



CATERHAM

ASSEMBLY GUIDE

SIGMA – EDITION 2.0

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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



Speak to our Expert Derek Howlett
derek.howlett@caterham.com
01322 625827



Video Guides
[https://www.youtube.com/
user/OfficialCaterhamUK](https://www.youtube.com/user/OfficialCaterhamUK)
Playlist coming soon

KEY

SYMBOLS

1 Item number

AA
AJ
AM Fixing item


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


Nm Required torque (where applicable)


S3
S5 S3 / S5 chassis specific instructions

REPEAT Repeat on other side




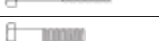







 Advice from factory professionals


 Now is a good time to take some photos

 Reminder to apply for your IVA test

 Refer to IVA Checklist Guide

FIXINGS

Pack A		CATERHAM		44	
		PACK NUMBER		38F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	AA Bolt M12 x 100 Grade 10.9	BM12X100	2	Lower wishbone rear	
2	AB Bolt M12 x 65 Grade 10.9	BM12X65	2	Lower wishbone front	
3	AC Bolt M10 x 65 Grade 10.9	BM10X65	2	Upper wishbone rear	
4	AD Bolt M10 x 60 Grade 10.9	BM10X60	2	Upper wishbone front	
5	AE Bolt M8 x 40 Grade 10.9	BM8X40	4	Anti-roll bar mounting brackets	
6	AF Plain Nut M14 x 1.5 thread	NM14	1	Temporary use to help lock upper wishbone ball joint	
7	AG Nyloc Nut M12	NM12	2	Lower wishbone rear	
8	AH Nyloc Nut M10	NM10	4	Upper wishbone	
9	AI Plain Washer M12 Oversized	WPCM12	18	Lower wishbone	
AK	Plain Washer M8 Heavy Duty	WPH8	4	Anti-roll bar mounting brackets	
AL	Plain Washer M2 x 2.5 Heavy Duty	WPH2.5	2	Steak stop	

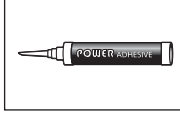
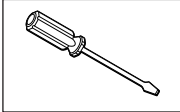

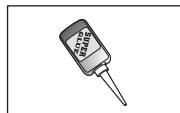
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	AA Bolt M12 x 100 Grade 10.9	BM12X100	2	Lower wishbone rear	

x4 ← (Indicates number of each fixing required)

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

KEY

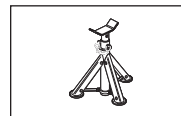
TOOLS

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

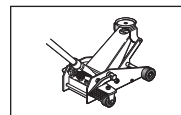
LET'S GET READY

PARTS

TOOLS



x3



FIXINGS

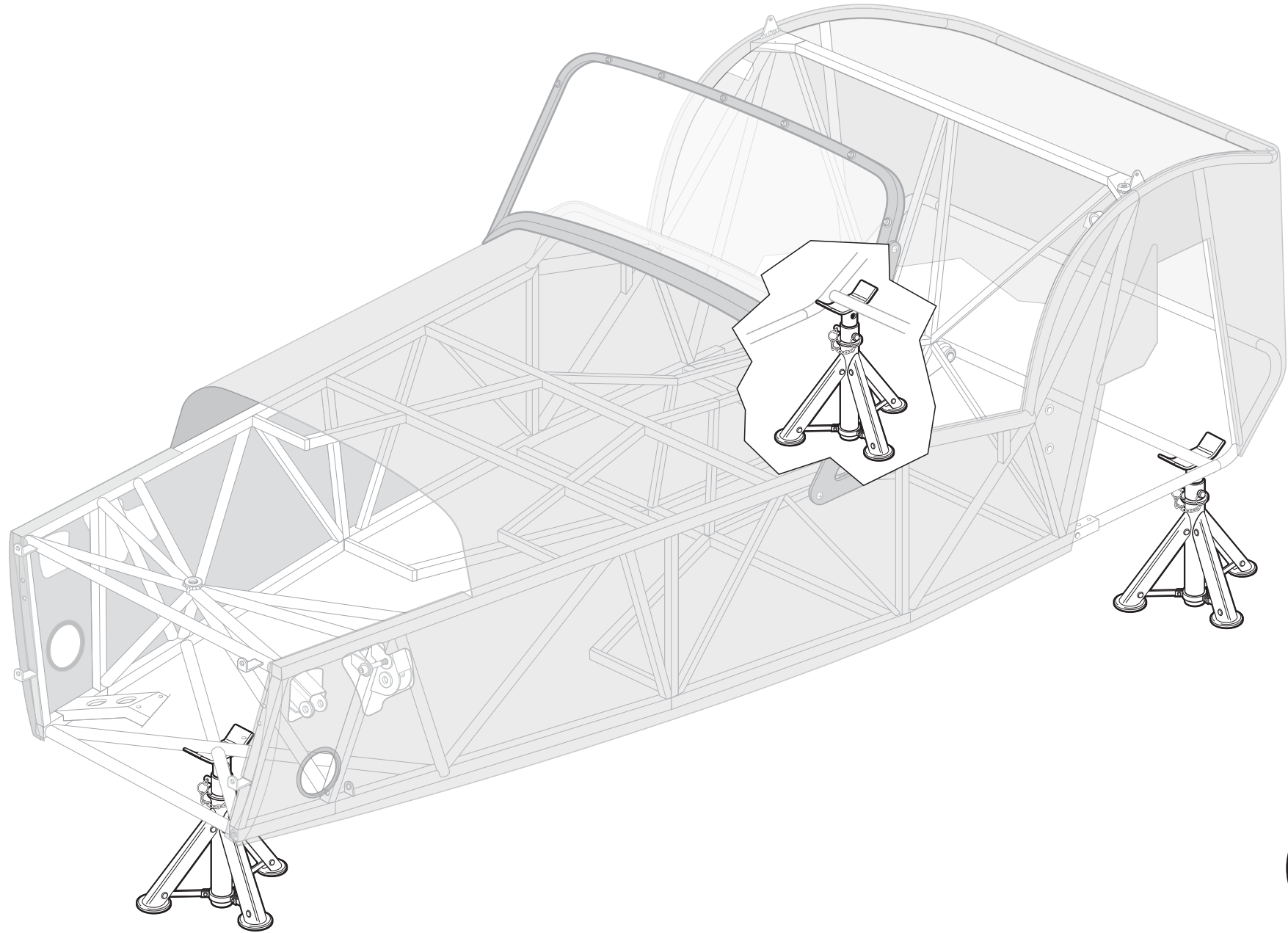
TIPS

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

Mick F

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

Matt T

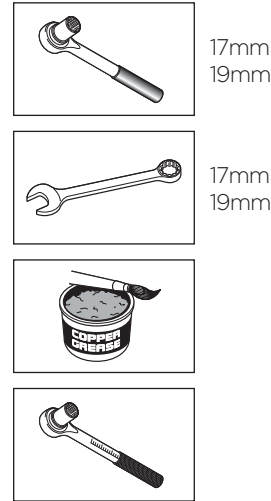


START WITH THE SUSPENSION WISHBONES

PARTS

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

TOOLS



FIXINGS

Pack A		CATERHAM		44	
		PART NUMBER		PACK NUMBER	
		30F015B		30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Bolt M12 x 100 Grade 10.9	BM12X100	2	Lower wishbone rear	
2	Bolt M12 x 65 Grade 10.9	BM12X65	2	Lower wishbone front	
3	Bolt M10 x 65 Grade 10.9	BM10X65	2	Upper wishbone rear	
4	Bolt M10 x 60 Grade 10.9	BM10X60	2	Upper wishbone front	
5	Bush M8 x 60 (Metric)	BM8X60	4	Anti-roll bar mounting brackets	
6	Flan Nut M12 x 1.5 Thread	NM12F1.5	1	Temporary jacking to the front upper wishbone ball joint	
7	Nylon Nut M12	NM12F12	2	Lower wishbone rear	
8	Nylon Nut M10	NM10F10	4	Upper wishbone	
9	Flan Washer M12 (Overhead)	WPM12	18	Lower wishbone	
10	Flan Washer M8 (Metric)	WPM8	4	Anti-roll bar mounting brackets	
11	Flan Washer 1/2" x 1/2" (Overhead)	WPM16	2	Brake pipe	

Pack A		CATERHAM		44	
		PART NUMBER		PACK NUMBER	
		30F015B		30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Spring Washer M12	WS-M12	2	Lower wishbone front	
13	Spring Washer M8	WS-M8	4	Anti-roll bar mounting brackets & upper damper rod nut	
14	Washer 1/2" Brake pipe	WS16	2	Brake pipe	
15	Nylon Nut 1/2" (Metric)	NM12F12	2	Wing nut	
16	Nylon Nut 1/2" (Metric)	NM12F12	2	Front brake spring mounting (old track)	

x2
x2
x2
x2
x2
x2
x4
x14

x2

TIPS

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

Harrison P

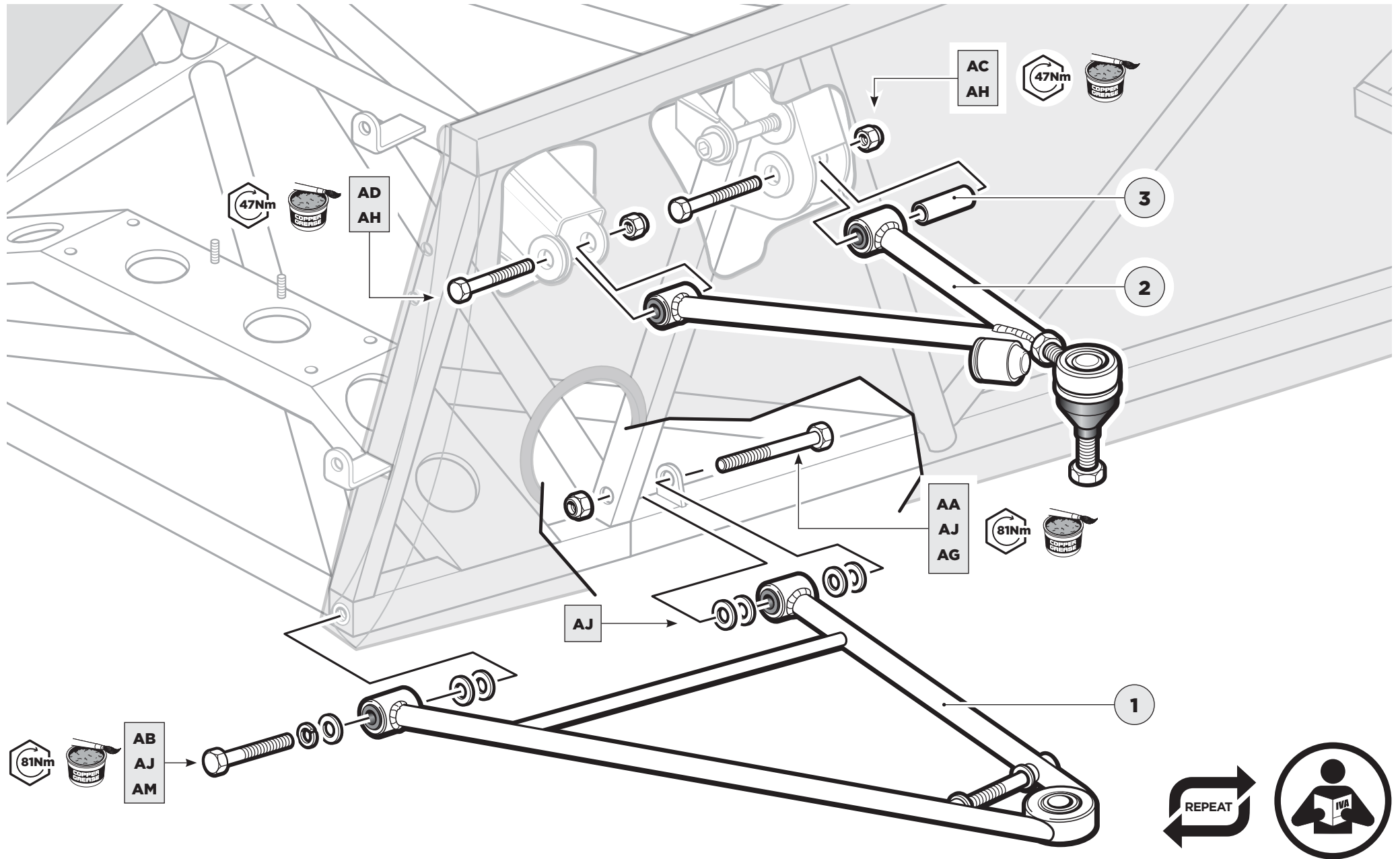
The big washers are chamfered and the chamfered side should be towards the wishbone.

Alex H

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

John K

START WITH THE SUSPENSION WISHBONES

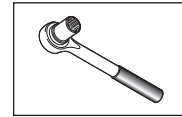


NOW FOR THE STEERING RACK

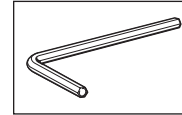
PARTS

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

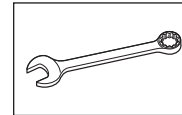
TOOLS



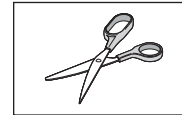
13mm



5mm



10mm
13mm
22mm
3/4"



FIXINGS

Pack B		CATERHAM		55	
		PACK NUMBER		3/20/2011	
		RELEASED NOV-13			
STEERING DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	BA Clamped Bolt M6 x 70 DIN 912	BMCHEX70	4	Rack clamps	
2	BB Bolt 12 x 110	BB12x110	2	Column clamp	
3	BC Ball Nut x40 G10x 10.8	BMSM40	2	Column to rack universal joint	
4	BD Nylon Nut 12 (100000)	NPN12	1	Steering wheel boss	
5	BE Plain Nut 12	NPN12	2	Track rod lock nut	
6	BF Plain Nut 10 (100000)	NPN10	1	Column clamp (optional vehicle)	
7	BG Nylon Nut M8	NM78	2	Column to rack universal joint	
8	BH Nylon Nut M6	NM76	4	Steering rack clamps	
9	BJ Plain Washer 12 x 16 (100000)	WPN12	1	Steering wheel boss	
10	BK Plain Washer 12" Heavy Duty	WPH14	6	Rack clamps and column clamp	
11	BL Spring Washer 12 (100000)	WSP14	2	Column clamp	

x4

x2

x2

x2

x4

x4

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

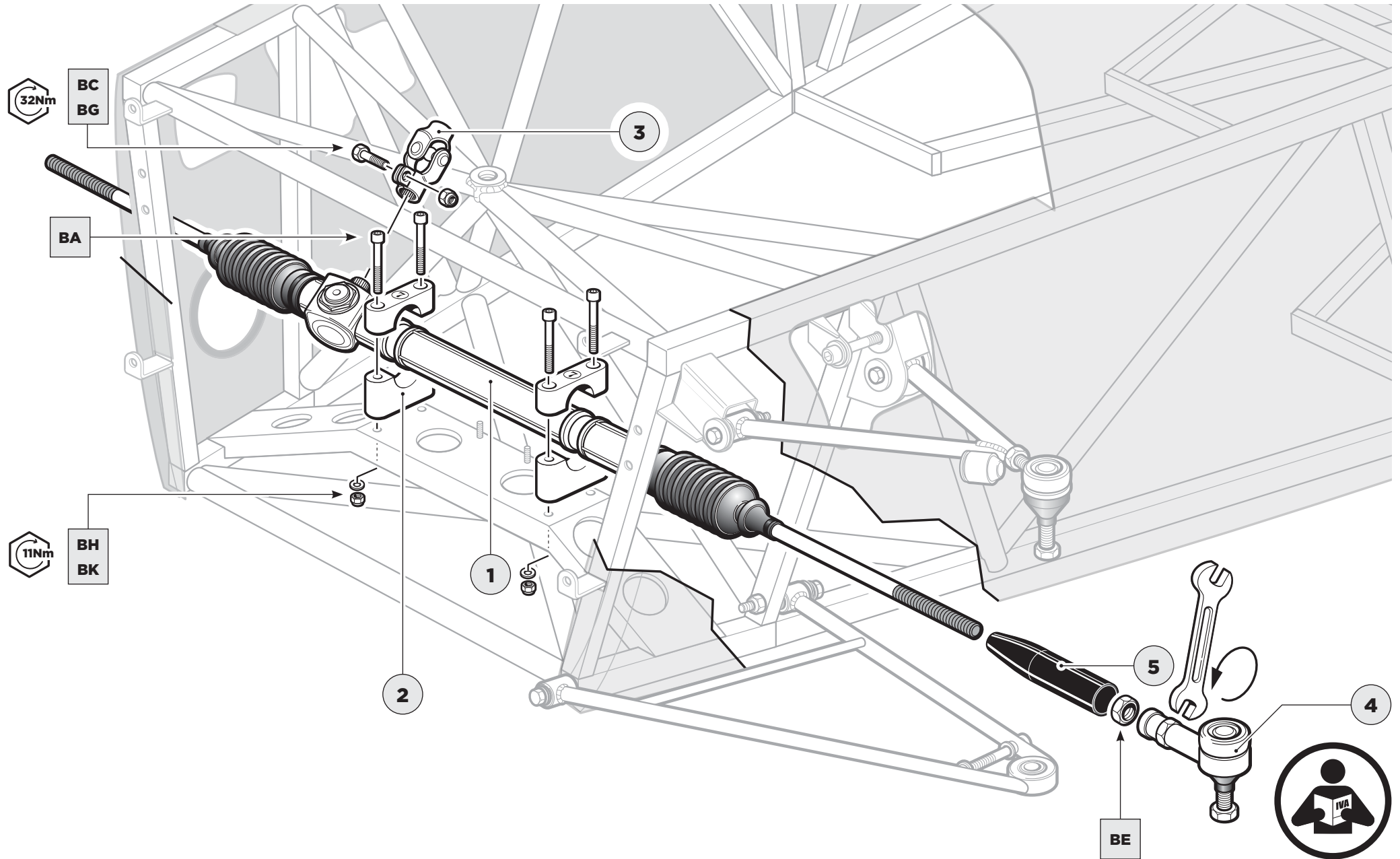
The trackrod end needs to screw on about 12 turns (it will be properly set later when the tracking is done).

Matthew H

Don't fully tighten steering rack for now.

Dan D

NOW FOR THE STEERING RACK

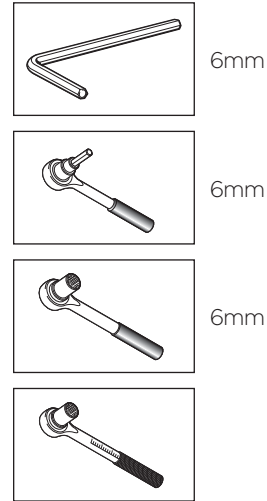


AND THEN THE DAMPERS

PARTS

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

TOOLS



FIXINGS

Pack A		CATERHAM		44	
		PACK NUMBER		30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball B12 x 60 (Metric)	BM12100	2	Lower wishbone rear	
2	Ball B12 x 60 (Metric)	BM12000	2	Lower wishbone front	
3	Ball B12 x 60 (Metric)	BM12000	2	Upper wishbone rear	
4	Ball B12 x 60 (Metric)	BM12000	2	Upper wishbone front	
5	Ball B6 x 40 (Metric)	BM0600	4	Anti-roll bar mounting brackets	
6	Flan Nu B14 x 1.5 Thread	BN1410	1	Temporary use to help lock upper wishbone ball joint	
7	Nylon Nut B12	BN1210	2	Lower wishbone rear	
8	Nylon Nut B10	BN1010	4	Upper wishbone	
9	Flan Wishbone B12 (Metric)	FW1210	18	Lower wishbone	
10	Flan Wishbone B6 (Metric)	FW0600	4	Anti-roll bar mounting brackets	
11	Flan Wishbone 1/2 x 1/2 (Metric)	FW1200	2	Brake pipe	

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

Pack A		CATERHAM		44	
		PACK NUMBER		30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Spring Washer B12	WS1200	2	Lower wishbone rear	
13	Spring Washer B6	WS0600	6	Anti-roll bar mounting brackets & upper damper mount	
14	Washer 1/2" Brake pipe	W1200	2	Brake pipe	
15	Nylon Nut 1/2" (Metric)	BN1210	2	Wing stay	
16	Nylon Nut 1/2" (Metric)	BN1210	2	Front brake spring mounting (old track pipe)	

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

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

TIPS

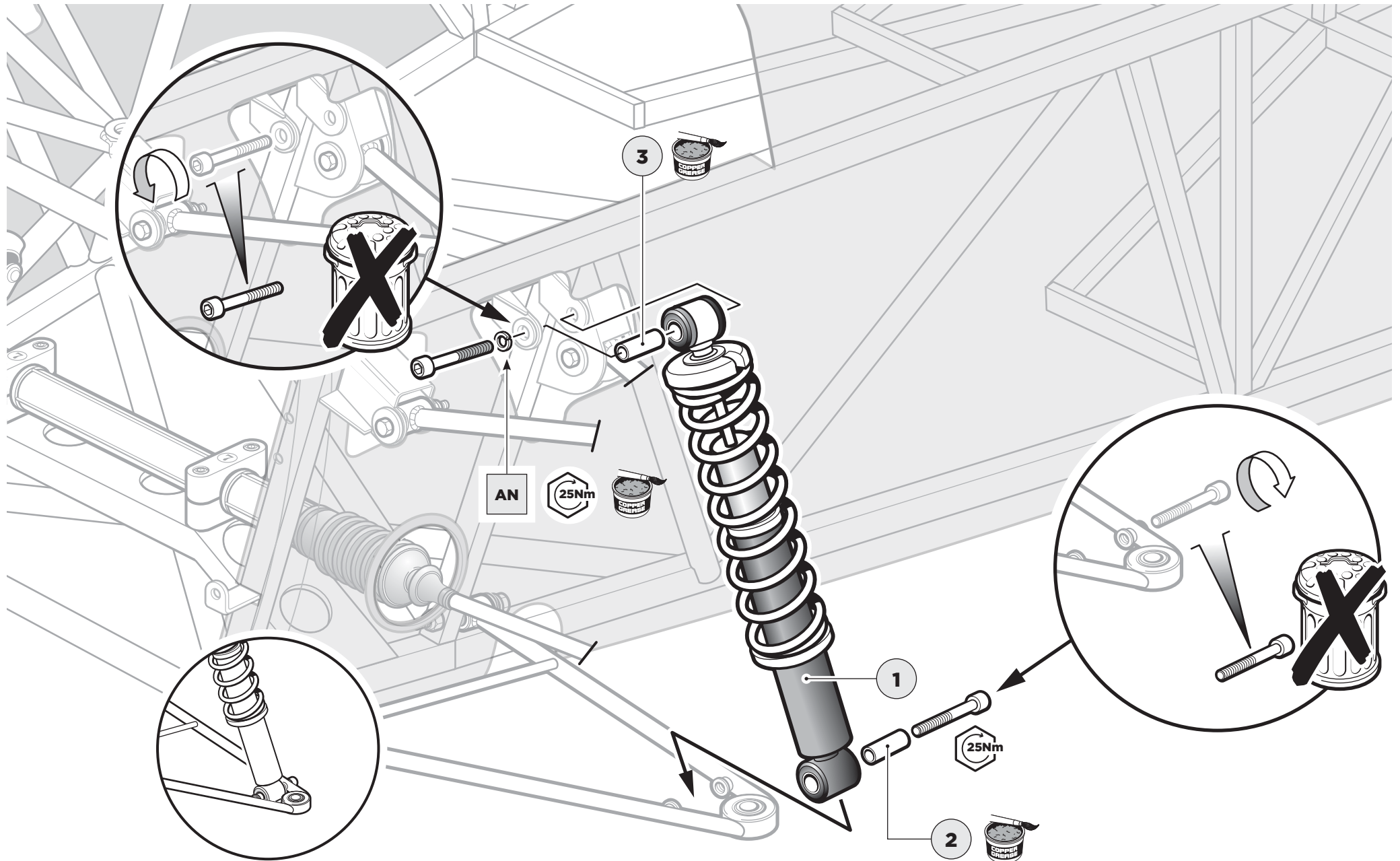
Put the top of the damper on first and be careful not to let it swing into the side of the chassis.

Grant P

The bottom can be a tight fit!

Mick F

AND THEN THE DAMPERS

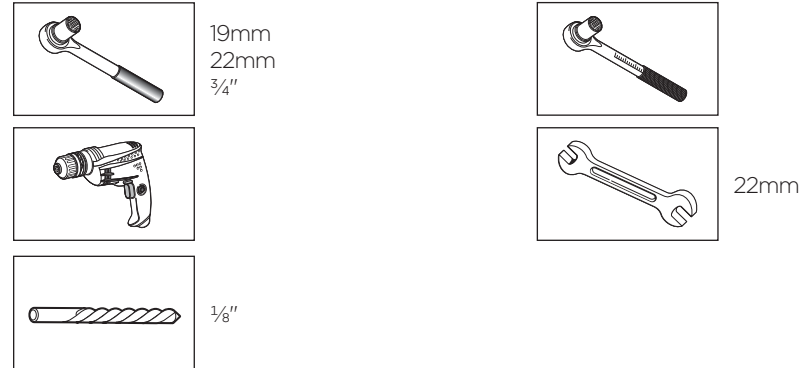


IT'S TIME FOR THE WINGSTAYS

PARTS

- 1 Wingstay
- 2 Front brake & upright assembly

TOOLS



FIXINGS

Pack A		CATERHAM		PART NUMBER: 30F015B		44	
FRONT SUSPENSION DeDION CARS (METRIC)							
This pack may include extra fasteners to cover different options							
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION		
1	AA Bolt M12 x 100 (Metric)	BA12100	2	Lower wishbone rear			
2	AB Bolt M12 x 60 (Metric)	BA12060	2	Lower wishbone front			
3	AC Bolt M12 x 60 (Metric)	BA12060	2	Upper wishbone rear			
4	AD Bolt M12 x 60 (Metric)	BA12060	2	Upper wishbone front			
5	AE Bolt M8 x 40 (Metric)	BA08040	4	Anti-roll bar mounting brackets			
6	AF Plain Nut M14 x 1.5 thread	NM1414	1	Temporary use to help lock upper wishbone ball joint			
7	AG Nylon Nut M12	NM1212	2	Lower wishbone rear			
8	AH Nylon Nut M12	NM1212	4	Upper wishbone			
9	AJ Plain Washer M12 (Metric)	WP1212	18	Lower wishbone			
10	AK Plain Washer M8 (Metric)	WP0808	4	Anti-roll bar mounting brackets			
11	AL Plain Washer 1/2" x 1/2" (Imperial)	WP1616	2	Brake pipe			

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

Pack A		CATERHAM		PART NUMBER: 30F015B		44	
FRONT SUSPENSION DeDION CARS (METRIC)							
This pack may include extra fasteners to cover different options							
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION		
12	AM Spring Washer M12	SP1212	2	Lower wishbone rear			
13	AN Spring Washer M8	SP0808	4	Anti-roll bar mounting brackets & upper damper mount			
14	AP Washer 1/2" (Imperial)	WP1616	2	Brake pipe			
15	AR Nylon Nut 1/2" (Imperial)	NM1616	2	Wing stay			
16	AS Nylon Nut 1/2" (Imperial)	NM1616	2	Front brake, upright mounting (std track ONLY)			

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

x1

x2

x2

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

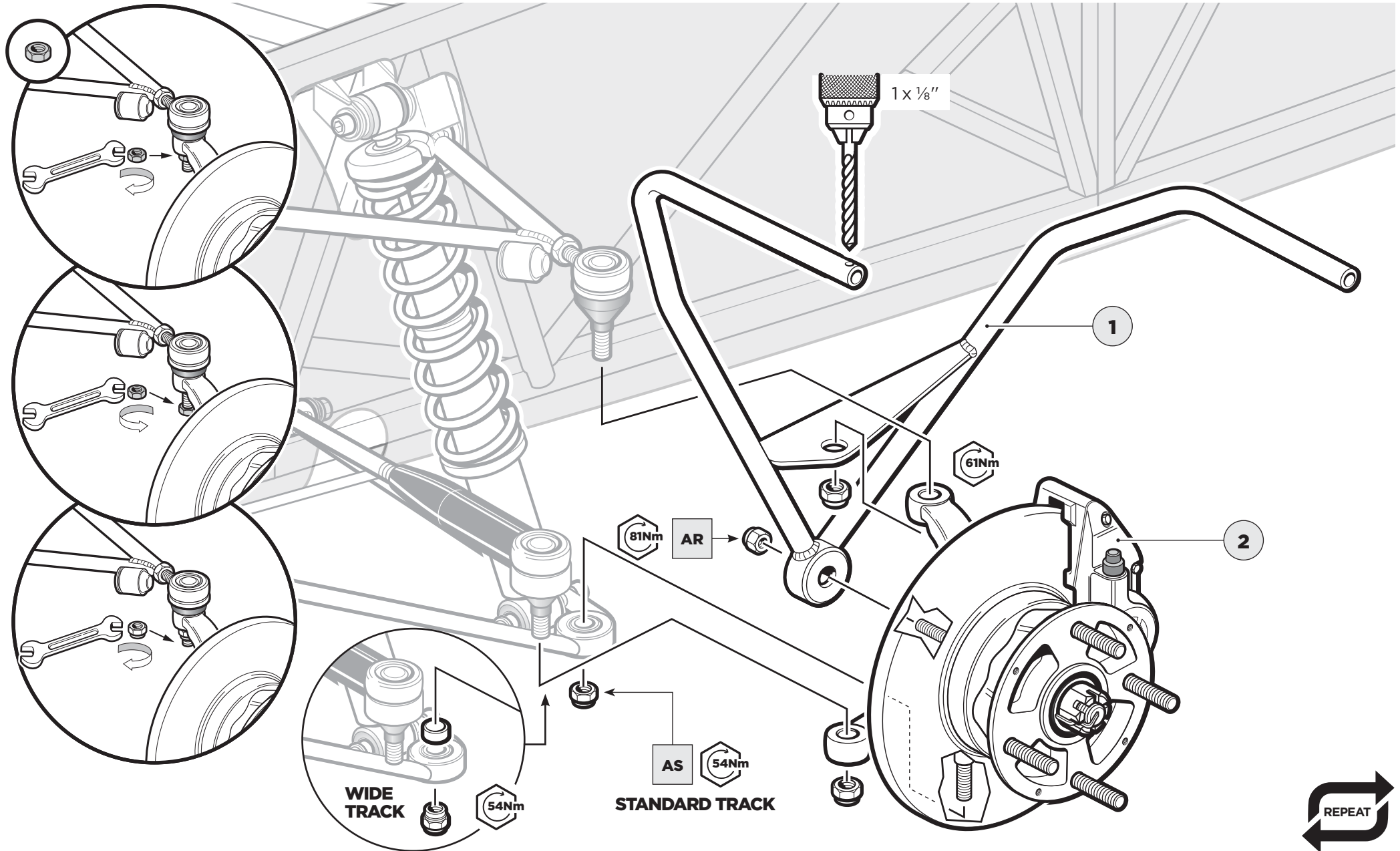
Remove and discard the washer that comes on the back of the assembly before fitting the wingstay; it's not needed.

Rich T

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

Chris N

IT'S TIME FOR THE WINGSTAYS





Now is a good time to take some photos



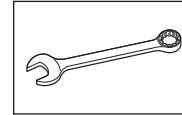
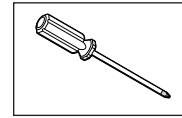
Have you applied for your IVA yet?

LET THERE BE LIGHTS

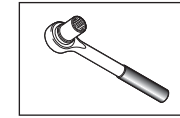
PARTS

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

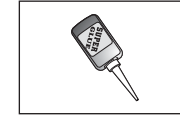
TOOLS



17mm
24mm



17mm



17mm

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

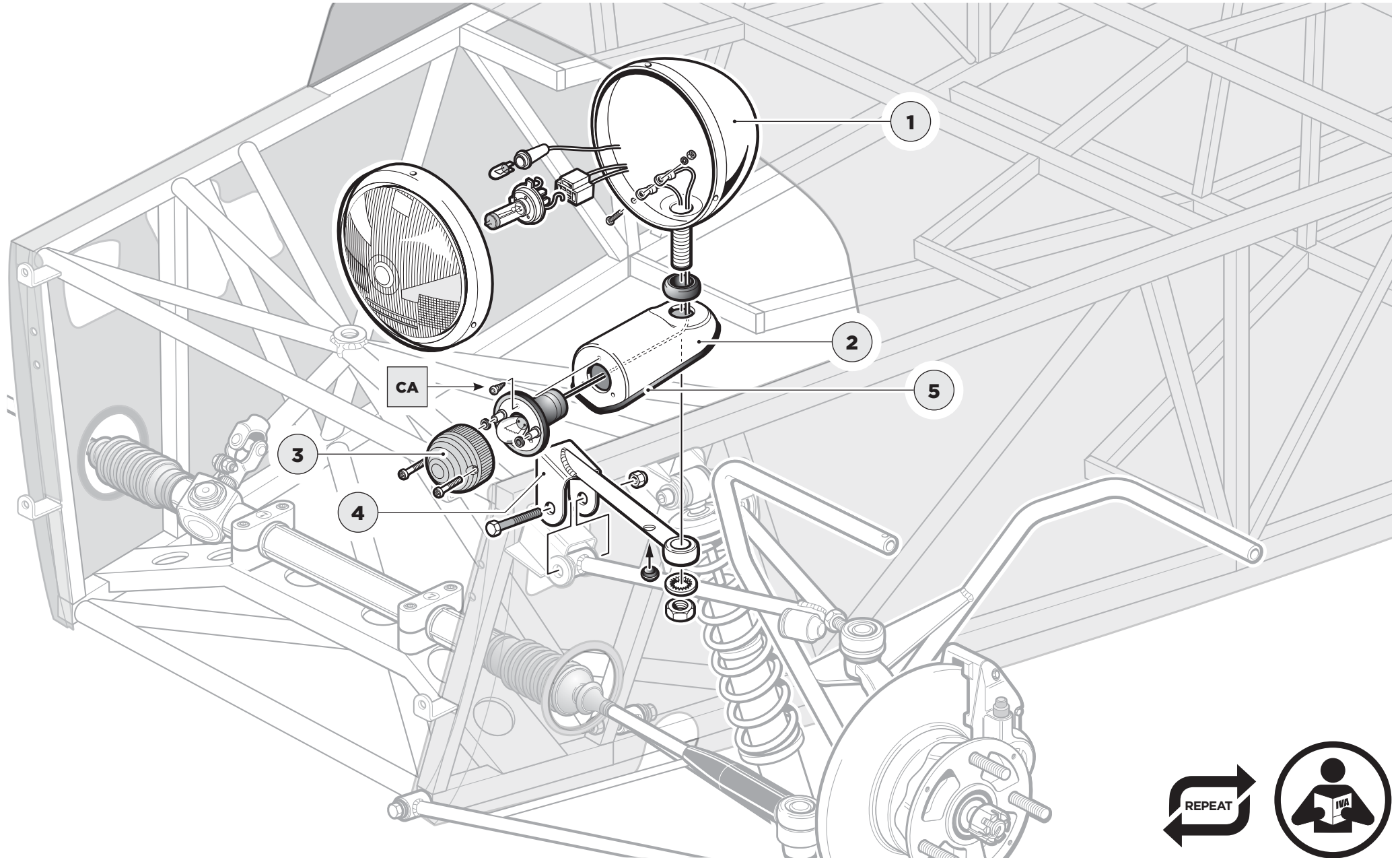
FIXINGS

Pack C		CATERHAM		45	
				PACK NUMBER 30L002B	
LIGHTING & HORNS					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Screw 10 x 1" (25mm)	F1080	6	Indicator assembly to indicator pod	
2	Screw 8 x 1" (20mm)	F1071	2	Side regulator earth on wing/body	
3	Screw 12 x 1/2" (30mm)	F1072	4	Rear light cluster upper fixing	
4	Screw 12 x 1/2" (30mm)	F1073	4	Rear light cluster lower fixing	
5	Wash Hex 100	H0170	2	Horn bracket to steering rack platform (1800/210/10)	
6	Wash Washer 100	H0171	2	Horn bracket to steering rack platform (1800/210/10)	
7	Ball 100 x 50 (Track 1.0)	B00010	1	Through steering rack platform & shock absorber (1800)	
8	Wash Washer 100	H0172	2	Ball Head/shock	
9	Wash Hex 100	H0173	1	Horn base	

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

x6

LET THERE BE LIGHTS

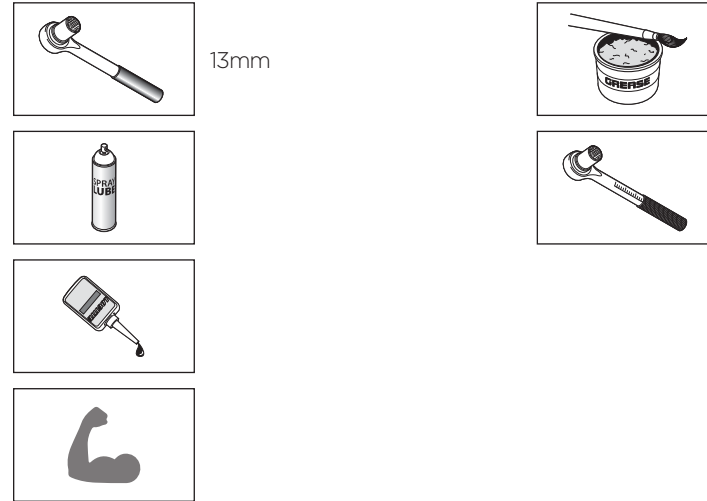


LAST PART OF THE FRONT SUSPENSION: CONNECTING THE TWO SIDES TOGETHER

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
1	AA Bolt M12 x 100 (Metric)	BA12100	2	Lower wishbone rear	
2	AE Bolt M12 x 60 (Metric)	BA12060	2	Lower wishbone front	
3	AC Bolt M12 x 60 (Metric)	BA12060	2	Upper wishbone rear	
4	AD Bolt M12 x 60 (Metric)	BA12060	2	Upper wishbone front	
5	AE Bolt M6 x 40 (Metric)	BA0640	4	Anti-roll bar mounting brackets	
6	AP Plain Nut M12 x 1.5 Thread	BA12114	1	Temporary use to help lock upper wishbone ball joint	
7	AG Nylon Nut M12	BA12112	2	Lower wishbone rear	
8	AD Nylon Nut M12	BA12112	4	Upper wishbone	
9	AJ Plain Washer M12 (Dished)	BA12112	18	Lower wishbone	
10	AK Plain Washer M6 Heavy Duty	BA06148	4	Anti-roll bar mounting brackets	
11	AL Plain Washer 1/2" x 1/2" (Metric)	BA12112	2	Brake pads	

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

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	AM Spring Washer M12	BA12112	2	Lower wishbone rear	
13	AN Spring Washer M6	BA06148	6	Anti-roll bar mounting brackets & upper damper mount	
14	AP Washer 1/2" Brake Pad	BA12112	2	Brake pads	
15	AD Nylon Nut M12 (Hex Nuts)	BA12112	2	Wing stay	
16	AS Nylon Nut M12 (Hex Nuts)	BA12112	2	Front brake, spring mounting (old track pads)	

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

x4

x4

x4

TIPS

Use four small cable ties to secure the dust cover.

Mick F

Grease the balls and cups generously.

Matt T

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

John K

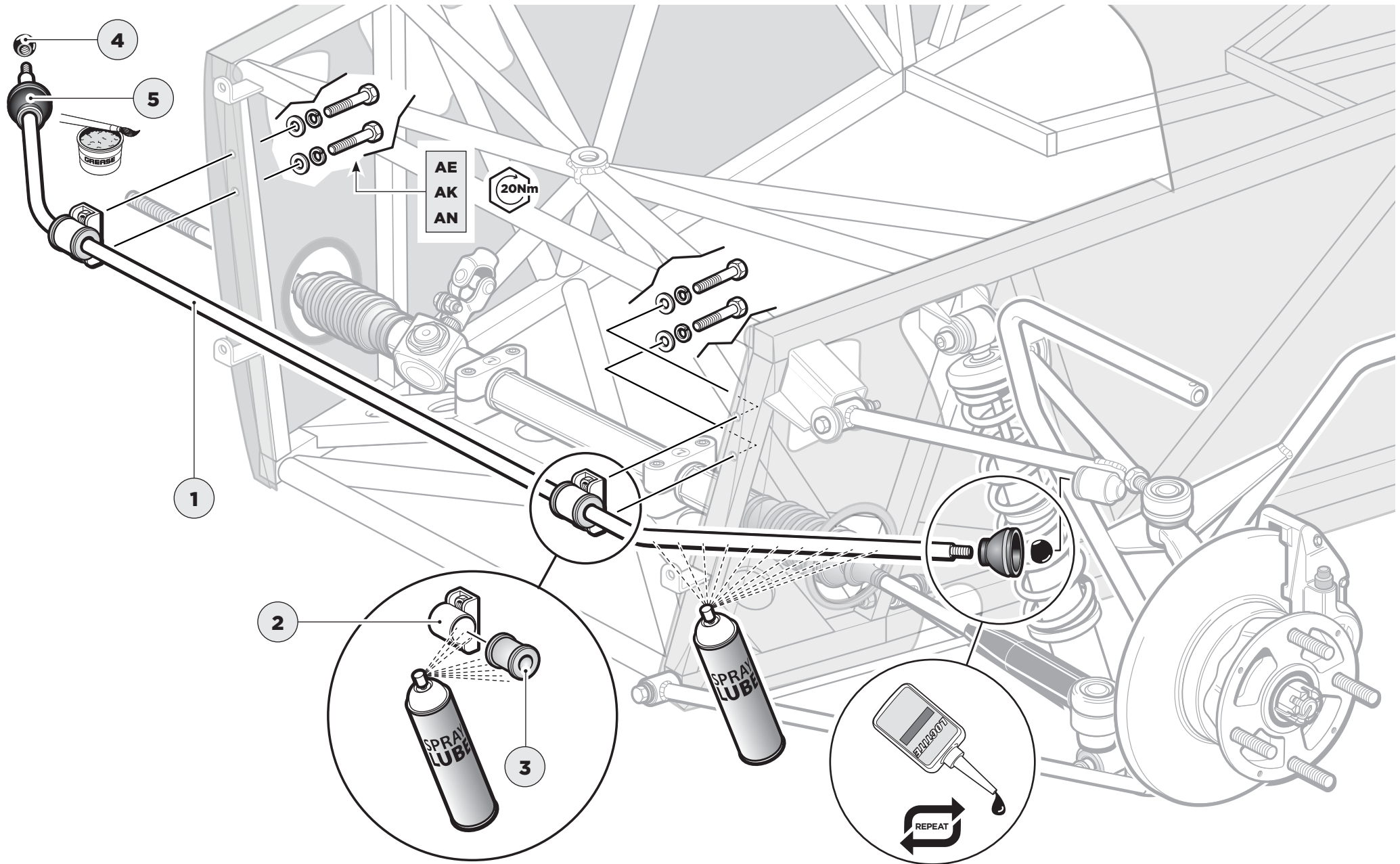
Use the thread lock on the thread of the anti-roll bar, not in the thread of the ball.

Dan D

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

Jamie A

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

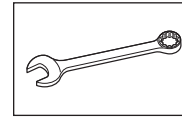


FITTING THE BRAKE HOSES

PARTS

- 1 Brake hose
- 2 Copper washer

TOOLS



13mm (x2)
9/16"

FIXINGS

Pack A		CATERHAM		44	
		PACK NUMBER		30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	AA Bush M12 x 60 (Metric)	BA122100	2	Lower wishbone rear	
2	AE Bush M12 x 60 (Metric)	BA122090	2	Lower wishbone front	
3	AC Bush M12 x 60 (Metric)	BA122080	2	Upper wishbone rear	
4	AD Bush M12 x 60 (Metric)	BA122070	2	Upper wishbone front	
5	AE Bush M8 x 40 (Metric)	BA08200	4	Anti-roll bar mounting brackets	
6	AF Plain Nut M14 x 1.5 Thread	BA09114	1	Temporary use to help lock upper wishbone ball joint	
7	AG Nylon Nut M12	BA09112	2	Lower wishbone rear	
8	AM Nylon Nut M10	BA09110	4	Upper wishbone	
9	AJ Plain Washer M12 (Metric)	WA08112	18	Lower wishbone	
10	AK Plain Washer M8 (Metric)	WA08108	4	Anti-roll bar mounting brackets	
11	AL Plain Washer 1/2" x 1/2" Heavy Duty	WA08108	2	Brake pipe	

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

Pack A		CATERHAM		44	
		PACK NUMBER		30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	AM Spring Washer M12	WA08112	2	Lower wishbone front	
13	AN Spring Washer M8	WA08108	6	Anti-roll bar mounting brackets & upper damper shock	
14	AP Washer 1/2" Brake steel	WA08108	2	Brake pipe	
15	AR Nylon Nut 1/2" (Metric)	WA09110	2	Wing stay	
16	AS Nylon Nut 1/2" (Metric)	WA09112	2	Front brake, spring mounting (old track)	

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

x2

x2

TIPS

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

Khalfani D

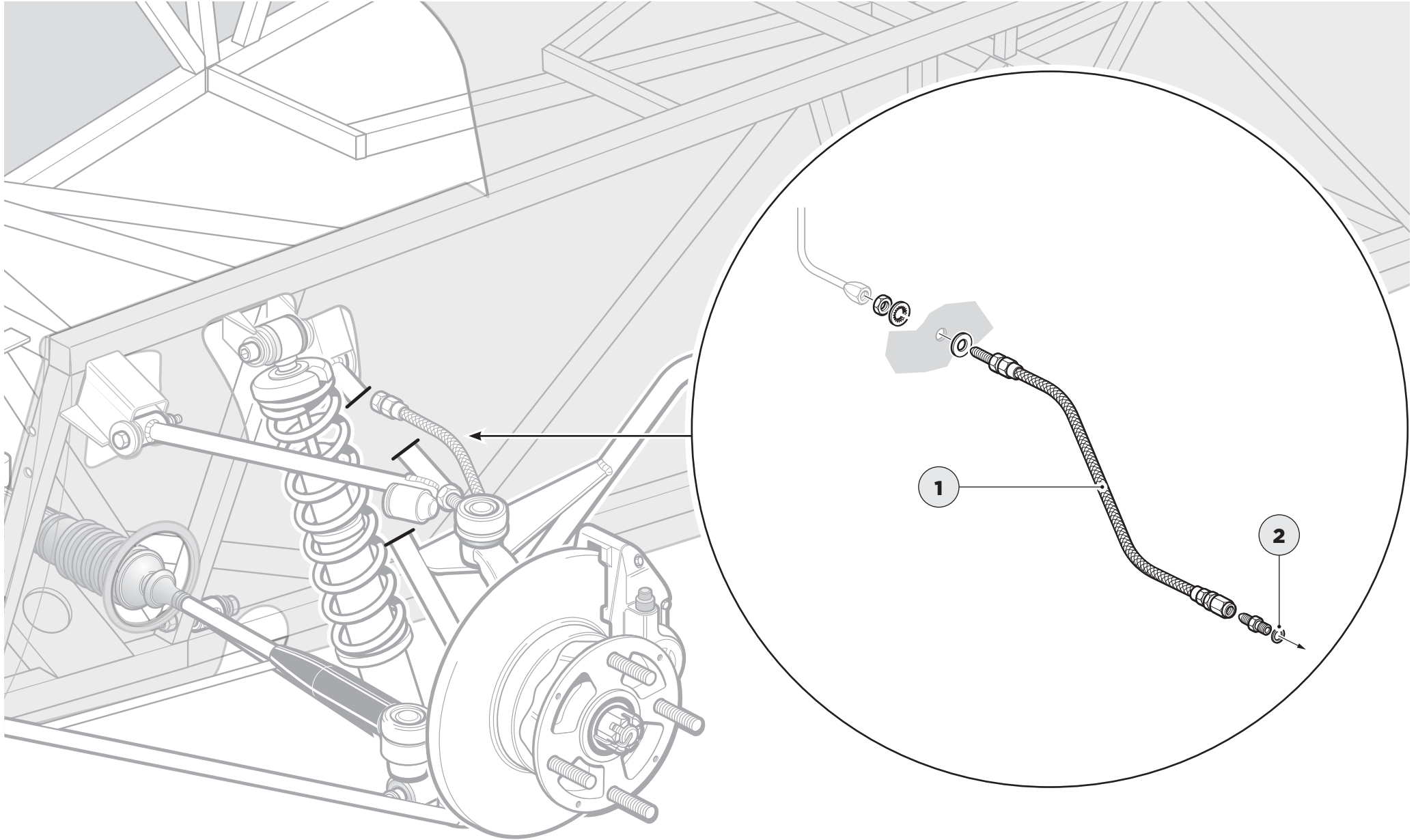
Brake hoses come in packs of 3: 2 front, 1 back.

Anthony L

The copper washer should be this size.

James A

FITTING THE BRAKE HOSES



LET'S MAKE SOME NOISE

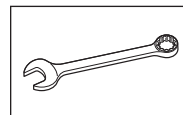
PARTS

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

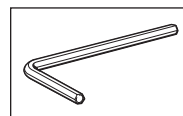
TOOLS



10mm



13mm



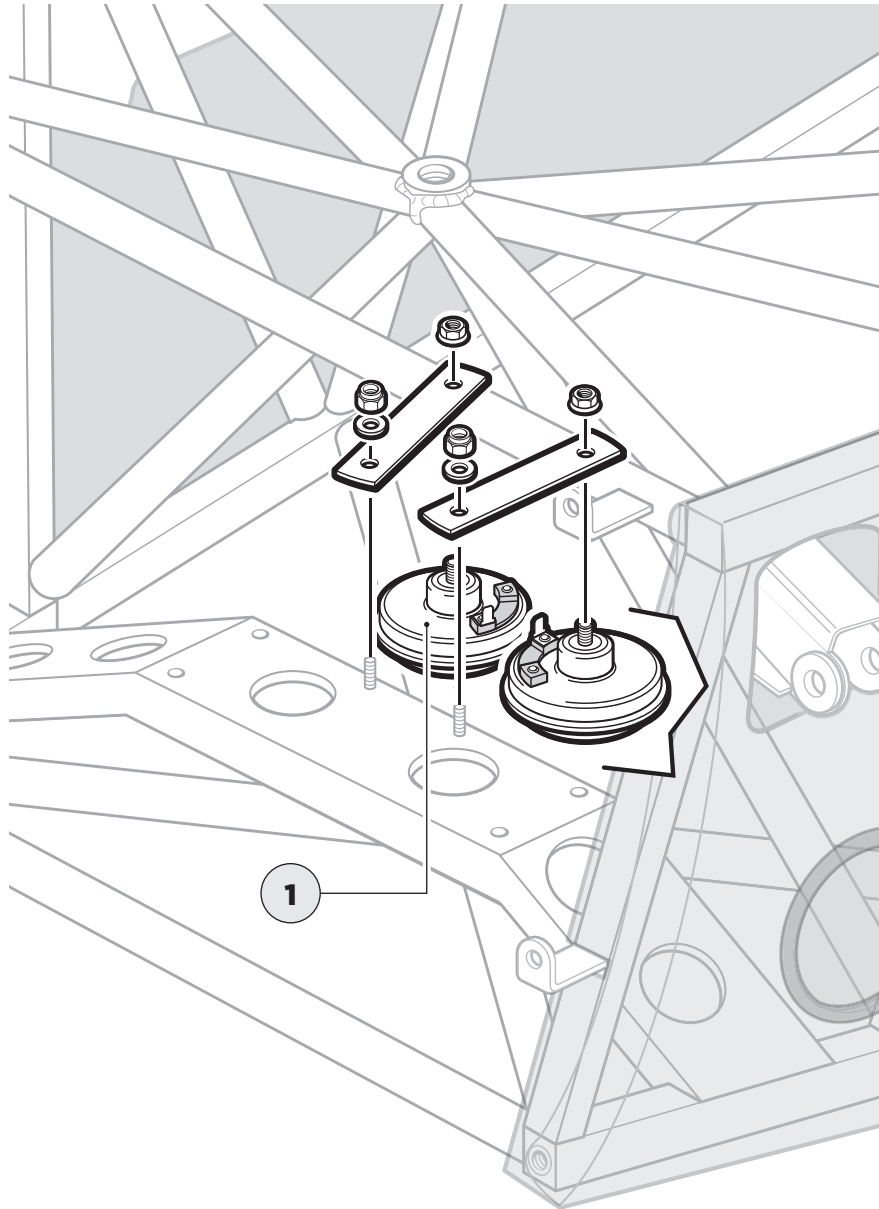
6mm

FIXINGS

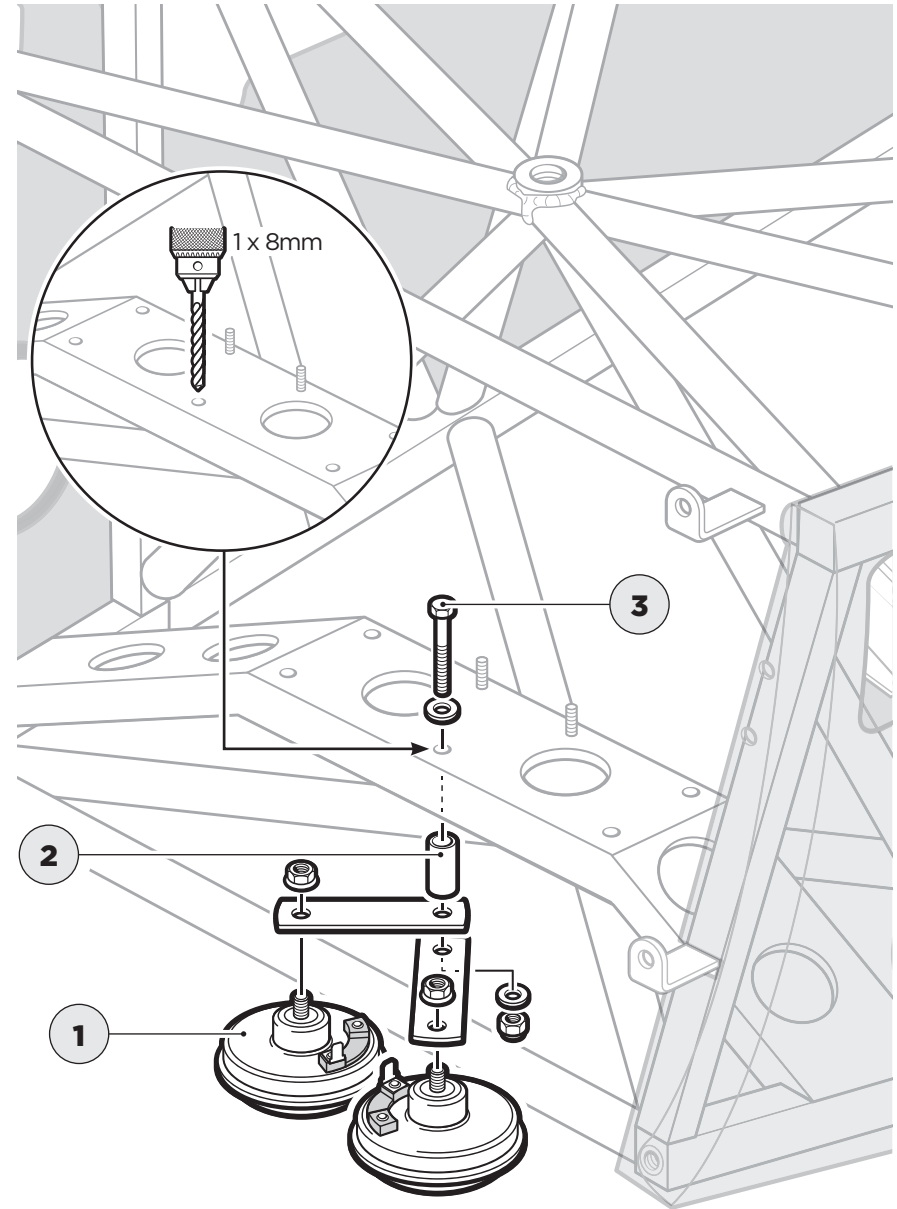
Miscellaneous box

TIPS

270/310/360



420

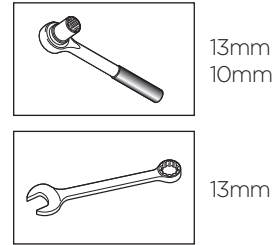


FITTING THE RADIATOR ON THE STANDARD CHASSIS

PARTS

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

TOOLS



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Nut M8 x 20 Hex 2.0	888440	1	Expansion tank bracket to chassis	
2	DB Bolt M8 x 16 Hex 2.0	887442/4	1	Expansion tank to bracket	
3	DC Bolt M8 x 20 Hex 2.0	888440	4	SM radiator bracket	
4	DD Nut M8 x 16 with square section	8021072A	4	Fan brackets to fan	
5	DE Bolt M8 x 16 Hex 2.0	888440/10	4	Fan to radiator mounting - 20 (top)	
6	DF Nylon Nut M8	NMFF8	8	84 Fan to radiator bracket	
7	DG Plain Nut M8	NMFF8	8	Radiator bobbin	
8	DH Nylon Nut M8	NMFF8/14	1	Expansion tank bracket	
9	DI Plain Washer 16 Hex 2.0	889114	13	8 x DV Nut Bracket 4 x 2 Fan Brackets 1 x Expansion tank 1 x Expansion tank to fan	
10	DJ Plain Washer 12.5 Hex 2.0	889116	4	Radiator bobbin back	
11	DK Plain Washer 12.5 Hex 2.0	889117/28	4	Radiator bobbin front	

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

x4

x4

x8

x4

x4

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Plain Washer 12.5 Hex 2.0	889116/28	1	Expansion tank bracket	
13	DM Spring Washer 16 Hex 2.0 Heavy duty	889117	9	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hex Cap 16 Hex 2.0	88720/40	6	2 x 2 Engine Bracket 2 x 2 Expansion tank 2 x 2 Radiator bracket	
15	DO Hex Cap 16 Hex 2.0	88720/38	2	1 x Engine outlet to top 1 Engine 1 x Engine outlet to bottom (top)	
16	DP Hex Cap 16 Hex 2.0	88720/28	18	2 x 2 Engine Bracket 2 x 2 Expansion tank 2 x 2 Radiator bracket	
17	DD Hex Cap 16 Hex 2.0	88720/38	6	Expansion tank small 1 piece	
18	DR Bolt - Black 12.5 x 16 Hex 2.0	1076-01010	12	Crossing cap	

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

x8

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.

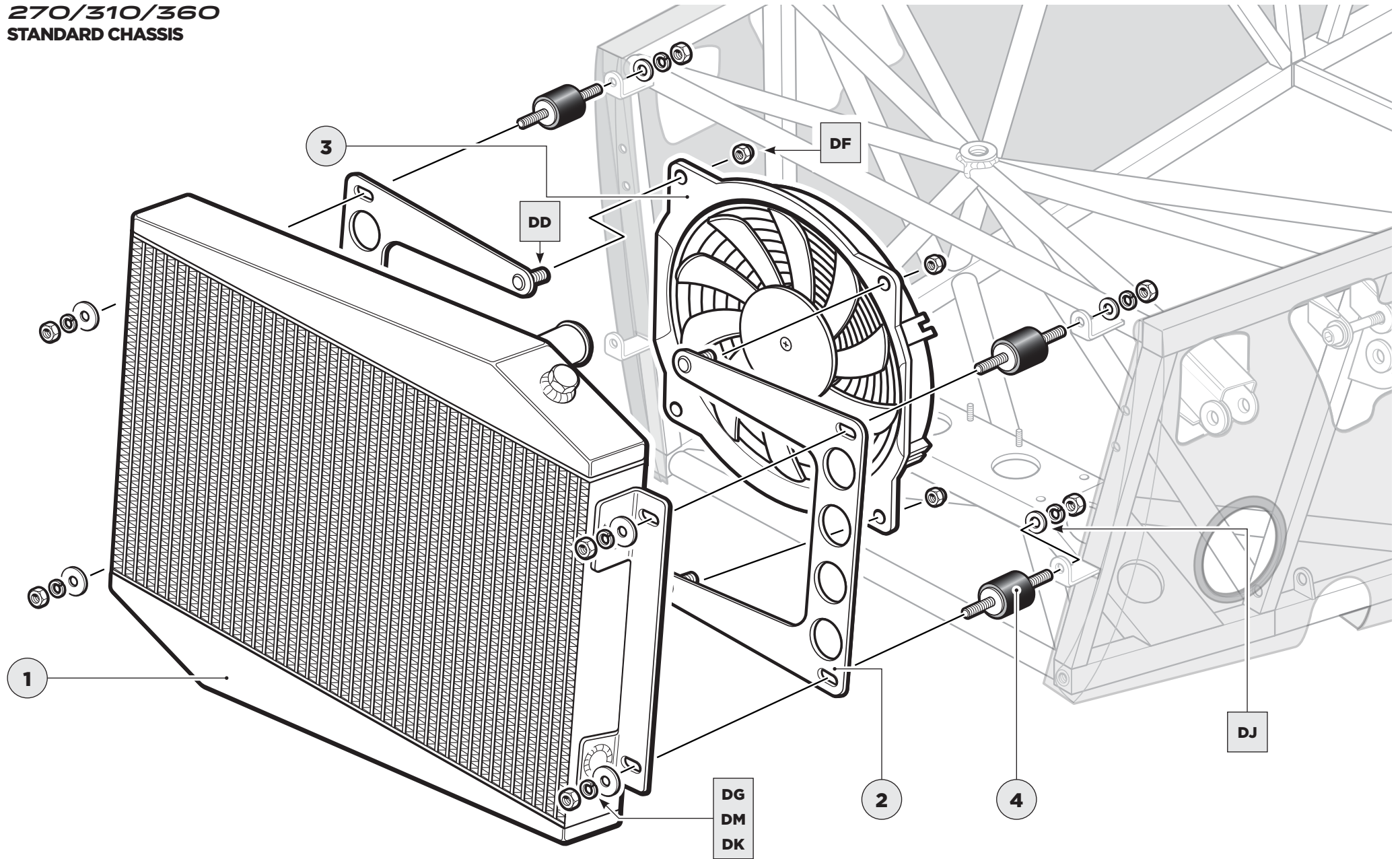
James S

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

Lloyd D

FITTING THE RADIATOR ON THE STANDARD CHASSIS

270/310/360
STANDARD CHASSIS

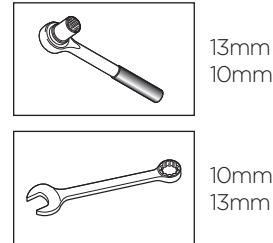


THE RADIATOR MOUNTING FOR THE WIDE-BODIED CHASSIS IS SLIGHTLY DIFFERENT

PARTS

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

TOOLS



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball MS X 20 Hex 8.8	888842	1	Expansion tank bracket to chassis	
2	Ball MS X 20 Hex 8.8	888842	1	Expansion tank to bracket	
3	Setscrew M8X20 Grade 8.8	888820	4	SV radiator bracket	
4	Ball MS X 16 with square section	882102A	4	Fan brackets to fan	
5	Setscrew M8X20 Grade 8.8	888820	4	Fan to radiator bracket to SV radiator	
6	Hyloc Nut M8	NM9F6	8	4x Fan to radiator bracket	
7	Plain Nut M8	NM9F8	8	Radiator bobbin	
8	Hyloc Nut M8	NM9F6	1	Expansion tank bracket	
9	Plain Washer 1st Heavy Duty	WPH114	13	8 x SV rad bracket 4 x Fan brackets 1 x Expansion tank bracket	
10	Plain Washer 2nd Heavy Duty	WPH116	4	Radiator bobbin back	
11	Plain Washer 3rd Heavy Duty	WPH117/2A	4	Radiator bobbin front	

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Plain Washer 1st Heavy Duty	WPH114/2A	1	Expansion tank bracket	
13	Spring Washer S16 Heavy duty	WSPH117	9	8 x Radiator bobbin 1 x Expansion tank	
14	Wash Chip 1st	WSP120-40	6	2 x 2x Heavy Duty Wash Chip 2 x 2x Expansion tank 2 x Radiator bobbin	
15	Wash Chip 2nd	WSP120-20	2	1 x Engine outlet to top of tank 1 x Engine outlet to middle of tank	
16	Wash Chip 3rd	WSP120-25	18	6 x Heavy Duty Wash Chip 6 x Expansion tank 6 x Radiator 6 x Fan	
17	Wash Chip 4th	WSP120-16	6	Expansion tank small 7 piece	
18	Steel - Black 12.5 x 1.5	18126-01010	12	Crossing Slip	

x8

x4

x4

x4

x8

x12

x4

x4

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.

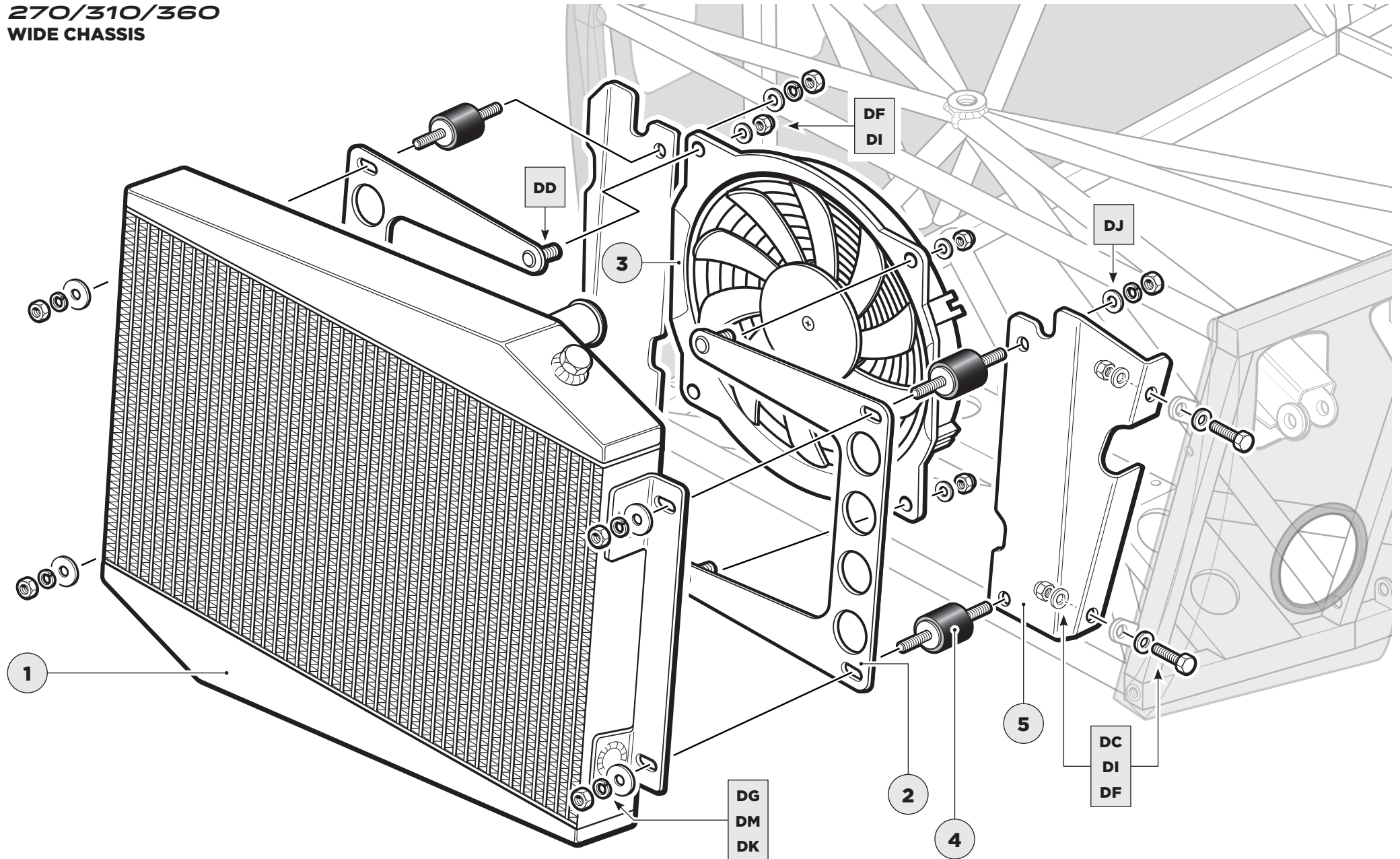
James S

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

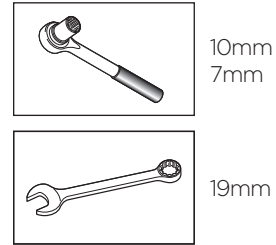


THINGS ARE HEATING UP

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



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Bolt M6 x 20 Hex Hd	888440	1	Expansion tank bracket	
2	DB Selflocking 1.5M x 3.5"	881424	1	Expansion tank to bracket	
3	DC Radiator BRACKET Hex Hd	888420	4	SM radiator bracket	
4	DD Bolt M6 x 16 with Square neck	881224	4	Fan brackets to fan	
5	DE Boltscrew M6x16 Fanhead Fan	888405	4	Fan to radiator cooler; SV only	
6	DF Flare Nut M6	888976	8	1/4" Fan to radiator and SV radiator bracket	
7	DG Flare Nut M6	888976	8	Radiator bobbin	
8	DH Bolt M6 x 14	881214	1	Expansion tank bracket	
9	DI Flare Washer 16 Hex Hd	888416	13	1/4" x SV Fan bracket 1/4" Fan bungs 1/4" Expansion tank bracket	
10	DJ Flare Washer 16 x 17 Hex Hd	888417	4	Radiator bobbin bung	
11	DK Flare Washer 16 x 17 Hex Hd	888417	4	Radiator bobbin bung	

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

x2

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Flare Washer 16 x 17 Hex Hd	888417	1	Expansion tank bracket	
13	DM Spring Washer 16 Hex Hd	888980	8	1/4" Radiator bobbin 1/4" Expansion tank	
14	DN Flare Clip 16 Hex Hd	881240	6	2 x 1/4" Flare hoses to upper fan 2 x 1/4" radiator hose 2 x Radiator bobbin hose	
15	DO Flare Clip 16 Hex Hd	881230	2	1 x Engine outlet to top 1/2" hose 1 x Engine outlet to lower hose	
16	DP Hose Clip 17-20mm	88116-25	18	1/4" Heater hoses to 1/4" Fan 1 x Expansion tank 1 x Dip Switch 1 x Dip Switch	
17	DI Flare Clip 16 Hex Hd	881230	6	Expansion tank small 1/4" piece	
18	DR Bolt - Blank 17 x 17	8816-0110	12	Cooling fan	

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

x4

TIPS

Remember to remove bungs from heater.

Jamie A

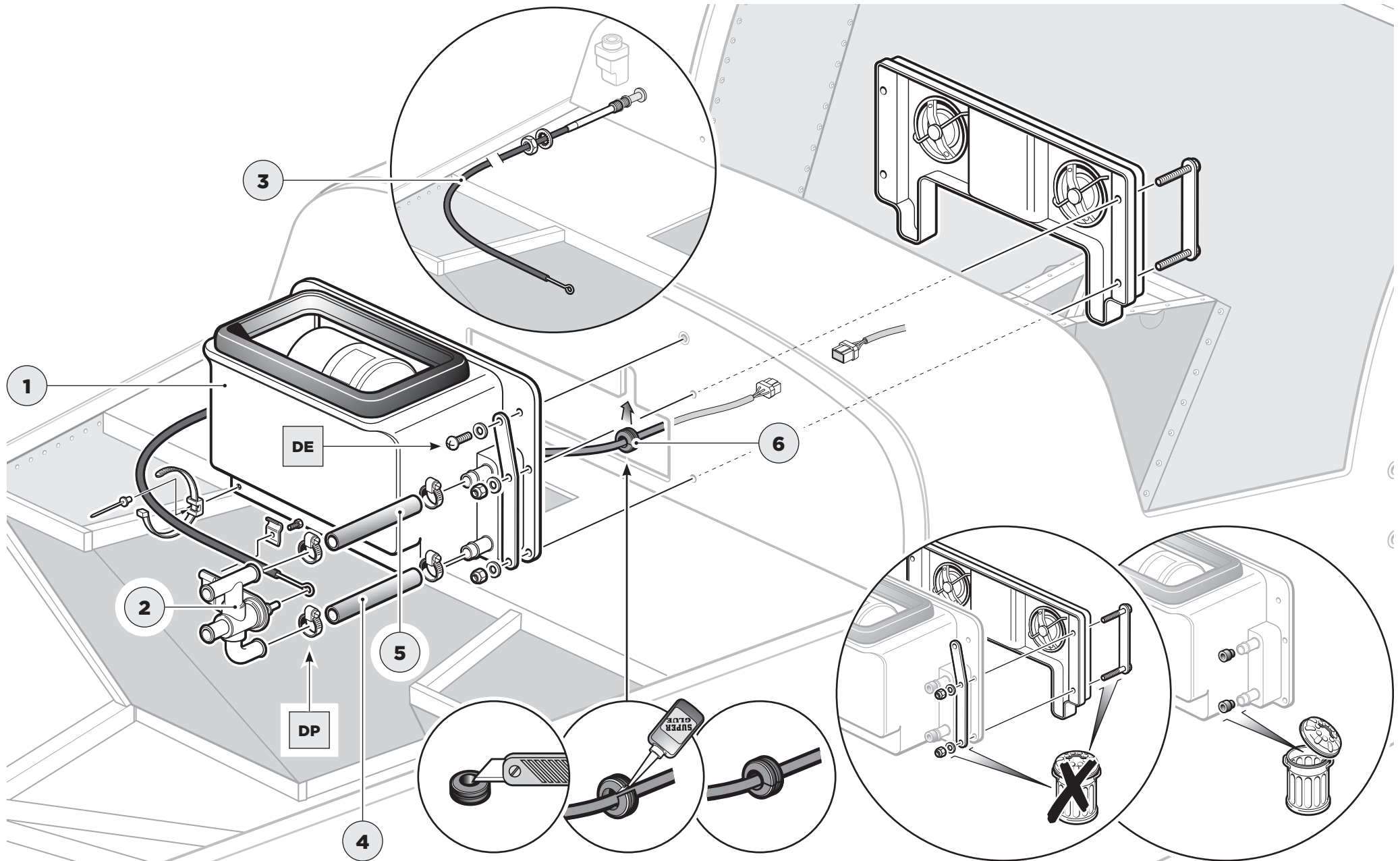
Use 7mm for jubilee clips but not too tight!

Chris B

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

John S

THINGS ARE HEATING UP

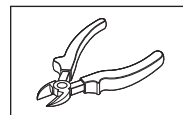
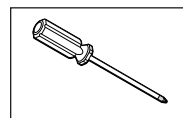


KEEPING THE AIR CLEAN

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)
- $\frac{3}{16}$ washers (x3)
- $\frac{3}{4}$ washers (x3)
- Screws (x20)

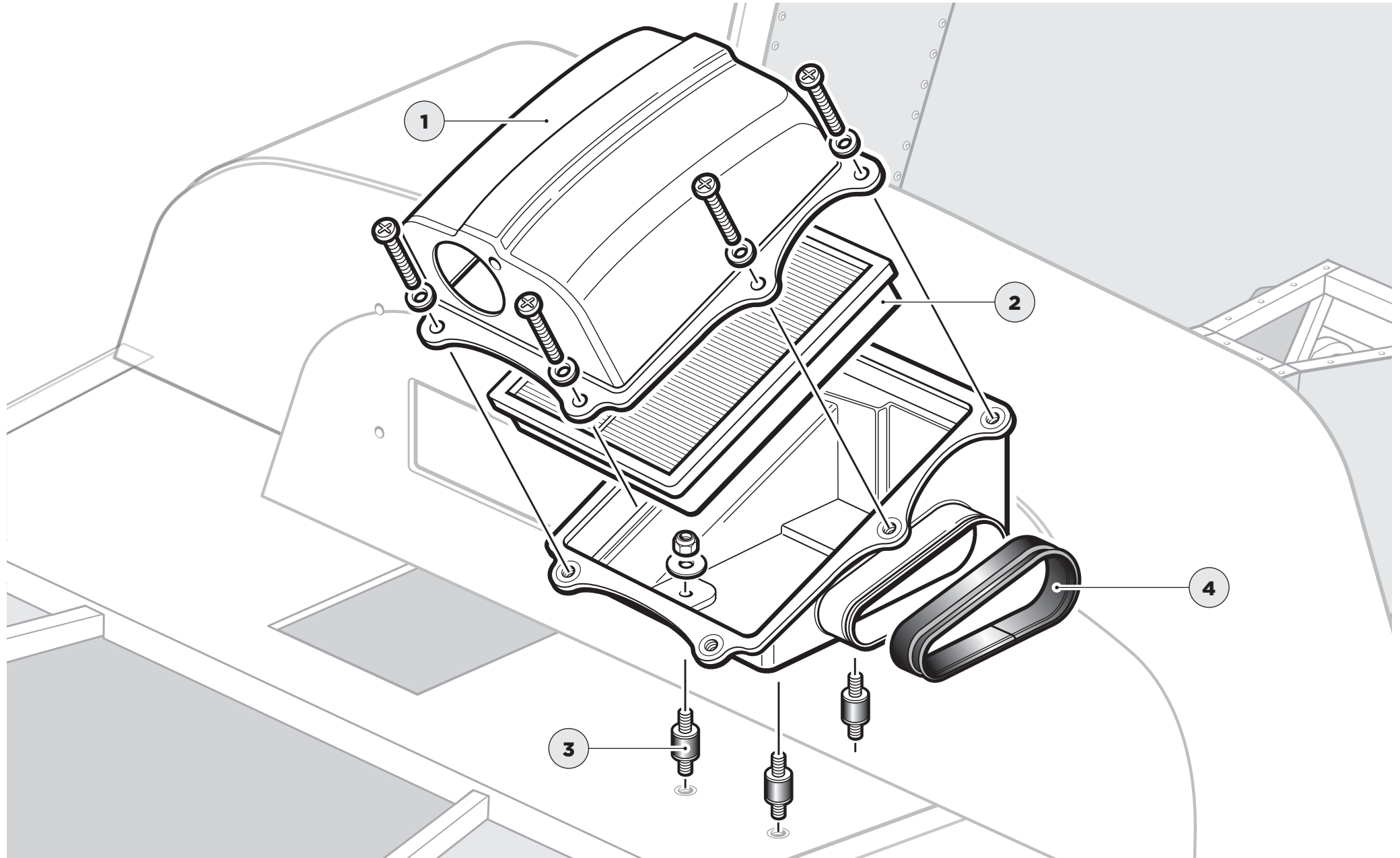
TIPS

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

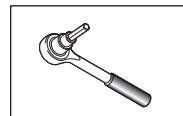


GETTING READY TO PUT THE ENGINE IN

PARTS

- 1 Engine mount
- 2 Starter motor
- 3 Bellhousing

TOOLS



6mm
8mm

FIXINGS

TIPS

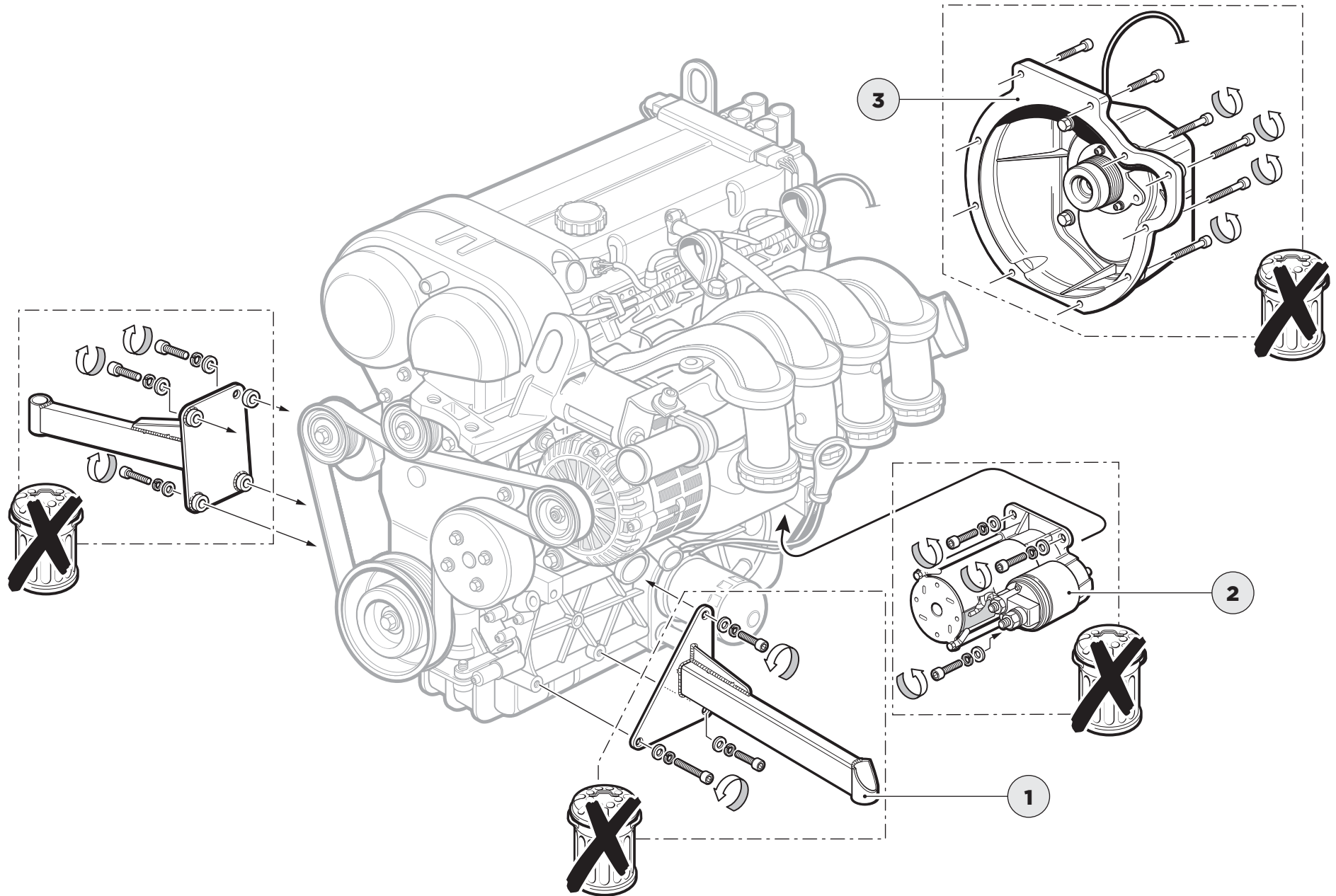
You will need to remove the engine mounts and starter motor but don't throw away the bolts – keep them safe!

Chris N

Remember when the bolts go.

Dan P

GETTING READY TO PUT THE ENGINE IN

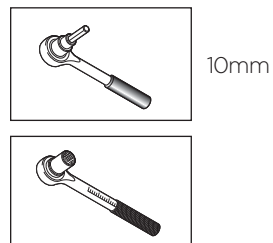


ATTACH THE GEARBOX TO THE BELLHOUSING

PARTS

- 1** Gearbox
- 2** Bell housing

TOOLS



10mm

FIXINGS

Pack E		CATERHAM		66
		PART NUMBER		3E21105F
SIGMA GEARBOX 5 SPEED				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
1	EA Bell Bolt 4.88 Grade 12.9	3E21125A	2	AV Mount
2	EB Caphead Bolt M6 x 40 Grade 12.9	3E21126A	4	AV Mount
3	EC Caphead Bolt M12 x 100 Grade 12.9 Cover Thread	3E21142A	4	Gearbox
4	ED Caphead Bolt M12 x 50 Grade 12.9	3E21127A	4	1 x Bellhousing 3 x Starter Motor
5	EE Caphead Bolt M12 x 30 Grade 12.9	3E21128A	3	Bellhousing
6	EF Caphead Bolt M12 x 40 Grade 12.9	3E21129A	3	Bellhousing
7	EG Caphead Bolt M12 x 30 Grade 12.9	3E21130A	2	Engine Mount RHS Top
8	EH Caphead Bolt M6 x 20 Grade 12.9	3E21131A	2	Engine Mount 1 x LHS Top 1 x LHS Bottom
9	EI Caphead Bolt M6 x 20 Grade 12.9	3E21132A	1	Engine Mount LHS Bottom
10	EJ Caphead Bolt M6 x 20 Grade 12.9	3E21133A	2	Engine Mount RHS Bottom
11	EK Caphead Bolt M6 x 20 Grade 12.9	3E21134A	3	Clutch Slave Cylinder

x4

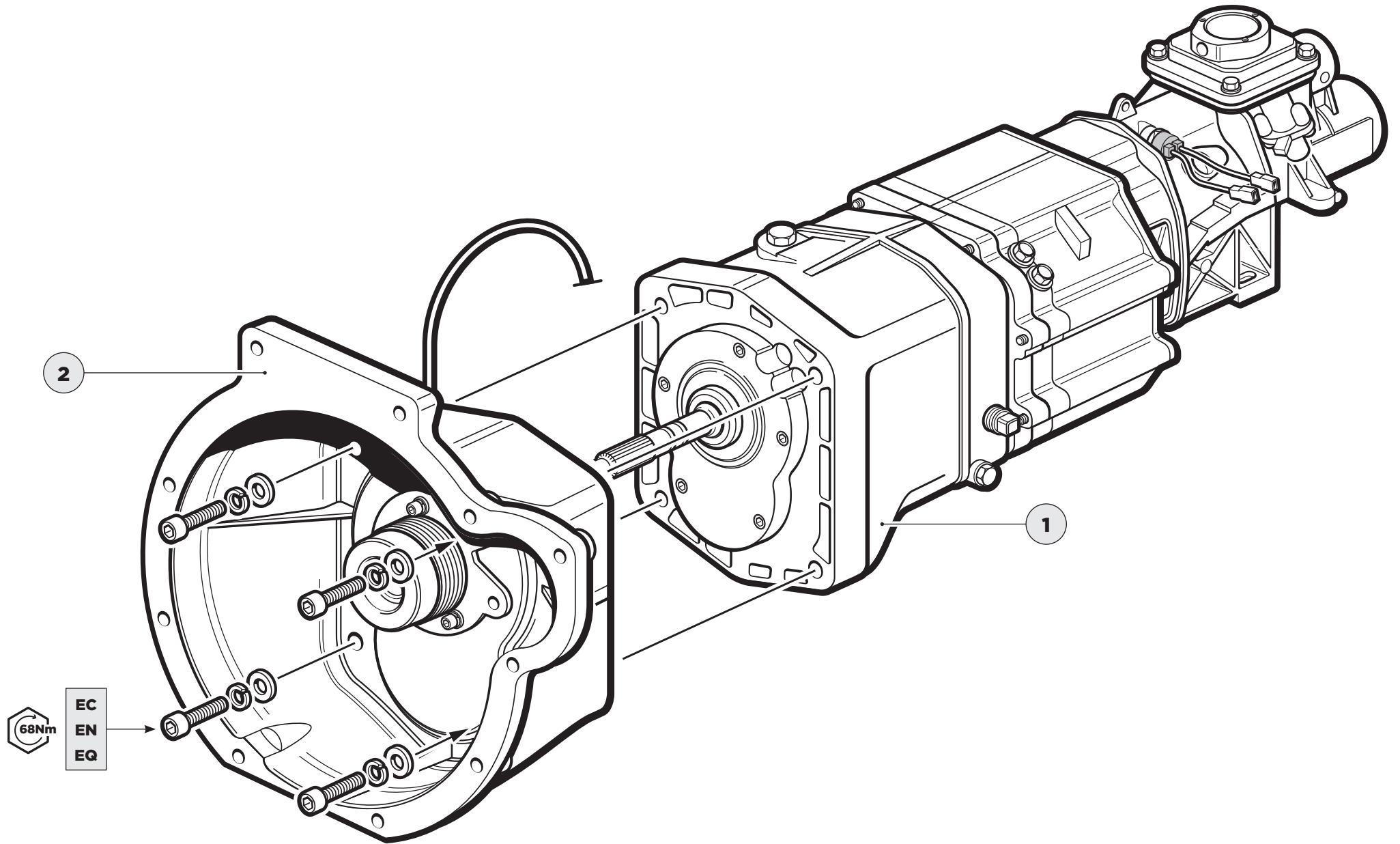
Pack E		CATERHAM		66
		PART NUMBER		3E21105F
SIGMA GEARBOX 5 SPEED				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
12	EL Backward Bolt M6 x 20 Grade 12.9	3E21135A	1	Gear Lever
13	EM Plain Washer M6	3E21136A	2	AV Mount
14	EN Plain Washer M12	3E22031A	4	Gearbox
15	EO Plain Washer M6	3E21137A	1	Gear Lever
16	EP Plain Washer M6	3E21138A	3	AV Mount
17	EQ Spring Washer M12	3E21139A	4	Gearbox
18	ER Spring Washer M12	3E21140A	10	1 x Bellhousing 3 Engine Mount
19	ES Plain Washer M12	3E21141A	3	Starter Motor
20	ET Spring Washer M6	3E21143A	1	Engine Mount
21	EU Spring Washer M6	3E21144A	1	Clutch Slave Cylinder
22	EV Plain Nut M6	3E21145A	4	AV Mount
23	EW Spring Washer M6	3E22032A	2	AV Mount

x4

x4

TIPS

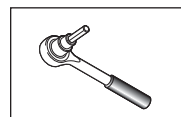
ATTACH THE GEARBOX TO THE BELLHOUSING



AND THEN THE GEARBOX TO THE ENGINE

PARTS

TOOLS



8mm



FIXINGS

TIPS

Pack E		CATERHAM		66	
		PACK NUMBER		3E21105F	
SIGMA GEARBOX 5 SPEED					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Shaft Bolt 2.00 Grade 12.9	3E21125A	2	AV Mount	
2	Clutch Bolt M6 x 40 Grade 12.9	3E21126A	4	AV Mount	
3	Clutch Bolt M10 x 55 Grade 12.9 (Clutch Slave)	3E21140A	4	Gearbox	
4	Clutch Bolt M10 x 60 Grade 12.9	3E21140B	4	Gearbox	
4	Clutch Bolt M10 x 60 Grade 12.9	3E21140A	4	Gearbox	
5	Clutch Bolt M10 x 55 Grade 12.9	3E21140B	4	Gearbox	
6	Clutch Bolt M10 x 40 Grade 12.9	3E21126A	4	AV Mount	
7	Clutch Bolt M10 x 55 Grade 12.9	3E21140A	4	Gearbox	
8	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	2	AV Mount	
9	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	2	AV Mount	
10	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	2	AV Mount	
11	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	2	AV Mount	

x1

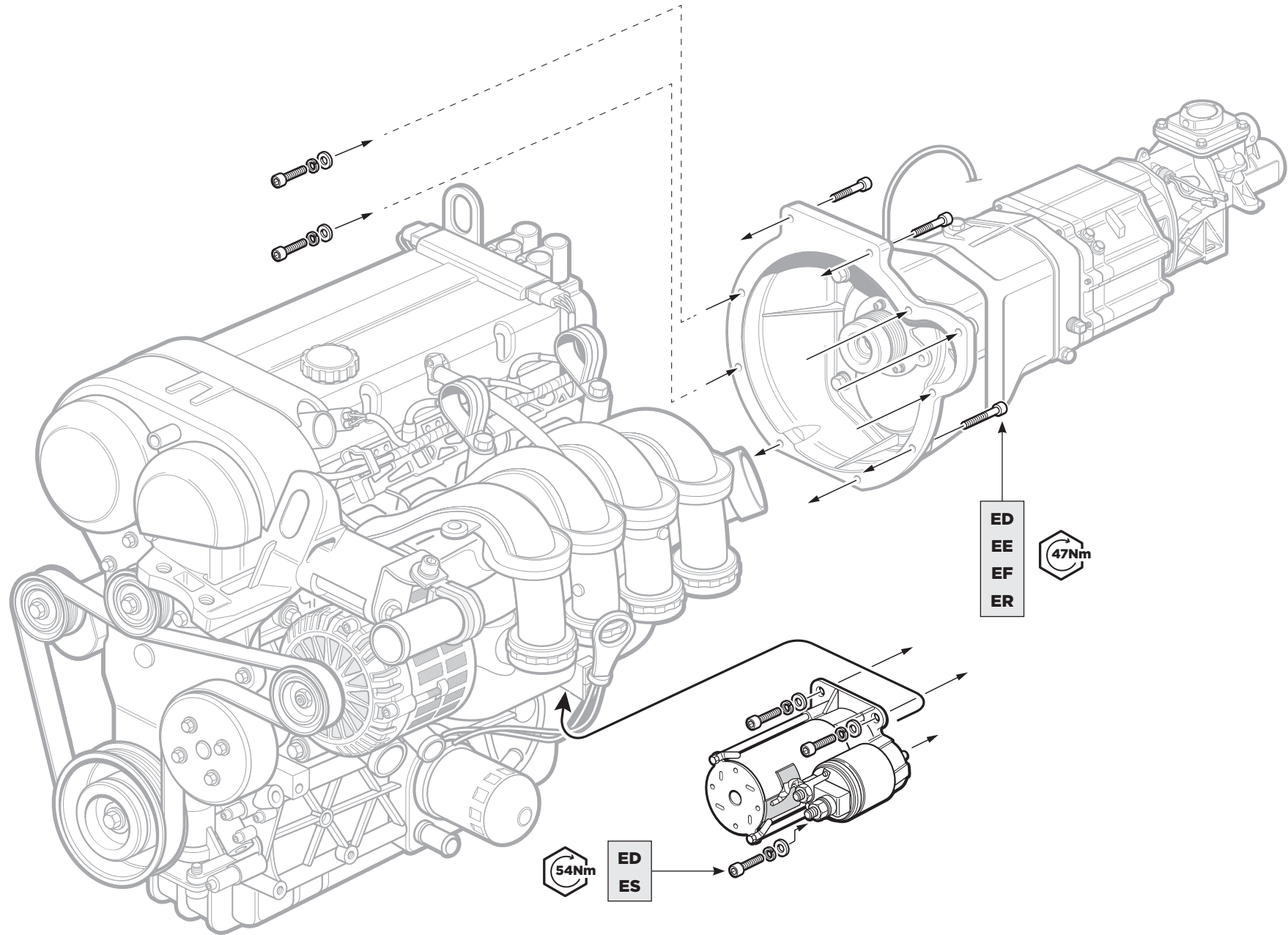
x3

x3

Pack E		CATERHAM		66	
		PACK NUMBER		3E21105F	
SIGMA GEARBOX 5 SPEED					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	1	Clutch Slave	
13	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	2	AV Mount	
14	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	4	Gearbox	
15	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	1	Clutch Slave	
16	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	3	AV Mount	
17	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	4	Gearbox	
18	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	10	Clutch Slave	
19	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	3	Clutch Slave	
20	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	3	Engine Mount	
21	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	3	Clutch Slave	
22	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	4	AV Mount	
23	Clutch Bolt M6 x 20 Grade 12.9	3E21125A	2	AV Mount	

x7

AND THEN THE GEARBOX TO THE ENGINE

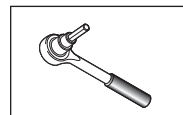


AT LAST, THE ENGINE IS GOING IN

PARTS

- 1 Engine mounts
- 2 Engine rubbers
- 3 Tensioner

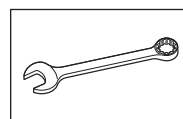
TOOLS



6mm
8mm
3/8"



13mm



13mm
15mm

FIXINGS

Miscellaneous pack

- Bolt 1/2" x 2 1/2" (x1)
- Bolt 1/2" x 1" (x1)
- Bolt M8 x 50 (x1)
- Bolt M8 x 45 (x3)
- Washer M8 (x4)
- Nyloc M8 (x4)

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

The shorter 1/2" bolt fits the nearside of the chassis.

Dan P

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

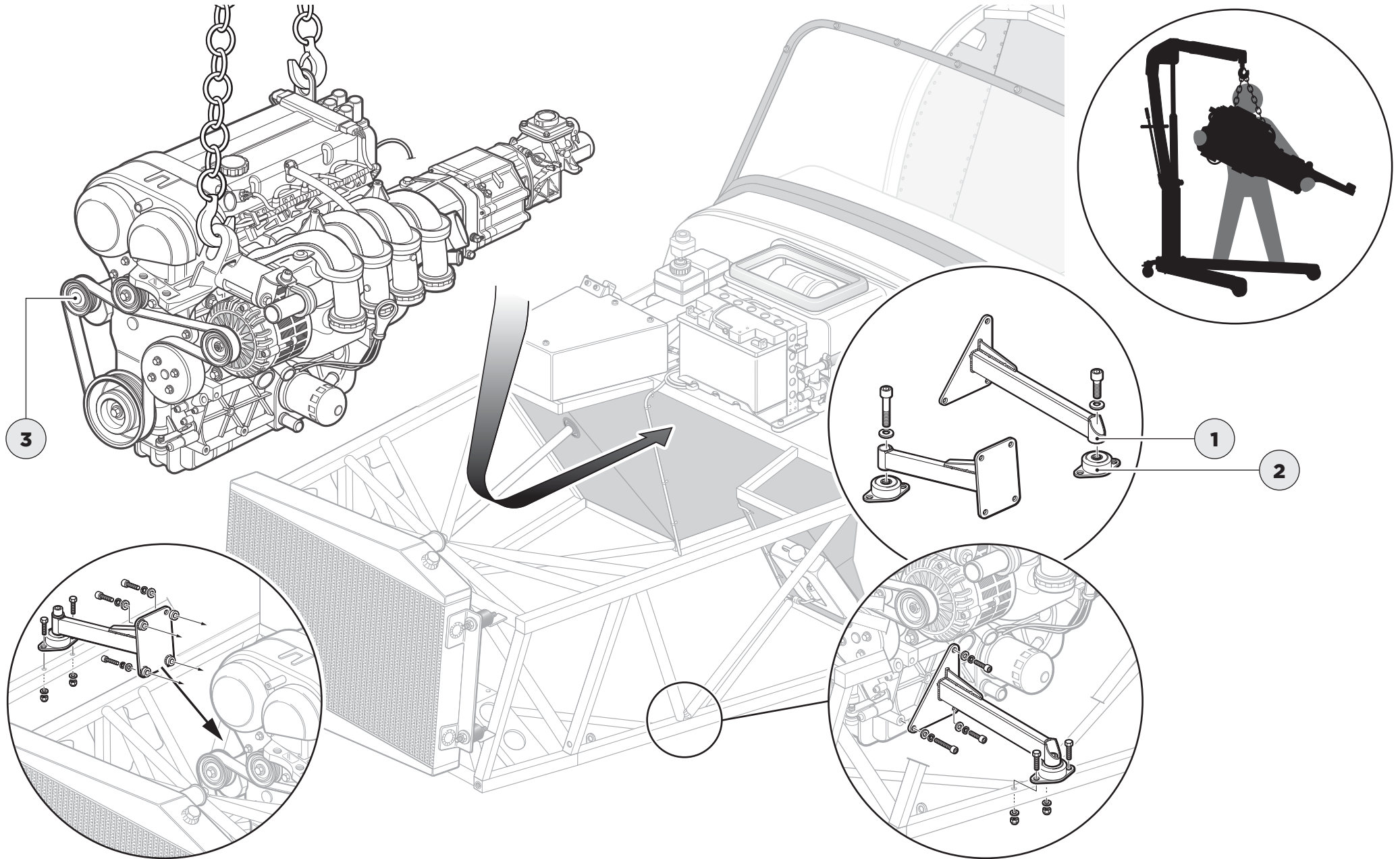
It will fit – keep at it!

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

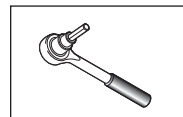
PARTS

TOOLS

5 Speed



13mm
22mm

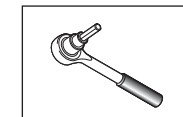


6mm

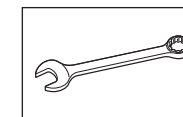
6 Speed



13mm
19mm



6mm



13mm

FIXINGS

TIPS

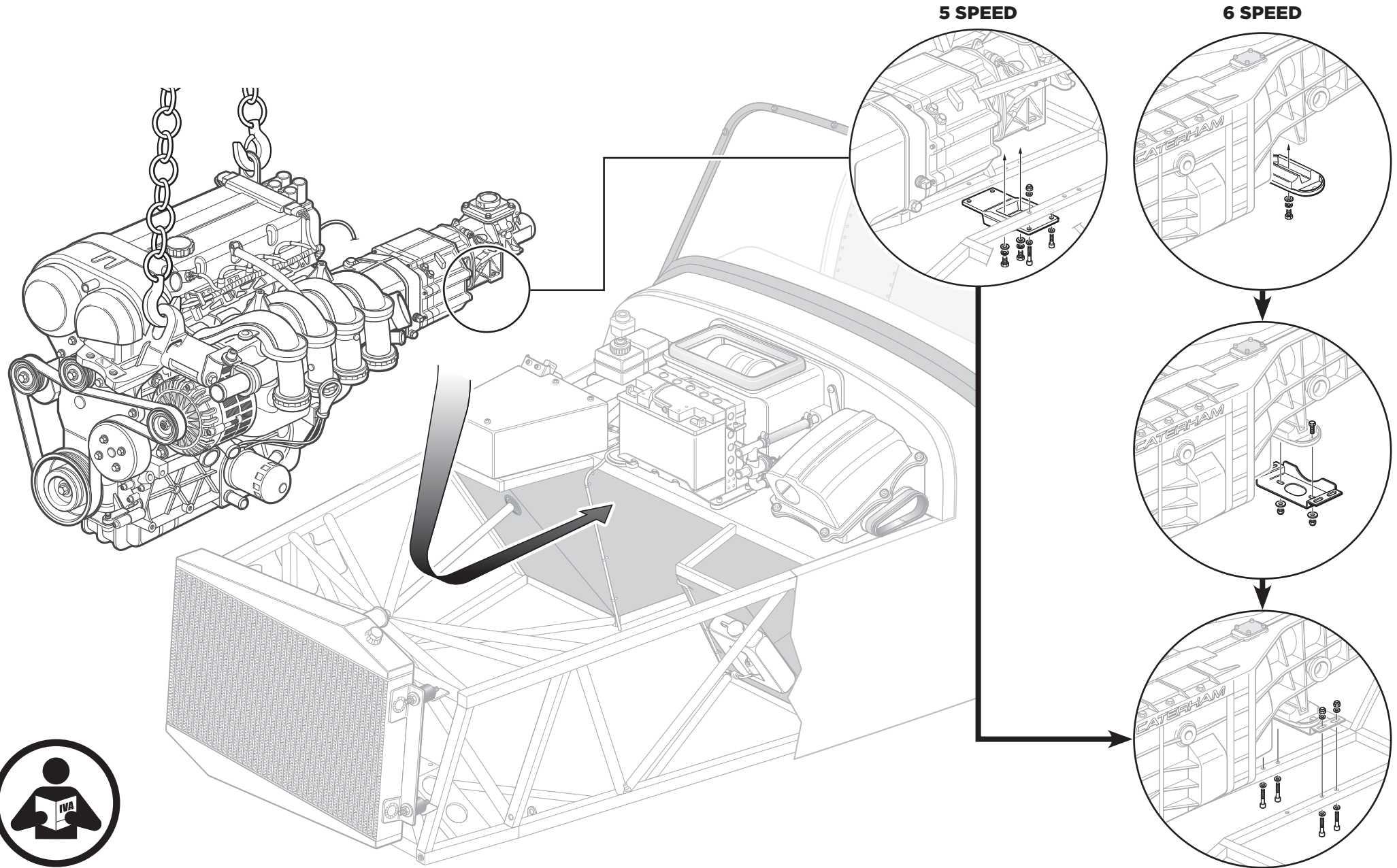
Once the engine is in, the wiring can be connected to the car's loom. It should be self explanatory.

Chris B

See IVA guide – how to secure a loom.

Grant P

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



Ford 1.6L Engine = 3.8 Litres (Pre-Filled)

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.

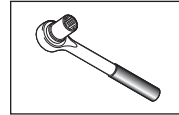
6 Speed Gearbox = Fill to level of filling point on the side of gearbox

START PLUMBING

PARTS

- 1 Lower radiator hose

TOOLS



7mm

FIXINGS

Pack D		CATERHAM		44	
PACK NUMBER		SIZES/PTS			
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DN Rail Kit 2.00 2.00 x 2.00	888440	1	Expansion tank bracket to chassis	
2	DN Expansion Tank 1.00 1.00 x 1.00	887142/24	1	Expansion tank to bracket	
3	DN Expansion Tank 2.00 2.00 x 2.00	888420	4	SM radiator bracket	
4	DN Rail Kit 2.00 2.00 x 2.00	887102/4	4	Fan brackets to fan	
5	DN Expansion Tank 1.00 1.00 x 1.00	888440/10	4	Fan to radiator mounting - 20 (top)	
6	DN Expansion Tank 1.00 1.00 x 1.00	888440/9	8	4x Fan to radiator and 2x Expansion tank bracket	
7	DN Plain Nut M8	888776	8	Radiator bobbin	
8	DN Plain Nut M8	887114	1	Expansion tank bracket	
9	DN Plain Washer 16 16 x 16 x 2.00	888416	13	13 x 16 x 16 bracket 4 x 16 Fan Brackets 1 x Expansion tank bracket	
10	DN Plain Washer 16 16 x 16 x 2.00	888416/10	4	Radiator bobbin back	
11	DN Plain Washer 16 16 x 16 x 2.00	888416/12	4	Radiator bobbin front	

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

Pack D		CATERHAM		44	
PACK NUMBER		SIZES/PTS			
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DN Plain Washer 16 16 x 16 x 2.00	888416/10/12	1	Expansion tank bracket	
13	DN Spring Washer 16 16 x 16 x 2.00	888416/12	8	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hose Clip 20 20 x 20	50725-40	6	2 x 16 shape hose to under rail 2 x 20 radiator hose 2 x 20 bottom radiator hose	
15	DN Hose Clip 20 20 x 20	50723-30	2	1 x Engine outlet to top 1 frame 1 x Engine outlet to bottom frame	
16	DN Hose Clip 16 16 x 16	50716-25	18	6 x Radiator bobbin 6 x Expansion tank 6 x Fan Brackets	
17	DN Hose Clip 16 16 x 16	50716-16	6	Expansion tank small 1 piece	
18	DN Plain - Black 16 x 16 x 2.00	88716-01/10	12	Cowling cap	

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

x2

TIPS

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

Grant P

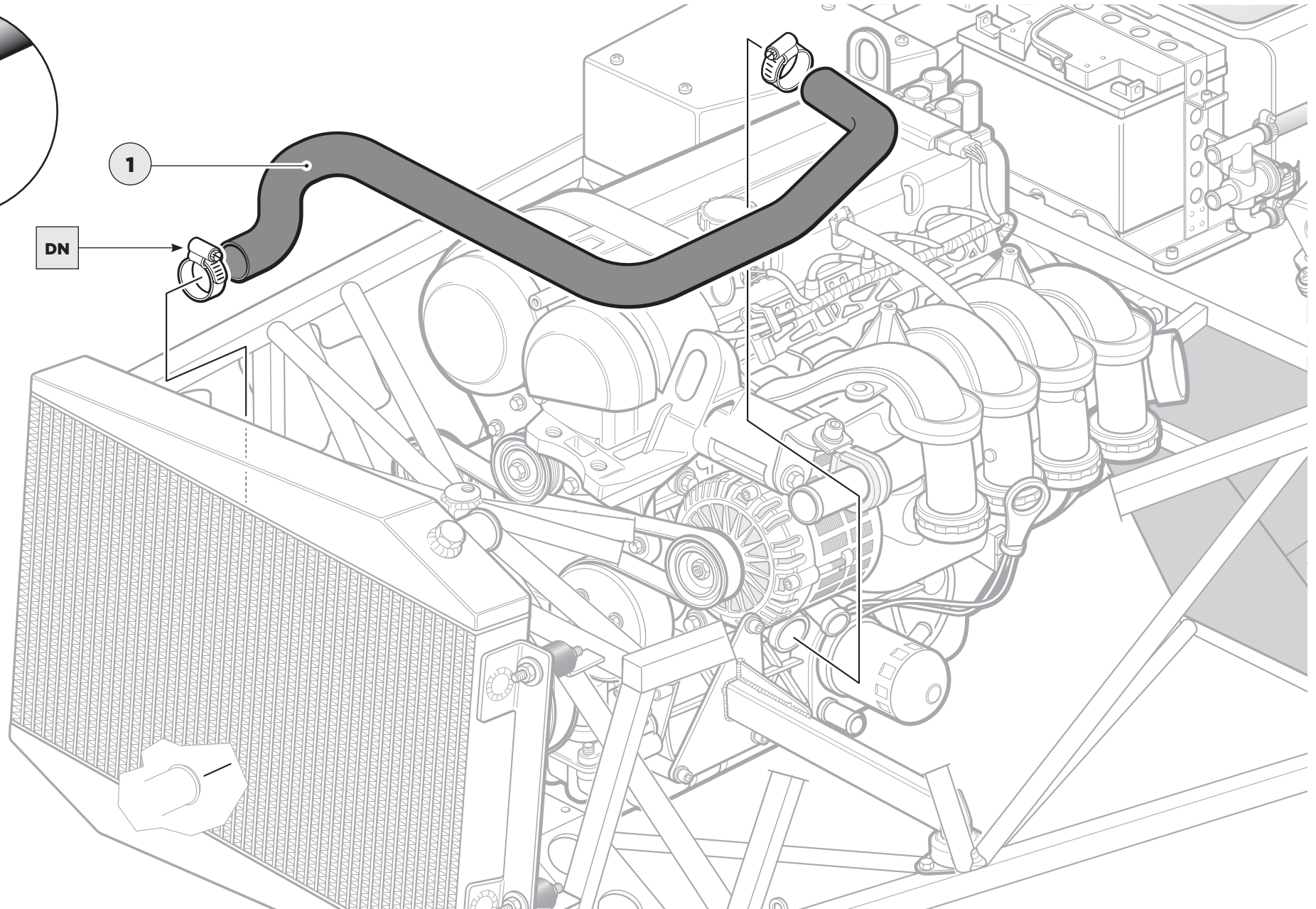
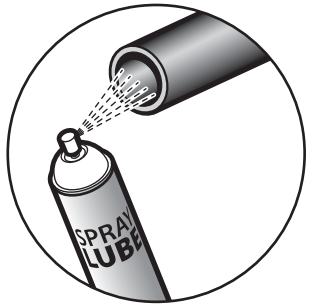
Fit the hose to the larger outlet on the engine.

Mick F

Support hose by cable tying to chassis rails – make sure they are clear of the steering rack.

Lee A

START PLUMBING

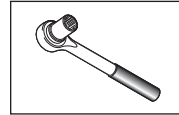
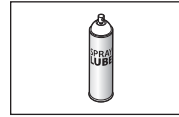


AND KEEP PLUMBING

PARTS

- 1 Upper radiator hose

TOOLS



7mm

FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DN Rail Kit 2.00 Rear 2.0	888440	1	Expansion tank bracket to chassis	
2	DB Hoseclip 1.50 3.5"	881442/4	1	Expansion tank to bracket	
3	DC Radiator 881020 Rear 2.0	888420	4	SM radiator bracket	
4	DD Rail Kit 2.0 18mm Square section	881102/4	4	Fan brackets to fan	
5	DE Radiator 881020 Fan 2.0	888421/2	4	Fan to radiator covering 2.0 (top)	
6	DF Fan Nut M8	880795	8	4x Fan to radiator 4x 2.0 radiator bracket	
7	DG Fan Nut M8	880795	8	Radiator bobbin	
8	DH Hose Nut 1/2"	881114	1	Expansion tank bracket	
9	DI Fan Washer 18 Hex 2.0	881114	13	13 x 2.0 Fan bracket 1 x Expansion tank bracket	
10	DJ Fan Washer 18 Hex 2.0	881115	4	Radiator bobbin back	
11	DK Fan Washer 18 Hex 2.0	881115/2	4	Radiator bobbin front	

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

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Fan Washer 18 Hex 2.0	881115/2/2	1	Expansion tank bracket	
13	DM Spring Washer 18 Hex 2.0	880691/2	8	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hose Clip 20 - 40mm	50725-40	6	2 x 18 shape hose to water rail 2 x Fan radiator hose 2 x Bottom radiator hose	
15	DD Hose Clip 21 - 25mm	50723-20	2	1 x Engine outlet to top 1.5mm 1 x Engine outlet to middle 1.5mm	
16	DE Hose Clip 17 - 20mm	50719-20	18	6 Radiator bobbin 6 Expansion tank 6 Fan 2.0 6 Fan 2.0	
17	DD Hose Clip 8 - 10mm	50719-16	6	Expansion tank small 1/2 piece	
18	DR Bolt - Black 1/2" x 1.5"	1019-01015	12	Cowling cap	

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

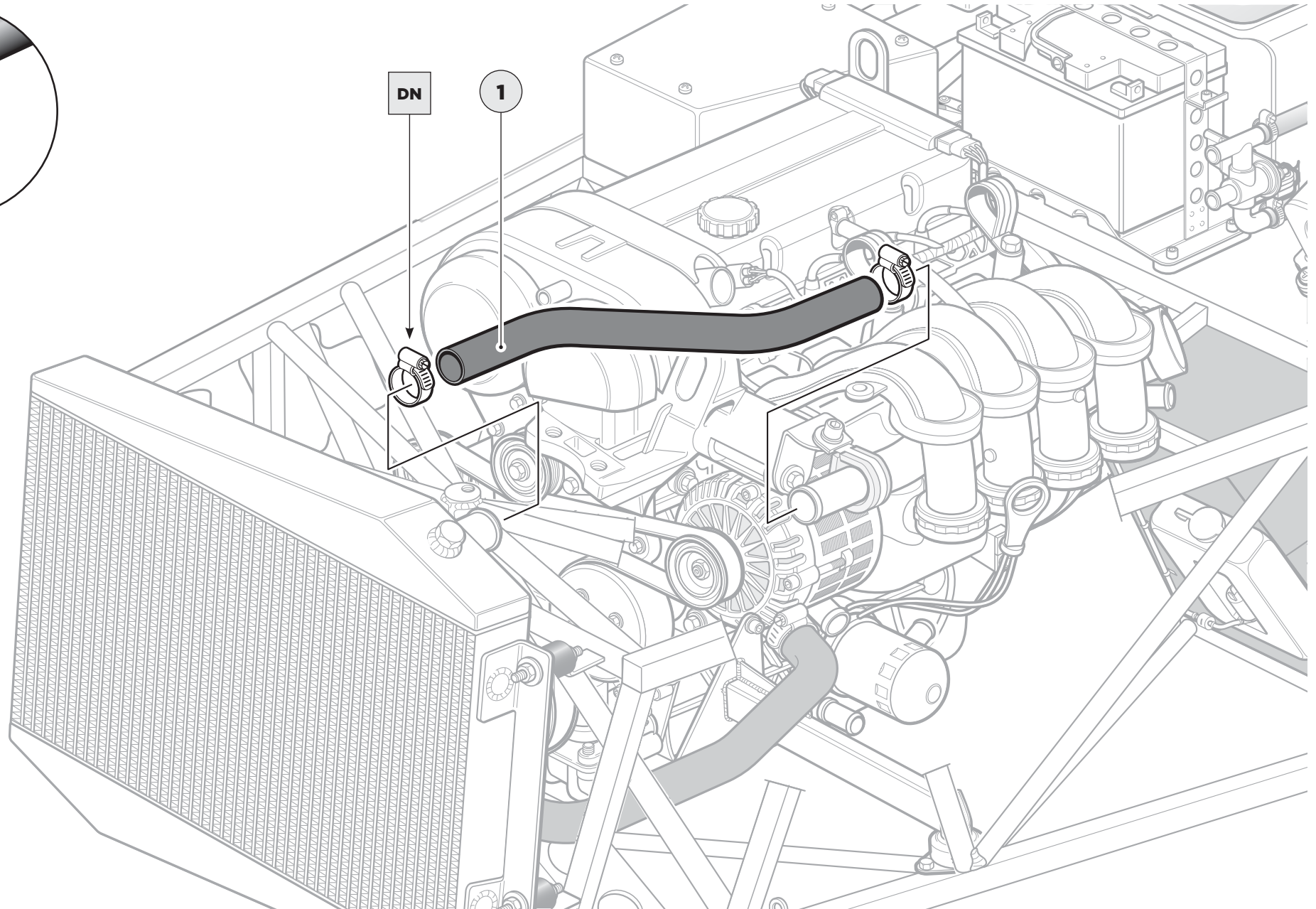
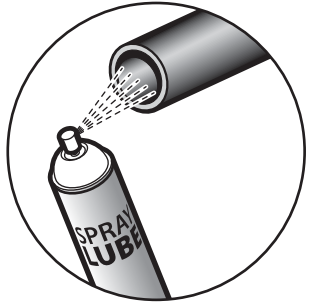
x2

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



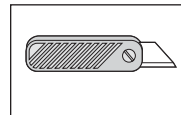
Have you applied for your IVA yet?

A BIT OF SUB-ASSEMBLY - SOME HOSES NEED MODIFYING

PARTS

- 1 Silicone hoses

TOOLS



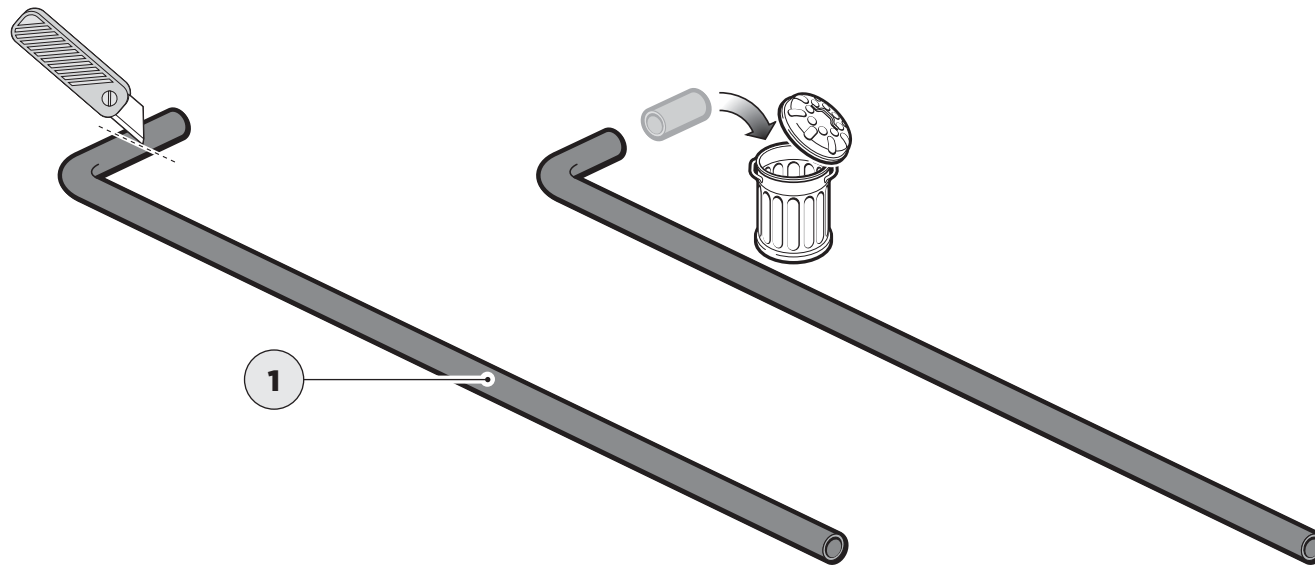
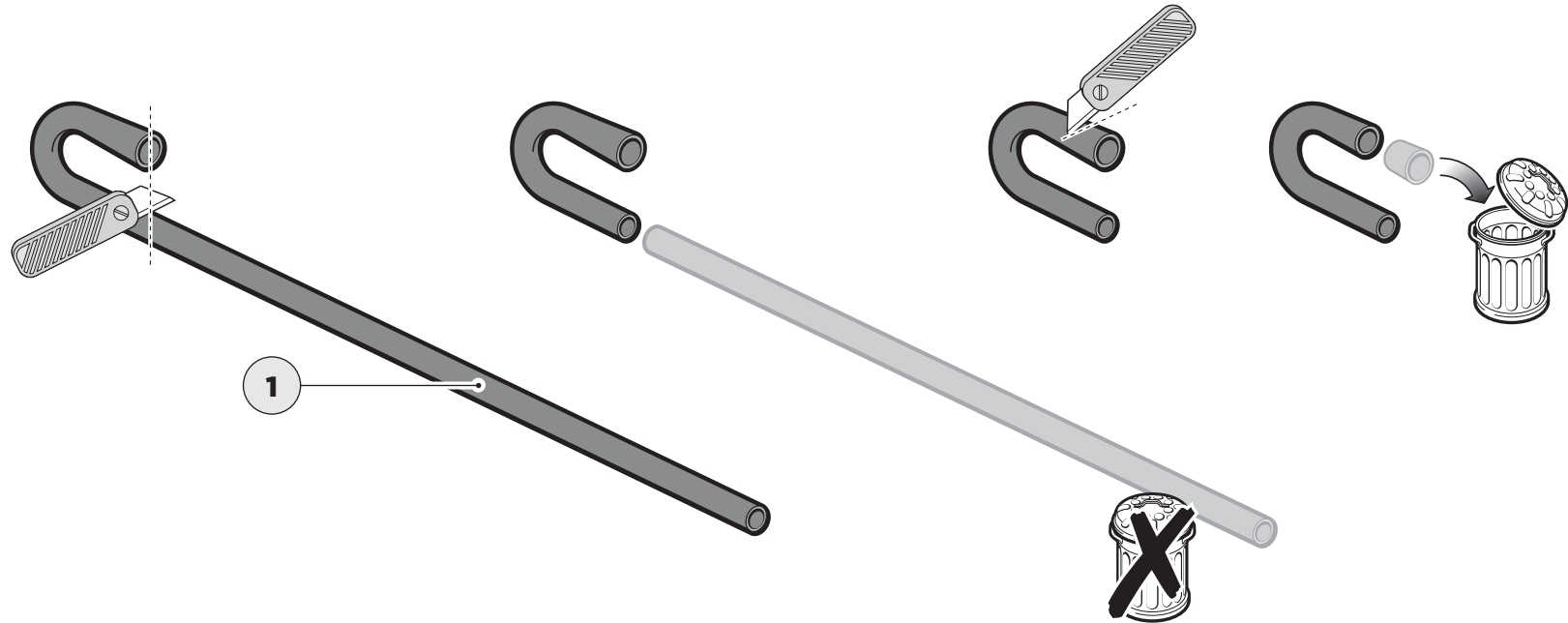
FIXINGS

TIPS

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

Rich T

A BIT OF SUB-ASSEMBLY - SOME HOSES NEED MODIFYING

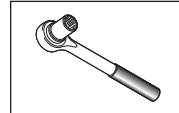
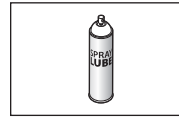


SUB-ASSEMBLY - TEMPERATURE SENSOR

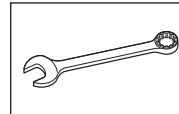
PARTS

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

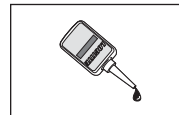
TOOLS



7mm
8mm



13mm



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Bolt M8 x 20 Hex Hd	888440	1	Expansion tank bracket to chassis	
2	DB Bolt M8 x 16 Hex Hd	887142/4	1	Expansion tank to bracket	
3	DC Submarine 80/20 Hex Hd	888420	4	SM radiator bracket	
4	DD Bolt M8 x 16 with Square neck	887107/4	4	Fan brackets to fan	
5	DE Submarine 80/20 Hex Hd	888421/2	4	Fan to radiator mounting - 20 (1/2)	
6	DF Plain Nut M8	88877/4	8	4x Fan to radiator 4x DV radiator bracket	
7	DG Plain Nut M8	88877/4	8	Radiator bobbin	
8	DH Bolt M8 x 14 Hex Hd	88711/4	1	Expansion tank bracket	
9	DI Plain Washer 16 Hex Hd	88811/4	13	13 x DV Fan bracket 1 x Expansion tank bracket	
10	DJ Plain Washer 16 Hex Hd	88811/2	4	Radiator bobbin back	
11	DK Plain Washer 16 Hex Hd	88811/2/2	4	Radiator bobbin front	

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

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Plain Washer 16 Hex Hd	88811/2/2/2	1	Expansion tank bracket	
13	DM Spring Washer 16 Hex Hd	88811/2/2	8	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hose Clip 20 Hex Hd	88720/40	6	2 x 4 x where hoses connect 2 x 4 x radiator hose 2 x Radiator return hose	
15	DO Hose Clip 20 Hex Hd	88720/30	2	1 x Engine outlet to top 1 x Engine outlet to expansion tank	
16	DP Hose Clip 17 Hex Hd	88716/25	18	6 x Radiator bracket 1 x Radiator tank 1 x Dip Pump 1 x Radiator	
17	DI Hose Clip 16 Hex Hd	88716/16	6	Expansion tank small 1 piece	
18	DR Bolt - Black 12 x 16	8876/010/12	12	Cooling fan	

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

x2

TIPS

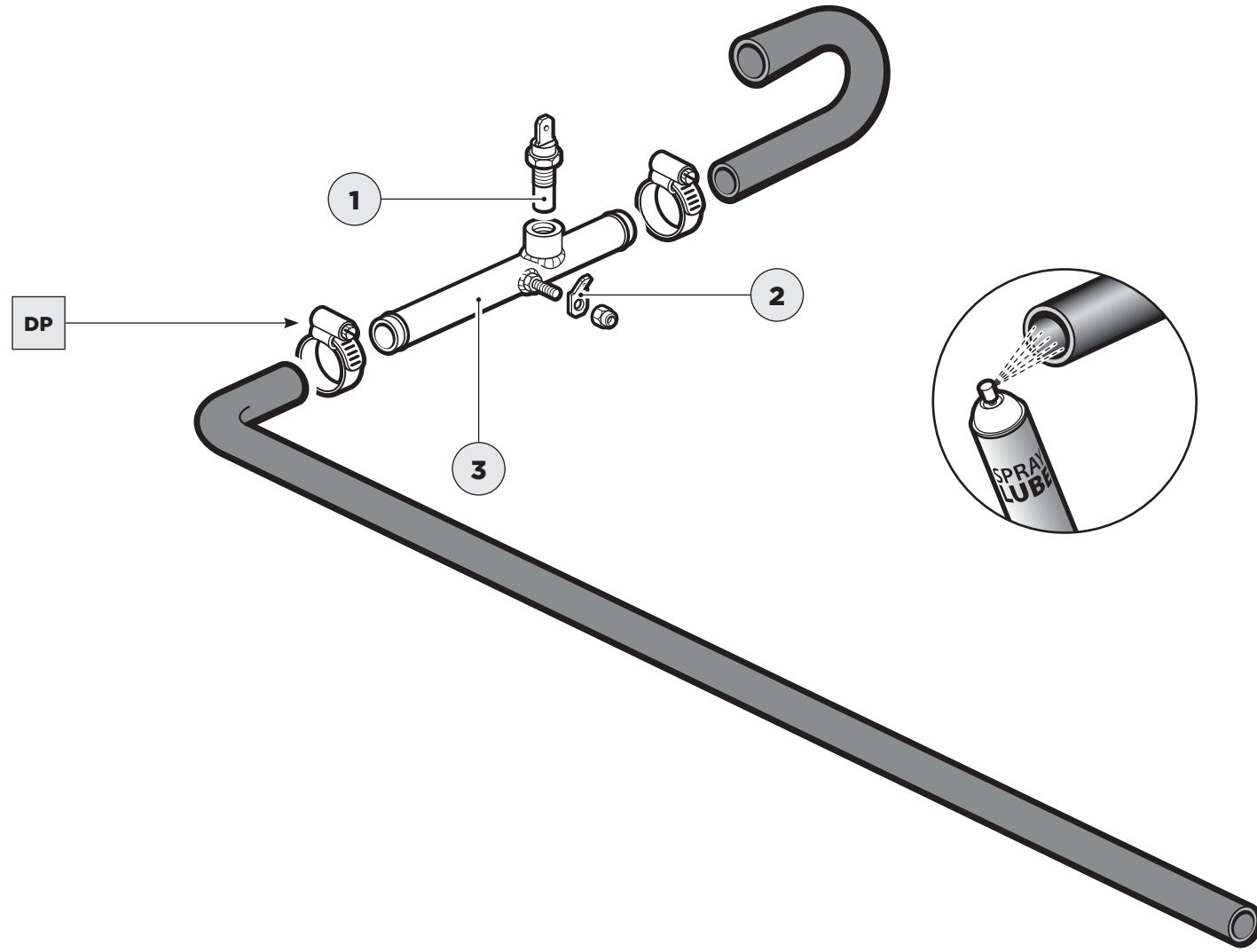
Use a drop of Loctite on the sender.

Tiago O

Be careful not to over-tighten the sender.

Jamie A

SUB-ASSEMBLY - TEMPERATURE SENSOR

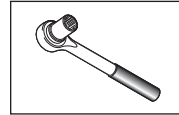
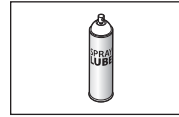


BACK TO THE PLUMBING

PARTS

1 Submarine assembly

TOOLS



7mm

FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Rad Mat 2.25 (Panel A)	888440	1	Expansion tank bracket to chassis	
2	DB Radiator 1.50 (3.50")	88714424	1	Expansion tank to bracket	
3	DC Radiator 887020 (Panel A)	888420	4	SM radiator bracket	
4	DD Rad Mat 2.18 with Square bracket	88710204	4	Fan brackets to fan	
5	DE Radiator 887010 (Panel A)	88844110	4	Fan to radiator mounting - 20 (10x)	
6	DF Radiator Mat 88	888170	8	4x Fan to radiator 4x 20 radiator bracket	
7	DG Plain Nut M8	888770	8	Radiator bobbin	
8	DH Radiator Mat 147	8871014	1	Expansion tank bracket	
9	DI Plain Washer 10 (Panel A)	8881114	13	18 x 10V rad bracket 4 x 20 Fan Brackets 1 x Expansion tank bracket	
10	DJ Plain Washer 10 (Panel A)	8881114	4	Radiator bobbin back	
11	DK Plain Washer 10 (20) (Panel A)	888111020	4	Radiator bobbin front	

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

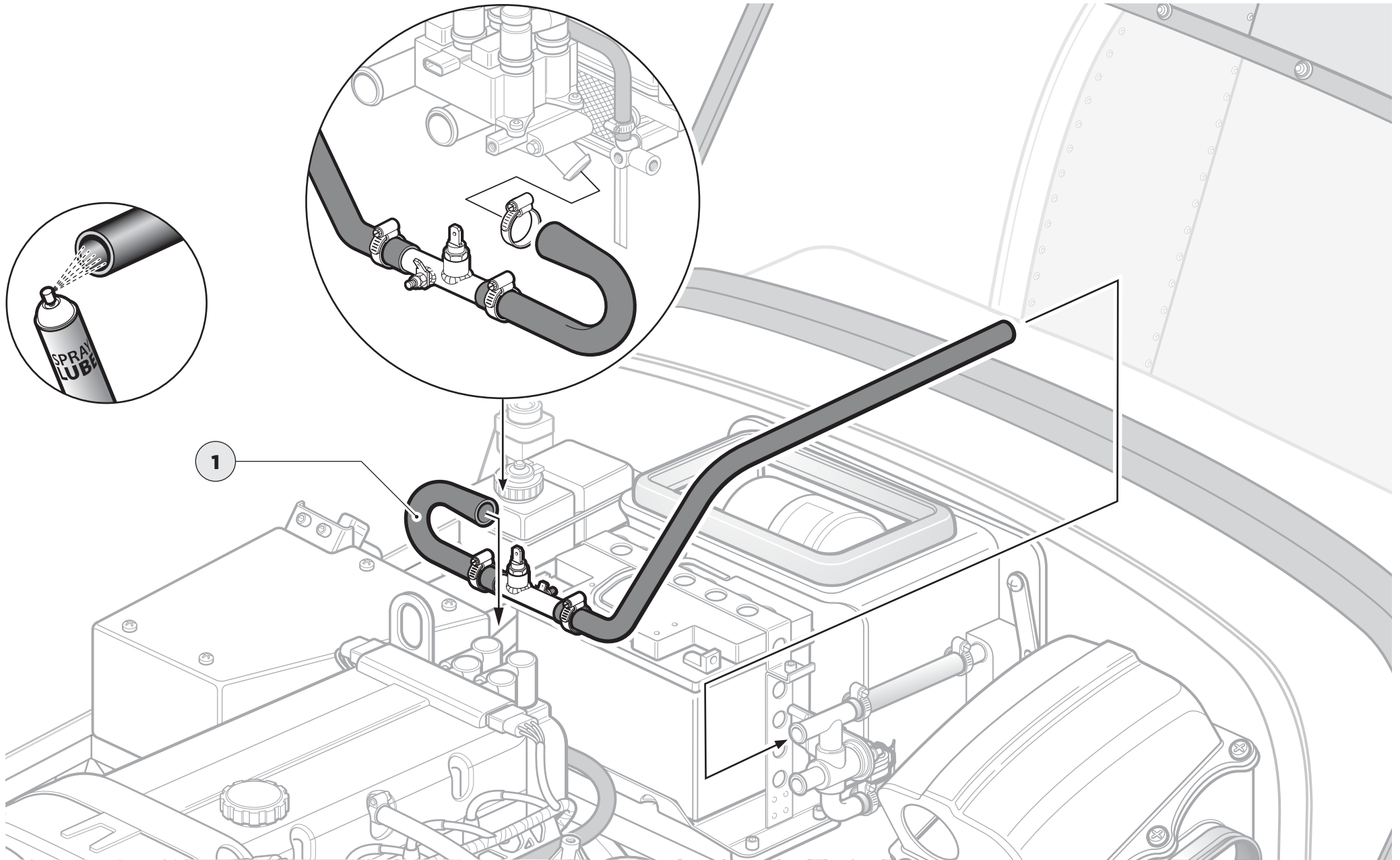
TIPS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	EL Plain Washer 10 (20) (Panel A)	888111020	1	Expansion tank bracket	
13	EM Spring Washer 10 (Panel A)	88810110	8	8 x Radiator bobbin 1 x Expansion tank	
14	EN Hose Clip 10 (Panel A)	8872040	6	2 x 11 where hoses connect 2 x 10 radiator hose 2 x Radiator bobbin hose	
15	EO Hose Clip 10 (Panel A)	8872030	2	1 x Engine outlet to top 1 Engine 1 x Engine outlet to lower (10x)	
16	EP Hose Clip 10 (20) (Panel A)	8871620	18	6 x Radiator bracket 16 x 10 Fan 1 x Expansion tank 1 x Dip Switch 1 x Dip Switch	
17	EQ Hose Clip 10 (Panel A)	8871610	6	Expansion tank small 1 piece	
18	ER Plain - Black 10 (20) (Panel A)	887101010	12	Coupling cap	

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

x1

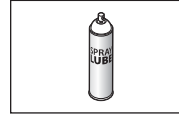
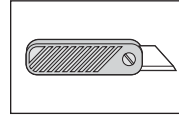
BACK TO THE PLUMBING



MORE PLUMBING

PARTS

TOOLS



FIXINGS

TIPS

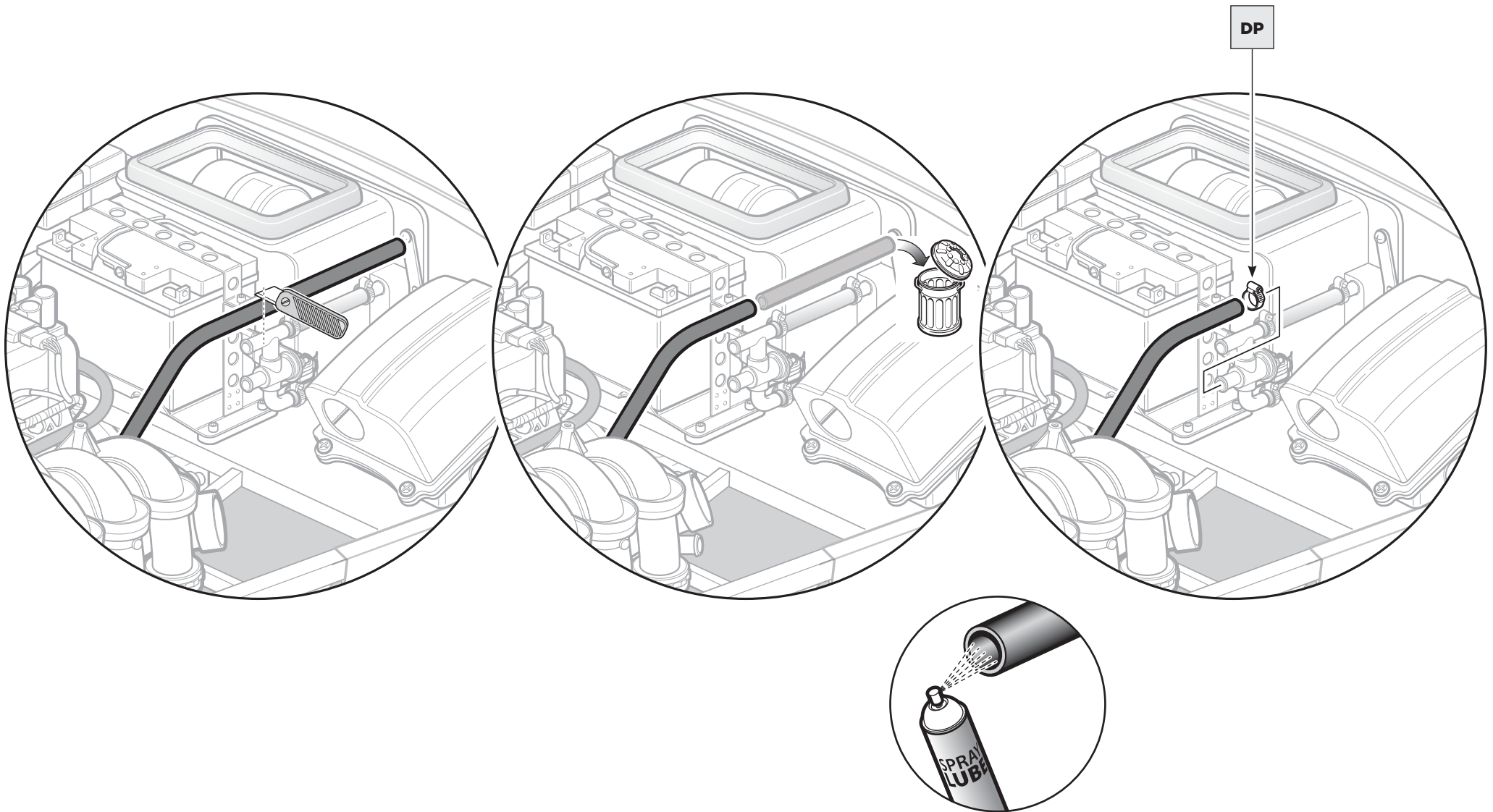
Pack D		CATERHAM		44	
		PACK NUMBER		3002478	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Bolt M8 x 20 Hex Hd	888440	1	Expansion tank bracket to chassis	
2	DB Washer 1.6 x 5.4	88714424	1	Expansion tank to bracket	
3	DC Washer M8x20 Hex Hd	888420	4	SM radiator bracket	
4	DD Bolt M8 x 18 with Square neck	8821024	4	Fan brackets to fan	
5	DE Washer M8x18 Hex Hd	8884410	4	Fan to radiator mounting - 20 100g	
6	DF Hex Nut M8	888176	8	44 Fan to radiator and SM radiator bracket	
7	DG Hex Nut M8	888176	8	Radiator bobbin	
8	DH Bolt M4 x 14	887114	1	Expansion tank bracket	
9	DI Hex Washer 16 Hex Hd	888114	13	18 x 50V rad bracket 4 x 4 Fan Brackets 1 x Expansion tank bracket	
10	DJ Hex Washer 16 Hex Hd	888114	4	Radiator bobbin back	
11	DK Hex Washer 16 Hex Hd	888114	4	Radiator bobbin front	

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

Pack D		CATERHAM		44	
		PACK NUMBER		3002478	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Plate Washer M4 x 14 Hex Hd	888114	1	Expansion tank bracket	
13	DM Spring Washer 16 Hex Hd	888114	8	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hose Clip 16 Hex	8872040	6	2 x 44 where hoses connect to 2 x 44 radiator hose 2 x Radiator bobbin	
15	DO Hose Clip 16 Hex	8872038	2	1 x Engine outlet to top 1 engine 1 x Engine outlet to lower engine	
16	DP Hose Clip 17 Hex	8871625	18	6 x Radiator bobbin 16 x 16 Fan 1 x Expansion tank 4 x Dip Sump 4 x Radiator	
17	DD Hose Clip 16 Hex	8872038	5	Expansion tank small 7 piece	
18	DR Bolt - Black 12 x 18 Hex Hd	88761010	12	Crossing flap	

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

x1

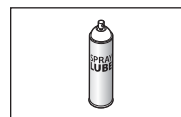


STILL MORE PLUMBING

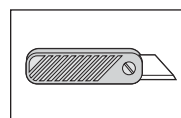
PARTS

1 U shape hose

TOOLS



7mm



FIXINGS

TIPS

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DN Rail Kit 2.00 1.00 x 2.00	888440	1	Expansion tank bracket to chassis	
2	DB Radiator 1.00 1.00 x 1.00	887142/1	1	Expansion tank to bracket	
3	DC Radiator 887020 1.00 x 1.00	888420	4	SM radiator bracket	
4	DD Rail Kit 2.00 with Square bracket	887102/1	4	Fan brackets to fan	
5	DE Radiator 887010 1.00 x 1.00	888410/1	4	Fan to radiator mounting - 20 (top)	
6	DF Fan Kit 88	888170	8	4x Fan to radiator kit 88 radiator bracket	
7	DG Fan Kit 88	888170	8	Radiator bobbin	
8	DH Radiator 1.00 1.00 x 1.00	887110	1	Expansion tank bracket	
9	DI Fan Washer 1.00 1.00 x 1.00	888110	13	13 x 10V fan bracket 13 x 10V fan bracket 13 x 10V fan bracket	
10	DJ Fan Washer 1.00 1.00 x 1.00	888110	4	Radiator bobbin back	
11	DK Fan Washer 1.00 1.00 x 1.00	888110/1	4	Radiator bobbin front	

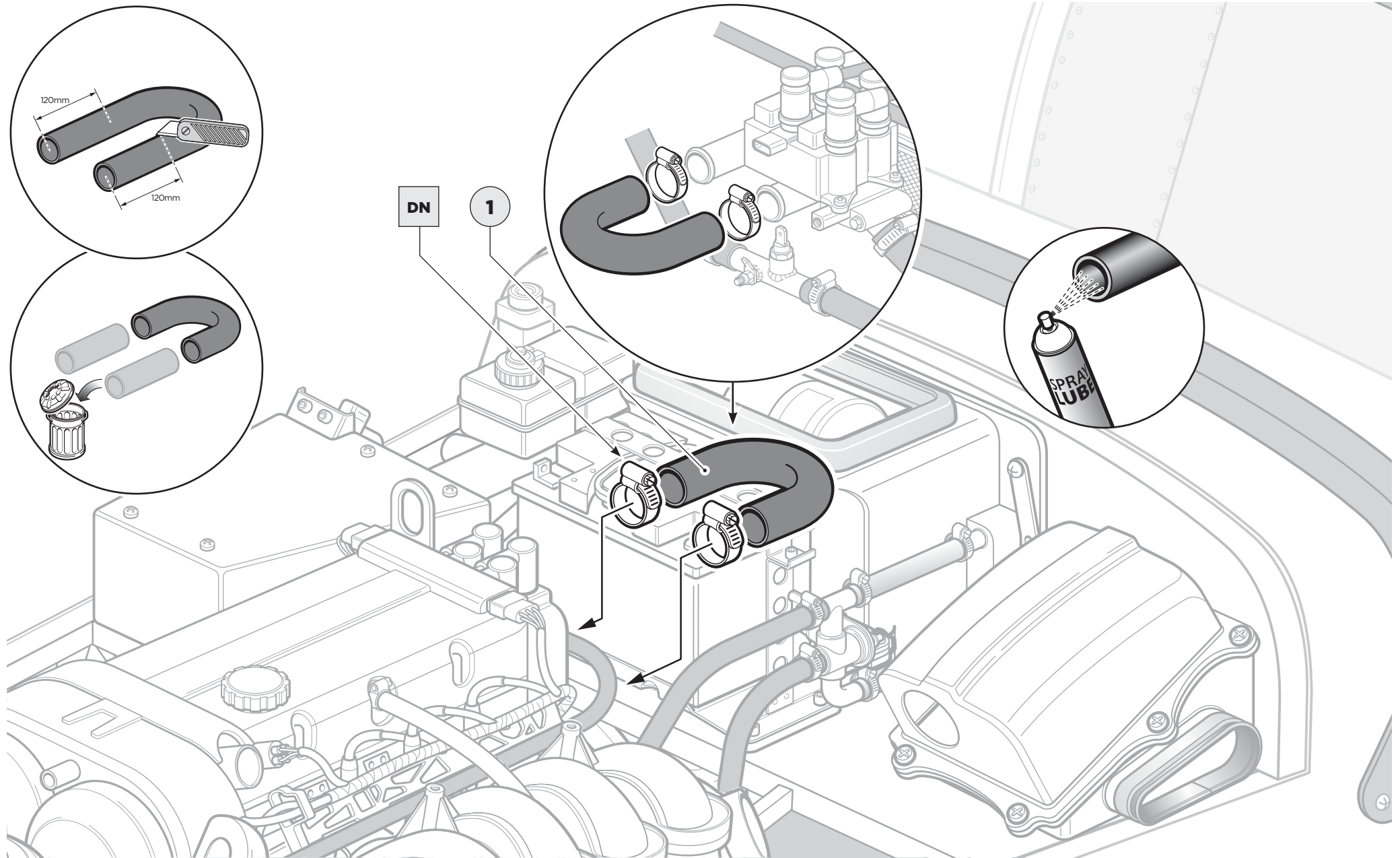
Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

Pack D		CATERHAM		44	
		PACK NUMBER		SIZES/TS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	EL Fan Washer 1.00 1.00 x 1.00	888110/1	1	Expansion tank bracket	
13	EM Spring Washer 1.00 1.00 x 1.00	888110/1	8	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hose Clip 20 20 x 20	80725-40	6	2 x U shape hose to water rail 2 x Fan radiator hose 2 x Bottom radiator hose	
15	DD Hose Clip 20 20 x 20	80723-30	2	1 x Engine outlet to top 1 frame 1 x Engine outlet to bottom frame	
16	DP Hose Clip 17 17 x 17	80710-20	16	16 x Radiator bobbin 16 x Radiator bobbin 16 x Radiator bobbin	
17	DD Hose Clip 16 16 x 16	80709-16	6	Expansion tank small 1 piece	
18	DR Head - Black 1.00 1.00 x 1.00	1070-01010	12	Coupling cap	

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

x2

STILL MORE PLUMBING

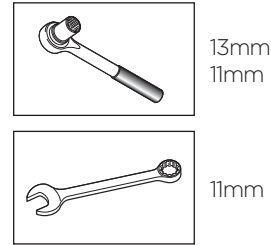


A BREAK FROM PLUMBING TO FIT THE EXPANSION BOTTLE

PARTS

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

TOOLS



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SIGMATS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Bolt M6 x 20 Coarse 8.8	BMS030	1	Expansion tank bracket to chassis	
2	DB Self-tape 1/4" x 3/4"	SF14234	1	Expansion tank to bracket	
3	DC Self-tape M6x20 Coarse 8.8	BMS020	4	5M radiator bracket	
4	DD Bolt M6 x 16 with square neck	MS10724	4	Fan brackets to fan	
5	DE Self-tape M6x20 Fine 8.8	SFMS010	4	Fan to radiator cooling - 20 100g	
6	DF Self-tape M6x8	MS070	8	4x Fan to radiator 4x 5M radiator bracket	
7	DG Plain Nut M6	MS070	8	Radiator bobbin	
8	DH Metric Nut 1/4"	MFV114	1	Expansion tank bracket	
9	DI Plain Washer 1/4" Heavy duty	WPH114	13	8 x 5M rad bracket 4 x Fan fixings 1 x Expansion tank bracket	
10	DJ Plain Washer 1/4" Heavy duty	WPH114	4	Radiator bobbin back	
11	DK Plain Washer 1/4" Heavy duty	SFMS110	4	Radiator bobbin front	

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

x1

x1

x1

x1

Pack D		CATERHAM		44	
		PACK NUMBER		SIGMATS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Plain Washer 1/4" x 3/4" Heavy duty	WPH14234	1	Expansion tank bracket	
13	DM Spring Washer 5/16" Heavy duty	WSP5117	9	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hex Cap 1/4" 20mm	SC170-40	6	2 x 4 Engine bracket 2 x 4 Radiator cap 2 x Radiator bobbin	
15	DO Hex Cap 1/4" 20mm	SC170-30	2	1 x Engine outlet to top 1 10mm 1 x Engine outlet to bottom 10mm	
16	DP Hex Cap 1/4" 20mm	SC170-20	18	6 Radiator bobbin 6 Radiator cap 6 20mm 10mm 6 20mm 10mm	
17	DO Hex Cap 1/4" 20mm	SC170-30	6	Expansion tank small 7 piece	
18	DR Plain Wash 1/4" x 3/4" Heavy duty	WPH14234	12	Cooling fan	

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

x1

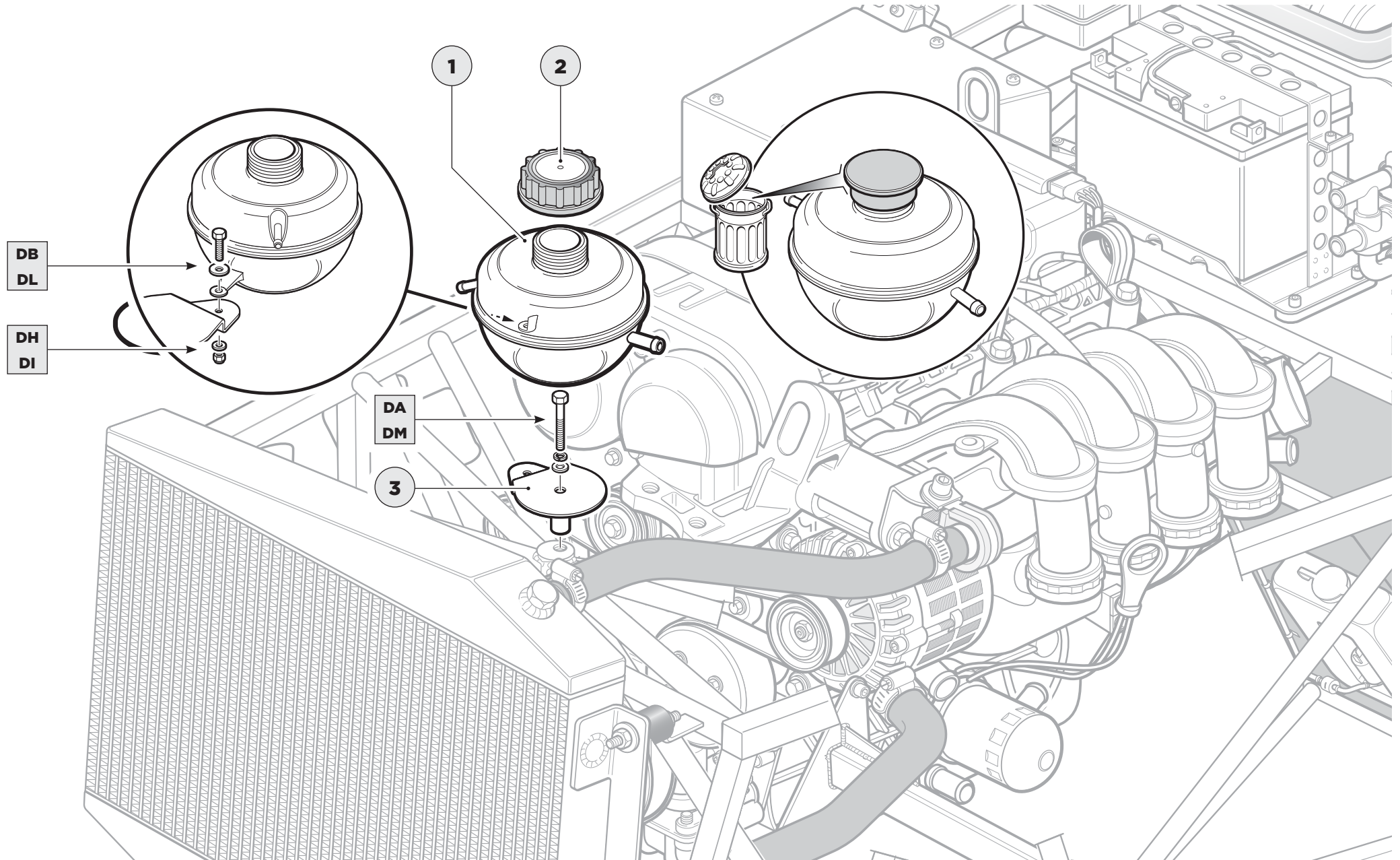
x1

TIPS

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

Grant P

A BREAK FROM PLUMBING TO FIT THE EXPANSION BOTTLE

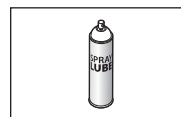


SOME MORE HOSE MODIFICATION

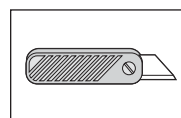
PARTS

1 T-Piece

TOOLS



7mm



FIXINGS

Pack D		CATERHAM		44
		PACK NUMBER		
		SOCKETS		
COOLING SIGMA				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
1	Ball Nut 2.25 Thread 2.8	888440	1	Expansion tank bracket to chassis
2	Ball Nut 1.50 Thread 2.0	88714224	1	Expansion tank to bracket
3	Ball Nut M8x1.25 Thread 1.5	888420	4	SM radiator bracket
4	Ball Nut 2.18 with Square Washer	88710724	4	Fan brackets to fan
5	Ball Nut M8x1.25 Thread 1.5	88842010	4	Fan to radiator mounting - 20 100g
6	Wash Nut M8	888770	8	4x Fan to radiator and 2x radiator bracket
7	Wash Nut M8	888770	8	Radiator bobbin
8	Wash Nut 1.47	88710714	1	Expansion tank bracket
9	Wash Washer 1.50 Thread 2.0	88842014	13	18 x 20V Nut Bracket 4 x 2 Fan Brackets 1 x Expansion tank bracket
10	Wash Washer 1.50 Thread 2.0	88842010	4	Radiator bobbin back
11	Wash Washer 1.50 Thread 2.0	88842010	4	Radiator bobbin front

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

Pack D		CATERHAM		44
		PACK NUMBER		
		SOCKETS		
COOLING SIGMA				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
12	Ball Washer 1.50 Thread 2.0	88842010	1	Expansion tank bracket
13	Spring Washer 1.50 Thread 2.0	88842010	8	8 x Radiator bobbin 1 x Expansion tank
14	Wash Clip 2.0	88710740	6	2 x 18 where hoses connect to fan 2 x 18 radiator hose 2 x 18 when radiator hose
15	Wash Clip 2.0	88710730	2	1 x Engine outlet to top 1 engine 1 x Engine outlet to bottom engine
16	Hose Clip 17.25mm	88716205	18	8 x Water reservoir 16 x 16 Fan 2 x Expansion tank 4 x Dip Sump 4 x Dip Sump
17	Wash Clip 2.0	88710730	6	Expansion tank small 7 piece
18	Wash - Black 1.50 Thread 2.0	88710710	12	Coupling cap

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

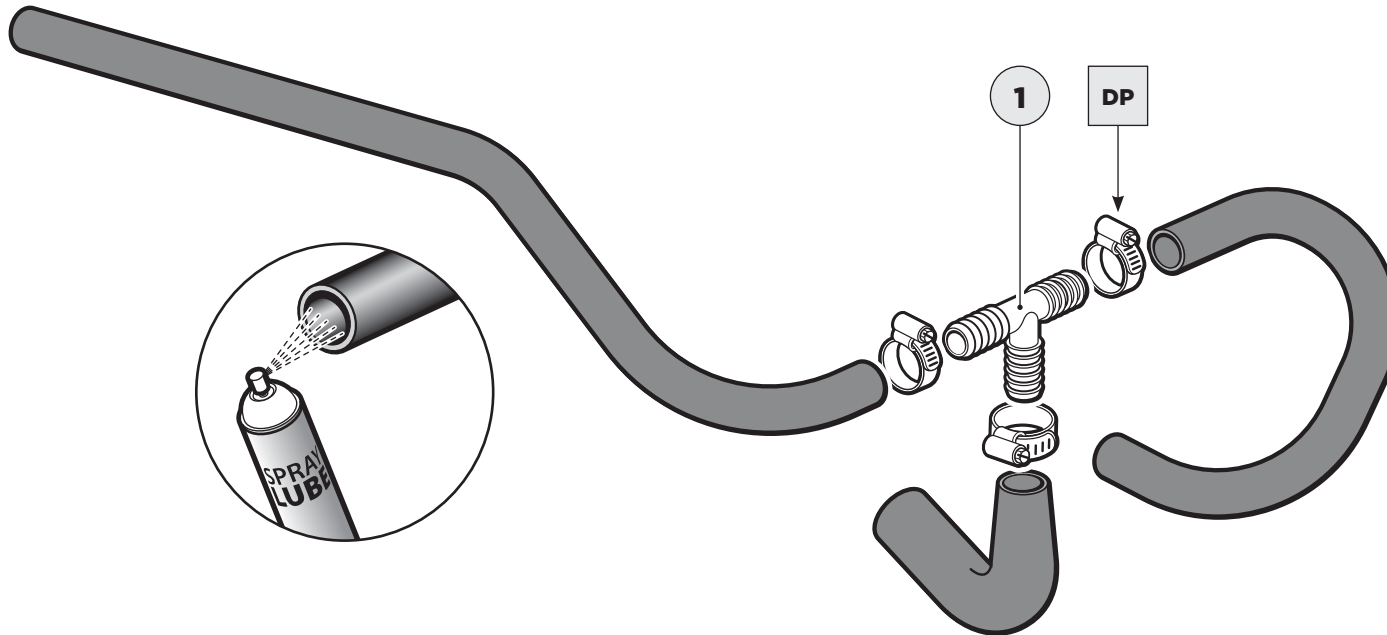
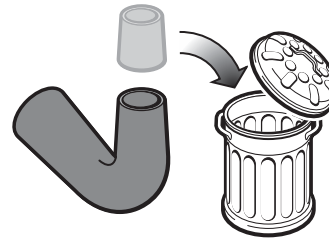
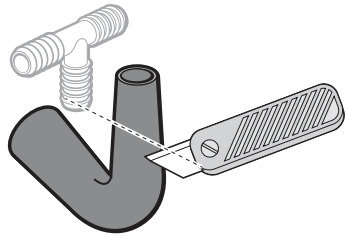
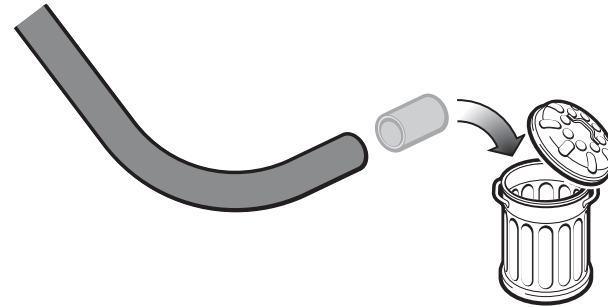
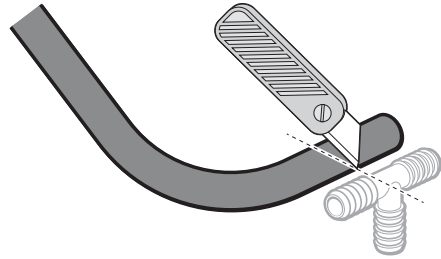
x3

TIPS

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

John S

SOME MORE HOSE MODIFICATION

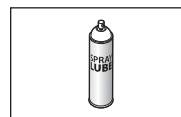


AND BACK TO PLUMBING

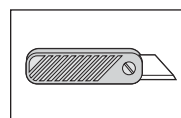
PARTS

1 T-Piece assembly

TOOLS



7mm



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball Nut 2.25 Hex 2.8	888440	1	Expansion tank bracket to chassis	
2	Ball Nut 1.50 Hex 2.0	888440	1	Expansion tank to bracket	
3	Ball Nut 1.50 Hex 2.0	888440	4	SM radiator bracket	
4	Ball Nut 2.00 Hex 2.5	888440	4	Fan brackets to fan	
5	Ball Nut 1.50 Hex 2.0	888440	4	Fan to radiator mounting - 20 100g	
6	Ball Nut 1.50 Hex 2.0	888440	8	Ball Nut to radiator fan 20 radiator bracket	
7	Ball Nut 1.50 Hex 2.0	888440	8	Radiator bobbin	
8	Ball Nut 1.50 Hex 2.0	888440	1	Expansion tank bracket	
9	Ball Nut 1.50 Hex 2.0	888440	13	18 x 50V nut bracket 18 x Fan Brackets 1 x Expansion tank bracket	
10	Ball Nut 1.50 Hex 2.0	888440	4	Radiator bobbin back	
11	Ball Nut 1.50 Hex 2.0	888440	4	Radiator bobbin front	

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

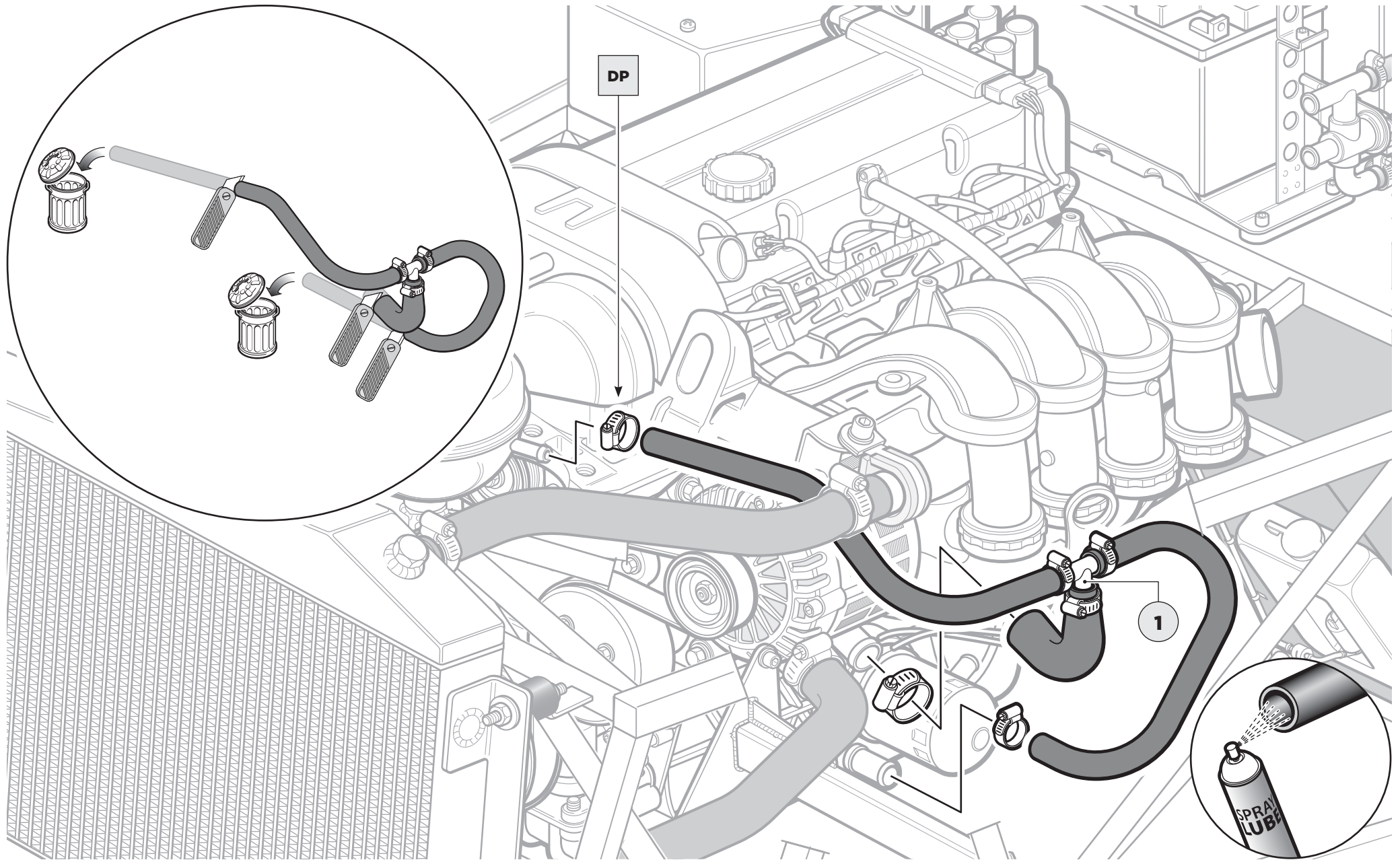
TIPS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Expansion tank bracket	888440	1	Expansion tank bracket	
13	Expansion tank to bracket	888440	1	Expansion tank to bracket	
14	Expansion tank to bracket	888440	1	Expansion tank to bracket	
15	Expansion tank to bracket	888440	1	Expansion tank to bracket	
16	Expansion tank to bracket	888440	1	Expansion tank to bracket	
17	Expansion tank to bracket	888440	1	Expansion tank to bracket	
18	Expansion tank to bracket	888440	1	Expansion tank to bracket	
19	Expansion tank to bracket	888440	1	Expansion tank to bracket	
20	Expansion tank to bracket	888440	1	Expansion tank to bracket	
21	Expansion tank to bracket	888440	1	Expansion tank to bracket	
22	Expansion tank to bracket	888440	1	Expansion tank to bracket	
23	Expansion tank to bracket	888440	1	Expansion tank to bracket	
24	Expansion tank to bracket	888440	1	Expansion tank to bracket	
25	Expansion tank to bracket	888440	1	Expansion tank to bracket	
26	Expansion tank to bracket	888440	1	Expansion tank to bracket	
27	Expansion tank to bracket	888440	1	Expansion tank to bracket	
28	Expansion tank to bracket	888440	1	Expansion tank to bracket	
29	Expansion tank to bracket	888440	1	Expansion tank to bracket	
30	Expansion tank to bracket	888440	1	Expansion tank to bracket	
31	Expansion tank to bracket	888440	1	Expansion tank to bracket	
32	Expansion tank to bracket	888440	1	Expansion tank to bracket	
33	Expansion tank to bracket	888440	1	Expansion tank to bracket	
34	Expansion tank to bracket	888440	1	Expansion tank to bracket	
35	Expansion tank to bracket	888440	1	Expansion tank to bracket	
36	Expansion tank to bracket	888440	1	Expansion tank to bracket	
37	Expansion tank to bracket	888440	1	Expansion tank to bracket	
38	Expansion tank to bracket	888440	1	Expansion tank to bracket	
39	Expansion tank to bracket	888440	1	Expansion tank to bracket	
40	Expansion tank to bracket	888440	1	Expansion tank to bracket	
41	Expansion tank to bracket	888440	1	Expansion tank to bracket	
42	Expansion tank to bracket	888440	1	Expansion tank to bracket	
43	Expansion tank to bracket	888440	1	Expansion tank to bracket	
44	Expansion tank to bracket	888440	1	Expansion tank to bracket	

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

x1

AND BACK TO PLUMBING

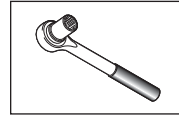
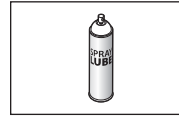


LAST BIT OF PLUMBING

PARTS

1 5/16" Hose

TOOLS



7mm

FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball Mt 2-20 Hex Hd	888440	1	Expansion tank bracket to chassis	
2	Ball Mount 1-1/2 x 3/4"	8871422A	1	Expansion tank to bracket	
3	Ball Mount 1/2-20 Hex Hd	888420	4	SM radiator bracket	
4	Ball Mt 1/2-18 with Square Washer	882102A	4	Fan brackets to fan	
5	Ball Mount 1/2-18 Hex Hd	882102B	4	Fan to radiator bracket - 20 Torq	
6	Ball Mount 1/2-18 Hex Hd	882102C	3	44 Fan to radiator bracket	
7	Plan Nut M8	888776	8	Radiator bobbin	
8	Ball Mt 1/2-18 Hex Hd	887104	1	Expansion tank bracket	
9	Plan Washer 1/2-18 Hex Hd	888104	13	18 x 10V Rad Bracket 4 x 4 Fan Brackets 1 x Expansion tank bracket	
10	Plan Washer 1/2-18 Hex Hd	888105	4	Radiator bobbin back	
11	Plan Washer 1/2-18 Hex Hd	888106	4	Radiator bobbin front	

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

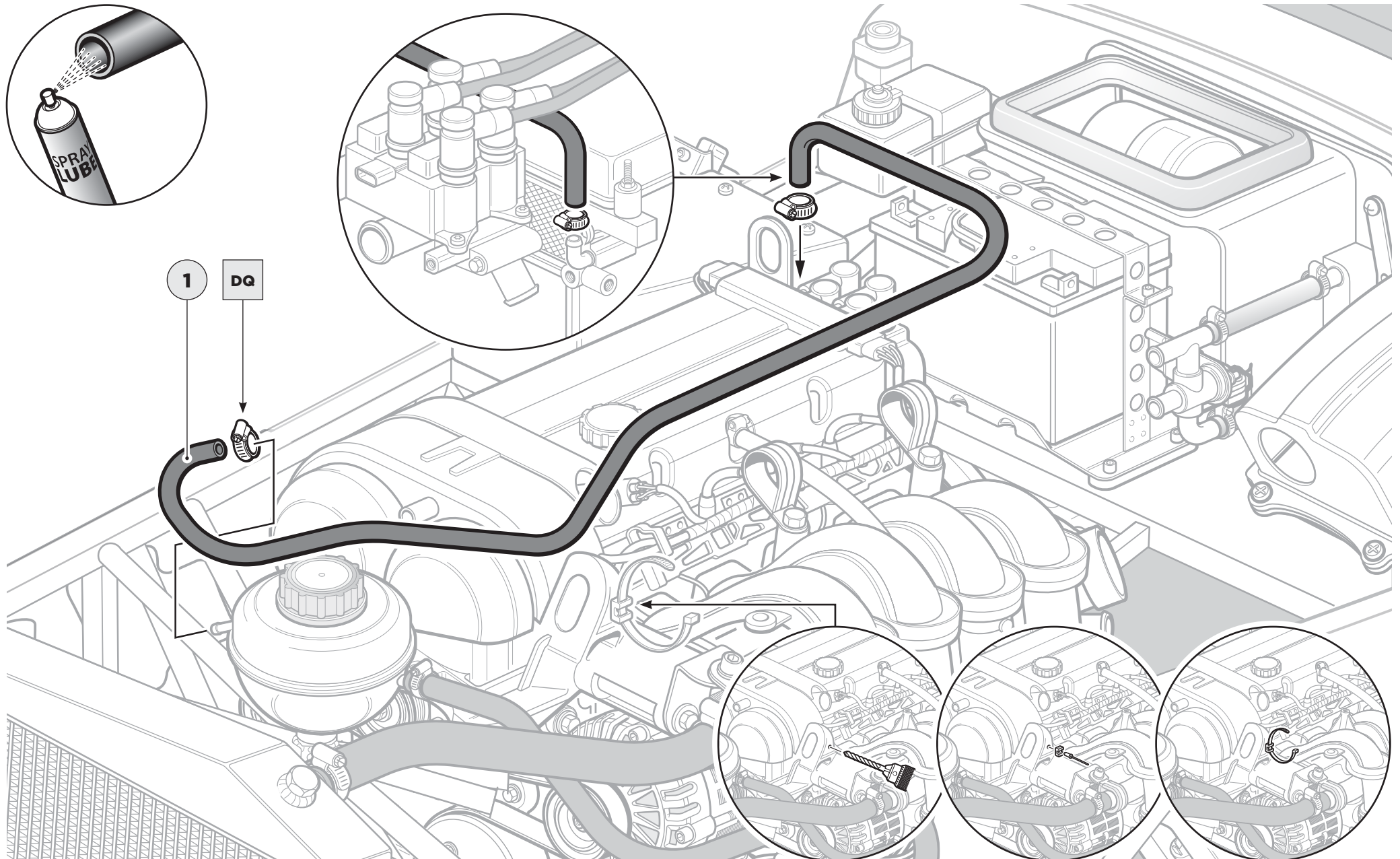
Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Plan Washer 1/2-18 Hex Hd	888104	1	Expansion tank bracket	
13	Spring Washer 1/8 Hex Hd	888902	8	8 x Radiator bobbin 1 x Expansion tank	
14	Hex Cap 1/2-18mm	8872040	6	2 x 18 where hoses meet fan 2 x 18 radiator hose 2 x 18 when radiator hose	
15	Hex Cap 1/2-20mm	8872030	2	1 x Engine outlet to top T-piece 1 x Engine outlet to middle T-piece	
16	Hex Cap 1/2-20mm	8871020	18	6 where hoses meet fan 6 Expansion tank 2 x 18 hoses 1 x 18 hose	
17	Hex Cap 1/4-16mm	887816	5	Expansion tank small T-piece	
18	Plan - Black 1/2-18mm	88761010	12	Cooling fan	

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

x2

TIPS

LAST BIT OF PLUMBING



CONNECTING THE FUEL LINE

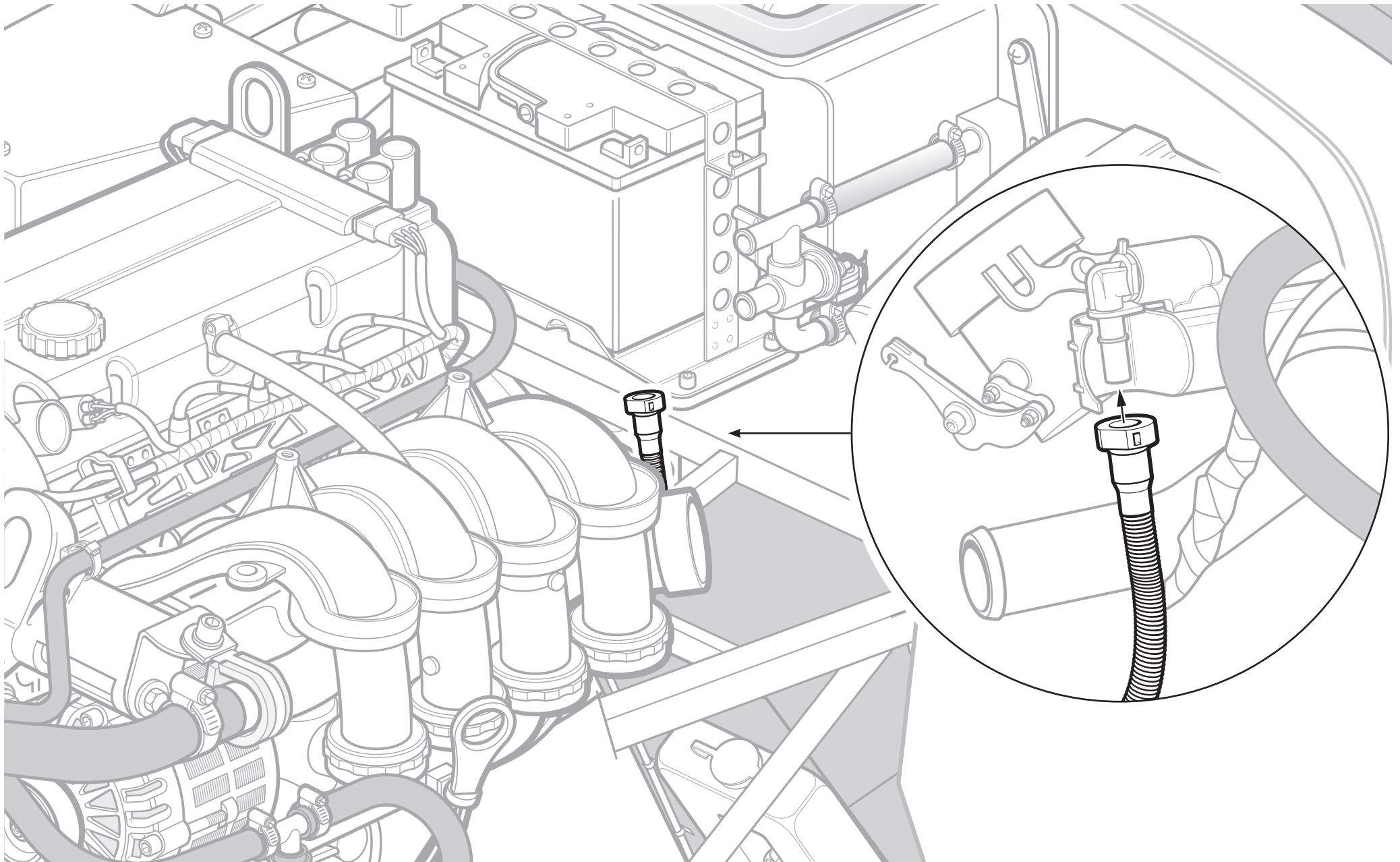
P A R T S

T O O L S

F I X I N G S

T I P S

CONNECTING THE FUEL LINE

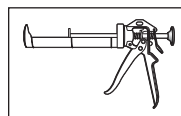
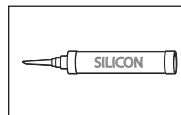
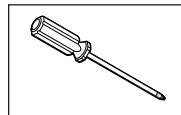


FIT THROTTLE CABLE

PARTS

- 1 Throttle cable

TOOLS



FIXINGS

Fixings are supplied loosely attached to the engine in place

TIPS

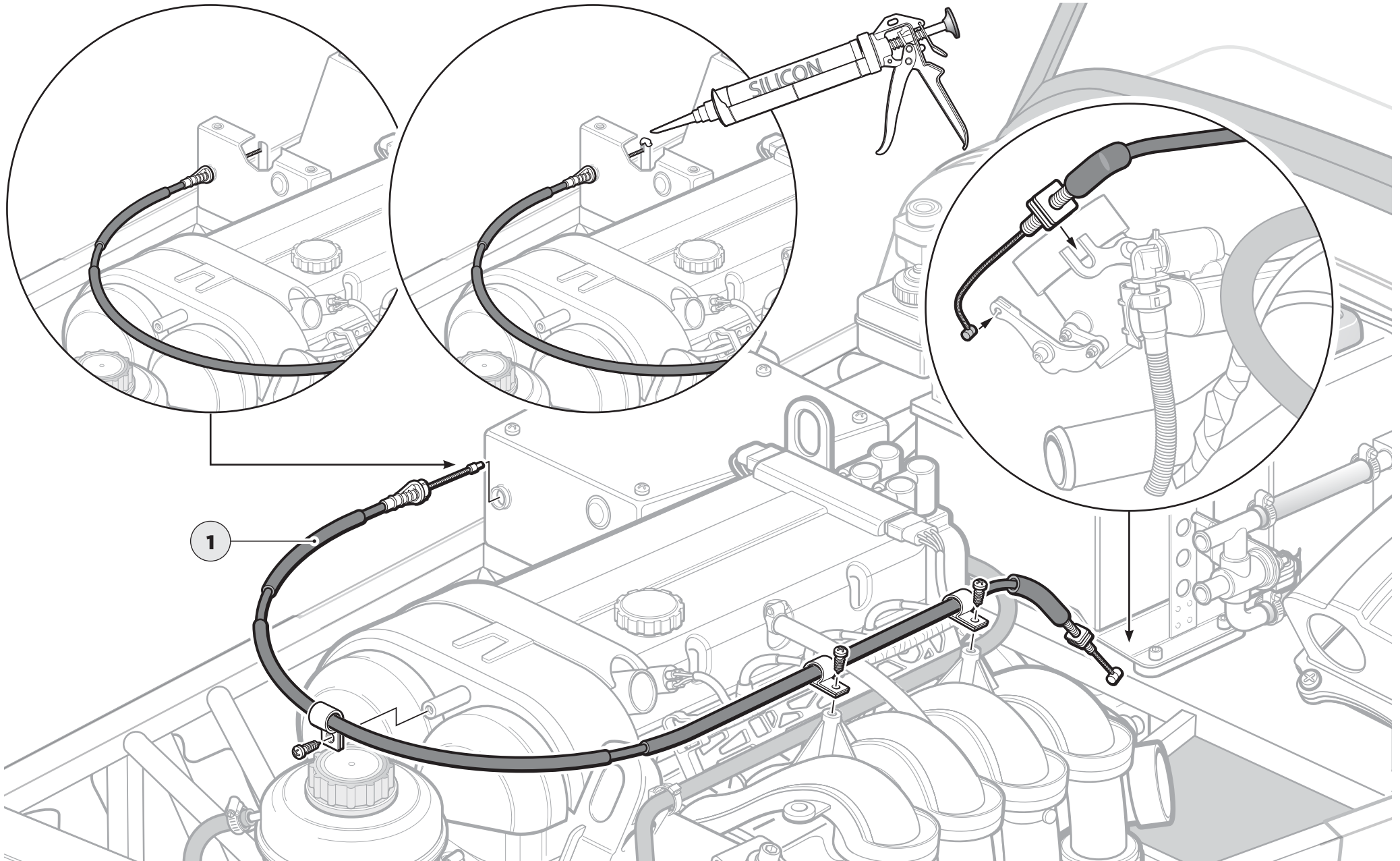
The silicone goes in the top of the pedal to prevent the cable coming out.

Rich T

Max throttle pedal travel may need adjusting in the pedalbox.

Jamie A

FIT THROTTLE CABLE

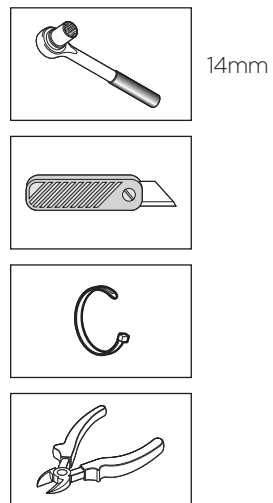


PROTECTING & ATTACHING THE CLUTCH HOSE

PARTS

- 1 8mm water hose

TOOLS



FIXINGS

TIPS

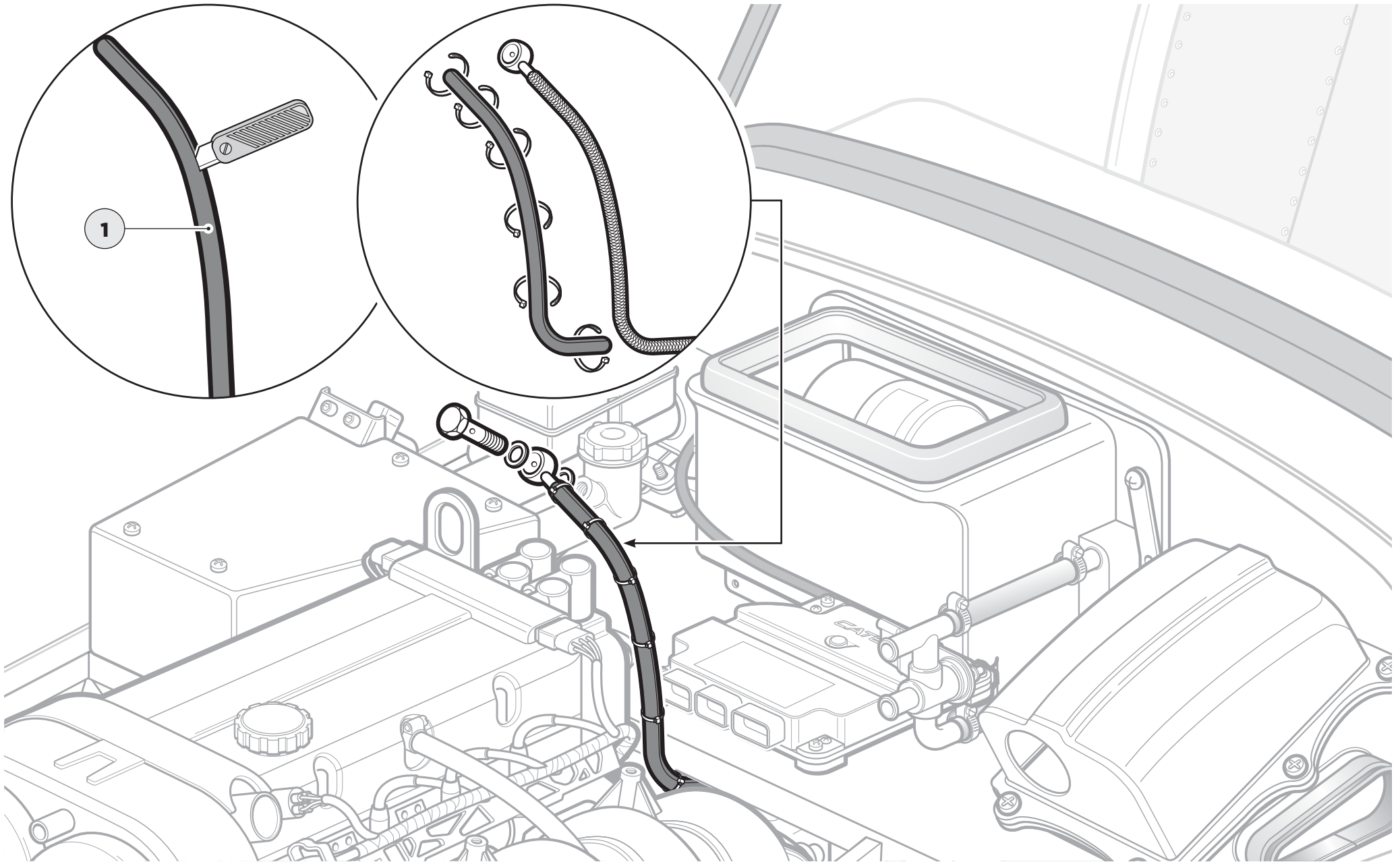
Nip up the banjo bolt.

John K

The hose is used to stop chaffing.

James A

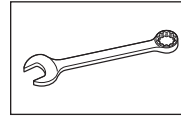
PROTECTING & ATTACHING THE CLUTCH HOSE



CONNECTING THE BATTERY (POSITIVE / RED FIRST)

PARTS

TOOLS



10mm (x2)

FIXINGS

TIPS

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

Chris B

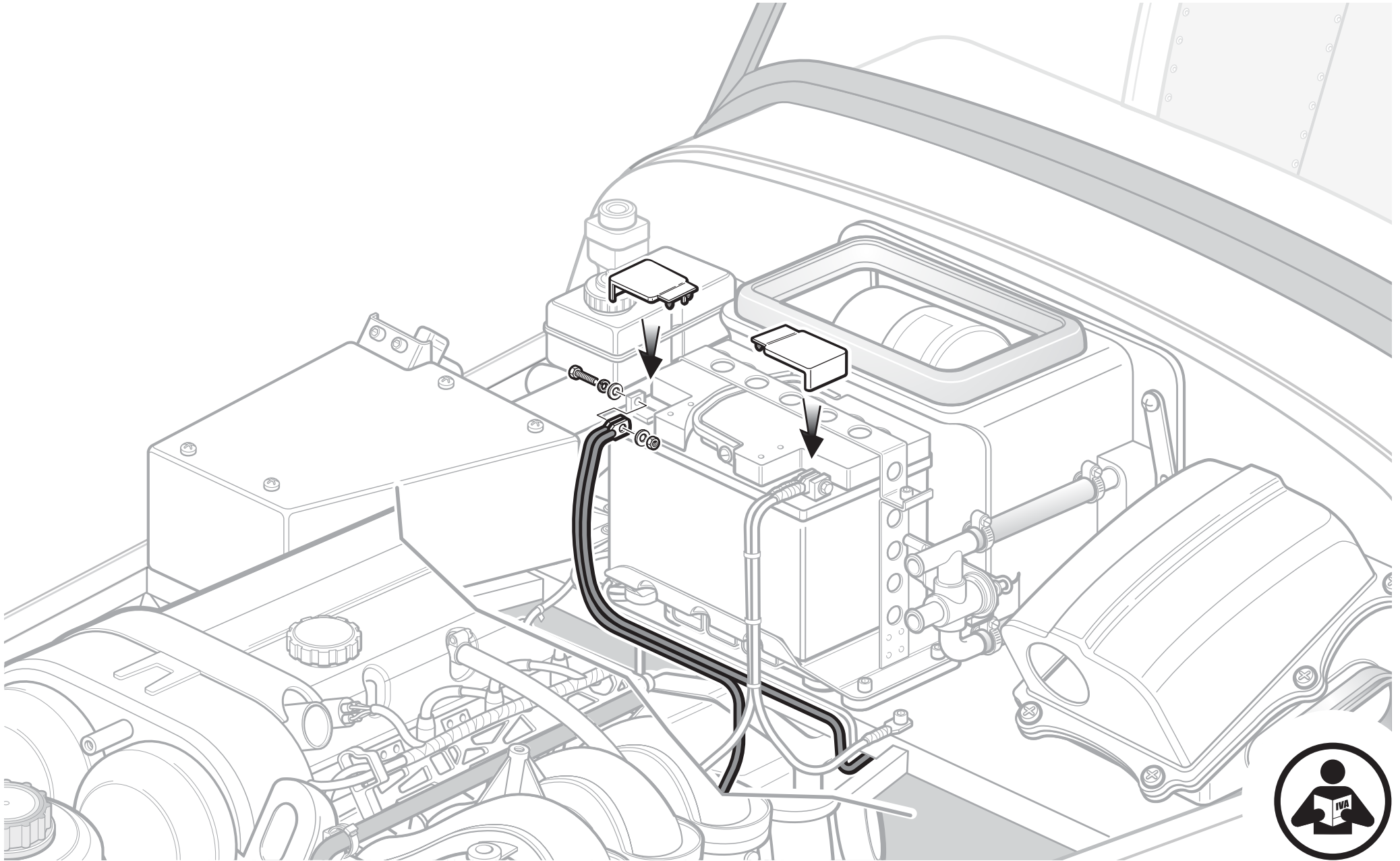
Make the battery the last thing you connect.

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

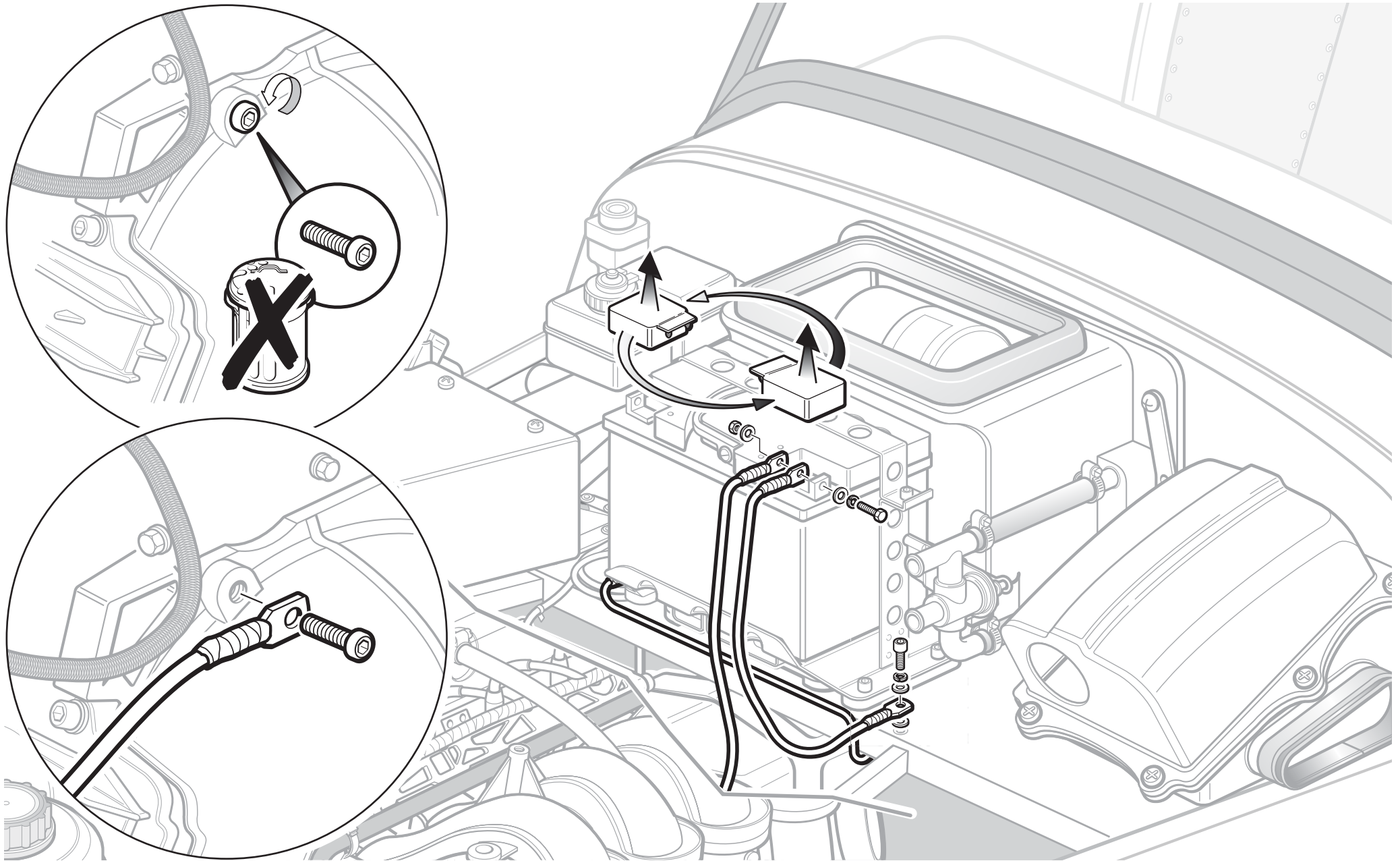
TOOLS

FIXINGS

TIPS

Add a plain M8 or $\frac{5}{16}$ washer underneath the earth lead to chassis.

Dan P

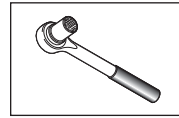


ONE LAST BIT OF PLUMBING...

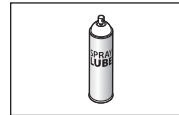
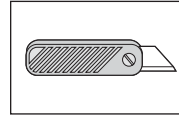
PARTS

1 Hose

TOOLS



7mm



FIXINGS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Exp. tank 2.5 litre	888440	1	Expansion tank, bracket to chassis	
2	Exp. tank 1.5 litre	887142/14	1	Expansion tank to bracket	
3	SM radiator bracket	888420	4	SM radiator bracket	
4	Fan brackets to fan	887107/4	4	Fan brackets to fan	
5	Fan to radiator mounting - 20 (1/2)	888421/2	4	Fan to radiator mounting - 20 (1/2)	
6	44 Fan to radiator 44 (20) radiator bracket	888474	8	44 Fan to radiator 44 (20) radiator bracket	
7	Radiator bobbin	888474	8	Radiator bobbin	
8	Exp. tank bracket	887114	1	Expansion tank bracket	
9	18 x 50V rad bracket 18 x 50V rad bracket 18 x 50V rad bracket	888414	13	18 x 50V rad bracket 18 x 50V rad bracket 18 x 50V rad bracket	
10	Radiator bobbin back	888475	4	Radiator bobbin back	
11	Radiator bobbin front	888476/2	4	Radiator bobbin front	

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

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATS	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Exp. tank bracket	888440/1	1	Expansion tank bracket	
13	4 x 4 Radiator bracket 1 x Expansion tank	888414/1	8	4 x 4 Radiator bracket 1 x Expansion tank	
14	2 x 4 x 4 Radiator hose 2 x Radiator bobbin hose	887107/40	6	2 x 4 x 4 Radiator hose 2 x Radiator bobbin hose	
15	1 x Engine outlet to top 1 Engine 1 x Engine outlet to bottom 1 Engine	887107/38	2	1 x Engine outlet to top 1 Engine 1 x Engine outlet to bottom 1 Engine	
16	18 x 50V rad bracket 18 x 50V rad bracket 18 x 50V rad bracket	88716/25	18	18 x 50V rad bracket 18 x 50V rad bracket 18 x 50V rad bracket	
17	Expansion tank small 7 pieces	887114	6	Expansion tank small 7 pieces	
18	Covering cap	887107/10	12	Covering cap	

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

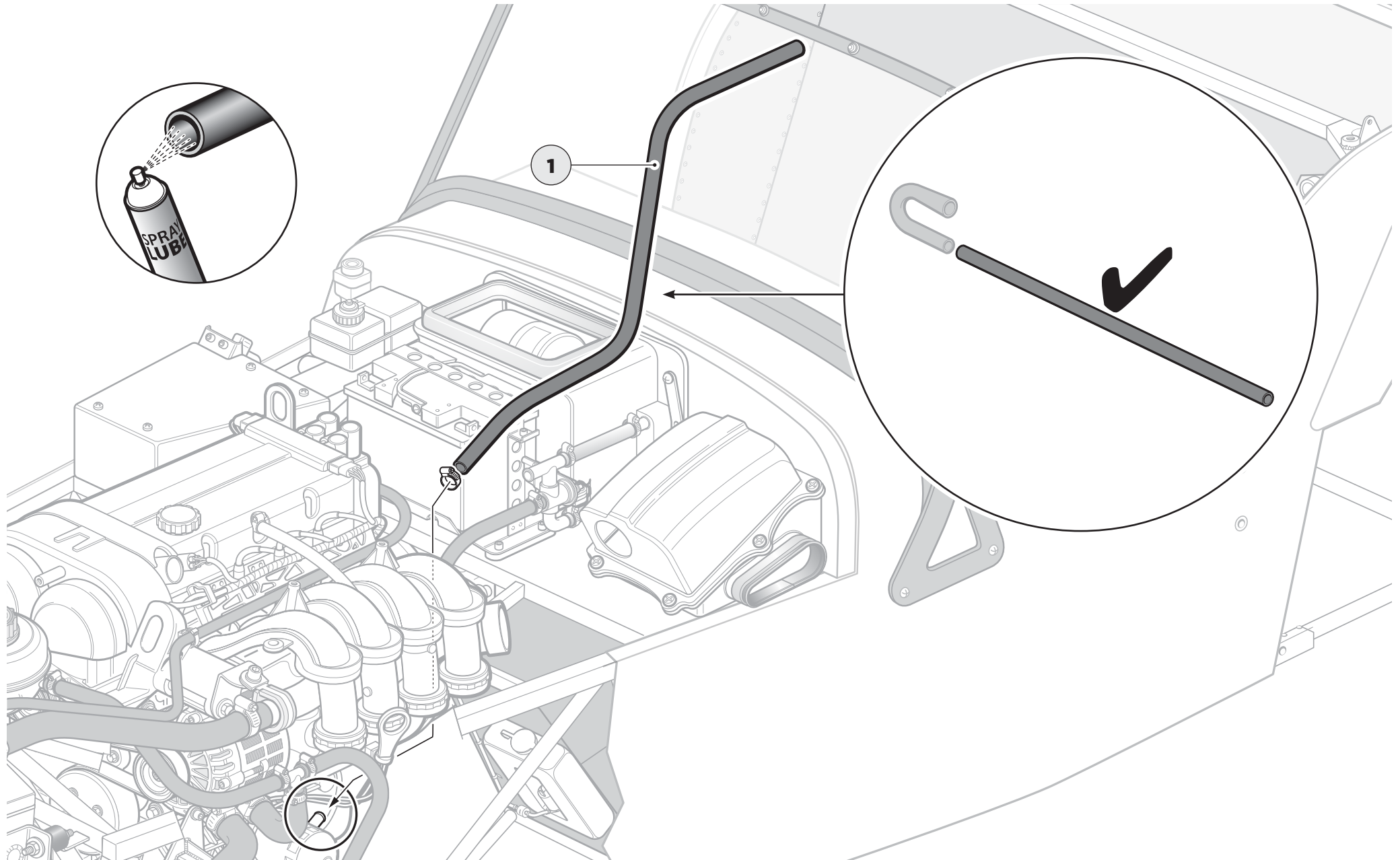
x1

TIPS

Cut off hook and trim if required.

Grant P

ONE LAST BIT OF PLUMBING...



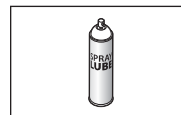
...TO CONNECT THE HEATER

PARTS

TOOLS



7mm



FIXINGS

TIPS

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball Nut 2.25 Hex 2.8	888440	1	Expansion tank bracket to chassis	
2	Ball Nut 1.50 Hex 2.0	887442/4	1	Expansion tank to bracket	
3	Ball Nut M8x1.25 Hex 1.6	888420	4	SM radiator bracket	
4	Ball Nut 2.00 Hex 2.5	887102/4	4	Fan brackets to fan	
5	Ball Nut M8x1.25 Hex 1.6	888420/10	4	Fan to radiator mounting - 20 100g	
6	Plan Nut M8	888770	8	4x Fan to radiator 4x SM radiator bracket	
7	Plan Nut M8	888770	8	Radiator bobbin	
8	Plan Nut 1.40	887114	1	Expansion tank bracket	
9	Plan Washer 10 Hex 1.40	888114	13	8 x 10V fan bracket 4 x Fan brackets 1 x Expansion tank bracket	
10	Plan Washer 10 Hex 1.40	888114	4	Radiator bobbin back	
11	Plan Washer 10 Hex 1.40	888114/10	4	Radiator bobbin front	

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

Pack D		CATERHAM		44	
		PACK NUMBER		SICCATB	
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Plan Washer 10 Hex 1.40	888114/10	1	Expansion tank bracket	
13	Spring Washer 10 Hex 1.40	888114/10	8	8 x Radiator bobbin 1 x Expansion tank	
14	Wash Clip 10 Hex 1.40	88720-40	6	2 x 10 Hex fan to radiator 4 x 10 Hex radiator hose 2 x Radiator bobbin hose	
15	Wash Clip 10 Hex 1.40	88720-30	2	1 x Engine outlet to top 1 100mm 1 x Engine outlet to bottom 100mm	
16	Hose Clip 17-20mm	88716-20	18	8 x Heater hoses 16 x 10g Fan 1 x Expansion tank 1 x Dip Pump 1 x Radiator	
17	Wash Clip 10 Hex 1.40	88720-10	6	Expansion tank small 1 piece	
18	Plan - Black 10 Hex 1.40	88710-10/10	12	Cooling fan	

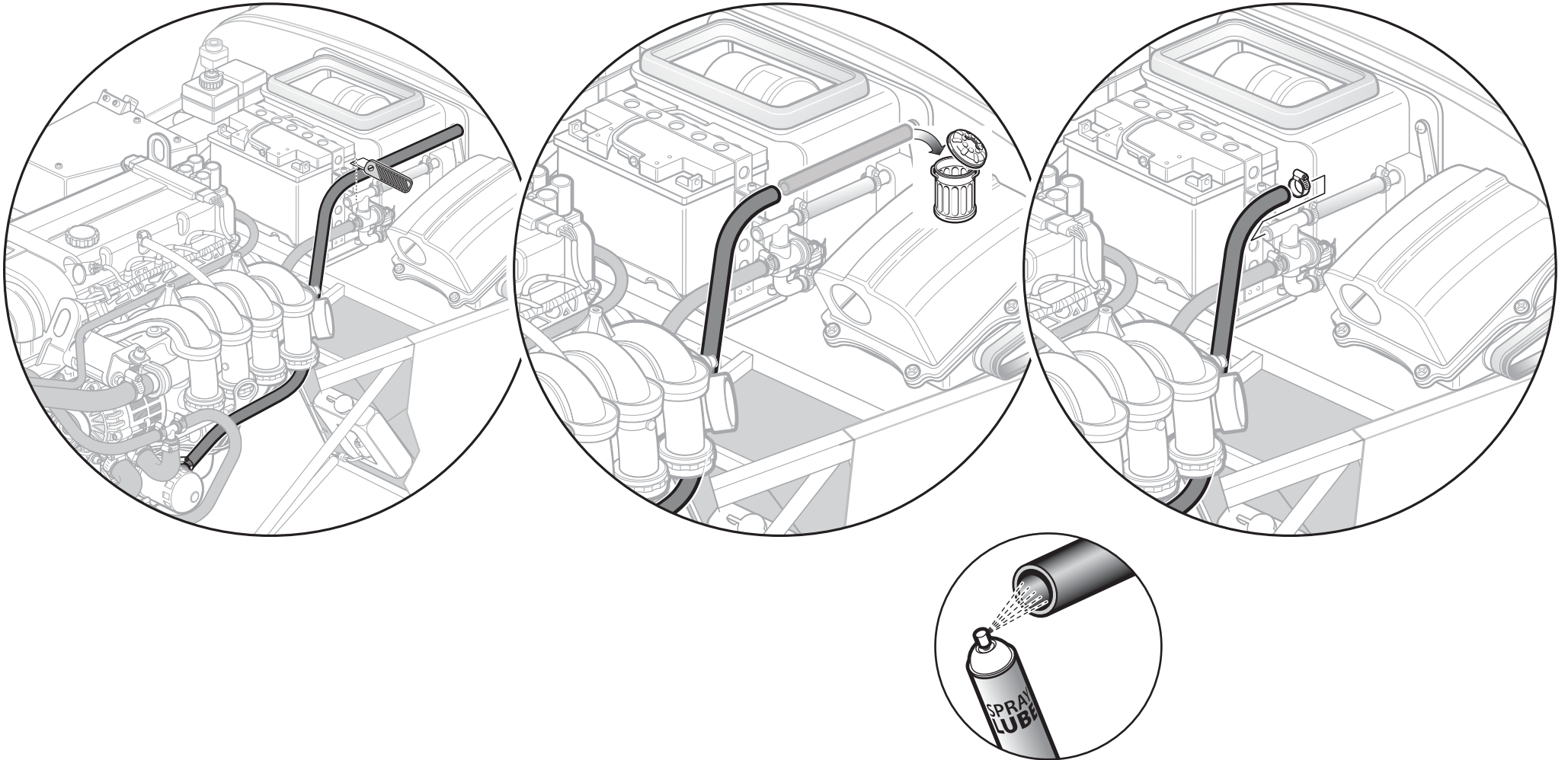
Drawings are for illustrative purposes only and are not to scale. Page 1 of 2

x1

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

Anthony L

...TO CONNECT THE HEATER

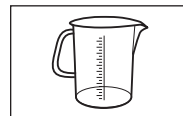


FILL WITH COOLANT

PARTS

Coolant concentrate

TOOLS



FIXINGS

TIPS



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

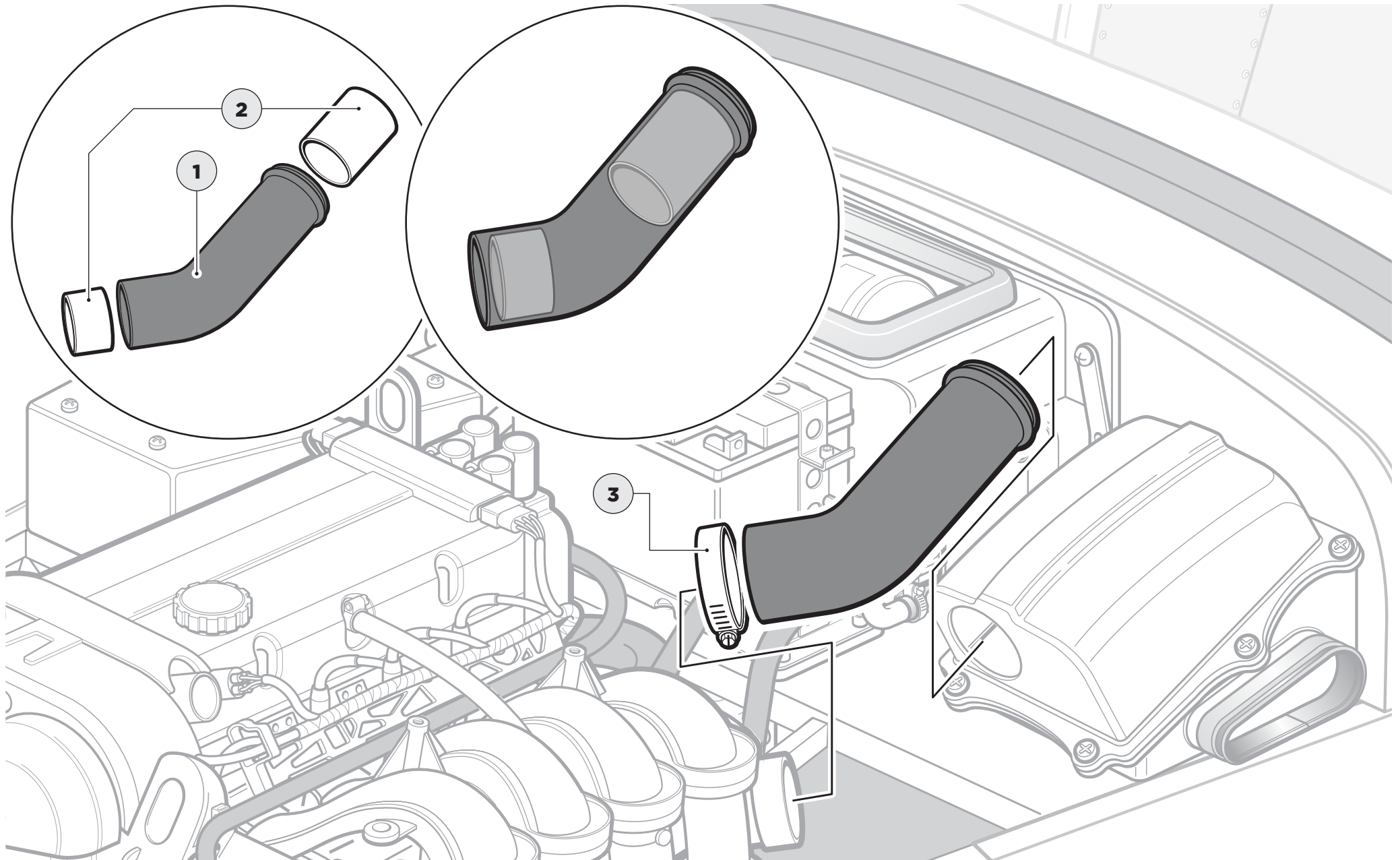
To help push insert in use the work bench.

Rich T

Spray brake cleaner in the hose and on the insert.

John K

CONNECT THE AIRBOX TO THE ENGINE

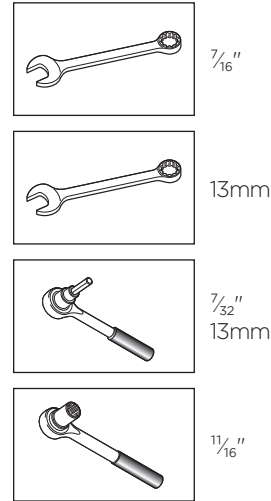


GIVING IT SOME DIRECTION

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		RELEASED NOV-13	
STEERING DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	BA Locking Nut 1/2" x 12" 1/4"	BMX4070	4	Rack clamps	
2	BE Bolt 1/2" x 12"	BMX4011	2	Column clamp	
3	BC Ball Nut 40 DIN 914	BMX440	2	Column to rack universal joint	
4	BD Nylon Nut 1/2" x 12"	NF1112	1	Steering wheel boss	
5	BE Plain Nut 1/2"	NF1112	2	Track rod lock out	
6	BE Plain Nut 1/2" x 12"	NF1112	1	Column clamp grub screw bracket	
7	BC Nylon Nut M8	NF1108	2	Column to rack universal joint	
8	BA Nylon Nut M8	NF1108	4	Steering rack clamps	
9	BJ Plain Washer 1/2" x 12" 1/4"	WF1112	1	Steering wheel boss	
10	BA Plain Washer 1/2" x 12"	WF1112	5	Rack clamps and column clamp	
11	BE Spring Washer 1/2" x 12"	WF1112	2	Column clamp	

x2
x1
x2
x1

TIPS

Check clearance between steering column & Aux belt tensioner once engine is installed. If necessary, rotate steering rack.

Dan P

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

Jamie A

Steering rack to be rotated to fit column – don't forget to tighten rack brackets!

Harrison P

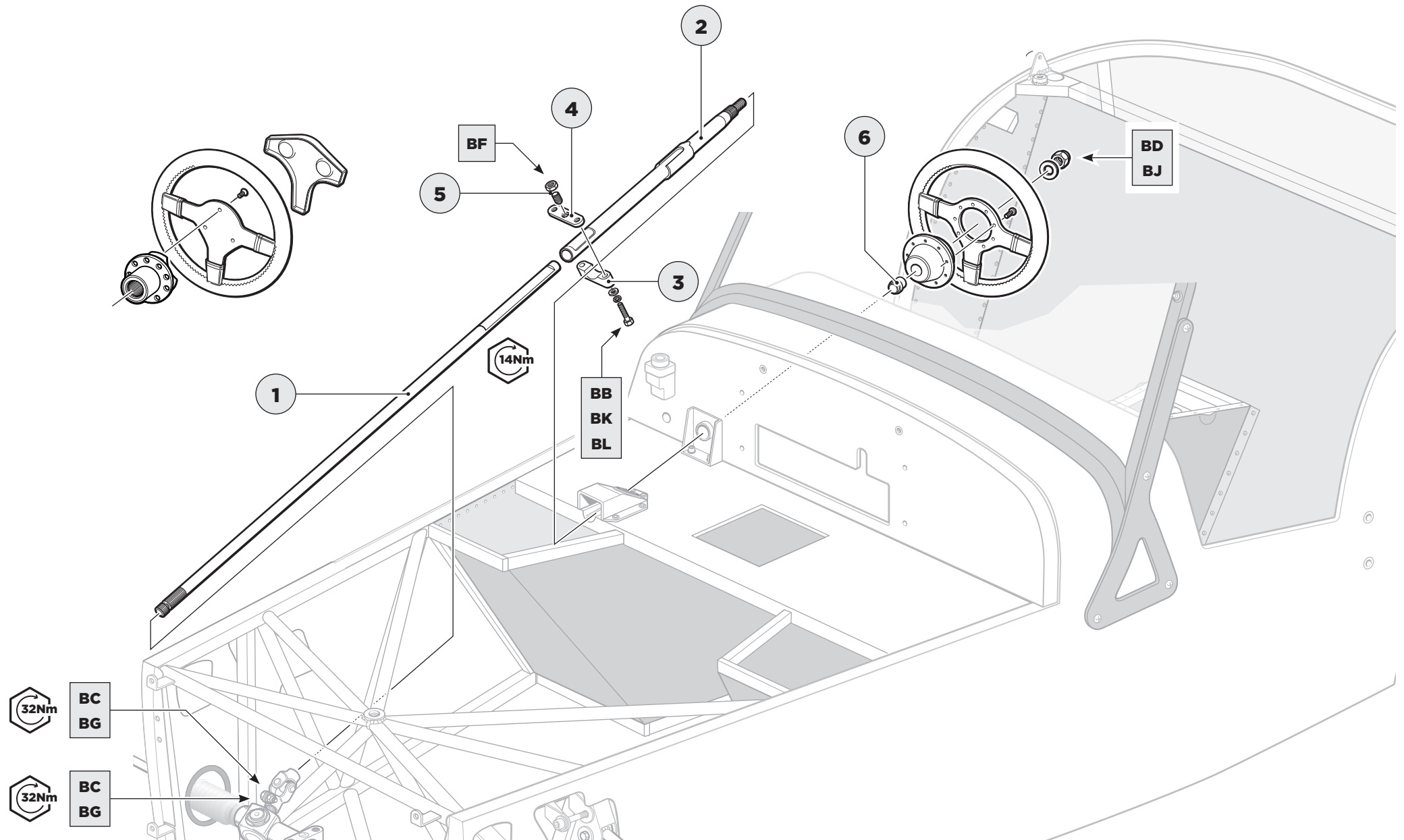
Grease the steering bushes.

Lee A

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

Tiago O

GIVING IT SOME DIRECTION

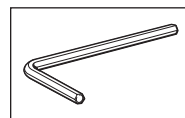


THIS IS EXHAUSTING

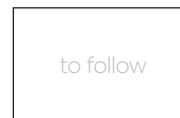
PARTS

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

TOOLS

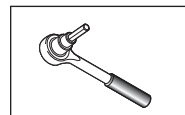


8mm

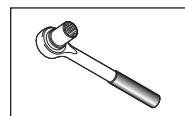


to follow

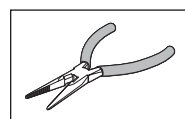
Extension



8mm



17mm
(270 & 310 only)



FIXINGS

Fixings are supplied loosely attached to the engine in place

TIPS

Use cable ties to compress exhaust spring.

Mick F

A pair of pliers are best to help hook over.

James A

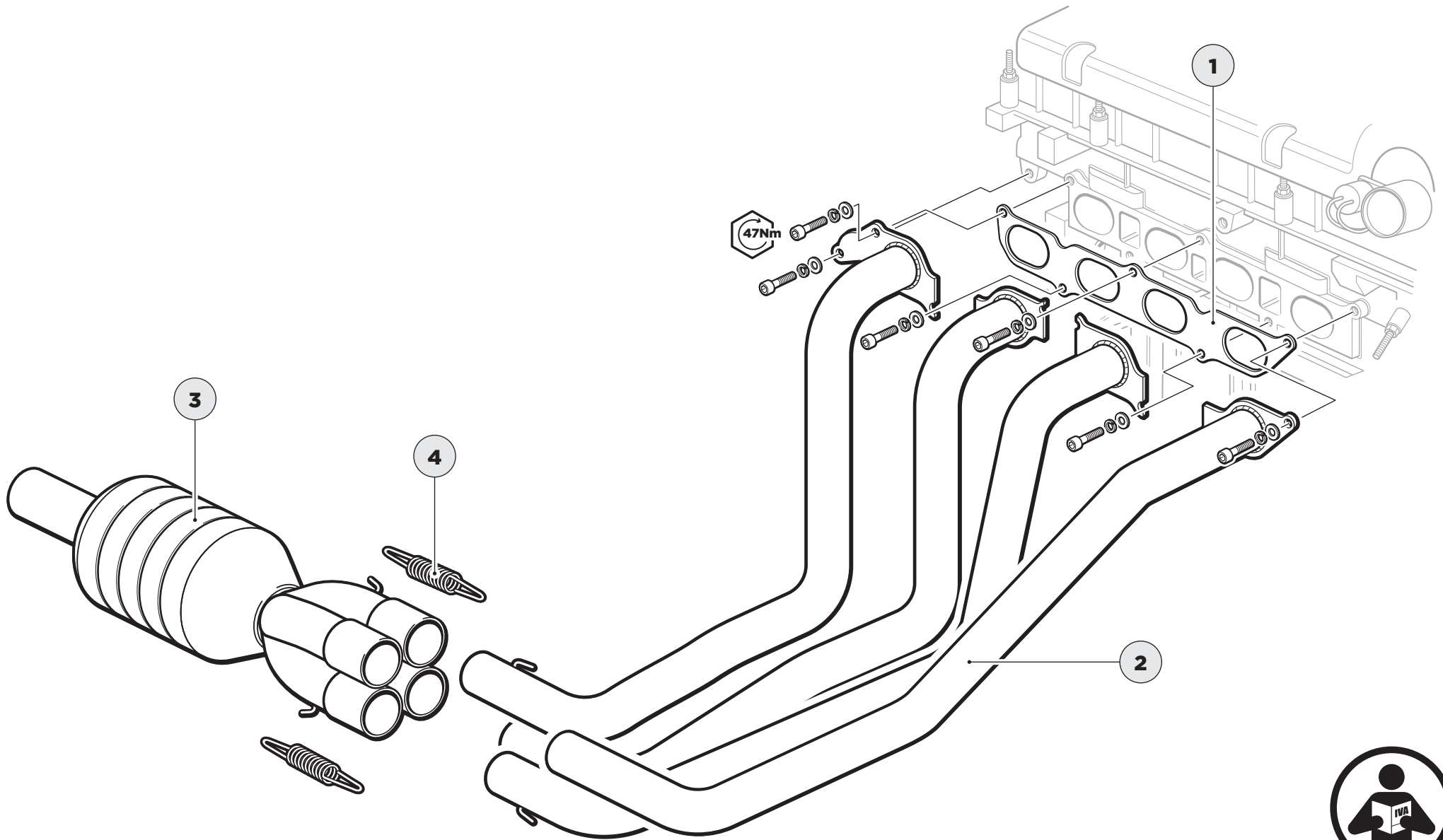
Put masking tape round exhaust hole to prevent scratches.

Chris B

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

THIS IS EXHAUSTING

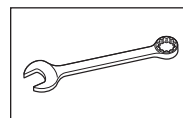


FITTING THE HANDBRAKE

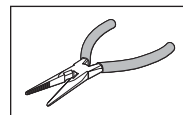
PARTS

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

TOOLS



13mm (x2)



FIXINGS

Miscellaneous pack

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

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

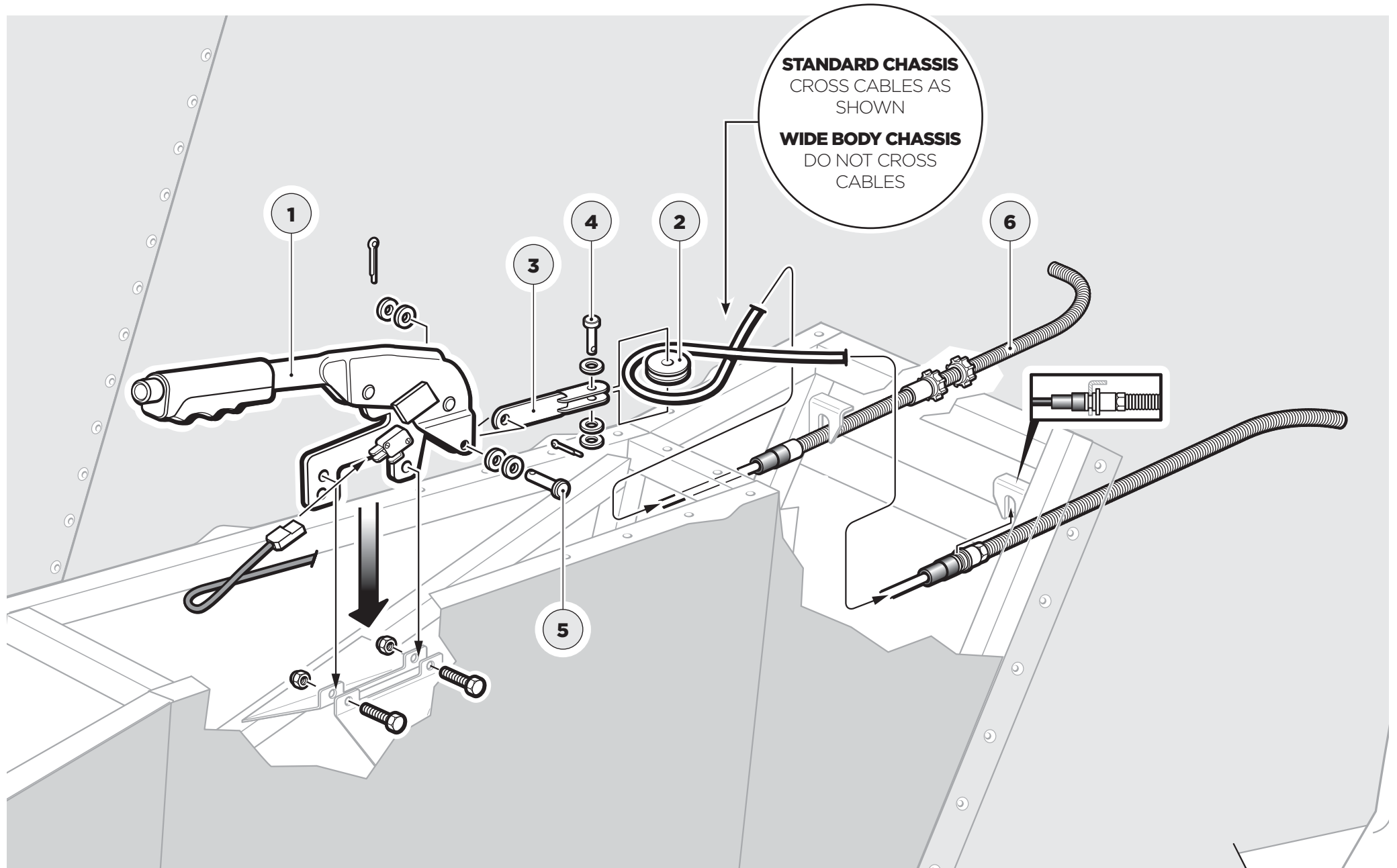
Handbrake wire connector goes to top of terminal & ties up.

Jamie A

After plugging in connector, cable tie and secure any excess wiring.

Dan P

FITTING THE HANDBRAKE



SLIDE IN THE PROPSHAFT

PARTS

- 1** Propshaft

TOOLS



FIXINGS

TIPS

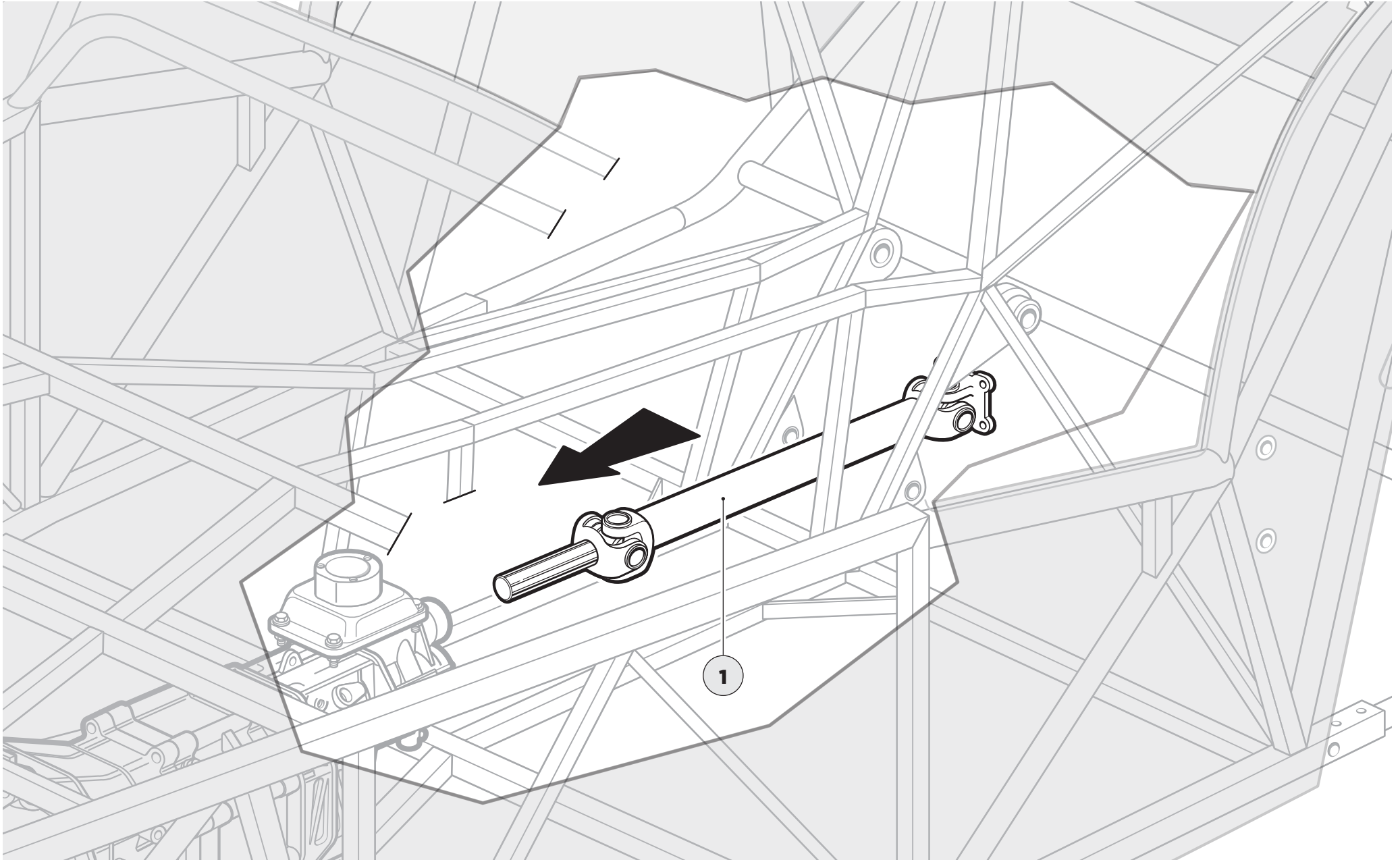
Line the splines in the propshaft to the gearbox.

Anthony L

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

John S

SLIDE IN THE PROPSHAFT

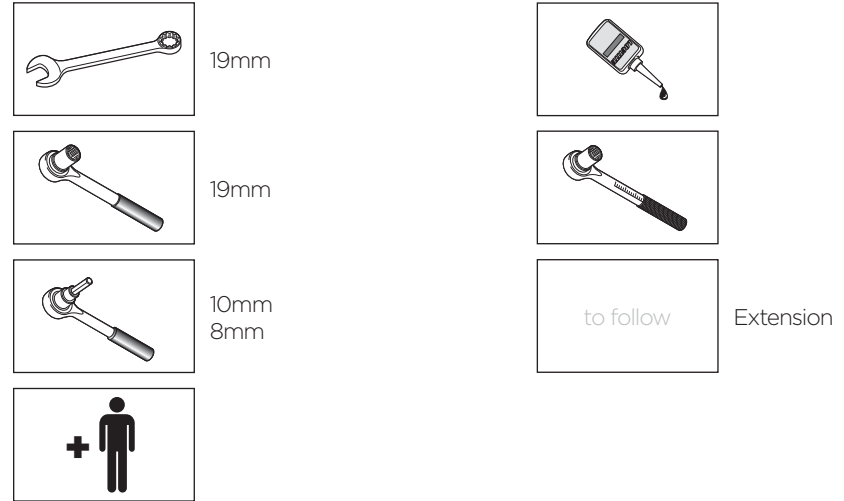


HEAVY STUFF: FITTING THE DIFF

PARTS

1 Differential

TOOLS



FIXINGS

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Bolt 1/2" x 11" LNF	BP12X11	1	Upper diff mounting bolt	
2	Caphead Bolt M12 x 95 Grade 10.9	BMCH12X95	2	Lower diff mounting bolt	
3	Bolt M10 x 95 Grade 10.9	BM10X95	4	Rear hub through axle to front DeDion	
4	Bolt M10 x 95 Grade 10.9	BM10X95	8	3 x 4 Front hub through ear x 4 Caliper carrier bolts	
5	Bolt M10 x 95 Grade 10.9	BM10X95	4	Through rear of axle into Reinforced DeDion tubes	
6	Caphead Bolt M12 x 25 Grade 12.9	BMCH12X25	4	Propshaft bolts	
7	Caphead Bolt M12 x 25 Grade 12.9	BMCH12X25	2	Diff cage	
8	Half Nuts 1/2" Type	NFY1/2	1	Upper diff bolt	
9	Nut M10	NM10	8	Hub through axle to DeDion	
10	1/2" Type Nut M10	NM1/2	4	Rear axle roll bar brackets	
11	Plain washer 1/2" x 3/4"	W1/2X3/4	2	Brake pipe	

x1
x2
x4
x1

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Plain washer 1/2" x 3/4" Thin	W1/2X3/4	16	Flats behind diff shells	
13	Plain washer 1/2" x 3/4" Thin	W1/2	8	Free play on diff	
14	Plain washer 1/2" x 3/4" Thin	W1/2	16	Diff shim washers	
15	Washer M12	W12	16	Rear DeDion Carrier Center Hub	
16	Spring Washer M12	WS12	16	Rear DeDion Tube Carrier Center	
17	Softner washer M12	WS12	4	Behind bolt heads on diff	
18	Reinforced washer 1/2"	WR1/2	1	Braked brake hose	
19	Rear 1/2" x 5.17"	1/2-5.17	5	P-clips on DeDion for brake pipe	
20	P-Clip	PC1	5	Brake pipe on DeDion	

*
*
x4

* Use as required for spacing

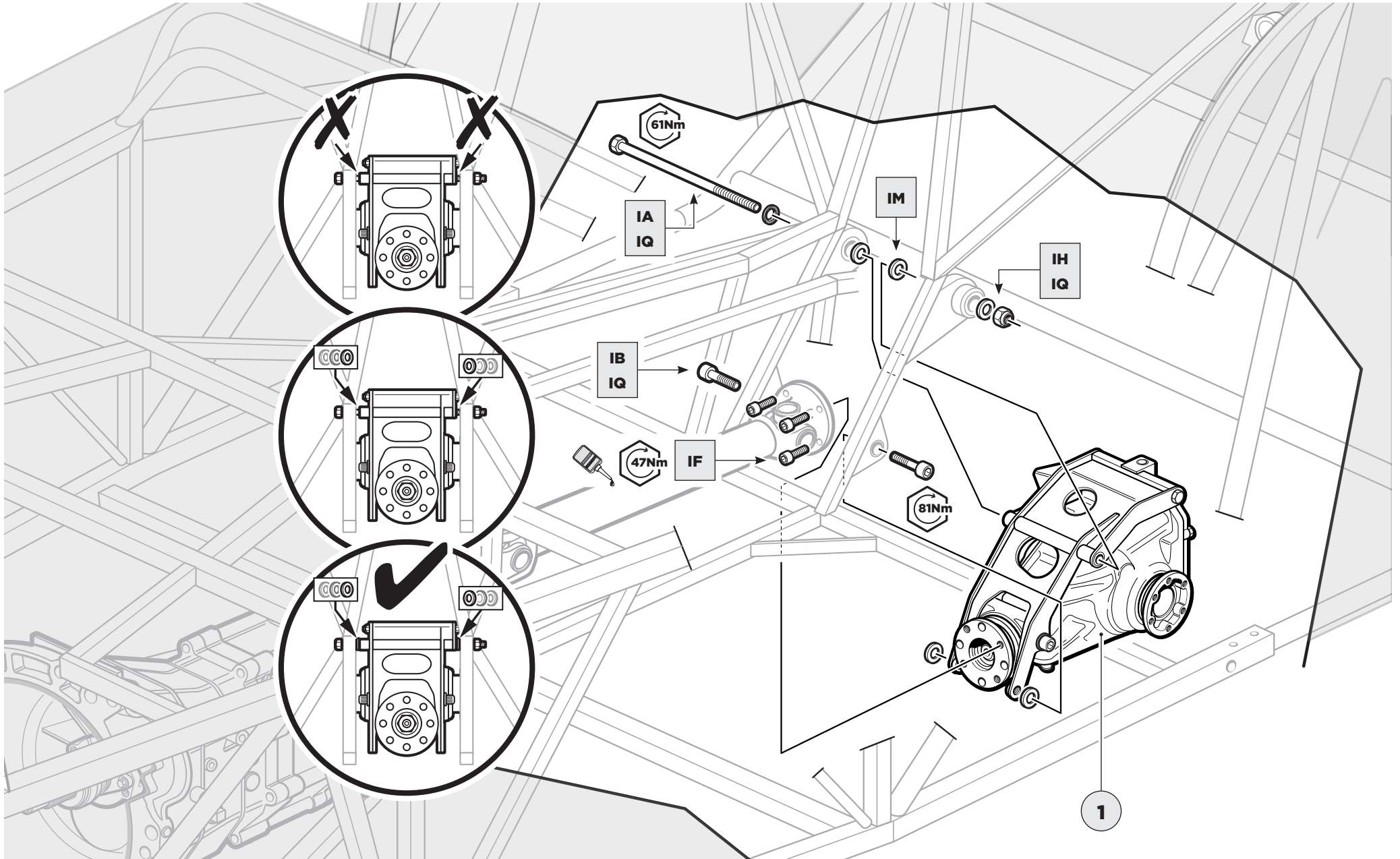
TIPS

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

Make sure propshaft is in first!
Harry P

Lower diff bolts may require more than one washer – try to keep them even.
Tiago O

HEAVY STUFF: FITTING THE DIFF



FILL THE DIFFERENTIAL WITH OIL

P A R T S

T O O L S

Differential oil

F I X I N G S

T I P S



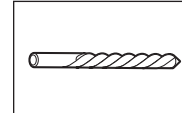
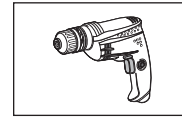
Differential = 0.8L

PREPARING THE DEDION TUBE

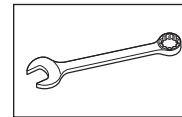
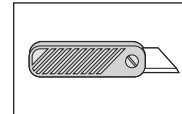
PARTS

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

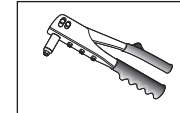
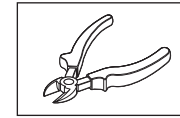
TOOLS



1/8"



11mm
13mm
14mm



FIXINGS

Pack H		CATERHAM		53
		PACK NUMBER		30R01TD
REAR SUSPENSION DEDION METRIC				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
1	Ball Joint LHS (Cable 10.0)	SM124100	2	A-frame front mountings
2	Capstan Bolt M10 x 6.0	SM121000	2	Front radius arm (through cockpit)
3	Nut 12x1.25 (Cable 10.0)	SM120210	4	x 2 Lower Race Damper x 2 Rear Radius Arm
4	Ball Nut x 4.0 (Cable 10.0)	SM1200	4	Rear Axle Roll Bar Mounting Blocks
5	Ball Nut x 2.25 (Cable 10.0)	SM120214	1	A-frame to DeDion
6	Half Nut 12x1.00	SM12110	3	x 2 Rear Radius Arm 1 A-frame to DeDion
7	Nut Nut M12	SM12110	2	A-frame front radius
8	Nut Nut M10	SM12110	2	Front radius arm (through cockpit)
9	Half Nut M10	SM12110	2	Rear Axle Roll Bar Drop Link
10	Nut Nut M10	SM12110	4	Rear Axle Roll Bar Mounting Blocks
11	HK Metric Nut M10	SM12114	1	3-way union on DeDion tube

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

x1

Pack I		CATERHAM		44
		PACK NUMBER		30Z1067B
AXLE DEDION METRIC				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
1	IA Upper 12x14 1/4" DIA	SM120111	1	Upper roll mounting bolt
2	IB Capstan Bolt M12 x 6.0 (Cable 10.0)	SM121000	2	Lower roll mounting bolt
3	IC Ball Nut M10 x 4.0 (Cable 10.0)	SM120000	4	Rear roll through ear to front DeDion
4	ID Ball Nut M10 x 5.0 (Cable 10.0)	SM120000	8	x 4 Front roll through ear x 4 Capstan capstan bolt
5	IE Ball Nut M10 x 4.0 (Cable 10.0)	SM120000	4	Through rear of ear into threaded DeDion tubes
6	IF Capstan Bolt M10 x 2.0 (Cable 10.0)	SM121000	4	Pinhead bolts
7	IG Capstan Bolt M10 x 2.0 (Cable 8.0)	SM121000	2	Off rags
8	IH Half Nut 12x1.25 (Cable 10.0)	SM12110	1	Upper roll bolt
9	II Nut Nut M10	SM12110	8	Hub through ear to DeDion
10	IJ 12x Nut Nut M10	SM12110	4	Rear axle roll bar dropout
11	IK Pipe washer 3/8" x 7/8"	SM120070	2	Brake pipe

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

x2

Pack I		CATERHAM		44
		PACK NUMBER		30Z1067B
AXLE DEDION METRIC				
This pack may include extra fasteners to cover different options				
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON
12	IL Shim washers 12 x 7/8"	SM120000	10	Front timing roll axle
13	IM Thin washer 12 x 7/8"	SM12110	8	Thin plate on off
14	IN Plain washer 12 x 7/8"	SM1200	14	Off shim washers
15	IO Washer M10	SM120000	10	Rear DeDion Caliper Carrier Hub
16	IP Spring Washer M10	SM120000	10	Rear DeDion Tube Caliper Carrier
17	IQ Spring washer M10	SM120000	4	Behind ball studs on off
18	IR Shaperod washer 3/8"	WSS38	1	Braided brake hose
19	IS Steel 1/8" x 3/8"	1661-0414	3	P-clips on DeDion for brake pipe
20	IT P-clip	NX1	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

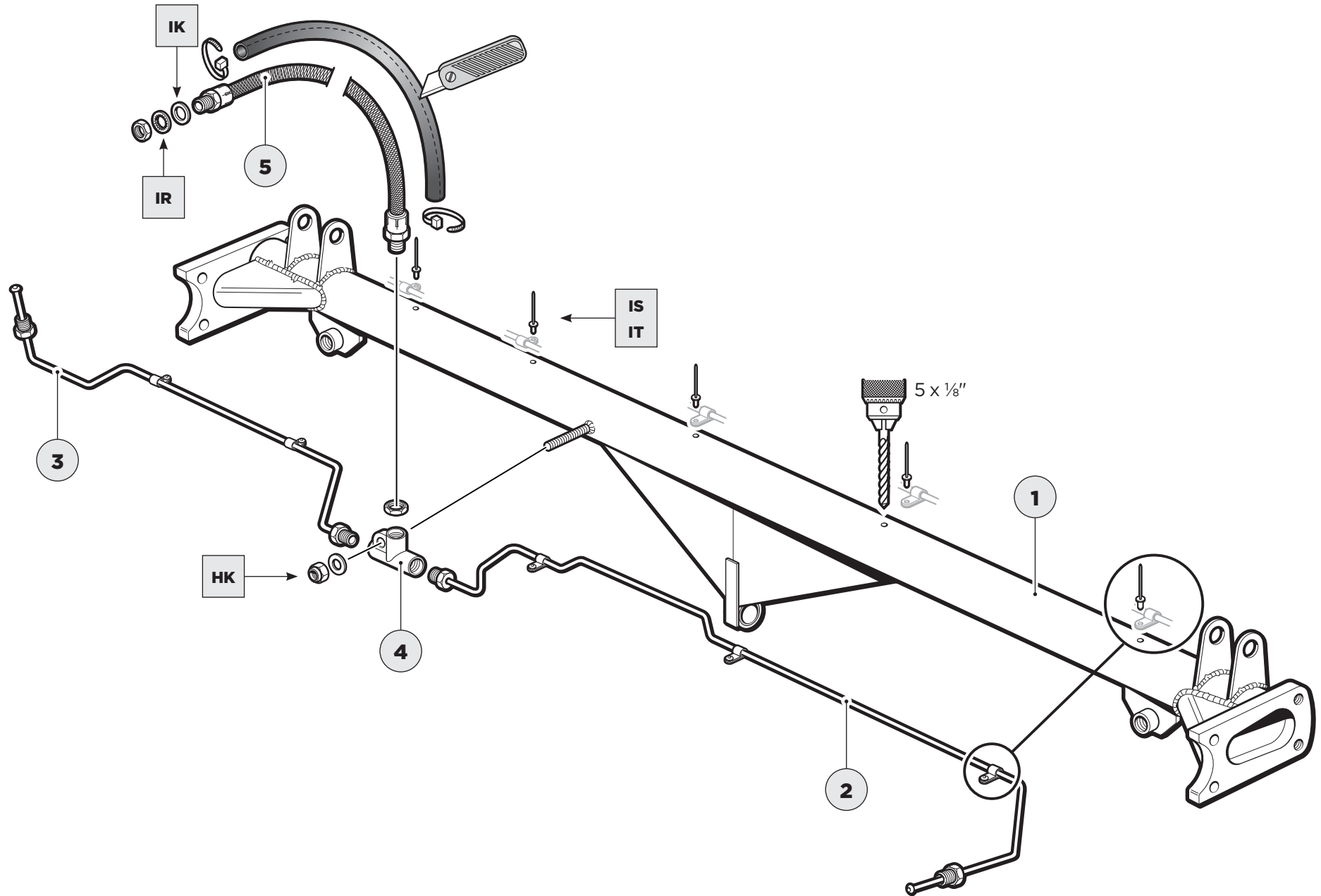
The upper brake hose fittings will become self explanatory on the rear damper installation page.

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

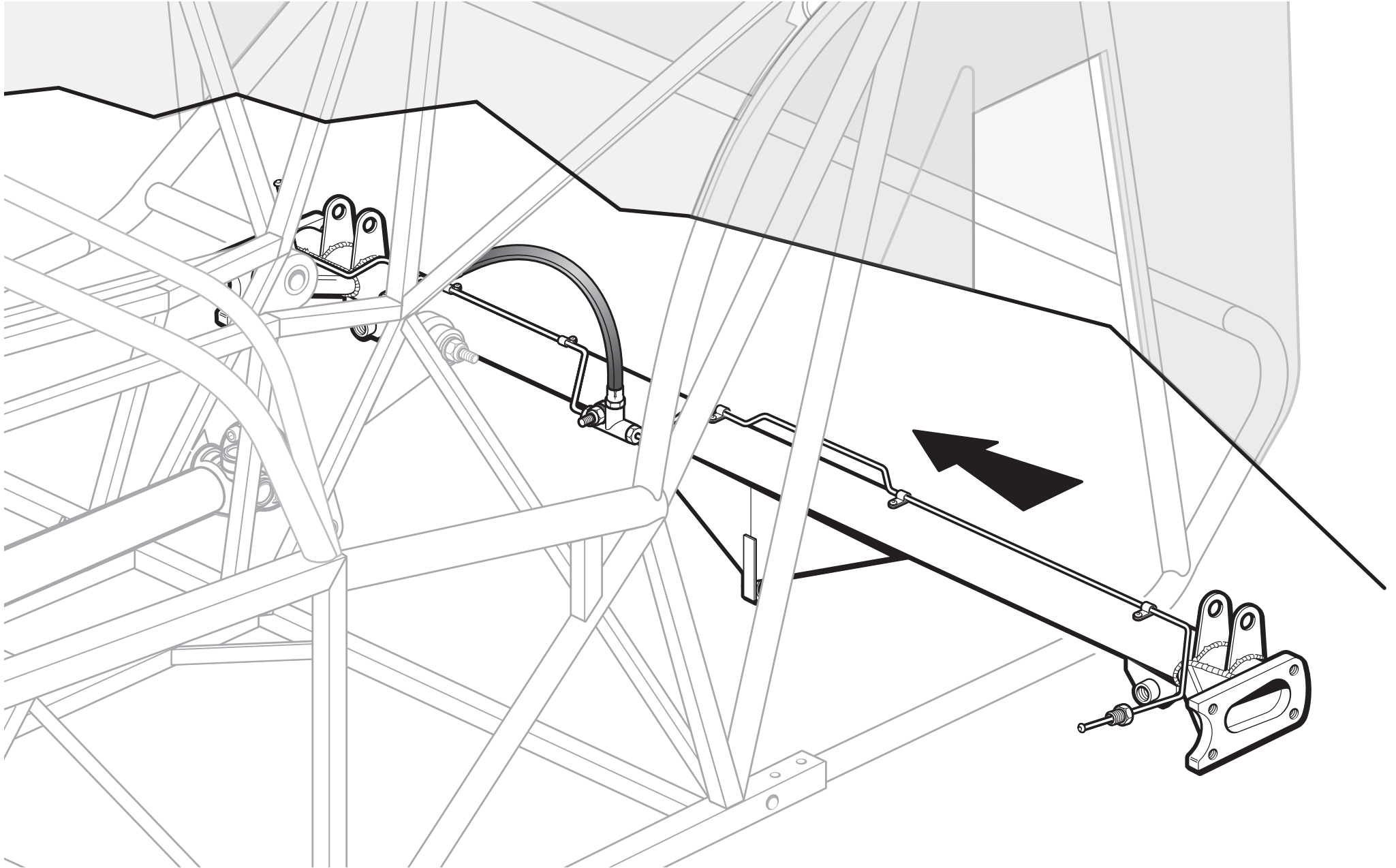
P A R T S

T O O L S

F I X I N G S

T I P S

AND FITTING IT IN PLACE

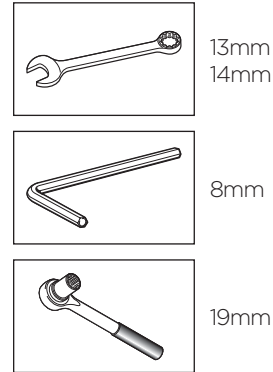


ATTACHING THE REAR DAMPERS

PARTS

- 1** Rear damper assembly
- 2** Rear damper sleeve

TOOLS



FIXINGS

Pack H		CATERHAM		53	
		PACK NUMBER		30R011D	
REAR SUSPENSION DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball Joint 1.000 (Crank 10.0)	BM214100	2	A-frame front mounting	
2	Coilover Rod 1000 0.000	RC01101000	2	Front radius arm (through cockpit)	
3	Bush 10" x 2.10" (Crank 10.0)	BF10X2.10	4	x 2 Lower Rear Damper x 2 Rear Radius Arm	
4	Roller 10" x 2.10" (Crank 10.0)	BR0100	4	Rear Anti Roll Bar Mounting Blocks	
5	Ball Joint 1.000 (Crank 10.0)	BM10X2.10	1	A-frame to DeCleon	
6	Roller 10" x 2.10" (Crank 10.0)	BR0101	3	x 2 Rear Radius Arm x 1 A-frame to DeCleon	
7	Nuts 10.0	NA0101	2	A-frame front mounting	
8	Nuts 10.0	NA0102	2	Front radius arm (through cockpit)	
9	Nuts 10.0	NA0103	2	Rear Anti Roll Bar Drop Link	
10	Nuts 10.0	NA0104	4	Rear Anti Roll Bar Mounting Blocks	
11	Nuts 10.0	NA0105	1	1" hole union on DeCleon tube	

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

x2

Pack H		CATERHAM		53	
		PACK NUMBER		30R011D	
REAR SUSPENSION DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Washer	W020	10	Differential isolation	
13	Plain Washer 1/2" (Chromed)	WP102	20	x 2 Lower Damper x 10 A-frame washers x 4 Radius Arm	
14	Plain Washer 5/8" x 3/4"	WP103010	2	Front Radius Arm	
15	Plain Washer 10"	WP100	4	Rear Anti Roll Bar Mounting Block	
16	Shim Washer M12	SW1000A	2	Lower Damper	

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

x4

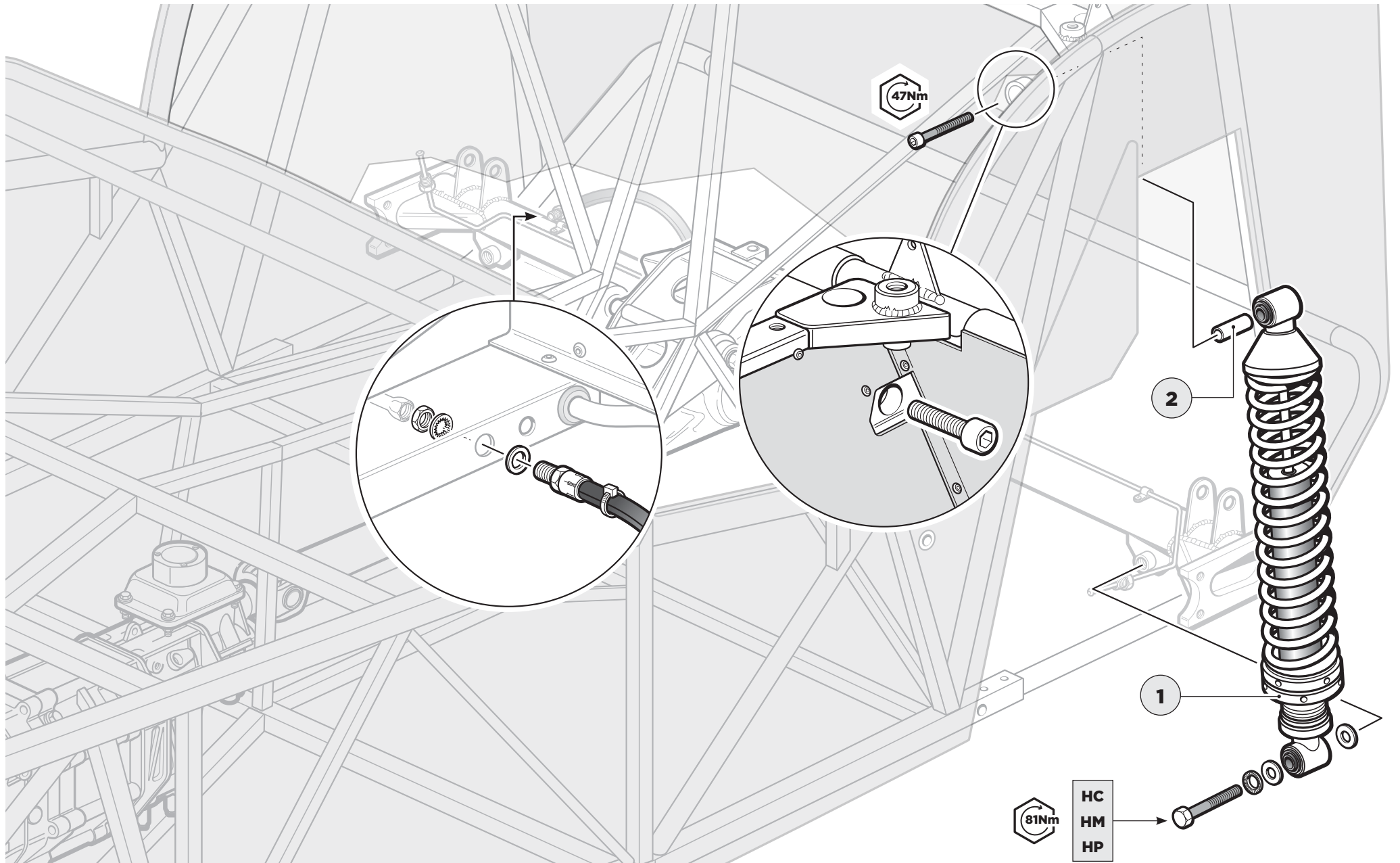
x2

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

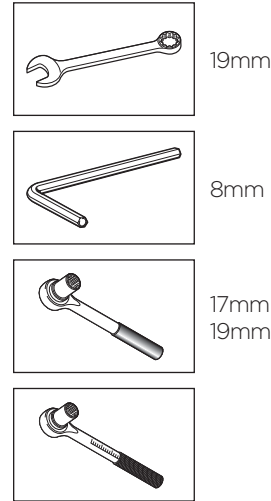


THEN THE RADIUS ARM

PARTS

1 Radius arm

TOOLS



FIXINGS

Pack H		CATERHAM		53	
		PACK NUMBER		30R011D	
REAR SUSPENSION DEDEION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball Joint 1.000 (Crank 10.0)	BM121100	2	A-frame front mountings	
2	Caphead Bolt M10 X 65	BMCH10X65	2	Front radius arm (through cockpit)	
3	Bolt 1/2" x 2.125 (Crank 10.0)	BF12X2.125	4	x 2 Lower Rear Damper x 2 Rear Radius Arm	
4	Roller Nut X 40 (Crank 10.0)	BN40X40	4	Rear Anti Roll Bar Mounting Blocks	
5	Roll 1/2" x 2.125 (Crank 10.0)	BF12X2.125	1	A-frame to DeDion	
6	Half Nylor 1/2" (Lube)	NFY1112	3	x 2 Rear Radius Arm x 1 A-frame to DeDion	
7	Nylon Nut M12	NMY112	2	A-frame front mountings	
8	Nylon Nut M10	NMY110	2	Front radius arm (through cockpit)	
9	Roller Nut M8	NMY108	2	Rear Anti Roll Bar Drop Link	
10	Roller Nut M8	NMY108	4	Rear Anti Roll Bar Mounting Blocks	
11	Nylon Nut M10	NMY110	1	Roller nut on DeDion tube	

Pack H		CATERHAM		53	
		PACK NUMBER		30R011D	
REAR SUSPENSION DEDEION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Washer	W020	10	Differential Isolation	
13	Plain Washer 1/2" (Chamfered)	WP112	20	x 2 Lower Damper x 10 A-frame washers x 4 Radius Arm	
14	Plain Washer 3/8" X 1/8"	WP13X18	2	Front Radius Arm	
15	Plain Washer M8	W0808	4	Rear Anti Roll Bar Mounting Block	
16	Conical Washer M10	SW1010A	2	Lower Damper	

x2
x2
x2
x2

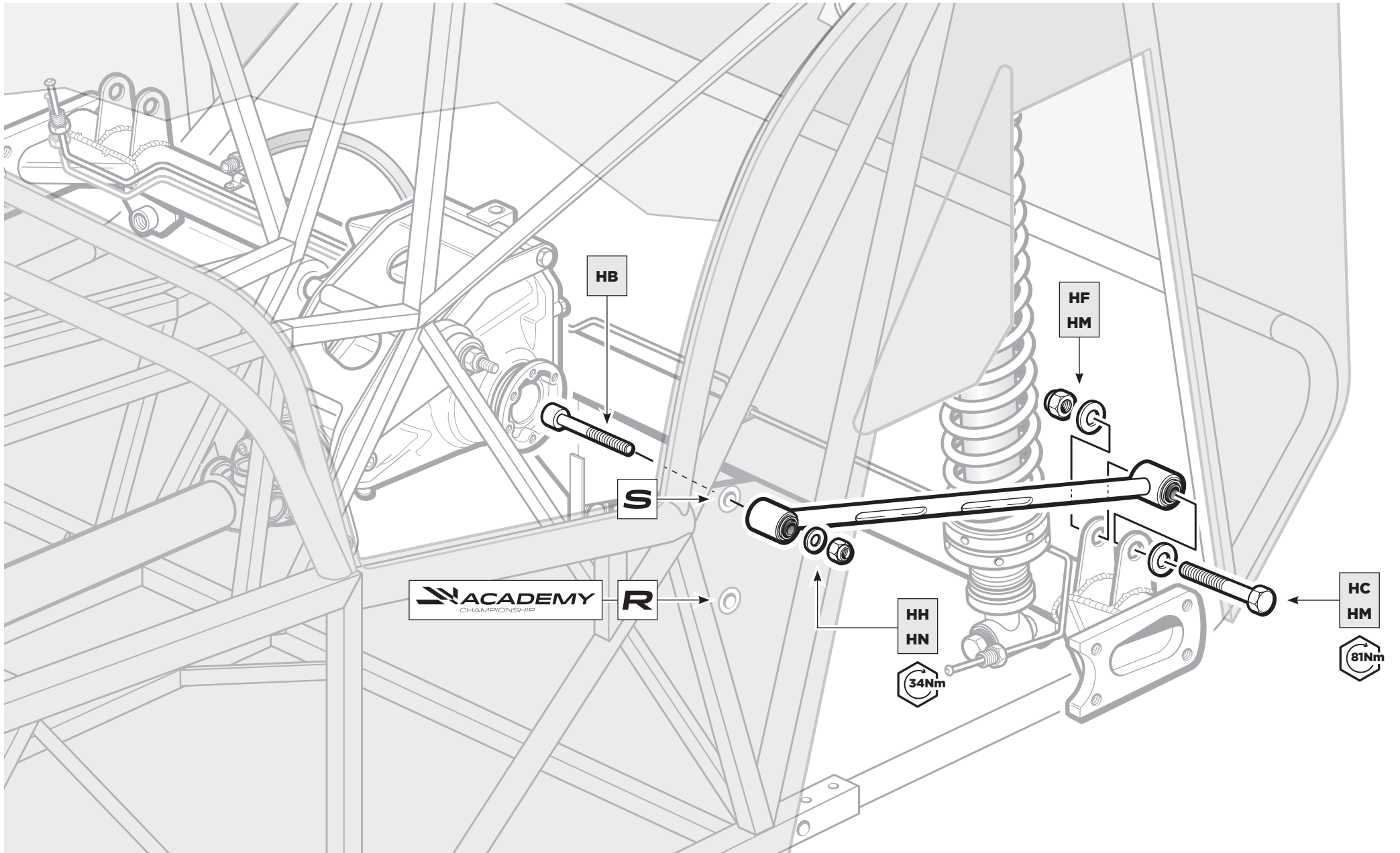
x4
x2

TIPS

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

THEN THE RADIUS ARM

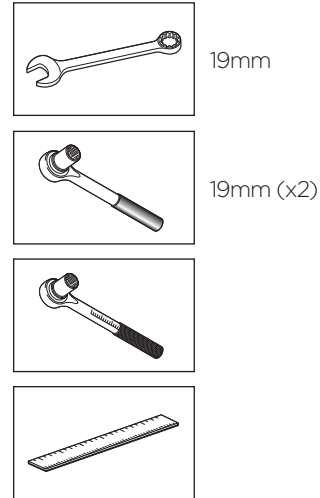


AND NOW THE (CAREFULLY SPACED) A-FRAME

PARTS

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

TOOLS



FIXINGS

Pack H		CATERHAM		53	
		PART NUMBER		30R01TD	
REAR SUSPENSION DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	HA Half 1/2" x 1/8" Grade 10.9	BM12X100	2	A-frame front mountings	
2	HG Coplanar Bush 1/8" x 1/8"	BM12X100	2	Front radius arm (through cockpit)	
3	HC Bush 1/2" x 1/2" x 1/2" Grade 10.9	BF12X22.52	4	x 2 Lower Rear Champs x 2 Rear Radius Arm	
4	HD Bolt M6 x 40 Grade 10.9	BM6x40	4	Rear Anti Roll Bar Mounting Blocks	
5	HE Bolt 1/2" x 2 3/4" Grade 10.9	BF12X2.34	1	A-frame to DeDion	
6	HF Half Nylon 1/2" Tube	NFY1/2	3	x 2 Rear Radius Arm x 1 A-frame to DeDion	
7	HG Nylon Nut M12	NMY12	2	A-frame front mounts	
8	HA Nylon Nut 1/2"	NMY1/2	2	Front radius arm (through cockpit)	
9	HE Nylon Nut M6	NMY6	2	Rear Anti Roll Bar Drop Link	
10	HA Nylon Nut 1/8"	NMY1/8	4	Rear Anti Roll Bar Mounting Blocks	
11	HG Nylon Nut 1/4"	NMY1/4	1	x 1 Nylon union on DeDion tube	

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

x2

x1

x1

x2

Pack H		CATERHAM		53	
		PART NUMBER		30R01TD	
REAR SUSPENSION DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	HL Washer	7622	10	Differential Isolation	
13	HM Plain Washer 1/2" Chamfered	WPH1/2	20	x 2 Lower Champs x 10 A-frame washers x 8 Radius Arm	
14	HN Plain Washer 3/8" x 3/8"	WPH3/8x3/8	2	Front Radius Arm	
15	HD Plain Washer M6	WPH6	4	Rear Anti Roll Bar Mounting Block	
16	HP Lower Washer M12	321205A	2	Lower Champs	

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

*

* 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

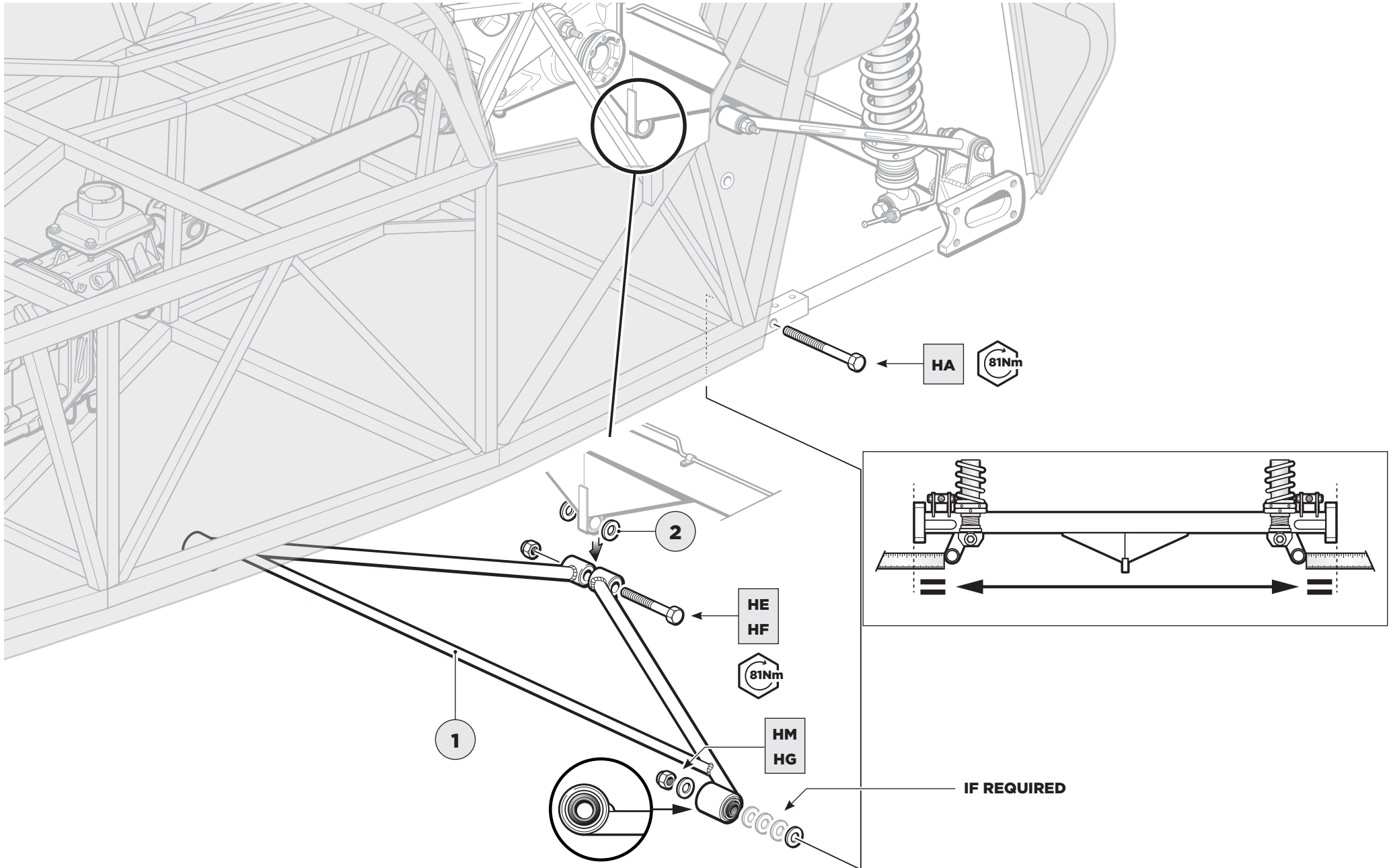
Take care to use the correct nuts as there is a mixture of metric and imperial here.

Lee A

Torque up as before on axle stands.

Rich T

AND NOW THE (CAREFULLY SPACED) A-FRAME

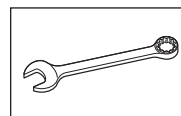
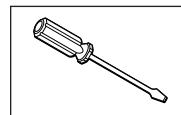
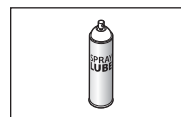


IF YOU HAVE THE OPTIONAL REAR ANTI-ROLL BAR, IT GOES ON LIKE THIS

PARTS

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

TOOLS



10mm



10mm

FIXINGS

Pack H		CATERHAM		53	
		PACK NUMBER		30R011D	
REAR SUSPENSION DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Ball Joint 1.000 Gasket 10.0	BM214100	2	A-Frames front mountings	
2	Coilover Bolt 10x1.0	BM211000	2	Front radius arm (through coilover)	
3	Bolt 1/2" x 2.0" 10.0 Gasket 10.0	BM120210	4	x 2 Lower Rear Dampers x 2 Rear Radius arm	
4	Bolt M8 x 40 Gasket 10.0	BM0080	4	Rear Anti Roll Bar Mounting Blocks	
5	Ball Joint 1.000 Gasket 10.0	BM214100	1	A-Frames to DeClic	
6	Half Nuts 10x1.0	BM1110	3	x 2 Rear Radius Arm x 1 A-Frames to DeClic	
7	Nuts M10 10.0	BM1110	2	A-Frames front mounting	
8	Nuts M10 10.0	BM1110	2	Front radius arm (through coilover)	
9	Half Nuts 10.0	BM1110	2	Rear Anti Roll Bar Drop Link	
10	Nuts M8 10.0	BM1110	4	Rear Anti Roll Bar Mounting Blocks	
11	Nuts M10 10.0	BM1110	1	x 1 Nut on front DeClic tube	

x4

x4

Pack H		CATERHAM		53	
		PACK NUMBER		30R011D	
REAR SUSPENSION DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Washer	W020	10	Differential isolation	
13	Plain Washer 10" Clearance	W1010	20	x 2 Lower Damper x 10 A-Frames washers x 4 Radius Arm	
14	Plain Washer 30" x 10"	W103010	2	Front Radius Arm	
15	Plain Washer M8	W1008	4	Rear Anti Roll Bar Mounting Block	
16	Lower Washer M10	W10100A	2	Lower Damper	

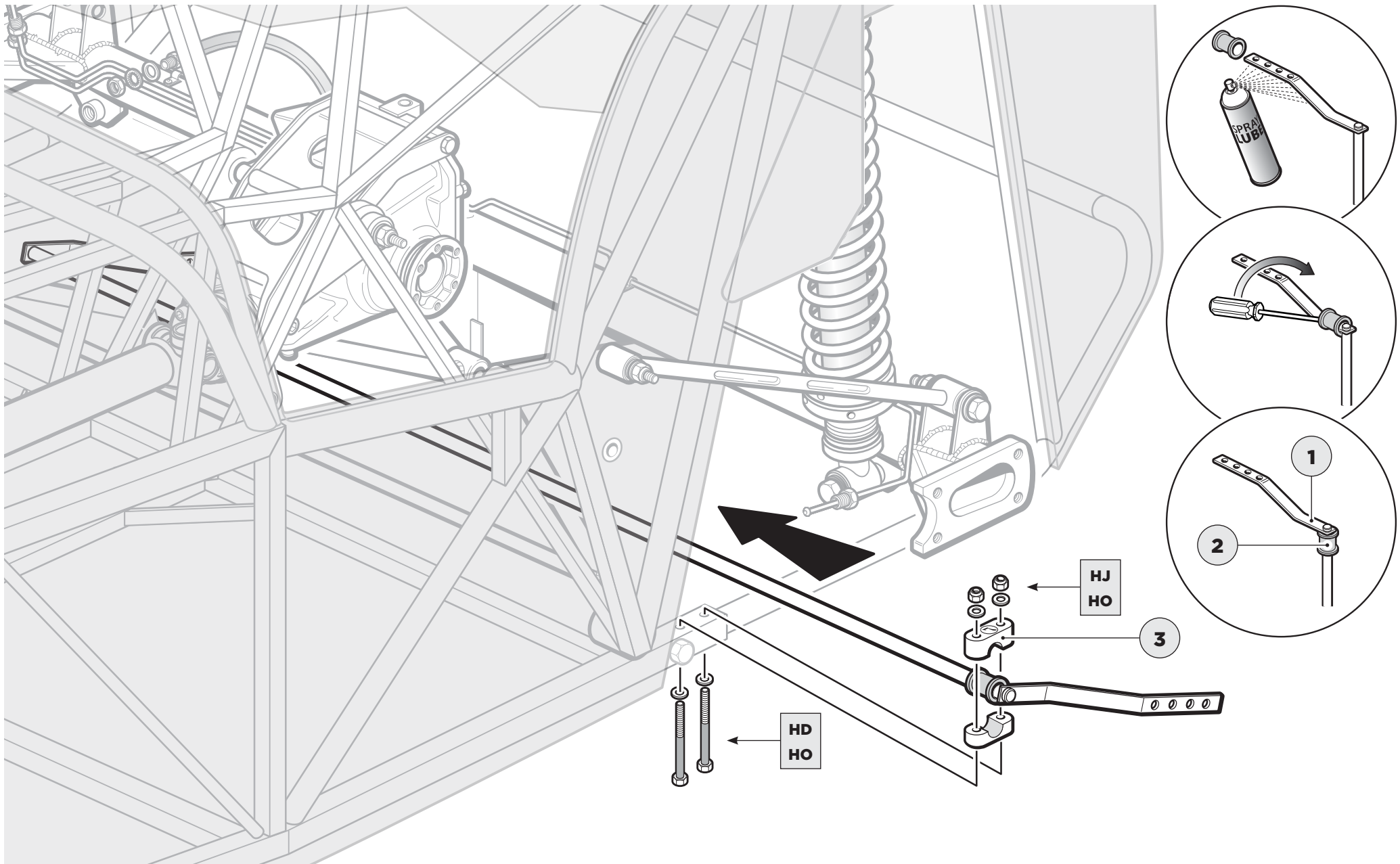
x8

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

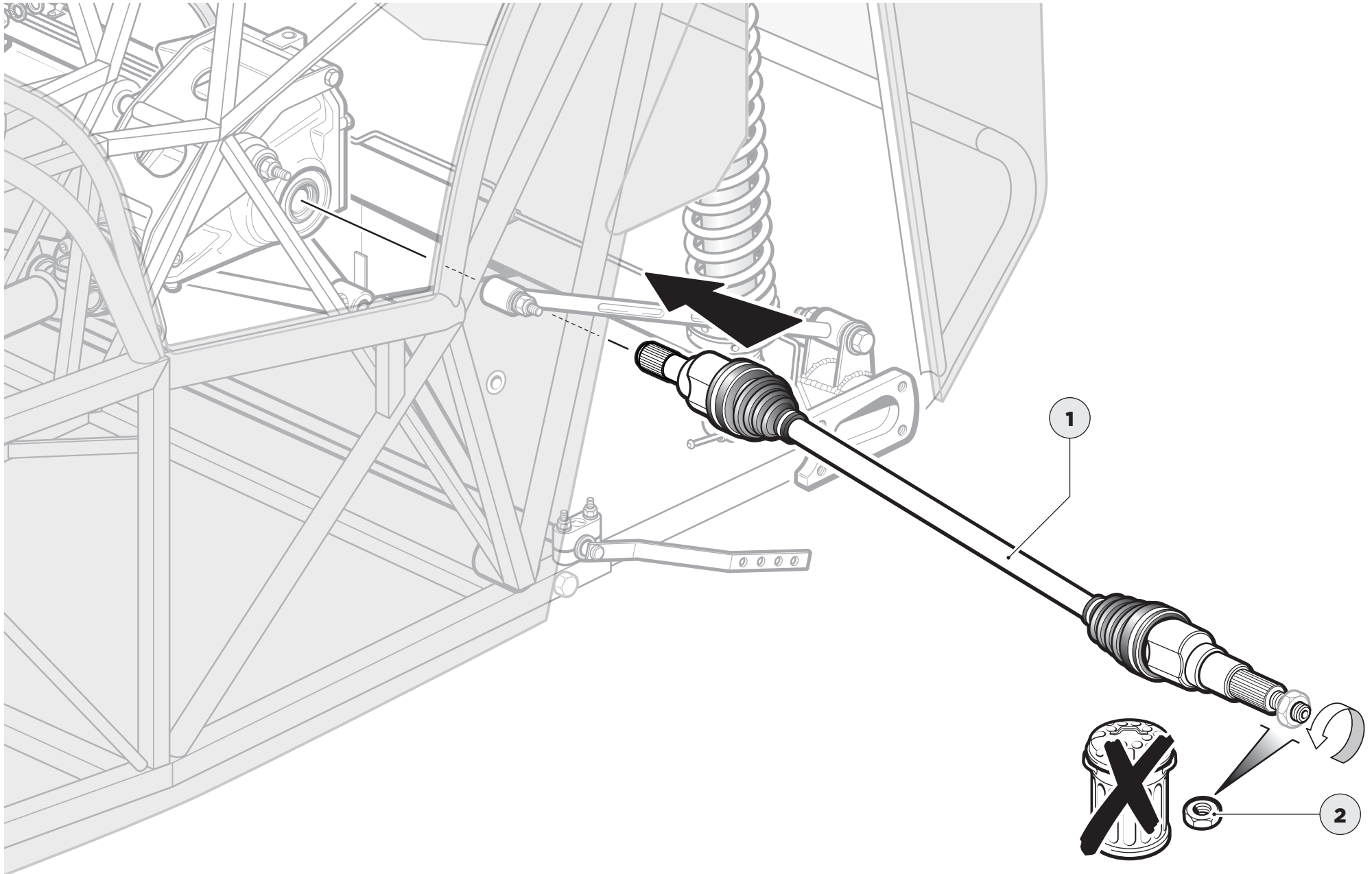
FIXINGS

TIPS

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

James A

INSERT THE DRIVESHAFTS

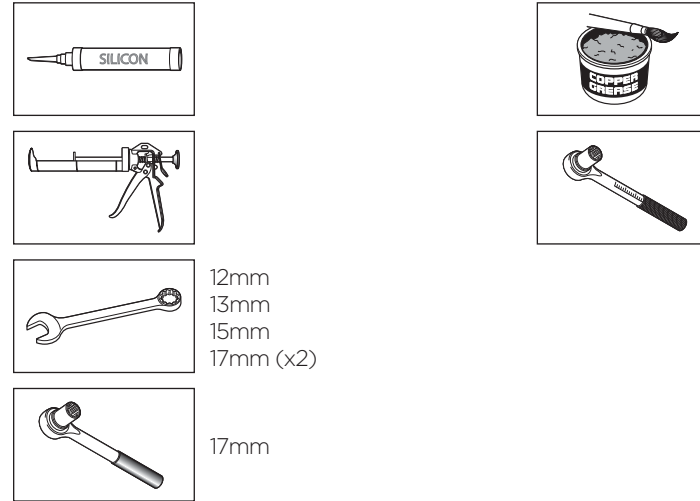


FITTING THE REAR HUB

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

Pack 1		CATERHAM		44	
AXLE DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Hub 12" x 17" 40	BM12A11	1	Upper off mounting bolt	
2	Upper off mounting bolt 12" x 17" 40	BM12A11	2	Lower off mounting bolt	
3	Hub 12" x 17" 40	BM12A11	4	Rear hub through ear to front DeDion	
4	Hub 12" x 17" 40	BM12A11	8	x 4 Front hub through ear x 4 Caliper carrier bolts	
5	Hub 12" x 17" 40	BM12A11	4	Through rear of ear into threaded DeDion holes	
6	Upper off mounting bolt 12" x 17" 40	BM12A11	4	Proprietary bolts	
7	Upper off mounting bolt 12" x 17" 40	BM12A11	2	DR page	
8	Hub 12" x 17" 40	BM12A11	1	Upper off bolt	
9	Hub 12" x 17" 40	BM12A11	8	Hub through ear to DeDion	
10	Hub 12" x 17" 40	BM12A11	4	Rear anti roll bar droplink	
11	Hub 12" x 17" 40	BM12A11	2	Brake pins	

x4
x8
x4
x8
x4

Pack 1		CATERHAM		44	
AXLE DEDION METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	Plain washer 12" x 34" 700	WPT12A16	16	Front bearing off setup	
13	Plain washer 12" x 34" 700	WPT13	8	Front ply off off	
14	Plain washer 12" x 34" x 175" 700	WPT14	16	DR shims washers	
15	Washer M10	WPM10	16	Rear DeDion Caliper Carrier Hub	
16	Spring Washer M10	WSM10	16	Rear DeDion Tube Caliper Carrier	
17	Ballnut washer 12" x 34" 700	WPT17	4	Behind both hubs on off	
18	Brake pad 12" x 34" 700	WPT18	1	Braked brake hose	
19	Hub 12" x 17" 40	BM12A11	1	Phillips on DeDion for brake pins	
20	Phillips	PH1	6	Brake pins on DeDion	

x16
x8

TIPS

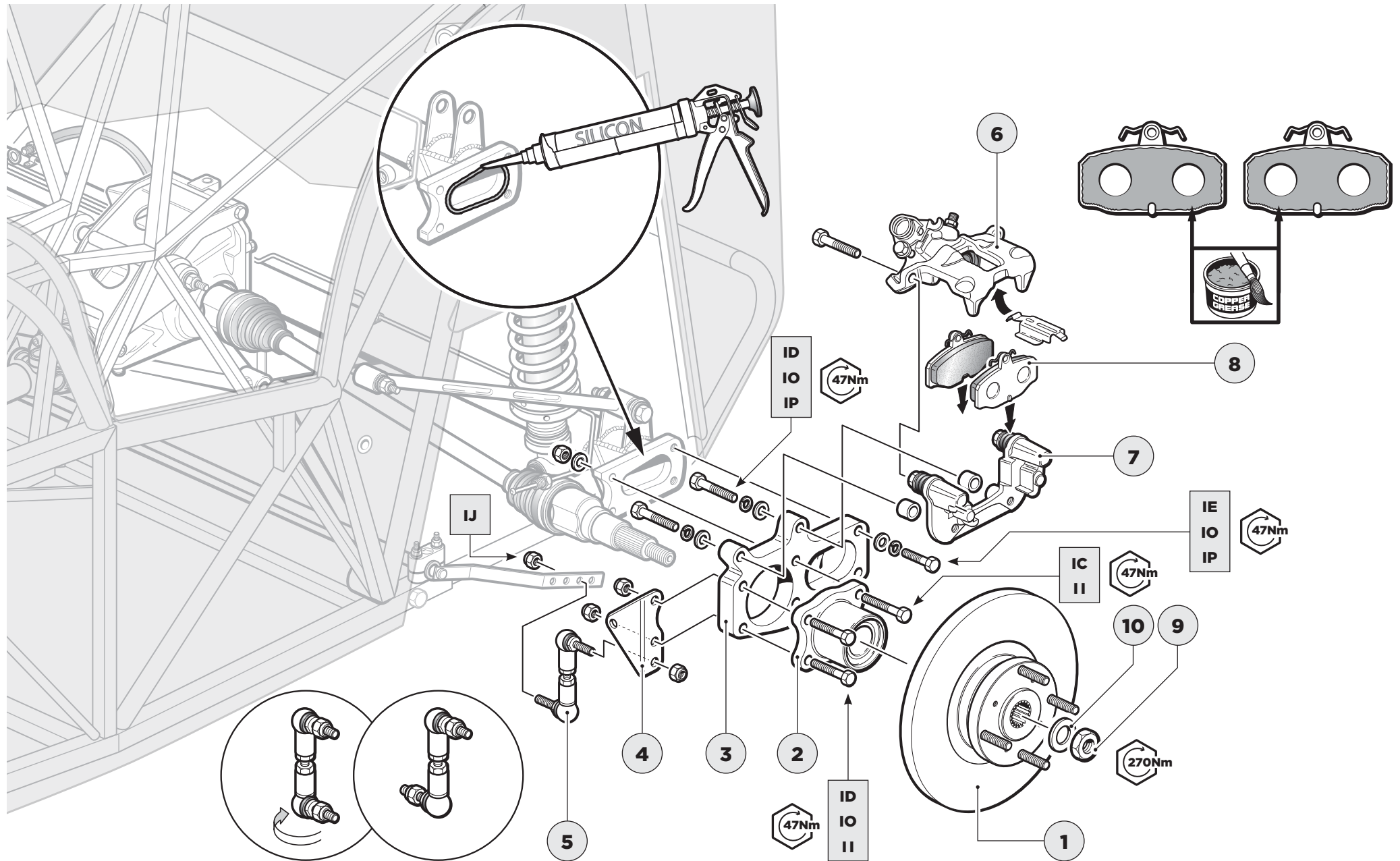
Swap the plain nuts on the droplinks for nylons.
Chris B

Remember the driveshaft nuts are handed.
Grant P

Torque up the bearing and ear before fitting the disc.
Dan D

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.
Rich T

FITTING THE REAR HUB

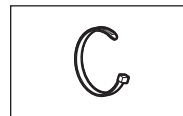


AND SPEED SENSOR (ONE SIDE ONLY)

PARTS

- 1 Speed sensor

TOOLS



FIXINGS

TIPS

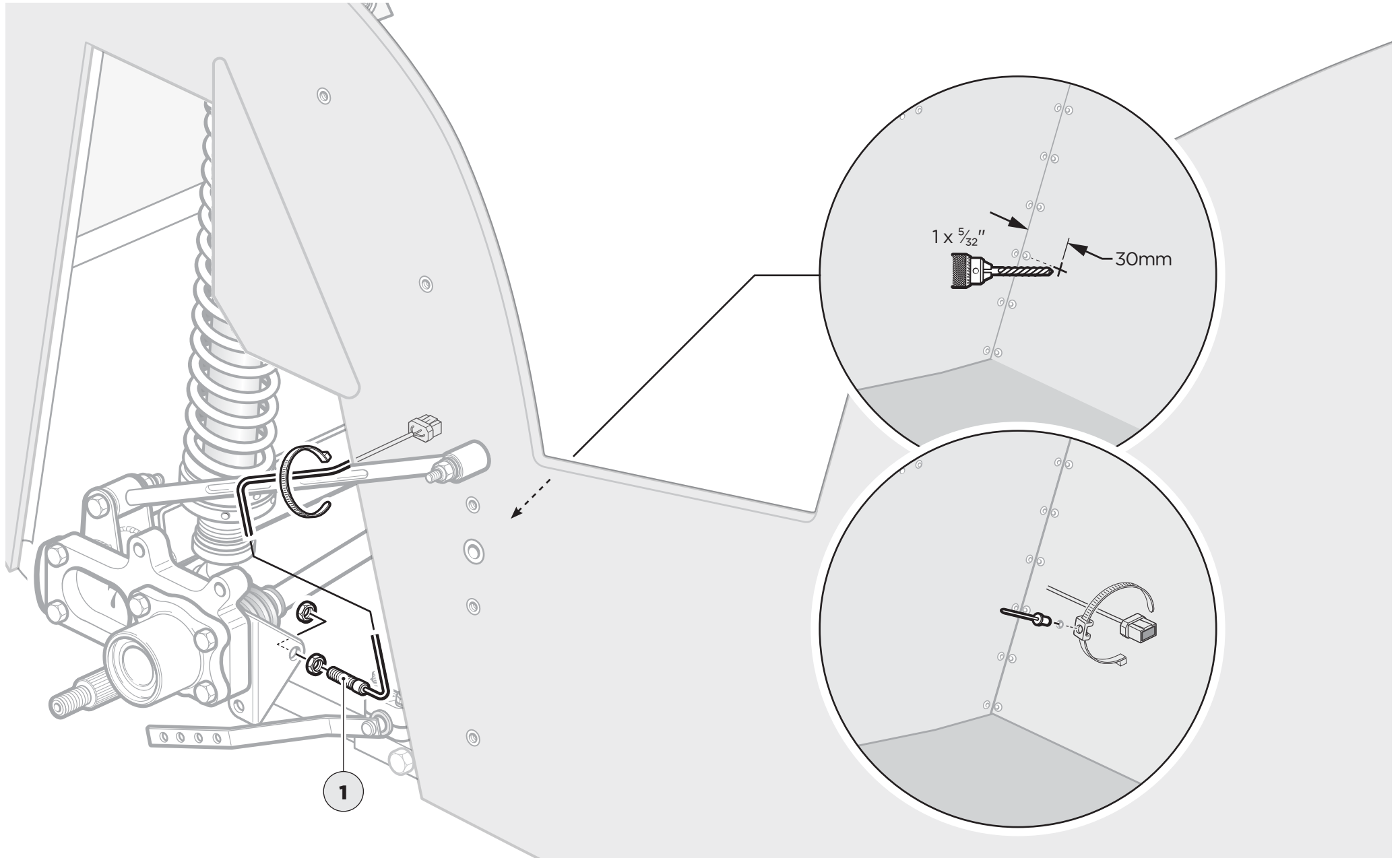
Ensure there is enough slack in the wire to allow for suspension travel.

Tiago O

Adjust sensor gap to approx. 0.8–0.9mm.

Lloyd D

AND SPEED SENSOR (ONE SIDE ONLY)





Now is a good time to take some photos



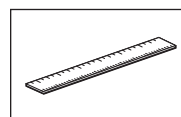
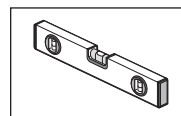
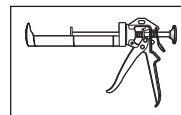
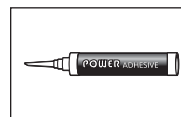
Have you applied for your IVA yet?

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 $\frac{1}{8}$ " hole you drilled earlier is for the indicator earth.

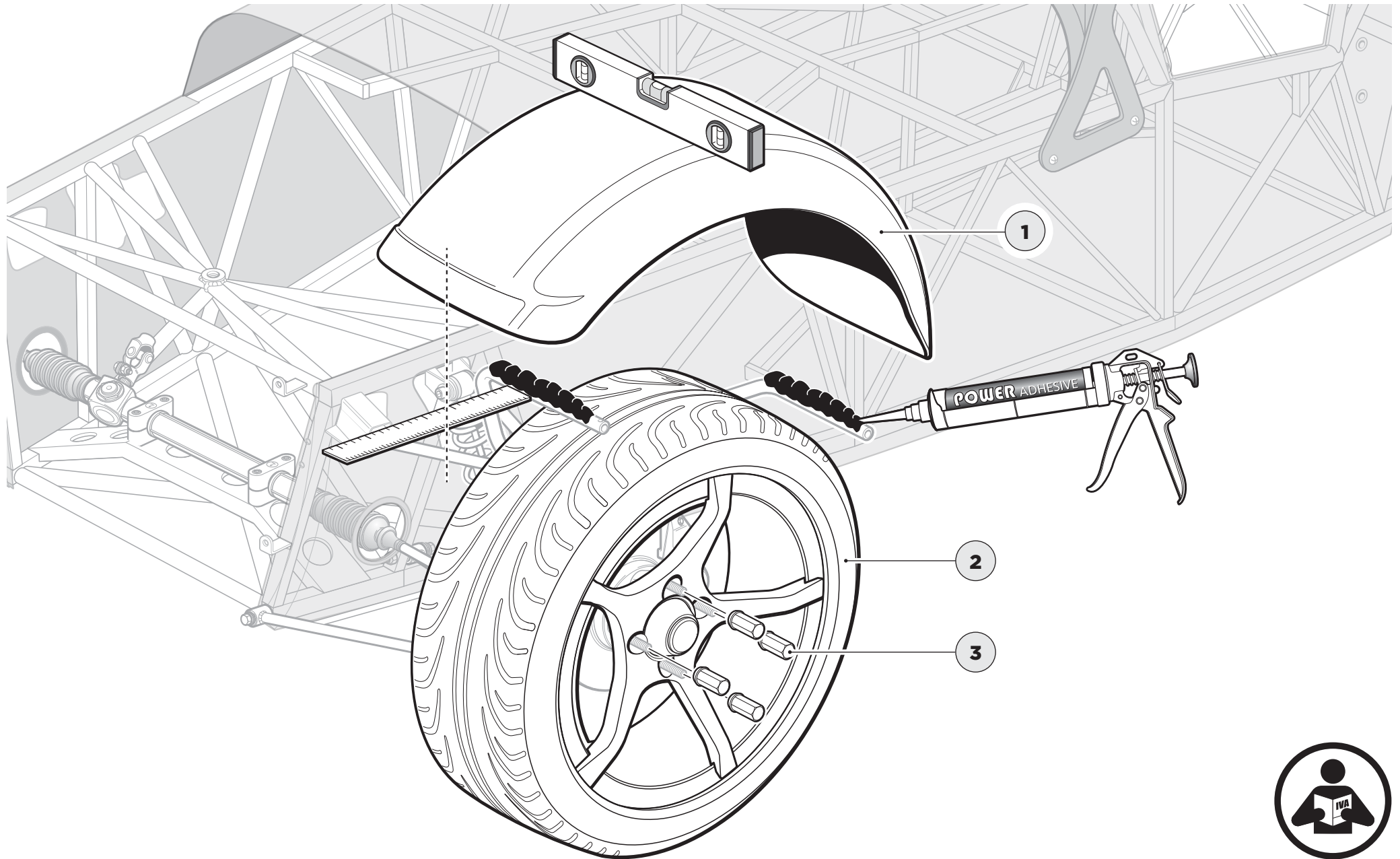
Harry P

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.

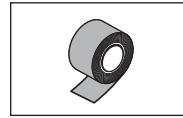
Chris N



TAPE IN PLACE FOR 24 HOURS

P A R T S

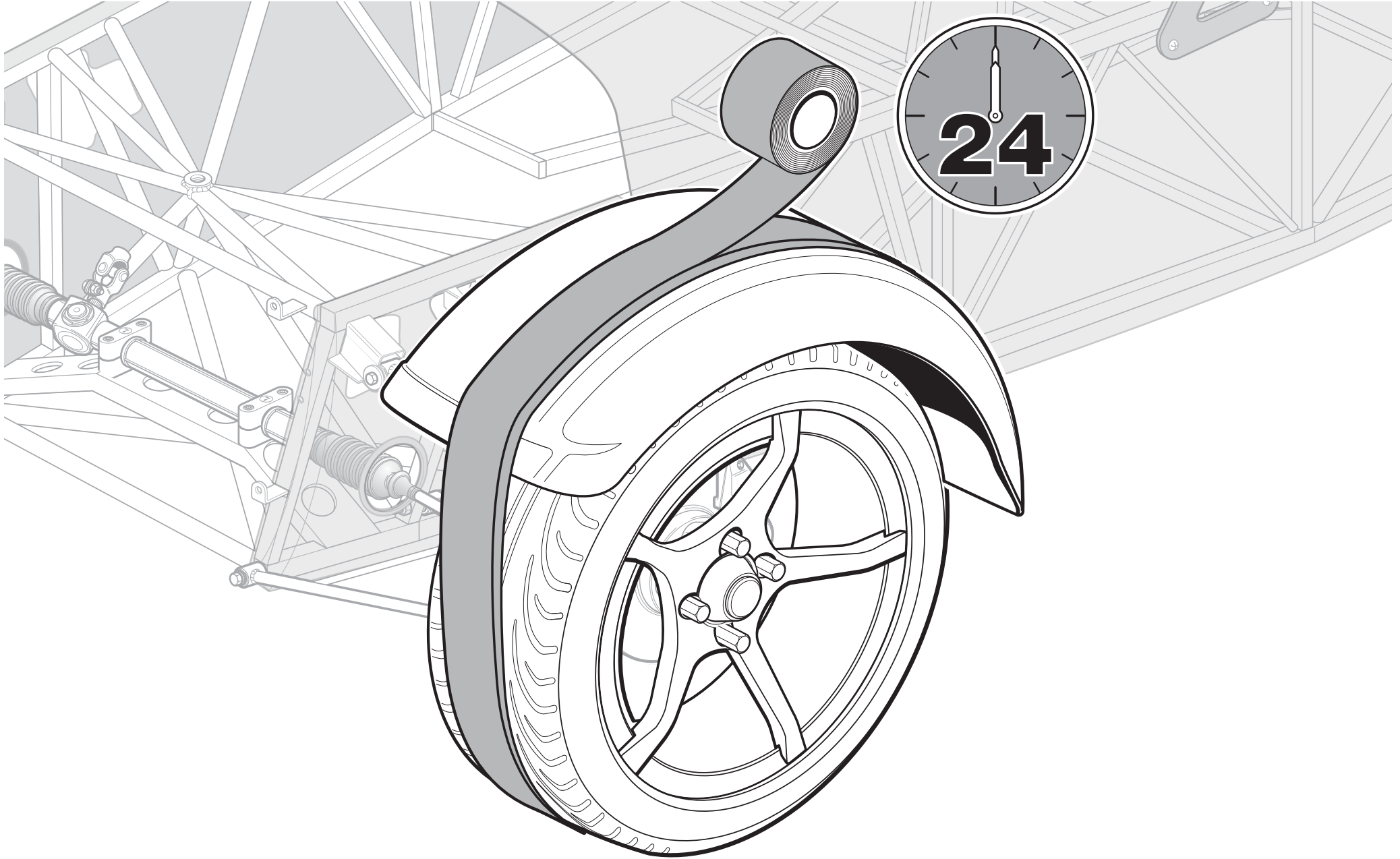
T O O L S



F I X I N G S

T I P S

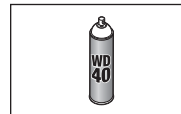
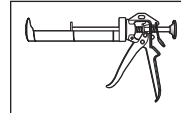
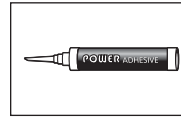
TAPE IN PLACE FOR 24 HOURS



SOME EXTRA ADHESIVE UNDERNEATH

PARTS

TOOLS

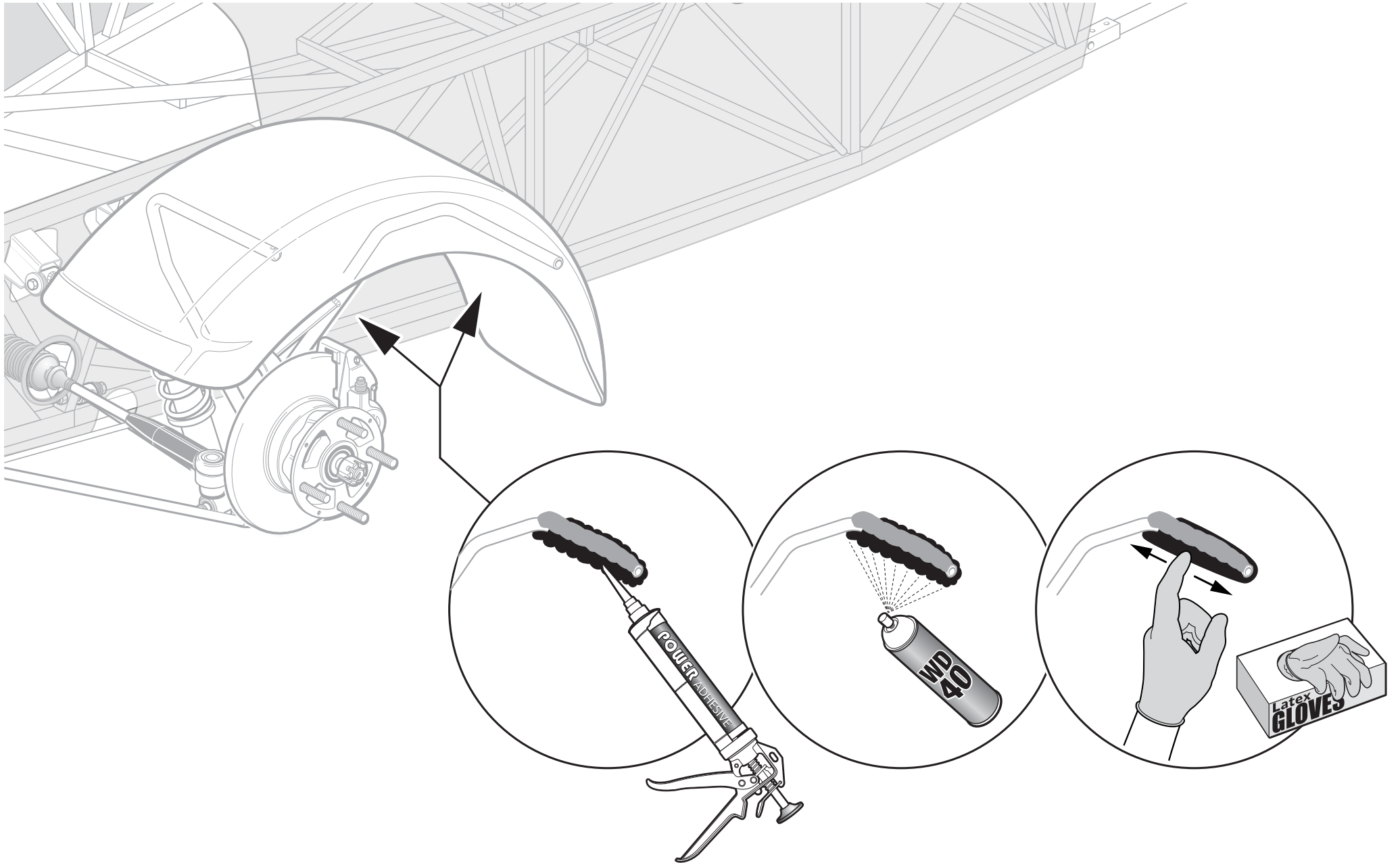


FIXINGS

TIPS

The WD40 will help spread the adhesive.

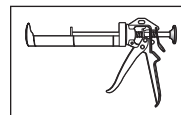
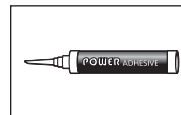
Mick F



FINISH WITH TRIM

PARTS

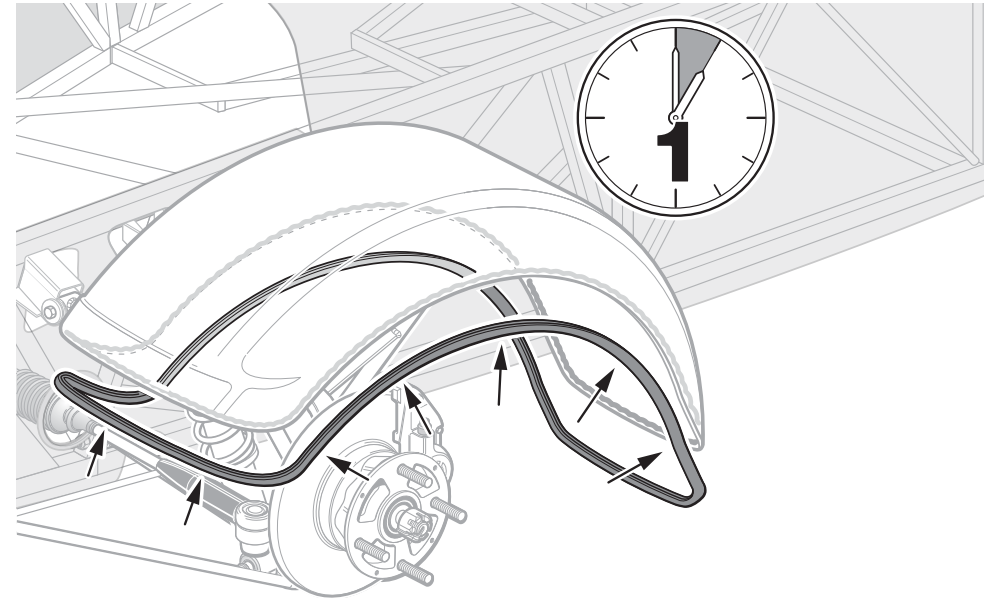
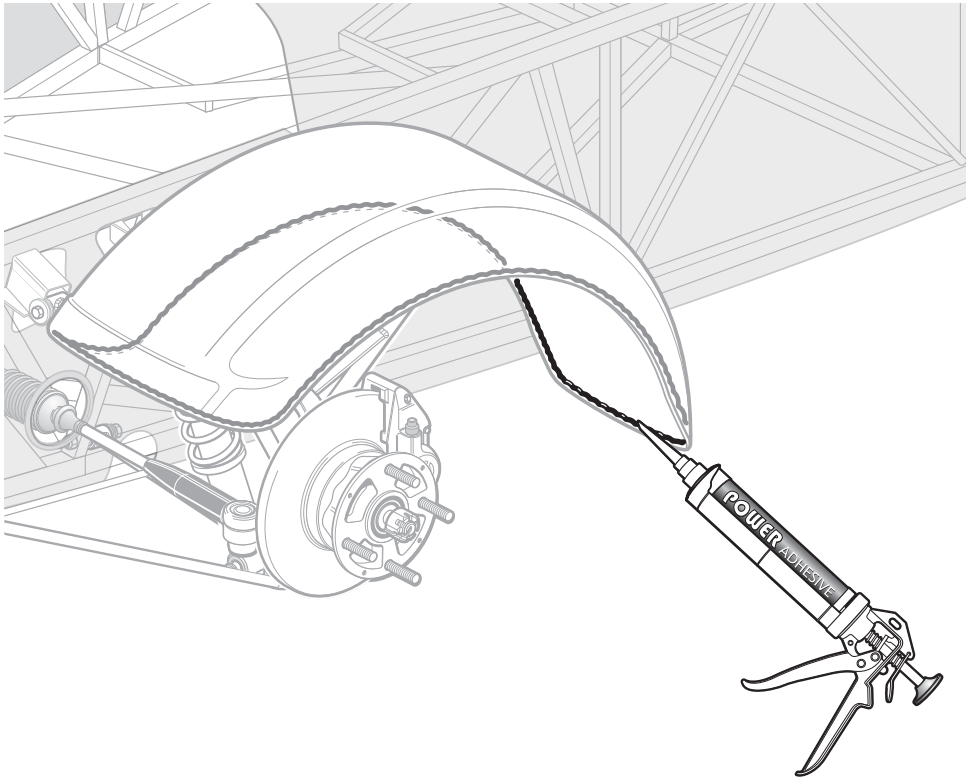
TOOLS



FIXINGS

TIPS

FINISH WITH TRIM

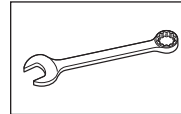
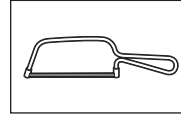
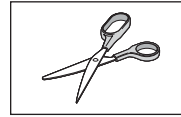


FITTING THE REAR WINGS

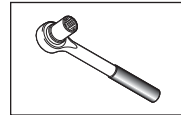
PARTS

1 Rear wing

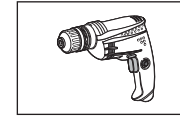
TOOLS



8mm



8mm



Sanding Drum

FIXINGS

Pack Q		CATERHAM		31		
		PART NUMBER		2FG12		
REAR WINGS						
This pack may include extra fasteners to cover different options						
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION	
1	OA	Self Drilling MS X 20	8MSX20	20	Rear Wings	
2	OB	Nylon Nut M5	N5NYS	10	Rear wings through boot	
3	OC	Flare Washer 3/16" X 3/4"	WFS16X34	30	Wing washers	
4	OD	Wing Pinns 1/4" X 1"	7602	4x	Between wing and body	

x20

x10

x30

x4

TIPS

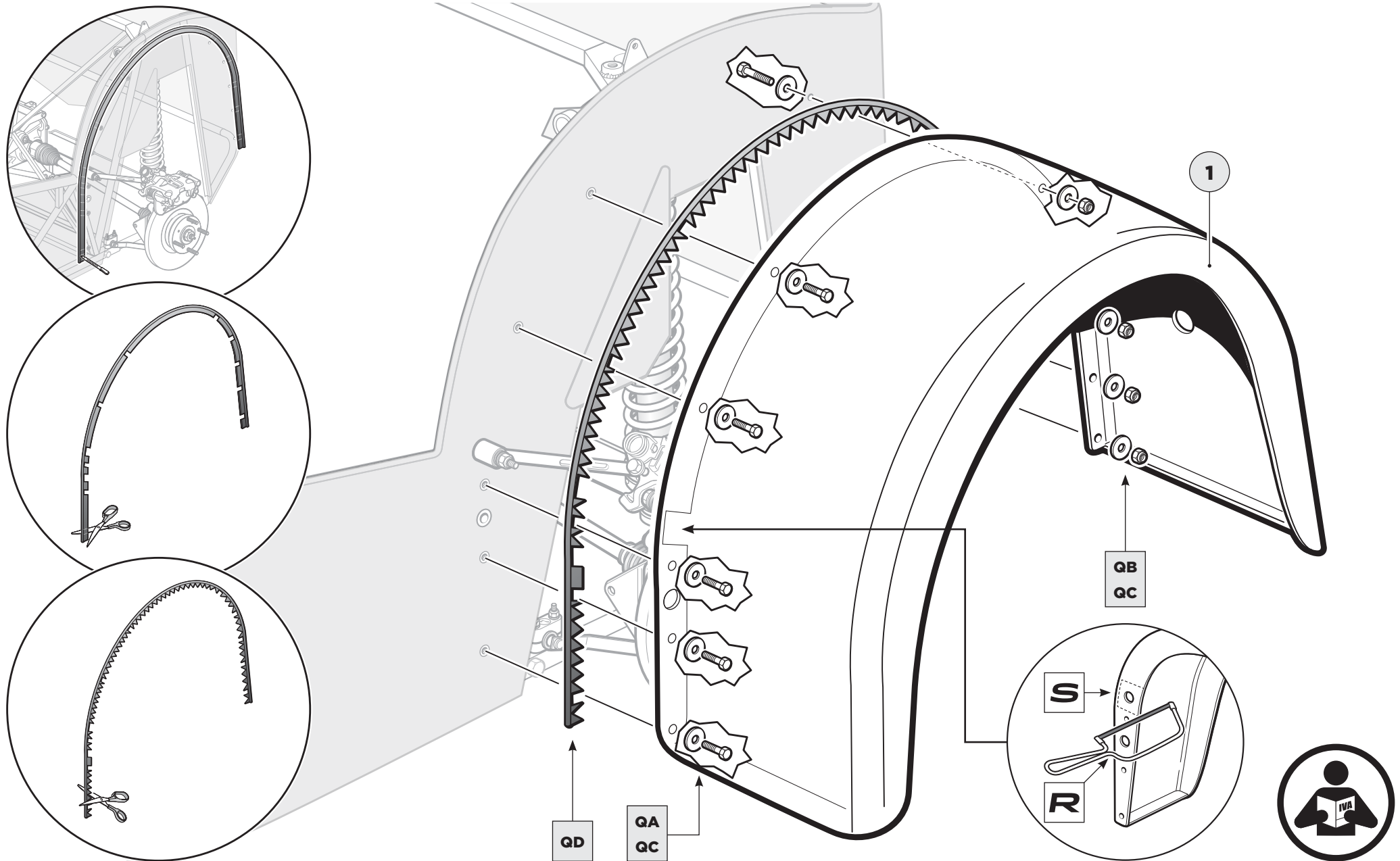
Cut the supplied piping in half and it will be enough for both wings.

Rich T

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

Tiago O

FITTING THE REAR WINGS

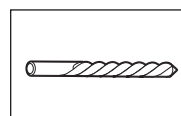
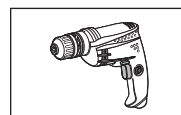
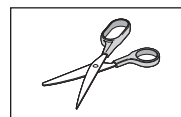


AND THE WING PROTECTORS

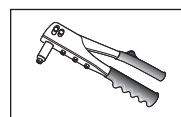
PARTS

- 1 Wing protector

TOOLS



1/8"



FIXINGS

For stainless steel protectors

Pack O		CATERHAM		<small>Part Number</small> ZWS01	
WING PROTECTORS STAINLESS STEEL					
<small>This pack may include extra fasteners to cover different options</small>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	OA Rivet 1/8" X 0.51"	1661-0414	30	Wing protector to wing	
2	OB Wing Plug	76901	2m	Between wing protector and wing	
<small>Drawings are for illustrative purposes only and are not to scale. Page 1 of 1</small>					

For carbon fibre protectors

Pack P		CATERHAM		<small>Part Number</small> ZWS02	
WING PROTECTORS CARBON FIBRE					
<small>This pack may include extra fasteners to cover different options</small>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	PA Rivet Black 1/8" X 0.51"	1610-01046	30	Wing protector to wing	
2	PB Wing Plug	76901	2m	Between wing protector and wing	
<small>Drawings are for illustrative purposes only and are not to scale. Page 1 of 1</small>					

TIPS

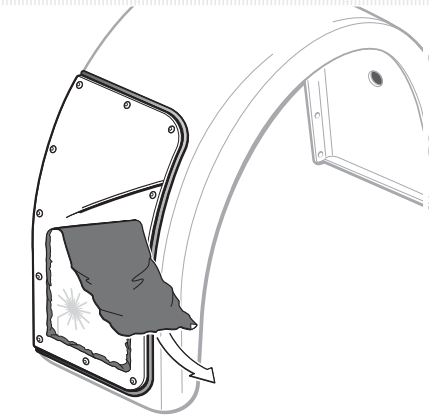
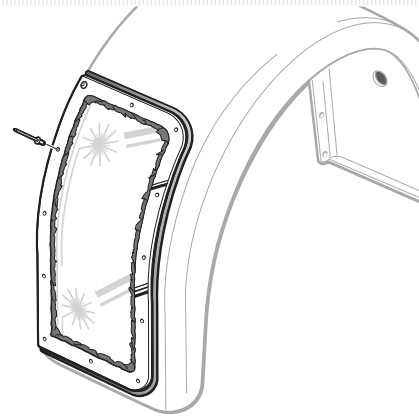
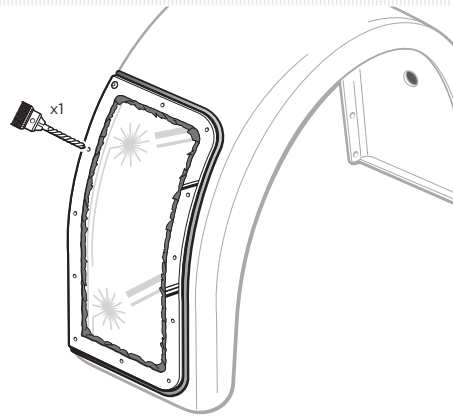
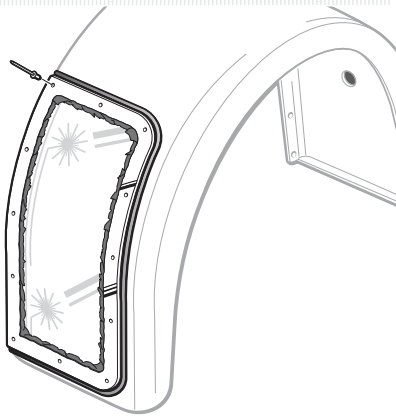
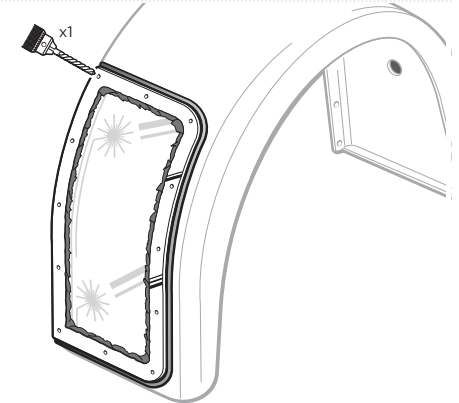
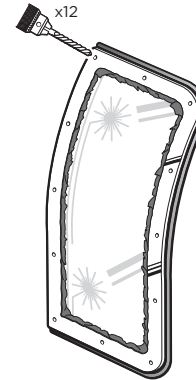
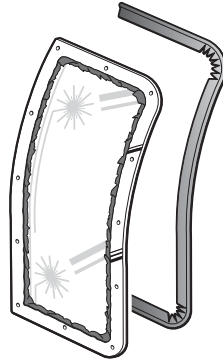
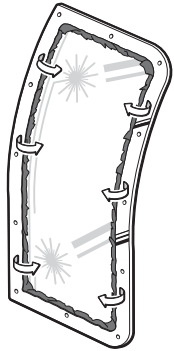
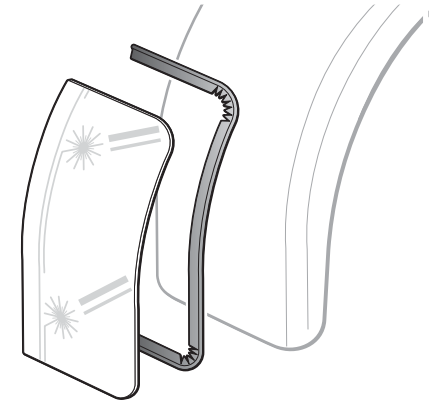
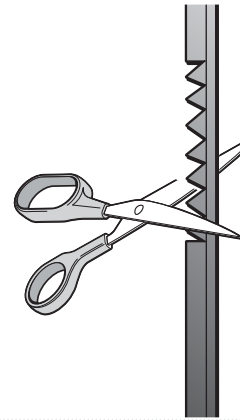
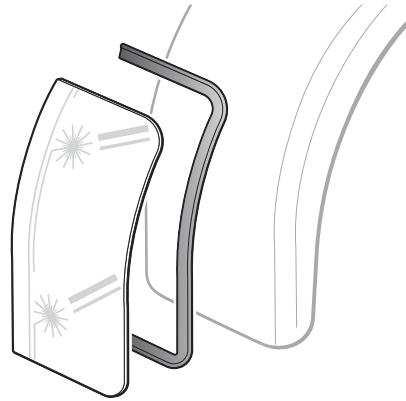
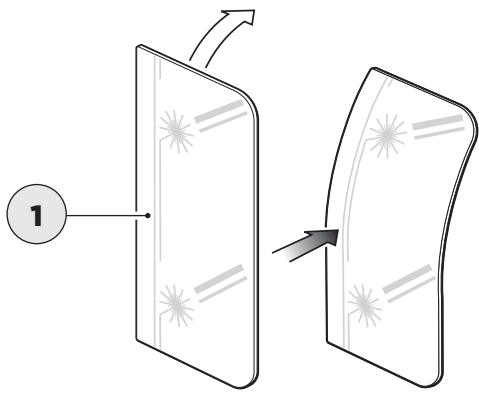
When drilling through protector start on the closest edge to the body. This will help the protector fit correctly.

Chris B

Carbon fibre protectors will not have the protective film shown.

Anthony L

AND THE WING PROTECTORS

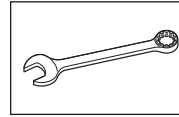


FITTING THE LIGHTS

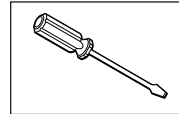
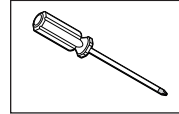
PARTS

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

TOOLS



8mm



FIXINGS

Pack C		CATERHAM		45	
		PACK NUMBER		39L002B	
FASTENER PACK - LIGHTING					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	CA Screw 10 x 37 Black hexagon	71060	6	Indicators connecting to indicator pad	
2	CB Screw 8 x 11 Black hexagon	71071	2	Side repeater parts on wingstay	
3	CC Screw 12 x 11* Self tapping	71070	4	Rear light cluster upper fixing	
4	CD Screw 12 x 11* Self tapping	71070	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

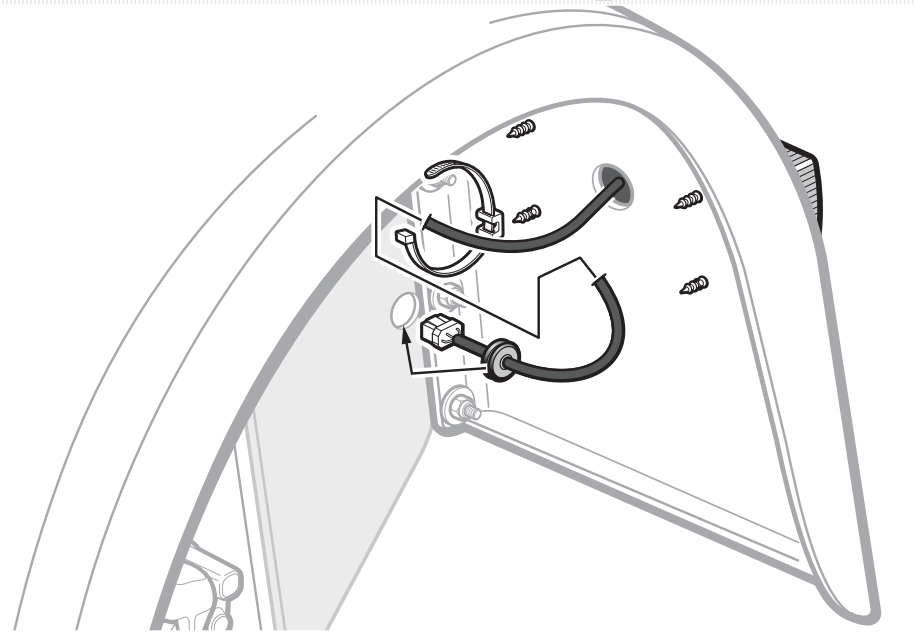
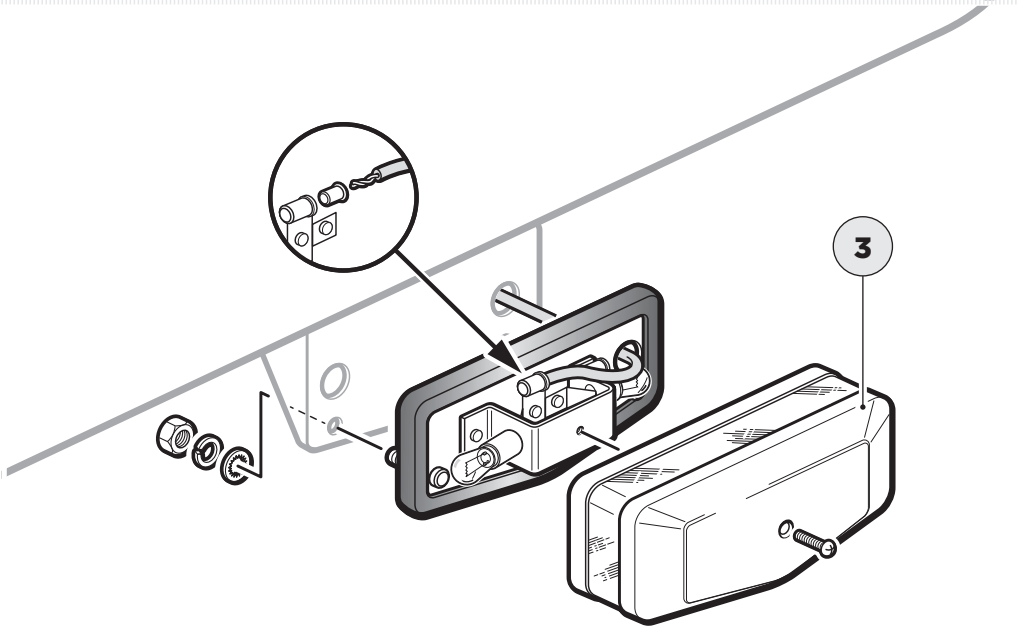
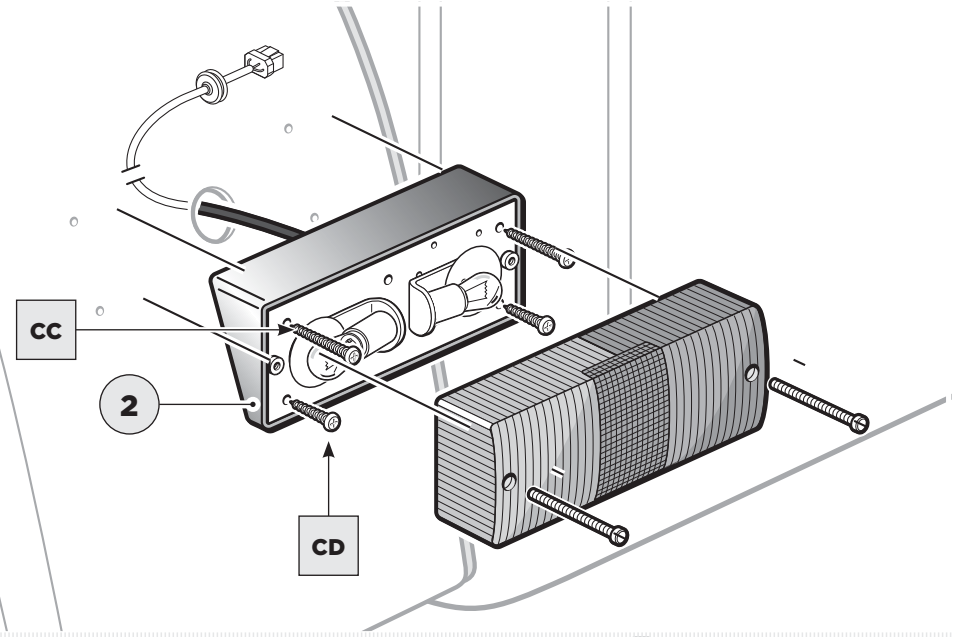
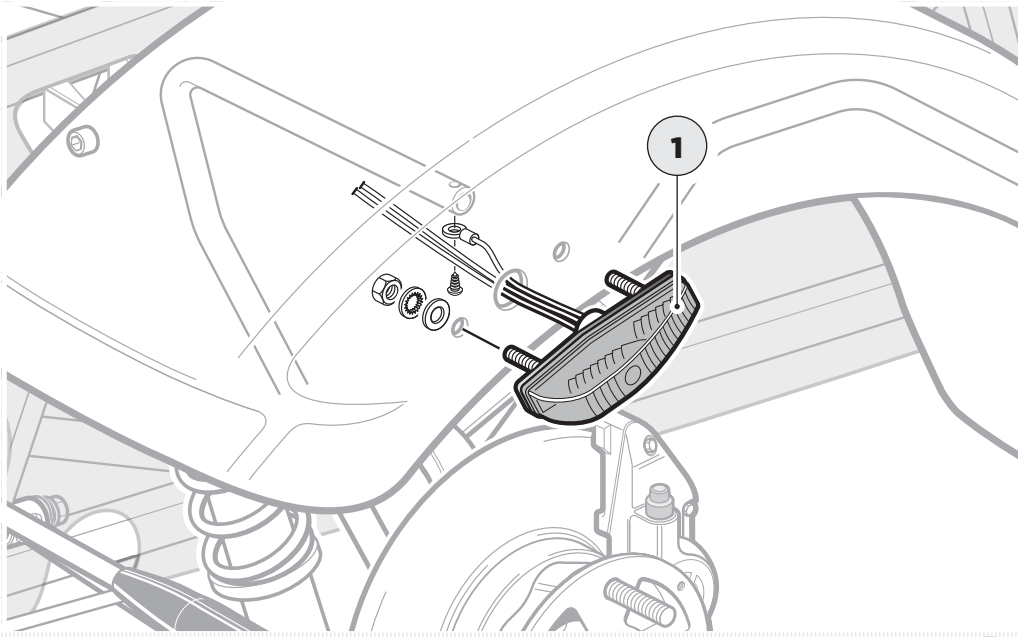
Rubber grommet on rear light goes in the body not the wing.

Jamie A

Indicator repeater wires go through the wingstay.

Chris B

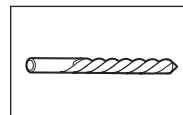
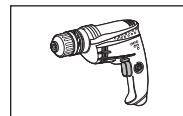
FITTING THE LIGHTS



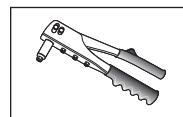
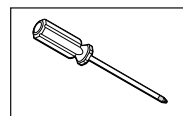
FUSE BOX COVER & KNEE TRIM PADS

PARTS

TOOLS



$\frac{5}{32}$ "



FIXINGS

Chassis fastener pack ZCH01 supplied loose:

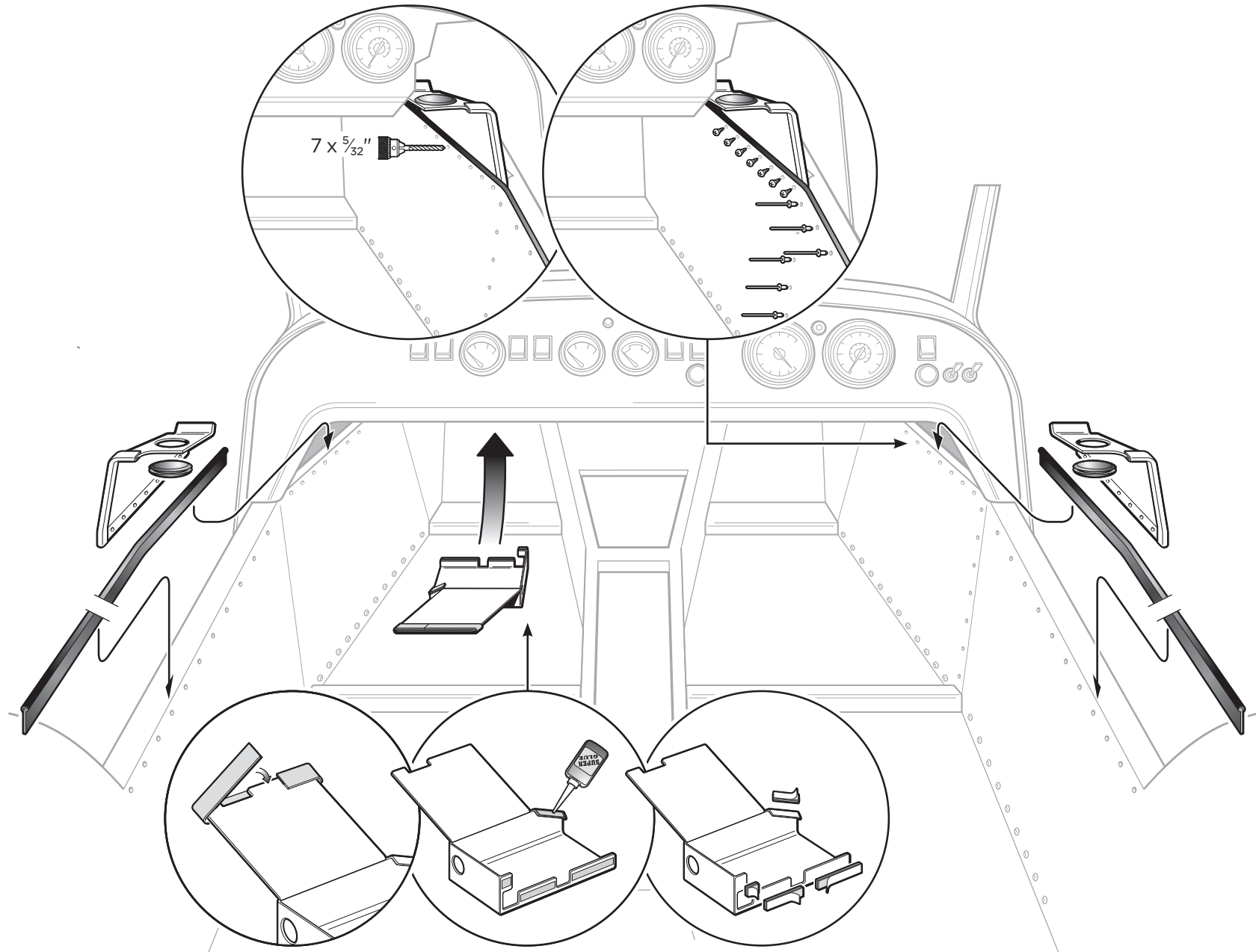
- Screw $\frac{3}{4}$ " x 10
- Rivet $\frac{5}{32}$ x 0.47"

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

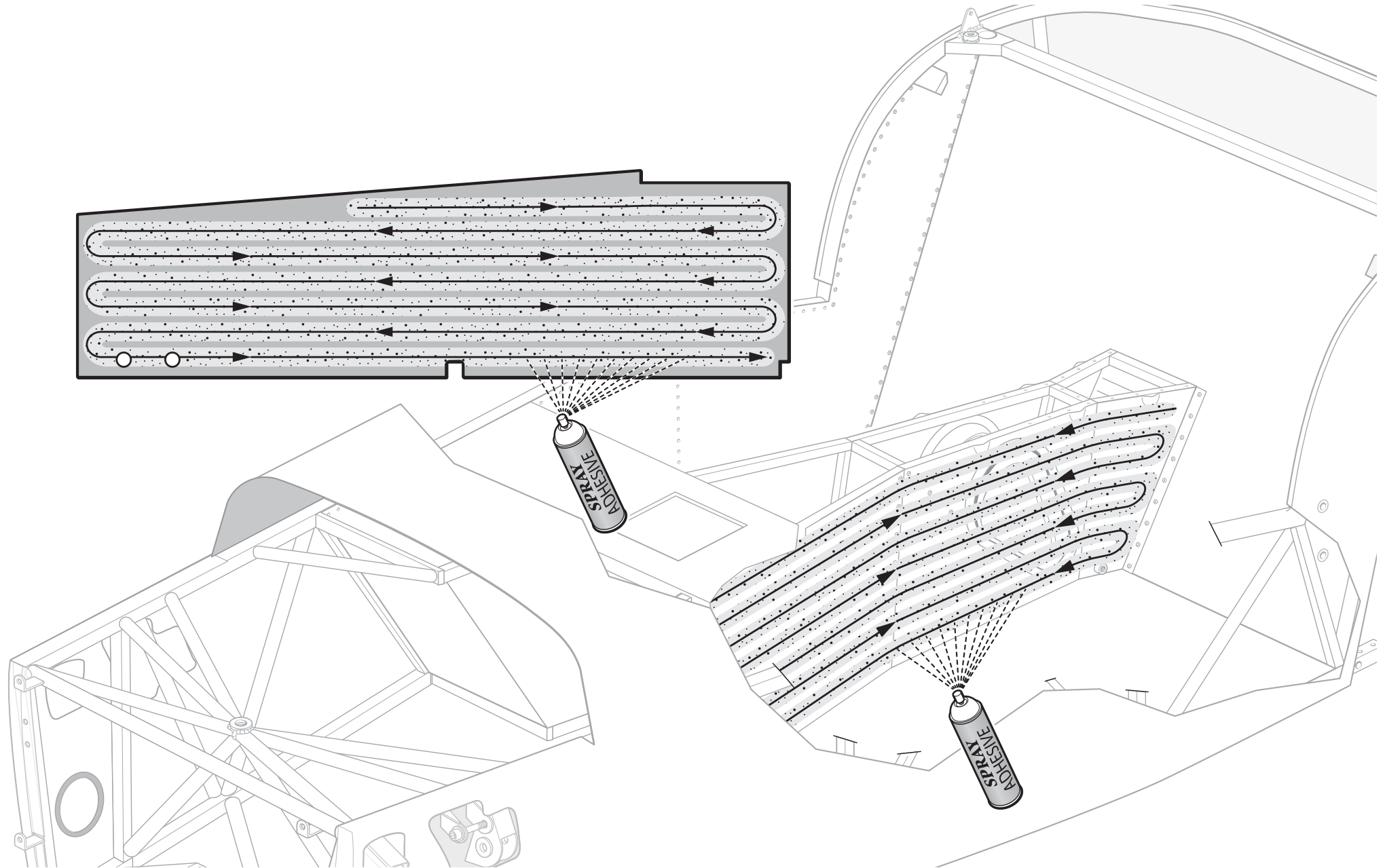
Spray on both tunnel panel and carpet.

John K

Allow the adhesive to go tacky before fitting.

Harry P

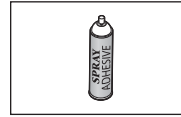
FIT THE TUNNEL CARPET



AND THE BOOT CARPET

PARTS

TOOLS



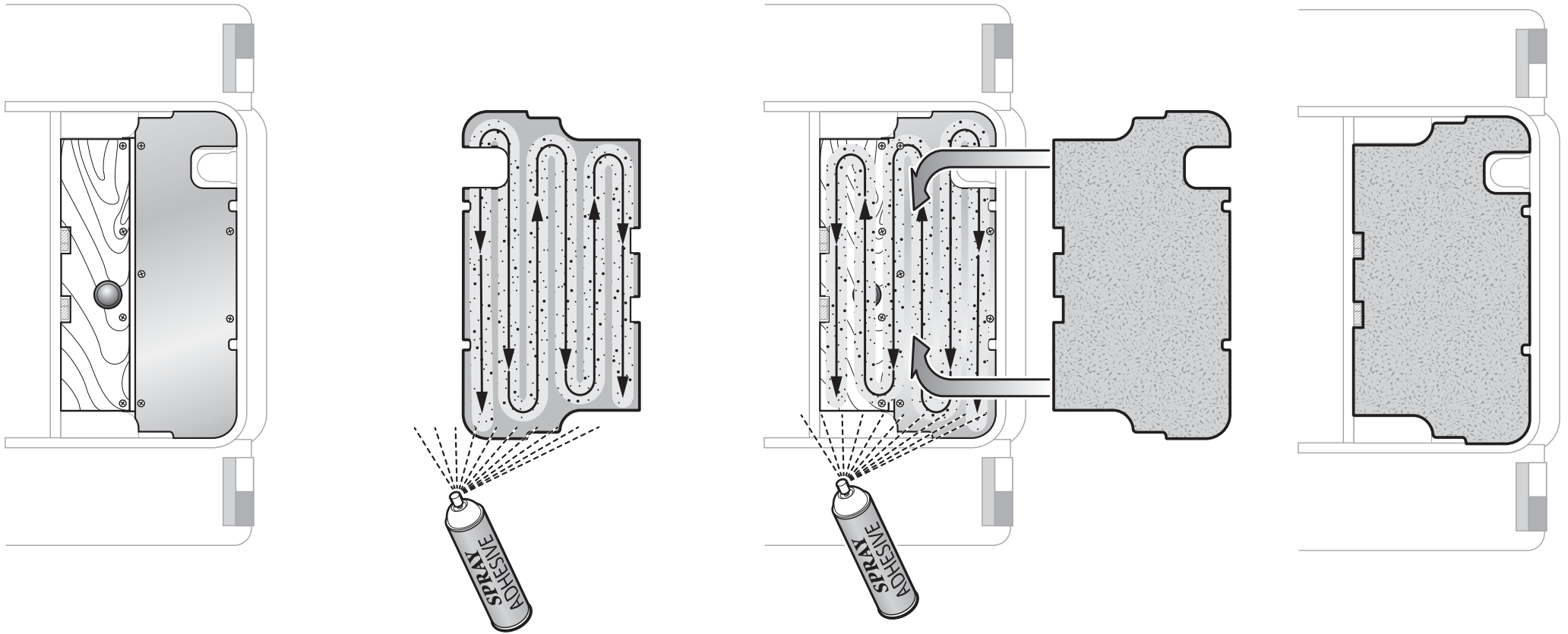
FIXINGS

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

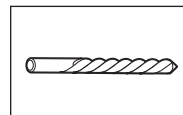
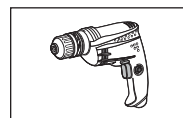


THIS IS A COVER UP

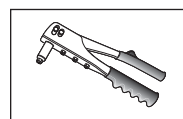
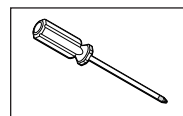
PARTS

- 1 Fuel filler cove
- 2 Tunnel closing panel

TOOLS



5/32"



FIXINGS

Supplied loose:

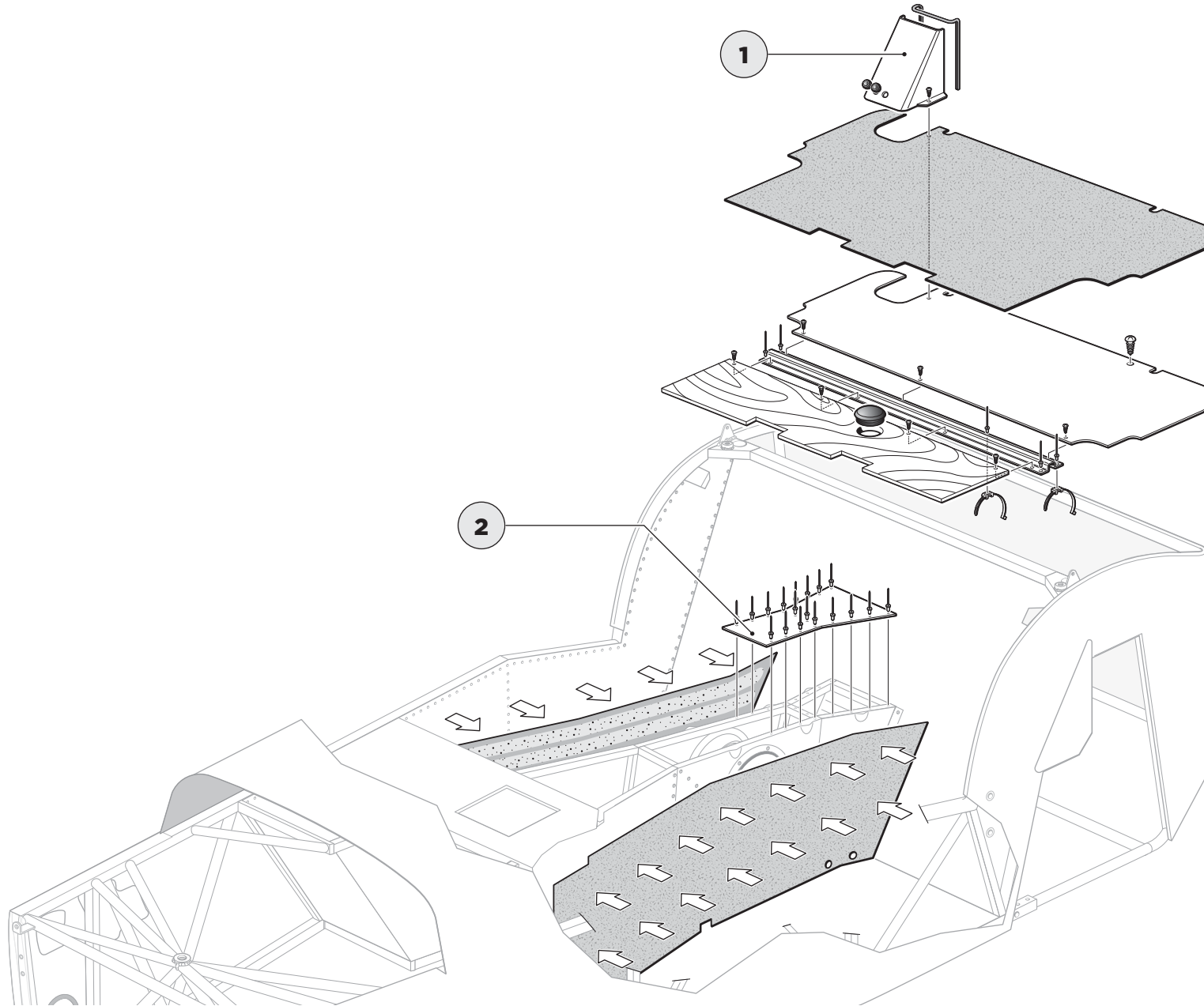
- Rivets
- Screws

TIPS

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

Rich T

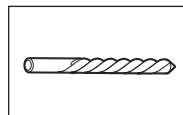
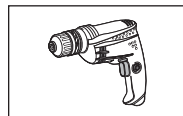
THIS IS A COVER UP



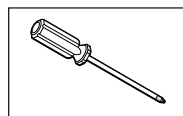
NOW FIT THE TUNNEL TOP

PARTS

TOOLS



1/8"



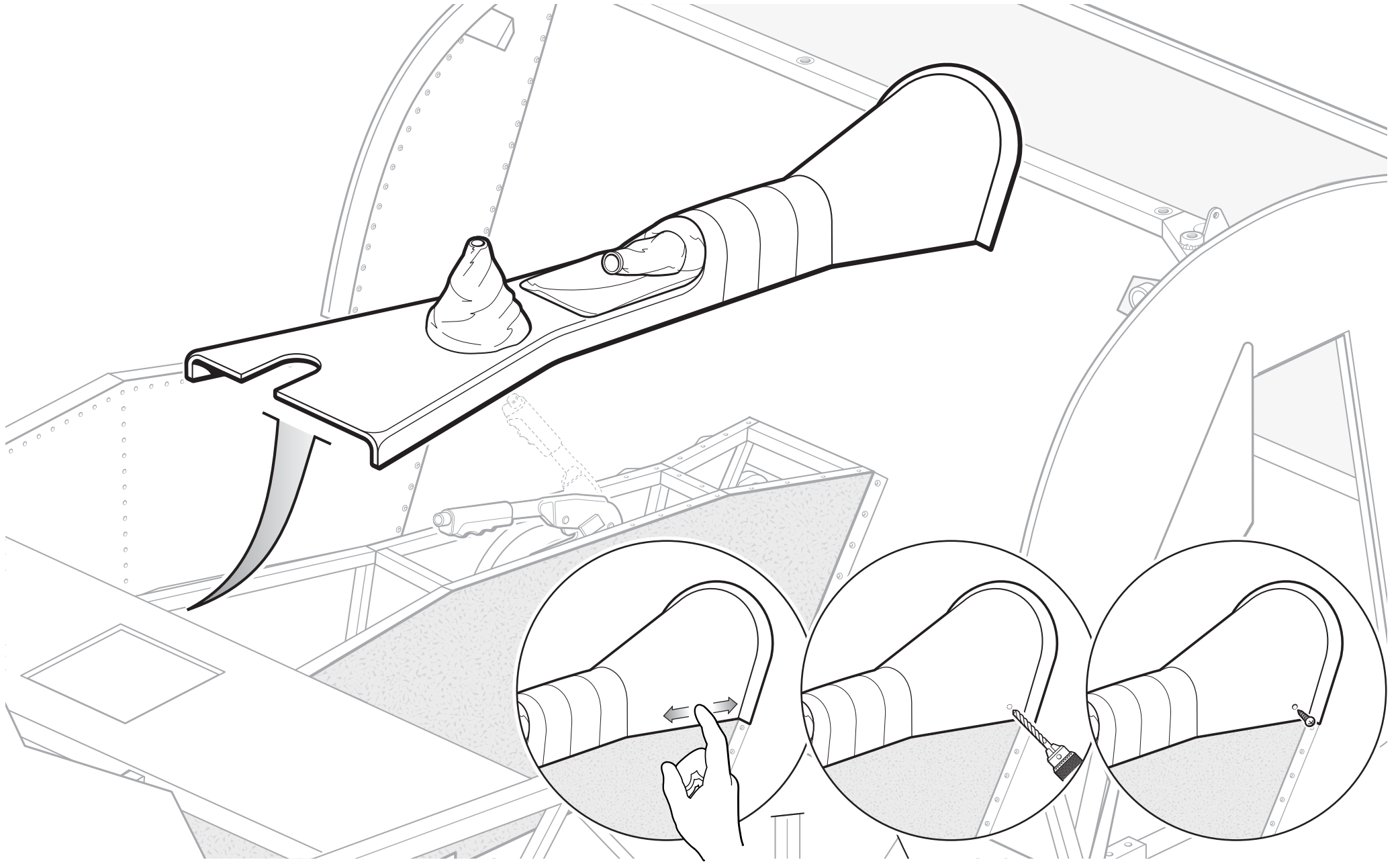
FIXINGS

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

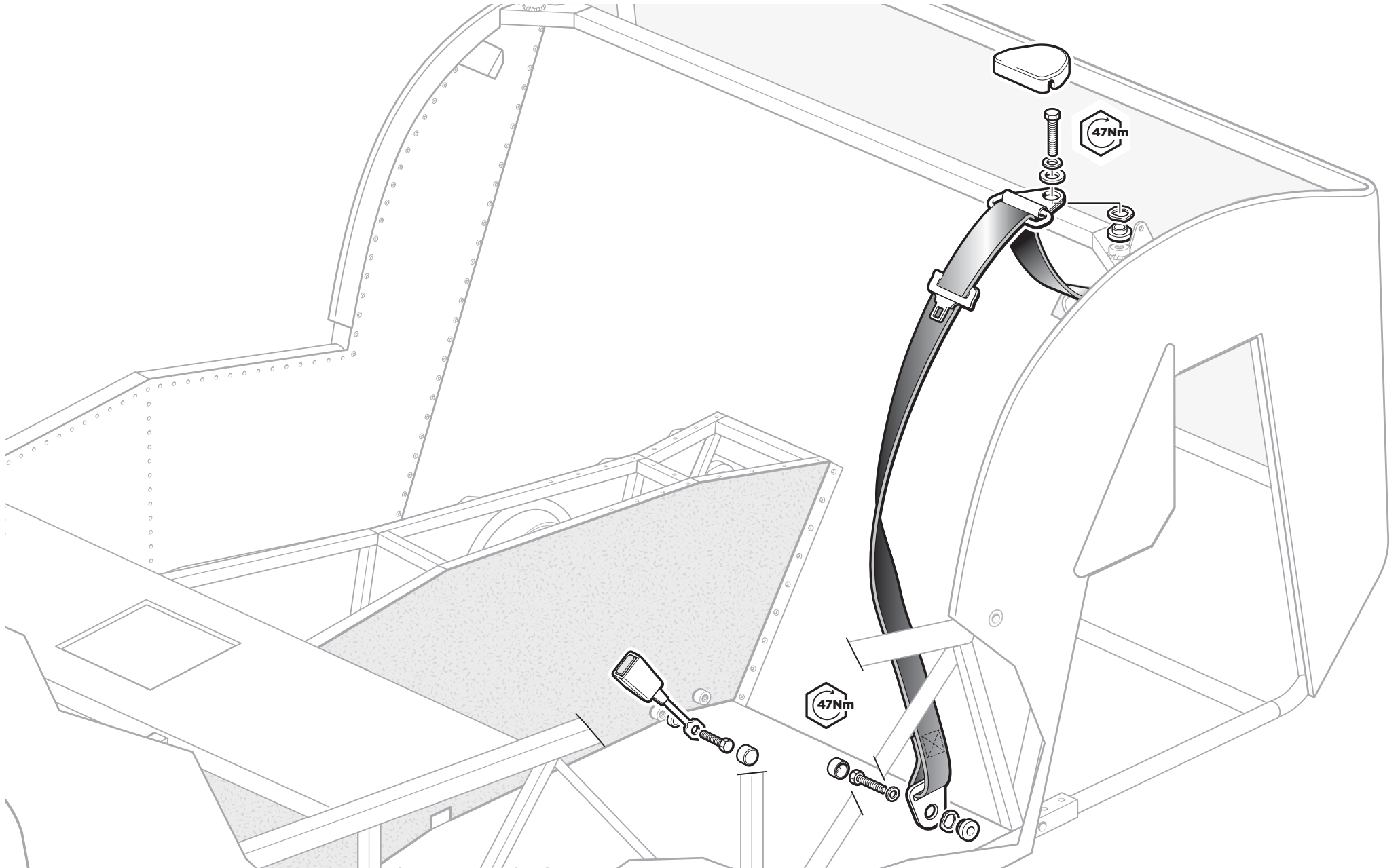
Supplied with seat belts

TIPS

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

Chris N

BELT UP



FITTING THE FOUR-POINT HARNESS

PARTS

TOOLS



17mm



FIXINGS

All fixings supplied with the harnesses

TIPS

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

Chris N

For Academy cars with Schroth Harnesses see Page 148.

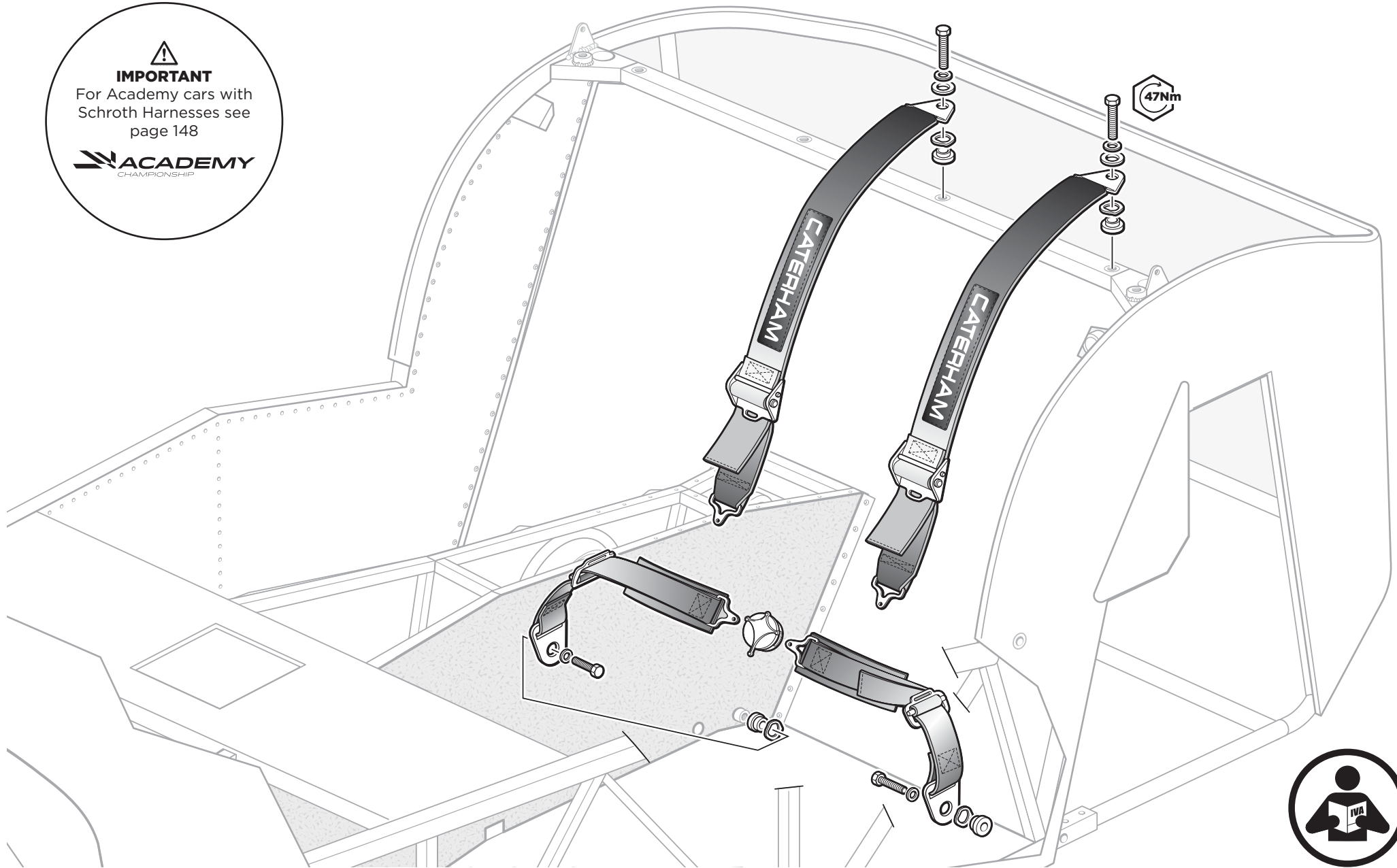
Dan P

FITTING THE FOUR-POINT HARNESS

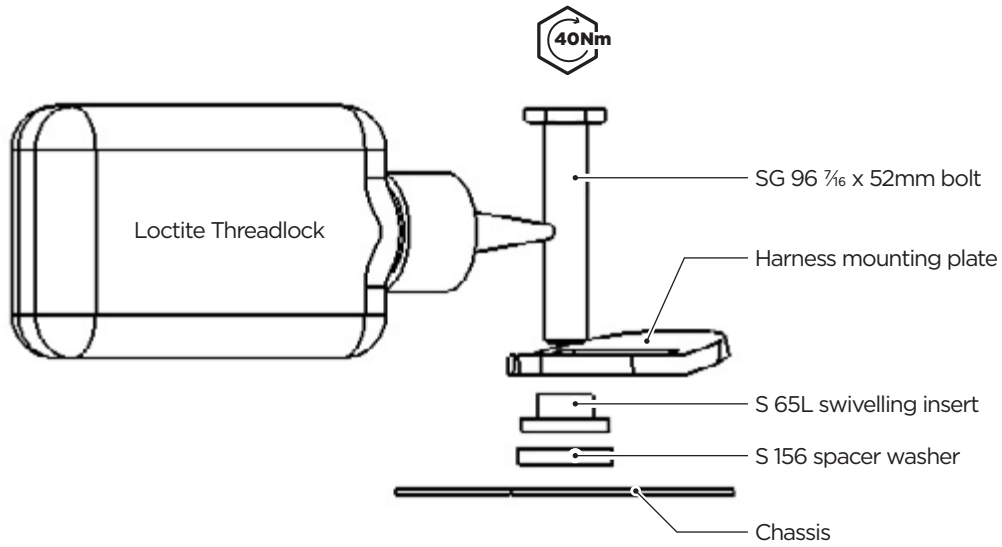


IMPORTANT

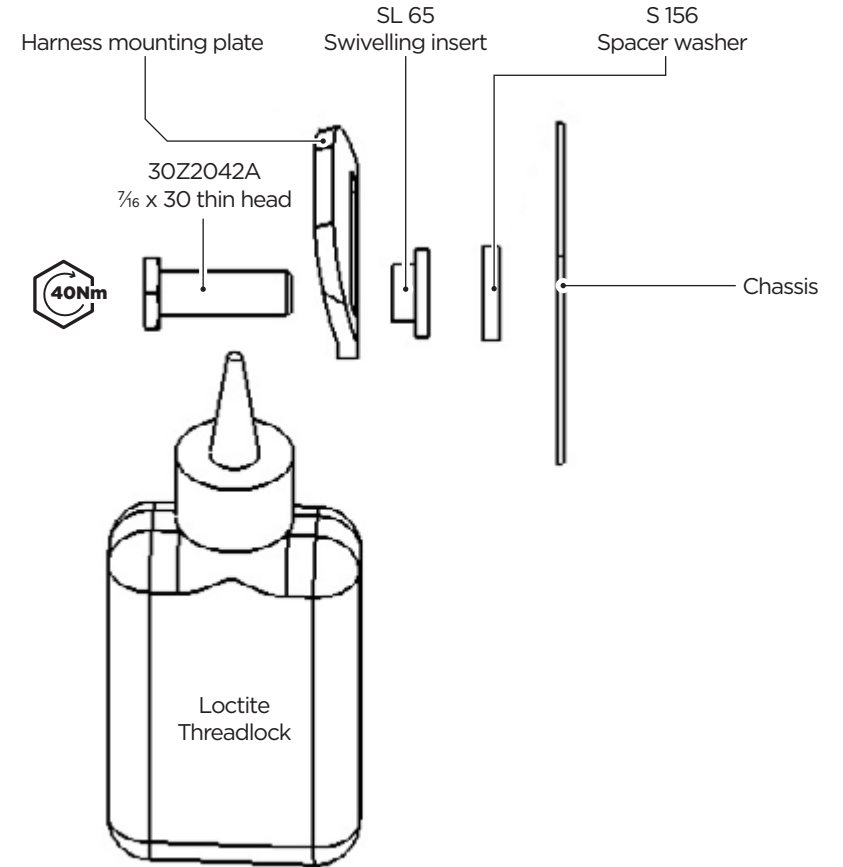
For Academy cars with Schroth Harnesses see page 148



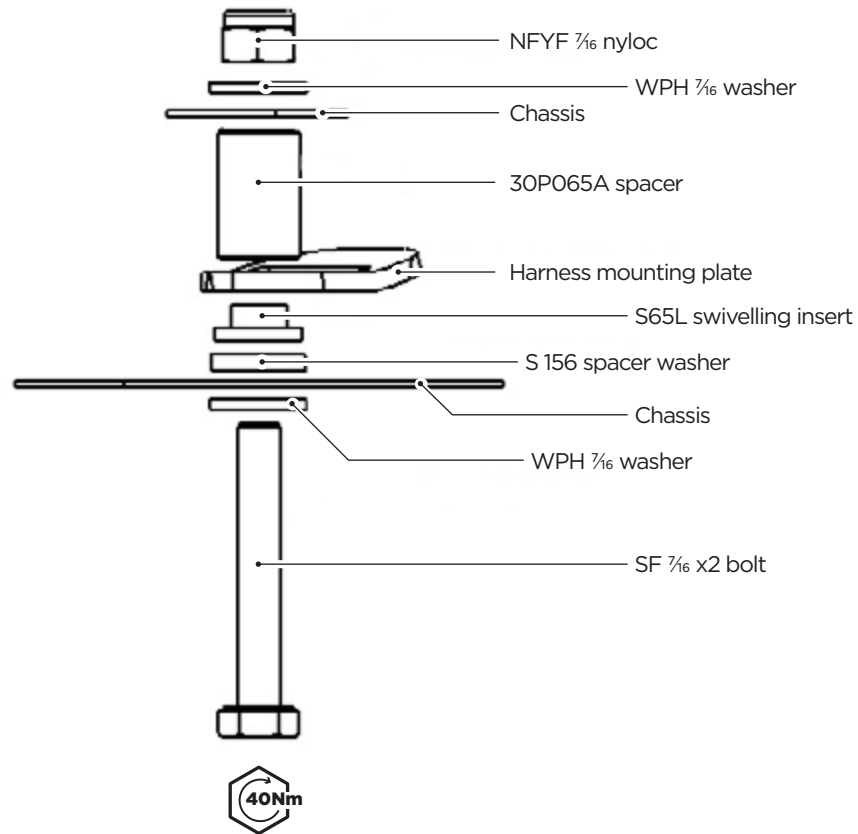
SHOULDER STRAP MOUNTING ORIENTATION



WAIST STRAP MOUNTING ORIENTATION



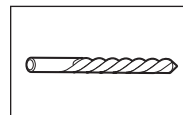
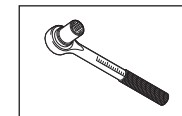
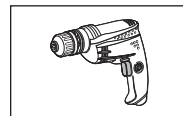
CRUTCH STRAP MOUNTING ORIENTATION



FITTING THE SIX-POINT HARNESS

PARTS

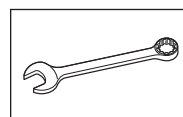
TOOLS



7/16"



16mm
17mm



16mm
17mm

FIXINGS

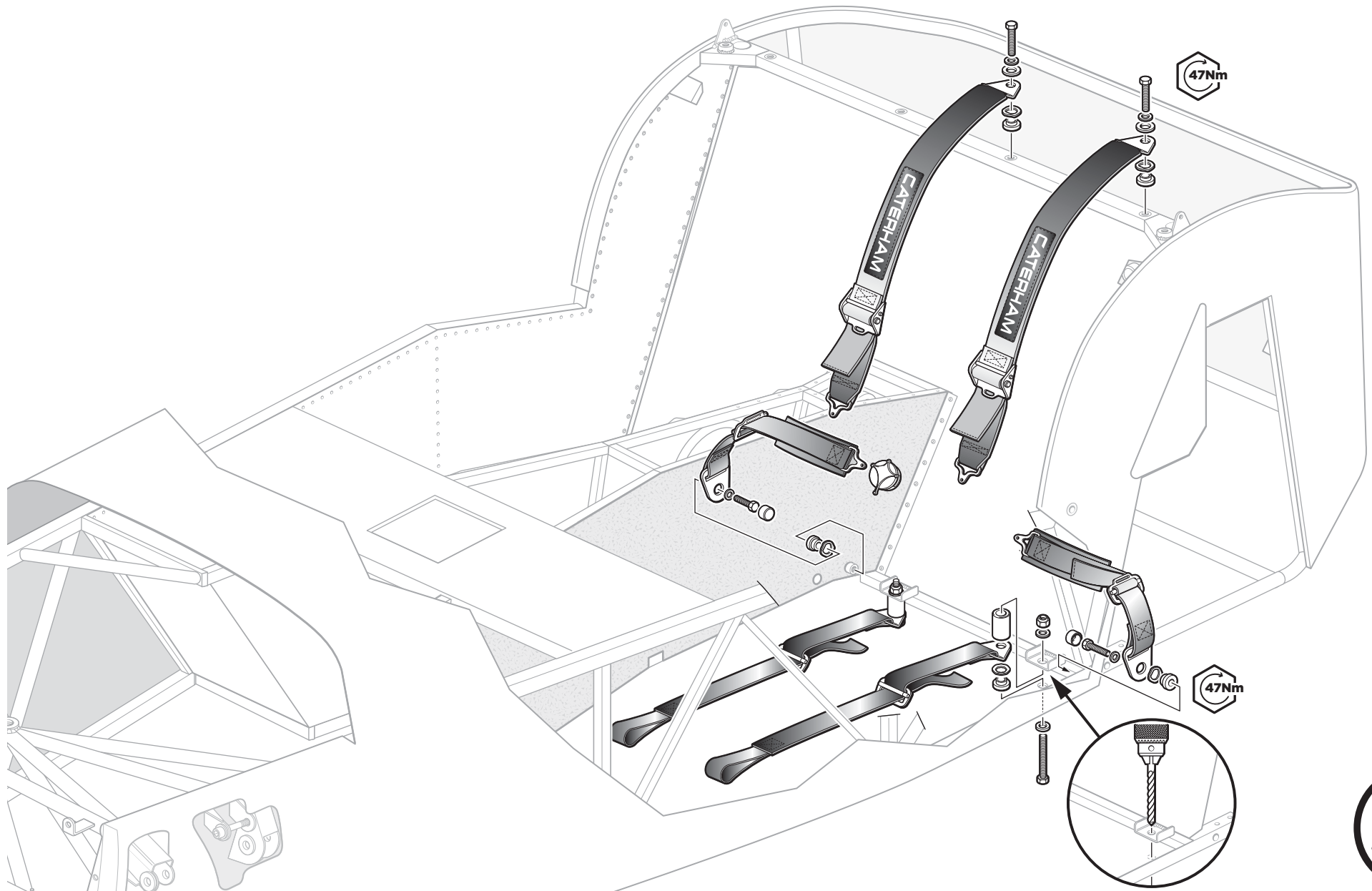
All fixings supplied with the harnesses

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

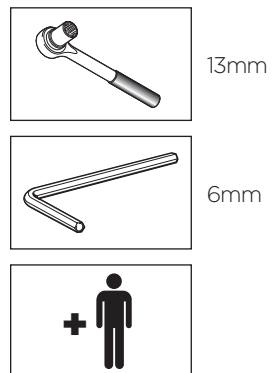


FITTING CLOTH OR LEATHER SEATS

PARTS

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

TOOLS



FIXINGS

Pack L		CATERHAM		62	
				302105B	
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	LA Cleat Bolt M8 X 20 Grade 12.9	SMCH002	4	Through seat runner & floor	
2	LB Nyloc Nut M8	N8N78	4	Under floor	
3	LC Plain Washer M8 X 30	WPH003	4	Under floor	

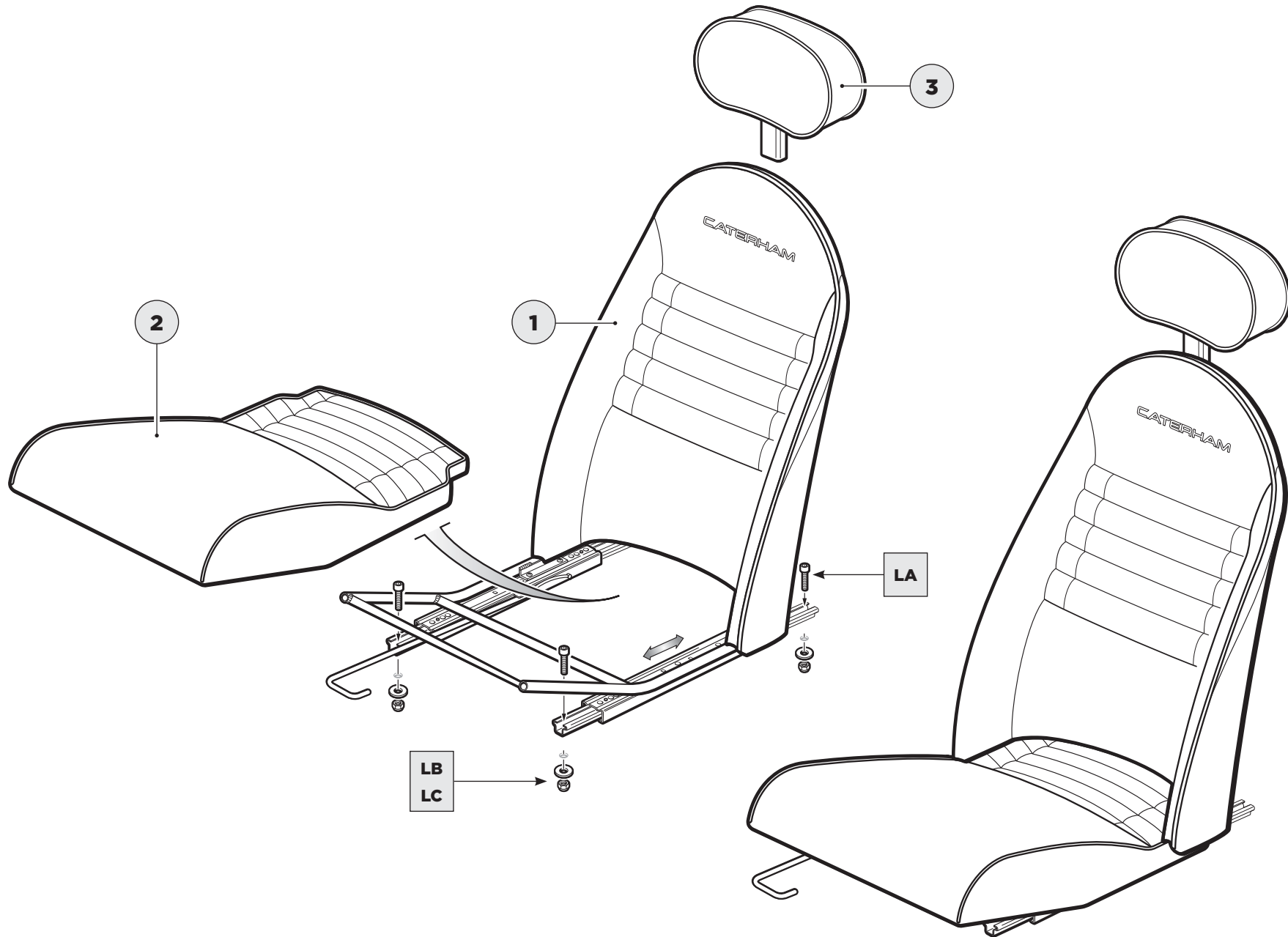
x4
x4
x4

TIPS

Loosely fit the rear bolts to help locate the front.
Dan D

Nip up all bolts once fitted.
Anthony L

FITTING CLOTH OR LEATHER SEATS

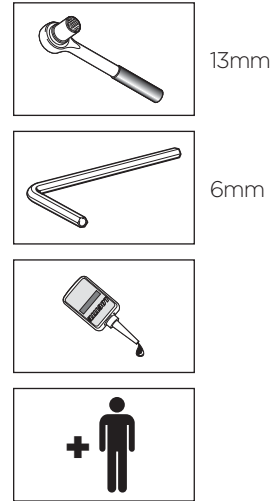


OR FITTING THE RACE SEATS

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	Caphead Bolt M8 X 20	8MCH8X20	4	Spacer box section to seat	
2	Caphead Bolt M8 X 20	8MCH8X20	4	Floor to mount in spacer box section	
3	Spring Washer 5/16"	W5/16S16	8	Bolt heads	
4	Washer 5/16" X 1 1/4"	W5/16X1 1/4	4	Under floor	
5	Washer M8 X 18	W8M8X18	4	Spacer box section to seat	
7	Spacer Block Plastic	TW2	3	Seat spacer	
8	Spacer Block Plastic	TW3	5	Seat spacer	

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

For adjustable seats

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Caphead Bolt M8 X 20	8MCH8X20	4	Runner to seat	
2	Caphead Bolt M8 X 20	8MCH8X20	4	Runner to floor	
3	Washer 5/16" X 1 1/4"	W5/16X1 1/4	4	Under floor	
4	Nylon Nut M8	8MNY8	4	Under floor	
5	Spacer Block Plastic	TW2	3	Seat spacer	
6	Spacer Block Plastic	TW3	5	Seat spacer	

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

TIPS

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

Chris B

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

Mick F

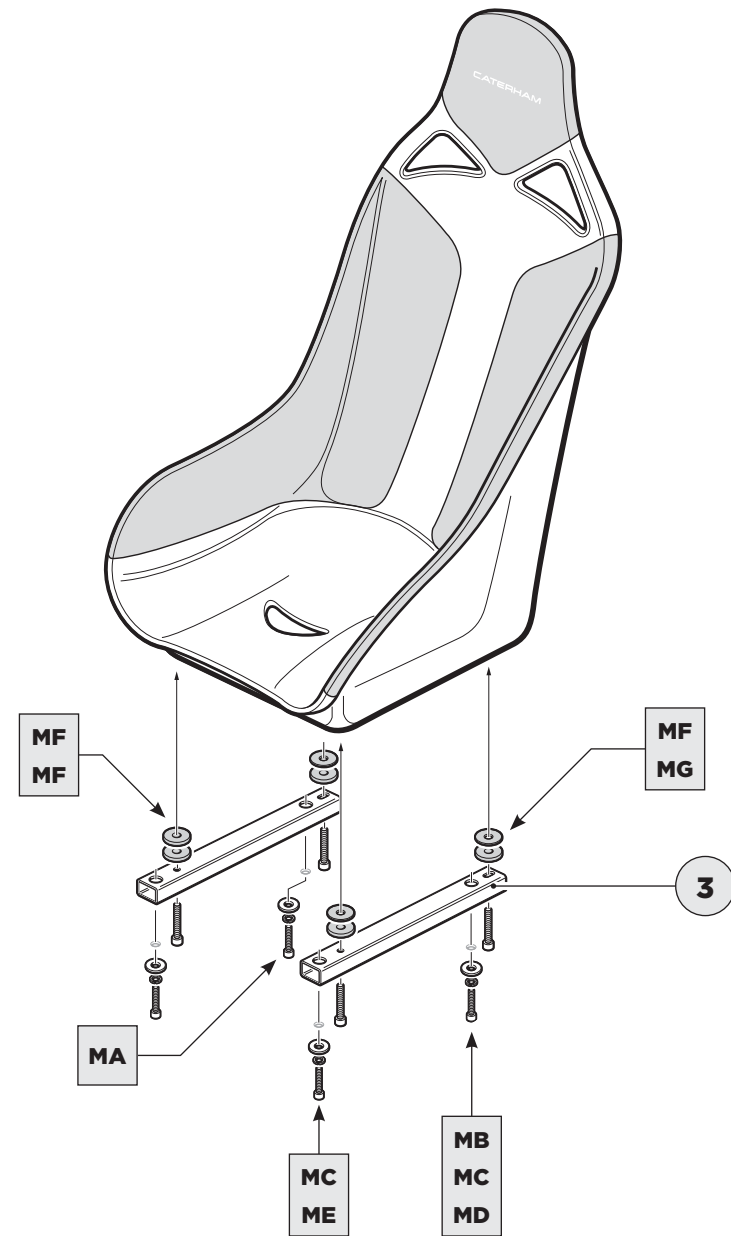
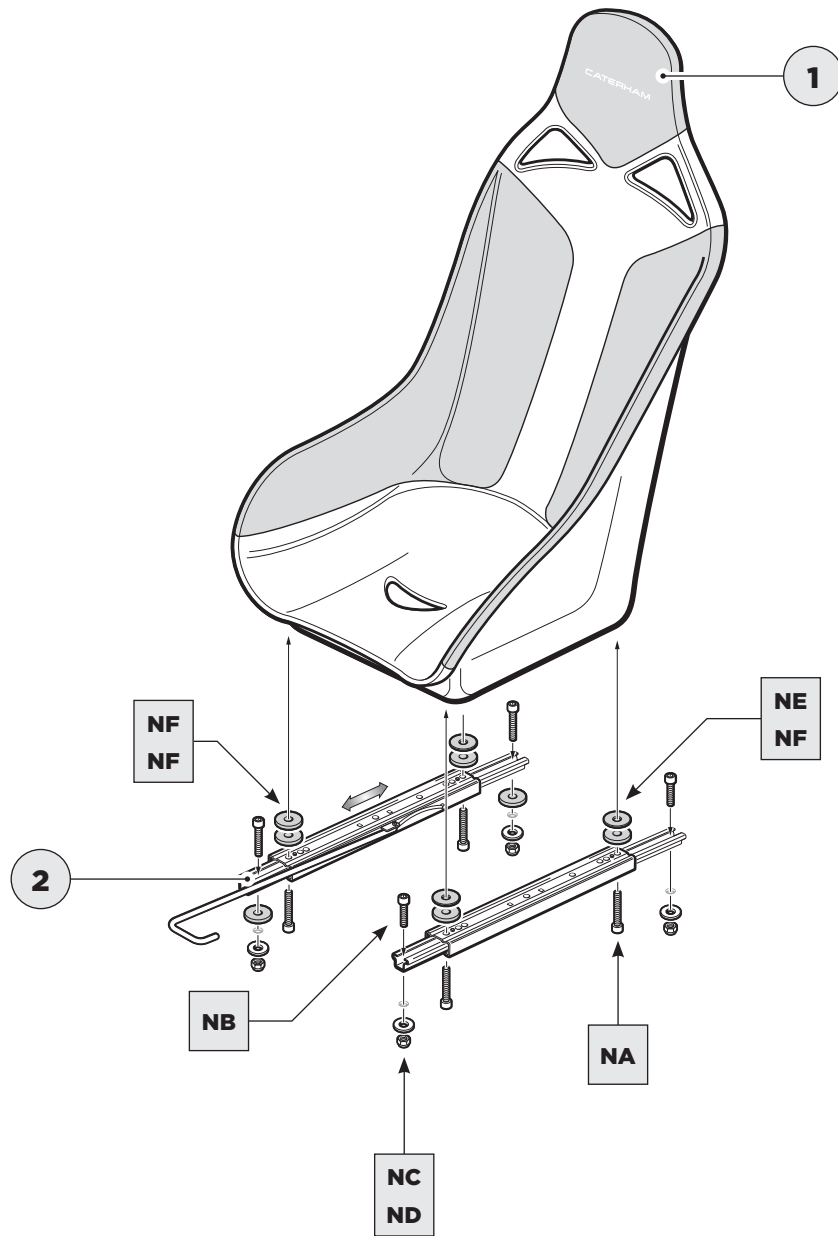
Loosely fit the rear bolts to help locate the front.

Harry P

The fixed position seat is for the passenger side!

Chris N

OR FITTING THE RACE SEATS

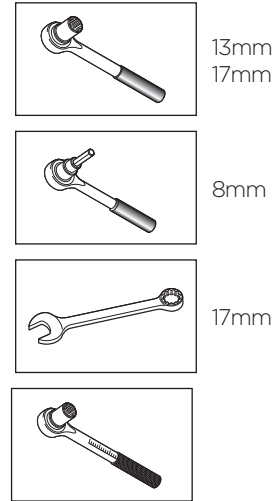


FITTING THE ROLL OVER BAR

PARTS

- 1 Roll over bar

TOOLS



FIXINGS

Pack J		CATERHAM		47	
		PACK NUMBER		30P010A	
ROLL OVER & TRACK DAY BAR SERIES 3 METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Roll M10 x 80 Grade 8.8	BM10080	2	Rear diagonals of roll over bar to mounting brackets	
2	Set screw M8 x 20 Grade 8.8	SM8X20	2	Roll over bar bracket to chassis	
3	Clamp nut M10 x 20	SMCH10X20	2	Roll over bar boss	
4	Nyloc Nut M10	NMNF10	2	Rear diagonals of roll over bar to mounting brackets	
5	Flan Washer M8	WP8M8	2	Roll over bar bracket to chassis	
6	Spring Washer M8	WS8M8	2	Roll over bar bracket to chassis	
7	Flan Washer M10	WP8M10	4	Rear diagonals of roll over bar to mounting brackets	

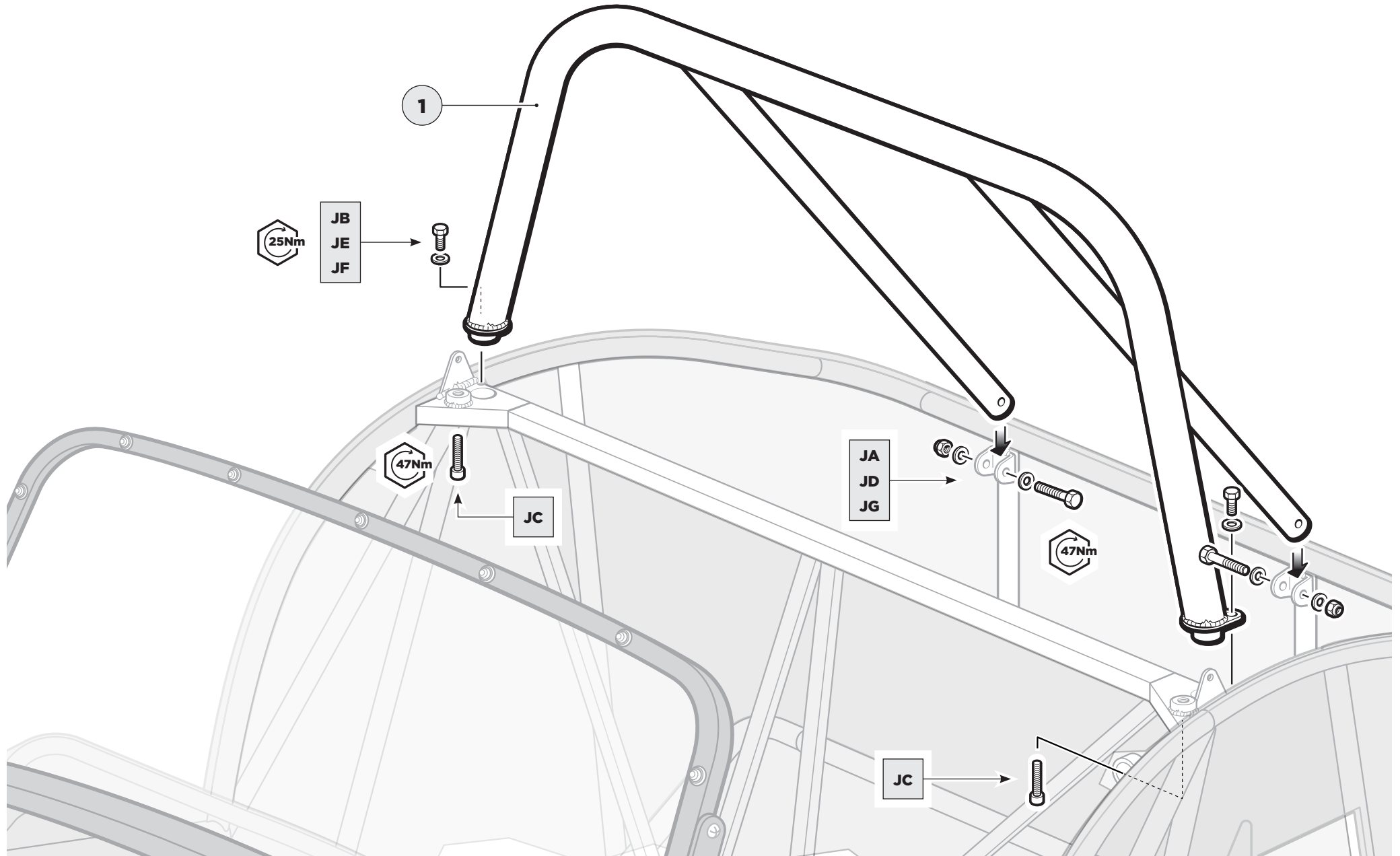
x2
x2
x2
x2
x2
x2
x4

TIPS

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

Chris B

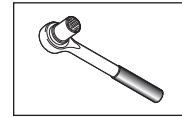
FITTING THE ROLL OVER BAR



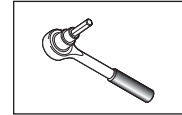
OR THE ROLL CAGE FOR ACADEMY CARS

PARTS

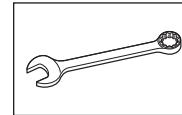
TOOLS



17mm



8mm



17mm



FIXINGS

TIPS

Pack K		CATERHAM		47	
		PACK NUMBER		30P017A	
ROLL CAGE SERIES 3 METRIC					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	Nut M10 x 80 Grade 8.8	BM10080	2	Rear diagonals of roll over bar to mounting brackets	
2	Set screw M8 x 16 Grade 8.8	SM10X16	4	Front cage bracket	
3	Clamped Bar M10 x 20	SMCH10X20	2	Roll over bar boss	
4	Nyloc Nut M10	NMYF10	2	Rear diagonals of roll over bar to mounting brackets	
5	Flan Washer M10	WPM10	8	x 4 Front cage bracket Rear diagonals	

x2

x4

x2

x2

x8

Mask up the paintwork before fitting to avoid scratches.

John S

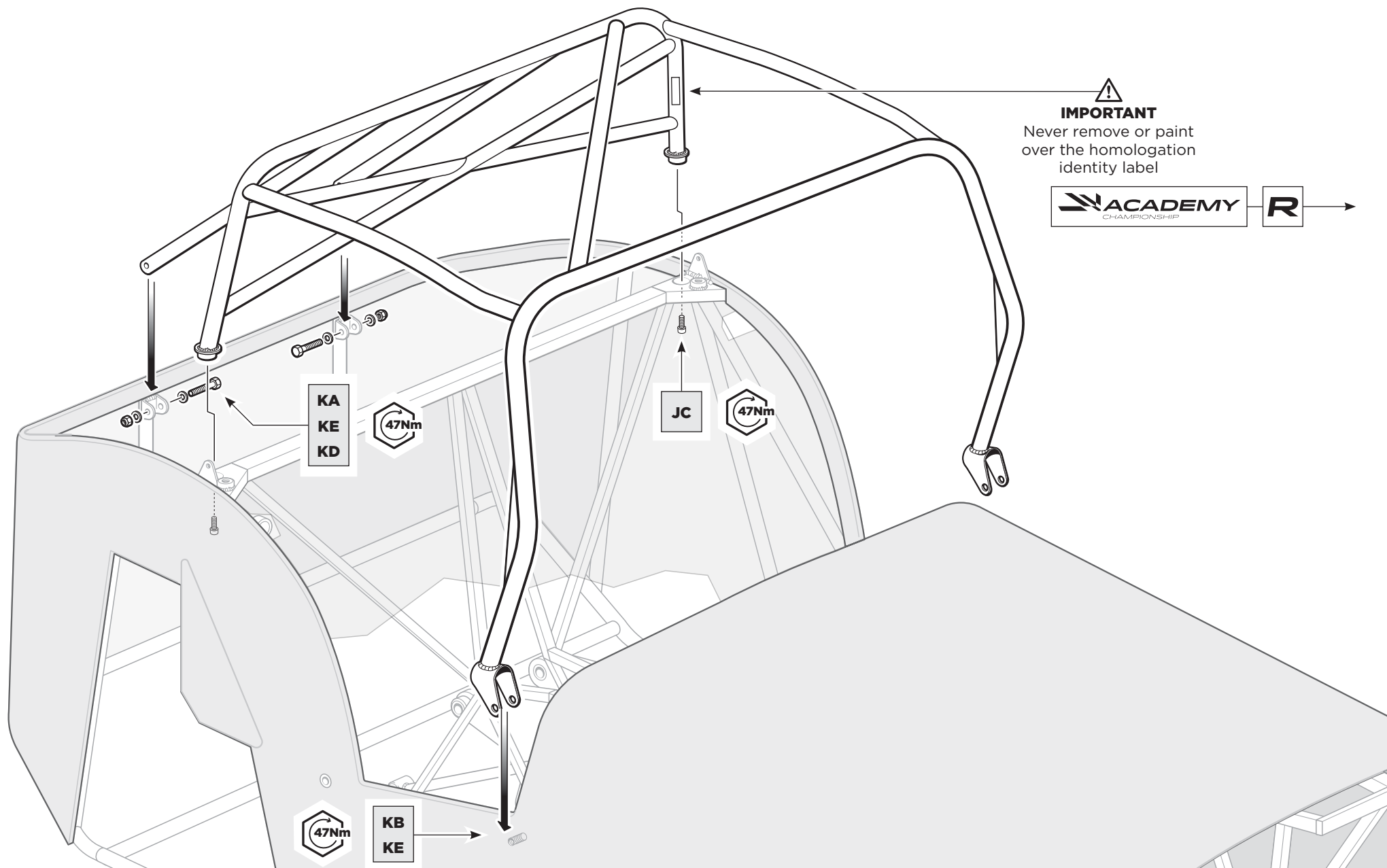
The front leg has two bolts – one from the inside & one from the outside. Great care should be taken to ensure they go in straight.

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



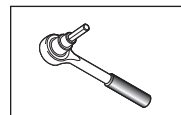
AND THE SIDE IMPACT BAR

PARTS

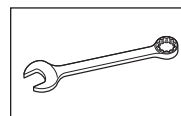
TOOLS



17mm
19mm



5/16"



19mm



FIXINGS

TIPS

Use washers from rollcage pack

Pack R		CATERHAM		46	
		PART NUMBER		30P099C	
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	Roll Bar Kit 120 Grade 10.9	SM12X120	1	A-frame	
2	Caphead Bolt 7/16" X 1 1/2"	WCH4HEX1.5	1	Boss on top of chassis	
3	Self screw M10 X 25 - Grade 10.9	SM10X25	1	Front cage bracket	
4	Plain Washer M10	WPM10	1	Front cage bracket	
5	Spring Washer 7/16"	WSH0716	1	Boss on top of chassis	

x1

x1

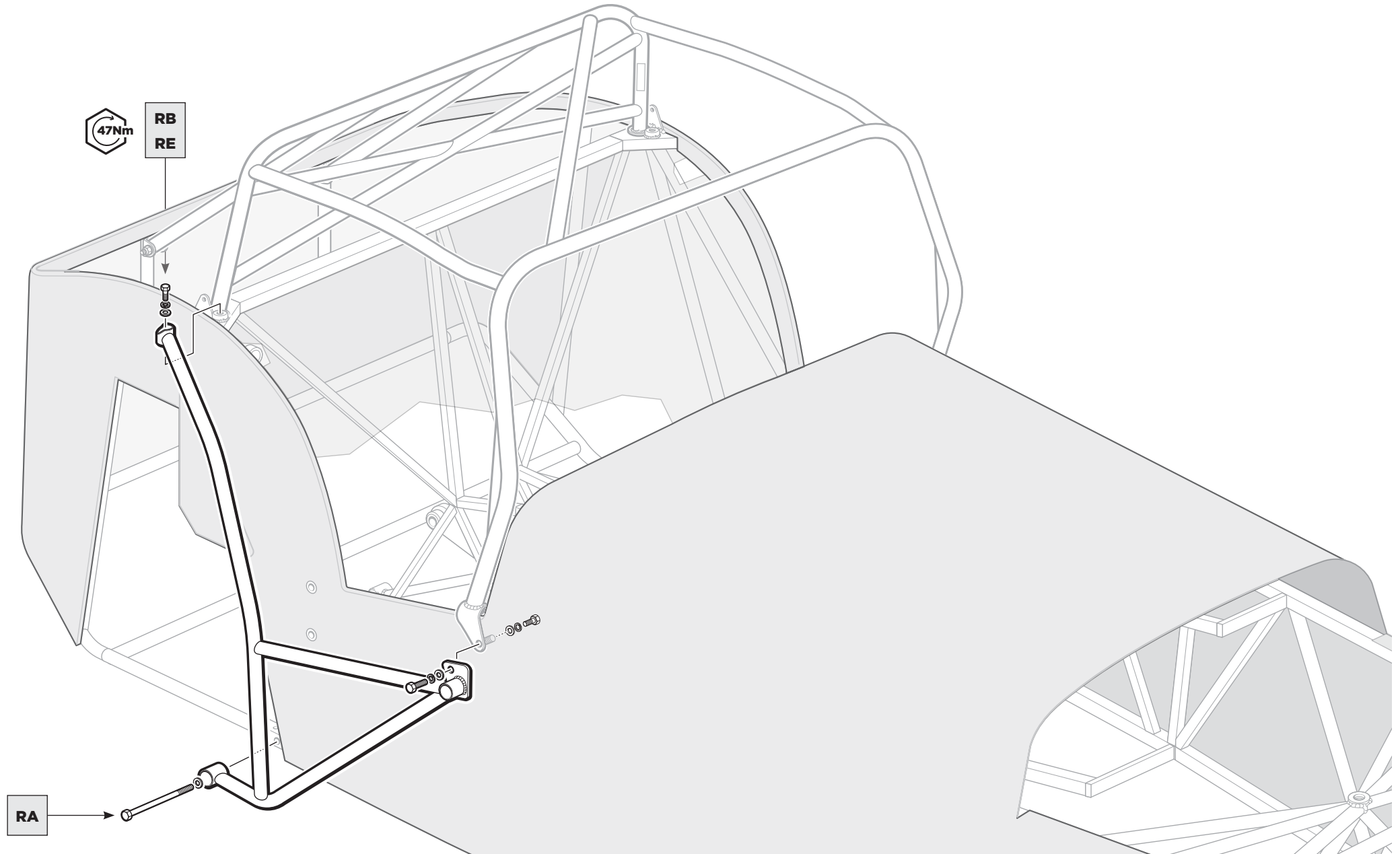
x1

x1

x1

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

AND THE SIDE IMPACT BAR

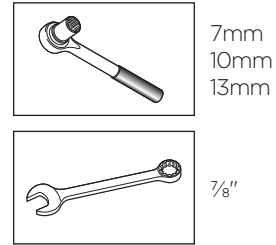


EVEN MORE EXHAUSTING

PARTS

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

TOOLS



FIXINGS

Pack G		CATERHAM		56	
		PART NUMBER		30X020E	
EXHAUST					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	GA Silencer MB X 25 Clutch 8.8	58KX25	1	Exhaust Mounting Bracket	
2	GB Flange Nut M8	NFFW8	2	Exhaust Bobbin	
3	GC Spring Washer M8	WSPH8	3	x 1 Exhaust Mounting Bracket x 2 Exhaust Bobbin	

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

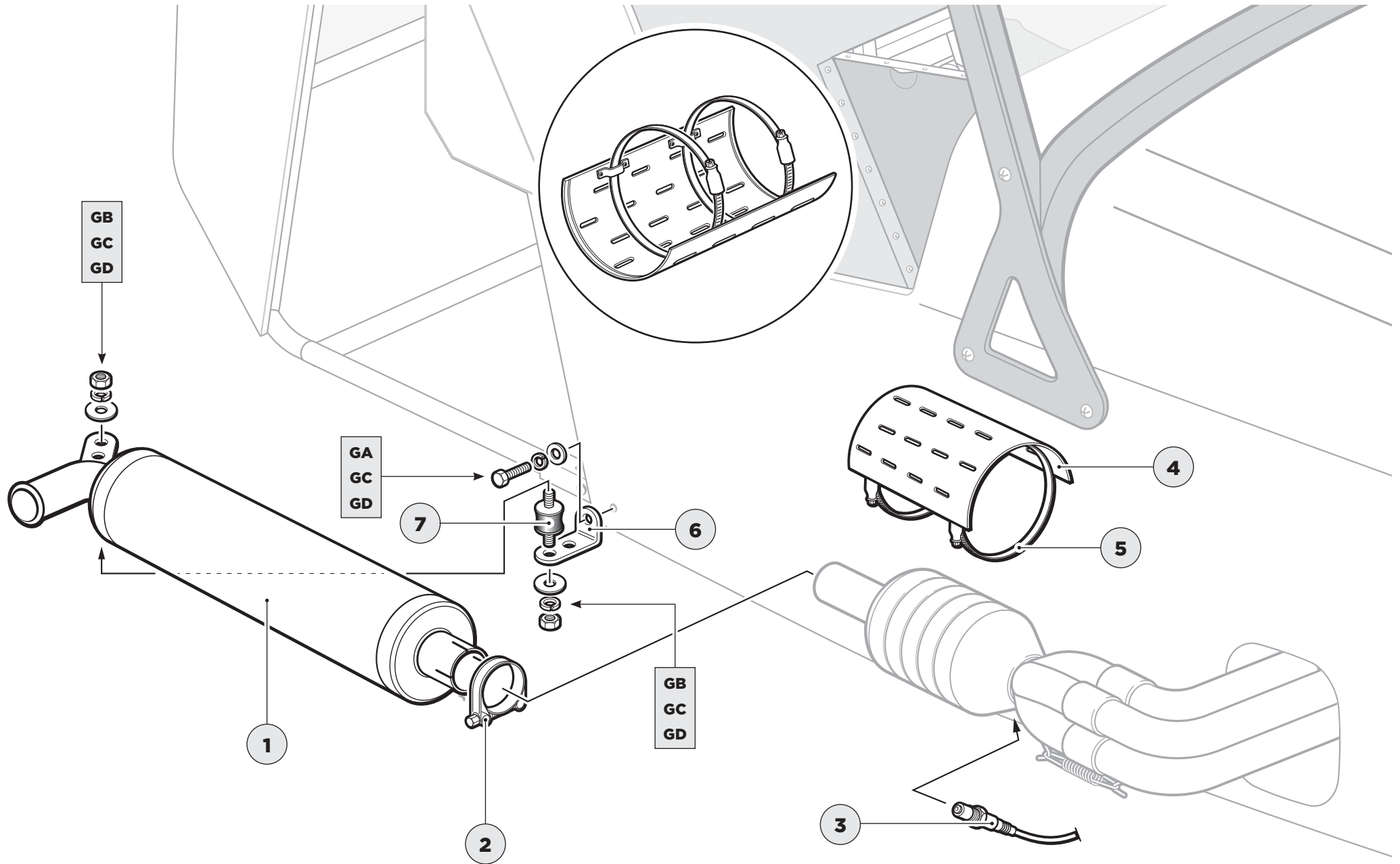
x1
x2
x3

TIPS

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

Lee A

EVEN MORE EXHAUSTING

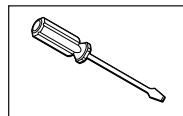


THE NOSE CONE BADGE

PARTS

- 1 Nose cone
- 2 Bonnet
- 3 Badge

TOOLS



FIXINGS

TIPS

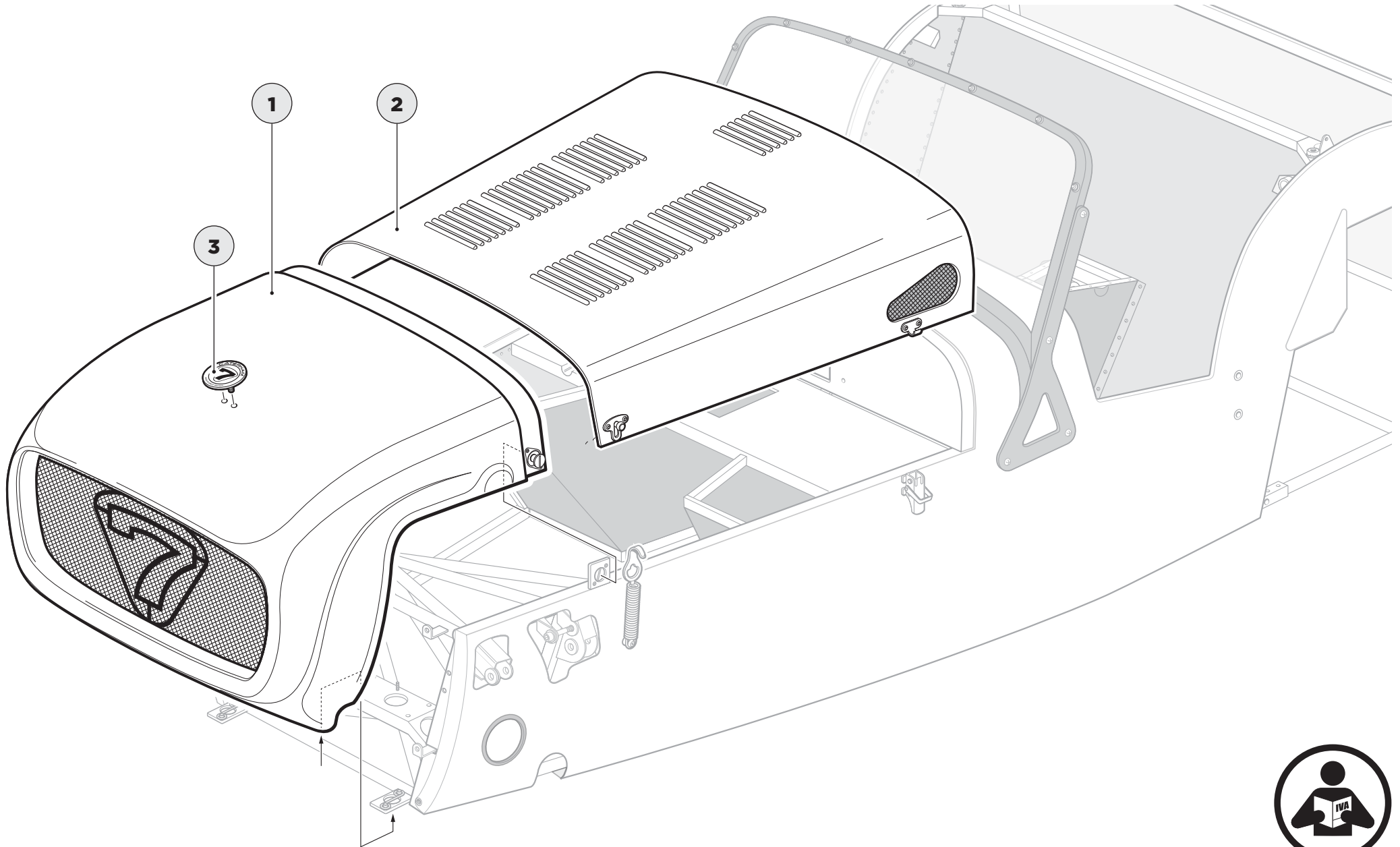
The nose cone goes on before the bonnet.

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

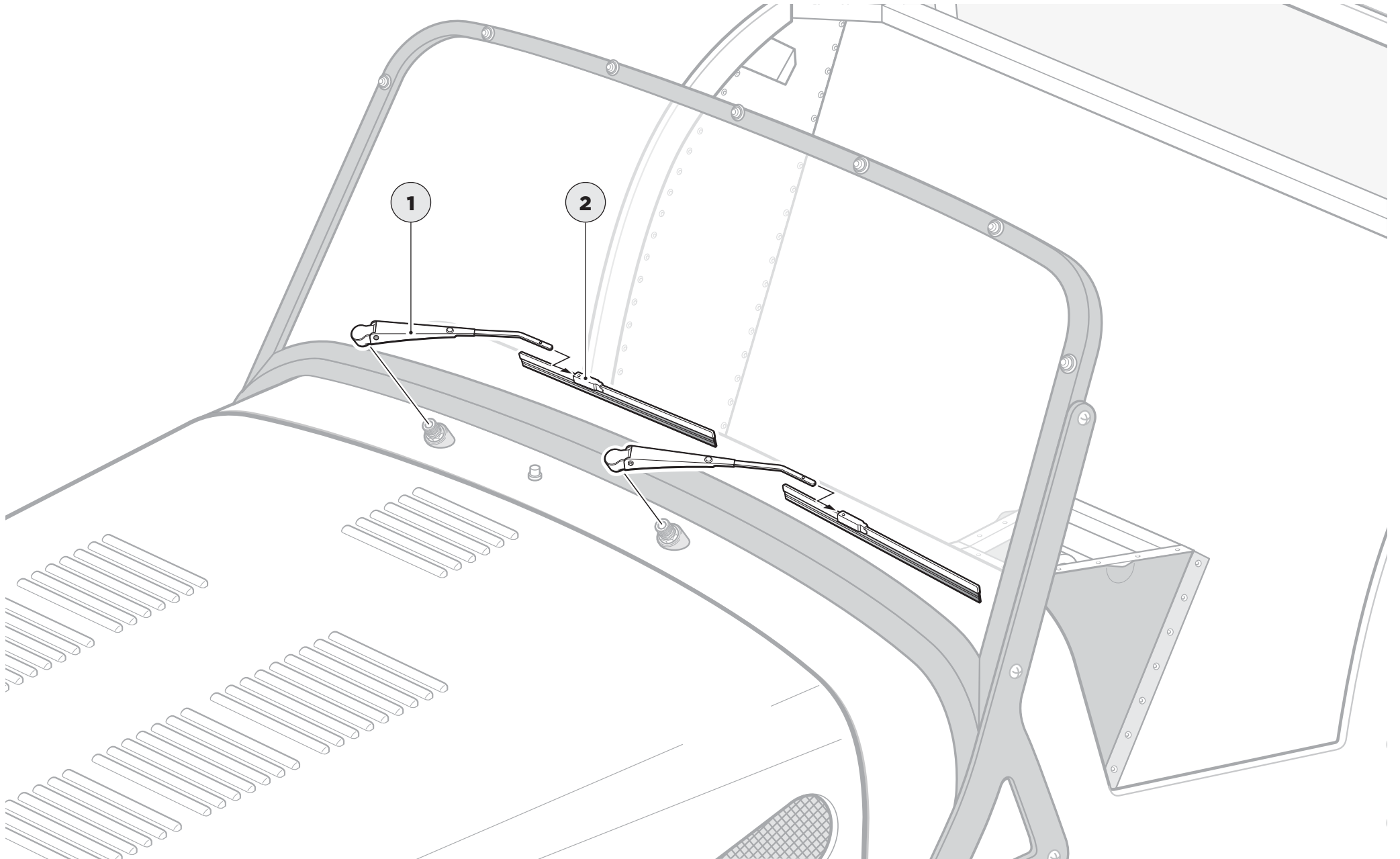
Ensure wipers are in *paused* position before fitting the wiper arms.

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

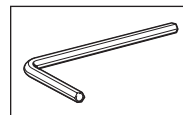
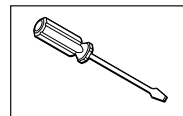


AND FINALLY, AT LAST, THE WING MIRRORS

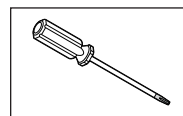
PARTS

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

TOOLS



2.5mm



T20

FIXINGS

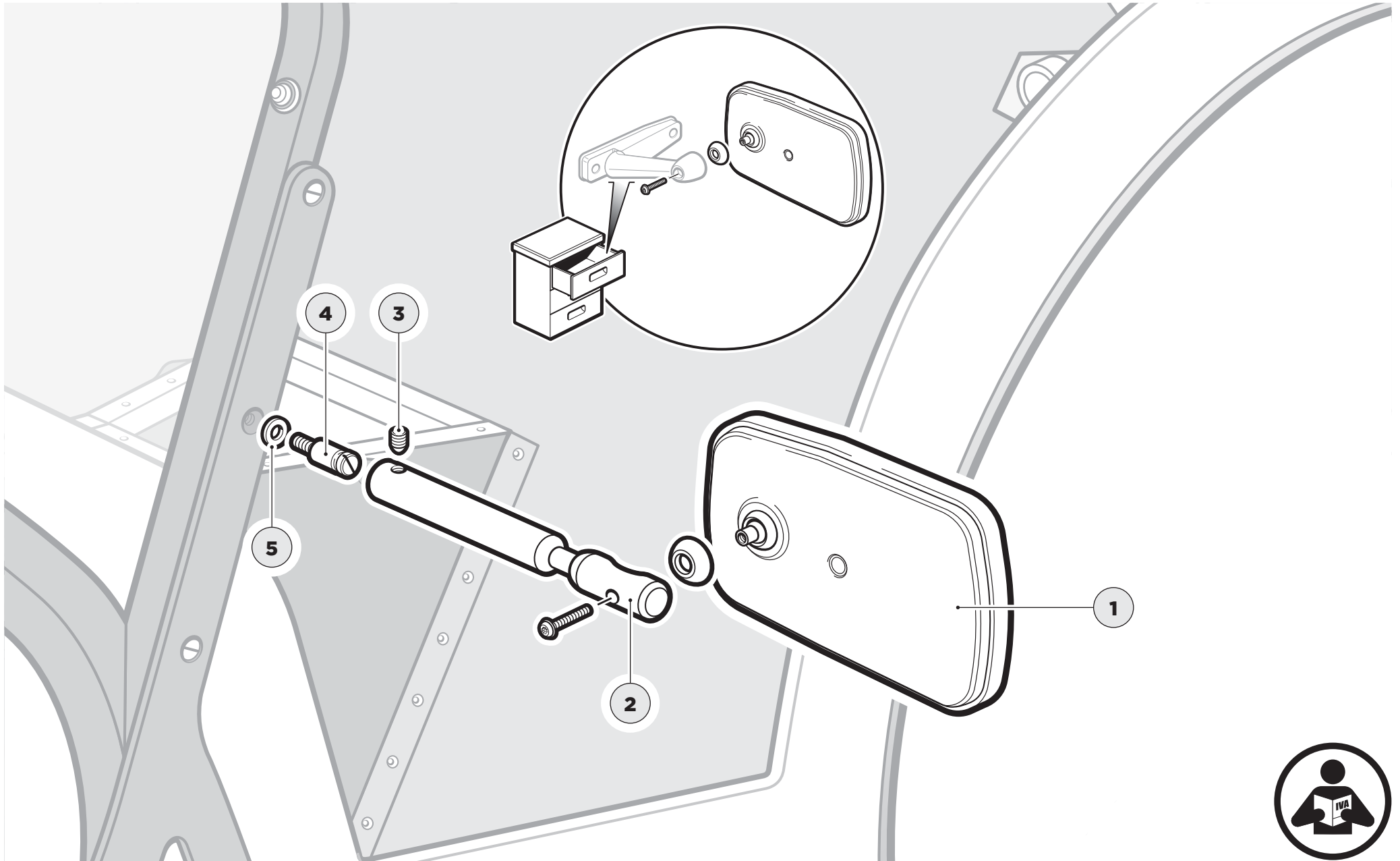
Wing mirror bag

TIPS

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

Mick F

AND FINALLY, AT LAST, THE WING MIRRORS



WIRING THE STARTER MOTOR

P A R T S

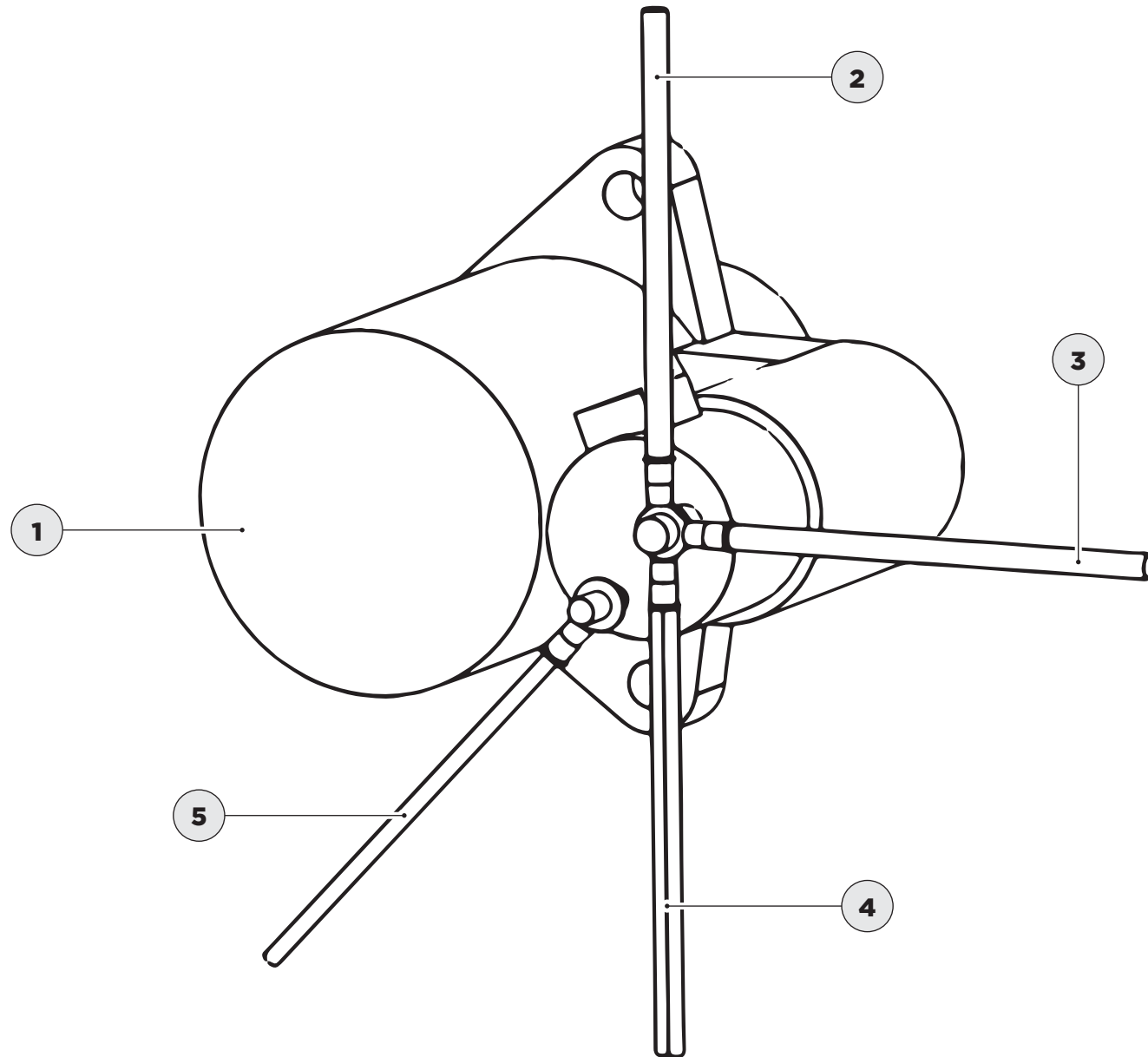
- 1** Starter motor
- 2** Cable from alternator
(brown wire with black sheath)
- 3** Cable from battery
(positive - red wire)
- 4** 2 cables from main loom
(2 brown wires joined)
- 5** Cable from engine loom
(white wire with red stripe)

T O O L S

F I X I N G S

T I P S

WIRING THE STARTER MOTOR



THE LAST FEW STEPS...

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

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

- 1** Assemble the things you'll need: Brake fluid, both a 10mm and an 11mm spanner, a length of washer hose (or similar clear plastic hose) and a waste fluid receptacle (some form of used bottle is ideal; you won't want to use it again after this)
- 2** Find a volunteer. They need to be able to reach and press the brake pedal, 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!

APPENDIX

FIXING PACKS

Pack A		CATERHAM		SERIAL NUMBER 44	
				PACK NUMBER	
				30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	AA Bolt M12 x 100 Grade 10.9	BM12X100	2	Lower wishbone rear	
2	AB Bolt M12 x 65 Grade 10.9	BM12X65	2	Lower wishbone front	
3	AC Bolt M10 x 65 Grade 10.9	BM10X65	2	Upper wishbone rear	
4	AD Bolt M10 x 60 Grade 10.9	BM10X60	2	Upper wishbone front	
5	AE Bolt M8 x 40 Grade 10.9	BM8X40	4	Anti-roll bar mounting brackets	
6	AF Plain Nut M14 x 1.5 thread	NMPH14	1	Temporary use to help lock upper wishbone ball joint	
7	AG Nyloc Nut M12	NMYF12	2	Lower wishbone rear	
8	AH Nyloc Nut M10	NMYF10	4	Upper wishbone	
9	AJ Plain Washer M12 Chamfered	WPCM12	18	Lower wishbone	
10	AK Plain Washer M8 Heavy duty	WPHM8	4	Anti-roll bar mounting brackets	
11	AL Plain Washer 3/4" x 3/4" Heavy duty	WPH3/8	2	Brake pipe	

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

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Pack A		CATERHAM		SERIAL NUMBER 44	
				PACK NUMBER	
				30F015B	
FRONT SUSPENSION DeDION CARS (METRIC)					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	AM Spring Washer M12	WSHM12	2	Lower wishbone front	
13	AN Spring Washer M8	WSHM8	6	Anti-roll bar mounting brackets & upper damper mount	
14	AP Washer 3/4" Shake-proof	WSS3/8	2	Brake pipe	
15	AR Nyloc Nut 1/2" Half height	NFYH1/2	2	Wing stay	
16	AS Nyloc Nut 1/2" Full height	NFYF1/2	2	Front brake, upright mounting (std track ONLY)	

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

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FIXING PACKS












Pack B		CATERHAM		SERIAL NUMBER 55	
				PACK NUMBER	
				3ACZ0021	
				RELEASED NOV-19	
STEERING DeDION CARS (METRIC)					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	BA Caphead Bolt M6 x 70 DIN 912	BMCH6X70	4	Rack clamps	
2	BB Bolt 1/4" x 1 1/2"	BF1/4X1.1/2	2	Column clamp	
3	BC Bolt M8 x 40 Grade 10.9	BM8X40	2	Column to rack universal joint	
4	BD Nyloc Nut 1/2" Half height	NFYH1/2	1	Steering wheel boss	
5	BE Plain Nut 1/2"	NFPF1/2	2	Track rod lock nut	
6	BF Plain Nut 3/16" Half height	NFPFH7/16	1	Column clamp grubscrew locknut	
7	BG Nyloc Nut M8	NMYF8	2	Column to rack universal joint	
8	BH Nyloc Nut M6	NMYF6	4	Steering rack clamps	
9	BJ Plain Washer 1/2" x 1 1/4" Chamfered	WPH1/2	1	Steering wheel boss	
10	BK Plain Washer 3/4" Heavy duty	WPH1/4	6	Rack clamps and column clamp	
11	BL Spring Washer 3/4 Heavy duty	WSH1/4	2	Column clamp	

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








Pack C		CATERHAM		SERIAL NUMBER 45	
				PACK NUMBER	
				30L002B	
LIGHTING & HORNS					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	CA Screw 10 x 1/2" Black Supaflange	71080	6	Indicator assembly to indicator pod	
2	CB Screw 8 x 1/2" Black Supaflange	71077	2	Side repeater earth on wingstay	
3	CC Screw 12 x 1 1/4" Self tapping	71079	4	Rear light cluster upper fixing	
4	CD Screw 12 x 1" Self tapping	71078	4	Rear light cluster lower fixing	
5	CE Nyloc Nut M6	NMYF6	2	Horn bracket to steering rack platform (160/270/310)	
6	CF Plain Washer 3/4" Heavy duty	WPH1/4	2	Horn bracket to steering rack platform (160/270/310)	
7	CG Bolt M8 x 5 Grade 8.8	BM8X50	1	Through steering rack platform & spacer (420)	
8	CH Plain Washer 5/16"	WPH5/16	2	Bolt head/nut	
9	CI Nyloc Nut M8	NMYF8	1	Horn bolt	

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

FIXING PACKS







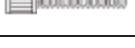
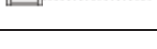
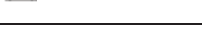
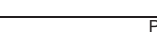
Pack D		CATERHAM		SERIAL NUMBER	44
				PACK NUMBER	30C047B
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	DA Bolt M8 X 50 Grade 8.8	BM8X50	1	Expansion tank bracket to chassis	
2	DB Setscrew 1/4" X 3/4"	SF1/4X3/4	1	Expansion tank to bracket	
3	DC Setscrew M8X20 Grade 8.8	SM6X20	4	SV radiator bracket	
4	DD Bolt M6 X 16 with square section	30Z1072A	4	Fan brackets to fan	
5	DE Setscrew M6X16 Panhead Pozi	SPHM6X16	4	Fan to radiator cowling - SV only	
6	DF Nyloc Nut M6	NMYF6	8	x4 Fan to radiator x4 SV radiator bracket	
7	DG Plain Nut M8	NMPF8	8	Radiator bobbin	
8	DH Nyloc Nut 1/4"	NFYF1/4	1	Expansion tank bracket	
9	DI Plain Washer 1/4" Heavy duty	WPH1/4	13	8 x SV rad bracket 4 x Fan fixings 1 x Expansion tank bracket	
10	DJ Plain Washer 5/16" Heavy duty	WPH5/16	4	Radiator bobbin back	
11	DK Plain Washer 5/16" x 7/8" Heavy duty	WPH5/17X7/8	4	Radiator bobbin front	

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

Pack D		CATERHAM		SERIAL NUMBER	44
				PACK NUMBER	30C047B
COOLING SIGMA					
This pack may include extra fasteners to cover different options					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	DL Plain Washer 1/4" x 7/8" Heavy duty	WPH1/4X7/8	1	Expansion tank bracket	
13	DM Spring Washer 5/16" Heavy duty	WSH5/17	9	8 x Radiator bobbin 1 x Expansion tank	
14	DN Hose Clip 30 - 40mm	SGT25-40	6	2 x U shape hose to water rail 2 x Top radiator hose 2 x Bottom radiator hose	
15	DO Hose Clip 23 - 35mm	SGT23-35	2	1 x Engine outlet to big T piece 1 x Engine outlet to heater inlet	
16	DP Hose Clip 17 - 25mm	SGT16-25	18	6 x Heater inlet/outlet 3 x Big T-piece 1 x Expansion tank 2 x Modine 4 x Dry Sump 2 x Submarine	
17	DQ Hose Clip 8 - 16mm	SGT8-16	6	Expansion tank small T-piece	
18	DR Rivet - Black 5/32" X 0.47"	1610-01015	12	Cowling flap	



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

FIXING PACKS

Pack E		CATERHAM		SERIAL NUMBER	66
				PACK NUMBER	3EZ1105F
SIGMA GEARBOX 5 SPEED					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	EA Bolt M14 X 40 Grade 12.9	3EZ1137A	2	AV Mount	
2	EB Caphead Bolt M8 X 40 Grade 12.9	30Z1076A	4	AV Mount	
3	EC Caphead Bolt M12 X 50 Grade 12.9 Coarse Thread	3EZ1142A	4	Gearbox	
4	ED Caphead Bolt M10 X 60 Grade 12.9	BMCH10X60	4	1 x Bellhousing 3 x Starter Motor	
5	EE Caphead Bolt M10 X 55 Grade 12.9	BMCH10X55	3	Bellhousing	
6	EF Caphead Bolt M10 X 40 Grade 12.9	BMCH10X40	3	Bellhousing	
7	EG Caphead Bolt M10 X 35 Grade 12.9	BMCH10X35	2	Engine Mount RHS Top	
8	EH Caphead Bolt M8 X 25 Grade 12.9	BMCH8X25	2	Engine Mount 1 x LHS Top 1 x LHS Bottom	
9	EI Caphead Bolt M8 X 30 Grade 12.9	BMCH8X30	1	Engine Mount LHS Bottom	
10	EJ Caphead Bolt M8 X 35 Grade 12.9	BMCH8X35	2	Engine Mount RHS Bottom	
11	EK Caphead Bolt M6 X 25 Grade 12.9	BMCH6X25	3	Clutch Slave Cylinder	

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









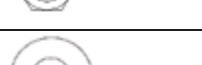


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Pack E		CATERHAM		SERIAL NUMBER	66
				PACK NUMBER	3EZ1105F
SIGMA GEARBOX 5 SPEED					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	EL Buttonhead Bolt M6 X 10 Grade 10.9 Internal Hex	3GZ1163A	3	Gear Lever	
13	EM Plain Washer M14	WPH14	2	AV Mount	
14	EN Plain Washer M12	30Z2031A	4	Gearbox	
15	EO Plain Washer M6	WPHM6	3	Gear Lever	
16	EP Plain Washer 5/16"	WPH5/16	8	AV Mount	
17	EQ Spring Washer M12	WSHM12	4	Gearbox	
18	ER Spring Washer M10	WSHM10	10	x 7 Bellhousing x 3 Engine Mount	
19	ES Wire Spring Washer M10	WSHM10	3	Starter Motor	
20	ET Spring Washer M8	WSHM8	5	Engine Mount	
21	EU Spring Washer M6	WSHM6	3	Clutch Slave Cylinder	
22	EV Myloc Nut M8	NMYF8	4	AV Mount	
23	EW Spring Washer M14	30Z2030A	2	AV Mount	

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






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FIXING PACKS

Pack F		CATERHAM		SERIAL NUMBER 66	
				PACK NUMBER	
				3EZ2029B	
DURATEC GEARBOX 5 SPEED					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	FA Bolt M14 X 30 X 1.5 Grade 12.9	30Z2032A	2	AV Mount	
2	FB Caphead M12 X 40 X 1.75 Grade 12.9	BMCH12X40	4	Bellhousing	
3	FC Caphead Bolt M10 X 90 Grade 12.9	BMCH10X90	1	Bellhousing	
4	FD Caphead Bolt M10 X 55 Grade 12.9	BMCH10X55	3	Bellhousing	
5	FE Caphead Bolt M10 X 45 Grade 12.9	BMCH10X45	7	x 5 Bellhousing x 2 Starter Motor	
6	FF Caphead Bolt M8 X 40 Grade 12.9	30Z1076A	4	AV Mount	
7	FG Caphead Bolt M6 X 25 Grade 12.9	BMCH6X25	3	Clutch Release Bearing	
8	FH Buttonhead Bolt M6 X 10 Grade 10.9 Internal Hex	3GZ1163A	3	Gear Lever	
9	FI Nyloc Nut M8	NMYF8	4	AV Mount	
10	FJ Plain Washer M14	WPH14	2	AV Mount	
11	FK Plain Washer M12	30Z2031A	4	Bellhousing	

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

Page 1 of 2

Pack F		CATERHAM		SERIAL NUMBER 66	
				PACK NUMBER	
				3EZ2029B	
DURATEC GEARBOX 5 SPEED					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	FL Plain Washer M6	WPHM6	3	Gear Lever	
13	FM Spring Washer M14	30Z2030A	2	AV Mount	
14	FN Spring Washer M12	WSHM12	4	Gearbox	
15	FO Spring Washer M10	WSHM10	4	x 2 Starter Motor x 2 Front Bellhousing	
16	FP Spring Washer M6	WSHM6	3	Clutch Slave Cylinder	

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

Page 2 of 2

FIXING PACKS




Pack **G**

CATERHAM

SERIAL NUMBER	56
PACK NUMBER	30X020B

EXHAUST

This pack may include extra fasteners to cover different options

ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	GA Setscrew M8 X 25 Grade 8.8	SM8X25	1	Exhaust Mounting Bracket	
2	GB Plain Nut M8	NFPF8	2	Exhaust Bobbin	
3	GC Spring Washer M8	WSHM8	3	x 1 Exhaust Mounting Bracket x 2 Exhaust Bobbin	

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

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FIXING PACKS

Pack H		CATERHAM		SERIAL NUMBER 53	
				PACK NUMBER	
				30R011D	
REAR SUSPENSION DEDION METRIC					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	HA Bolt M12 X 100 Grade 10.9	BM12X100	2	A-frame front mountings	
2	HB Caphead Bolt M10 X 65	BMCH10X65	2	Front radius arm (through cockpit)	
3	HC Bolt 1/2" X 2.1/2" Grade 10.9	BF1/2X2.1/2	4	x 2 Lower Rear Damper 2 Rear Radius Arm	
4	HD Bolt M6 X 80 Grade 10.9	BM6X80	4	Rear Anti Roll Bar Mounting Blocks	
5	HE Bolt 1/2" X 2.3/4" Grade 10.9	BF1/2X2.3/4	1	A-frame to DeDion	
6	HF Half Nyloc 1/2" UNF	NFYH1/2	3	x 2 Rear Radius Arm 1 A-frame to DeDion	
7	HG Nyloc Nut M12	NMYF12	2	A-frame front mounts	
8	HH Nyloc Nut M10	NMYF10	2	Front radius arm (through cockpit)	
9	HI Half Nyloc M8	NMYH8	2	Rear Anti Roll Bar Drop Link	
10	HJ Nyloc Nut M6	NMYF6	4	Rear Anti Roll Bar Mounting Blocks	
11	HK Nyloc Nut 1/4"	NFYF1/4	1	3 - way union on DeDion tube	

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








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Pack H		CATERHAM		SERIAL NUMBER 53	
				PACK NUMBER	
				30R011D	
REAR SUSPENSION DEDION METRIC					
<i>This pack may include extra fasteners to cover different options</i>					
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
12	HL Washer	79029	10	Differential Isolation	
13	HM Plain Washer 1/2" Chamfered	WPH1/2	20	x 2 Lower Damper x 10 A-frame washers 4 Radius Arm	
14	HN Plain Washer 3/8" X 7/8"	WPH3/8X7/8	2	Front Radius Arm	
15	HO Plain Washer M6	WPHM6	4	Rear Anti Roll Bar Mounting Block	
16	HP Schnorr Washer M12	30Z1069A	2	Lower Damper	

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

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FIXING PACKS

Pack J		CATERHAM			SERIAL NUMBER 47	
					PACK NUMBER 30P010A	
ROLL OVER & TRACK DAY BAR SERIES 3 METRIC						
<i>This pack may include extra fasteners to cover different options</i>						
ITEM		BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	JA	Bolt M10 X 60 Grade 8.8	BM10X60	2	Rear diagonals of roll over bar to mounting brackets	
2	JB	Setscrew M8 X 20 Grade 8.8	SM8X20	2	Roll over bar bracket to chassis	
3	JC	Caphead Bolt M10 X 20	BMCH10X20	2	Roll over bar boss	
4	JD	Nyloc Nut M10	NMYF10	2	Rear diagonals of roll over bar to mounting brackets	
5	JE	Plain Washer M8	WPHM8	2	Roll over bar bracket to chassis	
6	JF	Spring Washer M8	WSHM8	2	Roll over bar bracket to chassis	
7	JG	Plain Washer M10	WPHM10	4	Rear diagonals of roll over bar to mounting brackets	
Drawings are for illustrative purposes only and are not to scale.						Page 1 of 1

Pack O		CATERHAM			SERIAL NUMBER	
					PACK NUMBER ZWS01	
WING PROTECTORS STAINLESS STEEL						
<i>This pack may include extra fasteners to cover different options</i>						
ITEM		BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION
1	OA	Rivet 1/8" X 0.51"	1661-0414	30	Wing protector to wing	
2	OB	Wing Piping	76901	2m	Between wing protector and wing	
Drawings are for illustrative purposes only and are not to scale.						Page 1 of 1

FIXING PACKS

Pack P		CATERHAM			SERIAL NUMBER PACK NUMBER ZWS02	
WING PROTECTORS CARBON FIBRE						
<i>This pack may include extra fasteners to cover different options</i>						
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION	
1	PA Rivet Black 1/8" X 0.51"	1610-01049	30	Wing protector to wing		
2	PB Wing Piping	76901	2m	Between wing protector and wing		
Drawings are for illustrative purposes only and are not to scale.					Page 1 of 1	

Pack Q		CATERHAM			SERIAL NUMBER 31 PACK NUMBER ZFG12	
REAR WINGS						
<i>This pack may include extra fasteners to cover different options</i>						
ITEM	BASIC DESCRIPTION	PART NUMBER	QTY	USED ON	ILLUSTRATION	
1	QA Set Screw M5 X 20	SM5X20	20	Rear Wings		
2	QB Nylc Nut M5	NMYF5	10	Rear wings through boot		
3	QC Plain Washer 3/16" X 3/4"	WP3/16X3/4	30	Wing washers		
4	QD Wing Piping 1/4" X 1"	76902	4m	Between wing and body		
Drawings are for illustrative purposes only and are not to scale.					Page 1 of 1	

CATERHAM

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

CATERHAMCARS.COM

 /CaterhamCars  @caterhamcars

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