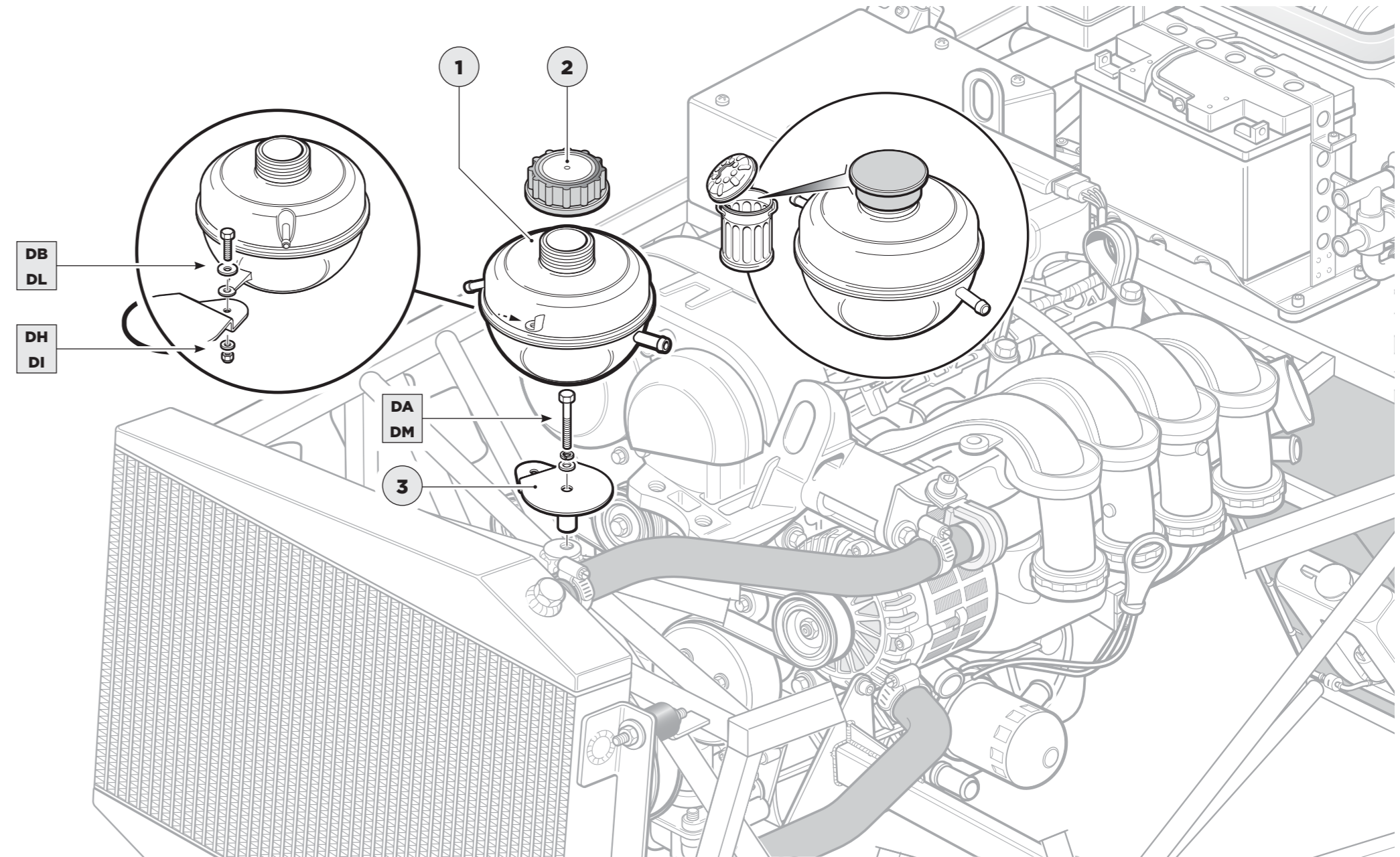
x1
x1
x1
x1
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x1
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Page 1 of 2

TIPS

Throw away the red cap that came on the expansion bottle.
Grant P

A BREAK FROM PLUMBING TO FIT THE EXPANSION BOTTLE

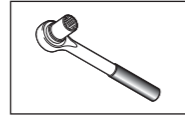
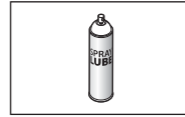


SOME MORE HOSE MODIFICATION

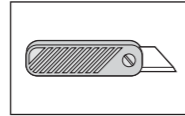
PARTS

1 T-Piece

TOOLS



7mm



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	3800002	1	Expansion tank	
2	Expansion tank to bracket	3800001	1	Expansion tank to bracket	
3	EV radiator bracket	3800003	1	EV radiator bracket	
4	Fast bracket for fan	3800004	1	Fast bracket for fan	
5	Fast bracket for fan	3800005	1	Fast bracket for fan	
6	Fast bracket for fan	3800006	1	Fast bracket for fan	
7	Fast bracket for fan	3800007	1	Fast bracket for fan	
8	Fast bracket for fan	3800008	1	Fast bracket for fan	
9	Fast bracket for fan	3800009	1	Fast bracket for fan	
10	Fast bracket for fan	3800010	1	Fast bracket for fan	
11	Fast bracket for fan	3800011	1	Fast bracket for fan	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	3800002	1	Expansion tank	
2	Expansion tank to bracket	3800001	1	Expansion tank to bracket	
3	EV radiator bracket	3800003	1	EV radiator bracket	
4	Fast bracket for fan	3800004	1	Fast bracket for fan	
5	Fast bracket for fan	3800005	1	Fast bracket for fan	
6	Fast bracket for fan	3800006	1	Fast bracket for fan	
7	Fast bracket for fan	3800007	1	Fast bracket for fan	
8	Fast bracket for fan	3800008	1	Fast bracket for fan	
9	Fast bracket for fan	3800009	1	Fast bracket for fan	
10	Fast bracket for fan	3800010	1	Fast bracket for fan	
11	Fast bracket for fan	3800011	1	Fast bracket for fan	

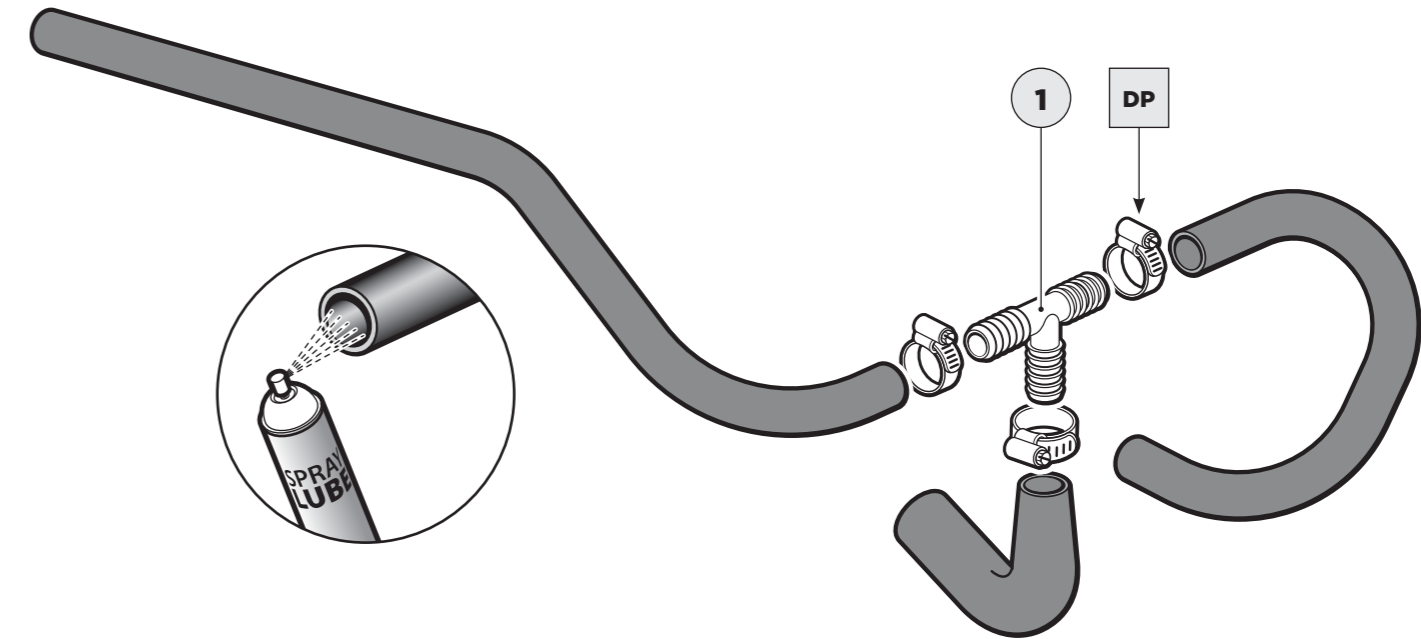
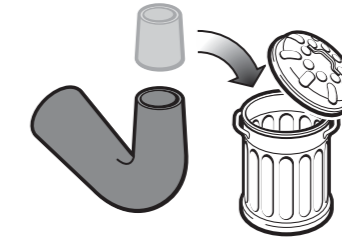
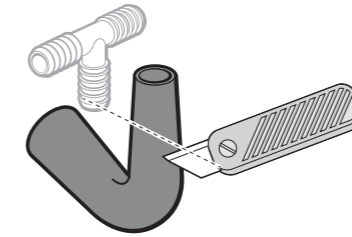
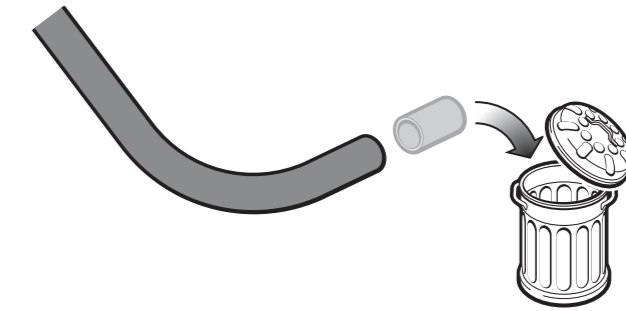
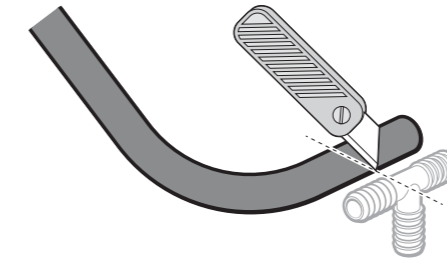
TIPS

The short 'L' shaped hose is pre-formed.

John S

x3

SOME MORE HOSE MODIFICATION



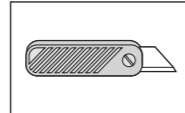
AND BACK TO PLUMBING

PARTS

1 T-Piece assembly



7mm



TOOLS

FIXINGS

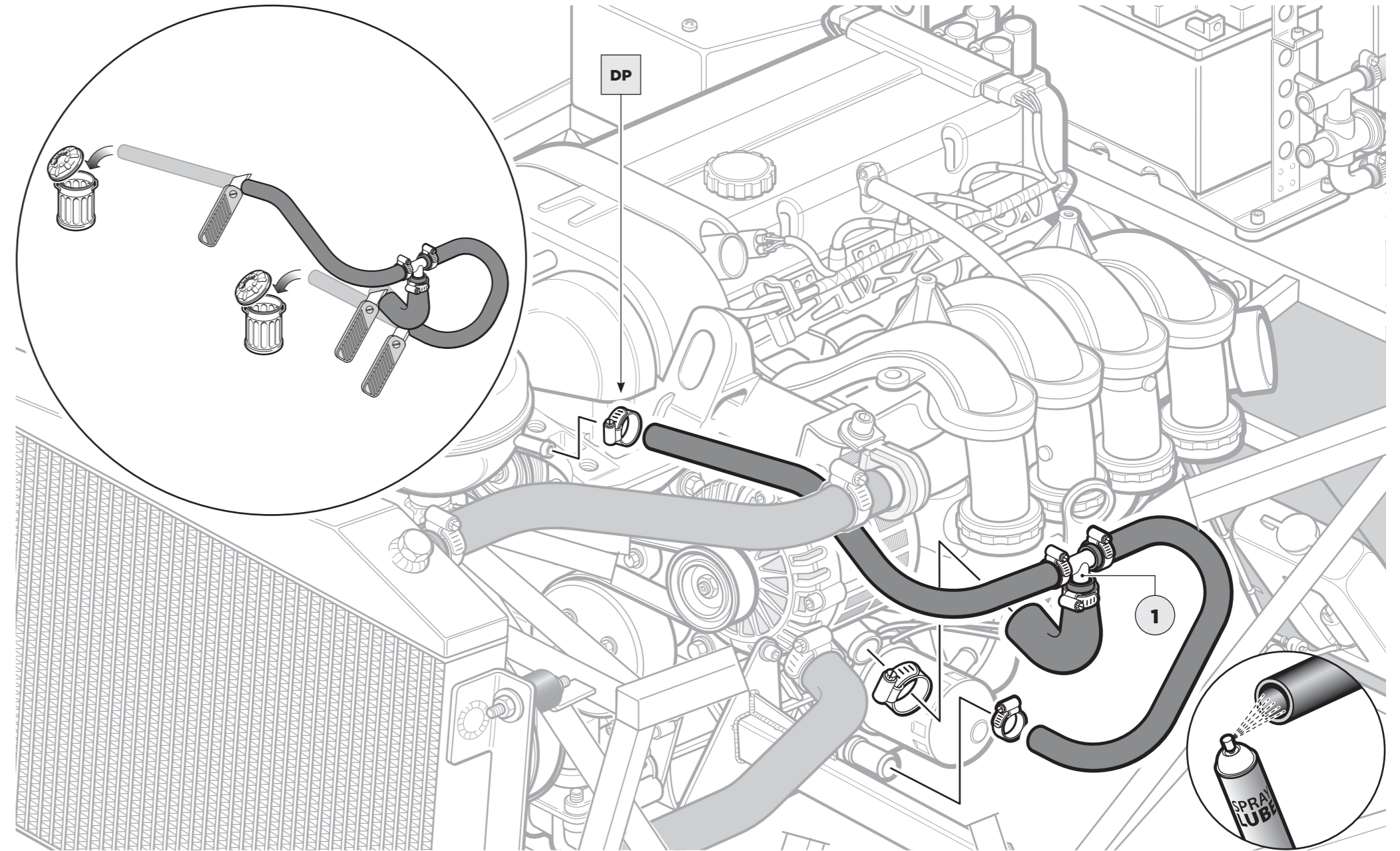
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
4	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
5	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
6	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
7	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
8	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
9	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
10	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
11	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
4	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
5	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
6	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
7	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
8	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
9	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
10	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
11	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	

x1

TIPS

AND BACK TO PLUMBING

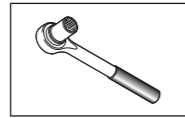


LAST BIT OF PLUMBING

PARTS

1 5/16" Hose

TOOLS



7mm

FIXINGS

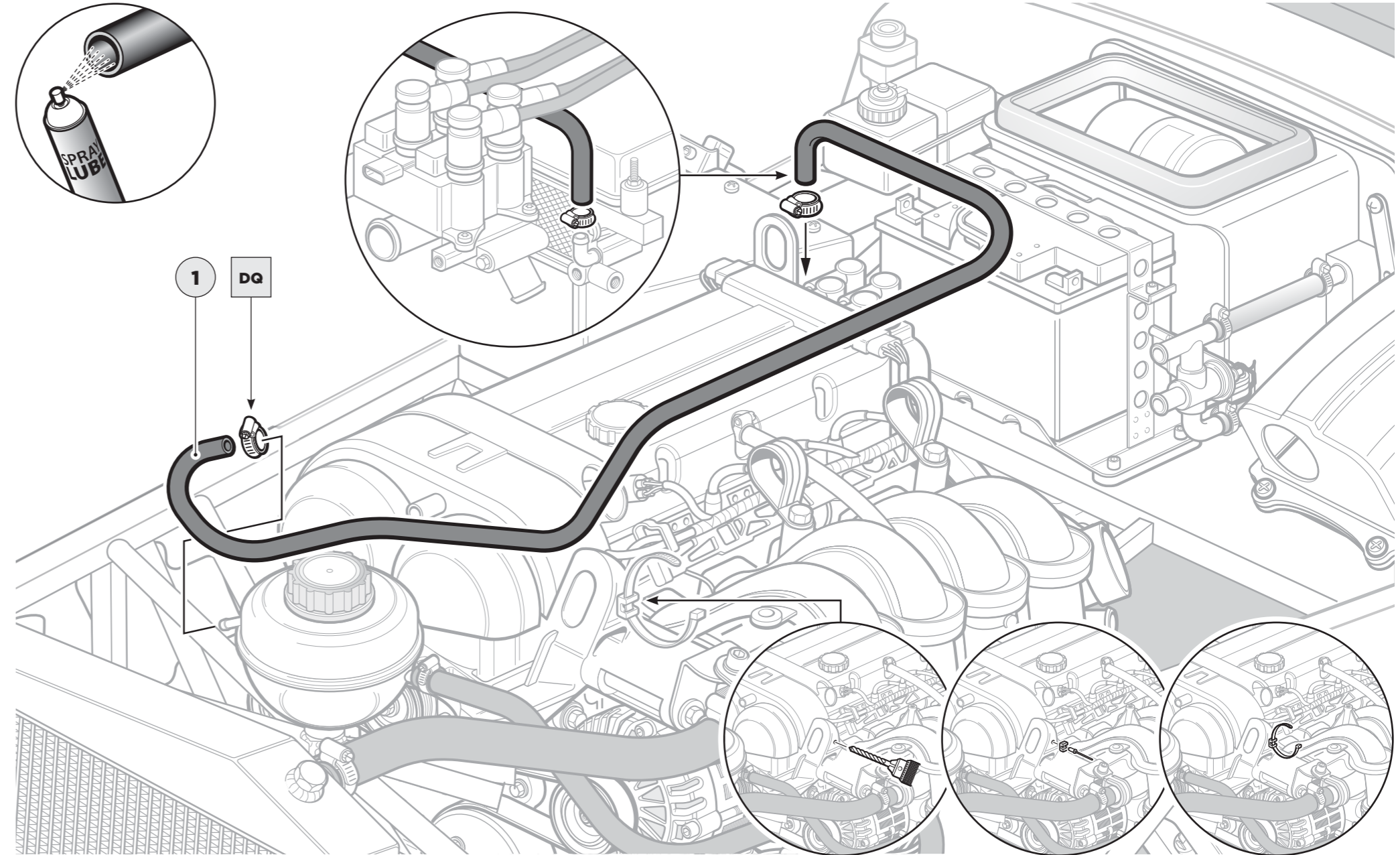
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	5/16" Hose	9078-16	1	Expansion tank	
2	Expansion tank	9078-16	1	Expansion tank	
3	Expansion tank	9078-16	1	Expansion tank	
4	Expansion tank	9078-16	1	Expansion tank	
5	Expansion tank	9078-16	1	Expansion tank	
6	Expansion tank	9078-16	1	Expansion tank	
7	Expansion tank	9078-16	1	Expansion tank	
8	Expansion tank	9078-16	1	Expansion tank	
9	Expansion tank	9078-16	1	Expansion tank	
10	Expansion tank	9078-16	1	Expansion tank	
11	Expansion tank	9078-16	1	Expansion tank	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
17	Expansion tank	9078-16	1	Expansion tank	
18	Expansion tank	9078-16	1	Expansion tank	
19	Expansion tank	9078-16	1	Expansion tank	
20	Expansion tank	9078-16	1	Expansion tank	
21	Expansion tank	9078-16	1	Expansion tank	
22	Expansion tank	9078-16	1	Expansion tank	
23	Expansion tank	9078-16	1	Expansion tank	
24	Expansion tank	9078-16	1	Expansion tank	
25	Expansion tank	9078-16	1	Expansion tank	
26	Expansion tank	9078-16	1	Expansion tank	
27	Expansion tank	9078-16	1	Expansion tank	
28	Expansion tank	9078-16	1	Expansion tank	
29	Expansion tank	9078-16	1	Expansion tank	
30	Expansion tank	9078-16	1	Expansion tank	
31	Expansion tank	9078-16	1	Expansion tank	
32	Expansion tank	9078-16	1	Expansion tank	
33	Expansion tank	9078-16	1	Expansion tank	
34	Expansion tank	9078-16	1	Expansion tank	
35	Expansion tank	9078-16	1	Expansion tank	
36	Expansion tank	9078-16	1	Expansion tank	
37	Expansion tank	9078-16	1	Expansion tank	
38	Expansion tank	9078-16	1	Expansion tank	
39	Expansion tank	9078-16	1	Expansion tank	
40	Expansion tank	9078-16	1	Expansion tank	
41	Expansion tank	9078-16	1	Expansion tank	
42	Expansion tank	9078-16	1	Expansion tank	
43	Expansion tank	9078-16	1	Expansion tank	
44	Expansion tank	9078-16	1	Expansion tank	
45	Expansion tank	9078-16	1	Expansion tank	
46	Expansion tank	9078-16	1	Expansion tank	
47	Expansion tank	9078-16	1	Expansion tank	
48	Expansion tank	9078-16	1	Expansion tank	
49	Expansion tank	9078-16	1	Expansion tank	
50	Expansion tank	9078-16	1	Expansion tank	
51	Expansion tank	9078-16	1	Expansion tank	
52	Expansion tank	9078-16	1	Expansion tank	
53	Expansion tank	9078-16	1	Expansion tank	
54	Expansion tank	9078-16	1	Expansion tank	
55	Expansion tank	9078-16	1	Expansion tank	
56	Expansion tank	9078-16	1	Expansion tank	
57	Expansion tank	9078-16	1	Expansion tank	
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59	Expansion tank	9078-16	1	Expansion tank	
60	Expansion tank	9078-16	1	Expansion tank	
61	Expansion tank	9078-16	1	Expansion tank	
62	Expansion tank	9078-16	1	Expansion tank	
63	Expansion tank	9078-16	1	Expansion tank	
64	Expansion tank	9078-16	1	Expansion tank	
65	Expansion tank	9078-16	1	Expansion tank	
66	Expansion tank	9078-16	1	Expansion tank	
67	Expansion tank	9078-16	1	Expansion tank	
68	Expansion tank	9078-16	1	Expansion tank	
69	Expansion tank	9078-16	1	Expansion tank	
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71	Expansion tank	9078-16	1	Expansion tank	
72	Expansion tank	9078-16	1	Expansion tank	
73	Expansion tank	9078-16	1	Expansion tank	
74	Expansion tank	9078-16	1	Expansion tank	
75	Expansion tank	9078-16	1	Expansion tank	
76	Expansion tank	9078-16	1	Expansion tank	
77	Expansion tank	9078-16	1	Expansion tank	
78	Expansion tank	9078-16	1	Expansion tank	
79	Expansion tank	9078-16	1	Expansion tank	
80	Expansion tank	9078-16	1	Expansion tank	
81	Expansion tank	9078-16	1	Expansion tank	
82	Expansion tank	9078-16	1	Expansion tank	
83	Expansion tank	9078-16	1	Expansion tank	
84	Expansion tank	9078-16	1	Expansion tank	
85	Expansion tank	9078-16	1	Expansion tank	
86	Expansion tank	9078-16	1	Expansion tank	
87	Expansion tank	9078-16	1	Expansion tank	
88	Expansion tank	9078-16	1	Expansion tank	
89	Expansion tank	9078-16	1	Expansion tank	
90	Expansion tank	9078-16	1	Expansion tank	
91	Expansion tank	9078-16	1	Expansion tank	
92	Expansion tank	9078-16	1	Expansion tank	
93	Expansion tank	9078-16	1	Expansion tank	
94	Expansion tank	9078-16	1	Expansion tank	
95	Expansion tank	9078-16	1	Expansion tank	
96	Expansion tank	9078-16	1	Expansion tank	
97	Expansion tank	9078-16	1	Expansion tank	
98	Expansion tank	9078-16	1	Expansion tank	
99	Expansion tank	9078-16	1	Expansion tank	
100	Expansion tank	9078-16	1	Expansion tank	

x2

TIPS

LAST BIT OF PLUMBING



CONNECTING THE FUEL LINE

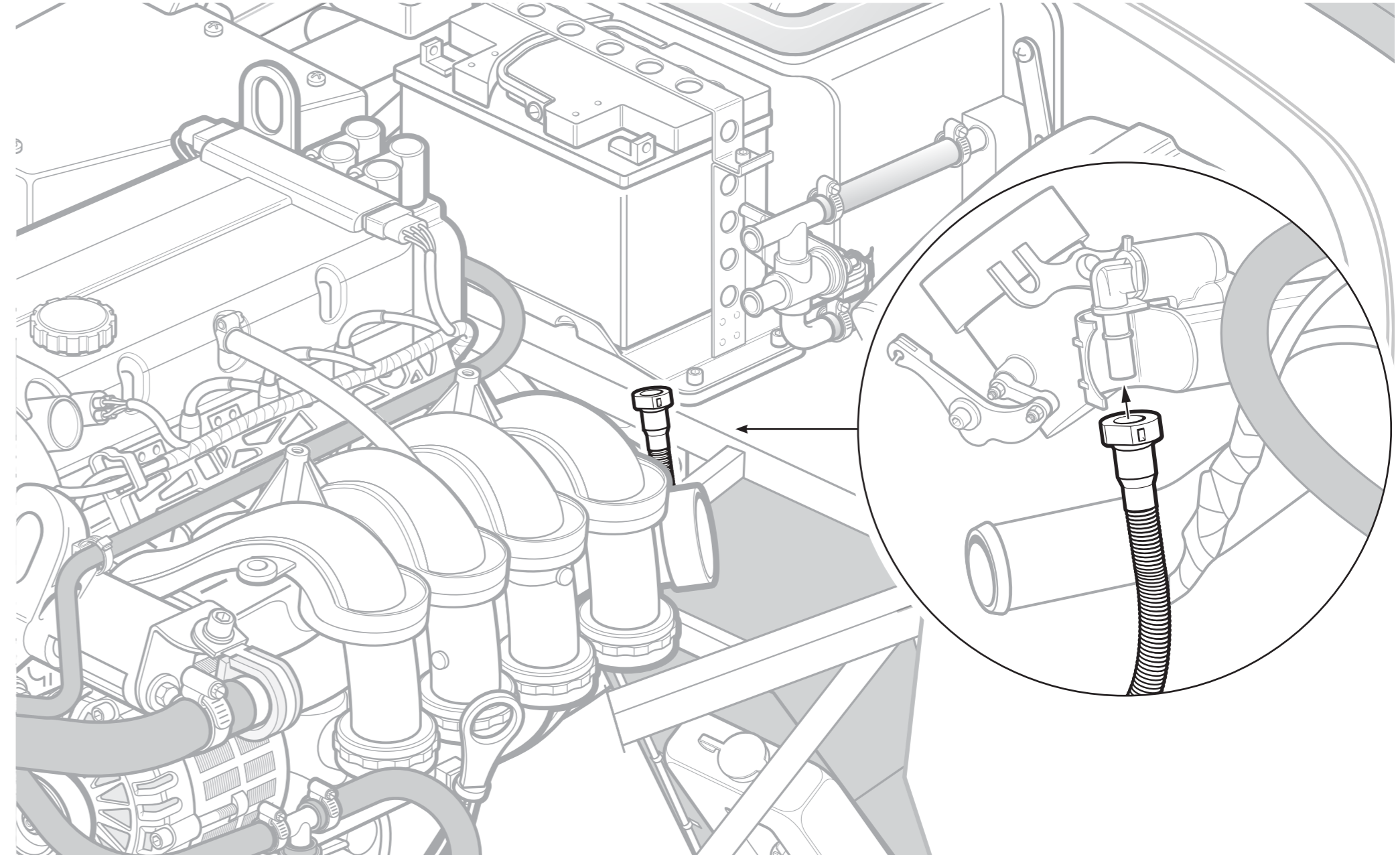
PARTS

TOOLS

FIXINGS

TIPS

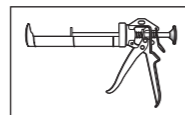
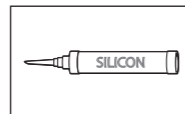
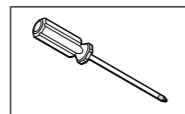
CONNECTING THE FUEL LINE



FIT THROTTLE CABLE

PARTS

1 Throttle cable



TOOLS

FIXINGS

Fixings are supplied loosely attached to the engine in place

TIPS

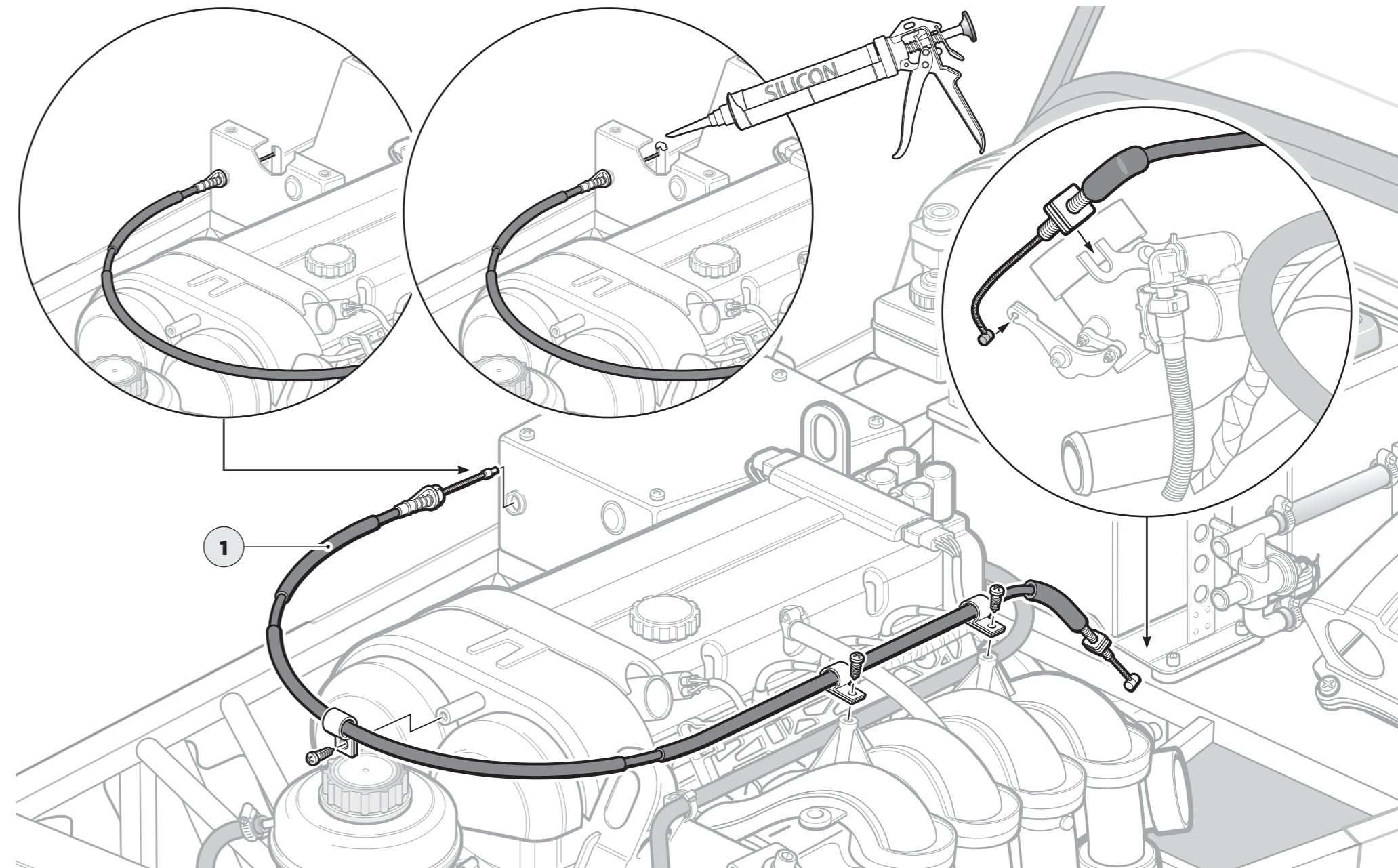
The silicone goes in the top of the pedal to prevent the cable coming out.

Rich T

The pedal may need to be 'manipulated' (by which I mean bent) in order to get full throttle and/or to suit your pedal position preference. This is normal but it should be removed from the car to do this otherwise you may damage the mounting.

Jamie A

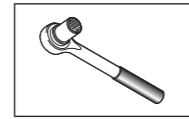
FIT THROTTLE CABLE



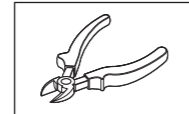
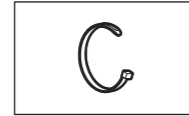
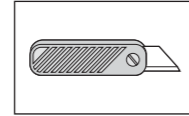
PROTECTING & ATTACHING THE CLUTCH HOSE

PARTS

1 8mm water hose



14mm



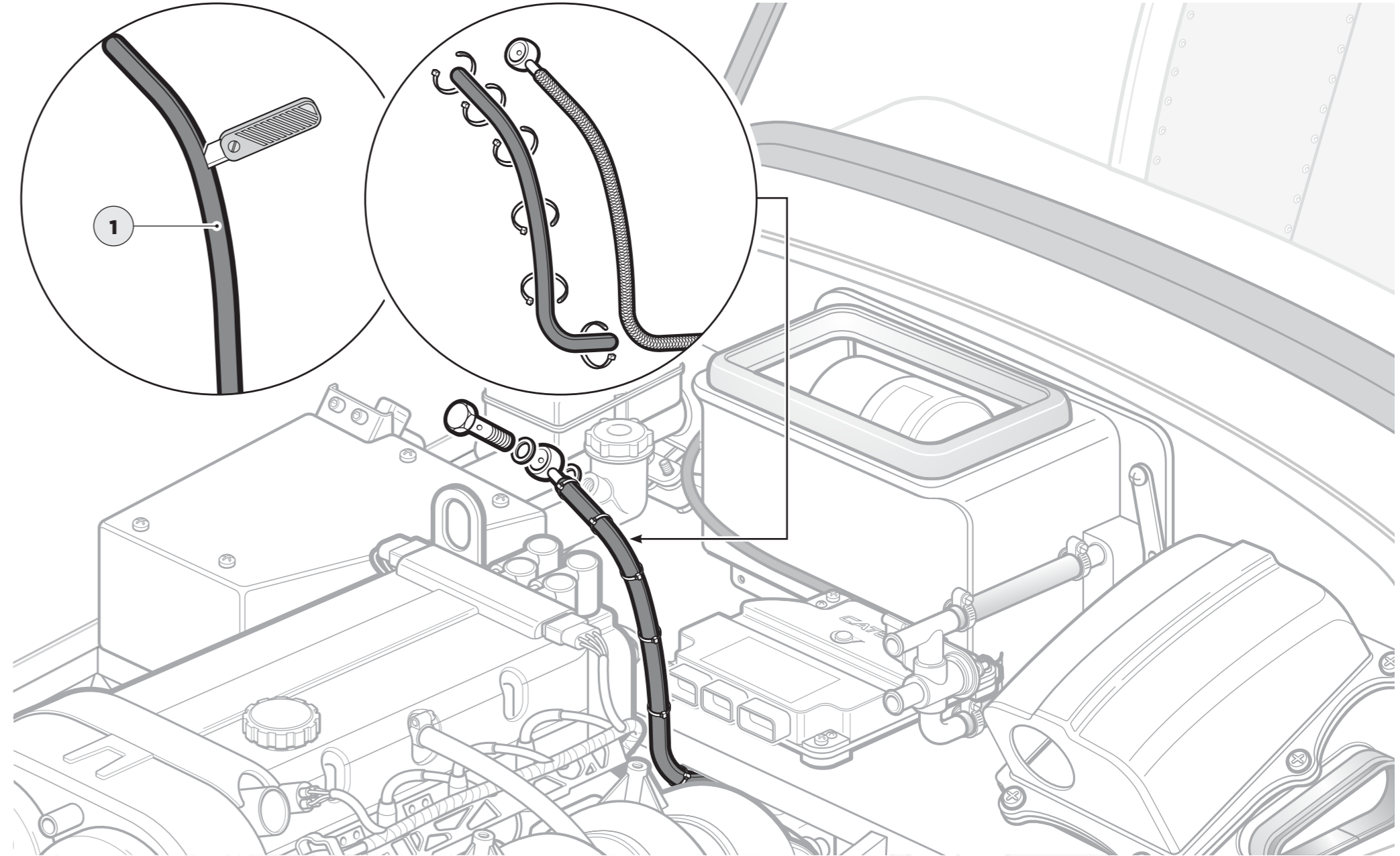
FIXINGS

Nip up the banjo bolt.
John K

TIPS

The hose is used to stop chaffing.
James A

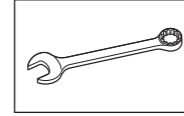
PROTECTING & ATTACHING THE CLUTCH HOSE



CONNECTING THE BATTERY (POSITIVE / RED FIRST)

PARTS

TOOLS



10mm (x2)

FIXINGS

TIPS

Always connect live side of battery first (red wire).

Chris B

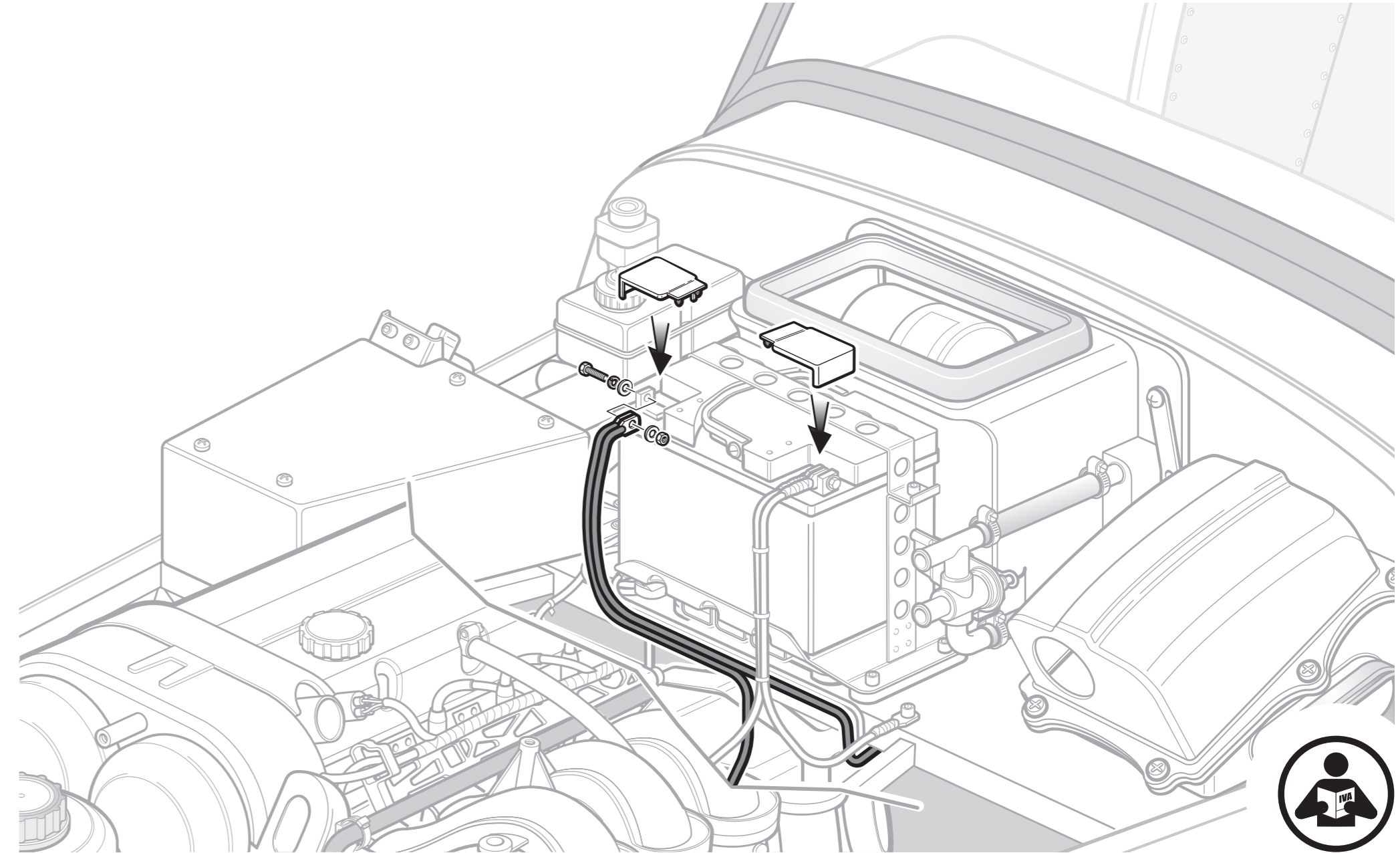
Make the battery the last thing you connect.

Jamie A

Be careful to ensure that the red leads go to the + side and the black wires to the - side.

Dan D

CONNECTING THE BATTERY (POSITIVE / RED FIRST)

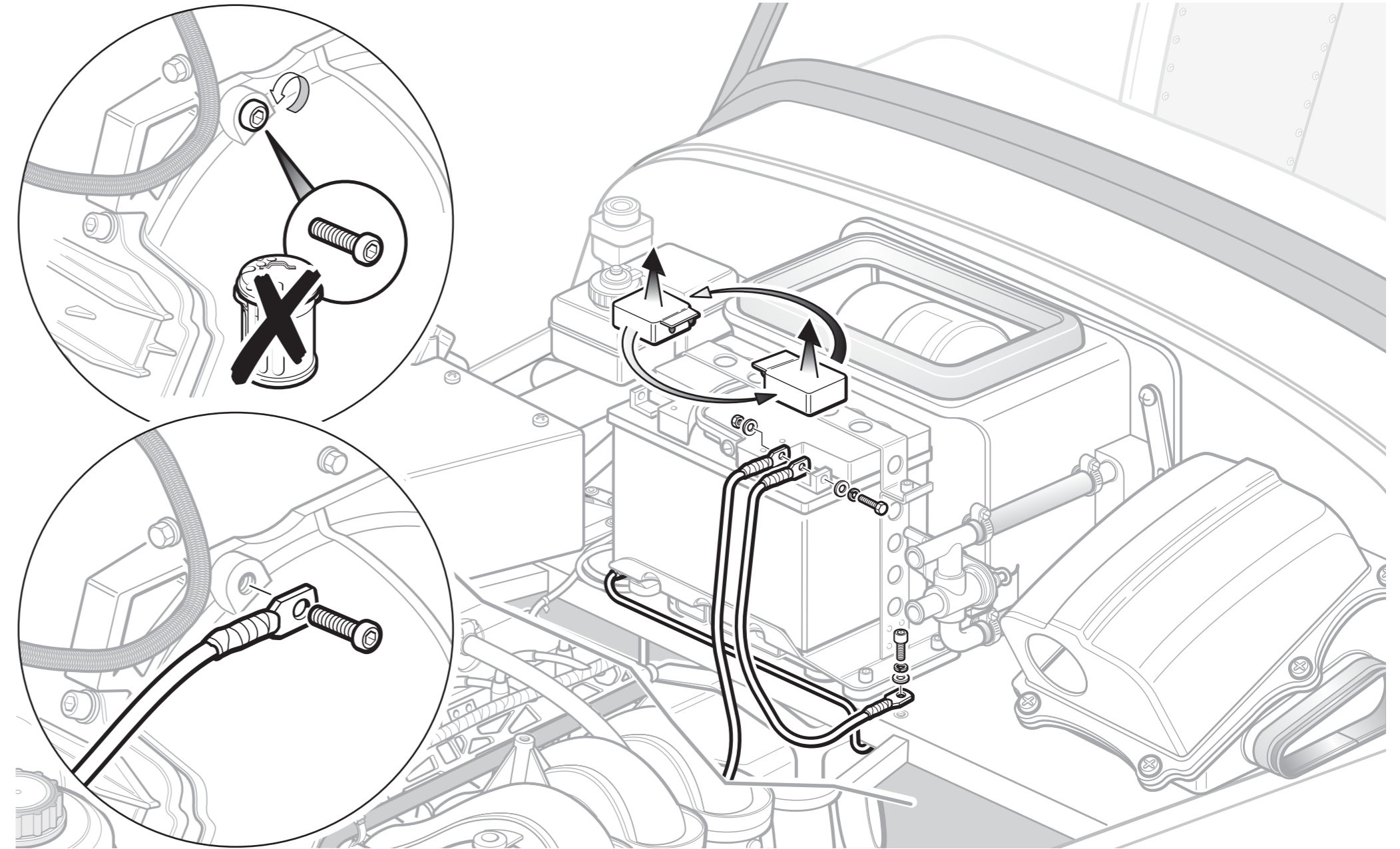


PARTS

TOOLS

FIXINGS

TIPS

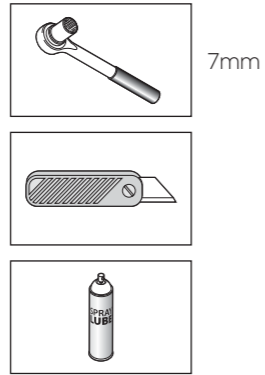


ONE LAST BIT OF PLUMBING...

PARTS

1 Hose

TOOLS



7mm

FIXINGS

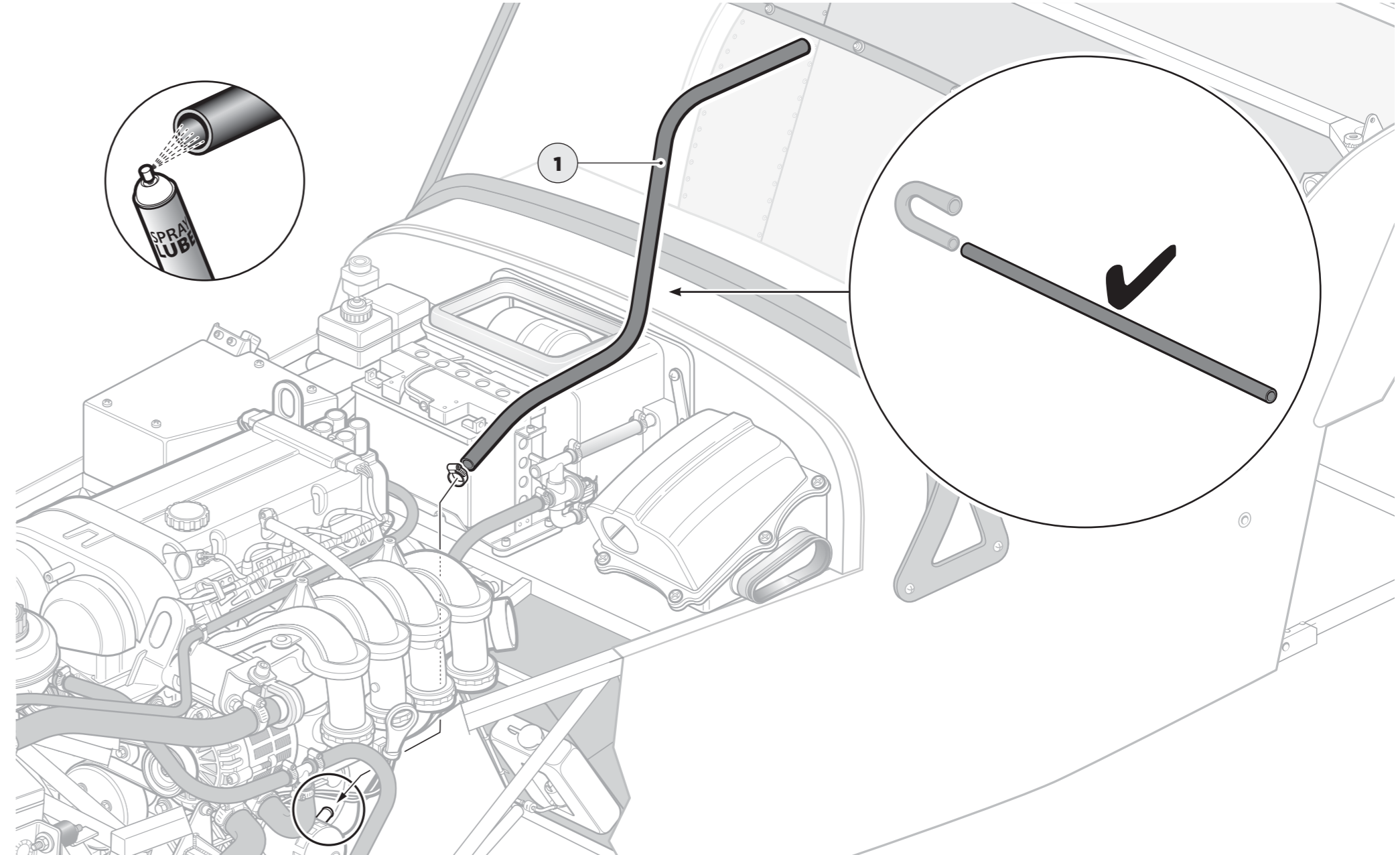
Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
4	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
5	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
6	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
7	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
8	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
9	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
10	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
11	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	

Pack D		CATERHAM		44	
		PACK NUMBER		38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
4	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
5	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
6	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
7	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
8	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
9	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
10	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
11	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	

Cut off hook and trim if required.
Grant P

TIPS

ONE LAST BIT OF PLUMBING...



...TO CONNECT THE HEATER

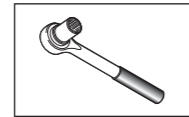
PARTS

Pack D		CATERHAM		44	
				PACK NUMBER	
				38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
4	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
5	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
6	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
7	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
8	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
9	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
10	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
11	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	

Pack D		CATERHAM		44	
				PACK NUMBER	
				38C047B	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Expansion tank	38C047B	1	Expansion tank	
2	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
3	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
4	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
5	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
6	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
7	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
8	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
9	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
10	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	
11	Expansion tank to bracket	38C047B	1	Expansion tank to bracket	

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

TOOLS



7mm



FIXINGS

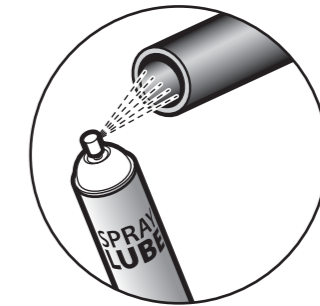
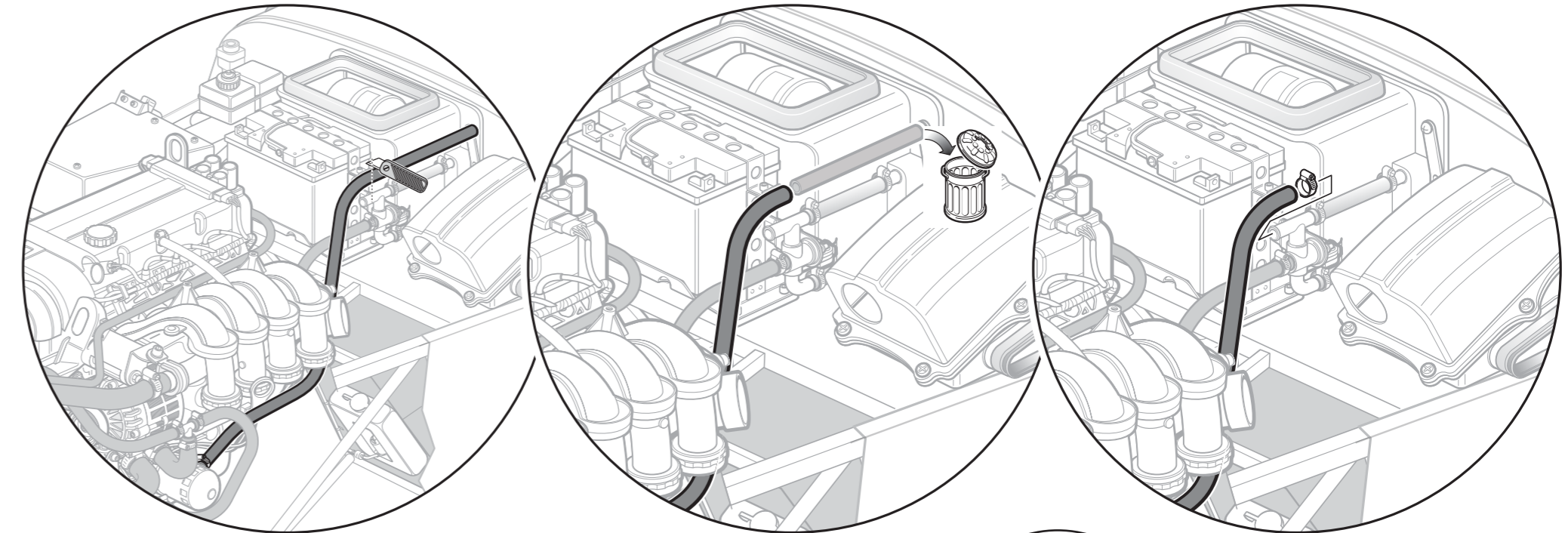
TIPS

The coolant concentrate should be diluted 50/50 with water. It does not need to be exact!

Anthony L

x1

...TO CONNECT THE HEATER



FILL WITH COOLANT

PARTS

Coolant concentrate



TOOLS

FIXINGS

TIPS

FILL WITH COOLANT



Fill expansion bottle to max mark

CONNECT THE AIRBOX TO THE ENGINE

PARTS

- 1 Airbox hose
- 2 Insert set
- 3 Hose clip

TOOLS



7mm

FIXINGS

All fixings for this step should be in the supplied airbox box

TIPS

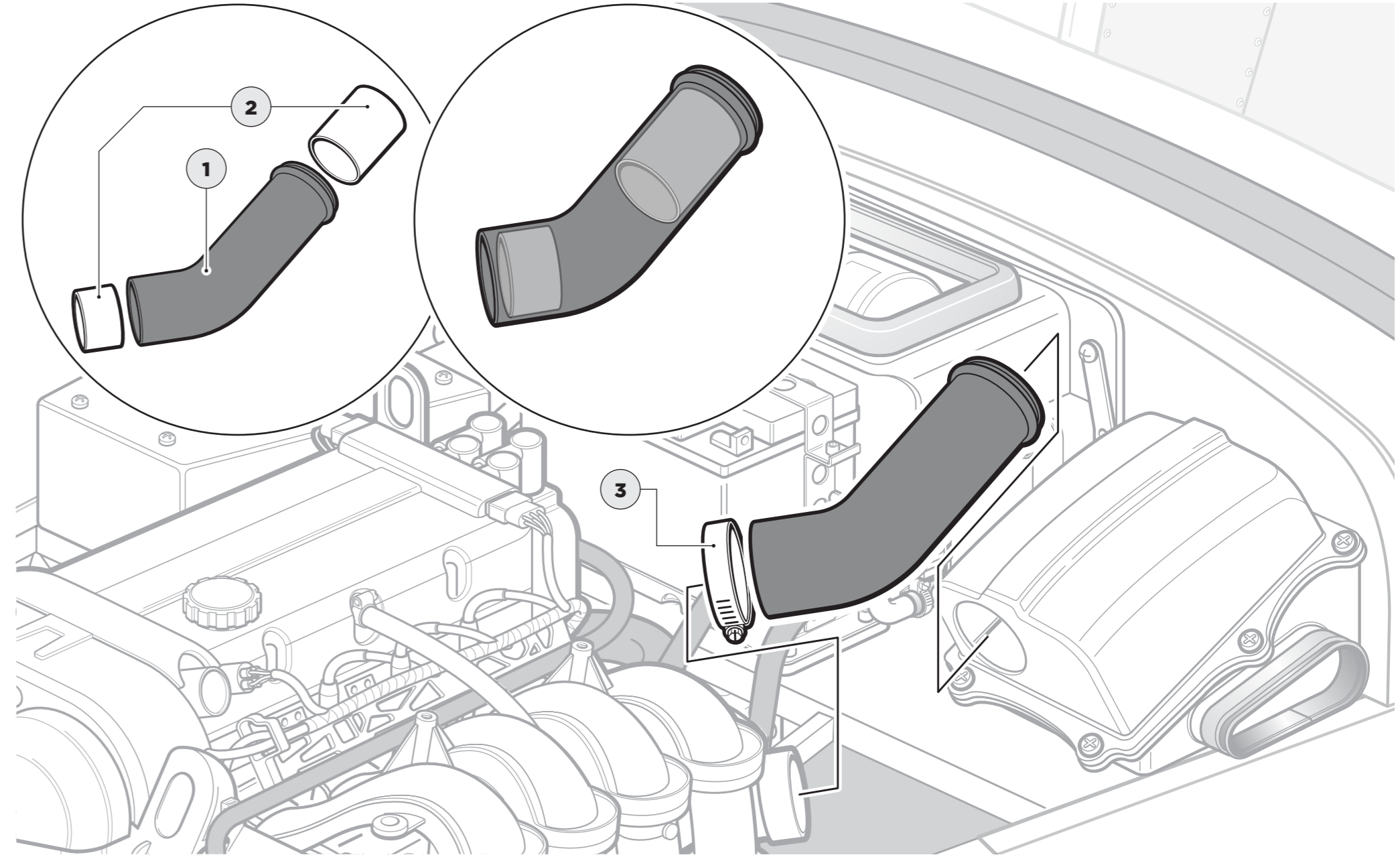
To help push insert in use the work bench.

Rich T

Spray brake cleaner in the hose and on the insert.

John K

CONNECT THE AIRBOX TO THE ENGINE

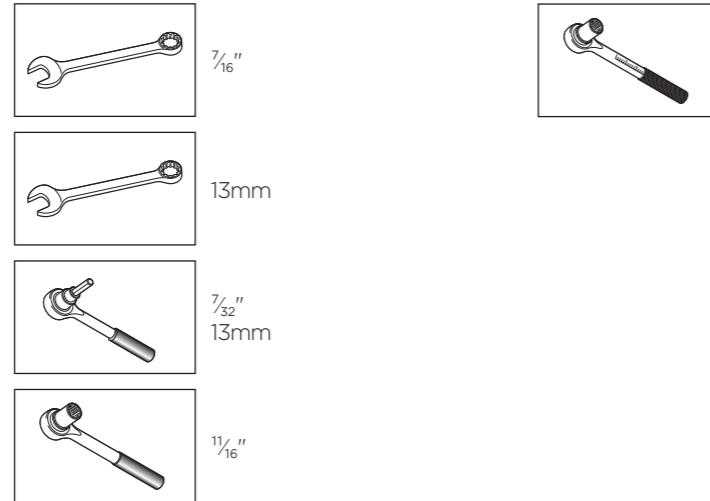


GIVING IT SOME DIRECTION

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



FIXINGS

Pack B		CATERHAM		55	
		PACK NUMBER		3280038	
STEERING DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	PART DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Lower steering column	1000001	1		
2	Upper steering column	1000002	1		
3	Steering column clamp	1000003	1		
4	Steering column clamp plate	1000004	1		
5	Grub screw	1000005	1		
6	Steering column bush	1000006	1		

TIPS

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

Jamie A

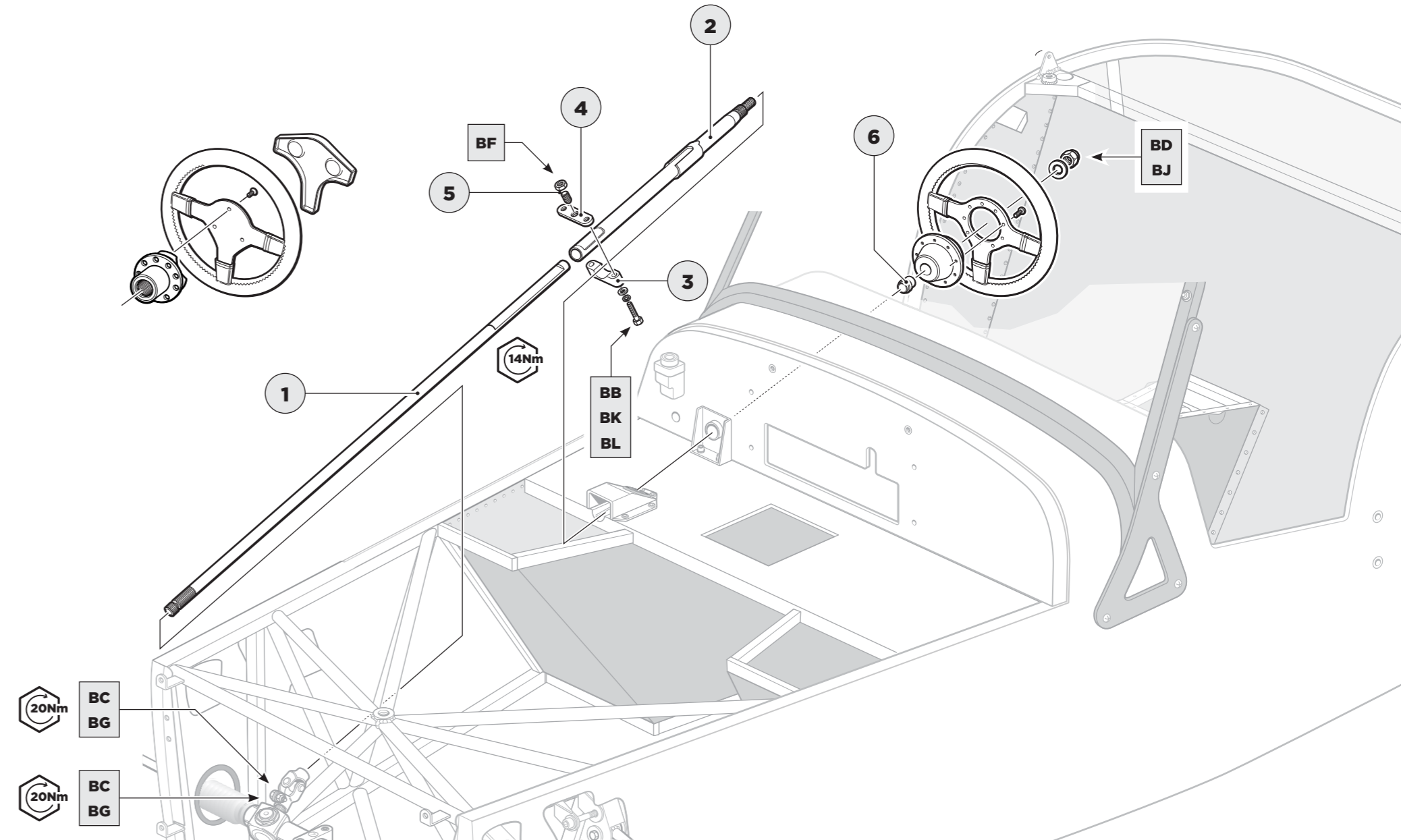
Fit the clamp bolts first, then grub screw & finish with the locking nut.

Tiago O

Grease the steering bushes.

Lee A

GIVING IT SOME DIRECTION



THIS IS EXHAUSTING

PARTS

- 1** Exhaust manifold gasket
- 2** Exhaust primary pipes
- 3** Cat / Collector
- 4** Exhaust collector springs

FIXINGS

Fixings are supplied loosely attached to the engine in place

TOOLS



TIPS

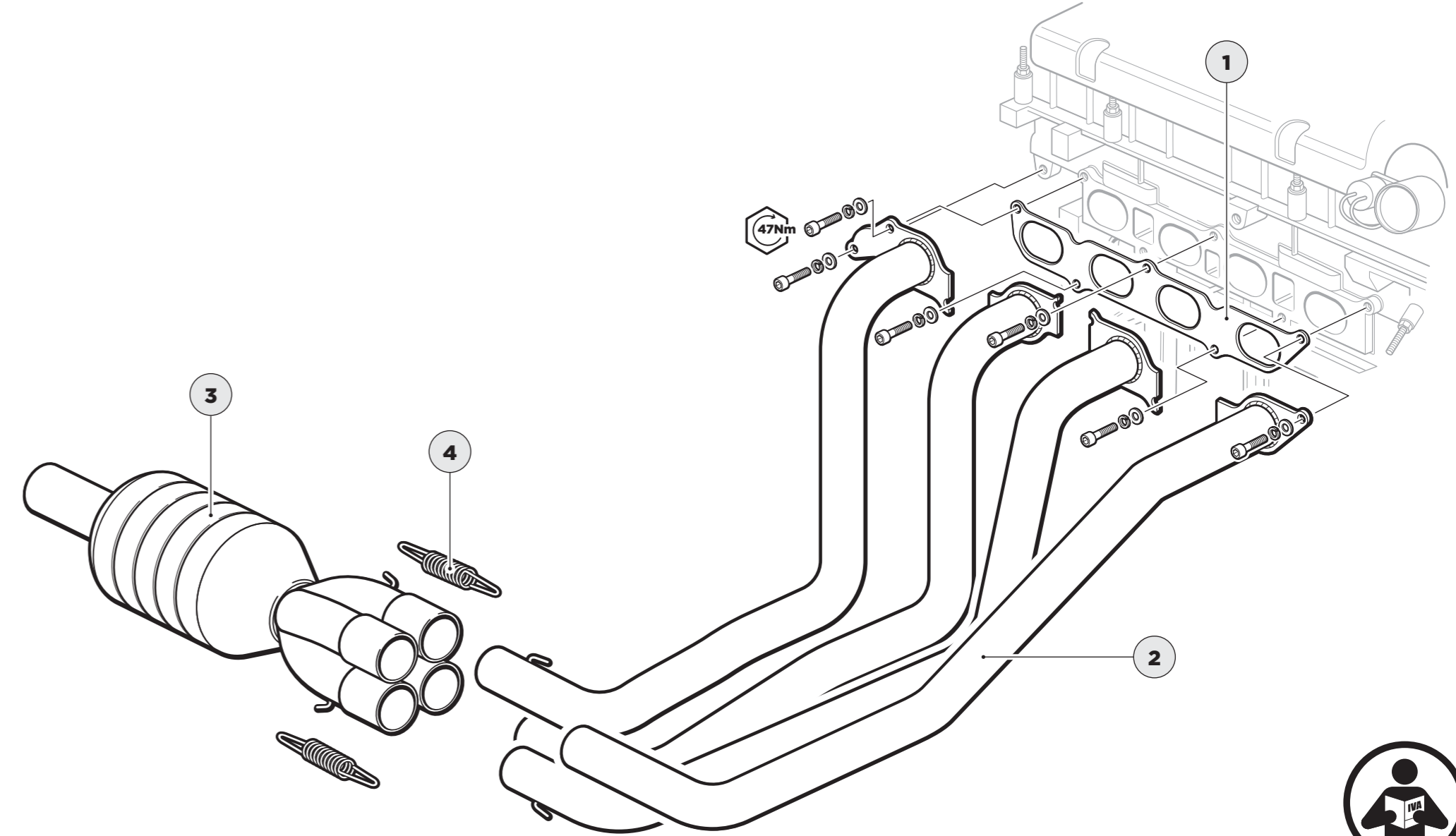
Use cable ties to compress exhaust spring.
Mick F

A pair of pliers are best to help hook over.
James A

Work out which primary pipe goes where, individually then put all four in plane, starting with the front one & working back. Take care with the hooks on your paintwork.
Chris N

Put masking tape round exhaust hole to prevent scratches.
Chris B

THIS IS EXHAUSTING



FITTING THE HANDBRAKE

PARTS

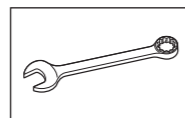
- 1** Handbrake assembly
- 2** Handbrake pulley
- 3** Handbrake clevis
- 4** Pulley clevis pin
- 5** Handbrake clevis pin
- 6** Handbrake cable

FIXINGS

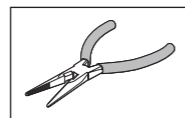
Miscellaneous pack

- Setscrew 8 (x25)
- Washer M8
- Washer M6

TOOLS



13mm (x2)



TIPS

Remember to put a loop in inner cable around pulley.

Grant P

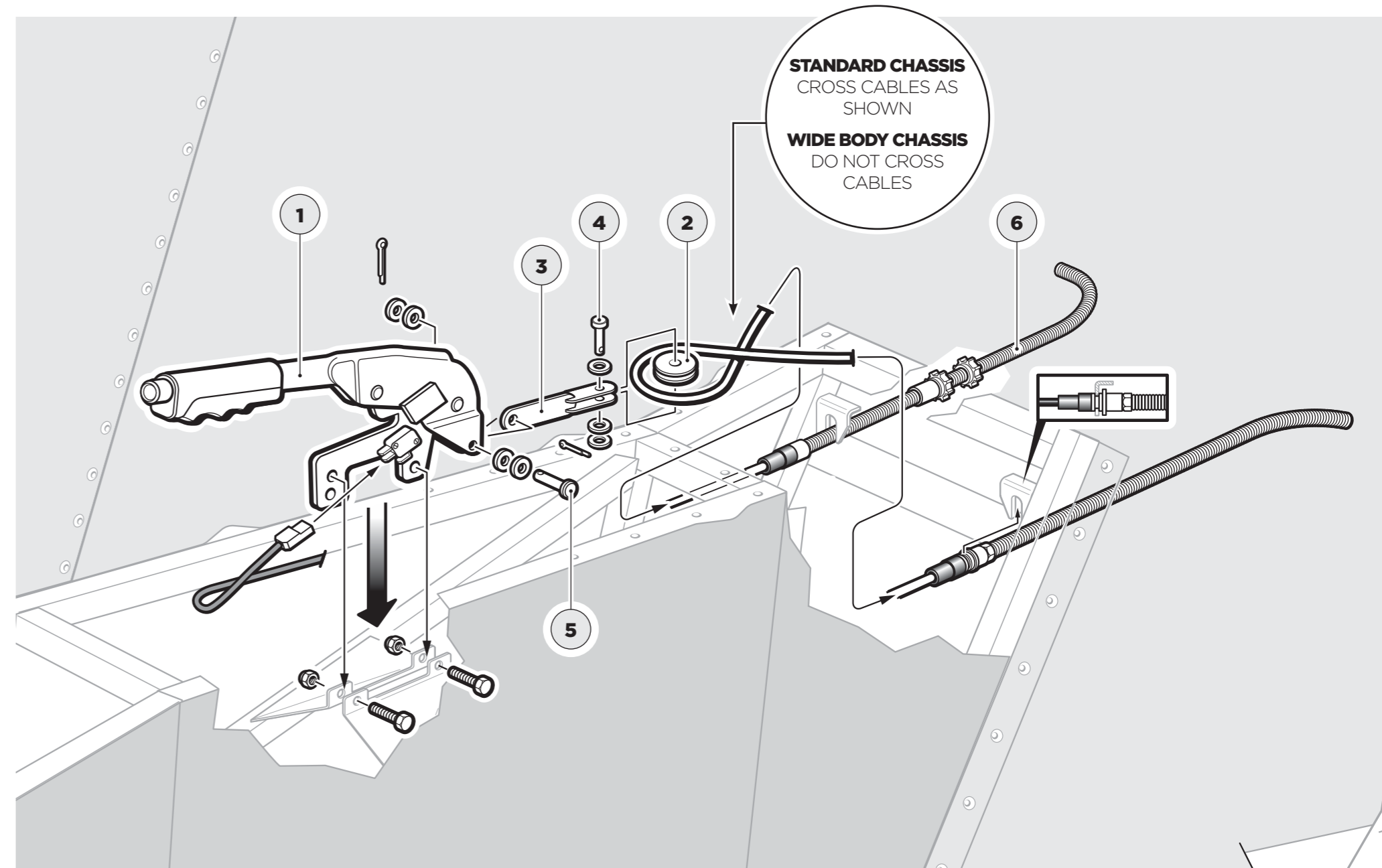
Cable tie adjuster end of cable to diff.

Dan D

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

Chris B

FITTING THE HANDBRAKE



SLIDE IN THE PROPSHAFT

PARTS

1 Propshaft



TOOLS

FIXINGS

TIPS

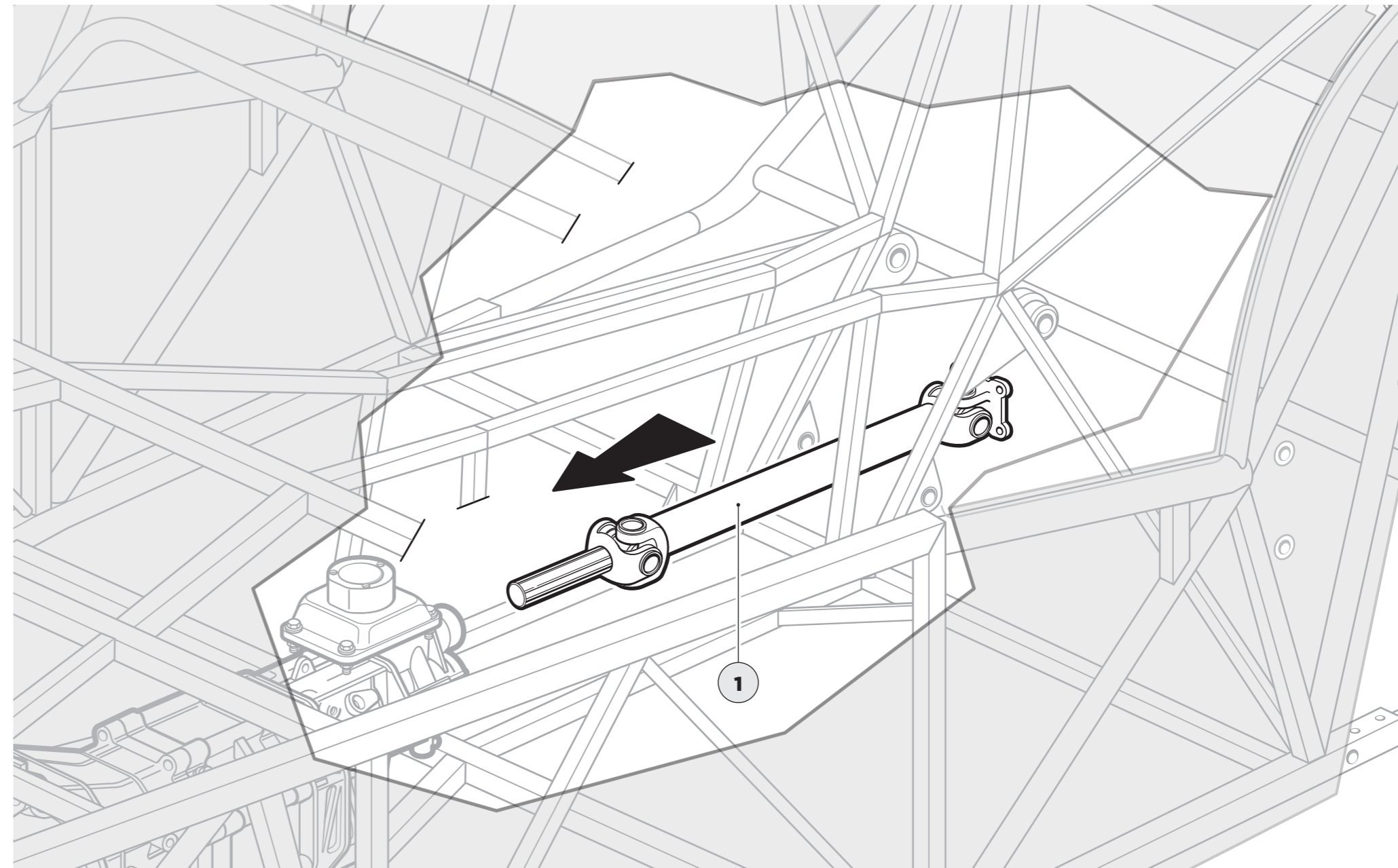
Line the splines in the propshaft to the gearbox.

Anthony L

Grease prop if necessary, it will have a grease nipple.

John S

SLIDE IN THE PROPSHAFT



HEAVY STUFF: FITTING THE DIFF

PARTS

1 Differential

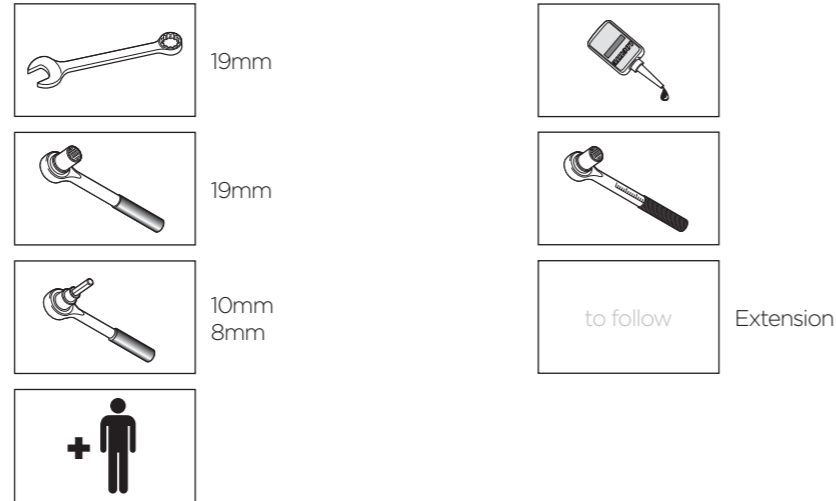
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball 1/2" x 1 1/4" UNF	BF122X1	1	Upper diff mounting bolt	
2	Control Bolt M10 x 45 Grade 12.9	BAC11262	2	Lower diff mounting bolt	
3	Half Pin 1/2" x 1 1/4" UNF	BF122X1	4	Rear axle through axle to front DaDum	
4	Half Pin 1/2" x 1 1/4" UNF	BF122X1	4	Half Pin 1/2" x 1 1/4" UNF	
5	Control Bolt M10 x 45 Grade 12.9	BAC11262	4	Propshaft bolts	
6	Control Bolt M10 x 45 Grade 12.9	BAC11262	2	Off-ropes	
7	Half Pin 1/2" x 1 1/4" UNF	BF122X1	1	Upper diff bolt	
8	Half Pin 1/2" x 1 1/4" UNF	BF122X1	2	Half through axle to DaDum	
9	Half Pin 1/2" x 1 1/4" UNF	BF122X1	4	Rear axle and off-ropes	
10	Half Pin 1/2" x 1 1/4" UNF	BF122X1	2	Brake pipe	

FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
13	Pin washer 1/2" x 3/4" 12.9	79017	8	Free play on diff	
14	Pin washer 1/2" x 3/4" 12.9	79017	14	Off-ropes	
15	Pin washer 1/2" x 3/4" 12.9	79017	16	Rear Diffion Upper Control Arm	
16	Pin washer 1/2" x 3/4" 12.9	79017	16	Rear DaDum Trans Control Arm	
17	Ball washer 402	402	4	Behind bolt heads on diff	
18	Pin washer 1/2" x 3/4" 12.9	79017	1	Behind lower bolt	
19	Pin 1/2" x 0.51"	181-0414	5	Pin on DaDum for brake pipe	
20	P-Clip	500	5	Brake pipe on DaDum	

* Use as required for spacing

TOOLS



TIPS

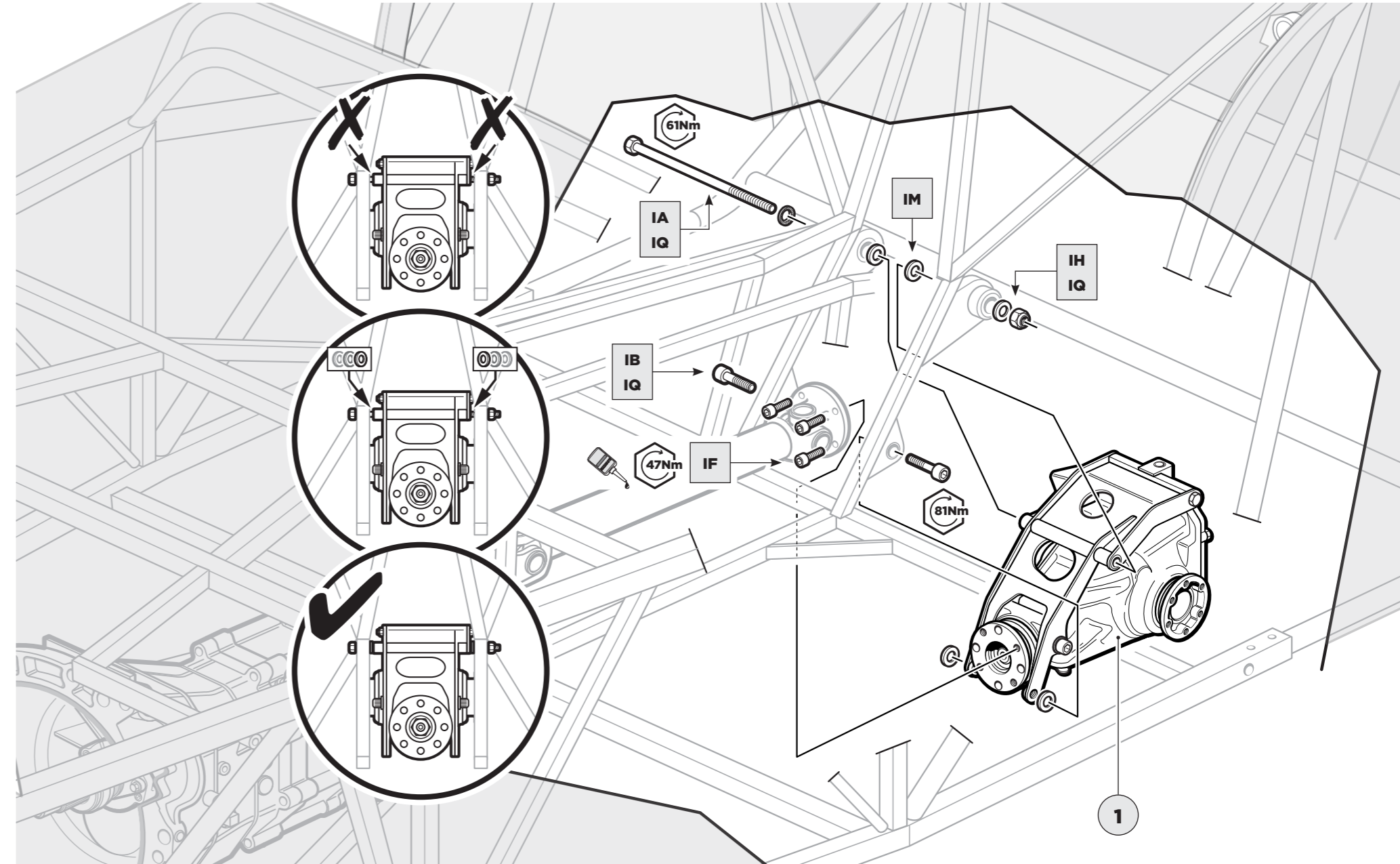
Start at bottom right with spanner & work your way around.

Chris B

Make sure propshaft is in first!

Harry P

HEAVY STUFF: FITTING THE DIFF



FILL THE DIFFERENTIAL WITH OIL

PARTS

Differential oil

TOOLS

FIXINGS

TIPS

FILL THE DIFFERENTIAL WITH OIL



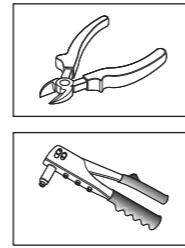
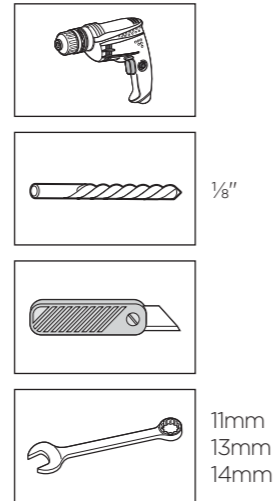
Differential = 0.8L

PREPARING THE DEDION TUBE

PARTS

- 1 DeDion tube
- 2 LHS brake pipe
- 3 RHS brake pipe
- 4 3 way union
- 5 Brake hose

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
11	HK Nylon Nut 1/4" x 1/2"	NP10114	1	3-way union on DeDion tube	

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

x1

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
11	HK Nylon Nut 1/4" x 1/2"	NP10114	2	Brake pipe	

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

x2

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
18	IR Shakedown washer 3/8"	W5538	1	Braked brake hose	
19	IS Bolt 1/8" x 0.51"	1881-0414	5	P-clip on DeDion for brake pipe	
20	IT P-Clip	1001	5	Brake pipe on DeDion	

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

x1

x5

x5

Brake pipe washers and nuts are included with the hose

TIPS

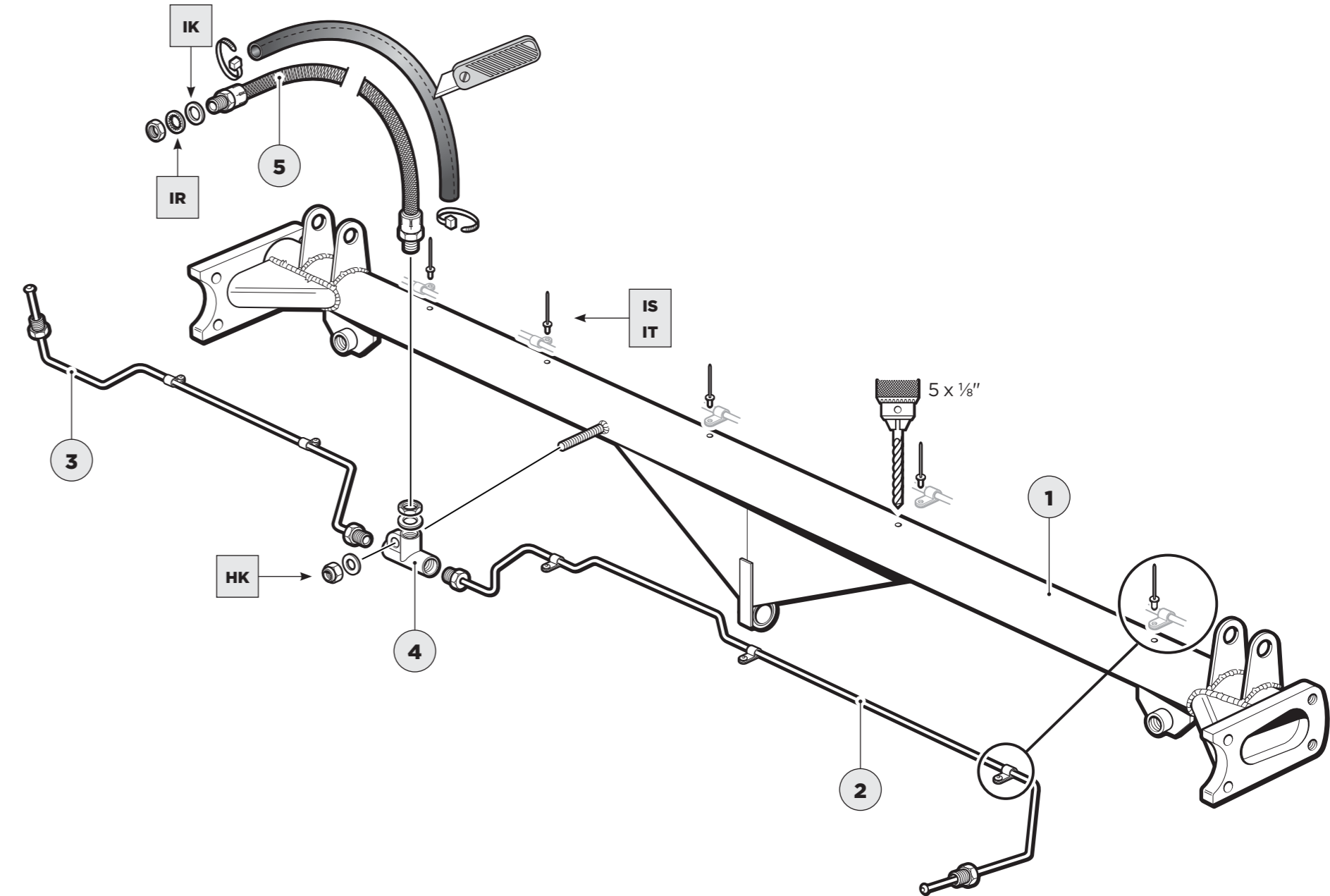
The upper brake hose fittings will become self explanatory on the rear damper installation page.

John K

Tighten the braided pipe 5 into the union before nipping up the locknut.

Chris N

PREPARING THE DEDION TUBE



AND FITTING IT IN PLACE

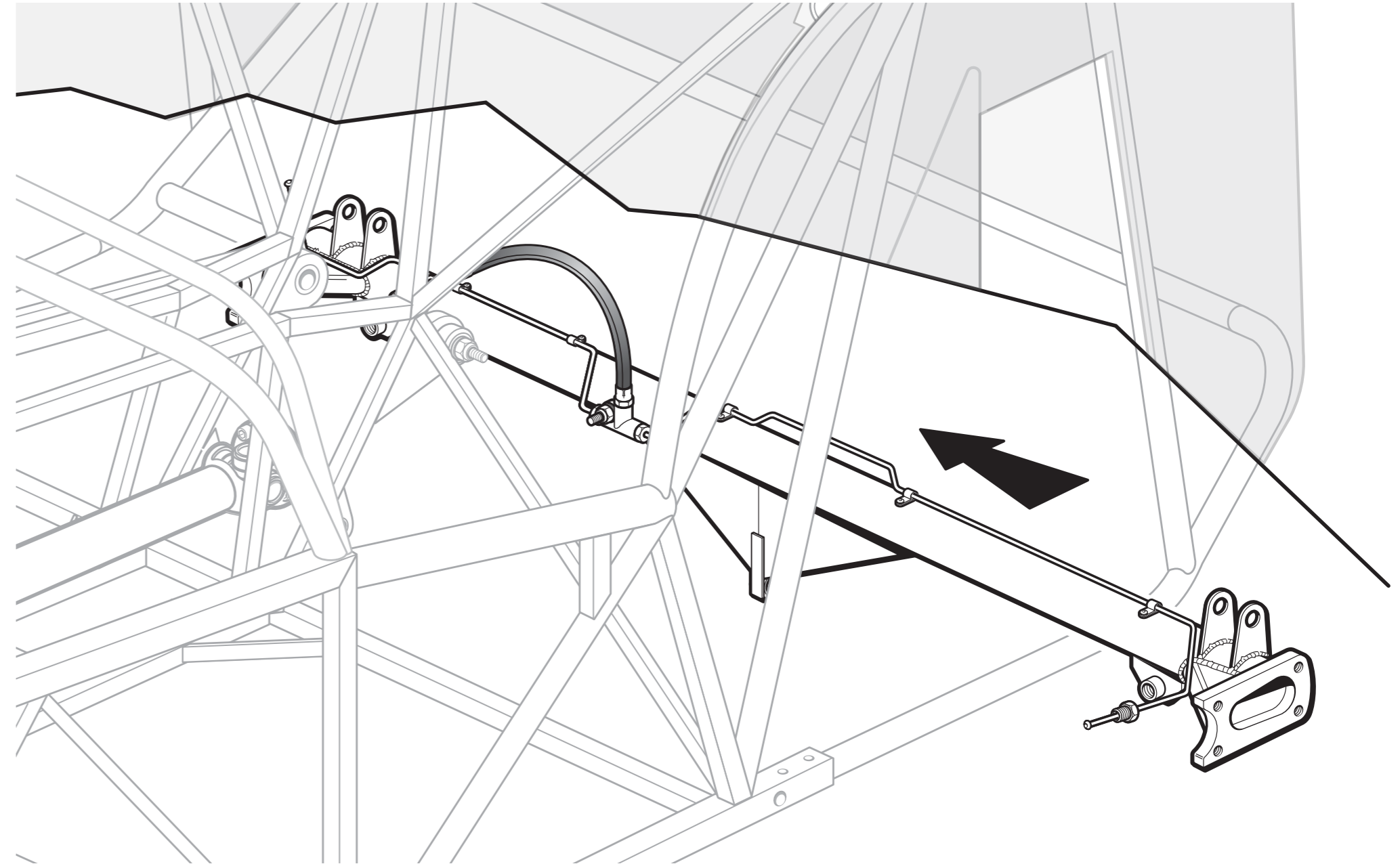
PARTS

TOOLS

FIXINGS

TIPS

AND FITTING IT IN PLACE

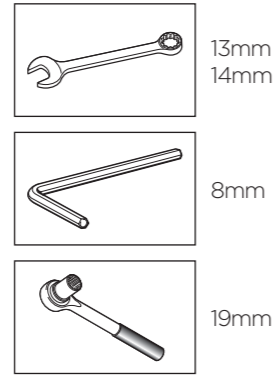


ATTACHING THE REAR DAMPERS

PARTS

- 1 Rear damper assembly
- 2 Rear damper sleeve

TOOLS



FIXINGS

Pack H		CATERHAM		53	
REAR SUSPENSION DEDION METRIC		PART NUMBER		3680110	
ITEM	BASIC DESCRIPTION	QTY	USED ON	ILLUSTRATION	
1	Ball Joint	2	A-frame Rear	[Illustration]	
2	Coil Spring	2	Front Radius Arm	[Illustration]	
3	Ball	4	x 2 Lower Rear Damper	[Illustration]	
4	Pin	4	x 2 Rear Radius Arm	[Illustration]	
5	Pin	4	Pin	[Illustration]	
6	Pin	4	Pin	[Illustration]	
7	Pin	4	Pin	[Illustration]	
8	Pin	4	Pin	[Illustration]	
9	Pin	4	Pin	[Illustration]	
10	Pin	4	Pin	[Illustration]	
11	Pin	4	Pin	[Illustration]	

x2

x4

x2

x2

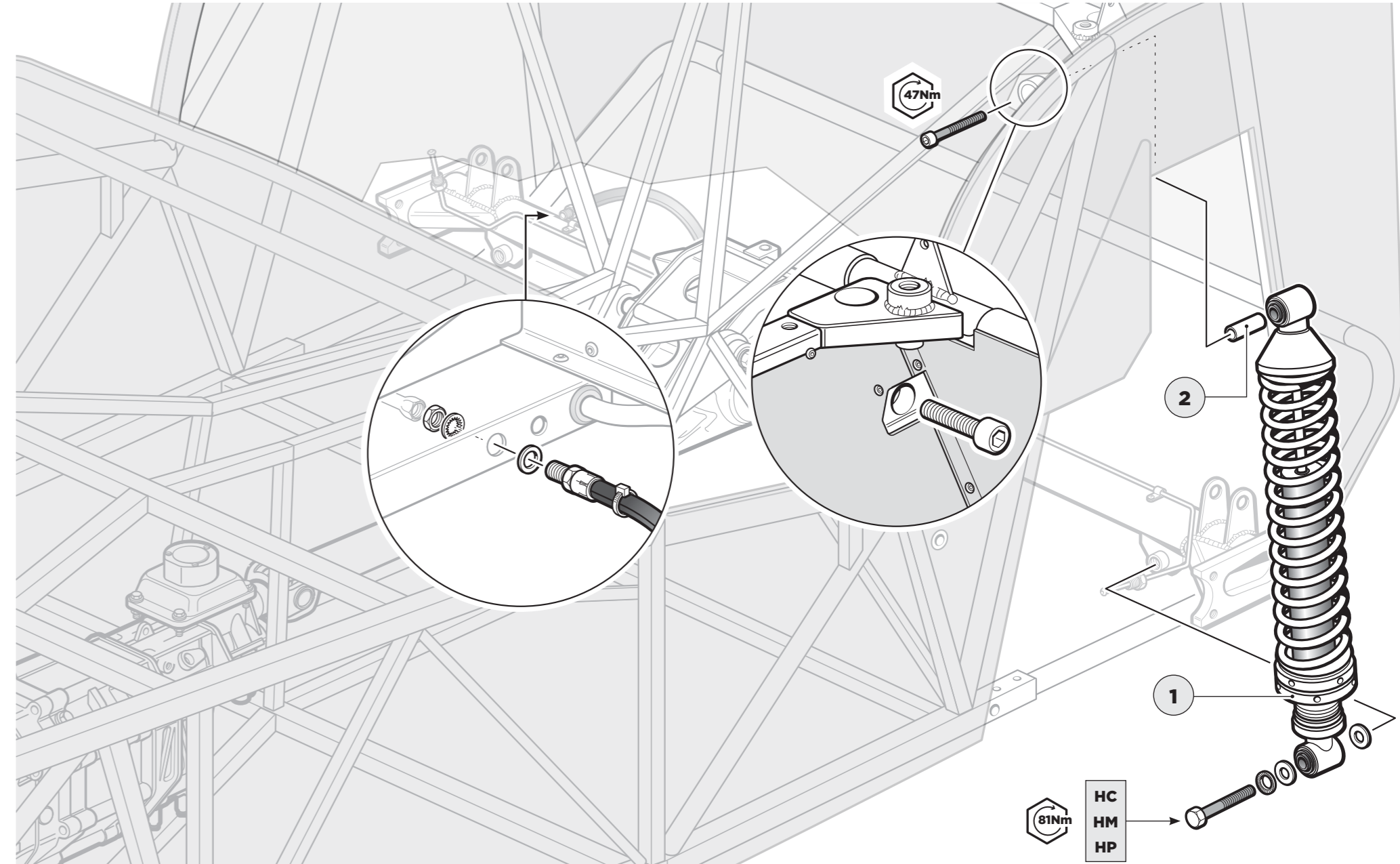
x2

TIPS

Although we show the fitting of the dampers here as part of the rear suspension, it is better to leave this step until you've fitted the roll over bar much later in the process.

Jamie A

ATTACHING THE REAR DAMPERS

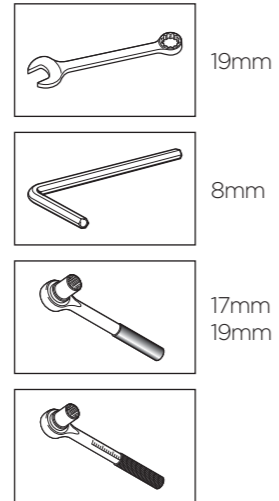


THEN THE RADIUS ARM

PARTS

1 Radius arm

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Radius Arm	3881110	2	Front	
2	Hub Bolt M10 x 65	3881100	2	Front	
3	Bolt 12" x 2.12" Grade 10.9	3881110	4	Front	
4	Hub Bolt M10 x 65	3881100	2	Front	
5	Hub Bolt M10 x 65	3881100	2	Front	
6	Hub Bolt M10 x 65	3881100	2	Front	
7	Hub Bolt M10 x 65	3881100	2	Front	
8	Hub Bolt M10 x 65	3881100	2	Front	
9	Hub Bolt M10 x 65	3881100	2	Front	
10	Hub Bolt M10 x 65	3881100	2	Front	
11	Hub Bolt M10 x 65	3881100	2	Front	

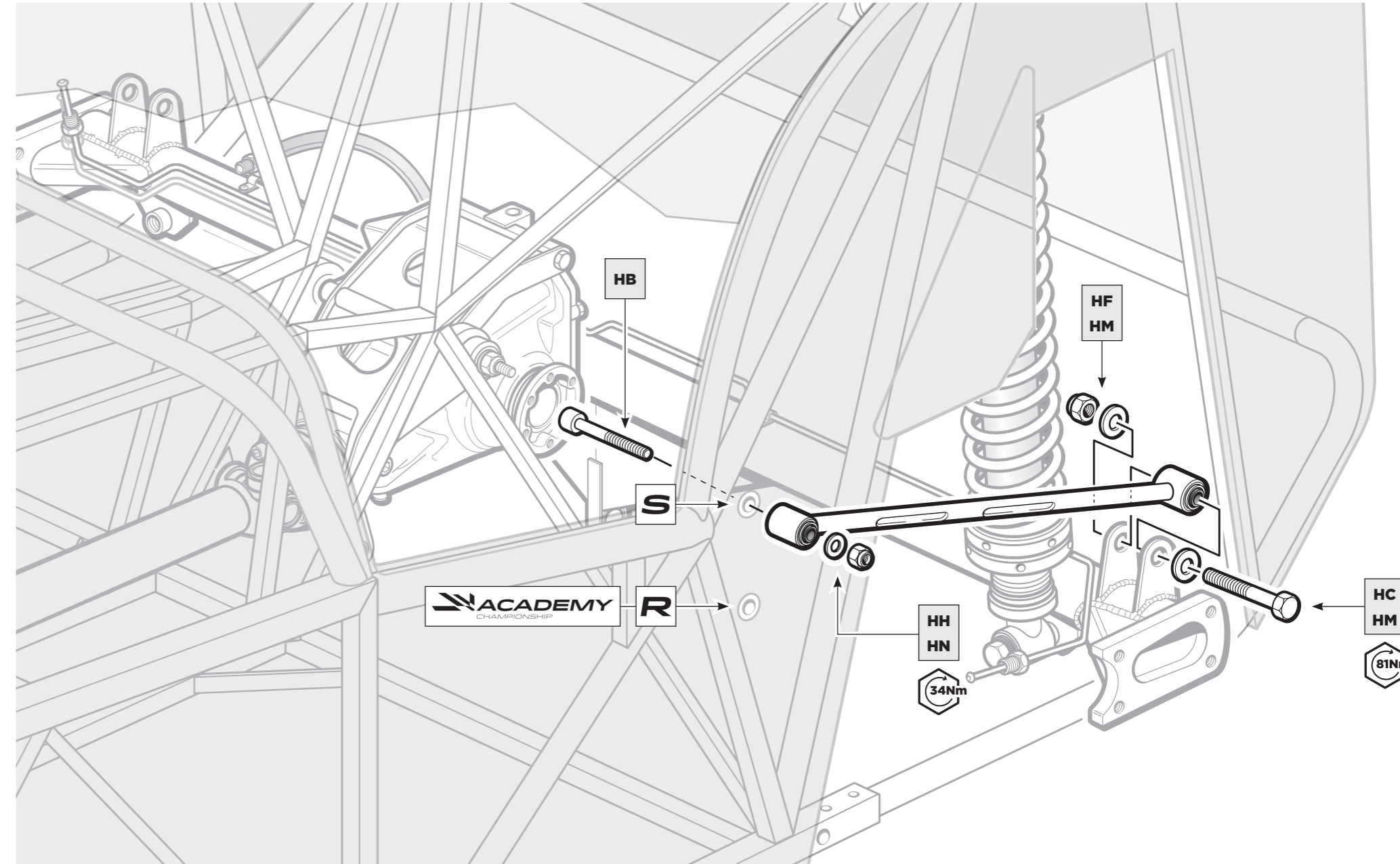
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Hub Bolt M10 x 65	3881100	2	Front	
13	Hub Bolt M10 x 65	3881100	2	Front	
14	Hub Bolt M10 x 65	3881100	2	Front	
15	Hub Bolt M10 x 65	3881100	2	Front	
16	Hub Bolt M10 x 65	3881100	2	Front	
17	Hub Bolt M10 x 65	3881100	2	Front	
18	Hub Bolt M10 x 65	3881100	2	Front	
19	Hub Bolt M10 x 65	3881100	2	Front	
20	Hub Bolt M10 x 65	3881100	2	Front	

Before torquing up these bolts, reposition the axle stands to under the DeDion tube (to hold up the suspension). Make sure front has two axle stands so it is steady when jacking up the rear!

Mick F

TIPS

THEN THE RADIUS ARM

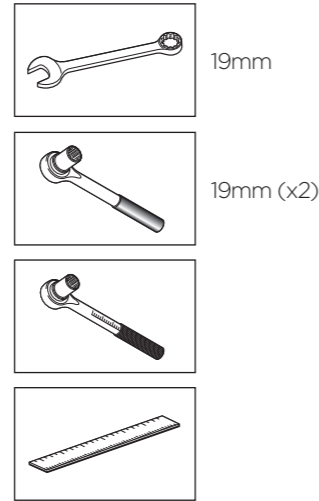


AND NOW THE (CAREFULLY SPACED) A-FRAME

PARTS

- 1 A-frame
- 2 White nylon anti-squeak washers

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	HA 19x2.5 100 Grade 10.9	BM123100	2	A-frame front mounts	
2	HE 1/2" X 2 3/4" Grade 10.9	MF1300.34	1	A-frame to DeDion	
3	HF Half Nylon 1/2" UNF	MF0112	3	x2 Rear Radius Arms 1 A-frame to DeDion	
4	HM Nylon Nut M12	MF0112	2	A-frame front mounts	

x2

x1

x1

x2

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
13	HR Plain Washer 1/2" Checkered	W0112	20	x2 Lower Damper x10 A-frame washers & Radius Arm	

*

* Use as required for spacing

TIPS

Make sure the DeDion tube is equal on both sides.
Tiago O

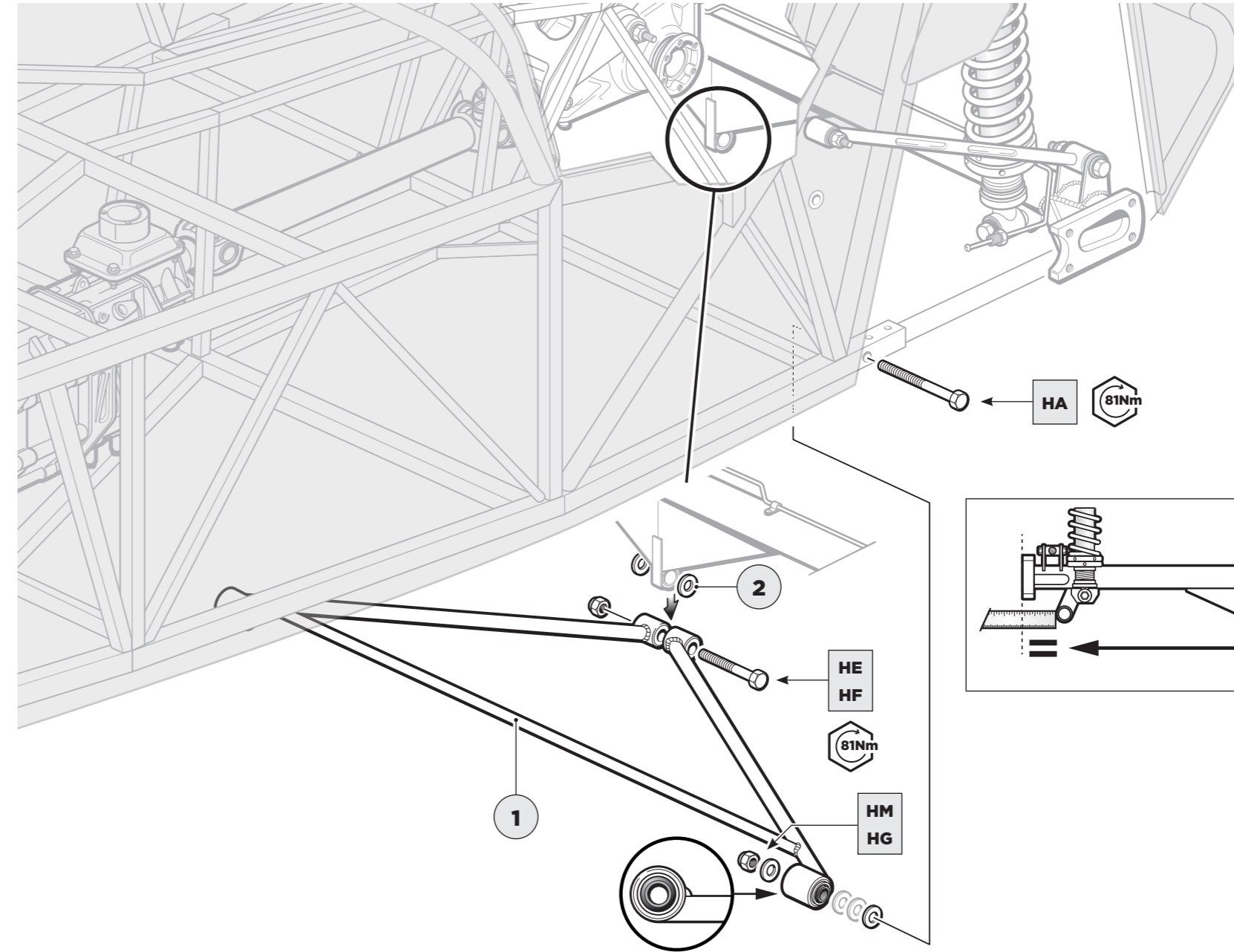
Use as many HM washers as required to space A-frame.
John K

The A-frame has a 'way up'. The arms should be offset downwards in relation to the front bushes.
Chris N

Take care to use the correct nuts as there is a mixture of metric and imperial here.
Lee A

Torque up as before on axle stands.
Rich T

AND NOW THE (CAREFULLY SPACED) A-FRAME

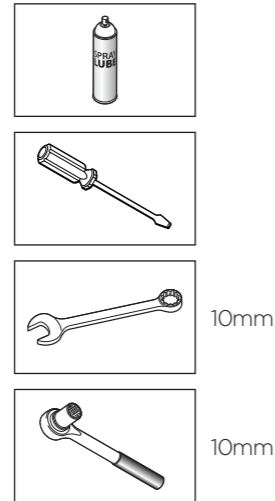


IF YOU HAVE THE OPTIONAL REAR ANTI-ROLL BAR, IT GOES ON LIKE THIS

PARTS

- 1 Rear anti roll bar
- 2 Anti roll bar rubber
- 3 Rear anti roll bar clamp

TOOLS



10mm

10mm

FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Rear Anti Roll Bar	38812100	2	A-Roll Bar	
2	Anti Roll Bar Rubber	38812101	2	Front Roll Bar	
3	Rear Anti Roll Bar Clamp	38812102	4	Rear Roll Bar	
4	Rear Anti Roll Bar Mounting Blocks	38812103	4	Rear Roll Bar	
5	Rear Anti Roll Bar Mounting Blocks	38812104	4	Rear Roll Bar	
6	Rear Anti Roll Bar Mounting Blocks	38812105	4	Rear Roll Bar	
7	Rear Anti Roll Bar Mounting Blocks	38812106	4	Rear Roll Bar	
8	Rear Anti Roll Bar Mounting Blocks	38812107	4	Rear Roll Bar	
9	Rear Anti Roll Bar Mounting Blocks	38812108	4	Rear Roll Bar	
10	Rear Anti Roll Bar Mounting Blocks	38812109	4	Rear Roll Bar	
11	Rear Anti Roll Bar Mounting Blocks	38812110	4	Rear Roll Bar	

x4

x4

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Differential Substn	38812111	1	Differential	
13	Lower Control Arm	38812112	2	Lower Control Arm	
14	Upper Control Arm	38812113	2	Upper Control Arm	
15	Rear Anti Roll Bar Mounting Block	38812114	4	Rear Anti Roll Bar	
16	Lower Control Arm	38812115	2	Lower Control Arm	

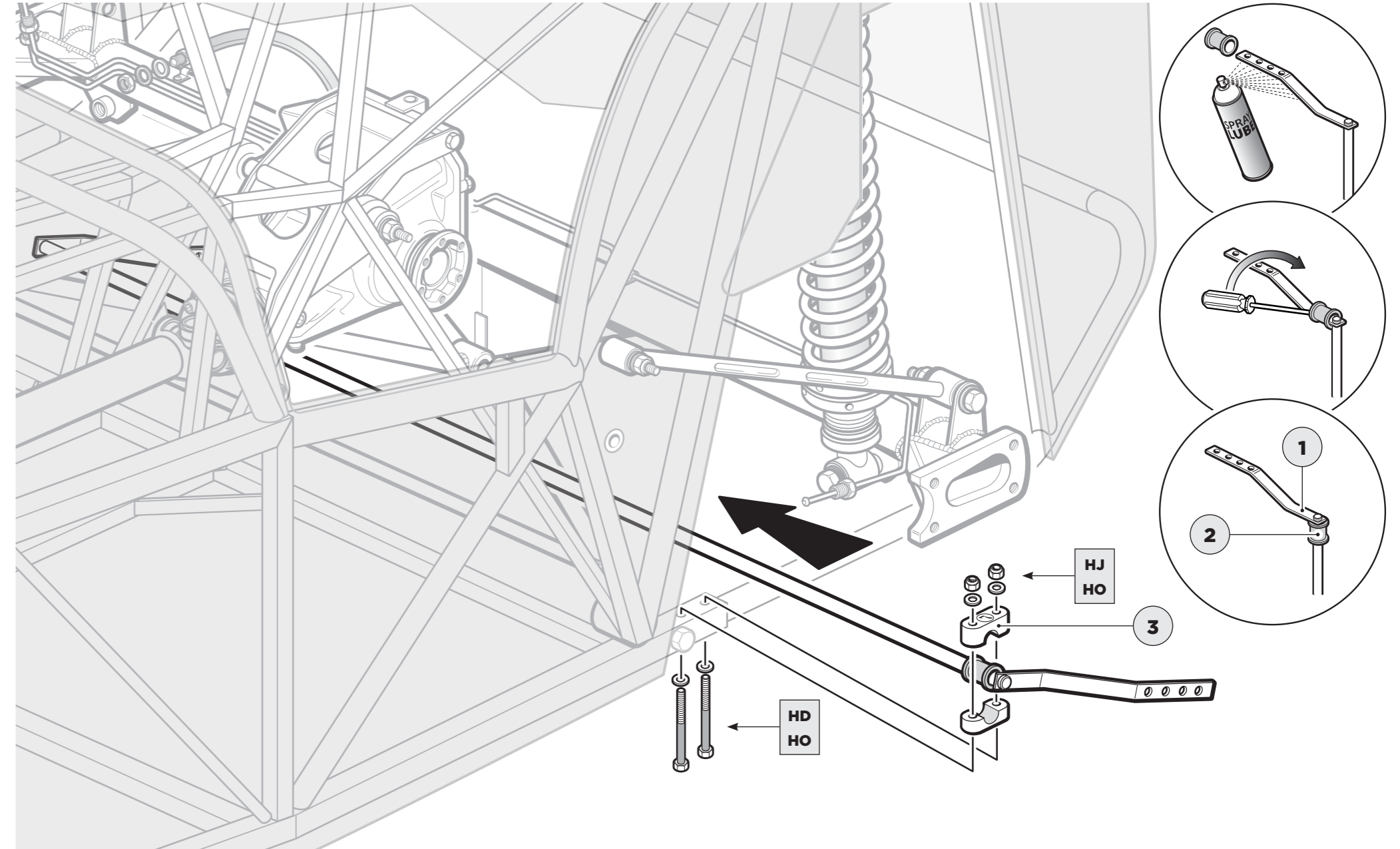
x8

TIPS

Be careful not to slip with the screwdriver!

John S

IF YOU HAVE THE OPTIONAL REAR ANTI-ROLL BAR, IT GOES ON LIKE THIS



INSERT THE DRIVESHAFTS

PARTS

- 1 Driveshaft
- 2 Driveshaft nut

TOOLS

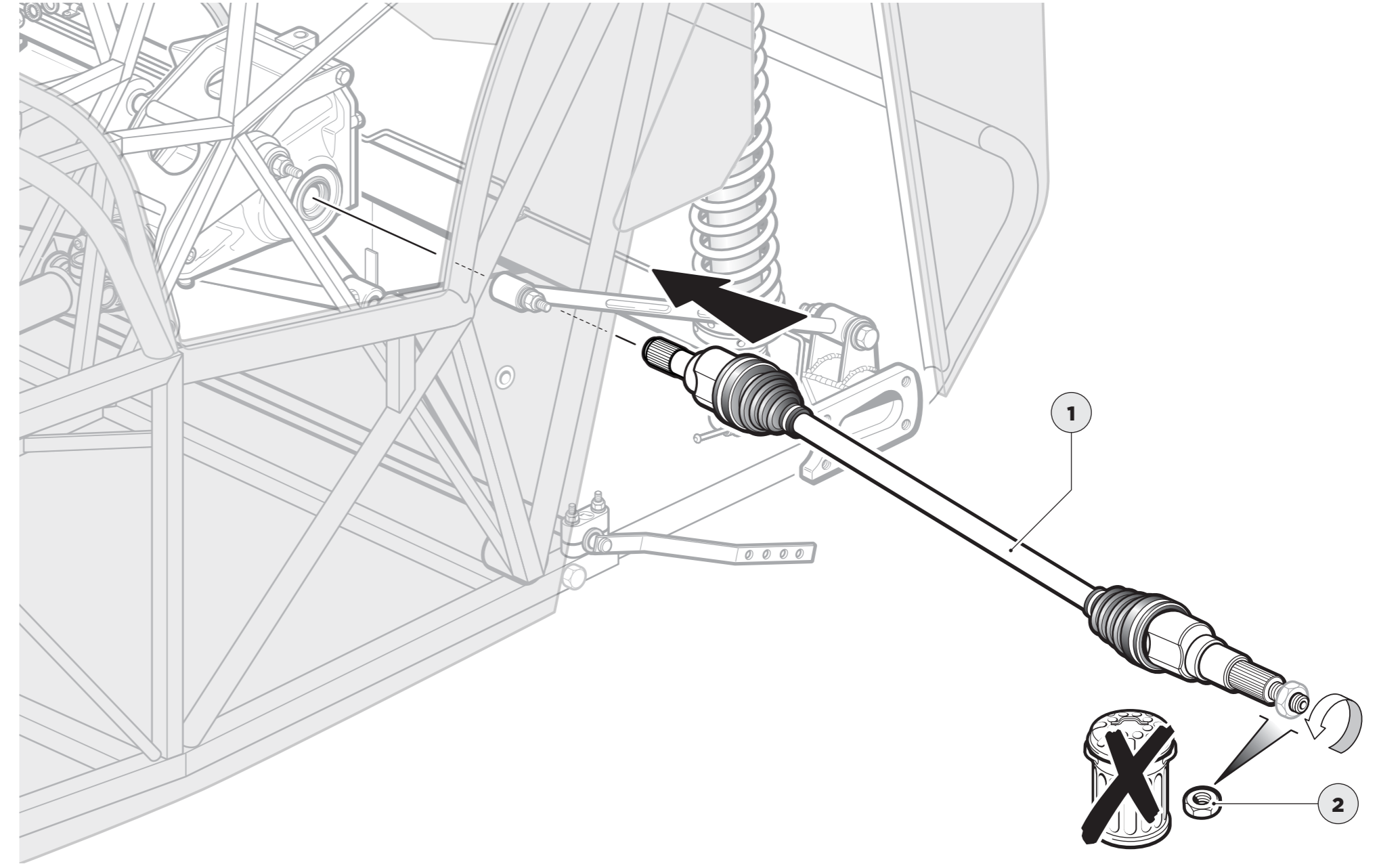
FIXINGS

TIPS

Driveshafts are handed, and so are the nuts, the left hand nut tightens anti-clockwise.

James A

INSERT THE DRIVESHAFTS

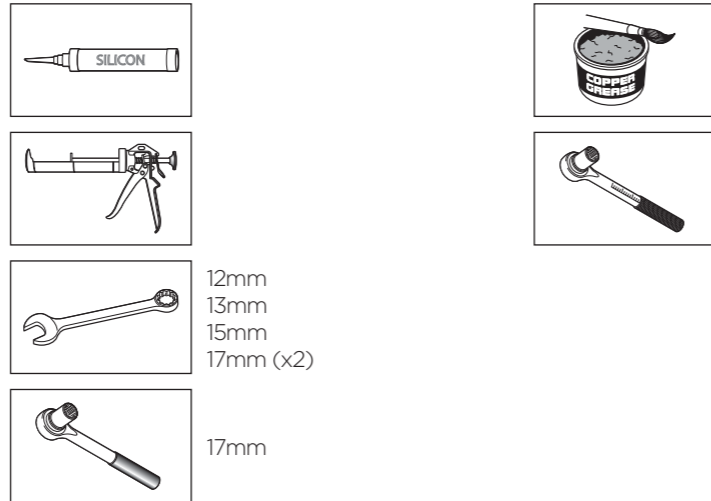


FITTING THE REAR HUB

PARTS

- 1** Rear brake disc / flange assembly
- 2** Rear hub
- 3** DeDion ear
- 4** Anti roll bar bracket
- 5** Anti roll bar drop link
- 6** Brake calliper
- 7** Brake calliper mount
- 8** Brake pads
- 9** Driveshaft nut
- 10** Driveshaft washer

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Rear brake disc / flange assembly	BM1010	1	Rear wheel	
2	Rear hub	BM1011	1	Rear wheel	
3	DeDion ear	BM1012	1	Rear wheel	
4	Anti roll bar bracket	BM1013	1	Rear wheel	
5	Anti roll bar drop link	BM1014	1	Rear wheel	
6	Brake calliper	BM1015	1	Rear wheel	
7	Brake calliper mount	BM1016	1	Rear wheel	
8	Brake pads	BM1017	1	Rear wheel	
9	Driveshaft nut	BM1018	1	Rear wheel	
10	Driveshaft washer	BM1019	1	Rear wheel	

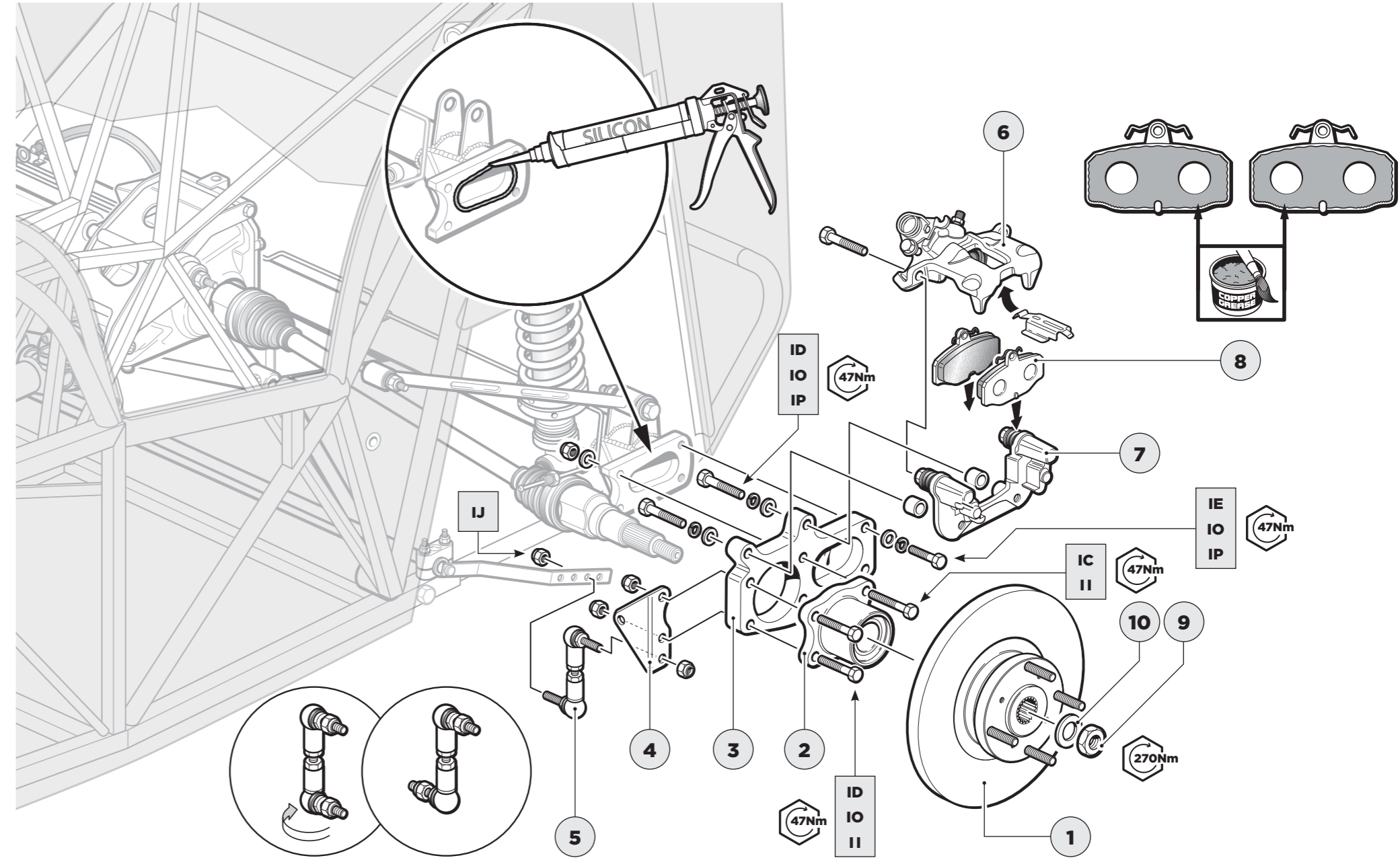
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Rear axle tube	BM1020	1	Rear wheel	
2	Rear axle nut	BM1021	1	Rear wheel	
3	Rear axle washer	BM1022	1	Rear wheel	
4	Rear axle seal	BM1023	1	Rear wheel	
5	Rear axle bearing	BM1024	1	Rear wheel	
6	Rear axle hub	BM1025	1	Rear wheel	
7	Rear axle drop link	BM1026	1	Rear wheel	
8	Rear axle bracket	BM1027	1	Rear wheel	
9	Rear axle nut	BM1028	1	Rear wheel	
10	Rear axle washer	BM1029	1	Rear wheel	

x4
x8
x4
x8
x4

TIPS

- Chris B**: Swap the plain nuts on the droplinks for nylons.
- Dan D**: Torque up the bearing and ear before fitting the disc.
- Grant P**: Remember the driveshaft nuts are handed.
- Rich T**: If you don't have an anti roll bar you will only have one bracket (for the right hand side) which holds the speed sensor.

FITTING THE REAR HUB



AND SPEED SENSOR (ONE SIDE ONLY)

PARTS

1 Speed sensor

TOOLS



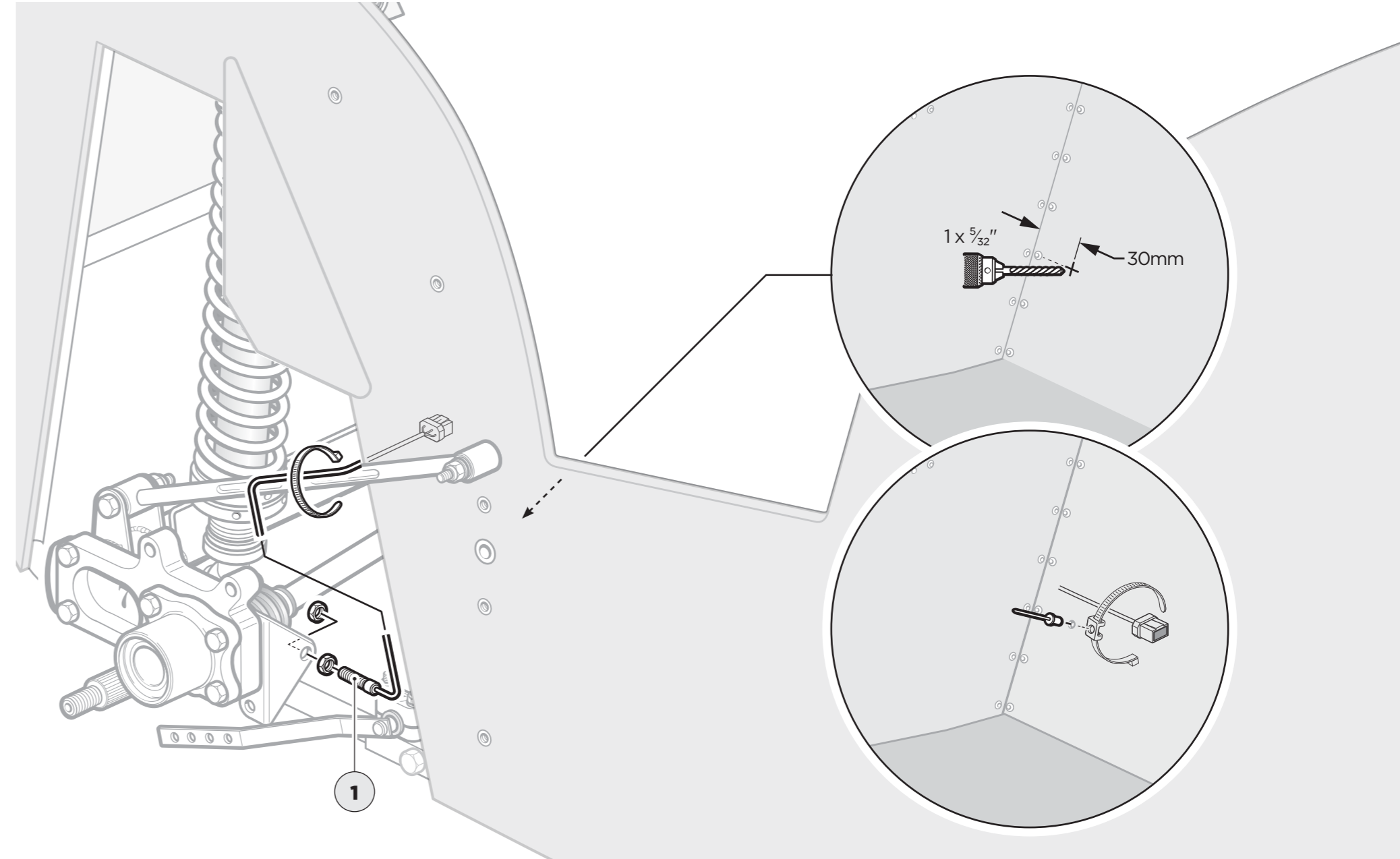
FIXINGS

TIPS

Ensure there is enough slack in the wire to allow for suspension travel.

Tiago O

AND SPEED SENSOR (ONE SIDE ONLY)





Now is a good time to take some photos



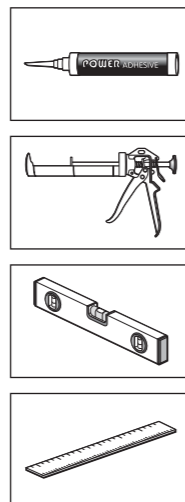
Have you applied for your IVA yet?

JUST WING IT

PARTS

- 1 Cycle wing
- 2 Wheel
- 3 Wheel nuts

TOOLS



FIXINGS

TIPS

Key the wing & wingstay before using adhesive.
John S

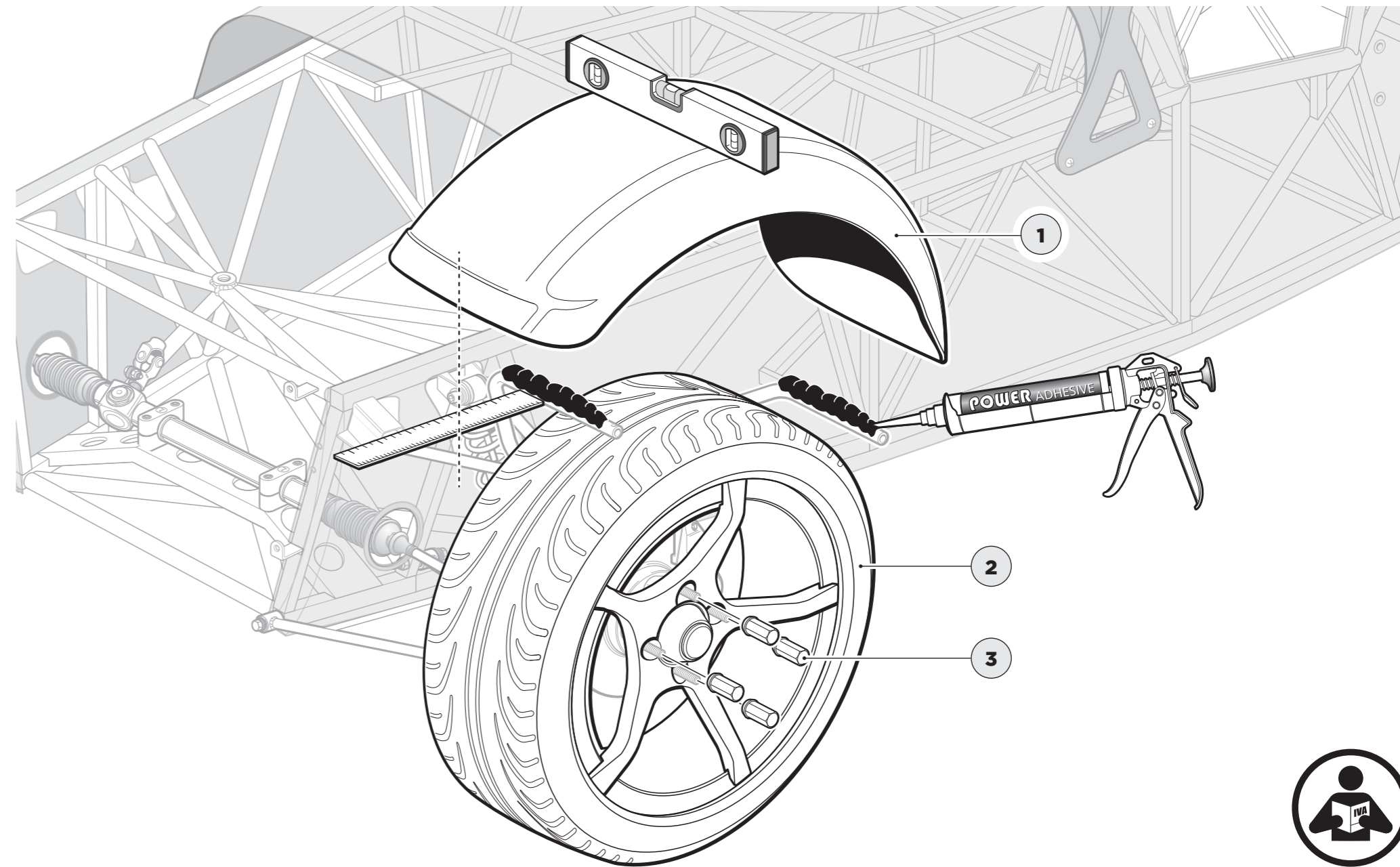
You may need to bend the arms of the wingstay to make the wing level.
Anthony L

The 1/8" hole you drilled earlier is for the indicator earth.
Harry P

The distance from the front edge of the wing to the wingstay should be 80mm.
Lee A

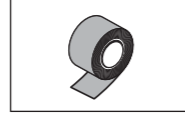
Do a 'dry run' first to make sure the wings are level before using power adhesive.
Chris N

JUST WING IT



TAPE IN PLACE FOR 24 HOURS

PARTS

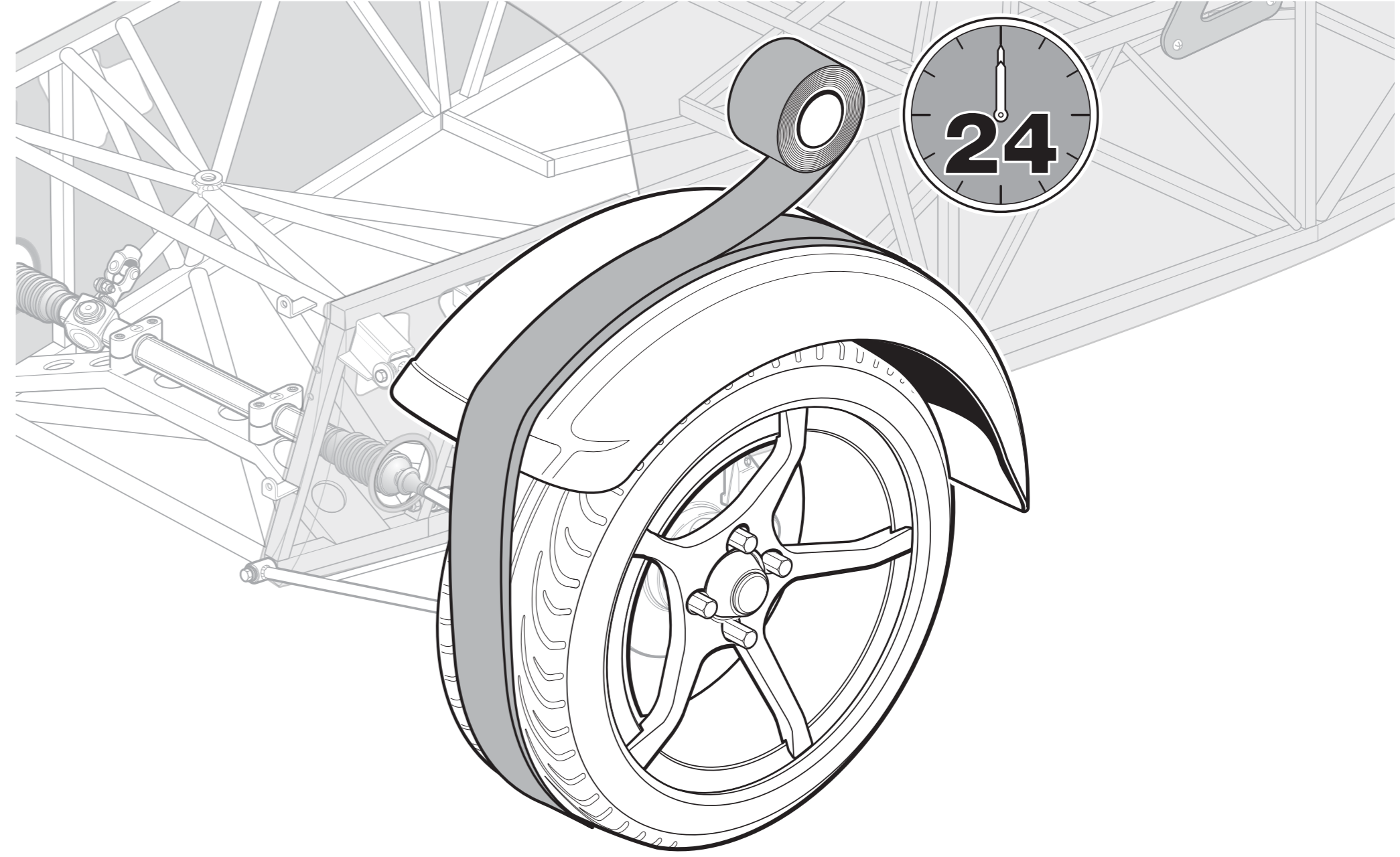


TOOLS

FIXINGS

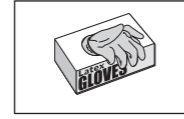
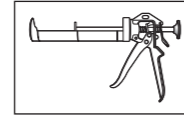
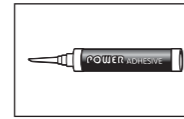
TIPS

TAPE IN PLACE FOR 24 HOURS



SOME EXTRA ADHESIVE UNDERNEATH

PARTS



FIXINGS

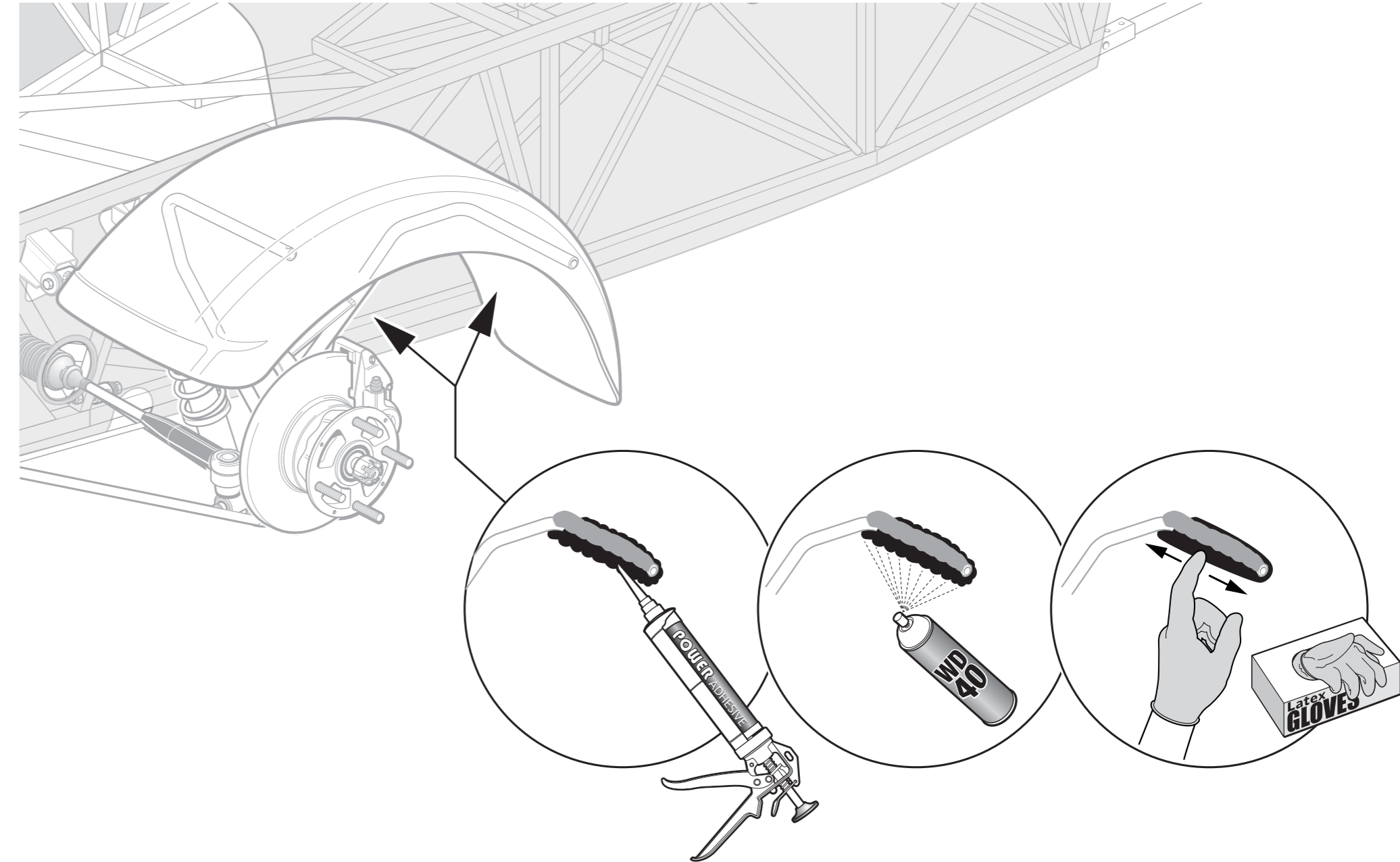
TOOLS

TIPS

The WD40 will help spread the adhesive.

Mick F

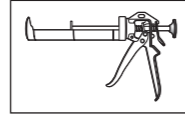
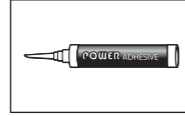
JUST WING IT



FINISH WITH TRIM

PARTS

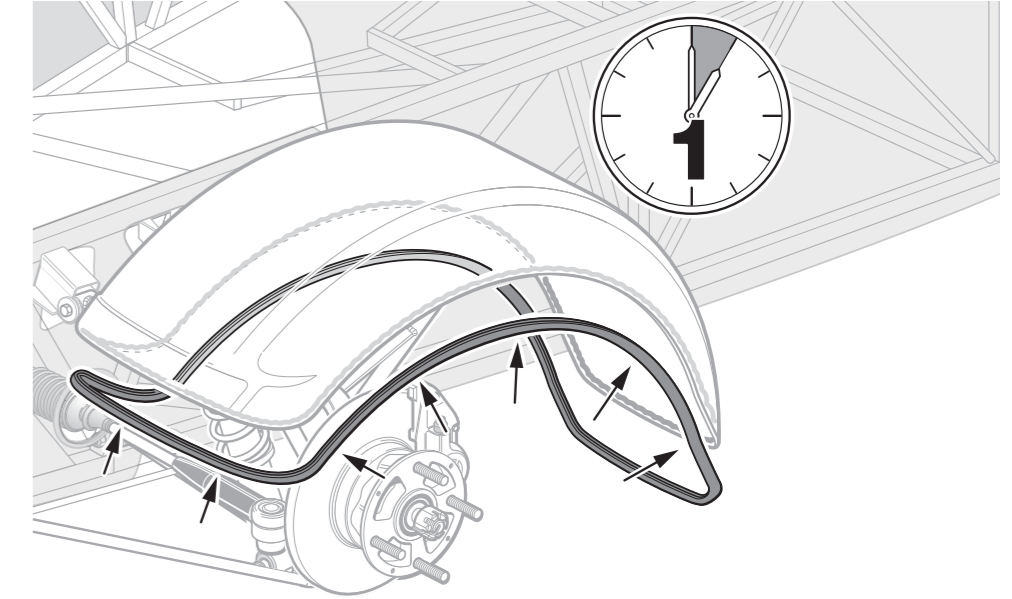
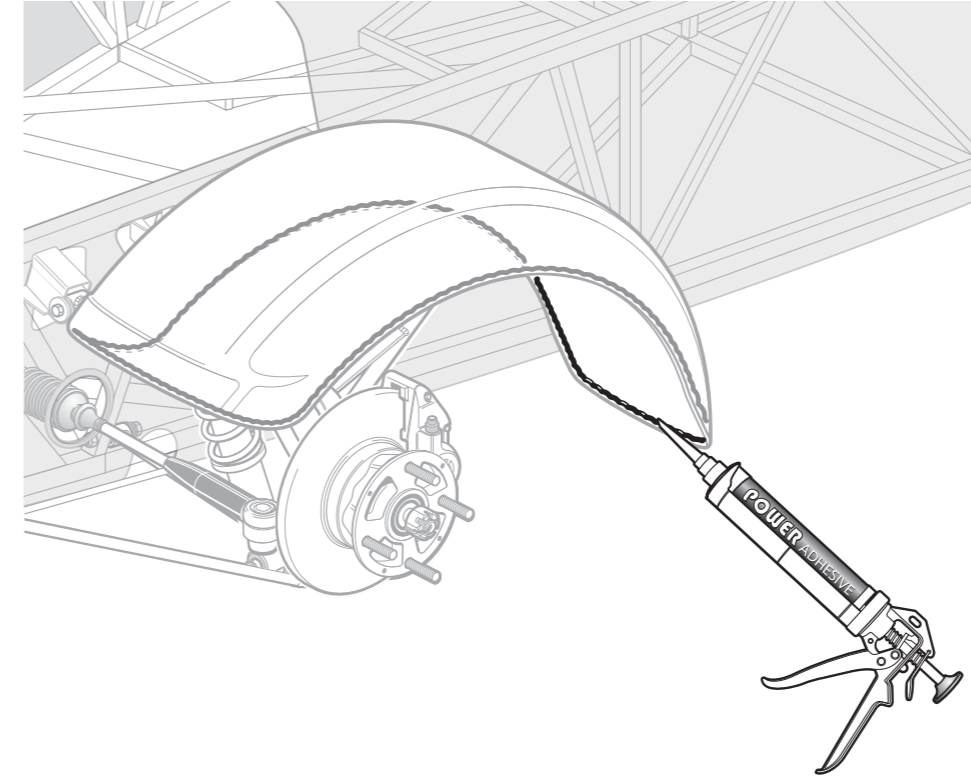
TOOLS



FIXINGS

TIPS

FINISH WITH TRIM

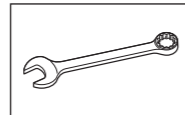
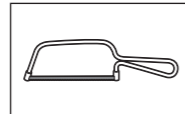


FITTING THE REAR WINGS

PARTS

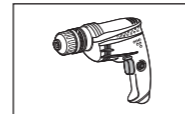
1 Rear wing

TOOLS



8mm

8mm



to follow

Sanding Drum

FIXINGS

Pack Q		CATERHAM		31	
		PACK NUMBER		27612	
REAR WINGS					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	QA	SAE Bolt M8 x 20	20	Rear Wings	
2	QB	Nut M8	10	Rear wings through body	
3	QC	Plain Washer 5/16" x 3/4"	30	Wing washers	
4	QD	Wing Pairs 1/4" x 1"	4	Between wing and body	

x20

x10

x30

x4

TIPS

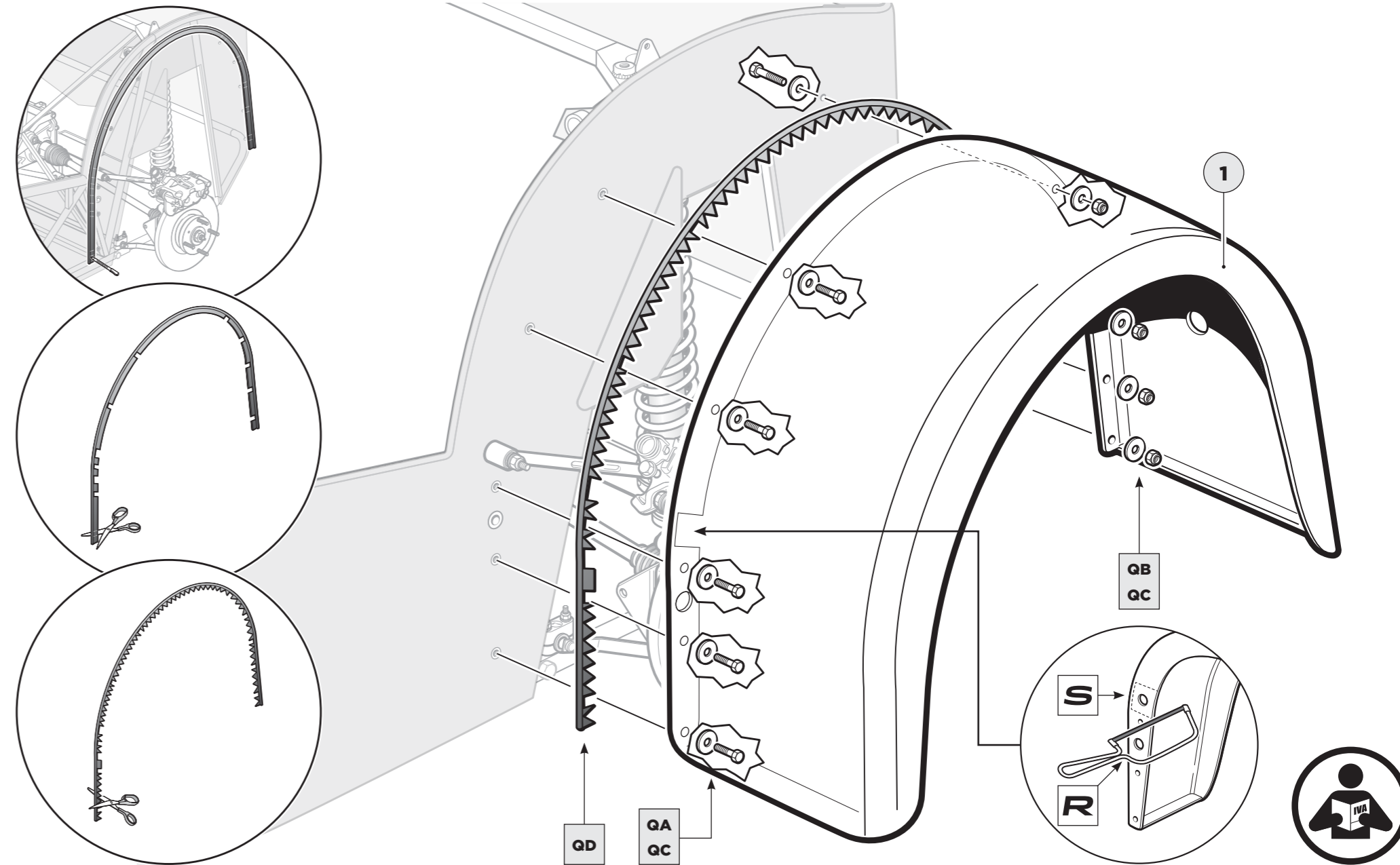
Cut the supplied piping in half and it will be enough for both wings.

Rich T

Don't forget the fuel tank earth strap gets bolted to the RH wing bolt.

Tiago O

FITTING THE REAR WINGS

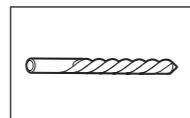


AND THE WING PROTECTORS

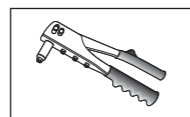
PARTS

1 Wing protector

TOOLS



1/8"



FIXINGS

For stainless steel protectors

Pack O		CATERHAM		PART NUMBER	
				ZW501	
WING PROTECTORS STAINLESS STEEL					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	CA Flat 1/8" x 3.31"	1651-0144	30	Wing protector to wing	
2	CB Wing Pairs	7801	2m	Between wing protector and wing	

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

For carbon fibre protectors

Pack P		CATERHAM		PART NUMBER	
				ZW502	
WING PROTECTORS CARBON FIBRE					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	PA Flat Steel 1/8" x 3.31"	1651-0144	30	Wing protector to wing	
2	FB Wing Pairs	7801	2m	Between wing protector and wing	

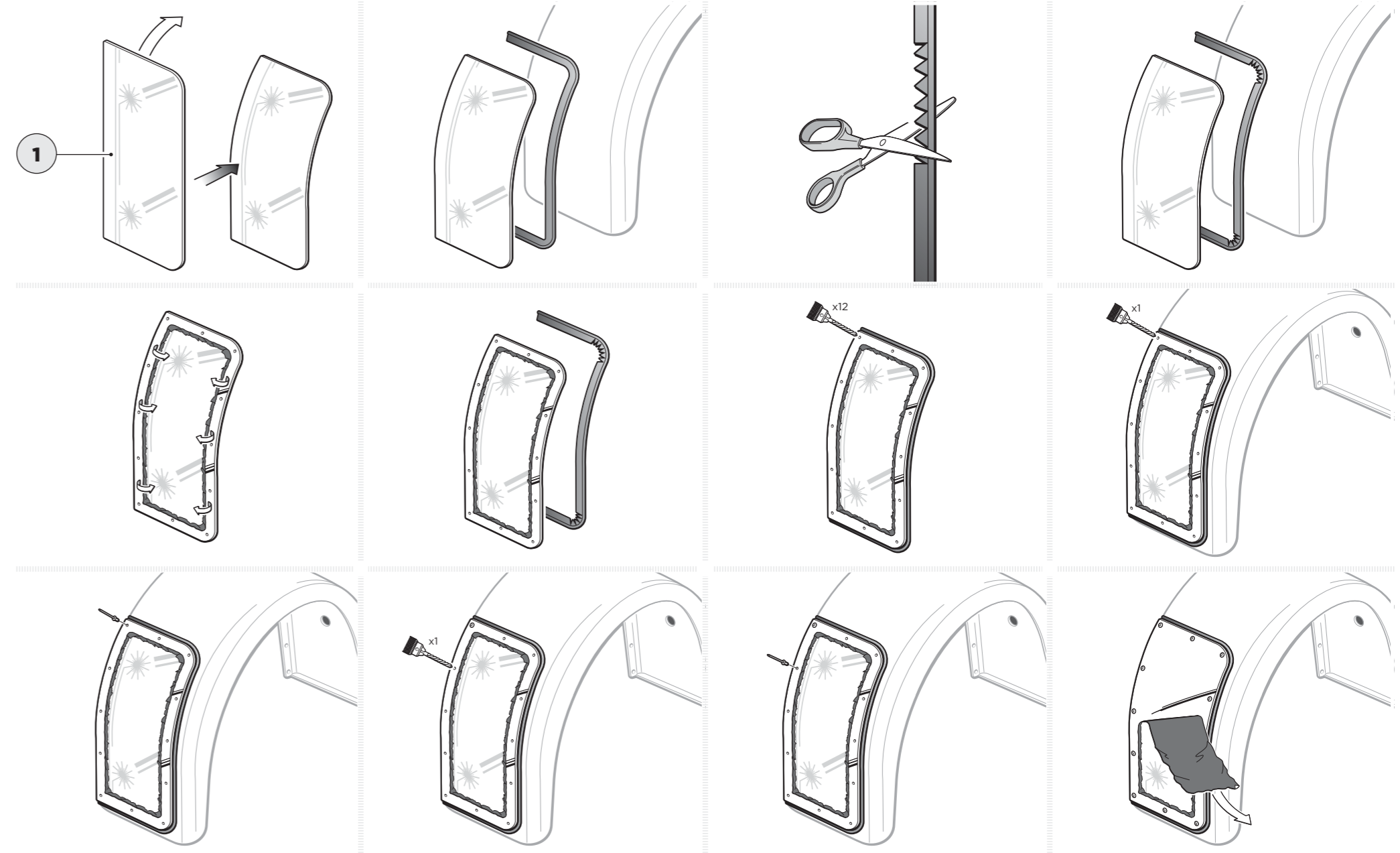
Drawings are for illustrative purposes only and are not to scale. Page 1 of 1

TIPS

When drilling through protector start on the closest edge to the body. This will help the protector fit correctly.
Chris B

Carbon fibre protectors will not have the protective film shown.
Anthony L

AND THE WING PROTECTORS

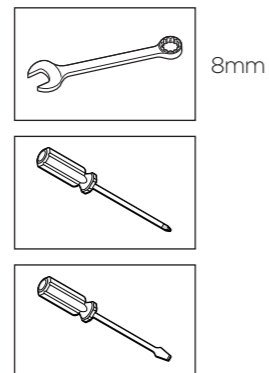


FITTING THE LIGHTS

PARTS

- 1** Side repeater
- 2** Rear light
- 3** Numberplate lamp

TOOLS



8mm

FIXINGS

Pack C		CATERHAM		45	
				PACK NUMBER	
				302.002B	
FASTENER PACK - LIGHTING					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
CA	Bracket 12 x 12" rear number	71078	4	Rear light assembly to rear number	
CA	Bracket 12 x 12" side repeater	71077	2	Side repeater with mounting arm	
3	Bracket 12 x 12" rear light	71079	4	Rear light cluster upper fixing	
4	Bracket 12 x 12" rear light	71078	4	Rear light cluster lower fixing	

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

x4

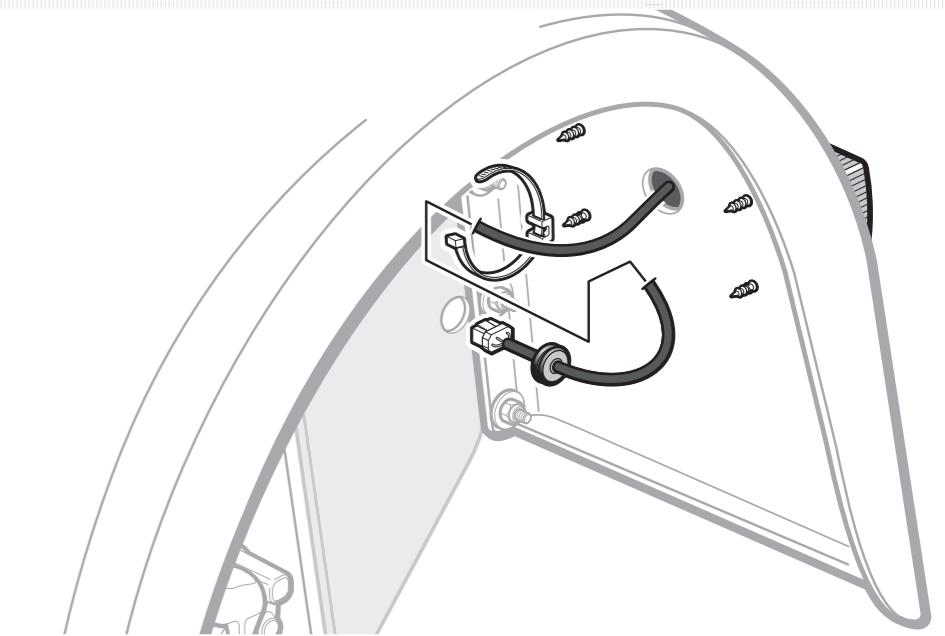
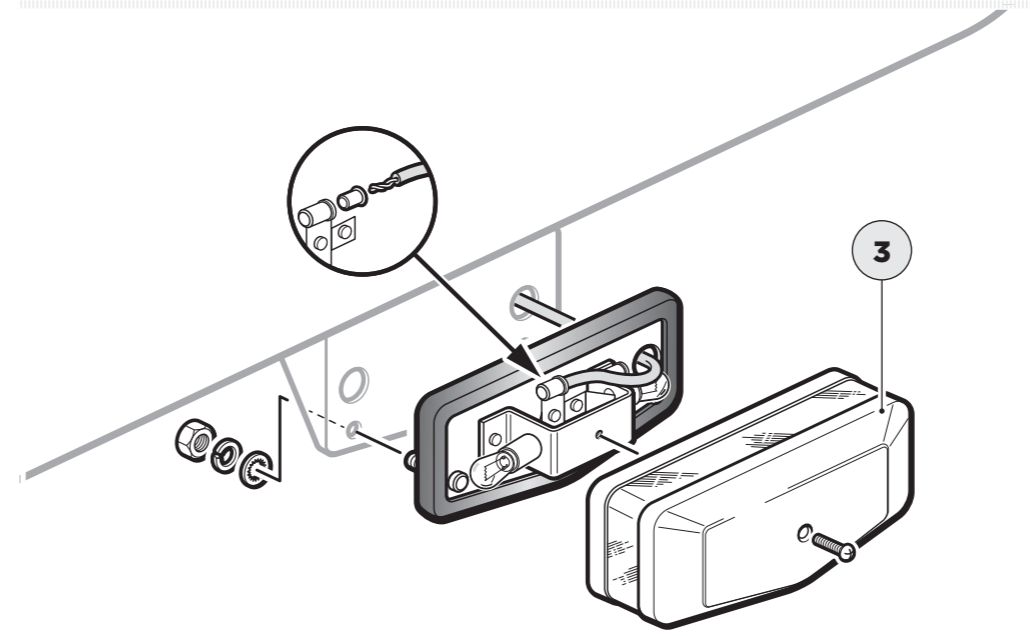
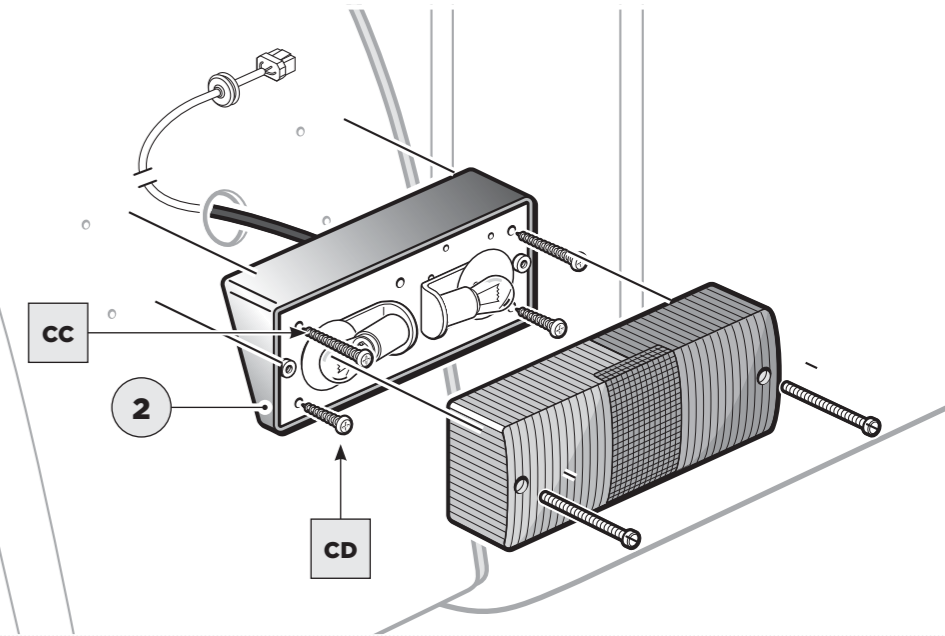
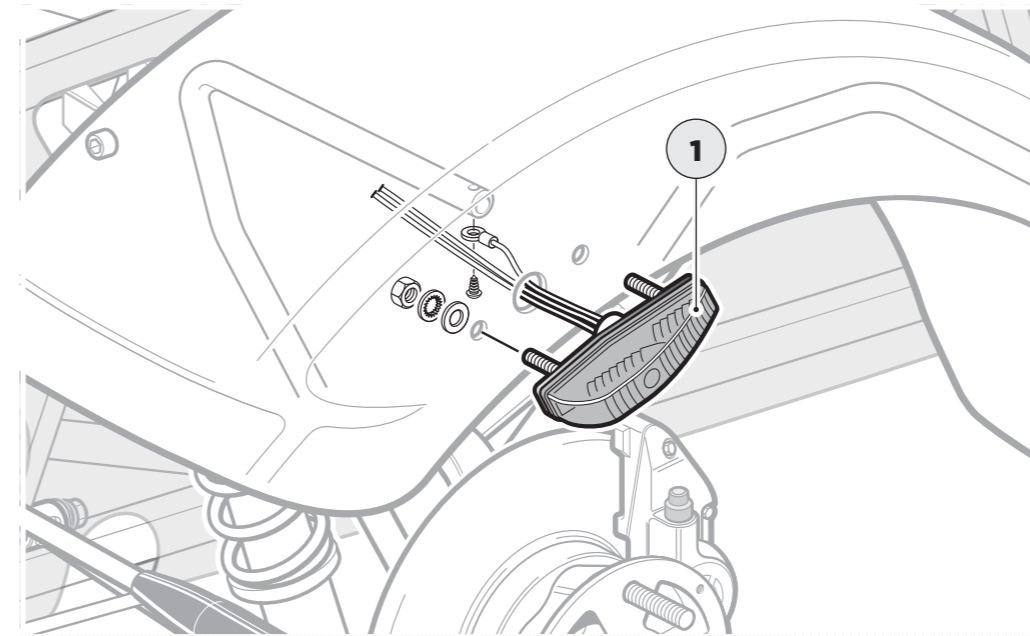
x4

TIPS

Use a cradle clip & cable tie to keep the rear light loom out of the way.

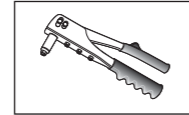
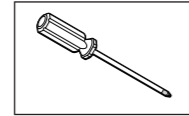
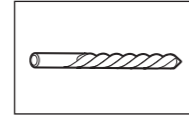
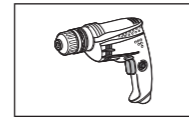
John S

FITTING THE LIGHTS



FUSE BOX COVER & KNEE TRIM PADS

PARTS



FIXINGS

Chassis fastener pack ZCH01 supplied loose:

- Screw 3/4" x 10
- Rivet 5/32 x 0.47"

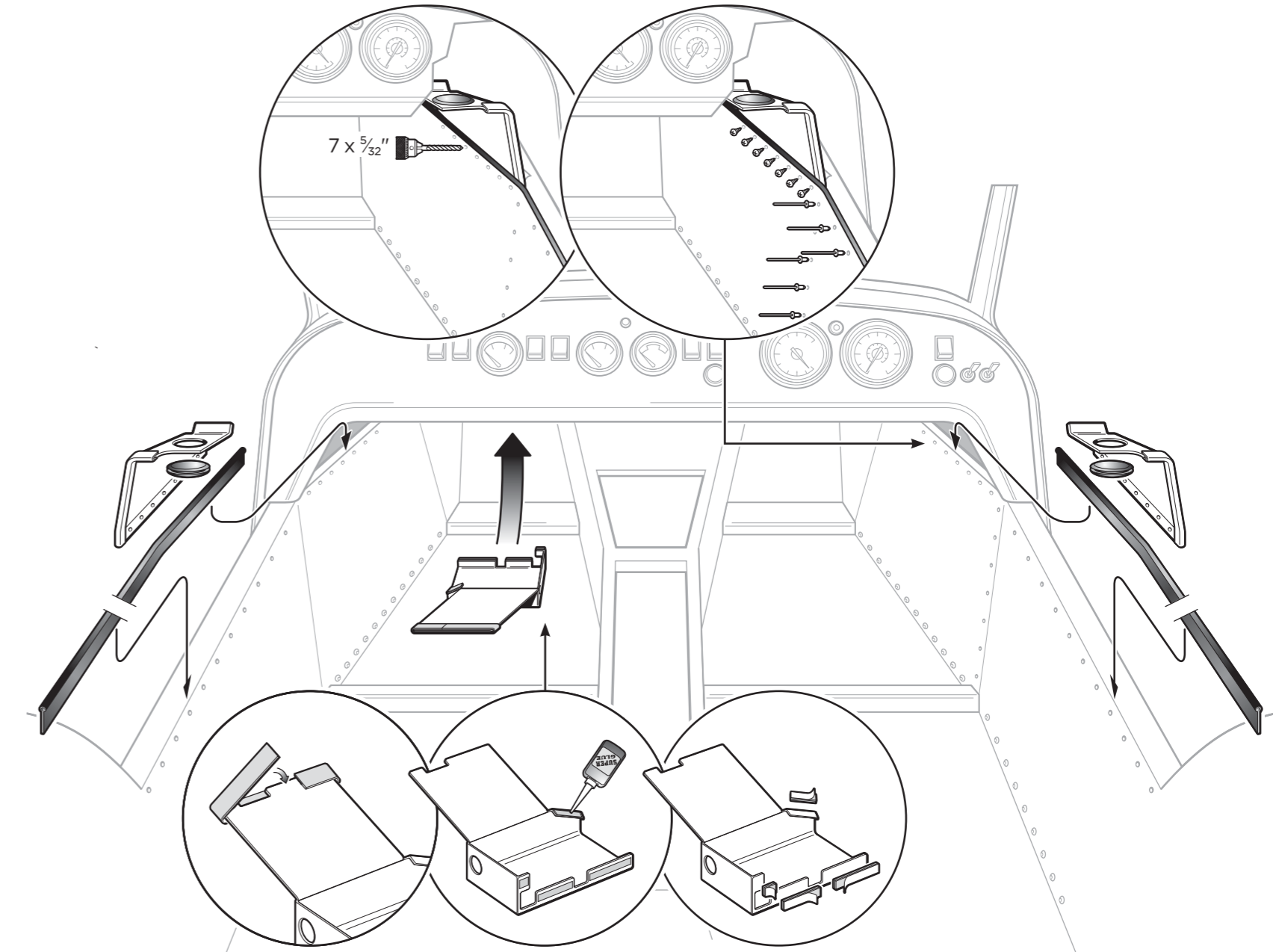
TOOLS

TIPS

Building an Academy Car? If so you'll need to leave the riveting-in of the side panels until after you've fitted the roll cage (p154-155) as the front legs go behind the panel, not over the top of it.

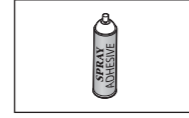
John S

FUSE BOX COVER & KNEE TRIM PADS



FIT THE TUNNEL CARPET

PARTS



TOOLS

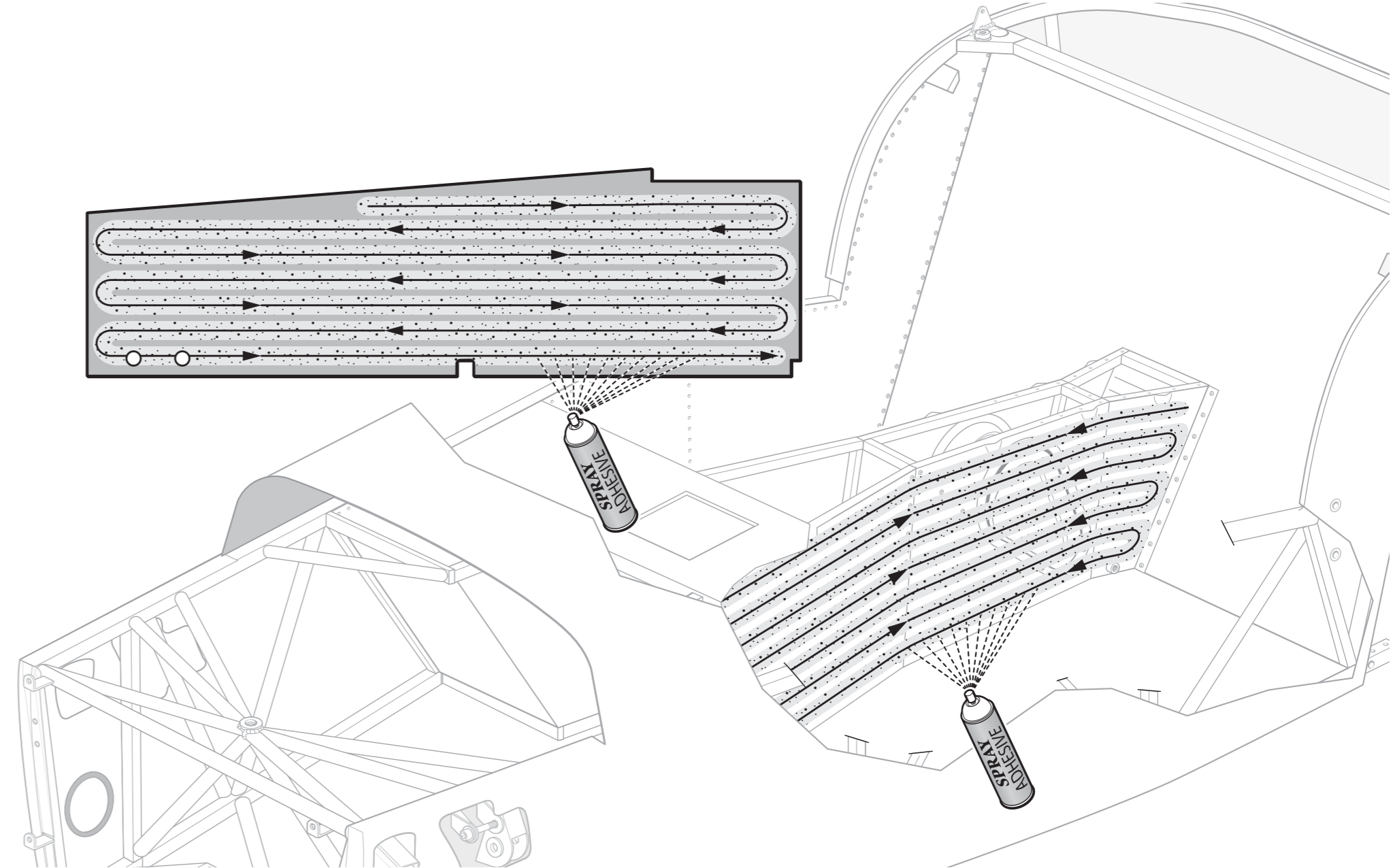
FIXINGS

TIPS

Spray on both tunnel panel and carpet.
John K

Allow the adhesive to go tacky before fitting.
Harry P

FIT THE TUNNEL CARPET



AND THE BOOT CARPET

PARTS

TOOLS



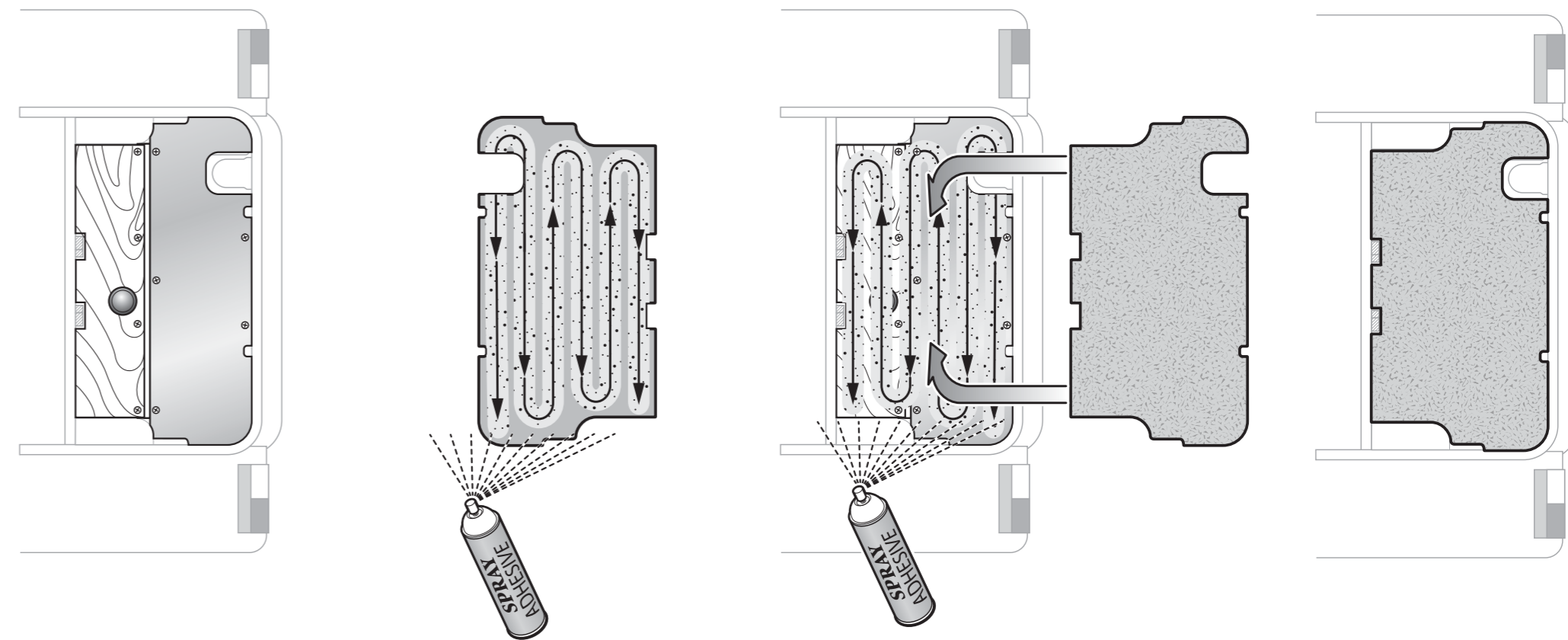
FIXINGS

TIPS

S-Pack cars have a fully carpeted boot. It's something of a jigsaw pattern, but the parts are simply glued in place like the bigger bits.

John S

AND THE BOOT CARPET



THIS IS A COVER UP

PARTS

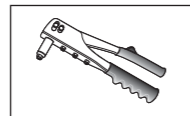
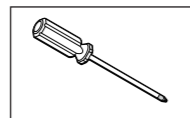
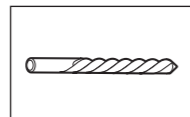
- 1 Fuel filler cove
- 2 Tunnel closing panel

FIXINGS

Supplied loose:

- Rivets
- Screws

TOOLS

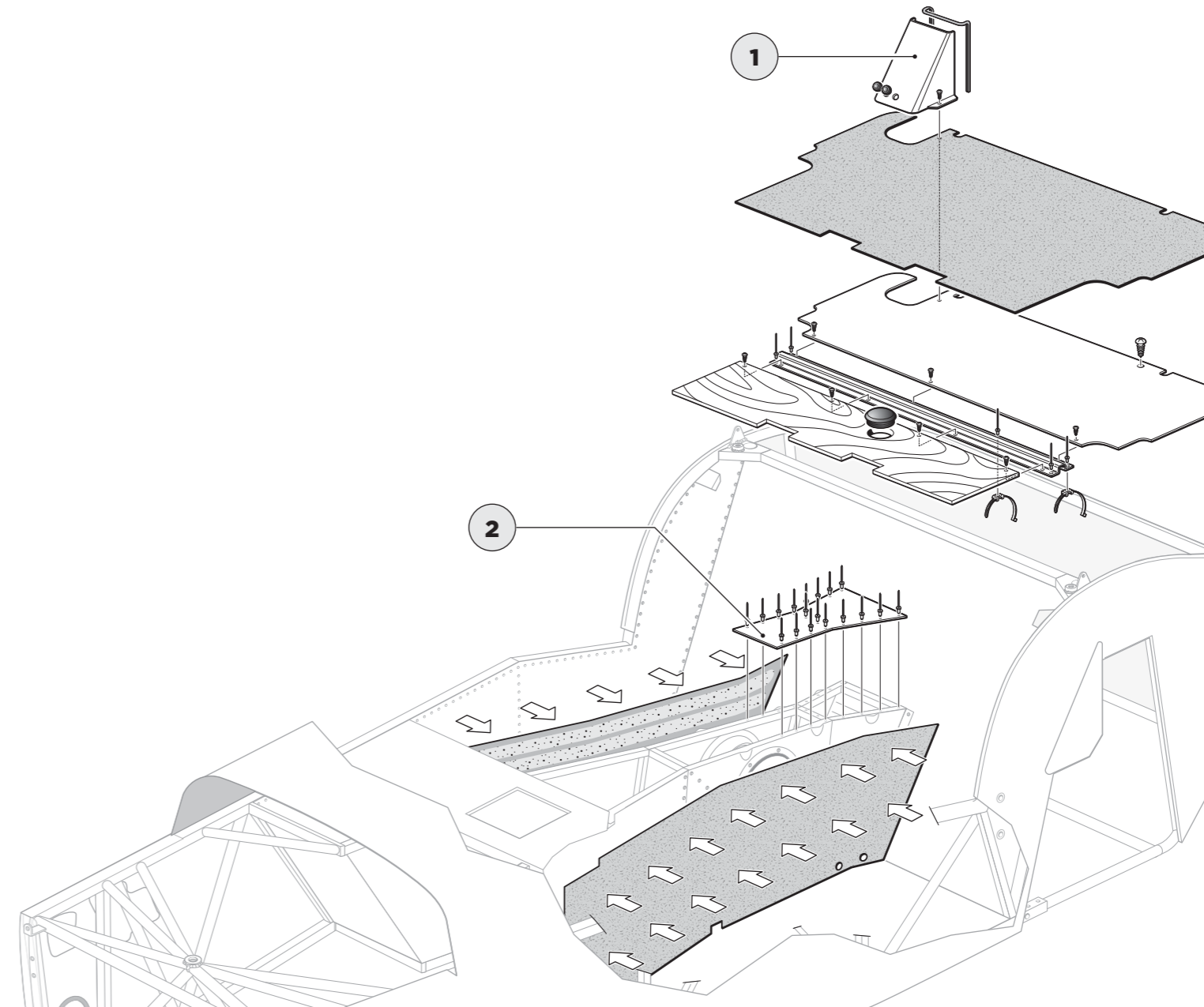


TIPS

The fuel filler cover just screws to the boot floor.
Drill two holes and use self tapping screws.

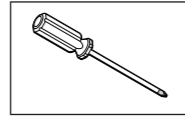
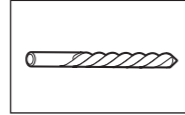
Rich T

THIS IS A COVER UP



NOW FIT THE TUNNEL TOP

PARTS



1/8"

FIXINGS

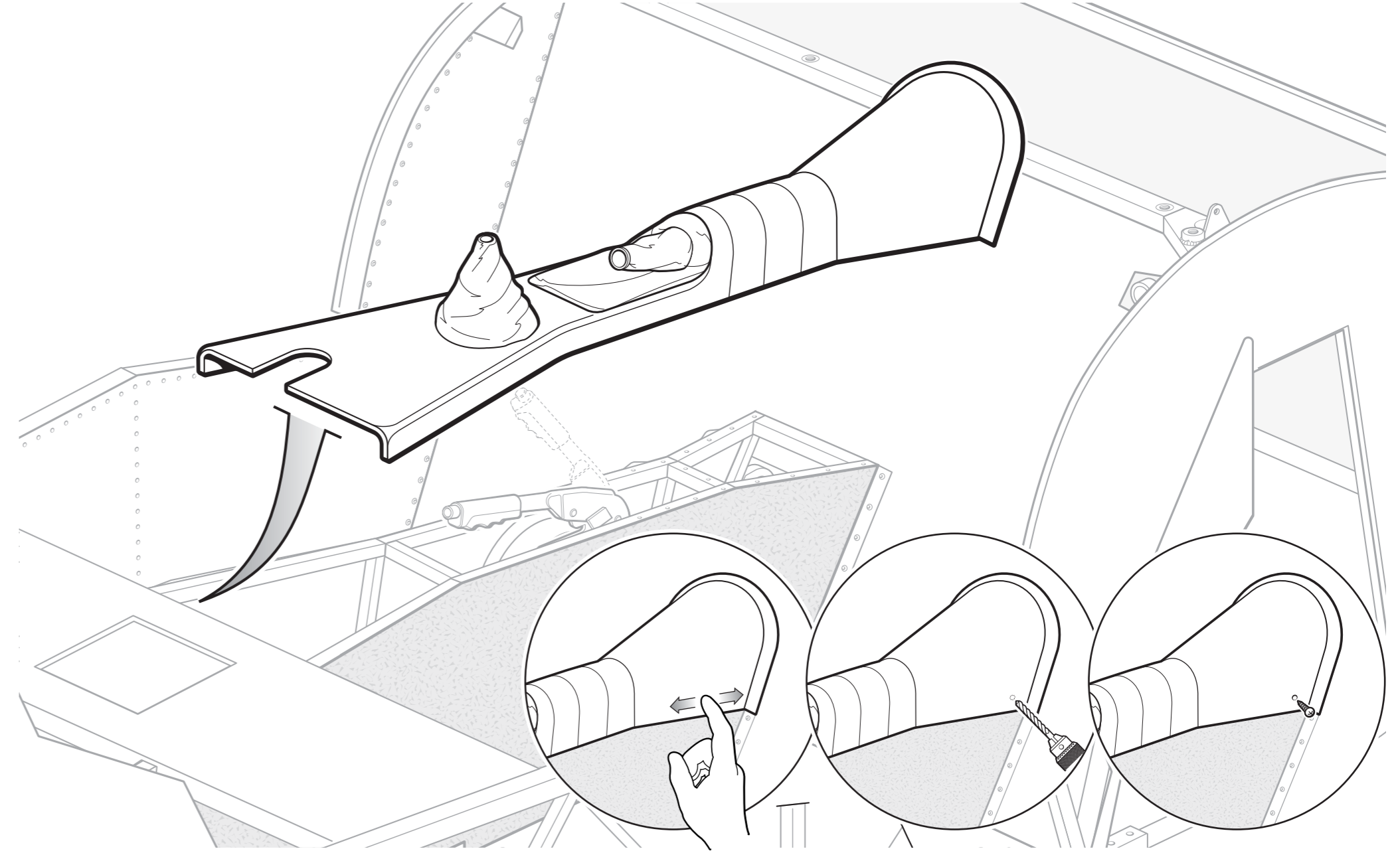
TOOLS

TIPS

The hole can be seen if you flip the tunnel top over.

Mick F

NOW FIT THE TUNNEL TOP



BELT UP

PARTS

TOOLS



FIXINGS

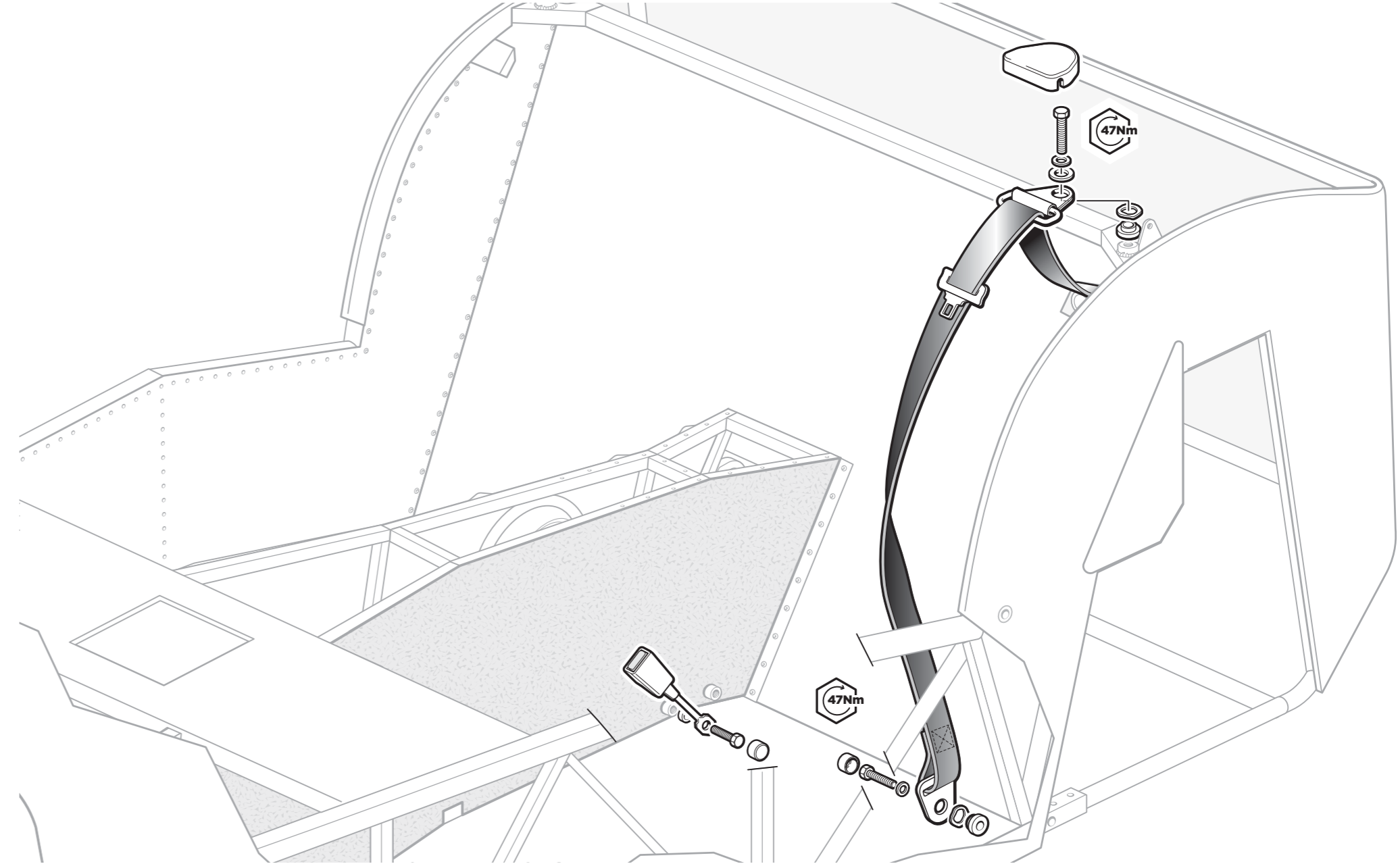
TIPS

Supplied with seat belts

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

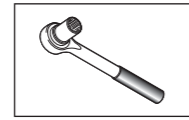
Chris N

BELT UP



FITTING THE FOUR-POINT HARNESS

PARTS



17mm



TOOLS

FIXINGS

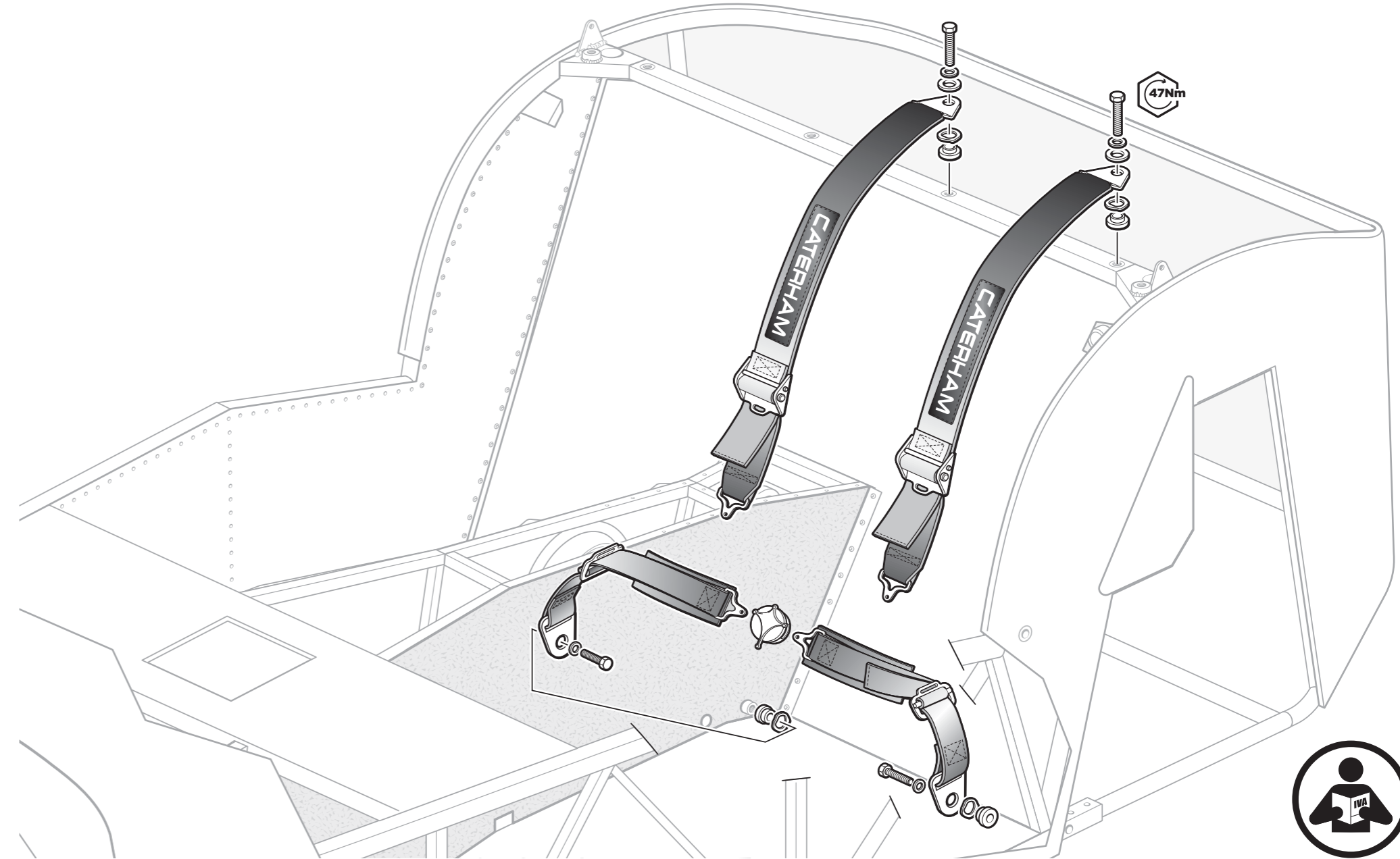
All fixings supplied with the harnesses

TIPS

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

Chris N

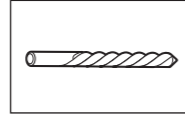
FITTING THE FOUR-POINT HARNESS



FITTING THE SIX-POINT HARNESS

PARTS

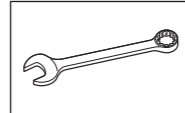
TOOLS



7/16"



16mm
17mm



16mm
17mm

FIXINGS

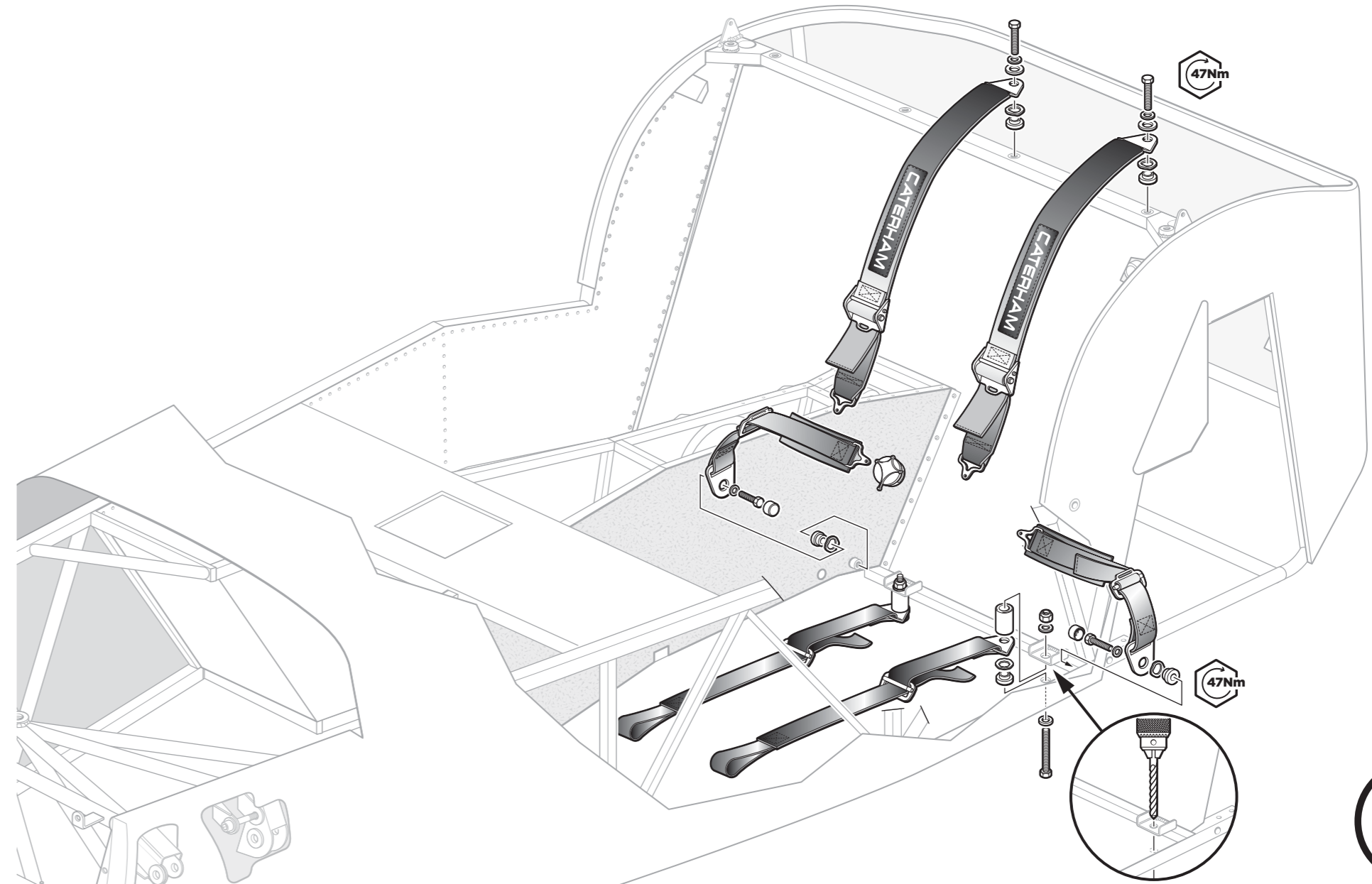
All fixings supplied with the harnesses

TIPS

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

Lee A

FITTING THE SIX-POINT HARNESS

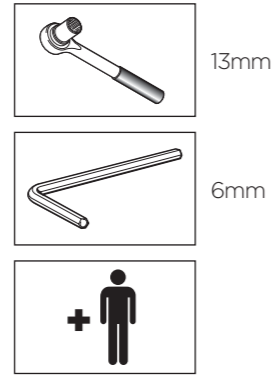


FITTING CLOTH OR LEATHER SEATS

PARTS

- 1** Seat
- 2** Seat base
- 3** Headrest

TOOLS



FIXINGS

Pack L		CATERHAM		62	
		PACK NUMBER		3A21048B	
CLOTH/LEATHER SEATS ALL CARS					
<small>This pack may include extra fasteners to cover different options</small>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Clamp Bolt M8 x 22 Grade 12.9	3A21048C	4	Through seat runner & floor	
2	Nut M8	8A01916	4	Under floor	
3	Plain Washer M8 x 10	8P01933	4	Under floor	

x4
x4
x4

Loosely fit the rear bolts to help locate the front.

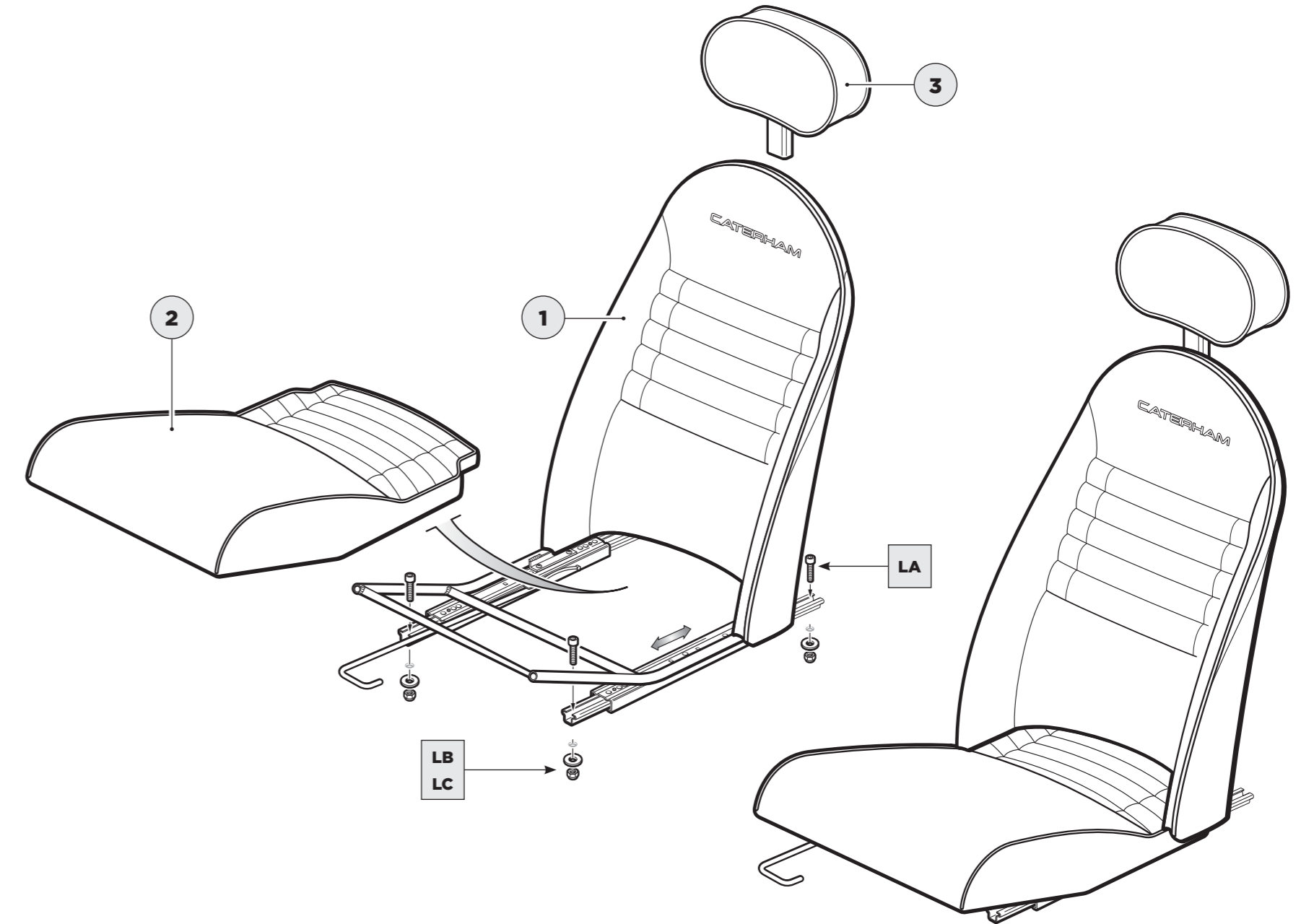
Dan D

TIPS

Nip up all bolts once fitted.

Anthony L

FITTING CLOTH OR LEATHER SEATS

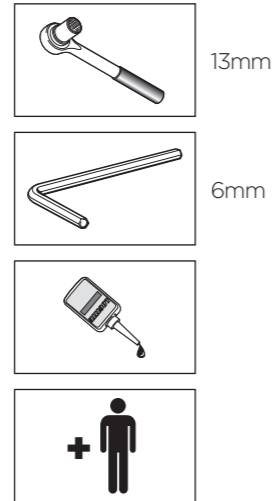


OR FITTING THE RACE SEATS

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	Cuphead Bolt M8 x 20	BA3CH623	4	Spacer box section to seat	
2	Cuphead Bolt M8 x 20	BA3CH623	4	Floor to mount in spacer box section	
3	Spring Washer 5/16"	W516/16	8	Bolt heads	
4	Washer 5/16" x 1 1/4"	W516X1 1/4	4	Under floor	
5	Washer M8 x 16	W8M816A1	4	Spacer box section to seat	
7	Spacer Block Plastic	T93	3	Seat spacer	
8	Spacer Block Plastic	T93	5	Seat spacer	

x4
x4
x8
x4
x4
x3
x5

For adjustable seats

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Cuphead Bolt M8 x 20	BA3CH623	4	Runner to seat	
2	Cuphead Bolt M8 x 20	BA3CH623	4	Runner to floor	
3	Washer 5/16" x 1 1/4"	W516X1 1/4	4	Under floor	
4	Nylon Nut M8	MM8F8	4	Under floor	
5	Spacer Block Plastic	T92	3	Seat spacer	
6	Spacer Block Plastic	T93	5	Seat spacer	

x4
x4
x4
x4
x3
x5

TIPS

Put a bit of Loctite on bolts that go into the seat on the runner version.

Chris B

Loosely fit the rear bolts to help locate the front.

Harry P

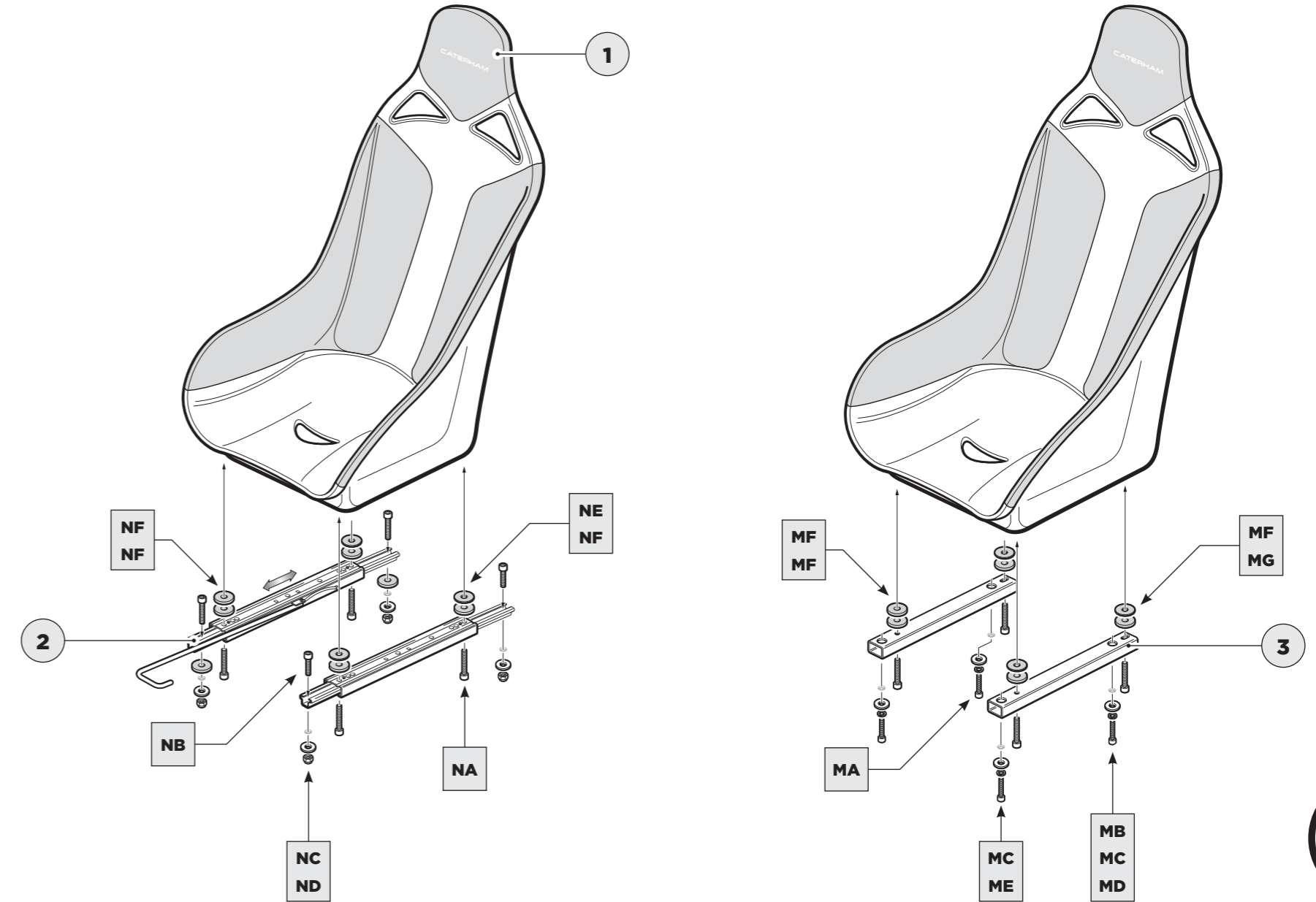
The fixed position seat is for the passenger side!

Chris N

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

Mick F

OR FITTING THE RACE SEATS

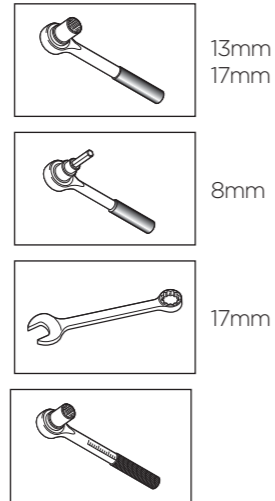


FITTING THE ROLL OVER BAR

PARTS

1 Roll over bar

TOOLS



FIXINGS

Pack J		CATERHAM		47	
ROLL OVER & TRACK DAY BAR SERIES 3 METRIC		PACK NUMBER		30P18A	
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	JA Roll over bar 1400 Series 3.3	BM1000	2	Rear diagonals of roll over bar to mounting brackets	
2	JB Roll over bar bracket to chassis	SM800	3	Roll over bar bracket to chassis	
3	JC Caphead Bolt M10 x 20	MC3000	2	Roll over bar boss	
4	JD Nylon Nut M10	NM10	2	Rear diagonals of roll over bar to mounting brackets	
5	JE Plain Washer M8	WM8	3	Roll over bar bracket to chassis	
6	JF Spring Washer M8	WS8	2	Roll over bar bracket to chassis	
7	JG Plain Washer M10	WM10	4	Rear diagonals of roll over bar to mounting brackets	

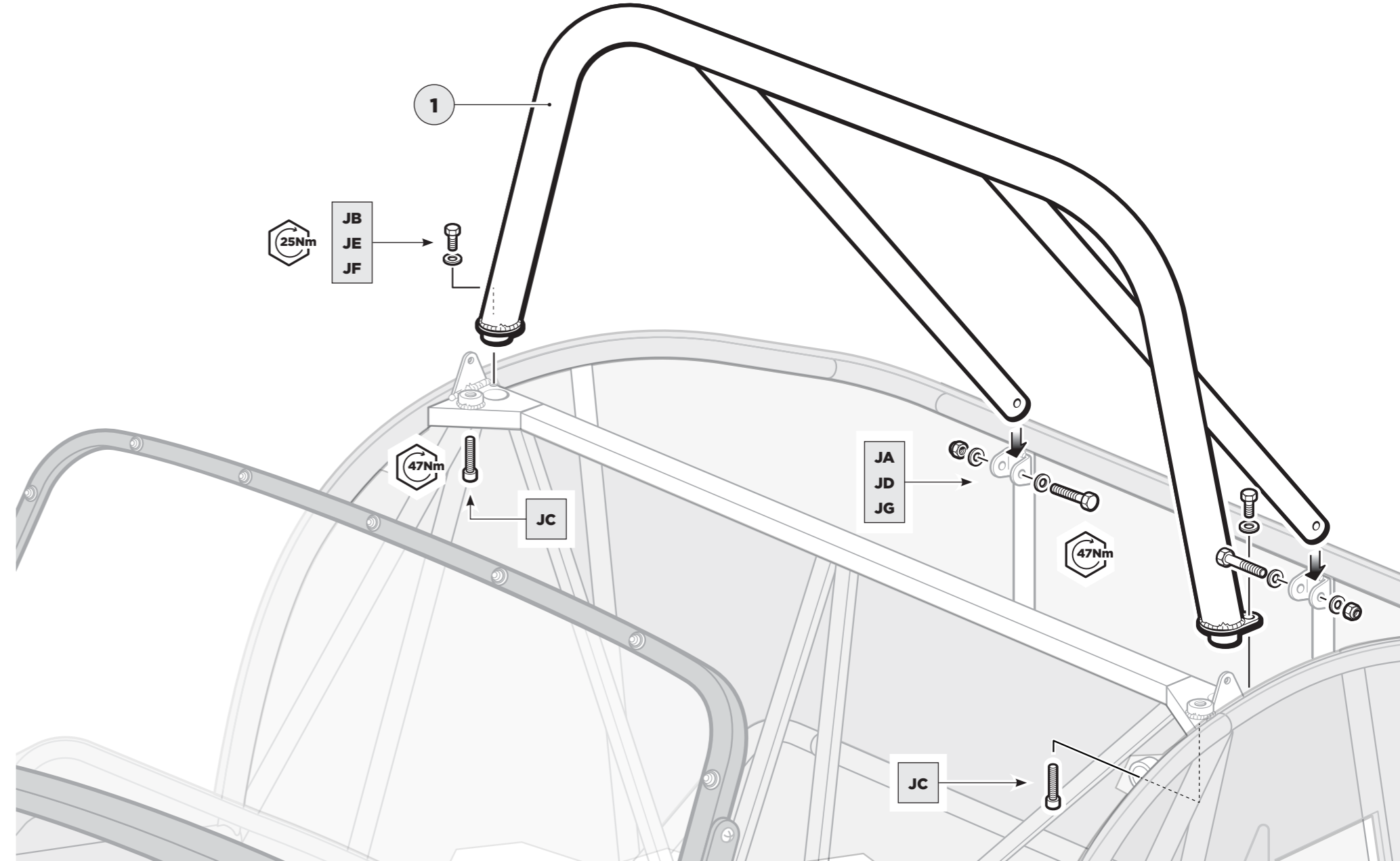
x2
x2
x2
x2
x2
x2
x4

TIPS

If you've fitted the rear dampers they'll need to come off again to do this properly.

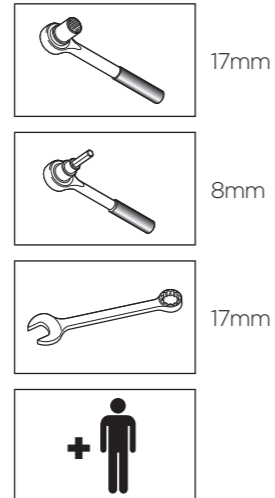
Chris B

FITTING THE ROLL OVER BAR



OR THE ROLL CAGE FOR ACADEMY CARS

PARTS



TOOLS



FIXINGS

Pack K		CATERHAM		47	
		PACK NUMBER		30P17A	
ROLL CAGE SERIES 3 METRIC					
<small>This pack may include extra fasteners to cover different options</small>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	KA Roll over bar Guide 8.8	BM1000	2	Rear diagonals of roll over bar to mounting brackets	
2	KB Bracket 8.8 x 18 Grade 8.8	BM1016	4	Front cage bracket	
3	KC Caphead Bolt M10 x 20	BMCH1020	2	Roll over bar boss	
4	KD Nylon Nut M10	BMNF10	2	Rear diagonals of roll over bar to mounting brackets	
5	KE Plain Washer M10	BMFM10	8	4 Front cage brackets Rear diagonals	

x2
x4
x2
x2
x8

TIPS

Mask up the paintwork before fitting to avoid scratches.

John S

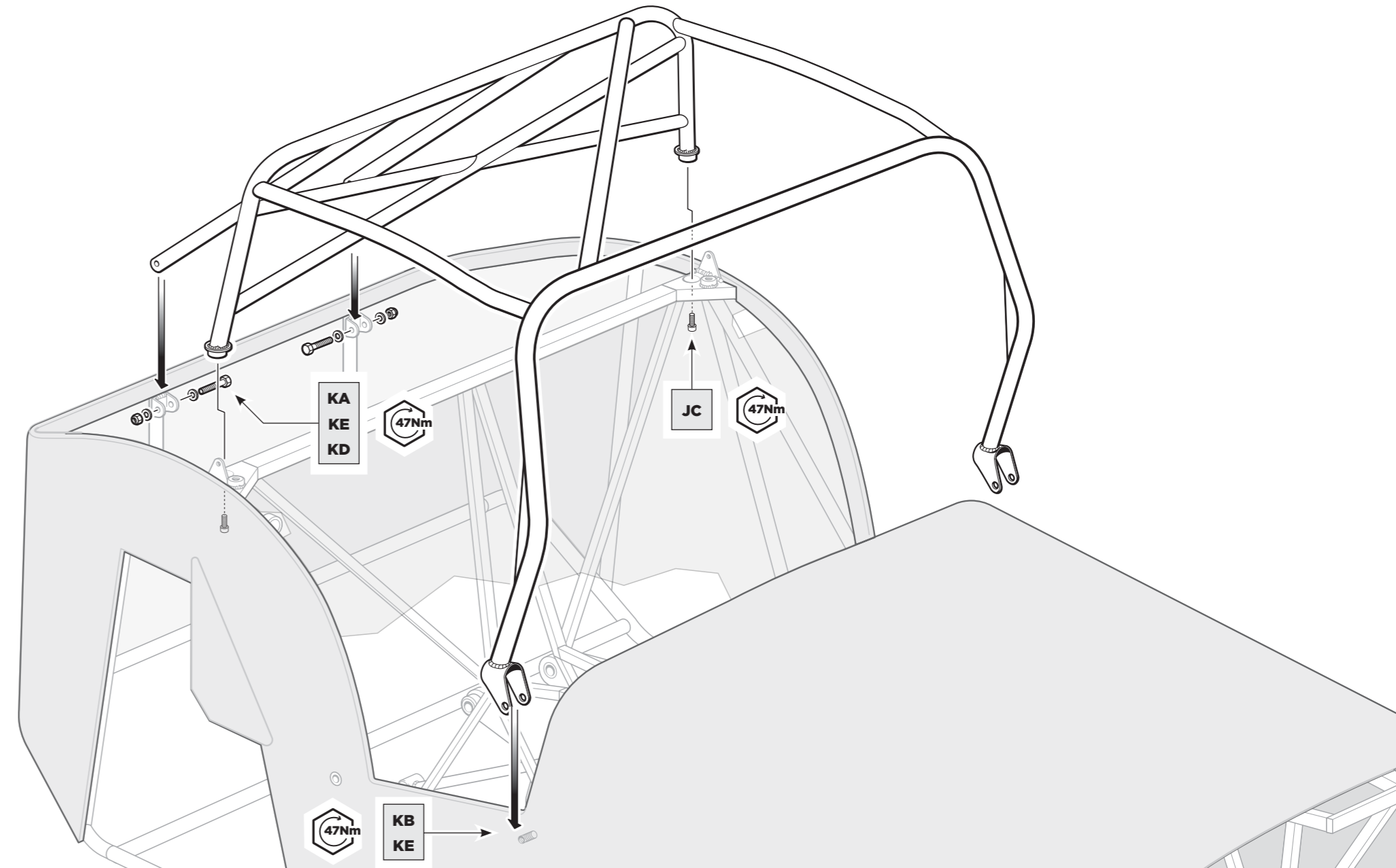
The front leg has two bolts – one from the inside & one from the outside. Great care should be taken to ensure they go in straight.

James A.

The front legs go over the sill and inside the inner panel, not over the panel.

Mick F

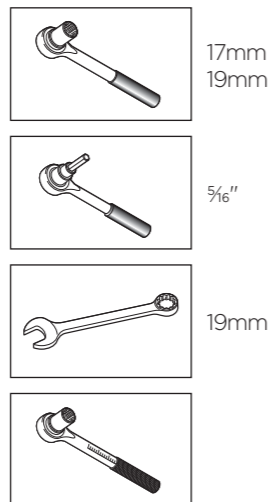
OR THE ROLL CAGE FOR ACADEMY CARS



AND THE SIDE IMPACT BAR

PARTS

TOOLS



17mm
19mm

5/16"

19mm

FIXINGS

TIPS

Pack R		CATERHAM		46	
		PACK NUMBER		30P88C	
SIDE PROTECTION BAR SERIES 3					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Roller 10 x 100 Gauge 10.9	BM12K10	1	A-frame	
2	Cathode Bolt 7/16" x 1 1/2"	BF0116x1.5	1	Boots on top of chassis	
3	Std screw M10 x 25, Grade 10.9	BM10X25	1	Front cage bracket	
4	Flats Washer M10	WPM10	1	Front cage bracket	
5	Spring Washer 1/4"	WS101/4	1	Boots on top of chassis	

Use washers from rollcage pack

x1

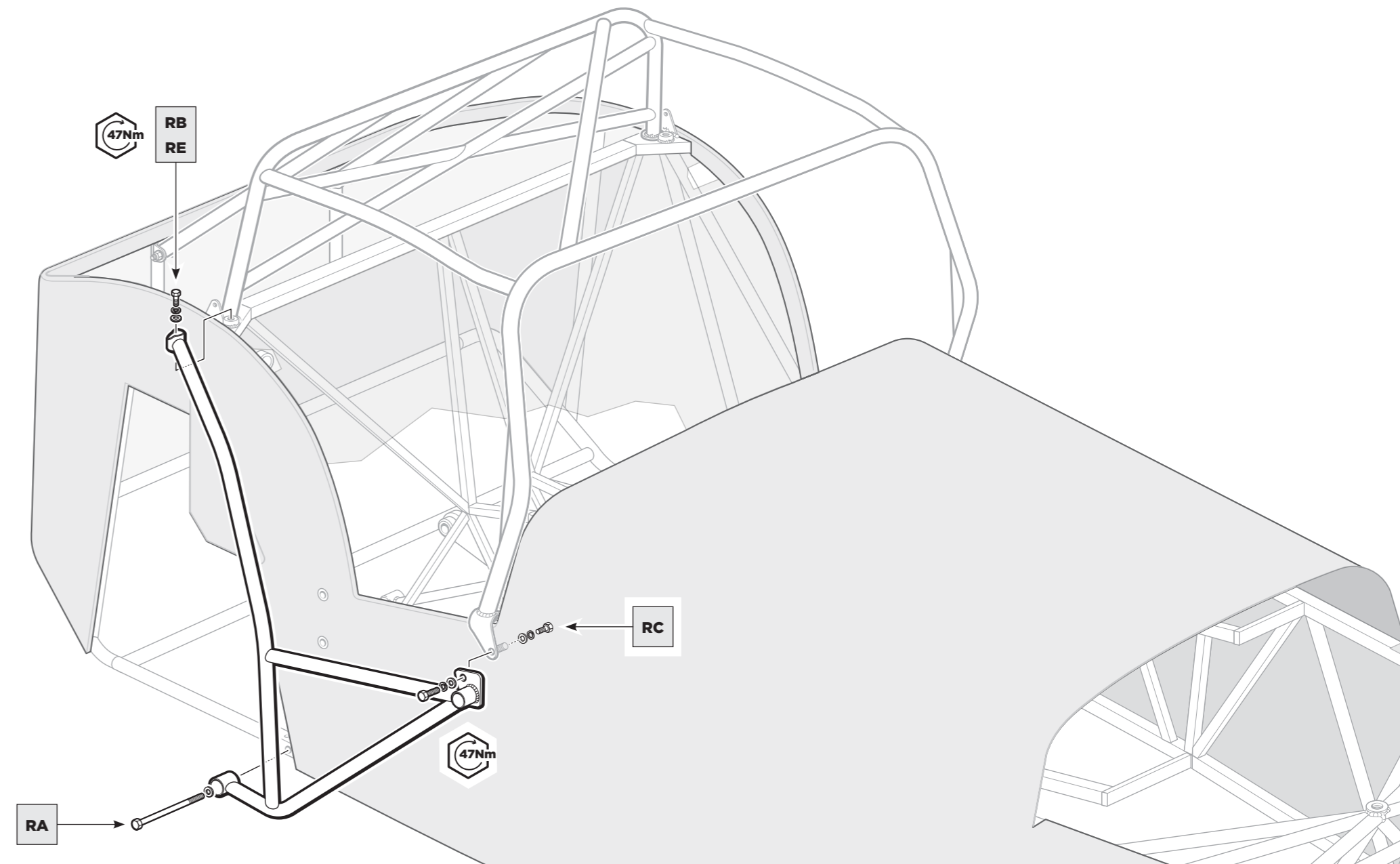
x1

x1

x1

x1

AND THE SIDE IMPACT BAR

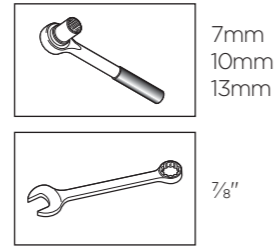


EVEN MORE EXHAUSTING

PARTS

- 1** Silencer
- 2** Exhaust clamp
- 3** Lambda sensor
- 4** Cat guard
- 5** Clip
- 6** Silencer mounting bracket
- 7** Exhaust mounting bobbin

TOOLS



7mm
10mm
13mm

7/8"

FIXINGS

Pack G		CATERHAM		56	
		PACK NUMBER		SEXLEDB	
EXHAUST					
<small>This pack may include extra fasteners to cover different options</small>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Silencer	SMX25	1	Exhaust Mounting Bracket	
2	Plan Nut	NFF6	2	Exhaust Bobbin	
3	Spring Washer	WVW48	3	1 Exhaust Mounting Bracket 2 Exhaust Bobbin	

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

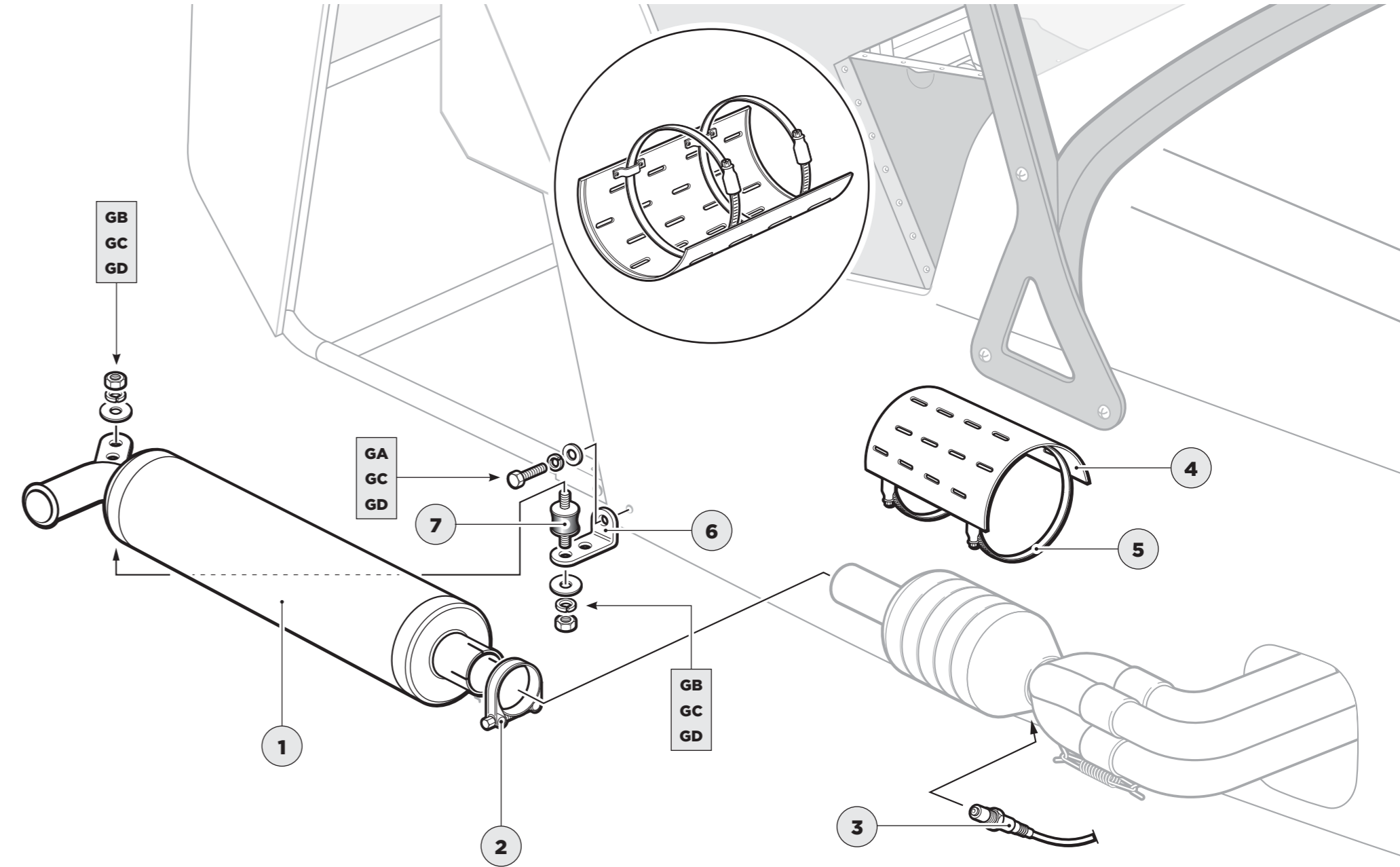
x1
x2
x3

TIPS

Cable tie the Lambda sensor lead neatly out of the way.

Lee A

EVEN MORE EXHAUSTING

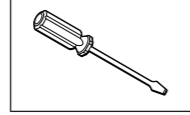


THE NOSE CONE BADGE

PARTS

- 1 Nose cone
- 2 Bonnet
- 3 Badge

TOOLS



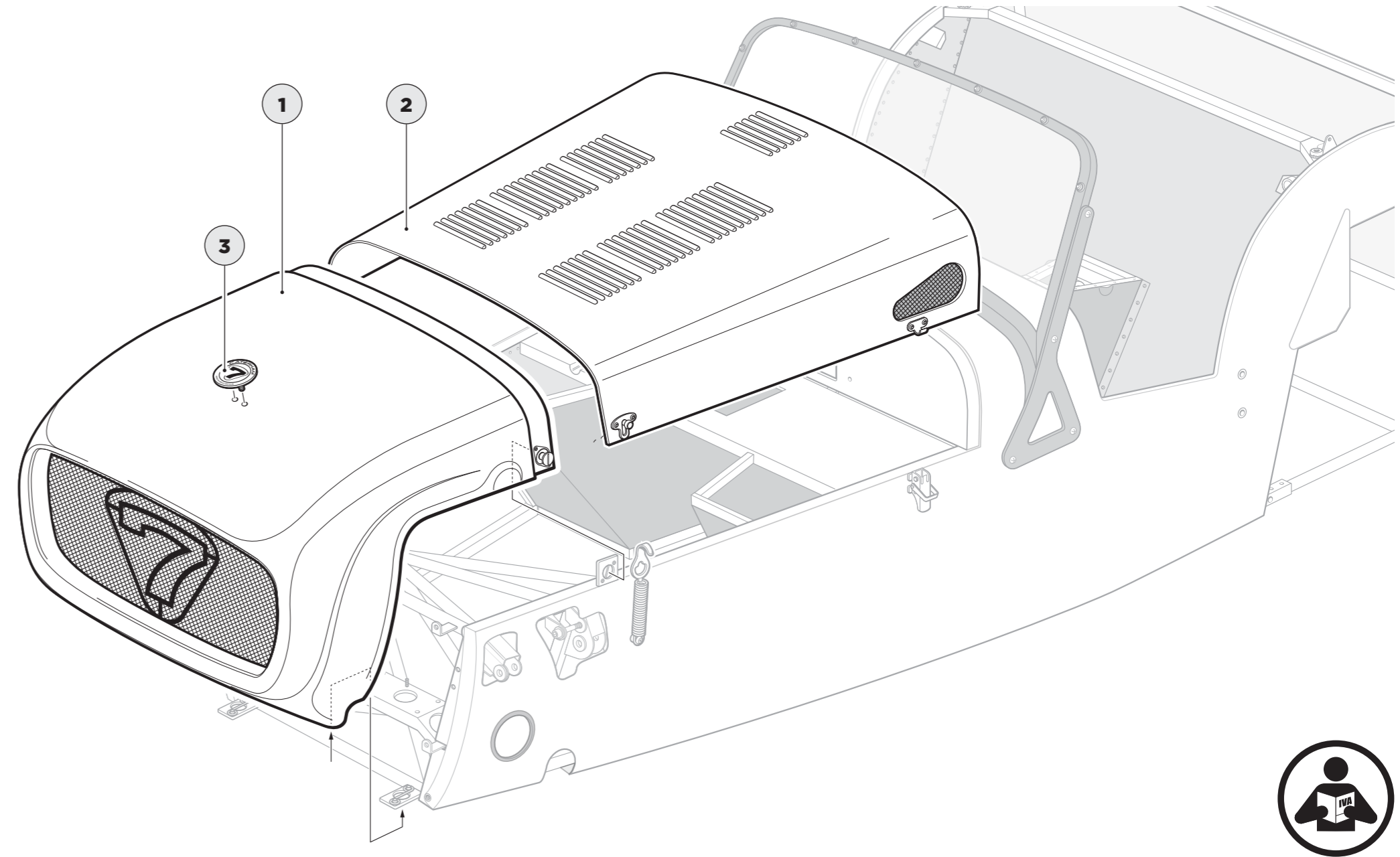
FIXINGS

TIPS

The nose cone goes on before the bonnet.
Anthony L

Stick the supplied foam around the edge of the nose and scuttle where the bonnet will sit (if you've not done already).
Harry P

THE NOSE CONE BADGE



FITTING THE WIPERS

PARTS

- 1 Wiper arm
- 2 Wiper blade

TOOLS

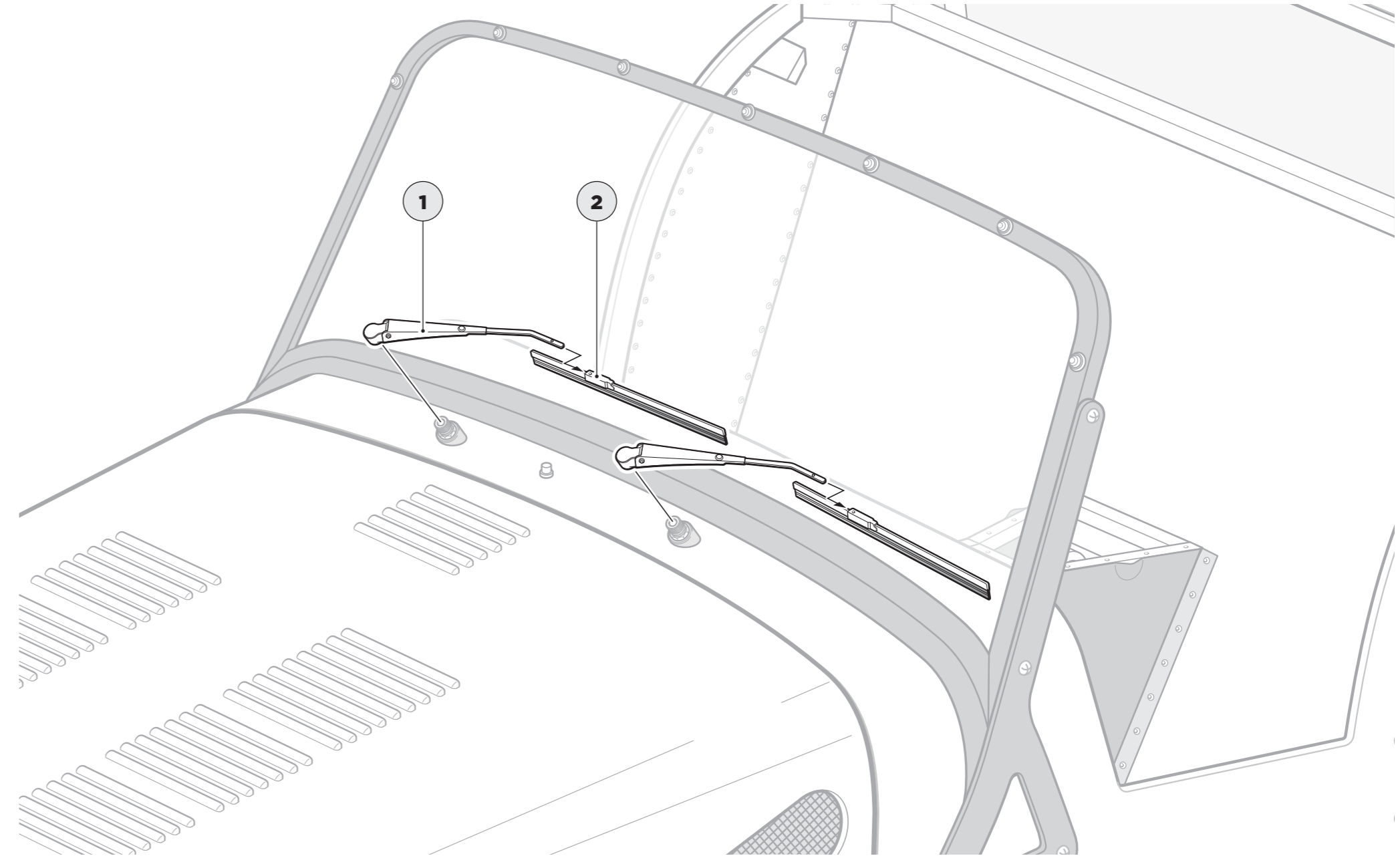
FIXINGS

TIPS

Ensure wipers are in paused 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

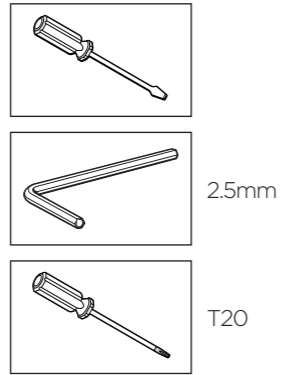


AND FINALLY, AT LAST, THE WING MIRRORS

PARTS

-  Mirror head
-  Mirror mount
-  Mirror mount stud
-  Grub screw
-  Fibre washer

TOOLS



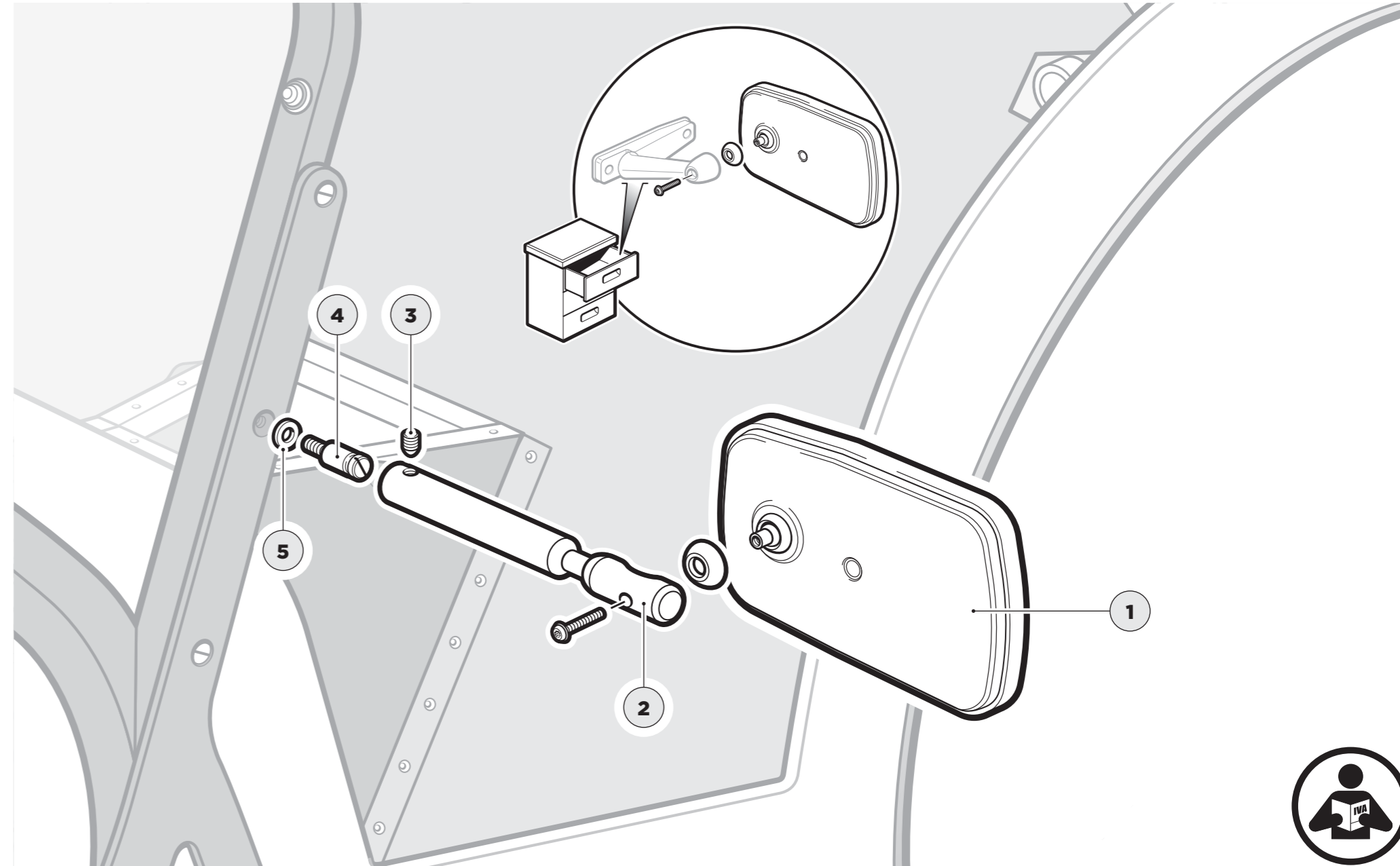
FIXINGS

Wing mirror bag

TIPS

You may have to unclick the glass out to tighten up.
Mick F

AND FINALLY, AT LAST, THE WING MIRRORS



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 the 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 a 10mm and an 11mm spanner, a length of washer hose (or similar clear plastic hose) and a waster 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, plus respond to your instructions, so whilst a child is fine for this job, someone's might be 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 caliper. 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 10mm 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 of 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. Tighten the nipple.
- 9 Repeat steps 8 and 9 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 (no more air in the caliper), then you can remove the washer hose and refit the dust cover.
- 11 Repeat steps 5 to 10 for the remaining brakes in this order, right rear next, then right front and lastly left front. The front brake nipples use 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.

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:

YOU DID REMEMBER TO PUT OIL IN THE ENGINE AND GEARBOX, RIGHT?

- 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!

CATERHAM

Caterham Cars Limited, 2-3 Kennet Road, Dartford, Kent, DA1 4QN
+44 (0) 1322 625800

CATERHAMCARS.COM

 /CaterhamCars  @caterhamcars

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