

# SALISBURY

## MARINE MUFFLERS and EXHAUST-GARD COVERS\*

### NEOPRENE HYDRO-VAC EXHAUST SILENCERS

Salisbury's Hydro-Vac Silencers — the scientific solution to transom mount silencers. Exclusive Hydro-Vac design reduces excessive back-pressure at low speed or while idling. The relief chamber permits the exhaust gas to escape when the main chamber is blocked by water at idling speeds. At higher speeds, the venturi effects pulls the exhaust down

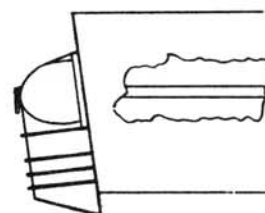
the main chamber and vents it under water. The streamlined hydrofoil design of the Silencers offer a minimum of underwater drag, and the smooth flow of water around the hydrofoil shape actually pulls the exhaust gases out of the Silencer. Gas and diesel fumes are buried underwater along with the exhaust noise.

- TRANSOM MOUNTED FOR EASE OF INSTALLATION
- FUMES DISPERSED UNDERWATER

- MADE OF NEOPRENE OR FIBERGLASS
- BUILT IN SPRAY DEFLECTORS

- EXCLUSIVE BACK-PRESSURE RELIEF CHAMBERS

- EXHAUST NOISE BURIED IN WAKE



**BEFORE ORDERING:** (1) Select the model corresponding to the horsepower of your engine. If your engine is a V-8 using two exhaust outlets on the transom, select the model corresponding to one-half the horsepower rating of the engine. (2) Check the outside diameter of your exhaust flange with the inlet size of the Hydro-Vac model. (3) Measure the distance from the bottom of the exhaust flange to the bottom of the transom. Based upon the speed chart, see installation instructions, the Hydro-Vac silencer must project 1/2" to 3" beyond the bottom of the transom. NOTE: For Turbo-Charged Diesels use the 2 cycle horsepower rating.

#### TM200



(1) Cat. No.	Gas	(2) Horsepower Diesel		Shipping Weight (Lbs.)	(3) Length From Bottom of Inlet	Inlet Size	Material
		2 Cycle	4 Cycle				
TM200	200	70	120	9	12" (305 mm)	5 1/8" (130 mm)	Neoprene

Complete with brass mounting plate.

#### SELECTION CHART

#### TM325



(1) Cat. No.	Gas	(2) Horsepower Diesel		Shipping Weight (Lbs.)	(3) Length From Bottom of Inlet	Inlet Size	Material
		2 Cycle	4 Cycle				
TM325	325	170	225	15	15" (381 mm)	5 3/4" (146 mm)	Neoprene

Complete with brass mounting plate.

## FIBERGLASS HYDRO-VAC SILENCER

Salisbury's Fiberglass Hydro-Vac Silencer made of tough durable marine fiberglass offering maximum silencing for larger diesel and gasoline engines, the chamber with relief holes and exclusive

flap valve design allows for ample exhaust flow while idling. At higher speeds the venturi pulls the exhaust down the main chamber and vents it underwater also shutting the flap valve.

#### TMD350 DIESEL



#### SELECTION CHART

(1) Cat. No.	Gas	(2) Horsepower Diesel		Shipping Weight (Lbs.)	(3) Length From Bottom of Inlet	Inlet Size	Material
		2 Cycle	4 Cycle				
TMD350	500	310	350	24	24" (610 mm)	10 1/4" (260 mm)	Fiberglass

TMD350 Muffler Shown Installed Below Swim Platform

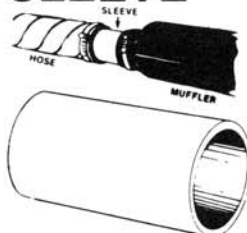


## FIBERGLASS CONNECTOR SLEEVE

Use these fiberglass connector sleeves between exhaust hose and Salisbury neoprene (rubber) mufflers—one set of stainless steel clamps is furnished with each connector to attach hose end only for the popular hose sizes. The connector is attached to the muffler with the clamps that are furnished with each Salisbury muffler.

To select proper connector measure inside diameter of exhaust hose and select connector with the same outside diameter. See chart.

Fiberglass sleeves carry fire ratings of self extinguishing under ASTM-D365.



Cat. No.	Size: Nominal			Number of Clamps	Wt. per Set Oz.
	Outside Diameter	Wall	Length		
FC-20	2"	1/8"	4"	1	5
FC-25	2 1/2"	1/8"	4"	1	6
FC-30	3"	1/8"	5"	1	7
FC-35	3 1/2"	1/8"	5"	2	10
FC-40	4"	1/8"	6"	2	12
FC-45	4 1/2"	1/8"	6"	2	14
FC-50	5"	1/8"	7"	2	16
FC-60	6"	1/8"	8"	2	20

Set consists of one connector and number of clamps shown.

W. H. Salisbury & Co. Skokie, Illinois 60077

# Salisbury's Multi-Flow MUFFLE-GARD™

## Acoustic Marine Silencers

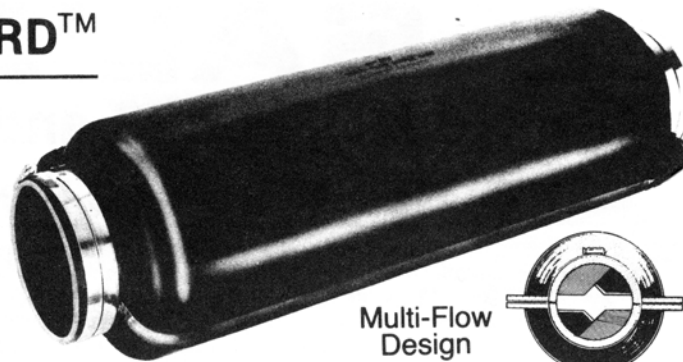
Eliminate Noise Fatigue with Salisbury Muffle-Gards Type

### The Marine Mufflers that silence the exhaust without stealing power

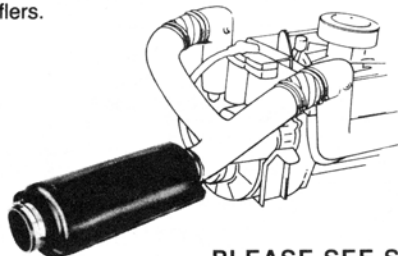
Back-pressure in all conventional marine mufflers causes a serious loss in engine RPM. Loss of engine RPM caused by back-pressure is like installing too large a propeller for the size of the engine. Both cause serious loss in efficiency, resulting in excessive wear, burned exhaust valves, and increased fuel consumption.

Marine engines, with very few exceptions, are automobile engines converted to marine use. In the case of an automobile it is very seldom one uses 25% of the actual horsepower. In a boat, it is like driving continuously up a very steep hill which means relentless strain on the engine. Placing any obstruction in the exhaust line such as the baffle system used in conventional mufflers seriously restricts the flow of the exhaust gases. This causes excessive back-pressure, thereby impairing engine performance.

Salisbury Mufflers allow the exhaust gases to flow freely through the Acoustic Chambers because they do not use the restricted baffling systems found in conventional mufflers.

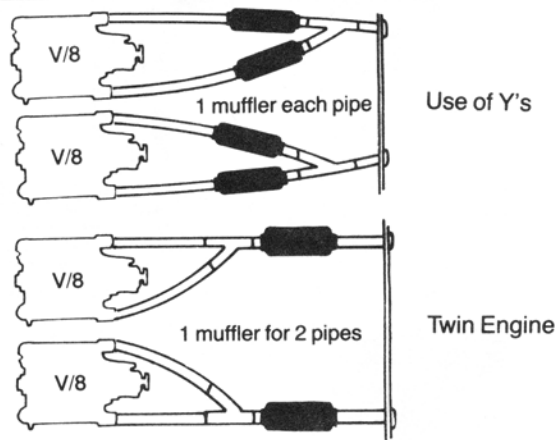
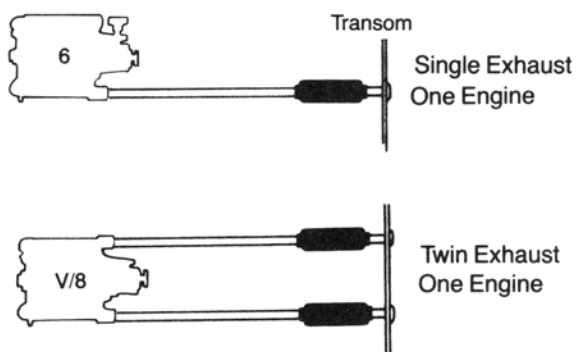


- The **scientific** solution to quiet boating.
- The muffler that **does not steal power** because of excessive back pressure.
- **Multi-Flow** acoustic method of noise suppression is a development of years of experience in the field.
- Manufactured of heat resistant neoprene, **impervious** to the corrosive acids contained in exhaust gases. **No metal** to corrode, rust, or suffer damage by electrolysis or freezing.
- **Flexible** neoprene construction **isolates** engine vibrations from the exhaust pipe and hull. **Elastic shape** expands and contracts with motor detonations to further reduce exhaust noise.
- **Easy to install**—a hacksaw and screwdriver are the only tools required. Stainless Steel clamps are furnished with each muffler.



PLEASE SEE SELECTION CHART ON PAGE 3.

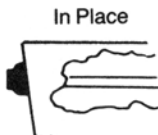
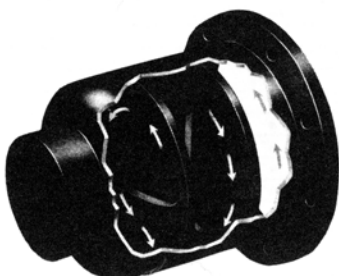
### Typical Installations



## TRANSOM MOUNT MUFFLE-GARD™

Designed specifically to reduce the sharp exhaust noise of outdrive units. Mounts over the exhaust flange on the transom with a brass mounting plate. Excellent for boats with trim-tabs that cannot use an underwater silencer. Fits all flanges up to 6½" outside diameter.

**Warranty** Each Salisbury Exhaust Silencer is warranted to be free from defects in workmanship and material. It is designed to give satisfactory service when properly installed and water cooled. This warranty is limited to the replacement of any defective Exhaust Silencer returned to the factory. It is recommended that installation be tested for back pressure in accordance with motor manufacturers' specifications.



### Selection Chart

Cat. No.	Horsepower 4 Cycle		Shipping Weight Lbs.	Length	Exhaust Flange Size
	Gas	Diesel			
TM 160	160	75	4	7¼" (184 mm)	Up to 5½" (140 mm)
TM 195	195	90	6	9¼" (248 mm)	Up to 6½" (165 mm)

Complete with brass mounting plate.

W. H. Salisbury & Co. Skokie, Illinois 60077

# MUFFLE-GARD SELECTION CHART

**To select the correct size and bushing**—First, select the model (1). Corresponding to the horsepower of your engine (2). If your engine is a V-8 using two exhaust lines, select the model corresponding to one-half the engine horsepower rating. After measuring the outside diameter of the exhaust line, find the corresponding figure in the outside diameter column (4). Select the bushing required from column (3). In ordering designate bushing size.

**Fiberglass connector sleeve**—recommended to connect to hose (see page 1). No connector needed if muffler is attached to rigid pipe.  
**Easy installation**—a hacksaw and screwdriver are the only tools required. Stainless steel clamps are furnished with each muffler. Detailed installation instructions furnished with each MUFFLE-GARD. Neoprene bushings, if required, are available to adapt to all exhaust pipe sizes.

**Note: Important**—Diesel engine installations and in particular turbo-charged engines must be checked for back pressure conformance to engine manufacturer's allowance. Any other muffler in the exhaust line should be removed to lessen the possibility of excessive back pressure.

Mufflers are elastomeric—I.D. will enlarge approx. 1/4" also I.D. will compress as much as 1/4".

Style A. Oval Design



Style B. Round Design



(1) Cat. No.	Style	(2) Horsepower Gas up to	Diesel up to	Shipping Weight (Lbs.)	Size (Inches) Diameter		Length	Standard Inlet Outlet Size	(3) Bushing Required (Cat. No.)	(4) Exhaust Line Outside Diameters	Weight Per Pair of Bushing (Oz.)
					Body	Flange					
*Note: Two cycle and turbo-charged diesels use next larger size muffler											
<b>M 40</b>	<b>A</b>	40	15	2	3" (76 mm)	5 1/8" (143 mm)	8 1/2" (216 mm)	1 3/4" (44 mm)	EE	For M 40 Model 3/4" to 1"	2 3/4
									FF	1" to 1 1/4"	2
									GG	1 1/4" to 1 1/2"	1
									None	1 1/2" to 1 3/4"	—
<b>M 90</b>	<b>B</b>	100	45	3	5 1/2" (140 mm)	6 3/4" (159 mm)	11 1/2" (292 mm)	2 7/8" (73 mm)	E	For M 90 Model 1 1/4" to 1 1/2"	14
									F	1 1/2" to 1 3/4"	11 3/4
									G	1 3/4" to 2"	9 1/2
									H	2" to 2 1/4"	7
									I	2 1/4" to 2 3/8"	4
									None	2 3/8" to 2 3/4"	—
<b>M 120</b>	<b>A</b>	120	55	4 1/2	4 1/2" (114 mm)	7" (178 mm)	13 1/4" (337 mm)	3 1/8" (79 mm)	BB	For M 120 Model 1 1/4" to 1 1/2"	16
									CC	1 1/2" to 1 3/4"	14 1/4
									A	1 3/4" to 2"	11 1/4
									B	2" to 2 1/4"	9
									C	2 1/4" to 2 1/2"	6 1/2
									D	2 1/2" to 2 3/4"	3 3/4
									None	2 3/4" to 3 1/8"	—
<b>M 165</b>	<b>B</b>	165	80	5 1/2	5 1/2" (140 mm)	7" (178 mm)	15 1/2" (394 mm)	3 1/8" (79 mm)	BB	For M 165 Model 1 1/4" to 1 1/2"	16
									CC	1 1/2" to 1 3/4"	14 1/4
									A	1 3/4" to 2"	11 1/4
									B	2" to 2 1/4"	9
									C	2 1/4" to 2 1/2"	6 1/2
									D	2 1/2" to 2 3/4"	3 3/4
<b>M 275</b>	<b>B</b>	275	140	16	8" (203 mm)	10" (254 mm)	23 1/2" (597 mm)	4 1/4" (108 mm)	None	2 3/4" to 3 1/8"	—
									HH	For M 275 Model 2 3/4" to 3"	20 3/4
									II	3" to 3 1/4"	17
									JJ	3 1/4" to 3 1/2"	12 3/4
									KK	3 1/2" to 4"	8 1/2
<b>M 375</b>	<b>B</b>	375	190	20	8 1/2" (216 mm)	10 1/2" (267 mm)	28 1/2" (724 mm)	5 1/4" (133 mm)	None	4" to 4 3/8"	—
									LL	For M 375 Model 3 3/4" to 4"	26 1/2
									MM	4" to 4 1/4"	21 1/2
									NN	4 1/4" to 4 1/2"	16
									OO	4 1/2" to 4 3/4"	10 1/2
<b>MD 510</b>	<b>B</b>	510	300	24	10" (254 mm)	12" (305 mm)	30" (762 mm)	6 1/8" (168 mm)	None	5" to 5 5/8"	—
									W	For MD 510 Model 5" to 5 5/16"	36
									X	5 5/16" to 5 5/8"	27 3/4
									Y	5 5/8" to 5 15/16"	19
									Z	5 15/16" to 6 1/4"	9 3/4
									None	6 1/4" to 6 3/4"	—

# EXHAUST-GARD™ Cover

4 models to fit up to 8" O.D. exhaust pipes.  
An effective flap valve to keep following sea from entering exhaust outlet

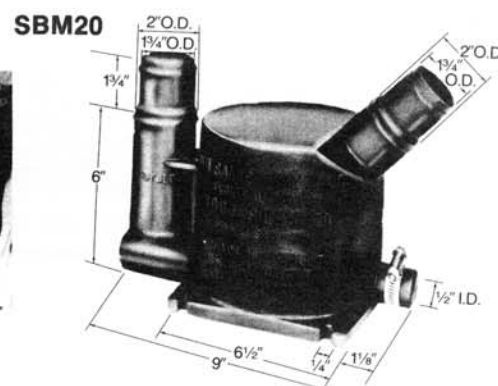
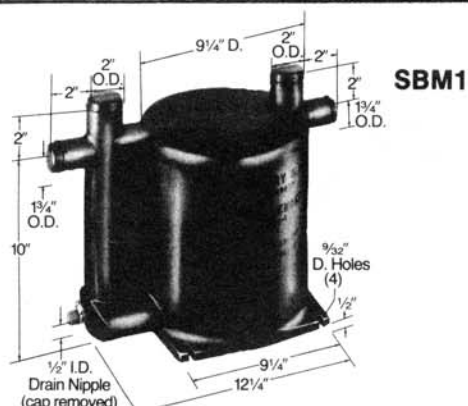
when moving slowly or stopping. Furnished in display bags, suitable for floor rack or wall display.

Selection Chart

Cat. No.	Pipe Size	Description
EG 300	3" (76 mm)	Fits standard 3" exhaust pipe and can be adjusted to fit 2½". (For 2½" exhaust cut out area between ribs—marked "For 2½".) Adjustable stainless steel clamp furnished with each exhaust cover.
EG 400	4" (102 mm)	Fits standard 4" exhaust pipe and can be adjusted to fit 3½". (For 3½" exhaust cut out area between ribs—marked "For 3½".) Adjustable stainless steel clamp furnished with each exhaust cover.
EG 600	6" (152 mm)	Fits standard 6" exhaust pipe and can be adjusted to fit 5". (For 5" exhaust cut area between ribs—marked "For 5".) For 4½" exhaust cut area between ribs marked 4½".) Adjustable stainless steel clamp furnished with each exhaust cover.
EG 800B	8" (203 mm)	Fits standard 8" exhaust pipe and can be adjusted to fit 7". (For 7" exhaust cut area between ribs—marked "For 7".) Adjustable stainless steel clamp furnished with each exhaust cover.



## HYDRO-SILENCERS FOR SAILBOAT AUXILIARY ENGINES & MARINE GENERATOR SETS



Salisbury's "HYDRO-SILENCERS" are compact, lightweight hydro-lift mufflers for auxiliary and sailboat installations up to 50 hp gasoline or 20 hp diesel marine engines and generator sets. The chart below shows the hp ratings of each silencer. Their compact design facilitates installation well away from the shaft log. Salisbury's "HYDRO-SILENCERS" are constructed of cross-linked linear polyethylene which is impervious to corrosion or deterioration from salt water or exhaust from gas or diesel engines. Electrolysis is eliminated as no metal parts are used.

"HYDRO-SILENCERS" are resistant to all temperatures normally experienced in water-cooled (wet-type) exhaust systems. A capped drain is provided for system cleaning or seasonal lay-up.

Our cannister type silencers are based on the design principle of cooling water entering the large portion of the cannister and the exhaust pressure forcing water and exhaust gases overboard.

Salisbury's "HYDRO-SILENCERS" provide two inlet-outlet options. Saw off the top cap leaving the lower sealing ring intact and 1¼" hose may be used. Saw off the extension to a point just above the lower sealing ring to accept 2" exhaust hose. Two stainless steel clamps on both the inlet and outlet connections will hold the hoses securely.

H.P. RATING CHART

Cat. No.	Horsepower		Standard Inlet-Outlet Sizes O.D.		Shipping Weight (Lbs.)
	Gas Up To	Diesel Up To			
SBM 1	50	20	1¾" (44 mm)	2" (51 mm)	3½
SBM 20	32	20	1¾" (44 mm)	2" (51 mm)	2