

# SERVICE BULLETIN

**Buell**<sup>®</sup>  
AMERICAN MOTORCYCLES

B-032

July 27, 2000

## PRODUCT PROGRAM BP7 - EXHAUST HEADER MOUNT RETROFIT KIT

### GENERAL

The purpose of this bulletin is to announce the release of a **new** kit for all 1995-2000 S1, S1W, M2, S2/S2T, S3/S3T, and X1 Model Buell motorcycles and to provide installation instructions. Buell Motorcycle Company has developed this kit as an upgrade to the exhaust header mounts currently in use.

The kits will be available on or before 31 July, 2000. Kits must be ordered as required and purchase price will be reimbursed by warranty. See CREDIT PROCEDURES.

The life expectancy of this product program is one year from the date of issue of this bulletin.

### VEHICLES INVOLVED

All domestic and HDI 1995-2000 S1, S1W, M2, S2/S2T, S3/S3T, and X1 Model Buell motorcycles.

### DEALER ACTION

Follow the instructions provided to install the kit. See below for list of Kit Contents:

#### Exhaust Header Mount Retrofit Kit (Part No. S1001.01A1)

Description	Quantity
Support, Header Assembly	1
Bracket, Voltage Regulator (not used on S1/S1W models)	1
Washer, 5/16 (S1/S1W models only)	1
Spacer, Muffler Mount	1
Bracket, Muffler Mount (rear) - used on 1999-2000 Models Only	1
Screw, 5/16-18x1-1/2 Hex Head, Grade 8	2
Locknut, metal 5/16-18	2
Cable Ties, Thick	3

### INSTALLATION

The following procedure applies to all models unless otherwise indicated.

#### Removing the Exhaust

1. Secure motorcycle on a suitable lift.

#### WARNING

**To protect against shock and accidental start-up of vehicle, disconnect the negative battery cable before proceeding. Inadequate safety precautions could result in death or serious injury.**

#### NOTE

*The S1W and S1 negative battery cables were recalled under safety recall #0811. If this recall service was not performed, refer to Service Bulletin B-019INT and perform recall procedure before continuing.*

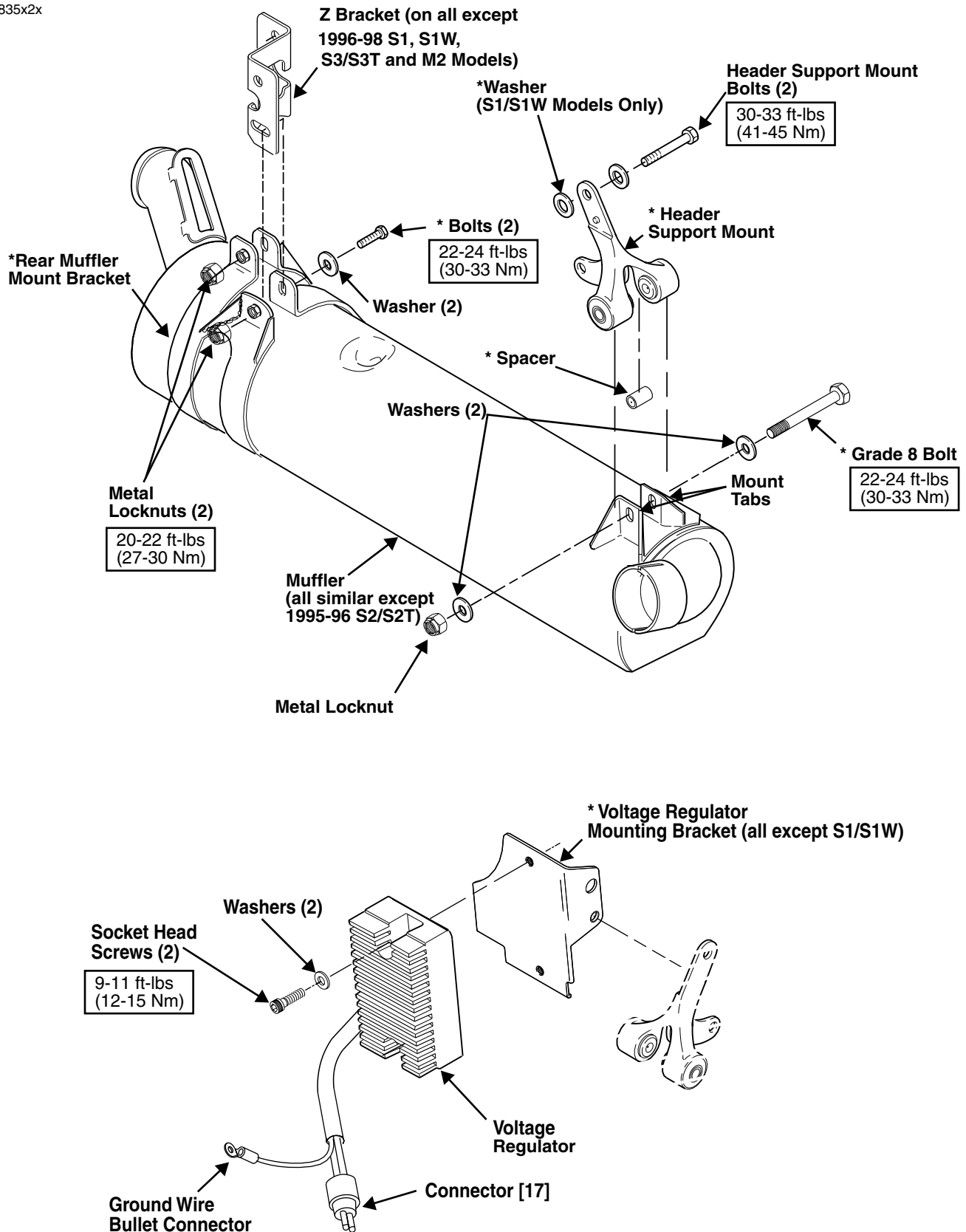
2. Disconnect negative battery cable from battery terminal.

#### NOTE

*Lightning S1 and White Lightning S1W models have side-mounted voltage regulators and will not need to perform steps 3 through 5. For S1 and S1W models, go to step 6.*

3. Remove voltage regulator from bracket.
  - a. See Figure 1. Remove two socket head screws and voltage regulator from bracket. Leave ground wire connected to back of voltage regulator.
  - b. Cut cable ties which secure voltage regulator wire harness to oil pump fitting. Pull voltage regulator connector [17] down from under gearcase cover.
  - c. Cut cable tie that secures connector halves together and disconnect connector [17].
  - d. Remove ground wire and disconnect connector [17] halves.
  - e. Set aside any star washers that may be present behind voltage regulator and/or bracket for reuse.
4. See Figures 1 and 2. Remove (long) button head screw, washer and metal locknut from voltage regulator mounting bracket. Discard long button head screw.
5. Insert ball end allen wrench through screw hole and remove short button head allen head screw, washer, and metal locknut. Remove voltage regulator mounting bracket from header support mount. Retain fasteners for reuse.

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									



\* = Included in Kit

Figure 1. Modified Exhaust Mounting System (1999-2000 Models)

6. See Figure 3. Position bottle jack under swing arm mount block and raise motorcycle just enough to unload rear suspension (rear wheel remains on lift).
7. Remove and discard header support mount from muffler and crankcase.
  - a. See Figure 2. Remove large button head allen screw, two washers and metal locknut from header support mount. Discard screw. Retain washers and locknut for reuse.

**NOTE**

*Earlier models have unthreaded front shock mounting brackets that used metal locknuts. Later models have the threaded front shock mounting bracket and no locknuts.*

- b. See Figure 2. Remove two header support mount bolts, washers, locknuts (if present) and header support mount, allowing shock mounting bracket (attached to front shock eye) to hang free. Discard header support mount. Retain washers and two bolts.
8. Inspect muffler inlet, O<sub>2</sub> sensor bung (if present), mounts and fasteners for cracks or damage. Replace damaged parts as required. See Credit Procedure.

**NOTE**

*The Lightning S1 and S1W do not use the provided voltage regulator bracket and instead use a washer between the header support mount and crankcase. This washer is necessary to maintain the correct alignment of the header support mount. For Lightning S1 and S1W Models, go to step 10.*

9. Install **new** voltage regulator bracket to **new** header support mount and install to crankcase/muffler.

**NOTE**

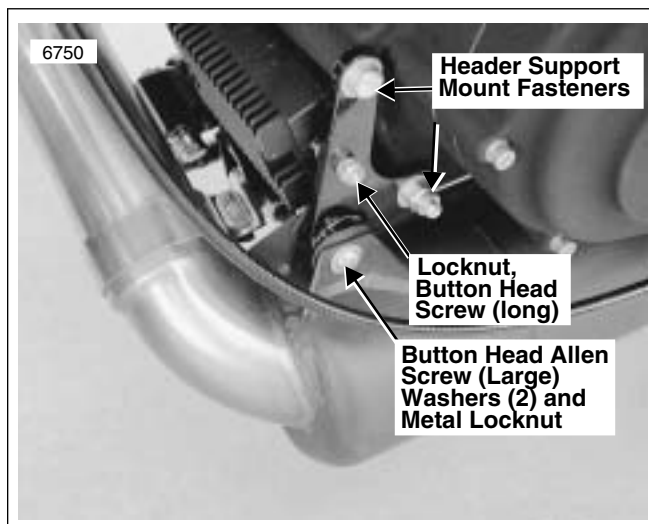
*Scraping the paint from the voltage regulator bracket is required to ensure a good ground for the voltage regulator.*

- a. See Figure 4. Scrape paint from inside corner of voltage regulator bracket on crankcase side.
  - b. See Figure 4. Position **new** header support so pin engages hole in new voltage regulator bracket.

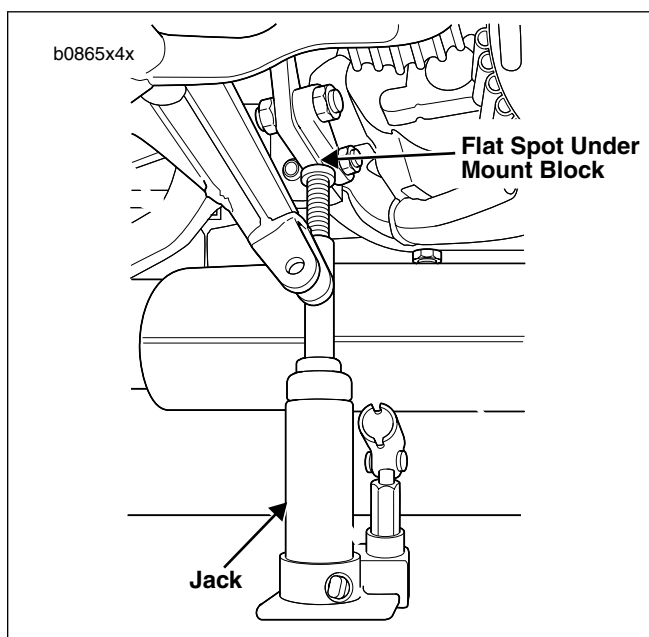
**NOTE**

*Make sure voltage regulator ground wire remains behind voltage regulator bracket.*

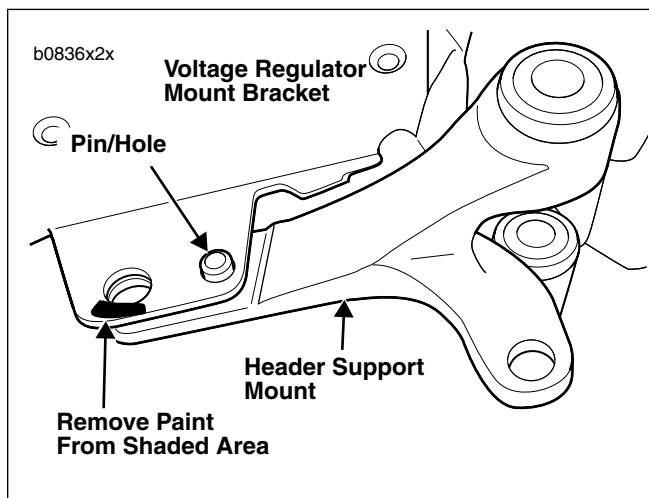
- c. See Figure 1. Apply LOCTITE THREADLOCKER 243 (Blue) to threads of two original header support mount bolts. Install voltage regulator bracket/header support assembly with two original header support mount bolts and washers (and locknuts if present). DO NOT tighten.
  - d. Apply LOCTITE THREADLOCKER 243 (Blue) to threads of original small button head allen screw and install to voltage regulator bracket and shock mounting bracket. DO NOT tighten.
  - e. See Figure 4. Check voltage regulator bracket to verify that pin remains engaged in hole and that bracket does not pivot front to rear.
10. **S1/S1W Models Only:** See Figure 1. Install **new** washer (provided in kit) over hole at top of the header support mount (between header support mount and crankcase). Install header support mount with two original header support mount bolts and washers.



**Figure 2. Original Exhaust Header Mount (1999-2000)**



**Figure 3. Supporting Motorcycle with Jack (Shock Absorber Removed for Clarity)**



**Figure 4. Voltage Regulator Bracket**

11. See Figures 1 and 5. Install **new** grade 8 bolt, original washer, **new** spacer, original washer and metal locknut to header support mount. NOTE: Spacer goes between front muffler mount tabs.

**NOTE**

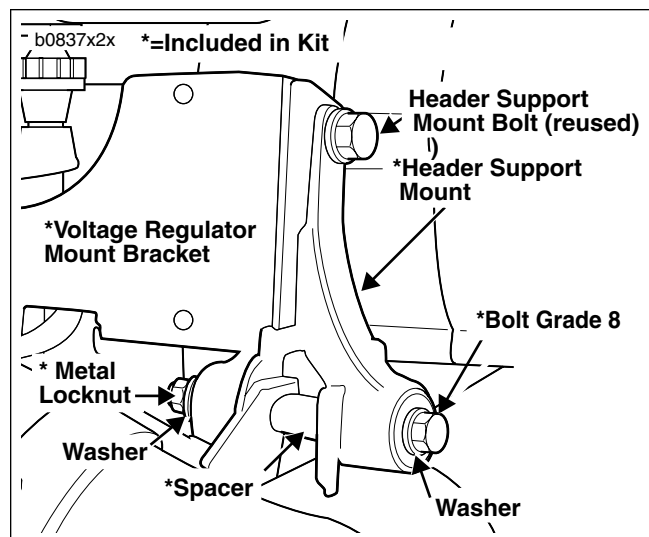
*Step 12 only applies to 1999 and 2000 Models. Earlier Models have a welded rear mount and will not use the provided rear mount. Go to step 13 if servicing a pre-1999 motorcycle.*

12. **1999-2000 Models Only:** See Figure 1. Remove and discard muffler mount from rear of muffler and install **new** muffler mount.
  - a. Remove two screws, lockwashers and washers from rear exhaust mount and Z bracket. Discard screws and lockwashers. Retain washers for reuse.
  - b. Push rear of muffler down slightly and remove (slide off) and discard original rear muffler mount bracket.
  - c. Slide **new** rear muffler mount bracket over muffler and install with two **new** grade 8 bolts (provided in kit), original washers and **new** metal locknuts. NOTE: Install two metal locknuts over weldnuts on right side.
  - d. Tighten rear muffler mount bracket bolts to 22-24 ft-lbs (30-33 Nm).
  - e. Tighten rear muffler mount bracket metal locknuts to 20-22 ft-lbs (27-30 Nm).
13. Tighten header support mount fasteners.
  - a. Tighten two header support mount bolts to 30-33 ft-lbs (41-45 Nm).
  - b. Tighten button head allen screw to 9-11 ft-lbs (12-15 Nm).
  - c. Tighten front muffler mount bolt to 22-24 ft-lbs (30-33 Nm).
14. Lower and remove bottle jack from motorcycle.

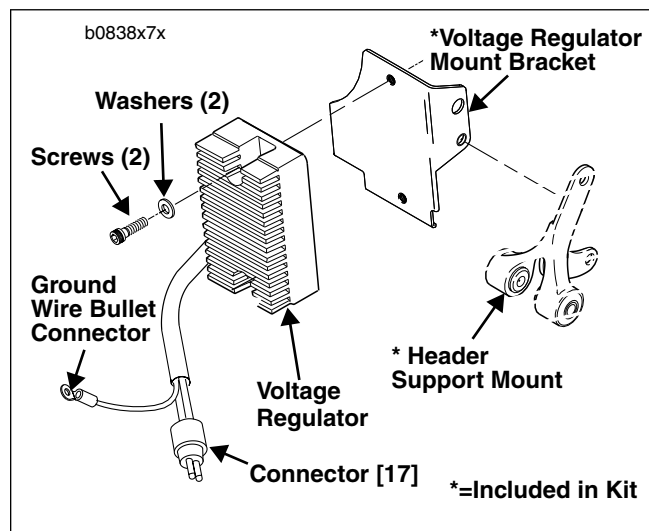
**NOTE**

*For Lightning S1 and White Lightning S1W models proceed to step 16.*

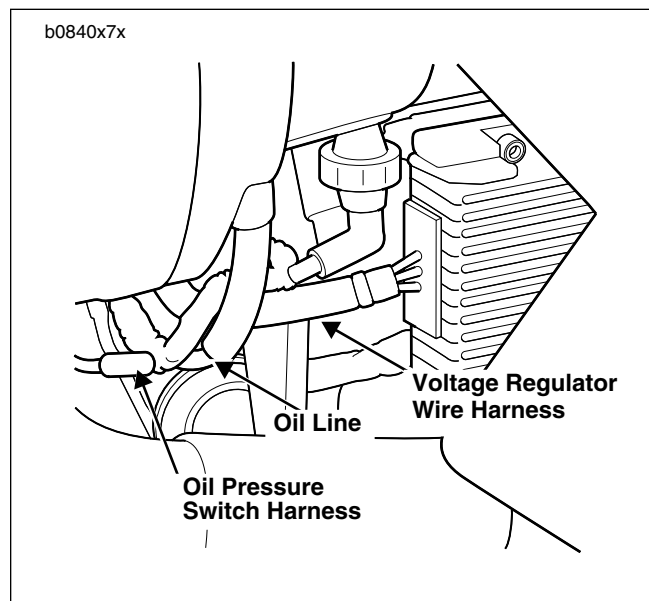
15. See Figure 6. Install voltage regulator.
  - a. Install voltage regulator to **new** bracket with original socket head screws and washers. Tighten screws to 9-11 ft-lbs (12-15 Nm).
  - b. See Figure 7. Route voltage regulator wire harness between shock mounting bracket and oil line.
  - c. See Figure 8. Mate connector [17] halves and secure with cable tie.
  - d. See Figure 6. Connect ground wire bullet connector to main wire harness.
  - e. See Figure 8. Push connector [17] behind gearcase cover and secure connector [17] to oil pump fitting with cable tie.
  - f. See Figure 8. Secure voltage regulator wire harness to oil line and oil pressure switch harness with cable tie.
16. Reconnect battery negative cable to negative terminal. Tighten terminal to specification given in service manual for model being serviced.



**Figure 5. Header Support Mount (all except S1/S1W)**



**Figure 6. Voltage Regulator Revised Mounting**



**Figure 7. Voltage Regulator Wire Harness Routing**

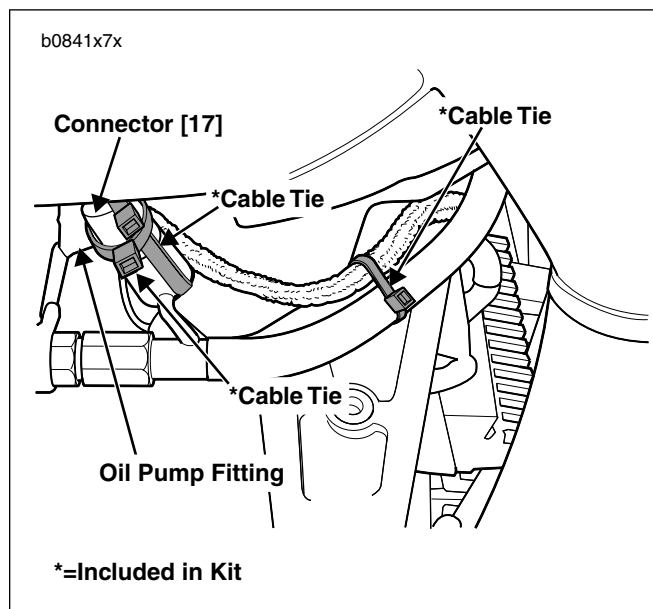


Figure 8. Cable Tie Locations

## CREDIT PROCEDURE- VEHICLE REPAIR

After servicing each vehicle, file a warranty claim referencing Service Bulletin B-032 in the "Description of Repair" or "Comments" section of the claim. Fill in the rest of the claim as follows:

### Credit for Labor

<b>Claim Type*</b>	BP7
<b>Event 1, Qty &amp; Problem Part No.</b>	0-65784-96YB
<b>Event 1, Additional (Replacement) Qty &amp; Part No.</b>	1-S1001.01A1
<b>Part Description</b>	Exhaust Header Mount Retrofit Kit
<b>Primary Labor Code</b>	2660
<b>Time:</b>	1.0 hr (All Models)
<b>Customer Concern Code</b>	3201
<b>Condition Code</b>	3202

#### NOTE

- If additional parts such as cable straps are required, list them under Event 1, Additional Parts.
- List any major components inspected in Step 8, found to be defective and replaced under Event 1, Additional Parts.
- Use of incorrect claim type will cause claim to be suspended and/or be rejected and credit delayed.

## CREDIT PROCEDURES - DEALER STOCK PARTS

**Remove and destroy all affected parts from your inventory.**

To receive credit, complete a regular warranty claim referencing Service Bulletin B-032 in the "Description of Repair" section. Fill in the rest of the claim as follows.

### Credit for Parts

<b>Claim Type</b>	BDS
<b>Quantity</b>	See Note Below
<b>Problem Part Nos.</b>	65300-94Y 65784-96Y 65784-96YA 65784-96YB * 65930-99Y
<b>Part Description</b>	Header Support Mount (1995-2000 Models) * Rear Mount Bracket (1999-2000 Models)
<b>Customer Concern Code</b>	3201
<b>Condition Code</b>	3202

#### NOTE

"Quantity" may vary depending upon what you have in stock.

Upon receipt of properly completed claim for parts in dealer stock, you will receive the appropriate credit for parts. Affected parts have been superseded. **Remove and destroy all affected parts from your inventory.** Order parts as required to restock your inventory.