

Consoles

A fine pipe organ is pleasing to the eye as well as the ear. From intricate façade casework to a richly carved console, nothing conveys the organ builder's dedication to quality like fine woodworking.

Creating the ideal console

We help the organ builder create the ideal console for each situation. We offer virtually unlimited freedom of choice in style, finish, key covering, stop control and layout. Our experienced staff will assist in the custom design of the console to suit the customer's needs and specifications, matching or complementing the architecture, style and finish of the environment in which the console is to be installed.

Designing the right console for your needs

Working together, we can create the ideal console for your particular application. Careful use of our Console Check Sheet ensures that every console specification and feature is addressed. From this information, we produce detailed computer assisted design (CAD) layout drawings and even stain and finish samples as required for the builder's review and approval.

Generous performance margins, quality construction

Construction begins as soon as the cabinet and layout details are approved. Our rigorous and exacting designs for cabinets, stop controls and keyboards are engineered to provide generous performance margins. Manual keyboards feature our own expanded sharp spacing, and pedal keyboards are constructed to AGO standards. Both are built in our shop. To ensure a lifetime of trouble-free operation, we use only the finest traditional materials, including solid, well-aged and clear cabinet-grade woods and customer selected Organ Control Systems and electronics. In the hands of our world-class master cabinetmakers, your console cabinet soon begins to take shape. Painstaking attention to fine joinery, matching grains and ingenious artistry yields a console that has unsurpassed strength, performance and beauty, ready for your choice of finish. All components are installed, adjusted and thoroughly tested to guarantee not only functional reliability, but also the delicate and consistent balance and feel for pure quality.

Create your console from ideas on the following pages

The next few pages illustrate some of the various styles, layouts and console appointments we've developed for other organ builders. Your console design is limited only by your imagination.

The following is a checklist of items which may be customized to your needs. Please think of this list as a starting point as all options are not listed. We welcome new and interesting challenges.

- Console Shell Style
- Console Case Wood
- Panels (Plain, Recessed, Carved)
- Pedalboard Style
- Flat or Curved Knee Panel
- Toe Piston Terraces
- Number and Style of Toe Pistons
- Synthetic / Wood Sharps (Pedal)
- Expression Shoes
- Organ Bench
- Adjustable Organ Bench
- Backrest
- Drawknob Jambs
- Drawknob Terraces
- Number and Style of Stopkeys
- Number and Style of Tilting Tablets
- Number and Style of Drawknobs
- Indicator Lights
- Control System
- Clock
- Number of Manual Keyboards
- Tracker Touch
- Key Covering
- Cheek Style
- Number and Style of Manual Pistons
- Music Rack
- Pedal Light
- OSI Installed Organ Control System
- Wired out to Spreaders

Organ Supply Consoles are not limited to OSI Components. We gladly install other manufactured components.

Cabinet Wood:

Red Oak, White Oak, Walnut, Mahogany, Other, Custom Moldings can be supplied by OSI or Furnished by customer

Interior Wood:

Red Oak, White Oak, Walnut, Mahogany, Other

Stop Control

Drawknob, Tilting Tablet, or Stopkey

Manual Keyboards:

Synthetic, Satin Synthetic, Wood, Bone, Ivory, Tracker Touch, Custom Pistons, Inclined or Flat

Cabinet Panels:

Plain, Recessed, Carved

Pedalboard:

Synthetic Sharps, Wood Sharps, Curved Knee Panel, Flat Knee Panel, Toe Piston Terraces, Style #1 or Style #2



Example One



Example Two

Example Three



Example Four



Example Five



Example Six



Example Seven



Example Eight



Music Racks

Music racks are provided in wood veneers on lumber core base or in clear acrylic. Acrylic racks come with or without wood lip. Custom sizes per specifications. Unfinished or finished to sample.

1/2" T x 30" W x 11-3/8" H, 2-1/4" D lip

Wood

- 0005.01 Birch
- 0005.03 Mahogany
- 0005.05 White Oak
- 0005.06 Red Oak
- 0005.08 Walnut

Acrylic

- 0001.01 Birch lip
- 0001.03 Mahogany lip
- 0001.05 Oak lip
- 0001.08 Walnut lip
- 0001.50 Without lip
- 0001.10 Special size



Wood Music Rack Brackets

Attractive, solid wood music rack brackets are constructed with standard 19° tilt. Furnished with hardware for mounting music rack solidly to console top. Unfinished or finished to sample.

6-3/4" H x 5" D x 3/4" T

- 0012.01 Birch
- 0012.02 Cherry
- 0012.03 Mahogany
- 0012.05 White Oak
- 0012.06 Red Oak
- 0012.08 Walnut



Hinged Music Rack Brackets

Versatile hinged music rack brackets allow the music rack to hang down into the console but swing out of the way of the roll top. Brackets mount easily to the console lid with No. 8 x 1-1/2" mounting screws furnished. Unfinished or finished to sample.

5-3/4" H x 6-3/4" D x 1-3/8" W

- 0017.01 Birch
- 0017.02 Cherry
- 0017.03 Mahogany
- 0017.05 White Oak
- 0017.06 Red Oak
- 0017.08 Walnut



Music Rack Hinge

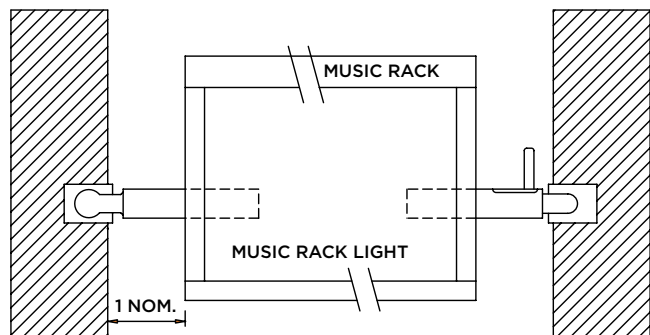
- 0015.00 These sturdily constructed, electroplated steel brackets mount on the console nameboard and hold the music rack at a standard 19° angle. Special pivot detent holds music rack solidly in the upright position. Lifting up on music rack allows rack to tilt down over keys. Supplied with four 1/2" Ø x 3/8" L "T" nuts and four 8-32 x 1/2" RHMS for mounting hinges to music rack. Use No. 8 RHWS for mounting.

3-5/16" H x 2-7/8" D x 9/16" W (open)



Music Rack Hinge Pin

- 0020.00 Music rack hinge pins are designed for standard drawknob consoles. The electroplated pins are inserted in the ends of the music rack light and mate with female sockets mounted on the drawknob terrace returns. One pin is retractable for easy removal of music rack. Pins are 3/8" Ø and mounting sockets are 1/2" Ø.



Music Rack Light

Wood-trimmed music rack light uses a single 13 W fluorescent tube to illuminate the music through clear pebble acrylic. Nameboard stop controls are also illuminated through translucent acrylic coverings. "Hold/Start" switch is located on the bottom right side. Supplied with 24" cord to the 120 VAC ballast, with 60" cord to light. Replaces rack shelf. May be attached to music rack with 0070.00 brass hinge. Lights can be provided with or without on/off switch for custom applications. Unfinished or finished to sample. Custom lengths available from 26" to 40" L.

1-1/8" T x 2-3/4" D x 28" L Shipping Weight: 10 lbs.

- 0051.01 Birch
- 0051.02 Cherry
- 0051.03 Mahogany
- 0051.05 White Oak
- 0051.06 Red Oak
- 0051.08 Walnut

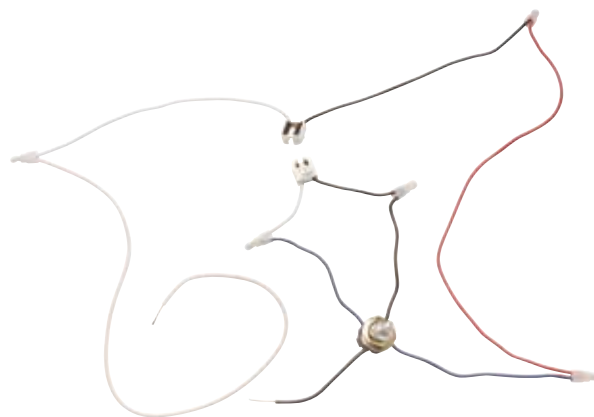
Custom Length

- 0051.21 Birch
- 0051.22 Cherry
- 0051.23 Mahogany
- 0051.25 White Oak
- 0051.26 Red Oak
- 0051.28 Walnut



Music Rack Light Harness

- 0051.51 The music rack light harness comes complete with two bulb sockets wired to "Hold/Start" switch. Order 0051.57 ballast and 0060.00 bulb separately.



Music Rack Light Ballast

- 0051.57 Music rack light ballast can be used for new installations or OEM replacement. 120 VAC ballast is designed for use with 0060.00 F13T5/CW fluorescent bulb and 0051.51 music rack light harness. 60" lead to light, 24" cord set.

1-7/8" W x 6-1/2" L O.A. x 1-1/2" H



Pedal Light

- 0055.00** Polished brass-plated fixture is complete with 25 W incandescent bulb, 96" cord set and switch. Easy to install.



Music Rack Light Bulb

- 0060.00** Replacement F-13T5/CW fluorescent bulb is used with 0051.00 music rack light and 0051.51 music rack light harness.

19-1/2" Bulb

Music Rack Light Hinge (Brass)

- 0070.00** Brass continuous hinge is used to mount music rack light to music rack. Furnished with No. 4 x 1/2" FH brass wood screws.

1-1/16" W x 28" L

Nameboards & Drawknob Terraces

0905.00 Attractive nameboards and drawknob terraces for new or replacement work can be custom-built in a variety of first quality wood veneers on lumber core base, finished or unfinished. Divisional nameplates, drawknobs, stop keys or tilting tablets can be engraved and installed, and indicator lights mounted to your specifications. Purchase just the basic wood components or complete, ready-to-install units, wired to spreaders, junctions, or solid-state combination actions.



Engraving

0090.00 Distinctive engraving provides the perfect final touch for your organ console. Both new and replacement engraved marker plates, drawknobs, stop keys, tilting tablets, builder's plates, or special plaques furnished per your instructions and samples. Available in solid white, ivory, or black and in a variety of colors in plastic, wood, or composite materials. Block engraving is standard, other fonts and special engraving are available per sample or instructions. Square or chamfered edges provided, mounting holes with pins available. Standard or special sizes per specification.

STANDARD BLOCK
(Gothic)

ROMAN
(TRIPLE LINE)

GERMAN BLOCK
(Gothic)

Old English
Style 1 - **TH**

Standard Script

Old English
Style 2 - **SL**

Modern Cursive

Stop Keys

Basic stop keys are available blank or engraved. Block engraving is standard. Send samples or instructions to specify other type fonts. Other stop key styles can be provided to match samples and engraving. **3-3/4" L**

	Style	Width	Colors
0094.00	No. 4 Blank	23/32"	White, Ivory, Black, Red, Gray,
0094.01	No. 4 Engraved		Yellow, Green, Orange, Blue, Red
0095.00	No. 5 Blank	13/16"	White, Ivory, Black
0095.01	No. 5 Engraved		



The following stop keys can also be cut to custom lengths, drilled per instructions for special or stop action magnet mounting. Specify type of stop action magnets.

0096.10	No. 20 Blank	13/16" x 3-3/8"	White, Ivory, Black
0096.20	No. 20 Engraved		
0096.11	No. 22 Blank	13/16" x 3-11/16"	White, Ivory, Black
0096.21	No. 22 Engraved		
0096.13	No. 23 Blank	13/16" x 3-13/16"	White, Ivory, Black
0096.23	No. 23 Engraved		



No. 20
(Chamfered Edge)



No. 22



No. 23

Mounting Hardware

0096.41	Round head machine screw 4-40 x 5/16"
0096.42	Truss head machine screw 6-32 x 5/16"
0096.43	External lock washer No. 6

Tilting Tablets

Several styles of tilting tablets are available blank or engraved. Block engraving is standard. Send samples or instructions to specify other type fonts. Other tilting tablet widths and styles can be provided to match samples and engraving.

Style No.	Description	Colors
0098.01	1 Rounded end, 3/4" x 2", blank	White, Ivory, Black
0098.11	1 Rounded end, 3/4" x 2", engraved	
0098.21	1 Rounded end, 5/8" x 2" blank	
0098.31	1 Rounded end, 5/8" x 2" engraved	White, Ivory, Black
0098.02	2 Rectangular, 3/4" x 2", blank	
0098.12	2 Rectangular, 3/4" x 2", engraved	
0098.22	2 Rectangular, 5/8" x 2", blank	
0098.32	2 Rectangular, 5/8" x 2", engraved	White, Ivory, Black
0098.03	3 Rounded corners, 3/4" x 2-3/8", blank	
0098.13	3 Rounded corners, 3/4" x 2-3/8", engraved	
0098.23	3 Rounded corners, 5/8" x 2", blank	White, Ivory, Black
0098.33	3 Rounded corners, 5/8" x 2", engraved	
0098.04	4 Raised ends, 13/16" x 2-3/8", blank	
0098.14	4 Raised ends, 13/16" x 2-3/8", engraved	
0098.24	4 Raised ends, 5/8" x 2-3/8", blank	White, Ivory, Black
0098.34	4 Raised ends, 5/8" x 2-3/8", engraved	



#1



#2



#3



#4

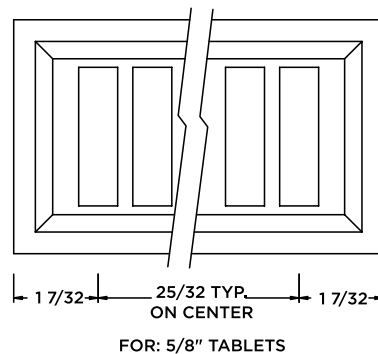
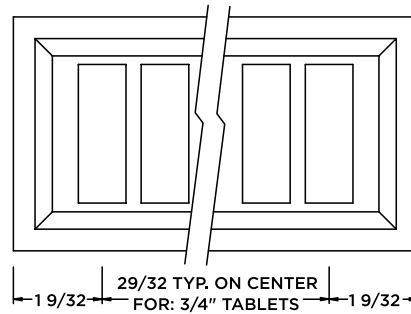
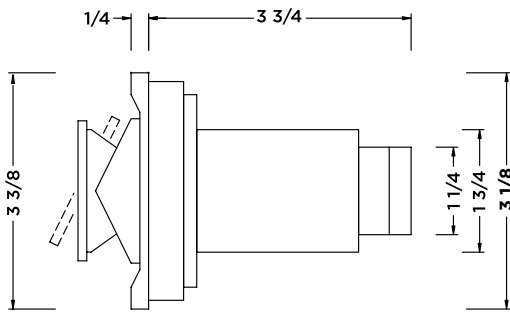
Tilting Tablet Magnet Assembly

Designed using contemporary magnetic attraction/repulsion technology for standard 3/4" or 5/8" wide tilting tablets. Four standard face styles are available: rectangular, with rounded ends, with rounded corners, and with raised ends. Tablets provided in white, ivory, or black; in synthetic, wood, or composite materials. Block engraving standard. Other engraving styles available. Provided with on/off coils. Units include headers with plugs. Specify face style, color, and positive or negative magnet ground. Operating voltage of 9-16 VDC. Nominal coil resistance of 29 ohms. Switching via Hall Effect triggered, opto-isolated device capable of switching up to 2 amps. Magnetically shielded. Adjustable tactile toggle resistance.

Frame 3-3/8" H O.D., 3-1/8" H I.D.

Overall Length can be calculated from the drawings below and right.

- 0100.00** Manual Operation
- 0101.00** Electric Operation



FOR: 5/8" TABLETS

Stop Key Bracket

0140.00 For No. 4 or 5 stop key.
Minimum spacing 15/16".



Stop Key Arms

Material	L	W/Dia.	T	Thread	L
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0141.01	Brass	1-3/4"	3/8"	1/8"	7/16"
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0141.02	Phosphor Bronze	3"	.115"	-	9/16"
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Stop Key Spring

0142.00 Electroplated steel. Used with Style No. 4 or 5 stop key and 0143.07 or .09 stop key screw. 1/2" W



Stop Key Screws

	Material	Length
0143.07	Brass	1"
0143.09	Brass	1-1/4"



Indicator Lights

This integrated lamp and lens unit is available in many colors. It is furnished with quick disconnect pin base connector and mounting grommet. Can be mounted from front or back of nameboard. 18 V, 40 MA. Requires 9/32" Ø mounting hole. Lens projects 1/4". O.A. length with connector 1-7/16".

0150.01	Amber
0150.02	Blue
0150.03	Green
0150.04	Red
0150.05	White
0150.06	Yellow
0150.61	Connector Only
0150.62	Grommet Only



LED Indicator Light

Cartridge-type LED (Light Emitting Diode) assembly, with lead wires. Units have uniform brightness and good light distribution (wide visibility angle). Easy to install. Fully compatible with other miniature indicator lights. Replacement for Reisner No. 25 Indicator Light. Requires 9/32" Ø mounting hole. Lens projects 1/4". Body 1-3/16", leads 4-3/4".

0155.03	Green
0155.04	Red
0155.06	Yellow



Indicator Jewel

Brass bezel with glass jewel.
Requires 5/16" Ø mounting hole.
Lens projects 3/16".

- 0160.04 Red
- 0160.05 White



Lamp Socket

- 0161.00 Miniature screw base for 0162.00 bulb.



Console Light Bulbs

	Voltage	Size	Socket
0162.00	18 volt	7/16" Ø, 7/8" L	0161.00

Miniature base



- 0163.00 13.5 volt 11/16" Ø, 1-3/8" L N/A

Bayonet base



- 0164.00 18 volt 1/4" Ø, 1-5/8" L N/A

Telephone base



Toggle Switch

- 0170.00 Engraved with "ON/OFF", rated 1/2 ampere.

Face 7/8" W x 1-7/16" L
Panel cutout 5/8" W x 1-3/16" L x 1" D



Slide Switch

- 0175.00 Single pole, double throw rated at 1/2 ampere, black toggle. For recorder board combination actions and other A/B switching applications.

1-11/32" L x 9/16" W x 1" D O.A.



Push Button

- 0180.00 Handsome brass momentary push button for organ console signaling. Brass 5/8" Ø mounting hole, two screw terminals.

3/4" Ø O.D.



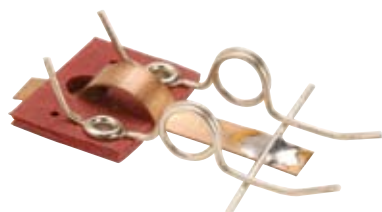
Manual Piston Units

PB1 Manual Piston is mounted in a clear anodized aluminum shell with long shank that extends through the front key rail. Mounts in key slip. Use with separate contacts 0181.03. White, Black or Red piston heads (9/16" dia.) are furnished blank or engraved. Requires 11/16" Ø mounting hole. Shank 3/32" x 3/32" x 2-11/16" L.

0181.01 PB1 Piston, AL shell w/contact rod, blank



0181.02 PB1 Piston, AL shell w/contact rod, engraved



0181.03 Contact assembly for PB1



2 Contact



3 Contact



Piston No. Shell Contacts Engraving

0186.01	PB6 Piston	AL	2	Blank
0186.02	PB6 Piston	AL	2	Engraved
0186.11	PB6-A Piston	Black	2	Blank
0186.12	PB6-A Piston	Black	2	Engraved
0187.01	PB7 Piston	AL	3	Blank
0187.02	PB7 Piston	AL	3	Engraved
0187.11	PB7-A Piston	Black	3	Blank
0187.12	PB7-A Piston	Black	3	Engraved

Console Clock - Program Timer

Digital display of hours and minutes. Built in timer for programs up to one hour in minutes and seconds. Time of day retention without batteries. Mounting template provided

Front Panel: **3" W x 1.75" H x 2" D x 0.062" Thick**
 Console Cutout Size: **2.625" W x 1.375" H**
 Input Voltage: **105 - 128 VAC, 60 hz**

0195.00 Console Clock with OSI Logo
0195.01 Console Clock without OSI Logo

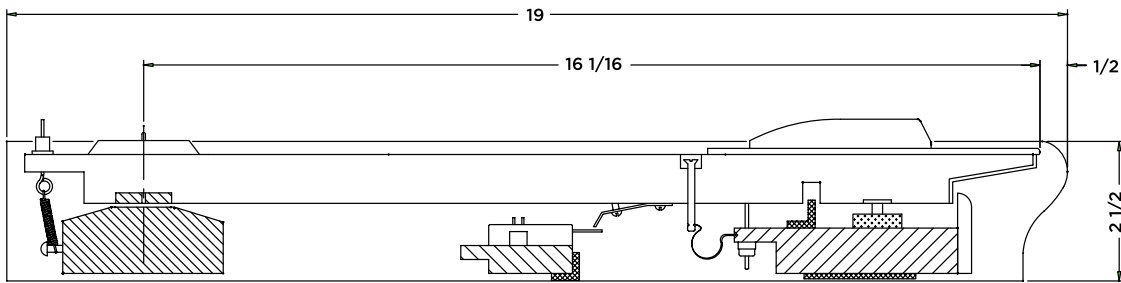


KEYBOARDS

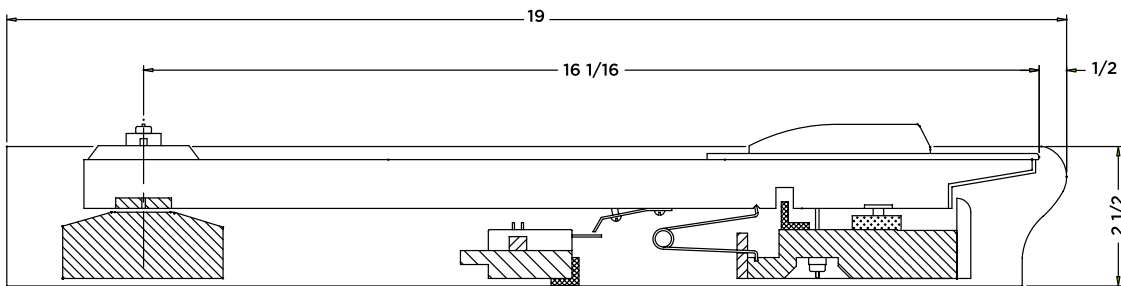
Organ Supply Industries is the only supplier of American-made laminated wood-based manual keyboards. These superior quality keyboards provide maximum stability and quality "feel." The basswood laminated key construction provides twist- and warp-free keyboards. The relaxed sharp key spacing offers a more comfortable playing surface. (165.20 mm center to center.) Hardwood frames with adjustable front "bat" pins, fully bushed bearing surfaces, and 16" long key with a rear fulcrum construction round out the standard keyboards. These are real wood keyboards designed for our American climate.

Standard keyboard options include wood, or bone coverings, front compass spring suspension, toggle or magnetic tracker touch. Available unmounted, without hardware, or fully mounted with cheeks, slips, pistons, and contact rails, ready to install.

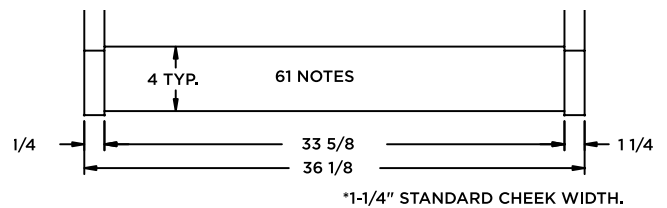
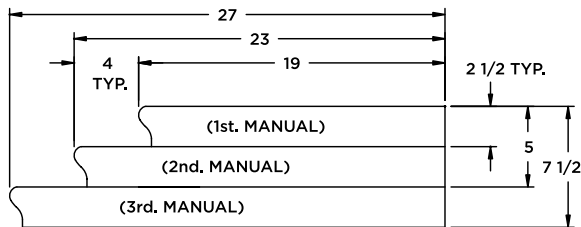
Custom keyboards can be machined and drilled to your drawings. Options include note compass, electric or mechanical operation, and center or rear fulcrum, with key coverings to your specifications.



Rear Spring with Tracker Touch



Front Compass Spring



*1-1/4" STANDARD CHEEK WIDTH.

Manual Keys, Unmounted

0200.00 Unmounted 61 note manual keys on maple frame, furnished with synthetic coverings. Specify rear or front springing. Order hardware and felts separately. 16" front to fulcrum pin, 18-1/4" overall front to back.



Parts For Unmounted Keyboards

	Description	Qty per 61 note Keyboard
0200.66	Up Stop Screw	61
0200.75	Keyboard Stiffener	1
0220.04	Manual Contact Block, 4-wire	61
0230.00	Manual Contact Rail	1
0240.02	Manual Contact Plate, Silver	61
6110.01	Hammer Rail Felt	1
6130.06	Felt Washer	61
6130.07	Felt Washer for Up Stop Screw	122
Back Sprung Keyboards Add		
6130.01	Felt Washer	61
6422.04	Plastic Hex Nut	61
7250.01	Manual key Spring	61
7410.08	1-1/8" Brass Eye Wire	61
7506.05	#6 x 3/4" RHWS	61
Front Sprung Keyboards Add		
7200.01	Compass Spring	61
Tracker Touch (rear spring only) Add		
0200.52	Tracker Touch Plate	1
0205.00	Tracker Touch Spring	61
0206.00	Tracker Touch Adjusting Screw	61

Manual Keys, Mounted

0200.01 Mounted with hardwood key cheeks of your choice, key slips, and top rail. Synthetic key coverings. Equipped with adjustable tension springs, adjustable up stop, front and balance rail felts, hinged at rear for service. Oak guides and hardwood bottom slides included. Contact rails with 4 to 10 wire contacts and, separate silver-tipped contact plates installed. Complete, ready to attach cables.

Additional services include finishing to sample, engraving and installing combination pistons with two or three contacts, and installing and regulating toggle or magnetic tracker touch. Satin synthetic, exotic wood, Ivory and bone coverings are available, as are special key cheek shapes.

Popular Cheek Styles



Standard



70°



E. M. Skinner



Square



Custom Manual Keyboard

0204.00 Manual keyboards are built to customer drawings and specifications with OSI's modified note spacing. 165.20 mm c to c

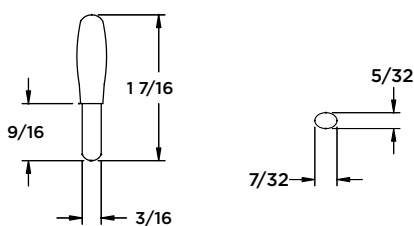


Manual Keyboard Recovering

- 0201.00** As a manufacturer of new manual keyboards, we have the talent and equipment to rework and restore existing keyboards. Manual keyboards in good condition can be cleaned and buffed, or recovered with off-white or crème synthetic, bone or hardwood naturals with synthetic or hardwood sharps. Keys can also be rebushed at the same time. New pistons can be added or installed and contact systems can be upgraded.

Manual Key Pins

- 0200.60** Bat pin, front rail.



- 0200.61** Balance rail pin, rear. .1445" Ø x 2"



Key Coverings

Off-white or crème synthetic manual key coverings for natural keys are in one piece octaves, ready to be cut apart, .090" thick. Individual black sharps are available polished or dull.

- 0215.00** Manual natural key octave covering
0215.01 Manual natural key covering, note No. 61
0215.10 Manual natural key covering, octave creme
0215.11 Manual natural key covering, note No. 61-crème
0216.01 Manual sharp, polished synthetic, 3-1/4"
0216.02 Manual sharp, dull synthetic, 3-1/4"
0217.01 Manual sharp, polished synthetic, 3-1/2"
0217.02 Manual sharp, dull synthetic, 3-1/2"



Tracker Touch Spring

- 0205.00** Omega or "C" spring used on manual keyboards for "kick-over" or "tracker" touch. Spring is most effective when compressed to 3/4". Use with 0206.00 tracker touch screw. **3/8" W**



Tracker Touch Screw

- 0206.00** Brass FHMS used to adjust tension on 0205.00 tracker touch spring.

8-32 x 1-1/2"



Tracker Touch Plate

- 0208.00** Zinc-plated steel, with 2 holes for No. 3 screws. Used with 0209.00 tracker touch bar.

1/16" T x 3/8" W x 2-1/2" L



Magnetic Tracker Touch Bar

- 0209.00** Permanent magnet supported in "U" channel. Used with 0208.00 tracker touch plate. Order bushing cloth bumper material separately.

35-1/4" L x 3/4" W x 3/8" H

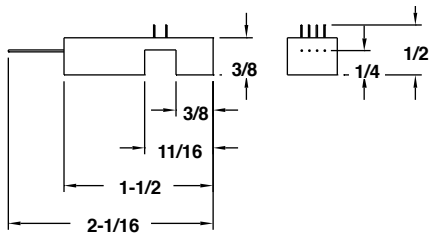


Manual Contact Blocks

Individual contact blocks with .0142" (27 ga.) silver wire. For new or replacement work. Wood block 1-1/2" L x 1/2" W x 3/8" H. Wires add 9/16" to length, 1/8" to height.

No. Wires

- 0220.04 4
- 0220.06 6
- 0220.08 8
- 0220.10 10
- 0220.20 Custom manual contact blocks



Manual Contact Rails

- 0230.00 Straight grained poplar with 1/2" x 1/2" steel angle iron installed. Built-in wiring guide provided. Installed under or at rear of manual keys. Blocks supplied separately. Contact blocks must be centered and glued for each individual keyboard.

36-1/2" L x 2" D x 7/8" H including spline.



- 0230.52 Spline only. 5/16" W x 1/4" H x 36-1/2" L
- 0200.75 Contact rail & keyboard stiffener. 1/8" x 1/2" x 1/2" x 32" angle iron.

Manual Contact Plate

Phosphor bronze, plain or with silver tip. Two screw holes for No. 4 x 5/8" and No. 4 x 3/4" RHWS.

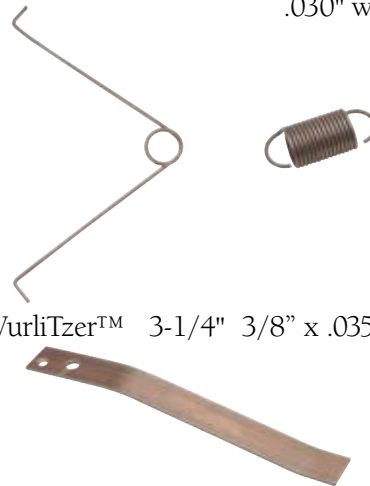
1-1/2" L O.A. x 1/2" W at contact.

- 0240.01 Plain
- 0240.02 Silver tip



Manual Key Springs

- | Type | O.A. Length | Other |
|-----------------|-------------|---------------------|
| 7200.01 Compass | 1-7/8" | .040" wire |
| 7250.01 Coil | 13/16" | 5/16" Ø, .030" wire |
- 0210.00 WurliTzer™ 3-1/4" 3/8" x .035" 2nd touch
 - 7503.02 Slotted RHWS For Mounting #3 x 3/8"



Up Stop Screw

- 0200.66 The Up Stop Screw takes the place of a threaded wire and leather nut to limit the upward travel at the front of the manual key. The washer allen head screw is easily adjusted with an allen driver. Drill No. 57 hole.

.076 Ø x 1-1/2" L



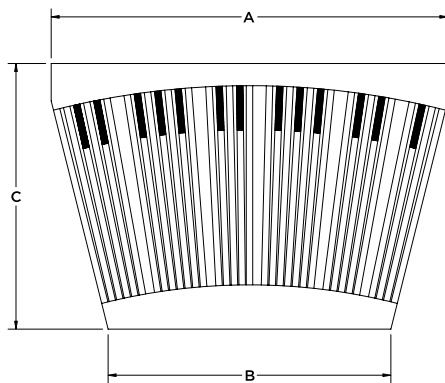
PEDALBOARDS

Pedalboards, built to AGO specifications, are provided in 30 and 32 note compass and in two frame styles. Standard Style No. 1 frame side rails are perpendicular to floor. Style No. 2 frame side rails are slanted and follow concave radius of keys. Pedalboards are constructed for hard usage and stability, with specially formed and veneered gumwood ply curve front top rail and hammer rail. Key bodies are constructed of straight grained white oak. Keys are guided by a 3/16" rod running through a felt bushed slot in the key front. Easily adjusted flat bent carbon steel tension springs are fastened to solid oak heel rail. Natural key caps are plain sawn select hard maple, finished with durable clear epoxy lacquer. Standard sharps are tough, molded phenolic. Style No. 1, 32 notes stock; Style No. 2 and 30 note compass provided to order.

	Style	Style	Wood	No. Notes
0301.11	1	0301.12	Birch	32
0303.11	1	0303.12	Mahogany	32
0305.11	1	0305.12	White Oak	32
0306.11	1	0306.12	Red Oak	32
0308.11	1	0308.12	Walnut	32
0301.01	1	0301.02	Birch	30
0303.01	1	0303.02	Mahogany	30
0305.01	1	0305.02	White Oak	30
0306.01	1	0306.02	Red Oak	30
0308.01	1	0308.02	Walnut	30

Additional services include finishing to sample, mounting contact bar (4 to 14 wires) with silver-tipped contact plates, mounting toe pistons with nameplates, installing wood ebony-capped sharps, theatre organ style 2nd touch and extended toe rail for Skinner and WurliTzer™ swell shoe mounting. Contact plates with pigtails, solid front key extensions for tracker work and special wood natural key caps are also available.

Shipping Weight: 135 lbs.



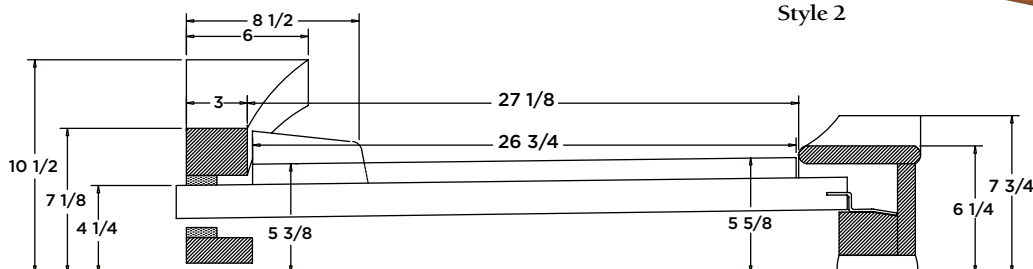
	A	B	C
30 Note Style No. 1	52-1/4"	35"	36"
32 Note Style No. 1	53-3/4"	36-3/4"	36"
30 Note Style No. 2	54"	36-3/4"	36"
32 Note Style No. 2	56-1/2"	39"	36"



Style 1



Style 2



SECTION AT E-F

32 NOTE PEDALBOARD

Pedal Key 2nd Touch

0301.20 Second touch is available installed on new pedal keyboards or can be retrofitted on existing OSI and Wurlitzer™ pedal keyboards. Mechanism provides consistent, quiet and firm stop and smooth, positive tactile feedback beyond the engagement point.



Pedal Key Guide Wire

0301.53 This sturdy guide wire, in the shape of a staple, guides the front end of the pedal key.

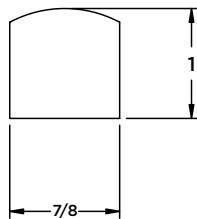
3/16" Ø x 4-3/4" L, legs 1-5/8" L



Pedal Keyboard Natural

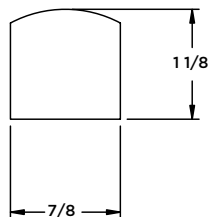
0310.00 Clear hard maple naturals are finished in a clear epoxy lacquer. Available cut to shorter lengths. Other woods to order.

7/8" W x 1" H x 26-3/4" L



0310.65 MP Möller Naturals

7/8" W x 1-1/8" H x 25-3/4" L



Pedal Sharps

Available in black molded phenolic or wood. Measurements are at rear high point. Molded sharps tapped 10-32 x 3/4". Mounting hardware available for molded sharps.

13/16" W x 5-1/2" L at base.

Material	Highest Point
0315.01 Phenolic	2-5/8"
0315.02 Phenolic	3"



0319.00 Mounting hardware for molded pedal sharp includes machine screw, No. 10-12-14 Screw Tension Spring, and two 1/2" x 1/4" I.D. steel washers. 10-32 x 2-3/4" RH machine screws furnished. 2" to 2-1/2" lengths must be specified.

0313.01 Ebony capped	2-5/8"
0316.01 Teak	2-5/8"
0317.01 Rosewood	2-5/8"
0318.01 Walnut	2-5/8"



Solid wood replacement sharps for M. P. Möller pedalboards.

13/16" W x 6-7/8" L at base.

0313.11 Ebony capped	2-3/4"
0318.11 Walnut	2-3/4"



Pedal Key Bushing

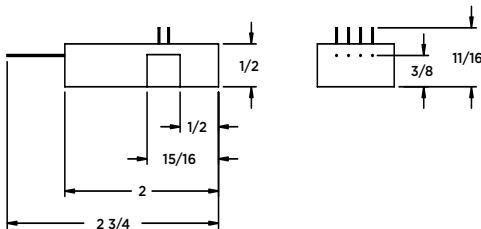
0301.51 Pre-cut bushing cloth for replacement of front guide pin bushing 32 pcs. per set. 1-3/8" x 3-3/8" each.

Pedal Contact Block

Individual contact blocks with .0201" (24 ga.) silver wires. Use in new or replacement work. Wood block 2" L x 1" W x 1/2" H. Wires add 3/4" to length, 3/16" to height.

No. Wires

0320.04	4
0320.06	6
0320.08	8
0320.10	10
0320.12	12
0320.14	14
0320.20	Special pedal contact block



Pedal Contact Rail

0330.00 Laminated gumwood plycurve furnished with cable guide, dust cover with screws, and mounting cleats, finished black. Must be cut to length and fit to individual pedal keyboard. Custom bars per drawings.

3-1/4" W x 1-1/8" T

Pedal Contact Plate

Phosphor bronze, plain or with silver tip. Two screw holes for No. 4 x 5/8" and No. 4 x 3/4" RHWS.

2-1/2" L O.A. x 31/32" W at contact.

0340.01 Plain
0340.02 Silver tip



Pedal Keyboard Springs

Flat tension springs are carbon steel, coil springs are steel.

Size	Description
------	-------------

0350.01	Flat 4" L x 7/8" W x 1/8" T
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0350.02	Flat bent 4-7/16" L x 7/8" W x 1/8" T
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0351.00	Coil 1-7/8" L x 1/2" O.D., .040" wire
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0350.05	Wire 12-5/8" L x .1286" Ø wire (Not Shown)
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Pedal Hammer Rail Felt

6111.00 Select gray felt for up and down stops at toe end of pedal keyboard thumper bars.

54" L x 1-1/2" W x 1/2" T

Pedal Toe Piston

Toe pistons are of rugged die-cast construction. Polished, chrome-finished heads are available on polished chrome or black crinkle base. Designed for installation on horizontal or vertical surfaces. Ribbon silver contacts with gold-plated shorting washer. Furnished with No. 4 x 3/4" plated mounting screws.

1-3/4" W x 1-7/8" D x 2-1/16" H

	Contacts	Finish
0400.02	2	Polished
0400.03	3	Polished
0400.12	2	Polished head, black crinkle base
0400.13	3	Polished head, black crinkle base

0400.05 Oval head, chrome plated wood screw. No. 4 x 3/4"

REISNER Pedal Toe Piston

Die-cast toe piston base is finished crinkle black with brushed aluminum or satin brass head. One-piece head with machined steel shaft terminates in a gold-plated shorting washer. Ribbon silver contacts with gold-plated shorting bar. Designed for vertical or horizontal mounting. Mounting holes provided for No. 4 mounting screws.

1-3/4" W x 1-3/4" D x 2-3/8" H

	Contacts	Head
0401.02	2	Brushed aluminum
0401.03	3	Brushed aluminum
0402.02	2	Satin brass
0402.03	3	Satin brass



Expression Shoe

For swell and crescendo. Hinged, mounted on base board for ease of installation, complete with "on/off" bumper blocks. Black horizontal rubber covering, black vinyl bindings. Crescendo shoe raised 1/4". Use with 0411.00 swell shoe connecting rod and 0420.00 swell roller. Brake is built into swell roller.

3-7/8" W x 11-1/8" H

- 0410.01 Swell only
- 0410.02 Swell & crescendo
- 0410.03 2 Swell & crescendo
- 0410.04 3 Swell & crescendo
- 0410.05 Special layout
- 0410.60 Replacement treads black, horizontal ribs.

1/8" T x 4" W x 11-1/4" H

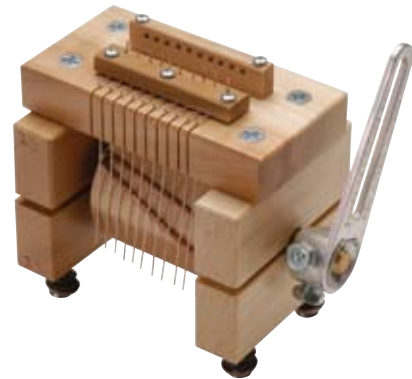


Swell/Crescendo Roller

For swell and crescendo. 22 ga. sterling silver fingers and phosphor bronze wiper. Complete with operating arm, friction brake, cable strip, and separate feed. Mained through axle. Use with 0410.00 swell shoe and 0411.00 swell shoe connecting rod.

4-1/2" H x 3" D

No. Contacts	O.A. Length	
0420.06	6	4-7/16"
0420.08	8	4-13/16"
0420.10	10	5-3/16"
0420.12	12	5-9/16"
0420.16	16	6-5/16"
0420.20	20	7-1/16"
0420.30	30	8-15/16"
0420.40	40	10-13/16"
0420.50	50	12-11/16"
0420.75	75	17-3/8"



Swell Shoe Connecting Rod

- 0411.00 Designed to connect swell pedal to contact roller. Adjustable from 14-1/2" to 16-1/2". Easily cut to shorter length.



Servo Shoe Potentiometer and Linkage

- 3411.00 1k OHM Linear Potentiometer mounted on aluminum angle brackets for solid state swell expression or crescendo. 11 Gauge phosphor bronze connecting rod and shoe attachment plate included.



Reisner Expression Shoe

Sturdily constructed, easy-to-install swell shoes have tension adjusting screw front-mounted for ease of maintenance. Rugged axle assembly mounts to back of knee panel with four No. 8 x 3/4" screws. Tilting wood extension arm can be mounted and adjusted as required for roller spacing. Plated connecting arm and lug furnished with unit. Brown vertical rubber covered with brushed aluminum bindings. Crescendo shoe raised 1/4". Use with 0421.00 Reisner swell roller.

4-1/4" W x 12-1/8" H

- 0415.01** Swell only
- 0415.02** Swell & crescendo
- 0415.03** 2 Swell & crescendo
- 0415.04** 3 Swell & crescendo
- 0415.05** Special layout
- 0415.60** Replacement treads, brown, vertical ribs.

1/8" T x 4-3/8" W x 12-1/8" H



Reisner Swell/Crescendo Roller

For swell and crescendo. 22 ga. sterling silver fingers. Phosphor bronze wiper maintained directly through phosphor bronze ribbon. Complete with operating arm, built-in "on/off" stops, and cable strip. Brake is built into 0415.00 Reisner swell shoe. Custom-built units available. Use No. 8 x 1-1/4" mounting screws.

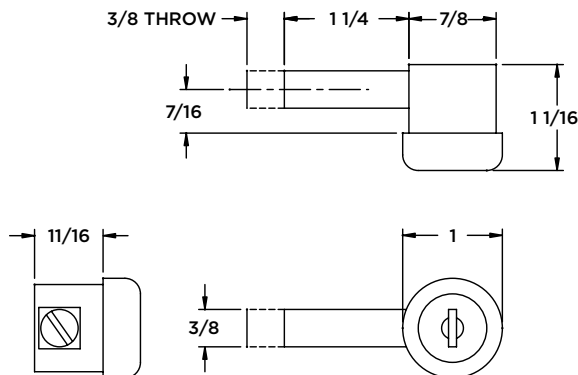
6-1/2" H x 3" D

No. Contacts	O.A. Length	
0421.08	8	7-3/16"
0421.16	16	8-1/4"
0421.20	20	8-3/8"
0421.30	30	10-7/8"
0421.40	40	13-3/8"
0421.50	50	16"
0421.99	Special Reisner swell roller.	



Console Lock

0440.00 Pillar lock, solid brass, common keying, two keys furnished. Extra keys available. Requires 7/8" Ø x 3/4" D mounting hole.



0440.01 Console lock key

Organ Bench

Stylish and rugged organ benches come complete with built-in music compartment and foot rest. Legs can be customized with moldings or inserts to match existing consoles. 0520.00 backrest can also be installed. Custom benches available with hinged top and special height. Unfinished or finished to sample.

26-1/2" H, bench top 14" D x 49-1/2" L, 45" between feet. 9-3/8" floor to bottom of heel rest. Shipping Weight: 78 lbs.



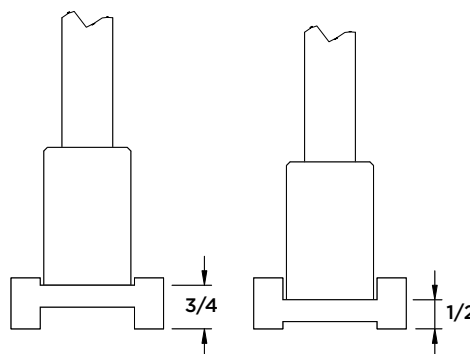
- 0500.01** Birch
- 0500.02** Cherry
- 0500.03** Mahogany
- 0500.05** White Oak
- 0500.06** Red Oak
- 0500.08** Walnut

Bench Adjusting Blocks

Reversible bench blocks fit securely on the feet of the standard OSI organ bench, raising the bench 1/2" or 3/4". They can be unfinished, finished to match the bench or provided in neutral finishes. Special sizes are also available in your choice of wood and two heights.

2-5/8" W x 13-7/8" L O.D.

- 0500.21** Birch
- 0500.22** Cherry
- 0500.23** Mahogany
- 0500.25** White Oak
- 0500.26** Red Oak
- 0500.28** Walnut
- 0500.99** Special Size



Adjustable Organ Bench

The benchtop on these adjustable benches can be raised 2" higher than standard height, or dropped 1" lower. Includes foot rest, but no music compartment. Optional backrest 0520.00 can be installed. Legs can be customized with moldings or inserts to match existing consoles. Crank extends 4-1/4". Unfinished or finished to sample. Special heights available.

Adjusts **25-1/2" to 28-1/2" H**, bench top **14" D x 49-1/2" L**, **45"** between legs.
9-3/8" floor to bottom of heel rest.

Shipping Weight: **85 lbs.**

- 0510.01** Birch
- 0510.02** Cherry
- 0510.03** Mahogany
- 0510.05** White Oak
- 0510.06** Red Oak
- 0510.08** Walnut



Adjustable Bench Accessories

- 0510.90** Height Indicator Kit
- 0510.11** Folding Handle, Round
- 0510.12** Folding Handle, Standard
- 0510.51** Non-Folding Handle, Standard



Adjustable Bench Mechanism

- 0515.00** Mechanism only for the adjustable bench. Includes all parts, including handle, screw, and bench top mounting blocks. Mechanism is **9-1/8" O.A.** front to back and **45"** between the legs.

Motorized Adjustable Organ Bench

Motorized adjustable organ bench adjusts from 1" below to 2" above standard bench height of 26-1/2". Bench is powered by strong yet quiet gear-head motor and a "V" belt drive mechanism. Momentary switch installed in right leg. Installation is simple - just plug the 8 ft. power cord into the nearest 120 VAC receptacle. Special optional backrest is available to mount below skirt. Legs and skirt can be customized with moldings or inserts to match existing consoles. Unfinished or finished to sample. Special heights available.

Adjusts **25-1/2" to 28-1/2" H**,
bench top **16" D x 51-3/4" L**, 45" between feet.
9-3/8" floor to bottom of heel rest.
Shipping Weight: **190 lbs.**

- 0512.01** Birch
- 0512.02** Cherry
- 0512.03** Mahogany
- 0512.05** White Oak
- 0512.06** Red Oak
- 0512.08** Walnut



Backrest

Backrest designed for standard or manual and motorized adjustable benches. Adds 5" to depth, 15-1/4" to height. Backrest has 4" mounting surface and mounts 1/2" below bottom of bench top on 33" centers. Mounting hardware provided.

- 0520.01** Birch
- 0520.02** Cherry
- 0520.03** Mahogany
- 0520.05** White Oak
- 0520.06** Red Oak
- 0520.08** Walnut

Gate Leg Bench

Elegant Skinner inspired bench with foot rest and music compartment. Foot style can be customized to enhance existing consoles. 0520.00 backrest can be installed. Available as standard height or adjustable, unfinished or finished to sample.

- 0513.01** Birch
- 0513.02** Cherry
- 0513.03** Mahogany
- 0513.04** White Oak
- 0513.05** Red Oak
- 0513.06** Walnut



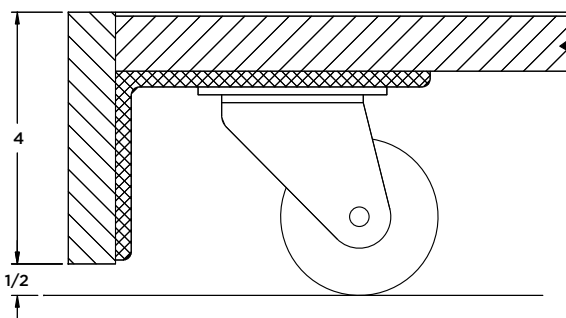
Console Dolly

Make your console easy to reposition with the addition of a custom-designed dolly. Just 4-1/2" high with 1/2" floor clearance, these rugged dollies feature welded steel frames that are engineered for torsional stiffness, which is important to maintaining the structural integrity of the console. Eight heavy-duty ball bearing casters are arranged to permit easy positioning while preventing the platform from "walking" across the floor. The vinyl or red oak surface is banded with solid hardwood, custom-finished to match the console.

- 0902.00 Console Dolly, Vinyl Floor
- 0902.01 Console Dolly, Hardwood Floor



Dolly wheel mechanism detail.



Deluxe Console Mirror

A fitting addition to any console, this 3-1/4" W x 12-5/8" L mirror surface is housed in a solid wood frame of pre-finished oak or walnut. The mirror tilts up or down. The base is felted to prevent unwanted movement of the assembly and to prevent scratches on the console top.

6-3/4" H x 16-1/2" L x 5-1/2" D O.A.
Shipping Weight: 8 lbs.

Finish

- 0916.05 Golden Oak
- 0916.06 Medium Oak
- 0916.08 Medium Walnut



WINDCHESTS

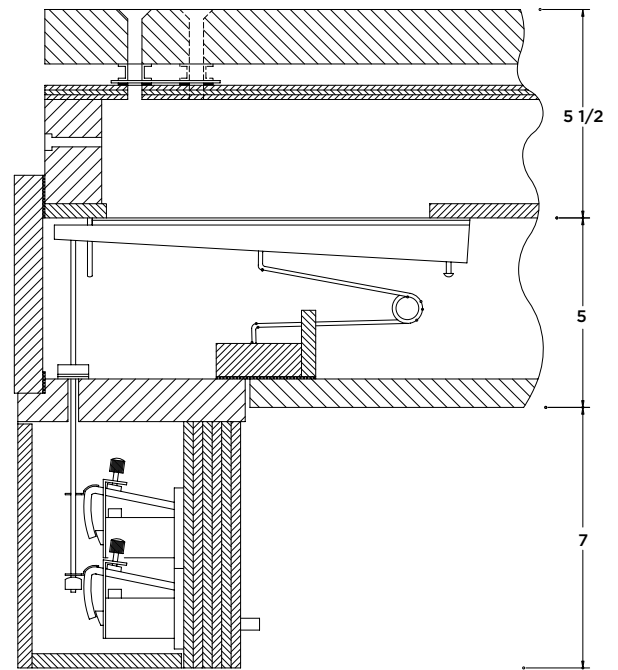
Manual and pedal windchests are custom-crafted to the individual organ builder's requirements. Chests can be furnished as Pitman, Unit or Electro-Mechanical Unit. Mechanical, Electro-Mechanical or Electro-Pneumatic Slider windchests are also available.

Top-grade poplar and basswood construction

All windchests are built from top-grade poplar and voidless basswood plywood. Each is furnished complete with center-spotted rackboards, appropriate primaries and stop actions, per specifications. All pouches and primary pneumatics are covered with top-grade pneumatic leather and are treated for additional protection. All Electro-Pneumatic chests incorporate Reisner chest magnets. We can also provide complete wiring, frame building and pipe racking, as well as built-in schwimmers, to fit builder specification.

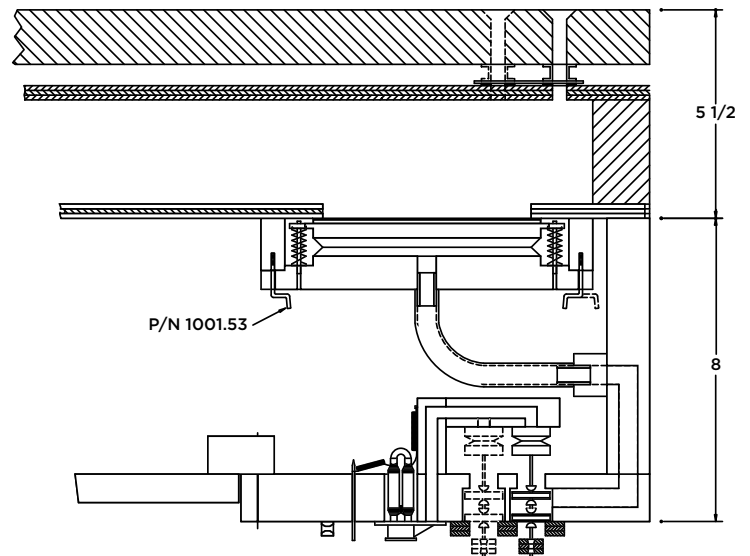
1000.00 Slider Chests

Slider chests are built from poplar, with voidless plywood used for the tables and toe boards. Telescopic seals and seal rings are employed along with phenolic sliders for stop action. Stop action and note action can be mechanical, electric SLIC motors, or motors of your choice. Schwimmers with pantograph springs can be built into the chests for wind control. Nominal toeboard width for an 8' or longer chest is 5 1/2".



1000.00 Electro-Pneumatic Slider Chests

The electro-pneumatic slider chest is the newest member of our broad line of windchests. The OSI electro-pneumatic pallet is an all new concept in slider chest note control. Influenced by the Blackinton concept, its unique design allows fuller wind flow to the channel, while maintaining the speech characteristics of the traditional manual or mechanical hinged pallet. Each single note action can be removed without tools for cleaning the pallet face, and no special techniques or materials are required for releathering. Pallet access is from the bottom, saving valuable walkboard space. The use of standard Reisner chest magnets reduces the electrical load and eliminates the need for heavy duty keying. Nominal toeboard width for an 8' or longer chest is 5 1/2".

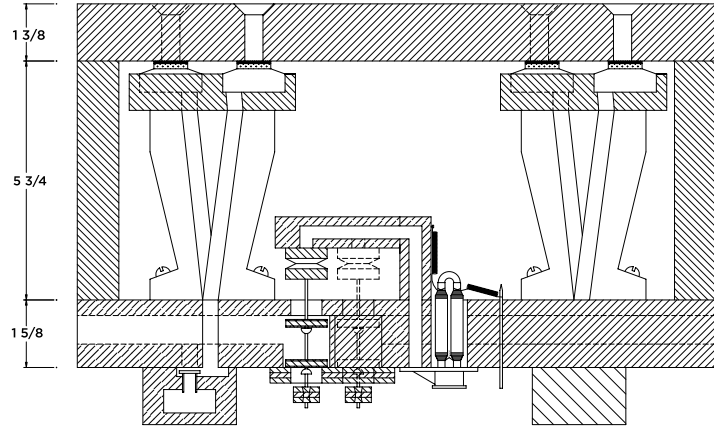


Pitman Chests

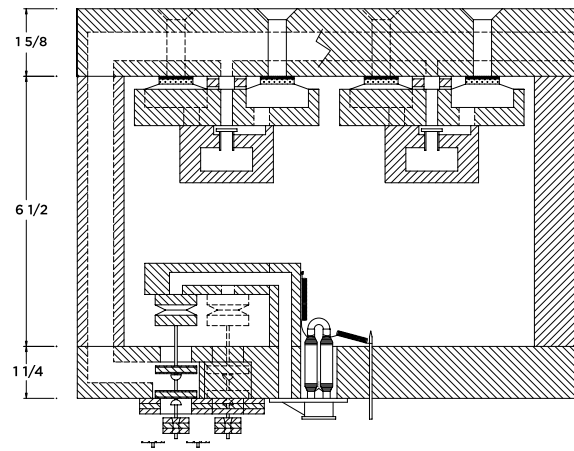
1100.00

Pitman chests are constructed in three styles.

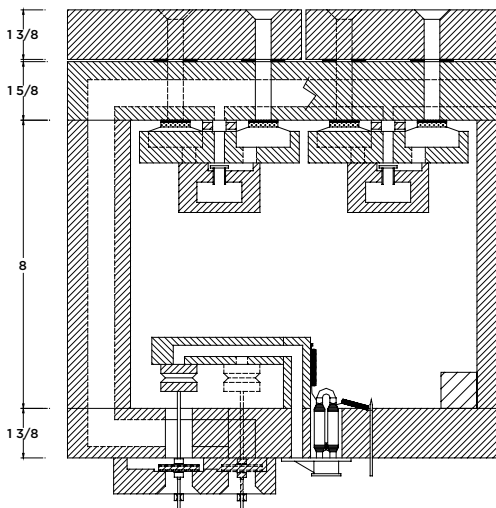
Style #1 employs primary channeling in the bottom boards, with the pouch boards attached. The Pitman rail is on the outside of the bottom board, allowing the entire action to be removed with the bottom board. Nominal toeboard width for an 8' or longer chest is 6 1/2".



Style #2 has the primary channeling in the toe board. The pouch boards are fastened to the toe board and the Pitman rail is, in turn, attached to the pouch board. The primary and stop actions are attached to the bottom of the chest. Built-in schwimmers can be used with this style. Nominal toeboard width for an 8' or longer chest is 7 1/2".



Style #3 has the primary channeling in the top table of the chests. Each toeboard and rackboard are separate and removable for easy racking of pipes without disassembly of the chest mechanism. The pouch rails with pitman rail are fastened to the chest table. The primary and stop actions are attached to the bottom of the chest. The primary can be mounted on the side of the chest. Built-in schwimmers can be used with this style. Average width per stop on an 8'0" or longer chest is 6-1/2"

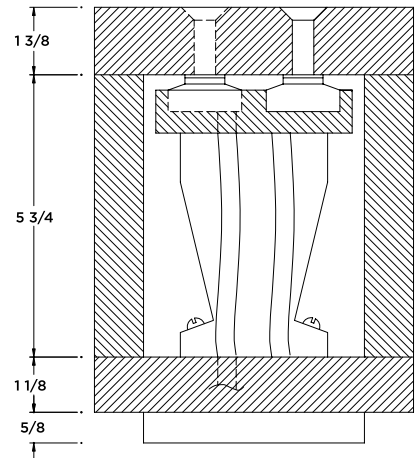


Primaries will accommodate up to 10 stops. Two chests are required for 11 stops or more. Unit chests may be combined with Pitman chests. Pitman chests will operate on wind pressure as low as 2". Normal lengths range from 8'-0" to 9'-6". Special lengths and layouts can be accommodated.

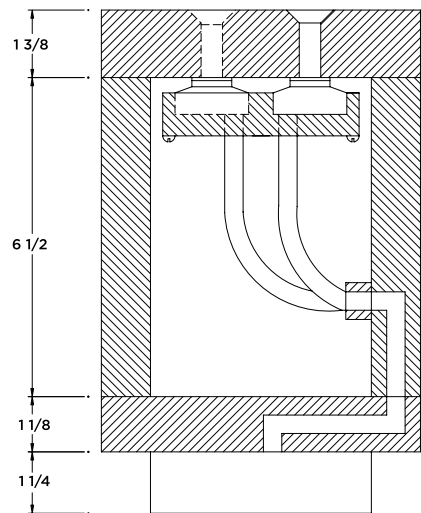
Unit Chests

1200.00 Unit chests are constructed in two styles with the action in the bottom bung. Side bung actions can be provided. Primaries are recommended for all toe holes larger than 1/2". Unit chests will operate on wind pressure as low as 2".

Style #1 has the pouch boards attached to and tubed to the bottom boards. This allows the entire action to be removed with the bottom board.



Style #2 has the pouch rail attached to the top board and tubed to the side rail. The bottom board with magnets and primaries is then removable separately.



Extras for Pitman and Unit Chests

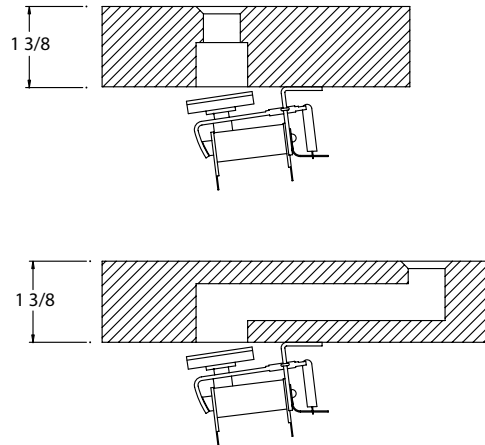
Options available for Pitman and Unit chests include wiring, channeling for mixtures, offnote contact blocks and unit actions where a stop on a Pitman chest is borrowed into the pedal.

Manual Chest Shells

- 1250.00** Chest shells are custom-built without actions to accommodate the time-proven Reisner 601 Direct Action Magnet or customer specified electro-mechanical note actions. Chest shells are supplied with pre-bored toe boards, center-spotted rackboards, and plain bottom boards. Finished per instructions, they are ready for installation of actions. Schwimmers and tremolo pneumatics are available.

601 Unit Chests

- 1280.00** Unit chests utilizing the reliable Reisner 601 Direct Action Magnets are individually scaled to your requirements, complete with center-spotted rackboards and actions installed. These chests can be provided with counter-bored or cross channel holes as illustrated. All 601 chests are wired with 10 feet of free cable to either a spreader, junction, or connector. The bottom of the chest can be a plain bung or a schwimmer with or without a tremolo pneumatic. These chests are an economical alternative that provide a highly versatile form of chest construction.



Offset Chests and Treble Extension Chests

Chests for pedal stops, larger manual pipes and treble extension pipes that must be offset can be provided in one or more sections. When built to sit on the floor, a front bung is used. Bottom bungs are used for elevated mounting. For larger pipes, butterfly valves are installed per specification. Primaries are not required for treble pipes.

- 1300.00** Offset Chest for 16' or 8' Basses
1310.00 12 Note Treble Extension Chest



Releathering

1930.00 Releathering services are available for manual and pedal pouches, pneumatics, tremolos, reservoirs, swell motors, and all other actions.

Pipe Racking and Wiring

Additional services are available to minimize work at the job site. These include:

Bored Rackboards furnished per instructions. All pipes furnished by OSI can be racked.

Upright Supports with scalloped or straight racks recommended for 8' and 16' zinc, reed, or wood pipes on both offset and manual chests.

Chest Wiring with specified free cable lengths terminating in spreaders, junctions, or connectors installed per specifications.

Building and Floor Frame

1940.00 Building frames for one or more chests with floor frames are constructed to drawings or instructions. Passage boards and organ ladders complete the package.

Chest Check Sheet

Chest Check Sheets are required for each chest. In order to simplify communications and minimize errors, please complete the Chest Check Sheet as accurately as possible.

Toe Blocks

Toe blocks complete with butterfly valves are constructed to fit individual pipes without lead toes. Pipe toe sits in felted recess. Can be bored for Orgaflex. Blocks have corked mounting surface and are secured with 2 screws. Provide O.D. of pipe toe and I.D. of toeboard hole.

1-1/8" H

1325.00 Recessed
1325.01 Counter Sink



Counter Sink

Recessed

Pitmans and Pitman Retainers

Thickness, diameter, and consistency are critical for correct operation of leather Pitman valves. Standard OSI and Möller replacement Pitman valves meet these requirements. Custom Pitmans provided per sample.

Line		Ø	Thickness
1189.00	OSI Pitmans	1/2"	.040/.050"
1190.00	Möller Standard Pitman	9/16"	.018"
1190.10	Möller Low Pressure Pitmans	5/8"	.027"
1192.00	Special Pitman Valves, per sample		



Line		I.D.	O.D.	Length
1191.00	Möller Pitman Retainers	5/16"	15/16"	1-1/4"
1191.10	Möller L.P. Pitman Retainers	3/8"	15/16"	1-7/16"



Straight Pouch Springs

Phosphor bronze, in packages of 100.

3/8" Ø O.D. x 1-5/8" L

Size	Wire Size
1500.13	Super Light .013"
1500.14	Extra Light .014"
1500.16	Light .016"
1500.18	Medium .018"
1500.20	Heavy .020"



Straight Pouch Springs—Möller

Designed as a replacement for Möller pouch springs or for use where a shorter spring is required. Phosphor bronze, in packages of 100.

7/16" Ø O.D. x 1-1/4" L

Size	Wire Size
1501.16	Light .016"
1501.18	Medium .018"
1501.20	Heavy .020"



Spring Guide & Retainer—Möller

- 1518.06** Möller Felt Spring Guide, 5/16" O.D. x 1/4" H
- 1519.00** Möller Paper Pouch Spring Retainers, 7/8" Ø

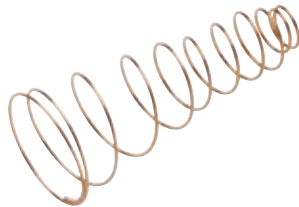
Tapered Pouch Springs

Phosphor bronze, in packages of 100.

1/4" Ø top, 5/8" Ø bottom, 1-5/8" L

Size	Wire Size
------	-----------

- | | | |
|----------------|-------------|-------|
| 1505.14 | Extra Light | .014" |
| 1505.16 | Light | .016" |
| 1505.18 | Medium | .018" |
| 1505.20 | Heavy | .020" |



Conical Pouch Springs

Phosphor bronze, in packages of 100.

1/8" Ø top, 1/2" Ø bottom, 1-3/8" L

Size	Wire Size
------	-----------

- | | | |
|----------------|-------------|-------|
| 1510.16 | Extra Light | .016" |
| 1510.18 | Light | .018" |
| 1510.19 | Medium | .019" |
| 1510.20 | Heavy | .020" |



Metal Valve Seats

Individual aluminum primary valve seat, gasket and bushed valve guide. Available in two sizes. Mounts in 1-1/16" boring with No. 3 x 1/2" RHWS. Valve seat drop from surface 1/4".

1-9/16" Ø O.D.

- 1520.51** 1/2" ID Metal Valve Seat
1520.52 5/8" ID Metal Valve Seat
1520.53 Gasket

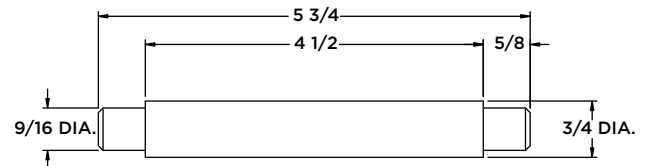


- 1520.54** Valve Guide



Rack Pin

- 1545.00** Hardwood, unfinished.



Offset Contact Block

- 1560.00** Install over existing pipe hole. Double contact.

3-1/4" L x 1-3/4" W x 3/4" H



Pipe Hooks

Kind **Description**

- 1600.01** Wood 3/16" galvanized steel wire.
Requires 9/16" rack hole.

1-1/2" W x 2-3/8" L



- 1600.02** Metal With neoprene sleeve 5/8" W.

1/2" W x 1-9/16" H
x 1-9/16" D

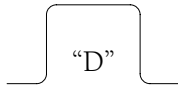


- 1600.03** Pipe Pin Electro-plated.

3/16" D x 2-5/8" L



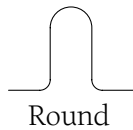
- 1600.04** Metal
Copper
or Zink



- 1600.05** Metal
Copper
or Zink



- 1600.06** Metal
Copper
or Zink



- 1605.01** Dag Screws 3/4" thread, 1/8" Ø x 1-5/8" L.



Bracing Material

Poplar, clear lacquer finish.

Size

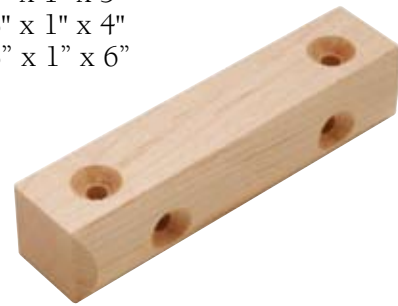
- 1625.03** 7/8" x 3" x 10'
1625.04 7/8" x 3-1/2" x 10'
1625.05 7/8" x 4" x 10'

Cleat

Hardwood, finished with clear lacquer.
4 screw holes for No. 10 FHWS.

Size

- 1650.03** 7/8" x 1" x 3"
1650.04 7/8" x 1" x 4"
1650.06 7/8" x 1" x 6"



Rackboard Sizing Jig

- 1199.00** A convenient tool used to determine rackboard hole sizes. 2-piece set in 52 gradations 2-7/8" Ø to 1/4" Ø.

Each section 37-1/2" L x 7" W x 6-3/8" H
Shipping Weight: 30 lbs.

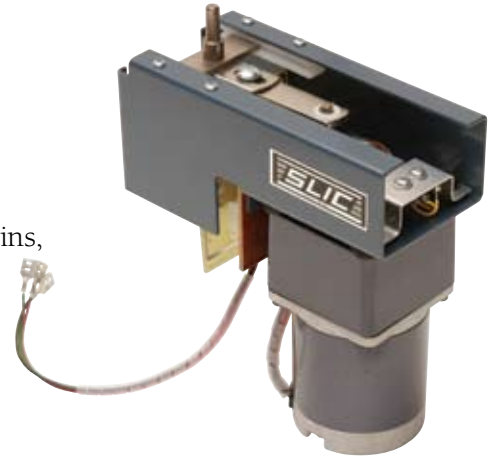


SLIC Motor

1700.00 Designed to provide fast, reliable operation under the heaviest loads for new or old slider chests, mechanical couplers, and tripper combination actions. Built-in travel adjustment eliminates the need for end stops or limit switches. Screwdriver adjustment of travel. Automatic cut-out prevents motor damage. Complete with control PC Board.

Specifications

Travel	Infinitely adjustable 3/8" to 1-1/2"
Accuracy	Better than .015"
Max. Pull	22 lbs. over 3/4"
Voltage	12-16 VDC
Current	Control card draws On-50 ma. Off-0 ma. Motor draws 1.5A for 0.2 seconds via mains, not stop switch.
Dimensions	2-9/16" W x 6-1/8" L x 5-1/2" H
Weight	3 lbs. net. 5 lbs. gross.



1700.04 SLIC Replacement Control Card

Magnet Boards and Primaries

These components are used for converting existing pneumatic actions to electrical operation or for replacing existing primary actions. For exhaust of a unit action primary, use a magnet board. If space is not available, use a magnet box and tube to action. If exhaust load is heavy or fast action is essential, a magnet box with valve (primary) is used. For inflate action, a magnet box with valve (primary) is required. Specify note scale and space available.

Description

- 1800.00** Magnet board
- 1810.00** Magnet box
- 1820.00** Magnet and primary action

Stop Action

Individual stop action with vent is used to control air supply to individual chests, actions, and other similar components. Use stop action without vent as a cutoff for concussion bellows. 4" Ø inlet, 3" Ø outlet.

7-3/4" W x 8-3/8" D x 14-3/4" L O.A.
Shipping Weight: 9 lbs.

Description

- 1900.01 With vent
- 1900.02 Without vent



Lieblich Gedeckt Action

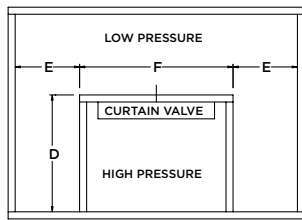
- 1925.00 This unit is designed with two stop actions mounted on a pressure regulator to obtain a softer sound from the single Pedal Bourdon. Furnishes high and low pressure to same set of pipes. One conductor required from action to chest. 4" Ø inlet, 3" Ø outlet.

19-1/4" W x 18" D x 19" H O.A.
Shipping Weight: 15 lbs.

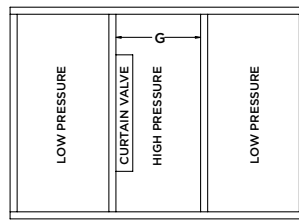


Standard Reservoirs

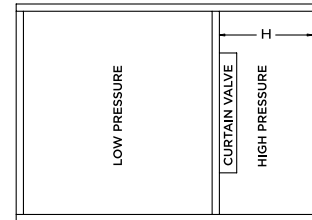
Reservoirs come complete with built-in curtain valves that are mounted on nylon bearings and are adjustable from the outside. If wind holes are required, specify size and location. Spring rails span short dimension; long dimension rails available. Indicate wind pressure so proper coil springs can be installed. Compass springs can be furnished in place of coil springs. Special size reservoirs are built to specifications.



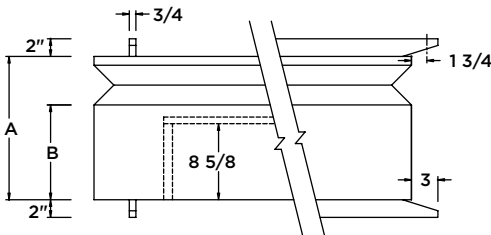
Style #1



Style #2



Style #3

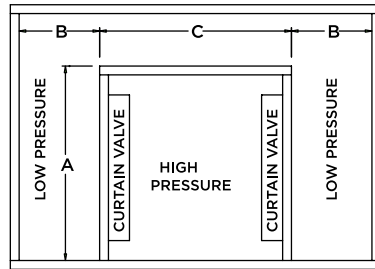


Reservoir Size	A	B	D	E	F	G	H	Curtain Valve
18" x 24"	15"	10-1/2"	10-9/16"	2-5/8"	16-3/4"	-	8"	#1
20" x 30"	15 -1/2"	10-1/2"	11-9/16"	4-1/8"	19-3/4"	-	10"	#2
24" x 36"	16"	10-1/2"	13-9/16"	7-1/8"	19-3/4"	-	13"	#2
30" x 42"	16"	10-3/4"	16-9/16"	9-1/8"	21-3/4"	12"	14"	#3
36" x 48"	16"	10-3/4"	19-9/16"	11-1/8"	23-3/4"	12"	16"	#4
8" x 60"	16"	10-3/4"	28"	18-1/8"	21-3/4"	14"	20"	2 x #3

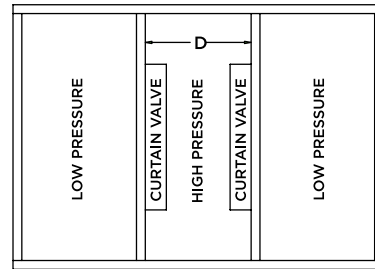
Size	Layout	No. Stops	Approx Shipping Weight	Size	Layout	No. Stops		
2001.00	18" x 24"	1	2	57 lbs.	2021.00	18" x 24"	3	2
2002.00	20" x 30"	1	3	67 lbs.	2022.00	20" x 30"	3	3
2003.00	24" x 36"	1	4	85 lbs.	2023.00	24" x 36"	3	4
2004.00	30" x 42"	1	6	127 lbs.	2024.00	30" x 42"	3	6
2005.00	36" x 48"	1	8	150 lbs.	2025.00	36" x 48"	3	8
2006.00	48" x 60"	1	12	325 lbs.	2026.00	48" x 60"	3	12
2008.00	Special Reservoir #1				2028.00	Special Reservoir, #3		
2014.00	30" x 42"	2	6					
2015.00	36" x 48"	2	8					
2016.00	48" x 60"	2	12					
2018.00	Special Reservoir, #2							

Floating Top Reservoirs

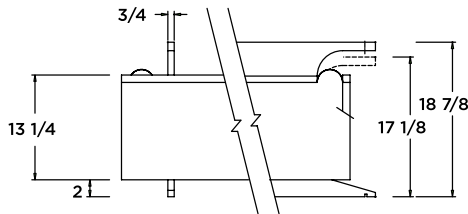
A floating top or schwimmerbalg reservoir is a logical alternative to leather gussets and folds. These reservoirs are available in all standard sizes, as well as custom sizes. The ease of maintenance, the longevity of the one-piece rubber cloth top, and the accurate regulation of this proven slotted curtain valve make this unit an attractive option. On sizes 20" x 30" and larger, a built-in pressure rise tremolo pneumatic can be provided for a neat and compact installation. Springs are included for specified wind pressure. Tremolo driver sold separately.



STYLE NO. 1



STYLE NO. 2



Reservoir Size	A	B	C	D	Curtain Valve
18" x 24"	-	-	-	8"	2 x #1
20" x 30"	-	-	-	8"	2 x #2
24" x 36"	20"	7-1/8"	19-3/4"	8"	2 x #2
30" x 42"	22"	9-1/8"	21-3/4"	12"	2 x #3
36" x 48"	24"	11-1/8"	23-3/4"	12"	2 x #4
48" x 60"	28"	18-1/8"	21-3/4"	14"	2 x #4

Size	Layout	No. Stops	Approx Shipping Weight
------	--------	-----------	------------------------

2053.00	24" x 36"	1	4	85 lbs.
2054.00	30" x 42"	1	6	127 lbs.
2055.00	36" x 48"	1	8	150 lbs.
2056.00	48" x 60"	1	12	325 lbs.
2058.00	Special Reservoir #1			
2061.00	18" x 24"	2	2	
2062.00	20" x 30"	2	3	
2063.00	24" x 36"	2	4	
2064.00	30" x 42"	2	6	
2065.00	36" x 48"	2	8	
2066.00	48" x 60"	2	12	
2068.00	Special Reservoir, #2			

WurliTzer™ Reservoirs

These WurliTzer™ style reservoirs are complete with one cone valve and two book or pallet valves and are ready to install on standard WurliTzer™ wind trunks. Four (4) long spring bars are furnished with each unit. Additional spring bars and coil springs are available.

	Size	Shipping Weight
2072.00	20" x 30"	48 lbs.
2073.00	26" x 35"	71 lbs.
2074.00	32" x 35"	97 lbs.
2075.00	35" x 42"	
2072.58	Short spring bars 5" w/screws	
2072.59	Long spring bars 10" w/screws	



WurliTzer™ Equalizer

WurliTzer™ originally designed these units as pressure regulators for swell shutter, console, and percussion actions. These hinged units employ a sophisticated cone valve and are an economical alternative to a standard reservoir where space is at a premium and critical regulation is not required. Suggested for pressures over 5". The 3" inlet and 3" outlet are located on the bottom of the unit. 15" H O.A.

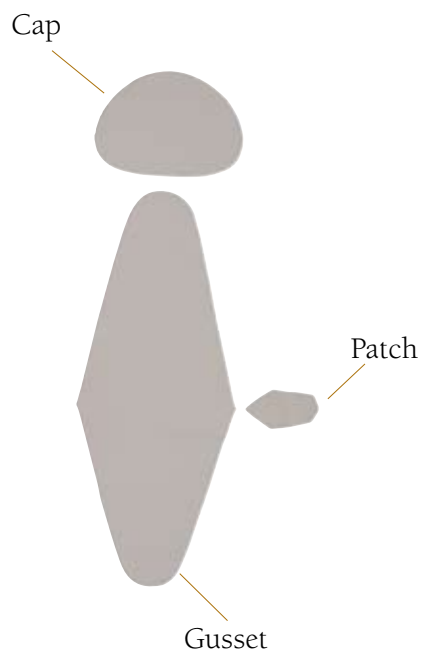
	W x L	Shipping Weight
2080.08	8" x 20"	15 lbs.
2080.10	10" x 24"	23 lbs.
2080.75	4 Legs, 17"	



Reservoir Gussets

Cut and skived leather corner gussets.
Set of 4 with 8 corner patches.

	Reservoir Size	Rib W.	Gusset
2001.57	18" x 24"	3-9/16"	5" x 14"
2002.57	20" x 30"	4-9/16"	6-3/4" x 16-1/2"
2003.57	24" x 36" & larger	5"	6-3/4" x 18-1/2"
2001.65	Patches only		
2001.66	Corner caps, for high pressure applications		
2001.67	Alum Bellows strips, 1-1/2"		
6120.03	Twill tape for hinge strips, 1" heavy		



Reservoir Releathering

2030.00 Releathering services are available for all styles of reservoirs and swimmer panels.

Reservoir Curtain Valves

Complete with roller mounted in nylon bearings, slat grid, and threaded brass operating rod. Height of grid opening is 4".

Size	W	x	H	Opening Equivalent (sq. in.)	Ø	
2040.01	#1	14-3/4"	x	7-7/8"	28	6"
2040.02	#2	17-3/4"	x	7-7/8"	36	6-3/4"
2040.03	#3	19-3/4"	x	7-7/8"	43	7-3/8"
2040.04	#4	21-3/4"	x	7-7/8"	50	8"



External Curtain Valves

Standard curtain valve installed in box for external mounting on existing reservoir. Normally "UP" to close. Curtain rod can be reversed for "UP" to open. Reversible by customer.

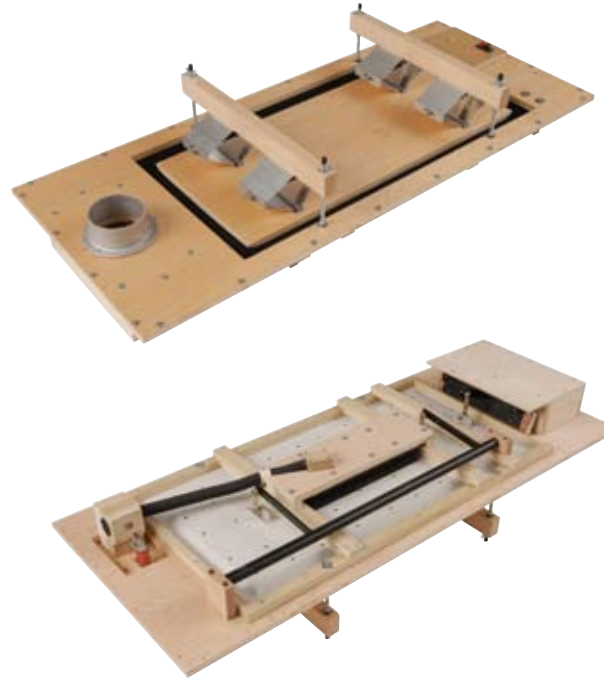
Size	W	x	H	x	D	Shipping Weight	
2045.01	#1	17"	x	14"	x	8"	23 lbs.
2045.02	#2	20"	x	14"	x	8"	25 lbs.
2045.03	#3	22"	x	14"	x	8"	26 lbs.
2045.04	#4	24"	x	14"	x	8"	28 lbs.



Schwimmer

A schwimmer is a chest-mounted regulator that takes the place of a reservoir and can be installed in slider, electro-mechanical, or top groove Pitman chests. 24" minimum width, 57" standard length. Custom sizes available. Tremolo pneumatic with electric dump valve available. Tremolo driver sold separately. Furnished with 2220.00 pantograph assemblies, requires 4" inside and 8" outside clearance.

- 2100.00** Schwimmer plate assembly
- 2110.00** Schwimmer plate assembly with tremolo pneumatic
- 2110.60** Dump Valve, Schwimmer Tremolo
- 2110.70** Schwimmer Tremolo Pneumatic Only



Pantograph Assembly

Used on schwimmer plates where total travel is 1" to 1-1/2". Depending on schwimmer plate size, 4 to 6 units are normally required for WP to 4". (100 mm)

2-5/8" to 3-5/8" H x 8-1/2" W x 5" D

- 2220.00** Pantograph Assembly
- 2220.57** Pantograph Spring only



Reservoir Eveners

- 2400.00** Eveners help eliminate "shimmy" and decrease weight of reservoir top. Two units provided per set. 28" L



Reservoir Legs

Four poplar legs per set, complete with cleats.

- | | <u>L</u> | <u>x</u> | <u>W</u> |
|----------------|-------------|----------|----------|
| 2020.01 | 16" | x | 4" |
| 2020.02 | 24" | x | 4" |
| 2020.03 | Custom made | | |

Reservoir Coil Spring

2" Ø O.D., 8" coil, 10-1/2" O.A.

	Size	Color	Wire Ø
2200.04	#4	Blue	.120
2200.05	#5	Orange	.135
2200.10	#10	White	.148
2200.20	#20	Yellow	.156
2200.30	#30	Green	.162
2200.40	#40	Red	.192



Reservoir Spring Chart

Spring Number	18" x 24"		20" x 30"		24" x 36"		30" x 42"		36" x 48"		48" x 60"	
	Wind Pressure		Wind Pressure		Wind Pressure		Wind Pressure		Wind Pressure		Wind Pressure	
*	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
#5 Orange	4-1/2"	6"	4-1/2"	5"	2-3/4"	3-1/2"	2-1/4"	2-3/4"	2"	2-1/4"	1-1/2"	1-3/4"
#10 White	6-1/2"	8"	6-1/2"	7-1/2"	4"	5"	3-1/4"	4"	2-3/4"	3"	1-3/4"	2-1/4"
#20 Yellow	9"	10"	7"	8-1/4"	6"	7-1/4"	4-1/2"	5-1/2"	3-1/2"	4-1/4"	2-1/2"	3"
#30 Green	11"	12"	9"	10"	7-3/4"	8-1/4"	5-1/2"	7"	4-1/2"	5-1/4"	3"	3-1/2"
#40 Red	13"	14"	11"	12"	9"	10"	7"	8-1/4"	6-3/4"	7-1/2"	4-1/4"	5-1/4"
Reservoir Top Area	3 sq. ft.		4.2 sq. ft.		6 sq. ft.		8.75 sq. ft.		12 sq. ft.		20 sq. ft.	

* Chart assumes 4 springs per reservoir

Reservoir Compass Spring

	Size	O.A. Length	Color	Thickness
2210.06	#6	6"	—	.042
2210.08	#8	8"	—	.046
2210.10	#10	12"	White	.055
2210.20	#20	12"	Yellow	.065
2210.30	#30	12"	Green	.080



Concussion Bellows

Concussion bellows (winkers) are used as "shock absorbers" in wind systems. If both concussion bellows and tremolo are used with a reservoir, Type 2 with added stop action cut-out is recommended.

	Type	Pneumatic Size	O.A. W x L x H	Inlet	Shipping Weight
2501.00	1	8" x 16"	11-1/2" x 16-1/2" x 5"	1-1/4"	9 lbs.
2502.00	2	12" x 18"	12-1/4" x 23-1/2" x 16"	3"	14 lbs.
2502.01	2	Cutout only	8-1/8" x 19-3/8" x 4-1/8"	2"	10 lbs.



Type 1



Type 2

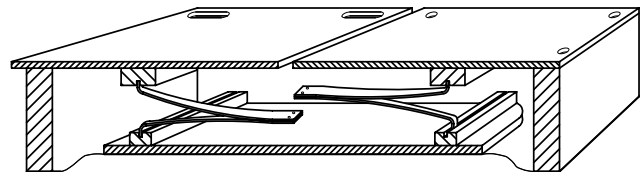


Type 2
mounted on cutout

Concussion Bellows, Tunable

Used as "shock absorber" in wind system. Mounts directly on top groove Pitman or slider chest. Free movement of swimmer style plate controlled by adjustable cover. Useful in single bellows winding of organs. Furnished with two 2210.06 reservoir compass springs and mounting screws. Requires 11" x 14" mounting hole.

2505.00 Concussion Bellows #4



Tremolo

This bellows style tremolo is covered with leather. The built-in electro-pneumatic stop action can be regulated to control air exhaust. Speed control is accomplished using the adjustable slide. Supplied with two weights. Muffler cover supplied separately.

	Size Pneumatic	Height Inflated	Inlet Ø	Application Guidelines to 4" WP or High Pressure	Shipping Weight
2607.00	7" x 16"	13-1/4"	2-1/2"	1-2 Stops to 4" WP	18 lbs.
2609.00	9" x 20"	13-1/4"	3"	3-6 Stops 4-6" WP	26 lbs.
2610.00	10" x 24"	13-1/4"	4"	7 + Stops 7-10"WP	32 lbs.

2607.75 Tremolo spring

Muffler covers

	Use with	Dimensions		
		L	W	H
2607.01	2607.00	19"	9"	4-1/2"
2609.01	2609.00	23"	11"	4-1/2"
2610.01	2610.00	27"	12"	4-1/2"



Tremolo Weight

2602.00 Cast iron, 6 oz. Use No. 6 screw.

1-1/2" Ø x 3/4" H



Dual Pneumatic Tremolo

- 2620.00** This pressure rise tremolo can be installed on almost any wind system up to 6" WP. Tremolo is accomplished by using pressure to pulsate or close large pneumatic, momentarily increasing the wind pressure in the chest. The 12" x 18" large pneumatic with 3" wind hole is normally attached directly to the chest bottom or side rail. The independent valve box, furnished with an electronic pulsating unit for infinite regulation, is connected to the smaller 5" x 12" pneumatic and to a wind source that is the same as or slightly higher than the chest pressure. Unit is furnished complete with 10 feet of 4010.03 1" Orgaflex and 2625.00 Electronic Tremolo Driver.

Tremolo 17" W x 18-1/2" L x 9" H O.A.
Valve box 6" W x 9-3/4" L x 6-1/2" H



Electronic Tremolo Driver

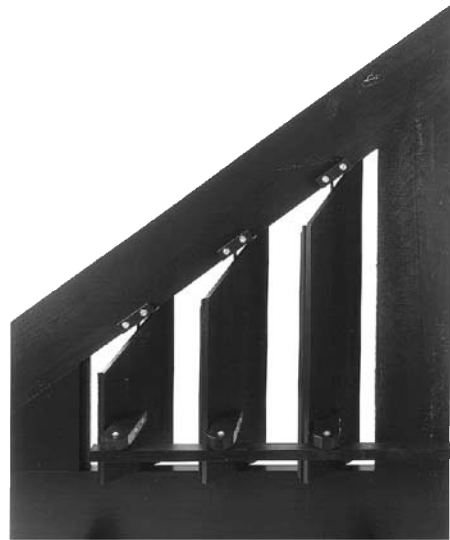
- 2625.00** Designed to be installed in the organ chamber, this compact pulsator is a very versatile unit. It can drive a magnet to inflate a pneumatic for schwimmers or dump valves attached to reservoirs. The unit has a built-in stop action that can be positive or negative. The speed and depth adjustments are changed by screw pots. The output will drive up to a 5 ampere total magnet load. PC board requires both rectifier positive and negative. Four mounting holes with stand-offs use No. 6 x 3/4" RHWS.

Unit is 2" W x 3-3/4" L x 7/8" H



Swell Shutter Assembly

3000.00 Solid swell shutters are made from glued up 1-1/2" x 1-3/4" basswood stock. Frame is 1-1/2" thick basswood, 6" wide. Vertical and horizontal shutters are mounted on ball bearings, double felted for quiet operation and easy removal. Shutter blades over 8' long require center support. Shade dogs attach to 7/8" x 2" hardwood trace rod with screws. Flat black is standard finish. Special finishes are available. Designate Style No. 1 or No. 2 and trace location. Custom-built swell shutters of thicker material, with hardwood veneer, special edge design or special shade dogs to keep trace within shade arc are constructed to specifications and drawings.



**HORIZONTAL SHADES
SIDE VIEW**

STYLE NO. 1

STYLE NO. 2



**VERTICAL SHADES
TOP VIEW**

Shade Dogs

3001.00 Shade Dogs (Goosenecks) mount on swell shade and connect with shade trace. Mounting hardware provided. Hole bushed for 3/16" Ø pin or No. 10 wood screw.

7/8" T x 2" W x 6-5/8" L O.A.



Swell Box

3200.00 Swell box is manufactured to drawings and specifications. Boxes are constructed of 3/4" plywood or 1" MDF.

Swell Shutter Pins

	Used	Size	Type Shade	Use with Bearing
3300.01	Bottom	1/4" Ø (3/8" Ø) x 2-1/4"	Vertical	3310.01



3300.02	Top	1/4" Ø x 3-1/4"	Vertical	
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3300.03	Ends	3/8" Ø x 3-1/4"	Horizontal	3310.02
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Ball Bearings

	I.D.	O.D.	Thick	Use
3310.01	1/4"	7/8"	1/4"	Bottom Vertical Shade
3310.02	3/8"	15/16"	5/16"	Horizontal Shade



Swell Shutter Spring

.035" steel wire with loop ends.

	O.D.	Coil Length	O.A. Length	Opens To
7250.04	1/2"	4"	4-3/4"	15"
7250.05	1/2"	8"	8-3/4"	30"



Unenclosed Swell Motor

Power stroke derived by energizing magnets and inflating bags (push). Speed is adjustable on first two stages. 3" Ø inlet.

Stages	Without Stand					Shipping Weight
	L	x	D	x	H	
3400.05	5	10-1/2"	11-3/4"	26-1/2"	34 lbs.	
3400.08	8	15"	11-3/4"	26-1/2"	45 lbs.	

Floor Stand

Unassembled floorstands are available for both 5 and 8 stage swell motors. The dimensions listed are for the swell motor with legs installed.

Stages	With Stand			
	L	x	D	H
3401.05	5	18-3/4"	11-3/4"	28-7/8"
3401.08	8	24"	11-3/4"	28-7/8"

3400.51 Replacement rubber cloth bags, complete with mounting block, ready for installation.

17" L x 11-3/4" W x 1" T



Enclosed Swell Motor

3408.00 8-stage, power stroke action is generated by de-energizing magnets and exhausting accordion bellows (pull). Stages are graduated. Speed is adjustable on first two stages via primary valve travel. No inlet provided. 6" stroke, will operate as low as 3" WP.

26-1/2" L x 25" H x 17-3/8" D
Shipping Weight: 75 lbs.

3408.01 Secondary muffler (not illustrated) encloses magnets and primaries for quieter operation.



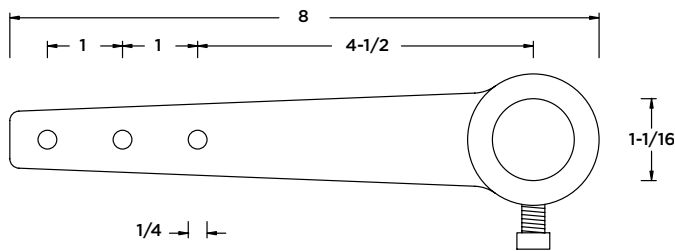
Servo Shoe Potentiometer and Linkage

3411.00 1k OHM Linear Potentiometer mounted on aluminum angle brackets for solid state swell expression or crescendo. 11 Gauge phosphor bronze connecting rod and shoe attachment plate included.



Aluminum Swell Arm

3501.00 For 3/4" I.D. iron pipe.



Swell Roller Assembly

3502.00 Adjustable, ball bearing mounted, with two 3501.00 arms and threaded brass connecting rods.

10-5/8" H x 10" W x 4" D without arms.



Orgaflex

This flexible paper conductor with foil core has a high mechanical strength. It can be cemented into conductor holes or used with flanges. Useful for winding facade pipes and small actions. Available by coil or cut lengths.

	I.D.	Drill Size for O.D.	Coil Length
4010.01	1/2"	5/8"	50'
4010.02	3/4"	15/16"	50'
4010.03	1"	1-3/16"	25'
4010.04	1-1/4"	1-7/16"	25'
4010.05	1-1/2"	1-11/16"	25'
4010.06	2"	2-1/4"	25'
4010.07	2-1/2"	2-11/16"	25'
4010.08	3"	3-3/16"	25'
4010.09	4"		25'
4010.11	6"		10'



Orgaduct

Orgaduct is a high grade, wire-reinforced conductor with a light weight elastomeric covering. Flexible over wide temperature range, it is also resistant to ozone and abrasion. Available by 12' or 6' lengths.

	I.D.	Coil Length
4020.04	1-1/4"	12'
4020.06	2"	12'
4020.07	2-1/2"	12'
4020.08	3"	12'
4020.09	4"	12'
4020.11	6"	12'



Flexduct

Flame retardant Flexduct is a bonded PVC/polyester fabric conductor with integral strength. Sizes up to 8" Ø are single ply, 10" and 12" use heavy duty, bonded double fabric for added strength. Available in coil or cut lengths.



	I.D.	Coil Length
4025.08	3"	25'
4025.09	4"	25'
4025.10	5"	25'
4025.11	6"	25'
4025.12	8"	25'
4025.14	10"	25'
4025.15	12"	25'

Flexaust

Very high grade Flexaust is a wire reinforced, fabric-covered conductor. This is the most rugged of the flexible conductors. 10" and 12" are heavy duty, double fabric. Available by coil or cut lengths.



	I.D.	Coil Length
4030.06	2"	25'
4030.07	2-1/2"	25'
4030.08	3"	25'
4030.09	4"	25'
4030.10	5"	25'
4030.11	6"	25'
4030.12	8"	25'
4030.14	10"	25'
4030.15	12"	25'

Cast Flanges

Cast aluminum flanges are designed for use with all of the flexible wind conductors. Use with 4060.00 series cork gaskets. Screw holes for No. 6 screws on 1" to 3" Ø flanges, all other flanges use No. 8 mounting screws.

	Size	Flange I.D.	Collar O.D.
4040.03	1"	3/4"	2-1/16"
4040.04	1-1/4"	1"	2-1/4"
4040.05	1-1/2"	1-1/4"	2-9/16"
4040.06	2"	1-5/8"	3-1/8"
4040.07	2-1/2"	2-3/16"	3-3/4"
4040.08	3"	2-9/16"	4-1/4"
4040.09	4"	3-5/8"	5-5/16"
4040.10	5"	4-9/16"	6-1/2"
4040.11	6"	5-3/8"	7-5/8"
4040.12	8"	7-3/8"	10-1/8"
4040.13	8" oval	8-9/16" x 5-1/16"	10-7/8" x 7-5/16"
4040.14	10"	9-7/16"	12"
4040.15	12"	11-1/4"	14"



Clamps

Made from rust-free stainless steel.

1/2" W

Size

4070.05	1" to 1-1/2"
4070.06	2"
4070.07	2-1/2"
4070.08	3"
4070.09	4"
4070.10	5"
4070.11	6"
4070.12	8"
4070.14	10"
4070.15	12"
4070.16	15"



Cork Gaskets

These 3/32" cork gaskets are designed for use with cast flanges.

	Size	I.D.	O.D.
4060.03	1"	1"	2"
4060.04	1-1/4"	1-1/4"	2-1/4"
4060.05	1-1/2"	1-1/2"	2-1/2"
4060.06	2"	2"	3"
4060.07	2-1/2"	2-1/2"	3-5/8"
4060.08	3"	2-3/4"	4-1/2"
4060.09	4"	3-3/4"	5-3/8"
4060.10	5"	4-3/4"	6-1/2"
4060.11	6"	5-3/8"	7-5/8"
4060.12	8"	8"	10"
4060.13	8" oval	5-3/4" x 9-3/8"	7-1/4" x 10-7/8"
4060.14	10"	9-1/2"	12"
4060.15	12"	11-7/8"	14"

Felt Clamp Liners

Gray felt strip used between clamp and flexible conductor or wind sleeve for air tight seal.

3/4" W x 1/8" T

Size

4080.03	1"
4080.04	1-1/4"
4080.05	1-1/2"
4080.06	2"
4080.07	2-1/2"
4080.08	3"
4080.09	4"
4080.10	5"
4080.11	6"
4080.12	8"
4080.14	10"
4080.15	12"

PVC WINDING SYSTEMS

The PVC pipe winding system components incorporate the best materials from the piping industry and have been selected specifically for organ winding. Both *S-40* (Schedule 40) and *Lite Pipe* systems include all male and female flanges and all commonly used components for 2", 3", 4", and 6" wind lines.

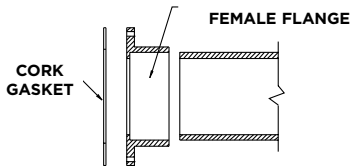
S-40 pipe and components are heavy duty, rigid materials. The tubing wall is 15/64" thick.

Lite Pipe components are 1/4 to 1/2 the weight of *S-40* materials and are an inexpensive alternative. With a wall thickness of 5/64" and lighter component weight, this system is more self supporting. *Lite Pipe* has one male and one female end on each length of pipe, eliminating use of in-line connectors.

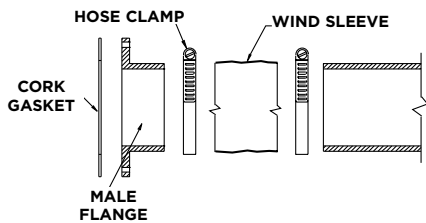
Both *S-40* and *Lite Pipe* can be easily cut and fabricated with hand tools. Standard PVC solvent adhesive used for bonding. Can be painted with readily available latex based paints. The drawings illustrate some of the many applications of *S-40* and *Lite Pipe* components.

S-40 and *Lite Pipe* components are **not** interchangeable.

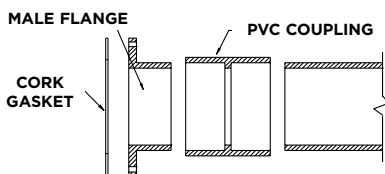
S-40



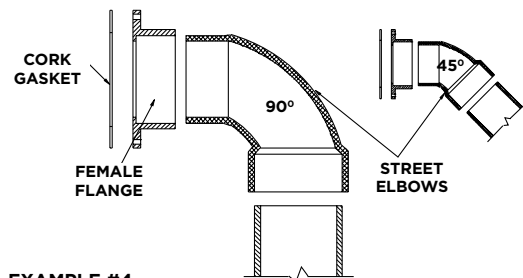
EXAMPLE #1



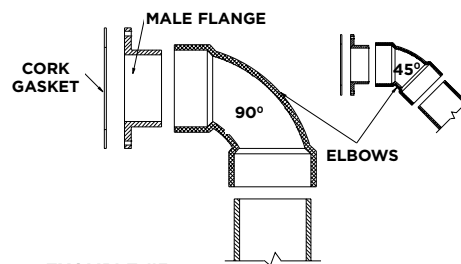
EXAMPLE #2



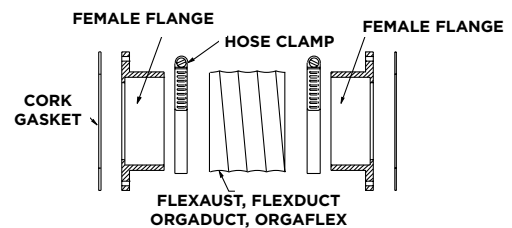
EXAMPLE #3



EXAMPLE #4

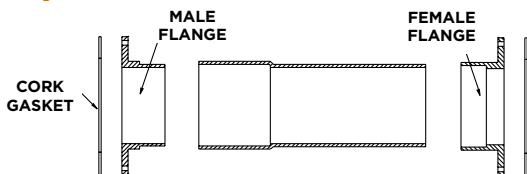


EXAMPLE #5



EXAMPLE #6

Lite Pipe



EXAMPLE #7

PVC Flanges

PVC flanges are available in both female and male configurations for *S-40* and *Lite Pipe* applications. Flanges may be joined to tubing, flexible conductors, or wind sleeves. Use No. 8 Washer Head screws listed below for mounting. With wind sleeves, select *S-40* or *Lite Pipe* male flanges. For flexible wind conductors, select appropriate 4040.00 series cast aluminum flanges.

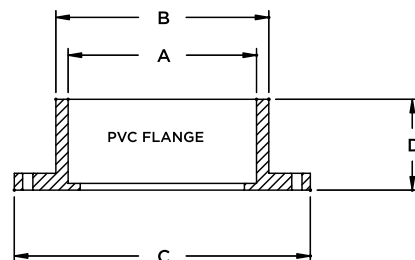
Lite Pipe

Size	A	B	C	D
4045.38 3" Male	3-1/16"	3-1/4"	5-1/2"	1-11/16"
4045.48 3" Female	3-1/4"	3-1/2"	5-1/2"	1-11/16"
4045.39 4" Male	4-1/16"	4-1/4"	6-1/2"	1-11/16"
4045.49 4" Female	4-1/4"	4-1/2"	6-1/2"	1-11/16"
4045.21 6" Female	6-5/16"	6-11/16"	8-1/8"	2-7/16"

S-40

Size	A	B	C	D
4045.06 2" Male	2-1/16"	2-3/8"	4"	1-1/2"
4045.16 2" Female	2-3/8"	2-15/16"	4"	1-1/2"
4045.08 3" Male	3-1/16"	3-1/2"	5-1/2"	1-11/16"
4045.18 3" Female	3-1/2"	3-15/16"	5-1/2"	1-11/16"
4045.09 4" Male	4-1/16"	4-1/2"	6-1/2"	1-11/16"
4045.19 4" Female	4-1/2"	4-15/16"	6-1/2"	1-11/16"

7608.55 No. 8 x 3/4" Hex Washer Head Slotted Mounting Screws



Cork Gasket

These 3/32" cork gaskets are sized for use with the PVC flanges.

Size	I.D.	O.D.
4061.02 2"	2-3/8"	4"
4060.09 3"	3-3/4"	5-3/8"
4060.10 4"	4-3/4"	6-1/2"
4061.06 6"	6-3/8"	8-1/8"

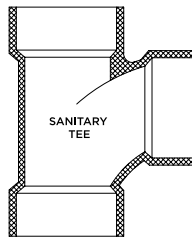
Pipe

PVC *S-40* pipe has male ends. *Lite Pipe* has one male and one female end. Both are shipped in 10' lengths. Truck shipment only.

Lite Pipe	S-40	Size
	4043.02	2"
4043.13	4043.03	3"
4043.14	4043.04	4"
4043.16	4043.06	6"

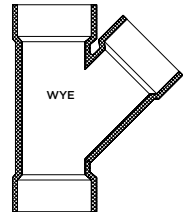
Tee, Sanitary

Lite Pipe	S-40	Size
	4044.02	2"
4044.13	4044.03	3"
4044.14	4044.04	4"
4044.16	4044.06	6"



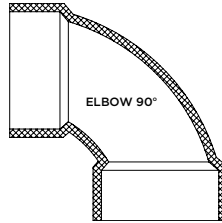
Wye

Lite Pipe	S-40	Size
	4048.02	2"
4048.13	4048.03	3"
4048.14	4048.04	4"
4048.16	4048.06	6"



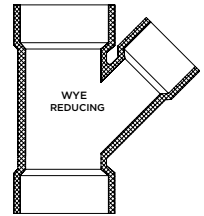
Elbow, 90°

Lite Pipe	S-40	Size
	4046.02	2"
4046.13	4046.03	3"
4046.14	4046.04	4"
4046.16	4046.06	6"



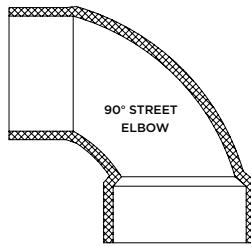
Wye, Reducing

Lite Pipe	S-40	Size
	4048.07	3" to 2"
	4048.08	4" to 3"



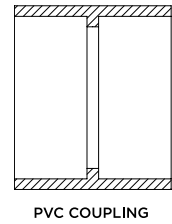
Elbow, 90° Street

Lite Pipe	S-40	Size
	4046.22	2"
4046.33	4046.23	3"
4046.34	4046.24	4"
4046.36	4046.26	6"



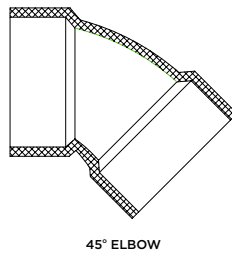
Coupling, Female

Lite Pipe	S-40	Size
	4049.02	2"
4049.13	4049.03	3"
4049.14	4049.04	4"
4049.16	4049.06	6"



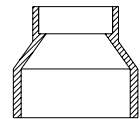
Elbow, 45°

Lite Pipe	S-40	Size
	4047.02	2"
4047.13	4047.03	3"
4047.14	4047.04	4"
4047.16	4047.06	6"



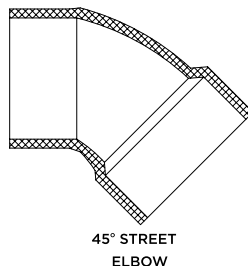
Reducer, Female

Lite Pipe	S-40	Size
	4049.27	3" to 2"
4049.38	4049.28	4" to 3"
4049.39		6" to 4"



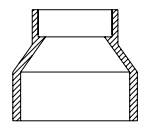
Elbow, 45° Street

Lite Pipe	S-40	Size
	4047.22	2"
4047.33	4047.23	3"
4047.34	4047.24	4"
4047.36	4047.26	6"



Lite Pipe to S-40 Adapter

Lite Pipe	S-40	Size
4049.44		4" Lite Pipe to 3" S-40



Galvanized Conductors

10' standard length, 26 gauge. Seam not soldered. Shipped by truck only.

Size

4100.06	2"
4100.08	3"
4100.09	4"
4100.10	5"
4100.11	6"

Galvanized Elbows, 90°

Non-adjustable, 26 gauge. Seams not soldered.

Size

4110.06	2"
4110.08	3"
4110.09	4"
4110.10	5"
4110.11	6"

Lead Tubing

Available in 50 ft. coil or 70 lb. reel.

	Package	I.D.	O.D.	Ft. /Lb.
4300.03	50 ft. coil	3/16"	1/4"	9
4300.05	50 ft. coil	1/4"	5/16"	8
4300.07	50 ft. coil	5/16"	3/8"	6
4300.10	50 ft. coil	3/8"	7/16"	5
4300.53	70 lb. reel	3/16"	1/4"	9
4300.55	70 lb. reel	1/4"	5/16"	8
4300.57	70 lb. reel	5/16"	3/8"	6
4300.60	70 lb. reel	3/8"	7/16"	5

Wind Sleeves

Flexible rubber cloth wind connections for conductors, blowers, etc. 28" long. Custom sizes available. Shorter lengths of 7", 14", or 21" are in stock.

Size Application

4200.08	3"	Galvanized
4200.09	4"	Galvanized
4200.11	6"	Galvanized
4200.07	7"	Galvanized
4200.12	8"	Galvanized
4200.14	10"	Galvanized
4200.15	12"	Galvanized
4200.17	14"	Galvanized
4200.16	15"	Galvanized
4200.26	2-3/8"	S-40
4200.28	3-1/2"	S-40
4200.29	4-1/2"	S-40
4200.31	6-5/8"	S-40
4200.38	3-1/4"	Lite Pipe
4200.39	4-1/4"	Lite Pipe
4200.41	6-1/4"	Lite Pipe
4201.00	Special size	

Neoprene Tubing

Supplied in coils or cut lengths.

I.D. O.D. Length

4400.01	1/8"	7/32"	100'
4400.02	11/64"	1/4"	100'
4400.03	3/16"	5/16"	100'
4400.04	7/32"	5/16"	100'
4400.05	1/4"	3/8"	100'
4400.06	9/32"	3/8"	100'
4400.07	5/16"	7/16"	100'
4400.08	11/32"	1/2"	100'
4400.09	13/32"	9/16"	100'
4400.10	15/32"	5/8"	100'
4400.11	15/32"	11/16"	100'



Air Switch

5000.00 A compact and reliable, enclosed air operated micro-switch for switching rectifiers. Switch meets approved electrical requirements with a rating of 15A @ 115-240 VAC. Operating pressure range is 2" to 10". Furnished complete with 36" of 1/4" I.D. neoprene tubing. Wired out 36" with 14/3 SJO cable.

1-7/8" H x 5-3/4" W x 3" D



AC Console Control System

5005.00 AC power control system to manage the switching of console and chamber components. Provides 4 switched and 4 unswitched 110 VAC outlets as well as 12 volts DC for control and general-purpose use. Can be activated locally with a switch contact located on the organ console or remotely with 12 volts.

9" L x 7-1/2" W x 2-1/2" H



OSI Switching Power Supply

UL and CE Approved DLS series power converter for solid state applications converts 120 nominal VAC to 13.6 VDC. Adjustable to 14.6 UDC. Compact, versatile design. Protection features include: Reverse Polarity Protection; Brown-out Input Protection; Over-Current Protection; Over-Temperature Protection and Silent Operation. 75A Model with Nema 5-20 Plug.



	Model	Input VAC	Input Fuse	Output (amps)	DC Output @ Full Load	OA H. W. D.
5025.15	PS-15	108-132	1-30A	15	13.4-14.0	6.45" W x 7" L x 3.42" H
5025.30	PS-30	108-132	1-30A	30	13.4-14.0	6.45" W x 7" L x 3.42" H
5025.55	PS-55	108-132	2-30A	55	13.4-14.0	6.45" W x 7" L x 3.42" H
5025.75	PS-75	108-132	2-40A	75	13.4-14.0	6.45" W x 10" L x 3.42" H

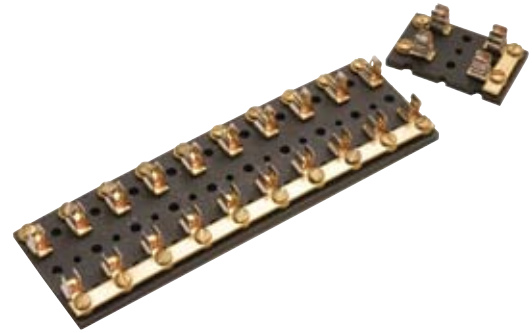
Fuses

Fuses used for individual organ circuits and replacements for OSI Ferro-Resonant and Astron Rectifiers, and Chime components. UL and CSA listed.

	Size	Use	Function	Amperes	Volts
5020.05	GMC 5	Astron Rectifier	Input	5	250 VAC
5020.08	GMC 8	Astron Rectifier	Input	8	250 VAC
5020.10	GMC 10	Astron Rectifier	Input	10	250 VAC
5020.11	ABC 6	Astron Rectifier	Input	6	250 VAC
5035.05	MTH 5	F-R Rectifier	Input	5	240 VAC
5035.10	GLH 10	F-R Rectifier	Input	10	120 VAC
5035.30	BAF 30	F-R Rectifier	Output	30	10-15 VDC
5036.30	ATC 30	OSI Power Supply	Output	30	32 VDC
5036.40	ATC 40	OSI Power Supply	Output	40	32 VDC
5051.01	AGC 0.1	E-M Chime Relay		0.1	125 VAC
5051.06	AGC 6	Organ Circuits Chime Rail		6	250 VAC
8510.01	MDQ 1	General	Time Delay		250 VAC
5035.03	AGC 3	General	Input	3	250 VAC

Fuse Holder

- 5050.10** One-piece, 10 pole design mounted on 3/8" fibre board. Fuse clip mounting with heavy common buss. Rated 6 Amp. May be cut to length as required. 7-3/8" L x 2-1/4" W



Fuse Holder 6A

- 5050.12** One-piece 12-pole design, break apart unit for individual or group usage. Terminals for spade clip or solder connections. Screw mounting. UL-94 VO flammability rating, CSA listed. Uses 5051.06 6A fuse.



Individual block 2-1/4" L x 1/2" W x 9/16" H,
12 unit block 7-3/8" L

PVC Spool Wire

Thinwall .010" PVC-covered copper wire designed for solid state applications. Sold by the spool only. Approximately 5000 ft. per spool (solid) 1000 ft. per spool (stranded)

	B & S Gauge	Color	Construction
5122.00	22	White	Solid
5124.00	24	White	Solid
5126.00	26	White	Solid
5126.01	26	Blue	Solid
5126.02	26	Green	Solid
5126.03	26	Red	Solid
5126.04	26	Yellow	Solid
5126.05	26	Black	Solid
5127.00	26	White	Stranded
5127.01	26	Blue	Stranded
5127.02	26	Green	Stranded
5127.03	26	Red	Stranded
5127.04	26	Yellow	Stranded
5127.05	26	Black	Stranded
5128.00	28	White	Solid
5128.01	28	Blue	Solid
5128.02	28	Green	Solid
5128.03	28	Red	Solid
5128.04	28	Yellow	Solid



PVC Chime Cable

Because of the higher current requirements of chime coils, all chime cables are specially constructed from 18 or 22 gauge wire. All wire is color coded for ease of installation. It is recommended that 22 gauge cable be used between chime actions and keyboard, underkey contacts, or relay assembly to avoid line voltage drop and soft chime notes.

Description	No. Conductors	B & S Gauge
5160.08	8	18
5160.21	25	22
5160.25	30	22
5160.40	40	22

Bare Copper Wire

Used for common feed or return wires.

B & S Gauge	Construction
5200.12	12 Solid
5200.14	14 Solid
5200.16	16 Solid
5205.10	10 Stranded
5205.12	12 Stranded
5205.14	14 Stranded
5205.16	16 Stranded
5205.18	18 Stranded
5205.20	20 Stranded

PVC Cable

PVC insulated and jacketed 24 B & S gauge wire for general organ wiring. Twisted conductors in pairs with cross-referenced band-marked color code system. Cable is flexible and easy to install.

	No. Conductors	Wt. Per 100'
5150.08	8	2 lbs
5150.12	12	3 lbs.
5150.24	24	5 lbs.
5150.32	32	6 lbs.
5150.50	50	10 lbs.
5150.64	64	11 lbs.
5150.99	100	18 lbs.
5150.01	Color code chart	



Insulated Copper Wire

Used for DC main wiring.

	B & S Gauge	Construction	Color
5210.06	6	Stranded	Black
5210.07	6	Stranded	White
5210.08	8	Stranded	Black
5210.09	8	Stranded	White
5210.10	10	Solid	Black
5210.11	10	Solid	White
5210.12	12	Solid	Black
5210.13	12	Solid	White
5210.14	14	Solid	Black
5210.15	14	Solid	White

Insulated Hookup Wire

PVC covered in 100 ft. spools.

	B & S Gauge	Color
5220.18	18	Black
5220.20	20	White

Braided Copper Wire

Flexible, flat braided copper wire, useful for flexible mains.

Size

5230.01	1/16"
5230.02	1/8"
5230.03	3/16"
5230.04	1/4"
5230.05	5/8"

Phosphor Bronze Wire

36" straight lengths except * which are coiled stock.

	B & S Gauge	Inches	mm
5300.08	8	.1284	3.2636
5300.09	9	.1144	2.9065
5300.10	10	.1018	2.5880
5300.11	11	.0907	2.3048
5300.12	12	.0808	2.0525
5300.13	13	.0719	1.8278
5300.14	14	.0640	1.6277
5300.15	15	.0570	1.4495
5300.18	18	.0403	1.0236
5300.20	20	.0319	.8118
5300.21	21 *	.0284	.7229
5300.22	22 *	.0253	.6438
5300.24	24 *	.0201	.5105
5300.26	26 *	.0159	.4048
5300.27	27	.0141	.3605
5300.28	28 *	.0126	.3210

Phosphor Bronze Strip**Size**

5310.01	.010 x 1/8"
5310.02	.010 x 3/16"
5310.03	.010 x 1/4"
5310.04	.027 x 1/8"
5310.05	.027 x 1/8" nickel plated

Copper Grounding Strip

5330.04	Easily installed soft copper grounding strip provides one wire installation of 60l magnets. The pressure sensitive adhesive is backed with release paper. It is readily soldered for permanent electrical joints and is easily pierced to accept screws and solder lugs.
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Size

.009" x 5/8" x 100'

Silver Wire

36" straight lengths, 90% coin silver.

	B & S Gauge	Inches	mm	Used For
5400.21	21	.0285	.723	Buss Bars
5400.22	22	.0253	.643	Expression Rollers
5400.24	24	.0201	.511	Pedal Contacts
5400.26	26	.0159	.404	
5400.27	27	.0142	.361	Manual Contacts

Silver Strip

5410.00 .010" x .123" in coil, 90% coin silver.

Channel Silver

5420.00 "U" shaped channel for contact plates,
90% coin silver.

REISNER CHEST MAGNETS

For over three quarters of a century the Reisner chest magnet has been the standard of the industry. It is undeniably the finest and most widely used magnet built for electro-pneumatic chests. Reisner chest magnets are offered in several versions for differing applications. All are dimensionally interchangeable, have die-cast bodies with precision wound 12-16 VDC coils wrapped for protection, and are terminated with 6" stranded and tinned leads. Two mounting holes accept No. 4 x 5/8" screws. Coils for 24 VDC operation are available.

REISNER Standard Chest Magnets

The standard chest magnets are available with plain or adjustable ports and with a variety of coil ohmages. These magnets operate well in vertical or horizontal position. 5501.08 armatures are electro-plated iron. The top side of each armature is paper gasketed to seal against the base cap, the bottom smooth surface seals against a resilient gasket mounted in the base. The aluminum base cap has a .234" Ø port for low pressure operation or a .150" Ø adjustable screw port regulating armature travel for high pressure use.

	Description	Ohms	Port
5501.10	#25 Chest Magnet	90	Plain
5501.12	#25A Chest Magnet	90	Adjustable
5501.20	#70 Chest Magnet	125	Plain
5501.22	#70A Chest Magnet	125	Adjustable
5501.30	#65 Chest Magnet	150	Plain
5501.32	#65A Chest Magnet	150	Adjustable
5501.40	#75 Chest Magnet	180	Plain
5501.42	#75A Chest Magnet	180	Adjustable
5501.50	#65-3 Chest Magnet	300	Plain
5501.53	#65-3 Chest Magnet (for 12 VDC or 24 VDC operation)	300	Adjustable

5501.08 Armatures for Chest Magnets & Adj. DVAs. .437 Ø



5502.56 Chest Magnet Donut Gasket.

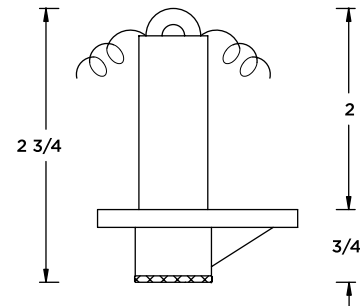
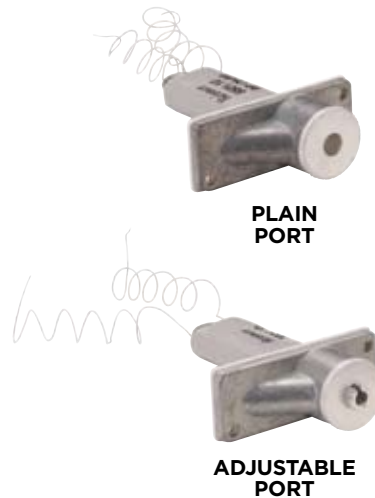


5501.70 Chest Magnet Base Gasket.

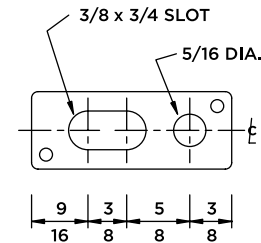
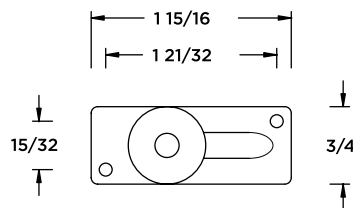


5502.09 Chest Magnet Cap, Plain Port.

5502.10 Chest Magnet Cap, Adjustable Port.



7604.54 No. 4 x 5/8" PH Phillips Mounting Screws.



REISNER CHEST MAGNET LAYOUT PATTERN

REISNER Top Note Magnet

The standard Reisner chest magnet with a counter-bored base screw is used to play small treble pipes. The foot of the pipe seats directly on the countersunk magnet cap. The 5501.09 armature, which acts as a valve, is held in place by a small coil spring, 60 ohm coil.



Pipe Hole

5909.10	1/8"
5909.12	3/16"

Performance Data Chart
on pages 5-18 & 5-19

REISNER Player Piano Magnet

5909.14	Designed to interface with piano and other vacuum actions. 1/8" brass nipple accommodates standard piano tubing and extends 1/2" from magnet cap. 60 ohm coil.
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REISNER C-17 Chest Magnets

The C-17 chest magnet features a flat base, special .563" diameter large armature paper gasketed on both sides, larger ports and latch-type cap. This magnet provides larger exhaust rate and is easily opened for cleaning. Operates best in vertical orientation.

Description	Ohms	Port
5511.10	90	.234
5511.12	90	.305
5511.20	150	.234
5511.22	150	.305

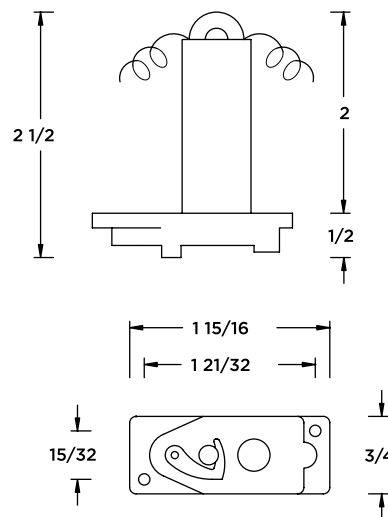
5501.09	Armatures for C-17 Chest Magnets & Standard DVAs. .542 Ø
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5501.70	C17 Chest Magnet Base Gasket.
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7604.54	No. 4 x 5/8" PH Phillips Mounting Screws.
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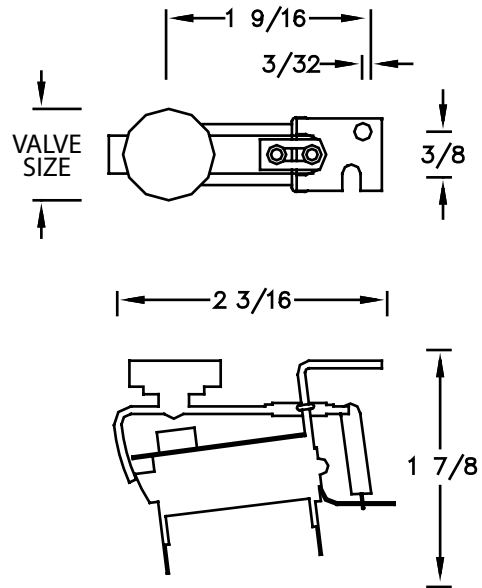


REISNER 601 Direct Pallet Magnet

The Reisner 601 Direct Pallet Magnet is the original unit against which all other available electro-mechanical magnets are measured. With recent refinements, it is a state-of-the-art magnet. The factory-adjusted soft felt and leather valves are cemented to an aluminum valve carrier. The valve assembly is firmly attached to the armature, eliminating loose or wandering valves. Patented two-piece design of the armature hinge will not rust or bind, assuring fast and positive operation under all conditions. Adjustable spring return is centered over the armature, providing an in-line, direct pull. Electro-plated steel construction provides long life protection in a variety of climates. Two-screw mounting provides worry free installation. The precision wound coils are covered with high temperature tape and terminate in tinned solder lugs, one of which is grounded to the frame for easy connection to a common buss. Voltage range is 10-15 VDC. Coils for higher voltages and other ohmages are available. Mounts with No. 4 x 5/8" screws.

Ohms	Valve Size
------	------------

5521.08	40	5/8"
5521.10	40	3/4"
5521.12	40	7/8"
5521.14	40	1"
5521.16	40	1-1/8"
5521.18	40	1-1/4"
5521.20	40	1-1/2"
5524.08	60	5/8"
5524.10	60	3/4"
5524.12	60	7/8"
5524.14	60	1"
5524.16	60	1-1/8"
5524.18	60	1-1/4"
5522.08	90	5/8"
5522.10	90	3/4"
5522.12	90	7/8"
5522.14	90	1"
5522.16	90	1-1/8"
5522.18	90	1-1/4"
5523.06	150	1/2"
5523.08	150	5/8"
5523.10	150	3/4"
5523.12	150	7/8"
5523.14	150	1"
5523.16	150	1-1/8"
5523.18	150	1-1/4"
5525.08	300	5/8" (24 VDC)
5525.10	300	3/4" (24 VDC)



- 5521.95 Install diodes on magnets.
- 5330.04 Copper Buss Strip. .009" x 5/8" x 100'
- 7604.54 No. 4 x 5/8" PH Phillips Mounting Screws.

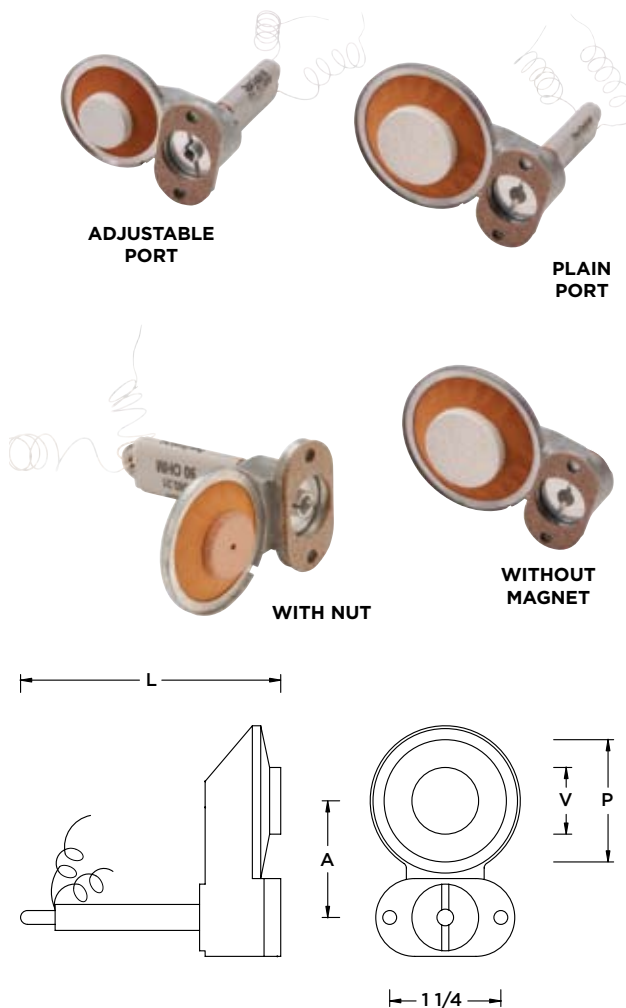
Performance Data Chart
on pages 5-18 & 5-19

Direct Valve Actions

The rugged die-cast Reisner DVA action combines a standard pouch with a built-in magnet, providing a self-contained electro-pneumatic note action. This combination delivers all the speech characteristics associated with a pipe hole opened by a pouch. Pouches are first grade pneumatic leather actuated by the dependable Reisner 90 ohm magnet. 3" minimum operating pressure for plain port magnets and 4" minimum for adjustable ports. The precision-wound coils are wrapped for protection and provided with 6" stranded and tinned lead wires for 12-16 VDC operation - 10" max WP. Coils for 24 VDC operation are available. Two mounting holes accept No. 6 x 5/8" screws.

The highly versatile DVA unit is available with a leather nut in place of the valve for operation of primary valve wires. Where the magnet is mounted remote from pouch, the DVA can be provided without armature and magnet for use as a pouch unit. Releathering service is available for older units.

	Size	Valve	Port
5580.01	DVA-1P	3/4"	Plain
5580.02	DVA-2P	1-1/8"	Plain
5580.03	DVA-3P	1-1/2"	Plain
5580.11	DVA-1	3/4"	Adjustable
5580.12	DVA-2	1-1/8"	Adjustable
5580.13	DVA-3	1-1/2"	Adjustable
5580.21	DVA-1BP	Nut	Plain
5580.22	DVA-2BP	Nut	Plain
5580.23	DVA-3BP	Nut	Plain
5580.31	DVA-1B	Nut	Adjustable
5580.32	DVA-2B	Nut	Adjustable
5580.33	DVA-3B	Nut	Adjustable
5580.41	DVA-1A	3/4"	Remote
5580.42	DVA-2A	1-1/8"	Remote
5580.43	DVA-3A	1-1/2"	Remote



5501.08	Armatures for Chest Magnets & Adj. DVAs. .437 Ø	
5501.09	Armatures for C-17 Chest Magnets & Standard DVAs. .542 Ø	
5580.95	Releather DVAs, all sizes.	
5580.98	Adjustable Cap Assembly (DVAs)	

Valve Size(V)	Pouch Size(P)	A	L
3/4"	1-3/8"	1-5/16"	2-15/16"
1-1/8"	1-7/8"	1-9/16"	2-15/16"
1-1/2"	2-1/2"	1-7/8"	2-15/16"

Performance Data Chart
on pages 5-18 & 5-19

Pedal Pouch Units

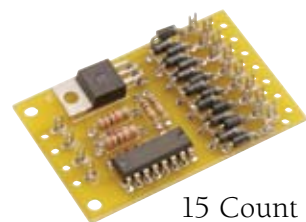
These individual pedal pouches extend the range of the time-proven Reisner Direct Valve Actions into the 16' octave. The integrated DVA primary provides fast and quiet operation. They are designed for easy two screw installation over a single 5/8" Ø exhaust hole. A paper mounting template is provided for each size. 90 ohm magnet

Size	Valve	O.A. L x W x H	
5581.01	PPA-1	2"	4-1/4" x 5-7/8" x 4-3/8"
5581.02	PPA-2	2-1/2"	5" x 6-5/8" x 4-3/8"
5581.03	PPA-3	3"	5-3/4" x 7-3/8" x 4-3/8"



Solid State Relay

OEM replacement for the Reisner C5 series. Designed to mount on the same centers as the C5 units. Output current 4 Amperes. Spark suppression diodes installed



15 Count

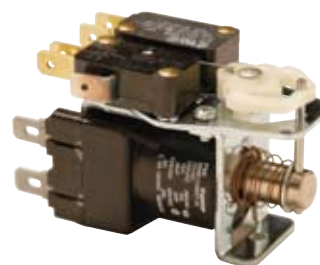


8 Count

	Position	Contacts	Replacement for
5531.02	Negative Out	15	5530.15
5531.04	Positive Out	15	5530.15
5531.06	Individual	8	5530.07

Impulse, Bi-Stable Relay

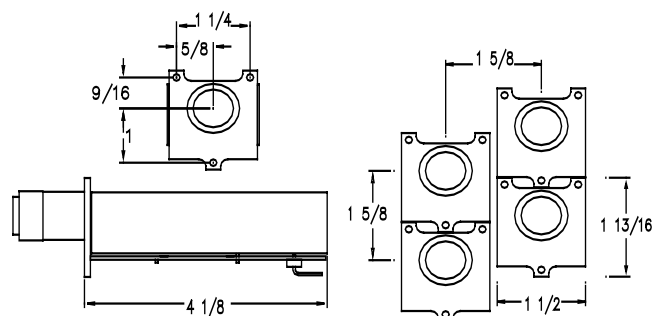
5535.00 A convenient electro-mechanical reversible DPDT relay. Single 23 ohm coil energizes reversing mechanism changing position with each impulse. 12 VDC coil, contacts rated at 15 amperes.



1-1/2" W x 1-7/8" H x 3" L

Drawknob

OSI Dual Magnetic Action Drawknob utilized single coil technology with optical isolation for stop control. Mounting options for either 3/4" or 1" jamb thickness available. Low combination system current load of 20mA @ 12 VDC eliminates the need for diodes or high current solid-state drivers. The solid-state switching device is capable of switching a 2 amp stop action load. Available with positive or negative coil common. Nominal coil load of 430mA @ 12.5 VDC. Unit includes header with plug (header may be direct terminate via "wire-wrap"). Linear movement of .675". May be supplied with drawknob engraved. Easily mounts with three #4 x 1/2" screws (not supplied). Mounting hole 29/32"



Jamb	Voltage
5725.01	3/4" 12V
5725.02	1" 12V
5725.03	3/4" 24V
5725.04	1" 24V

Action Magnets

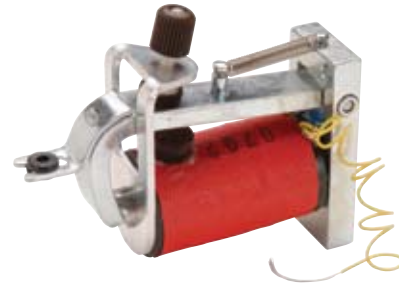
The Reisner 601A Action Magnet is based on the popular 601 magnet frame and armature; this unit adds a lug on the end of the armature, bored .094" Ø for installation and operation of action wires. Voltage range is 10-15 VDC. Coils for higher voltages and other ohmages are available. Two mounting holes accept No. 4 x 5/8" screws.



Ohms

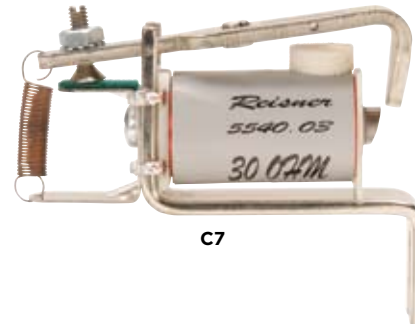
5521.40	40
5524.40	60
5522.40	90

- 5540.00** The Laukhuff Action Magnet is designed as a pallet pull-down action for direct operation of new slider chests and electrification of existing mechanical action chests. The off stop is adjustable. 30 ohm coil with VDR resistor, 12-14 VDC.



3" H x 3-1/4" L x 1-1/8" W

- 5540.03** The C7 Reisner Action Magnet is used in the construction of the all-electric switches and is readily adaptable for many purposes. The C7 series has a special adjustment for armature travel. 30 ohm coil.

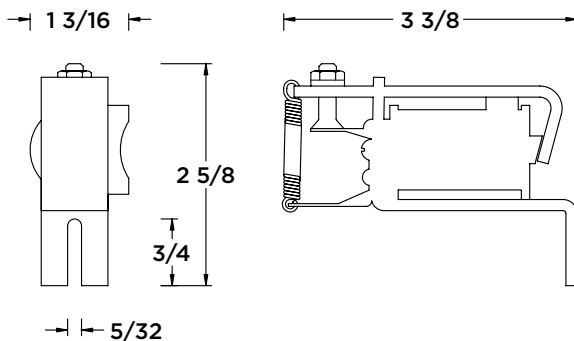


C7

- 5541.03** The Reisner W7 Action Magnet is identical to the C7 but without the armature adjustment. This magnet can be used where space is limited for installation and where the travel adjustment may be made externally. Interleaf spring. 30 ohm coil.



W7



Pick Magnet

5550.00

Designed for the original OSI tripper combination actions, this 35 ohm magnet is used for replacement work.

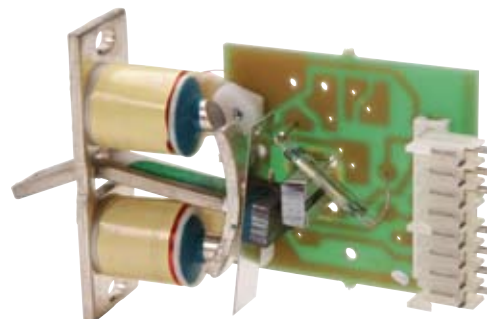
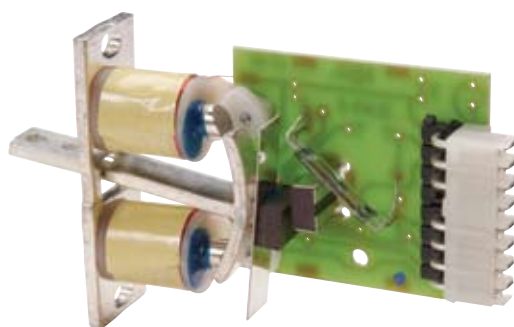
5/16" W x 1-1/2" L x 1-15/16" H



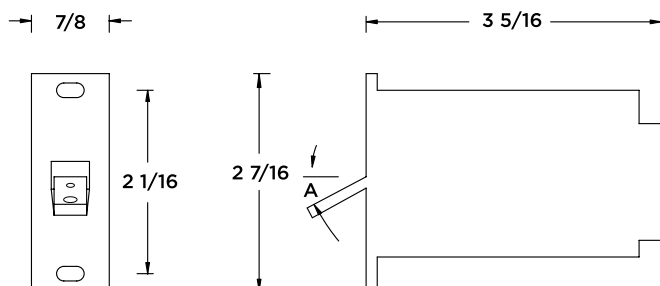
Stop Action Magnet

The Stop Action Magnet employs a magnetic toggle which also actuates the two .5A hermetically sealed reed switches. The 12-15 VDC coils are 28 ohms. Patented cam adjustment for key leveling. Three lever angles are available: straight, 15°, and 22°, measured in the off position using horizontal as reference. Lever accepts standard two-screw mount stop keys for secure mounting. Wiring header with connector furnished. 2-1/16" mounting centers.

2-7/16" H x 13/16" W x 3-5/16" D, including header.



	Application	Coil Ground	Armature Angle
5560.01	Tilting tablet	Positive	Straight
5560.02	Tilting tablet	Negative	Straight
5560.05	Tilting tablet	None	Straight
5565.01	Stop key	Positive	22°
5565.02	Stop key	Negative	22°
5566.01	Stop key	Positive	15°
5566.02	Stop key	Negative	15°
5560.51	Reed Switch for #612 Assembly		25/30 AT

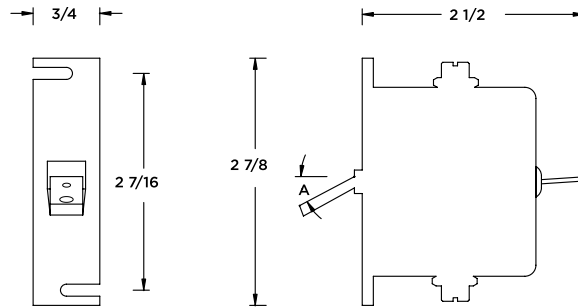
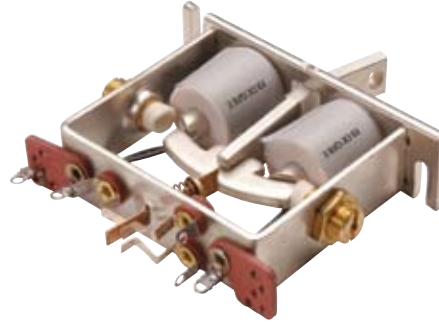


Stop Action Magnets, *REISNER*

The C3 Stop Action Magnet is the original Reisner electric stop key design for new or replacement work. Features include a nickel-plated frame, easily adjusted armature travel, 80% silver contacts, and polyethylene sleeve on armature. Supplied with or without 30 ohm coils for operation on 10-15 VDC, one "off" and two "on" contacts. Coils and stop contacts are independently grounded for use with positive or negative common. Choice of 19° or 32° armature measured as actual bend in the armature. The armature angles measured using the horizontal as reference in the off positions are 13° and 26°. Armature is provided with two screw holes for secure mounting of stop keys. Can be supplied with stop keys engraved and mounted.

Description	Armature		Coils	Contacts	
	Bend	Angle			
5566.19	C3-1M	19°	13°	2	3
5566.20	C3-1P	19°	13°	None	1
5566.32	C3-1E	32°	26°	2	3
5566.33	C3-1J	32°	26°	None	1

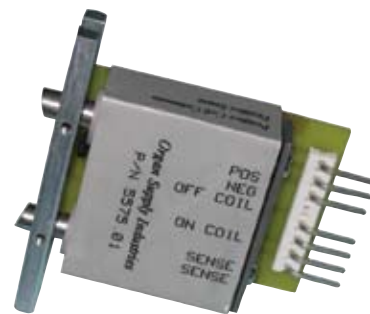
- 5566.90 Stop action mounting rail.
 5566.95 Assemble stop key to stop action magnet.
 5566.96 Assemble to stop action rail.



TILTING TABLET MAGNET

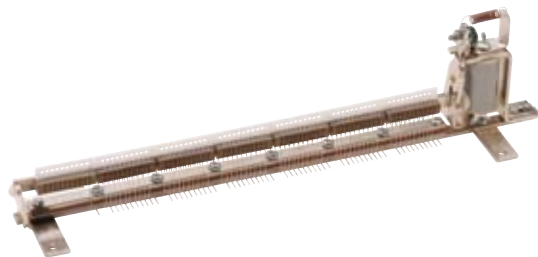
Magnet unit as supplied in OSI's Tilting Tablet Magnet Assembly. No moving parts. Switching via Hall Effect triggered, opto-isolated device capable of switching up to 2 amps. Nominal magnet operating voltage of 9 to 16 VDC with a coil resistance of 29 ohms. May be configured for positive or negative sense and positive or negative magnet common. Unit is magnetically shielded to eliminate interference. May be wired via IDC (insulation displacement connector) or direct wire-wrap termination.

Coil	Sense	
5575.01	Positive	Positive
5575.02	Negative	Negative
5575.03	Positive	Negative
5575.04	Negative	Positive



Switches

The all-electric Reisner switch provides a compact, efficient and reliable means to handle all organ switching functions using standard electro-mechanical methods. The design includes an all metal, electro-plated frame with self-lubricating Celcon hinges at the ends of movable bars. Square sterling silver contacts, rated at .5 amperes at 15 VDC, are mounted on a movable bar, providing good wiping action against round silver buss bars. Contact blocks are individually replaceable. Switches are available with 10 to 120 contacts, singly or ganged and mounted, configured per specifications. The 30 ohm adjustable magnet operates on 10-15 VDC. Wiring guides provided for switch fingers and buss bars. Single switch is 3" W x 3-5/8" H. 8-1/2" to 19" length is determined by number of contacts.



Switch Dimensions

Switches or Spaces	W	Number Contacts	L
1	3"	10-30	8-1/4"
2	4-1/4"	31-40	9-3/4"
3	5-1/2"	41-50	11-1/4"
4	6-3/4"	51-70	14-1/4"
5	8"	71-80	16"
6	9-1/4"	81-90	17-3/8"
7	10-1/2"	91-100	19"
8	11-3/4"		
9	13"		
10*	14-1/4"		

* Each additional switch or space adds 1-1/4" to width.

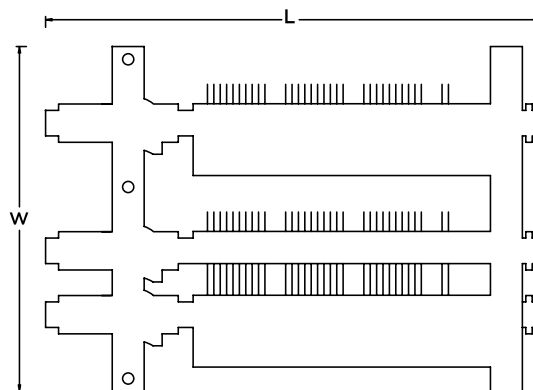
Contacts

- 5601.12 12
- 5601.25 25
- 5601.32 32
- 5601.49 49
- 5601.61 61
- 5601.73 73

- 5601.90 Replacement 10 finger blocks for switches.
- 5601.91 Diode mounting strip, only.

Typical Ganging Chart

Starting Pitches		Manual Position	Pedal Position
32'	16'		1-32
21-2/3'	10-1/3'		8-39
16'	8'	1-61	13-44
12-4/5'	6-2/5'	5-65	17-48
10-2/3'	5-1/3'	8-68	20-51
8'	4'	13-73	25-56
6-2/5'	3-1/5'	17-77	29-60
5-1/3'	2-2/3'	20-80	32-63
4'	2'	25-85	37-68
3-1/5'	1-3/5'	29-89	41-72
2-2/3'	1-1/3'	32-92	44-75
2'	1'	37-97	49-80
1-3/5'		41-101	
1-1/3'		44-104	
1'		49-109	



Diodes

Diodes are used for arc suppression and circuit isolation.

	Amperes	Use
5800.00	1N4004 1	General purpose
5801.00	1N4007 2.5	Heavy duty use

Electrical Tape

General purpose or fire retardant, cloth backed friction tape is used as wire harness wrap. Fire retardant tape is UL approved.

	Size	Use
5810.01	3/4" x 100'	General purpose
5810.02	3/4" x 100'	Fire retardant- (UL approved)
5810.03	3/4" x 100'	Flame Retardant- (not UL approved)

Electrical Contact Cleaner

- 5820.00 Contact cleaner and lubricant spray removes contaminants such as grease, dirt, dust, and oxidation residue and leaves behind a microscopic corrosion-proof film. 11 oz. spray can comes complete with extension tube. Nonflammable.

Junction Board

The solid-wood junction board is the traditional way to join two cables. The 16 ga. headless brass escutcheon pins in groups of 12 are compatible with wire wrap tools. A wiring guide is incorporated on each side of the strip. The escutcheon pin adds 1/2" to height.

1-1/2" W x 7/8" H

	Notes	Length
5900.12	12	5-1/2"
5900.24	24	9-1/2"
5900.32	32	12-1/2"
5900.33	2 x 32	23-1/2"
5900.49	49	18-1/2"
5900.61	61	22-1/2"
5900.73	73	26-1/2"
5900.85	85	30-1/2"
5900.97	97	34-3/4"



Junction Plate

5910.00 The brass junction plate is a convenient terminal strip for organ commons. It is bored and tapped for ten No. 8 brass screws and two mounting holes. Appropriate screws, copper washers, and mounting spacers are furnished.

1/16" T x 1/2" W x 6" L



Lacing Cord

5920.00 Designed for lacing cables, this waxed nylon cord comes in 1 lb. spools.



Insulated Staples

Used to secure small cables and main wires. 100 pcs. per box.

No.	Size
5930.03	3
5930.05	5
5930.06	6
5930.07	7



TOP NOTE and DVA Performance Charts

GRAPH INTERPRETATION

Each graph line indicates the maximum pressure for each style magnet at any given voltage. Satisfactory operation may be obtained with any combination of voltage and pressure below the line of the selected magnet.

Magnets

Five (5) magnets of each valve size and coil resistance from stock were installed per normal practice in each test.

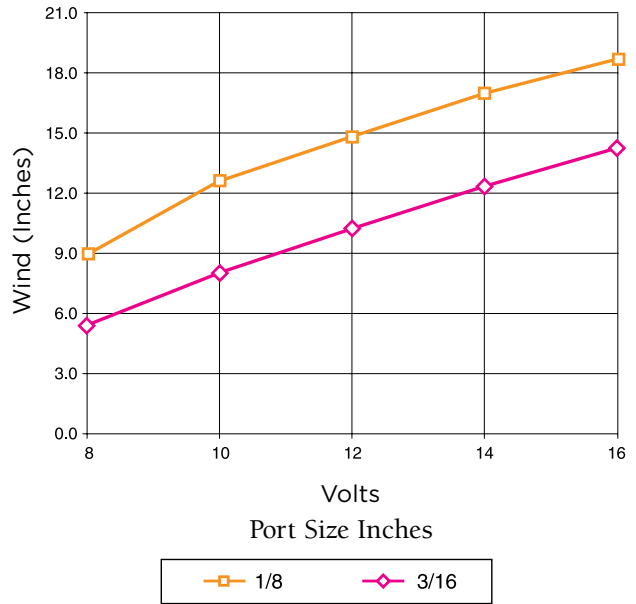
All magnets were installed on toe holes without restrictions that were 1/8" smaller than valve diameter.

Performance

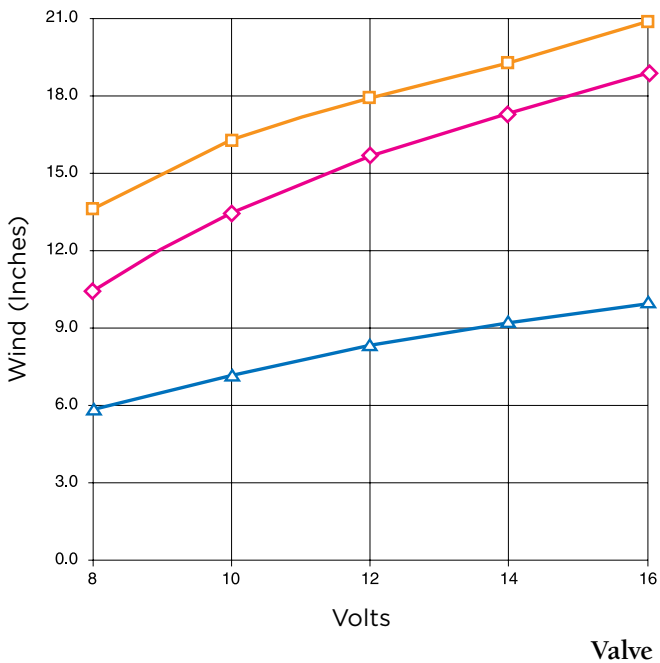
Magnets were operated on a 50% on and 50% off cycle at the highest practical repetition rate.

At each given voltage the pressure was increased until the magnet failed to fully open for each cycle. Of the five magnets, the one with the lowest cutoff pressure dictated the maximum pressure for the voltage for the group.

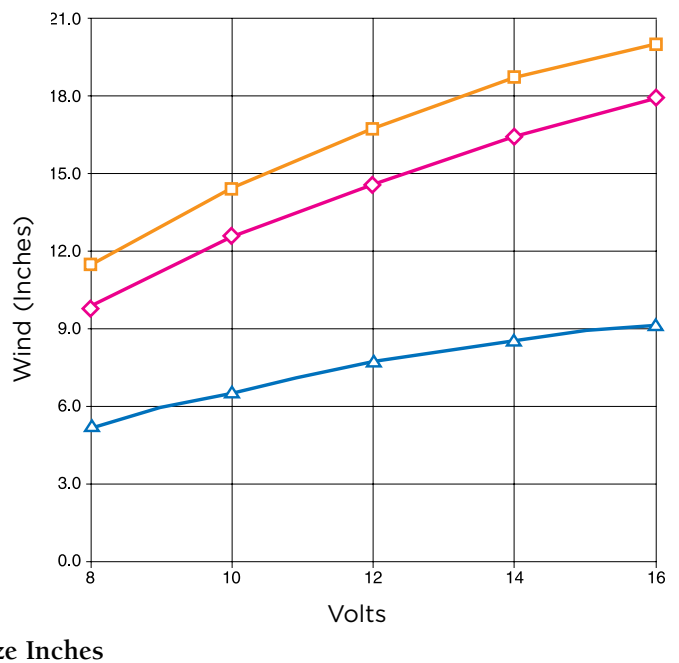
TOP NOTE MAGNET
Maximum Operating Wind Pressure



Adjustable DVA

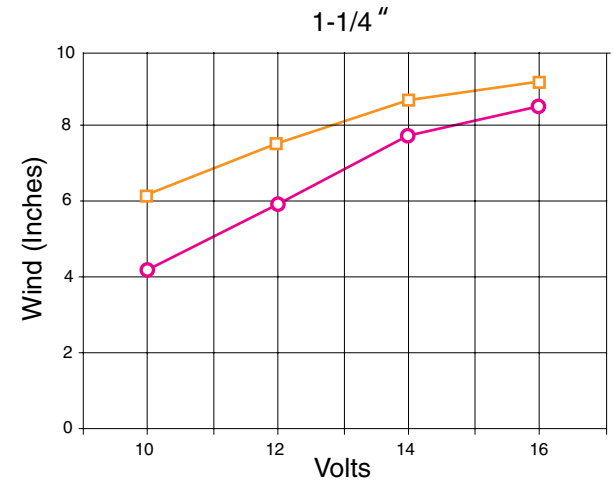
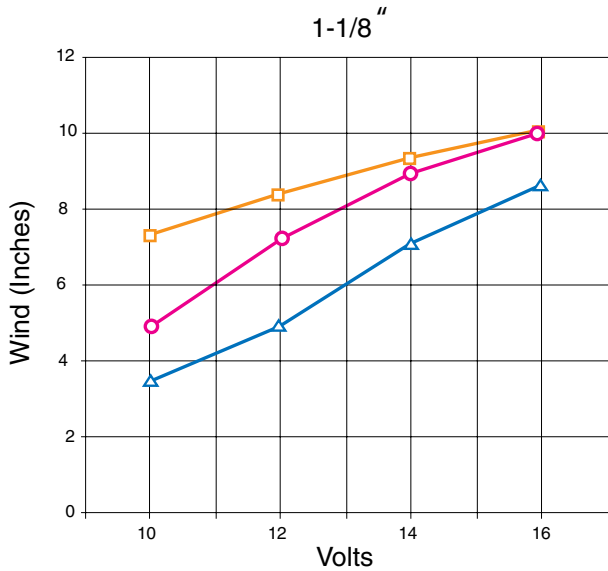
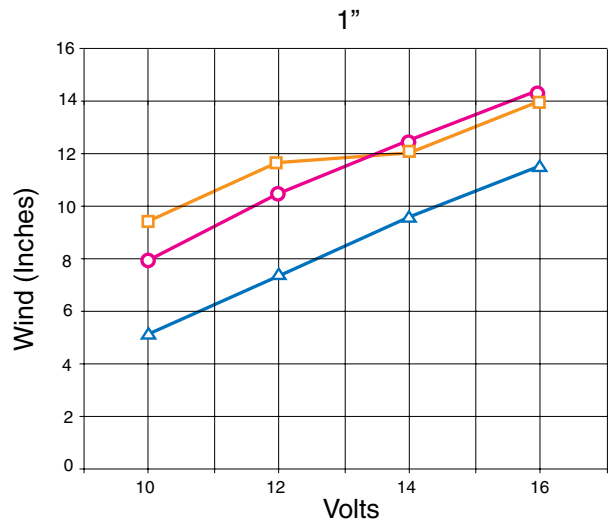
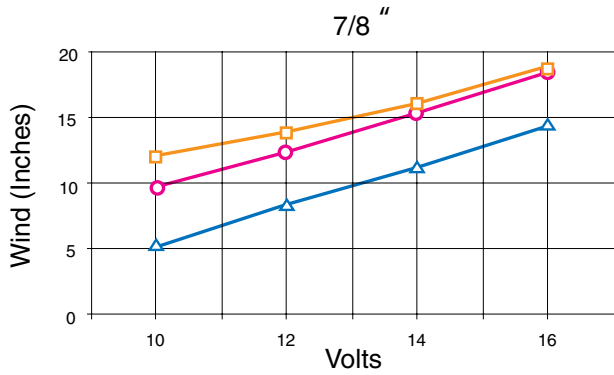
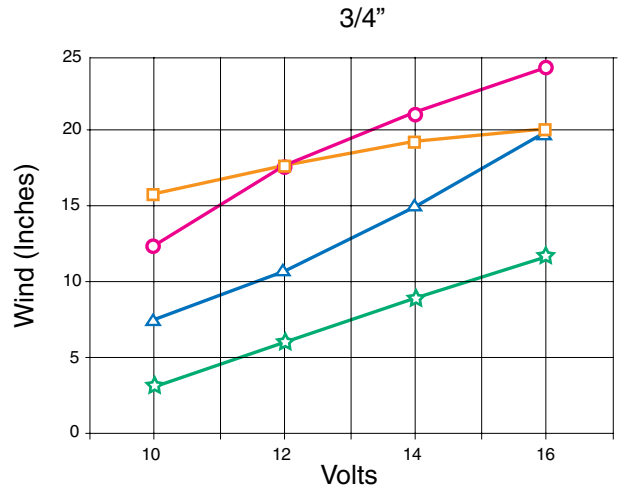
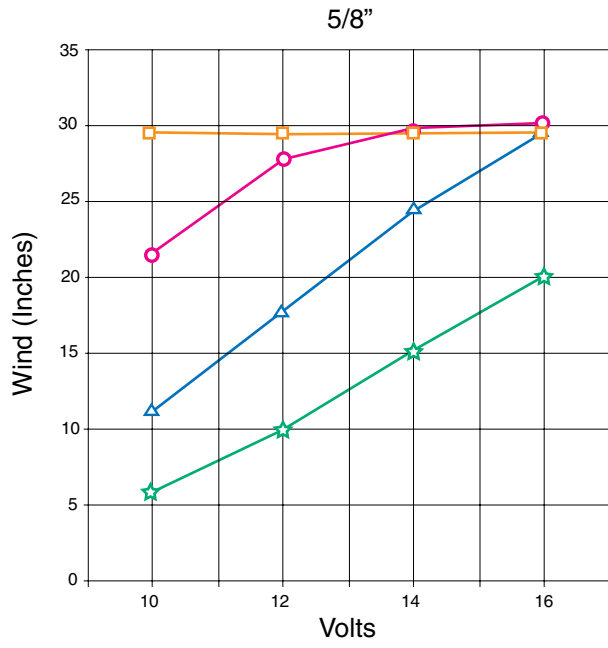


Plain Port DVA



Legend for DVA charts:
—□— 3/4 —◇— 1 1/8 —△— 1 1/2

60I Performance Charts



☆ - 150 Ohm △ - 90 Ohm ○ - 60 Ohm □ - 40 Ohm

Cork Packing

	Thickness	Width	Form
6000.01	1/32"	28" x 50"	Sheet
6000.02	1/16"	36"	Roll
6000.03	3/32"	36"	Roll
6000.04	1/8"	36"	Roll

Ribbon Cork

Available in 100' rolls only.

	Width	Thickness
6010.01	7/8"	1/16"
6010.02	1"	1/16"
6010.03	1-1/4"	1/16"
6010.04	1-1/2"	1/16"
6010.05	1-7/8"	1/16"



Felt

Provide sample and intended use if unsure of selection.

	Thickness	Width	Color	Application
6100.01	1/8"	72"	Gray	Shutters, bumpers, muffler boxes
6100.02	1/4"	72"	Gray	Shutters, bumpers, muffler boxes
6100.03	3/8"	72"	Gray	Shutters, bumpers, muffler boxes
6101.01	3/64"	18"	White, wool	Valves, pallets, mothproofed
6101.02	3/32"	72"	White, wool	Valves, pallets, mothproofed
6101.03	9/64"	72"	White, wool	Valves, pallets, mothproofed
6101.04	3/16"	72"	White, wool	Valves, pallets, mothproofed
6101.05	1/4"	72"	White, wool	Valves, pallets, mothproofed
6102.01	1/16"	76"	Red, wool	Pipe caps, valves
6102.02	1/16"	72"	Blue, wool	Pipe caps, valves
6102.03	1/16"	76"	Green, wool	Pipe caps, valves
6102.04	1/16"	66"	Black, wool	Pipe caps, valves
6103.01	3/64"	74"	Red, wool/rayon	General purposes
6103.02	3/64"	55"	Red, woven	General purposes
6103.03	3/64"	54"	Red, bushing	Bushings
6103.04	1/32"	65"	Green, billiard	Bushings

Polyester Felt

A white manufactured fiber, uniform in thickness, mothproof and resistant to mildew.

	Thickness	Width
6106.01	3/64"	54"
6106.02	5/64"	72"
6106.03	3/32"	72"
6106.04	5/32"	72"

Hammer Rail Felt

Used under the front of manual keyboards. When holes are provided, they are in the center of the strip. The pedal felt is used as an up and down stop at the front of pedal keys.

	Description	Size	Color
6110.00	Manual hammer rail	1/4" x 7/8" x 33-1/2"	Dark green
6110.11	Manual hammer rail, w/holes	3/16" x 7/8" x 33-1/2"	Dark green
6110.01	Manual hammer rail, w/holes	1/4" x 7/8" x 33-1/2"	Dark green
6111.00	Pedal hammer rail	1/2" x 1-1/2" x 54"	Gray

Cut Felt

	Size	Color	Use
6115.01	1/8" x 3/4" x 30'	Gray	Clamps, etc.
6115.02	1/4" x 1" x 30'	Gray	Shutters

Felt Strip

Adhesive-backed felt strip useful for racking pipes, decorative console trim, etc. Brown, 100' rolls.

Size

6116.01	1/16" x 1/2"
6116.02	1/16" x 7/8"
6117.01	1/8" x 1/2"
6117.02	1/8" x 7/8"

Twill Tape

Woven tape for racking pipes, pneumatic hinges, reservoir folds, curtain valves, and reed organ straps.

	Thickness	Dimensions	Color
6120.01	Thin	5/8" x 72 yds.	Natural
6120.02	Medium	1" x 72 yds.	Natural
6120.03	Heavy	1" x 100 yds.	Natural
6120.04	Heavy	2" x specified length	Green
6120.06	Medium	3/4" x 100 yds	Natural
6120.07	Medium	3/8" x 250 yds	Natural



Felt Punchings

Available in packages of 100 or 1000.

	O.D.	I.D.	Thickness	Material
6130.11	3/64"	9/64"	17/32"	Red, Woven Cloth
6130.12	3/8"	1/16"	1/32"	Green Billiard Cloth
6130.01	3/8"	1/16"	3/64"	Red, Woven Cloth
6130.02	3/8"	1/16"	3/64"	Red Bushing Cloth (white center)
6130.03	3/8"	1/16"	1/16"	Red, Felt
6130.04	3/8"	1/32"	1/8"	Red, Felt
6130.05	7/16"	3/64"	3/32"	White, Felt
6130.06	1/2"	3/32"	3/64"	Balance Rail, Woven
6130.07	1/2"	3/32"	3/32"	Balance Rail, Woven
6130.08	3/4"	5/32"	7/32"	Green Front Rail, Woven
6130.09	3/4"	13/32"	3/16"	Gray Spring Guide
6130.10	5/16"	1/16"	1/32"	Green Billiard Cloth

LEATHER

Leather is sold by the full skin, priced by the square foot. All skins are marked to indicate nearest quarter square foot: 5¹ = 5.25 sq. ft., 5² = 5.5 sq. ft., etc. Leather thickness is measured by a weighted gauge, a dial caliper designed to exert a fixed pressure per square unit while measuring thickness. Color, thickness and skin sizes listed may vary from descriptions. A Leather Sample Card is available. If further assistance selecting proper leather is required, provide sample or description of where and how it is to be used. Custom cut leather pieces available.

6200.99 Leather Sample Card

Pneumatic Leather

Fine grained tan Havana (brown leather) used for pouches, diaphragms and small pneumatics. Sheepskin. Available in 4 weights, 4 to 7 sq. ft. per hide.

	Weight	Thickness
6200.01	Extra thin	.010" - .014"
6200.02	Thin	.014" - .018"
6200.03	Medium	.018" - .024"
6200.04	Heavy	.024" - .032"

Chrome Hairsheep Leather

Chrome tanned hairsheep pneumatic leather, referred to as "CPL", is the most sought after leather for covering and re-leathering of organ pouches. This pearl-colored leather is ideal for pouches, diaphragms, and small pneumatics. Sheepskin. Available in 3 weights, 4 to 7 sq. ft. per hide.

	Weight	Thickness
6202.02	Medium	.018" - .023"
6202.03	Heavy	.022" - .026"
6202.04	Extra Heavy	.035" - .044"

Kangaroo Pneumatic

6203.02 Fine thin pearl leather used for pouches, diaphragms and small pneumatics. Subject to available supply. 3 to 5 sq. ft. per hide. Thickness .012" - .019".

Cabretta

High quality leather for medium pneumatics, and small stoppers. Sheepskin.

	Weight	Average Thickness	Sq. Ft.
6210.01	1 oz.	.020" - .025"	3 - 5
6210.02	2, 2-1/2 oz.	.035" - .040"	5 - 9

Nappa Chrome Leather

6213.00 High quality chrome tanned leather for large pneumatics and tremolos. Cowhide. Weight 1.75 - 2 oz. 16 to 30 sq. ft. per hide. Thickness .030" - .040".

Swellshade Pneumatic

6215.00 Very soft and tough, this heavy leather is suitable for large pneumatics. Cowhide. 18 to 22 sq. ft. per hide. Thickness .055" - .070".

Alum Valve

6220.00 White, alum-tanned leather with flesh side buffed for valves and pallets. Sheepskin. 6 to 9 sq. ft. per hide. Thickness .035" - .055".

Alum Gusset

- 6225.00** Soft, pliable white leather tanned for corners of reservoirs. Sheep Skin. **8 to 10** sq. ft. per hide. Thickness **.055" - .065"**.
-

Kangaroo Gusset

- 6225.10** Soft, pliable pearl leather for reservoir corners. Subject to available supply. **3 to 5** sq. ft. per hide. Thickness **.020" - .030"**.
-

Alum Gusset, Cow

- 6225.20** Soft, pliable white leather tanned for corners of reservoirs. Cowhide. **11 to 27** sq. ft. per hide. Thickness **.030" - .045"**.
-

Alum Bellows

- 6230.00** White, stretched leather tanned for reservoir ribs. Cowhide. **18 to 25** sq. ft. per hide. Thickness **.040" - .050"**.
-

Packing Leather

Double buffed, uniformly thick. For chest gaskets and large wood pipe stoppers. Cowhide.

- 6240.00** Thickness **.065" - .080"**, **8 to 14** sq. ft. per hide.

- 6241.00** Thickness **.040" - .050"**, **10 to 14** sq. ft. per hide.
-

Membrane

- 6250.00** Animal intestinal membrane (Zephyr) is light, strong, and flexible. For small pneumatics and pouches. Approximate skin size **8" x 16"**. Thickness **.003"**.

Silicone Leather Conditioner

- 6260.00** Silicone solution improves flexibility and extends life of leather when exposed to alkalis, acids, salts, and chemicals. Water absorption is reduced, breathing characteristic of leather is unimpaired. Silicone solution is brushed on leather or fabric after material is glued in place. (Cannot be applied to leather before gluing.)
-

Rubber Cloth

Rubber cloth is available in various laminations of one or more layers of high quality cotton or synthetic fabric bonded to an extruded natural or synthetic rubber membrane. Single coated rubber cloth has one fabric sheet bonded to one layer of rubber. Double textured rubber cloth has the rubber membrane sandwiched between two layers of fabric. Fabric color may vary from description.

- 6300.99** Rubber Cloth Sample Card

- 6310.00** Single coated black rubber on white cloth, very thin. For small pneumatics. **.012"** thick, **44"** w.

- 6315.00** Double textured cloth with rubber center. For medium pneumatics and small motors. **.017"** thick, **54"** w.

- 6320.00** Double textured black drill cloth with rubber center and cloth back. For swimmers, reed organ and player piano pump bellows. **.030"** thick, **57"** w.

- 6330.00** Double textured black drill cloth with rubber center and fleece backed. For reservoirs and blower bags. **.050"** thick, **62"** w.

- 6340.00** Single coated black rubber on **20 oz.** heavy cloth back. For large reed organ reservoirs. **.023"** thick, **63"** w.



Fibre Washers

	O.D.	I.D.	Thickness
6400.07	1/2"	1/16"	1/16"
6400.08	5/8"	1/16"	1/16"
6400.09	5/8"	1/8"	1/16"
6400.10	3/4"	1/16"	1/16"
6400.11	3/4"	1/8"	1/16"
6400.32	13/16"	1/16"	1/16"
6400.12	7/8"	1/16"	1/16"
6400.13	7/8"	1/8"	1/16"
6400.33	15/16"	1/16"	1/16"
6400.14	1"	1/16"	1/16"
6400.15	1"	1/8"	1/16"
6400.16	1-1/8"	1/16"	3/32"
6400.17	1-1/8"	1/8"	3/32"
6400.18	1-1/4"	1/16"	3/32"
6400.19	1-1/4"	1/8"	3/32"
6400.20	1-3/8"	1/16"	3/32"
6400.21	1-3/8"	1/8"	3/32"
6400.22	1-1/2"	1/16"	3/32"
6400.23	1-1/2"	1/8"	3/32"
6400.24	1-5/8"	1/8"	3/32"
6400.25	1-3/4"	1/8"	3/32"
6400.27	2"	1/8"	3/32"
6400.28	2-1/4"	1/8"	1/8"
6400.29	2-1/2"	1/8"	1/8"
6400.30	2-3/4"	1/8"	1/8"
6400.31	3"	1/8"	1/8"



	O.D.	I.D.	Thickness
--	------	------	-----------

6401.08	5/8"	1/4"	1/16"
6401.09	5/8"	5/16"	3/32"
6401.10	3/4"	5/16"	3/32"
6401.12	7/8"	5/16"	3/32"
6401.14	1"	5/16"	3/32"



Leather Nuts

No. 50 hole fits No. 13 B & S threaded wire. Available in packages of 100 or 1000.

	O.D.	Head
6410.03	1/4"	Round
6410.04	5/16"	Round
6410.05	3/8"	Round
6410.06	7/16"	Round
6410.07	1/2"	Round
6411.07	1/2"	Flat
6411.08	5/8"	Flat
6411.10	3/4"	Flat
6411.14	1"	Flat



Leather Nuts — No Hole

Without center hole, for small wires. Useful for restoration work. Available in packages of 100 or 1000.

	O.D.	Head
6420.03	1/4"	Round
6420.04	5/16"	Round
6420.05	3/8"	Round



Plastic Hex Nuts

These low profile black nuts are intended for use with #13 B & S gauge (.072" Ø) wires with rolled threads. A spherical radius on one side permit valves to gimbel for better seating. The nuts are easily installed with standard hex wrenches or nut drivers. The natural memory of the molded Acetal composition allows easy installation with a firm grip on the wire.



	Diameter	Height
6422.02	3/16"	1/8"
6422.03	1/4"	1/8"
6422.04	5/16"	1/8"
6422.05	3/8"	3/16"
6422.06	7/16"	3/16"
6422.07	1/2"	3/16"
6422.08	5/8"	3/16"
6421.10	3/4"	3/32" Flat
6421.14	1"	3/32" Flat

Felt & Leather

Select white wool felt and valve leather, laminated with flexible adhesive, for valves and pallets. Sold by the square foot.

	Weight	Nominal Thickness
6500.01	Extra Thin	5/32"
6500.02	Thin	3/16"
6500.03	Medium	7/32"
6500.04	Heavy	5/16"

Polyester Felt & Leather

Polyester felt and valve leather bonded with flexible adhesive, for valves and pallets. Sold by the square foot.

	Weight	Nominal Thickness
6510.01	Extra Thin	3/32"
6510.02	Thin	1/8"
6510.03	Medium	7/32"
6510.04	Heavy	1/4"

Pouch Leather

Pre-cut fine grained tan Havana pneumatic leather. Other selected leathers available. Custom pouch leather per instructions.

	Leather Size		Pouch Hole Size
	Round	Square	
6600.25	1-3/4"		1"
6600.27	2"		1-1/4" - 1-3/8"
6600.28	2-1/4"		1-1/2" - 1-5/8"
6600.29	2-1/2"		1-3/4" - 1-7/8"
6600.30	2-3/4"		2"
6600.31	3"		2-1/4"
6600.32	3-1/4"	3-1/4"	2-1/4"
6600.33	3-1/2"	3-1/2"	2-1/2"
6600.34	3-3/4"	3-3/4"	2-3/4"
6600.35	4"	4"	3"
6600.36		4-1/2"	3-1/2"
6600.37		5"	4"
6600.38		5-1/2"	4-1/2"
6601.00	Special Size		

Felt & Leather Valves

Select white wool felt and valve leather punched to size. Special thickness to specification. Polyester felt and center holes optional.

	O.D.	Standard Thickness
6700.07	1/2"	5/32"
6700.08	5/8"	5/32"
6700.10	3/4"	5/32"
6700.12	7/8"	5/32"
6700.14	1"	5/32"
6700.16	1-1/8"	5/32"
6700.18	1-1/4"	5/32"
6700.20	1-3/8"	5/32"
6700.22	1-1/2"	7/32"
6700.24	1-5/8"	7/32"
6700.25	1-3/4"	7/32"
6700.26	1-7/8"	7/32"
6700.27	2"	7/32"
6700.28	2-1/4"	7/32"
6700.29	2-1/2"	7/32"
6700.30	2-3/4"	7/32"
6700.31	3"	7/32"
6701.00	Special Size	



Reisner Valves

	O.D.	Standard Thickness
6702.06	1/2"	7/32"
6702.08	5/8"	7/32"
6702.10	3/4"	7/32"
6702.12	7/8"	7/32"
6702.14	1"	7/32"
6702.16	1-1/8"	7/32"
6702.18	1-1/4"	7/32"
6702.22	1-1/2"	7/32"

Fibre, Felt & Leather Valves

Wool felt and leather valves bonded to fibre washers. Center holes bored 1/2" Ø to 1-1/2" Ø unless otherwise specified. Sizes 1-5/8" Ø up, center holes provided per instructions.

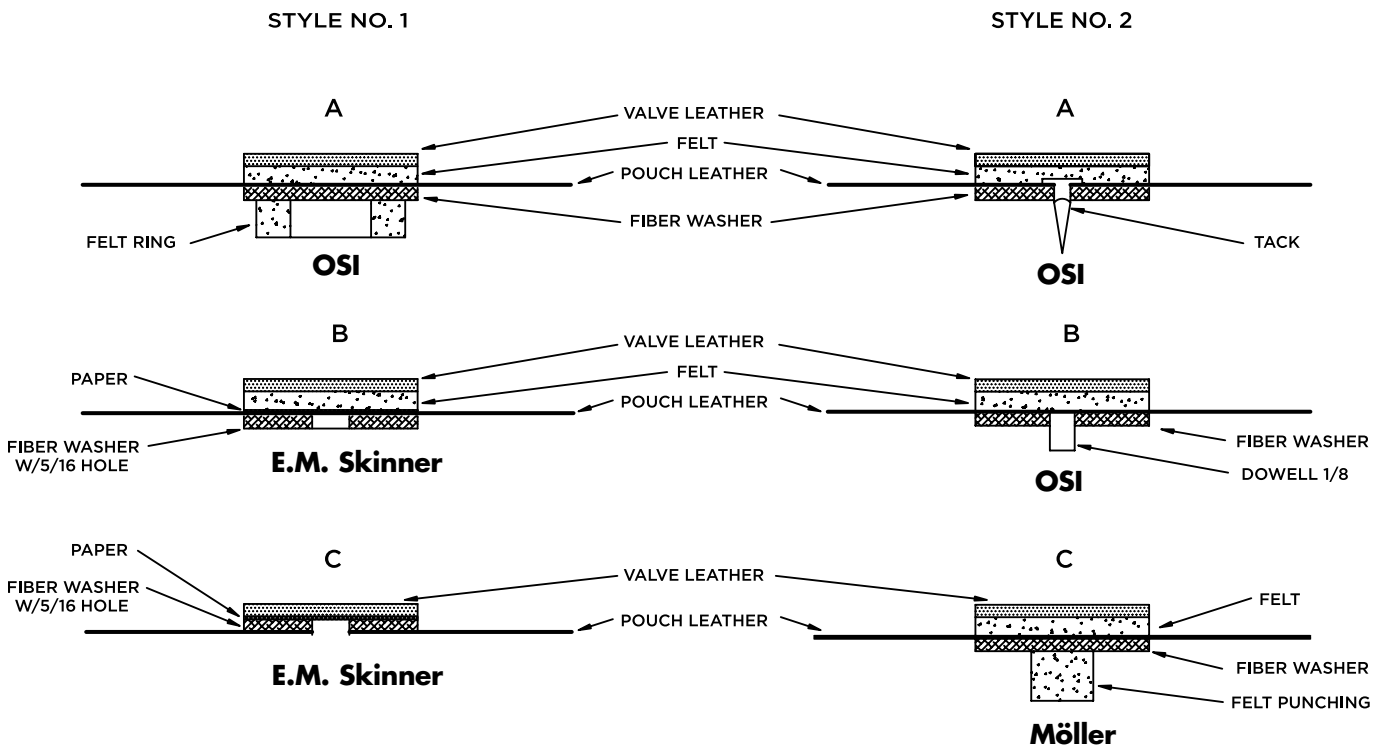
	O.D.	I.D.	Standard Thickness
6800.07	1/2"	1/8"	5/32"
6800.08	5/8"	1/8"	5/32"
6800.10	3/4"	1/8"	5/32"
6800.12	7/8"	1/8"	5/32"
6800.14	1"	1/8"	5/32"
6800.16	1-1/8"	1/8"	15/64"
6800.18	1-1/4"	1/8"	15/64"
6800.20	1-3/8"	1/8"	15/64"
6800.22	1-1/2"	1/8"	15/64"
6800.24	1-5/8"		15/64"
6800.25	1-3/4"		15/64"
6800.26	1-7/8"		15/64"
6800.27	2"		15/64"
6800.28	2-1/4"		5/16"
6800.29	2-1/2"		5/16"
6800.30	2-3/4"		5/16"
6800.31	3"		5/16"
6801.00	Special Size		



Pouch Leather with Valve

Pouch leathers complete, ready to install are for new or replacement work. Pouch leather has felt and leather valve glued on smooth side and fibre disc glued on flesh side. Leather valve can be furnished with the smooth side out in the Möller style. Style No. 1 spring guide is a felt washer glued to fibre. Style No. 2 spring guide can be furnished as a tack or a dowel, and as a felt punching for Möller pouches. Custom pouches furnished per sample.

Style No. 1	Style No. 2	Valve	Leather Size		Pouch Hole Size
			Round	Square	
6900.07	6950.07	1/2"	1-3/4"		1-1/4"
6900.08	6950.08	5/8"	2"		1-1/4"
6900.10	6950.10	3/4"	2-1/4"		1-1/2"
6900.12	6950.12	7/8"	2-1/2"		1-3/4"
6900.14	6950.14	1"	2-3/4"		2"
6900.16	6950.16	1-1/8"	3"		2-1/4"
6900.17	6950.17	1-1/8"		3-1/4"	2-1/4"
6900.18	6950.18	1-1/4"	3"		2-1/4"
6900.19	6950.19	1-1/4"	3-1/2"	3-1/2"	2-1/2"
6900.22	6950.22	1-1/2"	3-3/4"	3-3/4"	2-3/4"
6900.25	6950.25	1-3/4"	4"	4"	3"
6900.27	6950.27	2"		4-1/4"	3-1/4"
6900.28	6950.28	2-1/4"		4-1/2"	3-1/2"
6900.29	6950.29	2-1/2"		5"	4"
6900.30	6950.30	2-1/2"		5-1/4"	4-1/4"
6900.31	6950.31	3"		6"	5"
6901.00	6951.00	Special Size			



Primary Pneumatics

Primary pneumatics are covered in first quality thin tan pneumatic leather. The leather is silicone treated for longer life. The wood blocks are 1/4" thick. One side is drilled with a No. 50 Ø hole for a standard 13 ga. valve wire. The other face has a 3/8" Ø hole and has a leather gasket on the gluing face.

	Size	Open O.A.	Use
6975.14	3/4" x 1-1/2"	1"	Primary
6975.24	1" x 1-1/2"	1"	Primary
6975.25	1" x 1-3/4"	1"	Primary
6975.34	1-1/4" x 1/1-2"	1"	Primary
6975.45	1-1/2" x 1-3/4"	1"	Primary
6975.55	1-3/4" x 1-3/4"	1"	Stop action
6975.58	1-3/4" x 2-1/2"	1"	Stop action



ADHESIVES

Flake Hide Glue

7010.00 Joins leather, wood, and rubber cloth. Dissolve granules in water and apply at 140°F. Infinitely dilutable. Warm water cleanup. Indefinite shelf life when stored dry. Sold by the pound dry weight.

Liquid Hide Glue

Liquid form of hide glue, ready to use cold. Infinitely dilutable. Warm water cleanup. Indefinite shelf life when stored in sealed container between 50° and 80° F. Freeze thaw stable.

Size

7020.02 Pint
7020.03 Quart
7020.00 Gallon

Fish Glue

Liquid collagen glue manufactured from fish skins. Joins leather, wood, and rubber cloth. Water clean-up. Do not thin. Not for use for outdoor or damp environments. Indefinite shelf life when stored in sealed container. Freeze thaw stable.

Size

7025.02 Pint
7025.03 Quart
7025.04 Gallon

PVC-E Adhesive

Bonds non-porous to porous surfaces (i.e. plastic to wood, metal to felt). Water cleanup. Do not thin. Freezing renders adhesive inert. Shelf life six months.

Size

7030.02 Pint
7030.03 Quart

Felt & Leather Glue

Joins felt, leather, wood, and rubber cloth. Water cleanup. Do not thin. Freezing renders adhesive inert. Shelf life one year.

Size

7040.03 Quart
7040.04 Gallon

Woodworking Glue

Joins porous surfaces, wood, fabric, paper, hardboard. Aliphatic resin. Water cleanup. Thin with water. Keep from freezing. Indefinite shelf life.

Size

7060.01 1/2 Pint
7060.03 Quart
7060.00 Gallon

Compass Springs

	Description	Leg	Wire Ø	Material
7200.01	Manual Key	1-7/8"	.040"	Steel
7200.02	Percussion	2-15/16"	.048"	Steel
7200.03	Pneumatic	3-11/16"	.034"	Steel
7200.14	Slider Chest	110 mm	1.4 mm	Steel/Electro-Plated
7200.18	Slider Chest	100 mm	1.8 mm	Brass
7200.20	Slider Chest	100 mm	2.0 mm	Brass
7200.22	Slider Chest	110 mm	2.2 mm	Brass



Coil Springs

	Description	Coil	O.A.	Coil	Wire Ø	Material
7250.01	Manual Key	7/16"	13/16"	5/16"	.030"	Steel
7250.02	Coil	13/16"	1-1/8"	3/16"	.018"	Steel
7250.03	Concussion	1-1/8"	2"	1/2"	.040"	Steel
7250.04	Swell Shutter	4"	5"	1/2"	.040"	Steel
7250.05	Swell Shutter	8"	9"	1/2"	.040"	Steel



Escutcheon Pins

Brass, available by pound and half pound. NOTE: Escutcheon pin gauges are BWG not AWG or B & S.

	Size	Diameter	Approximate Pieces/Pound
7316.01	16 x 1/4"	.065"	3100
7316.03	16 x 1/2"	.065"	1720
7316.05	16 x 3/4"	.065"	1275
7317.01	17 x 3/8"	.058"	2755
7317.07	17 x 1"	.058"	1051
7317.11	17 x 1-1/2"	.058"	784
7318.03	18 x 1/2"	.049"	2550
7318.04	18 x 5/8"	.049"	2450
7318.05	18 x 3/4"	.049"	2200
7318.07	18 x 1"	.049"	1520
7319.01	19 x 1/4"	.042"	7303
7319.03	19 x 1/2"	.042"	4130
7320.02	20 x 3/8"	.035"	8419
7320.03	20 x 1/2"	.035"	6374



Escutcheon Pins, Headless

Headless escutcheon pins used for junction boards. Sized for wire wrap tools.

	Size	Diameter	Approximate Pieces/Pound
7336.07	16 x 1"	.065"	1017
7336.13	16 x 1-3/4"	.065"	575
7336.15	16 x 2"	.065"	555
7336.17	16 x 2-1/4"	.065"	495
7336.19	16 x 2-1/2"	.065"	450



Coupling Wires

Brass, nickel plated.

	O.A. Length	Thread on Each End	B & S Gauge	Ø
7400.14	1-7/8"	1/2" - 1/2"	12	.081"
7400.18	2-1/2"	5/16" - 1-1/2"	13	.072"
7400.21	3-1/4"	3/8" - 1-1/2"	13	.072"
7400.22	3-1/2"	5/8" - 1-1/2"	13	.072"
7400.24	4"	3/8" - 2-1/2"	13	.072"
7400.26	4-1/2"	7/16" - 2-1/2"	13	.072"
7400.31	5-3/4"	1-5/8" - 3-1/4"	13	.072"



Eye Wires

Brass, nickel plated, No. 13 B & S gauge. .072" Ø

	O.A. Length	Thread
7410.08	1-5/16"	3/4"
7410.12	1-7/8"	1-1/4"
7410.16	2-1/8"	1-1/4"
7410.22	3-1/2"	2"



Pallet Wires

Brass, nickel plated. No. 13 B & S gauge. .072" Ø

	O.A. Length
7420.13	1-3/4"
7420.15	2"
7420.18	2-1/2"



Valve Wires

Brass, nickel plated, No. 13 B & S gauge. .072" Ø

	O.A. Length	Smooth End
7430.18	2-1/2"	1/2"
7430.19	2-3/4"	1/2"
7440.17	2-1/4"	3/4"
7440.18	2-1/2"	3/4"
7440.19	2-3/4"	3/4"
7440.20	3"	3/4"
7440.21	3-1/4"	3/4"
7440.22	3-1/2"	3/4"
7440.23	3-3/4"	3/4"
7440.24	4"	3/4"
7440.25	4-1/4"	3/4"
7440.26	4-1/2"	3/4"
7440.27	4-3/4"	3/4"
7440.28	5"	3/4"
7440.29	5-1/4"	3/4"
7440.30	5-1/2"	3/4"
7440.31	5-3/4"	3/4"
7440.32	6"	3/4"
7440.33	6-1/4"	3/4"
7440.34	6-1/2"	3/4"
7440.35	6-3/4"	3/4"
7440.36	7"	3/4"
7440.38	7-1/2"	3/4"



Wood Screws

Slotted steel, bright zinc chromate plated, packed 100 per box.

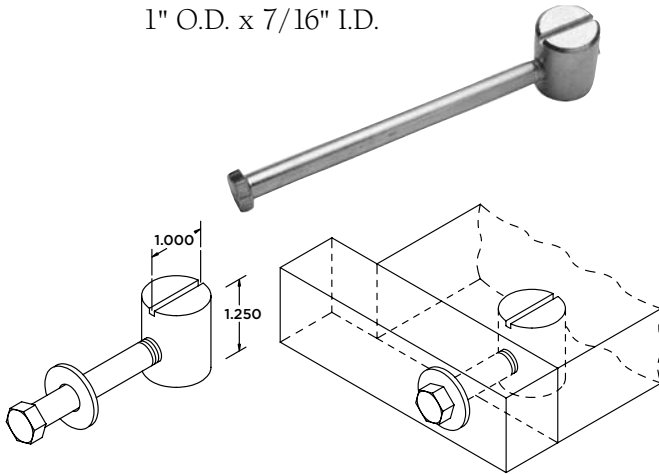
Round Head	Flat Head	Size
7502.01		2 x 1/4"
7502.02		2 x 3/8"
7502.03	7602.03	2 x 1/2"
7502.04	7602.04	2 x 5/8"
7502.05		2 x 3/4"
7503.03		3 x 1/2"
7503.04		3 x 5/8"
7504.01		4 x 1/4"
7504.03	7604.03	4 x 1/2"
7504.04	7604.04	4 x 5/8"

Round Head	Flat Head	Size
7504.05	7604.05	4 x 3/4"
7504.06		4 x 7/8"
7504.07	7604.07	4 x 1"
7504.09	7604.09	4 x 1-1/4"
7504.11	7604.11	4 x 1-1/2"
7506.04		6 x 5/8"
7506.05	7606.05	6 x 3/4"
7506.07	7606.07	6 x 1"
7506.09	7606.09	6 x 1-1/4"
7506.11	7606.11	6 x 1-1/2"
7506.13	7606.13	6 x 1-3/4"
7506.15	7606.15	6 x 2"
7506.17		6 x 2-1/2"
7508.05	7608.05	8 x 3/4"
7508.07	7608.07	8 x 1"
7508.09	7608.09	8 x 1-1/4"
7508.11	7608.11	8 x 1-1/2"
7508.13	7608.13	8 x 1-3/4"
7508.15	7608.15	8 x 2"
	7608.19	8 x 2-3/4"
7508.20	7608.20	8 x 3"
	7610.07	10 x 1"
7510.09	7610.09	10 x 1-1/4"
7510.11	7610.11	10 x 1-1/2"
7510.13	7610.13	10 x 1-3/4"
7510.15	7610.15	10 x 2"
	7610.17	10 x 2-1/4"
7510.18	7610.18	10 x 2-1/2"
7510.19	7610.19	10 x 2-3/4"
7510.20	7610.20	10 x 3"
7510.22	7610.22	10 x 3-1/2"
7510.24	7610.24	10 x 4"
7512.13	7612.13	12 x 1-3/4"
7512.15	7612.15	12 x 2"
7512.18	7612.18	12 x 2-1/2"
	7612.19	12 x 2-3/4"
7512.20	7612.20	12 x 3"
7512.22	7612.22	12 x 3-1/2"
	7612.24	12 x 4"
	7614.17	14 x 2-1/4"
	7614.18	14 x 2-1/2"
	7614.19	14 x 2-3/4"
7514.20	7614.20	14 x 3"
7514.22	7614.22	14 x 3-1/2"
7514.24		14 x 4"

Cross Dowel Connectors

Ideal for swell shade assembly, building frame, or wherever strong right angle joints are required. Fastener applies even, controlled pressure, creating a strong joint that can be quickly assembled or disassembled. Installation requires drilling one hole for bolt and one hole for cross dowel. Dowel is electro-plated steel. 1" Ø x 1-1/4" L with 3/8" - 16 cross thread.

- 7700.01** Cross dowel only
- 7700.06** 6" bolt
- 7700.08** 8" bolt
- 7700.10** 10" bolt
- 7830.06** Steel washer
1" O.D. x 7/16" I.D.



Copper Tacks

Most commonly used as spring guides for pneumatic pouches.

Size

- 7730.02** 3 x 3/8"
- 7730.03** 6 x 1/2"

Screw Eyes

Steel, zinc plated



	I.D.	O.D.	Shank	O.A.	Wire
7750.01	1/4"	25/64"	5/8"	15/16"	.070"
7750.02	3/16"	25/64"	5/8"	1"	.100"

Screw Tension Spring

Used under screw heads for toeboards, channel boards, etc. Black oxide finish.

Screw Size	Dimensions	
	O.D. x Length	
7800.06	6-8	11/32" x 3/8"
7800.10	10-12-14	7/16" x 1/2"
7800.15	16-18	5/16" x 1/2"



Cup Washers

Size of cup washer is determined by screw size. Steel, nickel plated.

Screw Size

- 7810.06** 6
- 7810.08** 8
- 7810.10** 10
- 7810.12** 12
- 7810.14** 14



Copper Washer (Burr)

Screw

Size	Burr	I.D.	O.D.	Thickness	
7820.04	4	12	.124"	.360"	.028"
7820.06	6	8	.166"	.469"	.045"
7820.08	8-10	6	.188"	.555"	.057"

Flat Washers

Size	O.D.	I.D.	Screw Size	Material
7830.01	9/16"	3/16"	8-10	Steel/Zinc Pl.
7830.02	1/2"	1/4"	10-12	Steel/Zinc Pl.
7830.03	9/16"	1/4"	10-12	Steel
7830.04	3/4"	1/4"	10-12	Steel
7830.05	1"	1/4"	10-12	Steel
7830.06	1"	7/16"	12-14	Steel

MISCELLANEOUS FASTENERS

Wood Screws, Bronze

Oval head wood screws used on exterior of finished cabinets, keyboards, and pedal keyboards.

	Size	Drive
7504.54	4 x 3/4"	Phillips
7508.57	8 x 1"	Phillips
7508.61	8 x 1-1/2"	Phillips
7510.61	10 x 1-1/2"	Phillips
7510.63	10 x 1-3/4"	Slotted
7512.72	12 x 3-1/2"	Slotted

Flush Cup Washers, Bronze

A countersunk washer prevents screw from pulling into the wood.

Screw Size

7810.54
7810.56
7810.58
7810.60

4
6
8
10



Sheet Metal Screws

Pan head Phillips screws used to mount Reisner chest and 60l magnets. Zinc chromate plated.

Size

7604.54 4 x 5/8"

Threaded Inserts

Use in new construction, replacement of stripped wood screws, or replacement of WurliTzer™ inserts. Allows for convenient, efficient, and frequent removal of chest parts. Bore 3/8" hole.

.453" OD x 1/2" L

	ID	Material	Use	Drive Tool
7710.10	10-24	Brass		8246.10
7710.12	10-32	Brass		8246.10
7710.16	12-24	Plated Steel	WurliTzer™	8246.10
7710.20	1/4-20	Brass		8246.16



Threaded Insert Drive Tools

Recommended for installation of threaded inserts, these drive tools provide more positive engagement and efficient installation of inserts. Fits standard hex socket, most screw guns, or can be chucked in reversible drill.

	Insert Sizes	L
8246.10	10-24 & 10-32 & 12-24	1-7/8"
8246.16	1/4-20	1-15/16"






TRACKER PARTS

Aluminum Wires

	Dia.	Length
7916.16	1.65 mm	1.83 M or 6'
7916.20	2.00 mm	1.83 M or 6'

Ring Terminals

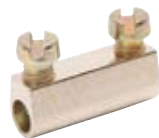
Aluminum, hex or Allen head set screw.
7 mm O.D. 2.5 mm I.D.

	Type	Set Screw	
7917.01	Plain	Hex head	
7917.11	Plain	Allen	
7917.02	Adjustable	Hex head	
7917.12	Adjustable	Allen	
7917.51	Hex head set screws		
7917.52	Allen set screws		

Connector Terminal

7918.00 For connecting pull-down wires.

4.5 mm O.D. x 3 mm I.D. x
15 mm long



Tracker Material

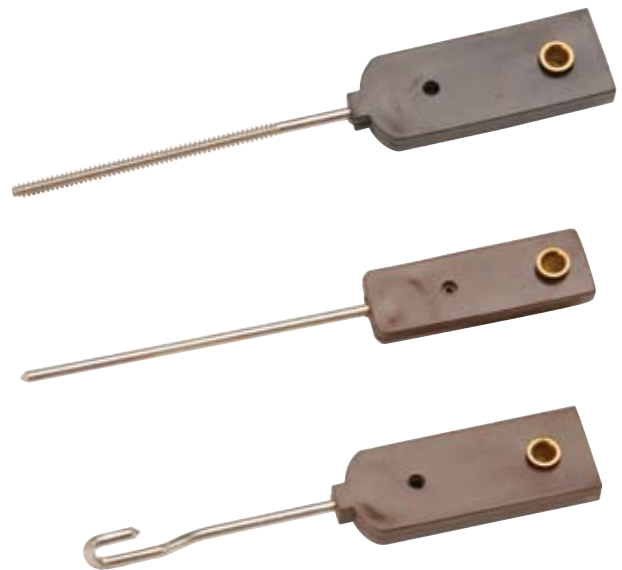
7920.00

Basswood, custom-made. Provide sample or specify cross section and lengths required.

Tracker Tops

Supplied with tubular rivets, wire.
1.65 mm

	Color	Size	End
7922.01	Black	1/16" x 5/16"	Threaded
7922.02	Brown	1/16" x 5/16"	Plain
7922.03	Black	1/16" x 7/16"	Threaded
7922.04	Brown	1/16" x 7/16"	Plain
7922.05	Brown	1/16" x 7/16"	Hook
7922.09	Tracker Top Rivet		



Tracker Wires

	Length	Dia.	Thread	Bend	Material
7924.01	80 mm	1.65 mm	–	10 mm	Nickel Plated Brass
7924.02	95 mm	1.8 mm	50 mm	4 mm	Brass



Wire Ends

Plated brass, 1.65 mm end. 1.65 mm I.D. sleeve.

End

- 7926.01 Straight, plain
- 7926.02 Bent for brown button



Tracker Connector

- 7928.00 Plated brass with steel axle and brown plastic buttons. For bridging and coupling long horizontal tracker runs.

60 mm L x 20 mm W x 1.3 mm T



Axle Holders & Hangers

Plated spring brass.

	Length	Width	Height	Other
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7930.01	26 mm	10 mm	19 mm	2 mounting holes
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7930.02	55 mm	10 mm	9 mm	For oblique mounting
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7932.00	22 mm	10 mm	—	Ring terminal attached
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Axle

7934.00 Hardened stainless steel.

9 mm L x 1.8 mm Ø



Squares

Aluminum, 50 mm arms. Order plastic buttons and axle holders separately.

Axle	Arms
------	------

7935.01	4" x 1-1/4" RH Screw	Straight
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7935.02	Steel	Straight
7935.03	Steel	Turned/Straight
7935.04	Steel	Turned



Plastic Buttons

Brown buttons for plain wires, black buttons for threaded wires. For square arms, roller brackets, tracker connectors, etc.

Color	I.D.
-------	------

7938.01	Brown	1.65 mm
7938.02	Black	2.5 mm



Wood Tracker Squares

Bored or bushed for 1.65 mm wire,
59 mm leg.

	Kind	Axle Holder
7940.01	Horizontal	1-1/2"
7940.02	Horizontal	2-1/4"



7940.03	Vertical	1-1/2"
7940.04	Vertical	2-1/4"



Wood Axle Holders

Birch.

1/2" W x 5/16" H

Length

7945.01	1-1/2"
7945.02	2-1/4"



Aluminum Rollers

For use with 7960.02 and 7960.03
bearing inserts.

	I.D.	O.D.	Length	Maximum Unsupported Length
7950.08	6 mm	8 mm	6' only	70 cm
7950.10	6 mm	9.5 mm	6' only	110 cm



Roller Bracket

Tinned brass.

26 mm L x 11 mm W,
13 mm base to axle.



- 7955.01 Brown Plastic Button
- 7955.02 Roller Bracket w/axle screw
- 7955.03 Wood, with cloth bushing.
Use with 7960.03. Tip 5/16" Ø.



Bearing Inserts

7960.02 Use with 7955.01 bracket and 7950.08 and 7950.10 aluminum rollers as center support on long rollers.



7960.03 Use with 7965.01 and 7965.03 roller arms, 7950.08 and 7950.10 aluminum rollers, 7955.03 roller bracket.



Roller Arms

Aluminum. Order plastic buttons separately.

	Length O.A.	End	Use With
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7965.01 59 mm 5 mm thread 7960.03



7965.02 64 mm 15 mm plain



7965.03 60 mm 5 mm thread 7932.00 & 7960.03



Pull-Down Wire

7970.00 Aluminum.

150 mm long, 1.65 mm Ø



Lead Discs

7972.00 Use with 7970.00, with felt and leather punching attached. 20 mm Ø

7972.51 Plain, without felt and leather.



Brass Pull-Down Disc

7973.00 Brass.

1/2" O.D., .045" I.D., .025" T

Plastic Socket

For pull-down seals in slider windchest.

Color	O.D.	I.D.
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7974.01 Lt. Brown 7.5 mm 1.9 mm

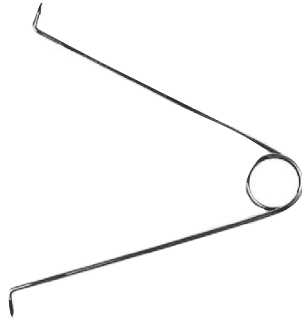
7974.02 Dk. Brown 7.5 mm 2.7 mm



Compass Springs

For slider chest pallets.

	Wire Dia.	Leg	Material
7200.14	1.4 mm	110 mm	Steel, electro-plated
7200.18	1.8 mm	100 mm	Spring brass
7200.20	2.0 mm	100 mm	Spring brass
7200.22	2.2 mm	110 mm	Spring brass



Pull-Down Links

20 mm long x 10 mm wide, hole centers 10 mm.

Material

7978.01	Stretched leather
7978.02	Fibre



Screw Eye

7750.01	For pallet valves. 24 mm long, 12.7 mm shank, 2 mm wire
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Pallet Guide Pin

12 ga. brass, electro-plated.

	Length	Used	Pcs. Per Lb.
7980.01	2" Headless	Front/rear	187



Pallet Tubing Nipples

Convenient way to install rubber tubing

	Dimension	Length
7980.20	3/8" O.D.	1"
7980.21	1/2" O.D.	1"

Pallet Guide Pins, Threaded

2.5 mm Ø, thread length 10 mm.

	Length
7982.01	50 mm
7982.02	70 mm



Slider Material

7984.00	1/16" natural phenolic, sheet size 48" wide x 120" long. Can be cut to specified width by 120" long. 6 ft. lengths shipped by UPS, 10 ft. lengths shipped by truck.
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Telescopic Sleeves

Black plastic with 1mm wall. Flanged top and bottom with steel spring between movable flanges. Use with 7988.00 seal rings. Install with PVC-E adhesive, 7030.02.

16mm Extended Height

	I.D.	O.D.
7986.07	7 mm	20 mm
7986.10	10 mm	22 mm
7986.12	12 mm	26 mm
7986.15	15 mm	28 mm
7986.17	17 mm	30 mm
7986.19	19 mm	33 mm
7986.21	21 mm	40 mm
7986.25	25 mm	42 mm
7986.28	28 mm	42 mm



Teflon Seal Rings

Mounted as stand-offs on opposite side of slider from telescopic sleeves. Teflon impregnated fiberglass, with self-adhesive or plain backing. Use PVC-E adhesive 7030.02 with plain backing.

	I.D.	O.D.	Backing	Use With Sleeves
7988.12	12 mm	22 mm	Adhesive	7986.07, 7986.10, 7986.12
7988.17	17 mm	28 mm	Adhesive	7986.15, 7986.17
7988.22	22 mm	32 mm	Adhesive	7986.19, 7986.21
7988.28	28 mm	44 mm	Adhesive	7986.25, 7986.28
7989.30	5 mm x 27.5 mm	18 mm x 41 mm	Adhesive	
7989.31	9 mm x 27.5 mm	22 mm x 41 mm	Adhesive	
7989.32	15 mm x 33.5 mm	28 mm x 47 mm	Adhesive	
7988.32	12 mm	22 mm	Plain	7986.07, 7986.10, 7986.12
7988.37	17 mm	28 mm	Plain	7986.15, 7986.17
7988.42	22 mm	32 mm	Plain	7986.19, 7986.21
7988.48	28 mm	44 mm	Plain	7986.25, 7986.28
7989.40	5 mm x 27.5 mm	18 mm x 41 mm	Plain	
7989.41	9 mm x 27.5 mm	22 mm x 41 mm	Plain	
7989.42	15 mm x 33.5 mm	28 mm x 47 mm	Plain	



Ball Joints

- 7990.00** Female with stud in permanently lubricated bearing, 1/4-28 threads.



- 7991.00** Plain female end bearing, .250"-.252" I.D., 1/4-28 threads.



- 7992.00** Spring-loaded female stud, 1/4-28 threads, for zero end play.



- 7993.00** One male/one female, 1/4-20 threads.



- 7994.00** 5/16" hole with set screw. 1/4-20 thread, with nut and washer. 5/16-24 adjusting screw. Use with 7995.01 and 7995.02.



Threaded Rods

Use with ball joints for swimmers, swell shutter linkage and many other applications.

- 7997.20** 1/4-20 x 3'
7997.28 1/4-28 x 3'

Crank Arms

With collar and 2 set screws, slotted arm.

	Working Radius	Shaft Ø
7995.01	3/4" to 3-1/8"	1/2"
7995.11	3/4" to 3-1/8"	3/8"
7995.02	3/4" to 4-5/8"	1/2"





BOOKS

The Art of Organ Building

by George Ashdown Audsley

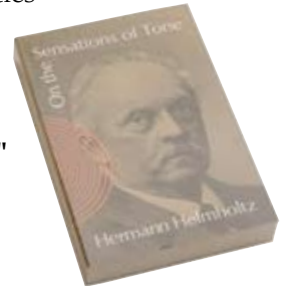
- 8001.00** Two volumes contain a comprehensive historical, theoretical and practical treatise on the tonal appointment and mechanical construction of concert room, church and chamber organs. Over 400 illustrations. Reprint. Paperbound - 1358 pages. 6-1/2" x 9-1/4"



Sensations of Tone

by Herman Helmholtz

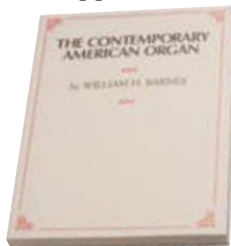
- 8007.00** Contains a wealth of information on tone, acoustics and related matters. Paperbound - 576 pages. 6-1/8" x 9-1/4"



The Contemporary American Organ

by William H. Barnes

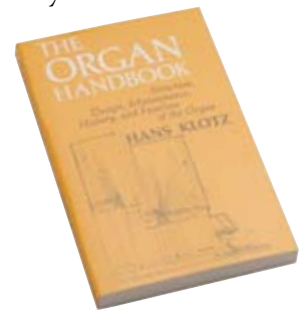
- 8002.00** The book chronicles the design, evolution, and construction of the American electro-pneumatic organ in the 20th century. It is profusely illustrated with action drawings and photographs of important consoles and organs. It has a supplement on electronic instruments. Reprint of the 8th edition, 1964. Paperbound - 389 pages. 7-1/2" x 9-3/4"



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by Horton Presley

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Pulling Out All The Stops

by C. Fischer

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- 8014.01** Vol. I
- 8014.02** Vol. II
- 8014.03** Vol. III



Organ Supply PCN Tour

8050.01

Guided tour of Organ Supply Industries that takes the viewer through each of the departments in the organization. Hosted by Randy Wagner and produced by the Pennsylvania Cable Network 2004.

TOOLS

OSI Pipe Scale Ruler

- 8090.00** A very practical 12" ruler with direct-reading metric and diameter pipe scales. It contains useful formulas for pipe scaling, wood to metal conversion and mouth widths.



Pipe Patterns

Pipe patterns for chest layout are provided with Normal 17th halving from 30 Scale (285.2 mm) to 90 Scale (19.3 mm). Each set of 61 patterns is engraved with crosshairs for alignment, scale number and diameter in mm. The durable ABS patterns have a 3/16" center hole for convenient stacking. A convenient hardwood storage base is available.



- 8095.00** Pipe Patterns
8095.01 Mounting stand

Wind Gauges

This compact dial wind pressure gauge is complete with 1/4" Ø foot and rubber toe ready to insert in rackboard or drilled wind hole. No water required. The small size makes it ideal for the toolbox. The unit is accurate to within 2% of full scale. Gauge has an aluminum die cast case with plastic face and is furnished complete with protective pouch.

2-5/8" Ø x 1-1/2" T x 9" L

- 8101.15** 0" to 15" WP
8101.30 0" to 30" WP



The Magnahelic® pressure gauge is a larger easy to read unit suited for the shop and voicing room as well as service work. The case is die cast aluminum with a clear plastic face. The gauge is accurate to within 2% of full scale. A carrying case, hang/stand bracket and 9 feet of 3/16" ID rubber tubing complete the package.

4-3/4" Ø x 2-1/4" T

- 8102.10** 0" to 10" WP
8102.20 0" to 20" WP



Wind Gauges (cont.)

8103.00 The handheld Digital Manometer measures positive, negative, and differential wind pressures. It is rugged and lightweight, easy to use. 0" to 20" WP with calibration in English units only. Accuracy is 0.5% of full scale. 1/2" LCD display is easily read in poor light. A 9 volt battery provides up to 100 hours use. Connectors for 1/8" or 3/16" ID tubing provided. Instructions printed on rear of case. A tough gray nylon storage pouch is furnished.



8101.40 The remote sensing probe is a convenient accessory for any of the above wind gauges. The kit provides a weighted brass probe with rubber foot and 3 feet of 3/16" tubing.



Proportional Dividers & Case

8105.00 Aluminum with metal points.
185 mm long
8105.01 Replacement tips (4 pieces).



Toe Cones

Size	Material	Dia. Opening	Weight
8110.01 Small	Brass	1-7/8"	1 lb. 1 oz.
8110.02 Double	Brass	2" & 2-1/4"	1 lb. 8 oz.



Foot Hole Gauge

8115.00 Made of Brass, for measuring and opening foot holes.
290 mm L, 2-20 mm Ø O.D.



Pipe Toe Reamers

The three pipe toe reamers cut toe openings from zero to 20 mm. Each reamer is complete with handle.

	Size	Diameter	Reamer Ln.	O.A. Length
8120.01	Small	0-5 mm, 3/16"	30 mm	100 mm
8120.02	Medium	5-12 mm, 1/2"	90 mm	240 mm
8120.03	Large	5-20 mm, 3/4"	165 mm	310 mm



Nicking Tool

8125.00 Double edge steel blade on wood handle is 1-1/2" L, 5-7/16" O.A.



Voicing Drawknives

These drawknives are available in long shank for 16' and 8' pipes and a shorter version for pipes 4' and under. Heat treated and ground tool steel blades tightly wedge into the steel shank and are secured by a thumb screw. The wedge design maintains blade alignment and stability through the life of the tool. Shank extends through the hardwood handle for balance, stiffness and control. Three blade sizes and one plow point hook are available in kits or individually.

Short knife 8" L, Long Knife 12" L

Voicing Hook

8130.00 Steel, for pulling out upper lips of metal pipes, with handle. 145 mm L



Size	Blades
------	--------

- | | | |
|----------------|-------|--|
| 8132.01 | Short | Small & medium blades, plus cutting hook |
| 8132.02 | Long | Large blade only |
| 8132.11 | | Small Blade 1-11/16" |
| 8132.12 | | Medium Blade 2-7/16" |
| 8132.13 | | Large Blade 3-7/16" |
| 8132.15 | | Plow Point Pipe Hook 2-9/16" |
| 8132.21 | | Drawknife 8" handle only |
| 8132.22 | | Drawknife 12" handle only |



Lip Raisers

Polished steel, for adjusting mouths of metal pipes, shell handle.

Size	Length
------	--------

- | | | |
|----------------|--------|--------|
| 8135.01 | Small | 180 mm |
| 8135.02 | Medium | 215 mm |



Languid Depressors

Nickel plated steel.

Size	Length
------	--------

- | | | |
|----------------|-------|--------|
| 8140.01 | Small | 110 mm |
| 8140.02 | Large | 150 mm |



Burnishing Iron

- 8145.00** Steel plate for curving reed tongues.
245 mm L x 35 mm W



Burnisher

- 8150.00** Steel with handle. 235 mm L



Scroll Tuner Keys

The scroll tuner key is ergonomically designed to assist the flue and reed voicer in starting and rolling a tight tuning roll. The small size will accommodate pipe metal up to .040", and the medium size will accommodate pipe metal up to .057".

- Small - 3/16" Ø x 4" L, handle 4" L
Medium - 1/4" Ø x 5-1/2" L, handle 4-1/2" L
Large - 1/2" Ø x 11-1/4" L, handle 6" L

- 8152.01** Small
8152.02 Medium
8152.03 Large



Tuning Knives

Stainless steel.

- 8155.01** 3mm x 15mm x 300mm
8155.02 3mm x 10mm x 500mm



- 8156.02** 5mm x 15mm x 500mm



Tuning Iron

- 8157.01** The tonal department of C. B. Fisk, Inc. developed this new design as their solution to the challenges of pipe tuning. The 6 oz. iron simplifies the precise tuning of small pipes in awkward places and is long enough for normal tuning. Each head has a "V" groove in the upper surface to assist in raising slides and notched reed wires. The bottom face is smooth for moving slides and wires down. The heads are angled for optimum use and are hardened to maintain a sharp edge. The balanced handle is coated for easier grip and durability.
 17-1/8" L



Tuning Forks

	Pitch	Plating
8165.01	A-440	Chrome
8165.02	Bb-466.2 (A440)	Chrome
8165.03	C-523.3 (A440)	Chrome



Double Tuning Cones

Polished Brass male and female cones.

	Size	I.D.	O.D.	O.A. Length
8160.01	Small	3/4"	7/8"	7-3/4"
8160.02	Medium	1-5/16"	1-7/16"	8-1/2"
8160.03	Large	1-1/2"	1-5/8"	8-7/8"
8160.04	Set of 3 sizes in canvas bag			



Peterson V-SAM™ Virtual Strobe/Audio Tuner with Metronome

- 8170.33** Programmable VIRTUAL STROBE tuner, AUDIO tone generator, and METRONOME in hand held format. Accuracy to 1/10 cent. Features include: Bright, high contrast display, selectable and user-defined temperaments (including historical), built-in speaker, built-in microphone, and automatic or manual note selection. Powered by 3 AA Batteries or Included 3 VDC Universal Adapter (90VAC-240 VAC). Protective rubber boot included.

Dimensions 7-1/2" T 4-1/4" D.
 Weight (1.2 pounds/ approx. 0.5kg)

Optional external microphone and carrying case available through special order.

Temperaments include: Equal, Pythagorean, Just Major, Quarter Comma Mean-Tone, Kernberger III, Young and Kellner



Metric Arch Punches

Inside taper permits punching to clear barrel. Sizes to **50 mm** diameter are alloy steel, drop forged in one piece. All sizes feature polished barrels, black Japanned handles.

Size

8190.04	4 mm
8190.06	6 mm
8190.08	8 mm
8190.10	10 mm
8190.12	12 mm
8190.14	14 mm
8190.16	16 mm
8190.18	18 mm
8190.20	20 mm
8190.22	22 mm
8190.24	24 mm
8190.26	26 mm
8190.28	28 mm
8190.30	30 mm
8190.32	32 mm
8190.34	34 mm
8190.36	36 mm
8190.38	38 mm
8190.40	40 mm
8190.50	50 mm



Punching Pad

8201.00 Resilient vinyl plastic pad used with arch punches, long wearing. Use both sides. **10" x 10" x 1/2"**

Arch Punches

Alloy steel, drop forged in one piece to **2"** diameter; **2-1/8" to 4"** sizes are two-piece welded construction. Inside taper permits punching to clear barrel. Polished barrel, black Japanned handle.

Size

8200.01	3/16"
8200.02	1/4"
8200.03	5/16"
8200.04	3/8"
8200.05	7/16"
8200.06	1/2"
8200.07	9/16"
8200.08	5/8"
8200.09	11/16"
8200.10	3/4"
8200.11	13/16"
8200.12	7/8"
8200.13	15/16"
8200.14	1"
8200.15	1-1/16"
8200.16	1-1/8"
8200.18	1-1/4"
8200.20	1-3/8"
8200.22	1-1/2"
8200.24	1-5/8"
8200.26	1-3/4"
8200.28	1-7/8"
8200.30	2"
8200.31	2-1/8"
8200.32	2-1/4"
8200.33	2-3/8"
8200.34	2-1/2"
8200.36	2-3/4"
8200.38	3"
8200.40	3-1/4"
8200.42	3-1/2"
8200.44	3-3/4"
8200.46	4"



Hand Dust Bellows

8205.00 530 mm L x 70 mm Ø



Automatic Glue Pots

Designed to melt and hold hot hide glue at correct temperature. Thermostatically controlled, 140° - 150° F, 120 VAC.

	Size	Shipping Weight
8210.01	1 quart	7 lbs.
8210.02	2 quart	8 lbs.
8210.03	4 quart	10 lbs.



8211.01 1 quart replacement liner
8211.02 2 quart replacement liner



Rawhide Hammer

Useful with arch punches.

8215.00 2-1/4 lb. - 1-3/4" Ø face
8215.01 Replacement faces



Leather Knives

	Blade	Blade Length	Total Length
8220.01	Rigid	2-3/4"	6-7/8"



8220.02 Flexible 3-7/8" 8"



8220.03 Square point 6-7/8" 10-1/8"



Organ Knife

8225.00 3-7/8" blade, 8" L



Rotary Cutter

Perfect tool for cutting rubber cloth, felt and leather. Razor sharp, retractable blade rolls for effortless cutting. Replaceable blade can be mounted for left hand use. Contoured handle reduces fatigue. Convenient hang hole for storage. Easy to use.

- 8228.00** Rotary cutter
- 8228.01** Replacement rotary blade, 45 mm



Skinning Knife

Skinning knife is a rugged tool with a sharp, detachable blade which may be reversed inside of hollow handle. Replacement blades available separately.

5" L open

- 8229.00** Skinning knife
- 8229.01** Skinning knife blade



Nut & Allen Key Spinner

- 8230.00** Hexagonal socket with handle for 4 mm hexagonal screws on ring terminals.

8-3/4" L



- 8230.01** Allen key with handle for 1.5 mm Allen set screws on ring terminals.

11-5/8" L



Pallet Spring Pliers

- 8235.00** Nickel plated steel. 320 mm L



Pallet Spring Puller

- 8236.00** Phosphor Bronze pallet puller, .250 Ø Brass Handle,

429 mm L



Pin Vise

- 8240.00** Parallel, three jaw chuck on a knurled, hollow brass handle for use with long wires.

4.72" L O.A.
Chuck Capacity 0. - 0.10"



Keyless Chuck

- 8241.00** Parallel, three jaw chuck with hex shank for use with hex driver.



Threaded Insert Drive Tools

Recommended for installation of threaded inserts, these drive tools provide more positive engagement and efficient installation of inserts. Fits standard hex socket, most screw guns, or can be chucked in reversible drill.

Insert Sizes	L
8246.10 10-24 & 10-32 & 12-24	1-7/8"
8246.16 1/4-20	1-15/16"



Fine Wood Backsaw

Reversible handle for push or draw operation.

8245.00 Blade. 250 mm, 380 mm L



Knob Handled Screw Driver

8250.00 Wood handle.

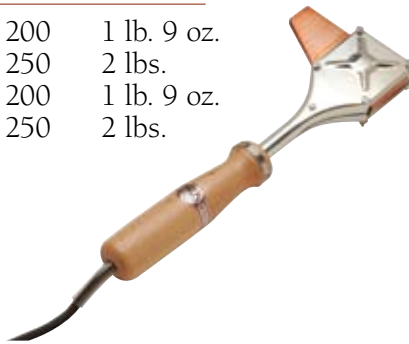
45 mm Ø x 50 mm L



Soldering Irons

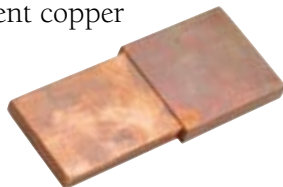
Designed for pipe making and repair.

	<u>Volts</u>	<u>Watts</u>	<u>Net Wt.</u>
8255.10	110	200	1 lb. 9 oz.
8255.12	110	250	2 lbs.
8255.20	220	200	1 lb. 9 oz.
8255.22	220	250	2 lbs.



8255.30 200W replacement elements
8255.35 250W replacement elements

8255.51 200W replacement copper
8255.52 250W replacement copper



Wire Twister

8260.00 Double ended.

7/64" & 5/32" I.D.s. 7" L



GlockenZimbel

GlockZimbel models are supplied with 20 or 40 solid aluminum chime bars of varying length. Rotation speed controlled by on board potentiometer. Volume easily regulated by striker height. Solid State control allows for latch reversible or on/off stop control on existing or new installations.

Operating voltage 10 to 16 VDC, 5 Amp. 12-7/8" O.A. Height, Top 10-1/2" Ø

8508.11 GlockenZimbel 3/8", 40 Notes
8508.21 GlockenZimbel 1/2", 20 Notes



BLOWERS

The Ventus and Ventola line of blowers are engineered to be truly quiet. Silence is in the details: close tolerance sleeve bearings, dynamically balanced rotors and impellers, intake manifolds with flap valves and meticulous engineering attention paid to avoiding or canceling natural resonance in housings and mounting frames. Though all motors are three phase, those of 1 HP or less allow single phase operation through capacitors. Instructions and high quality synthetic oil are furnished with each unit. All blowers carry the CE Mark, indicating they satisfy world standard electrical safety certification requirements.

Ventola Blower

The compact pancake design of this unit makes it the ideal choice for Portative or Positiv organs, anywhere space is a concern. The 120 VAC, single phase capable, flange mounted motor runs at 3360 RPM and is mounted on a cast aluminum housing. Unit is complete with grounded cord set.



Ventus Blower

Available from .25 HP to 1 HP, these blowers supply most small to medium organ requirements. The 3360 RPM flange mounted motor is installed on a cast aluminum housing, furnished with a sound absorbant connecting flange. Blowers are shipped with capacitors for 120 or 240 VAC single phase operation, or for your specified voltage.

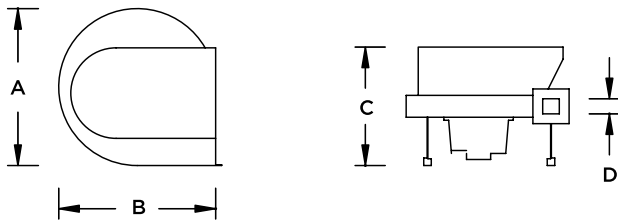


Ventus Slow Speed Blower

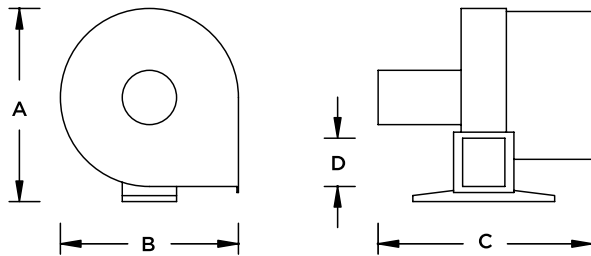
Where greater air volume is required for large instruments, the 2 HP and 3 HP slow speed blowers are advantageous. The rugged steel construction of the housing is supported on a welded steel frame. The 1680 RPM, 240 VAC motor is "ring" lubricated through a special oil reservoir equipped with a low oil warning indicator. THREE PHASE operation only.



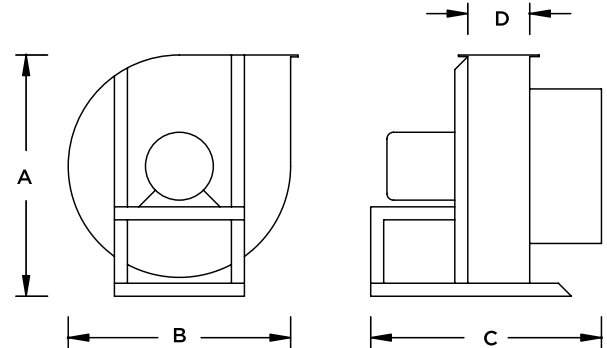
VENTOLA



VENTUS



VENTUS SLOW SPEED



Specifications

	HP	VAC	A	B	C	D W x H I.D.	Equivalent Ø	Net Wt. Lbs.
Ventola - 3360 RPM								
8610.10	0.10	120	8-7/8"	8-7/8"	3-7/8"	1-5/16" Ø	1-1/4"	6-1/4
8618.10	0.18	120	12-1/2"	12-1/2"	9-5/8"	2-7/8" x 2-11/16"	3"	20
Ventus - 3360 RPM								
8725.10	0.25	120	16-1/8"	14-11/16"	18-1/4"	3-1/2" x 4"	4"	48-1/2
8745.10	0.45	120	16-1/8"	14-5/8"	18-3/8"	4-1/8" x 4-1/16"	5"	50-1/2
8745.20	0.45	240	16-1/8"	14-5/8"	18-3/8"	4-1/8" x 4-1/16"	5"	50-1/2
8775.10	0.75	120	16-3/4"	14-5/8"	21-3/16"	4-15/16" x 4-7/16"	6"	77
8775.20	0.75	240	16-3/4"	14-5/8"	21-3/16"	4-15/16" x 4-7/16"	6"	77
8775.12	0.75	120	21"	18-7/8"	17"	2-3/4" x 3"	4"	75
8799.20	1.00	240	21"	19-1/4"	22-15/16"	5-7/16" x 5"	6"	105
Ventus Slow Speed - 1680 RPM								
8820.20	2.00	240 3Ø	35"	32"	35-3/4"	7" x 9-5/8"	10"	255
8835.22	3.00	240 3Ø	37"	35-1/4"	34-5/8"	7" x 9-11/16"	10"	354

Blower Performance Chart

HP	Static Wind Pressure	CFM at Wind Pressure												
		2"	3"	4"	5"	6"	7"	8"	9"	10"	11"			
8610.10	0.10	2"	36											
8618.10	0.18	3-1/8"	171	106										
Ventus														
8725.10	0.25	4-1/2"	320	227	169									
8745.10	0.45	5-1/2"	472	431	318	233								
8745.20	0.45	5-1/2"	472	431	318	233								
8775.10	0.75	5-3/4"	873	773	578	458	392							
8775.20	0.75	5-3/4"	873	773	578	458	392							
8775.12	0.75	12-3/4"	443	288	216	173	144	124	108	96	87	79		
8799.20	1.00	7-1/2"	1062	1002	919	746	604	512						
Ventus Slow Speed														
8820.20	2.00	9"		1948	1461	1169	974	835	730					
8835.22	3.00	10-3/4"				1813	1511	1295	1133	1007	907	824		

Ventus Current Requirements

Motor HP	Start	Run	Start	Run
	120 VAC	120 VAC	240 VAC	240 VAC
0.10	0.6	0.4	-	-
0.18	2.0	0.9	-	-
0.22	5.2	1.9	4.3	0.9
0.25	5.5	2.1	4.5	1.0
0.45	9.0	3.1	5.0	1.4
0.75	18.0	6.6	11.0	3.0
1.00	28.0	9.2	22.0	5.0
2.00			26.0	5.5
3.00			40.0	8.1

Capacitors For Ventus Blowers

The Ventus and Ventola high speed blowers employ three phase motors. For these blowers to run on single phase current, an appropriate start/run capacitor is installed in the circuit to provide a phantom third leg to assist the blower to start.

Each blower is furnished with the correct capacitor(s) for voltage ordered. Changing voltages without changing the matching capacitor(s) value will result in damage to the motor. Values of capacitors are additive when connected in parallel.

To select the correct capacitor(s) for your voltage, find your horsepower on the left and voltage across the top. Where that column and row cross is your capacitance range in microfarads (MFD). That number will lead you to the correct part number in the second chart.

Motor HP	MFD at Voltage				
	110 VAC	120 VAC	208 VAC	220 VAC	240 VAC
0.10	8-10	8-10	-	-	-
0.18	16	16	-	-	-
0.22	34-36	34-36	12	10	8
0.25	34-36	34-36	12	10	10
0.45	50-56	50-54	16	16	14
0.75	75-85	75-82	20	20	20
1.00	130	120	40	35	30

	MFD		MFD		MFD
8701.04	4	8701.20	20	8701.40	40
8701.10	10	8701.25	25	8701.50	50
8701.12	12	8701.30	30	8701.60	60
8701.14	14	8701.35	35	8701.80	80
8701.16	16				

Blower Oil

- 8900.02** Synthetic oil - 50 ml. for sleeve motors
8900.05 Oil for ring lubrication - 1 liter

Baffle Boxes

Attach directly to 3360 RPM Ventus blowers to quiet output turbulence.

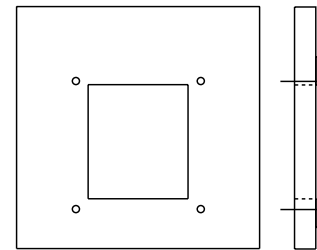
Blower Size	H x W x D	Outlet Dia.
8901.25 .25 HP	11-1/2" x 11-1/2" x 9-1/4"	4"
8901.45 .45 HP	11-1/2" x 11-1/2" x 9-1/4"	5"
8902.75 .75/1.00 HP	14-1/2" x 14-1/2" x 10-1/4"	6"
8902.76 .75 HP High Pressure	11-1/2" x 11-1/2" x 9-1/4"	4"



Ventus Adaptor Plates

Output plates attach directly to the Ventus blower outlet and permit the direct installation of PVC or Cast Aluminum flanges. Each adaptor plate is drilled and corked, ready to install on output hole of the blower.

	Blower Size	Flange Size	O.A. Dimensions
8910.25	.25 HP	4" to 6"	8-1/2" x 8-1/2" x 3/4"
8910.45	.45 HP	6"	8-1/2" x 8-1/2" x 3/4"
8910.75	.75 HP	8"	11" x 11" x 3/4"
8910.76	.75 HP High Pressure	4" to 6"	8-1/2" x 8-1/2" x 3/4"
8910.99	1.00 HP	8" to 10"	12-3/4" x 12-3/4" x 3/4"
8911.00	2.00 & 3.00 HP	10" to 12"	14-1/2" x 14-1/2" x 3/4"



Blower Sizing

Calculating the size of the blower for a pipe organ is based on the number of ranks in the organ and wind pressure of each division.

Each independent rank of pipes, manual or pedal, for calculation purposes is assumed to have 61 or more pipes and is counted as one (1) rank. Mixtures of II or more ranks are counted as one (1) rank. Celeste stops on one channel board with II ranks are counted as one (1) rank. For ranks of more than 61 pipes, use the following rank unit values.

61 notes or less.	1.00 rank
73 notes or less.	1.60 ranks
85 notes or less.	2.00 ranks
97 notes or less.	2.36 ranks

The following chart lists Cubic Feet per Minute or CFM for each unit or rank of 61 pipes at various wind pressures. It also lists nominal number of ranks that each blower can handle at different wind pressures. These values take into consideration normal sub and super couplers. The chart assumes that the blower will be located at sea level.

Wind Pressure	Average CFM/Rank	Ventus HP vs. Number of Rank Units					
		.25 HP	.45 HP	.75 HP	1 HP	2 HP	3 HP
3"	45	5	8	17	22	43	
3-1/2"	50	4	7	14	20	35	45
4"	54	4	6	11	17	27	40
4-1/2"	57		5	9	15	23	35
5"	60		4	8	12	20	30
6"	65			6	9	15	23
7"	68				8	12	19
8"	73			1 *		10	16
10"	80			1 *			11
12"	85			1 *			

* .75 HP 12-3/4" Static Pressure Blower

Note: Allowance should be made in the calculation for excessive wind leakage, large windways, large scaling, and consoles or swell shutter motors that may require pressures higher than pipes. For elevations over 1000 ft. above sea level, add an additional 1" of static wind pressure for each 2500 feet.

The sample stoplist which follows illustrates how the required CFM is calculated.

Pedal—32 notes, 4" wind pressure

			<u>Units</u>
16' Bourdon		44 pipes	1
16' Gedeckt	from Swell		
8' Principal		56 pipes	1
8' Bourdon	from 16'		
8' Gedeckt	from Swell		
4' Principal	from 8'		
4' Gedeckt	from Swell		
2' Principal	from 8'		
16' Trumpet		32 pipes	<u>1</u>
			3 units x 54 CFM = 162 CFM @ 4" WP

Great—61 notes, 3" wind pressure

			<u>Units</u>
8' Principal		61 pipes	1
8' Hohlflöte		73 pipes	1.6
8' Dulciana		61 pipes	1
4' Octave		61 pipes	1
4' Hohlflöte	from 8'		
2' Principal		61 pipes	1
IV Mixture		244 pipes	1
8' Trumpet		61 pipes	<u>1</u>
			7.6 units x 45 CFM = 342 CFM @ 3" WP

Swell—61 notes, 3" wind pressure

			<u>Units</u>
16' Gedeckt		97 pipes	2.36
8' Gedeckt	from 16'		
8' Viola		61 pipes	1
8' Celeste, tc		49 pipes	1
4' Spitzprincipal		73 pipes	1.6
4' Gedeckt	from 16'		
2-2/3' Gedeckt	from 16'		
2' Spitzprincipal	from 4'		
1' Gedeckt	from 16'		
8' Oboe		61 pipes	1
4' Clarion		61 pipes	<u>1</u>
			7.96 units x 45 CFM = <u>359 CFM</u> @ 3" WP 836 CFM

The example shows a total of 863 CFM required with the highest wind pressure of 4" and the lowest at 3". The majority of the requirement is 3" at 342 CFM + 359 CFM = 701 CFM. From the Blower Performance Chart on page 8-12, the blower most suited for this application would be the 1 HP Ventus. This blower produces 1002 CFM @ 3" WP and 919 CFM @ 4" WP. There is a sufficient volume of CFM @ 4" WP to support the Pedal. The static pressure of 7-1/2" is 3-1/2" above the required 4" wind pressure for the Pedal.

CHIMES

Craftsmanship and precision tuning of Mayland and Deagan Chimes have helped to set the standards for unsurpassed bell-like tone quality and purity of tone with a steady fundamental.

The layout of the action mounting bar is flexible and the many attractive or utilitarian arrangements of the individual notes are restricted only by your imagination.

Custom actions can be provided for existing Mayland and Deagan chimes with graduated tube diameters other than the standard 1-1/4" diameter tube. The largest and smallest tube diameters determine the size of the individual note actions and the length of the mounting rail.

Specifications

- Range:** 21 note, A-22 to F-43 chromatic.
25 note, G-20 to G-44 chromatic.
Custom actions as required.
- Tuning:** A = 440 Hz standard. Special pitch available at no additional cost.
- Layout:** The standard configuration is the diatonic or "W" formation.
Custom layouts per specifications.
- Parts:** All parts and chime tubes available separately.

DEAGAN CHIMES

Quality craftsmanship and precision harmonic tuning have been hallmarks of Deagan tubular chimes since 1868, providing traditional bell-like tonal quality and purity of tone.

The individual chime tubes are of highly polished seamless brass alloy, carefully lacquered for long lasting appearance. The tubes are suspended from an integrated, all-electric, solenoid note action. The built-in passive damper permits a natural bell-tone decay.

The layout of the action mounting bar is flexible and can provide many attractive visual or utilitarian arrangements of the individual notes, restricted only by your imagination. When the chimes are installed in the church sanctuary, an attractive, easily removable, medium oak canopy is available to cover the chime striking mechanism and mounting brackets. The canopy, also available in custom woods and colors, serves as mechanical protection and as a dust cover.

Deagan chimes are available in several attractive packages that are wired and ready to install. The packages start as small as just chime tubes, striking mechanism and power supply with volume control switch. Pre-wired cable of appropriate length can be added to this basic package. The other end of the cable can be wired to a free-standing chime keyboard, underkey contacts, or a multi-functional solid state relay.

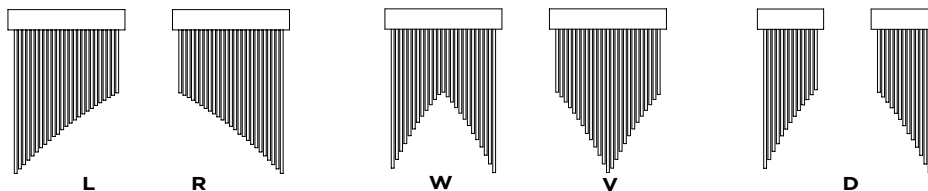
Custom actions can be provided for existing Deagan chimes with graduated tube diameters other than the standard 1-1/4" diameter tube. The largest and smallest tube diameters determine the size of the individual note actions and the length of the mounting rail.

Individual components are available for replacement needs. Single elements allow you to customize any installation for your particular needs.

Specifications



- Range:** 21 note, A-22 to F-43 chromatic.
25 note, G-20 to G-44 chromatic.
Custom actions as required.
- Chimes:** 1-1/4" bell metal seamless tubular brass.
- Finish:** Highly polished with a high quality clear lacquer finish.
- Tuning:** A = 440 Hz standard. Special pitch available at no additional cost.
- Dimensions:** 21 note set: 68" H x 44" W x 8" D includes canopy.
25 note set: 72" H x 51" W x 8" D includes canopy.
- Layout:** The standard configuration is the diatonic or "W" formation. The reverse diatonic or "V" formation, the left to right "L," the right to left "R," and the divided "D" configurations are also available. Custom layouts per specifications.
- Parts:** All parts and chime tubes available separately.



MAYLAND CHIMES

Since 1866, Mayland Chimes craftsmanship and precision tuning have set the standard for unsurpassed bell-like tone quality with a steady fundamental.

The individual chime tubes are of special bell alloy solid aluminum bar, gold lacquered for long lasting appearance. The tubes are suspended from an integrated, all-electric, solenoid note action with side hangers. The built-in passive damper permits a natural bell-tone delay.

The layout of the action mounting bar is flexible and the many attractive or utilitarian arrangements of the individual notes are restricted only by your imagination. When the chimes are installed in a visible location, a decorative and easily removable medium oak canopy is available to cover the chime-striking mechanism and mounting brackets. The canopy, also available in custom woods and colors, serves as both a mechanical protection and a dust cover.

Mayland chimes are available in several attractive packages that are wired and ready to install. The packages start as small as just chime tubes, striking mechanism, and power supply with volume control switch. Pre-wired cable of appropriate length can be added to this basic package. The other end of the cable can be wired to a free-standing chime keyboard, underkey contacts, or a multi-functional solid state relay.

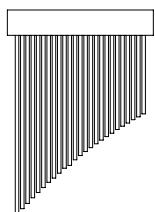
Custom actions can be provided for existing Mayland chimes with graduated tube diameters other than the standard 1-1/4" diameter tube. The largest and smallest tube diameters determine the size of the individual note actions and the length of the mounting rail.

Individual components are available for replacement needs. Single elements allow you to customize any installation for your particular needs.

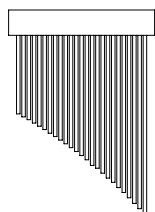
Specifications



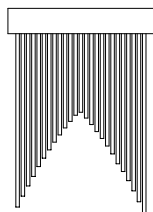
- Range:** 21 note, A-22 to F-43 chromatic.
25 note, G-20 to G-44 chromatic.
Custom actions as required.
- Chimes:** 1-1/4" solid alloy aluminum Bar.
- Finish:** Brilliant gold lacquer finish is standard. Satin silver or highly polished with a high quality clear lacquer finish available on special order.
- Tuning:** A = 440 Hz standard. Special pitch available at no additional cost.
- Dimensions:** 21 note set: 71" H x 44" W x 8" D includes canopy.
25 note set: 76" H x 51" W x 8" D includes canopy.
- Layout:** The standard configuration is the diatonic or "W" formation. The reverse diatonic or "V" formation, the left to right "L," the right to left "R," and the divided "D" configurations are also available. Custom layouts per specifications.
- Parts:** All parts and chime tubes available separately.



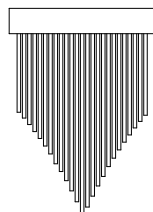
L



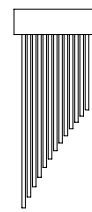
R



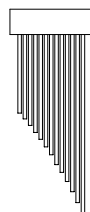
W



V



D



DEAGAN and **MAYLAND** Chime Packages

The basic chime package provides the materials necessary to install a Deagan or Mayland 21 or 25 note chime set. Included are the chime tubes, hanging cords, and electric action assemblies mounted on an oak rail, wired out with 50 feet of chime cable. A universal 120 VAC transformer with bridge rectifier is wired 6 feet to the volume control switch. Complete installation instructions are included with each package.

These packages may be further enhanced with essential keying systems including underkey contacts for mechanical action or pneumatic instruments, a standard keyboard for a stand-alone installation, or an electro-mechanical or solid state note relay for electric action or solid state controlled instruments. Additionally, both a solid state and electro-mechanical transformer relay are available where remote location and switching of the transformer output taps is desirable. Wall brackets simplify installation. The standard canopy adds the finishing touch to a visual installation.

Custom packages are designed for your particular requirements.

8321.01 21 note Deagan class "M" chime package
8421.01 21 note Mayland 1-1/4" chime package

8325.01 25 note Deagan class "M" chime package
8425.01 25 note Mayland 1-1/4" chime package

Unwired packages include chime tubes, hanging cords, electric action assembly, universal 120 VAC transformer, bridge rectifier and volume control.

8321.03 21 note Deagan class "M" chime package, unwired
8421.03 21 note Mayland 1-1/4" chime package, unwired

8325.03 25 note Deagan class "M" chime package, unwired
8425.03 25 note Mayland 1-1/4" chime package, unwired

Chime Tubes

21-note, 25-note, and custom chime tube sets are available, as are individual tubes. Deagan chime tubes are 1-1/4" diameter polished and lacquered brass. Hole for hanging cord is 1" from top of tube. Mayland chime tubes are 1-1/4" solid aluminum bar that are lacquered brilliant gold. Hole for hanging cord is 2-1/2" from top of tube. Chime cords are furnished with sets and with individual tubes.

Chime Tube Sets

8321.50	21 note Deagan class "M" chime set, A to F
8325.50	25 note Deagan class "M" chime set, G to G
8421.50	21 note Mayland 1-1/4" chime set, A to F
8425.50	25 note Mayland 1-1/4" chime set, G to G

Individual Chime Tubes

	Deagan Tube Pitch	Nominal O.A. Length		Mayland Tube Pitch	Nominal O.A. Length
8325.20	low G	66-7/8"	8425.20	low G	70-7/8"
8325.21	low G#	64-15/16"	8425.21	low G#	68-7/8"
8325.22	low A	63"	8425.22	low A	67"
8325.23	low A#	61-1/8"	8425.23	low A#	65"
8325.24	low B	59-5/16"	8425.24	low B	63-1/8"
8325.25	low C	57-1/2"	8425.25	low C	61-3/8"
8325.26	low C#	55-7/8"	8425.26	low C#	59-1/2"
8325.27	low D	54-3/16"	8425.27	low D	58"
8325.28	middle D#	52-1/2"	8425.28	middle D#	56-1/4"
8325.29	middle E	51-1/16"	8425.29	middle E	54-1/2"
8325.30	middle F	49-1/2"	8425.30	middle F	53-1/2"
8325.31	middle F#	48-1/16"	8425.31	middle F#	51-1/2"
8325.32	middle G	46-9/16"	8425.32	middle G	50"
8325.33	middle G#	45-1/4"	8425.33	middle G#	48-9/16"
8325.34	middle A	43-15/16"	8425.34	middle A	47-3/16"
8325.35	middle A#	42-9/16"	8425.35	middle A#	45-13/16"
8325.36	middle B	41-1/4"	8425.36	middle B	44-1/2"
8325.37	high C	40"	8425.37	high C	43-1/4"
8325.38	high C#	38-7/8"	8425.38	high C#	42-1/16"
8325.39	high D	37-11/16"	8425.39	high D	40-3/4"
8325.40	high D#	36-9/16"	8425.40	high D#	39-9/16"
8325.41	high E	35-3/8"	8425.41	high E	38-7/16"
8325.42	high F	34-5/16"	8425.42	high F	37-1/4"
8325.43	high F#	33-1/4"	8425.43	high F#	36-1/4"
8325.44	high G	32-1/4"	8425.44	high G	35-3/16"

Chime Twine

8500.63 Chime twine is furnished with chime packages and with chime tube sets. It is made from nylon filament to prevent elongation and is pre-cut to overlength dimension. Cut ends can be stabilized with a heat gun or soldering iron.

1/8" Ø x 18" L

Spacer Block

8500.87 The spacer block is used to tie the chime cords prior to hanging chimes.

1-1/2" W x 1-1/2" L x 15/16" H

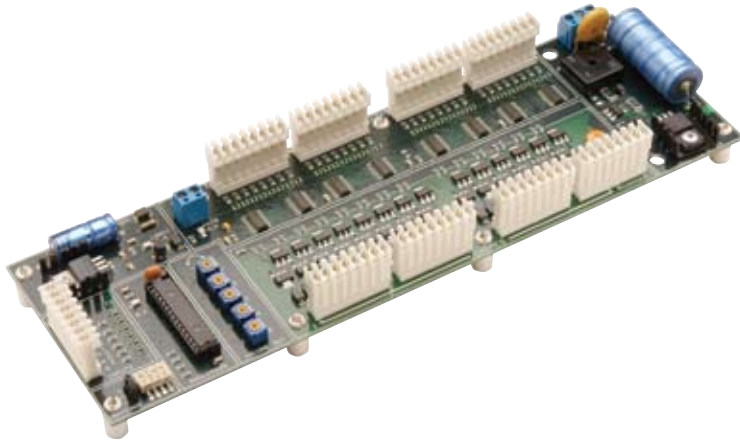
CHIME RELAYS

Solid State Chime Relay

The new concept 28 note chime relay design integrates previously separate chime system components with new capabilities providing unsurpassed installation flexibility. A 30 VAC transformer or the highest tap from an existing chime transformer provides power to the onboard rectifier. Key, volume, and stop inputs can be activated from organ contacts, multiplex systems, or from a chime keyboard powered by the onboard 12 VDC source. Chime board output can be switched on/off by a conventional volume control switch, an onboard stop setting, or by a stop control in the console. Input from the key commands the processor to deliver a constant voltage pulse to the chime coil. Pulse duration determines volume level. Up to five independent board adjustable volume levels can be selected through a traditional console mounted rotary switch. The processor controlled pulsed note output renders the system chord and held-note tolerant. Self-resetting circuit breakers eliminate fusing. Six mounting holes are provided for the No. 6 x 1" mounting screws.

3-1/2" W x 10-3/4" L x 1-3/8" H

- 8510.25** Solid State Chime Relay, 28 notes
- 0280.261** 8 Position IDC Chime Relay Connector
- 0280.262** Connector Cap



Electro-Mechanical Chime Relay

Electro-mechanical, single pole, single throw relays are mounted on a PC board with input and output mains installed. The 25 note relays have a fused 12 VDC input and 5A 12-25 V output contacts. Six mounting holes are provided for No. 8 x 1" mounting screws.

4-1/4" W x 9-1/8" L x 1-1/8" H

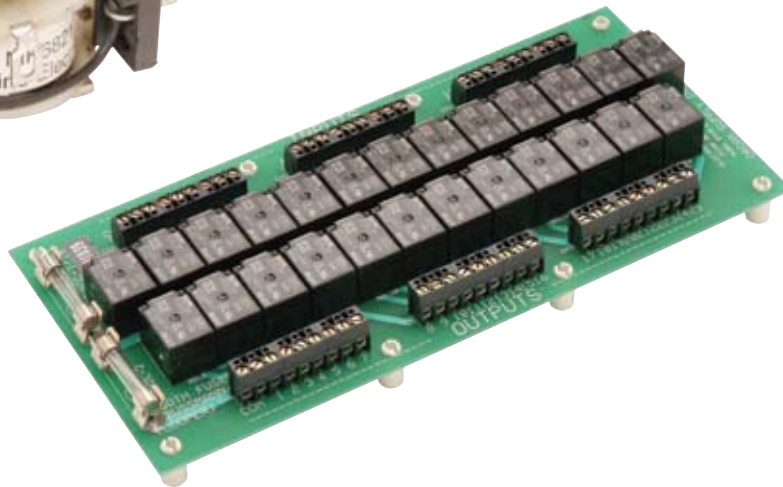
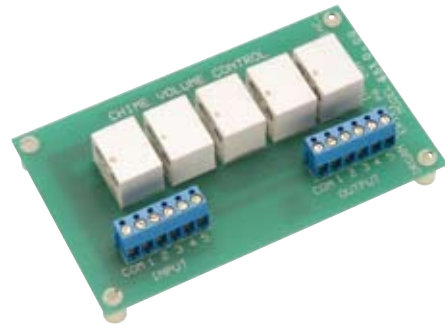
The five-note electro-mechanical volume control relay is used in installations where the organ is multiplexed and volume control must be mounted in the console. This allows the transformer to be installed and switched in the organ. Transformer is disconnected from the chimes when organ is "off." Four mounting holes are provided for No. 8 x 1" mounting screws.

3" W x 5" L x 1-1/8" H

Individual electro-mechanical relays are available for replacement use.

1-11/16" L x 1" W x 1-5/16" H

- 8510.00** Individual mechanical relay
- 8510.06** Mechanical volume control relay, 5 note
- 8510.26** Mechanical relay assembly, 25 note
- 5051.01** AGC .1 Ampere Fuse



Electric Chime Actions

The Deagan and Mayland chime actions are of electric solenoid design. The spring-returned, chrome plated striking core is attached to an adjusting screw at the back of the assembly to facilitate smooth regulation. The retaining screw and striking assembly are easily removed by depressing the retaining clip. The passive, weighted felt damper matches the chime tube diameter for correct tonal decay. The 5/16" chime tip is constructed for optimum tonal production. Two mounting holes accept No. 8 x 3/4" screws. The 5 ohm DC coil has a 220 ohm resistor installed for arc suppression. Wiring is terminated on the brass nut terminals. Actions are mounted on a 1-1/4" x 3-1/2" finished oak beam. The Deagan and Mayland chime tube hanging holes are located in different positions. Therefore the hanging arrangement of the two units is different. The Mayland unit adds a hanging cord standoff on either side of the standard 1-1/4" tube.

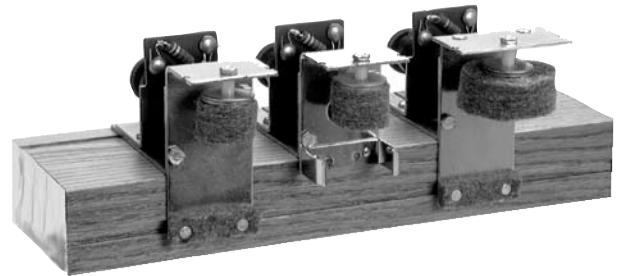
Custom electric chime actions are available for existing chime sets having diameters other than 1-1/4". For larger tube diameters, the Deagan action is utilized with the addition of a hanging plate and a passive damper for the corresponding tube sizes. Diameters and pitches of the largest and smallest tubes are required when ordering custom actions.

Deagan individual chime action is 1-3/4" W x 4-3/4" L x 2-3/8" above mounting rail with 1-1/4" below front of mounting rail.

Mayland individual chime action is 1-3/4" W x 4-3/4" L x 2-3/8" above mounting rail, with 1/4" below front of mounting rail.

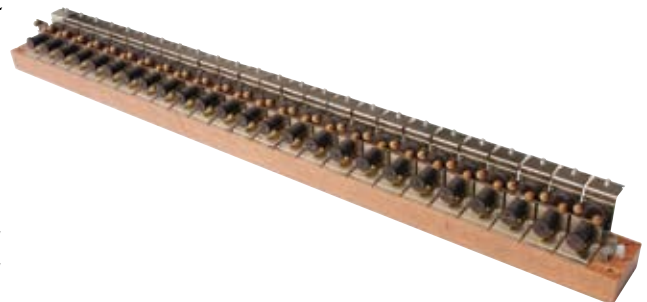
Custom individual Deagan chime actions range up to 2-1/2" W x 5-1/2" L x 2-3/8" above mounting rail, with 1-1/4" below mounting rail.

- 8500.83** Individual Deagan action w/passive damper
- 8500.84** Individual Mayland action w/passive damper
- 8500.85** Custom individual Deagan action w/passive damper
- 8500.82** Individual striker tip. .310" Ø x 1/4" T



Deagan Mayland Custom

	Description	Total Length
8583.20	20 note Deagan	40-7/8"
8584.20	20 note Mayland	40-7/8"
8585.20	20 note Deagan Split Rail	22-1/8" x 2
8586.20	20 note Mayland Split Rail	22-1/8" x 2
8583.21	21 note Deagan	42-3/4"
8584.21	21 note Mayland	42-3/4"
8585.21	21 note Deagan Split Rail	24" x 2
8586.21	21 note Mayland Split Rail	24" x 2
8583.25	25 note Deagan	50-1/4"
8584.25	25 note Mayland	50-1/4"
8585.25	25 note Deagan Split Rail	27-3/4" x 2
8586.25	25 note Mayland Split Rail	27-3/4" x 2
8583.30	Custom Action	



Underkey Contacts

Underkey contact assemblies are designed for use on mechanical or pneumatic action keyboards where external contacts must be added to play the chimes from the organ keyboard. The underkey contacts can also be mounted under electric or electronic action keyboards where extra contacts are required or when it is appropriate to isolate the chime circuits. The sturdy leaf switches are capable of handling a 5 ohm load. Installation usually requires an adjusting screw be installed on the underside of each key in the chime range. These felted screw heads depress the leaf spring contacts of the assembly.

15-3/16" L x 2-5/16" D x 3/8" T

- 8520.21** 21 note key contact assembly
- 8520.25** 25 note key contact assembly



- 8520.00** Single note key contact unit

Multi-Tap Transformer

Power for organ chimes is provided by a universal multi-tap, multi-voltage 120 VAC transformer. This unit, much like a door bell transformer, is designed to be plugged in and left running at all times. The universal 10-28 VAC transformer is furnished with the chime packages. Each transformer has 6 selectable voltage taps. A 6' cord set is provided.

3-3/4" W x 4" D (including lugs)
x 3-1/8" H

- 8530.15** Universal 120 VAC transformer, 10-28 VAC output



Chime Transformer

- 8530.14** 30 Volt, 5 AMP Transformer for use with Solid State Chime Relay

15-3/16" L x 2-5/16" D x 3/8" T

Bridge Rectifier

8530.20

A full-wave bridge rectifier is used on the secondary side of the transformer. DC current provides a more powerful stroke on the chime solenoid. The bridge rectifier is furnished as standard equipment with all chime packages and is recommended for use when new actions are installed on older chime tubes. Unit is provided with a center screw mounting hole and four spade terminals.

1-1/8" x 1-1/8" (including lugs) x 11/16" H



Chime Keyboards

Where it is not convenient to connect the chimes to the organ keyboard, a free-standing keyboard with built-in volume control is available. This unit can be furnished independently or wired to a chime package. It is mounted on an aluminum plate designed to be secured under an existing keyboard or attached to an external frame. The case is medium rubbed walnut. The 3-1/2" synthetic keys activate sturdy leaf switches capable of handling a 5 ohm load. 21 note unit is 15-1/2" L x 6-5/8" D (includes 1-7/8" mounting plate) x 2-3/8" T. 25 note unit adds 1-3/4" to length, all other dimensions remain the same.

8540.21

21 note keyboard with volume control

8540.25

25 note keyboard with volume control



Volume Control Switch

8530.05

The attractive volume control switch with gold colored plate permits the organist to choose among one of 5 power levels and "off." This unit is used to switch the appropriate voltage taps of the chime transformer. It is furnished with a black knob and either a Deagan or Mayland switch plate. Unwired.



Chime Canopy

Made from select oak veneers, the chime canopy provides a handsome cap or finish to an exposed set of chimes. The standard canopy is finished in medium oak and is complete with either of the attractive Deagan or Mayland nameplates. The canopy is designed to be used in conjunction with the heavy duty wall brackets 8570.10. The canopy simply sits on and is supported by the brackets. Custom-built canopies are provided in your choice of wood and finish.

8560.21 Standard 21 note canopy

44-3/8" L x 9" H x 8-1/4" D

8560.25 Standard 25 note canopy

51-7/8" L x 9" H x 8-1/4" D

8560.10 Custom canopy finished to sample



Wall Brackets

Welded steel wall brackets are provided in two sizes, for use with and without canopy. All brackets are constructed from 1/8" x 1-1/4" painted steel and are configured so that chimes mount in correct relationship to the wall and to the chime canopy, if used. Four 1/4-20 x 2-1/4" mounting bolts and two No. 8 x 3/4" RHWS furnished.

8570.00 Standard wall brackets
(w/o canopy use)

8-1/2" H x 6-1/8" D



8570.10 Heavy duty wall brackets
(for canopy use)

8-1/2" H x 7-3/16" D



Chime Cable

Because of the greater current requirements of chime coils, all chime cables are specially constructed from 18 or 22 gauge wire. All wire is color coded for ease of installation.

It is recommended that this cable be used between chime actions and keyboard, underkey contacts or relay assemblies to avoid line voltage drop and soft chime notes.

	Description	No. Conductors	B & S Gauge
5160.08	Volume control/transformer cable	8	18
5160.21	21 note cable	25	22
5160.25	25 note cable	30	22
5160.40	25 note cable	40	22

Floor Stand

8580.00

A floor stand is available for situations where permanent installation of chimes on existing walls or organ structure is not practical. The floor stand provides an alternative method of display. The attractive, massive oak stand is finished in medium oak and matches the standard canopy. The floor stand comes in one size and will accommodate 20, 21, or 25 note chime sets. It is shipped knocked down and is easily assembled.

8570.10 heavy duty wall brackets must be ordered separately when used for canopy support. Unit is 74-1/2" H to the top of the action rail and occupies a floor footprint of 17" D x 39-3/4" W.



PIPES & SUPPLIES

ORGAN PIPES

Organ Supply Industries is justly proud of the high quality, American-made pipework we provide for our customers. Each pipe is carefully crafted to your specifications by our experienced pipe makers in our Erie, PA workshop, then carefully voiced to your instructions. A Check Sheet is provided for Metal Flues, for Wood Pipes, and for Reed Pipes to assist you in preparing your custom order. The following construction information outlines some of the many variations in details that can be provided for each kind of pipe.



METAL FLUE PIPES



Pipe Metal Alloys

Metal used for organ pipes consists of alloys of tin and lead in various percentages. The metal compositions used are selected for visual or tonal reasons.

The basic organ metal alloys are:

- A) 30% tin, 70% lead, (common metal) planed on top side
- B) 50% tin, 50% lead, (spotted metal) planed on linen side
- C) 75% tin, 25% lead, (plain tin) planed on both sides
- D) Antimonial lead, 94% lead, 6% antimony

Zinc

Large bass pipes, customarily longer than 4' C, are generally made from organ quality zinc. Zinc can be finished in several ways depending on the visual result required. Zinc pipe standard finish is aluminum colored lacquer which approximates the color of natural zinc. When zinc pipes are exposed or to be used in a facade, they can be finished in gold or aluminum colored lacquer or highly polished and lacquered to look comparable to polished tin pipes.

Copper

Copper pipes can be used visually with great effect in the 16' and 8' range. Copper pipes can be finished in a number of ways; plain so that they develop their own patina, flamed and lacquered gives them a variegated and interesting pattern, or they can be highly polished and lacquered.

Mouth Inserts

The soldered-in mouth inserts for zinc or copper pipes are antimonial lead. Common metal, spotted metal, or 75% tin lips are options for visual reasons. Polished copper and polished zinc pipes are furnished with 75% tin upper and lower lips.

CONSTRUCTION DETAILS

Scaling

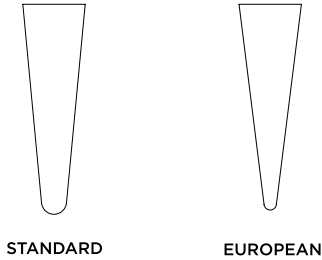
Scaling of organ pipes or the determination of pipe diameter is based on the 17th pipe being 1/2 the diameter of pipe #1 and is called normal 17th halving or Normalmensur, $1:\sqrt[17]{8}$. The 17th halving or Normalmensur chart shows the relationship between millimeters and corresponding scale numbers. All starting scales are based on this chart. 17th halving ratios are normal for Principals. Flutes and strings may use other ratios. When halving ratios other than 17th are requested, the halving begins with the dimension of C-1. Variable halving ratios are a viable alternative.

17th Halving or Normalmensur, $1:\sqrt[17]{8}$

	32'		16'		8'		4'		2'		1'		1/2'		1/4'		1/8'		1/16'	
	mm	scale	mm	scale	mm	scale	mm	scale	mm	scale	mm	scale	mm	scale	mm	scale	mm	scale	mm	scale
C 1	439.7	20	261.5	32	155.5	44	92.4	56	54.9	68	32.6	80	19.3	92	11.5	104	6.8	116	4.0	128
C# 2	421.2	21	250.4	33	148.9	45	88.5	57	52.6	69	31.3	81	18.6	93	11.0	105	6.5	117	3.9	129
D 3	403.2	22	239.8	34	142.6	46	84.7	58	50.4	70	29.9	82	17.8	94	10.5	106	6.3	118	3.7	130
D# 4	386.2	23	229.6	35	136.5	47	81.1	59	48.2	71	28.7	83	16.9	95	10.1	107	6.0	119	3.6	131
E 5	369.9	24	219.9	36	130.7	48	77.7	60	46.2	72	27.4	84	16.3	96	9.7	108	5.7	120	3.4	132
F 6	354.1	25	210.6	37	125.2	49	74.4	61	44.2	73	26.3	85	15.6	97	9.3	109	5.5	121	3.3	133
F# 7	339.1	26	201.6	38	119.9	50	71.3	62	42.3	74	25.2	86	14.9	98	8.8	110	5.2	122	3.1	134
G 8	324.7	27	193.1	39	114.8	51	68.2	63	40.5	75	24.1	87	14.3	99	8.5	111	5.0	123	3.0	135
G# 9	311.0	28	184.9	40	109.9	52	65.3	64	38.8	76	23.1	88	13.7	100	8.1	112	4.8	124	2.8	136
A 10	297.8	29	177.1	41	105.3	53	62.6	65	37.2	77	22.1	89	13.1	101	7.8	113	4.6	125	2.7	137
A# 11	285.2	30	169.5	42	100.8	54	59.9	66	35.6	78	21.1	90	12.6	102	7.4	114	4.4	126	2.6	138
B 12	273.1	31	162.3	43	96.5	55	57.4	67	34.1	79	20.2	91	12.0	103	7.1	115	4.2	127	2.5	139

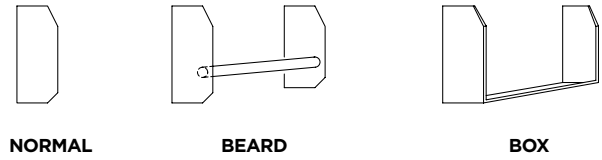
Feet

Pipes are provided with standard feet. European style feet with a greater taper are available. Either of these styles can have open or closed toes. The 16' pipes are normally furnished with open toes and the 8' and 4' zinc or copper pipes with cast metal toes.



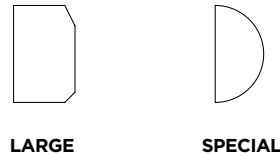
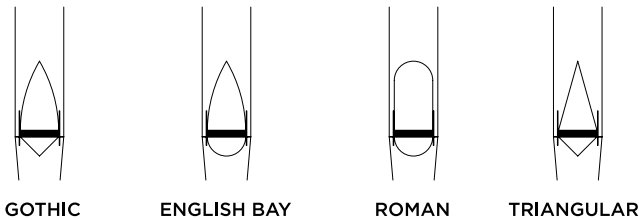
Ears

Ears are normally provided up to 1' E and come in several forms. The normal ear is illustrated first. On string pipes, beards or rollers are usually provided between the ears to stabilize pipe speech. For Quintadena pipes or small scale Flute basses, box beards are often provided. Rohrflutes and Gedeckts have large ears for stability of sound and/or tuning aids. For visual or aesthetic reasons, special shaped ears are also possible.



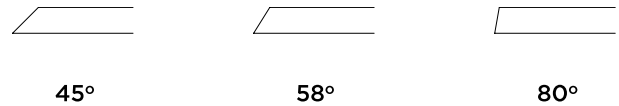
Mouth Style

The upper and lower lips of organ metal pipes are pressed down (flattened). On zinc or copper pipes, the upper and lower lips are soldered in. The normal mouth form is Gothic. Other choices include: English Bay, Roman, and Triangular styles of mouth. These styles can also be provided with the upper and/or lower lip slightly raised.



Languids

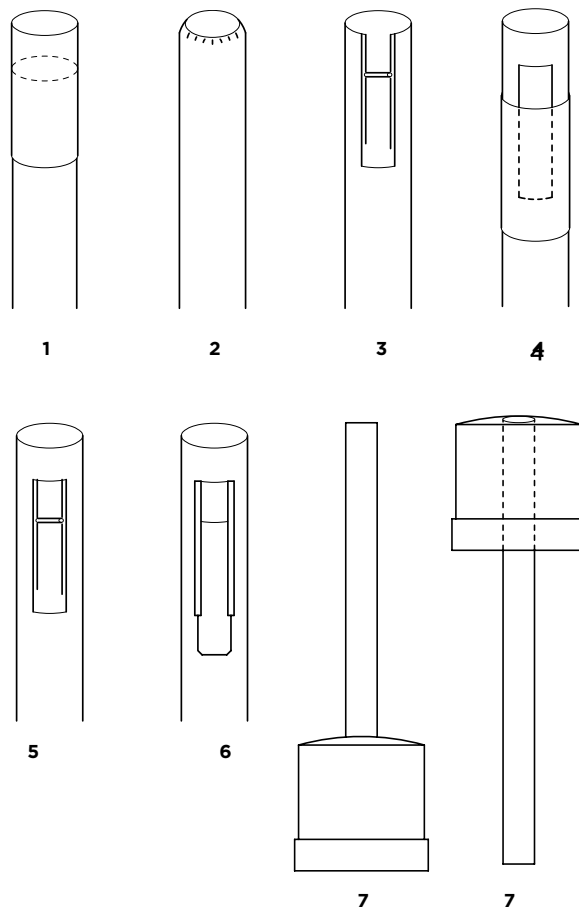
Normal languid bevel is 58°. Other languid bevels from 45° through 80° are available. Languid thickness is substantial and in direct proportion to the mouth width of the pipe.



Tuning Methods

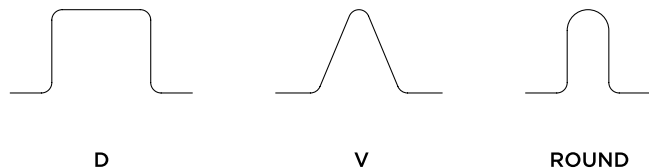
There are six basic styles of tuning devices for open flue pipes. They are:

1. Dead length with cylindrical tuner. On larger scaled pipes, springs are installed to add tension to tuner. Used on zinc, copper, and organ metal pipes.
2. Cone tuning for organ metal pipes. Normally from 2/3' G up.
3. Scroll tuner rolled from top of pipe. On zinc and copper pipes, an organ metal insert is provided in which slot is cut and rolled. On organ metal pipes, slot is cut and rolled in body up to 2/3' F#.
4. Slotted length with cylindrical tuner. Used on zinc and organ metal pipes.
5. Slotted length for roll tuning. An organ metal insert is provided in zinc and copper pipes in which a slot is cut and rolled. On organ metal pipes, slot is cut and rolled directly in body of the pipe.
6. Slotted length with track tuner. For zinc and copper pipes only, suggested for facade pipes that may be just out of reach.
7. Capped metal pipes have larger caps packed with felt. The smallest capped pipes are packed with paper. The tops of all capped flue pipes are slightly domed to provide rigidity and tuning stability.



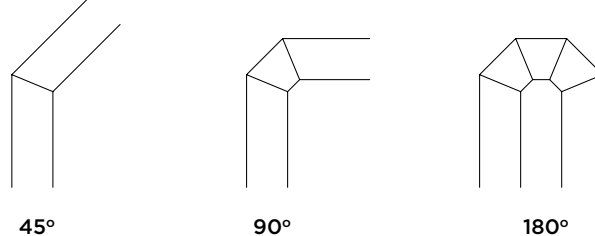
Pipe Hooks

Pipe hooks on larger pipes made of copper or zinc can be provided in three shapes: the D hook, the V hook (standard), and the round hook. Hooks are secured to zinc and copper pipes with pop rivets and soldered. On organ metal pipes, pipe hooks of the same metal are soldered on.



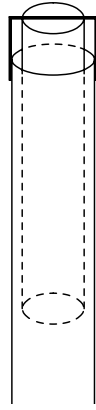
Mitering

Where sufficient height is not available, pipes can be mitered up to 180°. 90° miters are made with two cuts and 180° miters have four cuts and are securely braced. Good organ building practice suggests that the miter start no lower than 2/3 of body length. If a shorter pipe is required, a Haskell or stopped bass is an alternative.



Haskell Pipes

Where height and depth is a problem, Haskell pipes can be provided. These pipes are essentially fractional length with an internal tube which allows the pipe to speak the pitch of a full length pipe. The tone is slightly altered by the internal tube, having a trace more string quality.



9075.02

Treble Pipes

When an existing stop is to be extended by several notes or several octaves, where possible, stock treble spotted metal pipes, complete with slide tuners, are used. Matching pipes of spotted metal, common metal, or 75% tin can be provided. For best tonal and scaling match, the last existing pipe and wind pressure on which it is voiced should be furnished.

Voicing

Pipes are provided voiced, pre-voiced (cutup only), or unvoiced. Fill in all information requested on the Metal Pipe Check Sheet. This includes starting scale, material of the pipes, wind pressure, pitch (A=440 Hz), open or closed toes, chest type, and voicing instructions, including placement, room size, and any other information that would be helpful to the voicer.

9035.00

Pipe Repair

Our pipe shop is equipped to repair individual damaged metal flue pipes or to provide faithful replacement pipes for those missing from an incomplete set. When a pipe is to be repaired or replaced, the pipe on either side of the damaged or missing pipe is essential, along with operating wind pressure, so that a proper match for both scaling and voicing can be obtained. Pricing can be furnished after inspection of pipes to be repaired or replaced.

Standard Pipe Construction

Standard pipe construction includes zinc pipes with Gothic mouths, slide tuners or caps, finished in standard aluminum lacquer. Spotted metal pipes have pressed down (flattened) mouths and slide tuners or caps. All standard pipework employs an appropriate halving ratio, 58° languid bevel, and standard feet.

Custom Pipe Construction

All flue pipework is handcrafted in our plant. Customization to provide special scaling and special constructions is easily accommodated to your specifications for any flue pipework.

Flue Revoicing

9030.00 Older flue pipes in good physical condition can often be recycled and revoiced at a savings. Pipes will be accepted for revoicing provided they are of good manufacture, show no metal fatigue, and are not badly torn or mishandled. Pipes are washed and minor repairs are made. New tuning slides are installed as required and pipes are revoiced consistent with new tonal requirements, wind pressure, and customer instructions.

Mixture Compositions

The basic mixture formulas listed follow generally accepted norms and are based on 48 scale, 130.7 mm at 8' C. Mixtures with other formulas and scaling are easily provided.

II Mixture (12-15) No breaks

III Mixture (15-19-22)

#1-24	#25-48	#49-61
15	12	8
19	15	12
22	19	15

III Mixture (19-22-26)

#1-24	#25-36	#37-48	#49-61
19	15	12	8
22	19	15	12
26	22	19	15

III Mixture (22-26-29)

#1-12	#13-24	#25-36	#37-48	#49-61
22	19	15	12	8
26	22	19	15	12
29	26	22	19	15

IV Mixture (12-15-19-22)

#1-24	#25-48	#49-61
12	8	5
15	12	8
19	15	12
22	19	15

IV Mixture (15-19-22-26)

#1-24	#25-36	#37-48	#49-61
15	12	8	5
19	15	12	8
22	19	15	12
26	22	19	15

IV Mixture (19-22-26-29)

#1-12	#13-24	#25-36	#37-48	#49-61
19	15	12	8	5
22	19	15	12	8
26	22	19	15	12
29	26	22	19	15

V Mixture (15-19-22-26-29)

#1-12	#13-24	#25-36	#37-48	#49-61
15	12	8	5	1
19	15	12	8	5
22	19	15	12	8
26	22	19	15	12
29	26	22	19	15

Metal Flue Pipes

	Pitch/Stop	Normal Scale	Scale Range mm	Mouth Width	Halving	Number of Pipes Zinc	S.M.
Principals							
11600.00	16' Principal	30 - 38	286 - 202	1/4	17	12	
10800.00	8' Principal	42 - 50	170 - 120	1/4	17	12	49
10400.00	4' Octave	56 - 62	92 - 71	1/4	17		61
10220.00	2-2/3' Twelfth	64 - 70	65 - 50	1/4	17		61
10200.00	2' Fifteenth	70 - 76	50 - 39	1/4	17		61
10110.00	1-1/3' Quint	77	37	1/4	17		61
10100.00	1' Principal	84	27	1/4	17		61
Mixtures							
20020.00	II (12-15)	48 @ 8'	48-52 @ 8'	1/4	17		122
20030.00	III (15-19-22)	48 @ 8'		1/4	17		183
20030.00	III (19-22-26)	48 @ 8'		1/4	17		183
20030.00	III (22-26-29)	48 @ 8'		1/4	17		183
20040.00	IV (12-15-19-22)	48 @ 8'		1/4	17		244
20040.00	IV (15-19-22-26)	48 @ 8'		1/4	17		244
20040.00	IV (19-22-26-29)	48 @ 8'		1/4	17		244
20050.00	V (15-19-22-26-29)	48 @ 8'		1/4	17		305
Capped Flutes							
31600.00	16' Gedeckt	38 - 40	202 - 185	1/4	17	12	
31601.00	16' Quintadena	42 - 44	170 - 156	1/4	17	12	
30800.00	8' Gedeckt/Bourdon	48 - 52	131 - 110	1/4	20	12	49
30803.00	8' Rohrflöte	48 - 50	131 - 120	1/4	19	12	49
30801.00	8' Quintadena	54 - 56	101 - 92	1/4	18	12	49
30402.00	4' Koppelflöte	56 - 58	92 - 85	1/4	20	(5 Koppel Ged.)	61
30404.00	4' Spillflöte	61	75	1/5	20		61
30400.00	4' Gedeckt/Bourdon	56 - 64	92 - 65	1/4	20		61
30403.00	4' Rohrflöte	60 - 62	78 - 71	1/4	19		61
30401.00	4' Quintadena	66 - 68	60 - 55	1/4	18		61

	Pitch/Stop	Normal Scale	Range mm	Mouth Width	Halving	Taper	No. of Pipes Zinc	S.M.
Open Flutes								
40800.00	8' Harmonic Flute	46 - 48	143 - 131	1/5 - 2/9	18		12	49
10400.00	4' Nachthorn	56 - 58	92 - 85	1/5	19			61
40400.00	4' Harmonic Flute	58 - 60	85 - 78	1/5 - 2/9	18			61
10200.00	2' Piccolo	70	50	2/9	18			61
40200.00	2' Harmonic Piccolo	70 - 72	50 - 46	1/5 - 2/9	18			61
10130.00	1-3/5' Tierce	72 - 74	46 - 39	1/5	18			61
10110.00	1-1/3' Larigot	72 - 74	46 - 42	2/9	19			61
10100.00	1' Siffflöte	78	36	1/4	18			61
Strings								
51600.00	16' String	42 - 48	170 - 131	2/9 - 1/4	17		12	
50800.00	8' Viola	50 - 56	120 - 92	2/9 - 1/4	17		12	49
50800.00	8' Dulciana	54 - 58	101 - 85	2/9 - 1/4	17		12	49
50800.00	8' Gamba	56 - 58	92 - 85	2/9 - 1/4	18		12	49
50800.00	8' Salicional	58 - 60	85 - 78	2/9	18		12	49
50400.00	4' String	62 - 70	71 - 50	2/9 - 1/4	17 - 18			61
Tapered Stops								
61600.00	16' Gemshorn	38	202	2/9	17		12	
60800.00	8' Spitzprincipal/flöte	46	143	1/4	17	2/3 - 1/2	12	49
60800.00	8' Gemshorn	48 - 52	131 - 110	2/9	18	1/3 - 1/2	12	49
60800.00	8' Erzähler	50 - 52	120 - 110	1/5	18	1/3	12	49
60400.00	4' Blockflöte	54 - 56	101 - 92	1/5	19	1/2		61
60400.00	4' Spitzprincipal/flöte	58	85	1/4	17	2/3 - 1/2		61
60400.00	4' Gemshorn	60 - 64	78 - 65	2/9	18	1/3 - 1/2		61
60400.00	4' Erzähler	62 - 64	71 - 65	1/5	18	1/3		61
60220.00	2-2/3' Nazard	64 - 70	65 - 50	2/9	18	1/2		61
60200.00	2' Blockflöte	64 - 68	65 - 55	1/5	19	1/2		61
60200.00	2' Spitzprincipal/flöte	70	50	1/4	17	2/3 - 1/2		61

WOOD PIPES

Materials

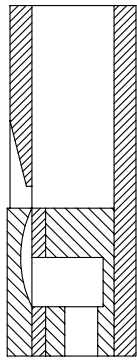
Wood pipes are constructed from top quality, clear poplar with hardwood windways and caps. They are provided unfinished, or finished clear lacquer, shellac, brown stain, or to a color sample. Wood pipes are available in most wood species and to custom scales.



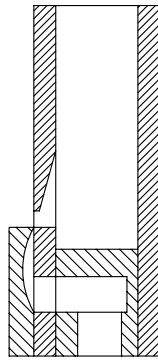
Mouth Style

Standard or English mouths are customarily used on stopped wood pipes in conjunction with a flat or level block. The windway is normally cut in the cap.

Inverted mouths are generally used on open wood pipes in conjunction with sunken block. The windway is cut in the cap.



STANDARD

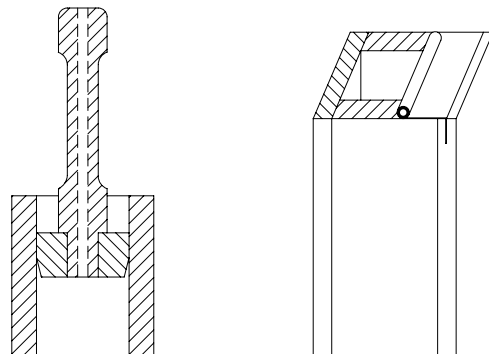


INVERTED

Tuning Methods

Stopped wood pipes have a turned handle attached to an end grain stopper in 4' pitch and smaller pipes. For larger pipes, plywood is employed for the stopper. Stoppers from 4' and smaller are leathered. For pipes longer than 4' pitch, the leather has a felt backing to assist sealing of the stopper. Wood Rohrflöte pipes have pierced (drilled) stopper handles.

Tuning open wood flutes is by a piece of common metal attached across the top of the pipe and rolled for tuning. Overlength open wood pipes may be slotted and fitted with a wood slide for tuning.



Scaling

All standard scales are shown on the following chart. Dimensions are I.D. Special scales can be provided.

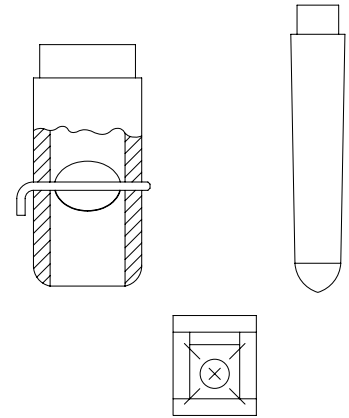
Scale	16' 1	8' 13 1	4' 25 13	2' 37 25	1' 49 37	1/2' 61 49	Comparable 8' Metal Scale
#1	8" x 9-1/2" 203.2 x 241.3	4-3/4" x 5-11/16" 120.7 x 144.5	2-13/16" x 3-7/16" 71.4 x 87.3	1-5/8" x 2" 41.3 x 50.8	1" x 1-1/4" 25.4 x 31.8	11/16" x 7/8" 17.5 x 22.2	44/45 149.7
#2	7" x 8-1/2" 177.8 x 215.9	4" x 5" 101.6 x 127	2-1/2" x 3-1/8" 63.5 x 79.4	1-3/4" x 1-15/16" 37.5 x 48.5	1" x 1-1/4" 25.4 x 31.8	11/16" x 7/8" 17.5 x 22.2	48/49 128.2
#3	6" x 7-1/2" 152.4 x 190.5	3-5/8" x 4-5/8" 92.1 x 117.5	2-1/4" x 3" 57 x 74	1-3/8" x 1-13/16" 35 x 46	15/16" x 1-3/16" 23 x 30	5/8" x 13/16" 15 x 20	50/51 117.4
#4	5-1/2" x 7" 139.7 x 177.8	3-3/8" x 4-1/2" 85.7 x 114.3	2" x 2-11/16" 50.8 x 68.3	1-13/16" x 1-9/16" 30.2 x 39.7	3/4" x 1" 19 x 25.4	9/16" x 11/16" 14.3 x 17.5	51/52 111.7
#5	5" x 6-1/2" 127 x 165.1	3" x 4" 76.2 x 101.6	1-13/16" x 2-3/8" 46 x 60.3	1-1/8" x 1-1/2" 28.6 x 38.1	3/4" x 15/16" 18 x 23.5	9/16" x 11/16" 13 x 17	54/55 99.3
#6	4-3/4" x 6" 120.7 x 152.4	2-3/4" x 3-3/4" 69.8 x 95.3	1-5/8" x 2-1/4" 43 x 57.2	1" x 1-3/8" 26 x 35	5/8" x 7/8" 16 x 21.5	3/8" x 11/16" 10.5 x 13.7	56 92.0
8' Melodia Hohlföte		3-3/8" x 4-1/2" 85.7 x 114.3	2-3/16" x 3" 55.6 x 76.2	1-5/16" x 1-13/16" 33 x 46	27/32" x 1-3/32" 21 x 28	9/16" x 3/4" 14.6 x 18.7	3/8" x 15/32" 10 x 11.7

Feet

Wood pipes of 32' and 16' pitch have wood toe pipe feet with a butterfly valve for wind regulation. Metal toe pipe feet, regulated by the size of the hole in the lead toe, are normally furnished on pipes of 8' pitch and smaller.

Placement of feet in wood pipes, when not specified, on 8' and 4' sets, is in the center of the pipe measured without the cap. Standard foot locations for 16' stopped wood pipes are shown. Dimensions given are from the back of the pipe. Foot is centered side to side. Pipe feet locations can be provided per instructions.

Note	Foot Location From Back			Toe I.D.		
	#1 & 2	#3 & 4	#5	#1 & 2	#3 & 4	#5
#1 - 4	4-1/2"	4"	3-1/2"	2"	1-3/4"	1-1/2"
#5 - 6	4"	3-1/2"	3-1/2"	1-3/4"	1-1/2"	1-1/2"
#7 - 8	4"	3-1/2"	3"	1-3/4"	1-1/2"	1-1/4"
#9 - 12	3-1/2"	3"	3"	1-1/2"	1-1/4"	1-1/4"



Treble Pipes

9075.02 When an existing stop is to be extended by several notes or several octaves, where possible, stock treble spotted metal pipes, complete with slide tuners, are used. Special pipes of spotted metal, common metal, or 75% tin can be provided. For best tonal and scaling match, the last existing pipe and wind pressure on which it is voiced should be furnished.

Flue Revoicing

9230.00 Older wood pipes in good physical condition can often be recycled and revoiced at a savings. Pipes will be accepted for revoicing provided pipes are of good manufacture, and are not badly mutilated or mishandled. Pipes are washed and minor repairs are made. The stoppers are repacked as required and pipes are revoiced consistent with new tonal requirements, wind pressure, and customer instructions.

Pipe Repair

9235.00 Our pipe shop is equipped to repair individual damaged wood flue pipes or to provide faithful replacement pipes for those missing from an incomplete set. When a pipe is to be repaired or replaced, the pipe on either side of the damaged or missing pipe is essential, along with operating wind pressure, so that a proper match for both scaling and voicing can be obtained. Prices can be furnished after inspection of pipes to be repaired or replaced.

Wood Pipes

	Pipes Pitch/Stop	Scale	I.D. Inches	I.D. mm	Metal Ø		Number of	
					mm	Metal Sc	Wood	S.M.
73200.00	32' Bourdon	#1	13" x 17"	330 x 432	426	21	12	
71604.00	16' Wood Open	#1	10" x 13"	254 x 330	327	27	12	
71600.00	16' Bourdon	#1	8" x 9-1/2"	203 x 241	250	33	12	
		#2	7" x 8-1/2"	178 x 216	221	36	12	
		#3	6" x 7-1/2"	152 x 191	192	39	12	
		#4	5-1/2" x 7"	140 x 178	178	41	12	
		#5	5" x 6-1/2"	127 x 165	163	43	12	
70800.00	8' Gedeckt	#1	4-3/4" x 5-11/16"	121 x 145	150	45	49	12
		#2	4" x 5"	102 x 127	128	48	49	12
		#3	3-5/8" x 4-5/8"	92 x 118	117	50	49	12
		#4	3-3/8" x 4-1/2"	86 x 114	118	52	49	12
		#5	3" x 4"	76 x 102	99	54	49	12
		#6	2-3/4" x 3-3/4"	70 x 95	92	56	49	12
70805.00	8' Ludwigtone	#4	1-3/4" x 4-1/4"	45x108	79	60	42	38
70403.00	4' Flute d'Amour	#3	2-3/16" x 3"	56 x 73	73	61	37	24
70403.00	4' Rohrflöte	#3	2-3/16" x 3"	56 x 73	73	61	37	24
70801.00	8' Melodia	#4	3-3/8" x 4-1/2"	86 x 114	118	52	61	
70801.00	8' Hohlflöte	#4	3-3/8" x 4-1/2"	86 x 114	118	52	61	
70802.00	8' Harmonic Flute	#4	3-3/8" x 4-1/2"	86 x 114	118	52	61	
70401.00	4' Melodia	#3	2-3/16" x 3"	56 x 76	73	61	49	12
70402.00	4' Harmonic Flute	#3	2-3/16" x 3"	56 x 76	73	61	49	12

8' Gedeckt #1-49 Stopped Wood, #50-61 Open Metal
 4' Gedeckt #1-37 Stopped Wood, #38-61 Open Metal
 8' Ludwigtone #1-12 Stopped Wood, #13-42 Open Wood, #43-61 S.M. (Double Pipes)

4' Rohrflöte #1-37 Stopped Wood with Pierced Stoppers, #38-61 Open Metal

8' Melodia/Hohlflöte #1-12 Stopped Wood, #13-61 Open Wood

4' Melodia/Hohlflöte #1-49 Open Wood, #50-61 Open Metal

8' Harmonic Flute #1-12 Stopped Wood, #13-36 Open Wood, #37-61 Harmonic Wood

4' Harmonic Flute #1-24 Open Wood, #25-49 Harmonic Wood, #50-61 Harmonic Metal

For 8' or 4' ranks an additional octave of wood treble pipes can be supplied.

REED PIPES

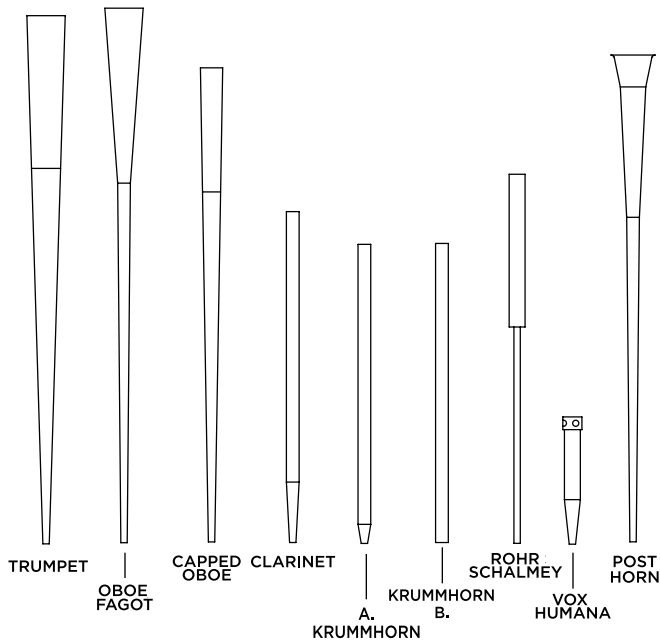
Materials

Reed pipes are built from spotted metal (50% tin). Resonators longer than 2' C on Trumpets and Oboes are traditionally of two piece construction with spotted metal bells and zinc stems. Full length spotted metal resonators can be provided for 8' and 1/2L 16' reeds. Full length 16' octaves are made from zinc with spotted metal tuner inserts. Spotted metal bells can be provided. Common metal or antimonial lead can be used in place of spotted metal.



Resonator Shapes

The shape of the reed resonator has a great effect on the development of harmonics and the type of tone color. The following proportioned drawings illustrate the shapes of standard reeds.



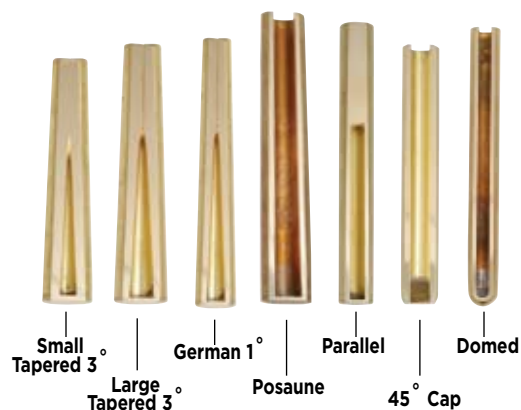
Resonator Length

Full length reed resonators in the 16' and 8' octaves are always preferable for complete development of sound, tonal weight, and color. When a full length or mitered full length bass is not practical, 1/2L resonators are an option for brighter chorus reeds such as Trumpet, Trompette, Posaune, Fagotto and Oboe stops. 1/2L basses are not recommended for predominantly dark or full bodied reeds in the Trombone, Tromba, or Tuba class. In most cases, a 1/2L bass will run from #1-12 with the break to full length at #13. Many times a break at #7, 18 or 20 can be more successful in disguising the tonal differences in the two constructions.

Harmonic length resonators (double length) are employed to strengthen the fundamental overtones of the treble range of chorus reeds. They are recommended on 3" and higher wind pressure. Normal break to harmonic resonators occurs at 1' F#, note #43 giving significant support to the higher notes of Trumpet solos. Special purpose reeds in the Tuba family will break at #19 or #31 or to your specifications.

Reed Shallots

Reed shallots are made from brass tubing for French or parallel shallots, or formed brass sheet for other shallots. Shallot faces can be leathered where a smoother tone is required. Seven (7) different types are illustrated.



Base Assembly

Blocks: All reed blocks are stepped style for added support of shallot.



Wires: Made from spring temper phosphor bronze, tightly formed to provide maximum stability.

Wedges: Made from rock maple and individually fitted to block and shallot.

Tongues: Cut from reed brass, of appropriate thickness determined by wind pressure and type of sound.

Ferrules: Provided on all 16' and 8' octaves of (Sockets) full length and 16' 1/2 L reeds for ease of service.

Boots: Tapered zinc boots with lead toes provide maximum stability and support of reed block and resonator.



Tuners

Roll tuners are cut into the bells of Oboes and Trumpets. Slide tuners are provided for cylindrical reeds of the Clarinet, Krummhorn, and Rohr Schalmey family. Tuning caps are used for Vox Humana pipes. Adjustable length resonators with telescopic tubing at the block are provided for Posthorns.

En Chamade Pipes

Brushed, flamed, or polished copper or polished or aluminum lacquered zinc are visually effective for en Chamade reeds.

Voicing

OSI is acutely aware that the organ is ultimately judged by the color and quality of the reed stops. All reed pipes are provided voiced to your particular requirements. Fill in all information on the Reed Pipe Check Sheet. This includes starting scale, material of the pipes, wind pressure, pitch, shallot style, chest type and voicing instructions, including placement, room size, and any other information about the instrument that would be helpful to the voicer. We work together with you to create a finished reed product worthy of your trust.

Treble Pipes

9075.02

When an existing stop is to be extended by several notes or several octaves, where possible, stock treble spotted metal pipes, complete with slide tuners, are used. Special pipes of spotted metal, common metal, or 75% tin can be provided. For best tonal and scaling match, the last existing pipe and wind pressure on which it is voiced should be furnished.

Reed Revoicing

9130.00

Older reeds in good physical condition can often be recycled and revoiced at a savings. Reed pipes will be accepted for revoicing provided pipes are of good manufacture, show no metal fatigue, and are not badly torn or mishandled. Pipes are washed and minor repairs are made. The tuning wires are replaced as required and new tongues provided consistent with new tonal requirements, wind pressure, and customer instructions. Changing shallot styles (taper to parallel) is not recommended.

9135.00 **Pipe Repair**

Our pipe shop is equipped to repair individual damaged reed pipes or to provide faithful replacement pipes for those missing from an incomplete set. When a pipe is to be repaired or replaced, the pipe on either side of the damaged or missing pipe is essential, along with operating wind pressure, so that a proper match for both scaling and voicing can be obtained. Prices can be furnished after inspection of pipes to be repaired or replaced.

Reed Pipes

	Pitch/Stop	Normal Scale Range		Zinc	Number of Pipes	
		Scale	mm		Reeds	Flues
81600.00	16' Trumpet	4-1/2" - 8"	114 - 203	12		
81600.00	16' Trumpet 1/2L	4" - 6"	102 - 152	12		
80800.00	8' Trumpet	3" - 5"	76 - 127		49 - 54	12 - 7
80400.00	4' Clarion	2-3/16" - 3-7/8"	56 - 98		37 - 42	24 - 19
81601.00	16' Fagotto/Oboe	5"	127	12		
81601.00	16' Fagotto/Oboe 1/2L	4-1/2"	114	12		
80801.00	8' Oboe/Hautbois	3-1/2"	89		49	12
80401.00	4' Oboe/Hautbois	2-3/4"	70		37	24
80802.00	8' Capped Oboe	2-1/4"	57		49	12
80402.00	4' Capped Oboe	1-3/4"	45		37	24
80806.00	8' French Horn	5"	127		49	12
80807.00	8' Cor Anglais	4-3/4"	121		49	12
80807.00	8' English Horn	3-5/8"	92		49	12
80809.00	8' Post Horn (Gottfried)	SPEC			49 - 54	12 - 7
81603.00	16' Clarinet	2-1/2"	64	12		
80803.00	8' Clarinet	1-1/2" - 2"	38 - 51		49	12
80403.00	4' Clarinet	1-5/16" - 1-1/2"	33 - 38		37	24
80804.00	8' Krummhorn	1" - 1-1/4"	25 - 32		49	12
80805.00	8' Rohr Schalmey	1-1/2"	38		49	12
80405.00	4' Rohr Schalmey	1-1/4"	32		37	24
80808.00	8' Vox Humana	1-1/2"	38		49	12

Stock Treble Pipes

Stock treble pipes are used for replacement of missing or damaged pipes and as treble extensions for existing stops. They are spotted metal with a 1/4" mouth and furnished with slide tuners, unvoiced. 180 mm foot length.

I.D.	Body Length	Max. Pitch
------	-------------	------------

9075.92	19.3 mm	150 mm	1/2' - C
9075.93	18.6 mm	150 mm	
9075.94	17.8 mm	150 mm	
9075.95	16.9 mm	150 mm	
9075.96	16.3 mm	150 mm	
9075.97	15.6 mm	150 mm	
9075.98	14.9 mm	150 mm	
9075.99	14.3 mm	150 mm	

9076.00	13.7 mm	150 mm	1/2' - D
9076.01	13.1 mm	150 mm	
9076.02	12.6 mm	150 mm	
9076.03	12.0 mm	150 mm	
9076.04	11.5 mm	125 mm	
9076.05	11.0 mm	125 mm	
9076.06	10.5 mm	125 mm	
9076.07	10.1 mm	125 mm	

9076.08	9.7 mm	125 mm	1/2' - F#
9076.09	9.3 mm	125 mm	
9076.10	8.8 mm	100 mm	
9076.11	8.5 mm	100 mm	
9076.12	8.1 mm	100 mm	
9076.13	7.8 mm	100 mm	
9076.14	7.4 mm	100 mm	
9076.15	7.1 mm	100 mm	

9076.16	6.8 mm	85 mm	1/2' - A	
9076.17	6.5 mm	85 mm		
9076.18	6.3 mm	85 mm		
9076.19	6.0 mm	85 mm		
9076.20	5.7 mm	85 mm		
9076.21	5.5 mm	85 mm		
9076.22	5.2 mm	75 mm		1/4' - C
9076.23	5.0 mm	75 mm		
9076.24	4.8 mm	75 mm		
9076.25	4.6 mm	75 mm		
9076.26	4.4 mm	75 mm		
9076.27	4.2 mm	75 mm		
9076.28	4.0 mm	75 mm		
9076.29	3.9 mm	65 mm	1/4' - D#	

9076.30	3.7 mm	65 mm
9076.31	3.6 mm	65 mm
9076.32	3.4 mm	65 mm



WurliTzer™ Tibia Treble Pipes

WurliTzer™ replacement treble pipes for 10" and 15" scale 8' Tibia available in Antimonial lead. These pipes are capped metal #50-55 and open from #56-85. Pipes provided voiced to your samples.

9080.50	#50-61
9080.62	#62-73
9080.74	#74-85

Pipe Making Supplies

Material	Form
9001.00	Gum Arabic Powder
9002.00	Whiting Powder
9003.00	Pipe Sizing Recipe
9004.00	Stearine Candles Candle

Solder

Pure tin and lead are alloyed to provide flux free solder. Use Stearine Candle 9004.00 for flux. Sold by the pound.

Composition Ø

9010.01	63/37	1/8"
9010.02	63/37	3/16"
9010.03	75/25	1/8"

Cast Toe Points

O.D. Wall

9050.01	2-1/4"	Heavy
9050.02	2-1/16"	Heavy
9050.03	1-7/8"	Heavy
9050.04	1-13/16"	Heavy
9050.05	1-3/4"	Heavy
9050.06	1-11/16"	Heavy
9050.07	1-5/8"	Heavy
9050.08	1-3/8"	Heavy

9055.11	1-9/16"	Light
9055.12	1-3/8"	Light
9055.13	1-3/16"	Light
9055.14	1-1/16"	Light
9055.15	15/16"	Light
9055.16	7/8"	Light
9055.17	13/16"	Light
9055.18	3/4"	Light

Reed Pipe Parts

Block	Wedge	Boot	Size	Pitch/ Amount
9100.02	9101.02	9103.02	2	16'-6
9100.03	9101.03	9103.03	3	6
9100.04	9101.04	9103.04	4	8'-8
9100.05	9101.05	9103.05	5	8
9100.06	9101.06	9103.06	6	8
9100.07	9101.07	9103.07	7	8
9100.08	9101.08	9103.08	8	8
9100.09	9101.09	9103.09	9	9

Reed Tuning Wire

Phosphor bronze wire.

Size	Wire Size	Wire Ga.	O.A. Length	Pitch/ Amount	
9102.02	2	.129	8	10-3/4"	16'-6
9102.03	3	.114	9	9"	6
9102.04	4	.102	10	7-1/4"	8'-8
9102.05	5	.091	11	6-1/2"	8
9102.06	6	.091	11	6-1/4"	8
9102.07	7	.080	12	5-3/4"	8
9102.08	8	.080	12	5-1/2"	8
9102.09	9	.071	13	4-1/4"	9
9102.10	10	.064	14	4"	
9102.11	11	.055	15	4"	
9102.20	Custom reed tuning wire				



Reed Shallots

Description

9150.00 16' Tapered - small scale

9151.00 8' Tapered - small scale



9155.00 16' Tapered - large scale

9156.00 8' Tapered - large scale



9160.00 16' French - small scale

9161.00 8' French - small scale



Reed Tongues

Reed tongues are furnished to your dimensions and thickness, unpolished.

9175.00 16' Reed tongues, unpolished

9176.00 8' Reed tongues, unpolished

Wood Toe Pipe Feet

6" or 18" long with butterfly valves. 1" Tenon. Finished yellow shellac. Special length pipe feet custom made.

I.D.	Tenon O.D.	Length	Scale #1-2	Used for 16'	
				Scale #3-4	Scale #5
9200.10	1"	1-3/8"			
9200.11	1-1/4"	1-5/8"		4	6
9200.12	1-1/2"	2"	4	4	6
9200.13	1-3/4"	2-1/4"	4	4	
9200.14	2"	2-1/2"	4		
9200.15	2-1/4"	2-3/4"			
9200.16	2-1/2"	3"			
9200.17	2-3/4"	3-1/4"			
9200.18	3"	3-1/2"			
9200.99	Special Wood Toe Pipe Feet				



9202.10	1"	1-3/8"	18"
9202.11	1-1/4"	1-11/16"	18"
9202.12	1-1/2"	1-7/8"	18"
9202.13	1-3/4"	2-1/8"	18"
9202.14	2"	2-3/8"	18"

Metal Toe Pipe Feet

Metal toe pipe feet 6" or 18" long. 3/4" Tenon. Lead toes are cast on wood feet. Finished yellow shellac. Special length pipe feet custom made.

I.D.	Tenon O.D.	Length	Rackboard Ø	Used for 8'	
				Scale #1-4	Scale #5-6
9205.01	3/16"	3/8"	6"		
9205.02	1/4"	7/16"	6"	5	9
9205.03	5/16"	1/2"	6"	4	4
9205.04	3/8"	9/16"	6"	4	6
9205.05	7/16"	5/8"	6"	6	6
9205.06	1/2"	11/16"	6"	6	6
9205.07	5/8"	7/8"	6"	6	6
9205.08	3/4"	1"	6"	6	6
9205.09	7/8"	1-3/16"	6"	6	6
9205.10	1"	1-3/8"	6"	6	
9205.11	1-1/4"	1-5/8"	6"		
9205.99	Special Metal Toe Pipe Feet				

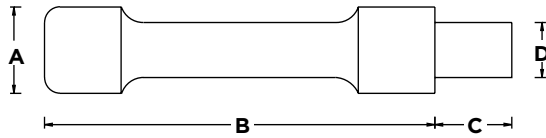
9210.06	1/2"	11/16"	18"	7/8"
9210.07	5/8"	7/8"	18"	1-1/8"
9210.08	3/4"	1"	18"	1-1/4"
9210.09	7/8"	1-3/16"	18"	1-7/16"
9210.10	1"	1-3/8"	18"	1-5/8"



Wood Stopper Handles

Unfinished hardwood, available in 12 sizes. For new or replacement work.

	A	B	C	D	Used For	
					#1 Sc	#2-5 Sc
9220.01	1-1/2"	7-3/8"	1-1/2"	1"	6	
9220.02	1-1/2"	6-7/8"	1-1/2"	1"	6	6
9220.03	1-5/16"	6-3/8"	1-1/4"	7/8"		6
9220.04	1-5/16"	5-7/8"	1-1/4"	7/8"	8'	6
9220.05	1-1/8"	5-1/4"	1-1/8"	3/4"		6
9220.06	1"	4-3/4"	1-1/8"	3/4"		6
9220.07	7/8"	4-1/4"	1"	5/8"		6
9220.08	11/16"	3-3/4"	7/8"	1/2"		6
9220.09	1/2"	3-1/4"	3/4"	3/8"		6
9220.10	3/8"	2-11/16"	5/8"	1/4"		6
9220.11	5/16"	2-3/16"	1/2"	3/16"		6
9220.12	5/16"	1-5/8"	1/2"	3/16"		6



Tallow

Rendered lamb fat used for lubricating wood pipe stoppers.

9250.01	1/2 lb. can
9250.02	1 lb. can

Slide Tuners

Stock coke tin or aluminum slide tuners are made using Normalmensur or 17th halving. Coke tin will be provided unless otherwise specified. Please provide stop name and starting pitch, give number of tuners, the starting pipe I.D. in inches, millimeters or scale numbers and provide diameter of all "C" pipes for the best fit. The 8090.00 Pipe Scale Ruler is a handy tool for this operation. Indicate breaks for harmonic pipes and mixtures. Standard tuner length is approximately two times the diameter. Standard tuning slides are made with overlap. All slide tuners are carefully rolled, but must be individually fit to pipes

Custom made slide tuners for tapered pipes require the diameter at tuning length and at the languid for each "C" pipe. Specify dead length or slotted length. Tapered slide tuners and extra length tuners are custom-made. 16' and 8' octaves are available with coil tension springs.

A slide tuner order form is available for your use.

- 9310.00** Coke Tin
- 9320.00** Aluminum
- 9330.00** Custom Slide Tuners



Slide Tuner Stock

Aluminum

Thickness	Sheet Size	Suggested Scales	
9300.10	.010"	12" x 24"	110-up
9300.12	.012"	12" x 24"	86-109
9300.16	.016"	24" x 36"	77-85
9300.20	.020"	24" x 36"	67-76
9300.25	.025"	24" x 36"	56-66
9300.32	.032"	24" x 36"	55

Coke Tin

Thickness	Approximate Sheet Size	Suggested Scales	
9301.08	.008"	24" x 30"	80-85
9301.10	.010"	24" x 30"	59-67
9301.15	.015"	24" x 30"	37-41
9301.20	.020"	24" x 30"	33-36

Organ Pipe Metal

Cast and planed organ pipe metal from .015" to .050" is available by the full or partial sheet. Sheet size is 31" x 96". Zinc is 27" wide by coil and is available from 11 ga. to 18 ga. All pipe metals sold by the pound. Custom cut metal per your specifications.

Material

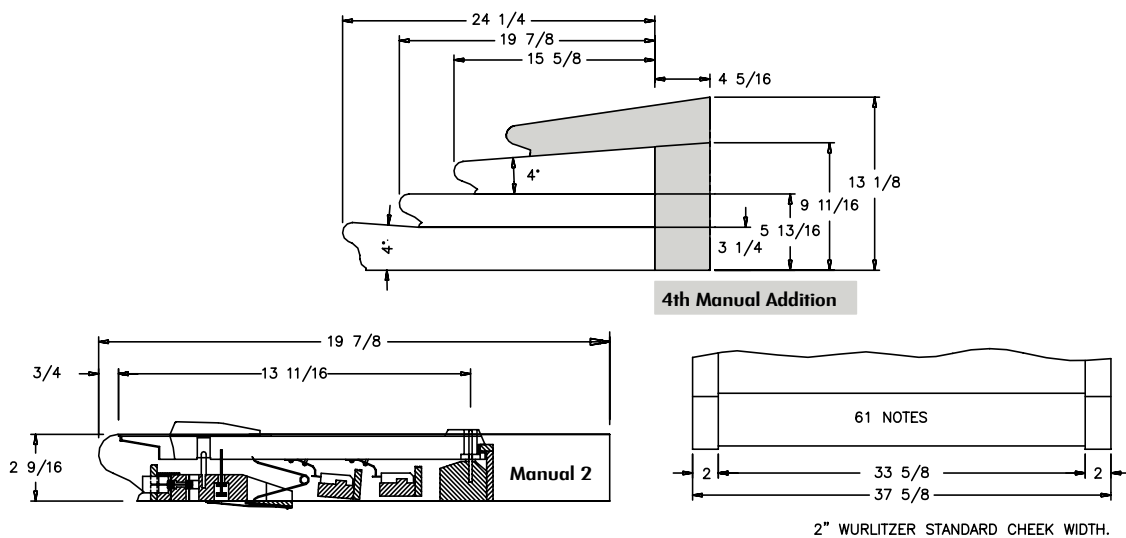
- 9400.00** Common metal 35/65
- 9500.00** Spotted metal 50/50
- 9600.00** 75% Tin 75/25
- 9800.00** Antimonial lead
- 9900.00** Zinc

Consoles



Keyboards

Organ Supply Industries is the only supplier of American-made laminated wood-based manual keyboards. These superior quality keyboards provide maximum stability and quality “feel.” The basswood laminated (Pat. Applied for) key construction provides twist- and warp-free keyboards. The relaxed sharp key spacing offers a more comfortable playing surface. (165.20 mm center to center.) Hardwood frames with adjustable front “bat” pins, fully bushed bearing surfaces, and 13-23/32” long key with a rear fulcrum construction round out the Theatre Organ keyboards. These are real wood keyboards designed for our American climate



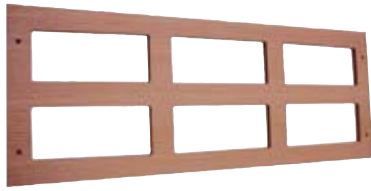
WurliTzer™ Music Rack

Music racks are provided in wood veneers on MDF base with or without lip. Ornate and traditional styles available. Unfinished or finished to sample

- 0005.20** Style 1
1/2" T x 31" W x 13-1/8" H, 1-3/4" D lip



- 0005.21** Style 2
1/2" T x 31" W x 11-7/8" H, 1-3/4" D lip



WurliTzer™ Style Music Rack Brackets

Ornate and traditional style brackets provided in wood veneers on MDF base. Unfinished or finished to sample

- 0012.20** Style 1 (pair)
3/4" T x 12-7/8" L x 11-1/8" H (nom)



- 0012.21** Style 2 (pair)
3/4" T x 12-7/8" L x 11-1/8" H (nom)



WurliTzer™ Style Manual Keys, Unmounted

- 0200.20** Unmounted 61 note manual keys on maple frame, furnished with synthetic coverings. Order hardware and felts separately.
13-23/32" front to fulcrum pin,
14-9/16" overall front to back.
33-9/16" W C-C



WurliTzer™ Style Manual Keys, Mounted

- 0203.00** Mounted with WurliTzer™ Mahogany key cheeks and key slips. Synthetic key coverings. Equipped with compass key tension springs, adjustable up stop, front and balance rail felts, hinged at rear for service. Contact rails with 4 or 7 wire contacts installed, separate silver-tipped contact plates installed. Complete, ready to attach cables.



Manual 1



Manual 2-4

Additional services include finishing to sample, engraving and installing combination and second touch. Satin synthetic and bone coverings are available, as are special key cheek shapes.

0210.00 WurliTzer™ 2nd Touch Spring

3-1/4" L, 3/8" W x .035" T



WurliTzer™ Hammer Rail Felt

- 6110.00** Manual Hammer Rail Felt Without 2nd Touch
6110.10 Manual Hammer Rail Felt For 2nd Touch

Manual Key Compass Spring

7200.01 1-7/8" L x .040 Ø Wire



WurliTzer™ Manual Piston Components

0203.50 Thumb Pistons Toggle

0203.51 Brass Coupler

0203.52 Pivot Pin

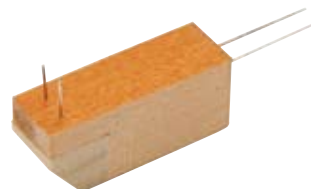
0203.53 Contact Pin

0203.54 Manual Piston Spring

0090.00 Piston Head, engraved

0220.21 Piston contact block, 2-wire

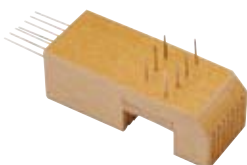
0220.23 Piston contact block, 3-wire



Manual Contact Blocks

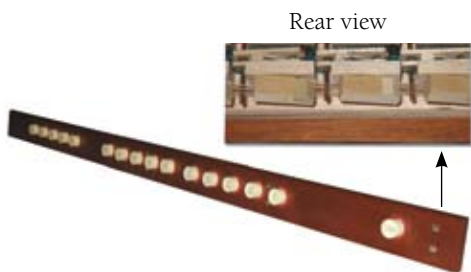
0220.24 4-wire

0220.27 7-wire



Replacement WurliTzer™ Manual Piston Rails and Slips

0220.40 Replacement rails and slips are faithful reproductions of the WurliTzer™ originals including the "preferred" feel. They set the standard for all theater organs. Second touch available upon request.



Push Button Momentary, Lighted (optional)

Single Pole, Double Throw push button ideal for advanced Control System features and miscellaneous organ peripherals. Low profile tactile feel. 12 VDC or 28 VDC Operation. Bore for 27/32" hole.

1.15" L x .930" Ø

0180.10 Switch w/ Lens, Blank

0180.11 Switch w/ Lens, Engraved

0180.51 12 VDC, Lamp

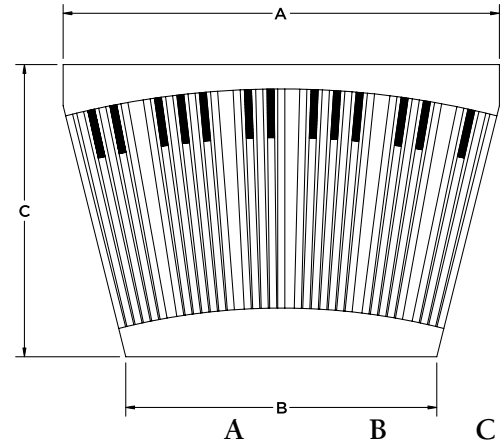
0180.52 28 VDC, Lamp



PEDALBOARDS

Pedalboards, built to AGO specifications, are provided in 32 note compass with WurliTzer™ appearance. Standard Style No. 1 frame side rails are perpendicular to floor with special flush mounted feet. Extended toe rail for WurliTzer™ swell shoe mounting. Includes WurliTzer™ naturals & sharps. Key bodies are constructed of straight grained white oak. Keys are guided by a 3/16" rod running through a felt bushed slot in the key front. Easily adjusted flat bent carbon steel tension springs are fastened to solid oak heel rail. Natural key caps are straight grained select hard maple, finished with durable clear epoxy lacquer. Pedalboards are constructed for hard usage and stability, with specially formed and veneered ply curve front top rail and hammer rail.

Additional services include: finishing to sample, mounting contact bar (4 to 12 wires) with silver-tipped contact plates, mounting toe pistons with nameplates and 2nd touch. Contact plates with pigtails are also available.



OSI WurliTzer™ Style 53-3/4" 36-3/4" 36"

Shipping Weight: 135 lbs.

- 0301.21 Birch
- 0303.21 Mahogany
- 0308.21 Walnut

Pedal Key 2nd Touch

- 0301.20 Second touch is available installed on new pedal keyboards or can be retrofitted on existing OSI pedal keyboards. Mechanism provides consistent, quiet and firm stop and smooth, positive tactile feedback beyond the engagement point.

WurliTzer™ Bench

- 0500.11 Faithful reproduction and sturdy construction from your choice of birch, mahogany or walnut. Available unfinished or finished to sample.

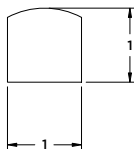


Pedal Keyboard Naturals

WurliTzer™ replacement naturals. Clear rock maple naturals are finished in a clear epoxy lacquer. Available in specified lengths.



- 0310.60** WurliTzer™ Pedal Natural
1" W x 1" H x 21" L



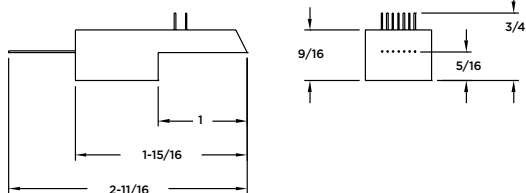
WurliTzer™ Pedal Sharps



- 0313.15** WurliTzer™ replacement sharps, ebony capped for original or OSI WurliTzer Style Pedalboards.
1" W x 2-1/2" H x 5-1/2" L at base

WurliTzer™ Pedal Contact Block

- 0320.24** Pedal contact block, 4-wire
0320.27 Pedal contact block, 7-wire
0320.32 Pedal contact block, 12-wire

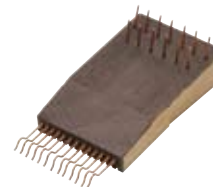


WurliTzer™ Friction Blocks and Swell Shoe Contact

- 0320.40** Long Stroke
0320.41 Short Stroke



- 0320.42** Expression contact block, 13-wire



WurliTzer™ Toe Piston

- 0403.01** Authentic WurliTzer™ Toe Piston, chrome plated with logo. Dust-free enclosed switch.



Sostenuto Kick Switch

- 0425.00** Designed to mount on a variety of expression shoes. Durable Nickel plated steel frame. Enclosed switch provides spring tension.



1-1/2 W x 2-3/4" H x 1-1/2" D

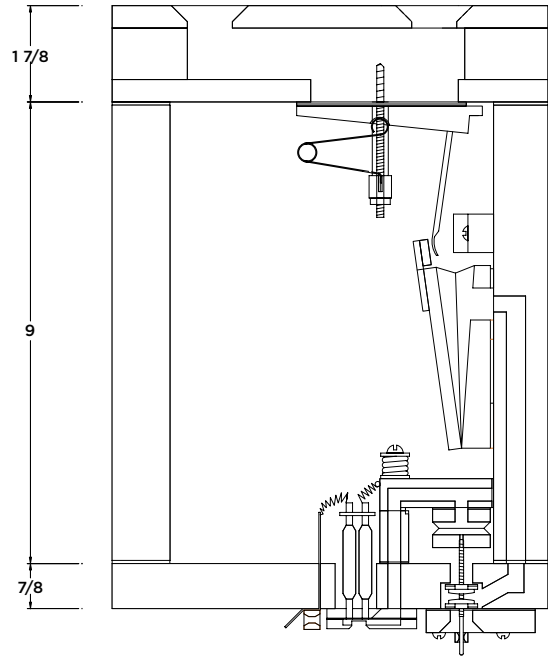
- 0425.10** Spacer for Sostenuto Switch for height adjustment when Installed on WurliTzer™ Swell Shoes.

1-5/8" L x 1/2" W x 5/8" D

WurliTzer™ Unit Chests

1225.00 WurliTzer™ manual unit chests are constructed using original layouts and factory details. The distinctive parts that make these high pressure chests the standard of the theatre organ are authentically reproduced. Chests are constructed as individual units or several stops on a common frame with appropriate wind manifold. Your choice of reliable Reisner chest magnets or rebuilt WurliTzer™ magnets are available. All chests are provided in original shellac finish.

Offset chests for 8' and 16' basses are available in original configurations or custom built to your specifications.

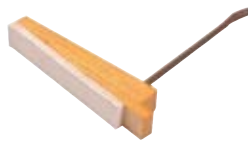


7200.30 WurliTzer™ Chest Pallet Spring



WurliTzer™ Manual Chest Pallets with Spoons, Leathered Complete

- 6960.02 2-5/8" x 7/16"
- 6960.04 2-5/8" x 5/8"
- 6991.02 3-5/8" x 7/16"
- 6991.03 3-5/8" x 9/16"
- 6991.04 3-5/8" x 5/8"
- 6991.05 3-5/8" x 3/4"



6975.13 3/4" x 1-1/8"

Primary Pneumatics, WurliTzer™ Manual Chest

Primary pneumatics are covered in first quality extra thin tan pneumatic leather. The leather is silicone treated for longer life. The wood blocks are 1/4" thick. One side is drilled with a No. 50 Ø hole for a standard 13 ga. Valve wire. The other face has a 3/8" Ø hold and has a leather gasket on the mounting face.

WurliTzer™ Pallet Leather

Layered Valve leather glued together with smooth face out, duplicating original pallet covering. Furnished in strips of varying length. Order by total length required.

Strip Width	Use
6520.01 2-5/16"	Manual Chests
6520.02 3-5/16"	Manual Chests
6520.03 2-7/8"	Offset Chests
6520.04 5-5/8"	Offset Chests
6520.05 6-5/8"	Offset Chests

WurliTzer™ Secondary Motor Gaskets

Each size shipped with punching (not shown) for mounting on hinge end of pneumatic.

- 6980.05 For 13/16" and 1-1/8" Motors
- 6980.06 For 1-1/4" and 1-3/8" Motors



WurliTzer™ Secondary Motors

These manual chest motors are time saving alternative for rebuilding or re-leathering. The pine blanks are exact duplicates of the originals and are furnished with maple "spoon" tabs and hinges ready to leather. Grain orientation has been carefully duplicated. Leather, felt, gaskets, screws, and escutcheon pins are available separately.

3-1/2" L

Blanks	Leathered Complete	Width
6980.01	6980.51	13/16"
6980.02	6980.52	1-1/8"
6980.03	6980.53	1-1/4"
6980.04	6980.54	1-3/8"



6980.15 WurliTzer™ Spoon Tab



7502.02 Round Head Wood Screws
#2 x 3/8"

7317.01 Escutcheon Pins #17 x 3/8"

6112.00 WurliTzer™ Spoon
Tab Felt
5/32" x 1/2" x 55"

WurliTzer™ Primary Valves

These original design WurliTzer™ leather, fibre, and leather punching primary valves are available for replacement of existing primary valves. The 5/8" Ø valve is the integrated, self-threading style. It is completely assembled and ready to install on valve wire without additional leather nuts.

The leather and fibre primary valve with center hole is also available. Assembly on the valve wire requires two leather nuts per valve. Provided with No. 37 drill hole in fibre, pin hole in leather.

The complete valve wire assembly consists of two self-threading 5/8" Ø valves installed on 2-1/4" Long 13 ga. Plated valve wire.

6850.08 WurliTzer™ self-tapping primary valve, 5/8"



6851.08 WurliTzer™ primary assembly



6850.18 WurliTzer™ plain primary valve, 5/8"



Manual Chest Magnet Board Screws

- 7701.15** 12-24 x 2", RH Slotted
7701.18 12-24 x 2-1/2", RH Slotted
-

Threaded Inserts

Use as a replacement for WurliTzer™ Chest inserts. Allows for convenient, efficient, and frequent removal of chest parts. Secure fit for existing WurliTzer™ stripped inserts knife thread. No tapping required.

.453" O.D. x 1/2" L

	I.D. Thread	Drive Material	Tool
7710.16	12-24	Plated Steel	8246.10



Threaded Insert Drive Tool

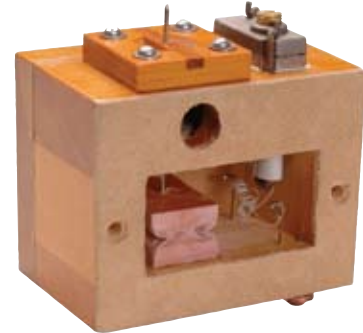
Recommended for installation of threaded inserts, these drive tools provide more positive engagement and efficient installation of inserts. Fits standard hex socket, most screw guns, or can be chucked in reversible drill

	Insert Size	L
8246.10	10-24 & 10-32 & 12-24	1-7/8"



WurliTzer™ Primary Action Box

- 1225.20** Replacement for a variety of existing WurliTzer™ Offset Primary Actions and Tremolos. Unit complete with rebuilt WurliTzer™ magnet and primary.



WurliTzer™ 12 Note Treble Extension Chest

- 1310.00** Chests for treble extension pipes that must be offset can be provided in one or more sections. Bottom bung construction. Primaries are not included.



Percussion Pneumatic Batten

Pneumatic Batten strips constructed from White Maple.

- 1660.01** 24" L x 3/8" W x 1/8" T
1660.02 24" L x 7/16" W x 1/8" T

WurliTzer™ Regulators

WurliTzer™ style reservoirs are complete with one cone valve and two book or pallet valves. Ready to install on standard WurliTzer™ wind trunks. Four (4) long spring bars are furnished with each unit. Additional spring bars and coil springs are available.

	Size	Shipping Weight
2072.00	20" x 30"	48 lbs.
2073.00	26" x 35"	71 lbs.
2074.00	32" x 35"	97 lbs.
2075.00	35" x 42"	126 lbs.

2072.58	Short spring bars 5" (maple)
2072.59	Long spring bars 10" (maple)



Wind Trunks

	Size	Capacity
2073.14	14" x 14" x 14"	1 Regulator
2073.44	14" x 14" x 44"	2 Regulator
2073.66	14" x 14" x 66"	3 Regulator

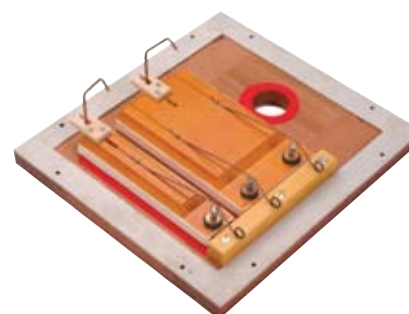
WurliTzer™ Regulator Valve Plate Assembly

	Size
2072.40	20" x 30"
2073.40	26" x 35" / 32" x 35"
2075.40	35" x 42"

Regulator Gussets, WurliTzer™

Cut and skived leather corner gussets. Set of 4 with 8 patches.

2072.57	Gussets, all sizes
2072.65	Patches
2072.66	Corner Caps
2072.67	Bellows Strips, 1-5/8"



2072.41 Bell Valve Assembly



WurliTzer™ Equalizer

WurliTzer™ originally designed these units as pressure regulators for swell shutter, console, and percussion actions. These hinged units employ a sophisticated cone valve and are an economical alternative to a standard reservoir where space is at a premium and critical regulation is not required. Suggested for pressures over 5". The 3" inlet and 3" outlet are located on the bottom of the unit. **15" H O.A.**



	W x L	Shipping Weight
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2080.08	8" x 20"	15 lbs.
2080.10	10" x 24"	23 lbs.

2080.75 4 Legs, 17"

2080.41 Cone Valve Assembly



3305.01 WurliTzer™ Shutter Spring Fibre Link



7250.10 WurliTzer™ Shutter Spring



5-3/8" L O.A.
.625" Ø O.D.

Power Pack 2000

5006.01 12 V / 65 A
5006.02 12 V / 120 A
5006.03 24 V / 65 A

Surge tolerant power source and energy monitor, which utilizes maintenance free self-charging batteries. Computer monitored output can supply the specified in-rush currents with no leaking or venting and fault protection built-in.

9.875" L x 6.750" W x 7.625" H
105 - 128 VAC, 60 hz Maximum -
48 Watts Trip Current Range from
0.3 Amps to 1.8 Amps



DC Logic 5 Volt Regulated Converter

5008.00 DC converter for applications that require well regulated logic supply. Small size, easy mounting, efficient operation reduces heat and bulk of traditional linear power supplies.

5-1/2" L x 2-1/2" W x 2" H
Input 10 VDC (min) - 30 VDC (max)
Output 5 Volt DC Regulated at 3 Amps



WurliTzer™ Chest Magnets

- 5500.40** 180 Ohm, Zinc Die Cast, Rebuilt
5500.42 180 Ohm, Phenolic, Black Cap Style, Rebuilt
5500.95 180 Ohm, Customer Magnet Rebuilt at OSI

WurliTzer™ Chest Magnet Parts

Chest magnet coils are wound on 1-3/4" long bobbins to fit WurliTzer™, Reisner, OSI, or any 5/32" Ø magnet core. They are provided in pairs with standard 6" lead wires, ready to install.

- 5500.61** 90 Ohm
5500.62 125 Ohm
5500.63 150 Ohm
5500.64 180 Ohm
5500.65 200 Ohm



- 5500.76** WurliTzer™ chest magnet cap (self-adhesive) gasket.



- 5500.77** WurliTzer™ chest magnet base (self-adhesive) gasket.



- 5500.85** WurliTzer™ armature, electro-plated .036" T x .450" Ø



- 5500.90** WurliTzer™ Chest Magnet Dag Screw 1-5/16" L x 3/8" W x 3/32" Ø



- 5500.91** WurliTzer™ Magnet Thru Wire



- 5503.70** Robert Morton Magnet Gasket



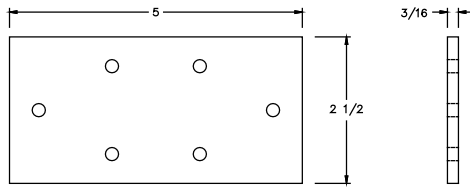
Reisner Player Piano Magnet

- 5909.14** Designed to interface with piano and other vacuum actions. 1/8" brass nipple accommodates standard piano tubing and extends 1/2" from magnet.

60 Ohm



7700.20 WurliTzer™ Percussion Cleats, Steel



6 SCREW HOLES FOR NO. 12 SCREW

Wind Chimes

Wind chime models are available with 3/8", 1/2 or 3/4" solid aluminum chime bars of varying length. Rotation speed controlled by on board potentiometer. Direction is switch selectable to create ascending or descending passages. Volume easily regulated by striker height. Solid State control allows for latch stop control on existing or new installations. Sizes are available for "best fit" depending on room size and location. The small size is suitable for more intimate installations, whereas the larger sizes are better suited for larger rooms and theatres.

Operating voltage 10 to 16 VDC, 5ADC, 5 Amp. 12-7/8" H O.A.

	Description	Top Ø
8508.10	Small, 3/8" Chimes	10-1/2"
8508.20	Medium, 1/2" Chimes	12-1/16"
8508.30	Large, 3/4" Chimes	16-7/32"



PIPES

Organ Supply Industries is justly proud of the high quality, American-made pipework we provide for our customers. Each pipe is carefully crafted to your specifications by our experienced pipe makers in our workshop, then meticulously voiced to your instructions.

MITERING

Where sufficient height is not available, pipes can be mitered up to 180°. 90° miters are made with two cuts and 180° miters have four cuts and are securely braced. Good organ building practice suggests that the miter start no lower than 2/3 of body length. If a shorter pipe is required, a Haskell or stopped bass is an alternative.

STANDARD PIPE CONSTRUCTION

Standard pipe construction includes zinc pipes with Gothic mouths, slide tuners or caps, finished in standard aluminum lacquer. Spotted metal pipes have pressed down (flattened) mouths and slide tuners or caps. All standard pipe work employs and appropriate halving ration, 58° languid level, and standard feet.

Wood pipes are constructed from top quality, clear poplar with hardwood windways and caps. They are provided unfinished, or finished clear lacquer, WurliTzer™ shellac, brown stain, or to a color sample. Wood pipes are available in most wood species and to custom scales.

Reed pipes are built from spotted metal (50% tin). Resonators longer than 2' C on Trumpets and Oboes are traditionally of two piece construction with spotted metal bells and zinc stems. Full length spotted metal resonators can be provided for 8' reeds. Full length 16' octaves are made from zinc with spotted metal tuner inserts. Spotted metal bells can be provided. Common metal or antimonial lead can be used in place of spotted metal.

CUSTOM PIPE CONSTRUCTION

All flue pipework is handcrafted in our plant. Customer to provide special scaling and special constructions are easily accommodated to your specifications for any flue pipework.

Treble Pipes

9075.02 When an existing stop is to be extended by several notes or several octaves, where possible, stock treble spotted metal pipes, complete with slide tuners, are used. Matching pipes of spotted metal, common metal, or 75% tin can be provided. For best tonal and scaling match, the last existing pipe and wind pressure on which it is voiced should be furnished.

Pipe Repair

Our pipe shop is equipped to repair individual damaged metal flue pipes or to provide faithful replacement pipes for those missing from an incomplete set. When a pipe is to be repaired or replaced, the pipe on either side of the damaged or missing pipe is essential, along with operating wind pressure, so that a proper match for both scaling and voicing can be obtained. Pricing can be furnished after inspection of pipes to be repaired or replaced.

9035.00 Metal Flue, Repair
9135.00 Reed Pipe, Repair
9235.00 Wood Pipe, Repair

Revoicing

Older flue and reed pipes in good physical condition can often be recycled and revoiced at a savings. Pipes will be accepted for revoicing provided they are of good manufacture, show no metal fatigue, and are not badly torn or mishandled. Pipes are washed and minor repairs are made. For flues, new tuning slides are installed as required and pipes are revoiced consistent with new tonal requirements, wind pressure, and customer instructions. For reeds, tuning wires are replaced as required and new tongues provided consistent with new tonal requirements wind pressure and customer instructions. Changing shallot styles is not recommended.

9030.00 Metal Flue, Revoice
9130.00 Reed Pipe, Revoice
9230.00 Wood Pipe, Revoice



WurliTzer™ Tibia Treble Pipes

WurliTzer™ replacement treble pipe for 10" and 15" scale 8' Tibia available in Antimonial lead. These pipes are capped metal #50-55 and open from #56-85. Pipes provided voiced to your samples.



9080.50 #50-61

9080.62 #62-73

9080.74 #74-85

9166.00 WurliTzer™ Special Reed Shallots

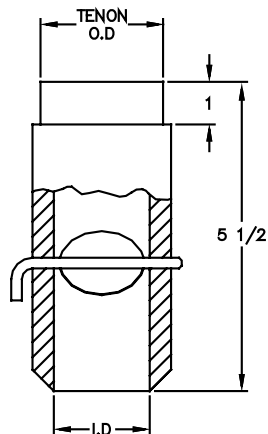


Tuba

Orch.
Oboe

Kinura

9200.90 Wood Toe Pipe Feet



STYLE	I.D.	TENON O.D.
1	1	1 1/2
2	1 1/4	1 3/4
3	1 1/2	2
4	1 7/8	2 7/16

Metal Flue Pipes

	Pitch/Stop	Scale	Halving	Number of Pipes Zinc	S.M.
10800.00	8' Open Diapason	43	18	12	49
	8' Diaphonic Diapason	44	18	12	49
	8' Horn Diapason	43	18	12	49

Wood Flue Pipes

	Pitch/Stop	Scale	Number of Pipes Wood	S.M.
70800.00	8' Tibia	10"	49	12
	8' Tibia	15"	49	12

Reed Pipes

	Pitch/Stop	Scale	Number of Pipes Reeds	S.M.
80809.00	8' English Post Horn	Gottfried	49	12
80800.00	8' Tuba Horn	5"	61	
	8' Harmonic Tuba	5"	61	
	8' Tuba Mirabilis	6-1/2"	61	
80802.00	8' Oboe Horn	3-1/2"	56	5
	8' Orchestral Oboe	1-7/16"	56	5
80817.00	8' Saxophone	4"	49	12
80814.00	8' Krummet	2"	56	5
80803.00	8' Clarinet	2-1/4"	56	5
80808.00	8' Vox Humana	1-5/8"	56	5
80818.00	8' Kinura	1-1/2"	61	



CONDITIONS

When Organ Supply Industries, Inc. (hereafter referred to as OSI) customer's order contains any provisions which contradict, vary or expand upon the provisions of OSI's "order acknowledgment" or with the provisions contained herein, OSI shall be deemed to have objected to the provisions which the customer seeks, and the provisions found herein and/or in OSI's "order acknowledgment" of order shall prevail. No stipulations, representations, agreements or understandings shall be valid unless issued and/or accepted by OSI in writing.

All agreements made and orders accepted are contingent upon strikes, terrorism, acts of war, fires, accidents or other causes and contingencies beyond OSI's control.

Prices & Specifications

Prices and specifications provided in print and/or electronic format are current at the time of publication. Prices are subject to change, and the "Price List" is for information only, and is not offered as a quotation. Prices invoiced are those in effect at time of shipment. Quoted prices on custom materials are subject to the acceptance terms stated in the quotation and the conditions set forth herein.

TERMS

Prices are FOB, Erie, Pennsylvania, or shipping point. Open accounts may be arranged by furnishing satisfactory credit references. Visa/MasterCard services are offered. C.O.D. and Visa/MasterCard shipments are not subject to cash discounts. Cash discounts are not allowed if there are prior unpaid invoices.

In all cases, full payment for each invoice is due the earlier of thirty days (30) after shipping or thirty days (30) after invoice date. Invoices that exceed these terms will be considered "past due" and subject to account suspension, cancellation and/or collection (see Transfer of Title).

Past due accounts are subject to interest at 1-1/2% per month, starting 30 days from date of invoice. (APR 18%)

A down payment of one-third is required on all custom orders. A second, equal payment is due prior to production. The remaining balance will be handled on the basis of the customer's credit status at the time of shipment.

A minimum order charge of \$10.00 will be added to orders of less than \$20.00. Checks returned for insufficient funds (NSF) will be charged at \$45.00 each.

No other payment terms apply without the written agreement of OSI management.

Deductions

No deductions of any nature, other than cash discount earned, will be honored unless credit memorandum or written authority has been previously issued.



Transfer of Title

All goods and equipment remain the sole property of OSI until OSI receives payment in full. OSI retains the right to demand return of goods and equipment for which OSI has not been paid in full. In the event the goods and equipment have been used in the manufacture or assembly of an instrument, OSI acquires ownership rights of the instrument until goods and equipment are paid in full.

Foreign Shipments

Payments are to be made in United States dollars at par. Prices are FOB Erie, Pennsylvania, USA or shipping point. All charges covering inland and ocean freight, insurance, customs' duties, fees, overseas packing, and all other charges connected with the order are to be paid by purchaser.

Routing Shipments

The customer is responsible for providing OSI with shipping instructions for each order. In the event the customer fails to provide OSI with shipping instruction, OSI will select both the method of shipment and the carrier. In all cases, the customer is responsible for all shipping and handling charges.

Claims

All goods manufactured by OSI are carefully inspected and/or tested before packing and shipment. All claims for damage must be presented to the carrier. OSI is not responsible for breakage or damage after goods are delivered to carrier. If OSI is notified of such claims within 5 days from the date of delivery of merchandise, OSI will assist to secure adjustment. Claims for shortages will be recognized if made within 5 days of date of delivery of merchandise. All other claims will be recognized only if made in writing, within 30 days from the date of delivery of merchandise.

Cancellations of Orders

Orders, once entered, may be cancelled only upon receipt of written notice by OSI, provided OSI is fully compensated for loss due to said cancellation.

Returns

Conditions under which we will accept the return of goods for credit require:

- (a) That authorization from OSI has been received. A Return Authorization Number must appear on the outside of the carton.
- (b) That the goods are in proper saleable condition.
- (c) That the goods are not of special design, construction or finish.
- (d) That the goods be returned, charges prepaid, within 60 days from date of shipment.
- (e) That we deduct 15 percent or \$20.00, whichever is higher, from purchase price as a service charge to cover the cost of handling, testing and restocking.
- (f) That, if in our opinion, goods need repairs or refinishing, OSI is authorized to charge against the credit the cost of such work, in addition to the regular service charge.



Adjustments

Adjustments of disputed accounts or disputes of any kind made by any representative of OSI are subject to written approval by OSI's Credit Manager in Erie, Pennsylvania, before considered binding on OSI.

Limited Warranty

All goods of OSI's own manufacture are warranted to the first user for a period of five years after date of shipment against defective workmanship and material. Any parts or goods deemed defective must be returned to OSI, transportation charges prepaid, and if upon examination we deem same to come under the terms of our warranty, OSI will repair or replace same free of charge. This is a limited, non-transferable warranty and OSI is not responsible for any consequential damages resulting from the breach of this warranty or for any labor or installation charges. Should repairs or replacement be necessary due to improper installation, usage, or other causes for which OSI is not responsible, a charge for repairs will be made.

Exceptions to Five (5) Year Warranty

OSI Rectifiers, Reisner Magnets, Chime Actions & Transformers, solid state Chime Relays and SLIC Motors are warranted to the first user against defective workmanship and material for one year from the date of shipment. Ventus Blowers are warranted for 18 months from the date of shipment. Other products sold by OSI, but manufactured by others are subject to the warranty terms and conditions of the manufacturer.

Replacements

When it is necessary to replace parts, the goods to be replaced are to be returned to OSI, with a Return Authorization Number, within 60 days from date of shipment. Credit will be applied upon receipt and inspection of returned parts. If original part(s) were damaged due to negligence, mis-handling and/or improper use, OSI reserves the right to charge for the part(s) and handling costs.

Legal Considerations

Any action for breach of a contract of sale must be commenced within one year of the accrual thereof or be forever barred.

Venue for all actions arising under this contract shall be exclusively in the courts of the Commonwealth of Pennsylvania located in Erie County, or in the Federal District Court located in Erie, Pennsylvania, and all customers and vendors, and their customers and suppliers, hereby consent and submit to the jurisdiction of said courts.

This contract and the duties of the seller and the buyer will be governed by the provisions of the Uniform Commercial Code—Sales of the Commonwealth of Pennsylvania, except as varied and modified herein.

In case any part of all of one or more of the provisions contained in these Conditions of Sale shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision or part thereof and these Conditions of Sale shall be construed as if such invalid, illegal, or unenforceable provision or part thereof had never been contained here in.