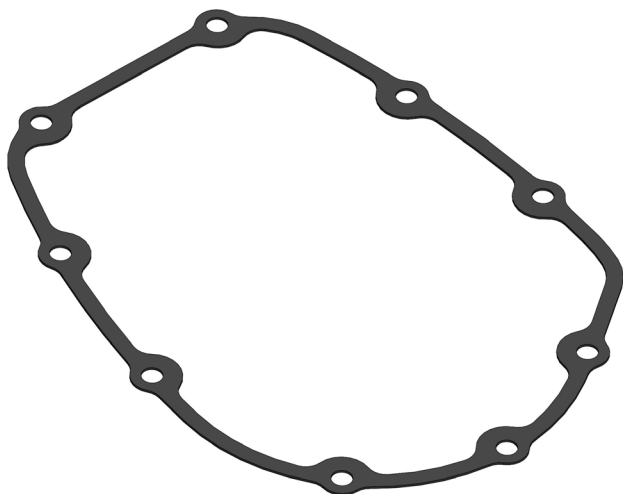




INSTALLATION INSTRUCTIONS:
HARLEY-DAVIDSON
CAMSHAFT & GASKET KIT
PART# 67001

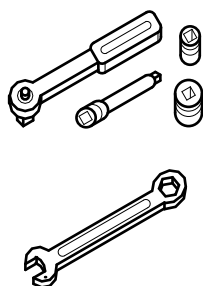
Fitment:

- 2017 – 2024 Softail models
- 2017 – 2023 Touring models (includes 24-25 FLHRXS, 24 FLHTK, 24 FLTRU)
- 2017 – 2025 Trike models



NO.	PART NO.	Description	
1	D100CM	V&H Camshaft	1
2	0177-1029	Gasket	1

TOOLS REQUIRED



- 3/16" Allen Socket
- T27 Torx Socket
- 1/2" & 9/16" Socket
- 3/8" Ratchet
- Torque Wrench (in-lbs & ft-lbs)
- Sprocket Locking Tool (Harley part # HD-47941)
- Magnetic Lifter Holder (Harley part #93979-10)

RECOMMENDED PARTS

- H-D Cam drive retention kit (Harley part # 91800088)
- O-ring (feed oil port of crankcase) (Harley part# 11900103)
- Cam Sprocket Spacer (See Fig 3)
- Adjustable Pushrod Kit
Chrome – Screamin Eagle part# 17900058
Black - Screamin Eagle part# 17900073
- Vance & Hines FPX Tuner (See FPX Intall Sheet for more details)
66155 FPX Tune (17-20 model year)
66055 FPX Track & Tune (17-20 model year)
66153 FPX Tune (21+ model year)
66053 FPX Track & Tune (21+ model year)

NOTES

- A Service Manual for your respective Year and Model motorcycle is recommended for the proper installation of this Camshaft kit.
- If you are not qualified or have the proper tools for this installation, please contact your local Harley-Davidson service department.
- Recalibration of the ECM is required when installing these Camshafts.
- H-D Cam drive retention kit part # 91800088 is required for proper installation.
- Adjustable pushrod kit is required for proper installation.

CAMSHAFT REMOVAL

Reference the Service Manual for your year and model motorcycle.

1. Prepare the motorcycle for disassembly.
 - a. Disarm security system, if equipped
 - b. Remove main fuse or disconnect the battery ground cable to prevent the potential for sparks or starter engagement.
 - c. Raise rear wheel off the ground.
2. Remove the necessary components to gain access to the camshaft compartment.
 - a. Air Cleaner
 - b. Exhaust
 - c. Floor boards / Foot pegs
3. Remove pushrod spring clips to gain access to pushrods. Collapse pushrod tubes.
4. Remove front and rear cylinder spark plugs from left side of vehicle.
5. With bike in 5th gear rotate engine to locate the front cylinder camshafts on their base circle (lowest point) to lower valve spring pressure prior to cutting O.E. pushrods. Note: When removing stock pushrods, do not cut pushrods using a method that creates metal debris (such as using a hacksaw or die grinder). Metal debris in engine causes severe damage. Recommend using bolt cutters.
6. Cut front pushrods and remove with Pushrod tubes.
7. Rotate engine to locate rear cylinder camshafts on base circle (lowest point)
8. Cut front pushrods and remove with Pushrod tubes.
9. Remove cam cover and gasket.
10. Remove chain and sprockets.
 - a. Mark one of the chain links with a colored marker
 - b. Remove cam chain tensioner.
 - c. Insert sprocket locking tool to prevent sprockets from rotating during bolt removal. (Harley part# HD-47941).
 - d. Remove cam sprocket screw and washer.
 - e. Remove crank sprocket screw and washer.
 - f. Remove cam locking tool.
 - g. Remove both sprockets and chain.
 - h. Remove spacer.
11. To prevent lifters from falling into cam compartment while the cam plate is removed use magnetic lifter holder (Harley part# 93979-10.)
12. Remove (4) oil pump screws.
13. Remove (6) support plate screws.
14. Remove cam support plate.
15. Remove camshaft.

CAMSHAFT INSTALL

Apply assembly lube to all bearing surfaces and bearings

1. Install camshaft into crankcase
2. Install new O-ring into feed oil port of crankcase if damaged or removed (Harley part# 11900103)
3. Apply assembly lube to the feed port spigot of cam support plate.
4. Slide cam support plate over shafts and mate to crankcase. Verify support plate is seated properly and start all screws.
5. Refer to **Fig 1**. Tighten screws in sequence
 - a. Tighten screws (1&2) to 60 in-lbs
 - b. Rotate crankshaft one full revolution (360°)
 - c. Tighten screws (3-8) in sequence to 120 in-lbs
 - d. Tighten oil pump screws (1&2, 9&10) to 120 in-lbs in sequence
6. Check sprocket alignment (See Service manual for your year and model for procedure)
7. Install chain and sprockets
 - a. Apply assembly lube to camshaft and crankshaft
 - b. Install correct cam sprocket spacer.
 - c. Assemble sprockets and chain with timing marks aligned. Verify that the marked chain link is on the same side as the timing marks.
 - d. Rotate camshaft until keyed spline is facing up.
 - e. Rotate crankshaft until flat side is facing up.
 - f. Install sprockets and chain, verify timing marks on the sprockets are aligned.
 - g. Apply red threadlocker cam and crankshaft sprocket screws. Apply oil to the bottom of both screw heads and washers.
 - h. Loosely install screws and washers.
 - i. Insert sprocket locking tool between sprockets. (Harley part# HD-47941).
 - j. Tighten both sprocket screws to 15 ft-lbs
 - k. Loosen both screws (360°)
 - l. Final tighten cam sprocket screw to 34 ft-lbs.
 - m. Final tighten crankshaft sprocket screw to 24 ft-lbs.
 - n. Remove sprocket locking tool.
 - o. Install cam chain tensioner and tighten to 120 in-lbs.
8. Install adjustable pushrods and covers. (See pushrod installation instructions for proper procedure.)
9. Install cam cover and supplied new gasket.
 - a. Refer to **Fig 2**, tighten screws in sequence (1-9) to 120 in-lbs.
 - b. If removed install timer cover and tighten to 35 in-lbs.

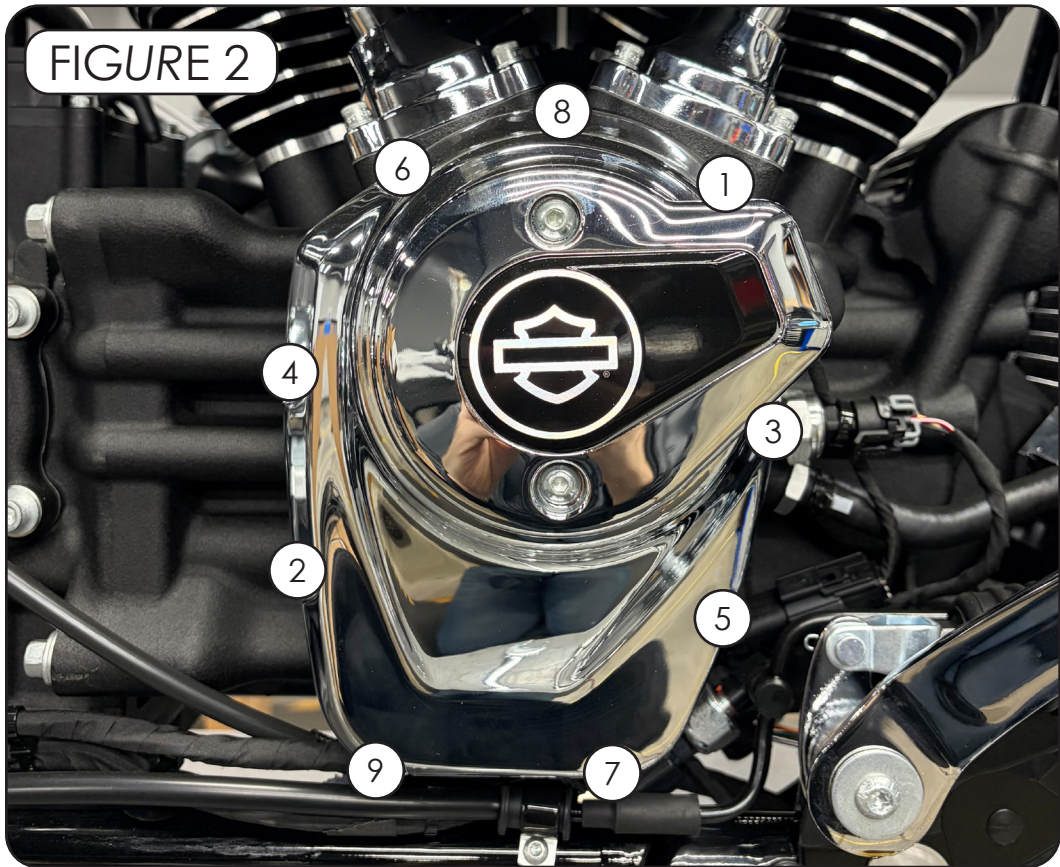
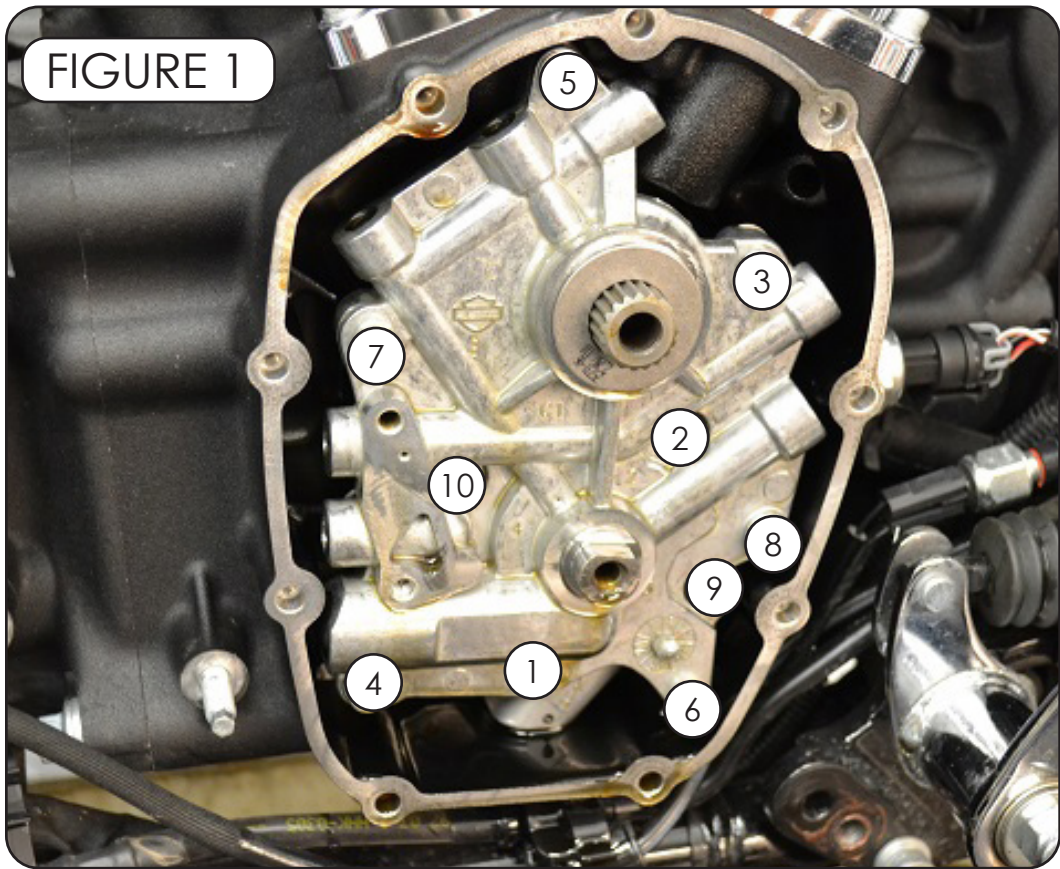


FIGURE 3

H-D PART#	IN.	MM
25729-06	0.100	2.54
25731-06	0.110	2.79
25734-06	0.120	3.05
25736-06	0.130	3.30
25737-06	0.140	3.56

Emissions Notice:

In California, in order to meet Air Resources Board emissions requirements, certain aftermarket part applications have been identified as replacements, and others have received ARB Executive Orders. All other emissions related aftermarket parts are for competition use only. A list of replacement parts and EO parts, and corresponding fitment is provided at vanceandhines.com/California.

Warranty:

All Vance & Hines products are warranted against defects in material and workmanship for a period of 90 days. This warranty does not cover discoloration or rust. This warranty shall be limited to the repair or replacement of the product, which may be proven defective under normal use. Vance & Hines will not warranty any system that has been abused, misused, improperly installed or modified.

Dealers or distributors are not authorized to make dispositions binding upon Vance & Hines. Vance & Hines will not be responsible for any labor charges incurred in removing or replacing any system under warranty. A return authorization number and a copy of the original purchase invoice must accompany all returns. Parts returned without a return authorization may be refused.

13861 ROSECRANS AVENUE / SANTA FE SPRINGS, CA 90670
SALES: (562) 921-5388
TECHNICAL: (562) 926-5291
FAX: (562) 802-0110

vanceandhines
.com