

## FlushPro™ Valve and Winterizing Kit

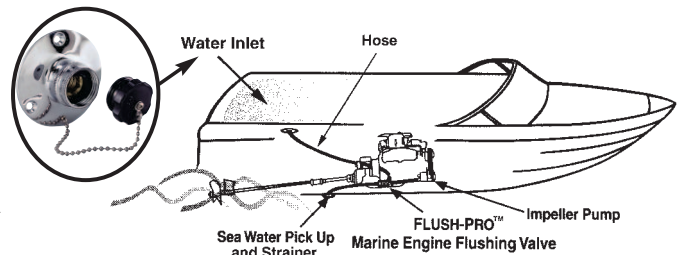
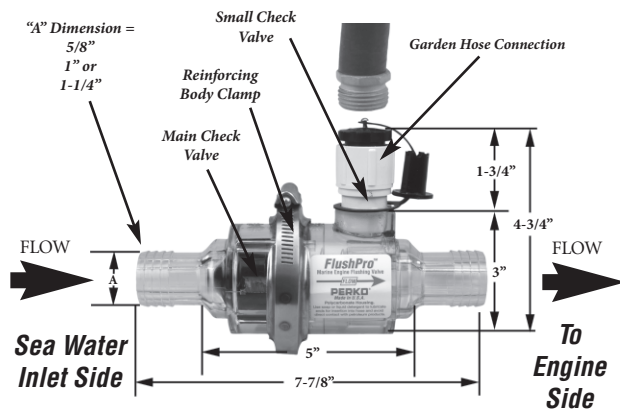
**FlushPro™ Marine Engine Flushing and Winterizing Valve** - Flush your boat engine safely and easily  
**Freshwater Flushing of Your Inboard is as Simple as Connecting a Garden Hose**

- Material: Polycarbonate, with Stainless Steel Spring  
 Finish: Clear  
 For Hose Sizes: 5/8", 1" or 1-1/4"  
 Features:
- Transparent body allows for visual inspection of water flow
  - Durable check valve system activated by water pressure from a garden hose
  - Check valve automatically shuts off hull intake when water pressure is applied
  - Adapter supplied with FlushPro™ makes winterizing your boat easy
  - Can be used with onboard generators



Fig. 0456

Finish	Hose Size "A" Dimension	Retail Pkg.	OEM Bulk Pkg.
Valve	5/8	0456DP4	0456004
Valve	1	0456DP6	0456006
Valve	1-1/4	0456DP7	0456007
Valve & Kit	5/8	0457DP4	0457004
Valve & Kit	1	0457DP6	0457006
Valve & Kit	1-1/4	0457DP7	0457007

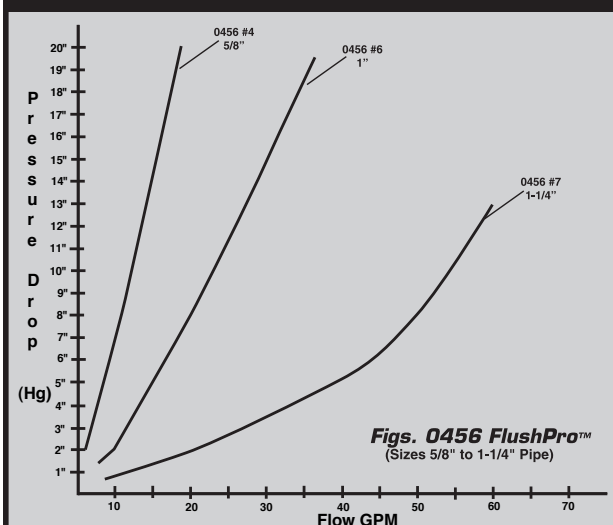


**PROP 65 WARNING**  
 (Contains Lead & DINP)

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Underwater Hardware

FIG. 0456 - DIFFERENTIAL PRESSURE GRAPH



### FlushPro™ Marine Engine Flushing & Winterizing Kit

**Kit includes:**

- FlushPro™ Valve with Two Clamps
- Hose Fittings & Clamps
- 7' of Hose
- Fig. 0499 Water Inlet Fitting

Fig. 0457



7 Feet  
of Hose



## Intake Water Strainers

### Flushing Strainer

Freshwater flushes your inboard or generator simply and easily

Material: Cast Bronze, Stainless Steel Basket and Clear Polycarbonate Cylinder  
 For Pipe Sizes: 1/2" to 1-1/4" NPT  
 Uses: For Flushing, Winterizing and acts as an Emergency Bilge Pump

- Features:
- Handle Indicates Flow Direction
  - Top Casting Removes Easily for Basket Cleaning
  - Reversible Bulkhead Mounting Option
  - Smooth Acting, Low Torque Ball Valve
  - Internal Cam Seals Fresh Water Intake During Normal (Through Strainer) Operation
  - Uses Standard Perko Strainer Replacement Parts (Gaskets, Cylinders, Nuts, and Tie Rods)
  - Designed for easy installation and cleaning
  - Mounting lugs cast into both sides to assure universal mounting
  - Four outside tie rods
  - Stainless steel strainer basket minimizes electrolysis
  - 0.079" Screen hole diameter provides 47% open area, among the highest in the industry for cylindrical strainer baskets.
  - Hinged lugs on cover permit easy removal and cleaning of the strainer basket
  - A drain plug in the bottom casting for easily removing sediment and draining for winterizing

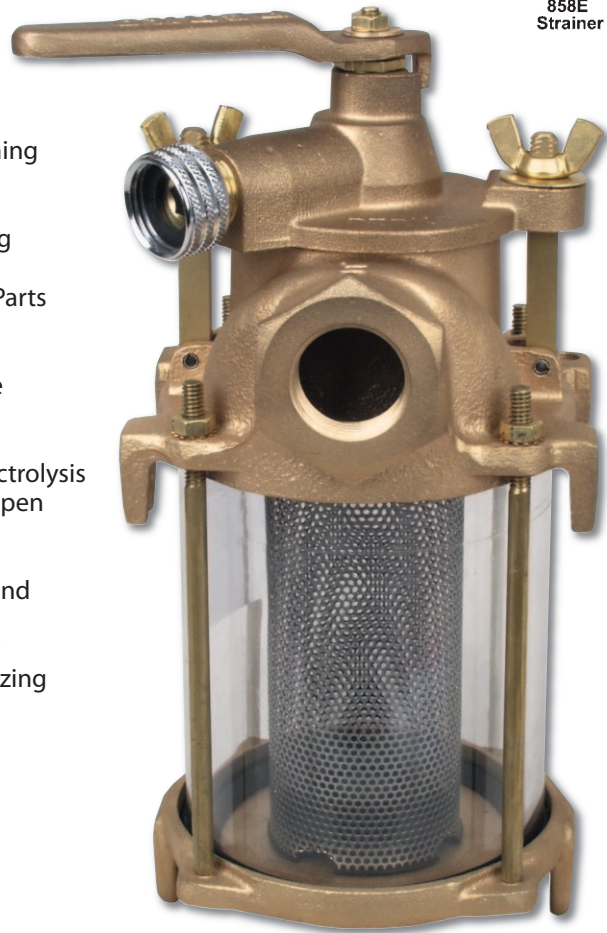
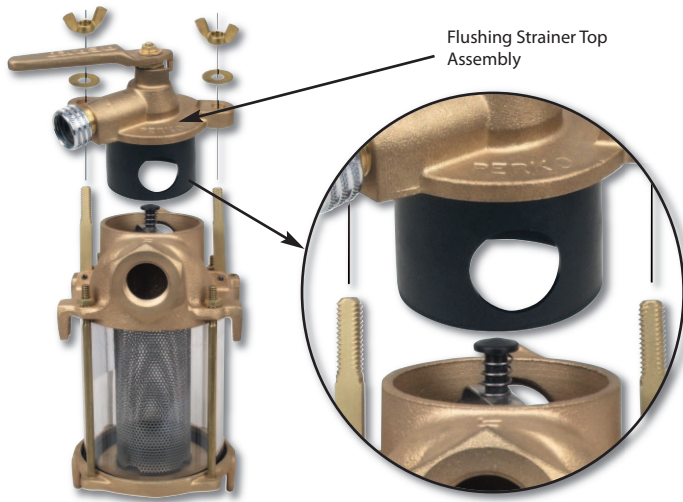


Fig. 0593



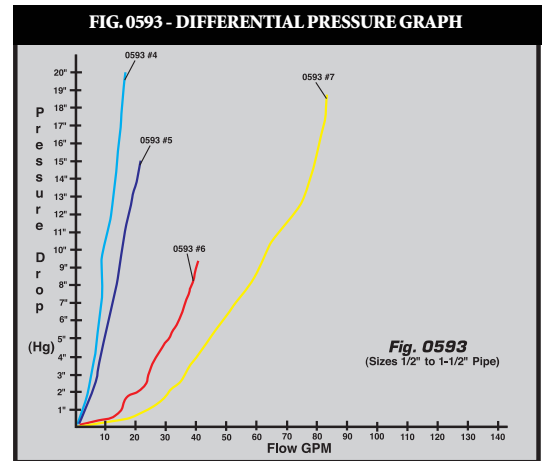
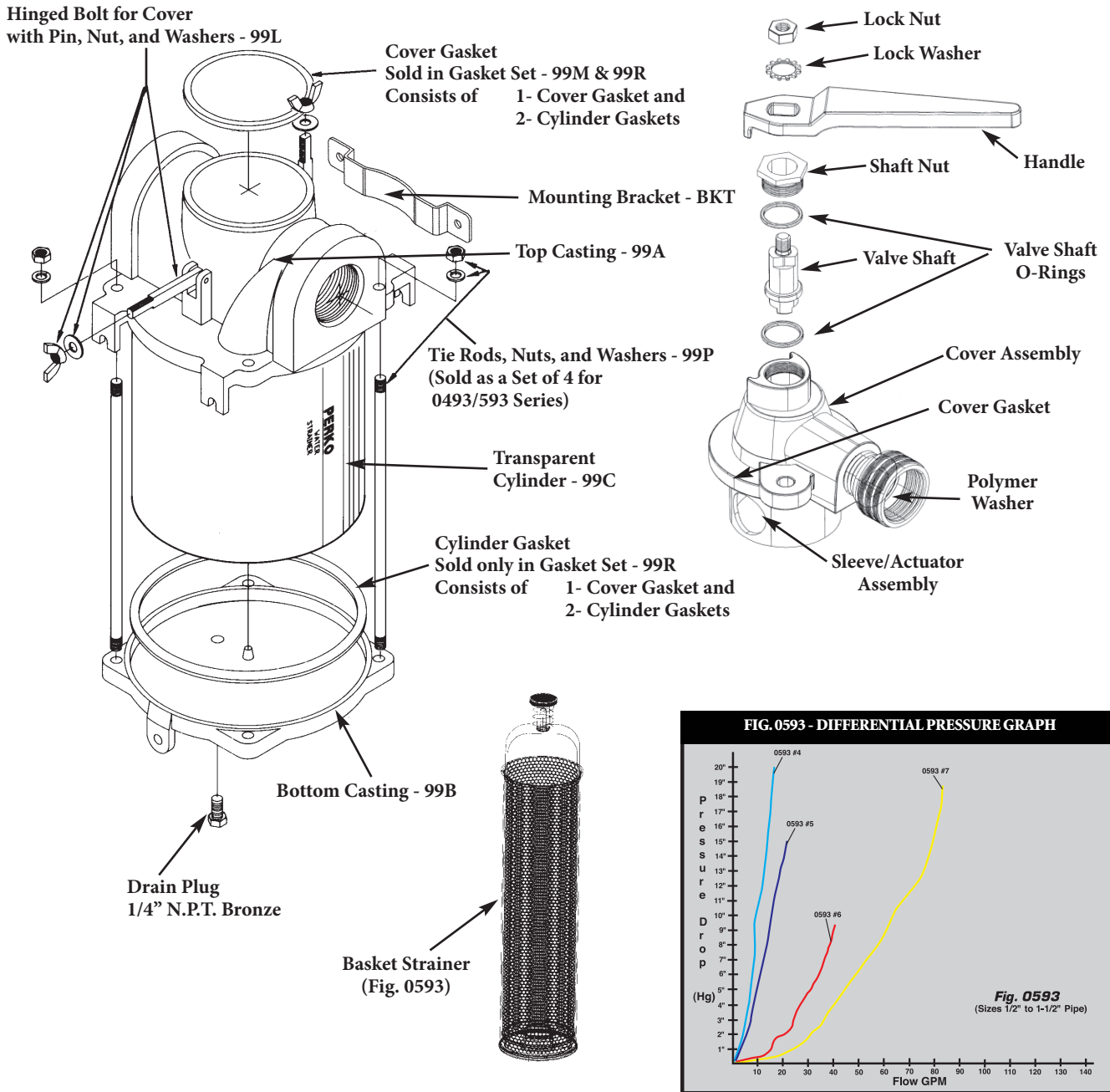
Flushing Strainer Top Assembly



Pipe Size	Height Overall	Width Overall	Standard Pkg.	Dimensions Cylinder	Dimensions Basket	Open Area To Pipe Size Ratio	Spare Gasket Kit* Retail Pkg.
1/2"	5-3/4"	4-1/2"	0593004PLB	3-1/2" x 4"	1-13/16" x 4-1/16"	30:1	0493DP599R
3/4"	8-3/8"	4-1/2"	0593005PLB	3-1/2" x 6"	1-13/16" x 6-1/4"	25:1	0493DP599R
1"	9-1/2"	5-1/2"	0593006PLB	4-1/2" x 5-1/2"	2-5/8" x 5-7/8"	20:1	0493DP799R
1-1/4"	10"	5-1/2"	0593007PLB	4-1/2" x 6"	2-5/8" x 6-1/4"	13:1	0493DP799R

\*Spare Gasket Kit Consists of: 1 Cover Gasket and 2 Cylinder Gaskets

## Fig. 0593 Flushing Strainer Spare Parts



### Spare Parts Information For Fig. 0593 Flushing Strainer Only

Description	Spare Part Code	Sample Part Number	Package	Description	Spare Part Code	Sample Part Number	Package
Handle (Fig. 0805)	99D	080500599D**	Boxed	Cover Assy.	99C	059300499C	Boxed
Valve Shaft	99A	059300499A	Boxed	Basket Strainer	99D	059300499D	Boxed
Sleeve Assy.	99B	059300499B	Boxed				

\*\* For Complete Handle Part Numbers See Fig. 0805 on page 98.

### Intake Water Strainer & Flushing Strainer Common Spare Parts Ordering Information

For Spare Part No. Insert a Spare Part Code Listed Below in Place of the "PLB" in the Strainer's Catalog Number (i.e., 049300699A, Top Casting for 1" (#6) Strainer).

Description	Spare Part Code	Sample Part Number	Package	Spare Part Description	Sample Code	Part Number	Package
Top Casting	99A	049300499A	Boxed	Rubber Gasket Kit Consists of:			
Bottom Casting	99B	049300499B	Boxed	1- Cover Gasket and			
Transparent Cylinder	99C	049300499C	Boxed	2- Rubber Cylinder Gaskets	99R*	0493DP599R	Bag
Cover with Gasket	99E	049300499E	Boxed	Tie Rods, Nuts, and Washers			
Cork Cover Gasket Kit (Set of 2)	99N	0493DP599N	Bag	Consists of (4 Each for 0493 Series)	99P	0493DP499P	Bag

## Clear Body Intake Water Strainer

### Lightweight Intake Water Strainer with Clear Body

**Material:** Cast Bronze with Clear Polycarbonate Body and Stainless Steel Basket

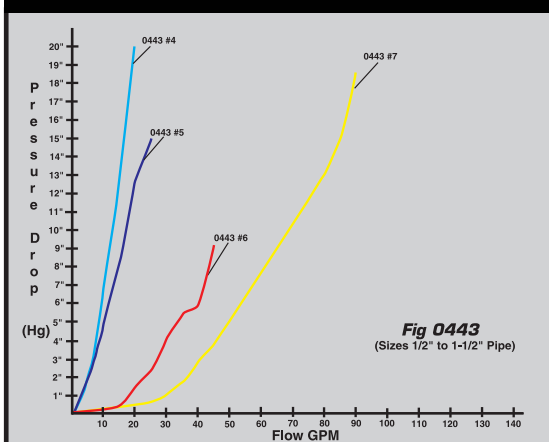
**For Pipe Sizes:** 1/2" to 1-1/4" NPT

- Features:**
- Many Replacement Parts in Common with Other Perko Strainers (Fig. 0493)
  - Our Lightest Weight Strainer Series
  - Designed for easy installation and cleaning
  - Mounting lugs cast into both sides to assure universal mounting
  - Stainless steel strainer basket minimizes electrolysis
  - 0.079" Screen hole diameter provides 47% open area, among the highest in the industry for cylindrical strainer baskets
  - Hinged lugs on cover permit easy removal and cleaning of the strainer basket
  - A drain plug in the bottom casting for easily removing sediment and draining for winterizing



Fig. 0443

FIG. 0443 - DIFFERENTIAL PRESSURE GRAPH

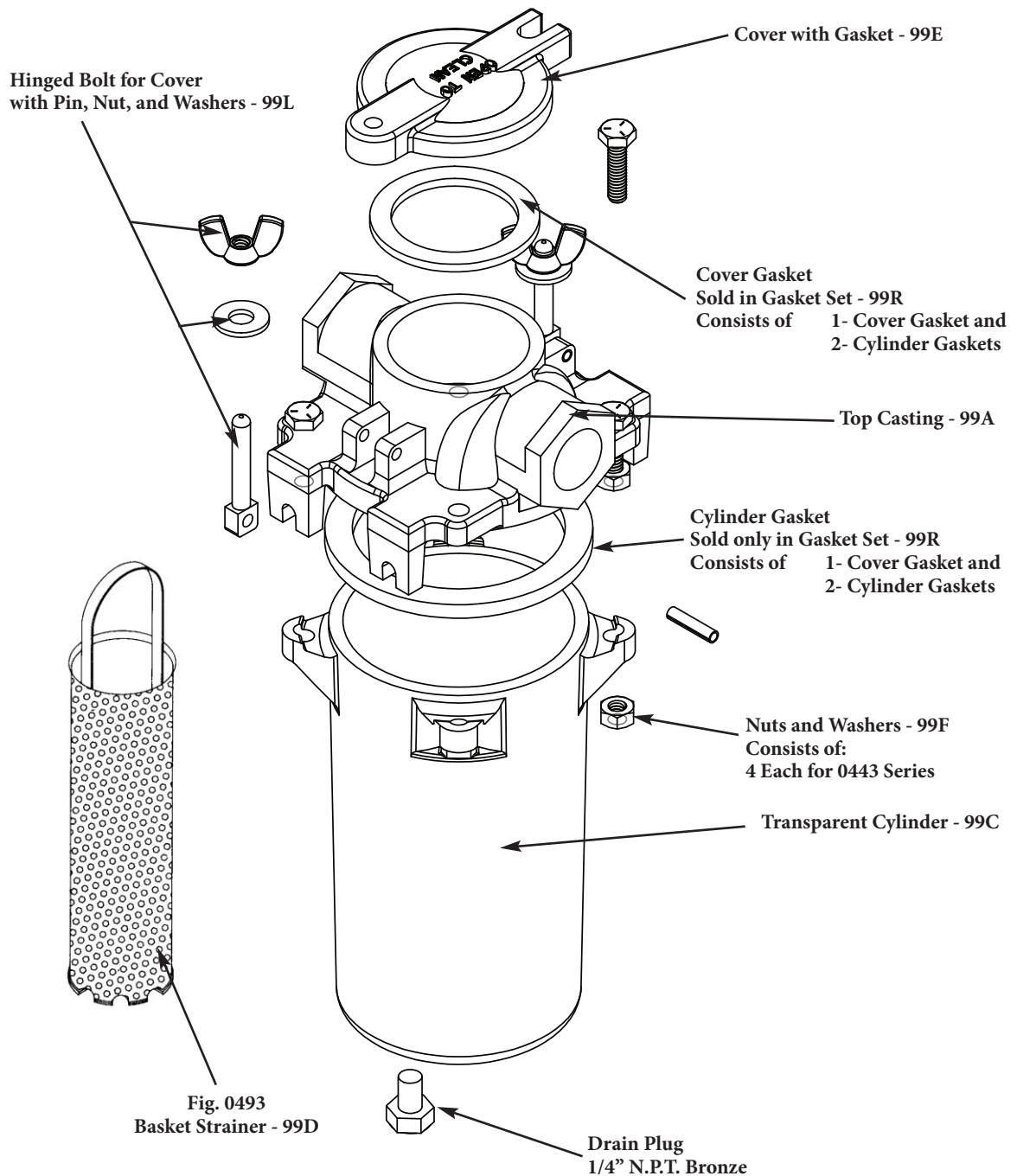


**PROP 65 WARNING**  
(Contains Lead & DINP)

Pipe Size	Standard Pkg.	Height Overall	Width Overall	Dimensions Cylinder (O.D. x L)	Dimensions Basket	Open Area To Pipe Size Ratio	Spare Gasket Kit* Retail Pkg.
1/2"	0443004PLB	6-1/4"	4-1/2"	3-1/2" x 4-1/4"	1-13/16" x 4-1/16"	30:1	0443DP599R
3/4"	0443005PLB	8-5/8"	4-1/2"	3-1/2" x 6-5/8"	1-13/16" x 6-1/4"	25:1	0443DP599R
1"	0443006PLB	8-3/4"	5-1/2"	4-1/2" x 6"	2-5/8" x 5-7/8"	20:1	0443DP799R
1-1/4"	0443007PLB	9-5/16"	5-1/2"	4-1/2" x 6-9/16"	2-5/8" x 6-1/4"	13:1	0443DP799R

\*Spare Gasket Kit Consists of: 1 Cover Gasket and 2 Cylinder Gaskets

## Fig. 0443 Clear Body Intake Water Strainer Spare Parts



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### Spare Parts Ordering Information

For Spare Part No. Insert a Spare Part Code Listed Below in Place of the "PLB" in the Strainer's Catalog Number (i.e., 049300699A, Top Casting for 1" (#6) Strainer).

Description	Spare Part Code	Sample Part Number	Package	Description	Spare Part Code	Sample Part Number	Package
Top Casting	99A	049300499A	Boxed	Hinged Bolt for Cover With Pin, Nut, and Washer	99L	0493DP599L	Bag
Transparent Cylinder Body	99C	044300499C	Boxed	Rubber Gasket Kit Consists of:			
Basket Strainer	99D	049300499D	Boxed	1- Cover Gasket and			
Cover with Gasket	99E	049300499E	Boxed	2- Rubber Cylinder Gaskets	99R*	0493DP599R	Bag
				Nuts and Washers Consists of:			
				4 Each for 0443 Series	99F	0443DP499F	Bag

## Intake Water Strainers

### Intake Water Strainers

**Material:** Cast Bronze, 316 Stainless Steel Basket and Clear Polycarbonate Cylinder  
**For Pipe Sizes:** 1/2" to 2-1/2" NPT

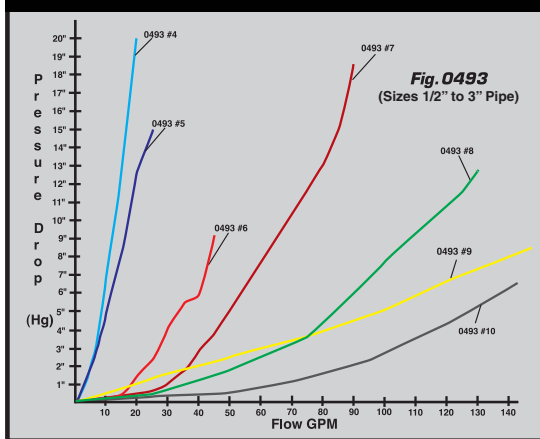
- Features:**
- Designed for easy installation and cleaning
  - Mounting lugs cast into both sides to assure universal mounting
  - Four outside tie rods
  - Stainless steel strainer basket minimizes electrolysis
  - 0.079" Screen hole diameter provides 47% open area, among the highest in the industry for cylindrical strainer baskets
  - Hinged lugs on cover permit easy removal and cleaning of the strainer basket
  - A drain plug in the bottom casting for easily removing sediment and draining for winterizing



Fig. 0493



FIGS. 0493 & 0593 - DIFFERENTIAL PRESSURE GRAPHS

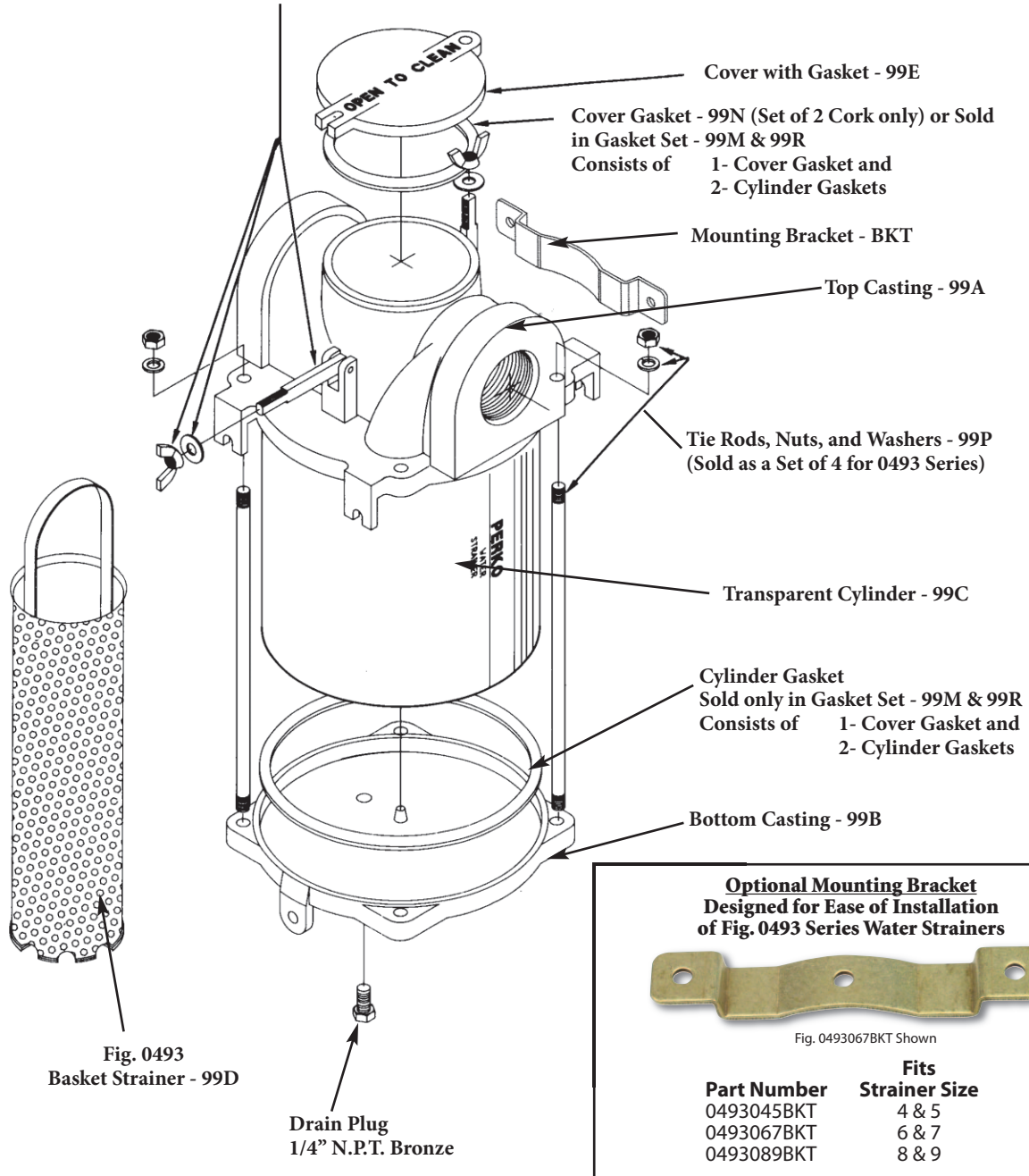


Pipe Size	Height Overall	Width Overall	Standard Pkg.	Dimensions Cylinder	Dimensions Basket	Open Area To Pipe Size Ratio	Spare Gasket Kit* Retail Pkg.
1/2"	5-3/4"	4-1/2"	0493004PLB	3-1/2 x 4"	1-13/16" x 4-1/16"	30:1	0493DP599M (or) 99R
3/4"	8-3/8"	4-1/2"	0493005PLB	3-1/2 x 6"	1-13/16" x 6-1/4"	25:1	0493DP599M (or) 99R
1"	9-1/2"	5-1/2"	0493006PLB	4-1/2 x 5-1/2"	2-5/8" x 5-7/8"	20:1	0493DP799M (or) 99R
1-1/4"	10"	5-1/2"	0493007PLB	4-1/2 x 6"	2-5/8" x 6-1/4"	13:1	0493DP799M (or) 99R
1-1/2"	11-1/2"	7-1/4"	0493008PLB	6 x 8"	3-5/16" x 8-7/16"	17:1	0493DP999M (or) 99R
2"	16"	7-1/2"	0493009PLB	6 x 12"	3-5/16" x 12-1/4"	13:1	0493DP999M (or) 99R
2-1/2"	16"	7-1/2"	0493010PLB	6 x 12"	3-5/16" x 12-1/2"	10:1	0493DP999M (or) 99R

\*Spare Gasket Kit Consists of: 1 Cover Gasket and 2 Cylinder Gaskets

# Fig. 0493 Intake Water Strainer Spare Parts

Hinged Bolt for Cover with Pin, Nut, and Washers - 99L



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### Spare Parts Ordering Information

For Spare Part No. Insert a Spare Part Code Listed Below in Place of the "PLB" in the Strainer's Catalog Number (i.e., 049300699A, Top Casting for 1" (#6) Strainer).

Description	Spare Part Code	Sample Part Number	Package	Description	Spare Part Code	Sample Part Number	Package
Top Casting	99A	049300499A	Boxed	Cork Gasket Kit Consists of:			
Bottom Casting	99B	049300499B	Boxed	1- Cover Gasket and			
Transparent Cylinder	99C	049300499C	Boxed	2- Cork Cylinder Gaskets	99M*	0493DP599M	Bag
Basket Strainer	99D	049300499D	Boxed	Rubber Gasket Kit Consists of:			
Cover with Gasket	99E	049300499E	Boxed	1- Cover Gasket and			
Hinged Bolt for Cover				2- Rubber Cylinder Gaskets	99R*	0493DP599R	Bag
With Pin, Nut and Washer	99L	0493DP599L	Bag	Tie Rods, Nuts, and Washers			
Cork Cover Gasket Kit (Set of 2)	99N	0493DP599N	Bag	Consists of (4 Each for 0493 Series)	99P	0493DP499P	Bag

\* Note: Older model strainers utilizing cork cylinder gaskets must order 99M Cork Gasket Kit and newer model strainers must order 99R Rubber Gasket Kit.

## Higher Capacity Intake Water Strainer

### Intake Water Strainers

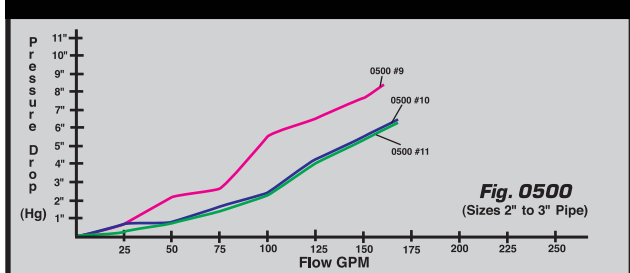
Material: Cast Bronze, Stainless Steel Basket and Clear Polycarbonate Cylinder  
 For Pipe Sizes: 2", 2-1/2", and 3" NPT  
 Use: For Applications requiring Higher Capacity

- Features:
- Designed for easy installation and cleaning
  - Mounting lugs cast into both sides to assure universal mounting
  - Four outside tie rods
  - Stainless steel strainer basket minimizes electrolysis
  - 0.079" Screen hole diameter provides 47% open area, among the highest in the industry for cylindrical strainer baskets.
  - Hinged lugs on cover permit easy removal and cleaning of the strainer basket
  - A drain plug in the bottom casting for easily removing sediment and draining for winterizing



Fig. 0500

FIG. 0500 - DIFFERENTIAL PRESSURE GRAPHS

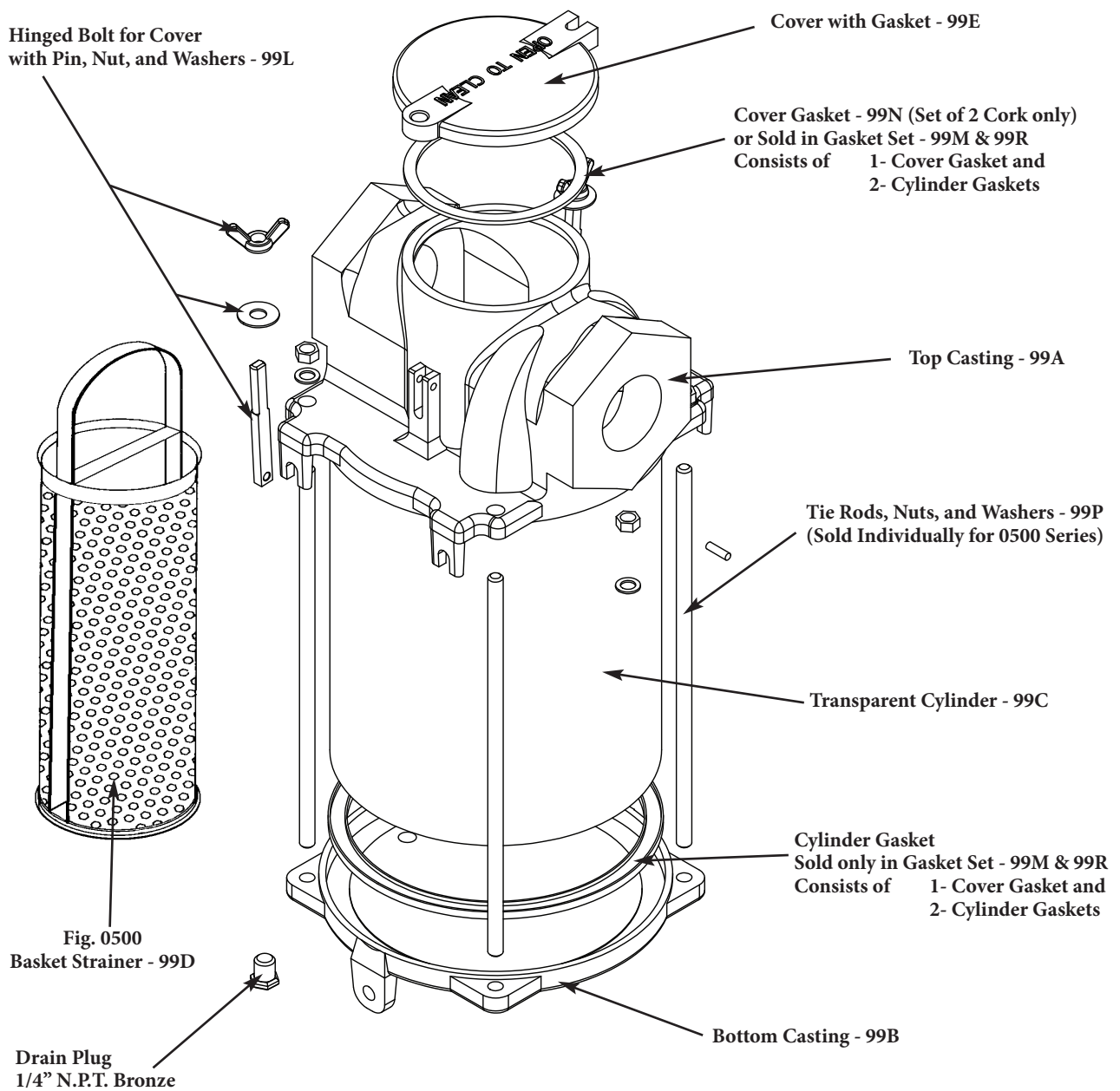


Pipe Size	Height Overall	Width Overall	Standard Pkg.	Dimensions Cylinder	Dimensions Basket	Open Area To Pipe Size Ratio	Spare Gasket Kit* Retail Pkg.
2"	14-1/2"	9"	0500009PLB	8" x 10"	3-7/8" x 10-1/4"	20:1	0500DP999M (or) 99R
2-1/2"	16-1/2"	9"	0500010PLB	8" x 12"	3-7/8" x 12-1/4"	18:1	0500DP999M (or) 99R
3"	18-1/2"	9"	0500011PLB	8" x 14"	3-7/8" x 14-1/4"	14:1	0500DP999M (or) 99R

\*Spare Gasket Kit Consists of: 1 Cover Gasket and 2 Cylinder Gaskets



## Fig. 0500 Intake Water Strainer Spare Parts



### Spare Parts Ordering Information

For Spare Part No. Insert a Spare Part Code Listed Below in Place of the "PLB" in the Strainer's Catalog Number (i.e., 050000999A, Top Casting for 2" (#9) Strainer).

Description	Spare Part Code	Sample Part Number	Package	Description	Spare Part Code	Sample Part Number	Package
Top Casting	99A	050000999A	Boxed	Cork Gasket Kit Consists of:			
Bottom Casting	99B	050000999B	Boxed	1- Cover Gasket and			
Transparent Cylinder	99C	050000999C	Boxed	2- Cork Cylinder Gaskets	99M*	0500DP999M	Bag
Basket Strainer	99D	050000999D	Boxed	Rubber Gasket Kit Consists of:			
Cover with Gasket	99E	050000999E	Boxed	1- Cover Gasket and			
Hinged Bolt for Cover				2- Rubber Cylinder Gaskets	99R*	0500DP999R	Bag
With Pin, Nut and Washer	99L	0500DP999L	Bag	Tie Rods, Nuts, and Washers			
Cork Cover Gasket Kit (Set of 2)	99N	0500DP999N	Bag	Consists of (1 Each for 0500 Series)	99P	0500DP999P	Bag

\* Note: Older model strainers utilizing cork cylinder gaskets must order 99M Cork Gasket Kit and newer model strainers must order 99R Rubber Gasket Kit.

## Underwater Hardware Packaging and Thread Styles

These durable little tags have everything a retailer needs to showcase products and ring up sales. On each tag you will find the Perko name colorfully printed in blue, our figure number, a product description and the bar code for your scanner. There is even a California Proposition 65 statement (where applicable) on the back. These tags are designed to securely hold on to the product and hang from your standard peg hooks. And since the tags are small, you can also simply toss them into a bulk bin if you prefer. Either way, the tags will stay attached, unlike stickers that fall off bronze parts. These tags are available on thru hulls, adapters and several types of strainers. Look for the "DP" designation. Our "DP" Dealer Package for small items (like the smaller thru hull fittings and tailpieces) will be a 5 or 10 piece bulk box with a bar code label on each individual unit.

**THESE 5 OR 10 PIECE CARTONS CANNOT BE BROKEN.** Larger items (like valves & strainers) will be available individually boxed as a single unit standard package with a barcode label on the outside of the box.

To be sure the parts you receive are barcoded for Retail Sale, order either a "DP" version or a single unit standard package.

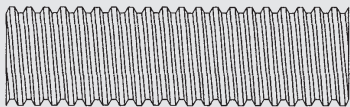


All of our small repair/replacement strainer parts are now barcoded. Top Castings (99A), Bottom Castings (99B), Transparent Cylinders (99C), Strainer Baskets (99D) and Covers (99E) are available individually boxed as barcoded single unit standard packages. Smaller items or kits including Cover Hardware Kits (99L), Gasket Kits (99M & 99R) and Tie Rod Kits (99P) are individually packaged as "DP" items in bags with a barcode label.

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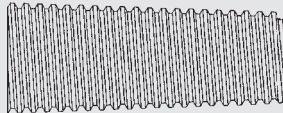
## UNDERSTANDING UNDERWATER HARDWARE PIPE THREAD STYLES

### Straight Pipe Threads (NPS)



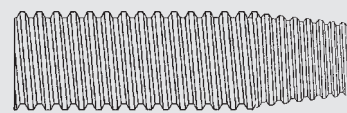
Straight pipe threads are used where connections are purely mechanical and/or bedding compounds are generally used. The intake side of all seacocks, thru-hulls, and scuppers with hose barbs, and all flanged lock nuts use straight threads.

### Tapered Pipe Threads (NPT)



Tapered pipe threads are used where connections must also be watertight. The output side of seacocks, in-line valves, hose adapters, drain plugs, raw water, and pump strainers use tapered threads.

### Combination Tapered/Straight Pipe Threads (NPT/S)



On all other thru-hulls, scuppers and intake strainers we use a unique combination pipe thread. The first few threads are tapered. The rest remain straight threads. This approach allows the same thru-hull to seal when coupled with an in-line valve or to engage at various depths when connected to a seacock.



## Strainers

### Intake Strainer

Material: Cast Bronze  
 For Pipe Sizes: 1/2" to 1-1/4" NPT/S (See Page 96)  
 Screw Size: #8  
 Features: Machined Slots

Max. Pipe Size	Max. Hull Thickness	Dimensions Strainer	Retail Pkg.	OEM Bulk Pkg.
1/2"	2-1/4"	3" x 4"	0065DP4PLB	0065004PLB
3/4"	2-3/16"	3" x 4"	0065DP5PLB	0065005PLB
1"	2-1/2"	3" x 4"	0065DP6PLB	0065006PLB
1-1/4"	3"	3-1/4" x 4-1/4"	0065DP7PLB	0065007PLB

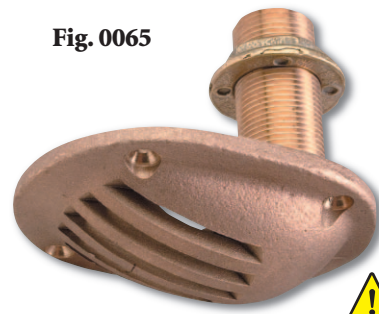


Fig. 0065



**PROP 65 WARNING**  
 (Contains Lead)

### Scoop Strainer

Material: Cast Bronze  
 For Thru Hull: Sizes: 3/8" to 2"  
 Screw Size: #8  
 Features: Machined Slots

For Thru-Hull Sizes	Dimensions Strainer	Retail Pkg.	Standard Pkg.
3/8" & 1/2"	3-1/2" x 2-1/2"	0066DP1PLB	0066001PLB
3/4" & 1"	5" x 3-1/4"	0066DP2PLB	0066002PLB
1-1/4" & 1-1/2"	6-1/4" x 4-1/4"	0066DP3PLB	0066003PLB
2"	8" x 5-1/8"	0066DP4PLB	0066004PLB



Fig. 0066



**PROP 65 WARNING**  
 (Contains Lead)

### Round Strainer

Material: Cast Bronze  
 For Thru Hull: Sizes: 3/8" to 3"  
 Screw Size: Sizes 1-5: #8  
 Sizes 6 & 7: #10  
 Features: Drilled Holes

For Thru-Hull Size	O.D.	I.D.	Retail Pkg.	Standard Pkg.
3/8" & 1/2"	2-1/2"	1-5/8"	0086DP1PLB	0086001PLB
3/4"	3"	2"	0086DP2PLB	0086002PLB
1"	3-1/2"	2-3/8"	0086DP3PLB	0086003PLB
1-1/4" & 1-1/2"	4"	3"	0086DP4PLB	0086004PLB
2"	5"	3-3/4"	0086DP5PLB	0086005PLB
2-1/2"	6"	4-1/2"	-----	0086006PLB
3"	8"	6-1/4"	-----	0086007PLB



Fig. 0086



**PROP 65 WARNING**  
 (Contains Lead)

### Pump Strainers - For Hose or Pipe

Material: Cast Bronze  
 Uses: For Hose: Fig. 0709  
 For Pipe (NPT): Figs. 0721 & 0722  
 (See Page 96)



Fig. 0709

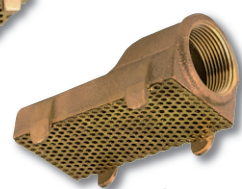


Fig. 0721

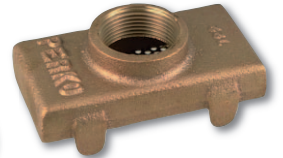


Fig. 0722

Hose Size	Pipe Size	Length Overall	Width Overall	Dealer Pkg.	Standard Pkg.
5/8"	-----	3-5/8"	1-3/4"	0709DP0PLB	-----
-----	1-1/4"	4-3/4"	2-3/4"	-----	0721000PLB
-----	1-1/4"	4-1/2"	2-3/4"	-----	0722000PLB

**Spare Parts Ordering Information**  
 Screen for: Fig 0709: 070900088A  
 Fig 0721: 072100088A  
 Fig 0722: 072200088A

**PROP 65 WARNING**  
 (Contains Lead)

Underwater Hardware

## Seacocks

### Seacocks - Ball Valve Design

- Material: Cast Bronze  
 Finish: Plain  
 For Hose Sizes: 3/4" to 3"  
 For Pipe Sizes: 3/4" to 3" NPS (Base) (See Page 96)  
 Features:
- Polymer Ball and Seat, Assuring a Tight Seal and Ease of Operation, and Drain Plugs for Winterizing
  - Handles are Easily Removed
  - Fig. 0834: With 90° Curved Hose Adapter
  - Fig. 0835: With Straight Hose Adapter



Fig. 0834

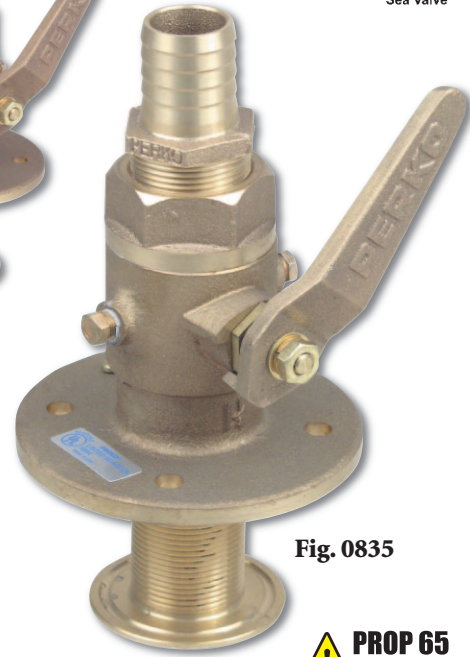


Fig. 0835



Hose Size	Pipe Size	Flange Dia.	Fig. 0834 Overall Height*	Fig. 0834 Std. Pkg.	Fig. 0835 Overall Height*	Fig. 0835 Std. Pkg.	Bolt Size
3/4"	3/4"	3-1/4"	5-7/8"	0834005PLB	5"	0835005PLB	5/16"
1"	1"	4-3/8"	6-3/8"	0834006PLB	5-3/8"	0835006PLB	3/8"
1-1/4"	1-1/4"	4-7/8"	7-5/8"	0834007PLB	6-1/4"	0835007PLB	3/8"
1-1/2"	1-1/2"	5-1/2"	8-3/8"	0834008PLB	6-5/8"	0835008PLB	3/8"
2"	2"	5-3/4"	10-3/8"	0834009PLB	7-7/8"	0835009PLB	3/8"
2-1/2"	2-1/2"	7-1/4"	12-1/2"	0834010PLB	10-3/8"	0835010PLB	1/2"
3"	3"	8"	14-3/8"	0834011PLB	12"	0835011PLB	1/2"

\* Overall Height is measured from the top of the hose adapter to the bottom of the flange.



### Seacock Body - Ball Valve Design

- Material: Cast Bronze  
 For Pipe Sizes: 3/4" to 3" NPS (Base) and NPT (Top) (See Page 96)  
 Features:
- Polymer Ball and Seat, Assuring a Tight Seal and Ease of Operation, and Drain Plugs for Winterizing
  - Handles are Easily Removed
  - These Valve Bodies are Offered to Meet the Needs of Applications that Require Extra Long, Scoop or Flush Type Thru-Hulls.

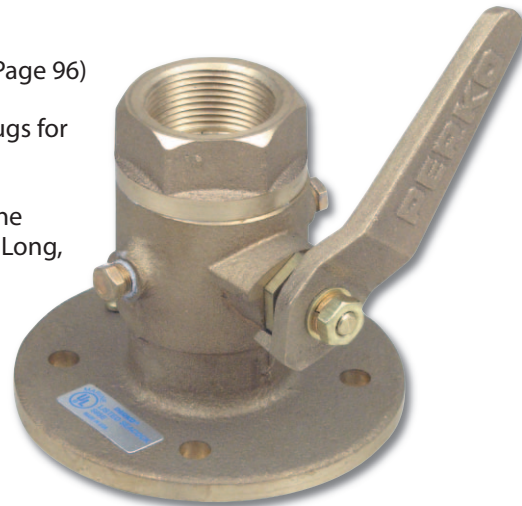


Fig. 0805



Pipe Size	Flange Diameter	Overall Height	Fig. 0805 Standard Pkg.	Bolt Size
3/4"	3-1/4"	3-3/8"	0805005PLB	5/16"
1"	4-3/8"	3-3/4"	0805006PLB	3/8"
1-1/4"	4-7/8"	4-1/4"	0805007PLB	3/8"
1-1/2"	5-1/2"	4-1/2"	0805008PLB	3/8"
2"	5-3/4"	5-3/4"	0805009PLB	3/8"
2-1/2"	7-1/4"	7-1/2"	0805010PLB	1/2"
3"	8"	7-3/4"	0805011PLB	1/2"

\* Overall Height is measured from the top of the valve body to the bottom of the flange.



#### Spare Parts Ordering Information

The Repair Kits Listed Below Consist of: 1 Ball, 2 Ball Seats and 2 O-Rings for the Valve Stem.

Pipe Size	Repair Kit Part No.	Pipe Size	Repair Kit Part No.	Handle Size	Part No.
3/4"	080500599B	2-1/2"	080501099B	Size 7	080500799D
1"	080500699B	3"	080501199B	Size 8	080500899D
1-1/4"	080500799B			Size 9	080500999D
1-1/2"	080500899B	Handle Part No.		Size 10	080501099D
2"	080500999B	Size 5	080500599D	Size 11	080501199D
		Size 6	080500699D		

## Pipe to Hose Adapters

### Pipe to Hose Adapter - 90° Curved

Material: Cast Bronze  
 For Pipe Sizes: 3/4" to 3" NPT (See Page 96)  
 Features: Cast Hex for Easier Installation



Fig. 0063

Pipe Size	Hose Size	Length Overall	Retail Pkg.	Standard Pkg.	OEM Bulk Pkg.
3/4"	3/4"	4-1/2"	0063DP5PLB	-----	0063005PLB
1"	1"	4-3/4"	0063DP6PLB	-----	0063006PLB
1-1/4"	1-1/4"	5-1/2"	0063DP7PLB	-----	0063007PLB
1-1/2"	1-1/2"	6"	0063DP8PLB	-----	0063008PLB
2"	2"	7"	-----	0063009PLB	-----
2-1/2"	2-1/2"	8-1/2"	-----	0063010PLB	-----
3"	3"	10"	-----	0063011PLB	-----

NOTE: The Above Item Meets the Requirements of U.S.C.G. Safety Standards, January 31, 1977 for Gasoline Fuel Systems, 33 CFR 183.



### Pipe to Hose Adapter - Straight

Material: Cast Bronze  
 For Pipe Sizes: 1/2" to 3" NPT (See Page 96)  
 Features:
 

- Cast Hex for Easier Installation
- Precision Machined Hose Barb

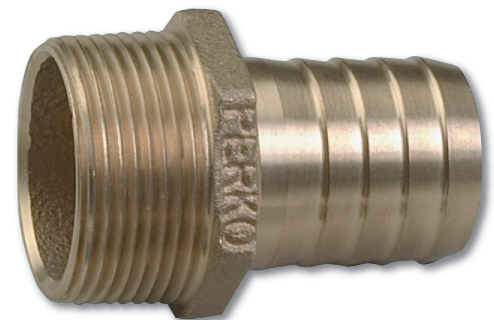


Fig. 0076

Pipe Size	Hose Size	Length Overall	Retail Pkg.	Standard Pkg.	OEM Bulk Pkg.
1/2"	5/8"	1-5/8"	0076DP4PLB	-----	0076004PLB
3/4"	3/4"	1-3/4"	0076DP5PLB	-----	0076005PLB
1"	1"	1-3/4"	0076DP6PLB	-----	0076006PLB
1-1/4"	1-1/4"	2"	0076DP7PLB	-----	0076007PLB
1-1/2"	1-1/2"	2-1/4"	0076DP8PLB	-----	0076008PLB
2"	2"	2-5/8"	-----	0076009PLB	0076009PLB
2-1/2"	2-1/2"	4"	-----	0076010PLB	-----
3"	3"	4-3/4"	-----	0076011PLB	-----

NOTE: The Above Item Meets the Requirements of U.S.C.G. Safety Standards, January 31, 1977 for Gasoline Fuel Systems, 33 CFR 183.



## Thru-Hull Connections

### Thru-Hull Connection for Use with Hose\*

- Material: Cast Bronze  
 Finish: Chrome Plated or Plain  
 For Hose Sizes: 5/8" to 2"  
 Max. Hull Thickness: Up To 2"  
 Features:
- Flange is Machined to Fit Hull and Grooved to Retain Bedding Compound.
  - Neck is Threaded to Approximately 3/16 Inch From Flange.

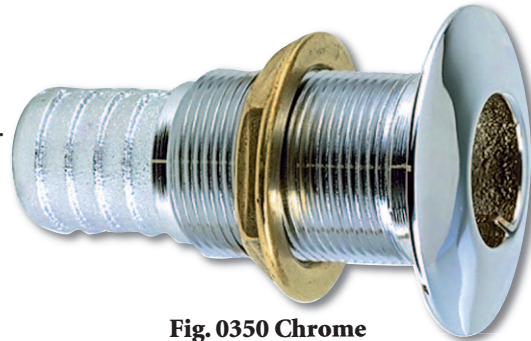


Fig. 0350 Chrome

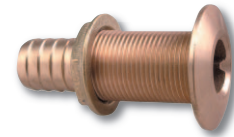


Fig. 0350 Plain



Illustration Of Bedding Groove

Hose Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	Plain Bronze		Chrome Plated Bronze	
				Retail Pkg.	OEM Bulk Pkg.	Retail Pkg.	OEM Bulk Pkg.
5/8"	13/16"	1-1/16"	1-1/2"	0350004DPP	0350004PLB	0350004DPC	0350004CHR
3/4"	1"	1-5/8"	1-7/8"	0350005DPP	0350005PLB	0350005DPC	0350005CHR
1"	1-5/16"	1-3/4"	2-1/4"	0350006DPP	0350006PLB	0350006DPC	0350006CHR
1-1/8"	1-5/16"	1-3/4"	2-1/4"	035006ADPP	035006APLB	035006ADPC	035006ACHR
1-1/4"	1-5/8"	1-7/8"	2-3/4"	0350007DPP	0350007PLB	0350007DPC	0350007CHR
1-1/2"	1-7/8"	1-7/8"	3-1/8"	0350008DPP	0350008PLB	0350008DPC	0350008CHR
2"	2-3/8"	2"	3-3/4"	-----	0350009PLB	-----	0350009CHR

Spare Flanged Nut See Fig. 0075, on page 105.

\*NOTE: Thru-Hull Connections For Use With Hose Are Not Recommended For Use Below The Waterline Per A.B.Y.C. "Safety Standards For Small Craft" Section H-27.



### Thru-Hull Connection for Use with Pipe - Flush Mount

- Material: Cast Bronze  
 Finish: Plain  
 For Pipe Sizes: 1/2" to 2" NPT/S (See Page 96)  
 Max. Hull Thickness: Up To 3-3/8"  
 Features: The exterior surface of the flange is machined flat and designed to be countersunk into the hull, resulting in a smooth external fit with no raised portion to increase drag.

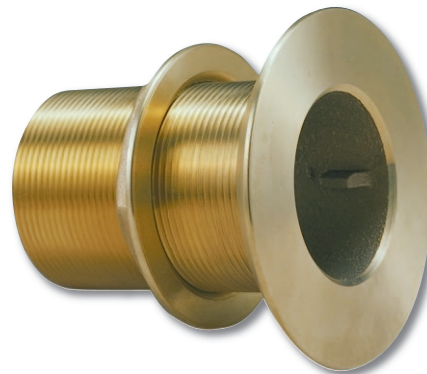
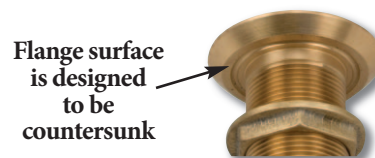


Fig. 0331



Flange surface is designed to be countersunk



Pipe Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
1/2"	13/16"	2-3/16"	1-11/16"	0331DP4PLB	0331004PLB
3/4"	1"	2-3/8"	2"	0331DP5PLB	0331005PLB
1"	1-5/16"	2-9/16"	2-1/4"	0331DP6PLB	0331006PLB
1-1/4"	1-5/8"	2-15/16"	2-7/8"	0331DP7PLB	0331007PLB
1-1/2"	1-7/8"	3-1/16"	2-31/32"	0331DP8PLB	0331008PLB
2"	2-3/8"	3-3/8"	3-7/8"	-----	0331009PLB

Spare Flanged Nut See Fig. 0075, on page 105.

## Thru-Hull Connections

### Thru-Hull Connection for Use with Pipe - Extra Long

- Material: Cast Bronze  
 Finish: Plain  
 For Pipe Sizes: 3/4" to 2-1/2" NPT/S (See Page 96)  
 Max. Hull Thickness: Up To 5"  
 Features:
- Flange is Machined to Fit Hull and Grooved to Retain Bedding Compound.
  - Neck is Threaded to Approximately 3/8 Inch From Flange.

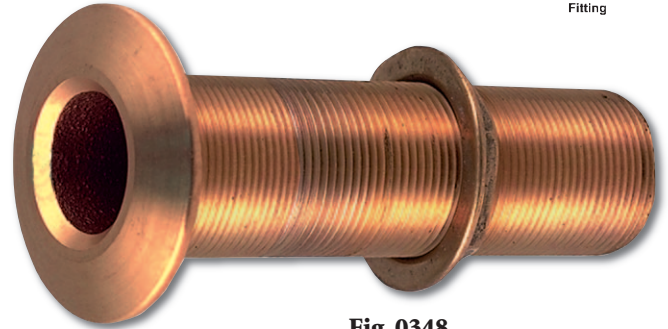


Fig. 0348

Pipe Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
3/4"	1"	5"	1-7/8"	0348DP5PLB	0348005PLB
1"	1-5/16"	4-7/8"	2-1/4"	0348DP6PLB	0348006PLB
1-1/4"	1-5/8"	4-5/8"	2-3/4"	0348DP7PLB	0348007PLB
1-1/2"	1-7/8"	4-5/8"	3"	0348DP8PLB	0348008PLB
2"	2-3/8"	4-1/2"	3-5/8"	-----	0348009PLB
2-1/2"	2-7/8"	4-1/4"	4-5/16"	-----	0348010PLB

Spare Flanged Nut See Fig. 0075, on page 105.



Illustration Of Bedding Groove



### Thru-Hull Connection for Use with Pipe

- Material: Cast Bronze  
 Finish: Plain  
 For Pipe Sizes: 3/8" to 3" NPT/S (See Page 96)  
 Max. Hull Thickness: Up To 2-3/4"  
 Features:
- Flange is Machined to Fit Hull and Grooved to Retain Bedding Compound.
  - Neck is Threaded to Approximately 3/8 Inch From Flange.

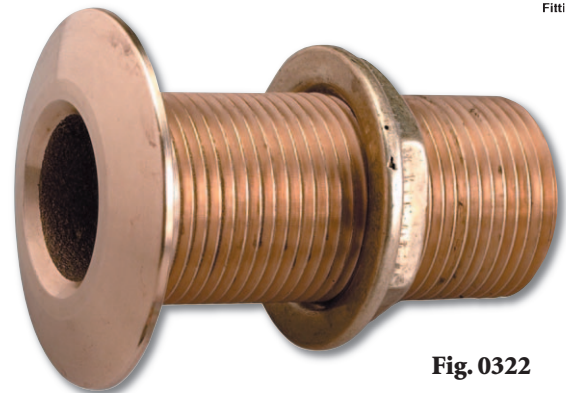


Fig. 0322

Pipe Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	Dealer Pkg.	Standard Pkg.	OEM Bulk Pkg.
3/8"	11/16"	1-3/4"	1-7/16"	0322DP3PLB	-----	0322003PLB
1/2"	13/16"	1-3/8"	1-1/2"	0322DP4PLB	-----	0322004PLB
3/4"	1"	1-1/2"	1-7/8"	0322DP5PLB	-----	0322005PLB
1"	1-5/16"	1-7/8"	2-3/16"	0322DP6PLB	-----	0322006PLB
1-1/4"	1-5/8"	2"	2-3/4"	0322DP7PLB	-----	0322007PLB
1-1/2"	1-7/8"	2-1/4"	3"	0322DP8PLB	-----	0322008PLB
2"	2-3/8"	2-3/8"	3-5/8"	-----	0322009PLB	0322009PLB
2-1/2"	2-7/8"	2-5/8"	4-1/2"	-----	0322010PLB	-----
3"	3-1/2"	2-3/4"	5"	-----	0322011PLB	-----

Spare Flanged Nut See Fig. 0075, on page 105.



Illustration Of Bedding Groove



## Thru-Hull Connections

### Thru-Hull Connection for Use with Hose\*

Material: Molded Polymer  
 Finish: White or Black  
 For Hose Sizes: 1/2" to 1-1/2"  
 Max. Hull Thickness: Up to 1-7/8"  
 Features: Narrow Flange



**Fig. 0301**  
White

Hose Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	White Retail Pkg.	White OEM Bulk Pkg.	Black OEM Bulk Pkg.
1/2"	13/16"	1-1/4"	1-1/4"	0301DP4	0301004	0301004BLK
5/8"	13/16"	1-1/4"	1-1/4"	0301DP4A	030104A	030104ABLK
3/4"	1"	1-7/16"	1-1/2"	0301DP5	0301005	0301005BLK
1"	1-5/16"	1-1/2"	1-7/8"	0301DP6	0301006	0301006BLK
1-1/8"	1-5/16"	1-1/2"	1-7/8"	0301DP6A	030106A	030106ABLK
1-1/2"	1-7/8"	1-7/8"	2-1/2"	0301DP8	0301008	0301008BLK



**Black**

Spare Flanged Nut See Fig. 0326 on Page 105.

### Thru-Hull Connection for Use with Hose\*

Material: Molded Polymer  
 Finish: White or Black  
 For Hose Sizes: 1/2" to 1-1/2"  
 Max. Hull Thickness: Up to 1-7/8"  
 Features: Broad Flange



**Fig. 0328**  
White

Hose Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	White Retail Pkg.	White OEM Bulk Pkg.	Black OEM Bulk Pkg.
1/2"	13/16"	1-1/4"	1-1/2"	0328DP4	0328004	0328004BLK
5/8"	13/16"	1-1/4"	1-1/2"	0328DP4A	032804A	032804ABLK
3/4"	1"	1-7/16"	1-7/8"	0328DP5	0328005	0328005BLK
1"	1-5/16"	1-1/2"	2-1/4"	0328DP6	0328006	0328006BLK
1-1/8"	1-5/16"	1-1/2"	2-1/4"	0328DP6A	032806A	032806ABLK
1-1/2"	1-7/8"	1-7/8"	3"	0328DP8	0328008	0328008BLK



**Black**

Spare Flanged Nut See Fig. 0326 on Page 105.

\*NOTE: Thru-Hull Connections For Use With Hose Are Not Recommended For Use Below The Waterline Per A.B.Y.C. "Safety Standards For Small Craft" Section H-27.



## Thru-Hull Scuppers

### Adjustable Thru-Hull Scupper

Material: Molded Polymer, Recessed Soft Black Flapper  
 Finish: White  
 Surface Thickness: 2" to 4-3/4"  
 Features: Female portion of scupper can be cut down by one rib for each 1/4 inch difference between hull thickness and 4-3/4 inches.

I.D.	Mounting Hole Dia.	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
1-11/32"	1-13/16"	2-15/16"	0343DP	0343

Spare Flapper: 0333DP099A

Fig. 0343

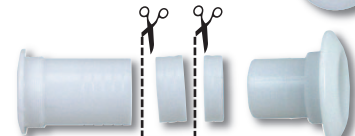


Illustration shows sections of ribs cut out to adjust for various surface thicknesses.

**! PROP 65 WARNING**  
(Contains DINP)

### Transom Mount - Thru-Hull Scupper for Use with Hose\*

Material: Molded Polymer, Recessed Soft Black Flapper  
 Finish: White  
 For Hose Sizes: 1-1/2"  
 Max. Hull Thickness: Up To 2-1/8"  
 Features: Nut and Mounting Hardware Included

Mounting Hole Dia.	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
1-7/8"	2-7/8"	0323DP	0323

Spare Flanged Nut See Fig. 0326, on page 105. Spare Flapper: 0323DP099A



Fig. 0323

**! PROP 65 WARNING**  
(Contains DINP)

### Transom Mount - Thru-Hull Scupper for Use with Hose\*

Material: Molded Polymer, Recessed Soft Black Flapper  
 Finish: White  
 For Hose Sizes: 1-1/2"  
 Max. Hull Thickness: Up To 3-1/4"  
 Features: Nut and Mounting Hardware Included

Mounting Hole Dia.	O.D. Flange	OEM Bulk Pkg.
1-7/8"	2-7/8"	0327

Spare Flanged Nut See Fig. 0326, on page 105. Spare Flapper: 0323DP099A



Fig. 0327

**! PROP 65 WARNING**  
(Contains DINP)

### Transom Mount - Thru-Hull Scupper for Use with Hose\*

Material: Molded Polymer, Recessed Soft Black Flapper  
 Finish: White  
 For Hose Sizes: 1-1/2"  
 Max. Hull Thickness: Up To 2-1/8"  
 Features: Nut Included

Mounting Hole Dia.	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
1-7/8"	3"	0333DP	0333

Spare Flanged Nut See Fig. 0326, on page 105. Spare Flapper: 0333DP099A

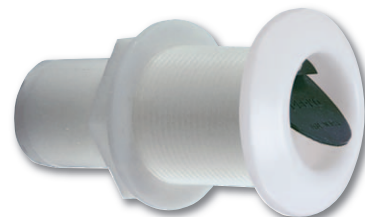


Fig. 0333

**! PROP 65 WARNING**  
(Contains DINP)

\*NOTE: Thru-Hull Connections For Use With Hose Are Not Recommended For Use Below The Waterline Per A.B.Y.C. "Safety Standards For Small Craft" Section H-27.

## Scuppers & Shower Drain

### Thru-Hull Scupper for Use with Hose

- Material: Cast Bronze with Recessed Flapper  
 Finish: Plain or Chrome Plated  
 For Hose Sizes: 1-1/2" & 2"  
 Features:
- "A" Style for thinner hull thickness
  - "B" Style for greater hull thickness
  - Flange is machined to fit hull and grooved to retain bedding compound



Illustration Of Bedding Groove

Finish	Hose Size	Mounting Hole Dia.	Max. Hull Thickness	O.D. Flange	OEM Bulk Pkg.
Chrome	1-1/2"	1-7/8"	1-3/4"	3-1/8"	0377A08CHR
Plain	1-1/2"	1-7/8"	1-3/4"	3-1/8"	0377A08PLB
Chrome	2"	2-3/8"	2"	3-3/4"	0377A09CHR
Chrome	1-1/2"	1-7/8"	3"	3-1/8"	0377B08CHR
Plain	1-1/2"	1-7/8"	3"	3-1/8"	0377B08PLB



Fig. 0377A Chrome

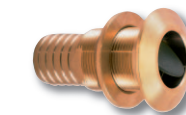


Fig. 0377A Plain



Fig. 0377B Plain & Chrome

Spare Flanged Nut See Fig. 0075, on page 105, Spare Flapper: 0333DP099A

NOTE: The Above Thru-Hull Connections For Use With Hose Are Not Recommended For Use Below The Waterline Per A.B.Y.C. "Safety Standards For Small Craft" Section H-27.



### In Hose Scupper Valve - A NEW Approach

- Material: Polymer Body and Flapper  
 Finish: Blue Body with Black Flapper Valve  
 For Hose Size: 1-1/2" and 2"  
 Installation:
- Mounts inside standard 1-1/2" or 2" hose
  - Simple replacement (if needed)



Fig. 0345 for 1-1/2" Hose (Shown)

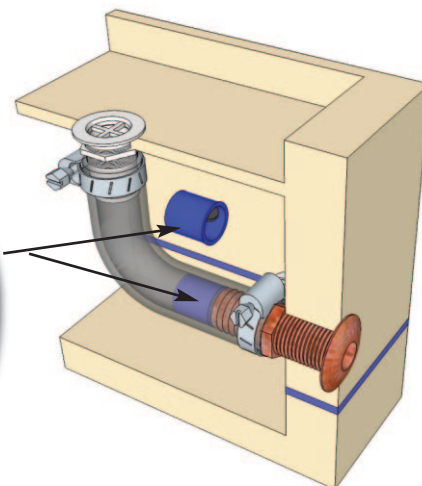


Illustration of In-Line Scupper Valve Installed

Hose Connection	Length	Width	Retail Pkg.	OEM Bulk Pkg.
1-1/2"	1-1/4"	1-9/16" Dia.	0345DP	0345
2"	1-1/4"	1-15/16" Dia.	0345DP2	0345002

Underwater Hardware

### Flush Mount Drain for Use with Pipe

- Material: Cast Bronze with Brass Screen  
 Finish: Chrome Plated  
 For Pipe Sizes: 3/4" & 1-1/4" NPT/S (See Page 96)

The exterior surface of the flange is machined flat and designed to be countersunk into the hull, resulting in a smooth external fit.



Pipe Size	Mounting Hole Dia.	Maximum Thickness	O.D. Flange	Standard Pkg.
3/4"	1"	2-3/8"	2"	0361005CHR
1-1/4"	1-5/8"	2-15/16"	2-7/8"	0361007CHR

Fig. 0361



Spare Flanged Nut See Fig. 0075, on page 105

## Scuppers and Spare Flanged Nuts

### Cockpit Scupper for Use with Hose

For Use When Discharge is Below the Waterline

Material: Cast Bronze with Rubber Check Ball  
 Finish: Plain or Chrome Plated  
 For Hose Sizes: 1" & 1-1/2"  
 Angle of Outlet: 45°  
 Screw Size: #8  
 Features: Deck Key Included



Chrome

Hose Size	O.D. Grate	O.D. Flange	Plain Bronze Standard Pkg.	Chrome Bronze Standard Pkg.
1"	1-13/16"	3-1/4"	0142001PLB	0142001CHR
1-1/2"	2-1/4"	3-5/8"	0142002PLB	0142002CHR

Spare Parts Ordering Information				
Hose Size	Plain Bronze Grate	Chrome Plated Bronze Grate	Check Ball Only	Spare Key Only
1"	0142P0199A	0142C0199A	014200199B	12487-8DP
1-1/2"	0142P0299A	0142C0299A	014200299B	12487-8DP

Fig. 0142 Plain



### Flush Mount Cockpit Scupper for Use with Hose

For Use When Discharge is Above the Waterline

Material: Molded Polymer  
 Finish: White  
 For Hose Sizes: 1-1/2"  
 Max. Hull Thickness: Up To 1-3/4"  
 Features: Insert Prevents Passage of Large Objects Without Restricting Water Flow



Fig. 0285

Hose Size	O.D. Flange	I.D.	Retail Pkg.	OEM Bulk Pkg.
1-1/2"	2-3/4"	1-1/2"	0285DP	0285

Spare Flanged Nut See Fig. 0326, Below

### Flush Mount Cockpit Scupper for Use with Hose

Material: Molded Polymer with Soft Black Flapper  
 Finish: White  
 Screw Size: #6



Fig. 0365

O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
2-7/8"	0365DP	0365



### Spare Flanged Lock Nuts

Material: Fig. 0075: Cast Bronze  
 Finish: Plain  
 Material: Fig. 0326: Polymer  
 Finish: White or Black



Fig. 0075

Pipe Size	Cast Bronze Retail Pkg.	Wht Polymer Retail Pkg.	Wht Polymer OEM Bulk Pkg.	Blk Polymer OEM Bulk Pkg.
3/8"	0075003DPP	-----	-----	-----
1/2"	0075004DPP	0326DP4	0326004	0326004BLK
3/4"	0075005DPP	0326DP5	0326005	0326005BLK
1"	0075006DPP	0326DP6	0326006	0326006BLK
1-1/4"	0075007DPP	-----	-----	-----
1-1/2"	0075008DPP	0326DP8	0326008	0326008BLK
2"	0075009DPP	-----	-----	-----
2-1/2"	0075010DPP	-----	-----	-----
3"	0075011DPP	-----	-----	-----



Fig. 0326 White



Fig. 0326 Black



6 Underwater Hardware

## Garboard Drain Pugs

### “T” Handle Garboard Drain Plugs

- Material: Cast Bronze  
 Finish: Plain  
 For Pipe Size: 3/4" NPT  
 Installation:
  - Fig. 0266: Mounts on outside surface with 4 screws
  - Fig. 0363: Flush mounts with flanged lock nut



Fig. 0266

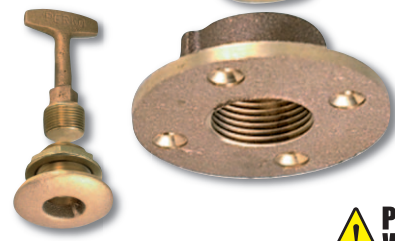


Fig. 0363



Pipe Size	Maximum Hull Thickness	Length Threaded Neck	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.	Screw Size
3/4"	-----	5/8"	2-3/8"	0266DP0PLB	0266000PLB	#8
3/4"	3/4"	1-1/4"	2-3/8"	0363DP0PLB	0363000PLB	-----

Spare Plug: 0370DP0PLB., Nut for Fig. 0363: 0075006DPP

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Underwater Hardware

### Garboard Drain Plug

- Material: Cast Bronze with Brass Plug  
 Finish: Plain  
 For Pipe Size: 1/2" NPT  
 Screw Size: #8  
 Installation: Mounts on outside surface with 3 screws

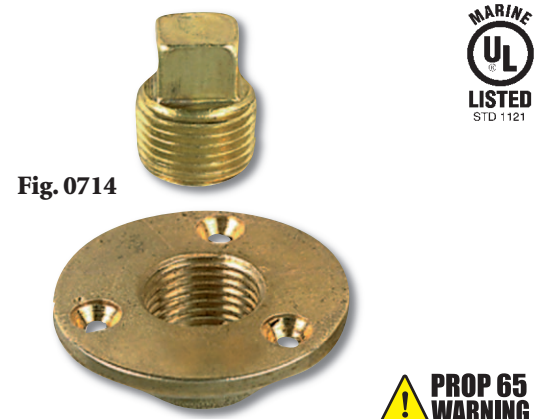


Fig. 0714



Pipe Size	O.D. Flange	Retail Pkg.	OEM Bulk Pkg.
1/2"	2"	0714DP1PLB	0714001PLB

Spare Plug: 0742DP1

### Garboard Drain Plugs

- Material: Cast Bronze Flange with Brass Plug  
 Zinc Plated Square Wrench  
 Finish: Plain  
 For Pipe Size: 1" NPT  
 Wrench Size: 1/2" x 1/2" Square  
 Screw Size: #10  
 Installation: Mounts on outside surface with 4 screws

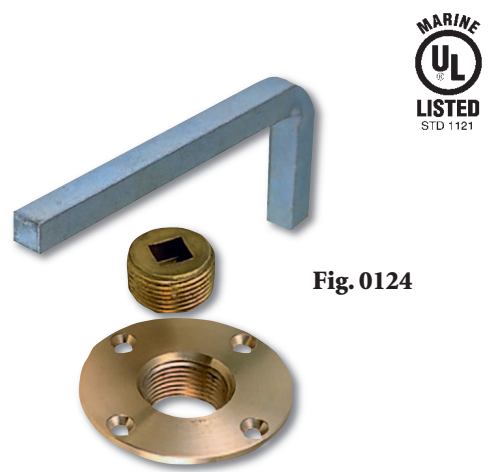


Fig. 0124



Pipe Size	Length Threaded Neck	O.D. Flange	Standard Pkg.
1"	1"	3-1/8"	0124000PLB

**Spare Parts Ordering Information**

Wrench: 012400099A Wrench Size: 1/2" x 1/2"  
 Plug: 012400099B