



LOF POWERboost servo kit for Defender

Fitting Instructions:

- With the LOF POWERboost and new diaphragm in hand, fitting should take no more than 1 hour on 300tdi/ TD5 Vehicles (TDCI it may take longer)
 - 300tdi and TD5 vehicles can have the LOF POWERboost installed WITHOUT disconnecting the brake lines, meaning no need to bleed up the brakes after installing
 - The 2.4/2.2 TDCI Will need two new brake lines making up (1x 500mm & 1x 600mm male to male pipes) Due to this, you will also need to bleed the brakes after fitting, maybe take this opportunity to refresh your brake fluid?
1. Open the bonnet and identify the brake master/ servo position
 2. Remove the 2x rubber grommets on the side of the pedal box as shown in the diagram below,
 3. Remove the split pin, Washer and Clevis pin connecting the old brake servo to the Pedal arm
 4. Disconnect the vacuum pipe from the old brake servo- this simply pulls off
 5. Disconnect the brake pipe clips holding the brake pipes together, giving more flexibility for movement (Dont disconnect the pipes!)
 6. Undo the 2x retaining nuts (13mm head, M8) holding the brake master to the old diaphragm
 7. Remove the master cylinder and move it over to the side, being careful to not damage or strain the pipes
 8. Undo the 4x 13mm (M8) nuts holding the old diaphragm to the pedal box, and remove the old servo

At this point you are back on to assembly, take this moment to clean up the pedal box face/ any other easily accessible areas

1. Take the new servo and the LOF POWERboost ring, place the Ring over the rear studs on the new double diaphragm servo, note there are 2 sets of counterbored holes, for this application you need to use the ones most forward, clockwise.
2. Use the 2x M8 flanged nylocs provided to tighten the ring to the new servo, up to a torque of 25nm
3. Take the whole assembly and install it back into the brake pedal box, add the two nuts loosely on the back to hold in place
4. Asking an assistant to help, move the brake pedal until the holes of the servo rod line up with the hole in the brake pedal arm, and add the clevis pin back through, securing with the washer + Split pin. Re-fit the 2x access grommets
5. Double check- now you should have the studs pointing out of the front of the servo, in the 10 O'clock and 4 O'clock position looking from the front!
6. Tighten the 2x M8 nuts holding the new servo to the pedal box, to a torque of 25nm
7. Take the New Rubber washer supplied in our kit, and fit it to the end of your original brake master, removing the old "O" ring if present.

8. TD5 and 300tdi Owners: You can now offer your brake master back up to the new servo studs, Noting that you will need to manipulate your 3x brake lines in order to reach, ensuring no tight bends or contact with other components that may rub/wear.
9. TDCI owners: You may now need to disconnect 2 of the brake lines in order to allow the master cylinder to reach into its required position, you will then need to re-make the 2x new lines (500mm and 600mm) to reach the Bias Valve block. Then mount the master cylinder and re-fit the 2x new M8 nuts. TDCI owners will now need to re-bleed their brakes in order to remove the air trapped in the system
10. Tighten the 2x master cylinder mounting M8 nuts to 25nm
11. Re-connect the vacuum pipe to the new ABS servo

Once finished, as you have been working on the braking system, pump the pedal 4 times before starting the test drive!

Notes:

1. Please ensure you are happy/ competent and comfortable working on the braking system before starting
2. You have now vastly improved your brakes performance and this will take some getting used to, please drive accordingly
3. This is a performance modification which we have tested in partnership with independent specialists world wide, however it is your responsibility to ensure the kit is fitted correctly and safely, LOF is not responsible for incorrect fitting!
4. Please enjoy this upgrade with care
5. Please ensure the rest of your braking system is in good working order before starting

