

# DISC-LOCK STAINLESS STEEL WASHER

Patented worldwide

**SOLVES THE PROBLEM OF FASTENER FAILURE**

THE MOST EFFECTIVE LOCKING DEVICE  
FOR MAINTAINING JOINT INTEGRITY IN HIGH STRESS  
APPLICATIONS IN THE WORLD

MADE FROM  
316L  
STAINLESS  
STEEL



PRESASSEMBLED  
(GLUED PAIRS)



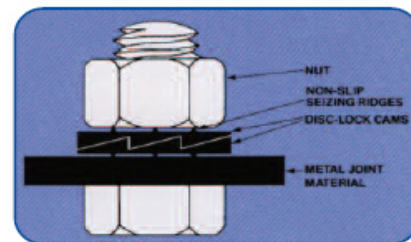
## How does it work?



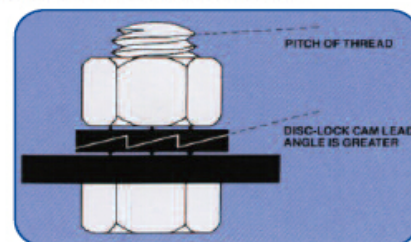
The working principle behind the *Disc-Lock* Washer is simple. It consists of two washer-shaped pieces which are preassembled (glued pairs) which have inclined cams on one side and a series of ridges on the other. On installation the two cam sides are mated together and placed between the nut and the joint material. Under vibration the nut will attempt to rotate loose but, as the angle of the cams is greater than the pitch angle of the thread on the bolt, the interlocking cams and the non-slip ridges of the *Disc-Lock* Washer work together to create a jamming effect. This effect prevents

## DISC-LOCK Washer Installation Procedures

- 1 To install the Disc-Lock Washer, simply place the preassembled pair of washers between the nut and the joint material.



- 2 As the nut is tightened, one half of the *Disc-Lock* Washer is seated to joint material and the other to the nut.



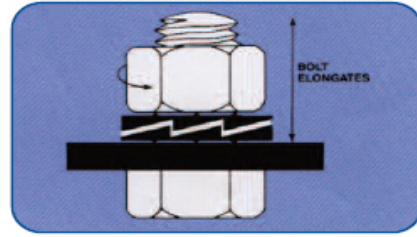
- 3 When the bolt elongates due to vibration and shock, the nut will attempt to rotate loose. As one half of the *Disc-Lock* Washer tries to rotate with the nut, the interlocking cams work against each other. This will maintain the preload and lock the assembly.

loosening and further locks the assembly, thereby maintaining joint integrity. The result is a fastening system that is vibration proof according to Military Standards. (United States Military MIL-STD-1312, Vibration Test 7. Test Results data available upon written request.)

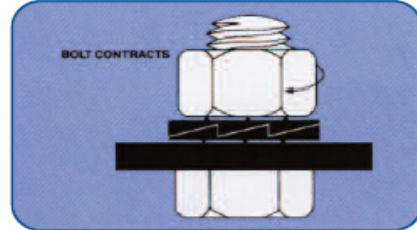
The *Disc-Lock Washer* is not only a vibration-proof locking device but also a heavy duty structural locking device recommended for the most stressful applications.

Once applied and installed correctly the *Disc-Lock Washer* will ensure that the fastener remains secure and that nuts and bolts do not require retightening.

*Disc-Lock* washers are sold in pairs. These pairs may be glued together for easier installation. However, due to circumstances beyond our control during shipping and handling, some washers may become separated. This does not affect the operation of the washers and these washers should not be returned as defective.



4 As the bolt contracts, the inclined planes of the cams cause the nut to rotate back to its original position.



5 In common with most fastening devices, *Disc-Lock Washers* should only be used against flat, relatively smooth metal surfaces.

6 If the joint material is not metal, the *Disc-Lock Washer* may be used by securing a metal plate to the joint material in such a manner that the metal plate will not rotate.

7 A torque wrench is not required when installing *Disc-Lock Washers*.

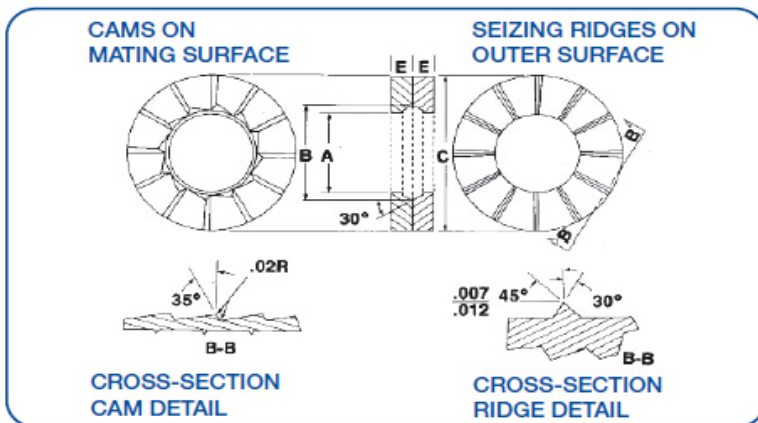
8 An air-gun can be used when installing and removing *Disc-Lock Washers*.

### Proven Applications

The Stainless Steel (316L) *DISC-LOCK* Washer outperforms all other types of loose, washered, threaded or pinned systems in a wide range of high stress, corrosive and vibration sensitive applications including:

- Automotive Industries - cars, trucks, buses
- Compressors
- Construction
- Cranes
- Farm Equipment
- Foundries
- Go-Kart Racing
- Heavy Equipment Manufacturers
- Logging Equipment
- Marine Installations
- Military
- Mining
- Oil Drilling Rigs (On and Off-shore)
- Pile Hammers
- Pipelines
- Public Utilities
- Quarrying
- Rail Engineering
- Rapid Transit Systems
- Refineries
- Rock Hammers
- Steel Mills

### DISC-LOCK Washer Technical Specification



## Specifications and Ordering Information

ORDER NUMBER	# OF CAMS	SIZE		STANDARD DIMENSIONS			METRIC DIMENSIONS		
		STD INCHES	METRIC MM.	A IN.	C IN.	EE IN.	A MM.	C MM. EE	MM.
SS100-01	6	3/16	5	0.203	0.401	0.080	5.150	10.18	2.030
SSG-101	6	1/4	6	0.262	0.495	0.101	6.660	12.57	2.560
SSG-102	8	5/16	8	0.326	0.628	0.119	8.280	15.95	3.020
SSG-103	8	3/8	10	0.409	0.705	0.135	10.38	17.90	3.400
SSG-104	10	7/16	11	0.450	0.880	0.135	11.43	22.35	3.330
SSG-105	10	1/2	12	0.510	0.937	0.136	12.95	23.82	3.450
SSG-106	10	9/16	14	0.572	1.128	0.127	14.53	28.65	3.230
SSG-107	12	5/8	16	0.651	1.247	0.134	16.53	31.67	3.400
SSG-108	14	3/4	20	0.820	1.381	0.183	20.82	35.08	4.650
SSG-109	14	7/8	22	0.883	1.470	0.240	22.44	37.34	6.100
SSG-110	16	1	24	1.015	1.626	0.240	25.78	41.30	6.100

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