

<b>X-TYPE</b>	Date <b>09/2001</b>	<b>A206-01</b>
<b>TECHNICAL BULLETIN</b>		

Subject <b>BRAKE VACUUM PUMP REMOVAL</b>	Model All Year VIN
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**A206-Brakes**

**ISSUE: A206-01 BRAKE VACUUM PUMP REMOVAL**

This Technical Bulletin has been issued to inform Dealers that there is now a workshop procedure for removing the brake vacuum pump fitted to X-TYPE series vehicles.

**ACTION**

**Only**, if there is a fault with brake vacuum pump, remove it following the workshop procedure outlined below.

**Workshop Procedure**

- 1 Open hood.
- 2 Fit fender protection covers.
- 3 Remove battery cover.
- 4 Disconnect vehicle battery. (See Workshop Manual, JTIS CD ROM section 414-01)

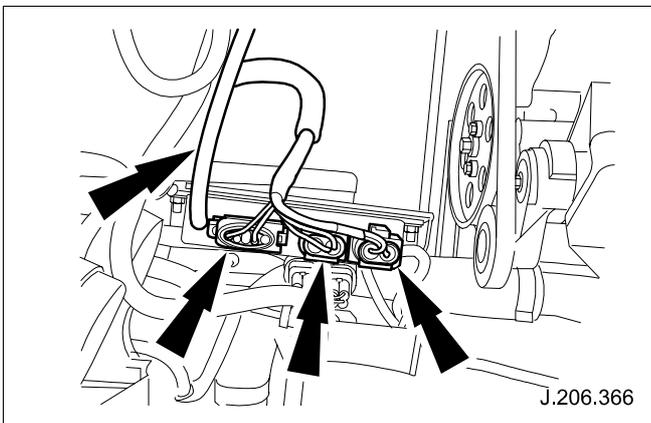
**WARNING: AFTER THE BATTERY HAS BEEN DISCONNECTED, WAIT FOR ONE MINUTE FOR THE AIR BAG SYSTEM TO DISARM.**

**CAUTION: ENSURE THAT THE RADIO CODE IS AVAILABLE BEFORE DISCONNECTING THE BATTERY.**

- 5 Remove vehicle battery. (See Workshop Manual, JTIS CD ROM section 414-01)
- 6 Disconnect battery box drain tube from its retaining clip under vehicle.
- 7 Remove battery box.

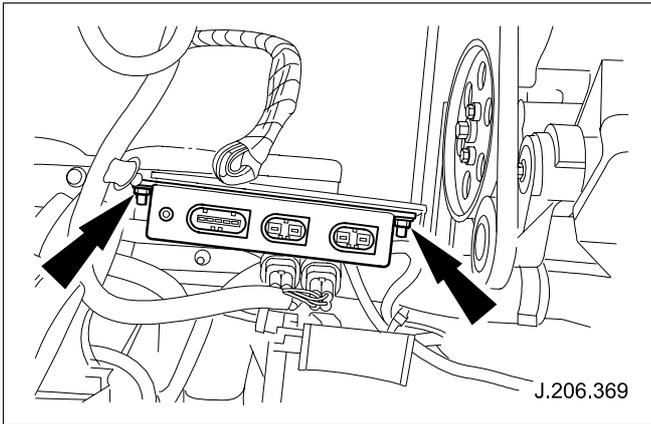
**Note: Note routing of drain tube.**

- 8 Disconnect vacuum hose from vacuum pump control module.



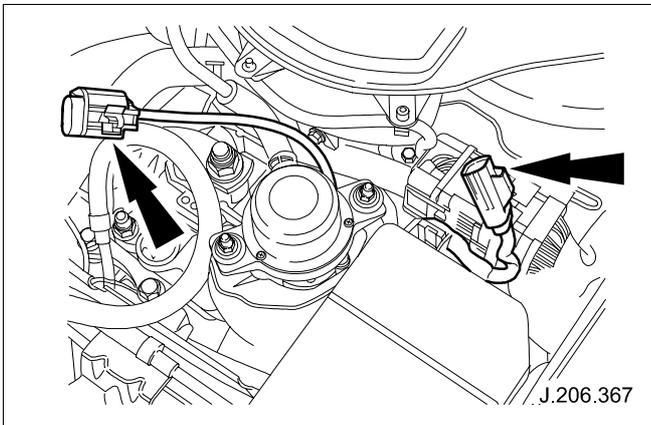
**Fig. 1**

- 9 Disconnect control module connector plugs. (See Fig. 1)

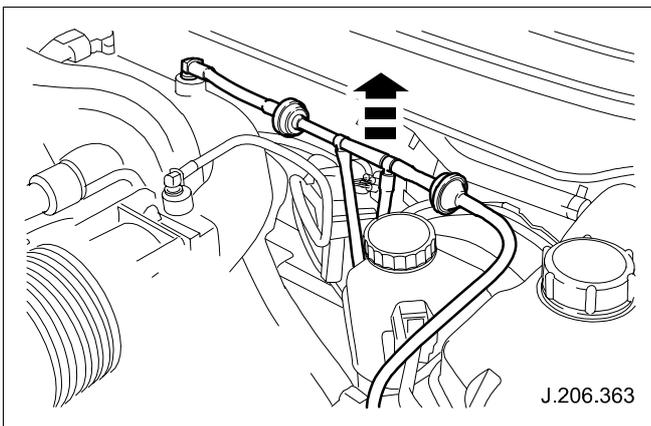
**Fig. 2**

- 10 Undo and remove control module-securing nuts. (See Fig. 2)

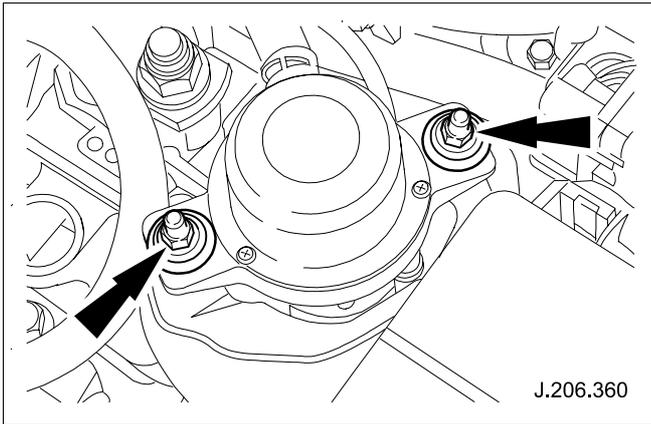
- 11 Remove control module and place aside.  
12 Disconnect vacuum hose and clip from battery cable.

**Fig. 3**

- 13 Disconnect vacuum pump connector. (See Fig. 3)

**Fig. 4**

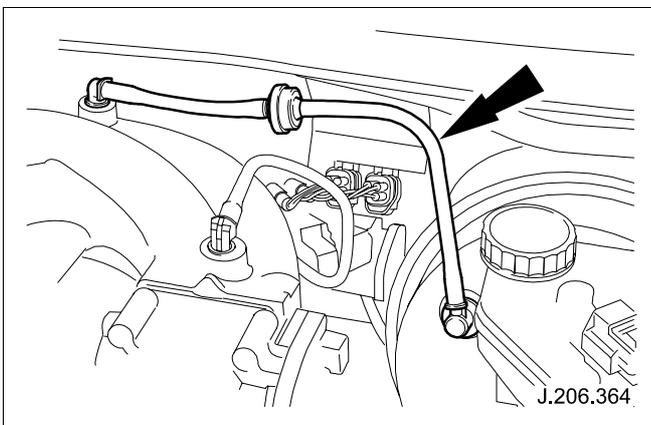
- 14 Disconnect vacuum pipe from brake booster and inlet manifold and remove pipe. (See Fig. 4)



**Fig. 5**

- 15 Undo and remove vacuum pump securing nuts. (See Fig. 5)

- 16 Remove vacuum pump, pipe and hose assembly from vehicle and place aside.

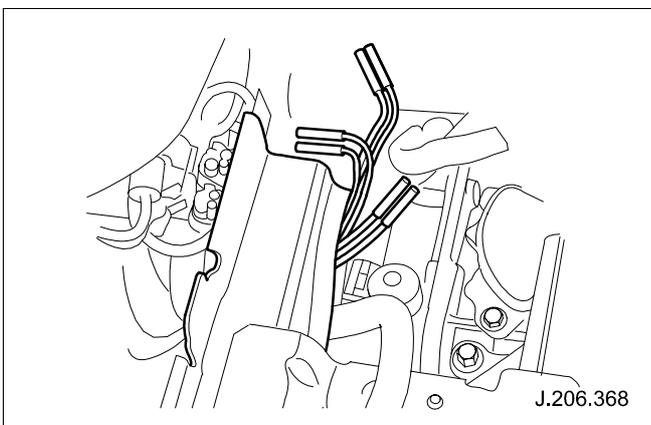


**Fig. 6**

- 17 Install new vacuum pipe connecting to inlet manifold and brake booster. (See Fig. 6)

- 18 Cut, remove and discard connector from vacuum pump harness.  
 19 Carefully cut back and remove harness sheathing as required.  
 20 Reposition vacuum pump control module harness upwards for access.  
 21 Cut, remove and discard three connectors from vacuum pump control module harness.

Working on first cut wire:



**Fig. 7**

- 22 Fit heat shrink tubing (418-104) from harness repair kit halfway onto end of wire. (See Fig. 7)

- 23 Using suitable hot air gun, shrink tubing onto wire.  
 24 Using suitable tool, squeeze tubing to seal wire.

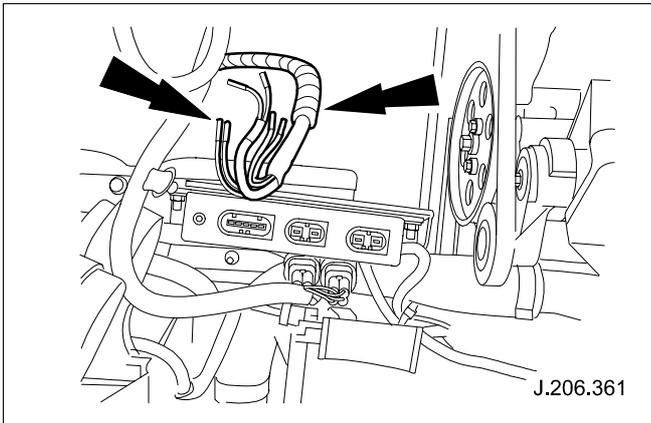
Working on second cut wire:

- 25 Fit heat shrink tubing (418-104) from harness repair kit halfway onto end of wire. (See Fig. 7)
- 26 Using suitable hot air gun, shrink tubing onto wire.
- 27 Using suitable tool, squeeze tubing to seal wire.

Working on third cut wire:

- 28 Fit heat shrink tubing (418-104) from harness repair kit halfway onto end of wire. (See Fig. 7)
- 29 Using suitable hot air gun, shrink tubing onto wire.
- 30 Using suitable tool, squeeze tubing to seal wire.

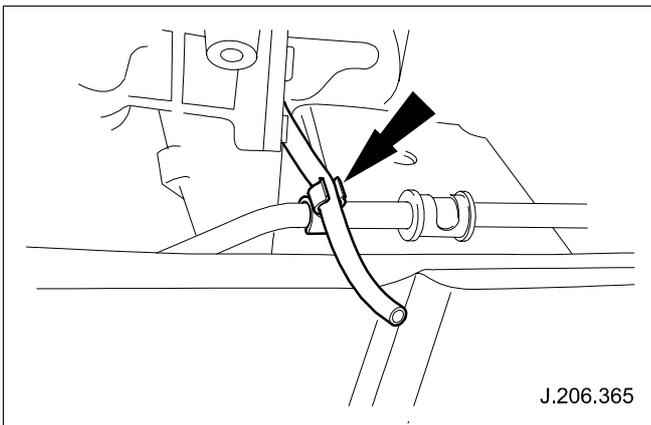
Proceed to:



**Fig. 8**

- 31 Fold back and tape wires to end of vacuum pump harness. (See Fig. 8)

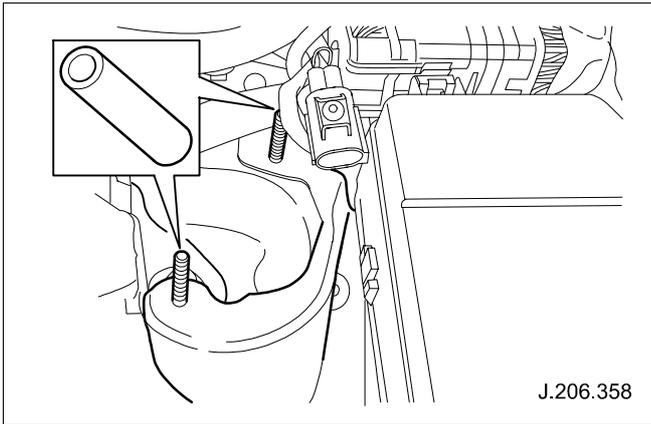
- 32 Stow taped vacuum pump harness.
- 33 Fold back and tape wires to end of vacuum pump control module harness.
- 34 Install and seat battery box whilst routing drain tube as noted during battery box removal.



**Fig. 9**

- 35 Secure battery box drain tube to its retaining clip under vehicle. (See Fig. 9)

- 36 Install vehicle battery.
- 37 Reconnect vehicle battery. (See Workshop Manual, JTIS CD ROM section 414-01)
- 38 Install battery cover.
- 39 Cut two pieces of 35mm long from discarded booster to inlet manifold vacuum pipe.



**Fig. 10**

- 40 To enhance appearance, fit two pieces of cut vacuum pipe to vacuum mounting studs. (See Fig. 10)

- 41 Remove fender protection covers.  
42 Close hood.

### PARTS INFORMATION

Description	Part Number	Quantity/Vehicle
Tube assembly – brake booster vacuum	C2S 17552	1

### WARRANTY INFORMATION

Description	SRO	Labor Time Allowance	Warranty Code
Brake booster vacuum pump disablement	70 91 23	0.6 Hours	HD-GB-42