



Service Bulletin

Questions, call : 1-800-MOTO-USA

Issued : 9/6/02

<http://www.cannondale.com/motorsports>

2003 X440 and S440 Motorcycles

Fuel System Hose Replacement

SPECIAL NOTE : This bulletin supercedes Cannondale Service Bulletin SB02-013 which has been cancelled.

BULLETIN : SB02-014

MODELS : This service bulletin affects a small number of 2003 model year X440 and S440 Motorcycles. See "Vehicle identification numbers affected" starting on page 5.

ISSUED : 9/6/02

SUBJECT : Fuel System Hose Replacement

CONDITION : Affected models were assembled with fuel system hoses that were incorrecedly manufactured by our supplier resulting in severely reduced durability and service life.

Over time or under extreme operating conditions, the damaged hoses can fail, developing small pin-sized holes or ruptures which would allow pressurized fuel to spray out increasing the chances of a fuel fed fire.

Operating with a damaged fuel system can result in fuel leakage increasing the risk of fire or explosion. The vehicle operator or service technician can be severely injured or killed.

There are several damaged fuel system hoses that must be replaced. They are identified in this bulletin. See "Replacement Fuel hoses" on page 4.

SOLUTION : In the interests of safety, we are requiring the following for all affected units:

Dealer Inventory

For all units in inventory, immediately remove the damaged hoses and install replacement hoses as indicated in this service bulletin . See "Replacement Fuel hoses" on page 4.

Do not deliver an un-corrected unit to a consumer.

Notification

Cannondale will mail a copy of this service bulletin to all owners for which we have returned vehi-

CUSTOMER INFORMATION : You should not attempt to perform the procedures described in this bulletin or assume that the information contained in this bulletin applies to your vehicle. The bulletin is intended for use only by skilled motorsports service technicians who are equipped with the proper tools and equipment necessary to correctly and safely perform the service described. Always consult an authorized Cannondale Motorsports Dealer to determine if a service procedure described is necessary for your vehicle and to schedule professional service.

Information is subject to change without notice.

SB02-014.fm

© 2002 Cannondale Corporation - All Rights Reserved

cle registration information. However, we are requesting your assistance in contacting owner's to inform them of the required service.

PARTS : The following parts are required to perform the service described in this bulletin:

QTY	P/N	DESC
1	5002202-05	Hose, Fuel, Filter to Pump
1	5002203-05	Hose, Fuel, Pump to Injector
1	5002204-05	Hose, Fuel, Injector to Regulator
1	5002205-05	Hose, Fuel, Regulator to Tank
7	5001607	Oetiker hose clamp, 12.3mm

Do NOT order parts for this service bulletin. Service kits will be automatically shipped to the attention of the SERVICE MANAGER at dealerships having invoiced units affected by this bulletin.

Questions, call: Cannondale Dealer Service at 1-877-DLR-MOTO.

Removed Parts

- Do not re-use any removed/replaced part.
- Mark or tag all removed/replaced parts as "damaged/destroy" and discard them.
- Do not deliver removed/replaced parts to the consumer.

REPLACEMENT PROCEDURE



WARNING

Gasoline is extremely flammable and explosive under certain conditions.

Don't smoke.

Work in a well-ventilated area free of sparks, flame, or welders.

Use a clean shop towel to wipe up spills immediately.

1. Secure the motorcycle upright on a suitable work stand so that there is no danger of it falling over while you work.
2. Remove the seat, radiator shrouds, and front fender.
3. Disconnect the inlet and outlet quick connect fittings from the fuel tank, remove the tank mounting bolts and remove the fuel tank.
4. Remove the fuse.
5. Disconnect the battery, negative lead first.
6. Working from the left side of the vehicle, remove the lower and upper radiator mounting bolts and hinge the radiator forward slightly to access the fuel hoses in the front of the engine.

Cut a 13"x 8" panel of ordinary cardboard and cover the engine side of the radiator core to protect it from damage as you work. Hold the panel in place with some duct tape.

Make sure the radiator is supported adequately while you work. Do not allow it to hang by the hoses.

7. Before you start to remove any of the damaged hoses, note the position of ties securing the hoses from contact with the radiator. Be sure to replace remove ties at reassembly.

⚠ WARNING

Residual fuel pressure may be present in the fuel circuit between the pump outlet fitting and regulator inlet. Relieve any residual pressure carefully; hold a clean shop towel around the clamp during removal to capture any escaping fuel.

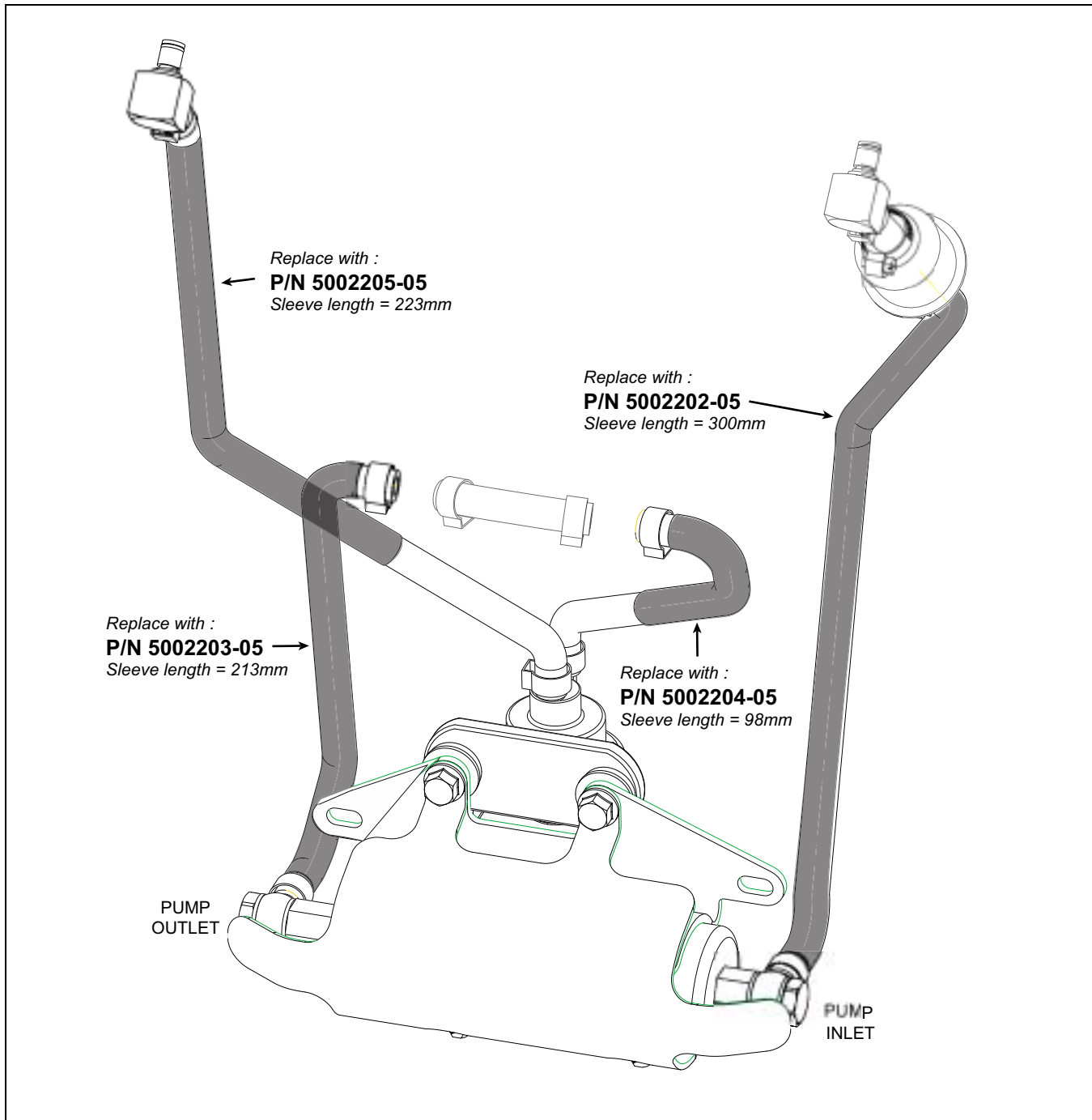
CAUTION :

The ends of the fuel pump banjo fittings must be maintained in the proper position, pointing straightback toward the rear of the motorcycle and parallel to the ground with the vehicle upright. This maintains the correct hose position preventing contact with the radiator core. The oetiker clamps at the fuel pump can be removed without the need to remove the fitting from the fuel pump. However, if the fittings must be repositioned or are mistakenly loosened, new sealing washer must be used. Further, a thin film of assembly lube must be applied to the fitting threads. Tighten the banjo fitting to 15.0 lbf•ft (20.3 N•m).

8. Remove the damaged hoses and install the replacements. See "Replacement Fuel hoses" starting on page 4.
9. Reinstall removed components.
10. Check the fuel systems for leaks and verify correct engine operation.

REPLACEMENT FUEL HOSES

The following illustration shows which fuel hoses on affected units to remove. The illustration shows the correct replacement part numbers in the assembly. Be sure to use new hose clamps. Fit sleeving which is already positioned on the hoses as indicated. The sleeving lengths shown below are approximate.



VEHICLE IDENTIFICATION NUMBERS AFFECTED

2003 X440 LIST			
5B6CC11C03B000007	5B6CC11C03B000010	5B6CC11C03B000024	5B6CC11C03B000038
5B6CC11C03B000041	5B6CC11C03B000055	5B6CC11C03B000069	5B6CC11C03B000072
5B6CC11C03B000086	5B6CC11C03B000105	5B6CC11C03B000119	5B6CC11C03B000122
5B6CC11C03B000136	5B6CC11C03B000153	5B6CC11C03B000167	5B6CC11C03B000170
5B6CC11C03B000184	5B6CC11C03B000198	5B6CC11C13B000002	5B6CC11C13B000016
5B6CC11C13B000033	5B6CC11C13B000047	5B6CC11C13B000050	5B6CC11C13B000064
5B6CC11C13B000078	5B6CC11C13B000081	5B6CC11C13B000095	5B6CC11C13B000100
5B6CC11C13B000114	5B6CC11C13B000128	5B6CC11C13B000131	5B6CC11C13B000145
5B6CC11C13B000159	5B6CC11C13B000162	5B6CC11C23B000008	5B6CC11C23B000008
5B6CC11C23B000011	5B6CC11C23B000025	5B6CC11C23B000039	5B6CC11C23B000042
5B6CC11C23B000056	5B6CC11C23B000073	5B6CC11C23B000087	5B6CC11C23B000090
5B6CC11C23B000106	5B6CC11C23B000123	5B6CC11C23B000137	5B6CC11C23B000140
5B6CC11C23B000154	5B6CC11C23B000168	5B6CC11C23B000171	5B6CC11C33B000003
5B6CC11C33B000017	5B6CC11C33B000020	5B6CC11C33B000034	5B6CC11C33B000048
5B6CC11C33B000051	5B6CC11C33B000065	5B6CC11C33B000079	5B6CC11C33B000082
5B6CC11C33B000096	5B6CC11C33B000101	5B6CC11C33B000115	5B6CC11C33B000129
5B6CC11C33B000132	5B6CC11C33B000146	5B6CC11C43B000009	5B6CC11C43B000012
5B6CC11C43B000026	5B6CC11C43B000043	5B6CC11C43B000057	5B6CC11C43B000060
5B6CC11C43B000074	5B6CC11C43B000088	5B6CC11C43B000091	5B6CC11C43B000107
5B6CC11C43B000110	5B6CC11C43B000124	5B6CC11C43B000138	5B6CC11C43B000141
5B6CC11C43B000155	5B6CC11C43B000169	5B6CC11C43B000172	5B6CC11C53B000004
5B6CC11C53B000018	5B6CC11C53B000021	5B6CC11C53B000035	5B6CC11C53B000049
5B6CC11C53B000052	5B6CC11C53B000066	5B6CC11C53B000083	5B6CC11C53B000097
5B6CC11C53B000102	5B6CC11C53B000116	5B6CC11C53B000133	5B6CC11C53B000150
5B6CC11C63B000013	5B6CC11C63B000027	5B6CC11C63B000030	5B6CC11C63B000044
5B6CC11C63B000058	5B6CC11C63B000061	5B6CC11C63B000075	5B6CC11C63B000089
5B6CC11C63B000092	5B6CC11C63B000108	5B6CC11C63B000111	5B6CC11C63B000125
5B6CC11C63B000139	5B6CC11C63B000142	5B6CC11C63B000156	5B6CC11C63B000173
5B6CC11C73B000005	5B6CC11C73B000019	5B6CC11C73B000022	5B6CC11C73B000036
5B6CC11C73B000053	5B6CC11C73B000067	5B6CC11C73B000070	5B6CC11C73B000084
5B6CC11C73B000098	5B6CC11C73B000103	5B6CC11C73B000117	5B6CC11C73B000120
5B6CC11C73B000134	5B6CC11C73B000148	5B6CC11C73B000151	5B6CC11C73B000165
5B6CC11C83B000014	5B6CC11C83B000028	5B6CC11C83B000031	5B6CC11C83B000045
5B6CC11C83B000059	5B6CC11C83B000062	5B6CC11C83B000076	5B6CC11C83B000093
5B6CC11C83B000109	5B6CC11C83B000112	5B6CC11C83B000126	5B6CC11C83B000143
5B6CC11C83B000157	5B6CC11C83B000160	5B6CC11C83B000174	5B6CC11C93B000006
5B6CC11C93B000023	5B6CC11C93B000037	5B6CC11C93B000040	5B6CC11C93B000054
5B6CC11C93B000068	5B6CC11C93B000071	5B6CC11C93B000085	5B6CC11C93B000099
5B6CC11C93B000104	5B6CC11C93B000118	5B6CC11C93B000121	5B6CC11C93B000135

2003 X440 LIST

5B6CC11C93B000149	5B6CC11C93B000166	5B6CC11CX3B000001	5B6CC11CX3B000015
5B6CC11CX3B000029	5B6CC11CX3B000032	5B6CC11CX3B000046	5B6CC11CX3B000063
5B6CC11CX3B000077	5B6CC11CX3B000080	5B6CC11CX3B000094	5B6CC11CX3B000113
5B6CC11CX3B000127	5B6CC11CX3B000130	5B6CC11CX3B000144	5B6CC11CX3B000158
5B6CC11CX3B000161	5B6CC11CX3B000175		

2003 S440 LIST

5B6AC91C33B000007	5B6AC91C53B000008	5B6AC91C73B000009	5B6AC91C03B000014
5B6AC91C33B000010	5B6AC91C63B000003	5B6AC91C73B000012	5B6AC91C83B000018
5B6AC91C93B000013	5B6AC91C23B000001	5B6AC91C43B000002	5B6AC91C53B000011