



INSTRUCTIONS

J05454

2025-01-23



SCREAMIN' EAGLE PRO TC (96 CI TO 103 CI) STAGE 4 KIT

GENERAL

Kit Number

27517-08E (Black)

Models

For model fitment information, see the P&A Retail Catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Additional Parts Required

This kit requires the separate purchase of an SE air cleaner kit that is compatible with the supplied 58mm throttle body. See the Screamin' Eagle Pro catalog for available kits.

This kit also requires the separate purchase of the Cam Drive Retention Kit (91800088) and Cam Service Kit (17045-99D) which are available from a Harley-Davidson dealer.

Separate purchase of Cam Spacer Kit (25928-06) is recommended. This kit contains five different spacers to achieve proper sprocket alignment.

See appropriate sections in service manual for the special tools required to install this kit.

Proper installation of this kit also requires ECM recalibration. Contact a Harley-Davidson dealer for details.

⚠ WARNING

Rider and passenger safety depend upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333b)

NOTE

This instruction sheet references service manual information. A service manual for your model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Kit Contents

See Figure 1 to Figure 3, and Table 1 to Table 3.

NOTE

This kit is intended for High Performance or Racing applications only and is not legal for sale or use on pollution controlled motor vehicles. This kit may reduce or void the limited vehicle warranty. Engine related performance parts are intended for the experienced rider only.

REMOVAL

Prepare for Service

1. Position motorcycle on a suitable lift.

NOTE

If vehicle is equipped with Harley-Davidson Smart Security System, see Owner's Manual for instructions to disarm the system.

2. Remove seat. See service manual.

⚠ WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

3. Remove fuel tank. See service manual.
4. Remove main fuse. See service manual.

Remove Engine Components

1. Remove existing air cleaner assembly. Refer to AIR CLEANER REMOVAL in service manual.
2. Remove existing exhaust system. Refer to EXHAUST SYSTEM REMOVAL in service manual.
3. Disassemble engine top end and cam plate assembly. Refer to appropriate ENGINE sections in service manual.
4. Remove existing clutch diaphragm spring. Refer to CLUTCH REMOVAL in service manual.

INSTALLATION

Install Engine and Clutch Components

1. See Figure 3. Inspect camshaft needle bearings (7) and replace if necessary.
2. See Figure 1 through Figure 3. Assemble cams to cam plate, performance cylinder heads and engine top end using parts from kit. Refer to appropriate ENGINE sections in service manual.
3. Assemble throttle body and injectors from kit using original equipment fuel line and fuel rail. Refer to instructions in the supplied throttle body kit.
4. Install throttle body assembly to engine using intake flanges and seals supplied in the throttle body kit. Refer to instructions from the supplied throttle body kit.
5. Install clutch diaphragm spring from kit. Refer to CLUTCH INSTALLATION in service manual.



- 6. Install exhaust system. Refer to EXHAUST SYSTEM INSTALLATION in service manual.
- 7. Install air cleaner assembly. Refer to AIR CLEANER INSTALLATION in service manual.

Final Assembly

- 1. Install main fuse. See service manual.
- 2. Install fuel tank. See service manual.
- 3. Install seat. After installing seat, pull up on seat to verify that it is secure. See service manual.

NOTICE

You must recalibrate the ECM when installing this kit. Failure to properly recalibrate the ECM can result in severe engine damage. (00399b)

- 4. Recalibrate the ECM. Contact a Harley-Davidson dealer for details.
- 5. Start and run engine. Repeat several times to verify proper operation.

Operation

Refer to BREAK-IN RIDING RULES in the Owner's Manual for instructions to break-in the motorcycle.

SERVICE PARTS

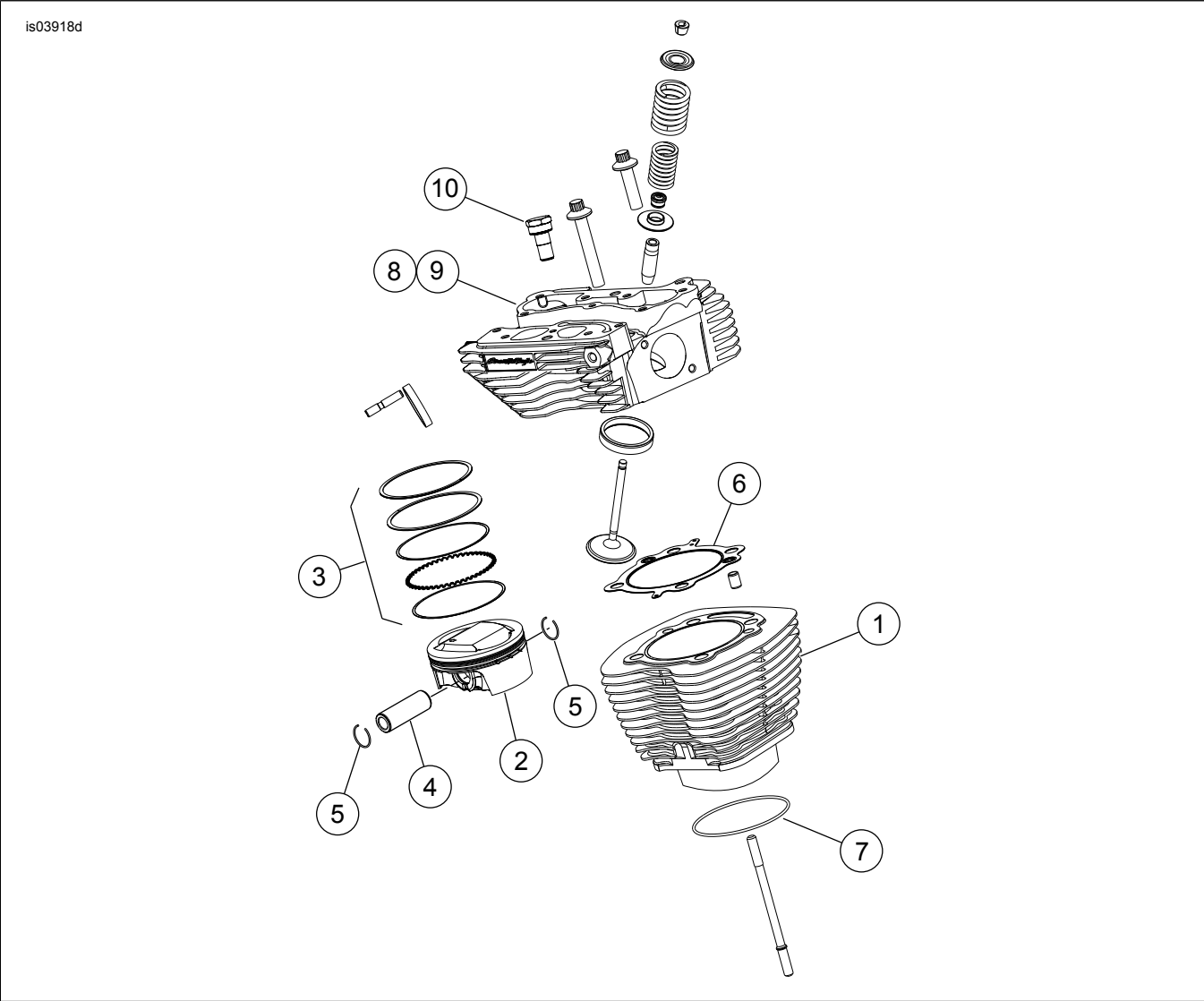


Figure 1. Service Parts: Screamin' Eagle Pro TC (96 ci to 103 ci) Stage 4 Kit

Table 1. Service Parts: Screamin' Eagle PRO TC (96 ci to 103 ci) Stage 4 Kit

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
1	3.875 cylinder assembly (black) (2)	16547-99A	7	O-ring, cylinder base	11256
2	Piston (2)	Not Sold Separately	8	Cylinder head assembly, front (black)	16500014A

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
3	Piston ring set (2)	22457-10	9	Cylinder head assembly, rear (black)	16500015A
4	Piston pin (2)	22455-03	10	Automatic compression release (ACR) plug	16648-08A
5	Piston pin circlip (4)	22097-99	Notes: Piston Kit (22144-08B) includes items 2 through 5. For cylinder head assembly (8, 9) components, refer to instruction sheet J04792.		
6	Gasket, cylinder head (2)	16787-99A			

Table 2. Service Parts: Screamin' Eagle TC (96 ci to 103 ci) Stage 4 Kit

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
6	O-ring, upper push rod cover (4)	11293	Notes: Breather assembly 17025-03A includes 8 through 10. Items 1 through 11 are included in Upper End Overhaul Kit (17052-99C) and items 6 and 7, Figure 1.		
7	O-ring, rocker arm support (2)	11270			
8	Breather bolt (4)	4400			

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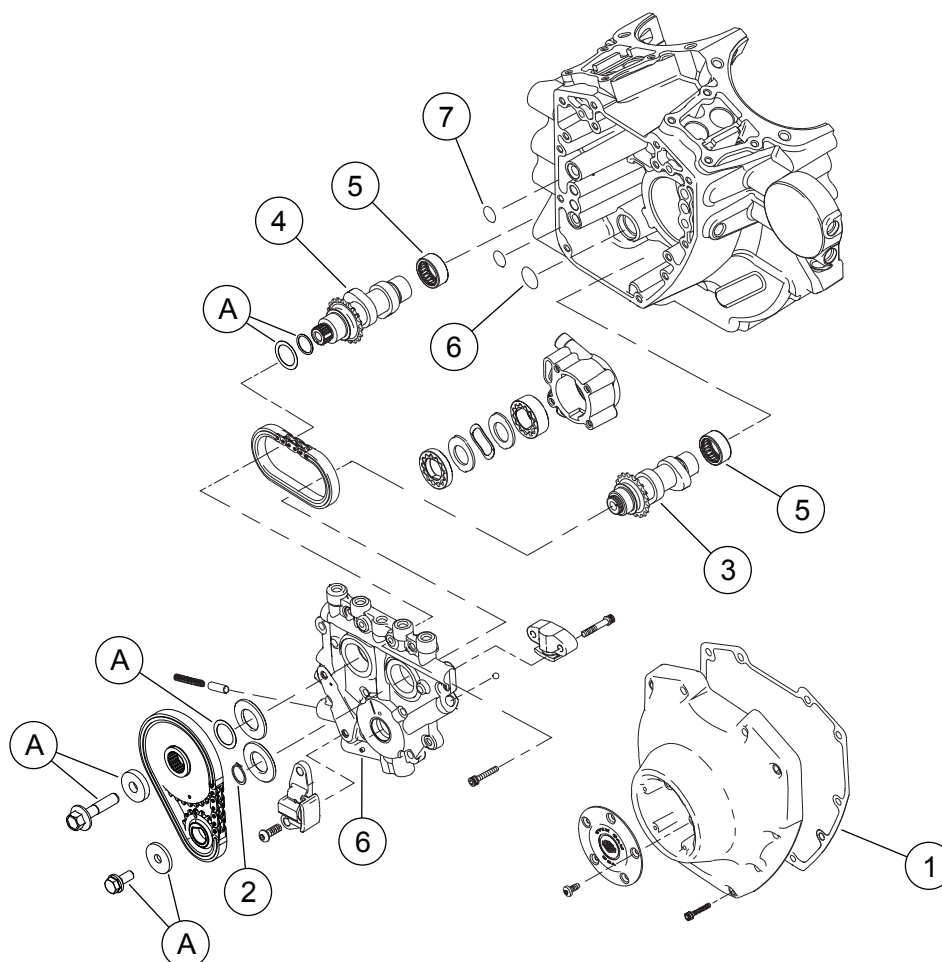


Figure 3. Service Parts: Screamin' Eagle Pro TC (96 ci to 103 ci) Stage 4 Kit

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Item	Description (Quantity)	Part Number
1	Gasket, cam cover	25244-99A
2	Retaining ring	11461
3	Camshaft, front, SE-259E	Not Sold Separately
4	Camshaft, rear, SE-259E	Not Sold Separately
5	Bearing, needle (2) (must be purchased separately, if needed)	9215
6	O-ring, oil pump to cam plate	11293
7	O-ring, cam plate to crankcase (2)	11301
8	Hi-flow injectors kit (not shown)	27796-08
9	58 mm ETC throttle body kit (not shown)	27713-08
Items mentioned in text, but not included in kit:		
A	Cam drive retention kit (includes screw and washer)	91800088
Notes: Items 1, 4, 8 and 9 are included in Cam Service Gasket Kit (17045-99D). Items 5 and 6 available in Cam Kit (25482-10).		