

PANAVISE®



ACTUAL SIZE

CATALOG NO. 170

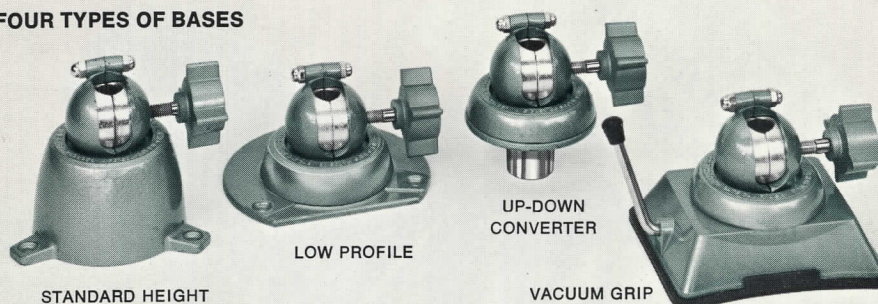
**TOOLS FOR
EVERY
INDUSTRY AND
PROFESSION:**

Avionics
Arts and Crafts
Broadcasting
Cameras
Clean Rooms
Clocks
Communications
Data Processing
Dental
Laboratories
Educational
Institutions
Electricians
Electronics
Engravers
Gunsmiths
Hobbyists
Instruments
Inventors
Jewelers
Jig and
Fixture Makers
Laboratories
Lapidaries
Locksmiths
Manufacturing
Machinists
Medical
Laboratories
Micro-Circuitry
Model Makers
Motion Pictures
Musical
Instruments
Office Machines
Optical
Orthodonture
Orthopedic
Appliances
Pattern Makers
Photographic
Equipment
Precision
Tool Makers
Printed and
Etched Circuitry
Production Lines
Radio
Railroad Models
Rehabilitation
Programs
Research
Laboratories
Technical
Instruction
Telephone
Equipment
Television
Equipment
Tool and
Die Makers
Watchmakers

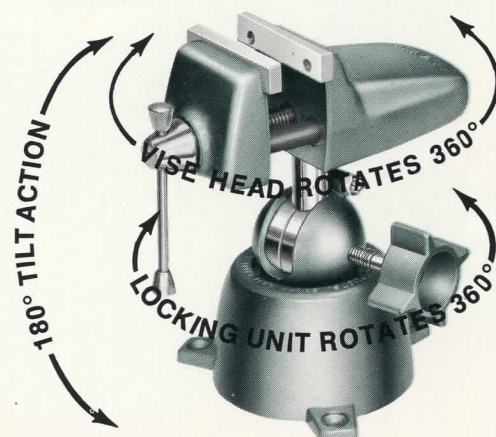
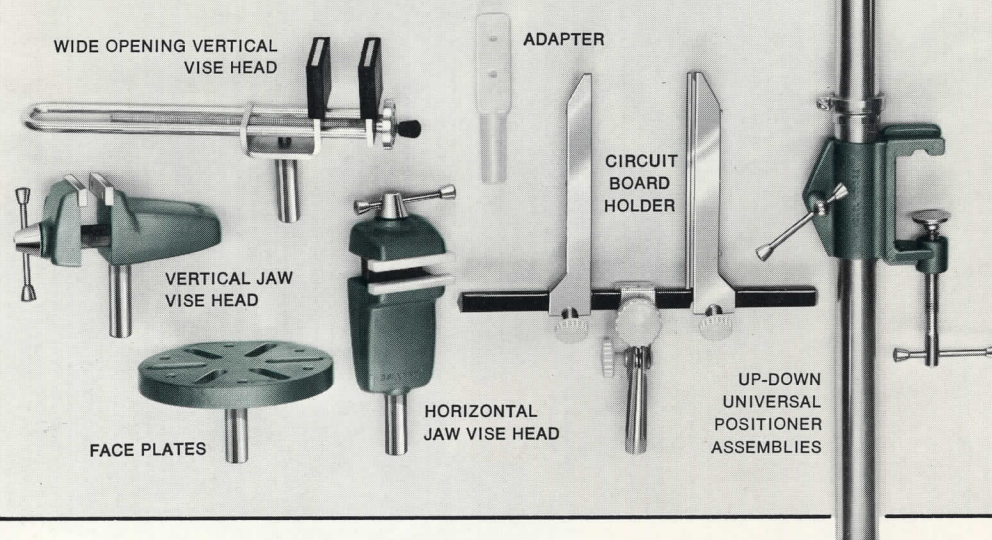
PANAVISE is a unique system of precision tools, designed as interchangeable components. They are used in innumerable combinations to hold intricately exacting work in any steady position desired. The system consists of four dimensionally related bases with compound rotation and tilt action... plus seven types of adjustable work-holder vise heads and attachments with variations... *plus three new, exclusive UP and DOWN universal positioner assemblies.*

Skilled technicians in science and industry enjoy working fatigue-free with PANAVISE tools. Management enjoys the assured benefits of greatly improved efficiency and higher output of quality products in less time. The PANAVISE tool systems are a proven profitable investment wherever tools are employed.

FOUR TYPES OF BASES



SEVEN TYPES OF WORK-HOLDER VISE HEADS AND ATTACHMENTS



TURNS AND TILTS TO ANY POSITION
MODEL 301 (left) illustrates four functional design features that make PANAVISE® work holder tool systems the most versatile in the world. (1) The stem of the vertical vise head turns full-circle within the $\frac{5}{8}$ " (1.59 cm) throat of the "locking unit" in the base. (2) This locking unit also permits the vise head to be tilted 90° in any direction (180° tilt action). (3) The housing containing the "locking unit" also rotates full-circle. (4) All these movements are controlled by one variable-pressure knob, making it possible to move the work at any desired drag-tension, or to lock it firmly, at any position, any angle, facing any direction around the base.

PANAVISE*

A PRODUCT OF COLBERT INDUSTRIES

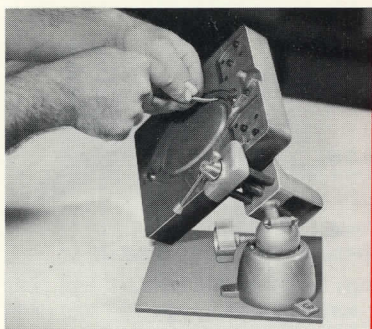


Manufacturers and marketers of Colbert Nameplates of Distinction and PANAVISE® work positioner tools.

10107 Adella Avenue, South Gate, California 90280 • Telephone (213) 569-8108. Cable: COLBIND

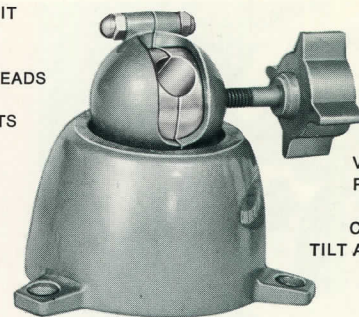
*PANAVISE® is a registered trade mark

PANAVISE® is protected by U.S. Patent No. 2,898,068.



PANAVISE TURN-AND-TILT WORK POSITIONER BASES

LOCKING UNIT
HOLDS ALL
 $\frac{5}{8}$ " (1.59 cm)
STEM VISE HEADS
AND
ATTACHMENTS



ONE
VARIABLE-
PRESSURE
KNOB
CONTROLS
TILT AND TURN

Each of these four bases has the same patented locking unit as detailed on page 2. The throat receptacle will instantly accommodate any of the vise heads or attachments shown on pages 4, 5 and 6, or any custom designed small tool with a $\frac{5}{8}$ " (1.59 cm) stem.

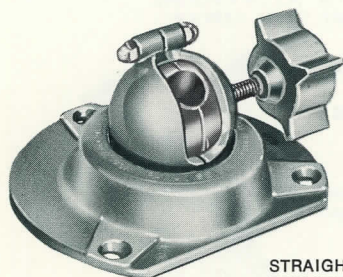
For detailed description of construction and finish see page 8 back cover.

MODEL 300 STANDARD HEIGHT BASE

The locking unit is as described on page two. Three lugs are positioned for mounting on No. 310 surface plate, 311 bench clamp, face plates No. 337, 338, 339, 340, or directly on bench, wall or work station.

Height: $3\frac{3}{4}$ " (9.5 cm)
Base diameter: 5" (12.7 cm)
Bolt circle: $2\frac{5}{8}$ ", three $\frac{5}{16}$ " holes, spaced 120°
(5.5 cm, three 7.9 mm holes)
Shipping weight: 2 lbs., 2 oz. (.964 kg)

HEAVY DUTY MODEL 400 (not illustrated) — with 1" (2.54 cm) diameter shaft receptacle, serrated locking unit and housing, is designed and constructed to accommodate extra heavy weights and pressures.



STRAIGHT FRONT
PERMITS FLUSH
EDGE MOUNT

MODEL 305 LOW PROFILE BASE

$2\frac{1}{2}$ " (6.4 cm) height allows working close to the mounting surface. Straight front permits mounting flush with edge of bench or station. Three lugs are positioned for mounting on No. 310 surface plate, 311 bench clamp, face plates No. 337, 338, 339, 340, or directly to bench, wall or work station. Finish: see page 8.

Height: $2\frac{1}{2}$ " (6.4 cm)
Base diameter: 5" (12.7 cm)
Bolt circle: $2\frac{5}{8}$ ", three $\frac{5}{16}$ " holes, spaced 120°
(5.5 cm, three 7.9 mm holes)
Shipping weight: $1\frac{3}{4}$ lbs. (.794 kg.)

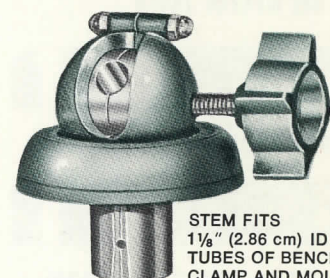


REPLACEABLE
HEAVY DUTY
SUCTION PAD

MODEL 380 VACUUM BASE

Attaches instantly and tightly to smooth non-porous surfaces. Ideal portable positioner for quick, changeable set-ups. A turn of the lever attaches and releases the heavy duty suction pad. Moistening the pad increases its powerful grip. Finish: see page 8.

Height: $2\frac{1}{4}$ " (5.7 cm)
Suction pad dim.: 5" x $4\frac{1}{4}$ " (12.7 cm x 10.8 cm)
Shipping weight: $2\frac{1}{2}$ lbs. (1.134 kg)



STEM FITS
 $1\frac{1}{8}$ " (2.86 cm) ID
TUBES OF BENCH
CLAMP AND MOUNTS
(PAGE 7)

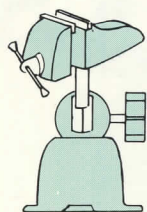
MODEL 336 UP-DOWN CONVERTER BASE

Designed with mounting shank to fit $1\frac{1}{8}$ " (2.86 cm) ID tube assemblies No. 325, 330, 330-1, see page 7. Finish: see page 8.

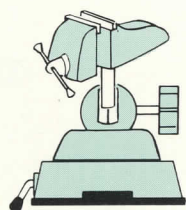
Height: $2\frac{1}{4}$ " (5.7 cm)
Base diameter: 3" (7.6 cm)
Shipping weight: 2 lbs. (.907 kg)

(all weights are approximate and subject to change without notice)

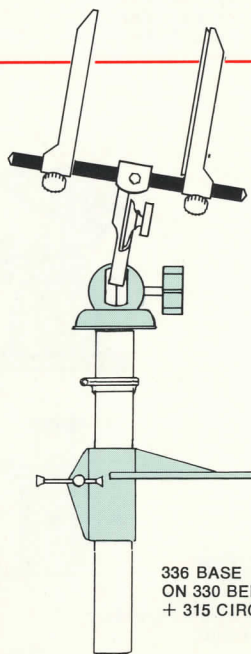
TYPICAL PANAVISE® COMBINATIONS



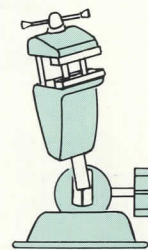
MODEL 301
(300 BASE
+ 303 VISE HEAD)



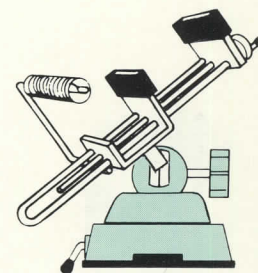
MODEL 381
(380 BASE
+ 303 VISE HEAD
WT. 4 LBS., 1.815kg)



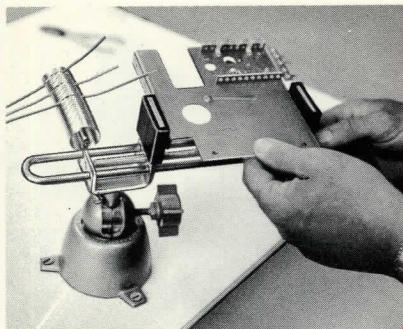
336 BASE
ON 330 BENCH MOUNT
+ 315 CIRCUIT BOARD HOLDER



305 BASE
+ 304 VISE HEAD



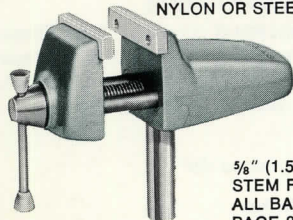
380 BASE
+ 366 VISE HEAD
+ 359 UNIVERSAL
HOLDER



PANAVISE

VERTICAL AND HORIZONTAL VISE HEADS

REPLACEABLE
NYLON OR STEEL JAWS



5/8" (1.59 CM)
STEM FITS
ALL BASES ON
PAGE 3



No. 343 NYLON JAWS

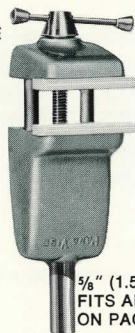


No. 344 GROOVED NYLON JAWS.



No. 353 PLATED STEEL JAWS.

REPLACEABLE
NYLON OR
STEEL
JAWS



5/8" (1.59 CM) STEM
FITS ALL BASES
ON PAGE 3

MODEL 303-1 VERTICAL JAW VISE HEAD

5/8" (1.59 cm) stem fits all positioner bases shown on page 3. 2 1/2" (6.35 cm) jaws open to 2 1/4" (5.72 cm) with throat depth of 1 3/8" (3.33 cm). Equipped with Nylon Jaws. (For Steel Jaws order No. 303-2.) Head is pressure die-cast aluminum alloy, with steel and brass inserts which are flared and notched for maximum bonding. Unitized construction, cross-ribbed body, nickel-plated stem, brass bushing for steel adjusting screw, steel guide pins, stainless steel tightening rod.

Height (in use above base): 2 3/4" (7.0 cm)

Size: 2 1/2" x 5 1/4" (6.4 cm x 13.3 cm)

Shipping weight: 1 3/8 lbs. (.737 kg)

No. 343 NYLON JAWS for 303-1 and 304-1 vises. Type 66 Nylon, excellent electrical insulation. Withstands intermittent heat up to 300° F. Continuous heat 200° F.

2 1/2" x 1/2" x 1/4" (6.4 cm x 1.27 cm x .635 cm)

Shipping weight: 1 oz. (28.35 cm)

No. 344 GROOVED NYLON JAWS. Same as 343, with horizontal V-groove designed to gently hold small objects.

Shipping weight: 1 oz. (28.35 cm)

No. 353 PLATED STEEL JAWS.

2 1/2" x 1/2" x 1/4" (6.4 cm x 1.27 cm x .635 cm)

Shipping weight: 3 oz. (85.05 gm)

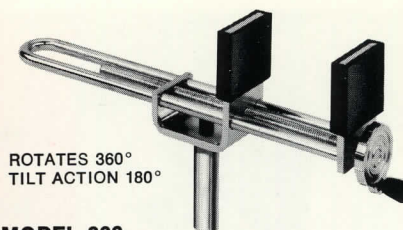
MODEL 304-1 HORIZONTAL JAW VISE HEAD

Designed specifically to permit working accurately close to the bench or work station surface, particularly when used in combination with No. 305 (page 2) low profile positioner base. All material and construction specifications same as Model 303-1 above. Equipped with Nylon Jaws (for Steel Jaws order No. 304-2).

Height (above base): 5 1/4" (13.3 cm)

Size: 2 1/2" x 5 1/4" (6.4 cm x 13.3 cm)

Shipping weight: 1 3/8 lbs. (.737 kg)



ROTATES 360°
TILT ACTION 180°

MODEL 366

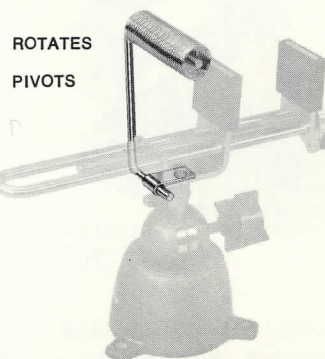
WIDE OPENING VERTICAL VISE HEAD

Grip range is 0" to 6 1/2" (16.51 cm). Fits all 300 series bases (page 3), and with No. 336 base it may be used on up-down positioners (page 7). Jaw pad width 1 3/4" (4.45 cm). Throat depth 2" (5.08 cm). Reversible, replaceable pads are neoprene. Designed for positioning and holding electrical and electronic products in assembly and repair, laboratory instruments and vessels, cameras, clocks, small firearms and firing mechanisms of rifles and other weapons. An important tool for miscellaneous industrial and scientific research and production. Steel parts machined to fine tolerances, plated for durability.

Height: 3 3/8" (9.2 cm)

Size: 1 3/4" x 11 1/4" (4.5 cm x 28.6 cm)

Shipping weight: 1 7/8 lbs. (.850 kg)



ROTATES

PIVOTS

MODEL 359 UNIVERSAL HOLDER

Convenient time-saving attachment for No. 366 vise head, designed for separating and holding lead wires, small precision tools, or light instruments at technician's fingertips. Mounts onto stem of 366 vise head, with removable clip, permitting positioning above, alongside, or beneath.

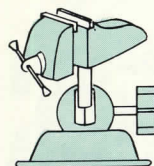
Height overall: 5" (12.7 cm)

Coil length: 3" (7.6 cm)

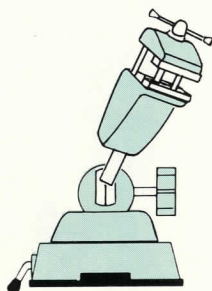
Coil width: 1" (2.54 cm)

Shipping weight: 1/2 lbs. (.227 kg)

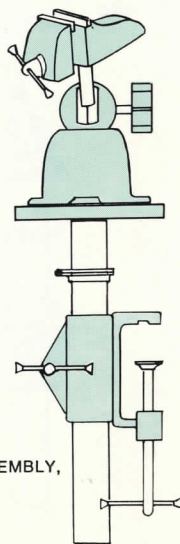
TYPICAL PANAVISE® COMBINATIONS



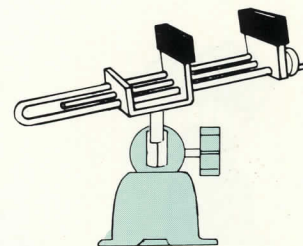
303 VISE HEAD
+ 305 BASE



304 VISE HEAD
+ 380 BASE

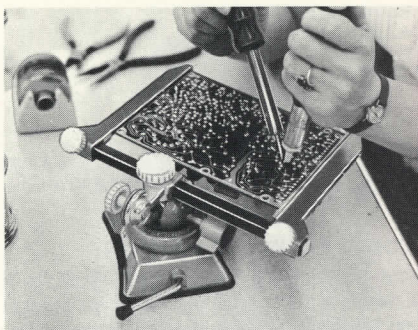


303 VISE HEAD
+ 300 BASE
+ 338 FACE PLATE
+ 325 UP-DOWN ASSEMBLY,
BENCH MOUNT



MODEL 366
(366 VISE HEAD
+ 300 BASE)

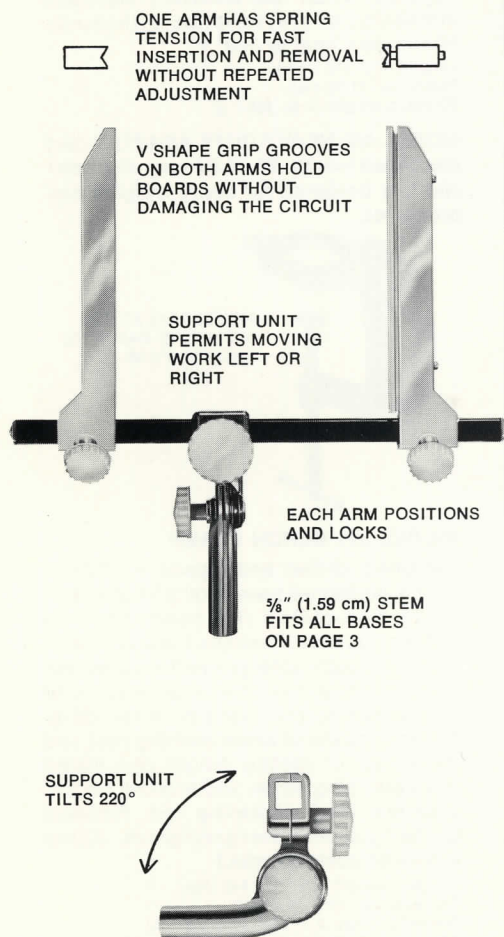
HEIGHT: 7 3/8" (18.7 CM)
WEIGHT: 4 LBS. (1.815 KG)



PANAVISE

CIRCUIT BOARD HOLDERS

**FAST, EFFICIENT HANDLING, OF BOARDS OF ANY
SHAPE, SIZE, OR THICKNESS TO 5/32" (.4 cm)**



MODEL 315 CIRCUIT BOARD HOLDER ASSEMBLY

Used in combination with 300 series bases shown on page 3, and up-down positioners on page 7, this versatile PANAVISE® holds circuit boards of any shape, up to 8" (20.32 cm) wide*, in any position... flat, vertically, at any angle. It is easily rotated, tipped, tilted, elevated, lowered, moved left or right, or turned over. The exclusive PANAVISE® spring tension arm permits a board to be inserted and removed without continual adjustment.

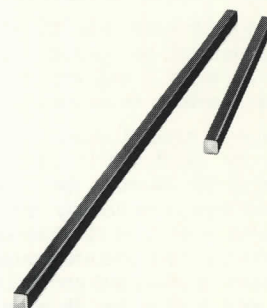
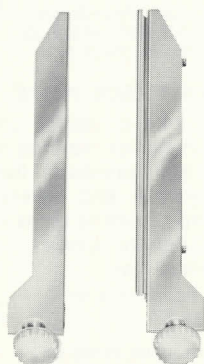
Both arms extend 6" (15.24 cm) from the bar, with V shape grip grooves designed to hold any board up to 5/32" (.4 cm) thick without damage to the circuit. The black

(steel) square bar keeps arms aligned. Each arm moves and locks independently.

The support unit has two adjustments, one to permit moving the work left to right, and the other to tilt the entire unit 220°.

Standard equipment on Model 315 includes one 10" (25.4 cm) cross bar, and a set of arms, one rigid and one with spring-tension. Longer cross bars up to 30" (76.2 cm) are available, frequently used with 2, 3 and 4 sets of arms, to hold several boards and speed up production.

Length of cross-bar (as illustrated, left):
10" (25.4 cm)
Grip-range (as illustrated, left):
1 1/4" to 8" (3.0 cm to 20.3 cm)
Arms extend from bar: 6" (15.3 cm)
Shipping weight: 1 1/8 lbs. (.510 kg)



No. 316 ARMS ONLY

Extra circuit board holder arms are available in sets, one rigid arm and one spring tension arm. Position adjustment knobs included.

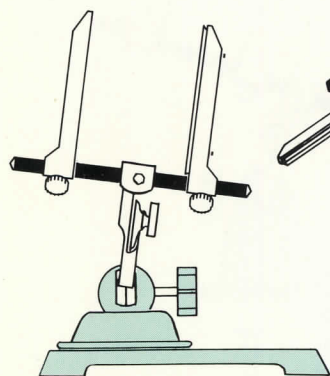
Length from cross bar: 6" (15.3 cm)
Shipping weight: 1/2 lb. (.227 kg)

*No. 318 CROSS BAR ONLY

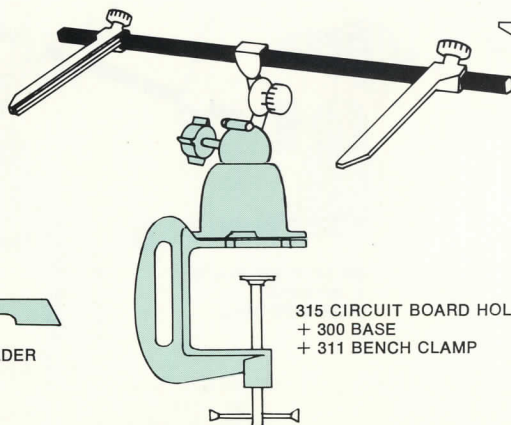
Any desired length available, up to 30" (76.2 cm). Specify length. Bars should be ordered 2" (5.08 cm) longer than the width of the circuit board to be held. Bars are furnished with white Nylon end inserts.

Standard Length: 10" (25.4 cm)
Size: 1/2" x 1/2" (1.3 cm x 1.3 cm)

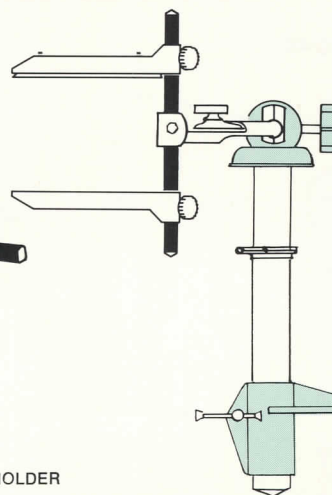
TYPICAL PANAVISE® COMBINATIONS



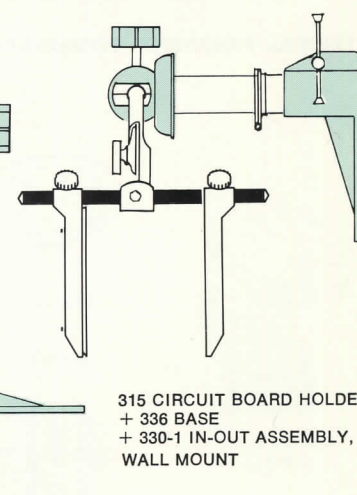
315 CIRCUIT BOARD HOLDER
+ 305 BASE
+ 310 SURFACE PLATE



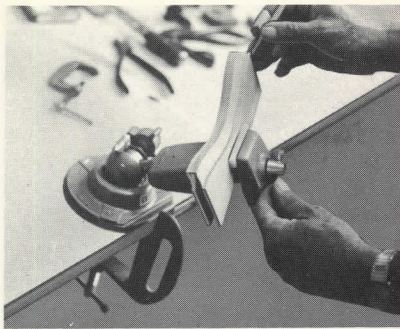
315 CIRCUIT BOARD HOLDER
+ 300 BASE
+ 311 BENCH CLAMP



315 CIRCUIT BOARD HOLDER
+ 336 BASE
+ 330 UP-DOWN ASSEMBLY, BENCH MOUNT

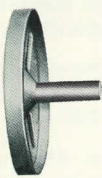


315 CIRCUIT BOARD HOLDER
+ 336 BASE
+ 330-1 IN-OUT ASSEMBLY,
WALL MOUNT

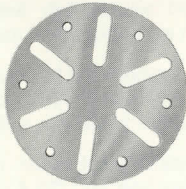


PANA-VICE

**FACE PLATES
BENCH CLAMPS
ADAPTERS
SURFACE PLATES**



5/8" (1.59 cm) STEM FITS
INTO BASES
300, 305, 380, 336



MODEL 337 FACE PLATE

With 5/8" (1.59 cm) steel jacketed stem, 2 1/2" (6.4 cm) long, the 337 face plate is designed for use with any of the PANA-VICE® positioner bases shown on page 3. With bases No. 300, 305 and 380, the 337 face plate holds work 3 1/2" (8.89 cm) to 5" (12.7 cm) above the table surface.

With No. 336 base, the 337 face plate can be mounted on up-down positioners shown on page 7, and elevated or lowered for standing or sitting positions.

The face is sanded aluminum, with six 1 5/8" x 3/16" (4.13 x 1.11 cm) key slots spaced at 60° intervals for variable pattern bolt area. Additionally, six 1/4" (.635 cm) holes spaced at 60° intervals alternate with the slots, and are spaced to permit mounting bases 300 and 305 (page 3). Sides and bottom are finished Colbert hammertone grey-green.

Diameter: 5 3/8" (13.7 cm)
Shipping weight: 1 lb. (.454 kg)

HEAVY DUTY MODEL 437 FACE PLATE
(not illustrated)—with 1" (2.54 cm) diameter stem, is designed and constructed to fit No. 400 base, accommodates extra heavy weights and pressures.

MODEL 309



MODEL 310

HOLES SPACED FOR
MOUNTING BASES 300
AND 305 (PAGE 3)

MODEL 309 SURFACE PLATE

Designed to take a beating under light ball peen hammer or marking tool. High grade gray iron, precision flat surface Blanchard ground and parallel to the base, with under surface cross-ribbed for strength and rigidity. A new convenience for every work center.

Dimensions (surface): 10" x 10"
(25.4 cm x 25.4 cm)
Height: 1 1/8" (2.9 cm)
Shipping weight: 10 lbs. (4.536 kg)

MODEL 310 SURFACE PLATE

Same as Model 309 above, but drilled and tapped for mounting PANA-VICE® positioner bases 300 and 305. Three plated flat-head machine screws supplied. A superior new working surface!

TWO 3/16" (.48 CM)
HOLES SPACED
ON 1" (2.54 CM)
CENTER



5/8" (1.59 CM) STEM FITS
ALL BASES SHOWN
ON PAGE 3

MODEL 342 NYLON ADAPTER

Flat portion, 2 3/4" x 1" x 3/8" (7.0 cm x 2.54 cm x .95 cm), is designed for mounting pegboard, plywood or other materials. Used with PANA-VICE® bases, the work can be tilted and turned at any position. Type 66 Nylon has excellent electrical insulation characteristics withstands intermittent heat to 300° F.

Length: 4 3/4" (12.1 cm)
Shank: 5/8" (1.59 cm)
Shipping weight: 2 oz. (56.7 g)

MODEL 442 HEAVY DUTY ADAPTER (not illustrated)—with 1" (2.54 cm) diameter shaft, is designed for heavy weights and pressures.



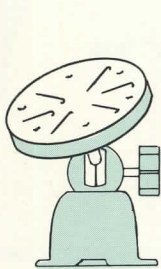
HOLES SPACED FOR
MOUNTING BASES 300
AND 305 (PAGE 3)

MODEL 311 BENCH CLAMP

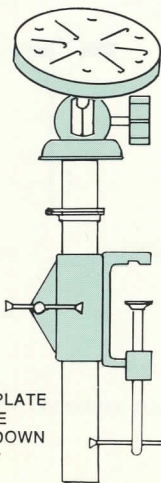
Designed, drilled and tapped for PANA-VICE® positioner bases 300 and 305, with three zinc-plated flat head machine screws supplied. Features include built-in handle design, strength and light weight achieved through optimum distribution of high pressure die cast zinc alloy, durability by means of brass bushing cast and made part of casting. Bright zinc plated steel clamping screw and leveling button, stainless steel tightening rod. Finished Colbert hammertone/gray/green. (Other colors on custom basis.)

Height (overall): 6 3/4" (17.145 cm)
Throat depth: 2 3/8" (6.0 cm)
Gripping range: 0 to 3 1/2" (0 to 8.9 cm)
Shipping weight: 2 1/2 lbs. (1.191 kg)

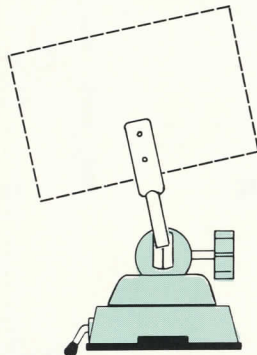
TYPICAL PANA-VICE® COMBINATIONS



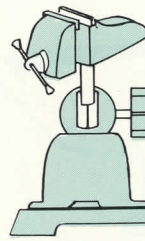
337 FACE PLATE
+ 300 BASE



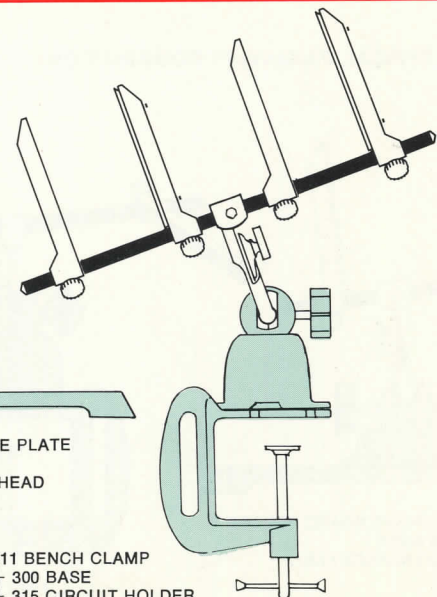
337 FACE PLATE
+ 336 BASE
+ 325 UP-DOWN
ASSEMBLY



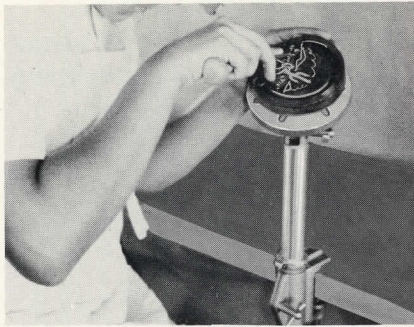
342 ADAPTER
+ 380 BASE



310 SURFACE PLATE
+ 300 BASE



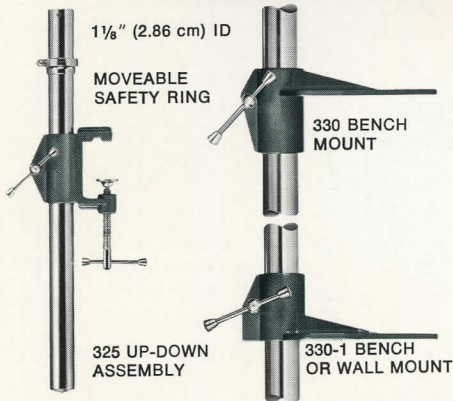
311 BENCH CLAMP
+ 300 BASE
+ 315 CIRCUIT HOLDER,
LONG BAR, EXTRA ARMS



A COLBERT EXCLUSIVE! UP-DOWN ROTATING WORK POSITONER ASSEMBLIES AND FACE PLATES

U.S. PATENT NO. 3,182,989

To meet the many requirements for work positioners with height adjustment, Colbert developed the three 18½" (47.00 cm) tube-and-mount assemblies, left, and three face plates, right. These Colbert face plates have shanks that fit only into the 1½" (2.86 cm) ID steel tubes, and not into the PANAVISE® bases with ⅝" (1.59 cm) stem receptacles. **The No. 336 converter base described on page 3 is designed with stem to fit the 1½" (2.86 cm) tubes...making it possible for you to use the three up-down positioners with all the vise heads and attachments on the preceding pages!**



MODEL 325 UP-DOWN ASSEMBLY, BENCH MOUNT

18½" (47.00 cm) steel tube moves work up and down 13½" (34.3 cm), and rotates 360° within clamp. 1½" (2.86 cm) ID Tube has moveable safety ring, bottom end plug, with ⅜" (.48 cm) hole at top for set screw, holds and locks in face plates 338, 339, 340, (right) or 336 converter base (below). Clamp opens with steel screw turning in brass bushing cast as part of clamp. Screw, leveling button, tightening nut and rod ends are plated. Tightening rods are stainless steel.

Grip range of clamp: 0 to 2½" (0 to 6.4 cm)
Throat depth of clamp: 1⅜" (3.0 cm)
Shipping weight: 3¼ lbs. (1.474 kg)

MODEL 330 UP-DOWN ASSEMBLY, BENCH MOUNT

Same tube assembly as 325. Vertical mounting plate is drilled and counter sunk for three ¼" (.635 cm) flat head screws.

Bench mount: 4½" x 4⅞" (11.4 cm x 11.6 cm)
Mounting holes: three ⅝" (three .79 cm)
Shipping weight: 3½ lbs. (1.418 kg)

MODEL 330-1 BENCH OR WALL MOUNT

Same tube assembly as 325. Flush base may be mounted vertically on bench, or horizontally to extend out from wall.

Wall mount: 4½" x 4¾" (11.4 cm x 12.1 cm)
Mounting holes: three ⅝" (three .79 cm)
Shipping weight: 3 lbs. (1.361 kg)

BOLT CIRCLE
HOLE SPACING
PERMITS MOUNTING
BASES 300 AND 305



1½" (2.86 cm)
OD SHANK FITS
INTO ALL THREE
UP-DOWN
TUBE ASSEMBLIES

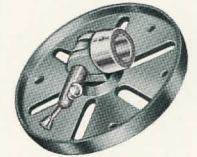
MODEL 338 RIGID FACE PLATE

1½" (2.86 cm) OD shank, ¾" (1.90 cm) long, drilled and tapped for set screw, for rigid mounting on 325, 330, 330-1 up-down-rotating positioners, (left).

The face is sanded aluminum, with six 1⅝" x ⅞" (4.13 cm x 1.11 cm) key slots spaced at 60° intervals for variable bolt area. Six ¼" (.635 cm) holes, spaced at 60° intervals alternate with the slots, and are spaced to permit mounting bases 300 and 305 (page 3). Sides and bottom are finished Colbert hammertone gray/green.

	MODEL 338	MODEL 339	MODEL 340
Diameter:	5⅞"	5⅞"	5⅞"
	(13.7 cm)	(13.7 cm)	(13.7 cm)
Depth:	1⅞"	2⅜"	3"
	(3.49 cm)	(7 cm)	(7.62 cm)
Shipping weight:	7/8 lbs.	1 lb.	1¼ lbs.
	(.397 kg)	(.454 kg)	(.567 kg)

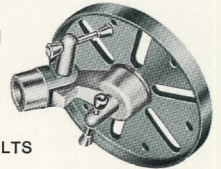
1½" (2.86 cm) CLEVIS SHANK
FITS INTO UP-DOWN
TUBE ASSEMBLIES



MODEL 339 TILTING FACE PLATE

Custom designed clevis shank is drilled and tapped for set screw, and mounts into up-down tube positioners (left). Clevis permits plate to be pivoted 180° and rigidly locked at any tilted point by a tightening bolt and nut. Tightening rod is stainless steel, nut and rod ends are plated. The work can be turned and tilted to any angle, raised or lowered so that the operator may stand, sit, or shift positions.

1½" (2.86 cm)
CLEVIS SHANK
FITS INTO UP-DOWN
TUBE ASSEMBLIES

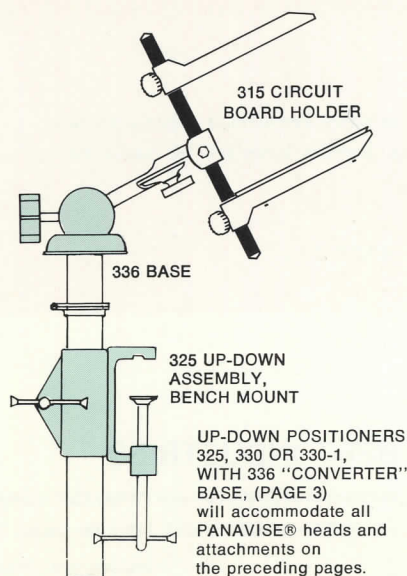


ROTATING HUB,
PIVOTING CLEVIS,
SEPARATE LOCK BOLTS

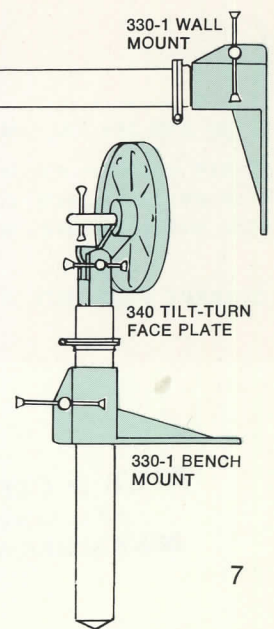
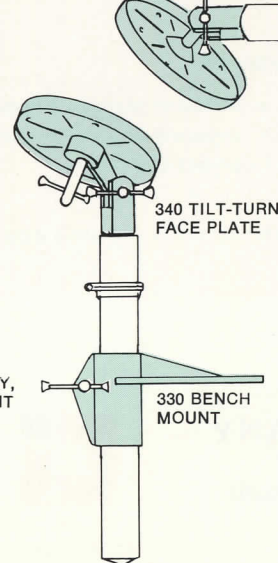
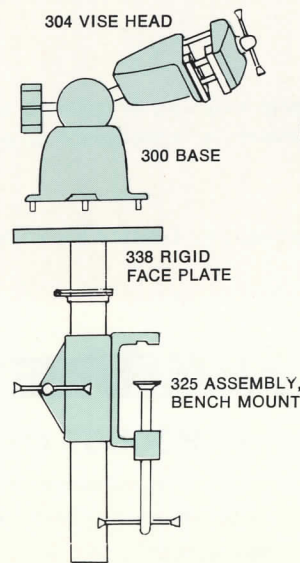
MODEL 340 TILT-AND-TURN FACE PLATE

Patented clevis and offset mount, with two locking bolts, permits the plate to be tilted 90°, and rotated 360° (independent from the rotational action of the up-down tube assembly). Clevis shank is drilled and tapped for set screw for mounting and locking in 1½" (2.86 cm) ID tube. Work may be tilted, turned, raised or lowered to any position, any angle, so that the operator may stand, sit, or change position easily.

TYPICAL UP-DOWN POSITONER COMBINATIONS



UP-DOWN POSITONERS
325, 330 OR 330-1,
WITH 336 "CONVERTER"
BASE, (PAGE 3)
will accommodate all
PANAVISE® heads and
attachments on
the preceding pages.



PANAVISE® tool systems are in increasing demand around the world for two reasons: (1) versatility of uses in science and modern precision industry, hobbies and crafts, as described on the preceding pages; (2) integrity of construction as described below.

Interchangeable steel or Nylon jaws. (Type 66 Nylon, high electrical insulation characteristic, withstands 200° F. continuous heat, 300° intermittent.)

Vise heads are high pressure die-cast aluminum alloy, with steel and brass inserts, knurled or flared and notched for maximum bonding.

Steel adjusting screw turns in brass bushing.

Two steel guide pins precision fitted into head for true and effortless jaw action.

Nickel plated cap screws control hinge action of locking unit

Nickel plated steel jacketed stem.

Stainless steel rod, plated die-cast rod ends.

Plated locking unit closes on vise head support stem with variable spring pressure. Operator can turn or tilt vise head with desired drag, or lock at any position with single knob.

Cadmium plated steel adjusting screw gives operator single precision control of compound swivel, tilt and rotation positioning.

Housing is precision machined to assure smooth, even open-and-close movement. Rotation of the entire unit is within the base.

Three lugs are positioned to fit bolt pattern of bench clamp, surface plate, and all Colbert face plates (shown on pages 6 and 7).

Hammertone gray/green finish developed by Colbert for shop durability, and stay-clean appearance. For laboratory room use, white or ivory furnished on special order. (Request quotation)

PANAVISE® is protected by U.S. Patent No. 2,898,068.

O.E.M. AND SPECIAL ORDER SERVICE

Colbert welcomes inquiries and consultation regarding special mounting for assembly line or conveyor systems, custom adaptation of attachments, special colors for corporate image conformation, or work-section color coding. Sample tools will be furnished for time, motion, efficiency tests and demonstrations.

COLBERT WARRANTY All Colbert products are guaranteed against defective materials and workmanship.

KILB & COMPANY
623 N. Second Street
MILWAUKEE, WIS. 53203



PANAVISE®

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Manufacturers and marketers of Colbert Nameplates of Distinction and PANAVISE® work positioner tools.
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June 1971

PANAVISE TOOL SYSTEMS - PRICE LIST

MODEL NO.	DESCRIPTION	SUGGESTED LIST
300	Standard Height Base	\$10.95
*301	PanaVise (combines models 300 & 303)	17.95
*303	Vertical Jaw Vise Head for 300 series Bases	7.00
*304	Horizontal Jaw Vise Head for 300 series Bases	7.00
305	Low Profile Base	10.95
▶ 308	Heavy iron mounting plate (for 300 & 305) 4 rubber feet	8.95
310	Surface Plate, with mounting holes for 300 & 305 Bases	14.95
311	Bench Clamp for 300 & 305 Bases	6.95
**315	Circuit Board Holder with 10" cross bar, for 300 series Bases	14.95
316	Arms for 315 Circuit Board Holder	7.75
**318	10" Cross Bar for 315 Circuit Board Holder	2.65
325	Up-Down Assembly with Bench Clamp	14.95
***330	Up-Down Assembly with either Bench or Wall mount	14.95
336	Up-Down Converter Base	10.95
337	Face Plate for 300 Series Bases	4.95
338	Rigid Face Plate for 325 & 330 Up-Down Assemblies	4.95
339	Tilting Face Plate for 325 & 330 Up-Down Assemblies	6.95
340	Tilt-and-Turn Face Plate for 325 and 330 Up-Down Assem.	9.95
342	Nylon Adapter for 300 Series Bases	1.95
343	Vise Jaws, Nylon for 303 & 304 Vise Heads (Pair)	1.00
344	Vise Jaws, Nylon, Horizontally Grooved for 303 & 304 (Pair)	1.50
345	Neoprene Reversible Vise Jaw pads for 366 (Pair)	1.00
▶ 346	Deluxe, Dual Purpose, Neoprene Jaw pads for 366 (Pair)	1.50
353	Vise Jaws, Steel, for 303 & 304 Vise Heads (Pair)	1.00
359	Universal Holder	3.95
366	Wide Opening Vertical Vise Head for 300 Series Bases	7.00
▶ 379	Vacuum Base, Flat Top, Easy Mounting	5.00
380	Vacuum Mounted Colbert Base	15.95
*381	Vacuum Base PanaVise (combines models 380 & 303)	22.95
396	Combination of 300 Base & 366 Vise Head	17.95
400	Heavy Duty Base with 1" throat receptacle	15.95
437	Face Plate for 400 Base	4.95
442	Adapter for 400 Base	1.50
▶ 101	Starter Set (combines models 304-1, 305 & 310)	32.90
▶ 102	Budget Set (combines models 304-1, 305 & 344)	18.95
▶ 103	Pro Set (combines models 303-2, 330-1, & 336)	32.90
*	Jaw selection: Add to model No., -1 for Nylon; -2 for Steel and -3 for Grooved Nylon.	
**	For 11" to 30" cross bars, write desired length after model No.; add 20¢ for each inch beyond 10"; order bars 2" longer than C.B. width.	
***	Add to model No., -1 for Wall Mount.	
▶ NEW		

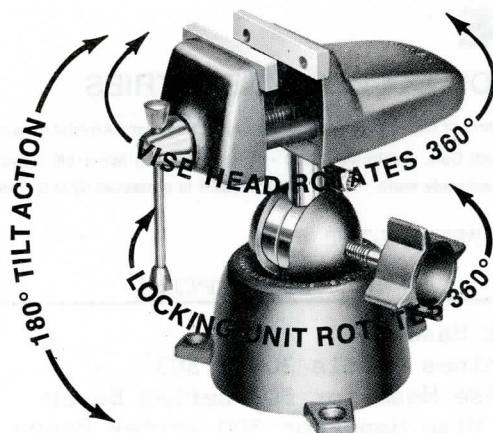
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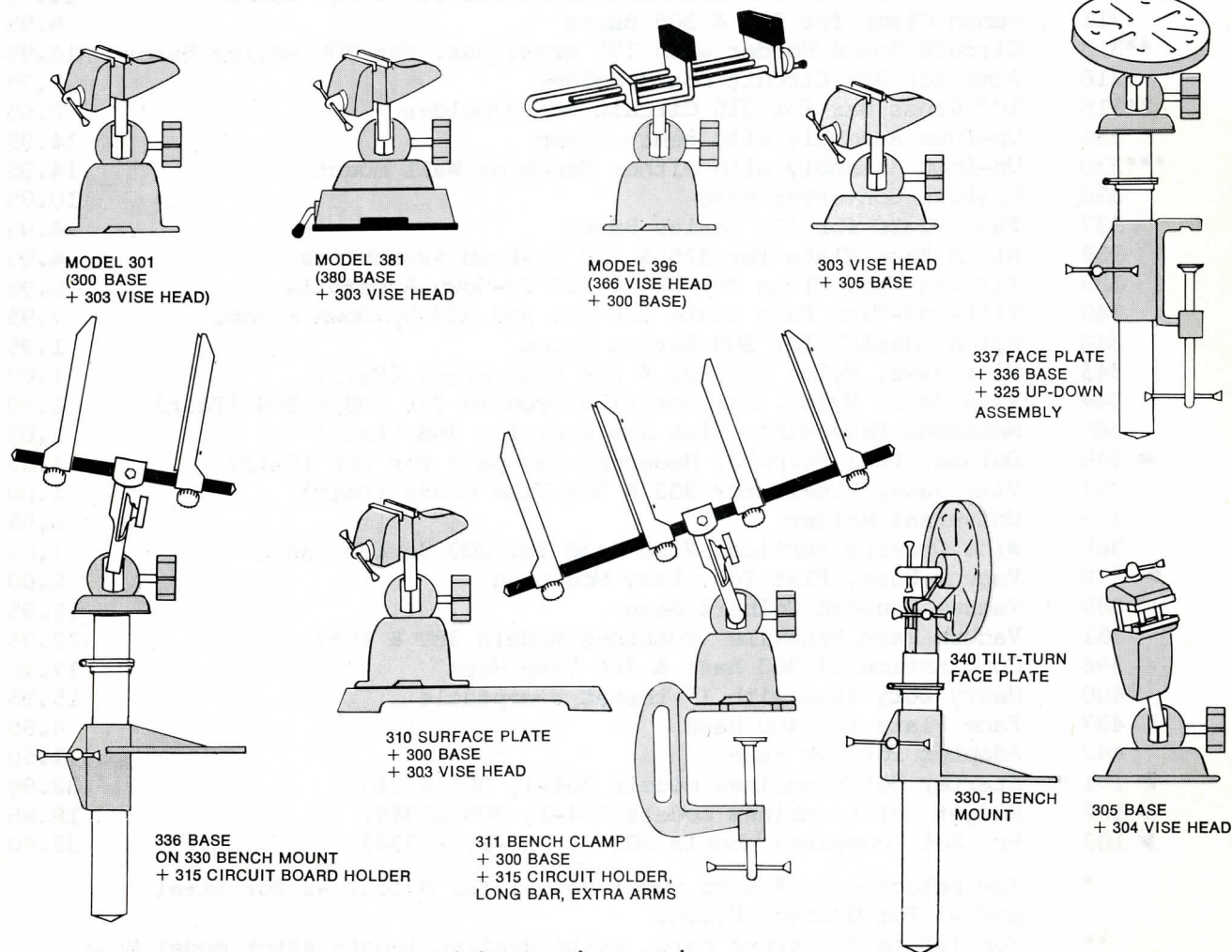
- **TECHNICIANS!**
- **CRAFTSMEN!**
- **HOBBYISTS!**

Here's the answer
to the "HOW TO
HOLD IT" problem!



TURNS AND TILTS TO ANY POSITION
MODEL 301 (left) illustrates four functional design features that make PANAVISE® work holder tool systems the most versatile in the world. (1) The stem of the vertical vise head turns full-circle within the $\frac{5}{8}$ " (1.59 cm) throat of the "locking unit" in the base. (2) This locking unit also permits the vise head to be tilted 90° in any direction (180° tilt action). (3) The housing containing the "locking unit" also rotates full-circle. (4) All these movements are controlled by one variable-pressure knob, making it possible to move the work at any desired drag-tension, or to lock it firmly, at any position, any angle, facing any direction around the base.

TYPICAL PANAVISE® COMBINATIONS (all heads & bases are interchangeable!)



Ask for complete catalog

PANAVISE

The new, modern work holder used by Industry World-Wide.



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- Laboratories
- Production areas
- Assembly lines
- Military applications