SLED Frame Service Guide

Tools Needed: 10, 8, 6, 5 & 3mm Allen Keys

Torque Wrench
Press fit Headset or BB Press
Loctite 638 Bearing Retainer!! (Very Important)

2-Arm Gear Puller
Crown race puller
SLED BB Plug (DMR-TOOL-BEARING-SUPPORT)

Introduction, if you are experiencing play in your frame and/or feel that it is getting a bit notchy through its travel then this will solve all your issues and help keep your SLED in fighting shape. Here we go....

Start by removing your shock from the frame. If you’re are dealing with a complete bicycle, remove the Crank, Chain & rear wheel to make sure you have the room to work on the frame.
Remove the 10mm Locking bolt from the D/S of the Collet, this will expose an 8mm Allen socket. Before you begin to undo the collet via this 8mm socket, release the 5mm locking bolt N/D/S. No need to remove the bolt, just release it by 2 full turns.

As you remove the collet be aware that there a 2x washers (DMR-S-SLED-WASHERS) that can easily be lost as you pull the collet from the frame. After the collet has been removed, undo (don’t remove) the 6x 3mm bolts from the centre of the link plates. Then you can remove the 2x 6mm bolts (DMR-S-SLED-LINK-BOLT) that attach the upper link to the top tube, the link is now free from the frame to service.
Here is the upper link exploded.

*inspect all the individual pieces for any damage and thoroughly clean the link before pressing in your fresh bearings. If for any reason you require an entire new link assembly here is our code: DMR-S-SLED-UPPER-LINK.
Now that you have replaced your bearings, you are ready to re-install the upper link. To make it all a little easier install the link spacer to one of the link plates and loosely thread in the other side via the 3mm bolts (pictured above for example), This makes it easier to get over the frames bearing posts. Once you are at this point you can install and Torque your 6mm linkage bolts into the frame (15-18Nm) and tighten the remaining 3x 3mm bolt in the centre of the link plate (5-8Nm). Do not re-instate the rear end at this point, this will make it a lot easier to work on the Orbit Link.

Now onto the lower link. Remove the 6mm and 3mm bolts on the D/S Link plate.
Place your SLED BB plug (DMR-TOOL-BEARING-SUPPORT) into the BB shell and use your gear puller to hook onto the link plate being careful to not catch the frame, pic below.

*DO NOT USE PUNCHES, DRIFTS, SCREWDRIVES OR ANYTHING YOU FIND IN THE KITCHEN DRAWER TO SMACK THE LINK PLATE!*
Gently wind the gear puller to remove the link plate. Hopefully when you remove the link plate it will take the bearing off the BB shell with it but if it doesn’t, he is our suggestion...

Use a crown race puller. This is the most efficient and least damaging way that we have found that will remove the bearing nice and square and runs no risk of damaging the frame. Repeat on the N/D/S.

28th September 2018
After you have removed the link plates, give the BB shell a really, really good clean and degrease ready for the Loctite 638 bearing retainer. Add a good even amount of Loctite 638 around the entirety of the bearing race on the BB shell. It is crucial that you use a bearing retainer, NOT! Threadlock (yes, it happens) it is not designed to lock bearings, it is formulated to lock threads. This step needs to be carried out, if it is not carried out you will see play at the BB of the frame, the frame is designed this way to increase the longevity of the alloy around the BB. We would rather the Loctite wear out than your frame. Slide your new bearings onto the BB and wipe away any excess Loctite that is displaced by the bearings.

Once you have cleaned up the links and pressed in new bearings (DMR-S-SLED-6001-B x2) to the rear of the link plates, you can start to press them onto the bearings over the BB shell. Run a thin bead of Loctite 638 on the inside of the link plate before using the BB or Headset press to fully install the link. When you get to the stage pictured left (NOT FULLY PRESSED) place the rear end in between the links and loosely thread in the 6mm link bolts, if you fully press the plates over the BB you will not have enough room to get the rear end in between the links.
Now you have the link fully pressed over the bearings you can torque the lower link bolts to 15-18Nm and the 8 x 3mm link spacer bolts to 5-8Nm.

Now you can bring the rear end up to the upper link and insert the collet. Make sure that you install the link spacers in between the frame and the link. Once you have the collet through the frame and link, torque the collet via the 8mm socket to 5Nm and check the movement of the rear end for any resistance. If there is any, back off the collet until the rear end is free and smooth with no play. Once you are happy with the action of the rear end torque the 5mm Bolt to 20-25Nm, this will lock the collet in place and stop it from ever working loose. Finally thread the 10mm bolt into the D/S of the collet and torque to 8-10Nm.
Now you are ready to install your shock and get back out there in the woods!

All small parts for the SLED are available from here -
https://www.upgradebikes.co.uk/Catalogue/Frames/DMR/Sled/Frame

SLED Frame spec sheet -
https://www.upgradebikes.co.uk/files/technical/dmr/SLEDFrameSpecSheet.pdf