



Suzuki vStrom DL1000 / DL650 vSystem



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Technical Support



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v3.2

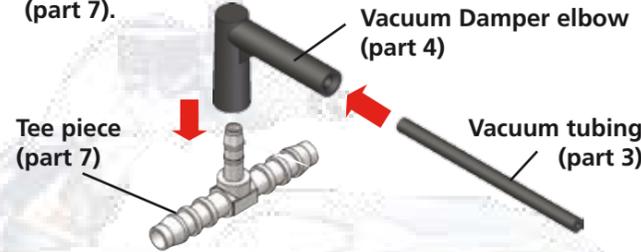
1. Vacuum Connection

1a. For DL650 and DL1000 models before 2012, locate the spigot on the underside of the throttle body. Remove rubber bung and replace with the vacuum damper elbow, (part 4). Push the vacuum tubing (part 3) into the rear of the elbow and route neatly to the rear of the bike.



Suzuki DL650 and DL1000 vStrom up to 2011

1b. For all models 2012 onwards, fit the damper elbow (Part 4) onto the third leg of the tee piece (part 7).



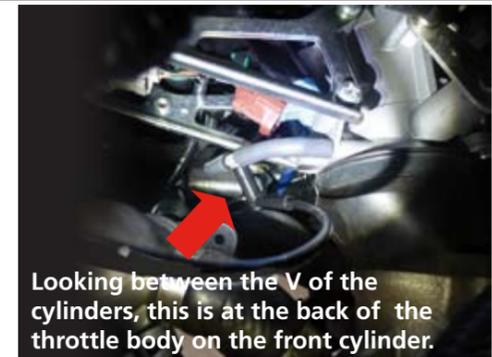
Push one end of the vacuum tubing (part 3) into the rear of the vacuum damper elbow part (part 4).



Suzuki DL650 vStrom, 2012 onwards

Locate the vacuum pipe on the throttle body, as shown in the relevant image. Cut the vacuum pipe on the bike, and insert the tee piece, with the vacuum damper elbow and vacuum tubing already fitted to it.

Route the vacuum tubing neatly back towards the rear of the bike.



Looking between the V of the cylinders, this is at the back of the throttle body on the front cylinder.

Suzuki DL1000 vStrom, 2014 onwards

On the DL1000 2014 onwards models only, it is possible to route the delivery tubing inside the swingarm. This is described further on in Section 3b. However the description below, Section 3a covers ALL models, INCLUDING the DL1000 2014 onward, and whilst more visible, is more straightforward.

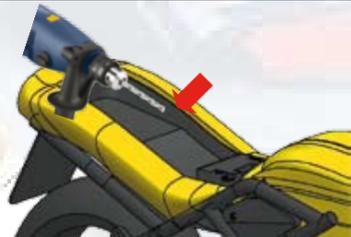
2. Reservoir Metering Valve

1. Fit the RMV (part 1) into the cage (part 11) and push fully into place. The RMV and cage can be mounted on the RHS rear sub-frame, above and behind the passenger footpeg hanger, or under the seat. Secure in position using cable ties (part 12).



Route the vacuum tubing to the top of the RMV. Trim and save any offcut. Push the end of the vacuum tubing into the top of the RMV.

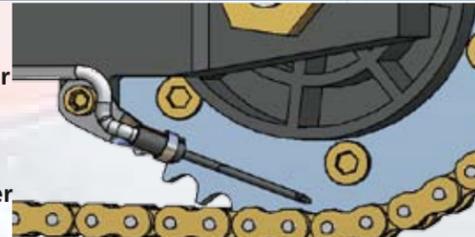
Hint: Remember to allow clearance for removal of filler plug.



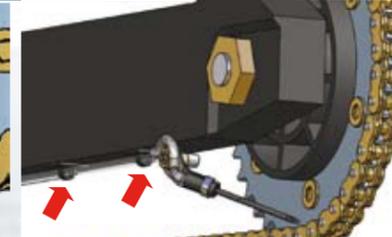
Using the cage as a guide, mark and drill 4 x 5mm holes so that the cage is mounted at an angle, with the spigot pointing downwards.

3a. Dispenser Assembly and Tube Routing: ALL MODELS

Using the M8 screw (part 14) secure the dispenser plate (part 16) to the outside face of the bobbin mount. Secure the dispenser assembly (part 13) to the plate using the dispenser plate circlip (part 15). The final nib should be lightly touching the rear sprocket with the slash cut facing outwards.



* The dispenser plate can be reversed for a neater fit.



Neatly route delivery tubing along the underside of the swingarm, and secure using self adhesive clips, part 17.

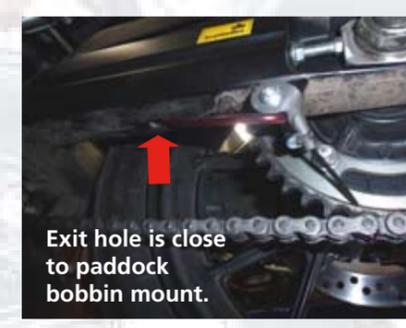
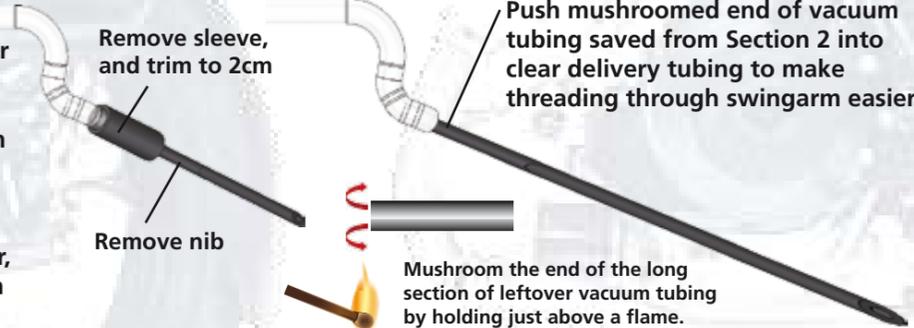
HINT use the isopropanol wipe (part 10) to clean the swing arm before fixing clip in place. Then, route delivery tubing upwards and cable tie to existing earth wire, then continue up and back to the RMV. Trim delivery tubing to length and push FULLY onto the brass spigot at the base of the RMV.



3b. Dispenser Assembly option for DL1000, 2014 onwards

On the DL1000, 2014 onwards models, it is possible to route the delivery tubing INSIDE the swingarm for a very discrete installation.

Remove the black sleeve from the dispenser assembly (part 13), and remove the final dispenser nib. Mushroom the end of the left over piece of vacuum tubing from section 2 by holding it over the flame of a match or lighter. Allow to cool then push the mushroomed end of the longer section of vacuum tubing into the end of the clear delivery tubing. Thread this, vacuum tubing first, into the swing arm beside the rear shock absorber, and out of the swing arm at the oval drain hole in front of the rear bobbin mount.

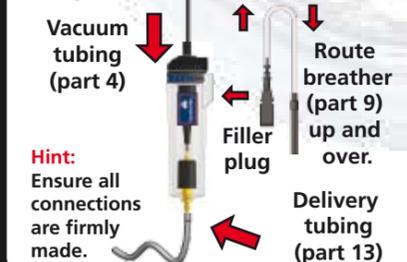


Thread the tubing through until the clear delivery tubing emerges, then remove the long section of vacuum tubing. Refit the final dispenser nib into the end of the clear delivery tubing. Trim the sleeve section to 20mm and refit over the nib/delivery tubing. Fit dispenser plate to bobbin mount, and secure re-assembled dispenser assembly to the plate using the dispenser plate clip. Then, secure the clear delivery tubing to the earth wire beside the rear shock and route up and back towards the RMV. Trim delivery tubing and connect to spigot at base of RMV.

4. Connections

Connect vacuum tubing and delivery tubing to the RMV.

Ensure that all connections are firmly made, and that parts are not situated close to components which may become hot. Take care to ensure that any mechanisms such as seat catches or throttle assemblies can operate properly and are not affected by tube routing.



5. RMV Filling

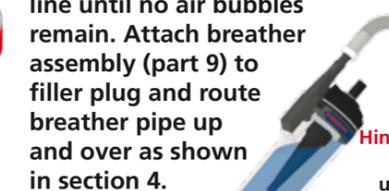
Fill RMV using bottle & spout (parts 18 & 19). **Hint:** Always remove filler plug (part 2) and breather (part 9) before filling.



6. RMV Priming

Press filler plug (part 2) into the RMV and set the RMV to "PRIME".

Connect spout to the filler plug and squeeze bottle. Force oil down the delivery line until no air bubbles remain. Attach breather assembly (part 9) to filler plug and route breather pipe up and over as shown in section 4.



7. Set Flow Rate

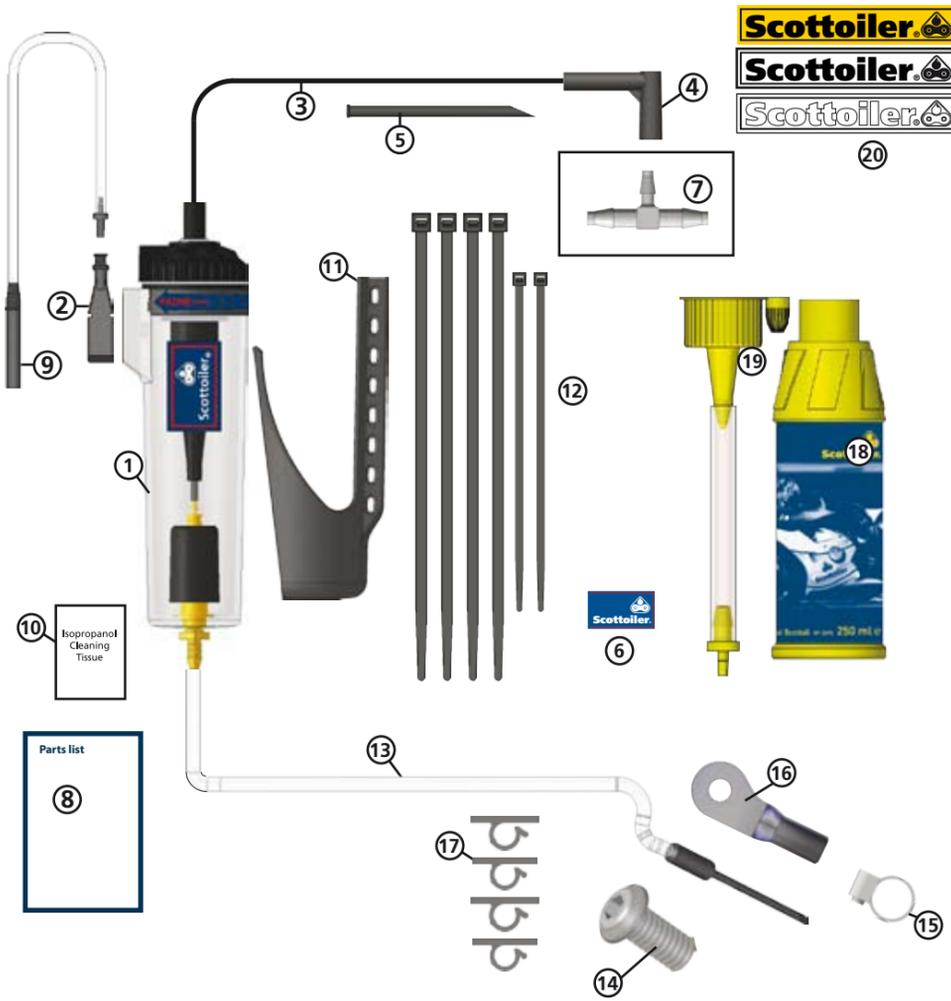
Start your bike & allow the engine to warm up. Adjust the flow until 1 drop per minute is achieved. Check flow after a short journey & adjust if necessary.



Hint: More than 2 drops per minute will result in excess fling.



Parts List



- | | | | |
|-----------------------------------|-------------|------------------------------------|-------------|
| 1. RMV (Reservoir Metering Valve) | (SO-0021) | 13. Dispenser Assembly | (SA-0024) |
| 2. Filler Plug | (SA-0040) | 14. M8 Screw (x1) | (RM-150143) |
| 3. Vacuum Tubing (Black) | (SC-0051) | 15. Dispenser Plate Clip | (RM-150065) |
| 4. Vacuum Damper | (SA-0100) | 16. Small Dispenser Plate | (RM-150062) |
| 5. Spare Nib (x2) | (SA-0075) | 17. Adhesive Clips (x4) | (SA-0175) |
| 6. Sticker (place on chainguard) | (RM-150019) | 18. 250ml Scottoil | (SA-0008) |
| 7. T-Piece | (SA-0084) | 19. Filling / Priming Spout | (SA-0126) |
| 8. Instructions | (SA-0084) | 20. Scottoiler Stickers (assorted) | |
| 9. Breather Assembly | (SA-0010) | | |
| 10. IPA Wipe | (RM-100125) | | |
| 11. RMV Cage | (SA-0600) | | |
| 12. Cable Ties (x6) | (SA-0015) | | |



vSystem

Quick Setup Guide

Scottoiler (Scotland) Limited, 2 Riverside, Milngavie, Glasgow G62 6PL

Model Specific Instructions

Check our website, www.scottoiler.com, for model specific installation guides showing where and how to fit on your own bike.



Accessories

For touring or regular long distance commuters, it may be useful to have additional capacity to extend the range.

The Scottoiler Lube Tube is an additional reservoir, which increases oil capacity, and due to its flexible nature, can be tucked inside fairing panels or seat panels, utilising 'dead space' on the bike.



The Lube Tube kit also includes 250ml of refill Scottoil.

The Dual Injector is also suitable for DL650 and DL1000 models, and like the Lube Tube is available from our website at www.scottoiler.com or from your local Scottoiler stockist.



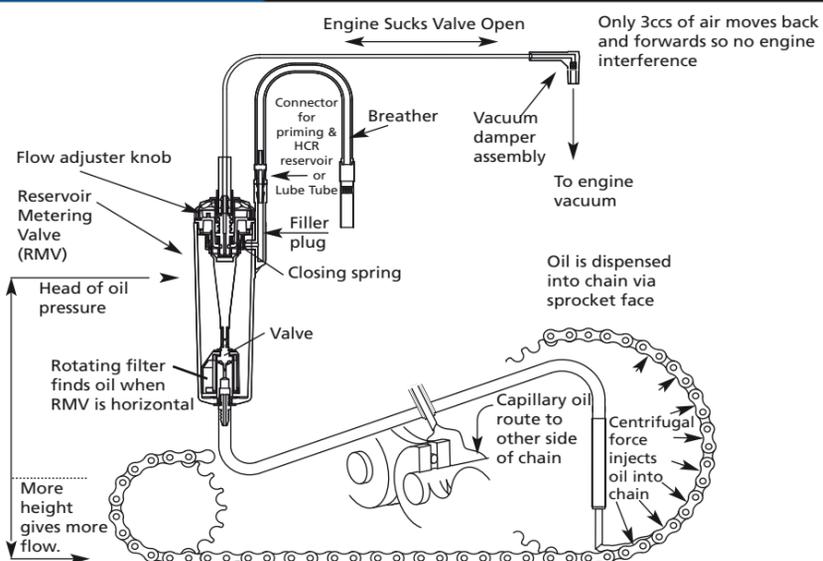
Limited Warranty

All Scottoiler products are guaranteed to be free from defects in materials and workmanship for a period of two years from date of purchase.

Please register your product online at www.scottoiler.com/guarantee to verify the date of purchase.

Important: Do not tamper with, modify or dismantle any part of your Scottoiler system. Such actions could damage the product, and/or your motorcycle, and may invalidate the product warranty.

How It Works



How does the Scottoiler work? The Scottoiler vSystem is vacuum operated. When the motorcycle engine is running vacuum is generated, this lifts a diaphragm which in turn opens the valve. Whilst open the valve allows oil to drip feed under gravity down the delivery tube to the chain via the rear sprocket. There is metering built into the valve to provide adjustment to control the rate at which oil is dispensed. It is not a pump.

How does this affect the engine? It doesn't. The Scottoiler's output is not affected by engine speed, throttle opening and so on. The vacuum chamber is a sealed unit and does not affect the running of the bike. Upon starting the engine the valve will open, this requires 3cc of air to be moved in order to lift the diaphragm, which stays up until the engine is switched off. It is not unusual to see the diaphragm pulsating with very low revs, particularly on singles and twins, don't confuse this for a pumping action, it is not a pump.

FAQs - Frequently Asked Questions

1. Which products are suitable for my bike? Visit our website at www.scottoiler.com and select your bike 'Manufacturer' and 'Model'. Select the kit you want and download the installation guide PDF.

2. What oil should I use to refill my Scottoiler? In ambient temperatures between 0 and 30 degrees Celcius we recommend Scottoil Traditional - Blue and in ambient temperature between 20 and 40 degrees Celcius we recommend Scottoil High Temperature - Red. Scottoil features a very low tack additive thus not attracting dirt. Scottoiler cannot guarantee the compatibility of our systems using any other manufacturers' oils as the materials used are tested for compatibility and flow rates with Scottoil only.

3. When should I refill my RMV (Reservoir Metering Valve)? If you refill the oiler before it runs dry you won't have to prime the dispenser tube. The Reservoir Metering Valve takes around ten seconds to top up with 50ml of oil which should last approximately up to 1500 miles.

4. Can I increase the capacity? Yes, the Lube Tube flexible high capacity reservoir increases combined capacity by up to four times. The Lube Tube can be fitted into any dead space on the bike and will mean up to 6,000 miles between refills.

5. Will the Scottoiler only oil one side of my chain? No. The oil is fed to the chain via the sprocket face where it splits over the inner side plates. Some of the oil is diverted onto the o-rings and the remainder feeds under the roller onto the bushing. Capillary action will then draw the oil across the chain. For best results load the chain with oil from the bottle or a rag after cleaning and then set the Scottoiler system to apply approx 1 drop per minute to maintain this film of oil.

6. Will I get oil on my tyre? No, A flow rate of approximately one drop per minute applied via the sprocket face will provide an oil-film which will not pollute the running surface of the tyre and will give a dramatic improvement in chain life. In conditions where high levels of dust, sand or heavy rain are present more oil flow will be necessary to extend chain life.

7. Do Scottoiler offer a fitting service? No. If you have a new bike and are local to Glasgow give us a call, we might be looking for your bike if we haven't seen it. If you aren't confident about fitting the system, having looked at the model specific installation guide for your bike, we have a network of approved and trusted Scottoiler dealers who will be able to fit this for you. Go to www.scottoiler.com and select Dealer Locator to find one closest to you.

8. I want to move my Scottoiler onto my new bike, are the spare parts available separately? Yes, the full range of spare parts, fittings and accessories are available online at www.scottoiler.com or by telephoning Sales on +44 (0)141 955 1100. Alternatively, contact your local Scottoiler dealer, who can order the parts on your behalf.