

The IEC Dynamics Cart

with safety catch



MF0945-001 Dynamics Carts (pair)

The IEC 'Dynamics Carts' have the following special features:

- Very low friction wheels, wide apart for better stability
- Inboard wheels that cannot catch around cords and tangle
- High Quality precise manufacture. Unit runs in a straight line
- Important Safety Catch on the firing shaft
- Accurate total mass of 600g per cart
- Low mass ball bearing wheels for low rotating mass
- Unbreakable and easily supports a person's weight
- Very strong ABS, anti twist and rigid body
- Pimple pattern gripping vinyl surface platform
- Both Carts are identical and both carts can fire shafts
- Tow point provided for towing Carts with elastic bands
- Fully stackable to double or triple mass or for storage
- Fitted with 'Velcro' bumpers for non-elastic collisions
- Very durable firing mechanism that is easy to set.
- Two settings on firing shaft for two firing forces
- Very attractive sleek and fun styling
- All spare parts stocked by IEC at all times

DIMENSIONS	OVERALL	PLATFORM
Length	307 mm	255 mm
Width	132 mm	80 mm
Height	90 mm	58 mm
Weight: 600 gms (each cart)		

INDUSTRIAL EQUIPMENT & CONTROL PTY.LTD.

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Instructions:

The DYNAMICS CART can be loaded with bricks or other weights to change its mass or two or three carts can be stacked. It can be towed along with cords or with rubber bands to simulate constant forces being applied to the cart. Experiments in impulse, momentum, velocity, acceleration, friction, energy and work can be performed. 'Velcro' pads permit two carts to lock together after collision. Can be used with the IEC Recording Timer for recording motion.

Notes: For safety in the classroom and during storage, the firing shaft can be locked to make firing impossible. The IEC DYNAMICS CART is fully assembled ready for use. Note that 'Velcro' is fitted to both ends of the carts so that any cart will adhere to any other cart for non-elastic collisions.

To Set The Dynamics Cart To Fire It's Shaft:

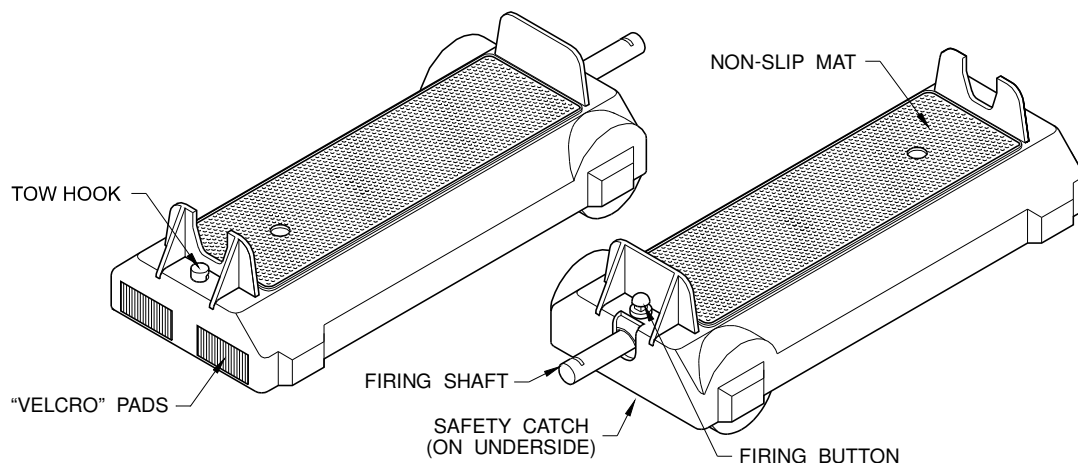
After unpacking, slide the safety catch so that the firing shaft can be released for firing the shaft from the body. Keep away from face and momentarily press the domed FIRING BUTTON near the end of the cart to disengage the shaft from the retaining blade and the shaft will fire forward but will remain captive with the cart.

With the thumb or hand, press the firing shaft in against the spring while also pulling slightly upwards on the shaft. The slot in the shaft will engage on the retaining blade when it is just over half way inserted. Keep away from face and momentarily press the domed FIRING BUTTON near the end of the cart. The shaft will fire at about half maximum force. Press the firing shaft all the way in until the second slot engages on the blade. Keep away from face and momentarily press FIRING BUTTON to fire at maximum force.

Soft Collisions:

For soft collision experiments, the firing shaft remains loosely protruding from the cart. For storage and for experiments not requiring firing, the shaft is normally fully pushed in, fully engaged on the retaining blade and the **SAFETY CATCH SHOULD BE APPLIED**.

The image below shows some of the features of the IEC 'Dynamics Carts'.



SAFETY:

THE FIRING SHAFT FIRES WITH HIGH FORCE. TAKE CAUTION AND KEEP CARTS AWAY FROM FACE AND EYES AT ALL TIMES.

ALWAYS ENGAGE THE SAFETY CATCH WHEN IN STORAGE OR AT ANY OTHER TIME WHEN NOT ACTUALLY FIRING THE CART.

Experiments involving the use of Dynamics Carts can be found in various student notes and Science text books.

KIT CONTENTS: 2 pcs Dynamics Carts fully assembled and ready to use.
1 pce Pack of rubber bands for towing the Dynamics Carts.
1 pce Instruction Sheet

NOTE: This IEC cart design has been copied in China so closely that they are almost indistinguishable from the original – even down to the label colours and text fonts. If you ever need to check that you have bought the originals, look for the IEC hexagon on the underside, note the faultless assembly, notice almost zero twist in the housing and very free-running wheels. The copy product will have none of these features.

Designed and manufactured in Australia

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