

SUMP THING

THE FINAL SOLUTION FOR ALL SOHC750 OIL TANK HATERS!

Important Safety Notice

Detailed descriptions of standard workshop procedures, safety principles and service operations are not included. It is important to note that this manual contains *some* warnings and cautions against some specific service methods which could cause PERSONAL INJURY to you or could damage a vehicle or render it unsafe. Please understand that those warnings could not cover all conceivable ways in which service, whether or not recommended by SumpThing.net, might be done or of the possibly hazardous consequences of each conceivable way, nor could SumpThing.net investigate all such ways. Anyone using installation procedures or tools, whether or not recommended by SumpThing.net or Honda, *must satisfy himself / herself thoroughly that neither own nor vehicle safety will be jeopardized by the service methods or tools selected.*

All information, illustrations, directions and specifications included in this publication are based on the latest product information available at the time of approval for online publishing. SumpThing.net reserves the right to make changes at any time without notice and without incurring any obligation whatever. No part of this publication may be reproduced without written permission. This manual is written for persons who have acquired basic knowledge of maintenance on the Honda SOHC CB750 vehicle.

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Please email us on contact@sumpthing.net



VERSION 1.1 MID FEBRUARY 2018

First of all, thank you for buying the Sumpthing kit!

Installing this kit on your motorcycle is quite easy, but please read every step closely as a small fault now, can cause big problems later on. If you have any doubts during the installation procedure, or if you question your skills, please stop and contact us. Our email address is on the first page of this manual. We will try to answer as quickly as possible.

Here are 7 tips that will help you during the installation:

1. Read each page before you start with it. That way you know what needs doing, and you can also get the right parts and tools ready.
2. Gaskets are fragile. Handle them with care.
3. When multiple bolts need to be placed in the same part, put them all in a couple turns before you tighten them. Tightening a single bolt before the others are all in can cause miss-alignment and damage to gaskets or mating surfaces.
4. Do not use (torque) force to get parts in the right position, unless explained otherwise.
5. **Orange** graphics indicate dedicated places or instructions for a particular step.
6. **Red** text indicates possible hazardous situations during installation or during operating the vehicle.
7. Text in comic-balloons like the one below gives valuable tips and tricks during installation.



Torque values:

m6 bolts	11Nm
sightglass	25Nm
oil drain bolt	35Nm
oil filter casing bolt	30Nm



1.

We start this tutorial with the oil and the oil filter housing removed from the engine. It's up to you if you want to remove the oil filter and housing, but since you need to put fresh oil in you might as well use the filter and new crush washer provided in the kit.

Removing oil and other parts from an engine can get messy. Have a container ready and dispose the old oil according to your countries' regulations.

We've also removed the external oil lines from the engine. You should do this before continuing, so put your motorcycle on its centerstand and make sure the motorcycle is stable and safe to work on. Teamwork makes the dreamwork so ask a buddy to help you out if in doubt!

DEPENDING ON THE STATE OF YOUR MOTORCYCLE AND ENGINE YOU MIGHT NEED TO REMOVE PARTS TO ACCESS THE PLACES DESCRIBED.

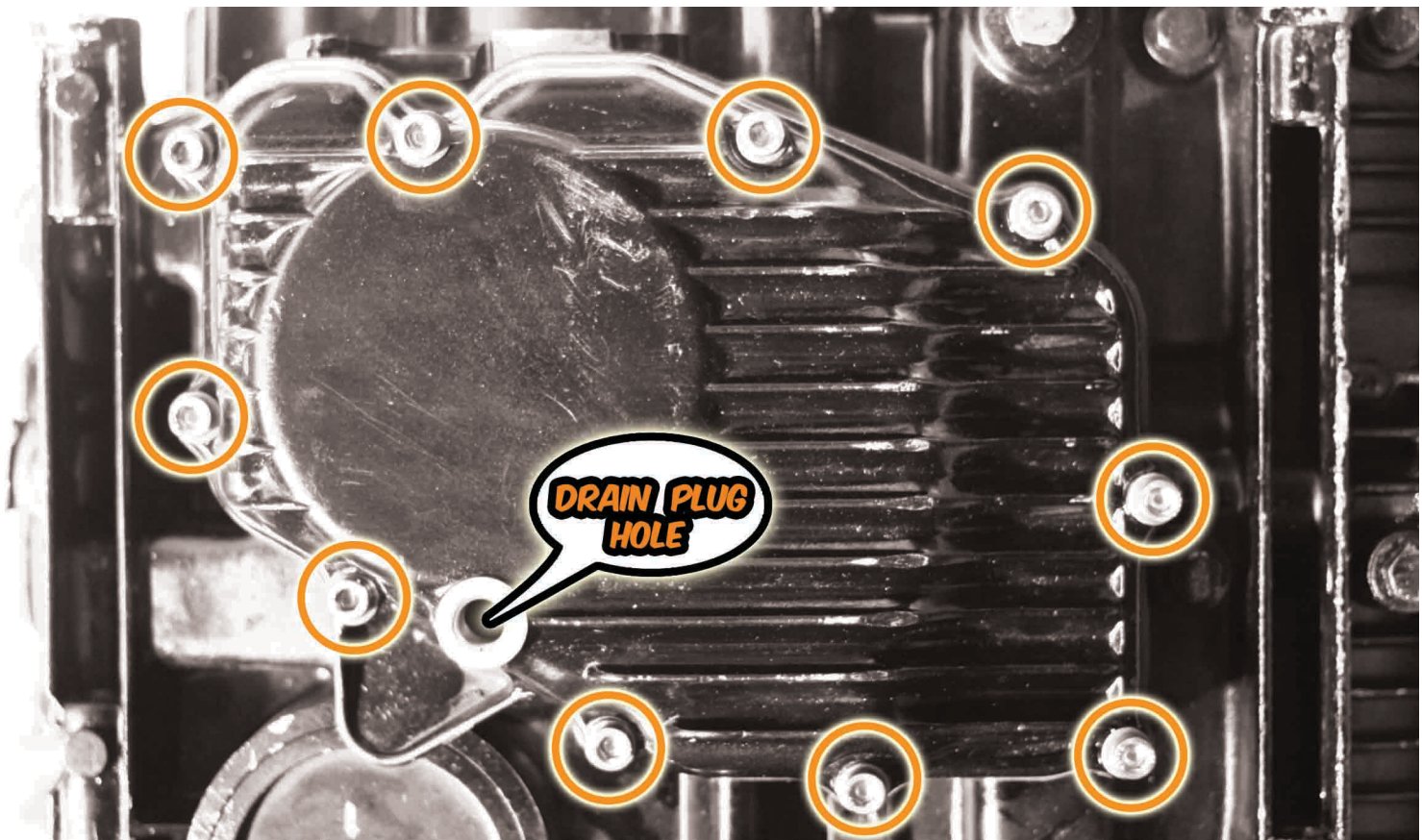


IN THE PICTURE BELOW, YOU CAN SEE WE'VE REMOVED THE DRAIN PLUG. THE ENGINE IS ON ITS SIDE FOR ILLUSTRATIONAL PURPOSES.

2.

Remove all **10** bolts holding the oil pan at the bottom of the engine. Remove the oil pan and old gasket from the engine.

***Make sure all gasket material is removed from the engine and oil pan.
Leaving old gasket material during installation will result in oil leaks.***



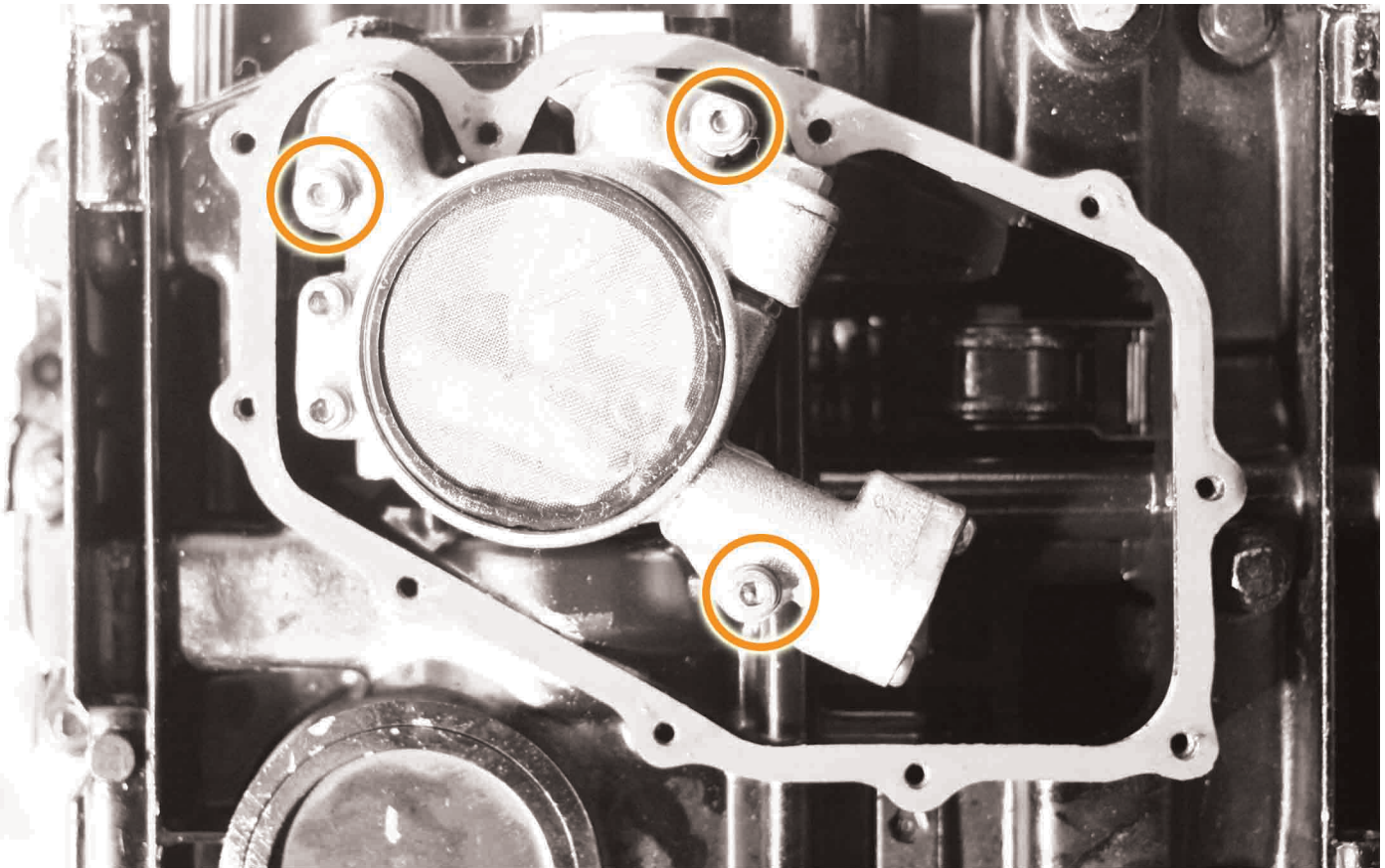
WHEN YOU'RE DOING THIS NEXT STEP WITH THE ENGINE IN THE FRAME, A SMALL MIRROR MIGHT HELP YOU GET THIS STEP DONE!

3.

Remove all 3 bolts holding the oil pump in the engine and remove the oil pump from the engine.

WARNING

MAKE SURE ALL 3 O-RING SEALS BETWEEN THE PUMP AND ENGINE ARE THROWN AWAY AND ARE NOT LEFT INSIDE THE ENGINE. DO NOT RE-USE THESE O-RING SEALS.



VERSION 1.1 MID FEBRUARY 2018

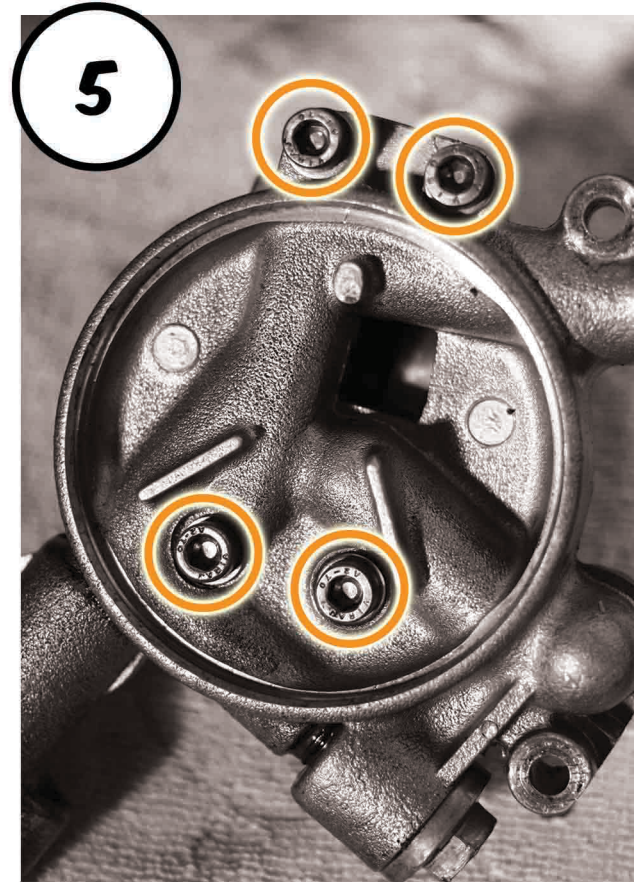
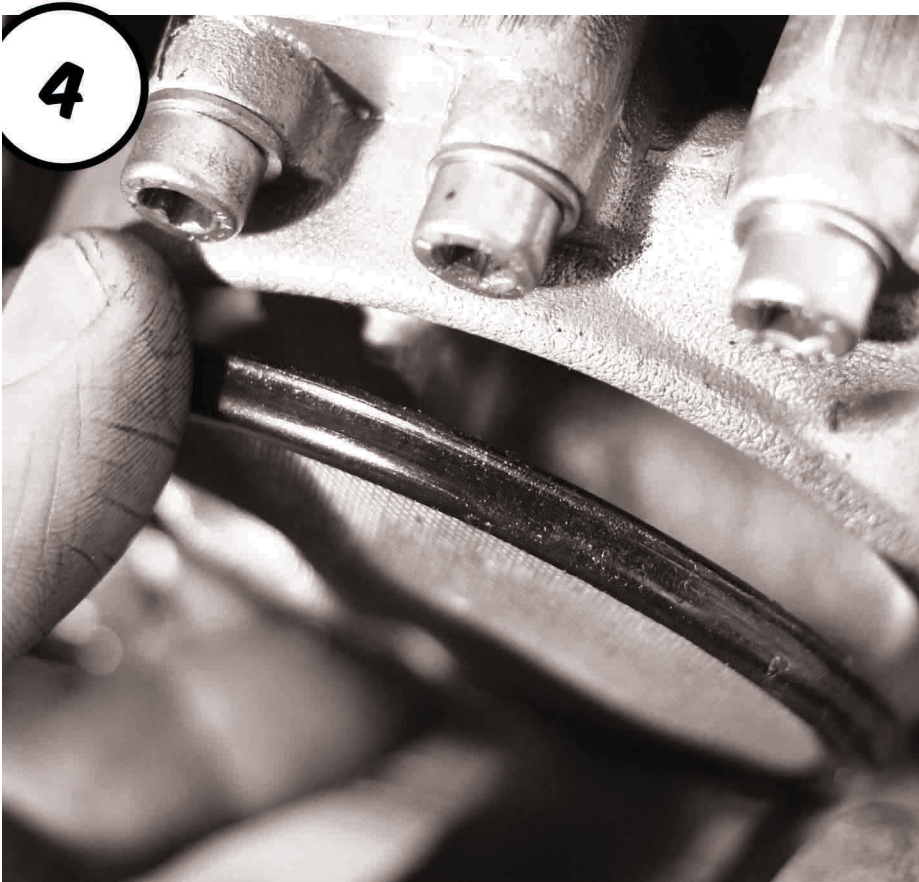
4.

Pry out the oil filter screen from the oil pump base with a small screwdriver. Remember how it came out, because we are placing it back later on.

5.

Remove the 4 bolts holding the oil pump base and the oil pump housing together. There are hex bolts in the picture but chances are yours are Philips head.

USING AN IMPACT DRIVER COULD HELP YOU HERE BUT WATCH OUT NOT TO DAMAGE THE FRAGILE CAST ALUMINUM HOUSING!



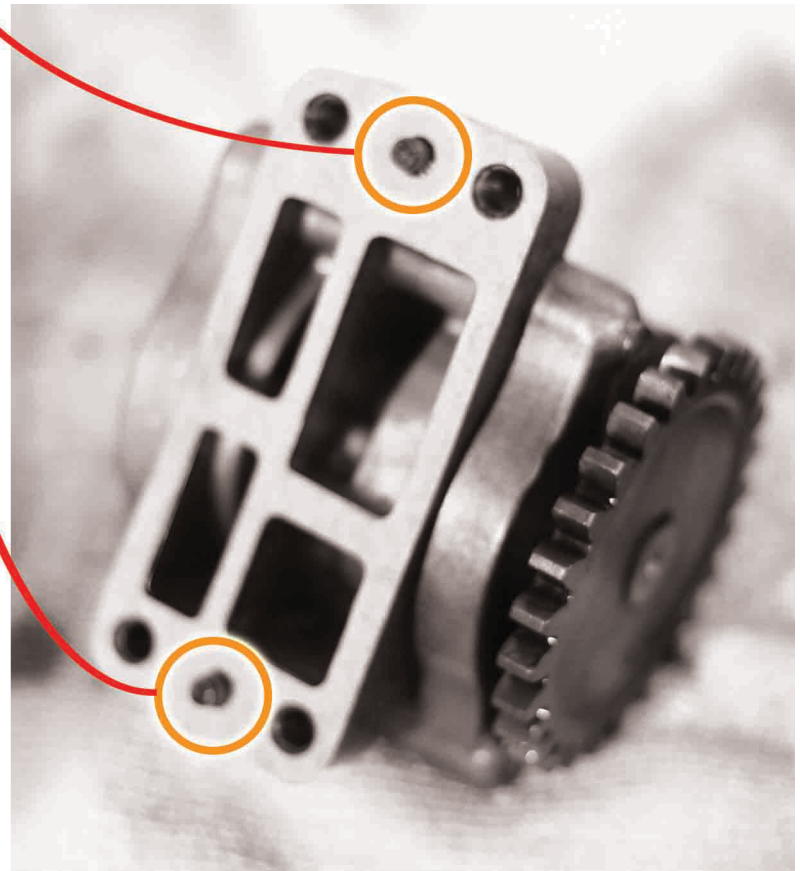
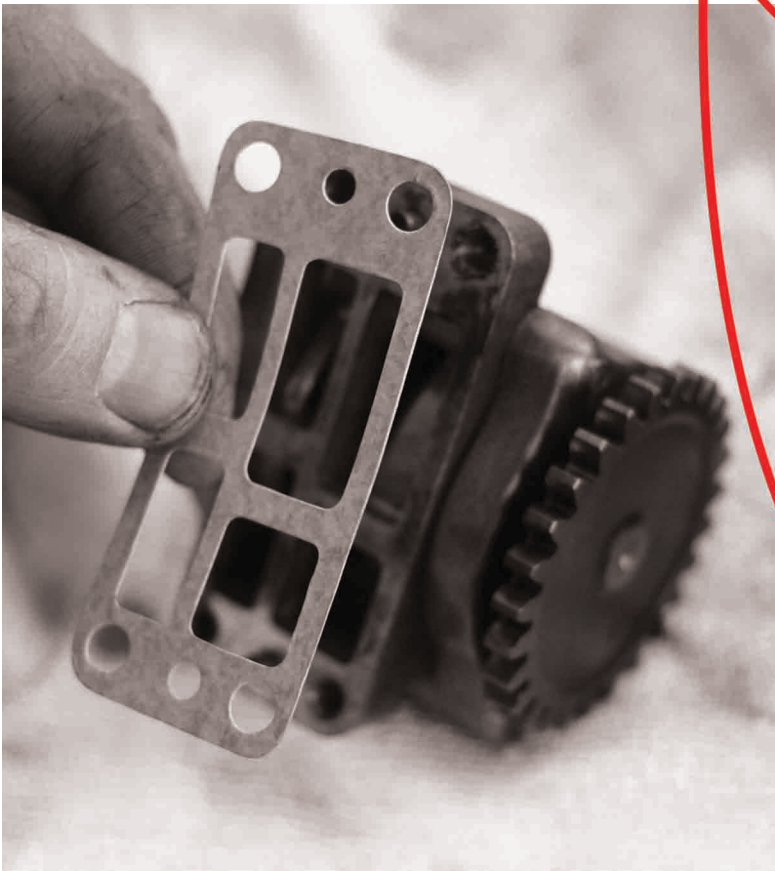
6.

Split the pump housing and pump base by pulling them apart. *Do not use a screwdriver to pry.*

7.

Clean the pump housing mating surface and place a new gasket. Make sure both knock pins are in place. Check the oil pump base to see if you're missing one or both knock pins and place them back into the pump housing.

WARNING - DO NOT CONTINUE IF ONE OR BOTH KNOCK PINS ARE MISSING!

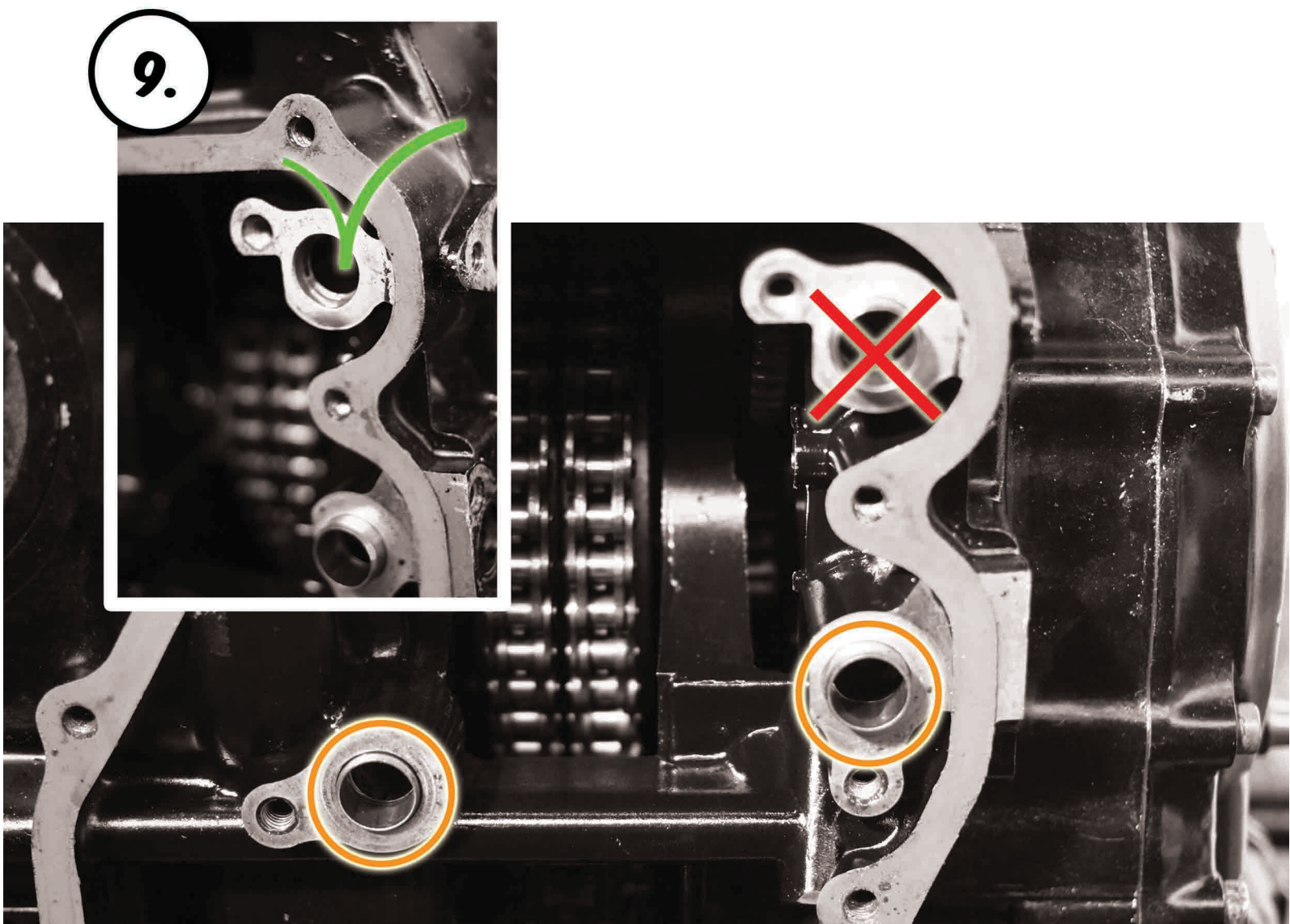


8.

Back tot the engine. Make sure the 2 lower o-ring collars (*with orange circles around them*) are still in place. If they're missing, check the oil pump base and place them back in the engine.

9.

Remove the top o-ring collar as pictured in the small picture below. **DO NOT THROW AWAY.**



VERSION 1.1 MID FEBRUARY 2018

10.

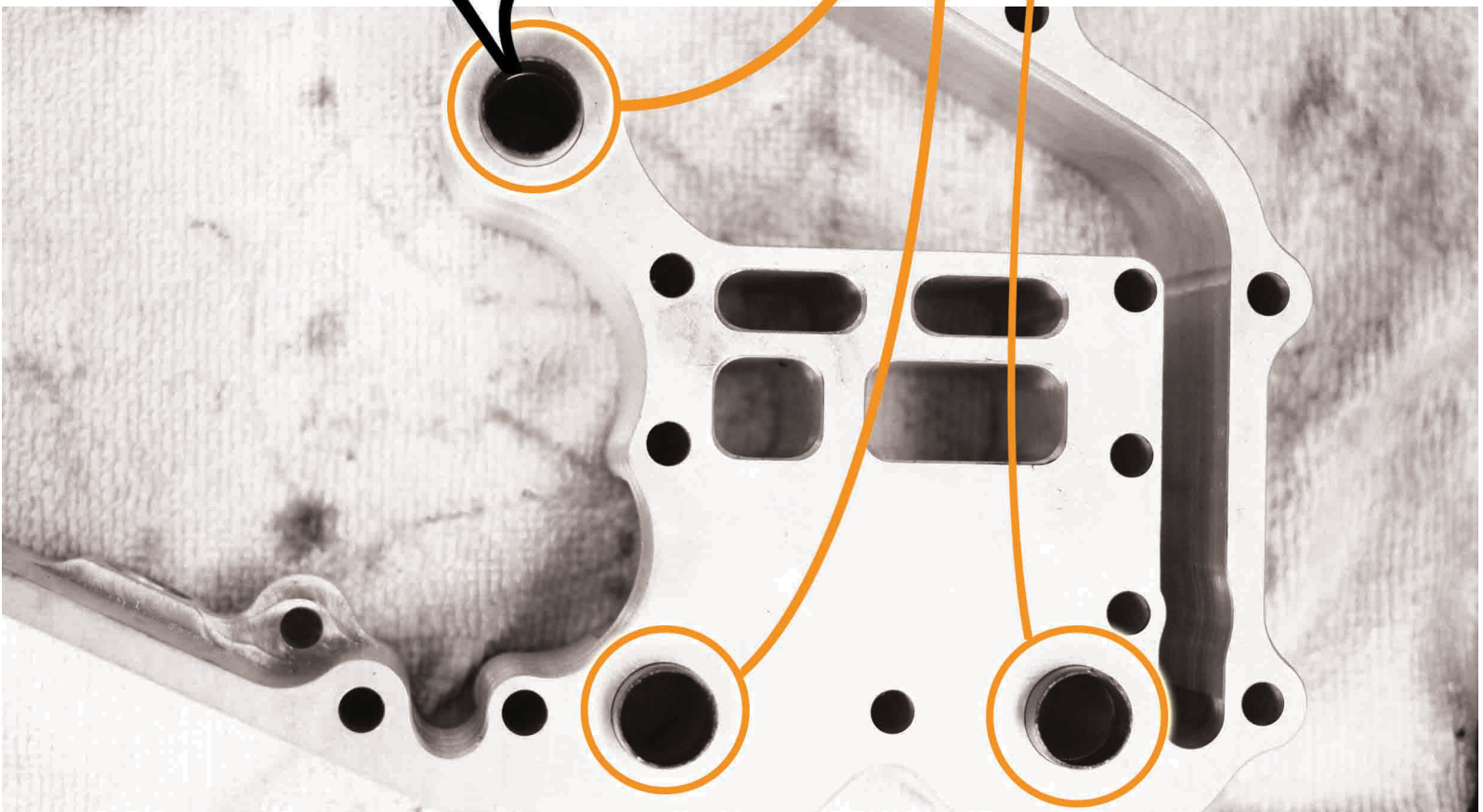
Place the o-ring collar you removed from the engine in step 9 in the hole pictured below into the SumpThing. Place the SumpThing upside down for this step.

Make sure the collars are fully seated into the SumpThing.

11.

Place the 2 new o-ring collars supplied in the kit into the other 2 holes.

THIS HOLE IS DEEPER, SO THIS COLLAR SEATS DEEPER THAN THE OTHER 2. USE A RUBBER Mallet TO TAP THE 3 COLLARS INSIDE.

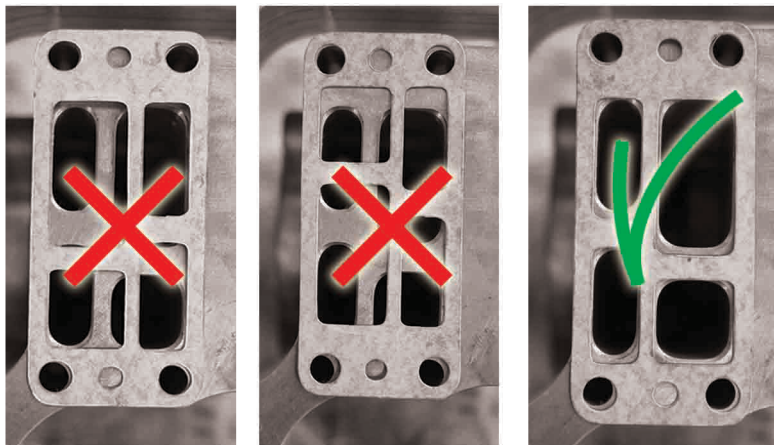


12.

Flip the SumpThing so that it's orientated facing up. Take the pump housing and push it onto the SumpThing. Make sure the paper gasket is in the right position, as pictured below.

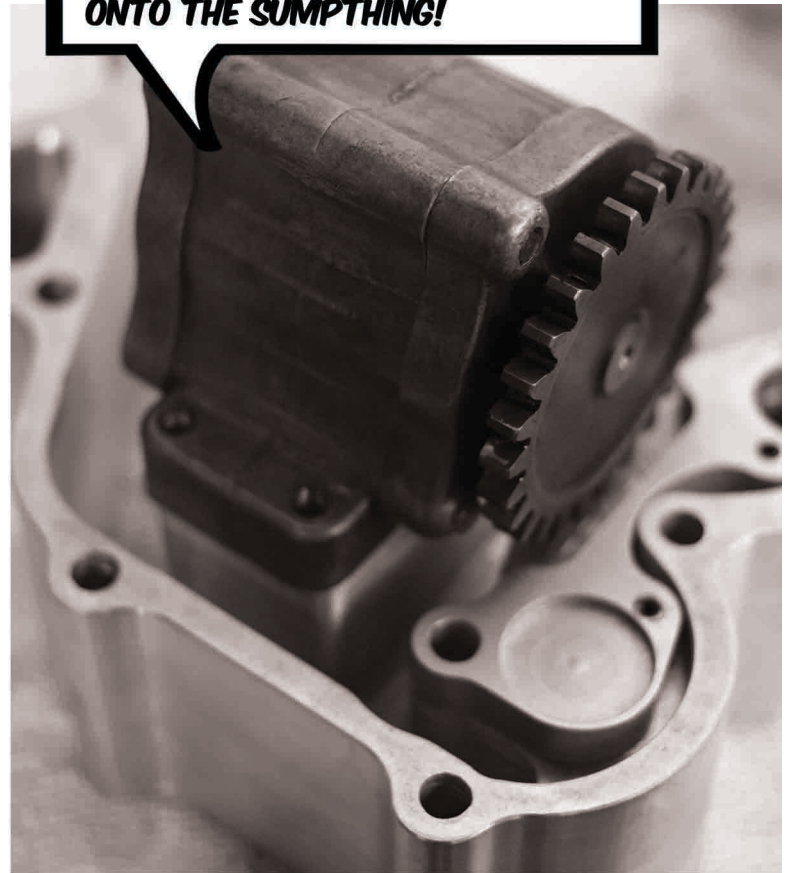
13.

Flip the Sumpthing over once again. Hold the pump in place by hand during this procedure to be sure the pump housing stays in place.



YES, THE KNOCK-PINS ARE MISSING IN THESE THREE PICTURES. THESE PICTURES ARE ONLY TO SHOW YOU THE CORRECT GASKET PLACEMENT.

CHECK KNOCK PINS AND GASKET POSITION ONE MORE TIME BEFORE PLACING THE PUMP HOUSING ONTO THE SUMPTHING!



14.

With the kit upside down, place **3** new o-ring seals over the o-ring collars as pictured below. Using another new paper gasket (the same type as the one used in step 7), place the pump base onto the SumpThing. Use 2 random m6 bolts to keep the gasket in place during this last step.

WARNING

JUST LIKE STEP 13, MAKE SURE THE HOLES IN GASKET AND SUMPTHING ALIGN. MAKE SURE THERE ARE NO OLD O-RING SEALS STILL INSIDE THE OIL-PUMP BASE.

DON'T FORGET THE PAPER GASKET BETWEEN THE SUMPTHING AND THE OIL PUMP BASE.

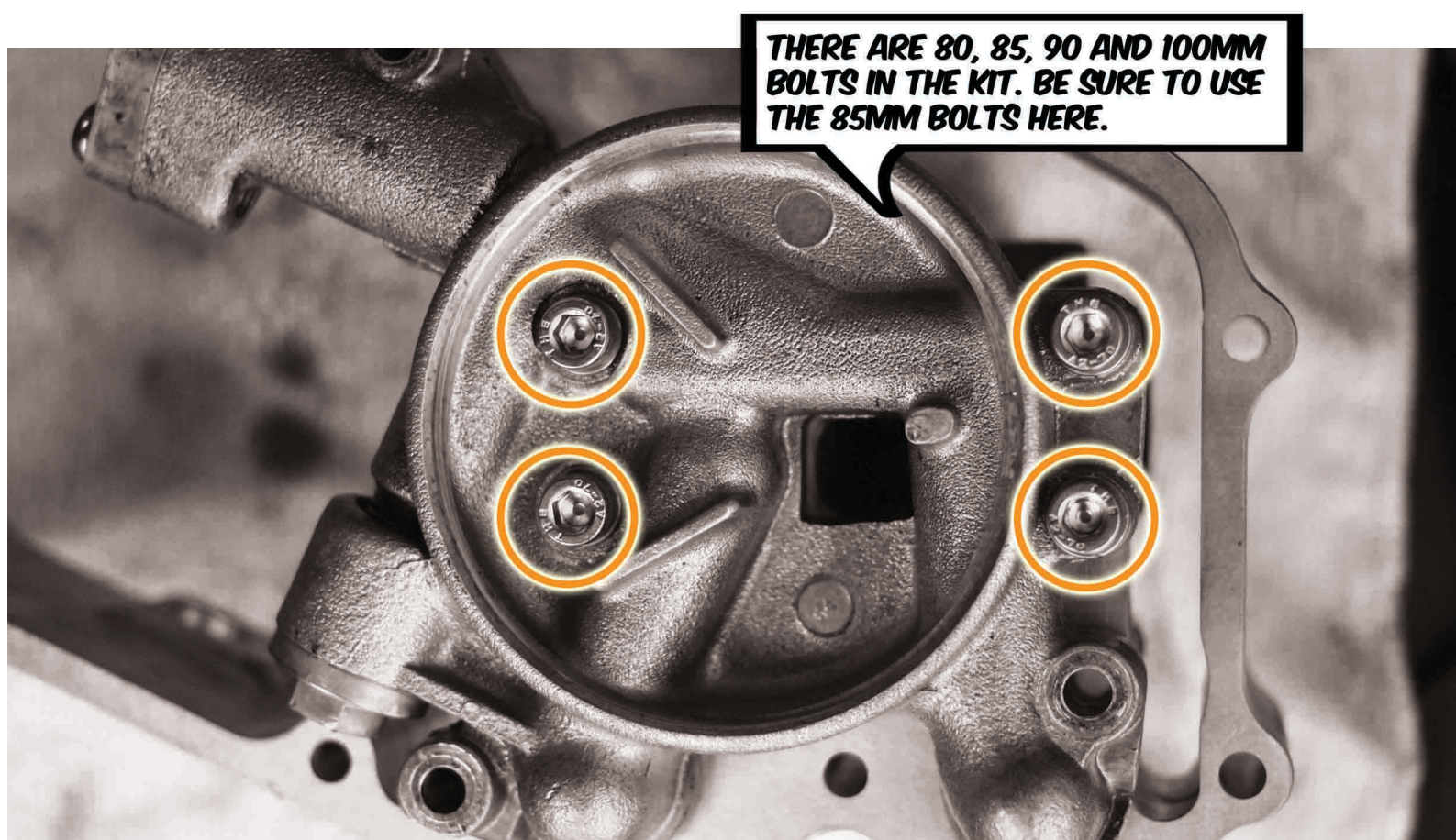


15.

After you made sure the 3 parts are fully seated onto each other and all o-ring seals and gaskets are in place, use **4x 85mm bolts with washers** to secure the parts in place.

WARNING!

PUT ALL 4 BOLTS IN A COUPLE TURNS BEFORE TIGHTENING THEM. ONLY TIGHTEN THE BOLTS IF THE PARTS ARE FULLY SEATED!



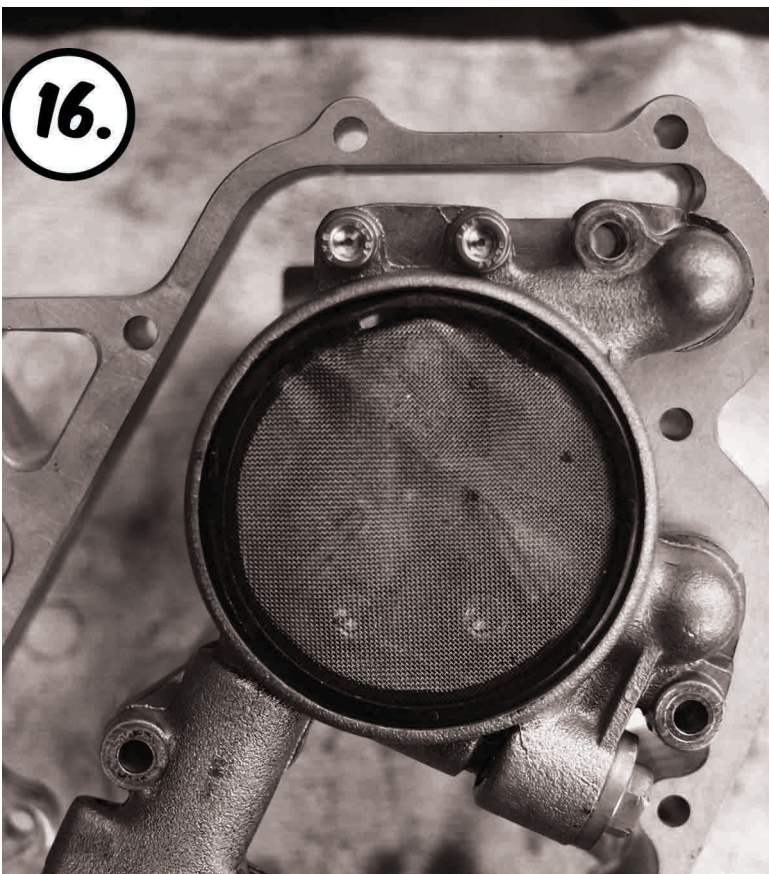
16.

Check if the oil screen is clean and place it back into the oil pump base the same way it came out. Use compressed air or brake-cleaner to clean the filter.

17.

Place the sightglass into the SumpThing. There is a threaded hole next to the logo on the side of the kit.

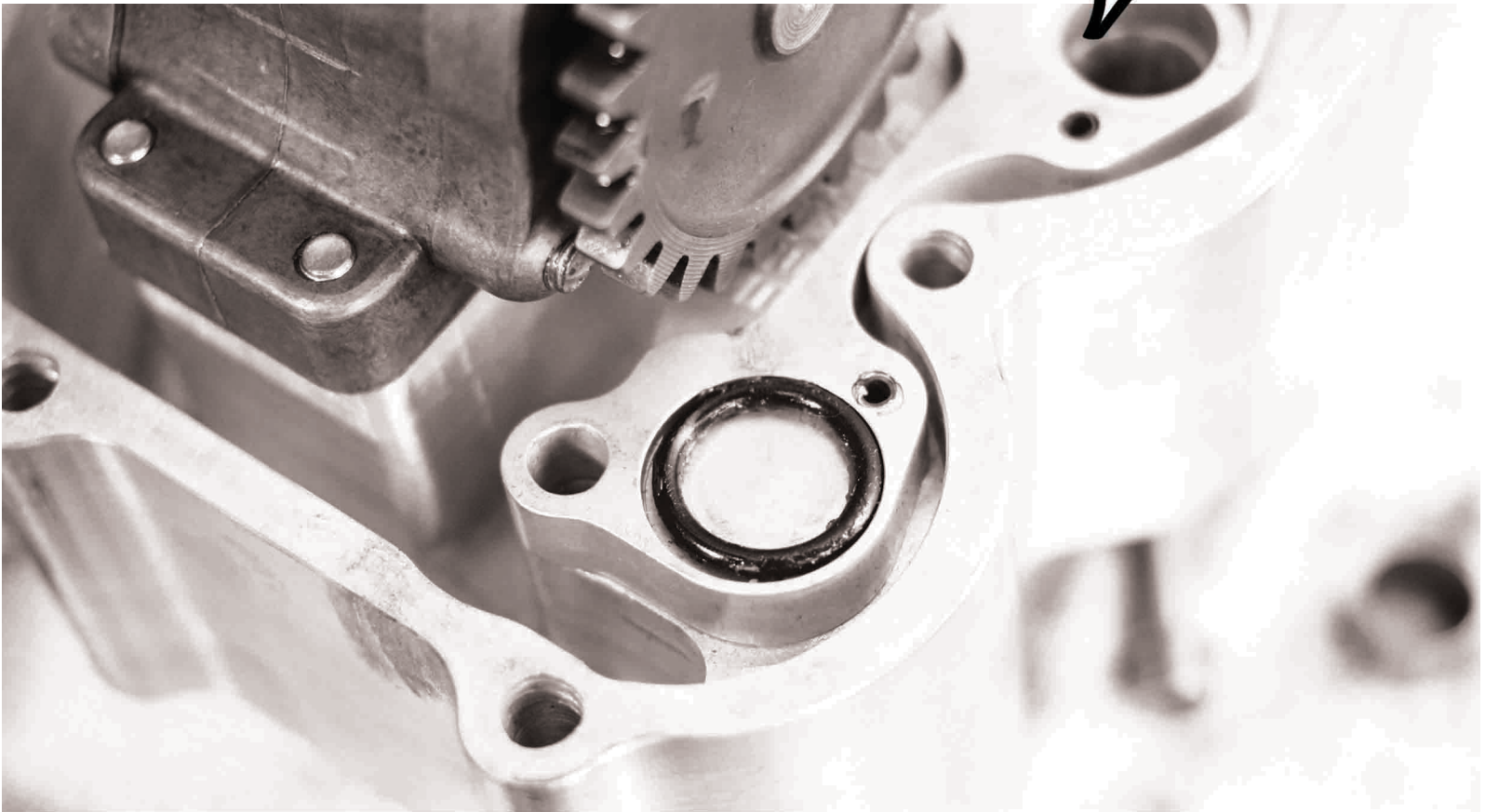
WARNING!
MAKE SURE THE OIL-SEAL IS ON THE SIGHTGLASS!



18.

Place another o-ring seal as pictured.

**USE REGULAR BEARING GREASE
TO KEEP THE O-RING SEALS IN
PLACE DURING INSTALLATION.**



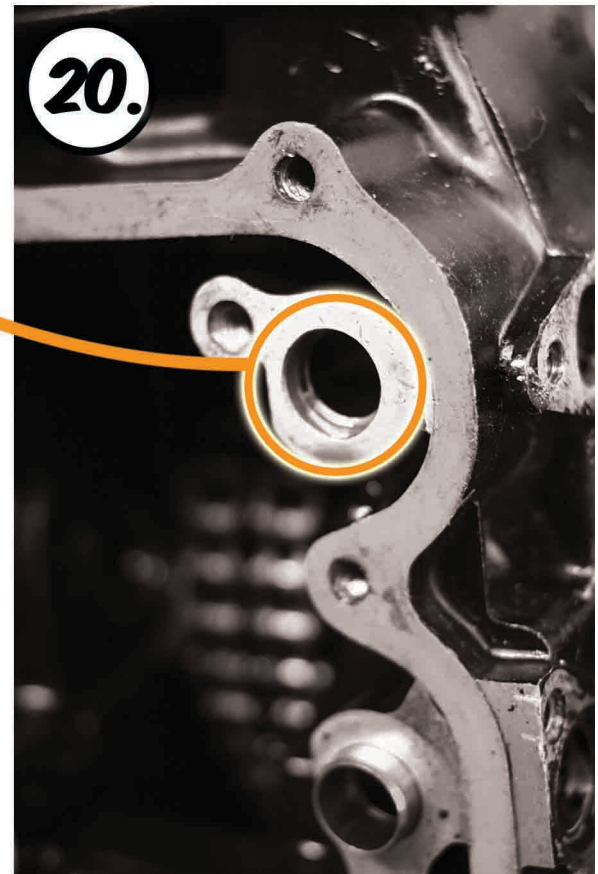
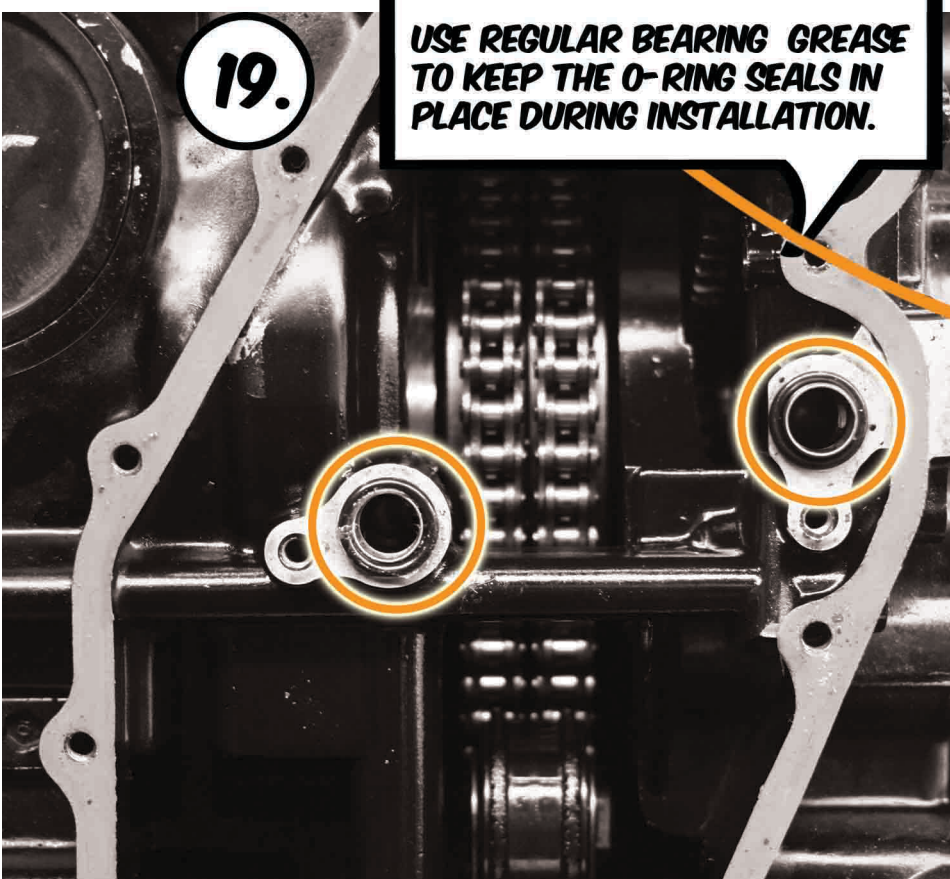
VERSION 1.1 MID FEBRUARY 2018

19.

Back to the engine. Put 2 new o-ring seals on the 2 o-ring collars like pictured. Use regular bearing grease to keep the o-ring seals from moving.

20.

Leave the 3rd hole (where you removed the o-ring collar) untouched.

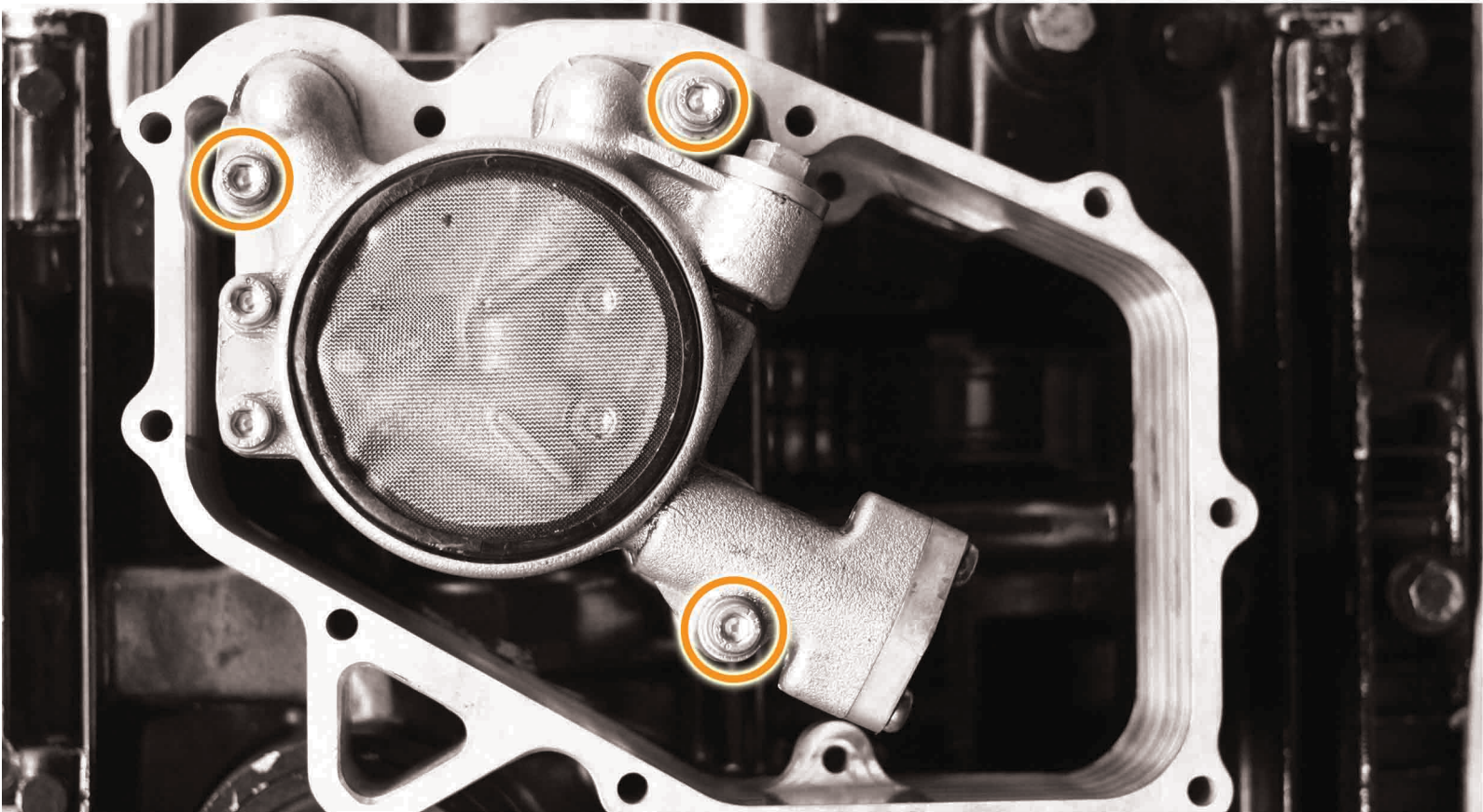


21.

Place the SumpThing onto the engine with a new gasket between the SumpThing and the engine. Use **3x 85mm bolts with washers** to secure the SumpThing back onto the engine.

WARNING
BE 100% SURE ALL 3 O-RING SEALS ARE IN PLACE WHEN TIGHTENING THESE 3 BOLTS!

WARNING
PUT ALL 3 BOLTS IN LOOSELY BEFORE TIGHTENING AND TIGHTEN EVENLY!



VERSION 1.1 MID FEBRUARY 2018

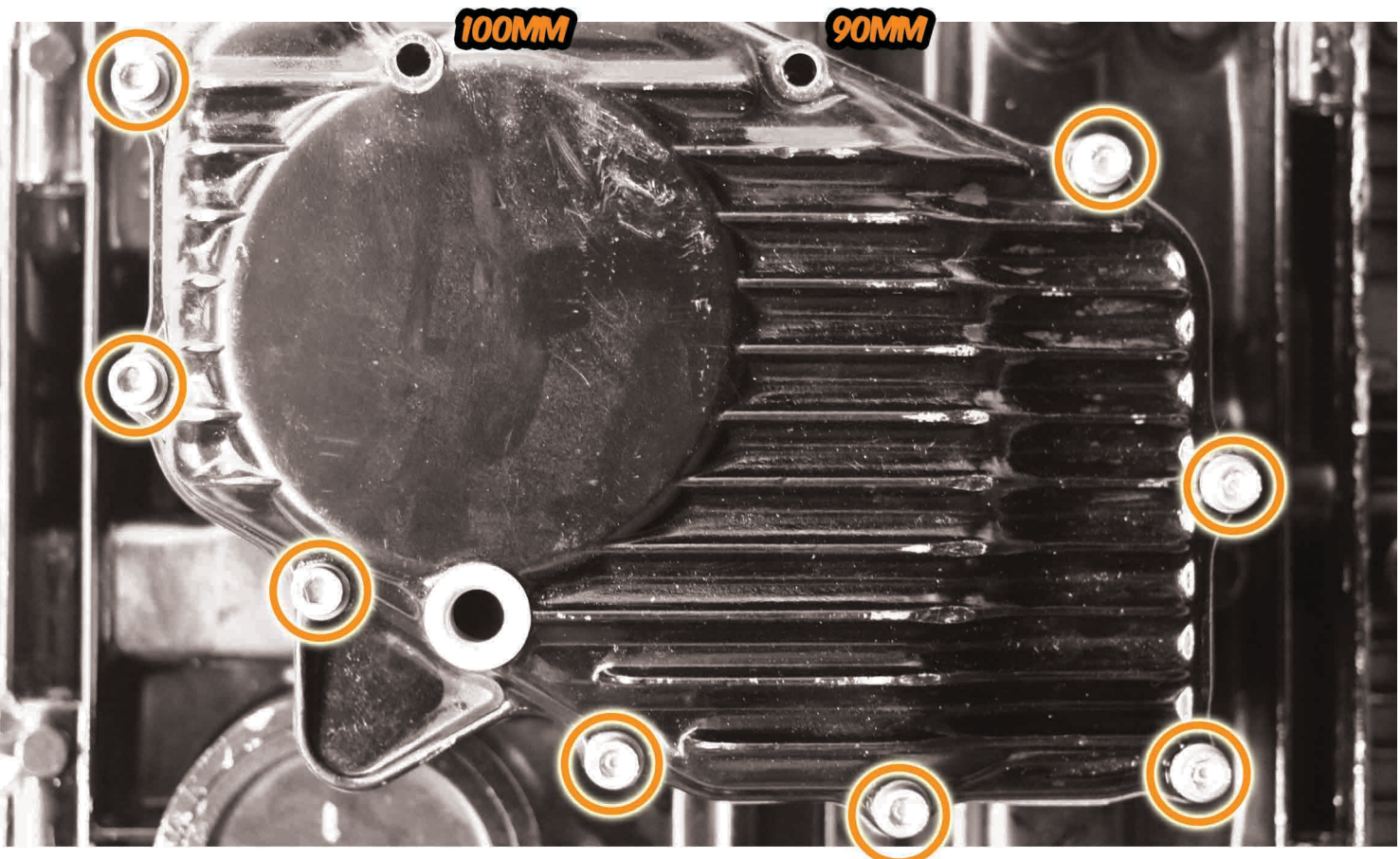
22.

WARNING
PLACE A NEW GASKET BETWEEN THE SUMP/THING AND OIL PAN.

Use **8x 80mm bolts with washers** to secure the oil pan onto the engine.
Use the **1x 90mm and 1x 100mm bolts with washers** in the remaining holes as pictured below.

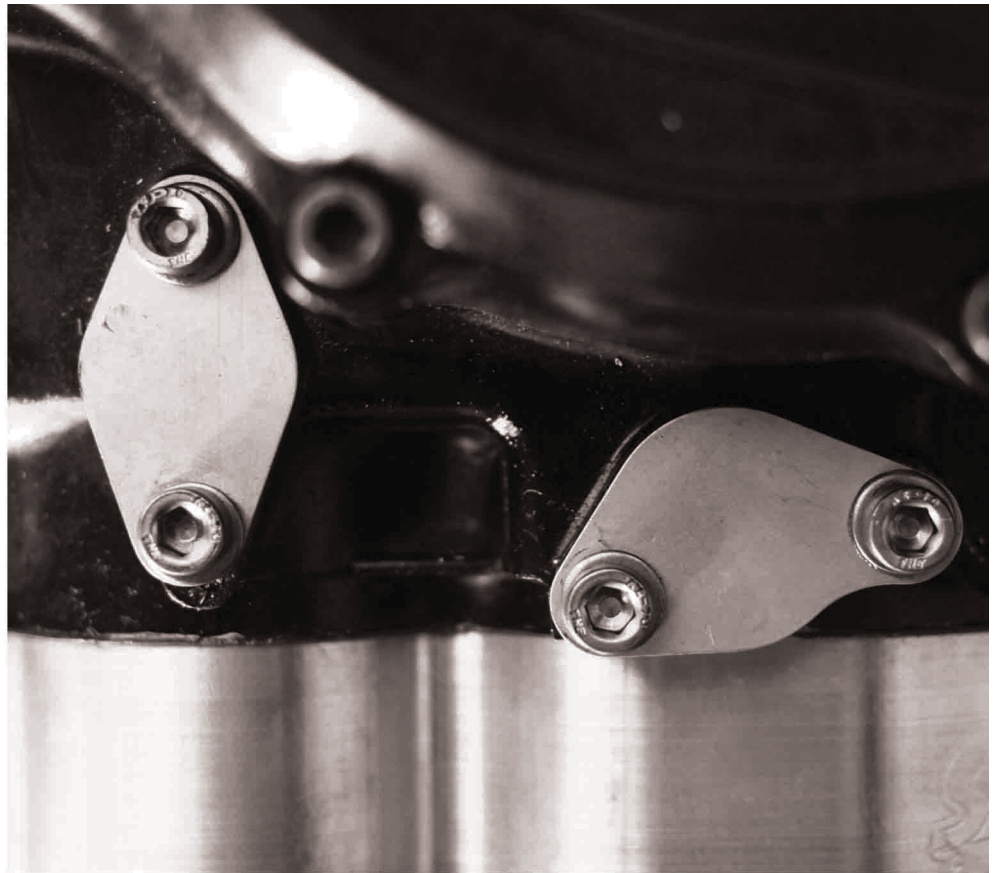
23.

Remove the crushed copper or aluminum washer from the oil drain bolt and replace with the new crush washer supplied. Tighten the bolt with 35Nm.



24.

Place the two remaining o-ring seals on the block-off plates and secure the plates to the engine with **4x 16mm bolts with washers**.



25.

Fill the engine with **2.8 liters of 10w40** oil by removing a tappet cover and filling up through there. The tappet covers are located on top of the engine. They are tool-size 19 and there are 8 of them. It does not matter which one you use.

Filling the whole amount takes some time but only needs doing once in a long time.

26.

Let the engine sit and check for obvious oil leaks around the places you worked on.

If everything looks ok, repeat all the steps in your head and convince yourself you did everything right.

27.

Safety first. Always. Ride around in your street and check if everything functions like it should.

ALWAYS WEAR YOUR HELMET & SAFETY GEAR!

WARNING

WE STRONGLY ADVISE TO USE AN OIL PRESSURE WARNING LIGHT. LOSS OF OIL PRESSURE DURING OPERATION CAUSES IMMEDIATE SERIOUS DAMAGE!

THE OIL PRESSURE LIGHT SHOULD GO OUT A SECOND OR TWO AFTER STARTING YOUR ENGINE. IF THE LIGHT STAYS ON LONGER THAN 3 SECONDS, SHUT OFF THE ENGINE AND CHECK ALL STEPS. ONLY START AGAIN WHEN PROBLEM IS FIXED!

WARNING - operating the vehicle without oil pressure results in serious damage, injury or even death.

