

REAR SHIM APPLICATIONS

Application Chart

FULL CONTRACT/DUAL ANGLE REAR SHIM SYSTEM

American Passenger Cars & Vans

Vehicle	Year	Body Type	Shim Series (Color)	Template No.	Torque Ft. Lbs.	Metric (N.m)
Buick (Except Models w/Rear Disc Brakes)						
Century (FWD)	82-96	A	Burgundy	D	45	60
Electra	85-96	C	Burgundy	D	52	70
LaSabre	86-98	H	Burgundy	D	52	70
Park Avenue/Ultra	85-96	C	Burgundy	D	52	70
Rendezvous	2002	B	Burgundy	D1	45	60
Riviera	79-92	E	Burgundy	D	52	70
(Includes Rear Disc Brakes)						
Skyhawk	82-89	J	Gray	C	45	60
Skylark	80-89	X/N	Gray	C	45	60
Somerset	85-90	N	Gray	C	45	60
Cadillac (Except Models w/Rear Disc Brakes)						
Cimarron	82-88	J	Gray	C	45	60
Eldorado	79-85	E	Burgundy	D	52	70
(Includes Rear Disc Brakes)						
Seville	80-85	K	Burgundy	D	52	70
(Includes Rear Disc Brakes)						
Chevrolet (Except Models w/Rear Disc Brakes)						
Beretta/Corsica	87-97	L	Gray	C	37	51
Cavalier	82-02	J	Gray	C	45	60
Celebrity	82-90	A	Burgundy	D	45	60
Citation	80-85	X	Gray	C	45	60
Lumina APV	90-96	U	Burgundy	D	45	60
Nova FWD	85-89	S	Burgundy	D	59	80
Spectrum	85-89	R	Blue	E	41	56
Venture	97-02	U	Burgundy	D1	45	60
Venture Van	97-98	U	Burgundy	D1	63	86
Chrysler & Imperial						
Dynasty (Canada)	91-93	AC	Blue	A	45	60
E-class Exc. Sedan	83-87	E	Blue	A	45	60
Fifth Avenue	90-93	AY	Blue	A	45	60
Imperial	90-93	AY	Blue	A	45	60
Laser	84-86	AG	Blue	A	45	60
LeBaron/GTS	82-85	H	Blue	A	45	60
LeBaron	82-85	AJ	Blue	A	45	60
IwnCity Wagon						
New Yorker-Exc. Fifth Avenue	83-93	AC	Blue	A	45	60
TC by Maserati	90-91	AQ	Blue	A	45	60
Town & Country-Van	96-02	NS	Green	L & M	95	130
Town & Country-Van	90-95	White	B	80	109	
Dodge						
400	82-83	K	Blue	A	45	60
600	83-88	E	Blue	A	45	60
Aries	81-89	K	Blue	A	45	60
Caravan Van	96-02	NS	Green	L & M	95	130
Caravan Van	84-95	AS	White	B	80	109
Charger	83-87	L	Blue	H	45	61
Daytona	84-93	L	Blue	A	45	61
Dynasty	88-93	AC	Blue	A	80	108
Lancer	85-89	H	Blue	A	45	61
Lancer	90-92	H	Blue	E	47	64
Monaco	78-90	L	Blue	H	45	61
Omni/024	82-84	L	Blue	H	45	61
Rampage	87-94	P	Blue	A	45	61
Shadow	87-94	P	Blue	A	45	61
Spirit	89-95	A	Blue	A	45	61
Eagle						
Premiere	88-92	BB	Blue	E	47	64
Medallion	88-89	BC	Blue	E	47	64
Ford						
Aspire	94-97		Blue	J	45	61
Festiva	88-93		Blue	J	45	61
Windstar	95-02		White	K	50-68	68-92
Geo (Except Models w/Rear Disc Brakes)						
Spectrum	89	R	Blue	E	59	79
Prism	89-97	S	Gray	G	59	79
Mercury						
Villager	93-02		White	I	52	71
NOTE: Hub & Bearing Assembly Nut 145/210 Ft. Lbs. - 196/284 (N.m.)						
Nissan						
Quest	93-02		White	I	52	71
NOTE: Hub & Bearing Assembly Nut 145/210 Ft. Lbs. - 196/284 (N.m.)						
Oldsmobile (Except Models w/Rear Disc Brakes)						
Achieva	92-98	N	Gray	C	43	58
Calais	85-91	N	Gray	C	43	58
Cutlass/Ciera & Cruiser	86-96	A	Burgundy	D	60	81
Delta 88 & Royale FWD	86-98	H	Burgundy	D	60	81
Firenza	82-88	J	Gray	C	39	53
98 Regency	85-96	C	Burgundy	D	52	70
Omega	80-84	X	Gray	C	43	58
Silhouette	97-98	U	Burgundy	D1	63	85
Silhouette	89-02	U	Burgundy	D	45	60
Toronado	79-85	E	Burgundy	D	52	71
(Includes Rear Disc Brakes)						
Plymouth						
Acclaim	89-95	A	Blue	A	45	61
Caravelle	85-88	E	Blue	A	45	61
Horizon/TC-3	78-90	L	Blue	H	45	61
Reliant	84-89	K	Blue	A	45	61
Reliant	81-83	K	Blue	A	45	61
Scamp	82-83	L	Blue	H	45	61
Sundance	87-95	P	Blue	A	45	61
Turismo	83-87	L	Blue	H	45	61
Voyager Van	96-02	NS	Green	L & M	95	129
Voyager Van	84-95	A	white	B	80	109

American Passenger Cars & Vans (Continued)

Vehicle	Year	Body Type	Shim Series (Color)	Template No.	Torque Ft. Lbs.	Metric (N.m)
Pontiac (Except models w/Rear Disk Brakes)						
6000	82-91	A	Burgundy	D	45	60
Bonneville	87-98	H	Burgundy	D	52	70
Grand Am	85-98	N	Gray	C	43	58
Phoenix	80-84	X	Gray	C	43	58
SSE	87-97	H	Burgundy	D	52	70
Sunbird/J2000	82-94	J	Gray	C	39	53
Sunburst	85-88	R	Blue	C	43	58
Sunfire	95-98	J	Gray	C	44	60
Tempest (Canada)	88-95	L	Gray	C	39	53
Trans Sport/Mont.	97-02	U	Burgundy	D1	63	86
Trans Sport	89-98	U	Burgundy	D	45	60
Saturn						
L	2001-02	L	Grey	-	37	50

Import Car Vehicles

Vehicle	Year	Body Type	Shim Series (Color)	Template No.	Torque Ft. Lbs.	Metric (N.m)
Acura						
Integra	86-89		Gray	C	40	54
Audi (Except Models w/Rear Disc Brakes)						
80	88-92 (Exc. Quattro)		Blue	A	22	30
90	88-95 (Exc. Quattro)		Blue	A	22	30
100/200 (2 WD)	89-94 (Exc. Quattro)		White	B	22	30
4000 (2 WD)	80-87		Blue	H	44	58
5000 (2 WD)	78-88 (Exc. Quattro)		White	B	22	30
Fox	73-79		Blue	A	44	58
GT Cope	83-87		Blue	A	44	58
Honda						
CRX	84-87		Gray	C	40	54
Civic	80-87		Gray	C	40	54
(Hatchback & Sedan)						
Civic Wagon	84-87		Gray	C	40	54
Prelude	79-82		White	F	40	54
Isuzu						
I-Mark FWD	85-90		Blue	E	41	56
Toyota						
Camry	83-98		Burgundy	D	59	79
Corolla FWD	88-98		Burgundy	D	59	80
Corolla FWD	84-87		Burgundy	D	59	80
FX-16	87-88		Burgundy	D	59	80
Tercel (Exc/SW)	83-86		Gray	G	29-39	39-53
Volkswagen (Except Models w/Rear Disc Brakes)						
Cabrio	95-02		Blue	A	44	60
Cabriolet	85-93		Blue	A	44	60
Corrado	89-94		Blue	A	44	60
Dasher	74-81		Blue	A	44	60
Fox	87-94		Blue	A	44	60
Golf & GTI	85-98		Blue	A	44	60
Jetta	80-98		Blue	A	44	60
Passat	90-97		Blue	A	44	60
Quantum	82-88		Blue	A	44	60
Rabbit	75-84		Blue	A	44	60
Rabbit Pickup	80-83		Blue	A	44	60
Scirocco	74-91		Blue	A	44	60

NOTE: Because this shim system is so versatile, you will find many other applications can be covered. If no bolt pattern template exists, simply calculate your toe and camber changes as usual, determine proper position number from chart, select appropriate shim style and number. Place shim on any proper size template. Rotate shim to previously calculated number, mark the "0" on 12: position on shim and use spindle from vehicle to mark bolt pattern.

NOTE: WHEN USING "DUAL CENTER' BLUE SHIM ON THE FOLLOWING APPLICATIONS:

**CHEVROLET - SPECTRUM
DODGE - MONACO
EAGLE - PREMIER, MEDALLIAN
ISUZU - I-MARK**

BREAK OUT SHIM CENTER AS ILLUSTRATED IN FIGURES 1 AND 2

Figure 1



Using a small side cutter of special "Micro - Shear", cut membrane (4 places).

Figure 2



Using a small plier, break out each section as shown.

INSTRUCTIONS
FULL CONTACT/DUAL ANGLE
REAR WHEEL ALIGNMENT SHIM SYSTEM

PRIOR TO HOOKING UP THE ALIGNMENT EQUIPMENT INSPECT THE REAR SPINDLE MOUNTING AREA FOR ANY EXISTING ALIGNMENT SHIMS. IF ANY SHIMS ARE PRESENT THEY MUST BE REMOVED TO ESTABLISH A BASE READING.

USE THE VEHICLE APPLICATION GUIDE SHOWN ON THE CHART TO SELECT WHICH SERIES/COLOR OF SHIM TO USE.

CAMBER CHANGE DESIRED						
Toe Change Column	1 1/2° 1.500	1 3/8° 1.375	1 1/4° 1.250	1 1/8° 1.125	1° 1.000	7/8° .875
0 .0000	6 Left Side IN 180 180 OUT 180 180		5 Left Side IN 180 180 OUT 180 180		4 Left Side IN 180 180 OUT 180 180	
1/32" .03125	6 Left Side IN 180 175 OUT 175 180		5 Left Side IN 180 175 OUT 175 180		4 Left Side IN 180 175 OUT 175 180	
1/16" .0625	6 Left Side IN 180 170 OUT 170 180		5 Left Side IN 180 170 OUT 170 180		4 Left Side IN 180 170 OUT 170 180	
3/32" .0937	6 Left Side IN 180 172 OUT 172 180		5 Left Side IN 180 172 OUT 172 180		4 Left Side IN 180 172 OUT 172 180	
1/8" .1250	6 Left Side IN 180 170 OUT 170 180		5 Left Side IN 180 170 OUT 170 180		4 Left Side IN 180 170 OUT 170 180	

Figure 1

1. Take and record rear alignment readings. Note the camber and toe changes desired.
2. Select the correct side of the shim **Application/Position Chart** (Included with shim). One side is for **computerized** four wheel alignment equipment and the other is for **(Non-Computerized)** equipment. **(Fig. 1)**

The difference is that when using non computerized equipment you must measure the diameter of the tires and select toe change desired from proper tire diameter column. Tire diameter is not measured when using electronic 4 wheel computerized equipment.

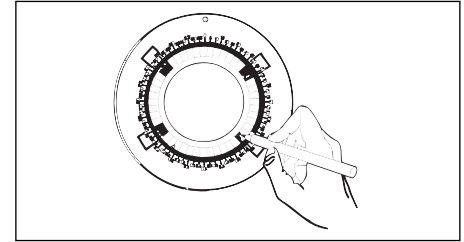


Figure 2

3. Select the amount of toe change desired (From appropriate chart) 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 listing 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. **(Fig. 1)**

Use the information shown in the box to obtain the correct shim number to use (Bold number in the upper left corner of the box). Determine if you are working on the right or left side and if you want to change toe inward or outward from the reading you now have. The number shown is the indexing number for the shim when locating it on the template. (See template furnished with shims).

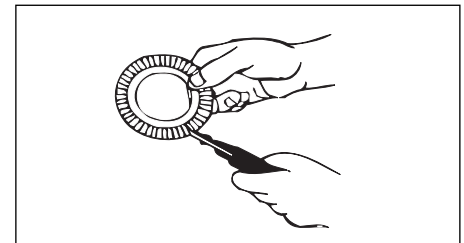


Figure 3

5. Select correct template and place shim over template with the notch indexed to the location number obtained from the chart. The serrated side of the shim faces up.
6. Select the mounting bolt pattern from the template (Included with shim) and mark the tabs on the shim which are to be removed to mount the shim **(Fig. 2)**

Mark a line on the shim at the 0 degree position of the template. This is the top position of the shim when it is installed.

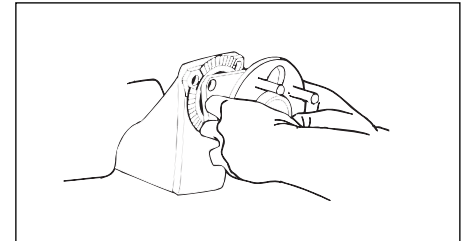


Figure 4

7. Remove the shim from template and using a side cutter, nip the very edge of the slots on either side of the tabs you wish to remove. (this will split the membrane) Next, grasp the tabs with the side cutter and bend **downward** to break tabs at the relief line causing them to neatly separate from shim body. **(Fig. 3)**
8. Remove the spindle or hub from the vehicle, clean all surfaces and install the shim with the top reference mark directly at 12:00 position and the serrations facing out (toward you) **(Figure 4)**
9. Torque hub mounting bolts to specifications, complete front alignment and road test vehicle.

NOTE: A FINE TIPPED PAINT PEN WORKS BEST FOR MARKING OF BOLT BREAK OUT PATTERNS AND "0" DEGREE TOP REFERENCES.