

Full Contact/Dual Angle Rear Wheel Alignment Shim System for Late Model Chrysler Mini Vans

Installation Instructions:

1. Install alignment equipment and record readings. Note the camber and toe changes needed for correction.
2. Using the shim positioning chart furnished with shim, select the correct side of the chart (one side is for **computerized** four wheel alignment equipment and the other is for **non-computerized** equipment).
3. Select the amount of toe change desired by reading down the toe change column on the left side of the chart.
4. Select the amount of camber change (increase or decrease) from camber change listings across the top of the chart. Next, read down the camber change column and across the toe change column to find the box where the two columns meet.
5. The bold number shown in the upper left corner of the box indicates the correct shim number to use. The words "IN" and "OUT" correspond to the direction the toe will change from the reading you now have. The words "LEFT" and "RIGHT" determine which side of the vehicle you are working on. The number shown is the indexing number for the shim when locating it on the template (See template furnished with shim).

If the box selected is empty, select a nearby box that offers the best possible adjustment. NOTE: Toe adjustment is always more critical than camber.

6. Place shim over template with the notch indexed to the number obtained from the chart (the smooth side faces down). Using provided paint stick, or other suitable marker, mark the full length of each tab segment that corresponds to the mounting bolt pattern and wheel speed sensor hole as indicated on the template. Next, mark only the first half of each tab segment as indicated by the long gray line along top of template.

Note: To maximize surface area and maintain integrity of shim, it is recommended a 1/2" hole cutter be used to bore holes (in place of full tab removal) for hub mounting bolts.

7. When using this method, place previously marked shim on block of wood and (with hole cutter installed in air drill) position centering pilot at first relief line (see figure No. 1). Using moderate pressure, drill 4 holes corresponding to hub mounting bolts. If you are not using a 1/2" hole cutter, simply remove the full tabs that correspond to the hub bolt pattern by using a shim cutter to break tab membrane its full length on either side of tabs to be removed. Grasp the tabs to be removed with the shim cutter and bend downward breaking off each tab at the inner relief line (see figure No. 2).

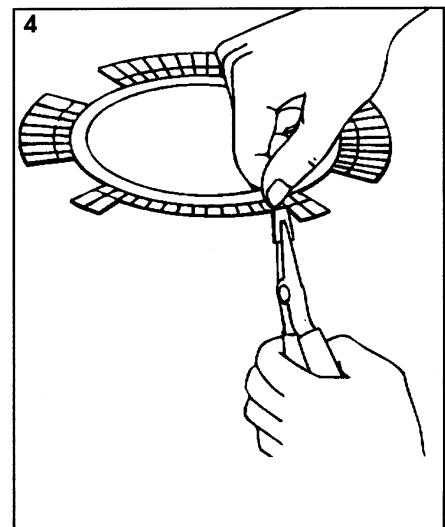
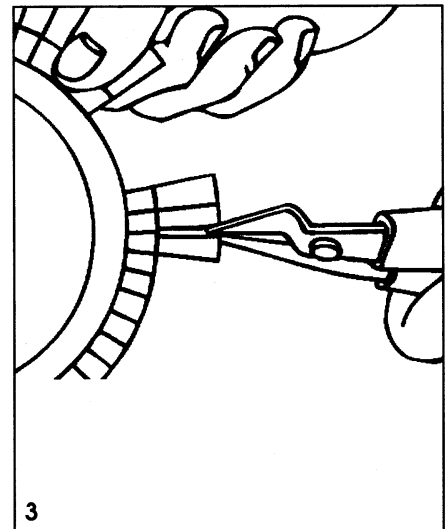
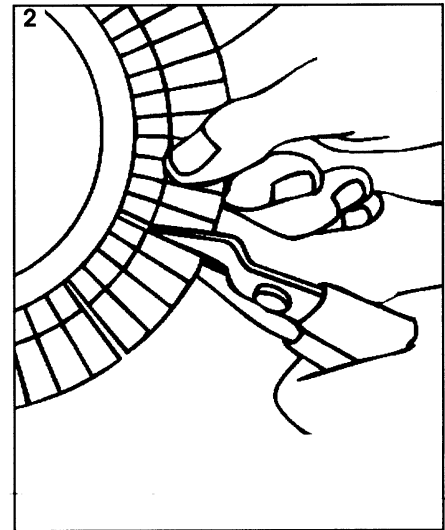
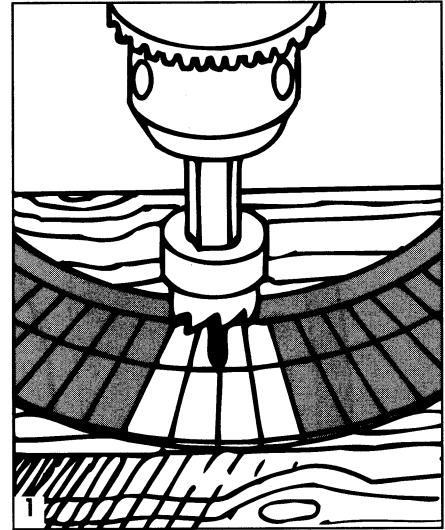
In the same manner, remove the tabs corresponding to wheel-speed sensor.

Next, as indicated by the long gray line on template, remove only the outer half of each tab segment that corresponds to this marking.

NOTE: Nip only the very edge of the slots on either side of the outer tab segments to be removed. This will split the membrane to only the first relief line (see figure No. 3). Next, using a needle nose plier and holding the shim as shown in figure No. 4, grasp tabs and bend downward breaking away.

Installing the Shim

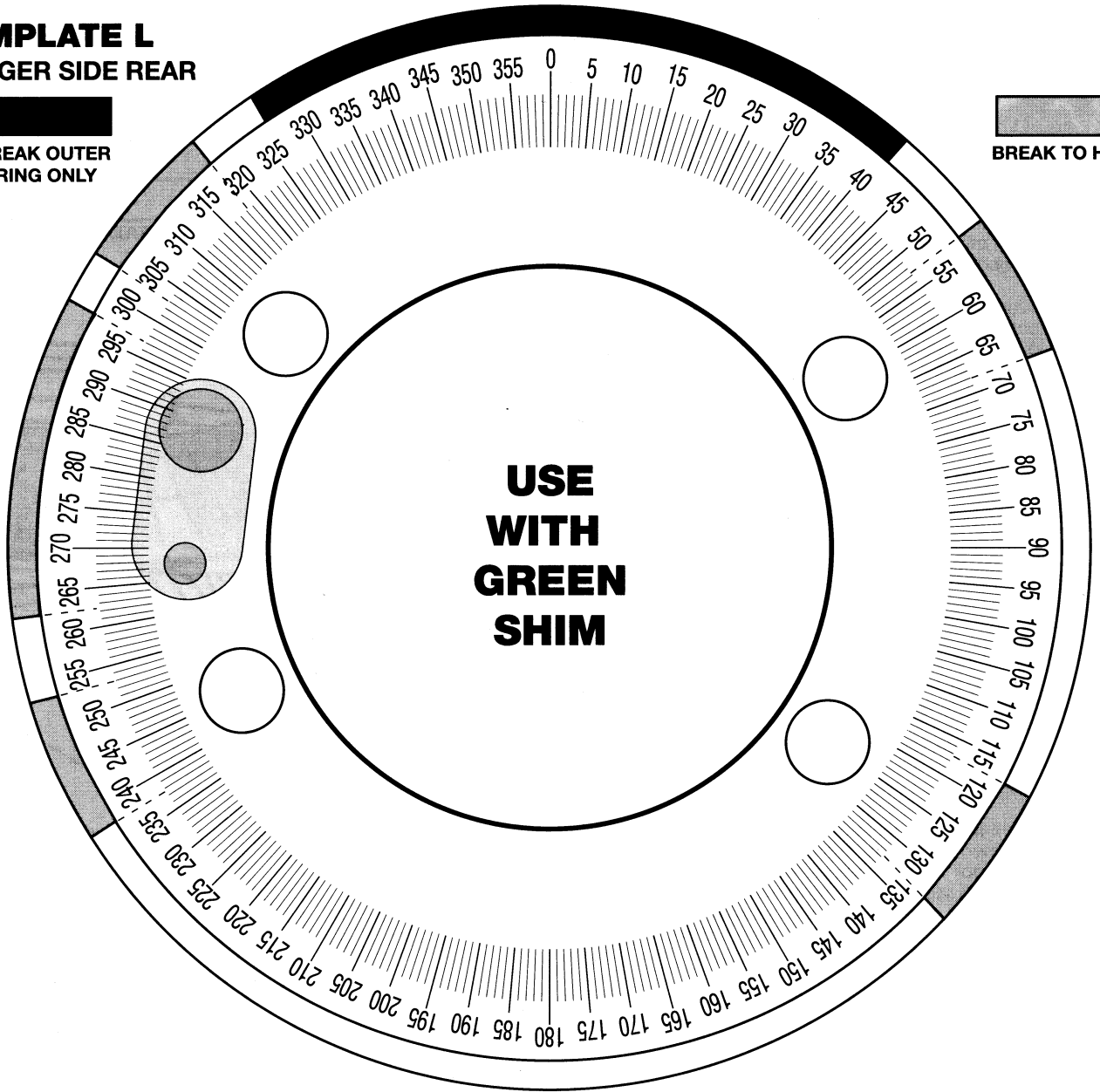
1. Raise and support vehicle in a safe manner. Remove alignment equipment and tire/wheel assembly from vehicle.
2. **IMPORTANT:** To prevent possible "kinking" of brake line during shim installation, first remove both brake line routing clips along axle. Next, from the back side of the axle, remove the rear wheel speed sensor. **CAUTION!** if the speed sensor has seized up, **DO NOT** use a pliers on sensor head in an attempt to remove it. Use a hammer and punch and tap edge of sensor, rocking it from side to side until free from hub and bearing assembly.
3. Remove hub & bearing assembly from vehicle - clean all surfaces and install shim with tabbed side facing out.
4. Replace hub and bearing mounting bolts and torque in a star pattern to 95 ft. lbs. (129 NM.).
5. Install rear wheel speed sensor and torque speed sensor attaching bolt to 105 inch lbs. (12 NM.).
6. Install rear brake drum.
7. Install rear tire wheel assembly and tighten lug nuts to 95 ft. lbs. (129 NM.).
8. Proceed with balance of total 4 wheel alignment and road test vehicle.



TEMPLATE L
PASSENGER SIDE REAR


BREAK OUTER
RING ONLY


BREAK TO HUB



TEMPLATE M
DRIVERS SIDE REAR


BREAK OUTER
RING ONLY


BREAK TO HUB

