

TECH Fusion®

Tube and Tire Repair System



**The ultimate combination
of technology, products
and support.**

Unit Molded Construction

Extended Shelf Life

Hot and Cold Application

Colour and Match Repair System



TECH Fusion®

Tube and Tire Repair System

A winning combination of innovative technology, product performance and unrivaled customer support.

The TechFusion Repair System brings you a complete line of tube, radial, all-purpose, bias, plug/patch combination units and stem repairs. Unit molded construction and black cured on gum technology provides extended shelf life, excellent repair unit adhesion, and is ideal for both hot and cold applications.

TechFusion Tube and Tire Repair System is supported by unparalleled Tech distributor training and service – and ongoing customer support. It's all part of a winning combination.

TechFusion Tube Repair System

The black, double scalloped feathered edge of TechFusion tube repairs ensure a virtually invisible repair, excellent tube adhesion and complete vulcanization. A unique rubber compounding is twice as strong as the tube itself. Available in convenient, durable storage tubs. Available for a wide range of tube applications.



TECHFUSION ROUND TUBE REPAIR SYSTEM

Cat.no	Box Qty	Size	
FT 1	100	1 ³ / ₈ "	35mm
FT 2	50	1 ³ / ₄ "	45mm
FT 3	50	2 ¹ / ₄ "	55mm
FT 4	40	3"	75mm
FT 5	10	3 ³ / ₄ "	95mm

TechFusion Universal Repair System

These non-directional, center-over-injury universal repairs, when used with TechFusion stem units, make an excellent nailhole repair on radial, bias, passenger, light truck and truck tires including performance tires. Special reinforced, thicker compounding for added strength and durability.



TECHFUSION SQUARE UNIVERSAL SYSTEM BIAS/RADIAL

Cat.no	Box Qty	Size	
FU 3	100	1 ¹ / ₂ " x 1 ¹ / ₂ "	38 X 38
FU 4.5	90	1 ³ / ₄ " x 1 ³ / ₄ "	45 X 45
FU 6	50	2 ¹ / ₄ " x 2 ¹ / ₄ "	55 X 55
FU 8	40	2 ³ / ₄ " x 2 ³ / ₄ "	70 X 70
FU 10 (reinforced)	20	3 ¹ / ₈ " x 3 ¹ / ₈ "	80 X 80

TechFusion Square Radial Repair System

Unique square design and special high technology cord reinforcement make these center-over-injury radial repairs perfect for repair of crown injuries in radial passenger/light truck and truck tires. These square radial repairs offer excellent performance in both hot and cold applications and deliver excellent adhesion with either method of application.



TECHFUSION SQUARE RADIAL SYSTEM

Cat.no	Box Qty	Size	
FR 09	40	2 ³ / ₈ " x 2 ³ / ₈ "	60 x 60
FR 15	20	3 ¹ / ₈ " x 3 ¹ / ₈ "	80 x 80
FR 25 (ARAMID)	10	4 ³ / ₄ " x 4 ³ / ₄ "	115 x 115

Cat.no	Injury Size	
FR 09	1/4"	6mm
FR 15	3/8"	10mm
FR 25 (ARAMID)	1/2"	12mm

TechFusion Radial Repair System

Tech pioneered center-over-injury repairs. Our TechFusion line of radial repairs offers outstanding durability, reliability and repair unit adhesion making these repairs excellent choices to make both nailhole and section repairs. These radial repair units are built to disperse and absorb high flex forces which today's radial tires generate when used in both hot and cold applications.



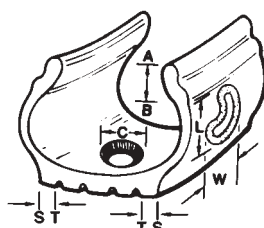
TECHFUSION RADIAL SYSTEM

Cat.no	Box Qty	Size	
FR 10 HD	20	2 1/2" x 3 1/4"	65 X 80
FR 12 HD	10	2 3/4" x 4 5/8"	70 X 115
FR 14	10	2 7/8" x 5 3/4"	75 X 145
FR 20	10	3" x 5"	75 X 125
FR 22	10	3" x 6 1/2"	75 X 165
FR 24	10	3" x 8 1/2"	5 X 215
FR 26	10	3" x 10"	75 X 250
FR 33	10	4" x 9"	100 X 125
FR 35	10	5" x 6"	125 X 150
FR 40	10	4" x 8"	100 X 200
FR 42	10	5" x 10"	125 X 250
FR 44	10	5" x 13"	125 X 330
FR 80	5	6" x 7 3/4"	150 X 195
FR 82	5	7 1/2" x 10"	190 X 250
FR 84	5	8 1/2" x 11 1/2"	215 X 290
FR 86	5	9 3/4" x 13 1/2"	245 X 340

TechFusion Radial Repair Chart

A-B NON-REPAIRABLE AREA

Passenger and light truck tires	1 1/2"	40mm
6.50 - 7.00	2 1/2"	65mm
7.50 - 16.00	3"	75mm
17.5 - 23.5	3 1/2"	90mm
24.00 - 29.5	5"	125mm
30.00 - 33.5	6"	150mm
36.00	7 1/2"	190mm
37.00 - 55/80	10"	250mm



A-B - AREA NON-REPAIRABLE
 C - MAXIMUM DIAMETER OF DAMAGED RADIAL CABLES
 W - WIDTH OF INJURY
 L - LENGTH OF INJURY
 S-T - SHOULDER AREA
 1 1/2" OR 40mm
 T-T - CROWN AREA

Sidewall Injury		Passenger Tire Sizes		Crown Injury Ø Diameter
Width	Length	125-175	185-255	
1/4" (6mm)	1/2" (15mm)	10 HD	10 HD	1/4" (6mm)
1/4" (6mm)	2" (50mm)	12 HD	12 HD	
3/8" (10mm)	3/8" (10mm)	10 HD	10 HD	3/8" (10mm)
3/8" (10mm)	1 1/2" (40mm)	12 HD	12 HD	
3/8" (10mm)	2" (50mm)	14	14	
1/2" (15mm)	1 1/2" (40mm)	12 HD	12 HD	1/2" (15mm)
1/2" (15mm)	2" (50mm)	14 HD	14	
3/4" (20mm)	3/4" (20mm)	12 HD	12 HD	3/4" (20mm)
3/4" (20mm)	1 1/2" (40mm)	12 HD	14	
3/4" (20mm)	2" (50mm)	14	14	
1" (25mm)	1 1/2" (40mm)	14	14	1" (25mm)
1" (25mm)	2" (50mm)	14	22	

Tube-Type Tire Sizes

Tubeless Tire Sizes

Sidewall Injury	Truck Tire Sizes	Truck Tire Sizes			Crown Injury Ø Diameter
		Light Truck	Heavy Truck		
Width	Length	6.50-12.50 7-10 215/85-255/85 215/75-265/75	7.50-10.00 8-11 235/80-275/80 245/75-295/75	11.00-14.00 12-16.5 295/80/315/80 315/75-425/65	
1/8" (3mm)	1/8" (3mm)	10	10	10	1/8" (3mm)
1/4" (6mm)	1/4" (6mm)	12	12	12	1/4" (6mm)
1 Cable	1 1/2" (40mm)	20	20	20	3/8" (10mm)
1 Cable	3 1/2" (80mm)	22	22	22	
1 Cable	4 1/2" (120mm)	24	24	24	
1 Cable	6" (150mm)	26	26	26	
2 Cable	3/4" (20mm)	20	20	22	3/8" (10mm)
2 Cable	1 1/2" (40mm)	20	22	24	
2 Cable	2 1/2" (60mm)	22	24	26	
2 Cable	5 1/2" (130mm)	26	26	26	
3/8" (10mm)	1 1/2" (40mm)	20	26	40	1/2" (15mm)
3/8" (10mm)	2 1/2" (60mm)	22	26	40	
3/8" (10mm)	3 1/2" (80mm)	26	26	42	
3/8" (10mm)	5 1/2" (130mm)	26	26	44	
1/2" (15mm)	1 1/2" (40mm)	22	[33]	[33]	1/2" (15mm)
1/2" (15mm)	2 1/2" (70mm)	22	40*	40*	
1/2" (15mm)	3 1/2" (95mm)	40	40	42	
1/2" (15mm)	5 1/2" (130mm)	40	44	44	
3/4" (20mm)	1" (25mm)	22	[33]	[35]	3/4" (20mm)
3/4" (20mm)	2 1/2" (65mm)	24	40*	40*	
3/4" (20mm)	4 1/2" (110mm)	42	42	44	
3/4" (20mm)	5 1/2" (130mm)	44	44	44	
1" (25mm)	2" (50mm)	[33]	[35]	[35]	1" (25mm)
1" (25mm)	3 1/2" (80mm)	40*	42*	44*	
1" (25mm)	4" (100mm)	44	44	44	
1 1/4" (32mm)	2" (50mm)	[37]	[37]	[37]	1 1/4" (32mm)
1 1/4" (32mm)	3" (75mm)	42*	44*	44*	
1 1/4" (32mm)	4" (100mm)	44	44	44	
1 1/2" (40mm)	2" (50mm)	[37]	[37]	[37]	1 1/2" (40mm)
1 1/2" (40mm)	3 1/2" (80mm)	44*	44*	44*	

REPAIR UNIT IN RED TO BE USED FOR CROWN INJURIES. TO MAINTAIN THEIR SPEED RATING, PASSENGER TIRES CARRYING A SPEED RATING OF H, V, OR Z SHOULD ONLY BE REPAIRED IN THE TREAD AREA, WITH A MAXIMUM LIMITATION OF 1/4" (6mm).

* REPAIR UNIT IN RED TO BE USED FOR CROWN AND SIDEWALL INJURIES UNLESS BOXED. INJURIES WITHIN THE S-T AREA ARE CONSIDERED SIDEWALL INJURIES. REPAIR UNITS APPEARING IN BOXES ARE FOR CROWN INJURIES ONLY OR INJURIES WITHIN THE T-T AREA ONLY. SEE SCHEMATIC ABOVE. REPAIR UNITS WITH * CAN BE USED AS AN OPTIONAL REPAIR UNIT FOR CROWN INJURIES. NOTE: THIS SECTION CHART IS A GUIDELINE ONLY. LOAD, SPEED AND HIGHWAY APPLICATION CAN AFFECT THE LIMITATIONS OF SECTION REPAIRS.

TechFusion Bias Ply Repair System

The high tensile strength cord and unique low profile design of TechFusion Bias ply tire repairs translate into excellent repair unit flexibility, strength and adhesion. TechFusion bias ply repairs can be used in both hot and cold applications and deliver exceptional performance.

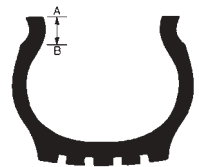


TECHFUSION BIAS PLY

Cat.no	Box Qty	Size	
FU 6	50	2 ¹ / ₄ " x 2 ¹ / ₄ "	55 x 55
FU 8	40	2 ³ / ₄ " x 2 ³ / ₄ "	70 x 70
FB 3	10	4" x 4"	100 x 100
FB 4	10	5 ⁵ / ₁₆ " x 5 ⁵ / ₁₆ "	130 x 130
FB 5	10	6 ¹ / ₂ " x 6 ¹ / ₂ "	165 x 165
FB 6	5	9 ⁹ / ₁₆ " x 9 ⁹ / ₁₆ "	240 x 240
FB 7	5	11 ⁵ / ₈ " x 11 ⁵ / ₈ "	290 x 290
FB 8	5	13 ⁵ / ₈ " x 13 ⁵ / ₈ "	340 x 340
FB 9	3	15 ¹ / ₈ " x 15 ¹ / ₈ "	380 x 380
FB 10	3	17 ¹ / ₈ " x 17 ¹ / ₈ "	430 x 430
FB 5 S (sidewall)	10	6 ¹ / ₂ " x 6 ¹ / ₂ "	165 x 165
FB 6 S (sidewall)	5	9 ⁹ / ₁₆ " x 9 ⁹ / ₁₆ "	240 x 240

TechFusion Size of Injury Chart

How to use this chart. For proper repair unit selection, determine the size of injury in the tire by measuring largest cord area removed. Locate the correct injury size along the top horizontal column of this chart. Now locate the tire's ply rating/load range along the extreme left column of the same chart. The repair unit number in the square where these two columns intersect is the proper unit to use.



A-B NON REPAIRABLE AREA	
7.00-8.75	3 ¹ / ₄ ", 80mm
9.00-14.00	4", 100mm
16.00-18.00	5", 125mm
21.00-27.00	6", 150mm

CAR, TRUCK AND EARTHMOVER SIZE OF INJURY—TREAD, SHOULDER AND SIDEWALL

PLY RATING (LOAD RANGE)	mm	3	6	10	15	20	25	40	50	65	75	100	125	150	175	200
	inches	3/16"	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	7"	8"
4 (B)	FU-6	FU-8	FU-8	FB-3	FB-3	FB-3	FB-4	FB-5								
6 (C)	FU-6	FU-8	FU-8	FB-3	FB-3	FB-3	FB-4	FB-5	FB-6							
8 (D)	FU-6	FU-8	FB-3	FB-3	FB-3	FB-4	FB-4	FB-5	FB-6							
10 (E)	FU-6	FU-8	FB-3	FB-3	FB-3	FB-4	FB-5	FB-6	FB-6	FB-7	FB-8					
12 (F)	FU-6	FU-8	FB-3	FB-4	FB-4	FB-4	FB-5	FB-6	FB-6	FB-7	FB-8					
14 (G)	FU-6	FU-8	FB-3	FB-4	FB-4	FB-5	FB-6	FB-6	FB-7	FB-7	FB-8	FB-10				
16 (H)	FU-6	FU-8	FB-4	FB-4	FB-5	FB-5	FB-6	FB-6	FB-7	FB-7	FB-8	FB-10				
18 (J)	FU-6	FU-8	FB-4	FB-5	FB-5	FB-6	FB-6	FB-7	FB-8	FB-8	FB-9	FB-10				
20 (L)	FU-6	FU-8	FB-4	FB-5	FB-5	FB-6	FB-7	FB-8	FB-8	FB-9	FB-9	FB-10				
22 (M)	FU-6	FU-8	FB-4	FB-6	FB-6	FB-7	FB-8	FB-8	FB-8	FB-9	FB-10					
24 (N)	FU-6	FU-8	FB-4	FB-6	FB-6	FB-7	FB-8	FB-8	FB-8	FB-9	FB-10					

NOTE: THIS SECTION REPAIR CHART IS ONLY A GUIDELINE. LOAD, SPEED, AND APPLICATION OF THE TIRE CAN AFFECT THE LIMITATIONS OF SECTION REPAIRS.

TechFusion Plug Patch Combination Units

One-piece nailhole repairing is becoming the global standard in tire repairing. TechFusion plug patch combination units offer fast, easy repair of the tread area of both bias and radial passenger, light truck and truck tires. The stem fills the injury and the cap reinforces the injured area of the inner liner. A wire guide is included to make installation simple. A complete one-piece system for repairing 3mm – 10mm injuries.



TECHFUSION PLUG PATCH COMBINATION UNITS

Cat.no	Box Qty	Injury Size	
FPP 3	60	1/8"	3mm
FPP 4.5	24	3/16"	4.5mm
FPP 6	24	1/4"	6mm
FPP 8	24	3/8"	8mm
FPP 10	10	7/16"	10mm





**TechFusion
Color+Match
Repair System.
Easy, Simple
and Fast.**



TechFusion's unique Color+Match Repair System features color coding that makes Plug/Patch, Universal and Stem Repair applications easier, simpler and faster.

Repair Technicians simply measure the injury using the measuring tool and match the Color Code ring on the tool to the corresponding injury size and color-coded repair unit box. This versatile repair system also enables the user to stock a limited number of repair units to accommodate 1/8" (3mm) – 7/16" (10mm) injuries. It's the ideal repair system that saves both time, and money while meeting industry standards while meeting industry standards.

REPAIR APPLICATION CHART

PASSENGER, LIGHT TRUCK & TRUCK, RADIAL & BIAS TREAD AREA					
Colour Match Code	Injury Size (after preparation)	Plug Patch 	Universal 	Stem 	Cutter 
3	1/8" 3mm	FPP3	FU3	FPS3	C3
4.5	3/16" 4.5mm	FPP4.5	FU4.5	FPS4.5	C4.5
6	1/4" 6mm	FPP6	FU6	FPS6	C6
8	3/8" 8mm	FPP8	FU8	FPS8	C8
10	7/16" 10mm	FPP10	FU10	FPS10	C10

2-PIECE SYSTEM

TechFusion Stem Repair System

When performing two-piece nailhole repairs, TechFusion stems work perfectly with TechFusion radial or universal repairs to create the ultimate repair for injuries greater than 25°. A wire guide is included on each stem to make application easier. These self vulcanizing 2-piece repair systems can be efficiently used to repair bias and radial, passenger, performance, light truck and truck tires.



TECHFUSION STEM SYSTEM

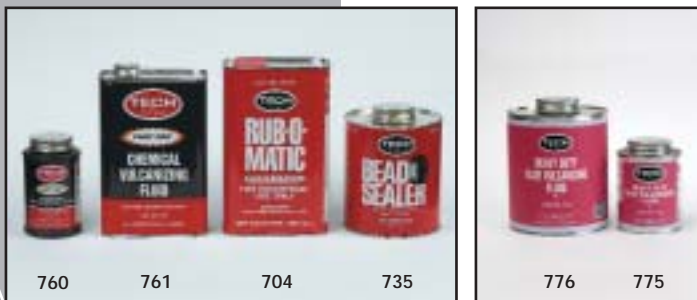
Cat.no	Box Qty	Injury Size	
FPS 3	60	1/8"	3mm
FPS 4.5	20	3/16"	4.5mm
FPS 6	20	1/4"	6mm
FPS 8	20	3/8"	8mm
FPS 10	10	7/16"	10mm

TechFusion Chemicals

Tech is pleased to offer two chemical vulcanizing fluids, which serve as the catalysts to provide exceptional vulcanization between TechFusion repair units and the inner liner of the tire. Tech 760, 761 Vulcanizing fluid and the new 775 and 776 Tech Heavy-Duty 'Blue' vulcanizing fluid meets every tire technician's needs.

Tech 735 Bead Sealer is designed to reseal stubborn beads and seal beads with minor damage.

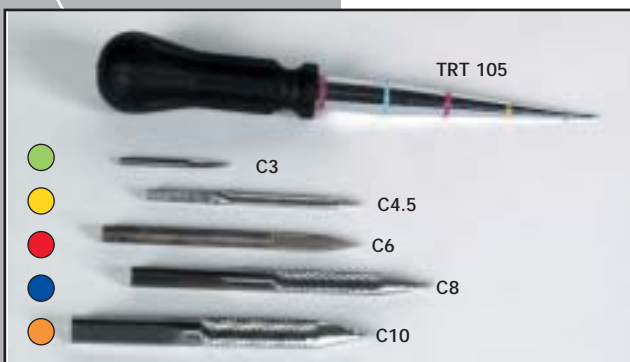
Tech 704 Rubber Cleaner removes injury contamination quickly & easily and promotes effective buffing and a cleaner, buffed surface, promoting superior vulcanisation.



CHEMICAL VULCANISING FLUID

Cat. No.	Box Qty	Size	
760	24	235ml/8oz can	(Flammable)
761	12	945ml/1 Qt. can	(Flammable)
735 Bead Sealer	10	945ml/1 Qt. can	(Flammable)
704 Rub-O-Matic	12	945ml/1 Qt. can	(Flammable)
775	24	235ml/8oz can	(Flammable)
776	10	945ml/1 Qt. can	(Flammable)

Tools



TOOLS

Cat. No.	Size
C3 Cutter	1/8" 3mm
C4.5 Cutter	3/16" 4.5mm
C6 Cutter	1/4" 6mm
C8 Cutter	3/8" 8mm
C10 Cutter	7/16" 10mm
TRT105 Measure Tool	NA

TECH Fusion®