



LOAD AND BRAKE MODULE HTM90D



Features

- Load and Brake unit allows for fault diagnosis in the mechanical set-up
- Adjustable brake pressure
- Brake pads provided
- Sprung caliper system
- System sits within the safety guard

Description

The HTM90D Load and Brake Module attaches to the HTM90 base unit to simulate a system under load. This enables the students to observe the vibrational affects produced at different speeds and load forces. The module creates the vibrations as a function of torque and resistance. The module consists of a brake and disc attachment to the main HTM90 base unit. The braking torque can be adjusted on the control unit via a clamping knob, different breaking forces can be finely adjusted for any part of the experimental procedures. The brake can be quickly and precisely mounted on the grooves of the base unit and tightened into position. This module can be used as an extension to experiments on various alternative HTM90 series setups and can constitute as an added variation to several of the module setups.

Learning capabilities

- To see the effect on a shaft when a braking force is applied to it
- To see how vibrations in the system are changed when a load is applied
- Apply load to different module setups and see how this loading will affect system
- Analyse reaction of motor when under load due to additional friction in the system

Technical Specification

- A single assembly that fixes to the HTM90 base unit by means of an angled bracket fixed by two location bolts
- A calliper holds the two brake pads in place on either side of the rotating wheel to apply force onto the brake pad and convert the friction onto the wheel
- A knurled clamping knob is located against a block with a long threaded shaft which is connected to the calliper arm. This will apply variable pressure onto the sprung pins which in turn apply force onto the near side brake pad
- Brake pads are used to generate extra friction and force to slow and stop the wheels rotation. They sit inside the calliper and are designed to push against either side of the rotating wheel
- A rotor disc is connected to the main shaft and clamped into position by tightening the grub screws on the wheel clamp

Essential Ancillaries

- HTM90 Base Unit

What's in the Box?

- Mini flight case
- 1 x Angled Base, with brake
- 1 x Brake rotor/disc (wrapped in anti-corrosion paper) + fasteners
- 15" Shaft (wrapped in anti-corrosion paper)

Weights & Dimensions

- Approximate net weight 2Kg
- Approximate dimensions 350mm (L) x 100mm (W) x 200mm (H)

Ordering information

To order this product, please call PA Hilton quoting the following code:
HTM90D - Load and Brake Module

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