

1. How Sequential Gearboxes Work



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Výuka jazyků
prostřednictvím ICT

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How Sequential Gearboxes Work

Transmission differences

Manual transmission:

- standard H pattern in shifter

Sequential transmission:

- click a shift lever

How Sequential Gearboxes Work

Race cars:

- up-shift – push shift lever forwards
- downshift – pull shift lever backwards

Formula 1 cars:

- paddles instead of shift lever
- up-shift with left paddle
- Downshift with right paddle

How Sequential Gearboxes Work

Same process applies for

Motorcycles:

- lever moves up or down to shift gear

Mass produced automobiles:

- lever moves backwards or forwards to shift gear

How Sequential Gearboxes Work

The motions rotate a ratcheting drum which has grooves cut into it.

The grooves (depending on position of gears):

- control standard control rods
- directly move the gear selector fork

How Sequential Gearboxes Work

Ratcheting drum
=
sequential shifting

How Sequential Gearboxes Work

Advantages:

- quicker shifting
- no shifting mistakes