



“Oval style” Stock Air Cleaner

Example shown is a 1999 Road King

Note: All parts supplied in kit may not be used in your specific application.

Parts List

- (1) Air Oil Separator
- (1) Air Oil Separator Bracket
- (1) Length of 3/16” I.D. Hose
- (1) Length of 1/4” I.D. Hose
- (2) 1/4” Barbed x 1/8” NPT Fittings
- (5) 3/16” to 1/4” Couplings
- (1) 3/16” to 3/16” Coupling
- (1) 3/16” “Y”
- (1) Air Cleaner Plug
- (2) 1/4-20x1/2” Pan Head Bolts
- (2) 1/4-20x1/2” Locking Bolts

Torque Values

Head Vent Bolts 22-24 ft-lbs

Air Filter Bolts 108-132 in-lbs

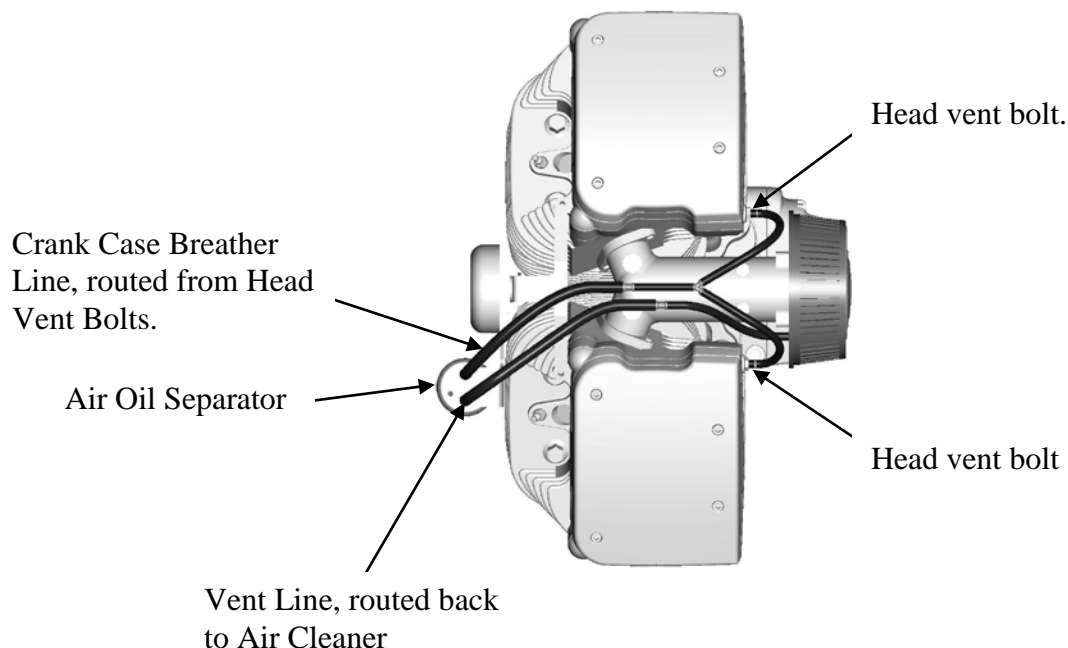
1/4-20x1/2” Pan Head Bolts 108-132 in-lbs

1/4-20x1/2” Locking Bolts 33-55 in-lbs

Illustration below is a general overview of the routing of lines and assembly of Moroso Air Oil Separator System.

This instruction manual contains model specific examples. Follow your model specific instructions or use generic illustration for installation.

In some applications it will be easier to install this kit with fuel tank removed but is not necessary. If fuel tank is going to be removed follow service manual instructions for removal and installation.



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85714

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Rev A

10-29-19



Step 1: Remove air filter cover and air filter.



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Step 2: Remove stock breather lines



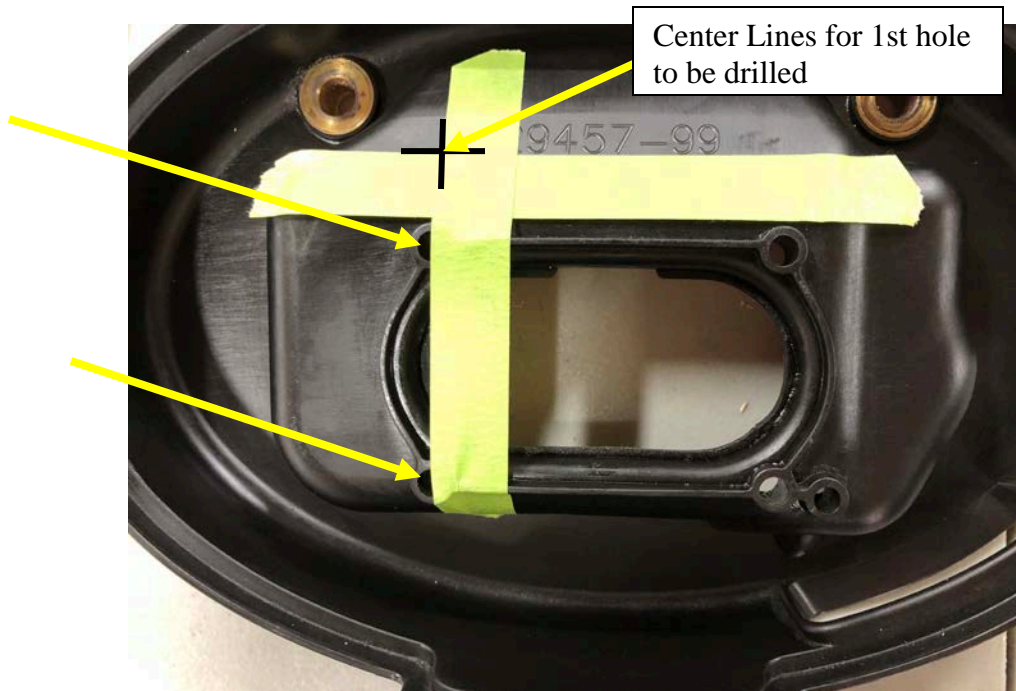
Step 3: Remove air pan.

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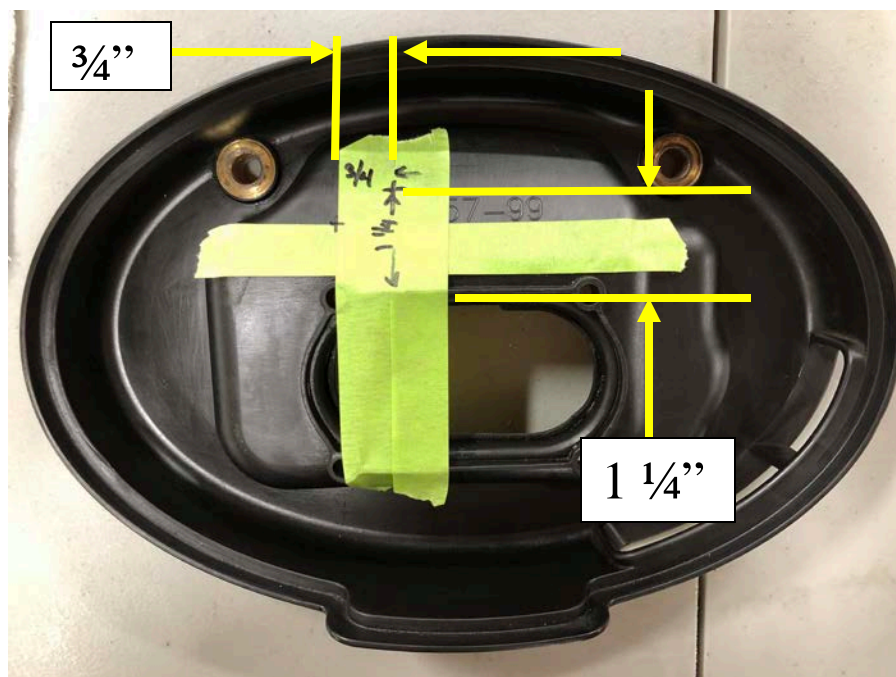


Step 4: Using masking tape, line up edge of masking tape to bottom of numbers as shown.

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Step 5: Using second piece of masking tape, line up with center of throttle body mounting holes as shown.



Step 6: Apply 3rd piece of masking tape as shown and mark $\frac{3}{4}''$ over from edge of masking tape and $1 \frac{1}{4}''$ up from inside edge as shown.

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Step 7: Drill (2) 1/2" dia holes and deburr as needed.

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Step 8: Remove horn from motorcycle.

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Step 9: Remove horn bracket from horn as shown.

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Step 10: Using (2) 1/4-20x1/2" locking bolts provided in kit assemble Air Oil Separator bracket between horn and horn bracket as shown.

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Step 11: Install (2) 1/4" barbed x 1/8" NPT fittings in Air Oil Separator.

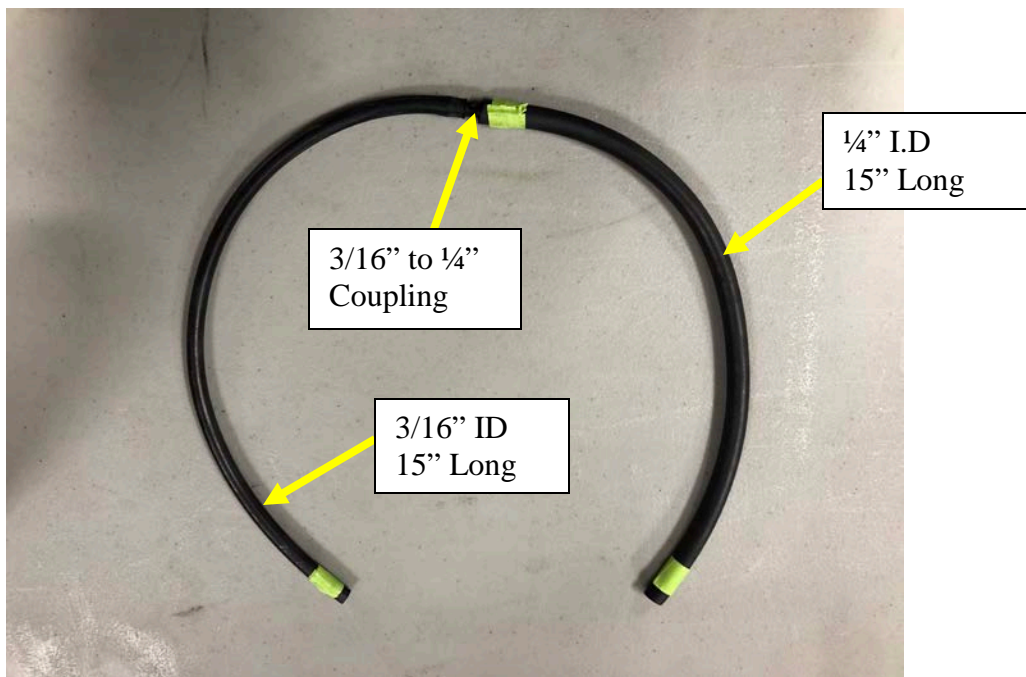


Step 12: Assemble Air Oil Separator to bracket using (2) 1/4-20 x 1/2 pan head bolts provided in kit.

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Step 13: Re-install horn / Air Oil Separator to motorcycle.



Step 15: Using 3/16" I.D. line provided in kit cut (1) pc 15" long and (1) pc 15" long using 1/4" I.D. line. Connect lines together using 1/4" to 3/16" coupling. Apply masking tape to ends for future identification.

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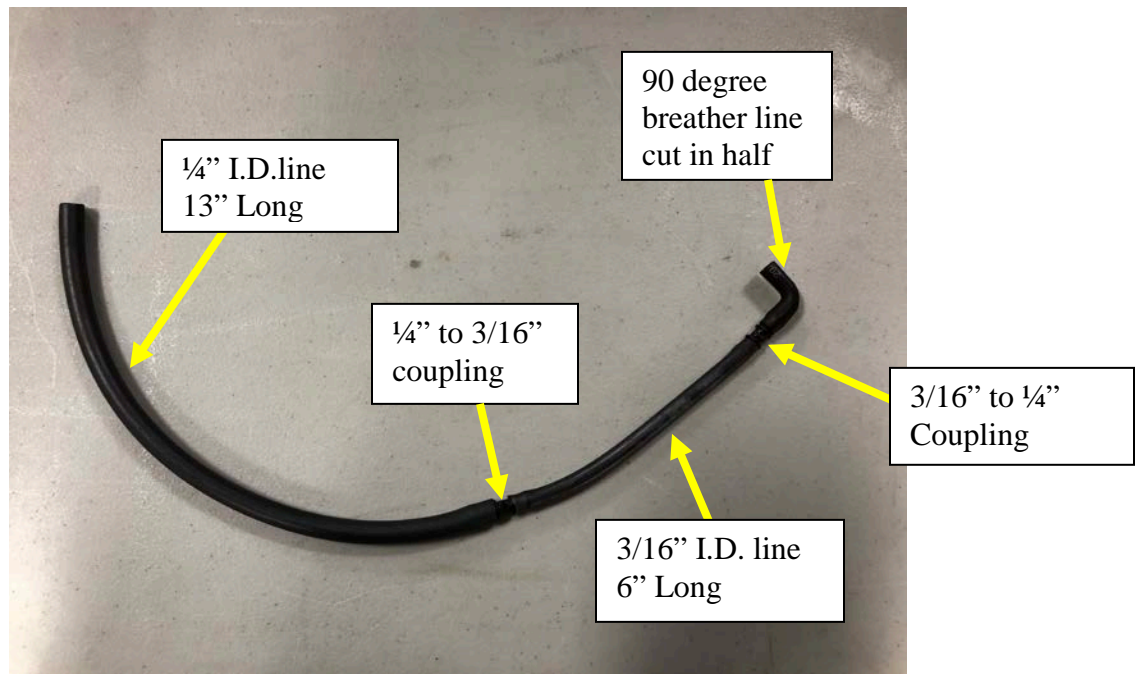


Note: Stock breather lines previously removed.

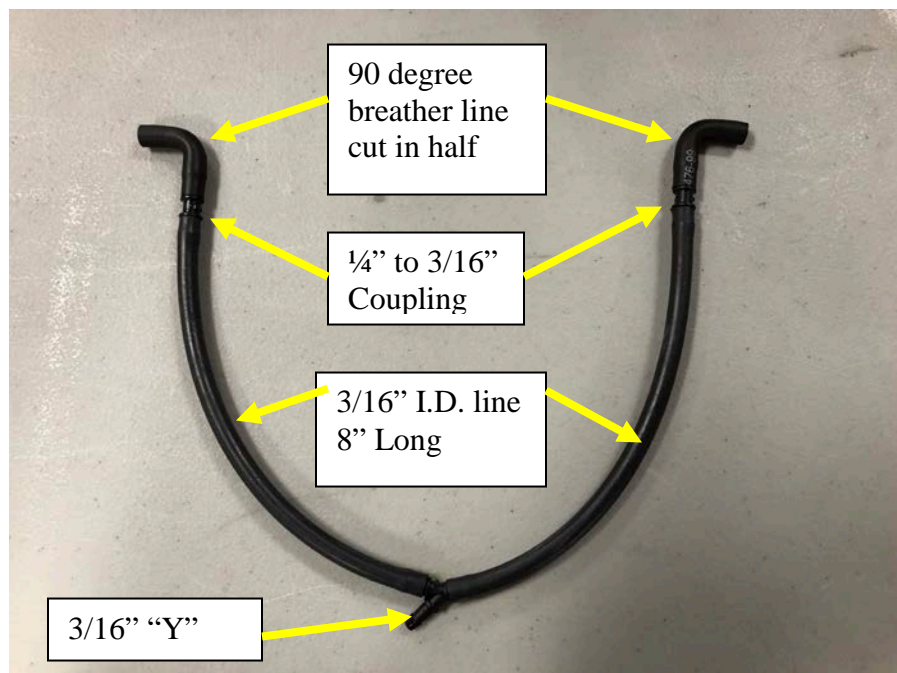


Step 16: Cut stock breather lines in half as shown.

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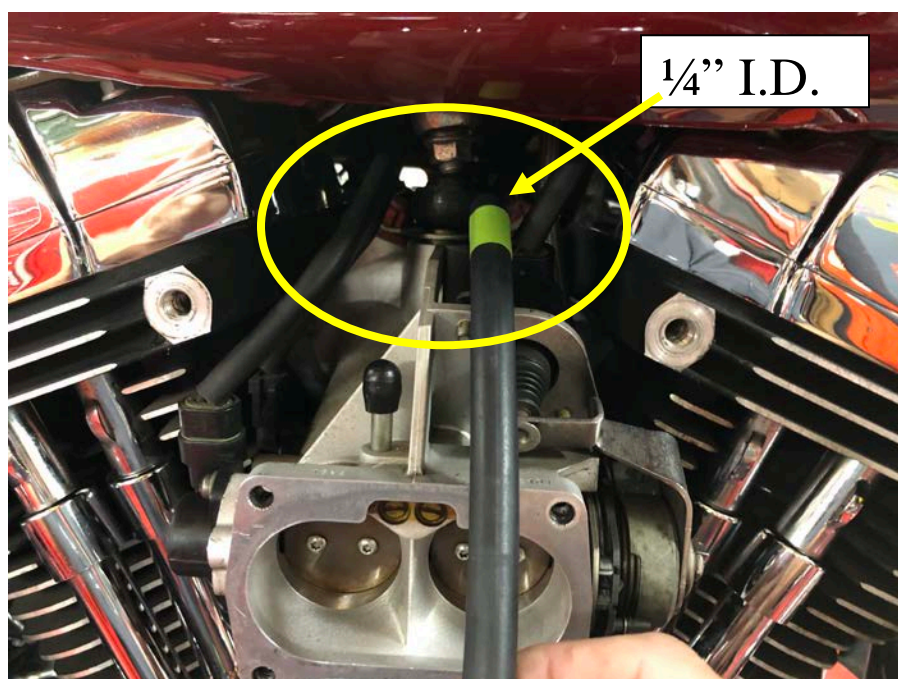


Step 17: Cut (1) pc of 1/4" I.D. line 13" long and (1) pc of 3/16" I.D. line 6" long, connect the lines using 1/4" to 3/16" coupling. Using a additional 1/4" to 3/16" coupling connect 90 degree stock breather line previously cut in half.



Step 18: Cut (2) 3/16" I.D. line 8" long and assemble as shown.

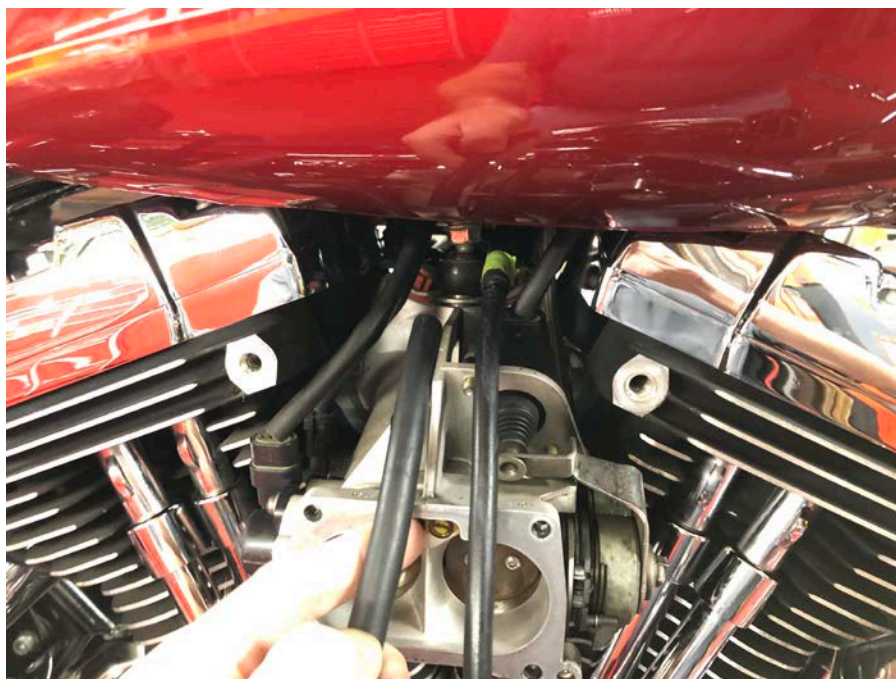
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Step 19: Route line assemble in step 15 with masking tape identifier on it from right side of motorcycle to left as shown.

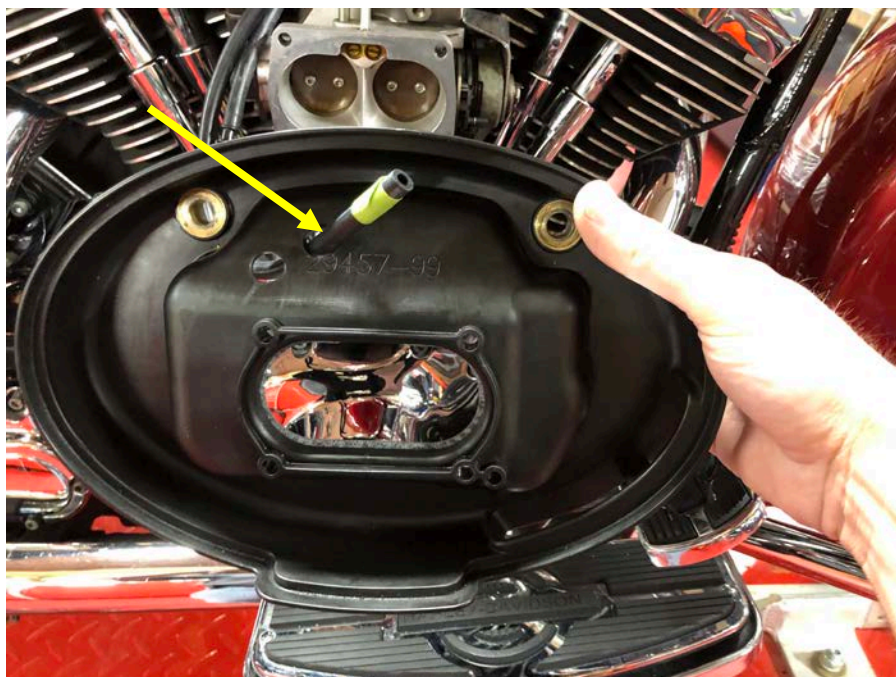


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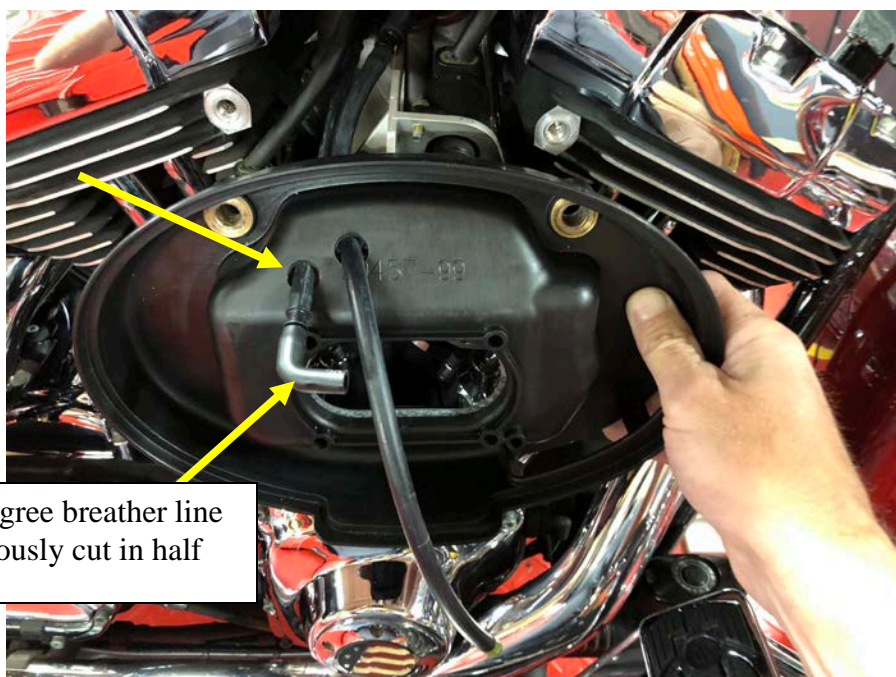
Step 20: Route line assembled in step 17 to left side of motorcycle. (1/4" I.D. line will be fed to left side)

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Step 21: Feed line with masking tape identifier through top hole of air pan.

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90 degree breather line
previously cut in half

Step 22: Feed second line through bottom hole and install 90 degree breather line using 3/16" to 1/4" coupling.



Step 23: Re-install Head vent bolts. Using line assembly from step 18 install to head vent bolts as shown.

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Step 24: Connect “Y” to breather line with masking tape identifier.



Step 25: Install plug into air cleaner as shown.

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Step 26: Install 90 degree breather line into air cleaner.



Step 27: Re-install air cleaner.

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Step 28: Re-install air cleaner cover.



Step 29: Trim as needed and install crank case breather line with masking tape identifier to front barbed fitting as shown.

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Step 30: Trim as needed and install Air Oil Separator return line to rear barbed fitting as shown.

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To drain Air Oil Separator unscrew bottom of Air Oil Separator

Draining of Air Oil Separator is needed; this will depend on riding conditions (i.e.) normal day to day riding check every 200 miles until a baseline is established. A good baseline is to drain the Air Oil Separator when it is about HALF full. This will vary with temperatures (cold days vs. hot days). For track usage Air Oil Separator will need to be drained after every outing.

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“Round style” Stock Air Cleaner

Example shown is a 2016 Road Glide

Note: All parts supplied in kit may not be used in your specific application.

Parts List

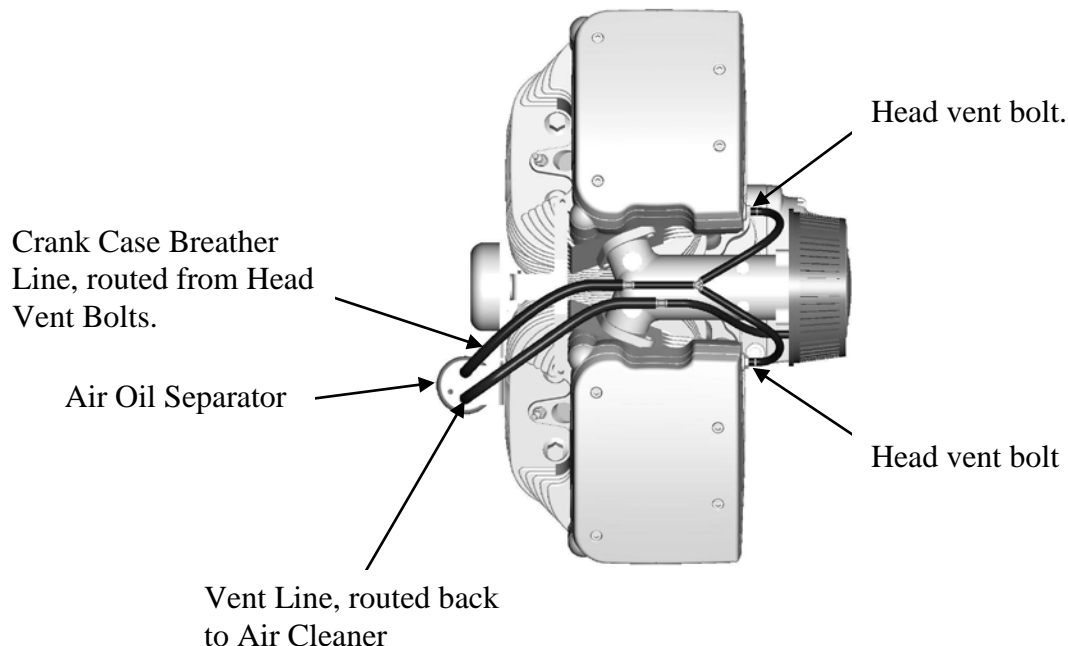
- (1) Air Oil Separator
- (1) Air Oil Separator Bracket
- (1) Length of 3/16” I.D. Hose
- (1) Length of 1/4” I.D. Hose
- (2) 1/4” Barbed x 1/8” NPT Fittings
- (5) 3/16” to 1/4” Couplings
- (1) 3/16” to 3/16” Coupling
- (1) 3/16” “Y”
- (1) Air Cleaner Plug
- (2) 1/4-20x1/2” Pan Head Bolts
- (2) 1/4-20x1/2” Locking bolts

Torque Values

- Head Vent Bolts 22-24 ft-lbs
- Air Filter Bolts 108-132 in-lbs
- 1/4-20x1/2” Pan Head Bolts 108-132 in-lbs
- 1/4-20x1/2” Locking Bolts 33-55 in-lbs

Illustration below is a general overview of the routing of lines and assembly of Moroso Air Oil Separator System.

This instruction manual contains model specific examples. Follow your model specific instructions or use generic illustration for installation.



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Step 1: Remove air cleaner cover and air cleaner.



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Step 2: Remove breather lines from breather bolts and air pan, set aside for future use.



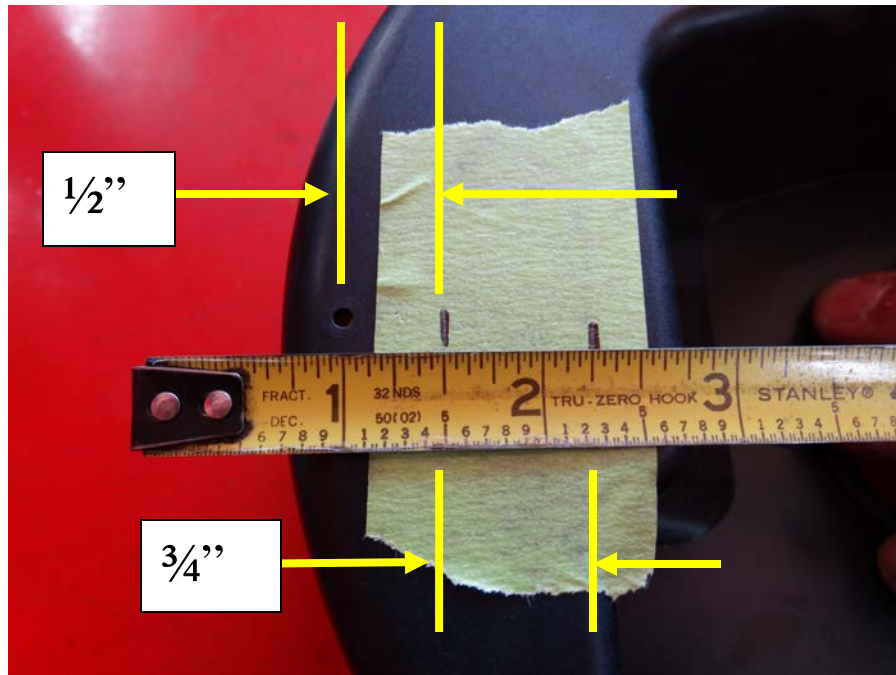
Step 3: Remove air pan.

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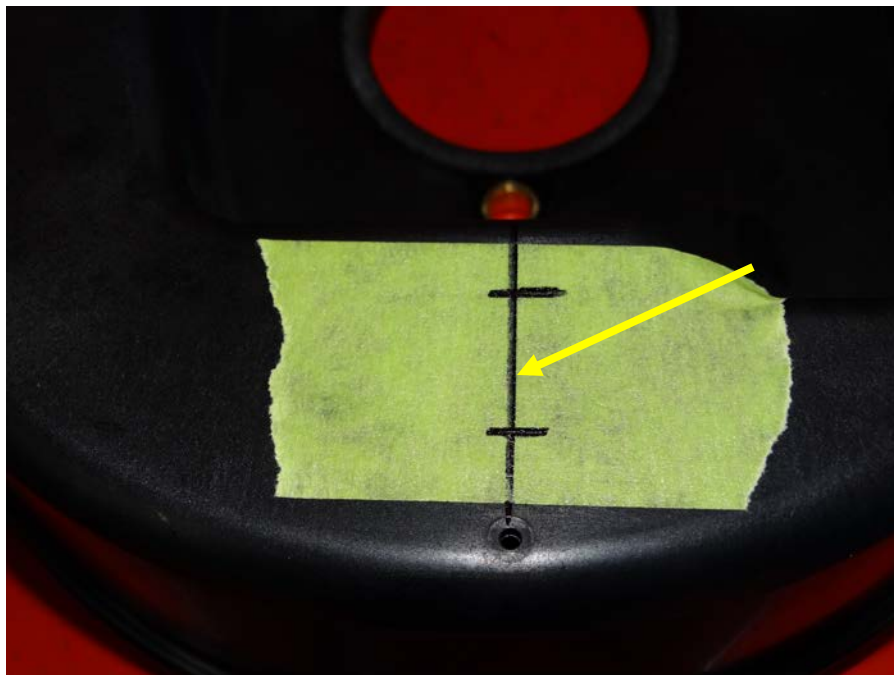


Step 4: Apply maskin tape to bottom of air pan as shown.

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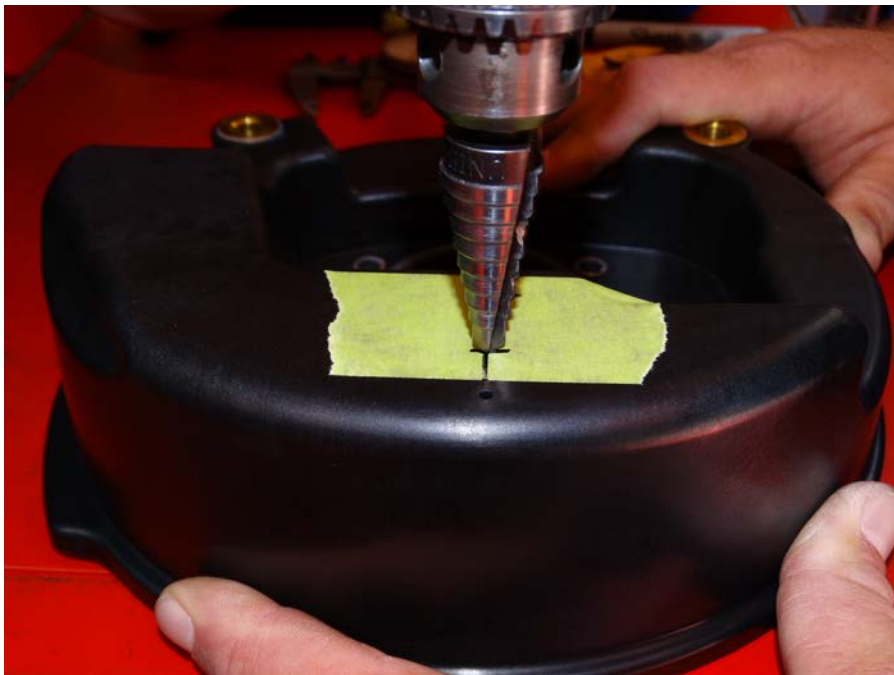


Step 5: From center of weep hole in air pan make a mark $\frac{1}{2}$ " from center, make a 2nd mark $\frac{3}{4}$ " from that mark.



Step 6: Make a center line as shown.

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Step 7: Drill (2) ½" holes on center lines previously marked.



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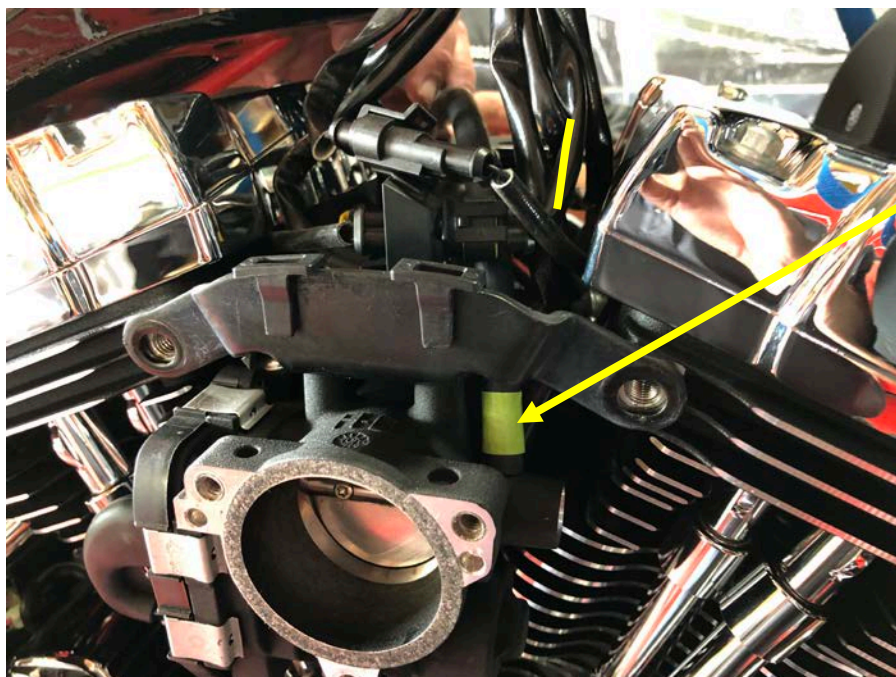


Step 8: Using $\frac{1}{4}$ " I.D. line provided in kit cut (1) pc 28" long and apply masking tape to each end for future reference.

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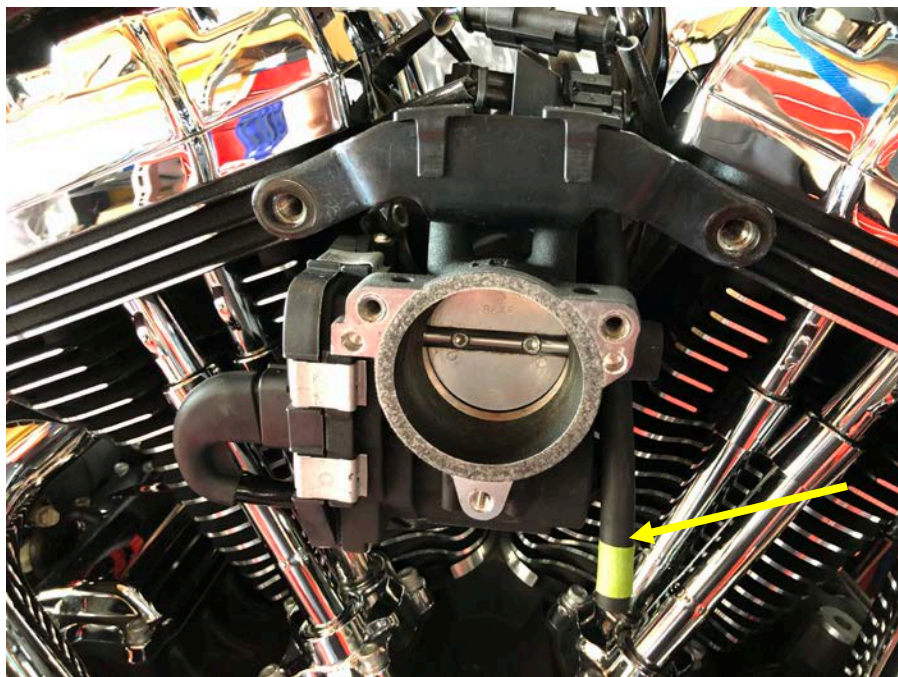


Step9: Route ¼" I.D. x 28" long line from left side of motorcycle to right side as shown.

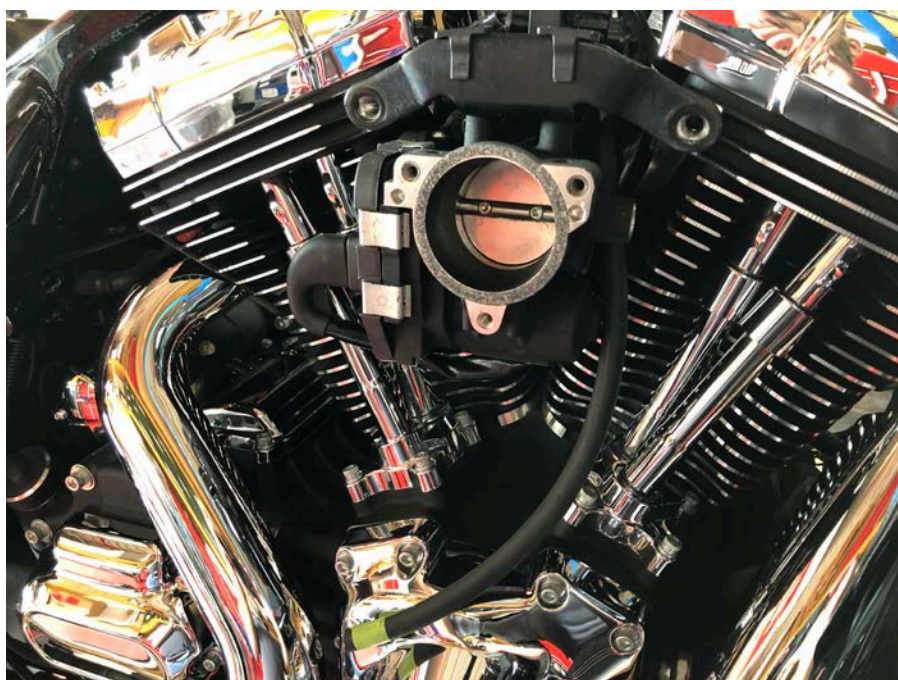


Step 10: On right (throttle body side) of motorcycle route line so that it runs behind throttle body as shown.

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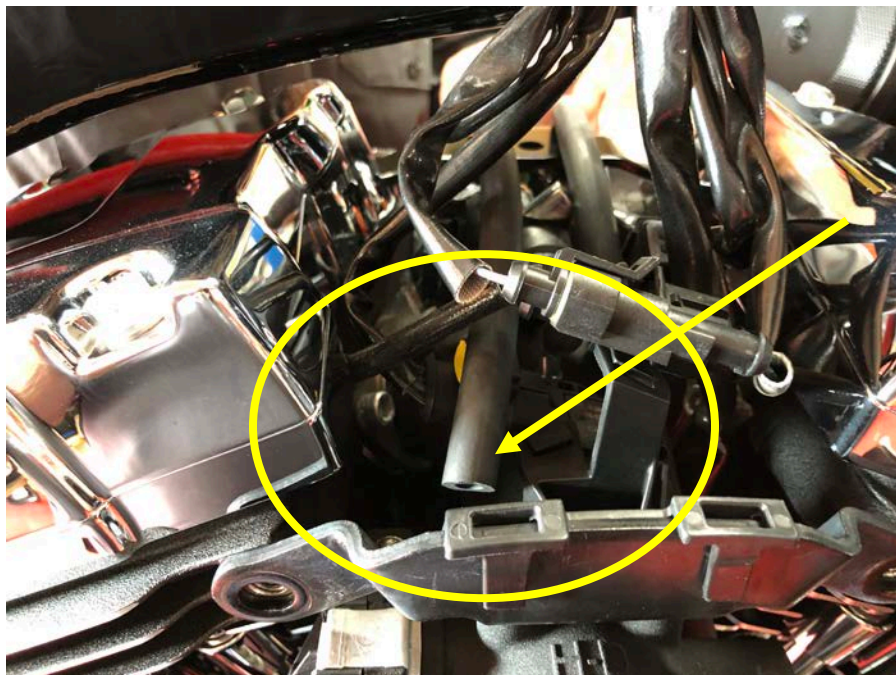
Note line must be routed so there is no interference upon re-installation of air pan.



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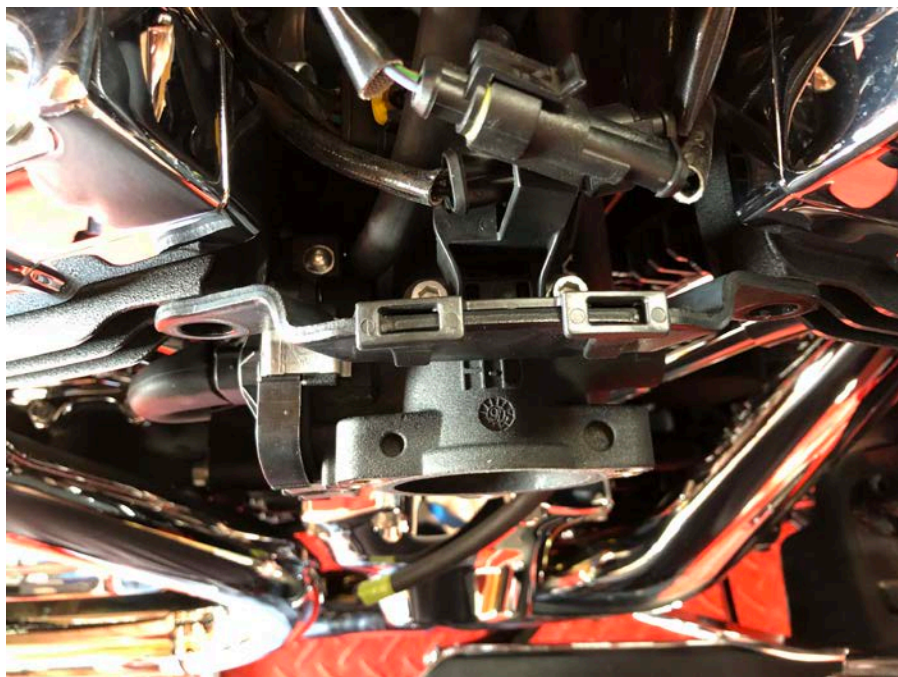


Step 11: Using ¼" I.D. line provided in kit cut (1) pc 28" long and route along side of first line installed.



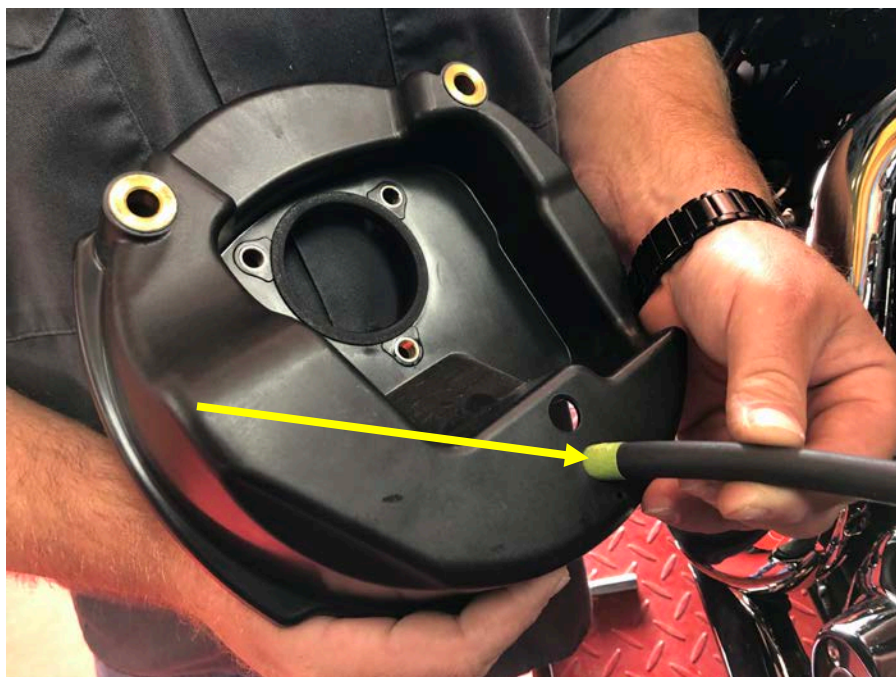
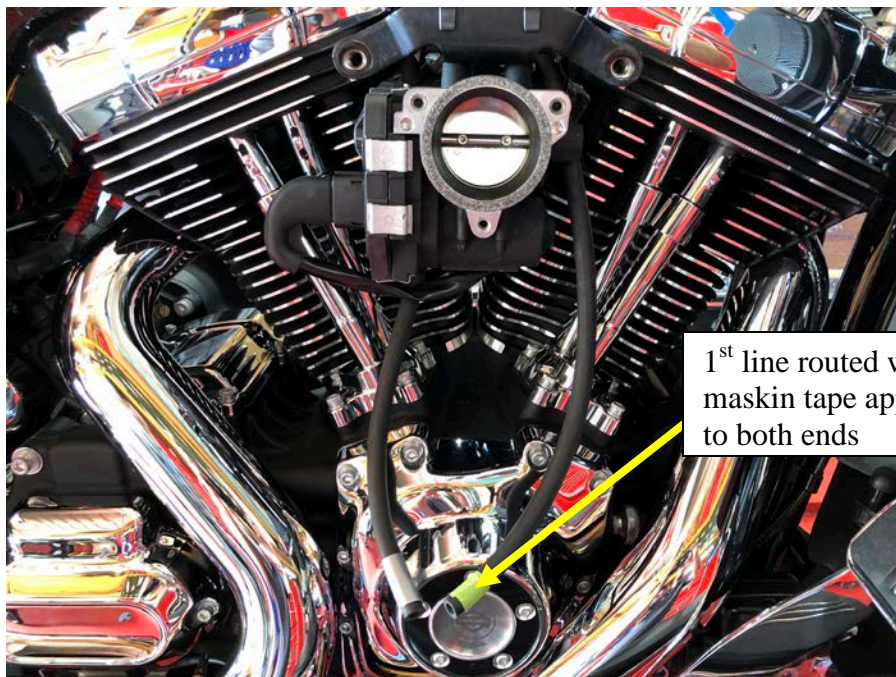
Step 12: On right (throttle body side) of motorcycle route line so that it runs behind throttle body as shown.(left side of throttle body)

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Step 13: Finish routing line behind throttle body to bottom.

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Step 14: Feed 1st line that was routed with masking tape applied to both ends through bottom hole in air pan.

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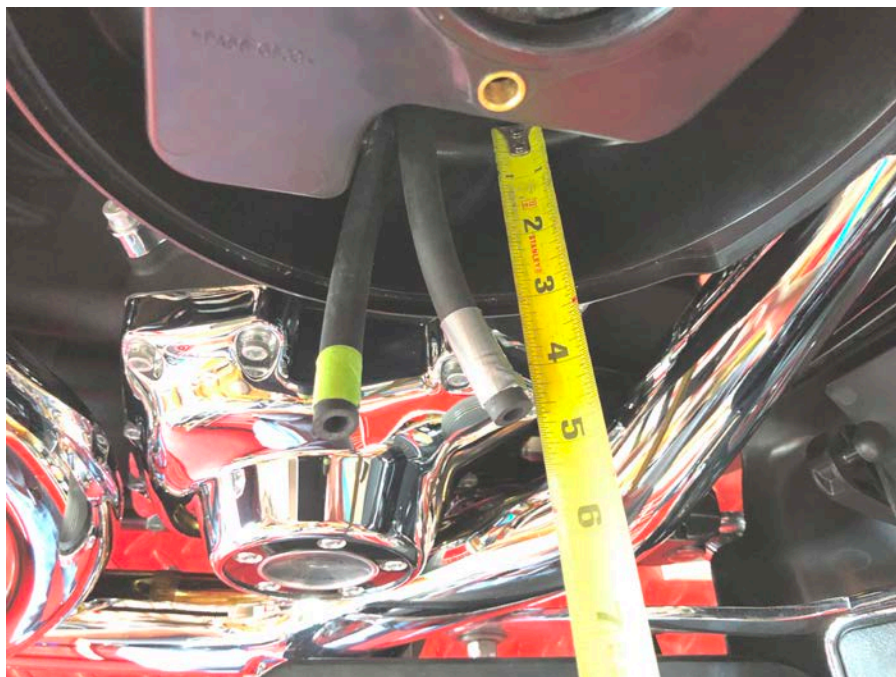


Step 15: Feed 2nd line through top hole previously drilled in air pan.

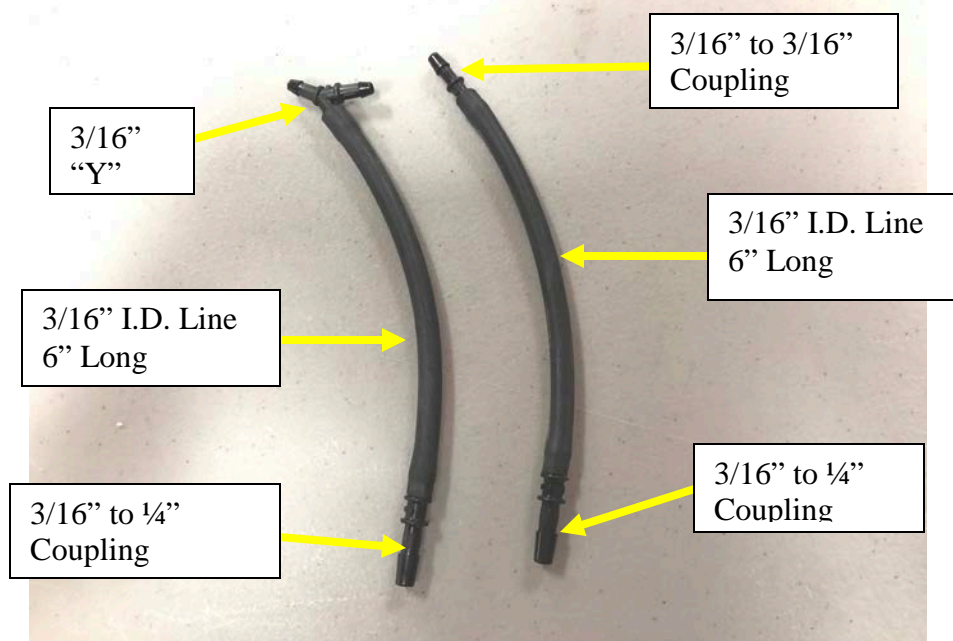


Step 16: Install head venting bolts do not tighten at this time.

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Step 17: Adjust lines as needed so that there is approximately 5" protruding out as shown. Also be certain that lines are running behind throttle body and will not be impeded by air pan when head vent bolts are tightened. Tighten head vent bolts at this time.



Step 18: Using 3/16" line provided in kit cut (2) pcs 6" long and assemble as shown above.

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Step 19: Disassemble breather line previously remove from motorcycle as shown.



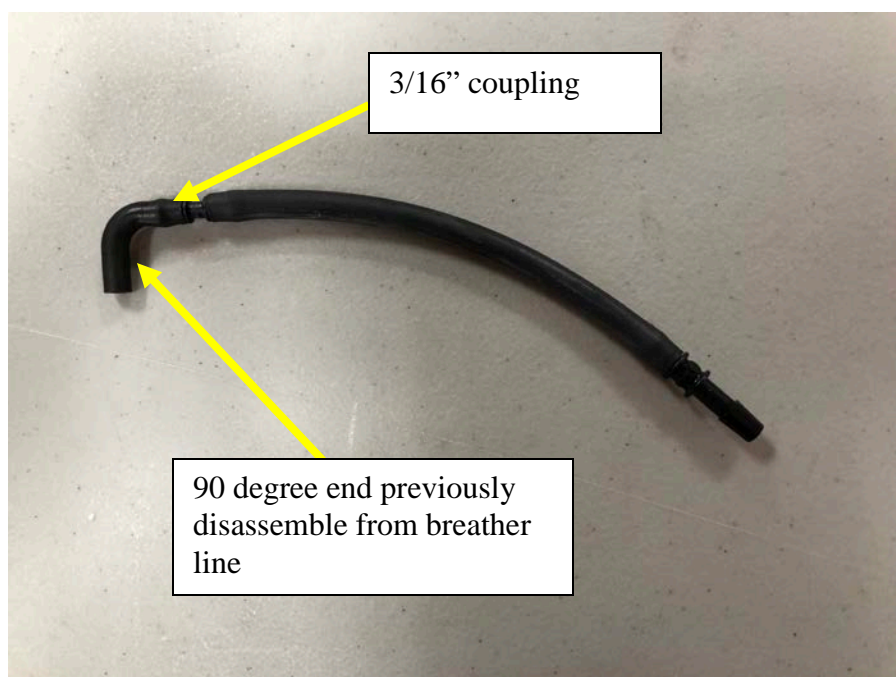
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Step 20: Using breather lines previously disassembled and 6" line with "Y" assemble as shown.



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Step 21: Using 2nd 6" line with couplings on each end assemble 90 degree to 3/16" coupling as shown.



Step 22: Install breather line assembled in step 20 to head vent bolts.

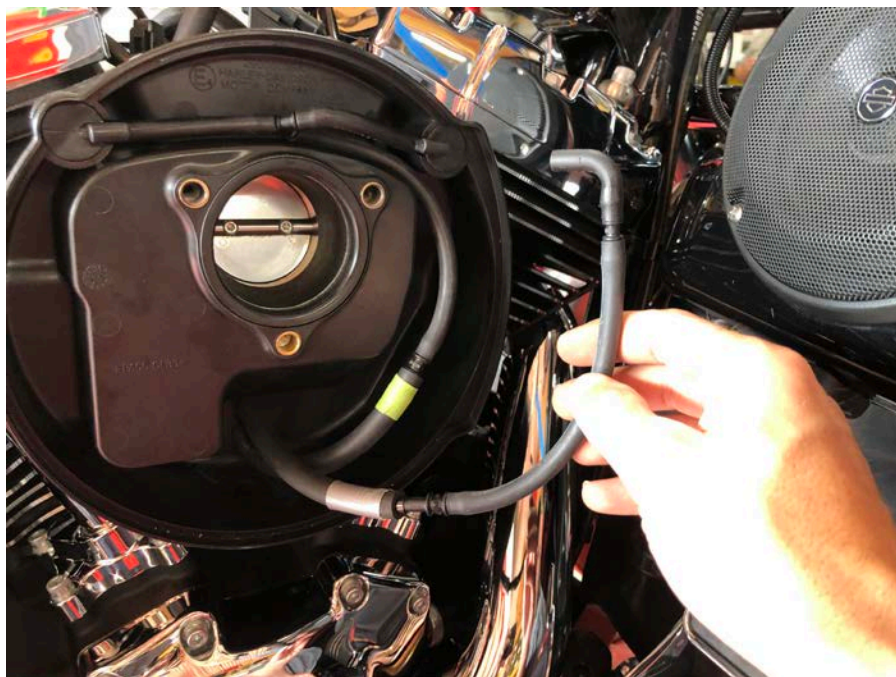
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Step 23: Connect head breather line to breather line with masking tape identifier.



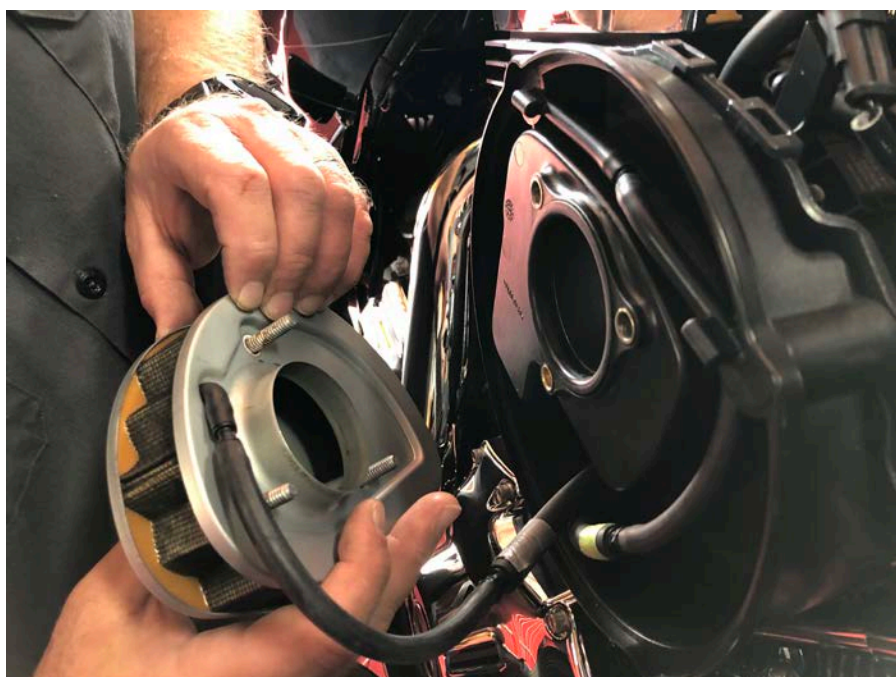
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Step 24: Connect 6" line with 90 degree end to return line as shown.



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Step 25: Insert 90 degree end of return line into back of air filter and re-install air filter.



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Step 26: Re-install air filter cover.



Step 27: Remove horn from motorcycle.

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Step 28: Disassemble horn from horn bracket as shown.



Step 29: Assemble Air Oil Separator to Air Oil Separator bracket using (2) $\frac{1}{4}$ -20x $\frac{1}{2}$ " button head bolts. Install (2) $\frac{1}{4}$ " x $\frac{1}{8}$ " NPT barbed fittings.

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Step 30: Using (2) 1/4-20x1/2" locking bolts provided in kit re-assemble horn and Air Oil Separator as shown.



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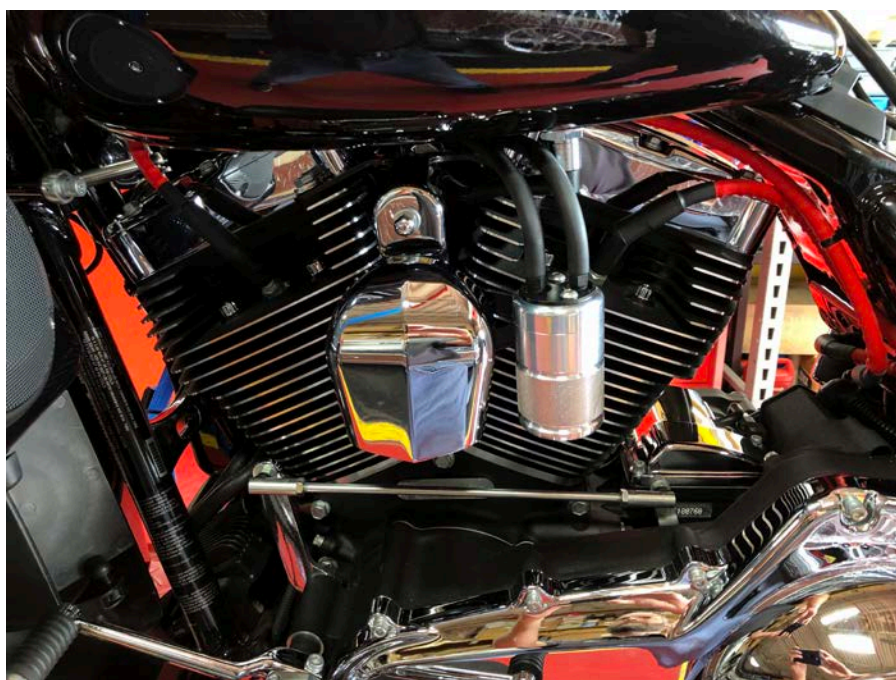


****If fuel tank was removed re-install at this time****

Step 30: Trim hose as needed and install crank case breather line with masking tape identifier to forward barb as shown



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Step 31: Trim return line as needed and install to rear barbed fitting.

For Technical Assistance, call Moroso's Tech Line
(203)-458-0542, 8:30am-5:00pm Eastern Time
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80 CARTER DRIVE
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To drain Air Oil Separator un-screw bottom of Air Oil Separator

Draining of Air Oil Separator is needed; this will depend on riding conditions (i.e.) normal day to day riding check every 200 miles until a baseline is established. A good baseline is to drain the Air Oil Separator when it is about HALF full. This will vary with temperatures (cold days vs. hot days). For track usage Air Oil Separator will need to be drained after every outing.

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