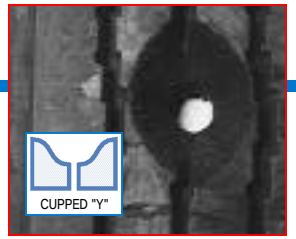
Bias Tire Section Repairs

The Patch Rubber Co.

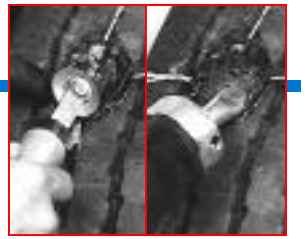
1. Remove the foreign object and probe the injury with a blunt awl to determine the **angle and extent of injury.**

2. Use a low speed buffer (max. 5,000 RPM) with a tungsten carbide tool or micro-cup cutter to remove the damaged area. Round out all corners and probe to assure all separations have been removed. Use proper eye protection.



3. Buff the innerliner to RMA #3 texture. Trim exposed cord. Tread skives should be a cupped "Y" type with a 90° skive through the cord body. Sidewall injuries should be skived through the rubber at a 60° taper and through the cord plys at a 90° angle. Vacuum buffing dust.

4. Measure the damaged cord body and select the proper repair unit.



5. Apply Patch Rubber Black Repair Cement to skived area and let dry. Lay bleeder cords in the skive area and fill with repair gum, extruder rope or appropriate filler material. The injury should be built up 1/16" above tread and innerliner surfaces for proper vulcanization.

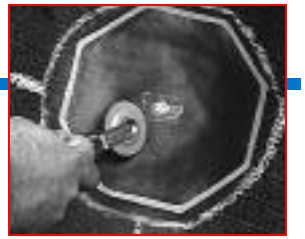
6. Cure spotter repairs, and allow to cool before proceeding to step 7. A guideline for curing: 295° F (146° C). Heat from both sides of injury; 3 minutes per 1/32 of injury for Fast Cure Repair Gum. 4 minutes per 1/32 of injury for Regular Cure Repair Gum. For retreading and section molds, the repair unit is laid prior to filling in the skive area.

7. Use cleaner fluid and scraper to clean the innerliner.

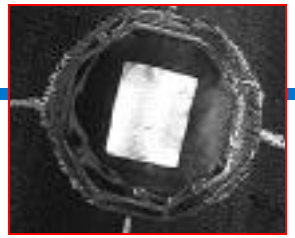
8. Center the repair unit over the injury with the bead arrows pointing directly at the bead. Using a tire crayon, outline an area 1" larger than the repair unit with crosshairs for centering location marks.

9. Use a low speed buffer (max. 5,000 RPM) and a 36 grit rasp to buff the innerliner (RMA #1 buffing texture). Vacuum buffing dust and use a light coat of Patch Rubber Cleaner Fluid and a scraper to clean the buffed area.

10. Apply an even coat of Patch Rubber Fast-Dry Cement to the buffed area. Allow to dry completely. Drying time will vary depending on temperature and humidity.



11. Make sure that the tire is in a relaxed position. Partially remove backing leaving enough to hold without touching the back of the repair unit. Apply the repair unit. Stitch vigorously from the center working outwardly. Use as much hand pressure as possible.

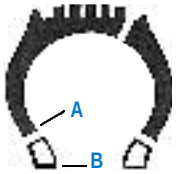


12. If the section repair is to be vulcanized during the retread cure cycle, it is recommended to apply a reinforcing metal plate over the repair unit to prevent dimpling during cure.

13. Apply Patch Rubber Repair Sealer to the overbuff area.

14. Allow a minimum of 24 hours for chemical vulcanization. For maximum chemical cure adhesion, mount tire and let repair cure under 30 PSI pressure.

A-B Non-Repairable Bead Area Damage



TIRE SIZE	Inches	mm
Passenger	2	51
Light Truck (7.00 - 8.75)	3-1/4	80
Heavy Duty (9.00 -14.00)	4	100
16.00 - 18.00 (20.5 - 22.5)	5	125
21.00 - 29.5 (26.5 - 33.8)	6	150
30.00 - 33.00 (37.25 - 37.5)	7	195
36.00 - up	8	200

CX PASSENGER, TRUCK & OTR TIRE REPAIR APPLICATION

Injury Size*		Tire Ply Rating							
Inches	mm	4	6	8	10	12	14	16	18
1/4	6	CX 2	CX 2	CX 2	CX 2	CX 2	CX 2	CX 3	CX 3
3/8	10	CX 2	CX 2	CX 2	CX 2	CX 2	CX 3	CX 4-2	CX 5-3
1/2	13	CX 3-2	CX 3-2	CX 3-2	CX 4-2	CX 4-2	CX 4-2	CX 5-3	CX 7-3
3/4	19	CX 4-2	CX 4-2	CX 4-2	CX 5-3	CX 5-3	CX 5-3	CX 6-4	CX 6-4
1	25	CX 5-3	CX 5-3	CX 5-3	CX 5-3	CX 6-4	CX 6-4	CX 8-4	CX 9-6
1-1/2	38	CX 5-3	CX 5-3	CX 7-3	CX 7-3	CX 6-4	CX 8-4	CX 9-6	CX 9-6
2	51	CX 7-3	CX 7-3	CX 6-4	CX 8-4	CX 9-6	CX 9-6	CX 12-6	CX 12-6
2-1/2	64	CX 8-4	CX 8-4	CX 8-4	CX 8-4	CX 9-6	CX 12-6	CX 15-6	CX 15-6
3	76	---	---	CX 9-6	CX 9-6	CX 12-6	CX 12-6	CX 16-8	CX 16-8
4	102	---	---	---	CX 15-6	CX 15-6	CX 15-6	CX 16-8	CX 16-8
5	127	---	---	---	---	---		CX 18-8	CX 18-8

*Reinforced Repairs-down size one patch, i.e. 1-1/2" thru 12 ply-rating tire. Section repair; 6-4, reinforced repair; 5-3.

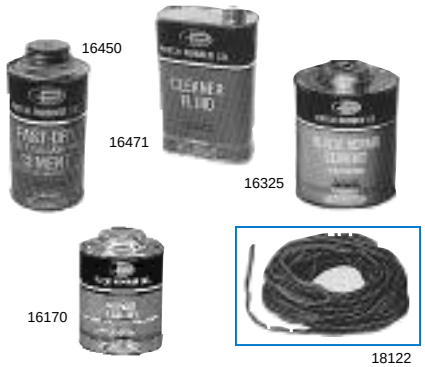
ORDERING INFORMATION

Size In.	Size mm	Ply	Order No.	Mfg. No.	Qty./ Box
2	51	1	**12021**	CX 1	20
2-1/2	64	1	**12022**	CX 2	20
3-1/4	82	1	**12023**	CX 3	10
4-5/8	118	1	**12024**	CX 4	10
3	76	2	**12142**	CX 3-2	24
4	102	2	**12143**	CX 4-2	12
6	152	2	**12145**	CX 6-2	12
5	127	3	**12146**	CX 5-3	12
7	178	3	**12147**	CX 7-3	12
6	152	4	**12148**	CX 6-4	12
8	203	4	**12150**	CX 8-4	12
10	254	4	**12151**	CX 10-4	12
13	330	4	**12153**	CX 13-4	6
16	406	4	**12154**	CX 16-4	6
9	229	6	**12155**	CX 9-6	12
12	305	6	**12156**	CX 12-6	6
15	381	6	**12157**	CX 15-6	6
16	406	8	**12158**	CX 16-8	6
18	457	8	**12159**	CX 18-8	6
SIDEWALL REPAIR UNITS					
5	127	2	**12170**	CXS 5-2	10
8	203	4	**12171**	CXS 8-4	10
10	254	4	**12172**	CXS 10-4	5
12	305	6	**12173**	CXS 12-6	5

WARNING!

Only a trained person should remove a tire from the wheel. Please refer to R.M.A., N.T.D.R.A. and tire manufacturing literature for proper mounting and dismounting procedures.

REPAIR MATERIALS



ORDERING INFORMATION

Order No.	Size	Per Case	Wt. Lbs.
Fast-Dry Self-Vulcanizing Cement			
16450	1 Qt.	6	11
16451	1/2 Pt..	6	11
Repair Sealer			
16170	1 Pt.		
Cleaner Fluid			
16471	1 Qt. Spout Can	6	13
16476	10-3/4 Oz. Aerosol Can	12	9
Black Repair Cement			
16325	1 Qt.	6	11
Repair Gums			
18122	Extruder Rope		25
18304	Filler Gum-Fast Cure 1"W x 1/16" Gauge		20

1293 S. Main Street, Akron, Ohio 44301
330-253-5592 Fax: 1-330-761-6133
E-mail: sales@po.myerstiresupply.com

Form No. 493004/3

BIAS TIRE SECTION REPAIR