Coupling/Shaft Alignment Trainer

Model: 208-000

DAC Worldwide’s Coupling/Shaft Alignment Trainer (208-000) is a heavy-duty, precision learning aid that allows for convenient, realistic training in shaft alignment. When paired with a variety of hands-on exercises, the training system creates a complete performance-based course in the maintenance of shaft alignment.

The Coupling/Shaft Alignment Trainer is designed based on the dimensions of a common ANSI centrifugal pump, and allows for training using all common alignment techniques and tools. With each element having adjustment capabilities to create unique alignment problems, this learning system offers a complete training experience in this fundamental industrial bearing maintenance.

Learners will use industrial-grade components to study topics such as using a dial indicator in coupling/shaft alignment, coupling alignment using the reverse dial indicator method, fabrication of shaft keys, and installing a flexible disc coupling. Not only do the components provide durability to stand up to frequent use, but they also aide learners in becoming better prepared for the tasks they will encounter on the job.

**Practice Hands-On Mechanical Skills for Various Applications**

The Coupling/Shaft Alignment Trainer features a heavy-duty, 7-gauge steel baseplate with provision for tabletop mounting. It includes flanged bearings, fasteners, shafts, and ¾” diameter shafting with keyways. It also comes with four (4) steel pads, an Allen wrench set, combination wrenches, and more.

**Courseware Takes Learning to the Next Level**

In addition to hands-on training, DAC Worldwide’s Coupling/Shaft Alignment Trainer comes with courseware, which is useful in both an instructor-led or self-directed format. The courseware includes a textbook with chapters on coupling and alignment techniques, as well as twenty illustrated, hands-on exercises. Some of the exercises locating and correcting soft foot, assembling a chain-type coupling, installing a universal joint coupling, and much more!

**Expand Training with Additional Mechanical Options**
The Coupling/Shaft Alignment Trainer is only one of DAC Worldwide’s expansive mechanical training systems. Other related equipment includes a Belt Drive Training System (201-000), a Gear Maintenance Training System (205-000), and many more!

**FEATURES & SPECIFICATIONS**

- 7-Gauge, formed-steel baseplate.
- Heavy-duty, welded aluminum driver and driven elements.
- Allows for alignment using all common methods and alignment tools.
- Multiple "motor" positions allow for use of many coupling types.
- Dimensions based on a common ANSI centrifugal pump.
- Rigid construction allows alignment to .001".
- Requires a minimal number of hand tools.
- Flanged bearings allow changes in angular and parallel misalignment.
- All fasteners easily accessible and replaceable.
- Motor attachment points include steel threaded inserts.
- Replaceable shafts. Bent shafts are easily installed.
- 3/4" Diameter shafting with keyways.
- Uses size "A" shims.
- High-durability, powder-coated surfaces allow for repeated use and rough handling.
- Can be used with or without jacking bolts.
- All components can be mounted on related bench and workstation products.
- Packaging for shipment via motor freight.

**PRODUCT DIMENSIONS**

- **Product Dimensions**
  (L x W x H)
  36in. x 13in. x 16in. (910 x 330 x 400 mm)
  50lbs. (23kg)

- **Shipping Dimensions**
  (L x W x H)
  40in. x 15in. x 24in. (1020 x 380 x 610 mm)
  102lbs. (46kg)

**OPTIONS**
• Recommended #902F - Electromechanical Workstation

• **#208-001 - Shaft Alignment Tool Kit (required)**

• #208-015 - Magnetic Base/Dial Indicator Set (required)

• #208-003 - Standard Shim Kit

• #208-004 - Extended Shim Kit

• #208-005 - Steel Grid Coupling

• #208-007 - Elastomeric Element Coupling

• #208-014 - Jaw and Spider-Type Coupling

• #208-020D - Laser Shaft Alignment System, Basic

• #510-000 - IPT Industrial Trades Training Manual

• #510-001 - IPT Industrial Trades Handbook

• #514-002 - Textbook, Industrial Mechanics and Maintenance, 3rd Ed.

• #839 - Coupling Sample Board

• #208-006 - Thomas Flexible Disk coupling.

• #208-012 - Chain-type coupling.

• #208-013 - Universal joint coupling.

• #208-500 - Use/Exercise Guide (additional).

• **#208-PAC - Coupling/Shaft Alignment Training System Plus**

**ACCESSORIES**

• Four steel pads for use with jacking bolts.

• Allen wrench set.

• Combination wrenches.

• Industrial Trades Training Manual (IPT).

• Use/Exercise Guide with 20 hands-on exercises.

**CONTENT** The courseware, useful in both an instructor-led or self-directed format, includes a textbook with chapters on couplings and alignment technique, and twenty, illustrated, hands-on exercises.

**Exercises Include:**

• Exercise 208-S01 - Introduction to Coupling/Shaft Alignment Terminology and Theory
Exercise 208-S02 - Use of a Dial Indicator in Coupling/Shaft Alignment
Exercise 208-S03 - Coupling Alignment Pre-Checks
Exercise 208-S04 - Locating and Correcting Soft Foot
Exercise 208-S05 - Calculating and Correcting for Bar Sag
Exercise 208-S06 - Coupling Alignment Using a Straightedge and Thickness Gage
Exercise 208-S07 - Coupling Alignment Using the Rim and Face Method
Exercise 208-S08 - Using Graphical Solution Techniques With the Rim and Face Method
Exercise 208-S10 - Coupling Alignment Using The Reverse Dial Indicator Method (Two Dials)
Exercise 208-S11 - Using Graphical Solution Techniques With the Reverse Dial Indicator Method
Exercise 208-S12 - Coupling Alignment Using The Reverse Dial Indicator Method (One Dial)
Exercise 208-S13 - Considering Thermal Growth in Shaft Alignment
Exercise 208-S50 - Inspection and Installation of Shafts and Keyways
Exercise 208-S51 - Fabrication and Installation of Shaft Keys
Exercise 208-S53 - Assembling and Installing a Chain-Type Coupling
Exercise 208-S57 - Assembling and Installing a Jaw and Spider Coupling
Exercise 208-S58 - Assembling and Installing an Elastomeric Element Coupling
Exercise 208-S60 - Assembling and Installing a Flexible Disc Coupling
Exercise 208-S61 - Assembling and Installing a Steel Grid Coupling
Exercise 208-S62 - Assembling and Installing a Universal Joint Coupling

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