

## Helpful Notes on Identifying TR5-6 Crankshaft and Flywheel Combinations

**Note 1:** 'Long backed' and 'Short backed' crankshafts refer to the length of the surface on which the rear oil seal runs and onto which the flywheel is located.

**Note 2:** Many TR's have had engine transplants with some donor engines having come from saloon cars. If the crankshaft or flywheel is to be changed for any reason, it is important to know which crankshaft you have, and to know which flywheel matches your crankshaft. In pairs they are interchangeable resulting in the clutch face always being in the correct relationship to the centre line of the crankshaft.

**Note 3:** The <http://> links below take you to the Triumph parts book pages on RevingtonTR's website.

### TO IDENTIFY THE CRANKSHAFT PROCEED AS FOLLOWS: -

#### QUICK CHECK: -

With the flywheel removed, if the back face of the crankshaft is roughly flush with the engine back plate, then a short back crankshaft is fitted. If the back face of the crankshaft protrudes from the engine back plate by roughly 25mm, then a long back crankshaft is fitted.

#### DETAILED CHECK: -

Take the seal housing off the back of the block (item 31 Plate A).

Please see here:

[http://www.revingtontr.com/shop/catalogue\\_page.asp?CarType=TR6CPCC&PlateID=316](http://www.revingtontr.com/shop/catalogue_page.asp?CarType=TR6CPCC&PlateID=316)

Then measure from the very back of the crank along the plain portion onto which the flywheel (item 23 Plate C) sits, to the flange up against which the rear thrust washer sits (item 3 Plate C).

Please see here:

[http://www.revingtontr.com/shop/catalogue\\_page.asp?CarType=TR6CPCC&PlateID=319](http://www.revingtontr.com/shop/catalogue_page.asp?CarType=TR6CPCC&PlateID=319)

The crankshaft as drawn in triumphs parts books does not show the flange, but both types of crankshaft, early and late, have it.

The flywheels differ in that the early flywheel has a shallow recess where the flywheel to crankshaft securing bolts (Item 25 Plate C) sit. The later crankshaft has a much deeper recess.

It is generally believed that this change was introduced to give more space for the Borg and Beck clutch centre plate, which had a tendency to catch on the flywheel to crankshaft securing bolts (Item 25 Plate C) when significantly worn.

#### DIMENSIONS: -

TR5, TR250 and early TR6 up to engine number CP50,000. **Long back crank and shallow flywheel**

Back of crankshaft measures 44mm

Recess in the clutch face of the flywheel is 9mm deep

All TR6 after engine number CP50,001. **Short back crank and deep flywheel**

Back of crankshaft measures 28mm

Recess in the clutch face of the flywheel is 25mm deep

**Note 4:** These measurements are approximate, but sufficiently different to make identification obvious



Figure 1: Short back crankshaft



Figure 2: Deep flywheel

## Part Number Table

The following table sets out what type of crankshaft should be fitted to your car. There is of course no guarantee that your car is fitted with the correct type.

**There are three basic types of crankshaft even though there are 6 different part numbers!**

1. Early TR5, TR250 and TR6 carburettor models are long back type with no oil way plugs
2. Late TR5, TR250 and early TR6 PI models are long back type with oil way plugs
3. Late TR6 carburettor and late PI models are short back type with oil way plugs

Part No.	Type	Notes
<b>TR5</b>		
214889	Type 1	
214926	Type 2	
<b>TR250</b>		
307546	Type 1	
308459	Type 2	
<b>TR6CC (Carb)</b>		
307546	Type 1	Fitted from Comm. No. CC32142 to Comm. No. CC50000
311322	Type 3	Fitted from Comm. No. CC50001
<b>TR6CF (Carb)</b>		
311322	Type 3	Fitted from Comm. No. CF0001
<b>TR6CP (PI)</b>		
214926	Type 2	Fitted from Comm. No. CP26998 to Comm. No. CP50000
216538	Type 2	Fitted from Comm. No. CP50001 to Comm. No. CP52319
311322	Type 3	Fitted from Comm. No. CP52320
<b>TR6CR (PI)</b>		
311322	Type 3	Fitted from Comm. No. CR0001

It should also be noted that in the case of a 'short backed' crankshaft, the spigot bush resides in the flywheel and not in the end of the crankshaft. This can be confusing since there is still a hole in the end of the crankshaft and a Spitfire bush fits exactly, but the shaft of the gearbox will not actually reach it, thus the need for the bush to be in the flywheel. Earlier long back cranks have the spigot bush residing in the crankshaft, in a similar way (same part number bush) as all TR2-4A.