



# **OIL FILTER RELOCATION KIT**

**10591** Dodge RAM 2500/3500 5.9L Cummins\* with Oil Filter Thread of 1 - 16 UN

**10592** Dodge RAM 2500/3500 5.9L & 6.7L\* Cummins\*

with Oil Filter Thread of 1 - 16 UN

↑ Inner fender well must be modified to provide filter clearance

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

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.



This manual is used across multiple kit variations. Installation step images may vary depending on your kit. Please pay attention to steps referencing your specific kit number.

KIT PART#	KIT DESCRIPTION & APPLICATION
10591	<b>1994 - 2002 DODGE RAM 2500/3500 5.9L CUMMINS</b> with OIL FILTER THREAD OF 1 - 16 UN
10592	<b>2003 - 2009 DODGE RAM 2500/3500 5.9L &amp; 6.7L^ CUMMINS</b> with OIL FILTER THREAD OF 1 - 16 UN

\*Inner fender well must be modified to provide filter clearance

## **BEFORE STARTING THE INSTALLATION:**

- 1. Using the application information above; ensure the kit you are installing is correct for the make, model and year of the vehicle you are installing on.
- 2. Please make sure all the items shown in the Kit Contents on Page 3 are provided in your kit before starting the installation.
- 3. A replacement oil filter is <u>NOT</u> included in this kit. Kits are designed to work with factory part number filters.

# **KIT CONTENTS**

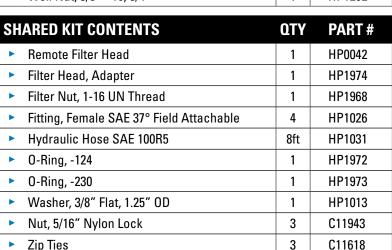
Please make sure all the items listed below are provided in your kit before starting the installation.

**①** A replacement oil filter is <u>NOT</u> included in this kit. Kits are designed to work with factory part number filters.

10591 KIT CONTENTS		PART#
► Filter Bracket	1	HP0035
► Fitting, Straight Thread	1	HP1025
► Fitting, 90° Straight Thread Elbow	2	HP1024
► Fitting, 45° Straight Thread Elbow	1	HP1082
► Bolt, 5/16" - 18 x 3" Flanged Hex	1	HP1027
▶ Bolt, 5/16"-18 x 1" Hex Head	2	HP1028

10592 KIT CONTENTS		PART#
► Filter Bracket	1	HP0043
► Fitting, 90° Straight Thread Elbow	1	HP1024
► Fitting, 45° Straight Thread Elbow	3	HP1082
► Bolt, 5/16"-18 x 1" Hex Head	3	HP1028
► Bolt, 5/16" - 18 x 1" Flange	1	C11819
► Bolt, 3/8" - 16 x 1 Hex Head	1	C18005
▶ Washer, 3/8" Flat, 1.25" Od	1	C18006
► Well Nut, 5/16 - 18, 5/8	1	HP1038
► Well Nut, 3/8" - 16, 3/4	1	HP1262

SHARED KIT CONTENTS		PART#
► Remote Filter Head	1	HP0042
► Filter Head, Adapter	1	HP1974
Filter Nut, 1-16 UN Thread	1	HP1968
► Fitting, Female SAE 37° Field Attachable	4	HP1026
► Hydraulic Hose SAE 100R5	8ft	HP1031
▶ 0-Ring, -124	1	HP1972
▶ 0-Ring, -230	1	HP1973
▶ Washer, 3/8" Flat, 1.25" OD	1	HP1013
Nut, 5/16" Nylon Lock	3	C11943
► Zip Ties	3	C11618



10591

1994 - 2002 DODGE RAM 2500/3500 **5.9L CUMMINS** 

OIL FILTER THREAD OF 1 - 16 UN



2003 - 2009 DODGE RAM 2500/3500 **5.9L & 6.7L\* CUMMINS** 

OIL FILTER THREAD OF 1 - 16 UN

\*Inner fender well must be modified to provide filter clearance

# **REQUIRED TOOLS**

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

# 1 REMOVE THE EXISTING OIL FILTER

Remove the existing oil filter and recycle. (Figure 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.



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# 3 INSTALL FITTINGS IN REPLACEMENT FILTER HEAD

PLEASE NOTE: For all 45° and 90° fittings, ensure the locking nut is threaded all the way on to the fitting before intalling.

#### 10591 Installations:

Install a 90° fitting into the port on the side of the filter head adapter (shown as reference in Figure 3 with a white arrow).

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

# 10592 Installations:

Install a 90° fitting into the port on the side of the filter head adapter.

Install a 45° fitting into the filter nut on the bottom of the filter head adapter.

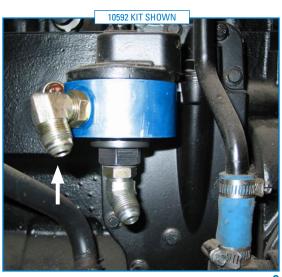
Rotate the replacement filter head assembly and fittings to attain maximum clearance for hose routing.

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

Position and tighten both fittings.



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# 4 ATTACH REMOTE FILTER HEAD TO BRACKET

Using the 5/16'' -  $18 \times 1''$  bolt and nylon lock nuts provided, secure the remote filter head to the mounting bracket.

# 10591 Installations Only:

Do not install a fastener in the far left hole (shown with a white arrow in Figure 4). This is for mounting the bracket through the frame (which will be addressed in Step 5B below).

Torque mounting bolts to 20 Nem (15 ft-lbs)



Install the two remaining 45° fittings into the remote filter head, keeping the protective cover on the exposed fitting end.

At the stabilizer bar, locate the 2 capscrews and remove both.

Install the filter mounting bracket between the stabilizer bar clamp and the head of the capscrew (as shown in Figure 5A).

Install the wellnut, flat washer and bolt provided, into the upper hole in the bracket and through the pre-existing hole in the frame.

With the vehicle on the ground at normal ride height torque both sway bar capscrews to 58 N•m (43 ft-lbs) and tighten the wellnut till snug

PLEASE NOTE: Two different sizes of wellnuts and bolts are supplied due to variances in frames. Choose the wellnut that fits the tightest.

# **5B 10591 INSTALLATIONS ONLY**

Install the remaining 90° fitting in the outer port, and the 45° fitting into the center port, keeping the protective cover on the exposed fitting ends.

At the stabilizer bar, locate the 2 capscrews and remove both.

Install the filter mounting bracket between the stabilizer bar clamp and the head of the capscrew (as shown in Figure 5B).

Install the 5/16" x 3" bolt through an existing hole in the frame, then through the mounting bracket and filter head.

Finally, install the nut provided.

With the vehicle on the ground at normal ride height torque both stabilizer bar capscrews to 58 N•m (43 ft-lbs) and then 5/16" fastener to 20 N•m (15 ft-lbs)



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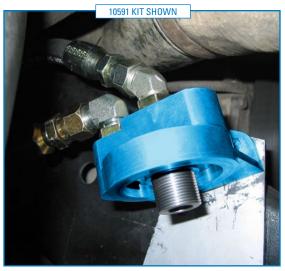
# **MODIFY HYDRAULIC LINES**

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 <u>outer</u> fitting at the replacement filter head assembly goes to the outer fitting at the remote filter head. (10591 is shown as reference in Figure 6)

Cut hose square to desired length.

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



#### **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 7), 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.



## **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.



# 9 ATTACHING HYDRAULIC LINES

(Using Figure 9A as reference), route the hoses from the remote filter head to the fittings on the replacement filter head:

- ① Connect the hose attached to the <u>center</u> fitting of the remote filter head to the <u>center</u> fitting on the replacement filter head (as shown with the **grey** hose in Figure 9A).
- ① Connect the hose attached to the <u>outside</u> fitting on the remote filter head to the <u>outside</u> fitting on the replacement filter head. (as shown with the **black** hose in Figure 9A).

Tighten both hose end fittings to 50 Nem (37 ft-lbs).

Use the supplied tie straps to secure the hydraulic lines away from heat sources and moving parts. (See Figure 9B)

#### 10 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 11.

#### 11 CHECK ENGINE OIL PRESSURE

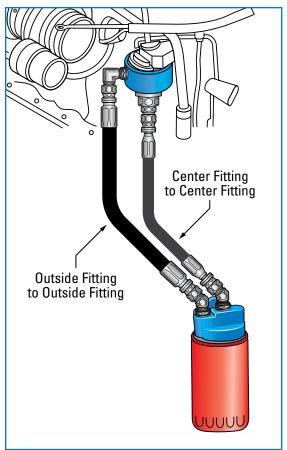
Start the vehicle and allow to idle while watching the oil pressure gauge.

Ensure the engine oil pressure is in the NORMAL range.

#### 12 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



9A



9E