

KEX Tire Repair Materials and Accessories Catalog





Iiffy Patches

Rubber patches for repairing injuries to tubes and rubber products. Install with KX-511F flammable chemical cement.

Part No	Description	Patch Size Inch	mm	Box/Qty
KX-001	Small Round	1-5/8	42	40
KX-002	Medium Round	2-1/4	57	40
KX-003	Large Round	3-1/8	80	25



Combi-Units with Pilot Wire

A small diameter steel pilot wire is molded into the plugs on these Combi-Units. When the wire and stem are inserted through the injury, the plug fills the injury and the patch seals the innerliner. Install with KX-511F flammable chemical cement. USE IN CONJUNCTION WITH CC-6, CC-10 CARBIDE CUTTERS

Part No	Description	Stem Size Inch	mm	Box/Qty
KX-386	KX-386	1/8	3	24
KX-386 Deluxe	KX-386 Deluxe (CC-3 Carbide Cutter 1/8" included, 1/box)	1/8	3	24
KX-387	Small Round	1/4	6	25
KX-388	Medium Round	3/8	10	25



KX-375

KX-376

Patch-N-Plugs Reinforced - for Radial Tires

The Radial Patch-N-Plug vulcanizes to the innerliner and fills the injury. Install with KX-511F flammable chemical cement. USE IN CONJUNCTION WITH CC-6, CC-10 CARBIDE CUTTERS

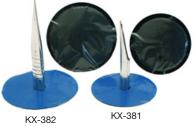
Part No	Description	Stem Size Inch	mm	Box/Qty
KX-375	Small Reinforced	1/4	6	25
KX-376	Medium Reinforced	3/8	10	25



Patch-N-Plugs Non-Reinforced

Rubber Patch-N-Plugs are recommended for the repair of radial and bias ply passenger tires. The all-rubber construction provides maximum flexibility and easy installation. Install with KX-511F flammable chemical cement. USE IN CONJUNCTION WITH CC-6, CC-10 CARBIDE CUTTERS

Part No	Description	Stem Size Inch	mm	Box/Qty
KX-381	Small Round	1/4	6	25
KX-382	Medium Round	3/8	10	25



Stem Units with Pilot Wire

A small diameter pilot wire is molded into the stem unit for easy insertion into the tire. After insertion, the properly selected patch is installed over the stem creating a permanent repair. Install with Part No. 511F flammable chemical cement. USE IN CONJUNCTION WITH CC-6, CC-10 CARBIDE CUTTERS, and KX-5102, KX-5103 FABRIC REINFORCED UNIVERSAL PATCHES.

Part No	Description	Stem Size Inch	mm	Box/Qty
KX-378	¼" Stem with Pilot Wire	1/4	6	20
KX-379	3/8" Stem with Pilot Wire	3/8	10	20



Fabric Reinforced Universal Patches

These Universal Tire Repair patches are reinforced with tire cord for added strength. For non-directional installation. Recommended for puncture repairs in the tread area of the tires. Use on both bias & radial tires. Install with KX-511F flammable chemical cement.

Part No	Description	Patch Size Inch	mm	Box/Qty
KX-5101	Small Round	1-9/16	40	120
KX-5102	Medium Round	2-1/4	57	100
KX-5103	Large Round	3-1/8	80	50





Rubber Reinforced Universal Patches

Universal patches are reinforced with rubber for added strength. Recommended for puncture repairs in the tread area of radial or bias tires. Install with Part No. 511F flammable chemical cement.

Part No	Description	Patch Size Inch	mm	Box/Qty
KX-4101	Small Round	1-5/8	42	1000
KX-4102	Medium Round	2-1/4	57	1000
KX-4103	Large Round	3-1/4	82	1000
KX-UP45	Square Universal Patch	1-3/4	44	30
KX-UP45P	Square Universal Patch	1-3/4	44	Pail of 300
KX-UP55	Square Universal Patch	2-1/8	54	30
KX-UP55P	Square Universal Patch	2-1/8	54	Pail of 200



MX Radial Patches

MX center over the injury radial repair units are designed for use in crown, shoulder (passenger & truck tire), or sidewall (truck tire) repairs. Install with KX-511F flammable chemical cement.

Part No	Description	Patch Size Inch	mm	Box/Qty
KX-MX10	COI MX Radial	1-7/8 x 2-7/8	48 x 73	20
KX-MX12	COI MX Radial	2-1/4 x 4-1/4	57 x 108	10
KX-MX14	COI MX Radial	3 x 5	75 x 125	10
KX-MX20	COI MX Radial	3 x 5	75 x 125	10
KX-MX22	COI MX Radial	3 x 5-7/8	75 x 150	10
KX-MX24	COI MX Radial	3-3/8 x 8	85 x 200	10
KX-MX40	COI MX Radial	$4 - \frac{1}{4} \times 7 - \frac{3}{4}$	100 x 200	10
KX-MX42	COI MX Radial	5-½ x 10-½	130 x 257	10
KX-MX44	COI MX Radial	5-1/8 x 13	130 x 330	10



Bias Ply Patches

Tire cord reinforced Bias Ply patches for repair in passenger, truck and agricultural Bias Ply tires. Install with KX-511F flammable chemical cement.

Part No	Description	Patch Size Inch	mm	Box/Qty
KX-470	Bias Ply Repair	3- ³ / ₄ x 3- ³ / ₄ (2 Ply)	95 x 95	20
KX-471	Bias Ply Repair	4-1/8 x 4-1/8 (2 Ply)	105 x 105	10
KX-472	Bias Ply Repair	5-½ x 5-½ (3 Ply)	140 x 140	10
KX-473	Bias Ply Repair	8-½ x 8-½ (4 Ply)	210 x 210	10
KX-474	Bias Ply Repair	9- ³ / ₄ x 9- ³ / ₄ (6 Ply)	248 x 248	10



2 PC Passenger Repair Kit

Contains 50 each of:

- KX-378 Stem Units with Pilot Wire (1/4" Stem)
- KX-4102 Rubber Reinforced Universal Patches (2-1/4" Medium Round)

Part No	Description	Box/Qty
KX-2PC-P	2 PC Passenger Repair Kit	50 Repairs

KK-2PC-P PKMRRRRRRR STATEMENT MAN

KX-2PC-P

2 PC Truck Repair Kit

Contains 25 each of:

- KX-379 Stem Units with Pilot Wire (3/8" Stem)
- KX-4103 Rubber Reinforced Universal Patches (3-1/4" Large Round)

Part No	Description	Box/Qty
KX-2PC-T	2 PC Truck Repair Kit	25 Repairs



KX-2PC-T



Inserts, Rubber Plugs & Brown Strings are recommended for temporary tire repair of non-highway service tires only.

Magicure Pli-Seal / Temporary Repairs

Designed for Nail Hole Injuries in all tubeless tires. Install with KX-917 inserting tool. Install with KX-511F flammable chemical cement.

Part No	Description	Plug Size Inch	mm	Box/Qty
KX-311	Regular	2-½ x ¼	64 x 6	50
KX-331	Regular, orange	2-½ x ¼	64 x 6	50
KX-901	Pistol Grip Split-Eye Needle			1



Posi-Cord String / Temporary Repairs

Rubber impregnated for vulcanization. Recommended for non-highway service tires only

Part No	Description	Box/Qty
361	Fat Brown String (4", 100mm)	50
362	Fat Brown String (8", 200mm)	25
370	Narrow Black String (7", 178mm)	50
KX-918	Pistol Grip Open-Eye Needle	1



Chemical Curing Fiber Seal Inserts / Temporary Repairs

Part No	Description	Box/Qty
KX-363	Regular (3-¾", 95mm)	50



KX-360 Fat-Brown String Kit / Temporary Repairs

Part No.	Description	Box/Qty
KX-360	Fat-Brown String Kit (String, Cement & Tools Included)	1



365 Deluxe Brown String Kit / Temporary Repairs

Deluxe box contains: One jar of Lube, One Knife, and fifty each 361 Fat Brown String Repair 4".

Part No.	Description	Box/Qty
365	4" Fat-Brown String Kit (Deluxe)	1

300

Super Fast Drying Cement

Part No	Description	Box/Qty
KX-511F	Flammable Chemical Cement (8 oz.)	10
	Super fast drying cement for use with all KEX patches and plugs	



Chemical Cleaners

Use Buffing Solution in conjunction with scraping tool KX-932 to dissolve and remove lubricants and contaminents from the innerliner before buffing.

Part No	Description	Box/Qty
KX-490F	Buffing Solution, Flammable (32 oz.)	10
KX-491F	Aerosol Buffing Solution, Flammable (16 oz.)	12





KX-490F

KX-491F



Bead Sealer, No-Drip Formula

KEX Rim/Bead Sealer helps to prevent leaks between the tire bead and rim.

Part No	Description	Box/Qty
KX-507F	Bead Sealer, Flammable, No-Drip Formula (32 oz.)	10



KX-507F

Liner Sealer

Designed for use around the edges of repair units, overbuff areas and on porous innerliners.

Part No	Description	Box/Qty
KX-508F	Liner Sealer, Flammable, 16 oz. Brush Top Can	10



KX-508F

Paste, Lubricants and Mounting Compounds For Tire Service

Use KEX products for fast and easy mounting and demounting of ALL TYPES OF TIRES. The use of KEX Paste Lubricants and Mounting compounds prevents bead damage to tires.

Part No	Description	Box/Qty	Pallet/Qty
KX-1052	Mounting Paste (7.7 lb. pail)	4	120
KX-1052N	New Style Mounting Paste (7.7 lb. pail)	4	120
KX-1208	Tire and Tube Mounting Compound (8 lb.)	4	
KX-1280	Tire and Tube Mounting Compound (25 lb.)	1	48
KX-81501-C	Concentrated Tire Mounting Lubricant (1 gal.)	4	144
KX-81505-C	C Concentrated Tire Mounting Lubricant (5 gal.)	1	36
2480	Black-Ice Stop Rust Rim Release (25 lb.)	1	48





Bracket & Brush

Bracket complete with mounting hardware to hold 1052 Bucket designed to mount on tire changers. The brush head is at a 45° angle for ease of application.

Part No	Description	Case/Qty
75-B	Bracket for 1052 Paste	1
75-NB	Bracket for 1052N Paste	1
73	Brush 45° Head, 1" diameter bristled head	1
73W	Brush 45° Head, 1" diameter bristled head	1
73-T	Brush 45° Head, Truck and Ag., 2" diameter bristled head	1



Leak Detector

KEX Spray-On Leak Detector makes locating air leaks easier!

• Ready-To-Use formula • Quick/Easy application • Can be used on all types of tires, tubes, valves and rims.

Part No	Description	Box/Qty
KLD-32	Leak Detector, 32 oz. spray bottle.	4



KLD-32



GREASE BULLY Nitrile gloves

GREASE BULLY Nitrile Gloves are formulated to have superior strength for the Professional Technician. The GREASE BULLY Glove has a strong black color and is resistant to most shop chemicals.

- New Nitrile Formula Offers Extra Comfort & Elasticity
- Delivers Unmatched Feel & Sensitivity
- Powder Free Textured Fingers 5.5-mil thick

Part #s: 9943 (M), 9944 (L), 9945 (XL). Box/Qty: 100



DURAGRIP Latex Gloves

The DURAGRIP Glove is a heavy favorite among Tire Repair Techs due to its durability and comfortable Latex fit.

- 60% thicker than traditional latex gloves
- Fully Textured surface Powder Free 8 mil thick, 9" long

Part #s: 2243 (M), 2244 (L), 2245 (XL). Box/Qty: 100



StrongHold Gloves

The StrongHold is a low cost reusable glove with a Nitrile dipped palm and nylon knit backing. The nylon knit backing is breathable and machine washable.

- Chemical resistant palm Excellent gripping power
- Breathable air flow comfort Seamless comfort
- Dexterity & Durability

Part #s: 8544 (L), 8545 (XL). Box/Qty: Pair



Tire Repair Wall Cabinet Kit 26-K

Part No.	Description	
26-K	Tire Repair Wall Cabinet Kit	

Contents Include: One each:

Repair Units/Kits: KX-2PC-P (2 PC Passenger Repair Kit)

KX-002 Jiffy Patch KX-387 Combi KX-378 Stem

27E Cabinet Contents comply with RMA standards. Chemicals:

KX-511F Cement KX-491F Buffing Solution KX-507F Bead Sealer KX-508F Repair Sealant

30 Stitcher 932 Scraper 6014 Brush TCW 210-80 Rasp

Tools:

CC-6 Carbide Cutter 6066 QR Arbor 6068 QR Adapter

Tire Repair Wall Cabinet Kit 26-KNH

Part No. Description 26-KNH Tire Repair Wall Cabinet Kit

KX-508F Repair Sealant

Chemicals:

Contents Include: One each:

Repair Units/Kits: KX-2PC-P (2 PC Passenger Repair Kit) KX-511F Cement KX-387 Combi-Units

27E-B Cabinet TRM-KEX Chart **Tools:**

CP-873K QR-Low Speed Tire Buffer KX-491F Buffing Solution 795 Air Vacuum

30 Stitcher 932 Scraper 6014 Brush TCW 210-80 Rasp CC-6 Carbide Cutter 190 Awl

6066 QR Arbor 6068 QR Adapter 929 Flexible Skiving Knife

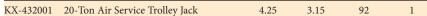




Winntec Jacks

Part No	Description		ension Weight crew (lbs.)	Box/Qty
KX-412000	20-Ton Bottle Jack	6.30 3	.15 23.6	2

These professional bottle jacks meet the highest standards. All models have a chrome main ram and a chrome pump piston. The extension screws have a pressed thread. These units are designed to be used horizontally.



This heavy-duty model is designed for service jobs in the truck industry. This jack has an extension screw and 3 saddles that can be placed on top of each other for added height. Chrome main ram and aluminum air motor guarantee optimum lifetime.

KX-432003 20-Ton Air/Hydraulic Jack w/Cart 5.70 3.15 54 1

Specifications are similar to Y432020. These bottle jacks are fixed on a heavy-duty cart, which results in convenient transportation and easy reach of lifting point. Due to the smart cart frame, these jacks can be stored vertically.

Part No	Description	Length (inches)	Width (inches)	Weight (lbs.)	Box/Qty
KX-420302	3-Ton Garage Jack (Economy)	28	14.15	99	1

Professional universal joint release valve makes it possible to lower the jack with load very precisely and free of any risks. The "protected" pump piston is placed at a 45° angle so a complete pumping stroke will always be utilized.

Designed with a heavy-duty welded base to prolong service life. Chrome plated RAM and aluminum air motor guarantee optimal performance. Premium air-filter connected to hose.

KX-420300 3-Ton Garage Jack, Length 31.30 15.15 105 1

Equipped with a rubber saddle and handle bumper, universal joint release valve results in precise and safe operation while under-load. Pump pistons are angled and protected from contamination resulting in smooth, full pumping stroke. Chrome RAM and durable seals provide long service life.

Winntec Jack Stands

P	art No	Description	Capacity (Ton)			u		Gross W (lbs.)		
K	X-450301	3-Ton Jack Stand	3	10.55	16.73	7.48	6.69	16.53	15.43	2
K	X-451600	6-Ton Jack Stands (pair)	6	15.51	23.50	10.63	9.45	33.51	30.42	2

These stands have a heavy duty robot welded frame, and a multi-position ductile ratchet bar. The quick adjustment mechanism securely locks into the right location. Includes counter-weighted pawl for safe securing.

Winntec Jack Stand with Wheels

Part No	Description	Capacity (Ton)		Max h. (inches)				Net W (lbs.)	Box/ Qty
KX-451205	12-Ton Jack Stand with Wheels	12	11.81	18.11	8.66	8.66	21	20	2

Sturdy, welded steel construction for superior safety and strength. Nylon wheels and removable handle ensure quick and SAFE positioning of jackstand under vehicle. Handle holder for vertical storage of handle while jackstand is not in use.

Part No	Description	Box/Qty
GHP-01	Jack Handle Protector	10
KX-HJ032	Gunk Hydraulic Jack Oil 32oz.	12

Rust inhibitors, anti-wear & anti-foam agents make Gunk the most demanded Hydraulic Oil in the automotive industry. For use in most-style hydraulic jacks.

Gaither Smart Tire Cart

- Works on Passenger 15" tires up to truck size 245/70R19.5 tires
- Moves Mounted Tires and Wheel sets Moves Stacks of Tires 8 to 10 high
- Stacks tires closer together than other Carts which creates more storage space
- Great for loading and unloading trucks and containers
- Patented Tilting Action Relieves stress off the user
- New PUSH/PULL system pushes the tires out of the Smart Cart arms without stress
- Fewer moving parts Easy to Assemble Gross Shipping Weight 68 lbs.

Part No	Description	Box/Qty
KX-471147HD	Gaither Smart Tire Cart	1







Markal Paintsticks

Part No	Description	Box/Qty	Case/Qty
80220	White Markal Paintstick	12	144
80221	Yellow Markal Paintstick	12	144
80222	Red Markal Paintstick	12	144
80223	Black Markal Paintstick	12	144
80224	Orange Markal Paintstick	12	144
80225	Blue Markal Paintstick	12	144
80226	Green Markal Paintstick	12	144
80227	Pink Markal Paintstick	12	144
80228	Purple Markal Paintstick	12	144
80229	Brown Markal Paintstick	12	144
80230	Grey Markal Paintstick	12	144



Tire Talc, Crayons, Swab

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Part No	Description	Box/Qty	Case/Qty
KX-550	Tire Talc Sifter Can (1 lb.)	12	
2990	Swab	12	
62Y	Yellow Marking Crayon	12	144
62W	White Marking Crayon	12	144



Stitchers, Knives and Scraper

Part No	Description	Box/Qty	Case/Qty
30	Ball Bearing Stitcher (1 ¼ x ½", 31 x 3mm)	1	10
6005-E	Ball Bearing Stitcher, Economy (2 x ¼", 50 x 6mm)	1	10
908	Roller Wheel Stitcher Economy	1	12
929	Flexible Skiving Knife - Round End	4	
930	Skiving Knife -Taper Point	1	12
932	Rubber Scraper	1	12
6014	Stiff Brass Brush	1	12
190	Awl	1	1



Gooseneck Stitchers

KEX Tire Repair's new Gooseneck Stitcher is designed to improve maneuverability and reduce stress & fatigue. The Gooseneck Stitcher's engineered design permits better control as the tire technician maneuvers the Gooseneck Stitcher inside the crown and sidewall area of the tire to ensure good adhesion while reducing stress to the wrist and hand.

Part No	Description	Width (inch)	Dia. (inch)	Size (inch)	Box/Qty
30-GN	Gooseneck stitcher, 1-½" x ½"	1-1/2	1/8	1-½ x 1/8	10
6005-GN	Gooseneck stitcher, 2" x 1/4"	2	1/4	2 x 1/4	10



Accessories

Part No.	Description	Box/Qty
KX-AT032	Marvel Air Tool Oil 32oz. 12-cs	6
TDFS-S	Flip Socket ¾" x ¹³/16"	10
TDFS-M	Flip Socket 19mm x 21mm	10
950	Hammer handle, 30"	1
952	Wedge Hammer handle, 17"	1





Inserting Tools

Part No	Description	Box/Qty	Case/Qty
KX-918	Pistol Grip Open-Eye Needle	1	10
KX-902	Pistol Grip Spiral Cementing Tool	1	10
KX-901	Pistol Grip Split-Eye Needle	1	10
KX-928	Metal T-Handle Split-Eye Needle	1	10
KX-931	Replacement Needle for 928	1	10
KX-900	Pistol Grip Open-End Needle	1	10
KX-917	Pistol Grip Open-Eye Needle	1	10
KX-934	Pistol Grip Closed Eye Needle	1	10
KX-966	Pistol Grip Probe	1	10



Air Buffers and High Speed Grinders

KEX's exceptional quality, durable Slow Speed Air Buffer, and High Speed Grinder are the right choice for injury and surface preparation. The Slow Speed Buffer comes complete with Quick Release-Chuck and rear exhaust. The High Speed Grinder is equipped with a ¼" Jacob's Chuck.

Part No.	Description	Units/Box
CP-871	High Speed Grinder, Jacob's chuck (22,000 rpm)	1
CP-873K	Low Speed Tire Buffer, QR chuck (2,800 rpm)	1



Quick Release Chucks & Adapters

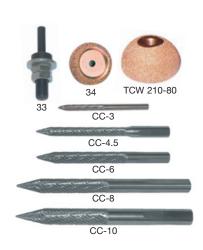
Designed for use with KEX and most other slow speed buffers, these Quick-Release Chucks and Adapters provide maximum versatility and flexibility.

Part No.	Description	Units/Box	Case/Qty
6060	QR Chuck Set, 2 QR Arbors	1	10
6066	2-1/4" Threaded QR Arbor, 3/8", 24-T	1	10
6067	2-1/4" Threaded QR Arbor, 3/8", 24-T with Sleeve	1	10
6068	QR Adapter w/set screws for 1/4" shank (use with CC4.5, CC-6)	1	10
6068-125	QR adapter, 1/8" shank, for use with CC-3	1	10
6068-5	QR adapter, 1/4" shank, for use with CC-5	1	10
5196593	QR Adapter for %" shank (use with CC-10)	1	1



Cup Rasps, Carbide Cutters & Burrs

Description	Box/Qty	Case/Qty
¼" Arbor for mounting Buffing Wheels	1	10
2-1/2" Dia. Buffing Wheels, Fine Grit	1	10
Buffing Rasp 80 Grit	10	10
1/8" Carbide Cutter (3mm)	1	10
3/16" Carbide Cutter (4.5mm)	1	10
7/32" Carbide Cutter (5mm)	1	10
1/4" Carbide Cutter (6mm), use with 1/4" stems	1	10
5/16" Carbide Cutter (8mm)	1	10
%" Carbide cutter (10mm), use with %" stems	1	1
	1/4" Arbor for mounting Buffing Wheels 2-½" Dia. Buffing Wheels, Fine Grit Buffing Rasp 80 Grit 1/8" Carbide Cutter (3mm) 3/16" Carbide Cutter (4.5mm) 7/32" Carbide Cutter (5mm) 1/4" Carbide Cutter (6mm), use with 1/4" stems 5/16" Carbide Cutter (8mm)	¼" Arbor for mounting Buffing Wheels12-½" Dia. Buffing Wheels, Fine Grit1Buffing Rasp 80 Grit1018" Carbide Cutter (3mm)13/16" Carbide Cutter (4.5mm)17/32" Carbide Cutter (5mm)1½" Carbide Cutter (6mm), use with ¼" stems15/16" Carbide Cutter (8mm)1





Vacuum Cleaner

KEX air operated wet or dry vacuum replaces standard shop vacs at repair stations. Easy hook-up and effective suction makes short work of any buffing dust and water clean up in the tire. Excellent for use on mobile service trucks.

Part No.	Description	Box/Qty
795	Air Vacuum, dry, includes bag	1
798	Air Vacuum with Water Hose Attachment and Bag	1
796	Replacement Vacuum Bag	1
797	Replacement Water Hose	1



OTR O-Rings Packed 2 O-Rings per poly-bag.

Description	Diameter (inch)	Units per Box	Bags per Box
20" Highway Use O-Ring, JM rim	1/4	24	12
24" Highway Use O-Ring, JM rim	1/4	24	12
25" Small Earthmover Use O-Ring	1/4	24	12
20" Grader Use O-Ring	1/4	24	12
24" Grader Use O-Ring	1/4	24	12
	20" Highway Use O-Ring, JM rim 24" Highway Use O-Ring, JM rim 25" Small Earthmover Use O-Ring 20" Grader Use O-Ring	Description (inch) 20" Highway Use O-Ring, JM rim 24" Highway Use O-Ring, JM rim ½ 25" Small Earthmover Use O-Ring ½ 20" Grader Use O-Ring ½	Description (inch) Box 20" Highway Use O-Ring, JM rim

Earthmover Use O-Rings: Diameter (inch): %, Units per Box: 24, Bags per Box: 12.

Part #s: OR-321-T (21"), OR-325-T (25"), OR-329-T (29"), OR-333-T (33"), OR-335-T (35"), OR-339-T (39"), OR-343-T (43"), OR-345-T (45"), OR-349-T (49")





6551 Economy Tire Spreader

The Air Powered 6551 Economy Tire Spreader is designed for servicing and repairing passenger, light truck, medium/heavy truck and small agricultural and OTR tires up to 20.5-25" in size.

- Extremely low eight-inch working platform, lifting power up to 500lbs.
- Adjustable spreading jaws that are shorter on the operator's side for improved access and safety.
- Integrated lifting device with a lifting height of 17-1/2"
- Working Height: 30"
- Integrated lighting, a ramp that automatically retracts as tire is lifted.
- Dimensions: 45" x 30-1/2" x 35"
- Weight 310 lbs.

Part No	Description	Box/Qty
6551	Economy Tire Spreader	1



Rep-Boy Tire Repair Spreader

The Rep Boy provides easy access for repairing passenger and light truck tires. The adjustable tire spreader can accommodate all tires from garden service through light truck. The spreading claws fit 13"-20" passenger and light truck tires. The Tire Spreader has a foot-control swivel, tilts, and is equipped with a tool tray and a floor stand base-plate.

Part No.	Description
3050-RB	Portable Tire Spreader





BEAD BAZOOKA® Tommy Gun

The BEAD BAZOOKA® Tommy Gun is the most powerful bead-seating tool on the market. With its new MIS valve it is capable of releasing air faster than any other tire inflation tool available. The BEAD BAZOOKA® Tommy Gun is available in both 6 liter and 9 liter models ensuring that you always have the right tool for the job. *patents pending

Features:

- The new Manual MIS Valve releases air faster than any other bead seater valve available, due to the new patent pending design.
- The larger MIS Valve also allows the compressed air to escape more quickly than other outdated designs.
- The compression transition from a 2" opening to a 1 1/2" barrel increases the velocity of the air at release for even more bead-seating efficiency.
- Gaither's patented Slotted Double Barrel (pat. no. 8,752,604) directs the air for the best overall lift and increases the volume of air inserted into the tire cavity.
- The new Tommy Gun grip offers two handed control for exact barrel positioning.
- The release grip lock provides added safety against inadvertent discharge.
- The MIS Release Valve is fully serviceable, and the proprietary tank coating guarantees no interior rust for years.
- 3 year warranty

Part No.	Description	Box/Qty
Tommy Gun 6L	6L Tommy Gun Bead Bazooka	1
Tommy Gun 9L	9L Tommy Gun Bead Bazooka	1





Tommy Gun 6L

MAX-WELL Air Square Wall Mounted Inflator

- MAX-WELL Quality Fast inflation Sturdy Metal Cabinet
- Can be mounted to a safety cage or wall State of the art electronics
- Multi choice finished inflation alarms to suite your location (Alarm only, Light only, or Alarm/Light)
- Large LCD numbers ensuring easy legibility Durable Button controls
- Long Hose to service more than one safety cage. (one at a time)
- Over Pressure system to assure proper bead seating
- Choice of Inflation Units (psi, kpa, Bar, kg/cm2)

Part No	Description	Box/Qty
AS100-SP	MAX-WELL Air Square	1



AS100-SP

MAX-WELL M-100 Mount/Dismount Tool

Superior Max-Well Tool Quality • Truck Tire Dismount and Mount • Time Saving

Stock No.	Description	Box/Qty
M-100	MAX-WELL Mount/Dismount Tool	1



MAX-WELL digital and analog inflation gauges

MAX-WELL digital and analog inflation gauges merge ease of use and readability with rapid, safe and cost effective tire pressure maintenance.

• Fast inflation and deflation • Increased accuracy and safety • Robust design • 6 ft Hose

Part No	Description	Box/Qty
H300532P	MAX-WELL Digital Inflation Gauge	1
H310532P	MAX-WELL Analog Inflation Gauge	1





Reinforced Air Hose

Heavy duty, non-kink Reinforced Air Hose can take the worst punishment.

Part No	Description	Hose ID	Box/Qty
890	25' Reinforced Air Hose with ¼" NPT Male Ends	3/8"	1
893	35' Reinforced Air Hose with ¼" NPT Male Ends	3/8"	1
891	50' Reinforced Air Hose with ¼" NPT Male Ends	3/8"	1
895	50' Reinforced Air Hose with ½" NPT Male Ends	1/2"	1



Reinforced Green Air Hose

Part No	Description	Hose ID	Box/Qty
890-G	25' Green Air Hose with ¼" NPT Male Ends	3/8"	1
893-G	35' Green Air Hose with ¼" NPT Male Ends	3/8"	1
891-G	50' Green Air Hose with ¼" NPT Male Ends	3/8"	1



Polyurethane Air Hose

Part No	Description	Hose ID	Box/Qty
840P	12' Polyurethane Coil Hose with ¼" Male Ends	1/4"	1
841P	25' Polyurethane Coil Hose with ¼" Male Ends	1/4"	1
842P	50' Polyurethane Coil Hose with ¼" Male Ends	1/4"	1
843P	25' Polyurethane Coil Hose with ¼" Male Ends	3/8"	1
844P	50' Polyurethane Coil Hose with ¼" Male Ends	3/8"	1



Air Pressure & Tread Depth Gauges

	1 0	
Part N	Io Description	Box/Qty
180	Passenger/Light Truck Pressure Gauge. 10-50 psi, calibrated in one pound increments.	10
181	Truck Pressure Gauge: 20-120 psi, calibrated in two pound increments, high impact chrome body.	10
183	Dual Head Truck Pressure Gauge: 10-120 psi, calibrated in two pound increments, chrome body.	10
184	Dual Head Pocket Truck Pressure Gauge: 20-120 psi, calibrated in two pound increments.	10
182	Agricultural Pressure Gauge: 5-50 psi for air/liquid ballast filled tires.	10
185	Tread Depth Gauge: reads 0" to 1" in 1/32 increments.	10
175	Truck gauge, dual-head: 20-120 psi, calibrated in two pound increments.	10
176	Truck gauge, dual-head: 10-150 psi, calibrated in two pound increments.	10
179	Straight Truck Pressure Gauge: 20-150 psi, calibrated in two pound increments.	10



Air Chucks

	-1-0-0-10	
Part No	Description	Box/Qty
765	Ball Chuck: 1/4" NPT female fitting (CLOSED)	10
765-O	Ball Chuck: 1/4" NPT female fitting (OPEN)	10
766	Ball Chuck: clip-on type, 1/4" NPT male (CLOSED)	10
766-O	Ball Chuck: clip-on type, ¼" NPT male (OPEN)	10
762	Euro-Style clip-on Air Chuck (CLOSED)	10
763	Dual Foot Lock on Air Chuck	10
771	Air chuck, dual-foot, press-on (CLOSED), black poly coating	10
772	Dual Foot Press-on Style Air Chuck	5
773	Lock-on Air Chuck	5
774	Safety Blow Gun	1



Valve Cores

Part No	Description	Box/Qty Case/Qty
TRC1 HT	Short High Temp Valve Core	100
TRC1-L	Long High Temp Valve Core	100
36	Large Bore Valve Core (TRC2)	100





Valve Caps *KEX offers many valve cap styles designed to help maintain proper tire pressures.*

Part No	Description	Box/Qty	Case/Qty
37	Fork-Type Standard Metal Cap (TRVC2)	100	1000
38	Dome-Type Standard Metal Cap	100	1000
39BLACK	Dome-Type Standard Plastic Cap (100 pcs. per bag)	1000	
39GRAY	Valve cap, gray	100	
39BLUE	Plastic valve cap, blue	100	
39GREEN	Green Valve Cap Nitrogen Fill	100	
39B-TPMS	TPMS Valve cap, black	100	
40	Chrome Valve Cap, Hex-Head	100	1000
42HT	Skirted Dome-Type Heat-Resistant Metal Cap (TRVC3)	100	1000
TRVC6	Fork-Type Large Bore Valve Cap (TRVC6)	50	100
TRVC7	Hex Head Large Bore Valve Cap (TRVC7)	50	100



Valve Service Tools

Part No	Description	Box/Qty	Case/Qty
41	Solid-Bar Pull-Through Valve Inserting Tool	10	100
44	Big Yank Valve Removal/Inserting Tool	10	100
186	4-in-1 Valve Repair Tool	10	100
187	Screwdriver handle valve core tool	10	100
EX-1522	Large Bore 4-in-1 Valve Repair Tool,	10	100
836	Cable-Type Valve Fishing Tool	10	100
449	Valve Nut Driver	1	5
EX-685	Standard & Large Bore Screwdriver-Style Valve Core Removal and Inserting Tool	10	100
834	Valve Core Removal Tool	10	100
TVCT	Torque Valve Core Tool	10	100



Passenger, Light Truck, Enkei Style Valves Snap-In/Clamp-In Valves for tubeless passenger and light truck tires. All valves are equipped with a

HI-TEMP valve cores.

III-IEWII V	uive cores.				
Part No	Description	Rim Hole Dia. Inch	Valve Size Inch	Valve Size mm	Box/Qty
TR-412	Snap-In Valve	.453"	1	25	500
TR-412C	Snap-In Valve, Chrome	.453"	1	25	500
TR-413	Snap-In Valve	.453"	1-1/4	31	500
TR-413C	Snap-In Valve, Chrome	.453"	1-1/4	31	500
TR-414	Snap-In Valve	.453"	1-1/2	37	500
TR-415	Snap-In Valve	.625"	1-1/4	31	500
TR-416	Clamp-In Custom Wheel Valve	.453"	1-7/16	39	100
TR-417	Torondao/Eldorado Clamp-In Valve				5
TR-418	Snap-In Valve	.453"	2	50	500
TR-418C	Snap-In Valve, Chrome	.453"	2	50	500
TR-423	Snap-In Valve	.453"	2-1/2	62	500
TR-425	Snap-In Valve	.625"	2-1/2	62	500
TR-600HP	High Pressure Snap-In Valve	.453"	1-3/4	45	500
TR-602HP	High Pressure Snap-In Valve	.453"	2	50	500
TR-801HP	High Pressure Snap-In Valve	.625"	1-1/4	31	500
TR-802HP	High Pressure Snap-In Valve	.625"	2	50	500
1-810	Clamp-In Valve, Chrome	.453"	1-1/4	31	100
1-811	Clamp-In Valve, Brass	.453"	2	50	100
1-860	ENKEI Style "Mini"	.453"			50
1-816	ENKEI Style 45° Bend	.453"			50
1-815	ENKEI Style "Short"	.453"			50





Clamp-In Brass Truck Valves

Brass Clamp-In Valves for Tubeless Truck and Bus tires. Compatible with all standard 5/8" side hole mount. Complete with metal valve cap and HI-TEMP valve core. Packed 10 per bag/10 bags per box.

Part No	Description	Valve Size Inch	Valve Size mm	Box/Qty
TR-500	Brass Truck Valve	2-5/32	54	100
TR-500A	Brass Truck Valve, 23° bend	2-5/32	54	100
TR-501	Brass Truck Valve	1-1/2	32	100
TR-570	Brass Truck Valve	3-9/32	82	100
TR-571	Brass Truck Valve	$3-\frac{3}{8}$	85	100
TR-572	Brass Truck Valve	3-3/4	95	100
TR-573	Brass Truck Valve	$4^{-3}/_{8}$	110	100
TR-574	Long Clamp-In Brass Valve	5	125	100
TR-575	Brass Truck Valve	$1-\frac{1}{8}$	29	100
TR-501-OV	Oval Rim Hole Brass Truck Valve	1-1/4	31	100



Metric Clamp-In Valves

Designed for tubeless truck and bus tires mounted on aluminum wheels with .389 (9.7mm) valve holes. Packed 10 per bag/10 bags per box.

Part No	Description	Valve Size mm	Box/Qty
TR-542	Clamp-In Valve	32	100
TR-543	Clamp-In Valve	60	100
TR-543C	Clamp-In Valve, w/45° bend	60	100
TR-543D	Clamp-In Valve, w/60° bend	60	100
TR-543E	Clamp-In Valve, w/75° bend	60	100
TR-544	Clamp-In Valve	73	100
TR-544D	Clamp-In Valve, w/60° bend	73	100
TR-545	Clamp-In Valve	90	100
TR-545D	Clamp-In Valve, w/60° bend	90	100
TR-545E	Clamp-In Valve, w/75° bend	90	100
TR-546	Clamp-in Valve	110	100
TR-546D	Clamp-in Valve, w/60° bend	110	100
TR-546E	Clamp-in Valve, w/70° bend	110	100
TR-547D	Clamp-in Valve, w/60° bend	110	100



Compatible with aluminum wheel designs with .389 valve hole. Produced with Viton grommets, all KEX clamp-in valves are equipped with high temperature valve cores.

- Viton grommets offer a greater temperature range, a better seal, and a longer service life.
- Easier installation than other Metric valve designs Packed 10 per bag/10 bags per box.

Part No	Description	Bending angle ⁽⁹⁾	Valve Size mm	Box/Qty
TR-552	Clamp-In Valve		32	100
TR-553	Clamp-In Valve		60	100
TR-553C	Clamp-In Valve	45	60	100
TR-553E	Clamp-In Valve	75	60	100
TR-554D	Clamp-In Valve	60	73	100
TR-555D	Clamp-In Valve	60	90	100
TR-555E	Clamp-In Valve	75	90	100

Aluminum Wheel Truck Valves

Designed for use with drop-center aluminum wheels. These quality single-bend valves have a 5/8" bottom hole and come with dome-type valve cap and HI-TEMP valve core. Packed 10 per bag/10 bags per box.

	7.2	_		
Part No	Description	Valve Size Inch	Valve Size mm	Box/Qty
TR-509	Aluminum Wheel Valve	4-3/4	120	100
TR-510	Aluminum Wheel Valve	5-1/2	140	100
TR-511	Aluminum Wheel Valve	4-1/4	107	100

Agricultural/OTR Clamp-In Valves

"Fast Flow" Valve Cores promote rapid filling of air or liquids. Packed 10 per bag/5 bags per box.

Part No	Description	Box/Qty
TR-618A	Agricultural/OTR Clamp-In Valve, fast flow valve core	50
TR-621A	Agricultural/OTR Clamp-In Valve, with 65° bend, .625" rim hole	50







Valve Cross Reference



Part No	Description	Length	Bending	LIOM	TR No.	Hamaton	Dill	Haltec	Myers	31Inc	ETRTO	Tech
	-	(inch)	angle (°)								LIKIO	
TR-412	Snap-in Valve	7/8		500	TR412	1-101	T-12R	TV-412	26118	17-412-500		TR412
TR-412C	Snap-in Valve, chrome	7/8		500	TR412C	1-101C				17-412-1		
TR-413	Snap-in Valve	11/4		500	TR413	1-102	T-13R	TV-413	21173	17-413-500	V2-03-1	TR413
TR-413C	Snap-in Valve, chrome	11/4		500	TR413C	1-102C	T-13S	TV-413-CH	22130	17-413-1		TR413CH
TR-414	Snap-in Valve	11/2		500	TR414	1-103	T-14R	TV-414	21174	17-414-500	V2-03-02	TR414
TR-414C	Snap-in Valve, chrome	11/2		500	TR414C		T	PTX 1 4 = =	21170		T/2 02 2	TTD 44.5
TR-415	Snap-in Valve	11/4		500	TR415	1-107	T-15R	TV-415	21170	17-415-500	V2-03-3	TR415
TR-416	Clamp-In Truck Valves			100	TR416	1-801	VS-902	TV-416	21583	17-416		VH521MS
TR-417	Toronado/Eldorado clamp-in valve				TR417		TI 10D	TTY 410			T70.00.1	TTD 44.0
TR-418	Snap-In Valve	2		500	TR418	1-105	T-18R	TV-418	21175	17-418-500	V2-03-4	TR418
TR-418C	Snap-in Valve, chrome	2		500	TR418C	1.106	T-18S	TV-418-CH	21155	17-418-1		TR418CH
TR-423	Snap-In Valve	21/2		500	TR423	1-106	T-23R	TV-423	21177	TR-423-500		TR423
TR-425	Snap-In Valve	21/2		500	TR425	1-108	T-25R	TV-425	22188	17-425		TR425
TR-500	Clamp-In Brass Valve	25/32	22	100	TR500	1-201	VS-500	TV-500	23150	17-500T		VH724MS
TR-500A	Brass truck valve	25/32	23	100	TD501	1 202	VC 501	TX 501	221.40	15 501T		VIII
TR-501	Clamp-In Brass Valve	121/32		100	TR501	1-202	VS-501	TV-501	23149	17-501T		VH723MS
TR-501OV	Clamp-In Brass Valve	f/5/8x7/8		100	TR501OV		MC OACD	TX 500	22050	17-501OV		VIII
TR-509	Alum Wheel Valve	43/4		100	TR509	1-301	VS-946R	TV-509	24111	17-509		VH756
TR-510	Alum Wheel Valve	51/2		100	TR510	1-302	VS-879R	TV-510	24110	17-510		VH758
TR-511	Alum Wheel Valve	41/4		100	TR511	1-303	VS-949R	TV-511	24112	17-511		VH755
TR-543	Metric Valve, 60mm			100	TR543	1-502	VS-543	TV-543	24252			
TR-543C	Metric Valve, 60mm		45	100	TR543C	1-502C	VS-543C	TV-543C	24236	17-543C		
TR-543D	Metric Valve, 60mm		60	100	TR543D	1-502D	****	TV-543D	24251	17-543D		
TR-543E	Metric Valve, 60mm		75	100	TR543E	1-502E	VS-543E	TV-543E	24253	17-543E		*****
TR-544	Metric Valve, 73mm			100	TR544	1-503	VS-544	TV-544	24240	17-544		VH733
TR-544D	Metric Valve, 73mm		60	100	TR544D	1-503D	VS-544D	TV-544D	24250	17-544D		VH734
TR-545	Metric Valve, 90mm			100	TR545	1-504	VS-545	TV-545	24242	17-545		VH735
TR-545D	Metric Valve, 90mm		60	100	TR545D	1-504D	VS-545D	TV-545D	24243	17-545D		VH736
TR-545E	Metric Valve, 90mm		75	100	TR545E	1-504E	VS-545E	TV-545E	24237			
TR-546	Metric Valve, 110mm			100	TR546	1-505	**************************************	WY - 44D	21211	15.5160		
TR-546D	Metric Valve, 110mm		60	100	TR546D	1-505D	VS-546D	TV-546D	24244	17-546D		
TR-546E	Metric Valve, 110mm		75	100	TR546E	1-505E	VS-546E	TV-546E	24239	17-546E		
TR-547D	O-Ring Seal Valve		60	100	TR547D	1-506D	VS-547D	TV-547D	24247			
TR-552	Clamp-in valve, 32mm			100	TR552	1.550	170 550	TINI EEO	24506			
TR-553	Clamp-In Valve, 60mm		45	100	TR553	1-553	VS-553	TV-553	24506			
TR-553C	Clamp-In Valve, 60mm		45	100	TR553C	1-553C	VS-553C	TV-553C	24507			
TR-553E	Clamp-In Valve, 60mm		75	100	TR553E	1-553E	VS-553E	TV-553E	24508			
TR-554D	Clamp-In Valve, 73mm		60	100	TR554D	1-554D	VS-554D	TV-554D	24509			
TR-555D TR-555E	Clamp-In Valve, 90mm		60	100	TR555D	1-555D	VS-555D	TV-555D	24510			
	Clamp-In Valve, 90mm	29/	75	100	TR555E	1-555E	VS-555E	TV-555E	24511	17 F70T	V2 21 4	VIIITATME
TR-570	Clamp-In Valve Clamp-In Valve	39/32		100	TR570	1-203	VS-570	TV-570	24161	17-570T	V3-21-4	VH725MS
TR-571 TR-572	Clamp-In Valve	$3^{17}/_{32}$ $3^{29}/_{32}$		100	TR571 TR572	1-204	VS-571 VS-572	TV-571 TV-572	24162	17-571T 17-572T	V3-21-5 V3-21-7	VH727MS
		417/32				1-206			24163			VH727MS
TR-573	Clamp-In Valve Clamp-In Valve	5		100	TR573	1-206	VS-573	TV-573	24164	17-573T	V3-21-7	VH728MS
TR-574	-	11//8		100	TR574		VS-574	TV-574	24165	17-574T	V3-21-8	VH722MS
TR-575	Brass Truck Valve	178		100	TR575	1-208		TV-575	24109	17 600HD		VH722MS
TR-600HP TR-602HP	Hi-Pressure Snap-in Valve Hi-Pressure Snap-in Valve	2		500	TR600HP TR602HP			TV-600HP TV-602HP	24120 24121	17-600HP 17-602HP		VH600HP
	· ·	2								17-002ΠΡ	VE 01 1	VILEOG
TR-618A TR-621A	Air/Water Clamp-In Valve Ag./OTR Clamp-in Valve			50	TR618A TR621A	1-1250 1-1251		TV-618A TV-621A	24147 24148		V5-01-1 V5-02-1	VH596 VH580
TR-801HP	Hi-Pressure Snap-in Valve	11/4								17-801HP	V 3-UZ-1	V 1130U
	_			500	TR801HP			TV-801-HP	23190			
TR-802HP	Hi-Pressure Snap-in Valve	11/.		500	TR802HP			TV-802-HP	23191	17-802HP		
1-810	Clamp-in Valve	11/4		100	TBD	1-810		N-1600		17-428		
1-811	Clamp-in Valve	2		100	TBD	1-811		TV-416MC	24117	17-429		
1-860	ENKEI Style "Mini"	11/4	45	50	TBD	1-860		TV-6030	24117			
1-816	ENKEI Style	11/	45	50	TBD	1-816		TV-6020	24118			
1-815	ENKEI Style "Short"	11/2		50	TBD	1-815						

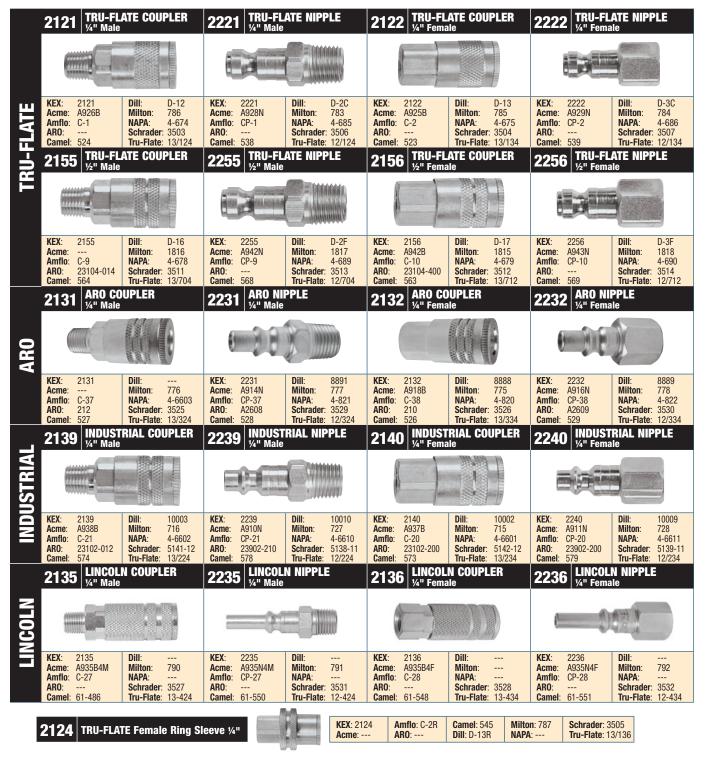


Air Line Couplers and Nipples

KEX Tire Repair's high-performance couplers and nipples are designed for reliability, prolonged service life and are compatible with corresponding interchanges from other manufacturers.

Rated for pressure up to 300 PSI, and operating temperatures from -40° to +250° F, these tools are versatile in any climate or location.

Heat treated and corrosion resistant, KEX Tire Repairs high performance couplers and nipples are built to withstand heavy use in retread and repair facilities.



Never exceed pressure limits of the air tool or air hose that you are working with. Designed for use with air lines with a maximum pressure of 300 PSI.

(Not intended for use with food or consumable products.) Failure to to follow directions and pressure limits may result in injury or property damage).

Repair Charts



NAIL HOLE REPAIR CHART CROWN AREA ONLY			1-PIECE REPAIR (Injury Angle < 25 degrees)			2-PIECE REPAIR (Injury Angle > 25 degrees)					
	Injury Size	Carbide Cuter	Combi with Pilot Wire	Patch-N-Plug Non-Reinforced	Patch-N-Plug Reinforced	STEM			BIAS PATCH		
TIRE Type						STEM UNIT with Pilot Wire	Rubber Reinforced UNIVERSAL PATCHES (Round)	Rubber Reinforced UNIVERSAL PATCHES (Square)	MX RADIAL Patches	Fabric Reinforced UNIVERSAL PATCHES	Bias Ply Patches
DACCENCED	1/8" (3mm)	CC-3	KX-386	-	-	-	-		-	-	-
PASSENGER	1/4" (6mm)	CC-6	KX-387	KX-381	KX-375	KX-378	KX-UP-45	KX-4102	KX-MX10	KX-5101	NA
LIGHT TRUCK	1/4" (6mm)	CC-6	KX-387	KX-381	KX-375	KX-378	KX-UP-55	KX-4102	KX-MX12	KX-5102	KX-470
HEAVY DUTY TRUCK	1/4" (6mm)	CC-6	KX-387	KX-381	KX-375	KX-378	NA	NA	KX-MX12	KX-5102	KX-470
	3/8" (10mm)	CC-10	KX-388	KX-382	KX-376	KX-379	NA	NA	KX-MX14	KX-5103	KX-471

RADIAL TIRE SECTION REPAIR CHART W = Width 1 = Sidewall 2 = Tread L = Length C = Max. Dia. 3 = Shoulder **Sidewall Injury** Crown Injury **Heavy Truck Injury Inches** 8.25-10.00 11.00-14.00 9R-11R 12R-15R 295/-365/ W L C 235/-285/ 1 Cable MX 20 MX 20 1-1/2" (37mm) 3/8" (10mm) MX 22 MX 22 1 Cable 3-1/8" (78mm) MX 24 4-3/4" MX 24 1 Cable (120mm)3/4" MX 20 MX 22 2 Cables (20mm) MX 22 MX 24 2 Cables 1-1/2" (37mm) MX 24 MX 40 2 Cables 2-3/4" (70mm) MX 24 MX 40 3/8 (10mm)1" (25mm) MX 24 MX 40 3/8 (10mm) 1-1/2" (37mm) MX 24 MX 42 3/8' 2-3/8" (10mm) (60mm) MX 44 MX 44 3/8 (10mm) 5-1/8" (128mm)MX 40 MX 40 1/2' (12mm) 1-1/2" (37mm) 1/2" (12mm) MX 40 MX 42 1/2' (12mm) 2-3/4" (70mm) MX 42 1/2' 3-3/4" MX 42 (12mm) (95mm) MX 44 MX 44 1/2" 5-1/8" (128mm) (12mm) MX 40 3/4 1" 3/41 MX 40 (20mm) (25mm) (20mm) MX 40 MX 42 3/41 (20mm) 2-1/2 (62mm) MX 42 MX 42 3/4' (20mm) 4-3/8" (110mm)MX 44 MX 44 3/4' (20mm) 5-1/8" (128mm)MX 42 MX 44 1" (25mm) 2" (50mm) 1" (25mm) MX 44 1" 3-1/8" MX 42 (25mm) (78mm) MX 44 1" MX 44 (25mm) 4" (100mm)MX 42 MX 44 1-1/4" (31mm) 2" (50mm) 1-1/4" (31mm)

Radial	Tire	Patch	Selection
--------	------	--------------	-----------

A. Only after the injury has been properly skived/prepared can the correct patch be selected.

1-1/4"

1-1/4"

1-1/2

1-1/2"

B. Measuring the injury:

MX 44

MX 44

MX 44

MX 44

Sidewall Injuries: Measure the length (L) and width (W) of the injury.

MX 44

MX 44

Tread/Crown Injuries:

- 1) If the skived/dressed injury is round, measure only the maximum diameter (C) of the injury at the body ply.
- 2) If the skived/dressed injury is oval or oblong shaped, measure both the length (L) and the width (W) of the injury at the body ply.

(31mm)

(31mm)

(37mm)

(37mm)

3-1/8"

3-1/8"

4"

2"

(78mm)

(100mm)

(50mm)

(78mm)

1-1/2"

(37mm)

3) If the maximum measurement of (C) is greater the L and W measurement, select the lager of the patches.

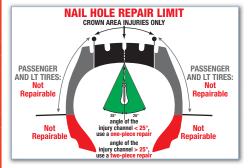
C. Using the Tire Size column on the Application Charts, find the injury area column – Sidewall, Tread/Crown or Shoulder – and go down the corresponding column until you match the measured size of the injury to the correct patch.

BIAS PLY TIRE SECTION REPAIR CHART

		Ply Rating								
Inches	mm	4	6	8	10	12	14	16	18	
3/8"	(10mm)	470	470	470	470	470	470	471	472	
1/2"	(12mm)	470	470	470	470	471	472	472	473	
3/4"	(20mm)	470	470	470	470	471	472	473	473	
1"	(25mm)	470	470	471	472	472	473	473	474	
1 1/2"	(37mm)	471	471	471	472	473	474	474	474	
2"	(50mm)	473	473	473	474	474	474	474		
2 1/2"	(62mm)	474	474	474	474	474				

Bias Tire Patch Selection

- A. Only after the injury has been properly skived can the correct patch be selected.
- B. When measuring the injury, always measure the longest damage of the top damaged ply.
- C. Note the ply rating of the tire. (This can be found embossed into the sidewall of the tire).
- D. Find the injury size on the Application Chart, read across the chart to find the correct patch based on the tire ply rating.



NAIL HOLE REPAIR PROCEDURES FOR PASSENGER, LIGHT TRUCK AND TRUCK TIRES

STEP 1 INSPECT

1.1 INSPECT THE TIRE ON THE OUTSIDE



Check tire surface and the valve for the source of the leak(s) by using a leak detector. Mark the injury with a tire crayon.

1.2 DEFLATE THE TIRE AND REMOVE FROM THE WHEEL

Deflate the tire before demounting, by safely removing the valve core. Safely remove the tire from the rim with the proper tire demounting tools and safety procedures, avoiding damage to the bead area.

1.3 PLACE ON TIRE SPREADER

Place tire on a well lighted tire spreader and spread the beads. Never invert radial tires - and avoid excessive spreading of the tire or tire beads.

1.4 LOCATE AND REMOVE THE PENETRATING ORJECT



Locate and remove the penetrating object from the tire, noting the direction of penetration.

1.5 MARK THE INJURY ON THE INSIDE



Identify the injury on the inside of the tire and mark the area with a tire crayon.

1.6 INSPECT THE INJURY



Inspect the injury with an awl, probing the injury to determine the extent of the damage and determine the inclination angle of the injury channel

Dipping the awl into KX-511F Super Fast Drying Cement before probing the injury channel serves as a lubricant, allowing easier insertion of the awl to inspect the injury.

Inspect the tire for any other damage.

1.7 REPAIR UNIT SELECTION

If the angle of the injury channel is greater than 25 degrees, a two-piece repair system must be used.

If the angle of the injury channel is less than 25 degrees, a one-piece repair system should be used.

Determine the injury size and refer to the NAIL HOLE REPAIR CHART above to select the appropriate repair unit.

PASSENGER AND LIGHT TRUCK TIRES

For passenger and light truck tires, the maximum injury size that can be repaired is 1/4 inch (6mm) in diameter. Injuries should be in the crown area only.

For truck tires, the maximum injury size that can be repaired is 3/8 inch (10mm) in diameter. Injuries should be in the crown area only.

STEP 2 PRE-CLEAN

2.1 APPLY PRE-BUFF CLEANER



2.2 SCRAPE AWAY CONTAMINANTS



Apply KX-491F Buffing Solution around the injury area. Using an innerliner scraper, scrape the area to be buffed removing the contaminates such as dirt, tire lubes, and mold release lubricants. The area cleaned should be slightly larger than the selected repair unit. Scrape the innerliner while the Buffing Solution is still wet. Repeat 2-3 times until the surface is clean.

STEP 3 DRILL

3.1 DRILL THE INJURY CHANNEL





Determine the correct size Carbide Cutter from the NAIL HOLE REPAIR CHART above. Use a low speed tool (not to exceed 1200 rpm) to drill the injury from the inside out two or three times first and then from the outside in once or twice. Use full strokes with the carbide cutter, completely removing the cutter from the tire with each stroke.

STEP 4 FILL THE INJURY CHANNEL

4.1 CEMENT THE INJURY CHANNEL



TWO PIECE REPAIR ONLY

Apply KX-511F Super Fast Drying Cement to the injury channel using a #626 pull-wire or a #190 awl.

4.2 INSERT THE STEM



TWO PIECE REPAIR ONLY

Fully coat the KEX Stem Unit with cement and guide the pilot wire of the KEX Stem Unit through the injury channel. Pull Stem Unit from the outside of the tire until there is approximately 1/4" (6 mm) of the stem remaining on the inside of the tire.

4.3 CUT THE STEM



TWO PIECE REPAIR ONLY

Cut the stem off leaving approximately 1/8" (3 mm) remaining on the inside of the tire. The remainder of the stem will be removed during the buffing process to provide a smooth surface.

STEP 5 BUFF

5.1 MARK AROUND THE REPAIR UNIT





Center the repair unit over the injury and outline an area larger than the unit, so buffing will not remove

If the repair unit has bead arrows, make sure the arrows are pointing to the bead

5.2 BUFF THE REPAIR AREA



Lightly buff the repair area using a low speed (< 5,000 RPM) air or electric buffing tool with a clean buffing rasp, 18 to 36 grit and remove all vent lines until you get a completely smooth surface. Continue lightly buffing the repair area to a smooth velvety finish (RMA Buff Texture 1 or 2) by putting slight pressure on the buffing tool and keeping it in constant movement.

NOTE: If during the buffing procedure the Radial Plies (or Body Plies) are damaged or exposed, the tire should be replaced

STEP 6 POST-CLEAN

6.1 BRUSH



Clean the buffed area with a 6014 Brass Brush by brushing the area several times in one direction. Avoid brushing the non-buffed areas where there are contaminants that could be pulled onto the freshly buffed area. Use a brush that is designated only for tire repair and not used for anything else. This will help avoid contaminants in the buffed area.

6.2 VACUUM



Use a vacuum to remove all debris from the inside of the tire. Do not touch the buffed area with the tip of the vacuum cleaner to avoid contamination. Always remove buffing dust with the use of a brass brush and vacuum. Never use compressed air. Do not use a Buffing Solution on the buffed texture after you have buffed to avoid leaving residues which reduce adhesion.

NAIL HOLE REPAIR PROCEDURES FOR PASSENGER, LIGHT TRUCK AND TRUCK TIRES



STEP 7 INSTALL

7.1 CEMENT THE INJURY CHANNEL



ONE PIECE REPAIR ONLY

Apply KX-511F Super Fast Drying Cement to the injury channel using a #626 pull-wire or a #190 awl. Super Fast Drying Cement provides the necessary lubrication for the insertion of the repair unit, and bonds it reliably to the tire.

7.2 CEMENT THE BUFFED AREA



Apply a thin, even coat of KX-511F Super Fast Drying Cement to the buffed area of the tire innerliner using a clean brush.

Use a swirling motion to apply the cement, as this will aid in the drying process as well as assure a thin, even coat. Completely cover the buffed area with cement to assure a good bond between the tire and the Repair Unit. Continue brushing and working the cement into the buffed area until the cement appears dry. Do not go outside the buffed area (Contaminates the brush).

Rotate the tire so that the cemented area is located between the 10 o'clock and 2 o'clock position. This will allow the solvent vapors, which are heavier than air, to "fall" away from the cemented innerliner.

Check the cement for dryness by touching the edge of the cemented area with the back of your finger. If the cement feels tacky, then it is dry. If it is not tacky, allow more drying time. Drying time depends on atmospheric conditions like heat and humidity. Hot temperature and high humidity require longer drying time of the cement. If the cement is not completely dry, the repair unit will lift off or blister and cause repair failure. Never use compressed air, hair dryers, heat guns, etc to aid in the drying of the cement.

Avoid any contamination on the bonding layer or the coat applied.

7.3 RELAX THE TIRE BEADS

Relax the beads of the tire from the spreader. During the repair unit application the tire beads must be in a relaxed position.

7.4 INSTALL THE MINICOMBI REPAIR UNIT



ONE PIECE REPAIR ONLY

When installing a KEX Combi-Unit with Pilot Wire repair unit, insert the guide pin and stem through the cemented injury channel, from the inside outwards. Using a pair of pliers pull the guide pin from the outside until it is through the tire and you can see the rubber part of the Combi-Unit. Re-grasp on the rubber portion of the stem and continue pulling the stem until the Combi-Unit base, on the inside of the tire, is flush with the tire and slightly dimples.

The guide pin is only used to get the Combi-Unit through the tire. Once it is through the tire, re-grasp on the rubber portion of the Combi-Unit. If you pull on the guide pin only, it will pull out of the Combi-Init

7.5 INSTALL THE REPAIR UNIT



TWO PIECE REPAIR ONLY

Remove the poly or foil from the back of the repair unit. Without touching the bonding layer, center the repair unit over the injury and apply carefully pushing down on the repair unit with your thumb or fingers.

If using a directional repair unit, make sure to align the arrows in the correct direction.

If using a non-directional or Universal Repair Unit, it does not matter in which direction the repair unit is installed.

7.6 STITCH



After the repair unit is applied, stitch thoroughly from the center outwards. Always start stitching from the center outward to remove any trapped air that may be under the repair unit. Continue several times in different directions over the whole surface of the repair unit to make sure that it is completely stitched to the innerliner and that it adheres securely to the buffed surface area.

Remove the cellophane from the repair unit.

STEP 8 FINISH

8.1 APPLY LINER SEALER



Check the repair area for defects. The finished repair should show no peeling or lifting at the edges, and should neatly cover the repair area.

Apply a generous application of KX-508F Liner Sealer to the entire over-buffed area and the edge of the repair unit. If a Combi-Unit has been used, apply the Liner Sealer to the base of the Combi-Unit and any still exposed buffed areas.

8.2 RE-MOUNT & INFLATE

Safely mount the tire on the rim and inflate to the recommended tire pressure.

8.3 CUT THE STEM & BUFF



Cut the excess stem off or buff flush with the tread of the tire.

DO NOT PULL ON THE STEM WHEN CUTTING IT OFF.

8.4 CHECK FOR LEAKS

Check both beads, the repair and the valve with a leak detector. If the tire continues to leak, it must be dismounted and re-inspected for other damage, and repaired correctly. If the damage is beyond repair limits, the tire should be scrapped.

8.5 BALANCE THE TIRE

Balance the tire. After the final inspection is done, the tire can immediately be put back into operation. The vulcanization between the repair unit and the tire is automatically completed under normal running conditions.

WARNING!

ALWAYS demount the tire from the wheel and complete a **thorough tire and wheel inspection** prior to returning the components to service.

This chart complies with industry standards for chemical repair methods as determined by the tire industry, and include the recommendations of TIA, TRMG & RMA.

This NAIL HOLE REPAIR PROCEDURES Wall Chart is meant for educational purposes only and is not meant to substitute for proper tire repair training.



WARNING: TIRES MUST ALWAYS BE PROPERLY REPAIRED AS DESCRIBED IN THIS CHART. Improperly repaired tires can fail while in service, such as by tread-belt separation and/or detachment, which may result in an accident causing serious personal injury or death.

ONLY PROPERLY TRAINED TIRE REPAIR TECHNICIANS SHOULD PERFORM THESE REPAIRS

DO NOT REPAIR A TIRE WITH THESE TIRE INJURIES:

- Greater than 1/4-inch (6mm) in diameter for passenger and LT, 3/8-inch (10mm) for medium truck
- **○** In the shoulder or sidewall areas
- **♦** In a position that would overlap an existing repair

DO NOT REPAIR A TIRE WITH THESE TIRE CONDITIONS:

- Any conditions shown in the Non-Repairable Tire Conditions box
- ◊ 2/32-inch (3mm) or less remaining in tread depth
- Sead rubber torn down to steel
- Run flat conditions
- O Broken or kinked beads
- O Loose or broken radial body cables on inside shoulder
- ♦ Weather checking beyond 2/32-inch (3mm) deep
- Soft, mushy rubber on inside shoulder
- Sproken or separated belts or tire with exposed fabric
- Liner separations too large for repair

DO NOT REPAIR A TIRE WITH THESE PREVIOUS REPAIRS:

- An existing improper repair
- Nepairs that are outside of the repairable areas
- ♦ Where 3 previous repairs already exist
- 🛇 An existing Non-Industry Standard Repair such as an "On the Wheel Repair / Outside In"
- Repair where a "Tire Sealant" has been used.

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03/19