

PRODUCT PROGRAM BP5 – ISOLATOR KIT

GENERAL

The purpose of this service bulletin is to inform you that Buell Motorcycle Company has developed an Isolator Kit (Part No. 91360-99Y) for motorcycles built prior to the 1999 model year. This kit can be ordered to replace failed rear engine isolators and to prevent future failures of the isolators.

VEHICLES INVOLVED

All 1996-1998 Buell motorcycles could be subject to this condition.

DEALER ACTION

The new rear Isolator Kit (Part No. 91360-99Y) is available. The kit includes two isolators and two shims. Only install the **new** isolators with the raised letter "B" molded into the side. Do not use the old isolator, Part No. 47680-94Y, for replacement purposes.

If a customer comes in with torn isolators on a pre-1999 model year motorcycle, inspect isolators prior to disassembly to verify that the isolators are actually torn.

NOTE

If an isolator's paint coating is cracked, it may give the false impression that the isolator itself is damaged. Inspect each isolator carefully and order an Isolator Kit (Part No. 91360-99Y) only for vehicles with torn isolators.

In the interest of customer satisfaction, if your customer experiences a failure with the old-style isolators, the new isolators can be installed under warranty. Vehicles beyond the warranty period will not require a prior authorization. See [CREDIT PROCEDURES](#).

REPAIR PROCEDURE

Isolator Removal

NOTE

- Perform the following procedures according to the guidelines given in the service manual for the particular model and year being serviced.
- Mark all hardware as it is removed so that it may be returned to its original location.

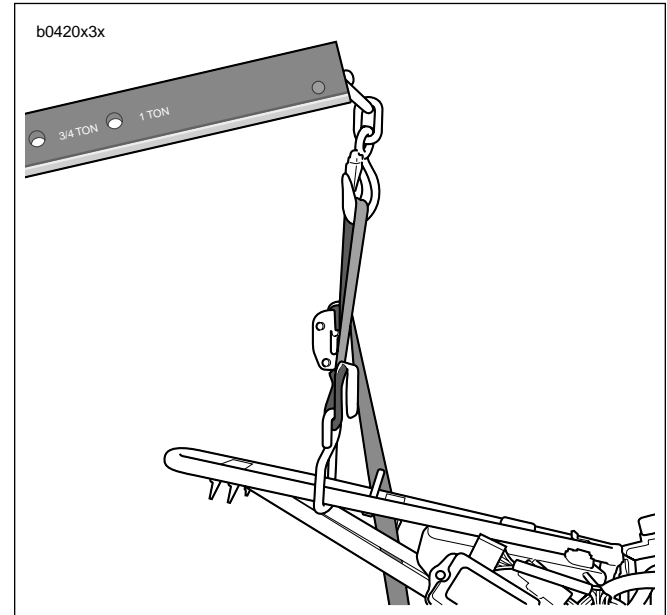


Figure 1. Floor Hoist

1. Prepare motorcycle for isolator service.
 - a. Remove saddlebags on S2T/S3T models.
 - b. Place vehicle on a lift and anchor front wheel in place.
 - c. Raise rear wheel off lift using REAR WHEEL SUPPORT STAND (Part No. B-41174).

WARNING

To avoid accidental start-up of vehicle and possible personal injury, disconnect the battery cables before proceeding. Always disconnect the negative cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion producing personal injury.

2. Disconnect **both** battery cables, negative cable first.
3. Remove seat, fuel tank cover (if applicable), fuel tank and tail section.
4. See [Figure 1](#). Attach lifting straps to a floor hoist placed behind the lift. Connect lifting straps to motorcycle frame tubes as shown.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO. 1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO:
INITIAL HERE									

CAUTION

Remove oil filter before raising frame. Without removal, oil filter will be damaged during procedure.

5. Remove cap from oil tank. Drain oil tank and remove oil filter.
6. Remove rear fender.
7. Remove rear brake caliper assembly. Support caliper from frame with rope.
8. Label and detach feed, vent and return hoses from oil tank.
9. Remove left rider footrest from footrest mounts.
10. Remove shift linkage, taking care not to scratch primary cover.
11. Remove air cleaner cover and backplate. This includes removing right side fairing lower on S2T/S3T models.
12. Remove carburetor, exhaust header and muffler.
13. Remove sprocket cover.
14. Unplug all wires which do not have adequate slack to support raising frame above engine. These will include:
 - a. Neutral indicator wiring.
 - b. Cam position sensor connector.
 - c. Relay terminal on starter.
 - d. Oil pressure switch lead.
 - e. Voltage regulator wiring.
 - f. V.O.E.S. wiring.
15. Remove any restrictive cable straps from wiring harness and oil lines. Note cable strap locations for reinstallation upon assembly. All wires and hoses must have adequate slack when frame is raised and all oil and vent lines must not be pinched.
16. Place a crating strap between the engine cylinders and around the lift. Tighten crating strap until snug.
17. Detach rear tie bar and chassis ground strap from frame. Do not remove tie bars from engine.
18. See [Figure 2](#). Remove isolators bolts (1) and washers (2) on each side.
19. Slowly raise floor hoist until rubber isolators (3) can be removed. Frame will rise while engine and swingarm remain secured to lift by crating strap.
20. Remove rubber isolators.

Isolator Pin Inspection

See [Figure 3](#). After disassembly, inspect frame mounted locating pins. Pins must extend from frame between 0.080-0.120 in. (2.032-3.048 mm).

- If pin length is within limits, continue with installation of **new** isolators and shims.
- If pin length is greater than specification, carefully file end of pin until it falls within specification. File perpendicular to pin end. Pin must not have any sharp or uneven edges which could tear rubber isolator upon installation.

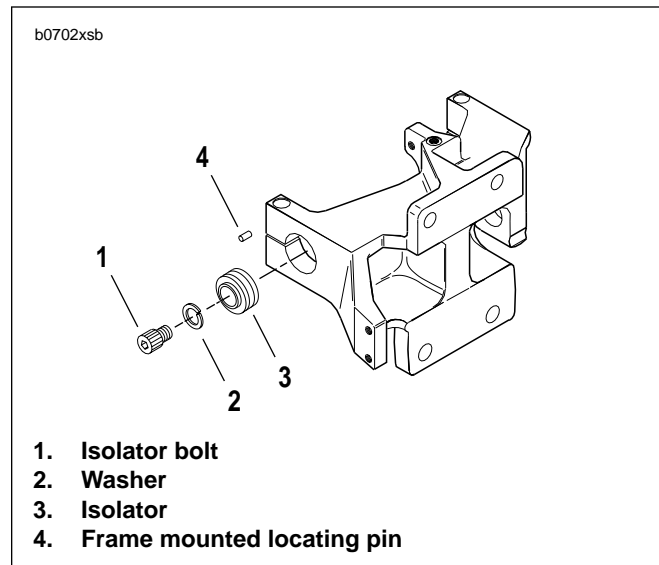


Figure 2. Isolator Assembly Before Installing Kit

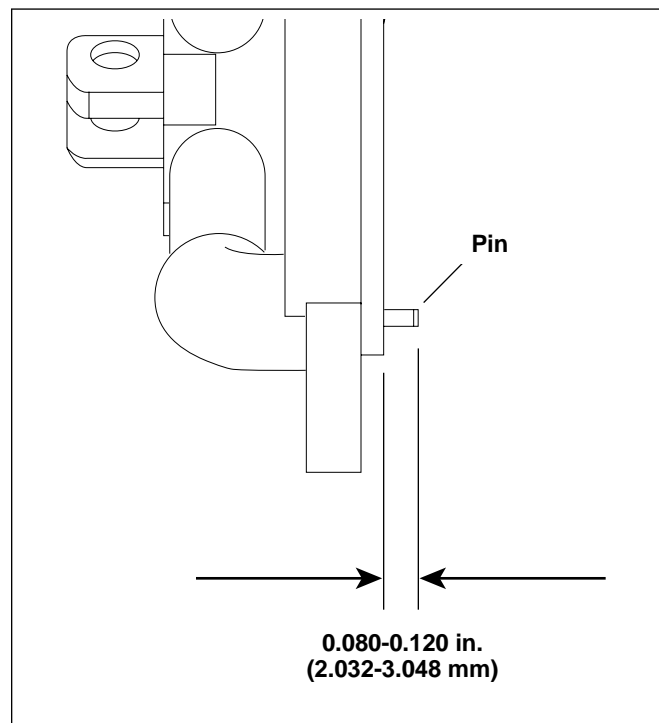


Figure 3. Locating Pin Inspection

Isolator Installation

CAUTION

Isolator bolts must be tightened within 30 minutes of applying **LOCTITE THREADLOCKER**. Failure to tighten bolts within 30 minutes may cause **LOCTITE** to set.

1. See [Figure 4](#). Prepare isolator hardware for installation.
 - a. Place isolator shim (5) next to swingarm mount block.
 - b. Insert **new** rubber isolators (3) in place. Align metal pin on frame (4) and hole in isolator.
 - c. At this time, apply **LOCTITE THREADLOCKER 262** (red) (Part No. 94759-99) to isolator bolt threads (1) and **LOCTITE ANTI-SEIZE** to bottom of isolator bolt head.
2. Lower floor hoist and guide frame over swingarm mount block.

CAUTION

- Use caution when installing isolator bolts. Bolts may be easily cross threaded.
 - Observe seam on rubber isolator after isolator bolt is tightened. If seam twists, apply more **LOCTITE ANTI-SEIZE** to underside of isolator bolt heads.
 - Do not overtighten isolator bolts. Too much torque may lead to premature isolator failure.
3. As frame lowers, install isolator bolts.
 - a. Place washer (2) over isolator bolt. Install assembly through isolators and into the swingarm mount block.
 - b. Tighten to 100-110 ft-lbs (135.6-149.1 Nm).
 - c. See [Figure 5](#). After tightening isolator bolts, verify that seam on isolators is perpendicular to swingarm mount block. If seam is not perpendicular loosen isolator hardware and realign.
 4. Install tie bars and chassis ground strap. Tighten tie bar hardware to 30-33 ft-lbs (40.7-44.7 Nm).
 5. Install carburetor, air cleaner assembly and exhaust system. This includes installing right side fairing lower on S2T/S3T models.
 6. Reconnect all disconnected wires except battery cables.
 7. Install shift linkage and left rider footrest.
 8. Attach oil tank hoses and fill lubrication system. Consult a service manual for oil type and amount.
 9. Install **new** cable straps around wiring and oil lines as needed.

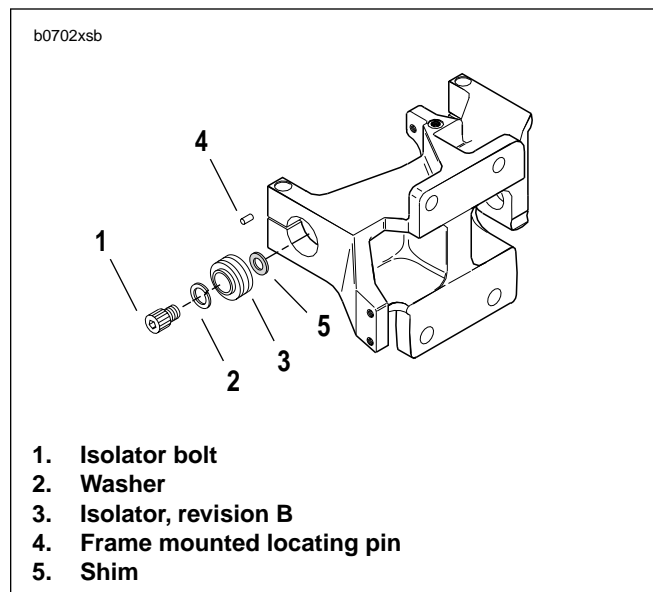


Figure 4. Isolator Assembly After Installing Kit

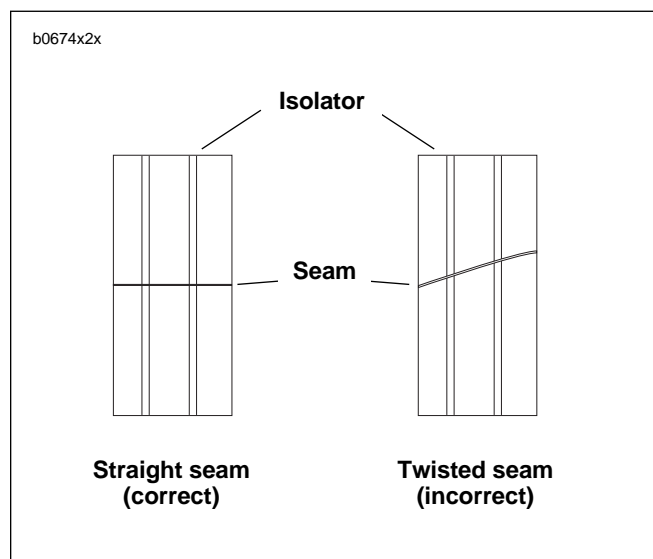


Figure 5. Isolator Alignment

⚠ WARNING

Always test motorcycle brakes at low speed after servicing or bleeding system. To prevent personal injury, Buell recommends that all brake repairs be performed by a Buell dealer or other qualified mechanic.

- 10. Install rear brake caliper assembly.
- 11. Install rear inner fender.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

- 12. Install tail section, fuel tank, fuel tank cover (if applicable) and seat.

⚠ WARNING

Always connect positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in personal injury.

- 13. Connect both battery cables, positive cable first.
- 14. Remove motorcycle from lift. Install saddlebags on S2T/S3T models.
- 15. Check oil level after starting vehicle and allowing motorcycle to reach operating temperature.

⚠ WARNING

Check for proper brake lamp operation before riding motorcycle. Visibility is a major concern for motorcyclists. Failure to have proper brake lamp operation could lead to personal injury.

- 16. Turn ignition key switch to IGN. Apply rear brake pedal to test brake lamp operation. Turn ignition key switch to LOCK.

CREDIT PROCEDURES

After servicing each vehicle, file a warranty claim referencing Product Program BP5 in the "Description of Repair" or "Comments" section of the claim. Fill in the rest of the claim as follows:

Table 1. Product Program BP5

Claim Type*	BMC, BGW
Event 1, Qty & Problem Part No.	0-47564-86
Event 1, Additional (Replacement) Qty & Part No.	1-91360-99Y
Part Description	Rear Isolator Kit
Primary Labor Code	2375
Time: S2T/S3T Models	3.1
Time: All Other Models	2.8
Customer Concern Code	9203
Condition Code	2101

*Use BMC if vehicle is still within factory warranty period; use BGW if vehicle is beyond factory warranty period. Vehicles beyond factory warranty period do not require prior authorization for this product program.

NOTE

If additional parts such as cable straps are required, list them under Event 1, Additional Parts.