



INSTRUCTIONS

-J05204

REV. 2010-06-23

SCREAMIN' EAGLE AUTOMATIC COMPRESSION RELEASE WIRE HARNESS KIT

GENERAL

Kit Number

70623-11

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

NOTICE

Installation of this kit requires a calibration update using Digital Technician. Failure to download calibration update before starting motorcycle will result in ACR failure. (00567b)

- It is recommended that the calibration update be done before the installation of this kit to eliminate the possibility of ACR failure.

WARNING

The rider's safety depends 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. (00333a)

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 6 and Table 1.

REMOVAL

Prepare for Service

NOTES

Complete these steps if this is a replacement to an existing ACR Overlay Wire Harness Kit. Otherwise, proceed with the INSTALLATION section.

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

- Position motorcycle on a suitable lift.

- Remove seat according to the instructions in the service manual.
- Remove main fuse. Refer to 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)

- Remove fuel tank according to the instructions in the service manual.

INSTALLATION

Remove Electrical Components

- Replacement Only:* Separate ACR front and rear connectors from the ACR assemblies on the cylinder heads.
- See Figure 1. Disconnect electronic control module (ECM) connector (1) from ECM module (2).
- Using screwdriver, remove clear plastic secondary lock from ECM connector.
- Disassemble ECM harness connector and remove plug from cavity 15. Refer to PACKARD ELECTRICAL CONNECTORS, DISASSEMBLY in service manual.

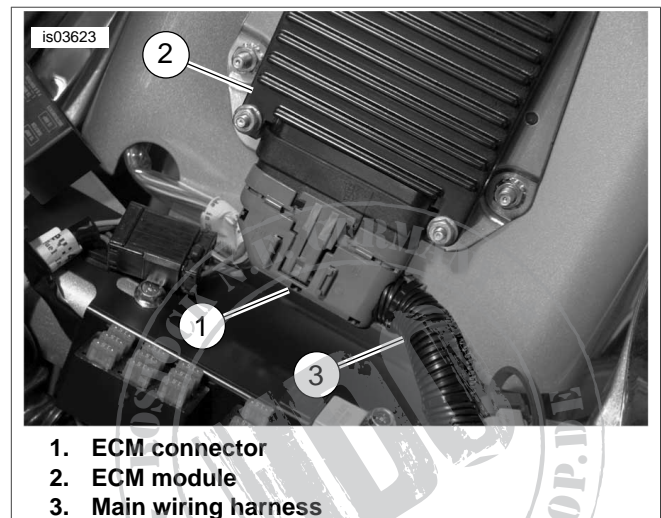


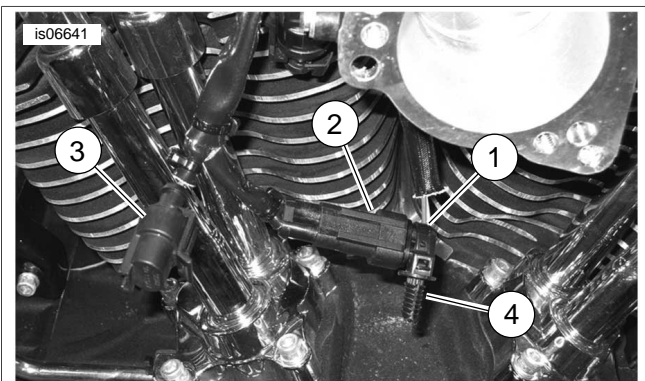
Figure 1. Electronic Control Module (ECM) and Connections

Install and Route ACR Overlay Wire Harness

- Determine best routing for ACR overlay wire harness to cylinder heads.

2. Connect ACR overlay wire harness to the ACR assemblies on the cylinder heads. Slack should be allowed at cylinder heads for relative motion.
3. **US (domestic and CAL) - No Active Intake but connector present with dust cap:** See Figure 2. Disconnect the unused Active Intake socket housing attached to the air cleaner backplate. Connect mated housings to the air cleaner backplate using original fastener.
 - a. Connect the ACR pin housing (kit harness) to the Active Intake socket housing (vehicle harness).
 - b. Install the dust cap to the remaining ACR harness socket housing (kit harness).
 - c. Connect mated housings to the air cleaner backplate using original fastener. Determine best routing for the remaining length of the ACR harness and Active Intake harness lead length back up into the area above and rear of the induction module.

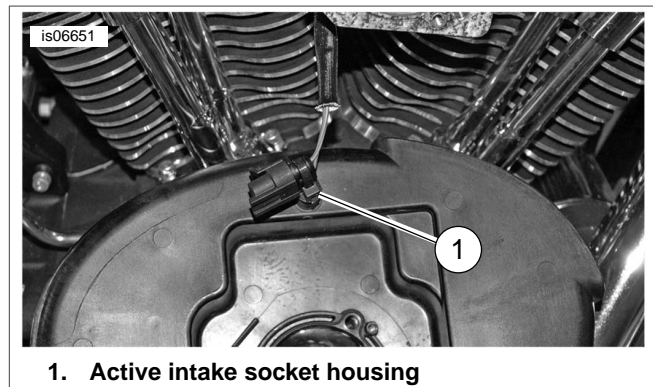
If using a Screamin' Eagle A/C or other open back A/C assembly, determine best routing for the remaining length of the ACR harness and Active Intake harness lead length back up into the area above and rear of the induction module.



1. Active intake socket housing (vehicle harness)
2. ACR pin housing (kit harness)
3. Capped ACR socket housing (kit harness, unused)
4. Harness fastener to air cleaner backplate

Figure 2. Power Connection, ACR harness (kit) to Active Intake (vehicle)

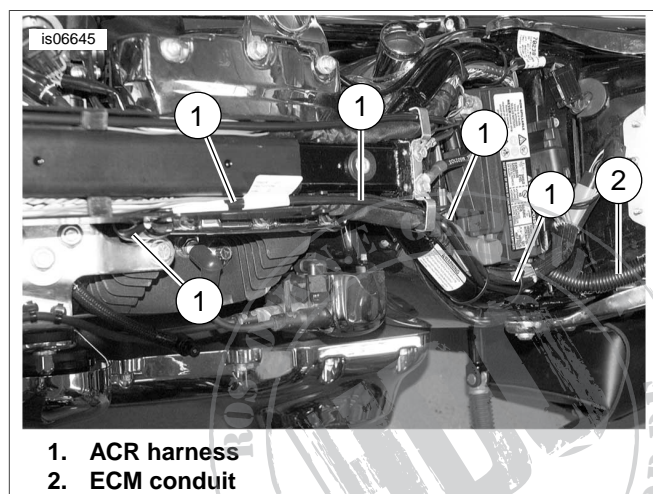
4. **HDI (non-domestic) - Active Intake equipped:** See Figure 3. Disconnect the Active Intake socket housing from the Active Intake solenoid located on A/C assembly.
 - a. Connect the ACR pin housing (kit harness) to the Active Intake socket housing (vehicle harness).
 - b. Connect ACR harness socket housing (kit harness) to Active Intake solenoid located on A/C assembly.
 - c. Connect mated housings to the air cleaner backplate using original fastener. Determine best routing for the remaining length of the ACR harness and Active Intake harness lead length back up into the area above and rear of the induction module.



1. Active intake socket housing

Figure 3. Active Intake Socket Housing, unused with dust cap

5. It is recommended to thread harness leads up and under and behind both the TPS and IAT sensor harness leads. In all cases, to avoid chafing or other damage to the harnesses make sure:
 - Slack is allowed at cylinder heads for relative motion.
 - Extra wire lengths and harness are cinched up as needed to keep from rubbing on fuel tank, oil tank, battery box, frame, etc.
6. Route the rest of the harness between the cylinders to the left side of the motorcycle, under the frame backbone.
7. See Figure 4. Route the harness up through the harness trough and thread the harness with the LGN/R wire through the existing cable ties if possible, and into the ECM conduit to the harness connector. Secure with kit cable ties and ty-raps as necessary.
8. Cut ty-raps on ECM wire harness conduit to enable routing of LGN/R wire into the back of the ECM connector housing.
9. See Figure 5. Install LGN/R pin housing wire from overlay harness into cavity 15 of ECM harness connector.
10. Assemble ECM harness connector and attach to ECM. Replace ty-raps previously removed.



1. ACR harness
2. ECM conduit

Figure 4. Wire Harness Routing

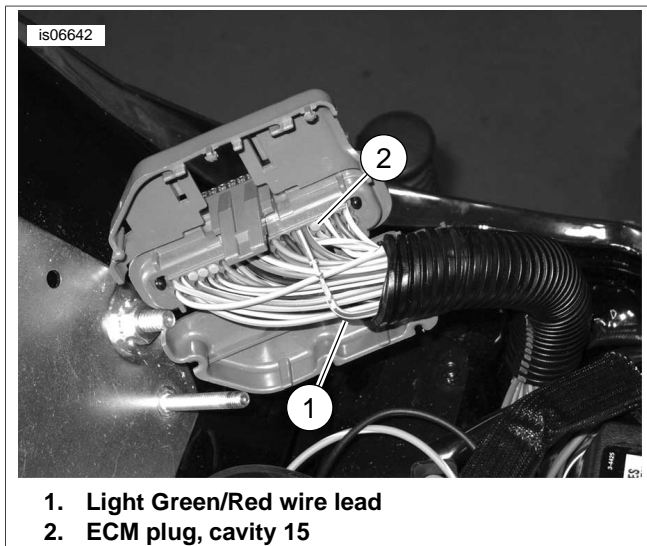


Figure 5. ECM Wire Lead Installation

FINAL ASSEMBLY

1. Install fuel tank according to the instructions in the service manual.

2. Install main fuse.

WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

3. Install seat according to the instructions in the service manual.

NOTICE

Installation of this kit requires a calibration update using Digital Technician. Failure to download calibration update before starting motorcycle will result in ACR failure. (00567b)

- If the calibration update has not been performed, it needs to be done NOW. Starting the motorcycle without the calibration update WILL cause ACR failure.
4. Start and run engine. Repeat several times to verify proper operation.



SERVICE PARTS

is03622b

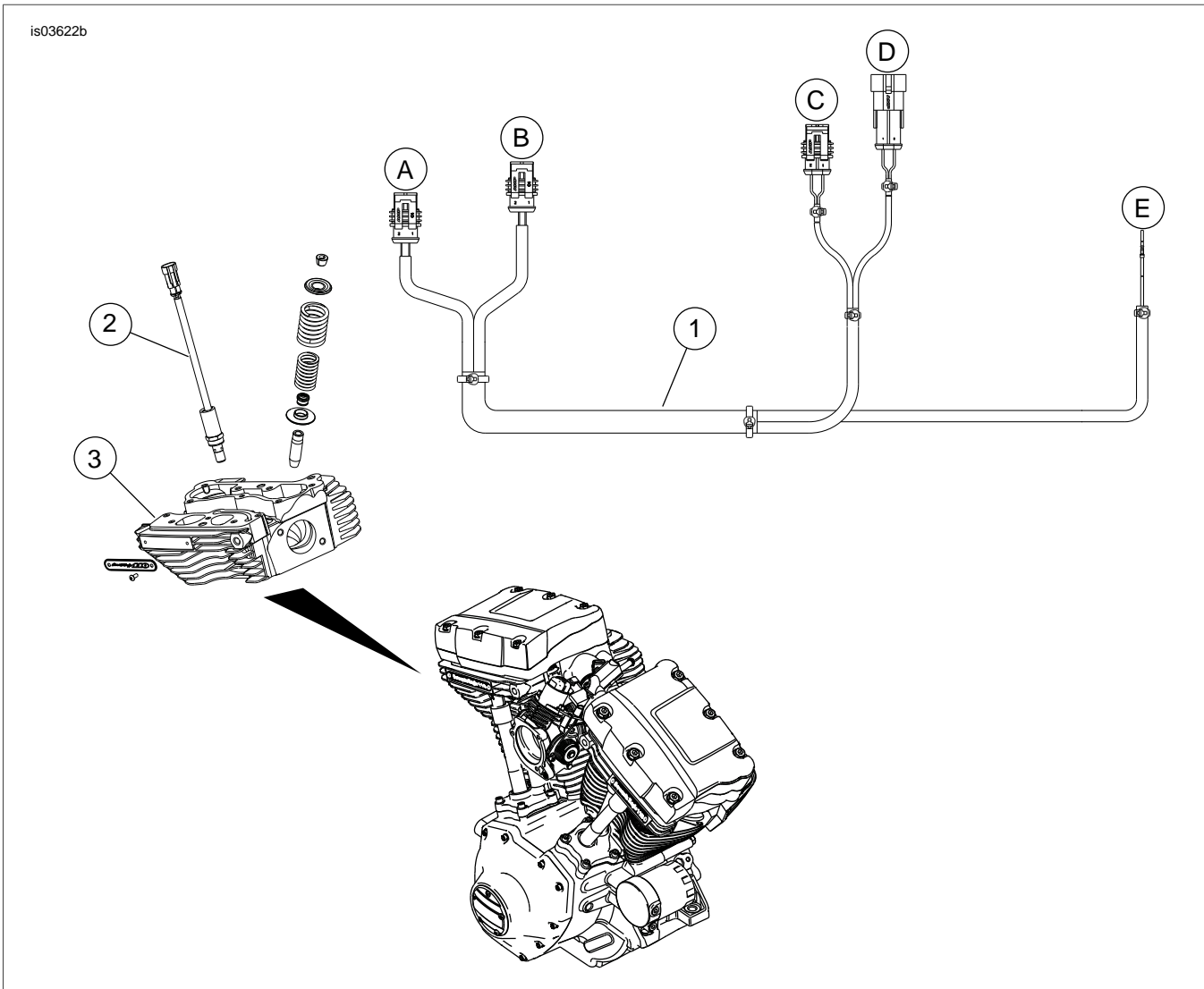


Figure 6. Service Parts; Automatic Compression Release Wire Harness Kit

Table 1. Service Parts: Automatic Compression Release (ACR) Overlay Wire Harness Kit

Item	Description (Quantity)	Part Number	Item	
1	ACR overlay wire harness	Not Sold Separately	Electrical Connections:	
2	Automatic compression release (ACR)	Reference Only	A	ACR front socket housing
3	Cylinder head	Reference Only	B	ACR rear socket housing
4	Strap, cable (6) (Not Shown)	10006	C	Active Intake socket housing (to Active Intake solenoid - HDI only)
5	Strap, cable (3) (Not Shown)	10039	D	Active Intake pin housing (to Active Intake - vehicle harness)
6	Strap, cable (6) (Not Shown)	10065	E	Pin terminal (to ECM connector, cavity 15)