

# Safety Recall Action Notice SB563 Issue 2 - 05.2019

Subject: Coolant Expansion Hose			
Bulletin Number	Models Affected	VIN Range	Markets Affected
563	Speed Twin	917456 to 940307, and Appendix A	All Markets

### **Background Information**

Internal investigations have identified that, in some instances, the coolant expansion hose may be routed incorrectly. If left in this position the coolant expansion hose may come into contact with the right hand exhaust header pipe, leading to coolant hose damage and loss of engine coolant.

Dealers are requested to check and if necessary reposition or replace the coolant hose as described in the procedure below.

#### **Customer Contact Instructions**

### Notice

STOP DELIVERY OF AFFECTED MOTORCYCLES IMMEDIATELY.

DO NOT deliver a motorcycle affected by this Safety Recall Action Notice to a customer until you have completed, or confirmed completion of, the procedures described in this Safety Recall Action Notice.

Delivering a motorcycle subject to an outstanding Safety Recall Action Notice may contravene local or national laws in your market, territory or country.

Triumph subsidiaries and distributors must instigate a Safety Recall Action in their country in accordance with the national recall code of practice. For vehicles in dealer stock, the safety recall MUST be actioned before delivery to the customer.

Dealers are to prioritise repair of customer owned motorcycles before any unsold motorcycles.

#### Identification of Affected Motorcycles

Speed Twin models from VIN 917456 to 940307, and the additional VINs listed in appendix A.

- Some affected motorcycles listed in the VIN range will have been modified and repaired by Triumph prior to their release from the factory.
- Unmodified motorcycles can be identified by checking the 'VIN Enquiry' on www.triumphonline.net.

### **Warranty Claim Instructions**

Notice Number	Fault Code	Repair Code	·	Repair Allowance	Time
563	021035934	995630	Check Only	0.02 hours	
		995631	Check and reposition hose	0.04 hours	
		995632	Check and replace hose	0.6 hours	

#### Note:

To assist workshop planning, note that the replacement of the coolant hose will be a rare occurrence.
 Factory experience shows that fewer than 13% of affected VINs will require a replacement coolant hose. Therefore dealers should expect 87% of VINs to require either a visual check or a check and reposition.

#### Genuine Parts Information

Notice Number	Part Number	Description	Quantity
563	T2100787	Hose, Expansion, Coolant	1
	T3350003	Locknut, Flanged, M6 x 1.0	3
	T3700440	Clip, Hose	2

#### Note:

• Part number T2100787 - Hose, Expansion, Coolant, T3350003 - Locknut, Flanged, M6 x 1.0 and T3700440 - Clip, Hose, are only required when replacing a damaged hose.

### **Parts Ordering Instructions**

For Triumph Subsidiary and Overseas Distributor dealers using Triumph Warranty On-Line with Parts Auto Ordering Flag switched on: Order all repair parts by submitting a New Prior through the Warranty On-Line system. Entering the above repair code in a New Prior will automatically add the parts required and labour times for this Safety Recall Action Notice.

For Overseas Distributor dealers NOT using Triumph Warranty On-Line or for Overseas Distributor dealers using Triumph Warranty On-Line with Parts Auto Ordering Flag switched off: Orders should be placed using the normal parts ordering procedure.

#### **Genuine Parts Return**

Dealer to retain parts for 90 days. All parts must be stored in a secure, non-public accessed area and correctly identified with a completed warranty label. Thereafter the parts must be rendered unusable prior to scrapping.

#### Other Instructions

Once completed, please mark the Service Record Book that the requirements of this Safety Recall Action Notice have been complied with.

Before returning the motorcycle to the customer, download the latest calibration to the engine control module using the current version of the Triumph diagnostic software.

# Warning

Before starting work, make sure the motorcycle is stabilised and adequately supported. This will help prevent it from falling and causing injury to the operator or damage to the motorcycle.

# Warning

Do not remove the coolant pressure cap when the engine is hot. When the engine is hot, the coolant inside the cooling system is hot and also under pressure. Contact with hot coolant will cause scalds and skin damage.

# **A** Warning

Triumph HD4X coolant contains chemicals which are harmful or toxic if swallowed. Prolonged or repeated contact with the skin or eyes may cause irritation.

Always wear suitable protective clothing, including impervious gloves and eye/face protection.

In case of ingestion, rinse mouth and seek medical attention immediately.

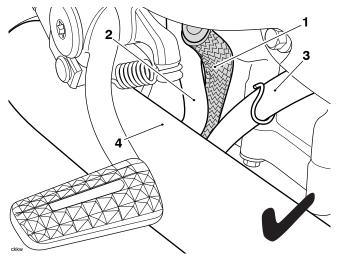
In case of skin contact wash the affected area with soap and water.

In case of eye contact, promptly wash eyes with plenty of water while lifting the eye lids.

### Coolant Expansion Hose Check

- Figure 1 below shows a correctly routed coolant expansion hose. The hose is routed between the brake line and the engine casing, and contact with the exhaust header pipe is not possible.
- Figures 2 and 3 below show incorrectly routed coolant expansion hoses. The hose is either routed in
  front of the brake line (when viewed from the right hand side of the motorcycle) or is routed between
  the brake line and the right hand exhaust header pipe. Contact with the right hand exhaust header is
  possible.
- If the coolant hose is not in contact with the header pipe and is routed correctly behind the brake line, as shown in Figure 1 below, no repair is necessary. Submit a warranty claim for Check Only using repair code 995630.
- If the coolant hose is not in contact with the header pipe but is routed incorrectly in front of the brake line, as shown in **Figure 2 or 3 below**, go to **Coolant Expansion Hose Reposition**. No tools or parts are required. Submit a warranty claim for **Coolant Expansion Hose Reposition** using repair code 995631.
- If the coolant expansion hose is routed incorrectly in front of the brake line, as shown in **Figure 2 or 3 below**, and there are signs of damage to the braided sheath or the hose itself go to **Coolant Expansion Hose Replace**. Submit a warranty claim for **Coolant Expansion Hose Replace** using repair code 995632.

1. Check the coolant expansion hose is positioned so that it is routed between the brake line and the engine casing as shown below.



**Figure1: Coolant Hose Correctly Routed** 

- 1. Coolant expansion hose (braided sheath)
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe

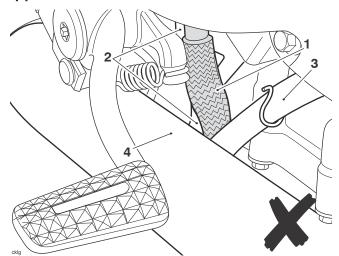


Figure 2: Coolant Hose Incorrectly Routed

- 1. Coolant expansion hose (braided sheath)
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe

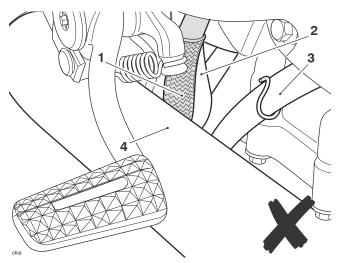
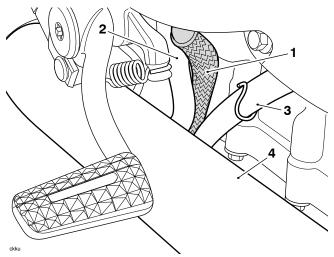


Figure 3: Coolant Hose Incorrectly Routed

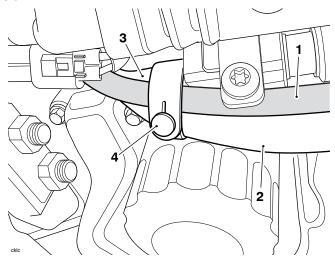
- 1. Coolant expansion hose (braided sheath)
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe

### **Coolant Expansion Hose Reposition**

- The coolant expansion hose can be identified by the braided sheath.
- When repositioning, it is not necessary to disconnect the coolant expansion hose.
- 1. Reposition the coolant expansion hose so that it is located between the brake line and the engine casing as shown below.



- 1. Coolant expansion hose
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe
- 2. From the underside of the motorcycle check the coolant expansion hose and alternator harness are positioned as shown below.



- 1. Coolant expansion hose
- 2. Alternator harness
- 3. Brake line (rear brake switch)
- 4. Rubber strap

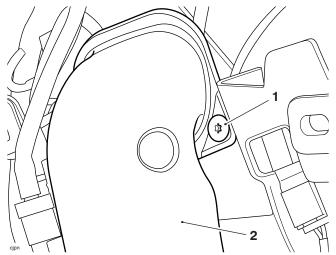
### Coolant Expansion Hose Replace

#### Removal

# Warning

If the engine has recently been running, the exhaust components may be hot to the touch. Contact with the hot components may cause damage to exposed skin. To avoid skin damage, always allow the hot parts to cool before touching the exhaust system.

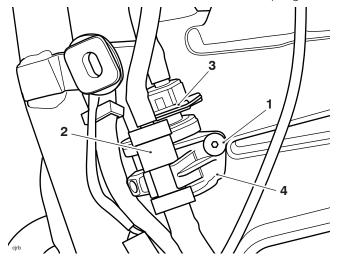
- 1. Remove the seat as described in the Service Manual.
- 2. Disconnect the battery as described in the Service Manual.
- 3. Remove the fuel tank as described in the Service Manual.
- 4. Remove the front sprocket cover as described in the Service Manual.
- 5. Remove the left hand side panel as described in the Service Manual.
- 6. Remove the fixing and remove the air intake duct from the left hand side of the airbox.



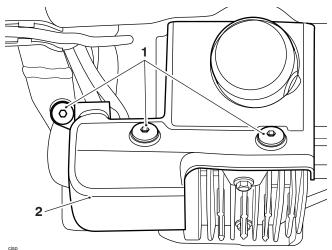
- 1. Fixing
- 2. Air intake duct

#### Note:

 Note the position and orientation of the roll over valve and, if fitted, the purge control valve and the bracket for installation. 7. Remove the fixing and detach the roll over valve and, if fitted, the purge control valve from the airbox.



- 1. Fixing
- 2. Roll over valve
- 3. Purge control valve
- 4. Bracket
- 8. Remove the fixings and shouldered washers then remove the ABS modulator cover.



- 1. Fixings
- 2. ABS modulator cover

# **Marning**

Triumph HD4X coolant contains chemicals which are harmful or toxic if swallowed. Prolonged or repeated contact with the skin or eyes may cause irritation.

Always wear suitable protective clothing, including impervious gloves and eye/face protection.

In case of ingestion, rinse mouth and seek medical attention immediately.

In case of skin contact wash the affected area with soap and water.

In case of eye contact, promptly wash eyes with plenty of water while lifting the eye lids.

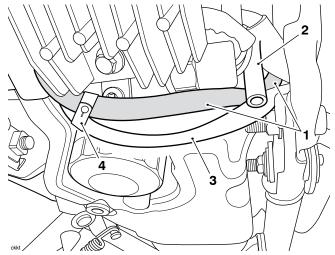
# **A** Caution

Do not allow the coolant to become contaminated.

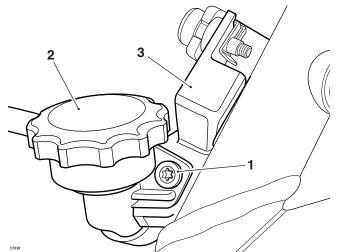
If the coolant becomes contaminated always dispose it in an environmentally safe manner.

Contaminated coolant may damage the motorcycle cooling system.

- Make sure the coolant expansion hose is correctly identified prior to cutting.
- The coolant expansion hose is constructed of hard rubber.
- The sleeve that covers the alternator harness is flexible plastic and soft when touched.
- To allow for reuse of the coolant, a clean container must be placed below the coolant expansion hose before it is cut.
- 9. Locate the coolant expansion hose and, noting it's orientation, remove the rubber strap.
- 10. Place a clean container under the coolant expansion hose.
- 11. Cut the coolant expansion hose at the lowest point, and allow the coolant to drain in to the clean container. Retain the coolant for reuse.

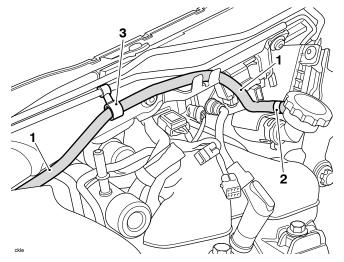


- 1. Coolant expansion hose (hard rubber)
- 2. Coolant overflow hose
- 3. Alternator harness (soft plastic)
- 4. Rubber strap
- 12. Remove the fixing and position the coolant filler neck away from the immobiliser bracket.



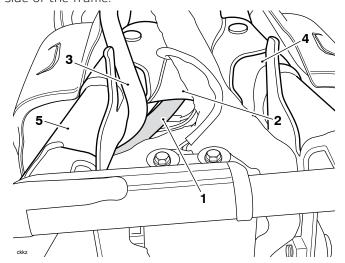
- 1. Fixing
- 2. Coolant pressure cap
- 3. Immobiliser bracket

- 13. Release the coolant expansion hose clamp from the coolant filler neck.
- 14. Noting the orientation of the coolant hose and the clips, remove the hose, and remove and discard the hose clamp.



- 1. Coolant expansion hose
- 2. Coolant expansion hose clamp
- 3. Clip

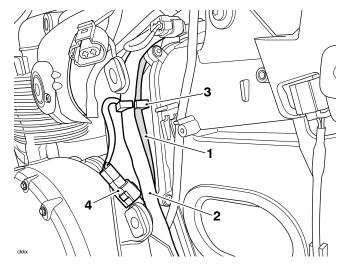
- Note the routing of the coolant expansion hose prior to removal.
- The coolant expansion hose is routed behind the left hand side panel.
- To ease the installation process it is advisable to attach a suitable length of cord to the coolant hose prior to removal.
- · Attaching the cord assists in the installation of the new coolant hose.
- 15. Attach a suitable cord to the hose prior to removing it completely from the motorcycle.
- 16. Noting the routing of the coolant expansion hose, pass the coolant expansion hose from the right hand side of the frame to the left hand side noting that the hose is routed through the harness guide and exits to the left hand side of the frame.



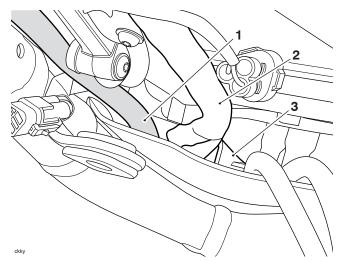
- 1. Coolant expansion hose
- 2. Harness guide
- 3. Roll over valve hose
- 4. Frame (right hand side)
- 5. Frame (left hand side)

#### Note:

 To allow access to the coolant expansion hose the motorcycle harness must first be unclipped from the guide loop and moved to one side. 17. Release the coolant expansion hose and the harness from the guide loop on the left hand side of the frame.

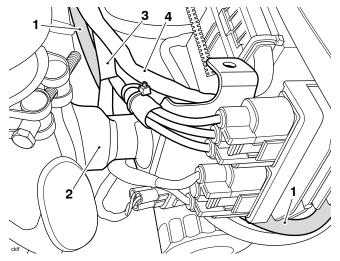


- 1. Coolant expansion hose
- 2. Harness
- 3. Guide loop
- 4. Connector
- 18. Pass the coolant expansion hose from the left hand side of the frame until it is free from the side panel infill.

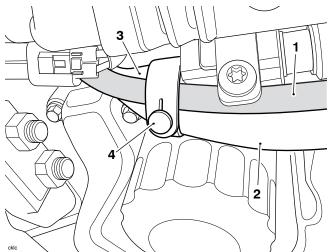


- 1. Coolant expansion hose
- 2. Harness
- 3. Side panel infill

19. Pass the coolant expansion hose between the left hand side of the frame and the frame cross member.

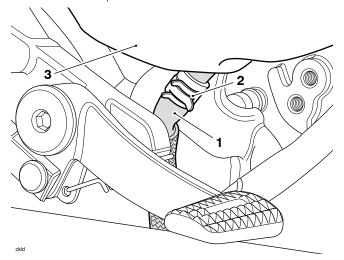


- 1. Coolant expansion hose
- 2. Frame cross member
- 3. Harness (regulator rectifier)
- 4. Harness (ABS modulator)
- 20. Note the routing of the coolant expansion hose in relation to the frame cross member and the electrical connectors and remove the coolant hose from the motorcycle.



- 1. Coolant expansion hose
- 2. Harness
- 3. Brake line (rear brake switch)
- 4. Strap

- 21. Remove the coolant expansion tank as described in the Service Manual.
- 22. Release the hose clamp from the coolant expansion hose and disconnect it from the coolant expansion tank outlet pipe, discard the hose clamp.

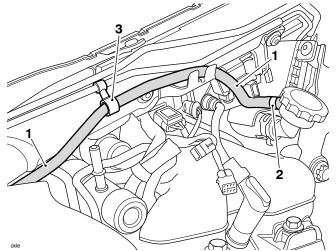


- 1. Coolant expansion hose
- 2. Hose clamp
- 3. Coolant expansion tank
- 23. Attach the cord to the remaining part of the hose and then remove the hose from the motorcycle.

- Make sure the cord remains routed on the motorcycle prior to removing the coolant expansion hose.
- 24. Remove the cord from the coolant expansion hose.

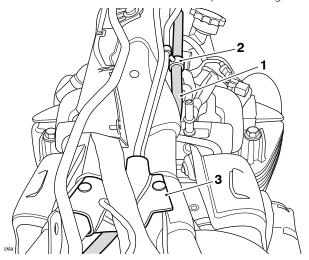
#### Installation

- When securing the cord to the coolant expansion hose make sure the edge of the braided hose is protected by a suitable tape to prevent snagging during installation.
- 1. Fit the cord to the braided end of the coolant expansion hose.
- 2. Route the coolant filler hose along the right hand side of the frame.
- 3. As noted during removal, fit the coolant hose to the coolant filler neck and secure with a new hose clamp.



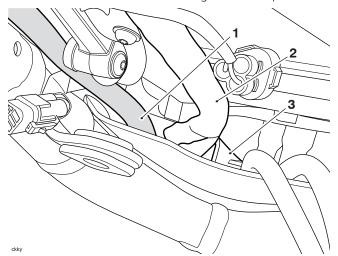
- 1. Coolant expansion hose
- 2. Coolant expansion hose clamp
- 3. Clip
- 4. Refit the coolant filler neck to the immobiliser bracket and tighten the fixing to **3 Nm**.

- 5. As noted during removal, pass the coolant expansion hose from the right hand side of the frame to the left hand side noting that the hose is routed through the harness guide and exits to the left hand side of the frame.
- 6. Route the coolant expansion hose and secure with the clip on the right hand side of the frame.



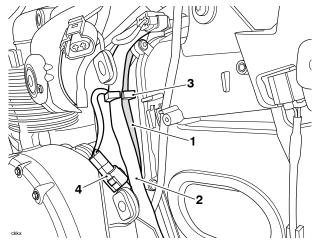
- 1. Coolant expansion hose
- 2. Clip
- 3. Harness guide

- Do not allow the coolant expansion hose to become separated from the cord at this stage.
- Push the coolant expansion hose whilst gently pulling on the cord.
- 7. As noted during removal, route the coolant hose through the side panel infill.

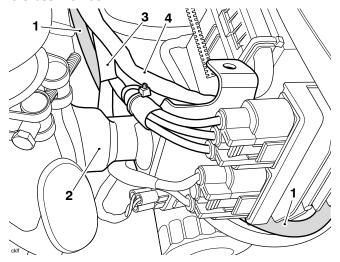


- 1. Coolant expansion hose
- 2. Harness
- 3. Side panel infill

8. As noted during removal, refit the coolant expansion hose and reposition the harness into the guide loop on the left hand side of the frame.

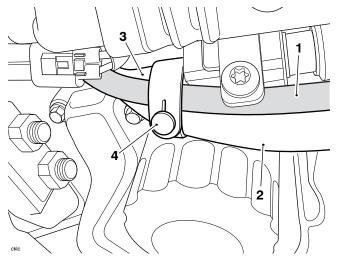


- 1. Coolant expansion hose
- 2. Harness
- 3. Guide loop
- 4. Connector
- 9. Noting the route of the coolant hose, pass the coolant expansion hose between the left hand side of the frame and the frame cross member.

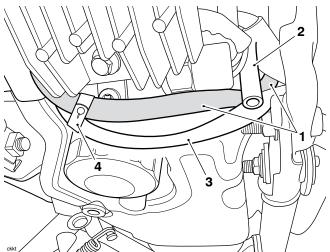


- 1. Coolant expansion hose
- 2. Frame cross member
- 3. Harness (regulator rectifier)
- 4. Harness (ABS modulator)
- 10. As noted during removal, route the coolant expansion hose around the frame cross member and the electrical connectors.

11. Refit the rubber strap.

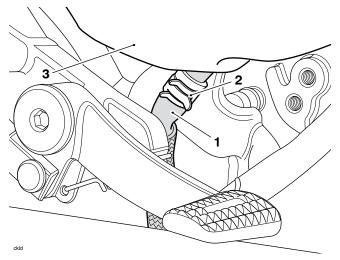


- 1. Coolant expansion hose
- 2. Harness
- 3. Brake line (rear brake switch)
- 4. Rubber strap
- 12. As noted during removal, route the coolant expansion hose to the front of the coolant overflow hose so that it rests between the alternator harness and the rear brake line.

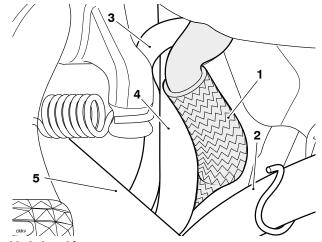


- 1. Coolant expansion hose
- 2. Coolant overflow hose
- 3. Alternator harness
- 4. Rubber strap

13. Refit the coolant expansion tank hose to the coolant expansion tank outlet pipe and secure using a new hose clamp.

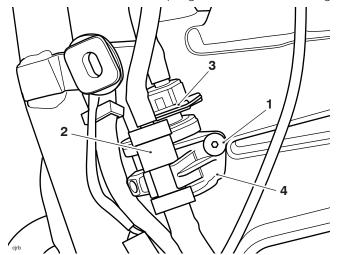


- 1. Coolant expansion hose
- 2. Hose clamp
- 3. Coolant expansion tank
- 14. Refit the coolant expansion tank, as described in the Service Manual, making sure the coolant expansion hose is routed so that it is positioned between the brake line and the engine casing and the coolant overflow is not trapped or kinked.

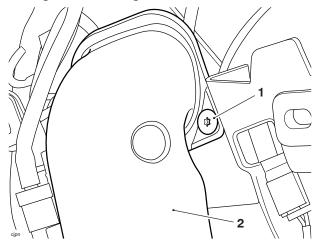


- 1. Coolant expansion hose (braided sheath)
- 2. Alternator harness
- 3. Coolant overflow hose
- 4. Rear brake line
- 5. Exhaust header pipe (right hand)

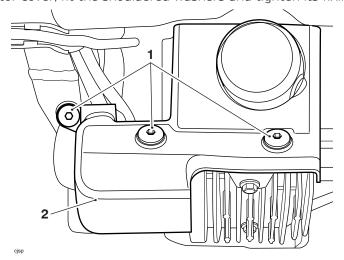
15. Refit the roll over valve bracket and, if fitted, the purge control valve and tighten the fixing to **1.5 Nm**.



- 1. Fixing
- 2. Roll over valve
- 3. Purge control valve
- 4. Bracket
- 16. Refit the air intake duct and tighten the fixing to **1.5 Nm**.



- 1. Fixing
- 2. Air intake duct
- 17. Refit the ABS modulator cover, fit the shouldered washers and tighten its fixings to 4 Nm.



- 1. Fixings
- 2. ABS modulator cover

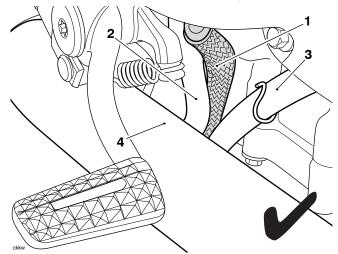
# **A** Caution

Do not allow the coolant to become contaminated.

If the coolant becomes contaminated always dispose of it in an environmentally safe manner.

Contaminated coolant may damage the motorcycle cooling system.

- 18. Refill the coolant expansion tank with the original coolant and adjust to the correct level as necessary.
- 19. Refit the front sprocket cover as described in the Service Manual.
- 20. Refit the left hand side panel as described in the Service Manual.
- 21. Refit the fuel tank as described in the Service Manual.
- 22. Connect the battery as described in the Service Manual.
- 23. Refit the seat as described in the Service Manual.
- 24. Carry out a final check of the coolant expansion hose routing, rectify as necessary.



**Figure 1: Coolant Hose Correctly Routed** 

- 1. Coolant expansion hose (braided sheath)
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe

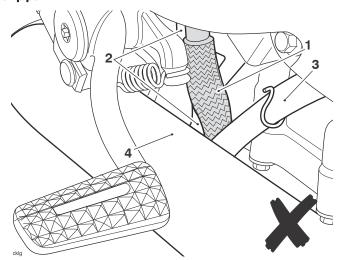


Figure 2: Coolant Hose Incorrectly Routed

- 1. Coolant expansion hose (braided sheath)
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe

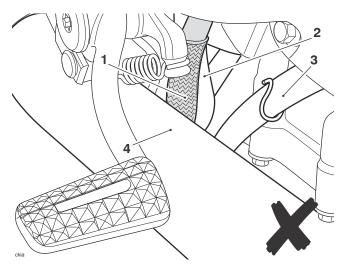


Figure 3: Coolant Hose Incorrectly Routed

- 1. Coolant expansion hose (braided sheath)
- 2. Brake line
- 3. Alternator harness
- 4. Right hand exhaust header pipe

### Circulation

Initial and date when read and return to central file holder

Service Manager	Parts Manager		Workshop Supervisor	Technician 1	Technician 2

Appendix A	944120	943853	948710	940938
941002	944124	943856	948720	941006
945919	944131	944100	948735	941008
948757	944144	944487	949415	941024
941333	944155	944500	949422	941027
942449	944157	947687	949428	941037
944068	944158	947690	949436	941299
944084	944160	947694	949454	941305
944414	944174	947700	949463	941315
944422	944181	951238	949470	941609
946309	945936	951248	949543	941623
946314	945943	951252	951367	941645
948866	948334	951256	951374	941654
950427	948347	951266	951385	941671
950431	948381	951270	953644	941681
941375	948387	951276	953646	941726
941687	948392	951277	953648	941733
944115	942553	951286	953652	941746
944166	944057	951294	953655	941753
944170	949806	951301	953657	941755
944171	949807	951307	953661	942104
949791	949809	954719	953664	942116
952931	949811	958012	953682	942143
953032	949813	958017	955104	942150
953936	949835	941259	955115	942170
953969	949836	941713	955140	942180
942513	949837	944161	955161	942198
943807	949838	944412	955181	942489
943812	949839	944575	940703	944032
943824	949852	944185	940706	944033
943828	949856	944416	940709	944035
943833	951040	947427	940713	944036
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