

Installation Manual



10590 KIT

UNIVERSAL MOUNTING KIT FOR CUMMINS ENGINES
*with M27 X 2.0 mm Oil Filter Thread**

Oil filtration relocation kits provide easy access & serviceability to the engine's oil filter.

* See application guide for proper fitment.

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Thank you and congratulations on the purchase of an Oil Filter Relocation Kit. Please read the entire manual prior to starting the installation to ensure you can complete it once started.



KIT CONTENTS

Please make sure all the items listed below are provided in your kit before starting the installation.

❗ A replacement oil filter is NOT included in this kit. Kits are designed to work with factory part number filters.

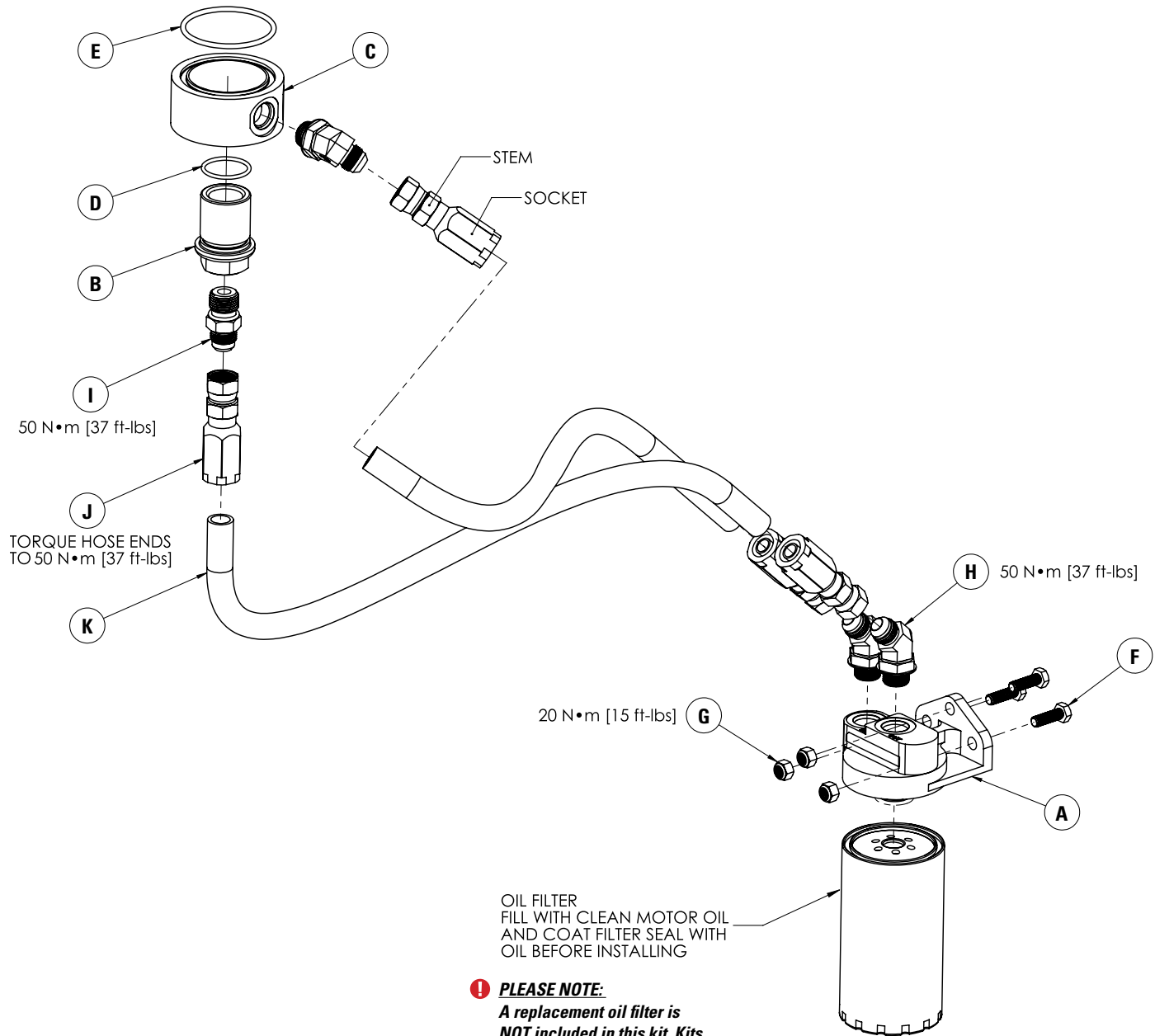
KIT CONTENTS		QTY	PART #
A	Remote Filter Head, M27 x 2.0	1	HP0108
B	Filter Nut, M27 x 2.0 Thread	1	HP1969
C	Filter Head, Adapter	1	HP1974
D	O-Ring, -124	1	HP1972
E	O-Ring, -230	1	HP1973
F	Bolt, 5/16\" -18 x 1\" Hex Head	3	HP1028
G	Nut, 5/16\" Nylon Lock	3	C11943
H	Fitting, 45° Straight Thread Elbow	3	HP1082
I	Fitting, Straight Thread	1	HP1025
J	Fitting, Female SAE 37° Field Attachable	4	HP1026
K	Hydraulic Hose SAE 100R5	12ft	HP1031
L	Zip Ties	3	C11618

REQUIRED TOOLS

- Hoist or Floor Jack
- Safety Stands
- Safety Glasses
- Torque Wrench
- Ratchet
- Standard Combination Wrenches
- Metric & Standard Sockets
- Fine-Toothed Saw / Cut-Off Wheel

KIT EXPLOSION DIAGRAM

Please make sure all the items highlighted below and in the kit contents on the previous page, are provided in your kit before starting the installation.



PLEASE NOTE:
 A replacement oil filter is **NOT** included in this kit. Kits are designed to work with factory part number filters.

1 REMOVE THE EXISTING OIL FILTER

Remove the existing oil filter and recycle. (Figure 1)



1

2 REPLACEMENT FILTER HEAD ASSEMBLY

Install the O-rings into the grooves on the replacement filter head and filter nut (as shown with the black arrows in Figure 2).

Put a light coat of clean engine oil on both seals and loosely install the assembly into the engine by turning the filter head retaining nut.

Do not tighten the nut until instructed to in Step 3 to allow for final adjustment with the fittings installed.

3 INSTALL FITTINGS IN REPLACEMENT FILTER HEAD

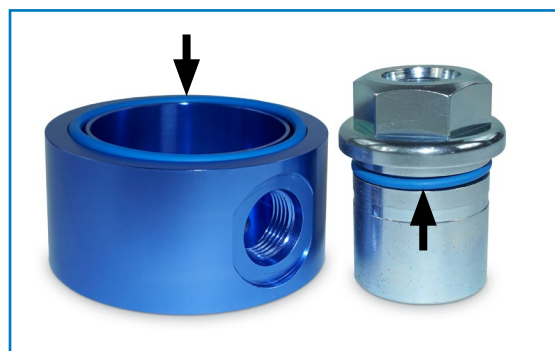
Locate the 45° fitting provided in the kit, ensuring the locking nut is threaded all the way on to the fitting before installation. Then install this into the port on the side of the filter head adapter.

Install the straight fitting into the filter nut on the bottom of the filter head adapter.

Rotate the replacement filter head assembly and fittings to attain maximum clearance for hose routing.

Tighten the filter head retaining nut as you would for a new filter installation.

Position and tighten both fittings.



2

4 ATTACH REMOTE FILTER HEAD

Find an appropriate location to mount the remote head, ensuring the filter head is not mounted to a source of high vibration, or near sources of high heat or moving components.

Mark the hole locations of the remote filter head and drill 3 holes using a Q [0.332"] drill.

Secure the remote filter head using the 5/16"-18 x 1" bolt and nylock nuts.

Torque mounting bolts to 20 N•m (15 ft-lbs)

5 MODIFY HYDRAULIC LINES

Measure the length of lines required and cut the hose line provided to the desired length with a fine-toothed saw or cut-off wheel.

- ❗ The center fitting at the replacement filter head assembly goes to the center fitting at the remote filter head.
- ❗ The outer fitting at the replacement filter head assembly goes to the outer fitting at the remote filter head.
(10591 is used as reference in Figure 5)

Cut hose square to desired length.

The hose should not be tight or pull on the fittings when routed.



5

6 INSTALL HYDRAULIC LINE FITTINGS

With the oil supply and return lines cut to length, you now need to install the compression fittings.

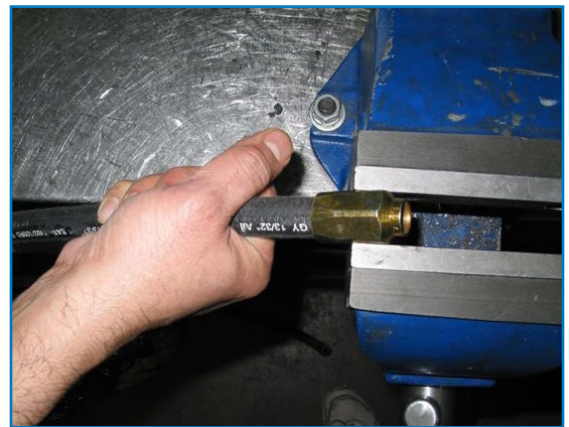
Dip the ends of the hose into clean engine oil.

Install the outer nut of the compression fitting into a vise (as shown in Figure 6), insert the end of the line turning it counter clockwise until it bottoms out, then turn it back (clockwise) ½ turn.

PLEASE NOTE: Failure to turn back the hose and not leave an end gap can cause cracking of the socket

Apply clean engine oil to the taper and threads of the inner compression fitting then screw the nipple assembly into the outer nut using a wrench until the nipple shoulder contacts the outer nut.

Repeat on both ends of each oil line.

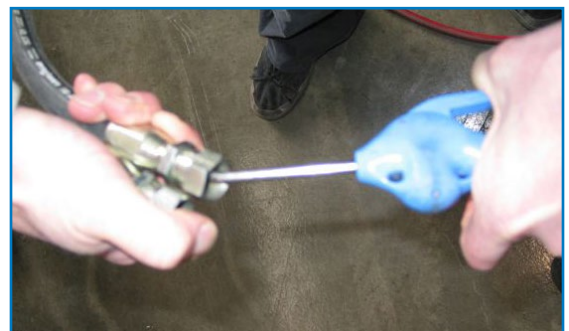


6

7 CLEAR HYDRAULIC LINES

VERY IMPORTANT:

- ⚠ ***Blow out the lines from each end with shop air to remove all debris. Check the volume of air exiting each to ensure no restrictions exist.***



7

8 ATTACHING HYDRAULIC LINES

(Using Figure 8A as reference), route the hoses from the remote filter head to the fittings on the replacement filter head:

- ❗ Connect the hose attached to the center fitting of the remote filter head to the center fitting on the replacement filter head (as shown with the **grey** hose in Figure 8A).
- ❗ Connect the hose attached to the outside fitting on the remote filter head to the outside fitting on the replacement filter head (as shown with the **black** hose in Figure 8A).

Tighten both hose end fittings to 50 N•m (37 ft-lbs).

Use the supplied tie straps to secure the hydraulic lines away from heat sources and moving parts. (See Figure 8B)

9 INSTALL A NEW OIL FILTER

The remote filter head is designed for use with the factory part number oil filter.

Install a new oil filter into the remote filter head.

It is a good idea to fill the new oil filter with clean engine oil prior to installation.

Double check all the fittings to ensure they are tightened adequately before proceeding to Step 10.

10 CHECK ENGINE OIL PRESSURE

Start the vehicle and allow to idle while watching the oil pressure gauge.

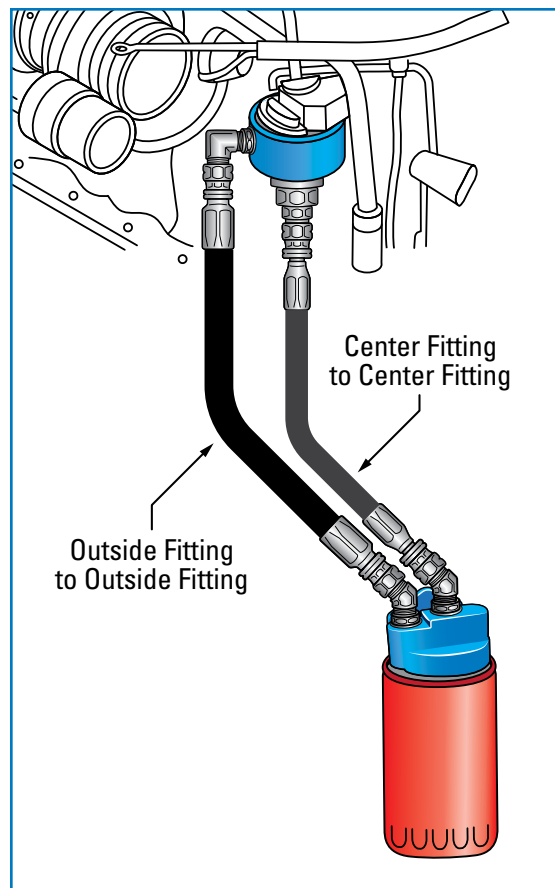
Ensure the engine oil pressure is in the NORMAL range.

11 CHECK FOR LEAKS

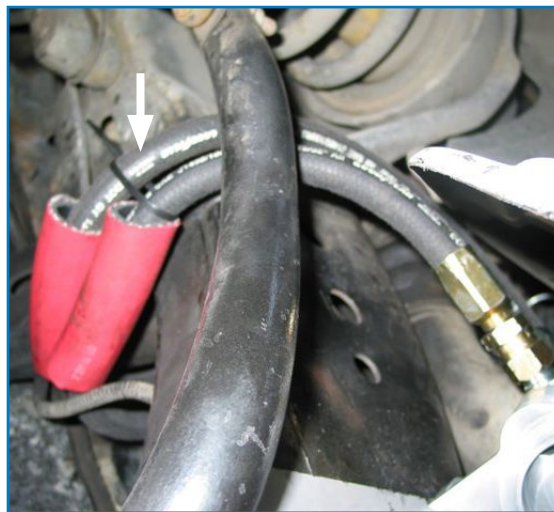
Once the engine oil pressure is in the normal range, check the entire system for oil leaks.

Congratulations!
You have completed the installation

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8A



8B