

TECHNOLOGY

582 GYROSCOPE DEMONSTRATION. Mounted on heavy stable cast iron base, baked hammertone finish. All metal construction, 150 mm diameter x 250 mm height. Ideal for demonstration in the classroom.

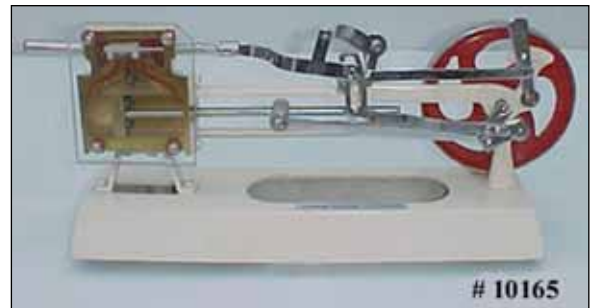


9136 GYROSCOPE WITH COUNTERPOISE. The circular frame has an accurately centered wheel and an adjustable counter poise. For demonstrating centripetal and centrifugal force.



EXTERNAL COMBUSTION ENGINES

10165 STEAM ENGINE MODEL. The cylinder is section cut and is covered with a glass plate. Complete with working parts - piston, slide valve, link motion and reversing .



10167 STEAM ENGINE MODEL WITH BOILER. Operation of a commercial steam engine is well illustrated with this working model. The unit is provided with a horizontal boiler with whistle, safety valve, steam gauge. Electrically heated and with a small dynamo.



INTERNAL COMBUSTION ENGINES



indicate air, fuel and gas

870 DEMONSTRATION TWO STROKE PETROL ENGINE. The model represents the internal structure of engine. The internal surfaces are finished in different colors to indicate air, fuel and gas mixture and exhaust gas contents. The crankshaft can be rotated by hand wheel to show the operating cycle with electrical contact for illuminating a 3-volt lamp as a spark plug to simulate ignition. The carburetor is also shown in section. The model is cast alloy construction, mounted on a polished wooden base.



871 DEMONSTRATION FOUR STROKE PETROL ENGINE: The model represents the internal structure of engine. The internal surfaces are finished in different colors to indicate air, fuel and gas mixture and exhaust gas contents. The crankshaft can be rotated by hand wheel to show the operating cycle with electrical contact for illuminating a 3-volt lamp as a spark plug to simulate ignition. The carburetor is also shown in section. The model is cast alloy construction, mounted on a polished wooden base.

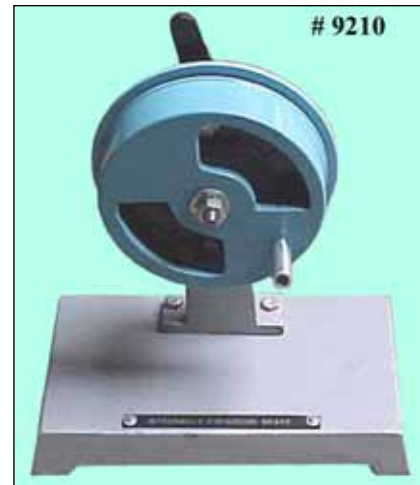
The firing point of the engine is shown by a 3-volt bulb which glows at the correct point in

875 DEMONSTRATION TWO STROKE DIESEL ENGINE: The model represents the internal structure and the operating principle. The internal surfaces finished in different colors to indicate air, fuel and gas mixture, and exhaust gas contents. With cam operated jerk pump and manually operated air inlet diaphragm injection nozzle and starting valve. The firing point of the engine is shown by a 3-volt bulb which glows at the correct point in the cycle by means of an electrical contact system in the model. The model is cast alloy construction, mounted on a polished wooden base.

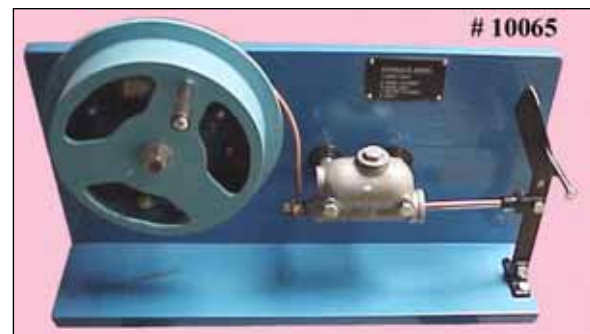


876 DEMONSTRATION FOUR STROKE DIESEL ENGINE: The model represents the internal structure and the operating principle. The internal surfaces finished in different colors to indicate air, fuel and gas mixture, and exhaust gas contents. With cam operated jerk pump and manually operated air inlet diaphragm injection nozzle and starting valve. The firing point of the engine is shown by a 3-volt bulb which glows at the correct point in the cycle by means of an electrical contact system in the model. The model is cast alloy construction, mounted on a polished wooden base.

9210 INTERNALLY EXPANDING BRAKE / DRUM BRAKE. The model consists of a hollow drum, two shoes are pivoted on pins. Braking action can be seen due to application of force on the cam-lever.



10065 HYRAULIC BRAKE. Full size unit, with master cylinder, wheel cylinder, brake shoe, brake drum. Complete with operating lever.



10056 DIFFERENTIAL GEAR MODEL. True to the original pattern. An all metallic sectioned model showing clearly the working. Shows all the essential parts rear axle, brake drum, wheel etc. Mounted on wooden base 45 x 45 cm.





10085 SINGLE CYLINDER DIESEL ENGINE. This is an actual single cylinder diesel equipment engine that has been dissected and cut away in order to show the mechanisms and inner workings of an internal combustion diesel engine. The engine can be operated (or turned over) by means of its drive shaft and flywheel.



10091 FOUR CYLINDER PETROL / GAS ENGINE. This device is an actual four-cylinder gasoline automotive engine that has been dissected and cut away in order to show the mechanisms and inner workings of an internal combustion engine. The engine is mounted on a sturdy metal base and can be operated (or turned over) by means of a large hand crank that is connected to the flywheel.

Mechanisms that can be observed include:

- Carburetor and Fuel Pump
- Distributor and Ignition System
- Valve Train
- Timing System