

INSTRUCTIONS TO FIT REAR CRANKCASE COVER & SEAL KIT (UE7488P)

RECOMMENDED TOOLS:

Hammer
Punch
Pry bar/ chisel
7/16" socket & ratchet with extension
3/16" allen key & socket

APPLICABLE TO:

ALL V8 ENGINE CARS FROM 1959 (SILVER CLOUD II & S2) THROUGH TO LATE SILVER SHADOW II & T2 MODELS (VIN 39529 APPROX)

Originally the V8 engines were fitted with oil flingers to the front (UE5770 & UE5769) and rear (UE5501) of the crankshaft to prevent oil leakage – see diagram A2.

The rear oil flinger is pressed onto the crankshaft and rotates inside a recess in the backplate on the rear of the crankcase which has an internal threaded scroll which is designed to throw the oil back into the engine - see diagram A1. These scrolls have a tendency to sludge up leading to oil leaks.

Later cars from approximately 1979 were fitted with engines (referred to as B series) with lipped oil seals around the front (UE40939) and rear (UE44273) of the crankshaft - see diagram A3.

We have built a kit of parts to modify the early rear crankshaft set-up to accept the later style rear lipped oil seal.

It is designed to be fitted leaving the rear oil flinger (UE5501) in situ. But the following conditions must be met in order to leave the flinger in place:

- 1. The crankshaft misalignment on the flinger must not exceed 0.15 mm/ 0.006"
- 2. The crankshaft run-out should not exceed 0.20 mm / 0.008"
- 3. The crankshaft run-out with the flinger should not exceed 0.10 mm/ 0.004"
- 4. External diameter of flinger must not be under 112.7 mm/ 4.420"
- 5. Roughness of flinger should not exceed 0.8 um
- 6. Engine oil pressure must exceed 30 lbs / 2 bar at 2000 rpm

You must ensure that the flinger is in the correct position and is flush with the end of the crankshaft and that the edge of the flinger is not too close to the extension piece (see diagram A5) on the end of the crankshaft (especially important if temporarily removing extension piece – we recommend marking on the extension piece where the crankshaft and extension touch).

If your engine does not meet these specifications or you are at all concerned about the condition of your flinger then we recommend that you remove the rear flinger and replace it with the sleeve UE37777 (which was fitted as standard to all early Corniche II models fitted with the early crankshaft

& later lipped oil seal – see diagram A4).

To remove the flinger we recommend that you centre punch it in order to spread it, then gently lever it off - see photo P1.

To fit the new sleeve UE37777 we recommend gently heating the sleeve up until it just starts to turn brown (similar to heating a starter ring gear in order to fit it) and tapping it onto the crankshaft using the old flinger - see photo P2.

Do not allow the sleeve to get too hot as this will damage the case hardening.

To fit the new seal & backplate kit:

Remove the transmission. Remove the setscrews securing the flywheel and withdraw the assembly from the rear of the crankshaft.

Locate the engine backplate UE7488 and unscrew the 7 retaining setscrews from the rear and 2 from the underside of the backplate. Collect the washers and withdraw the backplate. The backplate is dowelled to the crankcase. Discard the crankcase gasket. We recommend that the sump gasket and associated bottom end gaskets and seals are replaced (these are all supplied in our kit).

Inspect flinger as per instructions above.

Fit a new gasket UE5214 to the rear of the crankcase using gasket sealant.

Liberally smear oil onto the crankshaft and internal edge of new seal.

Fit new backplate and seal assembly UE7488P.

Tighten up the backplate bolts (including the two on the underside through the sump).

Refit flywheel and transmission.

If you have any further questions please do not hesitate to contact us: <u>sales@flyingspares.co.uk</u> or 00 44 (0)1455 292949.

DIAGRAM: A2
EARLY V8 ENGINE WITH OIL FLINGERS

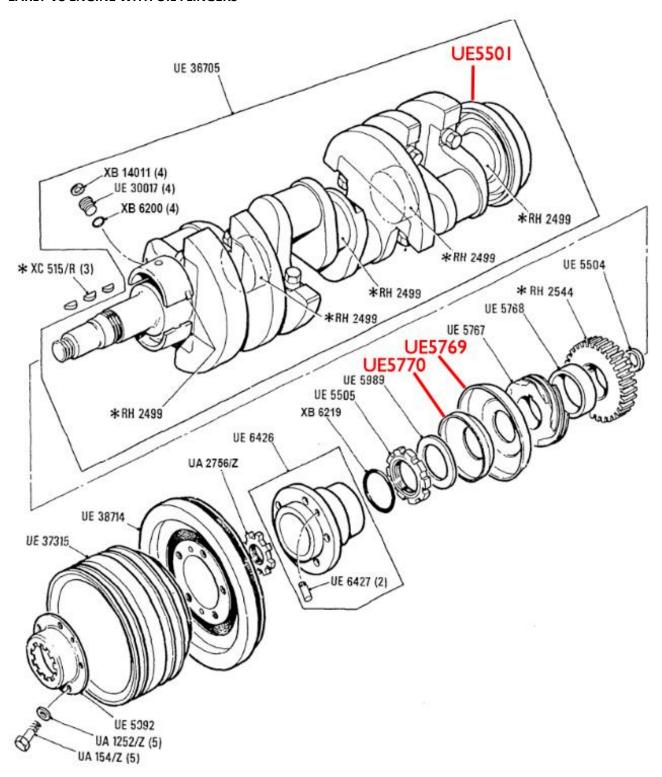
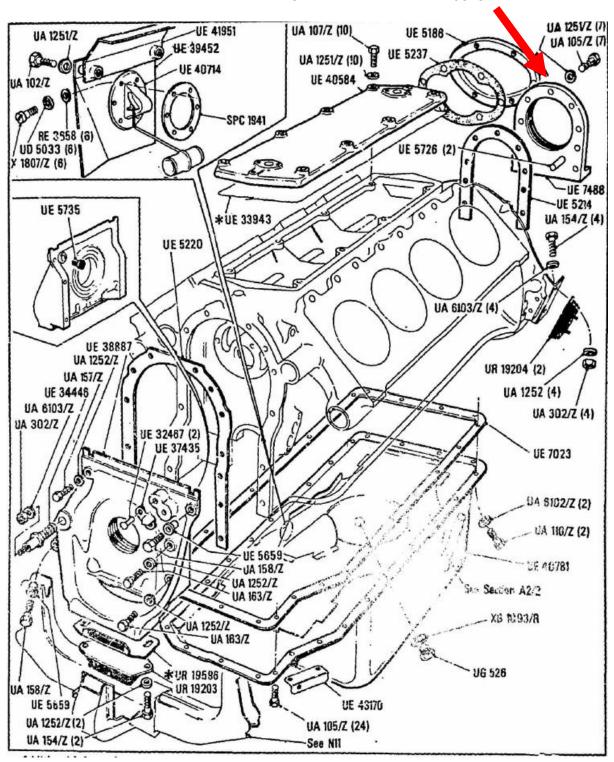
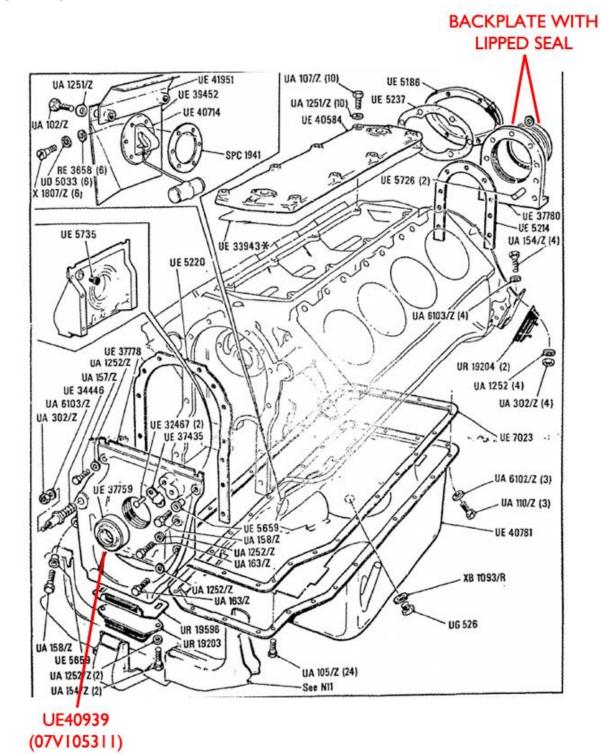


DIAGRAM: A1

EARLY BACKPLATE WITH THREADED SCROLL





OIL FLINGER & BACKPLATE

OIL SEAL & BACKPLATE

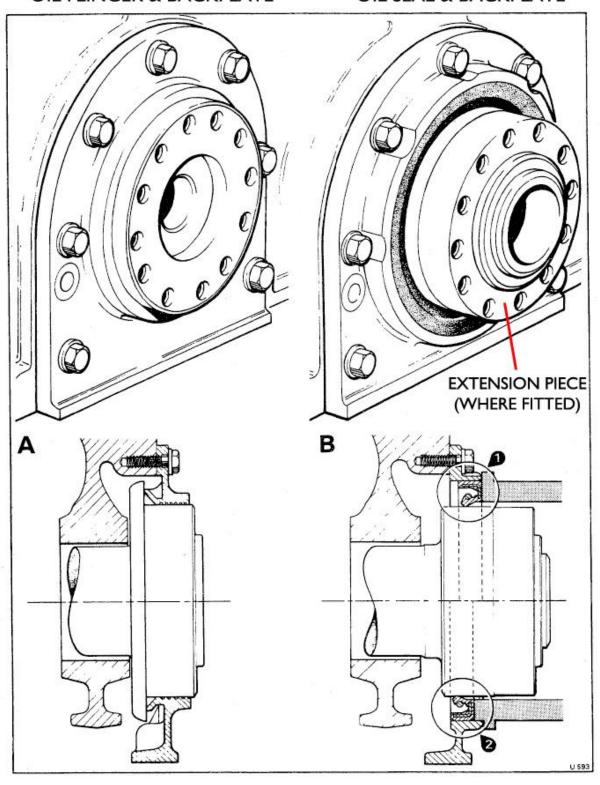


DIAGRAM: A4
EARLY CRANKSHAFT WITH SLEEVE

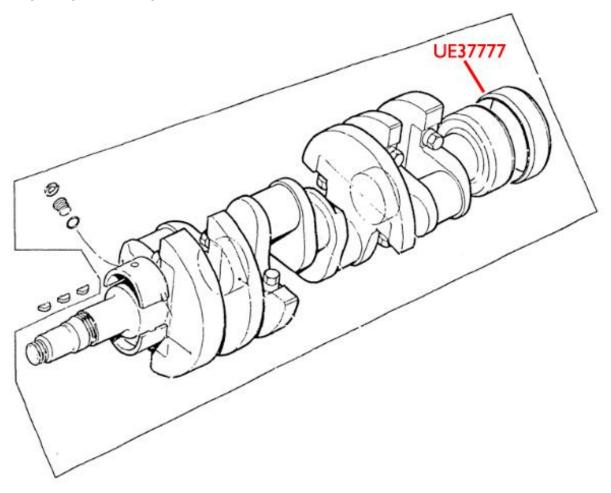


PHOTO: P1



PHOTO: P2

