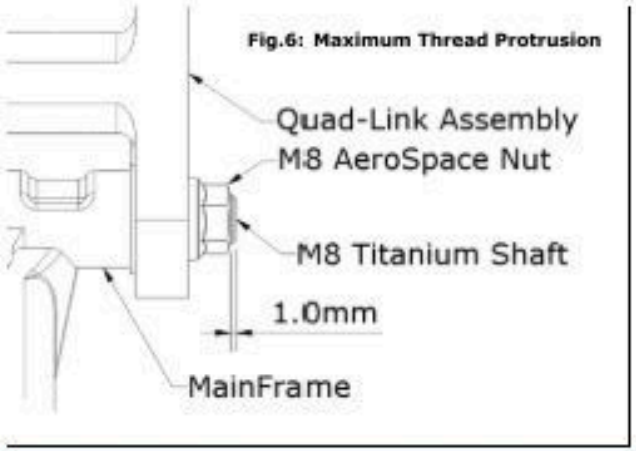
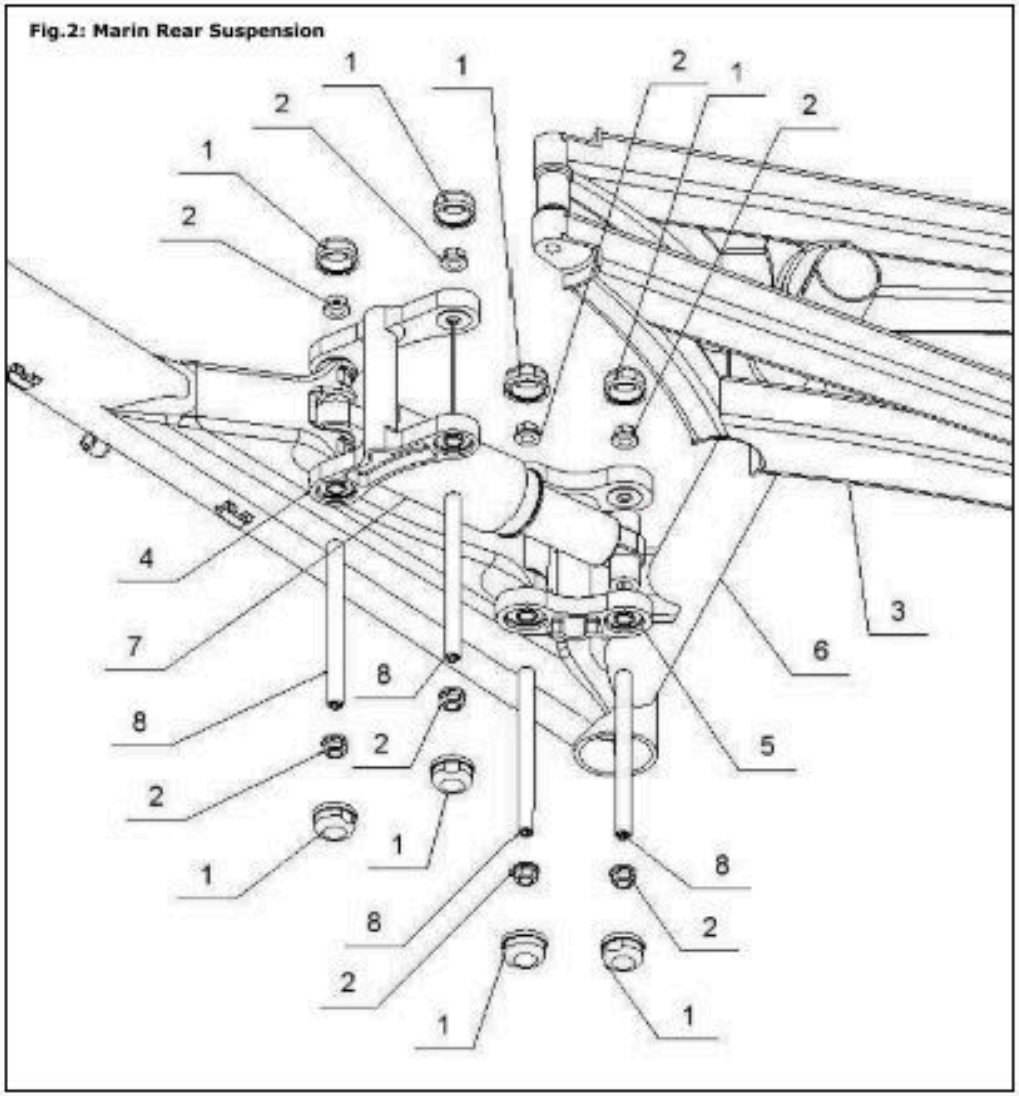
The re-assembly of the rear suspension is basically the reverse of the dis-assembly procedure. Starting with the rear 50mm Quad Link (5) ensure the rear Quad-Link (5) is complete and correctly assembled (See Fig.3). Next make sure the rear Quad-Link (5) orientated (see fig. 5) and pass an M8 Shaft (8) through the rear Quad-Link (5) and Main Frame (6). Next take the Fox Damper (7) and assemble the front mount of the Fox Damper (7) using SKF LG/AF anti fret paste on the contacting surfaces, into the forward shock mount of the Mainframe (6). IMPORTANT. Ensure the damper is the correct way up, with the blue Pro Pedal lever facing upwards. Assemble the front Quad-Link (4) onto the Mainframe (6), and pass an M8 Shaft (8) through the front Quad-Link (4), the Mainframe (6) and through the front of the Fox Damper (7) until the M8 Shaft (8) is showing out the other side of the front Quad-Link(4). You should now have both front and rear Quad-Links assembled onto the Mainframe (6), with the Fox Damper (7) in position. Next lower the Swinging Arm (3) onto the rear suspension assembly and position the Swinging Arm (3) onto the front Quad-Link (4) first. Make sure that the Inner Shield Washers (1, Fig.3) are present. Pass an M8 Shaft (8) through the front Quad-Link and Swinging Arm (3) until it has passed though the other side. Next rotate the Swinging Arm (3) down to attach it to the rear Quad-Link (5) and the rear of the Fox Damper (7). Ensure that the Inner Shield Washers (1, Fig.3) in the rear Quad-Link (5) are not pushed out, as you lower the swinging arm (3) into position. Once you have the Swinging Arm (3) in the correct position, make sure that the rear Quad-Link (5), the Swinging Arm (3) and the Fox Damper (7) though holes are all concentric with each other, and push through the last remaining M8 Shaft (8). Next re-fit the M8 AeroSpace Nuts (3). IMPORTANT: before final tightening of the M8 AeroSpace Nuts (3), it is important to make sure that there is a balanced amounts of thread showing through the M8 AeroSpace Nuts (2) on each side of the front and rear Quad-Link assemblies. Using the 4mm Allen key in the end of the M8 Shafts (8), and the 10mm spanner, adjust all 4 M8 Shafts (8) accordingly. Refer to Fig. 6. Tighten all M8 AeroSpace Nuts (2) to the recommended settings. (Refer to the Tightening torque settings in Section 8.0) Next make sure that there is still a substantial amount of Molykote 111 Silicon covering all the KP5AX Bearings. Refit the Bearing Caps (1) by screwing them into the links. Take care not to cross thread the Bearing Caps (1). Using the 19mm open ended spanner, tighten the Bearing Caps (1) to stop them from shaking loose. (Refer to the Tightening torque settings in Section 8.0)

Fig.6: Maximum Thread Protrusion



6.3.2: REASSEMBLING THE REAR SUSPENSION

Fig.2: Marin Rear Suspension



Tools Required:

4mm Allen Key
10mm A/F Spanner
Torque Wrench
19mm A/F Spanner

6.3: REASSEMBLING THE REAR SUSPENSION.

6.3.1: CORRECT ORIENTATION OF FRONT AND REAR QUAD-LINKS.

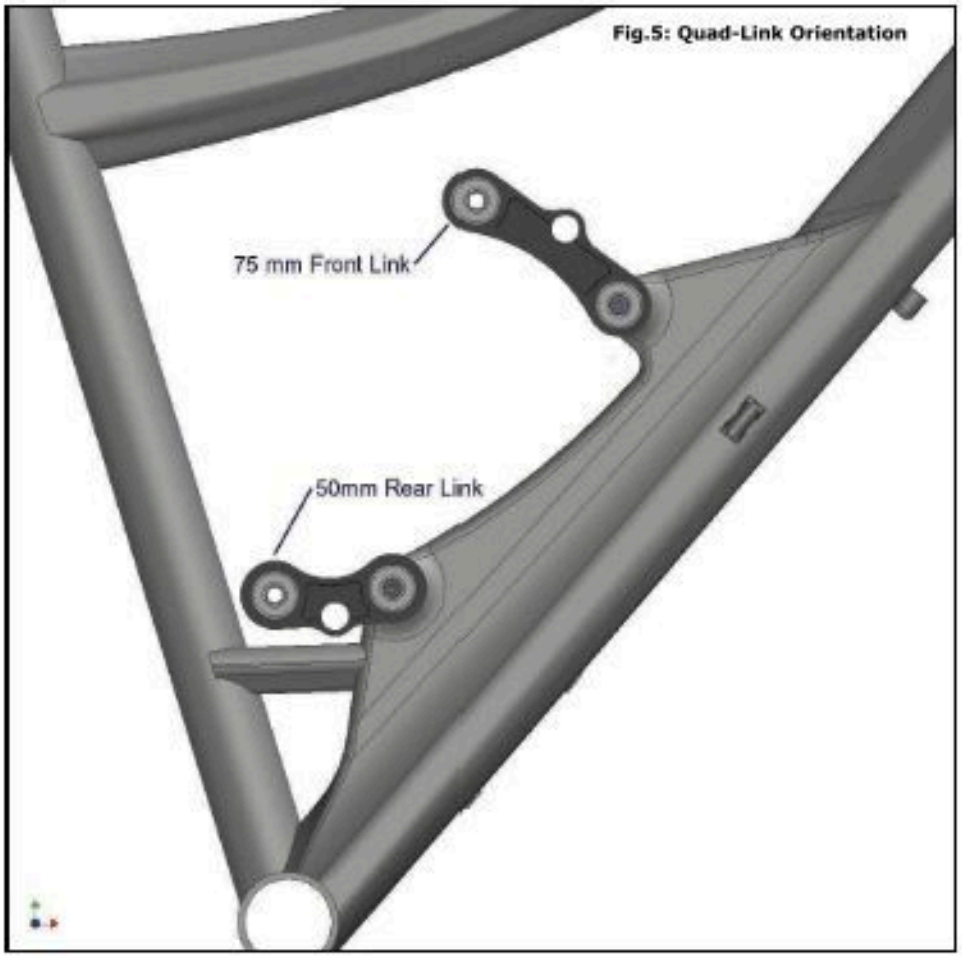


Fig.5: Quad-Link Orientation

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6.2.1: EXTRACTION OF KP5AX BEARINGS

Tools required: *KP5AX bearing press tool.*
6mm AF Allen Key
10mm AF Spanner.

To remove the KP5AX Bearings from the Link Body (4). Assemble the parts as shown in Fig 10a. Using the 6mm Allen Key and 10mm spanner, tighten the assembly together until the KP5AX bearing(5) is pressed out of the Link Body (4). Repeat on all 7 other KP5AX bearings.

6.2.2: INSERTION OF KP5AX BEARINGS

Tools required: *Whyte KP5AX bearing press tool.*
6mm AF Allen Key
10mm AF Spanner
Loctite 638

Before re-assembling both front and rear link assemblies, make sure all the components are clean from dirt and have been thoroughly de-greased. To press the KP5AX bearings (5) into the Link Body (4) apply a small amount of Loctite 638 to the outside diameter of the KP5AX bearing and to the inside Bearing bore of the Link Body (4). Next assembly the components as illustrated in Fig.10b. It is very important to make sure the KP5AX (5) bearing and Bearing Insertion tool 1 (3) are squarely seated against the Link Body (4). With great care, slowly tighten the M8 Socket head cap screw (7) with the 6mm Allen key and 10mm Spanner until you can see the KP5AX bearing (5) being pressed squarely into the Link Body (4). Once the KP5AX bearing is fully seated an you can no longer tighten the M8 Socket Head Cap Screw further, undo the nut and bolt and remove any excess Loctite from around the KP5AX Bearing. Repeat for the remaining 7 KP5AX Bearings.

6.2.3: REASSEMBLY OF QUAD-LINKS

Tools required: *Molykote Silicon 111*

Before re-assembling the Middle Shield Washer Components (3 see Fig.9), apply a good quantity of Molykote 111 Silicon on top of the KP5AX Bearings. The Molykote Silicon should completely cover each bearing and be applied on both sides of each bearing as it is assembled into the Link Body. Next assemble the Shield Washer Components (3 see Fig.9), If you have applied enough Molykote 111 Silicon, it should spread from under the Shield Washer component as they are positioned. Wipe this excess Silicon away from around the Shield Washer Components.

APPLICATION OF SKF LG/AF ANTI-FRET PASTE

Once the Links has been assembled correctly, SKF LGAF 3 Compound *must* be applied to all outside faces of the Middle Shield Washer Components (3 see Fig.9), that contact the Main Frame and Swinging Arm. It is additionally recommended to apply SKF LGAF 3 compound to the link contact surfaces on the Main Frame and Swinging Arm.

Fig.4a: KP5AX Bearing Extraction

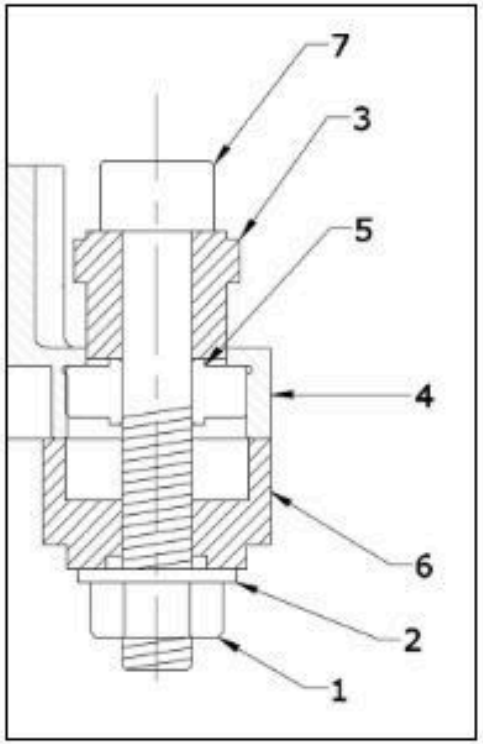
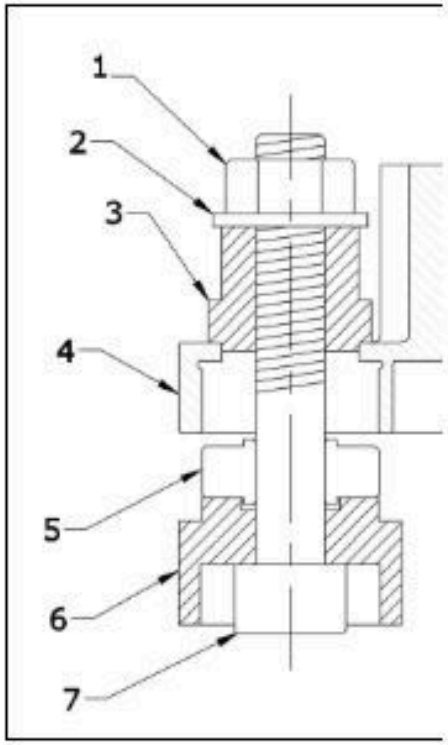


Fig.4b: KP5AX Bearing Insertion



Item:	Description.
1	M8 Nut
2	M8 Washer
3	KP5AX Tool 1
4	Link Body
5	KP5AX Bearing
6	KP5AX Tool 2
7	M8x50mm Socket Head Cap Screw

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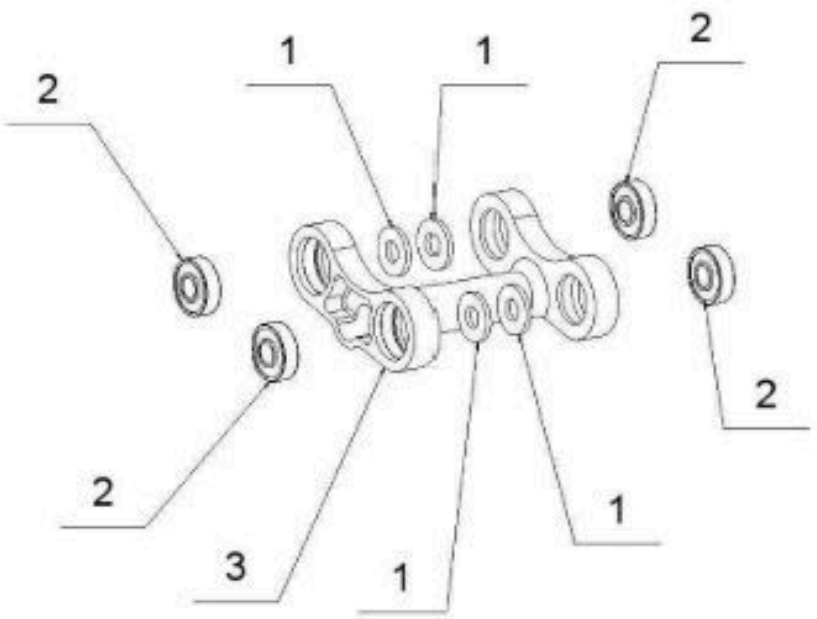
6.2: STRIPPING AND REASSEMBLING FRONT AND REAR QUAD-LINKS.

Fig.3: Assembly for both front and rear Quad-Links



Item	Description
1	Middle shield washer
2	KP5AX bearing
3	Front and Rear Link Body

Item	Description
1	Link Cap Cover
2	M8 Aerospace Nut
3	Rear Swinging Arm
4	Front Link Assembly
5	Rear Link Assembly
6	Front Triangle
7	Rear Fox Shock
8	M8 x 100mm Stud

6.1: REMOVING THE SWINGING ARM AND REAR DAMPER

See Figure X

Tools Required: *19mm A/F Open Ended Spanner.*
4mm Allen Key
10mm A/F Socket Wrench (2 off)

To remove the rear damper from the frame, using the 19mm open ended spanner, unscrew the 8 Bearing Caps (1) 4 per link. Next using the 10mm Sockets, undo the M8 Aerospace nuts (2) on the M8 shaft (8) that passes through the rear link assembly (5) and swinging arm (3). Whichever Aerospace Nut (3) becomes undone first, remove it, and pull the M8 Shaft (8) out from the other side. The swinging arm (3) can now be rotated out of the rear link assembly (5). Take care to retain the spacers that fit into the links. Next using the 10mm sockets undo the M8 Aerospace nuts (2) on the M8 Shaft (8) that pass through the front of the Swinging Arm (3). Whichever Aerospace Nut (2) becomes undone first, remove it, and pull the M8 Shaft (8) out from the other side. You can now lift off the Swinging Arm (3) from the front (4) and rear (5) link assemblies. To remove the links from the main frame (6) using the 10mm Sockets, undo the M8 Aerospace nuts (2) on the M8 shaft (8) that passes through the Main Frame (6) and front of the damper assembly (7). Again whichever Aerospace Nut (2) becomes undone first, remove it, and pull the M8 Shaft (8) out from the other side. You can now remove the damper assembly (7) and Front Link Assembly (4) from the main frame (6). To Remove the Rear Link Assembly (5) from the bike, using the 10mm Sockets, undo the M8 Aerospace nuts (2) on the M8 shaft (8) that passes through the Rear Link Assembly (5) and the Main Frame (6) and remove the M8 shaft (8) and the Rear Link Assembly (5) from the Main Frame (6). Be careful to retain all the spacers that fit into the Quad-Link assemblies.

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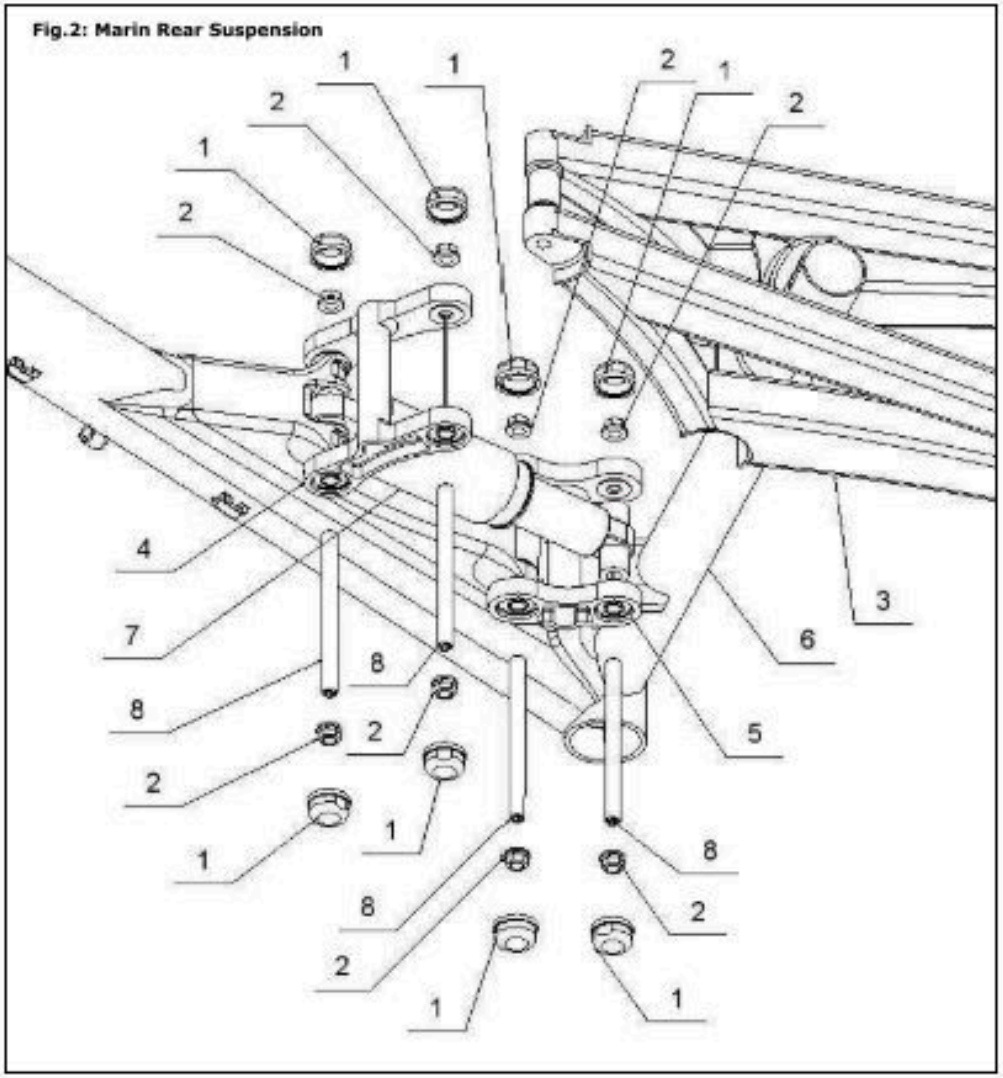
6.0: SERVICING THE REAR SUSPENSION

Fig.2: Marin Rear Suspension



7.1: Removing the Rear Dropouts from the Swinging Arm.

Tools Required: *5mm Allen Key*
6mm Allen Key

Both Left (4) and Right Hand (2) dropouts are a modular design, that can be replaced if damaged. They are each attached to the Swinging Arm (3) by two bolts (1a & 1b) . To remove either Right Hand (2) or Left Hand (4) dropout using the 5mm Allen key for the outside bolts (1a) and 6mm Allen key for the Inside Bolts (1b), undo both bolts, and remove them from the assembly. The Dropout (2 & 4) should now be detached from the Swinging Arm (3). Take care not to loose any of the components.

7.2: Assembling the Rear Dropouts onto the Swinging Arm

Tools Required: *5mm Allen Key*
6mm Allen Key
Torque Wrench
Loctitie 638

It is important to make sure the Swinging Arm (3) and Dropouts (2 & 4) are clean and free from mud, grease and other dirt, which could prevent the Dropouts (2 & 4) and Swinging Arm (3) from fitting together perfectly. Before assembling the bolts (1a & 1b), apply a small amount of Loctite 638 locking compound to the threads of each of the bolts (1a & 1b), as well as to the outside of the Female Chain Ring Bolts (1b) so an even covering is achieved. Next, assemble the parts as shown in Fig 7. making sure the Bolts (1a & 1b) are correctly positioned as shown. Using the Torque Wrench, tighten the bolts (1a & 1b) to the correct torque as specified in Section 8.0. Wipe off any excess retaining compound.

8.0: TORQUE SETTINGS

Quad-Link 2 Suspension:	Nm	lbs.ft
M8 AeroSpace Nuts	18.0	13.3
Bearing Caps	5.0	3.7
Rear Dropout Assembly		
Bolts	15.0 (Min) / 25.0 (Max)	11.0 (Min) / 25.0 (Max)

Torque explained: If no suitable Torque Wrench is available a Torque of 5 lbf.ft can be obtained by applying a force of 5lb, with a Spring Balance, to the end of a spanner, 1 Foot in length.

IMPORTANT: For all other torque settings, refer to the specific manufacturers information bundled with this manual, or alternatively, refer to the specific manufacturers website for further information.

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7.0: SERVICING THE MARIN DROPOUT SYSTEM.

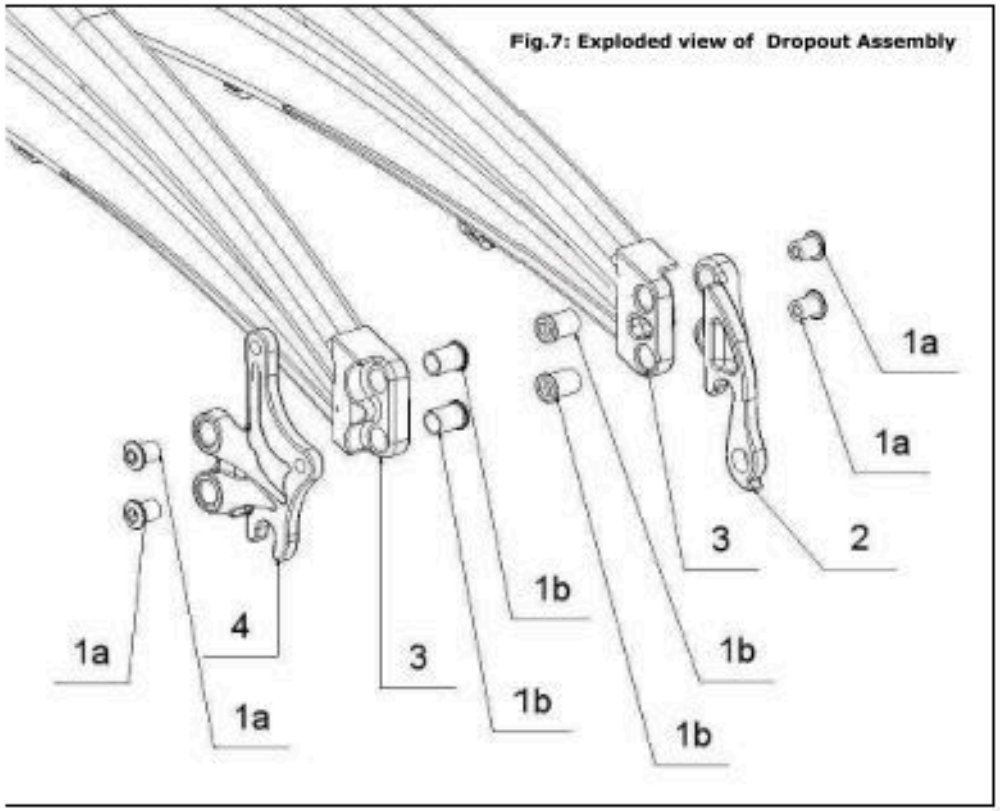

Fig.7: Exploded view of Dropout Assembly

Item	Description
1a	Chain ring Bolt Male
1b	Chain Ring Bolt Female
2	Dropout, Q/R Modular Type, Derailleur side
3	Swinging Arm Mounting Point
4	Dropout, Q/R Modular Type, Disc side