

RM-1

TECH
REPAIR
MANUAL



Tube & Valve Repair Method



Tube Repair Instructions



1. Inspect the tube and locate the injury.



2. If the injury is a cut or slit, the ends of the injury must be buttonholed (rounded) in order to prevent injury growth.



3. Pre-clean a large area around the injury using Rub-O-Matic Rubber Cleaner #704 or #704A and a clean, lint-free cloth to remove contaminants.
NOTE: If the tube is of Natural Rubber construction, DO NOT use Rub-O-Matic, as this could further damage the rubber.



4. Select the proper size tube repair for the injury. The repair unit must extend at least ½" (13mm) beyond the edge of the injury in all directions. Center the repair unit over the injury. Draw a perimeter, approximately ½" (13mm) larger than the repair unit as a guide for buffing.



5. Using a fine grit buffing wheel or wire brush on a low speed buffer (5,000 RPM Max.), lightly buff the tube to a #1 buffed texture, staying within the marked area. A hand buffer or wire brush may also be used if a pneumatic buffer is unavailable.



6. Use a wire brush or clean lint-free cloth to remove loose debris from the buffed surface.

1.800.433.TECH or 1.800.336.TECH

Tube Repair Instructions



7. Apply a thin, even coat of TECH Chemical Vulcanizing Fluid #760 to the entire buffed surface. Allow 3 - 5 minutes to dry. Additional drying time may be necessary in cold and/or humid conditions.



8. Fold the repair unit and peel back the blue poly backing to expose the center portion of the repair unit. Leave the blue poly partially on the repair in order to handle the repair unit without contaminating the cushion gum.



9. Center the repair unit over the injury and press it down with your thumb.



10. Stitch the repair unit thoroughly from the center out. Remove the blue poly from under the repair unit and continue stitching from the center out to the edges.



11. Remove the clear poly from the top of the repair unit. Apply TECH Tire Talc #706-1 to the repair unit. This will prevent the repair from adhering to the inside of the tire.

TECH 2-Way Tube Repairs

TECH 2-Way tube repairs are the finest made today. Every repair is permanent and safe, and the repair is twice as strong as the tube itself. TECH makes round and oval repairs for any size injury, on or off the road. TECH is the pioneer of self-vulcanizing repairs, so you can depend on high quality TECH repairs throughout the line.



ROUND 2-WAY TUBE REPAIRS

Cat. No.	Description	Dim. (mm)	Dim. (inches)	Box Qty.
09	TINY ROUND	25	1	140
10	MINI ROUND	35	1 ³ / ₈	50
11	SMALL ROUND	45	1 ³ / ₄	40
12	MEDIUM ROUND	60	2 ¹ / ₄	30
13	LARGE ROUND	80	3 ¹ / ₈	20
14	MAXI ROUND	100	4	20
15	GIANT ROUND	125	5	10
10T	MINI ROUND TUB	35	1 ³ / ₈	200
11T	SMALL ROUND TUB	45	1 ³ / ₄	160
12T	MEDIUM ROUND TUB	60	2 ¹ / ₄	100
13T	LARGE ROUND TUB	80	3 ¹ / ₈	75



OVAL 2-WAY TUBE REPAIRS

Cat. No.	Description	Dim. (mm)	Dim. (inches)	Box Qty.
16	MINI OVAL	40 x 30	1 ¹ / ₂ x 1 ¹ / ₈	100
17	SMALL OVAL	65 x 40	2 ¹ / ₂ x 1 ¹ / ₂	30
18	MEDIUM OVAL	100 x 50	4 x 2	20
19	LARGE OVAL	150 x 70	6 x 2 ³ / ₄	20
20	GIANT OVAL	160 x 100	6 ¹ / ₄ x 4	10
16T	MINI OVAL TUB	40 x 30	1 ¹ / ₂ x 1 ¹ / ₈	200
17T	SMALL OVAL TUB	65 x 40	2 ¹ / ₂ x 1 ¹ / ₂	120



TUBE REPLACEMENT VALVES

Cat. No.	TR No.	Description	Box Qty.
6213	13	PASSENGER VALVE for .453 rim hole, 2 ¹ / ₂ ", 63mm base diameter	10
6214	-	RIM HOLE BUSHING for .625 rim hole, protects tube valve	50
6218	218	AIR/LIQUID TRACTOR VALVE 4 ¹ / ₄ ", 110mm base diameter	10
6230	-	TRUCK VALVE SPUD 4 ¹ / ₄ ", 110mm base diameter	5
VH591	-	PLASTIC RIM NUT for 6218	
VH592	-	BRASS RIM NUT for 6218	

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Valve Repair Instructions



1. Inspect the tube and locate the injury.



2. Cut away the old valve stem.



3. Prepare the area to receive the appropriate TECH tube repair unit according to the Tube Repair section of this manual.



4. Move at least $\frac{1}{4}$ of the way around the tube and punch out a new hole for the replacement valve.



5. Pre-clean a large area on the tube using Rub-O-Matic Rubber Cleaner #704 or #704A and a clean, lint-free cloth.



6. Mark a perimeter approximately $\frac{1}{2}$ " (13mm) larger than the replacement valve as a guide for buffing. If necessary, also draw a guide line on the tube in the same direction as the original valve stem for proper alignment of the stem through the rim opening.

Valve Repair Instructions



7. Tighten the replacement valve stem onto the spud. Now draw a guide line under the valve stem to ensure proper alignment and to guard against air loss.



8. Using a fine grit buffing wheel or wire brush on a low speed buffer (5,000 RPM Max.), lightly buff the tube to a #1 buffed texture, staying within the marked area. A hand buffer or wire brush may also be used if a pneumatic buffer is unavailable.



9. Use a wire brush or clean lint-free cloth to remove loose debris from the buffed surface.



10. Apply a thin, even coat of TECH Chemical Vulcanizing Fluid #760 to the entire buffed surface. Allow 3 - 5 minutes to dry. Additional drying time may be necessary in cold and/or humid conditions.



11. Fold back the replacement valve and peel back the blue poly backing, exposing the center portion of the cushion gum. Leave the blue cushion gum partially on the repair unit in order to handle the repair without contaminating the gray cushion gum.



12. Use a blunt object to align the valve opening with the hole in the tube. Be sure that the guide lines on the tube and the replacement spud are aligned.

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Valve Repair Instructions



13. Press the unit into place.



14. Stitch thoroughly from the center out. Remove the remaining blue poly and continue stitching out to the edges.



15. Remove the clear protective poly from the unit.



16. Apply TECH Tire Talc #706-1 to the replacement valve. This will prevent the gray cushion gum from adhering to the tire. The tube is now ready to be returned to service.



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