



Instruction Manual

Lateral Tension System Assembly
MNL-LTS Rev 1.0



About Pro Spot

Pro Spot International specializes in quality welding and repair products for the collision repair industry. Pro Spot owns numerous patents for special welding equipment and applications, and works with the largest auto manufacturers in the world. Pro Spot is a proud 'MADE IN THE USA' manufacturer in Carlsbad, CA. The turnkey facility includes Design, Engineering, Machine and Sheet Metal Shops, Powder Coating, Assembly, Training and Customer Support. The Pro Spot equipment line includes resistance spot welders, aluminum & steel dent repair systems, pulse MIG welders, rivet guns and tools, dust-free sanding systems, fume extraction and more.

Pro Spot Training and Services

Pro Spot provides on-going training to all of our distributors and their technicians, therefore, all owners of Pro Spot products receive complete training first hand. Pro Spot has two ASE certified training programs that are I-CAR Alliance approved. Pro Spot has a fully equipped training facility at their Headquarters in Carlsbad, CA, as well as in Nashville, TN, and Denver, CO, for groups to come in and train on all products. To stay up-to-date, Pro Spot offers their unique My.prospot.com which includes interactive training courses for shops and technicians to access online.

Pro Spot is constantly striving to improve. Whether that means designing innovative equipment, implementing cutting edge technical support or further improving their already extensive training programs, Pro Spot is always looking for ways to better our customer's experiences.



PRO SPOT

QUALITY WELDING SYSTEMS

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TABLE OF CONTENTS

1.0 About LTS	3
1.1 Introduction	3
1.2 Key Features	3
1.3 Applications	3
1.4 Warranty	3
2.0 Models	4
3.0 Components	5
3.1 Components in Standard Version	5
3.2 Components in Deluxe Version	5
4.0 Assembly	6
4.1 Assembly	6
4.2 LTS Features	7
5.0 Dent Repair	8
6.0 Notes	9

1.1 About LTS

The Pro Spot Lateral Tension System (LTS) brings controlled mechanical precision to glue-pull and panel repair applications. Designed for use with glue tabs and adapters, the LTS applies consistent opposing force to relieve stress, reshape panels, and reduce repair time. Available in single push/pull (LTS-SP) and dual push/pull (LTS-DP) configurations, the system delivers unmatched versatility for small to medium panel corrections.

1.2 Key Features

- Single or Dual Action Models – Choose between the LTS-SP for quick single-direction tension or the LTS-DP for balanced opposing push/pulls. Dual pull technology creates more even and consistent tension relief and prevents the tabs from “digging in” creating secondary damage.
- Mechanical Stress Relief Design – Applies controlled lateral force to release panel tension without overstretching or compromising metal integrity.
- Precision Control – Fine-thread adjustment delivers accurate push or pull pressure for delicate or structural areas.
- Modular Adaptability – Compatible with glue-pull tabs and other anchoring systems.
- Fast Setup, Clean Operation – No welding, no sparks, and minimal setup time—ideal for paintless or glue-based repair systems.
- Durable Construction – Engineered aluminum body with reinforced aluminum brackets for long-term shop reliability.
- Compact and Portable – Lightweight, easy to position, and quickly folds away to keep the repair area open and accessible. Comes in two sizes, 36” length and 24” length.

1.3 Applications

- Small to medium panel repair
- Glue pull repair (GPR) and paintless dent repair (PDR)
- Structural tension relief on large panels
- Door, Fender, Roof Skins, and Quarter Panel correction
- Stress relieving during repair



WARNING: This Lateral Tension System is precision-engineered strictly for car body dent repair. It is not designed to bear loads outside of standard cosmetic auto body repair. Do not use this system for lifting, structural frame straightening, or non-automotive applications. Misuse can result in equipment breakage and personal injury.

1.4 Warranty

Coverage is valid for one year from the purchase date. The product shall be free from defects in material and workmanship. This warranty applies only to the original purchaser and is non-transferable. Damage caused by accidents, improper use, or normal wear and tear is not covered.

2.1 Models

Image	Model	Description	Application
	LTS-24-SP	24" Single Push/Pull	Ideal for smaller areas such as fenders, etc.
	LTS-24-SP-DX	24" Single Push/Pull Deluxe Version	Ideal for smaller areas such as fenders, etc. Includes additional attachments.
	LTS-36-SP	36" Single Push/Pull	Ideal for quick tension adjustments and repairs.
	LTS-36-SP-DX	36" Single Push/Pull, Deluxe Version	Ideal for quick tension adjustments and repairs. Includes additional attachments.
	LTS-36-DP	36" Dual Push/Pull	For larger or more complex panels requiring balanced opposing force.
	LTS-36-DP-DX	36" Dual Push/Pull Deluxe Version	For larger or more complex panels requiring balanced opposing force. Includes additional attachments.

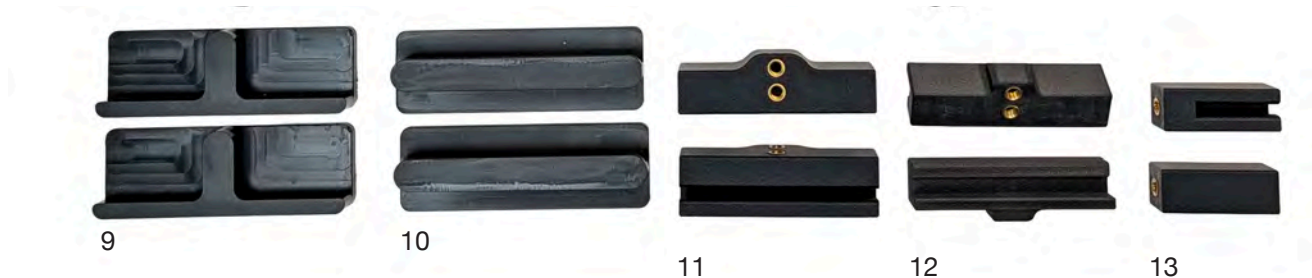
3.1 Components in Standard Version



1. **SA-0918** Rail Assembly, Lateral Tension System, Dual Pull (PB) 1/2 ROD, 36" (**SA-0916** for LTS-24-SP, **SA-0917** for LTS-36-SP)
2. **90-1453** Lanyard, Nylon Strap W/ Split Ring
3. **90-3070** Block, Foot Mounting, LTS
4. **C-09** Latching Snap Hook
5. **51-0246** Thumb Screw 5/16 x 1-3/4" Steel Black Oxide
6. **51-0247** Flat-Head Pin Quick-Release 1/4 x 1-3/8
7. **52-0165** Heavy Duty Suction Cup, 4.5", 100LB Strength
8. **90-3071** Glue Paddle Mount Foot

3.2 Components in Deluxe Version

All Deluxe Kits include components from 3.1 plus additional attachments below:



9. **90-3068** Foot, Glue Perpendicular Mount
10. **90-3069** Foot, Glue Parallel Mount
11. **90-2798** Holder, Parallel Closed Crease Tabs
12. **90-2793** Holder, Perpendicular Crease Tabs
13. **90-2794** Holder, Parallel Crease Tabs

4.1 Assembly

A. Attach the Foot Mounting Block to the Rail Carriage

Align the Block, Foot Mounting (3) with the underside channel of the vertical carriage on the Rail Assembly (1). Insert the Thumb Screw 5/16 x 1-3/4" (5) through the side hole of the vertical carriage support and thread it securely into the mounting block. Repeat this process for the second mounting block on the carriage at the opposite end of the rail.



ASSEMBLY TIP: Ensure the mounting block is aligned flush with the bottom of the carriage bracket before tightening the thumb screw to prevent cross-threading.

B. Connect the Glue Paddle Mount Foot

Position the Foot, Glue Paddle Mount (8) over the previously installed Block, Foot Mounting (3). Align the pin holes of both components, and slide the Flat-Head Quick-Release Pin 1/4 x 1-3/8 (6) straight through the holes to lock the foot assembly in place. Repeat this setup for the second foot on The opposite end of the rail.



ASSEMBLY TIP: The quick-release pin should slide in smoothly without excessive force. If you feel resistance, check that the holes of the mounting block and foot are fully aligned.

C. Prepare the Suction Cup Lanyards

Feed the looped end of the Tool Lanyard, Nylon Strap (2) underneath the metal bar on top of the Heavy Duty Suction Cup (7). Pull the opposite end of the strap (containing the split ring) all the way through the loop, and pull it tight to secure the lanyard to the suction cup with a clean cinch (girth hitch). Repeat this step for the second suction cup.



ASSEMBLY TIP: Pull the cinch tight against the suction cup metal bar to prevent the lanyard from shifting during operation.

D. Clip the Suction Cup Assembly to the Rail

Attach one end of the Latching Snap Hook (4) to the split ring of the Tool Lanyard (2).

Clip the other end of the Snap Hook (4) directly into the integrated D-ring eyelet on the vertical carriage support of the Rail Assembly (1). Repeat this step to secure the second suction cup to the opposite side of the rail.



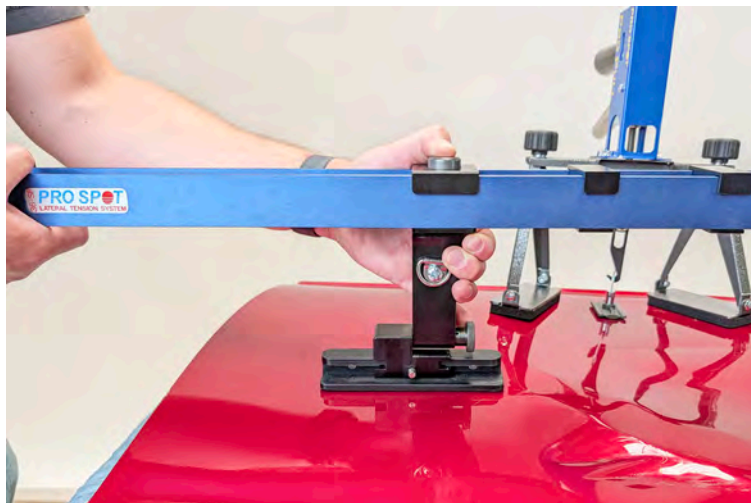
ASSEMBLY TIP: Check that the latch on the snap hook is fully closed and locked onto both the D-ring and the split ring to ensure a secure connection during tensioning.

Lateral Tension Bar is ready to be used.

Note: Use the suction cups to securely mount the LTS when working on vertical panels. For horizontal panels, the suction cups are not required, and the system can be used without them.



4.2 LTS Features



QUICK-RELEASE UNIVERSAL ADJUSTMENT

Integrated push-button on the central LTS leg enables effortless, tool-free repositioning for universal application across all automotive dent sizes and complex panel geometries.



VERSATILE DUAL-DRIVE KNOB

The LTS features a dual-drive knob designed for maximum flexibility. Use the knurled edge for meticulous manual adjustments, or connect your cordless drill to the central 13mm hex drive for rapid high-speed operation.

5.0 Dent Repair with LTS



1. Surface Prep

Thoroughly clean the target repair zone on the vehicle panel with a clean, lint-free rag using 91% isopropyl alcohol to remove dirt and oils.



2. Heating the Panel

Gently warm the repair area with a heat gun to eliminate residual moisture (the temperature should be approximately 100-120° F).



3. Tool Pad Preparation

Replicate the cleaning and heating process on both contact pads of the LTS feet to ensure maximum adhesion.

NOTE: the pads temperature should not exceed 90-100° F.



4. Adhesive Application

Dispense an even layer of hot melt glue across the surface of both mounting pads.



5. Positioning the System

Carefully align and firmly press the LTS assembly onto the panel, bridging the dent.



6. Locking the Mounts

Verify the feet are securely bonded to the panel, then tighten the stabilizing thumb screws to lock the unit in place.



7. Engaging Lateral Tension

Attach a cordless drill to the drive mechanism and slowly operate it to apply outward pulling tension.



8. Final Restoration

The tension successfully draws out the damage, restoring the panel's original geometry.

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