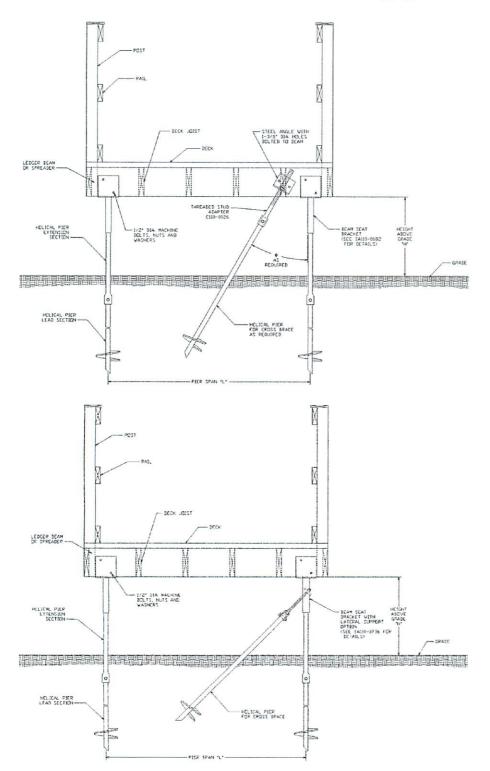


Typical Walkway Hardware Application



NOTE:

Where applicable, Chance[®] hardware is made from steel produced in accordance with ASTM A5 and/or ASTM A576. When galvanized, items are manufactured in accordance with ASTM A153.

Where appropriate, these hardware items comply to the following ANSI specifications:

ANSI

C135.1 C135.2 C135.22 C135.14 C135.17

ON THE COVER: Aerial view of a $1\frac{1}{2}$ -mile boardwalk constructed at a wetlands site for the Fairfax County, Virginia Park Authority. No wheel or track vehicles were allowed into the wetlands. The Instant Foundation® anchors (Type SS5 — $1\frac{1}{2}$ "-square solid-steel shaft, 10"-dia. helix, hot-dip glavanized) were installed to 7- and 10-ft. depths with average above-grade reveal of 1 to 2 ft. Maximum reveal was $4\frac{1}{2}$ ft.

Instant Foundation® System for Walkway Support

Walkway support system

A special Beam-Seat bracket employs a 12"-long steel pipe to sleeve a $1\frac{1}{2}$ " SS screw foundation. The bracket's $7\frac{1}{2}$ "-wide flanges mount it to lateral support beams for joist and deck structures. Flanges adjust to accept beams as wide as $3\frac{1}{2}$ ". System advantages give it accessibility to sensitive wetland

L-shape beam bracket with matching plate allows beam size variations. The pipe type sleeve mounts on Instant Foundation anchors to accommodate beams for joist and deck structure

No-Wrench

Screw Anchor

Lead

Section

Extension

Guy Adapter

- · Minimal disturbance,
- Transfers loads to bearing capable strata,
- Isolates structure from seasonal surfaces layer changes,
- · Modular helical foundation and extension sections,
- Portable hand-held installing equipment.

ORDERING INFORMATION

Minimum ultimate tension strength $5500\,\mathrm{ft.-lbs.}$ — Minimum ultimate tension strength $70,000\,\mathrm{lbs.}$

LEAD SECTIONS

| Catalog No. | Length | Helix Combinations | Std. Pkg./Pallet |
|-------------|--------|--------------------|------------------|
| T110-0676 | 7 ft. | 8" | 1/20 |
| T110-0677 | 7 ft. | 10" | 1/20 |
| T110-0678 | 7 ft. | 12" | 1/20 |
| P012642EJ | 5 ft. | 10" - 12" | 1/20 |
| P012642AEJ | 7 ft. | 8" - 10" - 12" | 1/20 |

EXTENSIONS

| Catalog No. | Nominal length | Std. Pkg./Pallet |
|-------------|----------------|------------------|
| 12655 | 3½ ft. | 1/50 |
| 12656 | 5 ft. | 1/50 |
| 12657 | 7 ft. | 1/40 |
| 12658 | 10 ft. | 1/30 |

Extensions with helices are available. Contact your Chance representative for information.

BEAM SEAT BRACKET

Hole size for $\frac{1}{2}$ " bolt. 10,000 lb. max. load compression only.

| Catalog No. | Length | Saddle Width | Std. Pkg./Pallet |
|-------------|--------|--------------|------------------|
| C110-0682 | 12" | 3½" | 4/148 |

GUY ADAPTERS

| Catalog No. | Nominal length | Description | Std. Pkg./Pallet |
|-------------|----------------|---------------|------------------|
| C102-0023 | 18" | Thimbleye | 5/175 |
| C102-0024 | 18" | Twineye | 5/250 |
| C102-0025 | 18" | Tripleye | 5/250 |
| C110-0026 | 20" | Threaded Stud | 5/130 |
| C110-0041 | 18" | Ovaleye | 5/200 |

NO-WRENCH SCREW ANCHOR

| Catalog No. Tripleye | Anchor Size Dia. | Rod Dia. & Length | Std. Pkg./ Pallet |
|-------------------------|---------------------|----------------------|----------------------|
| 6346 | 6" | 3/4" x 66" | 1/100 |
| 816 | 8" | 1" x 66" | 1/60 |
| 10146 | 10" | 11/4" x 66" | 1/20 |

Minimum ultimate torsion strength: 3/4" Rod 400 ft.-lbs. 1" Rod 1000 ft.-lbs.

1" Rod 1000 ft.-lbs. 11/4" Rod 2300 ft.-lbs.

Walkway Hardware

BOLTS, CARRIAGE

Carriage Bolts have square nuts, finished points and rolled threads. Standard heads have square shoulders. Open-hearth steel. Hot dip galvanized.



No. 8634

| | Dim. ir | n Inches | Approx. Ship Wt. Lbs |
|-------------------|-----------|----------|----------------------------|
| Cat. | Bolt | Thread | Per 100 |
| No. | Length | Length | Pcs. |
| 3 | /8-Inch I | Diamete | er |
| 8634 | 4 | 13/4 | 15.6 |
| $8634\frac{1}{2}$ | 41/2 | 13/4 | 17 |
| 8635 | 5 | 13/4 | 17.6 |
| 8636 | 6 | 13/4 | 21.6 |
| 8637 | 7 | 13/4 | 22 |

4,250 Pound Minimum Ultimate Tensile Strength

| | Dim. ir | n Inches | Approx. Ship Wt. Lbs. |
|-------------------|----------------|----------|-----------------------------|
| Cat. | Bolt | Thread | Per 100 |
| No. | Length | Length | Pcs. |
| 1, | /2-Inch | Diamete | er |
| 86441/2 | 41/2 | 3 | 32 |
| 8645 | 5 | 3 | 31 |
| $8645\frac{1}{2}$ | $5\frac{1}{2}$ | 3 | 37.5 |
| 8646 | 6 | 3 | 38 |
| 8647 | 7 | 4 | 44 |

7,800 Pound Minimum Ultimate Tensile Strength

BOLTS, MACHINE

Are also called crossarm bolts or through bolts. Bolts have rolled threads and one square nut. Bolts six inches or longer have cone-type points. Hot dip galvanized.



No. 8707

Approx. Dim. in Inches Ship Wt. Lbs Cat. Bolt Thread Per 100 No. Length Length 1/2-Inch Diameter 8707 48 8708 8 4 49 8709 9 4 57 8710 10 4 60 8712 12 6 71 8714 14 6

7,800 Pound Minimum Ultimate Tensile Strength

BOLTS, OVALEYE

Bolts with $\frac{5}{8}$ " and $\frac{3}{4}$ " shanks have $\frac{11}{2}$ " x 2" ovaleyes. Drop-forged, galvanized steel bolts have cone type points and rolled threads.

| | Length Under | Thread | Approx. Ship |
|---------|-----------------|--------|-----------------|
| Catalog | Eye | Length | Wt. Lbs. |
| No. | Inches | Inches | Per 100 Pcs. |

| | Length Under | Thread | Approx. Ship |
|---------|-----------------|--------|-----------------|
| Catalog | Eye | Length | Wt. Lbs. |
| No. | Inches | Inches | Per 100 Pcs. |

1/2-Inch Shank Diameter 7/16" x 11/4" x 15/8" Ovaleye

| 29939 | 8 | 4 | 77 |
|-------|---|---|----|
| | | | |

7,800 Pound Minimum Ultimate Tensile Strength

| 5/8" | Shank | Dia - | 9/16 X | 11/2" | x 2" | Ovaleye |
|------|-------|-------|--------|-------|------|---------|
|------|-------|-------|--------|-------|------|---------|

| 29956 | 6 | 4 | 100 |
|-------|----|---|-----|
| 29958 | 8 | 4 | 104 |
| 29959 | 9 | 4 | 113 |
| 29960 | 10 | 6 | 122 |
| 29962 | 12 | 6 | 144 |
| 29964 | 14 | 6 | 146 |
| 29966 | 16 | 6 | 168 |
| 29968 | 18 | 6 | 208 |
| 29970 | 20 | 6 | 240 |

12,400 Pound Minimum Ultimate Tensile Strength

' x 1¹/₄" x 1⁵/₈" Ovaleye

3/4" Shank Dia — 5/8" x 11/2" x 2" Ovaleye

| 29978 | 8 | 4 | 180 |
|-------|----|---|-----|
| 29980 | 10 | 4 | 200 |
| 29982 | 12 | 6 | 228 |
| 29984 | 14 | 6 | 248 |
| 29986 | 16 | 6 | 268 |
| 29988 | 18 | 6 | 314 |

18,350 Pound Minimum Ultimate Tensile Strength





BOLTS, SCREW EYE

Gimlet-point lag-screw thread. Drop-forged. Hot dip galvanized.

| | | Dimer | isions ir | Inches | Approx. Ship |
|----------------|-----------|---------------------------------------------------------------|-----------|---------------------|----------------------------|
| Catalog No. | Type | Size of Eve | Dia. | Length Under Eve | Wt. Lbs. Per 100 Pieces |
| 29930 | Ovaleye | 1 ¹ / ₄ x 1 ⁵ / ₈ | 1/2 | 6 | 65 |
| 09931 | Thimbleye | 9/ ₁₆ x ¹¹ / ₁₆ | 5/8 | 63/4 | 112 |

No. 09931



No. 29930

Walkway Hardware

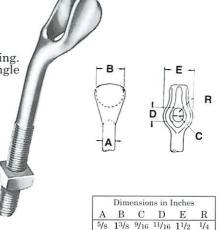
Angle Bolt

BOLTS, THIMBLEYE® BOLTS

Contoured eye keeps guy strand from kinking, bending, or spreading. Drop-forged steel. Hot dip galvanized. Cone-type points. Eyes of angle bolts are offset 45 degrees.

| Catalo | g No. | | Thread | Approx. Ship |
|------------------|---------------|----------------------------------|------------------|--------------------------|
| Straight Bolt | Angle Bolt | Size Inches | Length Inches | Wt. Lbs. Per 100 Pcs. |
| 5510 | 5010 | ⁵ / ₈ x 10 | 4 | 148 |
| 5512 | 5012 | 5/ ₈ x 12 | 6 | 176 |
| 5514 | 5014 | 5/ ₈ x 14 | 6 | 188 |
| 5516 | 5016 | 5/ ₈ x 16 | 6 | 192 |

12,400 Pound Minimum Ultimate Tensile Strength





CLIPS, WIRE ROPE GUY WIRE

Body of each clip is cast ductile iron designed to fit the strand, which is protected by smooth-rounded contact surfaces. Bolts are made of high-strength steel.

| Catalog | Size of | Approx. Ship. Wt. Lbs. |
|---------|-------------|---------------------------|
| No. | Strand, In. | Per 100 Pcs. |
| 6480 | 1/4 | 12.5 |
| 6481 | 5/16 | 13.5 |
| 6482 | 3/8 | 22.5 |
| 6484 | 1/2 | 56.3 |
| 6485 | 5/8 | 111 |

ROUND WASHERS

| | Dimension | s in Inches | | Approx. Ship |
|---------|---------------------------------------------|-------------|-----------|----------------|
| Catalog | | | | Wt. Lbs. |
| No. | Washer Size | Hole Dia. | Bolt Dia. | Per 100 Pieces |
| 6801 | 1 O.D. x 14 Ga. | 7/16 | 3/8 | 1.64 |
| 6802 | 1/ ₄ O.D. x 14 Ga. | 9/16 | 3/8 | 2.84 |
| 6803 | 1 ³ / ₈ O.D. x 12 Ga. | 9/16 | 1/2 | 4.50 |
| 6805 | 1 ³ / ₄ O.D. x 12 Ga. | 11/16 | 5/8 | 8.50 |
| 6806 | 2 O.D. x 9 Ga. | 13/16 | 3/4 | 11.80 |

SQUARE WASHERS

| | Dimensio | ns in Inches | | Approx. Ship |
|----------------|--------------------|--------------|-----------|----------------------------|
| Catalog No. | Washer Size | Hole Dia. | Bolt Dia. | Wt. Lbs. Per 100 Pieces |
| 6811 | 2 x 2 x ½ | 9/16 | 1/9 | 13 |
| 6812 | 2 x 2 x ½ | 11/16 | 5/8 | 12 |
| 6813 | 21/4 x 21/4 x 3/16 | 11/16 | 5/8 | 24 |

CLIP ANGLE

| Catalog No. | Dimensions |
|----------------|--------------------------------------------------------|
| P102-0333 | 3 ½" x 5" x 5%" x 3½" long hole, to accept ¾" bolt" |



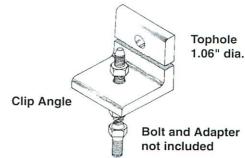
WASHERS Galvanized





Square

Round



Portable Anchor Installers

for small foundations

• 2,500 ft.-lb. torque capacity hydraulic power drive

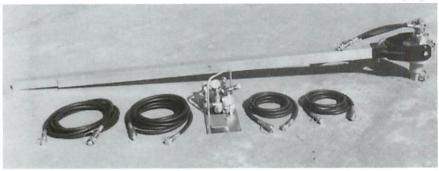
Manual-operated portability for economy, remote sites, common anchor installations

For most shaft-driven guy anchors and smaller screw foundations, these compact drivers get into areas where large equipment cannot go or is impractical. Operator does not need to resist the torque generated by anchor installation. Countertorque transmits through a torque bar from the drive head to the earth or other restraint. This frees the operator for the task of guiding the anchor path.

Built-in bypass valve limits output to 2,500-ft.-lb. maximum, two-way foot pedal gives operator direct control over drive and reverse directions, hoses (two 12-ft. and two 25-ft.) come with quick couplers for all connections from power supply to foot control to drive head. Pivoting drive-head yoke connects with bent-arm pin to square-tubular torque bar which telescopes from 8 feet to 10 feet as needed.

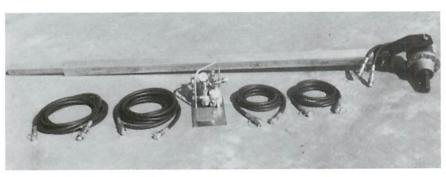
For a heavy-duty, portable Hydraulic Power Unit also available, see below.

See next page for Ordering Information.



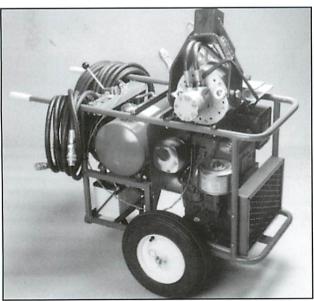
C303-1032

Medium-Duty Driver requires 1550 PSI at 8 gpm flow rate to deliver 2,500 ft.-lb. maximum torque.



C303-1244

Heavy-Duty Driver requires 1,900 PSI at 8 gpm flow rate to deliver 2,500 ft.-lb. maximum torque.



Optional Hydraulic Power Unit (Catalog No. C303-1201):

For easy wheeling to worksite, hydraulic drive head and foot control secure by rubber strap included to angle braces atop the cart frame and hoses ride on handles.

Cart-mounted on $\frac{5}{6}$ "-diameter axle with two 4.80 x 8 inflatable (30psi) tires; $\frac{271}{4}$ " wide x $\frac{341}{2}$ " high x 36" long; shipping weight with oil: 275 lb.

Hydraulic Pump with fan cooling system:

Typical output pressure 2500psi

Pump displacement 8gpm @ 3400rpm Reservoir capacity 5 gallons US (shipping cap and vented fill cap provided)

Gasoline Engine System:

16hp Briggs & Stratton Industrial/Commercial Model 326437, Type 2527 12-Volt pushbutton start, 3600rpm (maximum)

Operating instructions are included with anchor installer and hydraulic power unit.

2500 ft.-lb. Portable Anchor Installers

for small foundations Ordering Information

Medium Duty — Catalog No. C303-1032

| | ise filled gear case. Single Catalog N w. Each item also may be ordered by | |
|---|-------------------------------------------------------------------------------|------------------|
| * | Hydraulic Control Valve | C303-1031 |
| | Two 25-ft. Hydraulic Hoses | C417-6121 (each) |
| * | Hydraulic Drive Head | C303-1180 |
| | Yoke Assembly | E303-0680 |
| * | Two 12-ft. Hydraulic Hoses | E303-0876 (pair) |
| | Square Torque Bar Ass'y. | E303-1041 |

Output shaft is $1\frac{1}{2}$ " square socket. Requires C303-1230 and flanged drive tool (order separately) to install anchors other than $1\frac{1}{2}$ " square $1\frac{1}{4}$ " round shaft.

Heavy Duty — Catalog No. C303-1244

| ems below. Each item als | so may be ordered by separate number. |
|--------------------------|---------------------------------------|
| Hydraulic Control Val | lve C303-1247 |
| Two 25-ft. Hydraulic l | Hoses C417-6121 (each) |
| Hydraulic Drive Head | C303-1233 |
| Yoke Assembly | E303-0680 |
| Two 12-ft. Hydraulic l | Hoses E303-1253 |
| Square Torque Bar A | ss'y. E303-1041 |

Output Shaft is 2 inch Hex. - Requires Kelly Bar Adapter P630013 and flanged drive tool (order separately) to install all anchors.

Anchor Installing Tools Tool E303-0255 Tool 639001 Tool 639000 Tool C130-0010 Tool C303-0737 Tool C303-1230 for No-Wrench Anchors for to 11/4" dia. 11/2"SS & 11/4"RR Square-Drive Flange-Drive **Bumper Posts** Catalog C303-1032 to (Cat. Sec. 4) & Type GP Anchors Type LD Foundations "Pad-Pod" (Bulletin 01-0203) adapt to

To drive wrench-type anchors with these portable installers, consult factory.

Foundations

Foundations

using temporary eyenut

(Bulletin 01-0203)

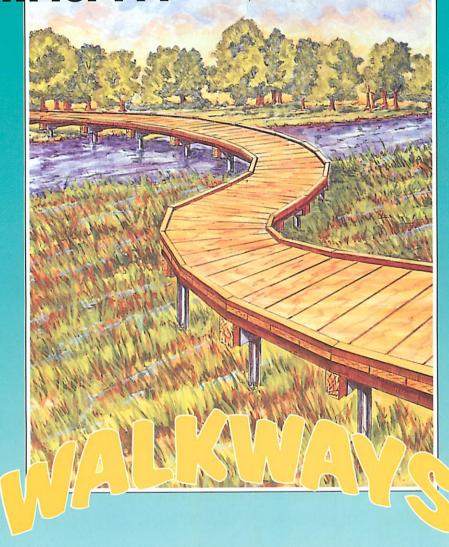
51/4" Bolt Circle

^{*} Note: Hydraulic components are not interchangeable between C303-1032 and C303-1244

^{*} Note: Hydraulic components are not interchangeable between C303-1032 and C303-1244

CHANCE®

INSTANT FOUNDATIONTM System for . . .



NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

Since 1912

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ww.abchance.com

