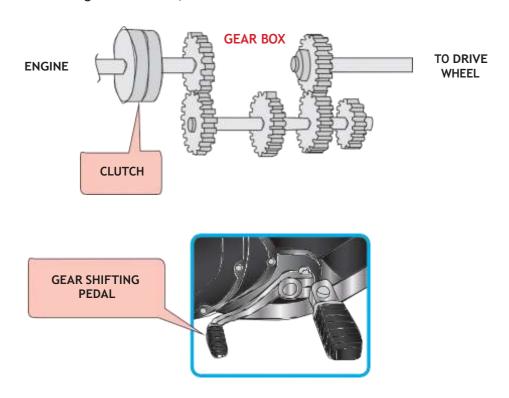
## **GEAR BOX**

37. The gear box contains a set of gears of various speed range and torque to enable the rider to regulate the motorcycle speed for different road and traffic conditions. When shifting gears, a rider uses the clutch to disconnect the transmission from the shaft, selects the gear by lifting or pressing the gear shift pedal with your left foot. Once the new gear is selected, the rider uses the clutch to re-establish the connection.



## DRIVE CHAIN & REAR WHEEL

38. Drive chain systems are the most common amongst modern motorcycles. In this system, a sprocket mounted to the output shaft (i.e., the countershaft in the gear box) is connected to a rear sprocket attached to the rear wheel of the motorcycle by a metal chain. When the transmission turns the smaller front sprocket, power is transmitted along the chain to the larger rear sprocket, which then turns the rear wheel. Drive chain requires periodic replacements. Beware that a wrongly adjusted drive chain can cause an accident.



## **BRAKING SYSTEM**

39. Drum brakes were common until the 1970s, most motorcycles today use disc brakes which consist of a steel braking disc, which is connected to the wheel and clamped between two brake pads.

The front and rear wheels on a motorcycle each have a brake. For manual transmission motorcycle, the rider activates the front brake with a hand lever on the right grip, the rear brake with the right foot pedal. The first thing you must test when riding a motorcycle is the effectiveness of the brakes.