



## Reversed shift sequence for ROTAX Kart engine type 128

The standard shift sequence of ROTAX engine type 128 is:

1<sup>st</sup> speed - downwards

2<sup>nd</sup> - 6<sup>th</sup> speed - upwards

Neutral position between 1<sup>st</sup> and 2<sup>nd</sup> speed.

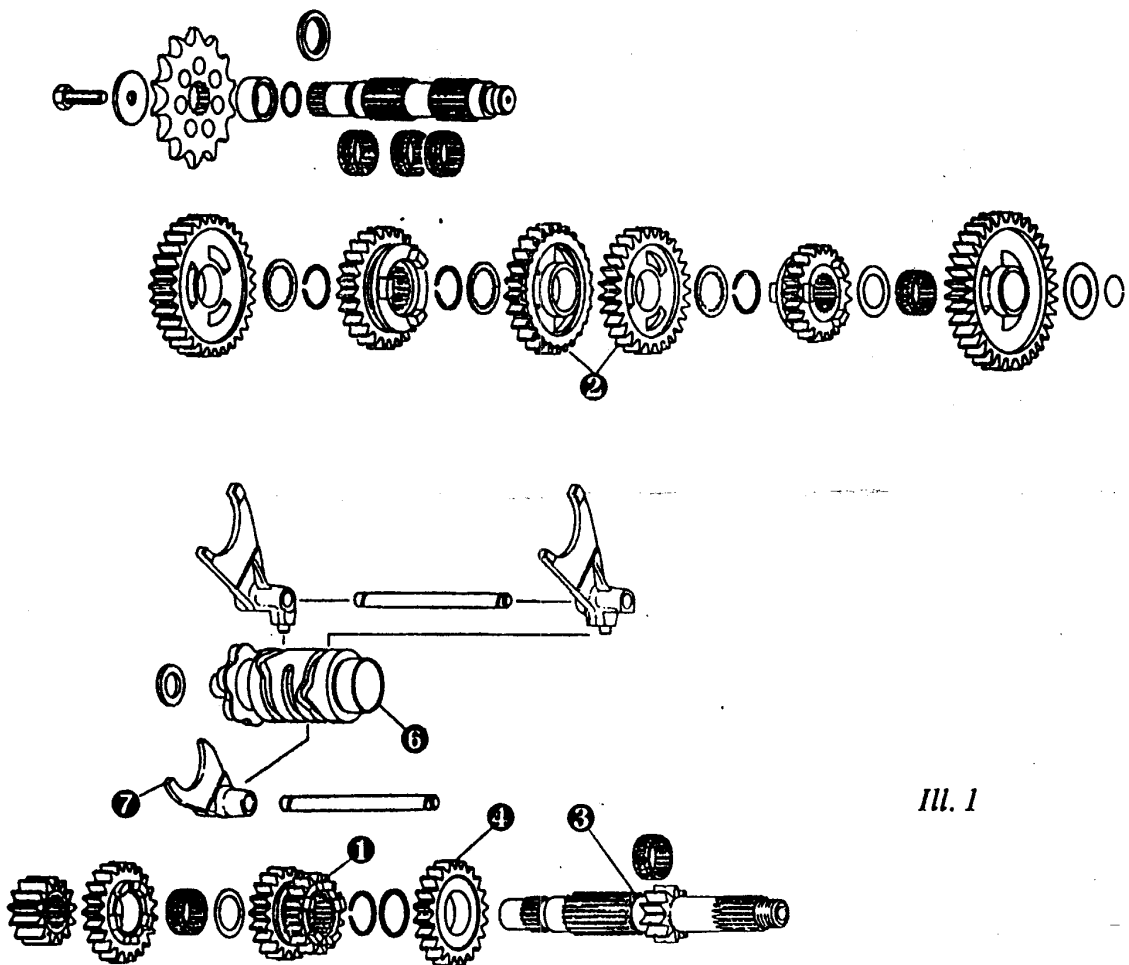
In Karting in many cases a reversed shifting sequence is an advantage to avoid inefficient gear lever linkage with incorrect „principles of leverage“ (e.g. when motor is situated to the right of the driver).

A reversed shifting sequence, i.e.

1<sup>st</sup> speed - upward

2<sup>nd</sup> - 6<sup>th</sup> speed - downwards

Neutral position between 1<sup>st</sup> and 2<sup>nd</sup> speed can be achieved by the following modifications:

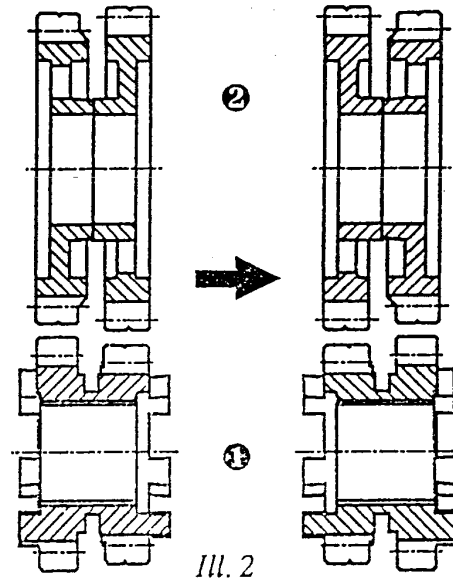


III. 1

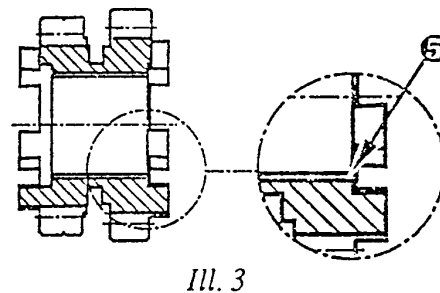


At installation of the 2 transmission shafts (clutch- and mainshafts) install the double gear ❶ on clutch shaft and the respective free gears ❷ on mainshaft transposed (*ill. no. 2*).

In this fitting position of the double gear it may happen, due to production tolerances, that the double gear ❶ may not clear the ending splines ❸ of the clutch shaft before the dogs engage properly in the dogs of the free gear ❹ (*ill. no. 1*).



In this case rework edge ❺ (*ill. no. 3*) of the double gears concerned with a turbo grinder or similar tool until the dogs can engage correctly.



Additionally the shift drum ❸ and shift fork ❹ have to be replaced by:

- |            |          |         |
|------------|----------|---------|
| shift drum | part no. | 258 945 |
| shift fork | part no. | 258 779 |

**ATTENTION:** At every modification of transmission ratios where the double gear ❶ is replaced, check before transmission installation for correct dog engagement between double gear ❶ and free gear ❹ and rework, if necessary, double gear ❶.