#### Technical product information

Continental Flying Spur - Continental GT and Continental GTC Front brake hose replacement

## Customer statement / workshop findings

Due to a change in material the original specification front flexible brake hoses are no longer available, therefore the original specification front flexible brake hoses cannot be supplied by Bentley Motors for the following vehicles only:

Continental GT

Continental GTC

Continental Flying Spur

Bentley Motors has developed and sourced alternative front flexible brake hoses. Along with the front brake hoses there are other components which must also be replaced as the new specification brake hoses <u>are not</u> interchangeable with the original caliper fixing bracket and metal caliper brake pipe (Unless stated)

**NOTE:** The rear flexible brake hoses are also made from the new material however the rear hoses are not affected by this TPI as they are fully interchangeable.

Should a new replacement front caliper be required and the vehicle is fitted with carbon ceramic brakes, the caliper will arrive with the original flexible brake hose bracket fitted, should the vehicle already have the latest specification hoses fitted the caliper bracket should be removed and the latest specification bracket will require fitting as per instructions within this TPI.

#### **Technical background**

All relevant parts should be ordered dependent on which system is fitted to the vehicle, the two types of system are the Iron brake system and the Carbon ceramic brake system. The parts should be ordered as detailed within the parts information section of this TPI.

In the event that one front flexible hose requires replacing outside of the recommended service interval and the vehicle has the original front flexible hoses fitted please replace both front brake hoses and all applicable parts as described within this TPI.

#### Production change

Not applicable

#### Measure

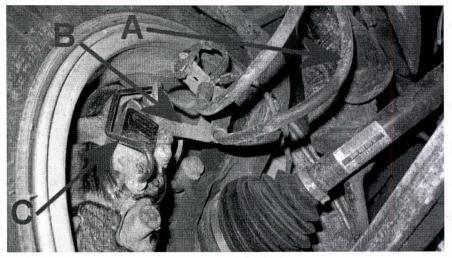
**IMPORTANT:** For clarity Figure 1 shows the Left hand front and was taken using a Continental GT with the Iron brake system fitted. Please follow this procedure for the Carbon brake system although the appearance of some components may be different than the Iron brake system.

Left Hand Front - Iron brake system

#### Always cap the ends of open pipes to prevent dirt ingress and fluid loss

1. Referring to the Workshop Manual Rep.Gr 47 - Remove the original Left hand front brake hose (Figure 1 point A)

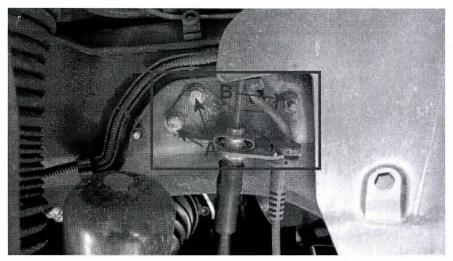
- Remove the existing caliper bracket (Figure 1 point B) and disconnect the brake pad wear connector and road wheel speed sensor bom grommet from the bracket



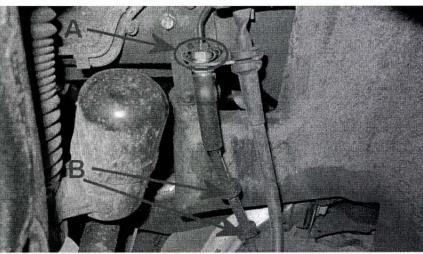
- Remove the metal caliper brake pipe (Figure 1 Point C) **IMPORTANT:** There is no requirement to replace the metal brake pipe on GT and GTC vehicles with the carbon ceramic brake system

Figure 1

Referring to Figure 2 the Continental Flying Spur requires the right and left hand wheel arch brake pipe bracket and fixings replacing The Torque for the two retaining Bolts (Point A) and the retaining nut (Point B) is 12 Nm



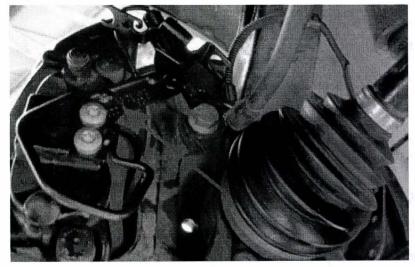
2. Referring to Figure 3 - Fit the new flexible brake hose with a new retaining clip (Point A) **CAUTION**: The pipe will only locate into the bracket one way only, to clarify correct orientation the two fixed rubber protective doughnuts will be positioned as shown in (point B)



- Torque tighten the 11 MM brake pipe nut to 15 Nm

# Figure 3

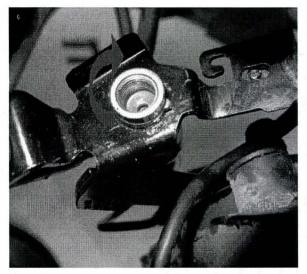
3. Fit the new brake caliper flexible pipe bracket as shown in Figure 4, ensure the bracket is seated and located correctly onto the caliper, use two new fixings and Torque to 23 Nm



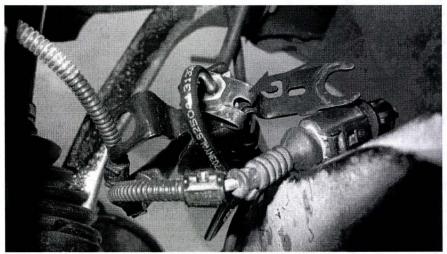
## Figure 4

4. The next step requires the flexible brake pipe locating into the bracket please follow the next key points

- Offer the pipe into the bracket, **IMPORTANT:** Should the pipe require turning to allow the pipe to bcate into the bracket turn the pipe clockwise as this will minimise the twist of the hose as shown in Figure 5 until the two tangs locate within the bracket

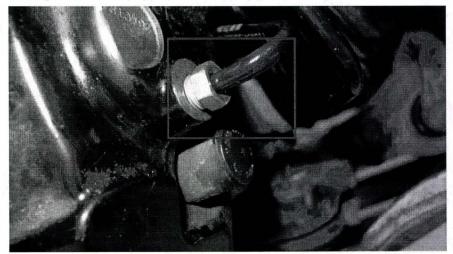


5. Fit the new metal brake pipe with a new retaining clip and hand tighten the 11 MM brake pipe nut, the retaining clip should be positioned exactly as shown in Figure 6



## Figure 6

- Hand tighten the lower caliper pipe nut into the caliper (Figure 7)

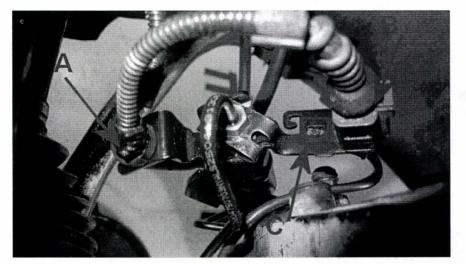


## Figure 7

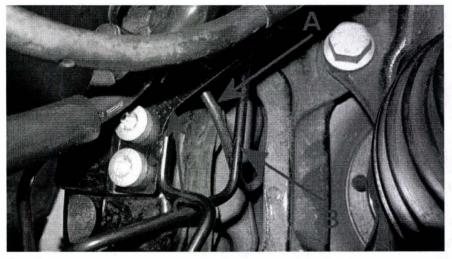
- Torque tighten the upper and lower brake pipe nuts to 15 Nm

6. Refit the road wheel speed sensor bom grommet as shown in Figure 8 (point A)

- Refit the brake pad wear connector (Point B) check the brake pad wear connection locating tang is clipped into position as shown in (Point C)



**IMPORTANT:** Referring to Figure 9, Check the routing of the pad wear indicator bom (Point A), the bom should be positioned behind the brake pipe (Point B) and pipe bracket (Point C)



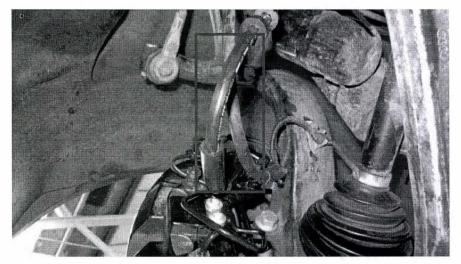
## Figure 9

The upper protective sleeve may appear to be close to the bracket (Figure 10), this is as intended.

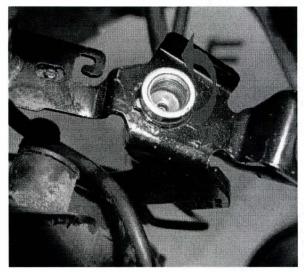


## Figure 10

7. With the steering pointing straight ahead the position of the flexible brake hose in relation to the road wheel speed sensor born should be as shown in Figure 11



8. Replace the Right Hand Front flexible brake pipe by repeating steps 1 to 7



Please note when locating the flexible brake pipe on the right hand side, the pipe must be located within the bracket by turning Anti – Clockwise as this will minimise the twist of the hose as shown in Figure 12 until the tangs locate within the bracket

#### Figure 12

9. When bleeding the braking system - Refer to Workshop Manual Rep.Gr 47 - Brake system To bleed

10. With the wheels refitted, rotate the steering from right hand lock to left hand lock and visually check that the brake pipes do not touch any other components **Recommendation**: This over check should be carried out with the vehicle sitting on all four wheels on a flatbed ramp

## **Parts information**

#### **Continental Flying Spur**

Front flexible brake hose 3D0 611 701E is no longer available please order as follows:

#### Flexible front brake hoses

3D0 611 701G - x2 Flexible brake hose - Carbon ceramic and Iron brakes

3D0 611 715B - x4 Spring clips - All Brake types

#### Metal brake pipes

#### **Iron Brakes**

3W5 611 723B - x1 Metal brake pipe – Iron brakes only

3W5 611 724B - x1 Metal brake pipe – Iron brakes only

## Carbon Brakes

3W5 611 723C - x1 Metal brake pipe – Carbon ceramic brakes only 3W5 611 724C - x1 Metal brake pipe – Carbon ceramic brakes only

Caliper brackets

**Iron Brakes** 

3Ŵ5 615 133B - x1 Bracket L/H Bracket – Iron Brakes

3W5 615 134B - x1 Bracket R/H Bracket – Iron Brakes

## **Carbon Brakes**

 $\label{eq:3W5-615-133C-x1} \begin{array}{l} Bracket \ L/H-Carbon \ Ceramic \ Brakes\\ 3W5-615-134C-x1 \ Bracket \ R/H-Carbon \ Ceramic \ Brakes\\ N909-953-03-x4 \ Calliper \ bracket \ retaining \ bolts \end{array}$ 

#### Body brackets

#### **Iron and Carbon Brakes**

 $3W5\;611\;843B-x1$  R/H/F wheel arch body bracket

3W5 611 844B - x1 L/H/F wheel arch body bracket

N902 452 06 - x4 Body bracket fixing bolts

N023 002 12 – x2 Body bracket fixing nuts

## **Continental GT and GTC**

Front flexible brake hose 3W0 611 701A is no longer available please order as follows:

#### Flexible front brake hoses

3D0 611 701G - x2 Flexible brake hose

3D0 611 715B - x4 Spring clips - All Brake types

## Metal brake pipes

#### **Iron Brakes**

3D0 611 721J - x1 Metal brake pipe – Iron brakes only

3D0 611 722J - x1 Metal brake pipe - Iron brakes only

# There is no requirement to replace the front Caliper metal brake pipe on GT and GTC models with carbon ceramic brakes use the original metal pipe

# Caliper brackets

**Iron Brakes** 

3D0 611 793F - x1 Bracket L/H – Iron Brakes

3D0 611 794F - x1 Bracket R/H – Iron Brakes

## Carbon Brakes

3W0 615 133A - x1 Bracket R/H - Carbon ceramic brakes

3W0 615 134A - x1 Bracket L/H - Carbon Ceramic brakes

N909 953 03 - x4 Caliper retaining bolts