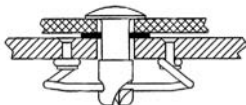


DZUS FASTENERS

STUD AND SPRING SELECTION TABLES



1. Find total thickness (distance) from underside of stud head to point of spring attachment).
2. Select stud "L" and spring "H" dims.

Size 3 Stud, S3 Spring USE			Size 4 Stud, S4 Spring USE		
Total Thickness	Stud Dim. L	Spring Dim. H	Total Thickness	Stud Dim. L	Spring Dim. H
.045 - .069	-25	-225	.050 - .074	-25	-225
.070 - .094	-25	-200	.075 - .099	-25	-200
.095 - .119	-30	-225	.100 - .124	-30	-225
.120 - .144	-30	-200	.125 - .149	-30	-200
.145 - .169	-30	-175	.150 - .174	-35	-225
.170 - .194	-30	-150	.175 - .199	-35	-200
.195 - .219	-35	-175	.200 - .224	-40	-225
.220 - .224	-35	-150	.225 - .249	-40	-200
.245 - .269	-40	-175	.250 - .274	-45	-225
.270 - .294	-40	-150	.275 - .299	-45	-200
			.300 - .324	-50	-225
			.325 - .344	-50	-200

Size 5 Stud, S5A Spring USE			Size 6 Stud, S6 Spring Size 7 Stud, S7 Spring USE		
Total Thickness	Stud Dim. L	Spring Dim. H	Total Thickness	Stud Dim. L	Spring Dim. H
.055 - .079	-30	-275	.090 - .114	-35	-300
.080 - .104	-30	-225	.115 - .139	-35	-275
.105 - .129	-30	-200	.140 - .164	-35	-300
.130 - .154	-30	-200	.165 - .189	-40	-275
.155 - .179	-40	-275	.190 - .214	-40	-250
.180 - .204	-40	-250	.215 - .239	-40	-225
.205 - .229	-40	-225	.240 - .264	-50	-300
.230 - .254	-40	-200	.225 - .249	-40	-200
.255 - .279	-50	-275	.265 - .289	-50	-275
.280 - .304	-50	-250	.290 - .314	-50	-250
.305 - .329	-50	-225	.315 - .339	-50	-225
.330 - .354	-50	-200	.340 - .364	-60	-300
.355 - .379	-60	-275	.365 - .389	-60	-275
.380 - .404	-60	-250	.390 - .414	-60	-250
.405 - .429	-60	-225	.415 - .439	-60	-225
.430 - .454	-60	-200	.440 - .464	-70	-300
.455 - .479	-70	-275	.465 - .489	-70	-275
.480 - .504	-70	-250	.490 - .514	-70	-250
.505 - .529	-70	-225	.515 - .539	-70	-225
.530 - .554	-70	-200			

INSTALLATION TOOLS

Part No.	Description (Installs:)	Price
04-01441	A, AJ3 Oval Head Studs & Grommets	.
04-01410	A4, AJ4 Oval Head Studs & Grommets	.
04-01409	A5, AJ5 Oval Head Studs & Grommets	.
04-01442	A6.5, AJ6.5 Oval Head Studs & Grommets	.
04-01413	A7, AJ7 Oval Head Studs & Grommets	.
04-01447	F5, FJ5 Flush Head Studs & Grommets	.
04-01637	F6.5, FA6.5, FJ6.5 Flush Head Studs & Grommets	.

* Note: A5 tool is specially designed to install grommets in Bonanza cowlings without removing cowling brackets. This will save you alot of time.

Description	Part No.	Price
Modified C-Clamp (Required and Accepts All Attachment Sets)	12-02272	.

RETAINING SPRINGS

When there is a gap between the top and bottom panels, a retaining spring is used to hold the stud in locking position for alignment with receptacle.

Model No.	Part No.	Price ea
1219-24520-SS	SX-520SS	.
1219-24523-SS	SX-523SS	.
1219-24510-SS	SX-510SS	.
1219-24518-SS	SX-518SS	.
1219-24519-SS	SX-519SS	.

SNAP RINGS

A snap ring is used when there is not a lot of pull-out load. This ring is expandable easily installed with pliers or screwdriver and takes little space.

Model No.	Part No.	Price ea
1219-R3-SS	SR3SS	.
1219-R4-SS	SR4SS	.
1219-R5-SS	SR5SS	.
1219-R6-SS	SR6SS	.
1219-R7-SS	SR7SS	.

SPRINGS



P/N S3-150

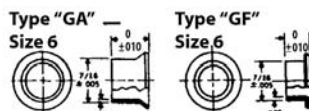


P/N S6A-250

Model No.	Part No.	Price Ea.	Model No.	Part No.	Price Ea.
1219-3175-Z3Y	S3-175	.	1219-5300-Z3Y	S5A-300	.
1219-3200-Z3Y	S3-200	.	1219-6225-Z3Y	S6A-225	.
1219-3225-Z3Y	S3-225	.	1219-6250-Z3Y	S6A-250	.
1219-4220-Z3Y	S4-200	.	1219-6275-Z3Y	S6A-275	.
1219-4225-Z3Y	S4-225	.	1219-6300-Z3Y	S6-300	.
1219-4250-Z3Y	S4-250	.	1219-6400-Z3Y	S6A-400	.
1219-A4200-Z3Y	S4A-200	.	1219-6425-Z3Y	S6A-425	.
	S5-325-SURP	.	1219-6325-Z3Y	S5A-325	.
1219-A5200-Z3Y	S5A-200	.	1219-7225-Z3Y	S7-225	.
1219-A5225-Z3Y	S5A-225	.	1219-7250-Z3Y	S7-250	.
1219-A5250-Z3Y	S5A-250	.	1219-7275-Z3Y	S7-275	.
1219-A5275-Z3Y	S5A-275	.	1219-7300-Z3Y	S7-300	.

The dash number represents the height ("H" dimension) of the spring.

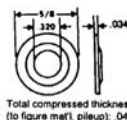
FULL GROMMETS



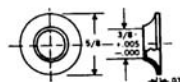
A full grommet is used when protection of the hole is a definite consideration. It protects panel finish and reduces stud play. A tool is required for installation. The "GA" type full grommet is used with a protruding head stud, and the "GF" type with a flush head stud.

ALUMINUM

Outer Panel Thickness	Type "GA"			Type "GF"		
	Model No.	Part No.	Price	Model No.	Part No.	Price
.015 - .025	1271-3175	GA3-175	.	---	N/A	---
.026 - .050	1271-200	GA3-200	.	---	N/A	---
.051 - .094	1271-250	GA3-250	.	---	N/A	---
.015 - .025	---	GA4-225	---	1276-4125	GF4-125	.
.026 - .050	1271-4250	GA4-250	.	1276-4150	GF4-150	.
.051 - .075	1271-4275	GA4-275	.	1276-4175	GF4-175	.
.076 - .100	1271-4300	GA4-300	.	1276-4200	GF4-200	.
.031 - .062	1271-5312	GA5-312	.	1276-5175	GF5-175	.
.063 - .094	1271-5350	GA5-350	.	1276-5225	GF5-225	.
.095 - .125	1271-5375	GA5-375	.	1276-5250	GF5-250	.
.040 - .065	1271-6350	GA6-350	.	---	GF6-218	---
.066 - .100	1271-6375	GA6-375	.	1276-6250	GF6-250	.
.101 - .135	1271-6425	GA6-425	.	---	---	---
.050 - .095	1271-7375	GA7-375	.	1276-7250	GF7-250	.
.096 - .156	---	GA7-475	---	---	GF7-325	---
.157 - .218	1271-7525	GA7-525	---	1276-7400	GF7-400	.



Total compressed thickness (to figure mat'l pileup): .045



HALF GROMMETS

A half grommet does not break easily, and it flattens but guarantees hold of the stud. It is used when protection of the hole is not a consideration, but protection of panel finish might be. The "GH" type half grommet is installed with a tool; the "GP" type is pushed on by hand.

Type "GP" Thermoplastic			Type "GH" Aluminum		
Model No.	Part No.	Price ea	Model No.	Part No.	Price ea
127P-3B	GP3B	.	127H-3	GH3	.
127P-4B	GP4B	.	127H-4	GH4	.
127P-5B	GP5B	.	127H-5	GH5	.
127P-6B	GP6B	.	127H-6	GH6	.
127P-7B	GP7B	---	127H-7	GH7	.

DZUS FASTENER SPRING ADJUSTER



The MS-7301 tool easily adjusts Dzus fastener springs for a perfect fit every time. Great for Warbirds and vintage aircraft. Bend springs in or out with a few simple turns. P/N 04-00957.....

DZUS DRIVER

The MS-Driver is a great tool for locking and unlocking Dzus fasteners. The large handle gives you plenty of torque and is comfortable in the hand. The blade has a radius end to fit fastener slots better than a standard screwdriver and is heat treated steel with zinc plating for long life. P/N 04-00958.....



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