REAR SHIM APPLICATIONS Application Chart

FULL CONTRACT/DUAL ANGLE REAR SHIM SYSTEM

American Passenger Cars & Vans

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Vehicle	Year	Body Type	Shim Series (Color)	Template No.	Torque Ft. Lbs.	Metric (N.m)
Buick (Except					45	
Century (FWD) Electra	82-96 85-96	A C H C B E	Burgundy Burgundy	D D	45 52	60 70
LaSabre	86-98	H	Burgundy	D	52 52	70
Park Avenue/Ultra	85-96	C	Burgundy	D	52 45	70
Rendezvous Riviera	2002 79-92	F	Burgundy Burgundy	D1 D	45 52	60 70
(Includes Rear Disc	Brakes)	-				
Skyhawk Skylark	82-89 80-89	X/N	Gray	CCC	45 45	60 60
Somerset	85-90	N	Gray Gray		45 45	60
Cadillac (Exce			ear Disc Brake			
Cimarron	82-88	J	Gray	C	45	60
Eldorado (Includes Rear Disc	79-85	Ë	Burgundy	D	52	70
Seville	80-85	K	Bugundy	D	52	70
(Includes Rear Disc			Daganay		02	
Chevrolet (Exc	cept Mo	dels w/F	Rear Disc Brak	es)		
Beretta/Corsica	87-97	L	Gray	С	37	51
Cavalier	82-02 82-90	Ϋ́	Gray	CCDCD	45 45	60
Celebrity Citation	80-85	X	Burgundy Gray	Ç.	45 45	60 60
Lumina APV	90-96	Û	Burgundy	Ď	45	60
Nova FWD	85-89	S	Burgundý Blue	Ē	59	80
Spectrum Venture	85-89 97-02	J A X U S R U	Blue Burgundy	E D1	41 45	56 60
Venture Van	97-02	Ü	Burgundy	Ď1	63	86
Chrysler & Im			. ე	-		
Dynasty (Canada)	91-93	AC	Blue	А	45	60
E-class Exe. Sedan	83-87	Е	Blue	Α	45	60
Fifth Avenue	90-93 90-93	AY AY	Blue Blue	A A	45 45	60 60
Imperial Laser	84-86	AY AG	Blue	Α	45 45	60
LeBaron/GTS	82-95	Н	Blue	Α	45	60
LeBaron TwnCity Wagon	82-85	AJ	Blue	А	45	60
TwnCity Wagon New Yorker-	83-93	AC	Blue	Α	45	60
Exc. Fifth Avenue						
TC by Maserati	90-91	AQ NS	Blue	A	45	60
Town & Country- Van	96-02	NS	Green	L & M	95	130
Town & Country-	90-95	White	В	80	109	
Van						
Dodge						
400	82-83	Ķ	Blue	A	45	60
600 Aries	83-88 81-89	K E K NS	Blue Blue	A A	45 45	60 60
Caravan Van	96-02	NS.	Green	L & M	45 95	130
Caravan Van	84-95	AS	White	R	80	109
Charger	83-87 84-93	Ĺ	Blue	H A	45 45	61 61
Daytona Dynasty	84-93 88-93	L G AC	Blue Blue	Α	45 80	61 108
Lancer	85-89	H	Blue	Â	45	61
Monaco	90-92	H B L	Blue	A E H	47	64
Omni/024 Rampage	78-90 82-84 87-94	L L	Blue Blue	H H	45 45	61 61
Shadow	87-94	Р	Blue	Α	45	61
Spirit	89-95	Ä	Blue	Á	45	61
Eagle						
Premiere	88-92	BB	Blue	E E	47	64
Medallion	88-89	BC	Blue	E	47	64
Ford						
Aspire	94-97		Blue	J	45	61
Festiva Windstar	88-93 95-02		Blue White	J K	45 50-68	61 68-92
Geo (Except N	lodels w	/Rear Г	Disc Brakes)	^	JU-00	00-97
Spectrum	89	R	Blue	F	59	79
Prism	89-97	R S	Gray	E G	59	79 79
Mercury				-		-
Villager	93-02		White		52	71
NOTE: Hub & Bearing	Assembly N	Nut 145/210) Ft. Lbs 196/284 (l			
Nissan						
Quest	93-02		White	1	52	71
	Assembly N) Ft. Lbs 196/284 (
Oldsmobile (E	xcept M		/Rear Disc Bra	akes)		
Achieva	92-98 85-91 86-96	N N	Gray	Č	43 43	58
Calais	85-91		Grav	C C D	43	58
Cutlass/Ciera & Cruiser	op-96	А	Burgundy	Ŋ	60	81
Delta 88 &	86-98	Н	Burgundy	D	60	81
_ Royale FWD						
Firenza 98 Regency	82-88 85-96	J C X U F	Gray Burgundy	C	39 52 43 63 45	53 70
98 Regency Omega	80-84	X	Gray	D C	43	70 58
Silhouette	80-84 97-98	Û	Burgundy	D1	63	85
Silhouette	89-02	μ̈	Burğundy	D	45	60
Toronado (Includes Rear Disc	79-85 : Brakes)	E	Burğundy	D	52	71
1	Dianos					
lymouth	00		6			
Acclaim	89-95	A	Blue	A	45	61
Caravelle	85-88	E	Blue	A	45 45	61 61
Horizon/TC-3 Reliant	78-90 84-80	L K	Blue Blue	H A	45 45	61 61
Reliant Reliant	84-89 81-83	K K	Blue Blue	A A	45	וס
Reliant Scamp	81-83 82-83	K L	Blue	H	45	61
Sundance	87-95	P	Blue	A	45	61
Turismo	83-87	Ĺ	Blue	Ĥ	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 (Exce	pt models	s w/Rea	r Disk Brakes	s)		
6000 Bonneville Grand Am Phoenix SSE Sunbird/J2000 Sunburst Sunfire Tempest (Canada) Trans Sport/Mont. Trans Sport/Mont.	82-91 87-98 85-98 80-97 82-94 85-88 95-98 88-95 97-02 89-98	A H N X H J R J L U U	Burgundy Burgundy Gray Gray Burgundy Gray Blue Gray Gray Burgundy Burgundy	DDCCDCECCD1	45 52 43 43 52 39 43 43 439 63 45	60 70 58 58 70 53 58 60 53 86 60
Saturn						
L	2001-02	L	Grey	-	37	50

Import Car Vehicles

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

- 1. Take and record rear alignment readingts. Note the camber and toe changes desired.
- 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.

- **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).

- **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.

- 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.

CAMBER CHANGE DESIRED							
Toe Change Column	1 1/2°	13/80	11/40	11/8°	1 ° 1.000	7/8 ° .875	
.0000	6 Len (Right 6N 180 180 6NT 180 180		5 Left Fight (M 180 180 OUT 180 180		4 Leh (Right JH 180 180 out 180 180		
1/32" .03125		6 Len (Right IN . 183 177 OUT 177 183		5 Left Agni IN 183 177 Out 177 183		4 Len Right IN 184 176 DUT 176 184	
1/16" .0625		6 Left Right IN 185 175 OUT 175 185		5 Left Rott BM 186 174 BM 174 186		4 Left Supht 8N 187 173 out 175 167	
3/32 " .0937		6 Left Right 8N 187 173 OUT 173 187		5 Len Right IN 185 171 OUT 171 189		4 Len Regist IN 191 189 OUT 169 191	
1/8"		6 Let Rg11 IN 190 170 OUT 170 190		5 Left Right IN 192 168 OUT 166 192		4 Len Right IN 195 165 OUT 165 195	

Figure 1

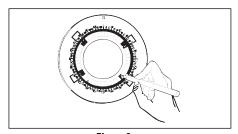


Figure 2

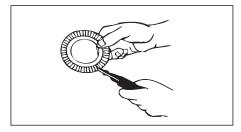


Figure 3



Figure 4