



Maruni

MARUNI INDUSTRY CO., LTD.

– since 1948 –

MADE IN JAPAN

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Maruni

Tire Repair Catalog

MADE IN JAPAN



Maruni Tire Repair Catalog 2024 / Volume 26

vol.

26

The Only-one Tire Repair Manufacturer In Japan

Our job is to resurrect large products with small materials.
We provide high quality repair materials that promise even faster and even more thorough puncture repairs.

Maruni was founded in 1914 (3rd year of Taisho) as a specialized manufacturer of
puncture repair materials for bicycle tires,
with a basic philosophy of "effectively utilizing the limited resources of the earth."
Since then, with the dramatic development of motorization, we developed repair materials for tires and tubes for motorcycles,
automobiles, heavy trucks and construction vehicles. In addition, we have developed patching materials for iron, steel and civil
engineering conveyor belts. We continue to steadily grow and evolve as a comprehensive repair material manufacturer.
During this time, we have designed and developed proprietary manufacturing equipment for each product, and we have
established ourselves as the only domestic manufacturer with an integrated production system that starts with rubber raw
materials and ends up as a final product. Our motto is to "provide our customers with safe, satisfactory products and services"
and in addition to the domestic market, we export our products to the US, Europe and
over 60 countries worldwide to meet expansive global needs.
We aim to become an even more global company and continue our steady growth and progress.



SUPPORTING A
SUSTAINABLE
FUTURE

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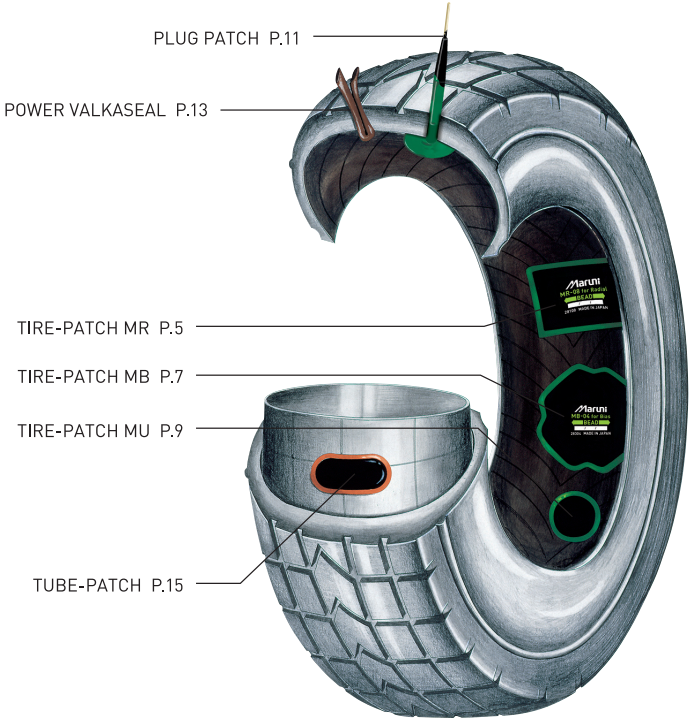
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DIRECTIONS



NEW ITEM

TIRE REPAIRS

TUBE REPAIRS

CHEMICALS

TOOLS

TIRE REPAIR PROCEDURE

EV PATCH

-Tire patch for electric vehicle-

NEW

NEW ITEM



Properties

- New material and compound provide further strength against the breaking.
- Provide a permanent repair.
- Always use with SUPER VALKARN G/ CFC FREE.

MR-10E/MR-12E/MR-14E/MR-18E
Can be used on all types of radial tires for EV vehicles from passenger cars to light trucks.

MU-S0E/ MU-S1E
Patches only for nail holes. These are applied for both radial and bias tires.

PW-3505E/PW-4007E
A convenient product that combines the stem and patch to enable effective repairs.

Product descriptions

MODEL No.	DESCRIPTION	CONTENTS
MR-10E	56mm × 77mm, 1PLY	20 pcs.
MR-12E	70mm × 120mm, 1PLY	10 pcs.
MR-14E	82mm × 130mm, 1PLY	10 pcs.
MR-18E	75mm × 100mm, 2PLY	10 pcs.
MU-S0E	45mm	850 g (≒ 200pcs.)
MU-S1E	60mm	785 g (≒ 100pcs.)
PW-3505E	base 35mm × shaft 5mm	20 pcs.
PW-4007E	base 40mm × shaft 7mm	16 pcs.

TOURING REPAIR KIT MOTOR BIKE

NEW



※CO2 cylinder is sold separately



Properties

- Easy to carry due to its compact size and light weight.
- Repair by yourself at a sudden puncture.
- Include all necessary tools to repair.
- Restart a motorcycle just after CO2 cylinder is used.
- Essential kits at motorcycle touring.
- Provide a permanent repair.
- Always use with SUPER VALKARN G/ CFC FREE.



Product descriptions

CONTENTS	
Compact case	1 pc.
Power Valkaseal S-10	3 pcs.
Super Valkarn G (CFC FREE) 8ml	1 pc.
Handle	1 pc.
Reamer S	1 pc.
Needle S	1 pc.
Small knife	1 pc.
Hexagon wrench	1 pc.
Hexagon socket set screws	2 pcs.
Regulator head (3/8"- 24UNF for CO2 Cylinder)	1 pc.

TOURING REPAIR KIT CAR

NEW



※Compressor image for illustration purposes only. Actual product may vary.



Properties

- Easy to carry due to its compact size and light weight.
- Repair by yourself at a sudden puncture.
- Include all necessary tools to repair.
- Essential kits at car touring.
- Provide a permanent repair.
- Always use with SUPER VALKARN G/ CFC FREE.



Product descriptions

CONTENTS	
Compact case	1 pc.
Air compressor	1 pc.
Power Valkaseal L-14	5 pcs.
Super Valkarn G (CFC FREE) 8ml	3 pc.
Screw reamer L	1 pc.
Insert needle L	1 pc.
Spare needle LL	1 pc.
Hexagon wrench	1 pc.
Nipper	1 pc.
Valve core remover	1 pc.
Hexagon socket set screws	2 pcs.
Small knife	1 pc.

TIRE-PATCH MR

Maruni Radial Patch



Associated products
SUPER VALKARN G▶P18/P21
STEM▶P12
SEALINER▶P19/P21
THERMO LIQUID▶P18

Repair procedure details
P24

From passenger cars to heavy construction equipment, this product economically provides complete and permanent inner repairs for all radial tires. A wide variety of product types allows repair of any type or size of injury.

- Properties**
- Rubber is compounded to provide strength and to last longer. Also features a reinforcing inner layer composed of strong nylon fibers.
 - The bonding and reinforcing layer are combined and will not separate.
 - Use with STEM and SEALINER / CFC FREE for more complete repairs.
 - Use SUPER VALKARN G / CFC FREE for cold cure and use THERMO LIQUID for hot cure.








Product descriptions and compatible vehicle tires

REF. No.	MODEL No.	SIZE (mm)	PLY	BOX QTY								
28108	MR-08	48 × 68	1	20 pcs.	●							
28110	MR-10	56 × 77	1	20 pcs.	●							
28112	MR-12	70 × 120	1	10 pcs.	●	●						
28114	MR-14	82 × 130	1	10 pcs.	●							
28118	MR-18	75 × 100	2	10 pcs.		●	●					
28120	MR-20	85 × 135	2	10 pcs.		●		●				
28122	MR-22	80 × 180	2	10 pcs.			●			●		
28124	MR-24	75 × 220	2	10 pcs.			●					
28125	MR-25	119 × 133	3	10 pcs.				●				
28126	MR-26	75 × 260	3	10 pcs.				●				
28128	MR-28	75 × 330	3	10 pcs.				●				
28135	MR-35	130 × 180	4	10 pcs.				●				
28140	MR-40	115 × 200	3	10 pcs.			●					
28142	MR-42	130 × 270	4	10 pcs.				●		●		
28144	MR-44	130 × 335	4	10 pcs.				●				●
28145	MR-45	180 × 230	4	10 pcs.				●				●
28146	MR-46	180 × 440	4	5 pcs.				●				●
28150	MR-50	180 × 580	5	5 pcs.								●
28152	MR-52	240 × 580	5	3 pcs.								●
28155	MR-55	260 × 330	5	5 pcs.								●
28156	MR-56	270 × 720	7	3 pcs.								●
28160	MR-60	270 × 880	7	3 pcs.								●
28162	MR-62	325 × 1030	7	3 pcs.								●
28165	MR-65	330 × 420	6	5 pcs.								●
28168	MR-68	350 × 760	7	3 pcs.								●
28175	MR-75	450 × 530	8	3 pcs.								●
28180	MR-80	150 × 190	2	5 pcs.						●		
28182	MR-82	185 × 240	3	5 pcs.						●		
28184	MR-84	210 × 290	3	5 pcs.						●		
28186	MR-86	245 × 340	3	5 pcs.						●		

Application chart

		W mm max.	L mm	Dφ mm max.	W/D mm max.	L mm	MR No.
	Q	4	12	6	10	10	08
		6	15	8	12	12	10
		20	37		22	22	14
	S	4	12	4	8	8	08
		6	15	6	10	10	10
		15	32		13	13	12
	H	4	5	2	6	6	08
		6	7	3	7	7	10
		3	4	3	7	7	10
	V ZR				3	3	10
	165R-215R 6-8PR	6	8	3	7	7	12
		12	25	6	14	14	18
		15	33	8	18	18	20
	6.00R-7.50R 7R-8.5R 205 / -225 /	8	10	6	10	10	18
		10	13	8	12	12	20
		15	62	10	18	18	22
	8.25R-10.00R 9R-11R 11 / 235 / -285 /	20	52				24
		10	82	15	28	43	40
		25	82				
	1 Cable 82 2 Cables 62						24
	8.25R-10.00R 9R-11R 11 / 235 / -285 /	6	13	8	12	12	20
		10	82				
		20	62	15	23	43	40
	1 Cable 82 2 Cables 62	10	115	20	33	53	42
		25	85				
		20	135	25	43	73	44
	11.00R-13.00R 12R-15R 12 / -13 / 295 / -365 /	40	85				
					17	27	25
					27	37	35
	1 Cable 122 3 Cables 63				42	62	45
							24
							26
	14.00R-16.5R / -15.5 / -385 /	6	8	6	10	10	20
		10	63	10	18	23	40
		15	38				
	1 Cable 142 2 Cables 82	10	103	20	28	53	42
		25	83				
		20	133	25	42	72	44
	11.00R-13.00R 12R-15R 12 / -13 / 295 / -365 /	40	83				
					12	22	25
					22	32	35
	1 Cable 122 3 Cables 62				42	62	45
							26
	14.00R-16.5R / -15.5 / -385 /	12	32	10	14	14	40
		10	102	20	22	32	42
		20	62				
	1 Cable 142 2 Cables 82	20	132	25	32	52	44
		30	62				
		40	102	30	42	72	46

		W mm max.	L mm	Dφ mm max.	W/D mm max.	L mm	MR No.
	5.00-7.50	10	12	5	13	18	20
		10	53	5	13	23	22
		15	33				
	7.00-10.00	10	12	5	13	13	20
		10	73	10	22	33	40
		20	52				
	8.3-12.4 8-11	20	73	15	27	38	42
		30	63				
		20	22	10	22	33	20
	13.6-30.5 12-15	50	72	25	42	63	80
		70	52				
		70	103	45	72	93	82
	13.6-30.5 12-15	120	72				
		20	32	10	22	33	22
		40	62	20	32	53	80
	13.6-30.5 12-15	60	42				
		70	102	45	72	93	82
		100	72				
	13.6-30.5 12-15	80	132	60	92	113	84
		120	82				
		100	162	85	132	153	86
	13.6-30.5 12-15	160	102				

									MR No.
100 SERIES	75-80 SERIES	65 SERIES	W mm max.	L mm	Dφ mm max.	W/D mm max.	L mm		
14.00-30.00	15.5-33.5	20/-50/-	20	73	15	23	43	44	
			25	153	20	43	63	46	
			50	103					
	17.5-50.5	25/-65/-	25	253	35	53	83	50	
			50	153					
			100	153	55	93	123	52	
16.00-40.00	17.5-50.5	25/-65/-	50	253					
			100	153	55	93	123	52	
			50	303					
18.00-40.00	20.5-50.5	35/-65/-	100	203	60	93	143	56	
			130	183					
			170	143	70	103	153	68	
27.00-40.00	29.5-50.5	45/-65/-	60	403	65	93	183	60	
			120	253					
			60	483					
33.00-40.00	37.25-50.5	55/-65/-	120	253	70	103	223	62	
14.00-18.00	15.5-20.5	20/-35/-				43	73	45	
21.00-30.00	23.5-33.5	40/-50/-				28	53		
16.00-21.00	17.5-23.5	25/-35/-				63	93	55	
24.00-30.00	26.5-33.5	40/-50/-				43	73		
33.00-40.00	37.25-50.5	55/-65/-				28	53		
21.00-30.00	23.5-33.5	40/-50/-				83	113	65	
33.00-40.00	37.25-50.5	55/-65/-				63	93		
27.00-40.00	29.5-50.5	45/-65/-				103	143	75	

TIRE-PATCH MB/MS

Maruni Bias Patch



VIDEO





Associated products
SUPER VALKARN G▶P18/P21
STEM▶P12
SEALINER▶P19/P21
THERMO LIQUID▶P18



Repair procedure details
P25



Can be used on all types of bias tires from passenger cars to heavy construction equipment. This patch is developed to ensure safer, easier, more economical and durable repairs.

Properties

- Select a patch depending on the type and location of injury (MB for tread, MS for sidewall)
- Rubber is compounded to provide strength and to last longer. Also features a reinforcing inner layer composed of strong nylon fibers.
- The bonding and reinforcing layer are combined and will not separate.
- Use with STEM and SEALINER / CFC FREE for more complete repairs.
- Use SUPER VALKARN G / CFC FREE for cold cure and use THERMO LIQUID for hot cure.

Product descriptions and compatible vehicle tires

REF. No.	MODEL No.	SIZE (mm)	PLY	BOX QTY		
28301	MB-01	60	1	30 pcs.	 <div>Car & Truck</div>	Nailhole Unit MB- 01~02
28302	MB-02	80	2	15 pcs.		
28303	MB-03	91	2	10 pcs.		
28304	MB-04	127	2	10 pcs.		
28305 / 28405	MB/MS-05	165	4	10 pcs.		
28306 / 28406	MB/MS-06	240	6	10 pcs.	 <div>Tractor</div>	MB- 03~10
28307 / 28407	MB/MS-07	295	6	10 pcs.		
28308 / 28408	MB/MS-08	345	6	10 pcs.		
28309 / 28409	MB/MS-09	390	8	10 pcs.		
28310 / 28410	MB/MS-10	450	8	5 pcs.		
28320	MB-20	255	4	10 pcs.	 <div>Grader & Earth Mover</div>	MB- 20~25
28321	MB-21	370	4	5 pcs.		
28322	MB-22	510	4	5 pcs.		
28323	MB-23	255	6	10 pcs.		
28324	MB-24	370	6	5 pcs.		
28325	MB-25	510	6	3 pcs.	 <div>Industrial Tires</div>	MB- 30~35
28330 / 28430	MB/MS-30	250	6	10 pcs.		
28331 / 28431	MB/MS-31	350	6	10 pcs.		
28332 / 28432	MB/MS-32	450	8	5 pcs.		
28333 / 28433	MB/MS-33	550	8	5 pcs.		
28334 / 28434	MB/MS-34	650	10	3 pcs.		MS- 30~35
28335 / 28435	MB/MS-35	750	12	3 pcs.		
28340	MB-40	160	4	10 pcs.		
28341	MB-41	235	6	10 pcs.		
28342	MB-42	265	8	10 pcs.		

Application chart

Car & Truck

Perforations of tread, shoulder and sidewall (for sidewall repair use MS patch)

PLY RATING	MAX. INJURY (D1)							
	11mm (7/16 inch)	16mm (5/8 inch)	25mm (1 inch)	38mm (1-1/2 inch)	50mm (2 inch)	75mm (3 inch)	100mm (4 inch)	125mm (5 inch)
4	MB No. 02	MB No. 03	MB No. 03	MB No. 04	MB No. 05	MB No. -	MB No. -	MB No. -
6 - 8	03	03	04	04	05	-	-	-
10 - 12	03	04	05	05	06	07	08	-
14 - 16	03	04	06	06	06	07	08	10
18 - 20	04	05	06	07	08	09	09	10
22 - 24	05	06	07	08	09	09	10	-
MPT-Farmer 6 - 18	03	04	04	05	06	07	08	09

Ply damages on tread, shoulder and sidewall up to half of the carcass thickness (for sidewall repair use MS patch)

PLY RATING	MAX. INJURY (D1)							
	11mm (7/16 inch)	16mm (5/8 inch)	25mm (1 inch)	38mm (1-1/2 inch)	50mm (2 inch)	75mm (3 inch)	100mm (4 inch)	125mm (5 inch)
8 - 12	MB No. 02	MB No. 02	MB No. 03	MB No. 03	MB No. 05	MB No. 06	MB No. 07	MB No. -
14 - 18	03	03	04	04	05	06	07	08
20 - 24	04	04	05	05	06	07	08	08

Grader & Earth Mover

Perforations of tread, shoulder and sidewall (for sidewall repair -max. 200mm/8inch- use MS patch)

PLY RATING	MAX. INJURY (D1)								
	25mm (1 inch)	50mm (2 inch)	75mm (3 inch)	100mm (4 inch)	125mm (5 inch)	150mm (6 inch)	175mm (7 inch)	200mm (8 inch)	250mm (10 inch)
8 - 12	MB No. 30	MB No. 30	MB No. 30	MB No. 31	MB No. 32	MB No. 32	MB No. 32	MB No. -	MB No. -
14 - 18	30	30	31	32	32	32	33	33	34
20 - 26	30	31	31	32	33	33	34	34	35
28 - 36	31	32	32	33	34	35	35	35	35 / 32
38 - 44	31	32	33	35	35	34 / 31	35 / 32	35 / 33	35 / 33
46 - 50	32	33	34	34 / 32	34 / 32	35 / 32	35 / 32	-	-
52 - 58	32	33	35	34 / 32	35 / 32	35 / 33	-	-	-
60 - 68	33	34	34 / 31	35 / 32	35 / 33	-	-	-	-

Ply damages on tread, shoulder and sidewall up to half of the carcass thickness (for sidewall repair use MS patch)

PLY RATING	MAX. INJURY (D1)			
	50mm (2 inch)	100mm (4 inch)	150mm (6 inch)	200mm (8 inch)
8 - 12	MB No. 30	MB No. 31	MB No. 31	MB No. 32
14 - 18	30	31	31	32
20 - 26	30	31	32	32
28 - 36	30	31	32	33
38 - 44	31	32	33	34
46 - 50	31	33	34	35
52 - 58	31	34	34	35
60 - 68	32	34	35	-

Explanation of MB-30 series chart

Layering patches (if there are 2 to 3 sizes of patches listed in the chart)

1. Coat the bonding layer of the largest patch to be layered with SUPER VALKARN G / CFC FREE. After letting dry for 20 to 30 minutes, attach FLOATER GUM to patch.
2. Coat the FLOATER GUM attached to the patch with SUPER VALKARN G / CFC FREE again and let dry for 10 to 20 minutes. Attach this to the tire.
3. Clean the top layer of the patch that was attached to the tire with LIQUID BUFFER / CFC FREE, buff and then remove any buff residue.
4. Coat the buffed surface of the patch attached to the tire and the bonding layer of the next sized patch with SUPER VALKARN G / CFC FREE. After letting dry for 10 to 20 minutes, layer the patch on.

Tractor

Perforations of tread, shoulder and sidewall

PLY RATING	MAX. INJURY (D1)		
	75mm (3 inch)	125mm (5 inch)	175mm (7 inch)
4 - 6	MB No. 20	MB No. 21	MB No. 22
8 - 12	23	24	25
14 - 16	24	25	-

Industrial Tires

Perforations of tread, shoulder and sidewall

PLY RATING	MAX. INJURY (D1)		
	25mm (1 inch)	50mm (2 inch)	75mm (3 inch)
6 - 8	MB No. 40	MB No. 40	MB No. -
10 - 12	41	41	42
14 - 16	41	42	42
18 - 20	42	42	-
22 - 24	42	-	-

Nailhole Units

MAX. INJURY (D1)	
4mm (3/16 inch)	6mm (1/4 inch)
MB No. 01	MB No. 02

D1 : Max. measurement of the damaged carcass cords.

Note: This internationally valid repair chart has been defined with values based on experience, taking into consideration many test bench controls for utmost safety. The maximum limits for repairable sizes must not be exceeded. Damage limitations that might exist in different countries have not been taken into consideration in this chart. In these cases, the tire repair specialist must take into consideration local driving, load and road condition to ensure safety.

TIRE REPAIRS

007

008

TIRE-PATCH MB-500'S

Maruni Bias Patch



Properties

- The Maruni TIRE-PATCH MB-500 series is recommended for repairs of Off-The-Road (OTR) bias tires.
- Compared to the MB-30'S, these are designed specially for OTR tires.
- The reinforcement layer and bonding layer of the patch are compounded for self-vulcanization and reinforced with strong nylon fibers.
- The bonding and reinforcing layer are combined and will not separate.
- Use with SEALINER / CFC FREE for more complete repairs.
- Use SUPER VALKARN G / CFC FREE for cold cure and use THERMO LIQUID for hot cure.



Associated products
SUPER VALKARN G▶P18/P21
THERMO LIQUID▶P18
SEALINER▶P19/P21



Repair procedure details
P25,P27

Product descriptions

REF. No.	MODEL No.	SIZE (mm)	PLY	BOX QTY.
28350	MB-502	240	4	10 pcs.
28351	MB-503	240	6	10 pcs.
28352	MB-523	360	6	10 pcs.
28353	MB-524	360	8	10 pcs.
28354	MB-544	480	8	5 pcs.
28355	MB-545	480	10	5 pcs.

Application chart

PLY RATING	MAX. INJURY (D1)									
	16mm (5/8 inch)	29mm (1-1/8 inch)	50mm (2 inch)	75mm (3 inch)	100mm (4 inch)	125mm (5 inch)	150mm (6 inch)	175mm (7 inch)	200mm (8 inch)	
10 - 14	MB No. 502	MB No. 502	MB No. 502	MB No. 502	MB No. 523	MB No. 523	MB No. 523	MB No. 523	MB No. 544	-
16 - 20	502	502	502	503	523	524	544	544	544	-
22 - 26	502	502	502	523	523	524	544	544	544	-
28 - 32	502	503	503	523	524	544	545	545	-	-
34 - 38	503	503	523	523	544	545	545	-	-	-
40 - 44	503	503	523	524	545	-	-	-	-	-
46 - 50	503	503	523	544	-	-	-	-	-	-
52 - 58	503	523	544	545	-	-	-	-	-	-
60 - 68	503	523	544	-	-	-	-	-	-	-

TIRE-PATCH MU / MU-SQUARE

Maruni Universal Patch



Properties

- Universal patch that can be used for both radial and bias tires.
- Patches only for nail holes. Allows easier repairs of small injuries.
- Does not contain reinforcement cords. Flexible structure.
- The bonding and reinforcing layer are combined and will not separate.
- Always use with SUPER VALKARN G / CFC FREE.
- Use with STEM and SEALINER / CFC FREE for more complete repairs.
- Economical.



Associated products
SUPER VALKARN G▶P18/P21
SEALINER▶P19/P21
STEM▶P12



Repair procedure details
P25

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
28199	MU-A0	34mm 100 pcs./ box
28200	MU-00	43mm 100 pcs./ box
28220	MU-B0	52mm 50 pcs./ box
28201	MU-01	65mm 50 pcs./ box
28202	MU-02	78mm 50 pcs./ box
28230	MU-S0	45mm 100 pcs./ box
28231	MU-S1	60mm 50 pcs./ box
28232	MU-S2	70mm 50 pcs./ box

FLOATER GUM

-Cushion Gum-



VIDEO



FL-05

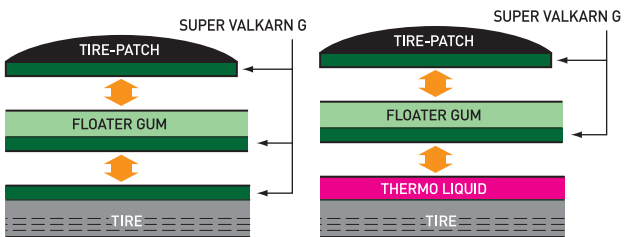
Properties

- Cushion gum for the bonding layer of the MR, MB and MS tire patches.
- Absorbs shocks from the tire to prevent splitting, breakage and wear on the patch which ensures long-lasting repairs.
- Use in combination with patches to improve adhesion strength during the attachment process.
- Facilitates adhesion of larger sized patches.
- Use with SUPER VALKARN G / CFC FREE for self-vulcanizing adhesion with the tire and patch.
- Can be used for both cold and hot curing.
- Shelf life: 2 years at 20°C when direct sunlight and humidity are avoided

1. SELF VULCANIZING (Floater Gum + Tire-Patch) more than 24 hours at 20°C, more than 48 hours at 10°C 2. LOW HEAT PRESSURE (Floater Gum + Tire-Patch) 30 min.~ 10hours at 90°C~110°C 3. HIGH HEAT PRESSURE (Floater Gum + Tire-Patch + Filler Gum) 60min.~20 hours at 130°C 30min.~20 hours at 150°C 20min.~ 8 hours at 165°C



Repair procedure details
P27



Product descriptions

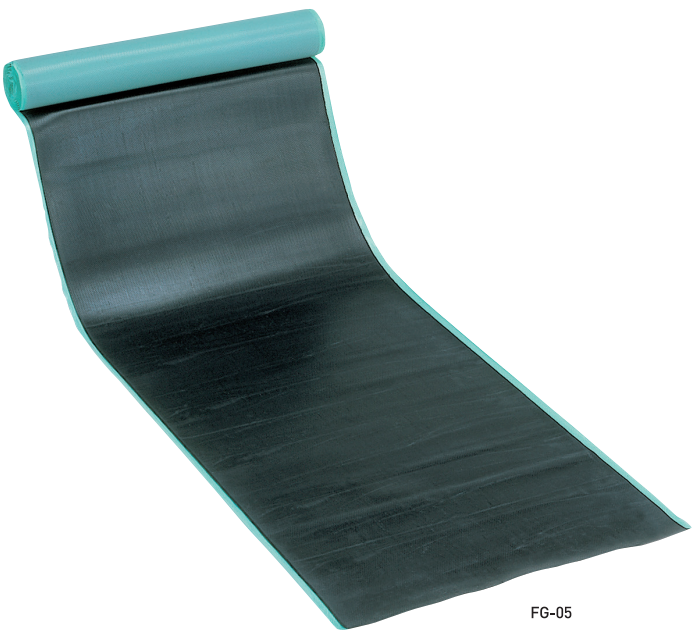
REF. No.	MODELNo.	DESCRIPTION
29002	FL-02	2kg 0.8mm × 500mm × about 3.8m
29005	FL-05	5kg 0.8mm × 500mm × about 9.5m

FILLER GUM

-Uncured Rubber Compound-



VIDEO



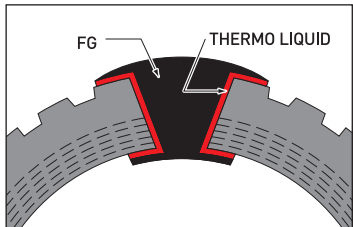
FG-05

Properties

- Use for large injuries that cannot be filled with stems.
- Specially compounded to have the same strength as tire rubber after vulcanization.
- Use hot curing only.
- Apply 140°C heat for 4 minutes or more for each millimeter of thickness.
(Warm up times for equipment require a separate 20 to 30 minutes)
- Shelf life: 1.5 years at 20°C when direct sunlight and humidity are avoided



Repair procedure details
P27



Coat THERMO LIQUID onto the skived and buffer area of the tire inside and out. Build up the skive with FILLER GUM as illustrated in the left column. Allow slight overfilling at center of damage.

Product descriptions

REF. No.	MODELNo.	DESCRIPTION
29962	FG-02	2kg 3.0mm × 500mm × about 1m
29965	FG-05	5kg 3.0mm × 500mm × about 2.5m

PREMIUM PLUG PATCH

-Combination Patch-

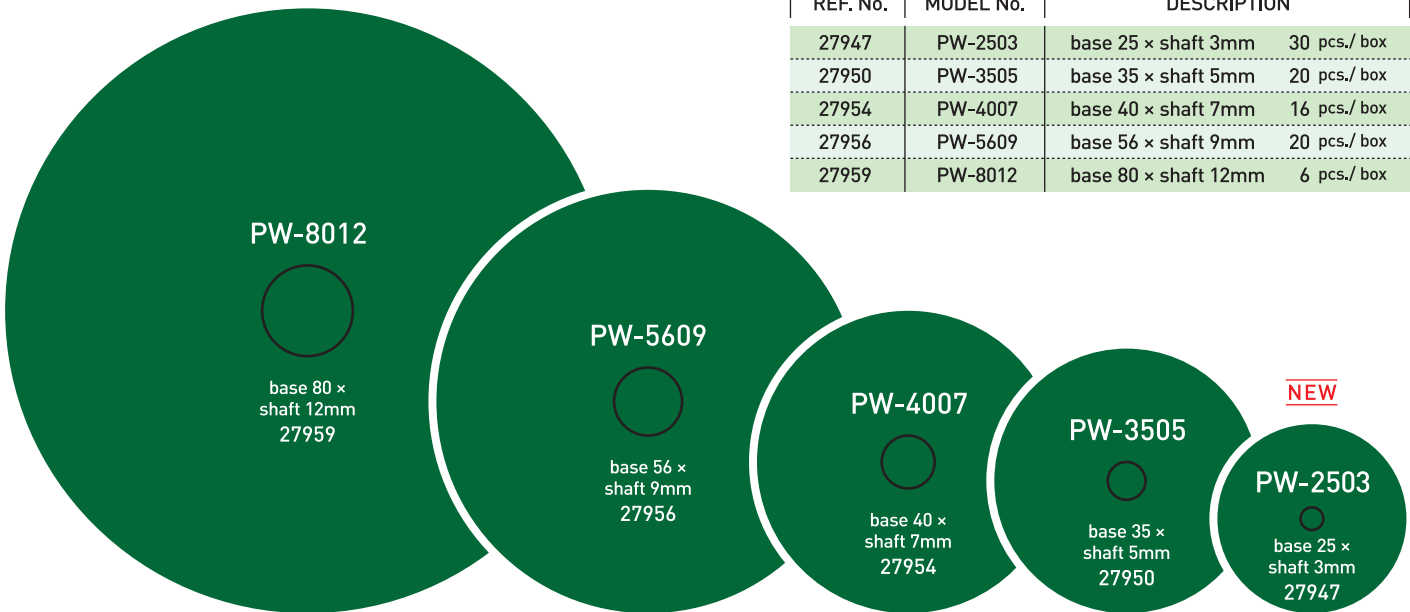


Associated products
SUPER VALKARN G ▶P18/P21
SEALINER ▶P19/P21

Repair procedure details
P23

- Properties**
- A convenient product that combines the stem and patch to enable effective repairs.
 - Integrated stem with patch allows complete and thorough repair of injury holes.
 - Can be used for injuries that are up to around 20° from the tire tread.
 - Greatly reduces the number of procedures required for repair.
 - Always use with SUPER VALKARN G / CFC FREE.

Actual size illustration



REF. No.	MODEL No.	DESCRIPTION
27947	PW-2503	base 25 × shaft 3mm 30 pcs./ box
27950	PW-3505	base 35 × shaft 5mm 20 pcs./ box
27954	PW-4007	base 40 × shaft 7mm 16 pcs./ box
27956	PW-5609	base 56 × shaft 9mm 20 pcs./ box
27959	PW-8012	base 80 × shaft 12mm 6 pcs./ box

27900 / 27930(CFC FREE) PW PM-SET01 PROMOTION SET

A special trial set.



REF. No.	MODEL No.	QTY
27950	PW-3505	5 pcs.
27954	PW-4007	8 pcs.
38186 / 38684	Super Valkarn G 100ml / CFC FREE	1 pc.
★ 93028	Milling Roller	1 pc.
★ 42395	Carbide Cutter 75 × 4mm	1 pc.
★ 42378	Carbide Cutter 80 × 6mm	1 pc.

★ Notice: The Milling Roller and the Carbide Cutter are optional.

STEM with wire -Filler Plug-



- Properties**
- A filler, embedding type plug.
 - Suitable for repairing injuries at a steeper angle.
 - Always use with a patch to improve safety of injury repairs.
 - By using SUPER VALKARN G / CFC FREE with the green bonding layer, this vulcanizes the bonding layer with the tire to ensure a complete seal.
 - Always use with SUPER VALKARN G / CFC FREE.

Associated products
SUPER VALKARN G ▶P18/P21

Repair procedure details
P24,P25

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
20905	SM-05	shaft 5φ 40 pcs./ box
20907	SM-07	shaft 7φ 30 pcs./ box
20910	SM-10	shaft 10φ 20 pcs./ box
20915	SM-15	shaft 15φ 10 pcs./ box
20920	SM-20	shaft 20φ 5 pcs./ box

CARBIDE CUTTER

Various sizes are available that correspond to all stem and plug patch sizes.



Product descriptions

Carbide Cutter		STEM		PLUG PATCH		Cutter (mmφ)	Injury (mmφ)	P/C	L/T	Truck
REF. No.	SIZE (mm)	REF. No.	MODEL NO.	REF. No.	MODEL NO.					
42381	60 × 3	-	-	27947	PW-2503	3	2	●	●	●
42395	75 × 4	20905	SM-05	27950	PW-3505	4	3	●	●	●
42378	80 × 6	20907	SM-07	-	-	6	4	●	●	●
42379	100 × 8	-	-	27953	PW-4007	6	4	●	●	●
42380	110 × 10	20910	SM-10	27956	PW-5609	8	6	●	●	●
42164	125 × 13	-	-	27959	PW-8012	10	8	●	●	●
42168	140 × 18	20915	SM-15	-	-	13	12	●	●	●
		20920	SM-20	-	-	18	17	●	●	●

STICK -Filler Plug for Tubeless Tire-



- Properties**
- Can be used for tubeless tires of motorcycles.
 - Allows for easy repairs of small injuries from the outside, without having to remove the tire from the wheel.
 - A "bullet" is embedded in the tip to allow easy insertion.
 - The construction is designed to prevent detachment while driving.
 - By using SUPER VALKARN G / CFC FREE with the red bonding layer that appears after removing the green film, this vulcanizes the bonding layer with the tire to ensure a complete seal.
 - Always use with SUPER VALKARN G / CFC FREE.

Associated products
SUPER VALKARN G ▶P18/P21 REAMER RM-05 ▶P22

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
25910	Stick-MINI	25 pcs./ box

TIRE REPAIRS

POWER VALKASEAL

-Repair Strings-



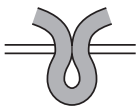
VIDEO

PVS



Properties

- Repairs are possible from the outside with the tire still attached to the wheel.
- Can be used for tubeless radial and bias tires.
- Enables repairs of the tire tread only.
- A tire plug in which the non-vulcanized rubber outer surface is combined with an inner nylon fiber.
- Excellent cross-sectional design that plugs the injury by changing into a round shape when inserted (with explaining diagram).
- By using SUPER VALKARN G / CFC FREE with the gray bonding layer, this vulcanizes the bonding layer with the tire to ensure a complete seal.



Sectional view

Associated products
SUPER VALKARN G ▶P18/P21

Repair procedure details
P29

Product descriptions

POWER VALKASEAL

REF. No.	MODEL No.	DESCRIPTION
23830	SP-1060	100mm 60 pcs./ box
23933	LP-1050	100mm 50 pcs./ box
23938	L-1430	140mm 30 pcs./ box
23942	L-2030	200mm 30 pcs./ box

POWER VALKASEAL SET

Products for tire retailers and garage related facilities such as automobile repair shops.



Product descriptions

23300 / 23330 (CFC FREE) POWER VALKASEAL PROMOTION SET PM-SET 01

No.	REF. No.	CONTENTS
①	23933	LP-1050 Power Valkaseal 30 pcs.
②	23938	L-1430 Power Valkaseal 20 pcs.
③	92802	SR-01 Screw Reamer L 1 pc.
④	92812	IN-02 Insert Needle L 1 pc.
⑤	38008 / 38682	Super Valkarn G 8ml / CFC FREE 5 pcs.



Product descriptions

23103 / 23133 (CFC FREE) POWER VALKASEAL SET L-10

No.	REF. No.	CONTENTS
①	23933	LP-1050 Power Valkaseal 1 box
②	38188 / 38688	Super Valkarn G 200ml / CFC FREE 1 tin
③	92802	SR-01 Screw Reamer L 1 pc.
④	92812	IN-02 Insert Needle L 1 pc.
⑤	92817	ND-30 Spare Needle S 1 pc.
⑥	92830	HX-25 Hexagon Wrench 1 pc.
⑦	92530	KF-04 Knife 1 pc.



Product descriptions

23107 / 23137 (CFC FREE) POWER VALKASEAL SET S-10

No.	REF. No.	CONTENTS
①	23830	SP-1060 Power Valkaseal 1 box
②	38188 / 38688	Super Valkarn G 200ml / CFC FREE 1 tin
③	92804	SR-02 Screw Reamer S 1 pc.
④	92905	IN-05 Insert Needle S 1 pc.
⑤	92817	ND-30 Spare Needle S 1 pc.
⑥	92830	HX-25 Hexagon Wrench 1 pc.
⑦	92530	KF-04 Knife 1 pc.

V-SEAL KIT

Kits that combine POWER VALKASEAL with tools which can be carried in cars and motorcycles.



VK-02



VK-03

Product descriptions

23967/23987 (CFC FREE) VK-02	23969/23989 (CFC FREE) VK-03
L-10 Power Valkaseal 5 pcs.	S-10 Power Valkaseal 3 pcs.
Super Valkarn G 8ml / CFC FREE 2 pcs.	Super Valkarn G 8ml / CFC FREE 1 pc.
SR-01 Screw Reamer L 1 pc.	Combination Tool-02 1 pc.
IN-02 Insert Needle L 1 pc.	Handy Bag 1 pc.

TIRE REPAIRS

TUBE-PATCH
-Tube Repair Patch-



Associated products
VALKARN ▶P18/P21

Repair procedure details
P26

High quality repair patch that can be used for various types of tubes from bicycles to OTR tires. Popular worldwide.

Properties

- High quality repair patch that can be used for various types of tubes from bicycles to OTR tires.
- A wide variety of sizes are available.
- The bonding and reinforcing layer are combined and will not separate.
- The feather edges can be layered to allow repair injuries that are close together.
- Always use with VALKARN / CFC FREE.

Product descriptions

OVAL

Standard Package

REF. No.	MODEL No.	DESCRIPTION
10403	S	24 × 34 mm 100 pcs./ box
10405	M	28 × 42 mm 50 pcs./ box
10409	L	33 × 53 mm 50 pcs./ box
10411	L2	41 × 76 mm 30 pcs./ box
10413	OV-01	41 × 107 mm 30 pcs./ box
10417	OV-03	66 × 138 mm 10 pcs./ box
10420	OV-05	91 × 159 mm 10 pcs./ box

ROUND

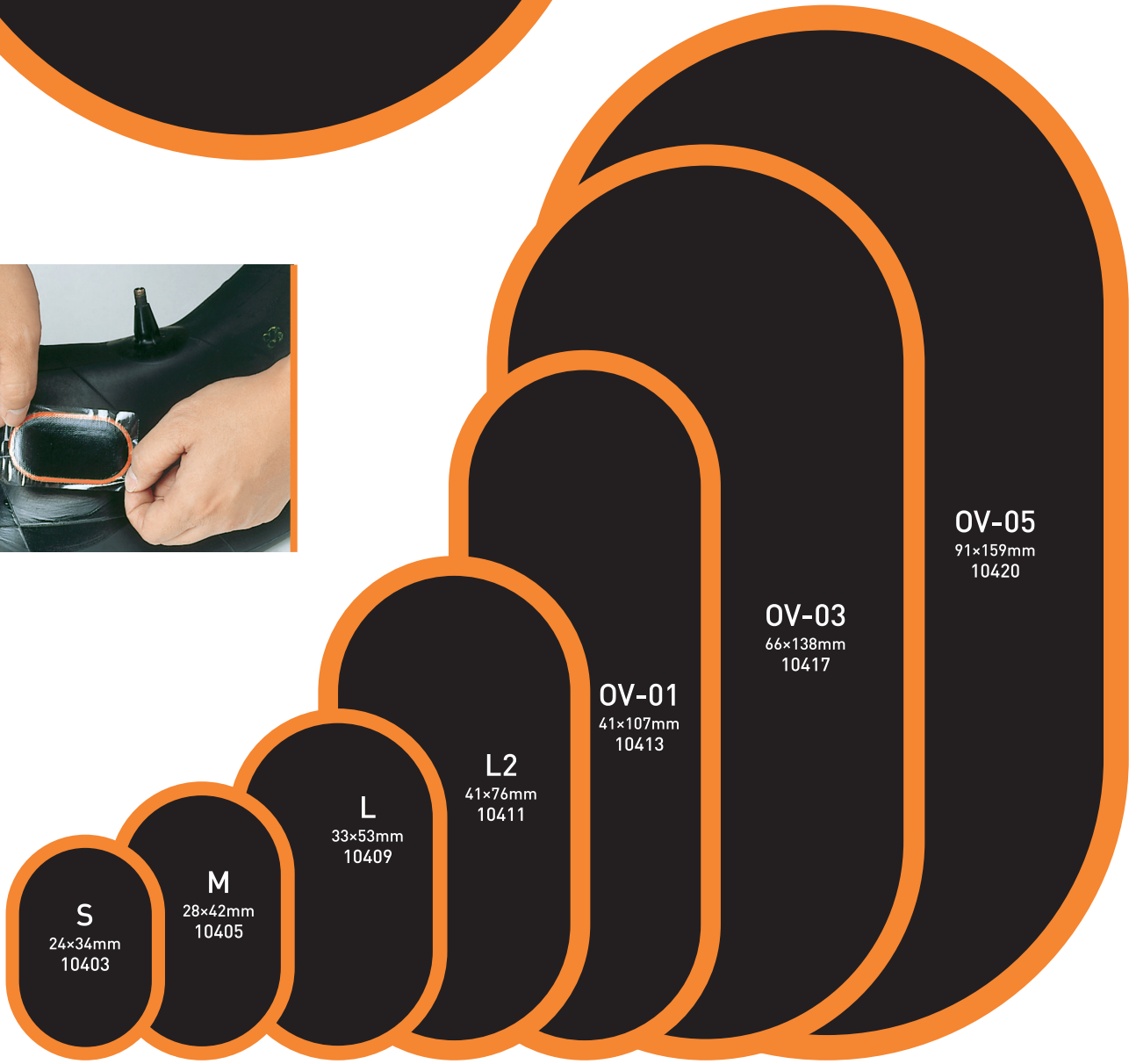
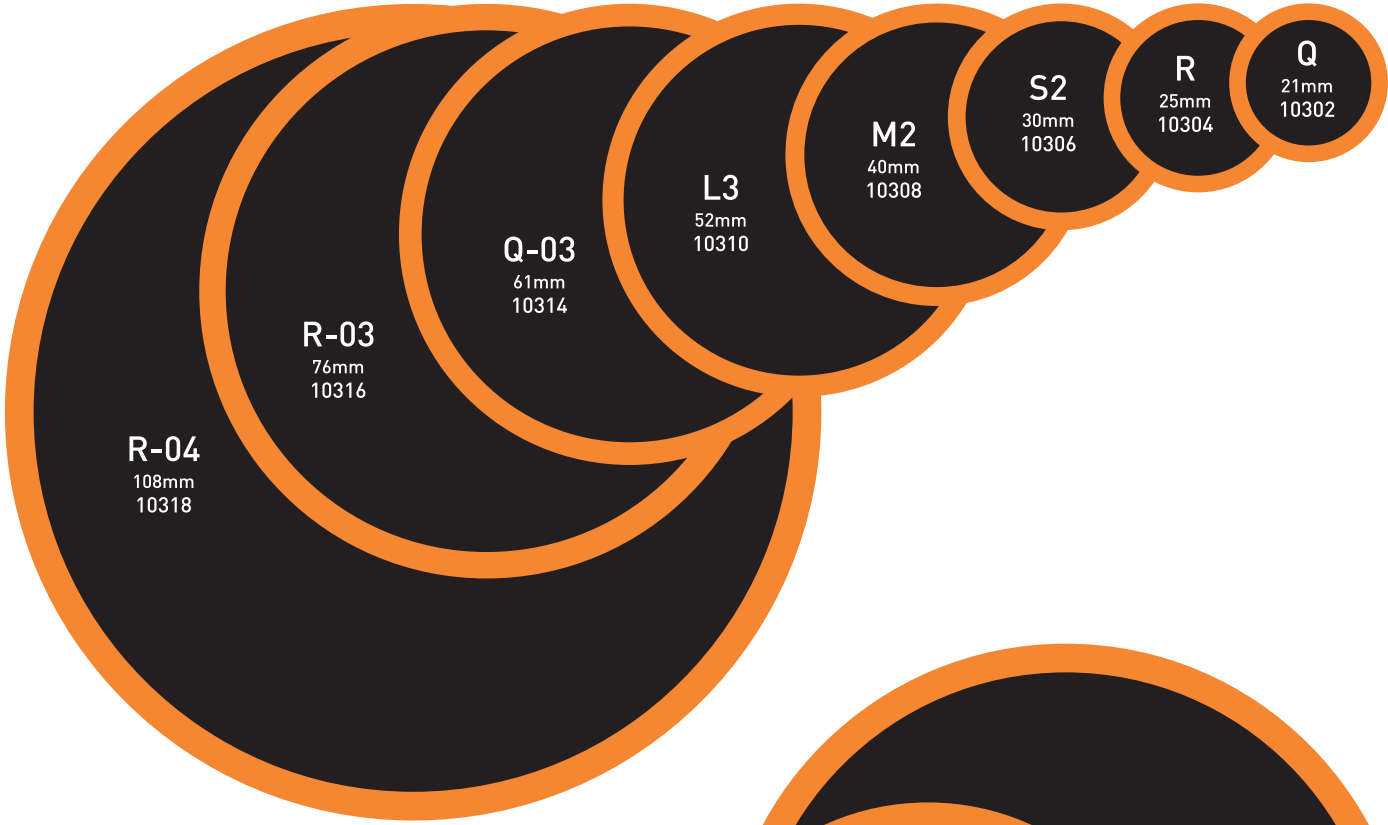
Standard Package

REF. No.	MODEL No.	DESCRIPTION
10302	Q	21mm 100 pcs./ box
10304	R	25mm 100 pcs./ box
10306	S2	30mm 100 pcs./ box
10308	M2	40mm 50 pcs./ box
10310	L3	52mm 30 pcs./ box
10314	Q-03	61mm 30 pcs./ box
10316	R-03	76mm 30 pcs./ box
10318	R-04	108mm 10 pcs./ box

Promotion Package

REF. No.	MODEL No.	DESCRIPTION
10306-PM	S2-PM	30mm 270 pcs./ box
10308-PM	M2-PM	40mm 180 pcs./ box
10310-PM	L3-PM	52mm 120 pcs./ box

Actual size illustration



TUBE REPAIRS

PATCH RUBBER SHEET -Tube Repair Patch-



- Properties**
- For repairs of bicycle and motorcycle tubes.
 - High quality and economical long sheet patches. Can be cut as needed to an optimal size.
 - 2 layer construction with a durable rubber layer and bonding layer.
 - Semi-cured and self-vulcanizes with use of VALKARN / CFC FREE.
 - Always use with VALKARN / CFC FREE.

Product descriptions

REF. No.	DESCRIPTION
45516	0.6mm × 3" × 36" [0.6mm × 76.2mm × 914mm] 12 pcs./ box
45523	0.6mm × 548mm × 86m 1 roll / box
45781	1.1mm × 410mm × 270mm 50 pcs./ box



BB-PATCH -Tube Repair Patch-



- Properties**
- For repairs of bicycle and motorcycle tubes.
 - Black colored so that the repair area blends with the tire.
 - Always use with VALKARN / CFC FREE.

Product descriptions

REF. No.	DESCRIPTION
10502	BB-Q 21mm 200 pcs./ box
10504	BB-R 25mm 256 pcs./ box
10506	BB-S2 30mm 180 pcs./ box
10513	BB-S 24 × 34mm 204 pcs./ box

CYCLE KIT A portable, pocket-sized bicycle and motorcycle tube repair kit in a compact case.



Product descriptions

DESCRIPTION	DESCRIPTION
11218 / 11724 (CFC FREE) CYCLE KIT CK-01	
BB-Patch BB-R	25mm 3 pcs.
BB-Patch BB-S	24 × 34mm 2 pcs.
Valkarn / CFC FREE	8ml 1 pc.
Emery Paper	1 pc.
Valve Tubing	1 pc.

SUPER VALKARN G -Vulcanizing Cement for Tire Repair-



- Properties**
- Vulcanizing cement for tire repairs.
 - Use for repairing a wide variety of tires from bicycles to OTR tires.
 - High quality and highly adhesive.
 - Optimal adhesive for rough surfaces after buffing the inside of the tire.
 - Outstanding heat resistance to prevent detachment of repair material while driving.
 - Outstanding cold curing cement with no heating required.
 - Always use with Maruni products.
 - Non-Flammable.

Product descriptions

REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
38008	8ml tube 12 tubes / box	38188	200ml tin 12 tins / box
38050	50ml tube 12 tubes / box	38190	1000ml tin
38186	100ml tin 12 tins / box	38190-BR	1000ml tin with Brush

VALKARN -Vulcanizing Cement for Tube Repair-



- Properties**
- Vulcanizing cement for tube patches.
 - Use for repairing a wide variety of tubes from bicycles to OTR tires.
 - High quality and highly adhesive.
 - Optimal adhesive strength for easy use. Smooth and easy to use.
 - Outstanding heat resistance to prevent detachment of repair material while driving.
 - Outstanding cold curing cement with no heating required.
 - Always use with Maruni products.
 - Non-Flammable.

Product descriptions

REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
35008	8ml tube 12 tubes / box	35188	200ml tin 12 tins / box
35022	22ml tube 12 tubes / box	35190	1000ml tin
35050	50ml tube 12 tubes / box	35190-BR	1000ml tin with Brush
35186	100ml tin 12 tins / box		

THERMO LIQUID -Vulcanizing Cement for Hotcure-



- Properties**
- Vulcanizing cement for hot curing.
 - High quality and highly adhesive.
 - Always use with Maruni products.
 - Non-Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
39188	TL-200	200ml tin 12 tins / box
39190	TL-1000	1000ml tin

TUBE REPAIRS

CHEMICALS

BEAD SEALER -Tire Sealant-



Properties

- Prevents air leaks when there is damage to beads or the rim.
- Completely seals the gap between the tire and wheel rim to prevent even minute air leaks.
- Non-Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60121	BS-02	200ml tin 12 tins / box
60123	BS-10	1000ml tin

SEALINER -Inner Liner Sealant-



Properties

- To prevent air leaks, even minute ones, coats areas that have been buffed too much or where the inner liner has been removed.
- Coating SEALINER over the patch is effective to provide a more complete repair.
- Non-Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60132	SL-02	200ml tin 12 tins / box
60131	SL-10	1000ml tin

LIQUID BUFFER -Chemical Cleaner-



Properties

- Chemical cleaner for the inside of tires, tubes and conveyor belts.
- Can be used in place of machine buffing for small injuries.
- Non-Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60104	LB-500S	420ml spray type in tin
60105	LB-500	500ml tin
60107	LB-200	200ml tin

BEAD LUBE -Mounting / Demounting Fluid-



Properties

- Liquid bead lube, ideal for mounting and demounting large tires.
- Easily applied and removed.
- Non-Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60117	BL-4000	4L bottle

BEAD WAX -Mounting / Demounting Cream-



Properties

- Lubricates the bead sections for easier mounting and demounting of tires.
- Allows smoother mounting and demounting of tires to protect the tires and wheels from damage.
- 3 types of grades.
- Non-Flammable.

BWC TYPE

Economical quality and the highest cost performance

BWE TYPE

Standard quality and optimum balance between quality and cost

BWM TYPE

Best quality and long lasting coating effect

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60127	BWC-10	1kg in plastic container / Green Label 12 tins / box
60130	BWC-40	4kg in plastic container / Green Label 4 tins / box
60136	BWE-10	1kg in plastic container / Red Label 12 tins / box
60139	BWE-40	4kg in plastic container / Red Label 4 tins / box
60141	BWM-10	1kg in plastic container / Gold Label 12 tins / box
60144	BWM-40	4kg in plastic container / Gold Label 4 tins / box

EMERGENCY TIRE SEALANT KIT



Repair procedure details
▶ <http://www.maruni-ind.co.jp/english/>



Properties

- Only for repairs of nail holes in passenger car tires.
- Allows easy temporary repairs in an emergency.
- Because this is a temporary repair, complete repairs are required at a tire retailer after using this product.
- Improves mileage and more environmentally friendly since the cars don't need to carry a spare tire.
- The included air compressor can be used anywhere and at any time by connecting it to the cigarette lighter socket.
- It is water-soluble, so you can easily wash off inside the tires after use.

Product descriptions

REF. No.	27202
MODEL No.	ETSK-02
COMMODITY DESCRIPTION	EMERGENCY TIRE SEALANT
COMPONENT	PROPYLENE GLYCOL, SYNTHETIC FIBER AND OTHERS
APPLICATION	EMERGENCY TIRE REPAIR FOR PASSENGER CAR TIRES
CONTENT	500ml
COMMODITY DESCRIPTION	HIGH-POWER AIR COMPRESSOR
INPUT VOLTAGE	DC12V
MAX PRESSURE	450kPa
OUTSIDE DIMENSIONS	148(W) × 65 (H) × 126 (D)mm
WEIGHT	640g
ELECTRIC CORD	3m (available length)
AIR HOSE	520mm (available length)
FUSE	10A (fuse)
ACCESSORIES	BICYCLE-ADAPTER, BALL-ADAPTER, VALVE CORE DRIVER, VALVE CORE, MANUAL

Easy emergency repair in case of flat tire

Easy operation for anybody, and get out from emergency!

- NO NEED TO JACK UP • NO NEED TO CHANGE WITH SPARE TIRE



STEP1 | Inject emergency tire sealant to the tire



STEP2 | Fill up with air by air compressor

CFC FREE **SUPER VALKARN G** -Vulcanizing Cement for Tire Repair-



Properties

- Vulcanizing cement for tire repairs.
- Use for repairing a wide variety of tires from bicycles to OTR tires.
- High quality and highly adhesive.
- Optimal adhesive for rough surfaces after buffing the inside of the tire.
- Outstanding heat resistance to prevent detachment of repair material while driving.
- Outstanding cold curing cement with no heating required.
- Always use with Maruni products.
- Flammable.

Product descriptions

REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
38682	8ml tube 12 tubes / box	38688	200ml tin 12 tins / box
38692	50ml tube 12 tubes / box	38690	1000ml tin
38684	100ml tin 12 tins / box	38690-BR	1000ml tin with Brush

CFC FREE **VALKARN** -Vulcanizing Cement for Tube Repair-



Properties

- Vulcanizing cement for tube patches.
- Use for repairing a wide variety of tubes from bicycles to OTR tires.
- High quality and highly adhesive.
- Optimal adhesive strength for easy use. Smooth and easy to use.
- Outstanding heat resistance to prevent detachment of repair material while driving.
- Outstanding cold curing cement with no heating required.
- Always use with Maruni products.
- Flammable.

Product descriptions

REF. No.	DESCRIPTION	REF. No.	DESCRIPTION
35682	8ml tube 12 tubes / box	35688	200ml tin 12 tins / box
35684	22ml tube 12 tubes / box	35690	1000ml tin
35692	50ml tube 12 tubes / box	35690-BR	1000ml tin with Brush
35686	100ml tin 12 tins / box		

CFC FREE **BEAD SEALER** -Tire Sealant-



Properties

- Prevents air leaks when there is damage to beads or the rim.
- Completely seals the gap between the tire and wheel rim to prevent even minute air leaks.
- Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60122	BS-02	200ml tin 12 tins / box
60124	BS-10	1000ml tin

CFC FREE **SEALINER** -Inner Liner Sealant-



Properties

- To prevent air leaks, even minute ones, coats areas that have been buffed too much or where the inner liner has been removed.
- Coating SEALINER over the patch is effective to provide a more complete repair.
- Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60133	SL-02	200ml tin 12 tins / box
60134	SL-10	1000ml tin

CFC FREE **LIQUID BUFFER** -Chemical Cleaner-



Properties

- Chemical cleaner for the inside of tires, tubes and conveyor belts.
- Can be used in place of machine buffing for small injuries.
- Flammable.

Product descriptions

REF. No.	MODEL No.	DESCRIPTION
60603	LB-200	200ml tin
60605	LB-500	500ml tin

TOOLS -Tools for tire repair-



No.	REF. No.	MODEL No.	DESCRIPTION
①	92504	RM-05	Reamer (for Stick-MINI)
②	92802	SR-01	Screw Reamer (for *P.V.S. L)
③	92804	SR-02	Screw Reamer (for *P.V.S. S)
④	92812	IN-02	Insert Needle L (for *P.V.S. L-10)
⑤	92905	IN-05	Insert Needle S (for *P.V.S. S-10)
⑥	92906	IN-06	Insert Needle LL (for *P.V.S. L-14)
⑦	92817	ND-30	Spare Needle S (for *P.V.S. L,S-10)
⑧	92818	ND-57	Spare Needle LL (for *P.V.S. L-14)

No.	REF. No.	MODEL No.	DESCRIPTION
⑨	93124	-	Milling Roller V-4mm (width)
⑩	93126	-	Milling Roller V-6mm (width)
⑪	93032	-	Scraper

*P.V.S.=Power Valkaseal

PLUG PATCH

Repairing tires from the inside



VIDEO

Repair example 1

Attaching PLUG PATCH(PW-4007) to P/C (passenger) radial treads.

PLUG PATCH ▶P11
CARBIDE CUTTER ▶P12
SUPER VALKARN G ▶P18/P21
SEALINER ▶P19/P21
LIQUID BUFFER ▶P19/P22



1 Remove foreign objects with pliers and mark the injured area with chalk to identify the area.



2 Prepare the injured area by inserting a carbide cutter into it 2 to 3 times.



3 Prepare the injured area by also inserting the carbide cutter 2 to 3 times from the inside of tire as well.



4 Adjust the PLUG PATCH so that the injured area is in the center of the patch and then outline an area slightly larger than the patch.



5 Use LIQUID BUFFER / CFC FREE to lift oil and stains from the inside of the guidelines on the attachment side.



6 Use a scraper to scrape off the lifted oil and stains.



7 Buff the attachment side of the tire with a low speed air buffer.



8 Use an air vacuum to thoroughly remove any scraps and residue.



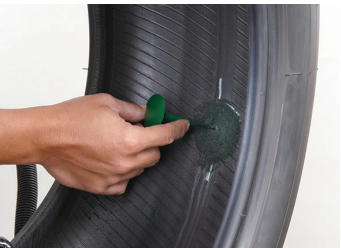
9 Evenly and thoroughly coat the patch attachment side of the tire with SUPER VALKARN G / CFC FREE and let it completely dry.



10 Apply one drop of SUPER VALKARN G / CFC FREE to the injured area as well.



11 Coat the tapered portion (black) of the PLUG PATCH with SUPER VALKARN G / CFC FREE.



12 After loosening the tire spreader, insert the wire of the PLUG PATCH into the puncture flaw from the inside while taking care not to touch the patch attachment surface.



13 Use pliers to grasp and pull out the wire.



14 Pressure bond with a milling roller from the center outwards to prevent air from entering the patch.



15 Cut the plug so that there is still 2 to 3mm in length protruding from the tire.



16 Coat portions that have been over-buffed with SEALINER / CFC FREE to prevent minute air leaks. The repair is complete.

TIRE-PATCH MR & STEM

Repairing tires from the inside



VIDEO

Repair example 2

Applying STEM(SM-10) and TIRE-PATCH (MR-20) to T/B (truck and bus) radial tire treads.

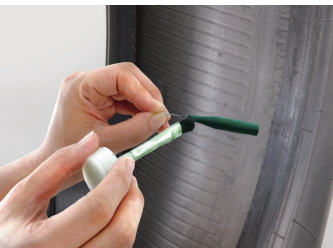
TIRE-PATCH MR ▶P5
STEM ▶P12
CARBIDE CUTTER ▶P12
SUPER VALKARN G ▶P18/P21
SEALINER ▶P19/P21
LIQUID BUFFER ▶P19/P22



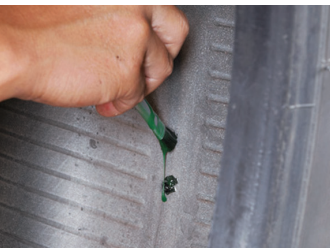
1 Use pliers to remove foreign objects and mark with chalk to identify the injured area.



2 Prepare the injured area by inserting a carbide cutter into it 2 to 3 times from the inner and outer side of tire.



3 Coat with SUPER VALKARN G / CFC FREE.



4 Apply SUPER VALKARN G / CFC FREE to the injury as well.



5 Insert the wire of the STEM to the injury from the inside of the tire.



6 Pull the wire of the STEM with pliers from the outside. Once the tip of the STEM appears, grasp the tip and pull until it has almost but not quite comes out.



7 Cut so that the STEM protrudes 2 to 3 mm in length from the inside of the tire.



8 Adjust the patch so that the injury is in the center of the patch and outline an area slightly larger than the patch. Make sure to match the bead section of tire and bead direction of the patch.



9 Use LIQUID BUFFER / CFC FREE to lift oil and stains and remove with a scraper.



10 Buff the attachment side of the patch with a low speed air buffer.



11 Use an air vacuum to thoroughly remove any scraps and residue.



12 Evenly and thoroughly coat the patch attachment side of the tire with SUPER VALKARN G / CFC FREE and let it completely dry.



13 After loosening the tire spreader, peel off the film of the patch and attach it to the tire while taking care not to touch the patch attachment surface. Make sure to match the bead section of tire and bead direction of the patch.



14 Pressure bond with a milling roller from the center outwards to prevent air from entering the patch.



15 Cut the STEM on the outside of the tire so that there is still 2 to 3mm in length protruding. Using SEALINER / CFC FREE to finish will ensure a more thorough repair. The repair is complete.

TIRE-PATCH MB & STEM

Repairing tires
from the inside

Repair example 3

Applying STEM(SM-15) and TIRE-PATCH (MB-04) to
T/B (truck and bus) bias tire treads.

TIRE-PATCH MB ▶P7
STEM ▶P12
CARBIDE CUTTER ▶P12

SUPER VALKARN G ▶P18/P21
SEALINER ▶P19/P21
LIQUID BUFFER ▶P19/P22



1~7 Perform steps 1~7 on page 24 to fill the injury with the STEM.
8 Adjust the patch so that the injury is in the center of the patch and outline an area slightly larger than the patch. Make sure to match the bead section of tire and bead direction of the patch.
9~12 Perform steps 9~12 on page 24.



13 Remove the film from the patch and attach to the tire without touching the attachment side. Make sure to match the bead section of tire and bead direction of the patch.
14 Pressure bond with a milling roller from the center outwards to prevent air from entering the patch.
15 Cut the STEM on the outside of the tire so that there is still 2 to 3mm in length protruding. Using SEALINER / CFC FREE to finish will ensure a more thorough repair. The repair is complete.

TIRE-PATCH MU & STEM

Repairing tires from the inside

Repair example 4

Applying STEM(SM-07) and TIRE-PATCH(MU-01) to
T/B (truck and bus) radial tire treads.

TIRE-PATCH MU ▶P9
STEM ▶P12
CARBIDE CUTTER ▶P12

SUPER VALKARN G ▶P18/P21
SEALINER ▶P19/P21
LIQUID BUFFER ▶P19/P22



1~7 Perform steps 1~7 on page 24 to fill the injury with the STEM.
8 Adjust the patch so that the injury is in the center of the patch and outline an area slightly larger than the patch.
9~12 Perform steps 9~12 on page 24.



13 Remove the film from the patch and attach to the tire without touching the attachment side.
14 Pressure bond with a milling roller from the center outwards to prevent air from entering the patch.
15 Cut the STEM on the outside of the tire so that there is still 2 to 3mm in length protruding. Using SEALINER / CFC FREE to finish will ensure a more thorough repair. The repair is complete.

TUBE-PATCH

Repairing tires from the inside



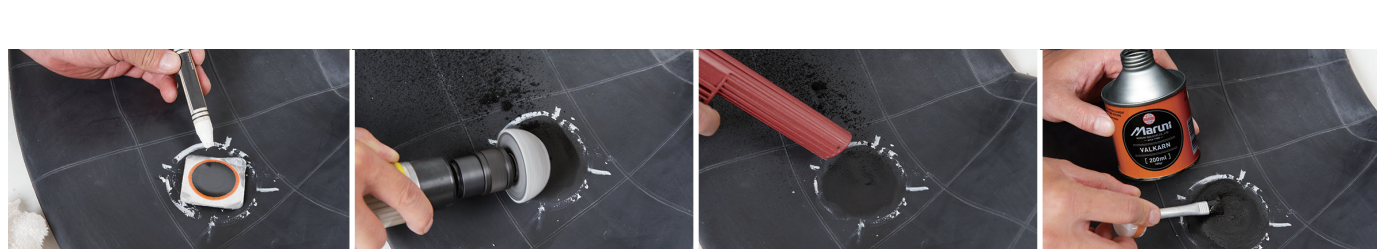
Repair example 5

Applying TUBE-PATCH (M2) to
T/B (truck and bus) tubes.

TUBE-PATCH ▶P15
VALKARN ▶P18/P21
LIQUID BUFFER ▶P19/P22



1 Mark the injured area with chalk to identify the area.
2 For rupture injuries, round the sides of the injury to prevent the injury from enlarging.
3 Use LIQUID BUFFER / CFC FREE to lift oil and stains from around the injury.
4 Use a rag to thoroughly remove oil and stains.



5 Place patch on the injury and use marking chalk to outline an area slightly larger than the patch.
6 Buff the attachment area of the tube.
7 Use an air vacuum to thoroughly remove any scraps and residue.
8 Thoroughly coat the patch attachment area on the tube with VALKARN / CFC FREE and let completely dry.



9 Remove the aluminum portion of the patch taking care not to touch the attachment side.
10 Apply the patch.
11 Thoroughly pressure bond with a milling roller from the center outwards to prevent air from entering the patch.
12 Remove the film to complete the repair.

FILLER GUM, FLOATER GUM & TIRE-PATCH MS

Repairing tires from the inside



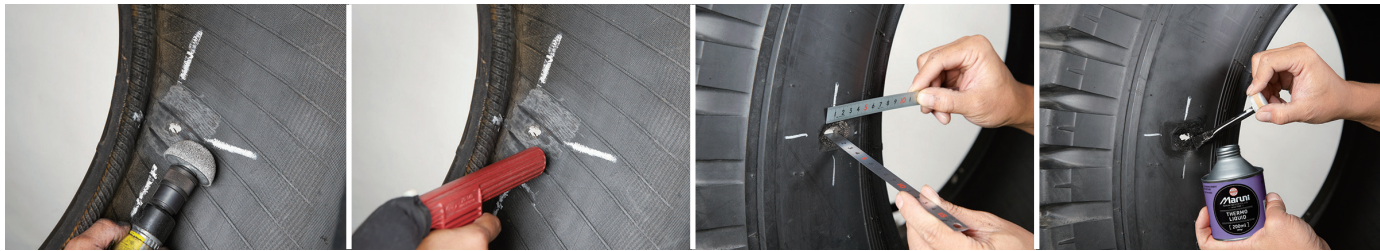
VIDEO

Repair example 6

Attaching FILLER GUM, FLOATER GUM, and TIRE-PATCH (MS-05) to the side of T/B (truck and bus) bias tires. This is for side, shoulder and large injuries that cannot be repaired with STEM, perform hot curing using filler gum.



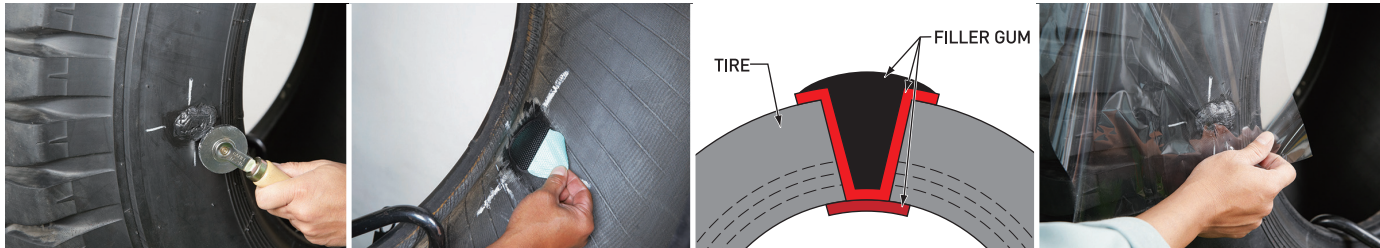
- 1** Use a rotary gorge on the outside of the tire to remove the injured sections.
- 2** Prepare the injury so that it becomes to be cone-shaped using a pencil or cone rasp from the outside of the tire.
- 3** Buff the area surrounding the prepare injury from the outside of the tire with a low speed air buffer.
- 4** Use marking chalk to mark a cross on the inside of the tire with the center of the injury at the center of the cross.



- 5** Buff the area surrounding the injury on the inside of the tire with a low speed air buffer.
- 6** Use an air vacuum to thoroughly remove any scraps and residue.
- 7** Measure the diameter and depth of the injury.
- 8** Coat the entire injury from the outside with THERMO LIQUID and let it completely dry.



- 9** Coat the FILLER GUM attachment area on the inside with THERMO LIQUID and let it completely dry.
- 10** Apply 1 piece of FILLER GUM to the injury from the inside of the tire, and thoroughly pressure bond with a milling roller.
- 11** Cut the FILLER GUM to an appropriate size to fill the injury, remove the film and heat on a plate or other devices to soften.
- 12** Fill the injury with FILLER GUM by layering it in the injury taking care not let air enter.



- 13** Once the FILLER GUM has been layered so that it rises slightly above the tire, use a milling roller to pressure bond.
- 14** Remove the FILLER GUM film that was attached to the inside of the tire.
- 15** The cross-section of the tire at this point is as shown.
- 16** Place cellophane on top of the FILLER GUM on the inside and outside.



TIRE-PATCH MS ▶P7
FLOATER GUM ▶P10
FILLER GUM ▶P10
SUPER VALKARN G ▶P18/P21

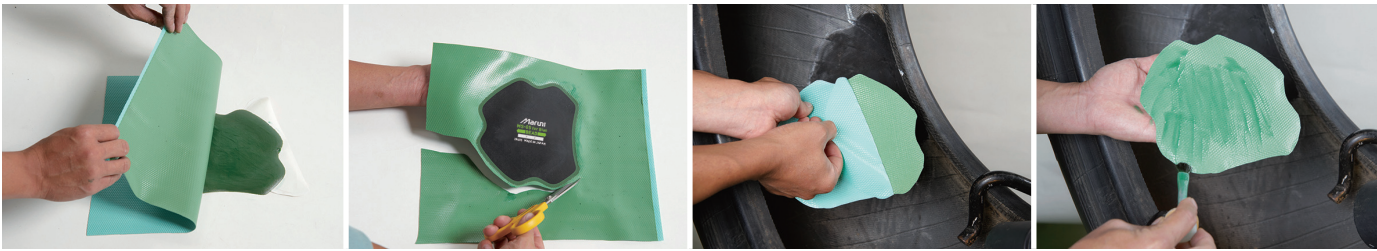
THERMO LIQUID ▶P18
SEALINER ▶P19/P21
LIQUID BUFFER ▶P19/P22



- 17** Perform hot curing by using a spotter. [Approximately 4 minutes for each 1 millimeter of thickness + warm up times for the spotter requires a separate 20 to 30 minutes]
- 18** Shape the injury with a low speed air buffer or similar tool.
- 19** Apply MS-05 from the inside of the tire and outline an area slightly larger than the patch. Make sure to match bead section of tire and bead direction of patch.
- 20** Use LIQUID BUFFER / CFC FREE to lift oil and stains from the inside of the guidelines on the attachment side.



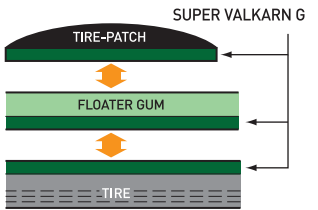
- 21** Use a scraper to scrape off the lifted oil and stains.
- 22** Buff the attachment side of the patch with a low speed air buffer.
- 23** Use an air vacuum to thoroughly remove any scraps and residue.
- 24** Remove the film from the patch taking care not to touch the patch attachment side and coat with SUPER VALKARN G / CFC FREE. Let it completely dry.



- 25** Attach FLOATER GUM to the patch attachment side and pressure bond with a milling roller while taking care not to let air enter. Remove any air by piercing the FLOATER GUM with a needle.
- 26** Cut off extra FLOATER GUM while leaving an area slightly larger than the patch.
- 27** Remove the film from the FLOATER GUM that was attached to the patch taking care not to touch the attachment side.
- 28** Coat the attachment area of the FLOATER GUM with SUPER VALKARN G / CFC FREE and let completely dry.



- 29** Coat the attachment area of the tire with SUPER VALKARN G / CFC FREE and let completely dry.
- 30** After the SUPER VALKARN G / CFC FREE coating on the tire and the FLOATER GUM have completely dried, loosen the tire spreader and apply the patch.
- 31** Complete the repair by pressure bonding with a milling roller from the center outwards to prevent air from entering the patch.
- 32** How to apply SUPER VALKARN G / CFC FREE when using FLOATER GUM.



TIRE REPAIR PROCEDURE

POWER VALKASEAL

Repairing tires from the outside



VIDEO

Repair example 7

Attaching POWER VALKASEAL (LP-1050) to PC (passenger) radial tire treads.

POWER VALKASEAL ▶P13
SUPER VALKARN G ▶P18/P21
SCREW REAMER L ▶P22
INSERT NEEDLE L ▶P22



- 1 Remove foreign objects with pliers and mark the injured area with chalk to identify the area.
- 2 Thoroughly coat the SCREW REAMER L with SUPER VALKARN G / CFC FREE.
- 3 Insert the SCREW REAMER L into the injury and turn clockwise to adjust the flaw. Repeat this procedure 2 to 3 times. Remove the SCREW REAMER L while turning clockwise.
- 4 Remove the polyfilm from the POWER VALKASEAL.



- 5 Apply POWER VALKASEAL to the INSERT NEEDLE L.
- 6 Coat POWER VALKASEAL with SUPER VALKARN G / CFC FREE.
- 7 Insert POWER VALKASEAL into the tire. Do not rotate while inserting, insert straight.
- 8 Insert fully.



- 9 Remove the INSERT NEEDLE L straight.
- 10 This is how it appears from the inside.
- 11 Cut so that there is 2 to 3mm in length protruding from both edges on the outside of the tire. The repair is complete.



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Establishment Establishment 1948

Capital 45 million yen
Properties Office
Factory
Delivery Center
Employees 48
Bank MUFG Bank, Ltd. Imazato Branch
Resona Bank, Ltd. Ikuno Branch
The Nanto Bank, Ltd. Osaka Branch



History

- | | | | |
|------|---|------|---|
| 1914 | Mr. Shigematsu Nishioka started to sell rubber in Osaka city. | 1999 | Delivery center was completed. |
| 1933 | Mr. Iwao Nishioka created his own business and started to sell tires, tubes and bicycles. | 2002 | Started to operate Chinese Factory. |
| 1948 | Established Maruni Industry Co., Ltd. and started to sell rubber cement as "Earth" brand. | 2008 | Developed Emergency Tire Sealant Kit. |
| 1956 | Developed patches for tube repair in place of the old method "Using wasted tube". | 2011 | Acquired certification of ISO 9001:2008. |
| 1960 | Received Minister's Award as a company contributing to exports. Also, in the tax field, awarded as excellent corporation award. | 2012 | Mr. Takashi Sunamura assumed the presidency. |
| 1973 | Developed the world's first "Earth Stick", which was "Bullet shape" tire repair material and entered in automobile tire repair field. | 2015 | Mr. Suguru Asano assumed the presidency.All packaging designs were renewed.Closed Chinese Factory. |
| 1976 | Developed conveyor patches for big size conveyor belt for quarry. Entered in quarry field. | 2019 | Launched the SANOA brand.Developed Japan's first climbing shoe resole rubber. |
| 1980 | Mr. Kiyoshi Nishioka assumed the presidency. | 2021 | Merged with Daito logistics center Co. Ltd. |
| 1987 | Entered in tire repair for big truck and heavy-construction-equipment fields. Established credibility as the only one manufacturer of repair material of tires,tubes and conveyor belts in Japan. | 2022 | Formulated the SDGs Declaration of Action. |
| | | 2024 | Completed the Tatsumi logistics center.Certified as an Excellent Corporations for Health Management.Started development and sales of repair materials for EV tires. |