



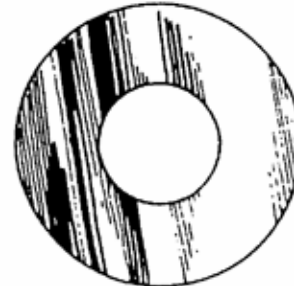
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# WASHERS

## USS FLAT WROUGHT WASHERS

- Specially engineered to insure ultimate clamping force.
- Burr-free -- uniform thickness.

PLATED FINISH		
J&B #	SIZE	QTY
25136	3/16	100
8420	3/16	500
8421	1/4	250
24010	1/4	100
8422	5/16	200
24011	5/16	100
8423	3/8	100
8424	7/16	100
8425	1/2	50
24012	1/2	100
8426	9/16	50
8427	5/8	25
24013	5/8	50
8428	3/4	25
24014	3/4	50
8429	7/8	20
8430	1	10
24015	1	25



PLATED FINISH		
J&B #	SIZE	QTY
8431	1-1/8	10
8432	1-1/4	10
24016	1-1/4	25
25137	1-3/8	25
8433	1-1/2	10
8434	1-3/4	5
8435	2	5

## USS HIGH ALLOY FLAT WASHERS

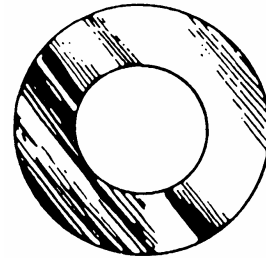
Yellow Zinc Plated  
GRADE 8

J&B #	SIZE	QTY
39524	1/4	100
39525	5/16	100
39526	3/8	100
39527	7/16	50
39528	1/2	50
39529	9/16	50
39530	5/8	25
39531	3/4	20
39532	7/8	15
39533	1	10
39534	1-1/8	10
39535	1-1/4	5
39536	1-3/8	5
39537	1-1/2	5

# WASHERS

## SAE FLAT WASHERS

- Perfectly round -- burr free.
- Eliminate downtime due to bending & dishing.



PLATED FINISH		
J&B #	SIZE	QTY
24035	# 4	500
25007	# 6	100
24036	# 6	500
25008	# 8	100
24037	# 8	500
25009	# 10	100
8440	# 10	500
10812	# 12	100
8441	1/4	250
24038	1/4	100
8442	5/16	200
24039	5/16	100
8443	3/8	100
8444	7/16	100

PLATED FINISH		
J&B #	SIZE	QTY
8445	1/2	50
24040	1/2	100
8446	9/16	50
8447	5/8	25
24041	5/8	50
8448	3/4	25
24042	3/4	50
24045	7/8	50
8449	7/8	20
8450	1	10
24043	1	50
8451	1-1/8	10
* 24044	1-1/4	25

\* Plain Finish

## SAE HIGH ALLOY WASHERS Yellow Zinc/Grade 8

## SAE L9 TENSION WASHER Yellow Zinc

PLATED FINISH		
J&B #	SIZE	QTY
39544	1/4	100
39545	5/16	100
39546	3/8	100
39547	7/16	50
39548	1/2	50
39549	9/16	50
39550	5/8	25
39551	3/4	20
39552	7/8	15
39553	1	10
39554	1-1/8	20
* 8471	1-1/4	25
* 8472	1-1/2	25

PLATED FINISH		
J&B #	SIZE	QTY
8460	1/4	100
8461	5/16	100
8462	3/8	100
8463	7/16	50
8464	1/2	50
8465	9/16	50
8466	5/8	50
8467	3/4	40
8468	7/8	30
8469	1	20

\* Plain Finish

# WASHERS

## EXTRA THICK WASHERS

- Designed for high performance in the most rugged environments.
- Through hardened carbon steel.
- Zinc plated finish protects against rust and corrosion.
- Extra thickness helps to prevent splitting, bellying and dishing.
- Eliminates bolt failure caused by ordinary flat washers “dishing out” and allowing assembly to vibrate loose.



USS WASHERS				
J&B #	SIZE	O.D.	THICK.	QTY
V45674	1/2	1-3/8"	.199"	100
V45675	9/16	1-1/2"	.199"	50
V45676	5/8	1-3/4"	.250"	50
V45677	3/4	2"	.250"	25
V45678	7/8	2-1/4"	.250"	25
V45679	1"	2-1/2"	.250"	25

SAE WASHERS				
J&B #	SIZE	O.D.	THICK.	QTY
V45667	1/2	1-1/16"	.199"	100
V45668	9/16	1-3/16"	.199"	50
V45669	5/8	1-5/16"	.250"	50
V45671	3/4	1-1/2"	.250"	25
V45672	7/8	1-3/4"	.250"	25
V45673	1"	2"	.250"	25

*\*Temporary stock item unless sales justify keeping in line. Will always be available special order fast delivery.*

# MEASURING CHART

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## SAE FLAT WASHERS



3/16



1/4



5/16



3/8



7/16



1/2



9/16



5/8



3/4

Illustrations are actual size

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## USS WROUGHT WASHERS



3/16



1/4



5/16



3/8



7/16



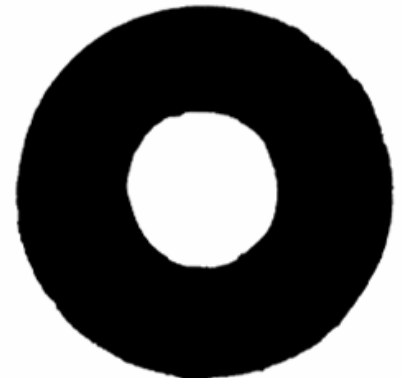
1/2



9/16



5/8



3/4

Illustrations are actual size

# LOCK WASHERS

## HELICAL SPRING LOCK WASHERS

Carbon Steel



- Developed to eliminate loose bolt problems and assembly failures.
- Add strength and insure against equipment breakdown; non-linking, positive locking.

PLATED FINISH		
J&B #	SIZE	QTY
24030	# 6	100
24031	# 8	100
8402	# 10	100
8403	# 12	100
8404	1/4	100
8405	5/16	100
8406	3/8	100
8407	7/16	100
8408	1/2	100
8409	9/16	100
8410	5/8	50
8411	3/4	50
8412	7/8	25
8413	1	25

PLATED FINISH		
J&B #	SIZE	QTY
24032	# 6	500
24033	# 8	500
24034	# 10	500
24020	1/4	500
24021	5/16	500
24022	3/8	200
24023	7/16	200
24024	1/2	200
24025	5/8	100
24026	3/4	100
24027	7/8	50
24028	1	50
* 8414	1-1/8	20
* 8415	1-1/4	20
* 8416	1-3/8	20
* 8417	1-1/2	20
* 8418	1-3/4	20
* 8419	2	20

\* Plain Finish

## HELICAL SPRING LOCK WASHERS

High Alloy/Yellow Zinc

GRADE 8

PLATED FINISH		
J&B #	SIZE	QTY
39504	1/4	100
39505	5/16	100
39506	3/8	100
39507	7/16	50
39508	1/2	50
39509	9/16	50
39510	5/8	50
39511	3/4	25
39512	7/8	25
39513	1	25
* 39514	1-1/8	5
* 39515	1-1/4	5
* 39516	1-3/8	5
* 39517	1-1/2	5

\* NOT HIGH ALLOY  
(SUITABLE FOR GR 5  
AND GR 8 APPLICATIONS)

# WASHERS

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## EXTERNAL LOCK WASHERS

- Cadmium plated to protect against rust and corrosion.
- Should be used when maximum holding power is needed.
- Heads should be large enough to contact the teeth, such as round, pan and binding heads.



J&B #	SIZE	QTY
10970	# 6	100
10971	# 8	100
10972	# 10	100
10973	# 12	100
10974	1/4	100
10975	5/16	100
10976	3/8	50
10977	7/16	50
10978	1/2	50
10979	9/16	50
10980	5/8	50
10981	3/4	25
10982	7/8	25
10983	1	25

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## INTERNAL LOCK WASHERS

- Cadmium plated to protect against rust and corrosion.
- Use where appearance warrants that teeth be hidden and to prevent snagging or scratching.
- Teeth lock into screw head or nut to prevent backoff rotation.



J&B #	SIZE	QTY
11070	# 4	100
11071	# 6	100
11072	# 8	100
11073	# 10	100
11074	# 12	100
11075	1/4	100
11076	5/16	100
11077	3/8	50
11078	7/16	50
11079	1/2	50
11080	9/16	50
11081	5/8	50
11082	3/4	25
11083	7/8	25
11084	1	25



# WASHERS

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## COUNTERSUNK EXTERNAL LOCK WASHERS

- Plated to protect against rust and corrosion.
- Used with either flat or oval head screws in either 82 or 100 degree countersunk angles.
- Use for applications that require concealed teeth.



J&B #	SIZE	QTY
11085	# 6	100
11086	# 8	100
11087	# 10	100
11089	1/4	50
11090	5/16	50

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## HIGH COLLAR LOCK WASHERS

(Used with Hex Socket Cap Screws)

- Springs back to normal position without loss of locking power.
- Non-linking.

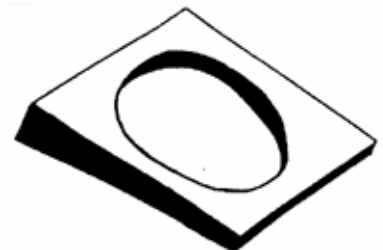


J&B #	SIZE	QTY
24087	3/16	100
24095	1/4	100
24096	5/16	100
24097	3/8	100
24098	1/2	100
24099	5/8	50

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## STEEL SQUARE BEVELED WASHERS

- Intended for structural and mechanical uses such as shimming and leveling.

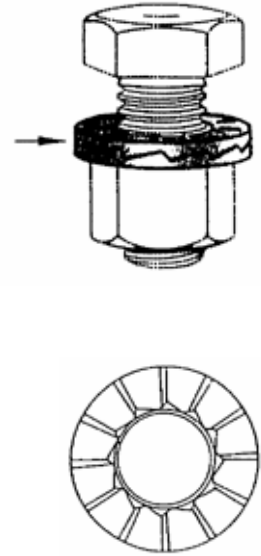


J&B #	SIZE	QTY
24091	3/8	50
24092	1/2	50
24093	5/8	25
24094	3/4	25

# WASHERS

## DISC-LOCK WASHERS

- Consists of identical lock washers each having a series of inclined cams on one side and radial teeth on the other.
- Self-locking fasteners; even self-tightening if subjected to vibration.



J&B #	SIZE	QTY
11750	3/16" - 5MM	50 (25 pair)
11751	1/4" - 6MM	50 (25 pair)
11752	5/16" - 8MM	50 (25 pair)
11753	3/8" - 10MM	50 (25 pair)
11754	7/16" - 11MM	30 (15 pair)
11755	1/2" - 12MM	20 (10 pair)
11756	9/16" - 14MM	20 (10 pair)
11757	5/8" - 16MM	10 ( 5 pair)
11758	3/4" - 19MM	10 ( 5 pair)
11759	7/8" - 22MM	10 ( 5 pair)
11760	1" - 25MM	10 ( 5 pair)

## COUNTERSUNK FINISHING WASHER

- Provide a finished, well-rounded appearance with no jagged edges.
- Use with flat and oval-head countersunk screws.



PLATED FINISH		
J&B #	SIZE	QTY
10957	# 8	50
10958	# 10	50

## FLUSH FINISHING WASHER

- Provides a finished appearance for places where fasteners can't be hidden.



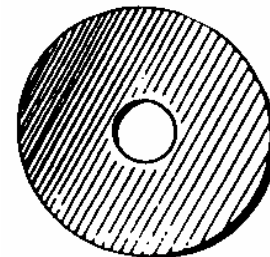
PLATED FINISH		
J&B #	SIZE	QTY
10953	# 8	50

# WASHERS

## FENDER WASHERS

Zinc Plated

- Specifically designed for application where a larger bearing is required.
- Smooth surface; free from burrs.
- **Uniform** thickness.



J&B #	I. D.	O. D.	QTY
41383	1/8	5/8	100
11142	3/16	3/4	100
25139	3/16	1	100
25010	3/16	1-1/4	100
11143	1/4	1	100
24018	1/4	1-1/4	100
41378	1/4	1-1/2	100
11144	5/16	1-1/4	100
24019	5/16	1-1/2	100
41422	3/8	1-1/4	100
11145	3/8	1-1/2	100
11146	3/8	2	50
41423	1/2	1-1/2	50
25011	1/2	2	50

## EXTRA THICK FENDER WASHERS

Zinc Plated

- Zinc plated for excellent corrosion resistance.
- Used to repair sloppy holes.
- Extra thickness allows for higher bolt torque without washer deformation.



J&B #	I. D.	O. D.	THICKNESS	QTY
45600	1/4	1	.120	50
45601	1/4	1-1/2	.120	50
45602	5/16	1-1/4	.120	50
45603	5/16	1-3/4	.120	50
45604	3/8	1-1/4	.120	50
45605	3/8	1-3/4	.120	50
45606	1/2	2	.120	50