### PART NO. 91040



Instruction Sheet HEAVY DUTY FASTRAX<sup>™</sup> ADJUSTABLE CAMBER / CASTER / TOE GAUGE

This part should only be installed by personnel who have the necessary skill, training and tools to do the job correctly and safely. Incorrect installation can result in personal injury, vehicle damage and / or loss of vehicle control.

Thank you for purchasing the innovative FASTRAX Hands Free Adjustable Camber/Caster Gauge. Your new gauge will now allow you to read accurate alignment angles as you adjust your suspension for optimal tire wear and handling. FASTRAX can be used quickly and accurately in the shop. With the locking screw engaged the tool is designed to be used and "zero set" for level racks or floors or may be re-leveled to any smooth surface.

FASTRAX displays camber angles over four degrees, positive or negative. Camber is the inward (negative) or outward (positive) tilt of the top of the wheel as viewed from the front, FASTRAX(tm) also displays caster angles from four degrees negative to twelve degrees positive. Caster is a front wheel angle only and is viewed from the side. Positive caster is described when the upper ball joint is rearward of the lower ball joint thereby increasing handling stability and the returnability of the steering wheel to center.



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## ASSEMBLY INSTRUCTIONS (Refer to Figure 1)

1. Insert the three 4" Cap Screws from the front of the unit into the 3 holes located at the top and bottom.

2. Slide the three Guide Stud Extensions over the screws, add the three Now Lip Adapters.

3. Using the 7/16" Open End Wrench on the Adapter and the 3/16" Allen Wrench on the cap screws tighten the assembly securely so there is no movement in the Guide Stud Extensions

4. Position Toe Bars (Left and Right) on the clenching studs (located on the bottom outside corners of the unit). Then install Pivot Knobs. Refer to **Figure 1.** 

#### Note: THIS GAUGE IS CALIBRATED. DO NOT DROP OR DAMAGE VIAL BLOCK.

### **USING FASTRAX ON LEVEL SURFACES**

Measuring Camber: Slightly loosen the black clamping knob and rotate the adjusting knob (see *Figure 1*) to lengthen or shorten the tool. FASTRAX adapts to most wheels from twenty one to twenty six inches in diameter. Fit the tool so the guide studs (3) grasp either the inner or outer lip of the wheel rim. Adjust the tool to apply enough pressure for a snug fit and tighten the black clamping knob. In cases that the wheel has no rim or lip to grasp, simply hold the tool to the accessible flat surfaces and read your camber angles or changes.

Measuring Caster: BEFORE checking caster angles, tighten the four sided pivot knob and unscrew the locking pin to allow movement of the vial block. The angled tip of the vial block represents 15 degree angles. To determine Caster: Turn the front wheel "out" fifteen degrees ( turn the front of the wheel away from the body fifteen degrees or until angled tip is parallel with the side of the vehicle). While maintaining this position, readjust the vial block to "zero" on the Caster side of the vial block. Next, turn the wheel back in the opposite direction so that the front of the tire is pointing "in" fifteen degrees (or until the angled tip is parallel with the side of the vehicle). The center of the bubble (on the Caster side) will then display your accurate caster reading.

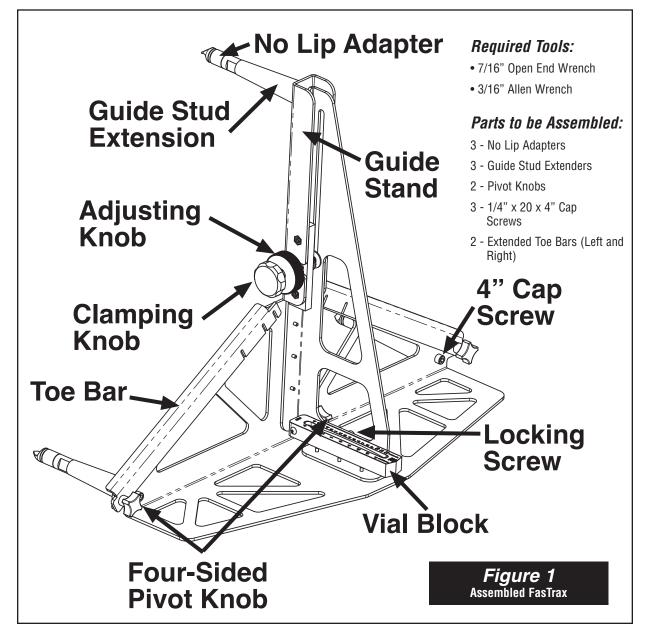
## USING FASTRAX ON UNEVEN SURFACES

The FASTRAX has been "zero set" at the factory with the locking screw in and engaged. If you are using the tool at locations that may not be level, FASTRAX can be reset and "zero set" to adapt to the new location. Unscrew the Locking Screw to disengage the vial block. Place the tool on the ground, FACING THE OPERATOR, next to the tire. Readjust the vial block to ZERO on the Camber scale and tighten the four sided Pivot Knob. Replace the tool onto the wheel for your true angles. REPEAT THIS PROCEDURE TO ZERO CAMBER ON EACH SIDE OF THE VEHICLE.

\*\*\* Positive and negative camber degrees are clearly displayed on the left side of the vial and caster on the right side.

## USING THE FASTRAX TOE BARS

To use the FASTRAX TOE BARS, attach the FASTRAX Camber/Caster Gauge securely to the wheel. Center the steering. Loosen the toe bar clamp knobs and lower the toe bars. Insert the head of your tape measure into one of the slots in the toe bar and stretch the tape measure over to the tire on the opposite side of the vehicle. Select a suitable reference point on the tire (scribe line, wear indicator, plate resting against sidewall, etc.) and record the measurement. Move the tape measure to the same slot on the TOE ADAPTER on the opposite side of the tire, and repeat the procedure. If the



measurement at the front of the tire is smaller than at the rear of the tire, you have a Toe-In condition. If the front measurement is larger than the rear measurement, you have a Toe-Out condition.

After you adjust toe, swing the toe bars up and clamp them in place. Roll the vehicle and settle the suspension. Lower the toe bars, and repeat the measurement procedure to verify your adjustment. To use the **FASTRAX™ TOE ADAPTER**, attach the **FASTRAX** Camber/Caster Gauge securely to the wheel. Center the steering. Loosen the toe bar clamp knobs and lower the toe bars. Insert the head of heavy-duty tape measure (included) into one of the

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slots in the toe bar and stretch the tape measure over to the tire on the opposite side of the vehicle. Select a suitable reference point on the tire (scribe line, wear indicator, plate resting against sidewall, etc.) and record the measurement. Move the tape measure to the same slot on the **TOE ADAPTER** on the opposite side of the tire, and repeat the procedure. If the measurement at the front of the tire is smaller than at the rear of the tire, you have a *Toe-In* condition. If the front measurement is larger than the rear measurement, you have a *Toe-Out* condition.

After you adjust toe, swing the toe bars up and clamp them in place. Roll the vehicle and settle the suspension. Lower the toe bars, and repeat the measurement procedure to verify your adjustment.

Final determination of the suitability of the parts for use contemplated by the buyer is the sole responsibility of the buyer. Specialty Products Company shall not be liable for any special, direct, indirect, incidental, or consequential damages that might be claimed as a result of the failure of any part, including claims for delay, loss of profits or labor. Specialty Products Company shall not be liable for any damage or injury to persons or property resulting from improper installation or misuse of any part subject to this warranty. There are no other warranties expressed or implied extending beyond those set forth above.



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There is no warranty stated or implied due to the inability to monitor the part's modification, installation, and use, except that Specialty Products Company warrants its products to be free from defects in material and workmanship for 90 days after purchase under normal use. In that case, parts returned must be determined by Specialty Products to be defective and Specialty Products's obligations under that warranty are solely limited to repairing or replacing, at its option, any part proven defective.