

CONGRATULATIONS ON THE PURCHASE OF YOUR DES SOL PRODUCT.

Part Number : DSJLRT-G4
Part Description : Des Sol Overlander Tank (2018 - Current)
Vehicle : Suzuki Jimny 2018 – Current

WARNING

NOTE THE FOLLOWING:

- **THIS PRODUCT MUST BE INSTALLED EXACTLY AS PER THE FITTING INSTRUCTIONS BELOW AND ONLY THE HARDWARE SUPPLIED WITH THIS PACK IS TO BE USED**
- **IN THE EVENT OF DAMAGE TO ANY COMPONENTS, CONTACT YOUR NEAREST DES SOL SUPPLIER – REPAIRS OR MODIFICATIONS MUST NOT BE ATTEMPTED**
- **THIS PRODUCT AND MOUNTING COMPONENTS MUST NOT BE MODIFIED IN ANY WAY**
- **DO NOT REMOVE LABELS FROM THIS PRODUCT**
- **THE JIMNYS “RANGE” FUNCTION WILL NO LONGER BE ACCURATE AS THIS IS BASED ON A 40L TANK**
- **TAKE NOTE ON YOUR MILEAGE AND CONSUMPTION FOR THE FIRST FEW TANKS TO LEARN THE NEW RANGE AND RESERVE CAPACITY**





Tools required for installation:

- Screw drivers
 - Medium Flat
- Spanners, Ratchet & Sockets:
 - 6mm socket/spanner
 - 8mm socket/spanner
 - 10mm socket/spanner
 - 12mm socket/spanner
 - 13mm socket/spanner
 - 14mm socket/spanner
 - 17mm socket/spanner
- Other
 - Stanley knife or scissors (to trim cable ties, pipes and pipe fitting)
 - Fuel pump spanner or strap wrench
 - Pliers or vice grips
 - 3mm Allen Key
 - 4mm Allen Key

ITEMS CONTAINED IN THIS KIT

Tank and accessories	<ul style="list-style-type: none"> 1 x Overlander 80l Fuel tank 1 x HDPE Skid Plate 1 x Skid Plate retaining bracket 1 x Exhaust heat shield 1 x Carbon canister relocation bracket 1 x Rollover valve 1 x Rollover valve plug (6mm Pin) 1 x Extended Float arm with float 1 x Fuel pump bolt on flange 1 x Handbrake cable relocating bracket
Piping and fittings	<ul style="list-style-type: none"> 1 x Ø6ID x 1m Fuel pipe (Rollover valve pipe) 1 x Ø8ID x 350mm Fuel pipe (Replacing hard line to CC) 1 x Ø8ID x 640mm Fuel pipe (Breather to CC) 1 x Ø8ID x 880mm Fuel pipe (Replace fuel pump hard line) 1 x Ø10ID x 320mm Fuel Pipe (Tank internal breather pipe) 11 x Hose clamps – No.04 size 6-17mm SS
Fasteners	<ul style="list-style-type: none"> 6 x M5 x 12mm Button head cap screws SS 6 x M5 Flat washers SS 6 x M5 spring washers SS 4 x M6 x 10 Button head cap screws SS 4 x M6 spring washers SS 7 x M6 fender washers ZP 3 x M6 x 20 set screws ZP 9 x M8 Nylock nuts ZP 9 x M8 Fender washers ZP 2 x M8 x 32 U-bolt ZP 2 x M10 x 40 U-bolt ZP 4 x M10 Nylock nuts ZP 4 x M10 Fender washers ZP 1 x M12 x 20 Button head Cap screw (Pre assembled) 1 x 12x16x1.5 annealed copper washer (Pre assembled)
Standard exhaust	<ul style="list-style-type: none"> 1 x Replacement Mid section
Viper exhaust (Optional extra ONLY)	<ul style="list-style-type: none"> 1 x Branch 2 x Heat shield 1 x Cat-fooler 1 x Extended CO2 sensor wire harness 1 x Mid section 1 x Rear box 2 x gaskets 6 x M8 x 30 8.8 bolts 6 x M8 nuts

TANK REMOVAL PROCESS

	<ol style="list-style-type: none">1. Remove the bolts from either end of the mid section2. Remove the mid section mount from the rubber exhaust mount (using soapy water or silicon spray will assist in this removal process)
	<ol style="list-style-type: none">3. Mark the front and the rear position of the prop shaft (Note: the shaft must go back in the same position)4. Remove the 4 front M6 and 4 rear M8 prop shaft bolts5. Lay the prop shaft flat on the ground when storing it. If it is placed up right, grease will be forced out.
	<ol style="list-style-type: none">6. Undo the hand brake cable that sits in front of the stock fuel tank on the drivers side and reroute it above the chase tube7. Use the U-Bracket provided to relocate the hand brake cable. Reconnect the cable. NOTE: Leave the handbrake down while dealing with this process. Make sure the vehicle is secure and safe to work on
 <p>The third photograph in this row shows a carbon canister with three red circles highlighting bolts. The second photograph shows two pipes labeled 'TANK' and 'AIR' with red boxes around them.</p>	<ol style="list-style-type: none">8. Remove the 3 x body clips on the carbon canister.9. Mark the pipes "Tank" and "Air" to assist with the reassembly.10. Undo the 3 bolts.

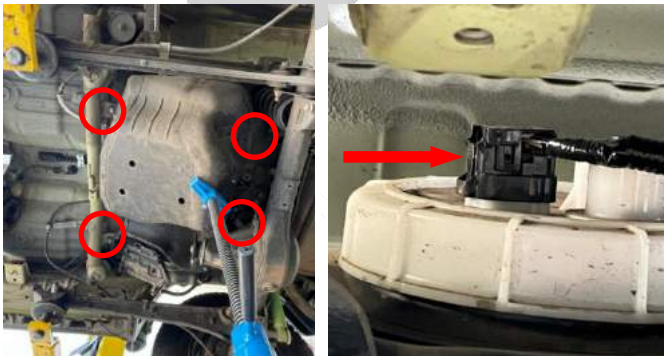
TANK REMOVAL PROCESS



11. Unclip the 4 body clips that are holding the wheel well cover on the petrol filler side.
12. Undo the 3 pipes located under this cover
13. Cable tie/clamp the large and middle size pipe back on their self to ensure the remaining fuel in the tank does not get contaminated.



14. Use the "fuel pipe fitting" removal wire to remove the fuel line and return line located near the carbon canister.
 - Push the wire into the fitting in order to open up the plastic clips that are retuning the fuel lines on to the steel barbed pipe.

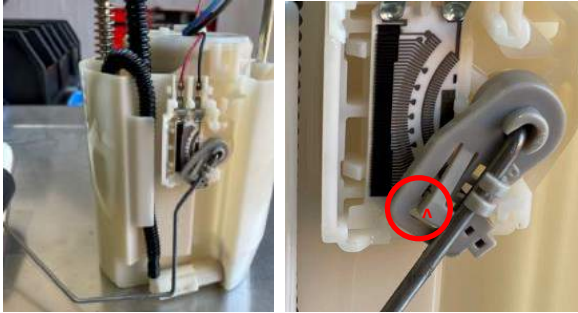


15. Place support under the fuel tank and loosen the two front (of vehicle) bolts and remove the two rear bolts completely
16. Lower the tank approximately 200mm in order to get access to the fuel pump cables.
17. You will gain access to this fuel pump cable clip
18. Push the clip in on the left hand side (see image) and pull up the clip to disconnect the cable.
19. Remove the remaining bolts and fuel tank



20. Remove the fuel pump connector.
21. Cut the roll over pipe shorter (60mm) and insert the 6mm rollover valve plug into the pipe
22. Use a strap wrench or fuel pump spanner to unscrew the retaining lid of the fuel pump (turn anti-clockwise)

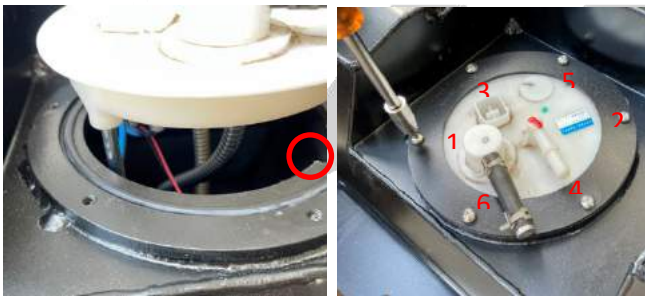
TANK INSTALLTION PROCESS



23. Carefully remove the fuel pump out of the tank. Take note of the fuel level float arm and do not allow it to hook on the tank and get damaged.
24. Remove the Fuel float arm by pushing down on A and rotating the fuel float arm clockwise, out of the housing. And then pull the arm towards you.
25. Insert the new arm supplied in the same manor.



26. Ensure that the bottom of the float arm is 35mm below the bottom of the fuel pump housing.
 - The way to check this is to have the fuel pump on a 45mm block and slide a 10mm shim under the float making sure there is no gap and that the float arm doesn't move up.



27. Insert the original O-ring into the slot.
28. Carefully insert the fuel pump into the Overlander Tank. Ensure that the locating Key locates into the slot circled in red.
29. Insert the pump retaining plate and using the M6x10 button heads, M6 spring washer and M6 washer. Slowly tighten each screw in a star fashion as illustrated. Tighten to 6nm



30. Insert the rollover valve seal first and the insert the rollover valve
31. Plum the $\text{\O}10\text{ID} \times 320\text{mm}$ Fuel Pipe (Tank internal breather pipe) to the bottom of the tank. Leave the top disconnected, this will be connected up once the tank is in place.

TANK INSTALLTION PROCESS



32. Remove the Couplings from the hard lines by making a light incision in the hard plastic (fuel pump line and return line)
NOTE: be careful not to cut all the way through and damage the coupling and or o-ring.



33. Join the Fuel pump line couplings to the $\varnothing 8$ ID x 880mm Fuel pipe Line provided – secure this with one pipe clamp on either side
34. Join the Fuel return line couplings to the $\varnothing 8$ ID x 350mm Fuel pipe provided – secure this with one pipe clamp either side
35. Connect the Fuel pump pipe on to the fuel pump
36. Connect the $\varnothing 6$ ID x 1m Fuel pipe (Rollover valve pipe) to the new rollover valve


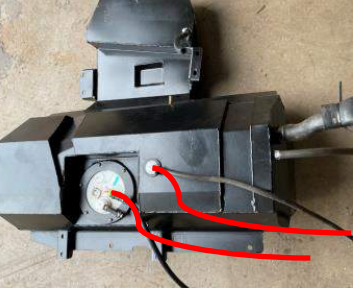
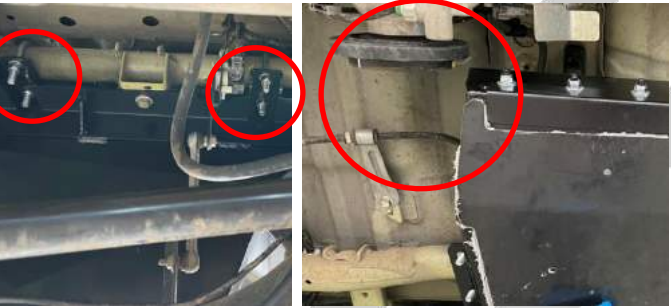




37. Fit the original filler pipe on to the new tank
38. Trim the end of the breather pipe off as this section will be faired. Trim this pipe down to 220mm and use the pipe clamp provided to secure it to the tank

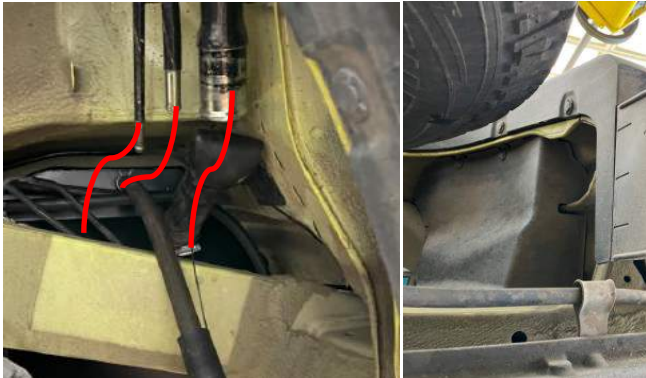


39. Insert the back of the tank into position first and rest the prop shaft well on the rear portion of the Diff (use a cloth and cardboard to stop the diff from scratching the tank).
NOTE: you will have to feed the Fuel filler inlet pipe and breather pipe up and over the chassis.
40. Rest the front end of the tank on a support
41. Reconnect the electronic cable to the fuel pump

TANK INSTALLTION PROCESS

 	<p>42. Lift the rear of the tank up to the original fuel tank strap mounting points. NOTE: Make sure that none of the pipes are pinched and are free – run these pipes along the top of the rear mounting bracket – See bottom image</p> <p>43. Insert the original bolts but do not tighten them</p> <p>44. Insert the two M10x 40 U-brackets with the M10 flat washer and M10 Nylock Nut – Do not tighten them completely (as per image 2 on this block)</p>
	<p>45. Insert the 2 M8 x 32 U-Bolts and fasten with the M8 flat washers and M8 Nylock nut (as per image 1 on this block)</p> <p>46. Ensure that there is adequate space between the transfer box and the tank</p> <p>47. Tighten the M8 bolts and U-Bolt to 20nm and the M10 Bolts to 40nm</p> <p>48. Connect the other end of the pipe mentioned in section 31 to the main part of the tank with the pipe clamp provided.</p>
	<p>49. Fit the carbon canister to the carbon canister mounting plate provided.</p> <p>50. Connect the roll over valve pipe to the centre pin on the Carbon canister (This is marked "TANK") and secure this with the pipe clamp provided.</p>
	<p>51. Remove the bottom bolt from the transfer box mount</p> <p>52. Remove the bolt securing the handbrake cable</p> <p>53. Fit the Carbon canister mount in position (sharing the Transfer box mount, hand brake cable mount and old tank stop mount) NOTE: the handbrake cable mount goes on top of the Carbon canister mount.</p>

TANK INSTALLTION PROCESS



54. Remove the cable ties and connect the fuel filler pipe back onto the steel pipe (Large right breather pipe) – secure with pipe camp
55. Connect the Tank Breather pipe back onto the steel pipe (middle steel pipe) – secure with pipe camp
56. Connect the “Ø8ID x 640mm Fuel pipe (Breather to Carbon Canister)” from the small steel (breather pipe) to the carbon canister nipple marked “AIR” – secure with pipe camp
57. Fit the plastic wheel well covers back on



58. Clip the pipe from the fuel pump back on to the steel fuel line pipe (This is marked with a Blue ring)



59. Connect the fuel return pipe to the carbon canister and steel fuel return line
NOTE: The straight fitting goes on to the steel fuel return line and the 45° goes on to the carbon canister
60. Cable tie the pipes neatly so they are retained and out of the way.



61. Fit the exhaust heat shield. Using the 4 M6 button heads and washers with spring washers on the cut out side of the tank.
62. Fit the new exhaust mid section supplied.

NOTE: The fuel gauge will differ from the standard tank’s readings. When the fuel light first comes on there will be approximately 15l of fuel left and when the light starts flashing there will be approximately 10l of fuel left. Use your fuel consumption and km done to double check the fuel you have used for the first few tanks so that you get used to the new readings