# MODEL 1400 TRUCK/TRACTOR AIR SPOTTER OPERATING INSTRUCTIONS

Your new LINCOLN MODEL 1400 TRUCK/TRACTOR AIR SPOTTER is a new and unique method of utilizing air pressure and electrically produced heat to effect spot or section repairs on tires. You may contact us at 800-221-4109 from 8:00 a.m. through 3:30 p.m. EST Monday through Friday with any questions.

#### TREAD AREA REPAIRS:

- 1. Attach T085 #59 outside contour adapter plate on upper (swivel) heat unit T039. Mount spotter with upper (swivel) heat unit on outside tire, air cylinder (T065) on inside.
- 2. Position upper (swivel) heat unit (T039), with adapter plate, directly over the repair to be cured. Center the adapter plate over the repair as closely as possible.
- 3. Slide telescoping pressure screw (T184) so that it locks into position with air cylinder as close to repair as possible. Rotate hand wheel screw clockwise until cylinder (T065) barely comes into contact with inside of tire. At this point, slightly rotate air cylinder with one hand while tightening hand wheel screw with other hand. This procedure helps guide air unit into proper contour of tire. Be sure unit centered over repair, keeping in mind that both inside and outside heat units must always be used. No need to place Holland cloth or similar material between heat unit and repair, as repair rubber will not stick to silicone pad. Tighten hand wheel screw sufficient enough to bring air unit into firm contact with tire.

Rotate air unit to best match tire contour! Excessive mis-match can result in heat pad being forced out of containment. This should happen, it can result in a blown air seal (T062). No damage should come to heat pad.

4. Connect air hose to pre-set air regulator (T119). Plug <u>BOTH</u> heat unit cords into a 120v or 240v electrical outlet (depending on what voltage you purchased) and the spotter is in operation. Please note that while the silicone rubber heat pad operates at about 300F the wattage output is very low. This necessitates <u>IN EVERY CASE</u> the use of the solid heat unit in conjunction with the silicone unit. It may seem unnecessary at times, but to insure proper cure, <u>ALWAYS</u> plug in <u>BOTH</u> heat units when making either spot or section repairs! Thermocouple tests show that a 1-1/8" deep repair, using 280F 15 minute cure rubber, can be cured in 67 minutes\*\*, starting cold. (Approximately 4 minutes per 1/16" rubber). This could vary with the repair rubber being used and environmental conditions. We recommend using a time factor of 70 minutes for this application to eliminate the possibility of under cure. Silicone rubber heat unit (T051) and regular heat unit (T039) are both pre-set to operate at an average of 270-300F.

NOTE: \*\* The above 67 minute curing time refers to a 1-1/8" repair in a non-steel belted tire. When repairing steel belted tires, we recommend using a low-temp or fast cure repair rubber in addition to allowing 7 minutes per 1/16" repair rubber. Using this method, your curing time would be equivalent to two (2) hours, 6 minutes for a 1-1/8" tread area repair in a steel belted tire. Allow slightly more than seven minutes per 1/16" low-temp rubber for sidewall repairs

5. After cure has been completed, <u>disconnect air supply be fore attempting to remove spotter</u>.

Failure to do this can result in a blown air seal (T062). A coarse thread has been used in the hand wheel screw, making it difficult to loosen when pressure is attached. This should help serve as a signal that air unit is still under pressure.

## SHOULDER AREA REPAIRS:

Attach T081 - #55 outside shoulder contour adapter plate on upper heat unit (T039). Mount spotter with upper heat unit on outside of tire, air unit on inside. Follow instructions #2 through #5 above. NOTE: At present we do not make a shoulder plate that properly contoured to fit the shoulder area of many Michelin and Bridgestone radial truck tires. On these areas the air unit will not seal properly because of mismatch between the outside contour plate and the tire. Page 1 of 2

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## SIDEWALL AREA REPAIRS:

Select a contour plate that best fits inside contour of tire at point of repair. Attach plate to upper heat unit (T039) Mount spotter with air unit on outside of tire, upper heat unit on inside. Follow instructions #2 through #5 above.

## FINAL NOTES:

- 1. Always use an adapter plate on the upper (swivel) heat unit to insure even pressure!
- 2. Always plug BOTH heat units when curing. This is necessary even for spot repairing.

## **OVERVIEW:**

We at LMC Van's Inc. appreciate your selection of our equipment for your shop and hope our quality lives up to your standards. If you have any comments or questions, please feel free to contact us at the toll free number listed at the top of the page. Thank you.