

TECHNICAL BULLETIN



MODEL/DERIVATIVE:

Range Rover
Discovery Series II

Bulletin N°: 0035
CDS. ref: L8642bu
Issue: 1
Date: 11.07.01

AFFECTED RANGE:

All V8 derivatives in approximate VIN ranges:

Discovery: XA 900012 to XA 907212

XA 200412 to 1A 299999

1A 700000 to 1A 729921

Range Rover: XA 410483 to 1A 459035

All engines prior to engine number 96D 09338A

PROBLEM:

KNOCK FROM UNDER BONNET WHEN CRANKING - STARTER MOTOR / FLYWHEEL

The customer complains of a knocking noise when the starter motor is operating.

CAUSE:

Starter motor drive assembly fouling flywheel / torque converter drive plate balance weights.

ACTION:

Where a customer complaint of the above is confirmed, replace the flywheel / drive plate balance weights with the low profile balance weights detailed in *PARTS INFORMATION* and attachment 1.

The new weights should also be fitted whenever a starter motor is replaced.

NOTE: Before replacing any starter motor, refer to Technical Bulletin - ENGINE WILL NOT START / STARTS INTERMITTENTLY - Electrical Section Number 0029.

Replace the balance weights using the following procedure.

1. Disconnect the battery earth lead.
2. Raise the vehicle on a four post lift.
3. Identify the two rubber access plugs fitted to the rear flange of the engine oil sump. Remove the most convenient, (this is vehicle dependant).
4. Rotate the flywheel / drive plate until a weight becomes visible through the aperture from which the rubber plug was removed.
5. Having located a weight, carefully remove it using an Allen key.



ANY WEIGHTS DROPPED INTO THE POWER UNIT MUST BE RETRIEVED VIA THE ACCESS PLATE ON THE GEARBOX.

6. Select a new balance weight from the kit, of equivalent mass to the original weight removed. Refer to *Attachment 1* for dimensional and visual identification of original weights and the equivalent mass new weights.

NOTE: The replacement weight must always be fitted to the same hole from which the original weight was removed. The new balance weight is designed so that it can only be fitted in one orientation.

7. Fit the new weight to the flywheel / drive plate and tighten to a torque of 10Nm.
8. Repeat the replacement process until all weights have been replaced. On completion, rotate the flywheel / drive plate one complete revolution to confirm that all weights have been replaced. Always replace the weights on a **ONE FOR ONE BASIS** to ensure that they are of the correct mass and fitted in their correct positions.
9. Refit the rubber access plug to the rear flange.
10. Lower the vehicle and reconnect the battery earth lead.

PARTS INFORMATION:

LBB000550 Kit - Balance weights, containing:	Balance weight	Quantity in kit
	3.3 gramme	2
	4.3 gramme	2
	6.4 gramme	2
	9.5 gramme	1

NOTE: The new 9.5 gramme weight replaces the original 9.5 gramme and 9.7 gramme weights, (items 4 and 5 on attachment 1).

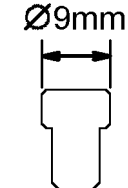
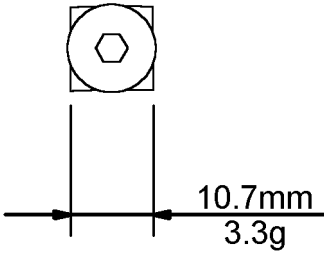
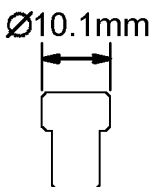
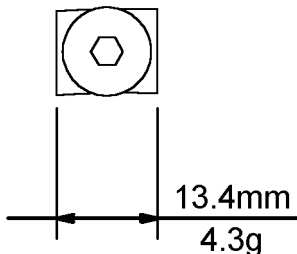
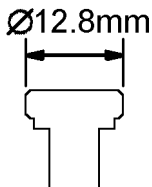
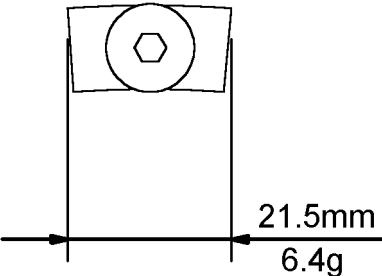
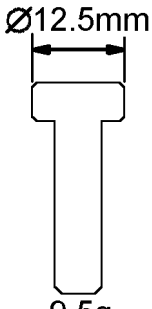
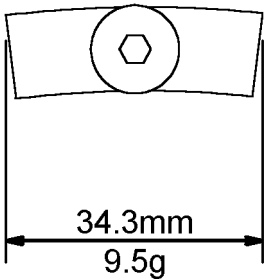
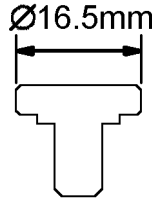
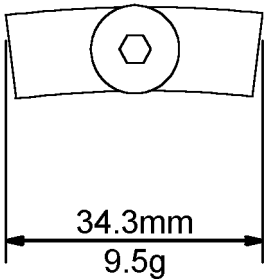
WARRANTY CLAIMS:

Use Complaint Code: 1C6K

Use S.R.O.: 12.53.89/41

Time allowance: 0.40Hrs

Attachment 1

	Original Weight		Replacement Weight
1	 <p>Ø9mm 3.3g Steel</p>		 <p>10.7mm 3.3g</p>
2	 <p>Ø10.1mm 4.3g Steel</p>		 <p>13.4mm 4.3g</p>
3	 <p>Ø12.8mm 6.4g Steel</p>		 <p>21.5mm 6.4g</p>
4	 <p>Ø12.5mm 9.5g Brass</p>		 <p>34.3mm 9.5g</p>
5	 <p>Ø16.5mm 9.7g Brass</p>		 <p>34.3mm 9.5g</p>

NOTE: The new 9.5 gramme weight replaces the original 9.5 gramme and 9.7 gramme weights, (items 4 and 5).