

**AGRIEMACH**<sup>LTD</sup>

# QUIET MUFFLER SPARK ARRESTORS



Since  
1976

# QUIET MUFFLER SPARK ARRESTORS

## INDUSTRIAL MODEL 3S

Model 3S adapts to a wide range of engines from 2 to 50 HP. Recommended for engines to 10 HP where minimum exhaust noise is required and for larger engines where space is limited. Supplements an existing muffler where minimum exhaust noise is critical. U.S.D.A. Approved spark arrestor No. T-100.

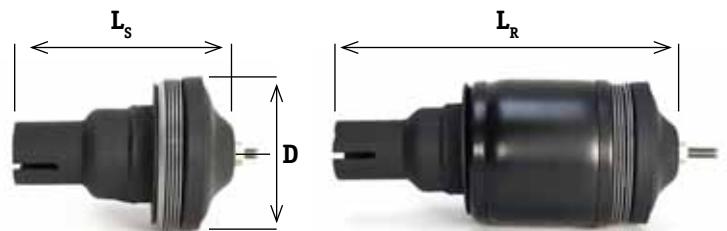
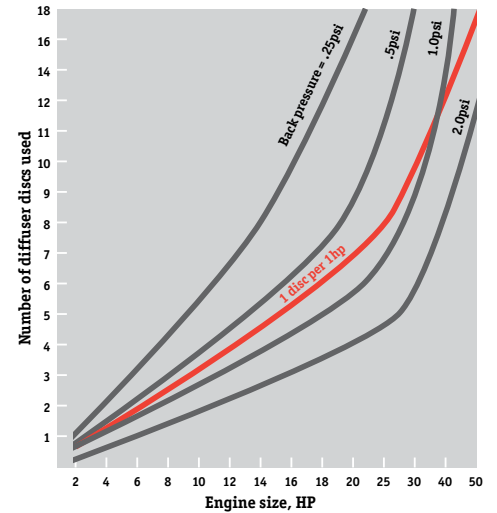
### APPLICATIONS

Use approximately **1 Disc per 3 HP** on Model 3S. The graph on the right relates the number of discs used to the resulting back-pressure.

Using 1 disc per 3 HP insures that the back-pressure stays within the engine manufacturer's recommendations. The resulting back-pressure will not significantly affect power. 4-cycle engines will tolerate a back-pressure considerably higher than 2 psi without endangering the engine.

The accessory Resonator (part no. 3S-5500) is recommended if further exhaust silencing is required (3 to 5 dbA added reduction). For critical noise applications reducing the number of discs used is suggested, however, some power loss may result. In addition, engine shielding or an engine enclosure will be required to reduce the other engine and mechanical noises to that of the silenced exhaust.

The number of discs used may need to be increased if the Agriemach SuperTrapp is used on an engine rated below 2400 rpm. Engines with dual exhausts should divide the recommended number of discs.



Standard configuration

With optional resonator

Flow rating at 1 psi back-pressure	Number of discs required vs. engine size	Inlet sizes available	
		T threaded	C Clamp-On
up to 250 CFM (18 discs)	1 disc per 3 HP	1/2" to 1 1/2" NPT *	1" to 2" dia.

Diameter D	Length		Weight	
	L <sub>S</sub> Standard config.	L <sub>R</sub> With optional resonator	Standard config.	With optional resonator
3"	3 7/8" + .08" /disc	6 1/2" + .08" /disc	9oz. + 1 oz/disc	19oz. + 1 oz/disc

# INDUSTRIAL MODEL 5S

Model 5S supplements an existing muffler where minimum exhaust noise is critical. U.S.D.A. Approved spark arrestor No. T-101.

## APPLICATIONS

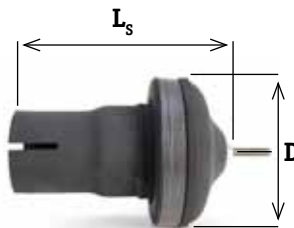
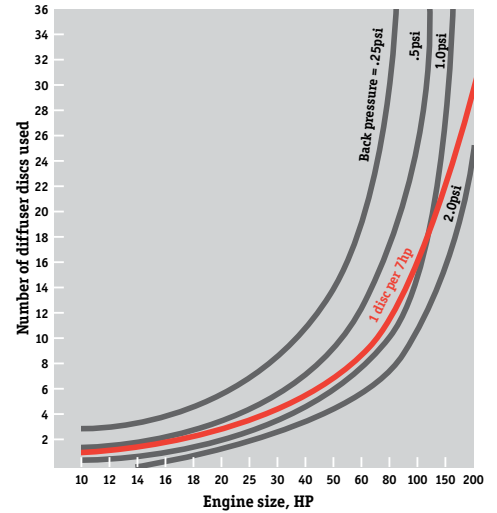
Use approximately **1 Disc per 7 HP** on Model 5S. The graph on the right relates the number of discs used to the resulting back-pressure.

Using 1 disc per 7 HP insures that the back-pressure stays within the engine manufacturer's recommendations. The resulting back-pressure will not significantly affect power. 4-cycle engines will tolerate a back-pressure considerably higher than 2 psi without endangering the engine.

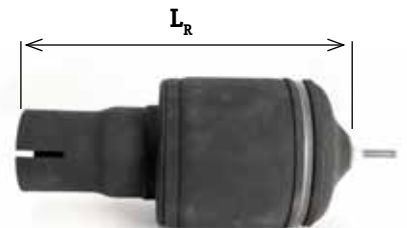
The accessory Resonator (part no. 5S-5500) is recommended if further exhaust silencing is required (4 to 6 dbA added reduction). For critical noise applications reducing the number of discs used is suggested, however, some power loss may result. In addition, engine shielding or an engine enclosure will be required to reduce the other engine and mechanical noises to that of the silenced exhaust.

If the Agriemach SuperTrapp is added to an engine rated below 2400 rpm, the number of discs should be increased (doubling the recommended number of discs will ensure a negligible change in the original exhaust backpressure). Engines with dual exhausts should divide the recommended number of discs.

**The Agriemach SuperTrapp discs will require frequent cleaning if used with oily or sooty exhausts or on malfunctioning engines (as evidenced by a visible exhaust).**



Standard configuration



With optional resonator

Flow rating at 1 psi back-pressure	Number of discs required vs. engine size	Inlet sizes available	
		T threaded	C Clamp-On
up to 1050 CFM (36 discs)	1 disc per 7 HP	1" to 2" NPT	1 <sup>5</sup> / <sub>16</sub> " to 5" dia.

Diameter D	Length		Weight	
	L <sub>S</sub> Standard config.	L <sub>R</sub> With optional resonator	Standard config.	With optional resonator
5"	Under 2" inlet: 4" + .13" per disc  2" inlet and larger: 5 <sup>1</sup> / <sub>4</sub> " + .13" per disc	Under 2" inlet: 8 <sup>1</sup> / <sub>8</sub> " + .13" per disc  2" inlet and larger: 9 <sup>3</sup> / <sub>8</sub> " + .13" per disc	1lb.6oz + 2.4oz per disc	3lb. 4 oz + 2.4oz per disc

# PARTS LIST

## ADAPTORS

A complete 3S or 5S model consists of the **adaptor** and **diffuser discs**. These components are sold separately. For OEM use all models may be factory assembled.



Discs sold separately

### 3S

#### THREADED

T = Male NPT

SIZE T	PART NO.
1/2" NPT *	3S-0500T
3/4" NPT *	3S-0750T
1" NPT *	3S-1000T
1 1/4" NPT	3S-1250T
1 1/2" NPT	3S-1500T

#### CLAMP-ON

C = Exhaust pipe O.D.

SIZE C	PART NO.
1"	3S-1000
1.050" (3/4" NPT)	3S-1050
1 1/4"	3S-1250
1.312" (1" NPT)	3S-1312
1 1/2"	3S-1500
1.660" (1 1/4" NPT)	3S-1660
1 3/4"	3S-1750
2"	3S-2000

### 5S

#### THREADED

T = Male NPT

SIZE T	PART NO.
1" NPT	5S-1000T
1 1/4" NPT	5S-1250T
1 1/2" NPT	5S-1500T
2" NPT	5S-2000T

#### CLAMP-ON

C = Exhaust pipe O.D.

SIZE C	PART NO.
1.312" (1" NPT)	5S-1312
1 3/8"	5S-1375
1 1/2"	5S-1500
1 5/8"	5S-1625
1.660" (1 1/4" NPT)	5S-1660
1 3/4"	5S-1750
1 7/8"	5S-1875
1.900" (1 1/2" NPT)	5S-1900
2"	5S-2000
2 1/4"	5S-2250
2 1/2"	5S-2500
3"	5S-3000
3.5"	6S-KC1990
4"	6S-KC1984
4.5"	6S-KC1985
5"	6S-KC0000

Additional Sizes Available for O.E.M. Use

\* NPT measured by inside inlet size.

## DIFFUSER DISCS

ITEM	DESCRIPTION	3S PART NO.	5S PART NO.
3-PACK	Required - use with above	3S-6503	5S-6503
12-PACK	ADAPTORS	3S-6512	5S-6512
ITEM	DESCRIPTION	3S PART NO.	5S PART NO.
Resonator 3S	Accessory - for 3 to 5 dbA additional noise reduction	3S-5500	
Resonator 5S	Accessory - for 4 to 6 dbA additional noise reduction		5S-5500
End cap	Replacement	3S-3031	5S-3052
Center bolts	Replacement - standard length (with end caps)	3S-7363	5S-7619
Center bolts	Replacement - resonator length	3S-7575	5S-7888

