

# FOR USE WITH ELECTRONIC COMPUTERIZED 4-WHEEL ALIGNMENT EQUIPMENT WITH TOE MEASUREMENTS READ IN DEGREES OR INCHES

**TOE SETTING IS THE MOST CRITICAL!**  
 1) SELECT DESIRED TOE CHANGE  
 2) MOVE ACROSS TO DESIRED  
 CAMBER CHANGE OR CLOSEST  
 CAMBER SELECTION.

## C A M B E R C H A N G E

POSITIVE

NEGATIVE

Toe Change Inches	Toe Change Degrees	1.50	1.38	1.25	1.13	1.00	.88	.75	.63	.50	.38	.25	.13	.00	.13	.25	.38	.50	.63	.75	.88	1.00	1.13	1.25	1.38	1.50	
		1-1/2°	1-3/8°	1-1/4°	1-1/8°	1°	7/8°	3/4°	5/8°	1/2°	3/8°	1/4°	1/8°	0°	1/8°	1/4°	3/8°	1/2°	5/8°	3/4°	7/8°	1°	1-1/8°	1-1/4°	1-3/8°	1-1/2°	
.00 0	00°	IN 24 336 OUT 336 24	IN 34 326 OUT 326 34	IN 40 320 OUT 320 40	IN 46 314 OUT 314 46	IN 52 308 OUT 308 52	IN 58 302 OUT 302 58	IN 62 298 OUT 298 62	IN 68 292 OUT 292 68	IN 72 288 OUT 288 72	IN 76 284 OUT 284 76	IN 82 278 OUT 278 82	IN 86 274 OUT 274 86	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	IN 180 350 OUT 350 180	
.03 1/32"	.06°	IN 26 338 OUT 338 26	IN 37 329 OUT 329 37	IN 43 323 OUT 323 43	IN 49 317 OUT 317 49	IN 56 312 OUT 312 56	IN 62 306 OUT 306 62	IN 67 303 OUT 303 67	IN 74 298 OUT 298 74	IN 79 295 OUT 295 79	IN 85 293 OUT 293 85	IN 98 294 OUT 294 98	IN 117 305 OUT 305 117	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178	IN 178 2 OUT 2 178
.06 1/16"	.12°	IN 29 341 OUT 341 29	IN 37 333 OUT 333 37	IN 46 326 OUT 326 46	IN 52 320 OUT 320 52	IN 59 315 OUT 315 59	IN 66 310 OUT 310 66	IN 71 307 OUT 307 71	IN 80 304 OUT 304 80	IN 86 302 OUT 302 86	IN 94 302 OUT 302 94	IN 106 306 OUT 306 106	IN 129 321 OUT 321 129	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176	IN 176 4 OUT 4 176
.09 3/32"	.19°	IN 29 345 OUT 345 29	IN 40 336 OUT 336 40	IN 46 330 OUT 330 46	IN 55 323 OUT 323 55	IN 63 319 OUT 319 63	IN 68 316 OUT 316 68	IN 76 312 OUT 312 76	IN 82 310 OUT 310 82	IN 89 309 OUT 309 89	IN 104 312 OUT 312 104	IN 113 317 OUT 317 113	IN 138 334 OUT 334 138	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174	IN 174 6 OUT 6 174
.12 1/8"	.25°	IN 31 347 OUT 347 31	IN 42 338 OUT 338 42	IN 49 333 OUT 333 49	IN 59 327 OUT 327 59	IN 64 324 OUT 324 64	IN 72 320 OUT 320 72	IN 81 317 OUT 317 81	IN 88 316 OUT 316 88	IN 97 317 OUT 317 97	IN 108 320 OUT 320 108	IN 123 327 OUT 327 123	IN 142 342 OUT 342 142	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172	IN 172 8 OUT 8 172
.16 5/32"	.32°	IN 32 352 OUT 352 32	IN 43 343 OUT 343 43	IN 52 336 OUT 336 52	IN 59 331 OUT 331 59	IN 67 327 OUT 327 67	IN 76 324 OUT 324 76	IN 82 322 OUT 322 82	IN 89 321 OUT 321 89	IN 103 323 OUT 323 103	IN 110 326 OUT 326 110	IN 127 335 OUT 335 127	IN 145 349 OUT 349 145	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168	IN 168 12 OUT 12 168
.19 3/16"	.38°	IN 34 354 OUT 354 34	IN 45 345 OUT 345 45	IN 55 339 OUT 339 55	IN 62 334 OUT 334 62	IN 71 331 OUT 331 71	IN 77 329 OUT 329 77	IN 87 327 OUT 327 87	IN 95 327 OUT 327 95	IN 106 330 OUT 330 106	IN 117 333 OUT 333 117	IN 130 342 OUT 342 130	IN 147 355 OUT 355 147	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166	IN 166 14 OUT 14 166
.22 7/32"	.44°	IN 34 358 OUT 358 34	IN 44 352 OUT 352 44	IN 56 344 OUT 344 56	IN 63 339 OUT 339 63	IN 72 336 OUT 336 72	IN 81 333 OUT 333 81	IN 88 332 OUT 332 88	IN 97 333 OUT 333 97	IN 107 335 OUT 335 107	IN 120 340 OUT 340 120	IN 132 348 OUT 348 132	IN 148 0 OUT 0 148	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164	IN 164 16 OUT 16 164
.25 1/4"	.50°	IN 32 4 OUT 4 32	IN 46 354 OUT 354 46	IN 58 346 OUT 346 58	IN 66 342 OUT 342 66	IN 75 339 OUT 339 75	IN 82 338 OUT 338 82	IN 89 337 OUT 337 89	IN 98 338 OUT 338 98	IN 109 341 OUT 341 109	IN 122 346 OUT 346 122	IN 133 353 OUT 353 133	IN 148 4 OUT 4 148	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162	IN 162 18 OUT 18 162
.28 9/32"	.57°	IN 30 10 OUT 10 30	IN 46 358 OUT 358 46	IN 58 350 OUT 350 58	IN 66 346 OUT 346 66	IN 75 343 OUT 343 75	IN 83 343 OUT 343 83	IN 90 342 OUT 342 90	IN 103 343 OUT 343 103	IN 109 345 OUT 345 109	IN 123 351 OUT 351 123	IN 134 358 OUT 358 134	IN 148 10 OUT 10 148	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160	IN 160 20 OUT 20 160
.31 5/16"	.63°	IN 24 20 OUT 20 24	IN 46 358 OUT 358 46	IN 59 355 OUT 355 59	IN 67 351 OUT 351 67	IN 76 348 OUT 348 76	IN 86 346 OUT 346 86	IN 94 346 OUT 346 94	IN 103 347 OUT 347 103	IN 110 350 OUT 350 110	IN 123 356 OUT 356 123	IN 134 2 OUT 2 134	IN 147 20 OUT 20 147	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158	IN 158 22 OUT 22 158
.34 11/32"	.70°	IN 46 6 OUT 6 46	IN 59 359 OUT 359 59	IN 67 355 OUT 355 67	IN 77 353 OUT 353 77	IN 87 351 OUT 351 87	IN 95 351 OUT 351 95	IN 104 352 OUT 352 104	IN 111 355 OUT 355 111	IN 125 1 OUT 1 125	IN 135 7 OUT 7 135	IN 144 16 OUT 16 144	IN 156 24 OUT 24 156	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164	IN 164 36 OUT 36 164
.37 3/8"	.74°	IN 47 11 OUT 11 47	IN 59 3 OUT 3 59	IN 68 0 OUT 0 68	IN 77 357 OUT 357 77	IN 87 355 OUT 355 87	IN 96 355 OUT 355 96	IN 105 357 OUT 357 105	IN 111 359 OUT 359 111	IN 125 5 OUT 5 125	IN 135 11 OUT 11 135	IN 142 18 OUT 18 142	IN 152 28 OUT 28 152	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165	IN 165 40 OUT 40 165
.41 13/32"	.83°	IN 45 17 OUT 17 45	IN 57 9 OUT 9 57	IN 68 4 OUT 4 68	IN 77 1 OUT 1 77	IN 87 359 OUT 359 87	IN 95 359 OUT 359 95	IN 105 1 OUT 1 105	IN 112 4 OUT 4 112	IN 121 9 OUT 9 121	IN 131 15 OUT 15 131	IN 141 21 OUT 21 141	IN 150 30 OUT 30 150	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159	IN 159 39 OUT 39 159
.44 7/16"	.90°	IN 41 25 OUT 25 41	IN 57 13 OUT 13 57	IN 68 8 OUT 8 68	IN 77 5 OUT 5 77	IN 86 5 OUT 5 86	IN 96 4 OUT 4 96	IN 102 6 OUT 6 102	IN 112 8 OUT 8 112	IN 121 13 OUT 13 121	IN 130 18 OUT 18 130	IN 140 24 OUT 24 140	IN 148 32 OUT 32 148	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156	IN 156 40 OUT 40 156
.47 15/32"	.95°	IN 35 35 OUT 35 35	IN 55 19 OUT 19 55	IN 68 12 OUT 12 68	IN 75 11 OUT 11 75	IN 85 9 OUT 9 85	IN 96 8 OUT 8 96	IN 102 10 OUT 10 102	IN 113 13 OUT 13 113	IN 120 16 OUT 16 120	IN 129 21 OUT 21 129	IN 136 28 OUT 28 136	IN 146 34 OUT 34 146	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152	IN 152 44 OUT 44 152
.50 1/2"	.99°	IN 51 27 OUT 27 51	IN 66 18 OUT 18 66	IN 75 15 OUT 15 75	IN 85 13 OUT 13 85	IN 93 13 OUT 13 93	IN 102 14 OUT 14 102	IN 109 17 OUT 17 109	IN 120 20 OUT 20 120	IN 126 26 OUT 26 126	IN 135 31 OUT 31 135	IN 142 38 OUT 38 142	IN 149 45 OUT 45 149	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154	IN 154 54 OUT 54 154
.53 17/32"	1.09°	IN 44 36 OUT 36 44	IN 63 23 OUT 23 63	IN 75 19 OUT 19 75	IN 85 17 OUT 17 85	IN 93 17 OUT 17 93	IN 102 18 OUT 18 102	IN 108 20 OUT 20 108	IN 116 24 OUT 24 116	IN 124 28 OUT 28 124	IN 134 34 OUT 34 134	IN 140 40 OUT 40 140	IN 146 46 OUT 46 146	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152	IN 152 56 OUT 56 152
.56 9/16"	1.15°	IN 59 31 OUT 31 59	IN 72 24 OUT 24 72	IN 82 22 OUT 22 82	IN 90 22 OUT 22 90	IN 98 22 OUT 22 98	IN 109 25 OUT 25 109	IN 116 28 OUT 28 116	IN 123 31 OUT 31 123	IN 130 38 OUT 38 130	IN 136 44 OUT 44 136	IN 142 50 OUT 50 142	IN 149 57 OUT 57 149	IN 154 64 OUT 64 154	IN 154 64 OUT 64 154	IN 154 64 OUT 64 154	IN 154 64 OUT 64 154	IN 154 64 OUT 64 15									



# FOR USE WITH ELECTRONIC COMPUTERIZED 4-WHEEL ALIGNMENT EQUIPMENT WITH TOE MEASUREMENTS READ IN DEGREES OR INCHES

**TOE SETTING IS THE MOST CRITICAL!**  
 1) SELECT DESIRED TOE CHANGE  
 2) MOVE ACROSS TO DESIRED  
 CAMBER CHANGE OR CLOSEST  
 CAMBER SELECTION.

## C A M B E R C H A N G E

### POSITIVE

### NEGATIVE

Toe Change Inches	Toe Change Degrees	1.50 1-1/2°	1.38 1-3/8°	1.25 1-1/4°	1.13 1-1/8°	1.00 1°	.88 7/8°	.75 3/4°	.63 5/8°	.50 1/2°	.38 3/8°	.25 1/4°	.13 1/8°	.00 0°	.13 1/8°	.25 1/4°	.38 3/8°	.50 1/2°	.63 5/8°	.75 3/4°	.88 7/8°	1.00 1°	1.13 1-1/8°	1.25 1-1/4°	1.38 1-3/8°	1.50 1-1/2°
.00 0	.00	IN 24 336 OUT	IN 34 326 OUT	IN 40 320 OUT	IN 46 314 OUT	IN 52 308 OUT	IN 58 302 OUT	IN 62 298 OUT	IN 68 292 OUT	IN 72 288 OUT	IN 76 284 OUT	IN 82 278 OUT	IN 86 274 OUT	IN 90 270 OUT	IN 94 266 OUT	IN 98 262 OUT	IN 104 256 OUT	IN 108 252 OUT	IN 112 248 OUT	IN 118 242 OUT	IN 122 238 OUT	IN 128 232 OUT	IN 134 226 OUT	IN 140 220 OUT	IN 146 214 OUT	IN 152 208 OUT
.03 1/32"	.06	IN 334 22 OUT 26 338	IN 323 31 OUT 37 329	IN 317 37 OUT 43 323	IN 311 43 OUT 49 317	IN 304 348 OUT 56 312	IN 298 54 OUT 62 306	IN 293 57 OUT 67 303	IN 286 62 OUT 74 298	IN 281 65 OUT 79 295	IN 275 67 OUT 85 293	IN 262 66 OUT 98 294	IN 243 55 OUT 117 305	IN 182 358 OUT 178 2	IN 125 297 OUT 63 235	IN 114 278 OUT 82 246	IN 113 265 OUT 95 247	IN 115 259 OUT 101 245	IN 118 254 OUT 106 242	IN 118 247 OUT 113 237	IN 123 247 OUT 118 234	IN 126 242 OUT 124 228	IN 132 236 OUT 131 223	IN 137 229 OUT 143 217	IN 143 223 OUT 154 202	IN 154 206 OUT 161 187
.06 1/16"	.12	IN 331 19 OUT 29 341	IN 323 27 OUT 37 333	IN 314 34 OUT 46 326	IN 308 40 OUT 52 320	IN 301 45 OUT 59 315	IN 294 50 OUT 66 310	IN 289 53 OUT 71 307	IN 280 56 OUT 80 304	IN 274 58 OUT 86 302	IN 266 58 OUT 94 302	IN 254 54 OUT 106 306	IN 231 39 OUT 129 321	IN 184 356 OUT 176 4	IN 141 309 OUT 51 219	IN 126 286 OUT 74 234	IN 122 274 OUT 86 239	IN 122 266 OUT 94 238	IN 124 260 OUT 100 236	IN 127 251 OUT 109 233	IN 130 246 OUT 114 230	IN 135 239 OUT 121 225	IN 140 232 OUT 128 220	IN 146 226 OUT 134 214	IN 153 217 OUT 143 207	IN 161 209 OUT 151 199
.09 3/32"	.19	IN 331 15 OUT 29 345	IN 320 24 OUT 40 336	IN 314 30 OUT 46 330	IN 305 37 OUT 55 323	IN 297 41 OUT 63 319	IN 292 44 OUT 68 316	IN 284 48 OUT 76 312	IN 278 50 OUT 82 310	IN 271 51 OUT 89 309	IN 256 48 OUT 104 312	IN 247 43 OUT 113 317	IN 222 26 OUT 138 334	IN 186 354 OUT 174 6	IN 154 318 OUT 42 206	IN 137 293 OUT 67 223	IN 132 284 OUT 76 228	IN 129 269 OUT 91 231	IN 130 262 OUT 98 230	IN 132 256 OUT 104 228	IN 136 248 OUT 112 224	IN 139 243 OUT 117 221	IN 143 235 OUT 125 217	IN 150 228 OUT 134 210	IN 156 220 OUT 140 204	IN 165 209 OUT 151 195
.12 1/8"	.25	IN 329 13 OUT 31 347	IN 316 22 OUT 42 338	IN 311 27 OUT 49 333	IN 301 33 OUT 59 327	IN 296 36 OUT 64 324	IN 288 40 OUT 72 320	IN 279 43 OUT 81 317	IN 272 44 OUT 88 316	IN 263 43 OUT 97 317	IN 252 40 OUT 108 320	IN 237 33 OUT 123 327	IN 218 18 OUT 142 342	IN 188 352 OUT 172 8	IN 148 39 OUT 39 198	IN 147 303 OUT 57 213	IN 140 288 OUT 72 220	IN 137 277 OUT 83 223	IN 136 268 OUT 92 224	IN 137 261 OUT 99 223	IN 140 252 OUT 106 220	IN 144 244 OUT 116 216	IN 147 239 OUT 121 213	IN 153 229 OUT 131 207	IN 158 222 OUT 138 202	IN 167 211 OUT 149 193
.16 5/32"	.32	IN 328 8 OUT 32 352	IN 317 17 OUT 43 343	IN 308 24 OUT 52 336	IN 301 29 OUT 59 331	IN 293 33 OUT 67 327	IN 284 36 OUT 76 324	IN 278 38 OUT 82 322	IN 271 39 OUT 89 321	IN 257 37 OUT 103 323	IN 250 34 OUT 110 326	IN 233 25 OUT 127 335	IN 215 11 OUT 145 349	IN 192 348 OUT 168 12	IN 169 325 OUT 35 191	IN 155 307 OUT 53 205	IN 146 290 OUT 70 214	IN 143 283 OUT 77 217	IN 141 269 OUT 81 219	IN 142 262 OUT 98 218	IN 144 256 OUT 104 216	IN 147 247 OUT 113 213	IN 151 239 OUT 121 209	IN 156 232 OUT 128 204	IN 163 223 OUT 137 197	IN 172 212 OUT 148 188
.19 3/16"	.38	IN 326 6 OUT 34 354	IN 315 15 OUT 45 345	IN 305 21 OUT 55 339	IN 298 26 OUT 62 334	IN 289 29 OUT 71 331	IN 283 31 OUT 77 329	IN 273 33 OUT 87 327	IN 265 33 OUT 95 327	IN 254 30 OUT 106 330	IN 243 27 OUT 117 333	IN 230 18 OUT 130 342	IN 213 5 OUT 147 355	IN 194 346 OUT 166 14	IN 175 327 OUT 33 185	IN 162 310 OUT 50 198	IN 153 297 OUT 63 207	IN 150 286 OUT 74 210	IN 147 275 OUT 85 213	IN 147 267 OUT 93 213	IN 149 257 OUT 103 211	IN 151 251 OUT 109 209	IN 154 242 OUT 118 206	IN 161 235 OUT 125 201	IN 165 225 OUT 135 195	IN 174 214 OUT 146 186
.22 7/32"	.44	IN 326 2 OUT 34 358	IN 316 8 OUT 44 352	IN 304 16 OUT 56 344	IN 297 21 OUT 63 339	IN 288 24 OUT 72 336	IN 279 27 OUT 81 333	IN 272 28 OUT 88 332	IN 263 27 OUT 97 333	IN 253 25 OUT 120 340	IN 240 20 OUT 132 348	IN 228 12 OUT 148 0	IN 212 0 OUT 164 16	IN 196 344 OUT 148 0	IN 180 328 OUT 32 180	IN 168 312 OUT 48 192	IN 160 300 OUT 60 200	IN 155 287 OUT 73 205	IN 153 277 OUT 83 207	IN 152 268 OUT 92 208	IN 153 261 OUT 99 207	IN 156 252 OUT 108 204	IN 159 243 OUT 117 201	IN 164 236 OUT 124 196	IN 170 226 OUT 134 190	IN 178 214 OUT 146 182
.25 1/4"	.50	IN 326 356 OUT 32 4	IN 314 6 OUT 46 354	IN 302 14 OUT 58 346	IN 294 18 OUT 66 342	IN 285 21 OUT 75 339	IN 278 22 OUT 82 338	IN 271 23 OUT 89 337	IN 262 22 OUT 98 338	IN 251 19 OUT 109 341	IN 238 14 OUT 122 346	IN 227 7 OUT 133 353	IN 212 356 OUT 146 4	IN 198 342 OUT 162 18	IN 184 328 OUT 32 176	IN 173 313 OUT 47 187	IN 166 302 OUT 58 194	IN 161 289 OUT 71 199	IN 159 278 OUT 82 202	IN 157 269 OUT 91 203	IN 158 262 OUT 98 202	IN 159 255 OUT 105 201	IN 162 246 OUT 114 198	IN 166 238 OUT 122 194	IN 174 228 OUT 134 186	IN 184 212 OUT 148 176
.28 9/32"	.57	IN 330 350 OUT 30 10	IN 314 2 OUT 46 358	IN 302 10 OUT 58 350	IN 294 14 OUT 66 346	IN 285 17 OUT 75 343	IN 277 17 OUT 83 343	IN 270 18 OUT 90 342	IN 257 17 OUT 103 343	IN 251 15 OUT 109 345	IN 237 9 OUT 123 351	IN 226 2 OUT 134 358	IN 212 350 OUT 148 10	IN 200 340 OUT 160 20	IN 188 328 OUT 32 172	IN 178 314 OUT 46 182	IN 171 303 OUT 57 189	IN 165 289 OUT 71 195	IN 163 283 OUT 77 197	IN 162 270 OUT 90 198	IN 163 263 OUT 97 197	IN 163 255 OUT 105 197	IN 166 246 OUT 114 194	IN 170 238 OUT 122 190	IN 178 226 OUT 134 182	IN 190 210 OUT 150 170
.31 5/16"	.63	IN 336 340 OUT 24 20	IN 314 358 OUT 46 2	IN 301 5 OUT 59 355	IN 293 9 OUT 67 351	IN 284 12 OUT 76 348	IN 274 14 OUT 86 346	IN 266 14 OUT 94 346	IN 257 13 OUT 103 347	IN 250 10 OUT 110 350	IN 237 5 OUT 123 355	IN 226 358 OUT 134 2	IN 213 340 OUT 147 20	IN 202 338 OUT 158 22	IN 191 327 OUT 33 169	IN 182 314 OUT 46 178	IN 175 303 OUT 57 185	IN 170 290 OUT 70 190	IN 167 283 OUT 77 193	IN 166 274 OUT 86 194	IN 166 266 OUT 94 194	IN 168 256 OUT 104 192	IN 171 247 OUT 113 189	IN 182 226 OUT 121 185	IN 192 206 OUT 134 178	IN 200 204 OUT 156 160
.34 11/32"	.70	IN 314 354 OUT 46 6	IN 301 1 OUT 59 359	IN 293 5 OUT 67 355	IN 283 7 OUT 77 353	IN 273 9 OUT 87 351	IN 265 9 OUT 95 351	IN 256 8 OUT 104 352	IN 249 5 OUT 111 355	IN 235 359 OUT 125 1	IN 225 353 OUT 135 7	IN 216 344 OUT 144 16	IN 204 336 OUT 156 24	IN 196 324 OUT 36 164	IN 187 315 OUT 45 173	IN 181 305 OUT 55 179	IN 175 291 OUT 69 185	IN 172 284 OUT 76 188	IN 171 275 OUT 85 189	IN 171 267 OUT 93 189	IN 173 257 OUT 103 187	IN 175 247 OUT 113 185	IN 179 239 OUT 121 181	IN 186 226 OUT 134 174		
.37 3/8"	.74	IN 313 349 OUT 47 11	IN 301 357 OUT 59 3	IN 292 0 OUT 68 0	IN 283 3 OUT 77 357	IN 273 5 OUT 87 355	IN 265 5 OUT 95 355	IN 255 3 OUT 105 357	IN 249 1 OUT 111 359	IN 235 355 OUT 125 5	IN 225 349 OUT 135 11	IN 218 342 OUT 142 18	IN 208 332 OUT 152 28	IN 198 322 OUT 36 162	IN 191 315 OUT 45 169	IN 185 305 OUT 55 175	IN 179 291 OUT 69 181	IN 177 285 OUT 75 183	IN 175 275 OUT 85 185	IN 175 267 OUT 93 185	IN 177 257 OUT 103 183	IN 180 248 OUT 112 180	IN 183 239 OUT 121 177	IN 191 227 OUT 133 169		
.41 13/32"	.83	IN 315 343 OUT 45 17	IN 303 351 OUT 57 9	IN 292 356 OUT 68 4	IN 283 359 OUT 77 1	IN 273 1 OUT 87 359	IN 265 1 OUT 95 359	IN 255 359 OUT 105 1	IN 248 356 OUT 112 4	IN 239 351 OUT 120 9	IN 229 345 OUT 131 15	IN 219 339 OUT 141 21	IN 210 330 OUT 150 30	IN 201 321 OUT 159 39	IN 195 311 OUT 45 165	IN 189 301 OUT 59 171	IN 184 292 OUT 68 178	IN 181 285 OUT 75 179	IN 179 275 OUT 85 181	IN 179 267 OUT 93 181	IN 181 257 OUT 103 179	IN 184 248 OUT 112 176	IN 189 237 OUT 123 171	IN 197 225 OUT 135 163		
.44 7/16"	.90	IN 319 335 OUT 41 25	IN 303 347 OUT 57 13	IN 292 352 OUT 68 8	IN 283 355 OUT 77 5	IN 273 5 OUT 85 5	IN 264 356 OUT 96 4	IN 259 354 OUT 102 6	IN 248 352 OUT 112 8	IN 239 347 OUT 121 13	IN 230 342 OUT 130 18	IN 220 336 OUT 140 24	IN 212 328 OUT 148 32	IN 204 320 OUT 156 40	IN 198 310 OUT 50 162	IN 193 301 OUT 59 167	IN 188 292 OUT 68 172	IN 186 282 OUT 78 174	IN 185 278 OUT 84 176	IN 185 269 OUT 95 175	IN 185 261 OUT 103 175	IN 188 249 OUT 112 172	IN 193 237 OUT 123 167	IN 205 221 OUT 139 155		
.47 15/32"	.95	IN 325 325 OUT 35 35	IN 305 341 OUT 55 19	IN 292 348 OUT 68 12	IN 285 349 OUT 75 11	IN 275 351 OUT 85 9	IN 264 352 OUT 96 8	IN 258 350 OUT 102 10	IN 247 347 OUT 113 13	IN 240 344 OUT 120 16	IN 231 339 OUT 129 21	IN 224 332 OUT 136 28	IN 214 326 OUT 146 34	IN 208 316 OUT 44 152	IN 201 309 OUT 51 159	IN 196 308 OUT 60 164	IN 193 293 OUT 67 167	IN 190 282 OUT 78 170	IN 188 276 OUT 84 172	IN 189 265 OUT 95 171	IN 191 255 OUT 105 169	IN 192 248 OUT 112 168	IN 199 235 OUT 125 161	IN 215 215 OUT 145 145		
.50 1/2"	.99	IN 309 333 OUT 51 27	IN 294 342 OUT 66 18	IN 285 345 OUT 75 15	IN 275 347 OUT 85 13	IN 267 347 OUT 93 13	IN 258 346 OUT 102 14	IN 251 343 OUT 109 17	IN 240 340 OUT 120 20	IN 234 334 OUT 126 26	IN 225 329 OUT 135 31	IN 218 322 OUT 142 38	IN 211 315 OUT 45 149	IN 206 306 OUT 54 154	IN 200 300 OUT 60 160	IN 197 289 OUT 71 163	IN 194 282 OUT 78 166	IN 193 273 OUT 87 167	IN 193 265 OUT 95 167	IN 195 255 OUT 105 165	IN 198 246 OUT 114 162	IN 207 231 OUT 129 153				
.53 17/32"	1.09	IN 316 324 OUT 44 36	IN 297 337 OUT 63 23	IN 285 341 OUT 75 19	IN 275 343 OUT 85 17	IN 267 343 OUT 93 17	IN 258 342 OUT 102 18	IN 252 340 OUT 108 20	IN 244 336 OUT 116 24	IN 236 332 OUT 124 28	IN 226 326 OUT 134 34	IN 220 320 OUT 140 40	IN 214 314 OUT 46 146	IN 208 304 OUT 56 152	IN 204 296 OUT 64 156	IN 200 288 OUT 72 160	IN 198 282 OUT 78 162	IN 197 273 OUT 87 163	IN 197 265 OUT 95 163	IN 199 255 OUT 105 161	IN 203 243 OUT 117 157	IN 216 224 OUT 136 144				
.56 9/16"	1.15	IN 301 329 OUT 59 31	IN 288 336 OUT 72 24	IN 278 338 OUT 82 22	IN 270 338 OUT 90 22	IN 262 338 OUT 98 22	IN 251 335 OUT 109 25	IN 244 332 OUT 116 28	IN 237 329 OUT 123 31	IN 230 322 OUT 130 36	IN 224 316 OUT 136 44	IN 218 310 OUT 50 142	IN 211 303 OUT 57 149	IN 208 296 OUT 64 152	IN 205 289 OUT 71 155	IN 202 278 OUT 82 158	IN 202 270 OUT 90 158	IN 202 262 OUT 98 158	IN 204 252 OUT 108 156	IN 211 239 OUT 121 149		</				