



# Magnum

## High Capacity Reservoir (HCR)

To register your product and activate your guarantee/warranty please visit [www.scottoiler.com/guarantee](http://www.scottoiler.com/guarantee)

Note: Check [www.scottoiler.com](http://www.scottoiler.com) or with your dealer for your bike's compatibility with this kit.



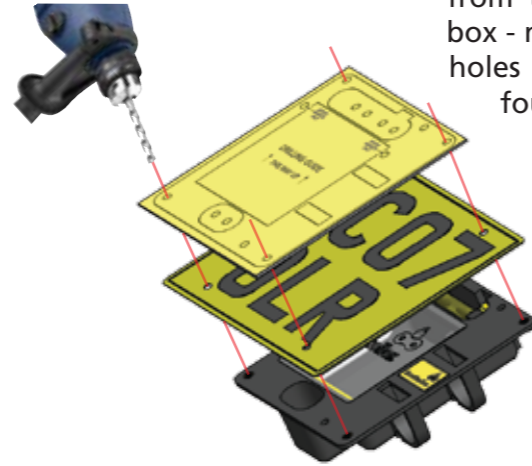
### Technical Support



[www.scottoiler.com](http://www.scottoiler.com) [technical@scottoiler.com](mailto:technical@scottoiler.com) +44(0)141 955 1100

### 1. Remove number plate

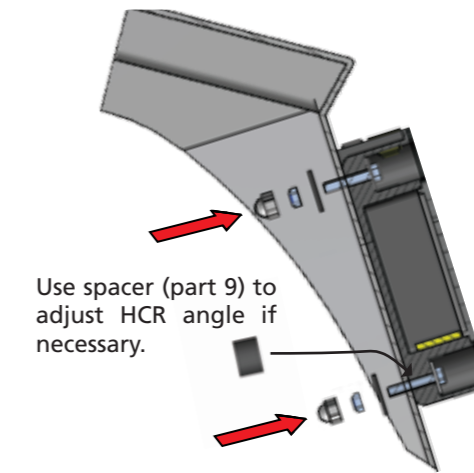
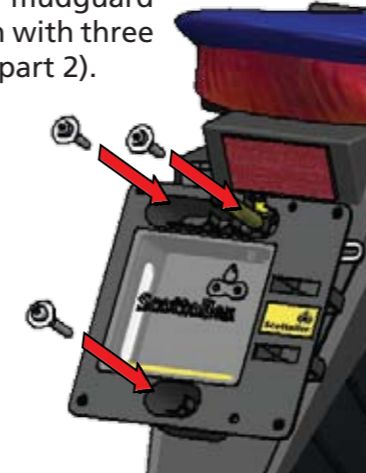
Remove number plate from bike.



Using drilling template - from the underside of the box - mark & drill four 6mm holes to line up with the four corners of the HCR.

### 2. Mount the HCR

Centre the HCR on the rear mudguard and attach with three M6 bolts (part 2).



Use spacer (part 9) to adjust HCR angle if necessary.

Use 25mm washers (part 5) on the mudguard side and 20mm washers (part 4) at the bolt heads. The spacer (part 9) and 40mm bolt (part 3) can be used on the bottom mount to angle the HCR if required.

Trim the bolts, if necessary, to avoid contact with tyre, then grease and cover with protectors (part 8).

### 3. Fill HCR

Place the vSystem or eSystem primary reservoir into the HCR.

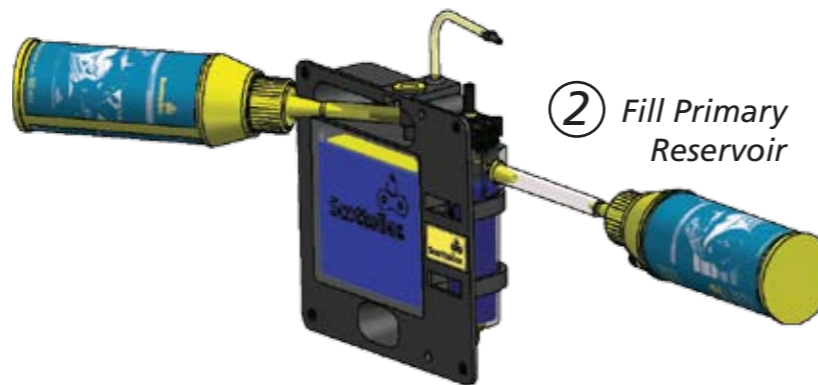


Fill HCR by swinging out the filler tube and removing the black plug.

Connect the Scottoil bottle, squeeze & hold for 10 secs then release. Repeat until HCR is full.

Fill the primary reservoir by removing the filler plug and filling using the oil bottle and spout.

① Fill HCR



② Fill Primary Reservoir

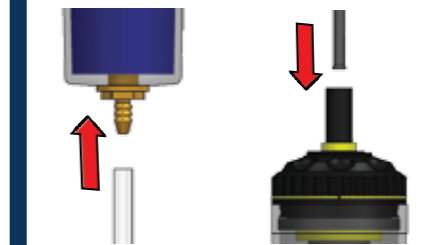
### 4. HCR connections



Connect the yellow siphon tubing to the filler plug luer. Insert filler plug into the primary reservoir.

#### vSystem

Route clear dispenser tubing (part 10) to outlet nozzle and connect. Connectors (part 7) can be used to join existing tubing.

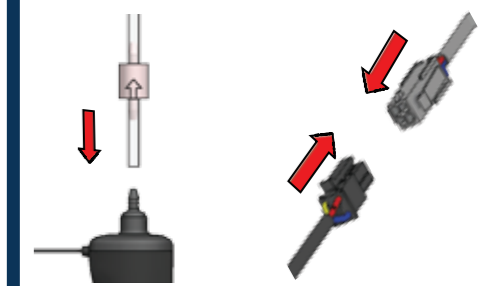


Route black vacuum tubing (part 11) to RMV top and connect.

Hint: Refer to vSystem or eSystem instructions for detailed guidance on the routing & connecting of tubing.

#### eSystem

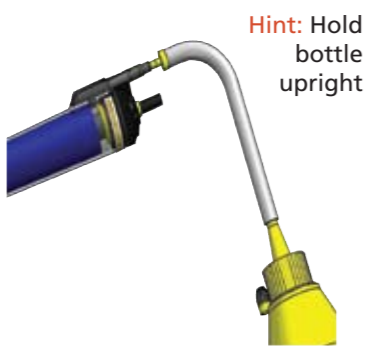
Route clear dispenser tubing (part 10) to outlet nozzle and connect. Connectors (part 7) can be used to join existing tubing. Connect REP to eSystem wiring loom.



### 5. Prime the system Only prime the system if the delivery tubing is empty of oil

#### vSystem

Remove yellow siphon tubing from filler plug. Turn RMV adjuster knob to the 'Prime' setting.



Hint: Hold bottle upright

Connect spout to the filler plug and squeeze bottle to force oil down the delivery line using air pressure.

#### eSystem



Navigate to the 'Prime' menu on the eSystem display unit. Press 'set' to run a prime cycle for 60 seconds. Repeat this step until oil starts to drip from the dispenser nozzle.

Note: Please refer to the eSystem instructions for full details on how to prime system.

### 6. Adjust flowrate

#### vSystem

Reconnect the yellow siphon tubing to the filler plug. Start your bike and allow the engine to warm up. Adjust flow to give approximately 1 drop per minute. Check chain condition after a short journey and adjust as necessary.



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

60 secs

#### eSystem

On the eSystem display unit, navigate to the 'Driving Screen'. Use the 'set' button to cycle through the desired flow rates until 60 - 70 seconds per drop (s/dp) is shown. Check chain condition after a short journey and adjust as necessary.

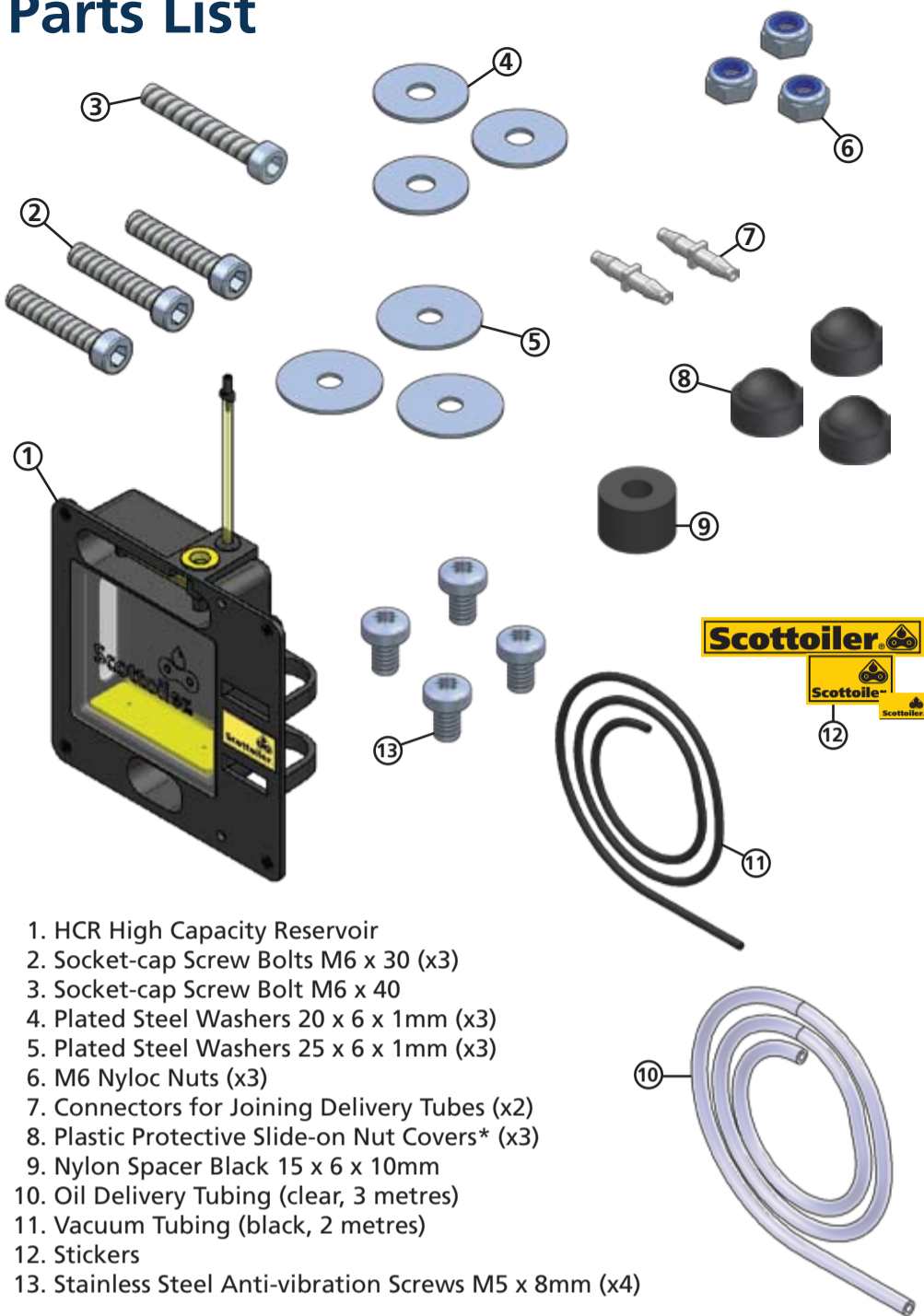


### 7. Number plate

Line up the number plate with the four corner holes of the HCR. Attach using the four M5 screws (part 13).



## Parts List



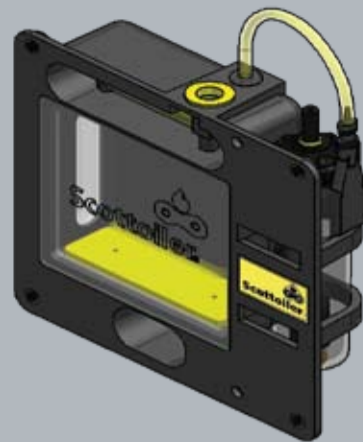
1. HCR High Capacity Reservoir
2. Socket-cap Screw Bolts M6 x 30 (x3)
3. Socket-cap Screw Bolt M6 x 40
4. Plated Steel Washers 20 x 6 x 1mm (x3)
5. Plated Steel Washers 25 x 6 x 1mm (x3)
6. M6 Nyloc Nuts (x3)
7. Connectors for Joining Delivery Tubes (x2)
8. Plastic Protective Slide-on Nut Covers\* (x3)
9. Nylon Spacer Black 15 x 6 x 10mm
10. Oil Delivery Tubing (clear, 3 metres)
11. Vacuum Tubing (black, 2 metres)
12. Stickers
13. Stainless Steel Anti-vibration Screws M5 x 8mm (x4)

\* cover the bolt threads with grease before fitting the nut-covers.

# Scotttoiler®



## Magnum Quick Setup Guide



The Magnum High Capacity Reservoir (HCR) increases the capacity of the Scotttoiler system from 50ml to 400ml i.e. from approximately 1500 miles to 7500 miles between fills. The HCR automatically refills the Scotttoiler primary reservoir and provides a more accessible mounting for the reservoir unit.

The HCR fits between the number plate and rear mudguard with the primary reservoir mounted on the side. The HCR can also be used with the primary reservoir mounted elsewhere on the bike. In this layout, the primary reservoir unit should be mounted above or at the same level as the HCR unit.

**Hint:** If using the vSystem, do not mount the RMV more than 10cm below the HCR.

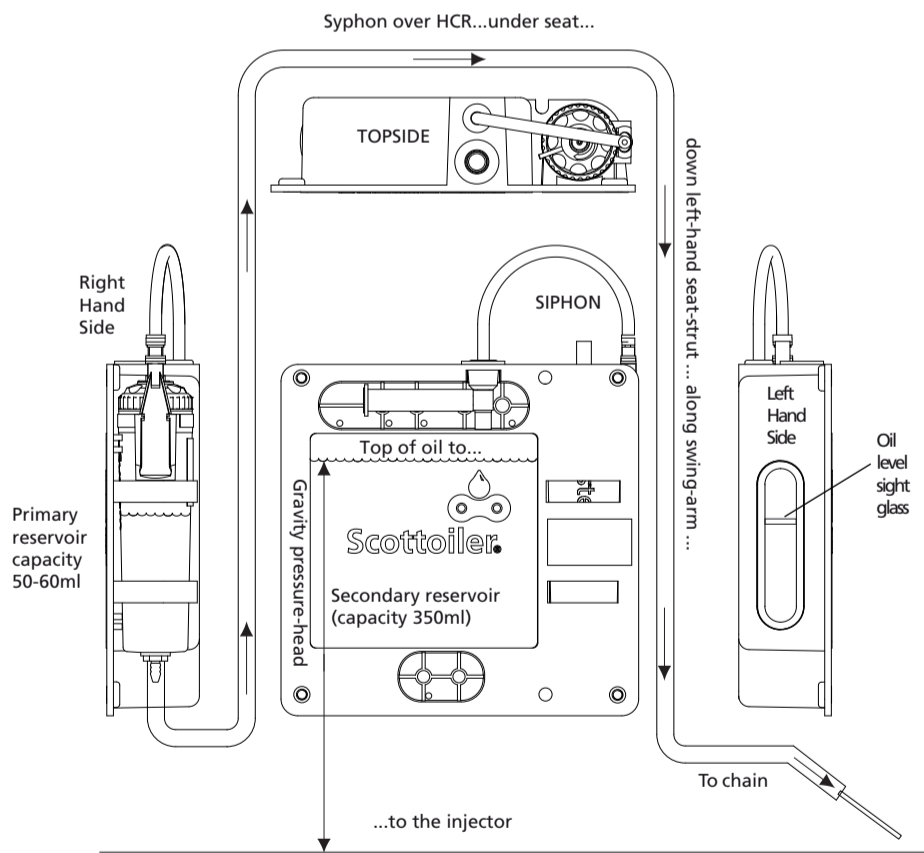
### Important Note

The mudguard must be strong and in good condition to mount the HCR. The weight of the oil filled HCR system - about 850g - should not cause the mudguard to vibrate excessively. Check [www.scottoiler.com](http://www.scottoiler.com) for the compatibility of your bike with the Magnum kit.

Care must be taken that the number plate light is not obstructed by the thickness of the HCR unit. The unit may need to be placed lower on the mudguard and a spacer used (see Section 2 overleaf) to angle the HCR.

If you cannot fit the HCR try the Lube Tube instead. Designed to fit in 'dead space' on motorcycles it offers an additional 200ml capacity, enough for up to an extra 6000 miles.

## How It Works



Primary reservoir will automatically siphon oil from the HCR...  
System refilling intervals increased to 4000 - 6000

### How does the Scotttoiler Magnum HCR work?

The Scotttoiler vSystem or eSystem delivers oil onto the chain from the primary reservoir. As oil is dispensed from the reservoir, air is pulled in through the breather and filler plug to replace this oil.

The HCR is connected to the primary reservoir through the filler plug so that when oil is dispensed more oil is siphoned in as opposed to air. The HCR has its own breathing mechanism which replaces the oil in the HCR with air.

In this manner the capacity of the system is increased up to 11500 miles (based on a flow rate of 1 drop per minute).

## Frequently Asked Questions (FAQ's)

### 1. Which products are suitable for my bike?

Visit our website [www.scottoiler.com](http://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 Scotttoiler?

In ambient temperatures between 0 and 20 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. Scotttoiler cannot guarantee the compatibility of our systems using any other manufacturers oils as the materials used are tested for compatibility with Scottoil only.

### 3. When should I refill my HCR (High Capacity Reservoir)?

Ideally you should refill your HCR before it runs dry as at this point it will start siphoning air into the primary reservoir. If this happens ensure that both the HCR and the primary reservoir are refilled before use. If the primary reservoir is also allowed to run dry then you will have to re-prime the system to fill the tubing with oil again.

### 4. My HCR doesn't seem to be re-filling the RMV or REP?

The most common cause of this problem is that the rubber filler plug is not properly connected into the primary reservoir. The HCR relies on an air-tight seal to allow for oil to be sucked from the HCR through to the primary reservoir. Ensure that this plug is fully pushed into the primary reservoir and is providing a good seal. Rubber grease (or similar) can be used on the filler plug to help maintain this seal.

### 5. Are there other methods available for increasing capacity?

Yes, the Lube Tube is a flexible high capacity reservoir that 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 7500 miles between refills.

### 6. Will the Scotttoiler 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 apply approximately 1 drop per minute to maintain this film of oil.

### 7. 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.

### 8. Do Scotttoiler 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 you aren't confident about fitting the system, having looked at the model specific installation guide for your bike, it is recommended to use a local motorcycle dealer experienced in fitting Scotttoiler products.

### 9. I want to move my Scotttoiler onto my new bike, are spare parts available?

Yes, the full range of spare parts, fittings and accessories are available online at [www.scottoiler.com](http://www.scottoiler.com) or by telephoning Sales on +44 (0)141 955 1100. Alternatively, contact your local Scotttoiler dealer, who can order the parts on your behalf.