

Gentlemen ~

From my notes per our meeting 3/27/2025, the boat has the following thru-hull fittings slated for replacement:

6 - ¾" fittings
4 - 1" fittings
4 - 1½" fittings

14 total fittings

My "Lego" dive at the Gemlux site produced the following results:

No.	Item #	Item Description	Amt	Cost	Total
01	90720 ¹	Thru-hull Domed .75"	6	\$ 9.84	\$ 59.04
02	90660 ²	Ball valve .75"	6	\$42.06	\$252.36
03	91167	Load bearing collar .75"	10 ³	\$ 6.84	\$ 60.84
04	90727 ⁴	Hose Barb .75x.75	6	\$ 2.31	\$ 13.86
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05	90716 ⁵	Thru-hull Domed 1"	4	\$10.73	\$ 42.92
06	90661	Ball valve 1"	4	\$69.21	\$276.84
07	90728	Hose Barb 1"x1"	4	\$ 3.49	\$ 13.96
 optional:					
08	90897	Hose Barb 90° 1"x1"	4	\$ 7.46	\$ 29.84

¹ The "length" is 1.61" - which depending on hull thickness may be problematic to attach sea cock to threaded end. Could not find a longer shaft.

² Height is 3.43" and length is 5.65" Handle appears to be around 5.65" long - making it extend about 2.825" beyond length of ball valve. Questions of space for it to fit after assembly may be present.

³ This load bearing collar fits .5, .75, and 1" skin fittings and ball valves meaning the boat will need 10 units - 6 for ¾" valves and 4 for 1" valves.

⁴ Straight design with height being 2.48" and length at 1.26" Questions of space for it to fit after assembly may be present. I could not find any .75" threaded 45°, 90° or 120° angled barbed fittings.

⁵ The "length" is 2.09" - which depending on hull thickness may be problematic to attach sea cock to threaded end. Could not find a longer shaft.

No.	Item #	Item Description	Amt	Cost	Total
09	90924	Hose Barb 120° 1"x1"	4	\$ 7.92	\$ 31.68
10	90723 ⁶	Thru-hull Domed 1.5"	4	\$17.53	\$ 70.12
11	90663	Ball valve 1.5"	4	\$87.15	\$348.60
12	91168	Load bearing collar 1.5"	4	\$ 7.93	\$ 31.72
13	90730	Hose Bard 1.5"x1.5"	4	\$ 6.12	\$ 24.48
optional:					
14	90928 ⁷	Hose Barb 120° 1.5"x1.5"	4	\$ 9.37	\$ 37.48
Additional items to consider:					
15	90477	Spanners ¾ & 1" valves	2	\$ 7.31	\$ 14.62
16	90478	Spanners for 1.5" valves	2	\$ 7.79	\$ 15.58
17	90933	Thru-hull install tool ¾"	2	\$ 3.81	\$ 7.62
18	90934	Thru-hull install tool 1"	2	\$ 4.04	\$ 8.08
19	90936	Thru-hull install tool 1.5"	2	\$ 4.94	\$ 9.88
20	91040	Ball valve 'T' handle 1.5"	4	\$ 7.79	\$ 31.16
21	91038	Ball valve 'T' handle ¾" 1"	10	\$ 6.54	\$ 65.40

Final Thoughts:

Marine adhesive sealants such as 3M Fast Cure 5200, Sika 291i or Sika 591 can be used. West type epoxy system can also be used, this method makes the Skin Fitting an integral part of the hull.

Further, the purchase of an additional item on thru hulls, collars, ball valves, and thru-hull washers, and backing nuts would be prudent. I have not "legoed" these items, but can, if desired.

⁶ The "length" is 2.95" - which depending on hull thickness may be problematic to attach sea cock to threaded end. Could not find a longer shaft.

⁷ I could not find a 1.5" x 1.5" **90°** threaded to hose bard fitting.