

# **REMOTE OIL FILTER SYSTEM** SINGLE OR DUAL OIL FILTER APPLICATIONS

# **INSTALLATION INSTRUCTIONS**

NOT RECOMMENDED FOR MARINE OR DIESEL APPLICATIONS

#### **GENERAL INFORMATION**

Before you begin the installation of this remote oil filter system kit, please take a few minutes to read the installation instructions thoroughly.

#### **Work Safely**

Perform this installation on a good clean level surface for maximum safety and protection.

Installation of remote oil filter system requires working underneath vehicle. Raise front of vehicle by lifting at points specified by the vehicle manufacturer. Place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction. Support the vehicle with approved automotive support stands or wheel ramps. Do not use a bumper jack for supporting vehicle.

#### **IMPORTANT!**

To avoid any possibility of bodily injury, do not get underneath vehicle until you ar confident that it is safely supported and will not move or fall from its raised position. Make sure engine is cool to the touch and oil has cooled sufficiently before beginning installation.

#### **Tools Required**

7/8" Open End Wrench	Hammer
3/8" Drill Bit	Ratchet
*3/8" Hex Key Wrench	Center-Punch
1/2" Open End Wrench	Utility Knife
1/2" Socket	Electric Hand Drill
Teflon <sup>®</sup> Thread Seal Tape	

(\*) Required for Remote Dual Oil Filter System Kits.

#### Oil Filter By-Pass and Remote Filter Bracket Mounting

1. Place drain pan underneath oil filter and remove filter from engine block.

**Note:** A complete oil change is not necessary for this installation but is recommended if oil has not been changed within 2,000 miles.

- 2. Check by-pass adapter and remote filter mounting bracket to be sure they are clean and free of any metal chips or burrs.
- Insert o-ring into the groove located in oil filter by-pass adapter. Lubricate top of o-ring using a light film of oil. Spin by-pass adapter onto engine block until snug, then tighten an additional 3/4 to 1 full turn same as the stock oil filter (Refer to illustration).
- 4. Select the best location for remote oil filter mounting bracket. The firewall, fenderwell, or frame rail are convenient locations. Be sure oil filter has sufficient ground clearance and mark location for remote bracket with a grease pen or scribe.

**Note:** Remote oil filter bracket can be mounted vertically or horizontally whichever is most convenient for your application.

5. Before starting, measure distance between bypass adapter on engine block and remote oil filter bracket. One length (60") of high temperature hose is supplied to complete the connections. This hose must be cut in two (2) individual lengths. Before cutting, make sure remote oil filter mounting bracket is located close enough to the by-pass adapter.

For installations that require more hose length, Mr. Gasket has available a 96" length of hose part no. 7697, this will allow using two (2) lengths of hose up to 48" each for these applications.

- 6. Use the remote oil filter mounting bracket as a template and mark mounting holes with a grease pen or scribe. Center-punch hole locations and make sure underside is free and clear from any obstructions. Drill three (3) 3/8" holes through surface and debur holes.
- 7. Place remote oil filter bracket onto mounting location and attach using 5/16" hex head bolts, flat washers, and lock-nuts supplied. Tighten all nuts and bolts securely.

**Note:** The dual remote oil filter mounting bracket requires installing hex head bolts through bracket from the back side.

# **Oil Hose Assembly and Fitting Installation**

#### **IMPORTANT!**

Keep hose as short as possible when routing. Hose must not kink, crimp, contact hot exhaust or sharp surfaces, otherwise damage to hose or engine will result. A minimum 3-1/2" radius bend is suggested when routing, or oil flow restriction will occur. Most installations can be completed using two (2) 30" hose lengths. Measure length needed and cut carefully using a utility knife. Hose must be cut straight and evenly.

- After hose is cut to the correct length, install brass fittings (push-loc type) into hose. Lubricate each fitting and inner liner of hose with soapy water or light oil. Insert fittings (male on one end and female flare on opposite end) into each hose until first barb is completely covered. Place end of fitting against a flat surface (bench or wall), grasp hose approximately one inch from end and push straight forward turning side to side until end of hose is covered by yellow cap on fitting. No external clamps are required with push-loc type brass fittings.
- Using Teflon<sup>®</sup> thread sealing tape, wrap the 1/2" NPT end of male flare fittings and screw into remote oil filter mounting bracket. Carefully tighten both fittings securely using a 7/8" open end wrench or deep well socket and torque wrench, do not exceed 20 ft. lbs.

#### CAUTION! DO NOT OVERTIGHTEN. ALUMINUM CASTING MAY CRACK OR BREAK.

3. Wrap Teflon<sup>®</sup> thread sealing tape around external threads of male fittings inserted into hoses. Screw into threaded holes of the by-pass adapter marked "in" and "out". Using a 7/8" open end wrench carefully tighten brass fittings securely.

#### **IMPORTANT!**

Hoses connected to by-pass adapter ports marked "in" and "out" must correspond to the same "in" and "out" ports on the remote oil filter mounting bracket for proper oil circulation. Check hoses to be sure they are connected correctly. (Refer to illustration).

**Note:** The dual remote oil filter mounting bracket requires installing two (2) 1/2" hex socket pipe plugs (supplied) into threaded holes on remote bracket opposite hoses, use Teflon<sup>®</sup> sealing tape on threads. Using a 3/8" hex key wrench tighten pipe plugs securely.

# **Oil Filter Installation**

- Screw end of nipple(s) (short end with less threads) into remote oil filter mounting bracket and tighten securely. Mr. Gasket single and dual remote oil filter mounting brackets require using oil filters with 3/4"-16 threads and 2-1/2" I.D. x 2-3/4" O.D. o-ring seal dimensions. Oil filter recommendation are listed below:
- Lubricate o-ring on oil filter using a light film of oil. Spin oil filter(s) onto remote mounting bracket until snug, then tighten an additional 3/4 to 1 full turn. Caution - do not overtighten.

**Note:** If remote oil filter mounting bracket is mounted so that filter(s) are in a vertical position, fill oil filter(s) with proper engine oil required and install onto remote bracket. This will produce oil pressure quickly.

- 3. If a complete oil change was necessary, add new oil to engine. Refer to the vehicle manufacturer's service manual for type of oil, quantity, and oil pressure specifications.
- 4. Start engine and check oil pressure warning light or oil pressure gauge if equipped.

# Warning! If oil pressure light stays on past five seconds or gauge indicates low oil pressure, turn engine "off" immediately.

Check hoses, make sure they are connected to the correct "inlet" and "outlet" ports on by-pass adapter and remote oil filter mounting bracket. Check for excessive bends in hose smaller than the minimum 3-1/2" radius bend allowed.

**Note:** If vehicle is not equipped with a mechanical or electrical oil pressure gauge, it is recommended that one be installed to monitor engine oil pressure.

 Start engine and let idle for five minutes, check all connections for oil leakage while engine is running. Turn engine "off" and check oil level on dipstick. Oil level may indicate "low" because of oil required to fill new hoses. Add additional oil to "full" line on dipstick.

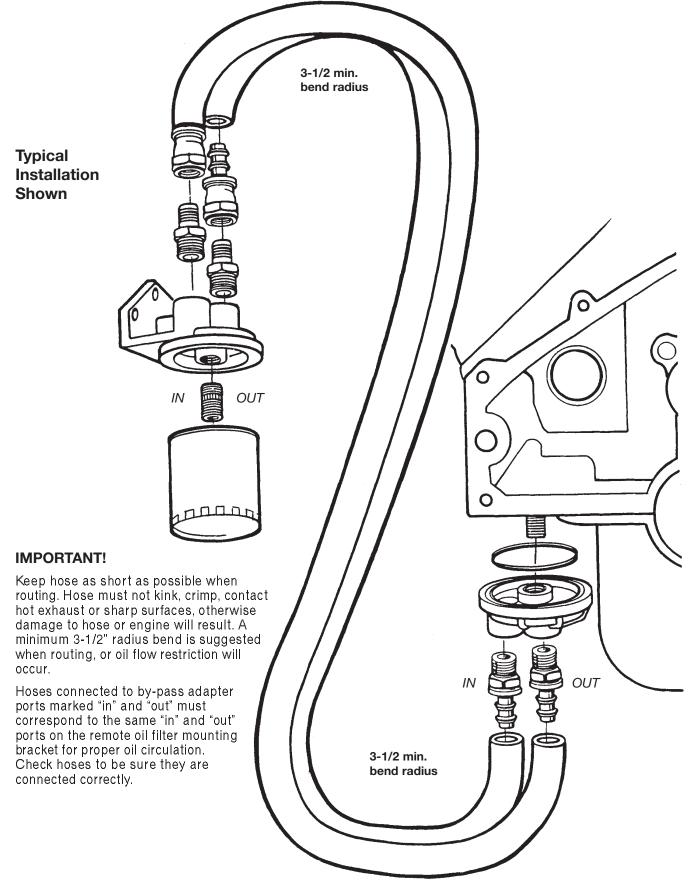
**Note:** If remote oil filter bracket is mounted higher than oil pan, oil level may indicate above "full" line on dipstick. This is due to oil draining back into the oil pan from hoses.

AC	FRAM	MOPAR	MOTORCRAFT	NAPA	PUROLATOR
PF20	PH43	L19	FL300	1068	PER81
*PF2	*PH8A	*L138	*FL1A	*1515	*PER100

# **OIL FILTER RECOMMENDATIONS**

(\*) Designates long oil filter design.

# Single Remote Oil Filter System Installation



# **Contents of Remote Oil Filter System Kits**

#### **Single Oil Filter Kit**

## **Dual Oil Filter Kit**

Description	Qty	Description	Qty
Oil Filter By-Pass Adapter	1	Oil Filter By-Pass Adapter	1
Remote Oil Filter Mounting Bracket	1	Remote Oil Filter Mounting Bracket	1
Nitrile O-Ring	1	Nitrile O-Ring	1
Nitrile Hose 60" Length	1	Nitrile Hose 60" Length	1
Threaded Nipple - 3/4"-16 x 1-1/4"	1	Threaded Nipple - 3/4"-16 x 1-1/4"	2
Brass Fitting - Male	2	1/2" NPT Hex Socket Pipe Plug	2
1/2" NPT x 1/2" I.D. Flare Brass Fitting - Male	2	Brass Fitting - Male 1/2" NPT x 1/2" I.D. Flare	2
1/2" NPT x 1/2" I.D. Barb End Brass Fitting - Female	2	Brass Fitting - Male 1/2" NPT x 1/2" I.D. Barb End	2
1/2" I.D. Barb End x 1/2" I.D. Flare 5/16"-18 Hex Head Bolt 5/16"-18 Hex Head Bolt	3 3	Brass Fitting - Female 1/2" I.D. Barb End x 1/2" I.D. Flare 5/16"-18 Hex Head Bolt	2 3
5/16"-18 Lock Nut	3	5/16"-18 Hex Head Bolt	3
5/16" Flat Washer	3	5/16"-18 Lock Nut	3
		5/16" Flat Washer	3

Note: Retain this instruction sheet for future reference.

# **Technical Service**

A highly trained technical service department is maintained by Mr. Gasket Company to answer your technical questions, provide additional product information and offer various recommendations. See your local retailer of Mr. Gasket products for specific prices.

For best results, technical service calls, correspondence and warranty questions should be directed to the following address:

Mr. Gasket Company 10601 Memphis Ave., #12 Cleveland, OH 44144

Phone: 216.688.8300 8:30 A.M. - 5:00 P.M. EST



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