

INSTALLING AND ADJUSTING HYDRAULIC LIFTERS

FOLLOW THE FOLLOWING POINTS

1.

Do not wash in any solvent. Wipe the parts off with a lint free towel.
2.

Use 10W30 oil and lube the O.D of the body and wheel.
3.

Make sure the lifter-to-bore clearance on cast iron blocks is .0015" to .0017".
On Aluminium blocks that oil the lifter (LS Series), the clearance is .0012" to .0014".
Both of these measrements are at 21 Deg C.
The Aluminium block will have a higher rate of expansion, that is why the clearance is tighter.

ADJUSTING THE ZERO-LASH SETTING OF THE LIFTER:

1.

We like using the firing order to set the valves. Put the engine on #1 Cylinder.
2.

What we want is the Intake and Exhaust to be on the base circle of the camshaft
3.

Adjust the rocker until the pushrod just starts to get tight while taking the pushrod and rolling it between your thumb and finger. Once you feel drag, this is what we call Zero-Lash
4.

You are now ready to tighten down on the adjuster using the following method:

a)

It's important to know the thread pitch, in threads per inch, of the adjuster nut becuse one complete turn of the nut will move a distance of one complete thread. Therefore, verify the thread pitch of the adjuster nut as racing rocker manufacturers use different nut sizes and thread pitches.

b)

If your adjuster nut is 7/16" x 20 threads per inch, then divide 1 inch by 20 threads per inch. One complete turn down on a 7/16" by adjuster nut will move .050"

c)

Next, Divide .050" by 4 to calculate the distance for a quarter-turn of the adjuster nut (.05" / 4 = .0125").

d)

For a 3/8" x 24 adjuster nut, the calculations are:
1" / 24 TPI = .042" per full turn
and .042" / 4 = .0105" per quarter turn.

e)

Use the chart above to determine how many quarter-turns to tighten the adjuster nut after Zero-Lash:
- | Block and Head Type | Sizes |
|------------------------------------|----------------|
| Cast Iron block and Cast Iron Head | .020" to .025" |
| Cast Iron Block and Aluminium Head | .030" to .035" |
| Aluminium Block and Aluminium Head | .045" to .050" |
5.

Repeat these adjustments for each cylinder running through the firing order.
- ## TYPES OF MOREL HYDRAULIC LIFTERS:
- ### 1. Street Performance
- The street performance hydraulic lifters are made from a cold formed body with a clipped axle and have 6500RPM capability. These lifters have a .120" plunger travel and have an 80% fill rate with the test oil. The lifter wheels in this series are .700" diameter.
- #### Recommended Spring Pressure:
- 100-180lbs Seat Pressure
280-380lbs Open Pressure
- ### 2. Hi-RPM
- The HI-RPM hydraulic lifters are made from a billet body and have a clipped axle. These lifters have 7000+ RPM capability with .120" plunger travel and have an 80% fill rate with the test oil. These lifters have a .750" diameter roller wheel for the .842" & .875" diameter lifters and a .810" diameter roller wheel for the .903" diameter lifters. The internal tolerances are much tighter in this series.
- #### Do not use engine oil heavier than 5w40.
- #### Recommended Spring Pressure:
- 100-225lbs Seat Pressure
350-550lbs Open Pressure
- # PERFORMANCE VALVE SPRING APPLICATION
- Crow Cams valve springs are made from aircraft quality alloy steels to give the best performance and reliability at a reasonable price. They are specially designed to suit our high lift, high acceleration profiles.
- The following is a guide to popular applications, if your spring is not listed please see the spring specification chart on page xx or contact our technical staff.
- Making correct measurements before assembly is critical as many variables are present to catch the unwary.**
- Note Dual Valve Springs may require head machining to fit. Dual Valve Springs measured with .100" Thick Retainer.**
- | Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|--|------------------|--------------------|-------------------|-----------|--------------|-----------------|-----------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|
| CHEV. BIG BLOCK 396 - 454 Standard retainers have large step which may bind on damper. | | | | | | | | | | | | | | |
| 7737-16 | 1.880" | 90 | 270 | .520" | 1.310" | 12700 | 12708 | 1.510" | 1.086" | 0.965" | 1 + Damper | L | 2.220" | 345 |
| 7437-16 ^D | 1.880" | 118 | 300 | .780" | 1.050" | 12700 | 12708 | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 |
| 4910-16 ^D | 1.900"/2.000" | 240 / 190 | 520 / 460 | .700" | 1.100" | 12710 / TR405 | 12708 | 1.550" | 1.150" | 0.800" | 2 | R | 2.466" | 555 |
| 8937-16 ^D | 1.900" | 131 | 325 | .650" | 1.180" | 12710 | 12708 | 1.530" | 1.120" | 0.760" | 2 + Damper | L | 2.335" | 390 |
| 9731-16 | 1.950" | 130 | 295 | .720" | 1.180" | 12700 | 12708 | 1.550" | 1.125" | 1.000" | 1 + Damper | L | 2.460" | 320 |
| 8337-16 ^D | 1.980" | 130 | 305 | .725" | 1.114" | 12710 | 12708 | 1.515" | 1.120" | 0.800" | 2 | L | 2.350" | 360 |
| 9936-16 ^D | 1.980" | 143 | 345 | .800" | 1.180" | 12710 | 12708 | 1.539" | 1.120" | 0.765" | 2 + Damper | L | 2.460" | 400 |
| 9950-16 ^D | 1.980" | 165 | 410 | .760" | 1.150" | 12710 | 12708 | 1.540" | 1.130" | 0.725" | 2 + Damper | L | 2.430" | 485 |
| 9945-16 ^D | 1.980" | 138 | 370 | .760" | 1.200" | 12710 | 12708 | 1.560" | 1.010" | 0.690" | 2 + Damper | L | 2.475" | 460 |
| 4920-16 ^D | 2.000" | 267 | 574 | .770" | 1.180" | 12710 / TR405 | 12708 | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 |
| CHEV. SMALL BLOCK V8 | | | | | | | | | | | | | | |
| 4931-16 | 1.700" | 85 | 250 | .550" | 1.140" | 11707 | 11701 | 1.230" | 0.880" | 0.770" | 1 + Damper | R | 2.020" | 275 |
| 4828-16 | 1.700" | 110 | 285 | .570" | 1.080" | 11707 | 11701 | 1.250" | 0.870" | | 1 | R | 2.030" | 360 |
| 4833-16 | 1.700" | 110 | 320 | .570" | 1.080" | 11707 | 11701 | 1.255" | 0.868" | 0.780" | 1 + Damper | R | 2.030" | 415 |
| 4843-16 | 1.700" | 120 | 320 | .490" | 1.160" | 11707 | 11701 | 1.265" | 0.875" | 0.760" | 1 + Damper | R | 2.015" | 411 |
| 7328-16 ^D | 1.700" | 140 | 285 | .690" | .960" | 11700 | 11701 | 1.430" | 1.080" | 0.810" | 2 | L | 2.372" | 280 |
| 4438-16 ^D | 1.800" | 155 | 330 | .650" | 1.050" | 11717 | 4133 | 1.290" | 0.948" | 0.690" | 2 | R | 2.345" | 365 |
| 7333-16 ^D | 1.800" | 130 | 295 | .650" | 1.050" | 13101/11710 | 11101 / 4134 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| 7331-16 ^D | 1.800" | 160 | 330 | .700" | 1.100" | 13101/11710 | 11101 / 4134-16 | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 330 |
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Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (Lb/in)
CHEV. SMALL BLOCK V8 ..CONTINUED														
4845-16	1.850"	95	285	.660"	1.140"	11717	4134	1.260"	0.880"	0.785"	1 + Damper	R	2.130"	380
7342-16^o	1.850"	125	320	.650"	1.060"	13101/11710	11101 / 4134	1.460"	1.080"	.800"	2	R	2.240"	390
7437-16^o	1.850"	130	315	.750"	1.050"	13101/11710	11101 / 4134	1.465"	1.080"	0.800"	2	L	2.260"	380
4910-16^o	1.900"/2.000"	240 / 190	520 / 460	.700"	1.100"	13101 / TR405	11101	1.550"	1.150"	0.800"	2	R	2.460"	555
4920-16^o	2.000"	267	574	.770"	1.180"	13101 / TR405	11101	1.560"	1.110"	0.780"	2	R	2.475"	620
CHRYSLER SMALL BLOCK 273 - 360 V8														
5091-16	1.687"	90	270	.542"	1.095"	12700	12108	1.500"	1.080"	0.990"	1 + Damper	R	1.960"	355
7736-16	1.687"	120	294	.510"	1.100"	12700	12108	1.440"	1.040"	0.950"	1 + Damper	L	2.100"	345
7331-16^o	1.687"	200	370	.700"	1.100"	12700	12108	1.450"	1.090"	0.800"	2	L	2.350"	330
CHRYSLER 300C V8 5.7 - 6.1														
4435-16	1.800"	135	314	.600"	1.150"	Stock	Stock	1.060"TOP 1.200"BOT	0.640"TOP 0.800"BOT		1 Conical	R	2.220"	350
CHRYSLER SLANT 6 225														
5091-12	1.650"	100	285	.542"	1.095"	Std.	Std.	1.500"	1.080"	0.990	1 + Damper	R	1.960"	355
CHRYSLER HEMI 6														
5091-12	1.687"	90	270	.542"	1.095"	12700	12102-12	1.500"	1.080"	0.990	1 + Damper	R	1.960"	355
7736-12	1.687"	120	295	.510"	1.100"	12700	12102-12	1.440"	1.040"	0.950"	1 + Damper	L	2.100"	345
DATSUN L SERIES ENGINES, 1600-2000 4CYL / 2400-2800 6CYL														
5840-8^o	1.580"	90	265	.670"	0.860"	Std.	Std.	1.335"	1.000"	0.720"	2	R	1.930"	345
FORD BA 6 CYLINDER														
1808-24	1.480"	90	200	.550"	.880"	Std	Std	0.970"TOP 1.060"BOT	0.650"TOP 0.727"BOT		1 Conical	R	1.970"	220
1809-24	1.520"	105	205	.570"	.900"	10703	Std	0.970"TOP 1.060"BOT	0.650"TOP 0.740"BOT		1 Conical	R	2.180"	205
FORD BA V8 290KW / XR8 FROM MAY 2008														
1808-32	1.490"	88	188	.550"	.880"	Std	Std	0.970"TOP 1.060"BOT	0.650"TOP 0.727"BOT		1 Conical	R	1.970"	220
1809-32	1.590"	90	190	.570"	.900"	10705	Std	0.970"TOP 1.060"BOT	0.650"TOP 0.740"BOT		1 Conical	R	2.180"	205
1804-32	1.590"	120	260	.520"	1.020"	Std	Std;	0.995"TOP 1.060"BOT	0.635"TOP 0.700"BOT		1 Conical	R	2.060"	280

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (Lb/in)
FORD FALCON CROSSFLOW														
7739-12	1.760"	115	290	.600"	1.120"	12706-12	11704-12	1.420"	1.015"	0.925"	1 + Damper	R	2.160"	340
7333-12^o	1.820"	124	285	.650"	1.050"	12700-12	11704-12	1.450"	1.090"	0.820"	2	L	2.345"	330
FORD FALCON AU NB. Step to be M/C off head for double springs														
7739-12	1.820"	100	270	.600"	1.120"	11750-12	Standard	1.420"	1.015"	0.925"	1 + Damper	R	2.160"	340
7332-12^o	1.820"	98	255	.650"	1.050"	11740-12	Standard	1.445"	1.090"	0.800"	2	L	2.335"	315
7333-12^o	1.820"	124	285	.650"	1.050"	11740-12	Standard	1.450"	1.090"	0.820"	2	L	2.345"	330
FORD FALCON PRE-CROSSFLOW														
1025-12	1.550"	125	260	.520"	1.030"	11700-12	11703-12	1.370"	1.005"		1	L	2.110"	265
FORD 4.6 V8 4 VALVE														
1832-32	1.470"	95	265	.500"	.900"	N/A	Standard	0.970"TOP 1.105"BOT	0.585"TOP 0.745"BOT		1 Conical	R	1.810"	310
FORD FALCON 6 OHC TO EL NB. Step to be M/C off head for double springs														
7739-12	1.820"	100	270	.600	1.120"	12700-12	11704-12	1.420"	1.015"	0.925"	1 + Damper	R	2.160"	340
7332-12^o	1.820"	98	255	.650"	1.050"	12700-12	11704-12	1.445"	1.090"	0.800"	2	L	2.335"	315
7333-12^o	1.820"	124	285	.650"	1.050"	12700-12	11704-12	1.450"	1.090"	0.820"	2	L	2.345"	330
FORD 998 - 1600 PUSHROD ENGINE NB. Step to be M/C off head for double springs														
2834-8^o	1.280"	115	270 @.400	.430"	.830"	Standard	Standard	1.140"	0.830"	0.612"	2	R	1.650"	390
2836-8^o	1.280"	130	290 @.400	.460"	.830"	Standard	Standard	1.140"	0.830"	0.612"	2	R	1.650"	355
2021-8	1.289"	75	195	.489"	.750"	Standard	Standard	1.140"	0.830"		1	R	1.650"	235
FORD 2000 OHC														
4250-8^o	1.417"	72	195	.550"	.805"	Standard	Standard	1.212"	0.930"	.0695"	2	R	1.960"	250

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (Lb/in)
FORD CLEVELAND & BIG BLOCK 370-460 SINGLE OR MULTI GROOVE VALVES														
NB. Step to be M/C off head for double springs														
7342-16^o	1.800"	145	340	.650"	1.060"	11700	4133	1.460"	1.080"	.800"	2	R	2.240"	390
7737-16	1.820"	110	295	.520"	1.310"	12700	11702	1.510"	1.086"	0.965"	1 + Damper	L	2.220"	370
7739-16	1.760"	115	290	.600"	1.120"	12706	11702	1.420"	1.015"	0.925"	1 + Damper	R	2.160"	340
7333-16^o	1.820"	124	285	.650"	1.050"	11700	4133	1.450"	1.090"	0.820"	2	L	2.345"	330
7437-16^o	1.820"	135	330	.750"	1.050"	11700	4133	1.465"	1.080"	0.800"	2	L	2.260"	380
4910-16^o	1.900"/2.000"	240 / 190	520 / 460	.700"	1.100"	12710 / TR405	12708	1.550"	1.150"	0.800"	2	R	2.460"	555
7331-16^o	1.920"	125	285	.700"	1.100"	13101	11101	1.450"	1.090"	0.800"	2	L	2.350"	315
9950-16^o	1.920"	190	440	.760"	1.150"	13102	11101	1.540"	1.130"	0.725"	2 + Damper	L	2.430"	500
4920-16^o	2.000"	267	574	.770"	1.180"	13101 / TR405	11101	1.560"	1.110"	0.780"	2	R	2.475"	620
FORD WINDSOR														
Check installed height before selecting springs as models vary														
7736-16	1.700"	115	290	.510"	1.150"	11700	11701	1.440"	1.040"	0.950"	1 + Damper	L	2.100"	345
7333-16^o	1.800"	130	295	.650"	1.050"	11710	11701 / 4134	1.450"	1.090"	0.820"	2	L	2.345"	330
7437-16^o	1.800"	145	335	.750"	1.050"	11710	4133	1.465"	1.080"	0.800"	2	L	2.260"	390
7342-16^o	1.800"	145	340	.650"	1.060"	11700	4134	1.460"	1.080"	.800"	2	R	2.240"	390
4910-16^o	1.900"/2.000"	240 / 190	520 / 460	.700"	1.100"	12710 / TR405	12708	1.550"	1.150"	0.800"	2	L	2.460"	555
4920-16^o	2.000"	267	574	.770"	1.180"	13101 / TR405	11101	1.560"	1.110"	0.780"	2	R	2.475"	620

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (Lb/in)
HOLDEN VN-VP V6														
4936-12	1.700"	85	250	.550"	1.120"	11707	11703	1.230"	0.875"	0.780"	1 + Damper	R	2.000"	330
4836-12	1.700"	115	315	.550"	1.100"	11707	11703	1.250"	0.875"	0.780"	1 + Damper	R	2.040"	405
4334-12^o	1.700"	120	280	.650"	.950"	11707	4133	1.280"	0.950"	0.710"	2	L	2.130"	340
4835-12	1.700"	120	290	.560"	1.090"	11707	11703	1.220"	0.860"	0.765"	1 + Damper	R	2.170"	340
7332-12^o	1.700"	135	295	.650"	1.050"	11700	4133	1.445"	1.090"	0.800"	2	L	2.335"	325
4231-12	1.780"	120	270	.550"	1.100"	11707	11703-12	1.045"TOP 1.275"BOT	0.650"TOP 0.870"BOT		1 Conical	R	2.260"	300
HOLDEN ECOTEC V6														
4231-12	1.780"	120	270	.550"	1.100"	10707	10701	1.045"TOP 1.275"BOT	0.650"TOP 0.870"BOT		1 Conical	R	2.260"	300
4438-12^o	1.780"	165	340	.650"	1.000"	10708	10701	1.295"	0.948"	0.690"	2	R	2.365"	355
4511X-12	1.780"	150	335	.600"	1.100"	10707	10701	1.035"TOP 1.290"BOT	0.655"TOP 0.910" BOT		1 Conical	R	2.230"	365
4919-12	1.780"	150	310	.590"	1.090"	10707	10701	1.050"TOP 1.275"BOT	0.650"TOP 0.880"BOT		1 Conical	R	2.390	320
4918-12	1.780"	135	295	.640"	1.090"	10707	10701	1.040"TOP 1.275"BOT	0.640" TOP 0.875" BOT		1 Conical	R	2.335"	314
4021-12	1.780"	55	230	.630"	1.150"	11707	11701	1.065"TOP 1.255"BOT	0.670" TOP 0.875" BOT		1 Conical	R	1.960"	350
HOLDEN 6 CYLINDER RED MOTOR														
4719-12	1.625"	85	210	.645"	.930"	11707	11703	1.240"	0.920"	0.840"	1	L	2.090"	250
4823-12	1.625"	115	250	.615"	.960"	11707	11703	1.275"	0.930"	0.850"	1 + Damper	L	2.170"	270
4334-12^o	1.700"	120	280	.650"	.950"	11707	4134	1.280"	0.950"	0.710"	2	L	2.130"	340
7333-12^o	1.810"	125	290	.650"	1.050"	11710	4134	1.450"	1.090"	0.820"	2	L	2.345"	325
7331-12^o	1.810"	160	324	.700"	1.100"	11710	4134	1.450"	1.090"	0.800"	2	L	2.350"	310

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (Lb/in)
HOLDEN 6 CYLINDER BLUE & BLACK MOTOR														
4028-12	1.470"	120	215	.470"	0.950"	11707	11703	1.250"	0.920"		1	L	2.105"	190
4038-12	1.470"	95	285	.500"	0.920"	11707	11703	1.200"	0.860"		1	R	1.830"	380
4823-12	1.605"	120	255	0.615"	0.960"	11717	4134	1.275"	0.930"	0.850"	1 + Damper	L	2.170"	275
4334-12^o	1.700"	120	280	.650"	.950"	11717	4134	1.280"	0.950"	0.710"	2	L	2.130"	340
HOLDEN GEMINI														
5840-8^o	1.550"	100	275	.640"	.860"	Standard	Standard	1.330"	0.990"	0.770"	2	R	1.930"	345
5833-8^o	1.550"	110	280	.600"	.900"	Standard	Standard	1.330"	0.990"	0.760"	2	R	2.160"	330
HOLDEN 253, 304, 308														
4931-16	1.700"	85	245	.550"	1.140"	11707	11701	1.230"	0.880"	0.780"	1 + Damper	R	2.020"	320
4828-16	1.700"	105	285	.570"	1.080"	11707	11701	1.250"	0.870"		1	R	2.030"	360
4833-16	1.700"	110	320	.570"	1.080"	11707	11701	1.255"	0.868"	0.780"	1 + Damper	R	2.030"	415
4843-16	1.700"	120	320	.490"	1.160"	11707	11701	1.265"	0.875"	0.760"	1 + Damper	R	2.015"	411
4438-16^o	1.800"	155	330	.650"	1.050"	11717	4133	1.290"	0.948"	0.690"	2	R	2.345"	365
7333-16^o	1.800"	125	290	.650"	1.050"	11710	4133	1.450"	1.090"	0.820"	2	L	2.345"	325
7331-16^o	1.800"	160	330	.700"	1.100"	13101/11710	11101 / 4134	1.450"	1.090"	0.800"	2	L	2.350"	330
4845-16	1.850"	95	285	.660"	1.140"	11717	4134	1.260"	0.875"	0.785"	1 + Damper	R	2.130"	380
7342-16^o	1.850"	125	320	.650"	1.060"	13101/11710	11101 / 4134	1.460"	1.080"	.800"	2	R	2.240"	390
7437-16^o	1.850"	130	315	.750"	1.050"	13101/11710	11101 / 4134	1.465"	1.080"	0.800"	2	L	2.260"	380
4910-16^o	1.900"/2.000"	240 / 190	520 / 460	.700"	1.100"	12710 / TR405	12708	1.550"	1.150"	0.800"	2	R	2.460"	555
4920-16^o	2.000"	267	574	.770"	1.180"	13101 / TR405	11101	1.560"	1.110"	0.780"	2	R	2.475"	620

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (Lb/in)
HOLDEN V8 LS ENGINE FAMILY														
4231-16	1.780"	120	270	.550"	1.100"	11707	11703	1.045"TOP 1.275"BOT	0.650"TOP 0.870"BOT		1 Conical	R	2.260"	300
1511ML-16	1.780"	140	330	.600"	1.100"	10707	10701	1.050" TOP 1.295" BOT	0.643" TOP 0.908" BOT		1 Conical	R	2.180"	385
4438-16^o	1.780"	165	340	.650"	1.000"	10708	10701	1.295"	0.948"	0.690"	2	R	2.365;	355
4439-16^o	1.800"	165	360	.650"	1.020"	10708	10701	1.305"	0.950"	0.690"	2	R	2.300"	375
4207X-16^o	1.800"	155	385	.700"	1.000"	10708	10701	1.304"	0.950"	0.680"	2	R	2.300"	430
4209X-16^o	1.800"	160	415	.750"	1.000"	10708	10701	1.324"	0.950"	0.689"	2	R	2.330"	495
1335-16^o	1.800"	250	860 @ .750"	.800"	0.985"	TR432-16	10701-16	1.300"	0.900"	0.616"	2	R	2.250"	813
NISSAN RB30														
5840-12^o	1.570"	95	270	.660"	0.860"	Standard	Standard	1.330"	0.990"	0.770"	2	R	1.930"	345
5833-12^o	1.570"	105	270	.600"	0.900"	Standard	Standard	1.330"	0.990"	0.760"	2	R	2.160"	330
5835-12^o	1.570"	110	280	.570"	0.950"	Standard	Standard	1.330"	0.971"	0.720"	2	R	1.920"	335
5838-12^o	1.600"	120	310	.550"	1.000"	Standard	Standard	1.330"	0.980"	0.690"	2	R	1.930"	395
MITSUBISHI SIGMA														
5840-8^o	1.560"	100	275	.660"	0.860"	Standard	Standard	1.330"	0.990"	0.770"	2	R	1.930"	345
TOYOTA 1FZ-FE														
4163-12	1.487"	105	235	.462"	0.975"	10715	Std	1.160"	0.835"		1	R	1.980"	260

STANDARD REPLACEMENT VALVE SPRING APPLICATION

These part numbers and dimensions are listings of applications we have used. Due to variations in models, dimensions & pressures should be checked before fitting. In some cases we may have used shims to adjust installed height.

Springs marked with * are a double spring.

Part Number	Model	Engine	I/H	Od	Int.	Id	Seat Press	.5 Lift	Solid Height
CHRYSLER									
5091-12	Slant 6	225	1.65	1.500		0.990	100	285	1.095
FORD 4									
2021-8	Pushrod Engine	998-1600	1.28	1.134		0.612	65	165	0.750
2834-8*	Cortina	1600	1.28	1.134	0.84	0.612	100	305	0.750
4028-8	Laser E3,E5	1300-1600	1.44	1.255		0.920	120	220	0.950
4250-8*	Laser	B6 1600	1.40	1.214	0.93	0.870	70	200	0.817
4250-8*	Escort, Cortina	2000 OHC	1.42	1.214	0.93	0.870	70	195	0.817
5840-8*	Telstar FE	Std Replace.	1.635	1.330	0.98	0.720	70	210	0.880
5833-8*	Telstar FE	Performance	1.635	1.330	0.98	0.760	80	240	0.900
FORD 6									
7739-12	Falcon EA-EL	XR6	1.82	1.420		0.916	110	275	1.150
4028-12	Capri	V6	1.54	1.255		0.920	95	205	0.950
5825-12	Zephyr	MKII	1.65	1.330		0.960	60	180	0.950
Note: Ford 6 Spring Retainer may need machining to suit double spring									
FORD 8									
0515-16	239 S/V	V8	1.89	1.15		0.73	40	115	1.05
7737-16	390	V8	1.82	1.510		0.965	110	295	1.310
GM 4									
5833-8*	Gemini	G161-G200Z	1.55	1.330	0.98	0.760	100	260	0.900
GM 6									
5088-12	Chev 6	235 Blue Flame	1.86	1.375		0.960	50	220	1.200
5092-12	Bedford	300	1.69	1.390		1.000	70	190	1.120

STANDARD REPLACEMENT VALVE SPRING APPLICATION

Part Number	Model	Engine	I/H	Od	Int.	Id	Seat Press	.5 Lift	Solid Height
GM 6									
5088-12	Holden	138 Grey	1.79	1.375		0.960	75	250	1.200
4028-12	Holden	Blue/Black	1.62	1.255		0.920	95	200	0.950
4021-12	Holden	Ecotec	1.78	1.04TOP 1.24BOT		0.67TOP 0.87BOT			1.190
4719-12	Holden	Red	1.62	1.255		0.920	95	200	0.930
5840-12*	Commodore	RB30	1.57	1.330	0.980	0.720	85	255	0.860
5835-12	Commodore	RB30	1.57	1.325	0.970	0.710	110	250	0.950
7332-12*	Commodore	VN V6	1.70	1.445	1.090	0.800	132	290	1.020
4836-12	Commodore	VP V6	1.70	1.255		0.780	115	310	1.100
GM V8									
4931-16	Holden VN-VS		1.70	1.240	.086	0.780	80	230	1.100
4843-16	Holden VT	V8 roller	1.75	1.260	0.86	0.780	120	320	1.160
INTERNATIONAL									
7739-16	345	V8	1.82	1.420		0.916	110	275	1.150
ISUZU									
5828-4*	4JB1	Diesel	1.50	1.330		0.660	80	270	0.840
LEYLAND,BMC									
2834-8*	Mini		1.47	1.134	0.84	0.612	35	210	0.750
5840-8*	MGB		1.55	1.330	0.98	0.720	95	265	0.860
MAZDA									
4250-8*		TC	1.21	1.214	0.93	0.870	120	220 @ .400	0.817
4250-8*	NA,MA	UC,VC	1.38	1.214	0.93	0.870	80	205	0.817
5080-8	single spring	B3/B6	1.41	1.283		0.930	75	165	0.930
4250-8*		B6	1.41	1.214	0.93	0.870	70	195	0.817
MITSUBISHI									
5080-8	Galant	4G63	1.46	1.283		0.930	60	180	0.930
5827-8	Cordia	4G62 Sirius	1.50	1.330		0.980	80	210	0.840
5840-8* ¹	Sigma	4G54	1.56	1.330	0.98	0.720	90	260	0.860
5825-8	Sigma	4G54	1.56	1.330		0.960	80	200	0.950
5840-8* ¹		4G63BT	1.66	1.330	0.98	0.720	75	225	0.860

Note 1: Mitsubishi 5840 Spring Retainer needs machining to suit double spring.

STANDARD REPLACEMENT VALVE SPRING APPLICATION

Part Number	Model	Engine	I/H	Od	Int.	Id	Seat Press	.5 Lift	Solid Height
NISSAN									
4038-8	Datsun	A12	1.52	1.197		0.840	80	250	0.920
4220-8*	Datsun	A12,A14,A15	1.55	1.210	0.93	0.700	80	180	0.820
5840-8/12*	Datsun	L Series	1.58	1.330	0.98	0.720	85	250	0.860
5840-8*	Datsun	CA20	1.55	1.330	0.98	0.720	95	255	0.860
4320-8	Pulsar	E15	1.58	1.255		0.920	100	190	0.930
NISSAN 6									
0612-12	300ZX	VG30DETT	1.45	1.07	0.81		65	130	0.82
5840-12*	Patrol	TB42,TB47T	1.58	1.330	0.98	0.720	95	265	0.860
5835-12	Patrol	TD42 Diesel	1.61	1.325	0.97	0.710	70	190	0.950
TOYOTA									
4038-8	Corolla	3K/4K	1.55	1.197		0.840	70	240	0.920
4220-8*	Corolla	3K/4K	1.55	1.210	0.93	0.700	80	180	0.820
4320-8	Hi Ace	2RZ 2400	1.59	1.255		0.920	95	195	0.930
4320-8	Celica	2T	1.46	1.255		0.920	115	210	0.930
4320-8	Corona	2S	1.54	1.255		0.920	100	195	0.930
4719-8		12R	1.55	1.255		0.920	100	200	0.930
5840-8*	Corona	18R	1.55	1.330	0.98	0.720	95	265	0.860
5827-8	Corona	18RG	1.5	1.330		0.720	80	210	0.840
5825-8	Corona	22R	1.58	1.330		0.960	75	195	0.950
4719-8	Corona	5R	1.55	1.255		0.920	100	200	0.930
5825-8		2RZ OHC	1.59	1.330		0.960	80	195	0.950
5827-8	Diesel	3L, 1HZ	1.46	1.330		0.980	85	225	0.840
4828-12	Landcruiser	2F	1.79	1.275		0.920	80	250	1.080
5840*	Diesel	3B	1.54	1.330	0.98	0.720	100	270	0.860

These part numbers and dimensions are listings of applications we have used. Due to variations in models, dimensions & pressures should be checked before fitting. In some cases we may have used shims to adjust installed height. **Springs marked * are double spring.**

VALVE SPRINGS

VALVE SPRINGS **PART NUMBER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
0507	1.000"	0.760"		1	L	2.050"	75	0.750"
0511	0.937"	0.697"		1	L	1.490"	123	0.740"
0513	0.953"	0.697"		1	L	1.937"	132	0.930"
0514	0.838"	0.612"		1	L	1.500"	145	0.710"
0515	1.015"	0.725"		1	L	2.165"	155	1.060"
0612	1.090"	0.810"		1	R	2.055"	120	0.880"
0613	1.080"	0.796"		1	R	2.230"	130	1.000"
0615	1.015"	0.740"		1	L	2.000"	135	0.870"
1025	1.370"	1.005"		1	L	2.110"	265	1.030"
1511ML	1.050" TOP 1.295" BOT	0.643" TOP 0.908" BOT		1 Conical	R	2.180"	385	1.100"
1804	0.995" TOP 1.060" BOT"	0.635" TOP 0.700" BOT		1 Conical	R	2.060"	280	1.020"
1808	0.970" TOP 1.060" BOT	0.650" TOP 0.727" BOT		1 Conical	R	1.970"	220	0.880"
1809	0.970" TOP 1.060" BOT	0.650" TOP 0.740" BOT		1 Conical	R	2.180"	205	0.900"
1832	0.970" TOP 1.105" BOT	0.585" TOP 0.745" BOT		1 Conical	R	1.810"	310	0.900"
2021	1.140"	0.840"		1	R	1.650"	235	0.750"
2834 ^D	1.140"	0.830"	0.612"	2	R	1.650"	390	0.830"
2836 ^D	1.140"	0.830"	0.612"	2	R	1.650"	355	0.830"
4021	1.065" TOP 1.255" BOT	0.670" TOP 0.875" BOT		1 Conical	R	1.960"	350	1.190"
4028	1.250"	0.920"		1	L	2.105"	190	0.950"
4038	1.200"	0.860"		1	R	1.830"	380	0.920"
4162	1.100"	0.765"		1	R	1.895"	260	0.980"
4163	1.160"	0.835"		1	R	1.980"	260	0.975"
4164	1.050"	0.735"		1	R	1.740"	265	0.840"
4177 ^D	1.113"	0.805"	0.636"	2	R	1.660"	230	0.730"
4207X ^D	1.304"	0.950"	0.680"	2	R	2.300"	430	1.000"
4209X ^D	1.324"	0.950"	0.689"	2	R	2.230"	495	1.000"
4220 ^D	1.210"	0.926"	0.700"	2	R	1.900"	200	0.820"
4231	1.045" TOP 1.275" BOT	0.650" TOP 0.870" BOT		1 Conical	R	2.260"	300	1.100"
4250 ^D	1.212"	0.930"	0.695"	2	R	1.960"	250	0.805"
4320	1.245"	0.910"		1	L	2.105"	210	0.950"
4330 ^D	1.280"	0.926"	0.700"	2	R	1.960"	315	0.925"
4334 ^D	1.280"	0.950"	0.710"	2	L	2.130"	340	0.950"
4403	1.000"	0.700"		1	R	1.900"	260	0.945"

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

VALVE SPRINGS **PART NUMBER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
4420	1.110" TOP 1.440" BOT	0.660" TOP 0.990" BOT		1 Conical	R	2.445"	360	1.200"
4429 [Ⓛ]	1.167"	0.860"	0.660"	2	R	1.820"	240	0.810"
4435	1.060" TOP 1.200" BOT	0.640" TOP 0.800" BOT		1 Conical	R	2.220"	350	1.150"
4438 [Ⓛ]	1.290"	0.948"	0.690"	2	R	2.345"	365	1.050"
4439 [Ⓛ]	1.305"	0.950"	0.690"	2	R	2.300"	375	1.020"
4511X	1.035" TOP 1.290" BOT	0.665" TOP 0.910" BOT		1 Conical	R	2.230"	365	1.100"
4718	1.255"	0.920"	0.835"	1	L	2.100"	230	0.930"
4719	1.240"	0.920"	0.840"	1	L	2.090"	250	0.930"
4823	1.275"	0.930"	0.850"	1 + Damper	L	2.170"	275	0.960"
4828	1.250"	0.870"		1	R	2.030"	360	1.080"
4830	1.220"	0.860"	0.755"	1 + Damper	R	2.140"	310	1.120"
4833	1.255"	0.868"	0.780"	1 + Damper	R	2.030"	415	1.100"
4835	1.220"	0.860"	0.765"	1 + Damper	R	2.170"	340	1.090"
4836	1.250"	0.875"	0.780"	1 + Damper	R	2.040"	405	1.080"
4843	1.265"	0.875"	0.760"	1 + Damper	R	2.015"	411	1.160"
4845	1.260"	0.880"	0.785"	1 + Damper	R	2.130"	380	1.140"
4910 [Ⓛ]	1.550"	1.150"	0.800"	2	R	2.460"	555	1.110"
4918	1.040" TOP 1.275" BOT	0.640" TOP 0.875" BOT		1 Conical	R	2.335"	314	1.090"
4920 [Ⓛ]	1.560"	1.110"	0.780"	2	R	2.475"	620	1.180"
4931	1.230"	0.880"	0.770"	1 + Damper	R	2.020"	275	1.140"
4936	1.230"	0.875"	0.780"	1 + Damper	R	2.000"	330	1.120"
5002	1.510"	1.090"	0.970"	1 + Damper	L	2.200"	345	1.300"
5014	1.420"	1.010"		1	L	2.145"	310	1.250"
5037	1.230"	0.875"		1	R	2.060"	265	1.230"
5038	1.211"	0.857"		1	R	1.780"	340	1.010"
5077	1.500"	1.080"	0.990	1 + Damper	R	1.960"	355	1.095"
5078 [Ⓛ]	1.332"	0.990"	0.715	2	L	1.835"	330	1.070"
5080	1.283"	0.930"		1	R	1.750"	240	0.930"
5088	1.375"	0.960"		1	R	2.050"	335	1.200"
5091	1.500"	1.080"	0.99	1 + Damper	R	1.960"	355	1.095"

VALVE SPRINGS **PART NUMBER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
5092	1.390"	1.000"		1	R	2.035"	245	1.120"
5094	1.420"	1.000"		1	L	2.120"	350	1.265"
5107	1.330"	0.960"		1	R	1.920"	230	0.930"
5825	1.330"	0.960"		1	R	1.935"	230	0.950"
5827	1.330"	0.980"		1	R	1.860"	228	0.840"
5828 [Ⓛ]	1.330"	0.980"	0.660"	2	R	1.860"	350	0.840"
5833 [Ⓛ]	1.330"	0.990"	0.760"	2	R	2.160"	330	0.900"
5835 [Ⓛ]	1.330"	0.971"	0.720"	2	R	1.920"	335	0.950"
5838 [Ⓛ]	1.330"	0.980"	0.690"	2	R	1.930"	395	0.950"
5840 [Ⓛ]	1.335"	1.000"	0.720"	2	R	1.930"	345	0.860"
5844-IRH	0.950"	0.720"		1	R	1.955"	95	0.750"
5854 [Ⓛ]	1.335"	0.980"	0.690"	2	R	1.960"	410	0.900"
6038	1.255"	0.900"		1	R	2.050"	340	1.170"
7331 [Ⓛ]	1.450"	1.090"	0.800"	2	L	2.350"	330	1.100"
7332 [Ⓛ]	1.445"	1.090"	0.800"	2	L	2.335"	315	1.050"
7333 [Ⓛ]	1.450"	1.090"	0.820"	2	L	2.345"	330	1.050"
7334 [Ⓛ]	1.455"	1.080"	0.810"	2	L	2.440"	320	1.050"
7335	1.465"	1.070"		1	L	2.410"	285	1.040"
7341 [Ⓛ]	1.470"	1.080"	0.800"	2	L	2.280"	430	1.050"
7342 [Ⓛ]	1.460"	1.080"	0.800"	2	R	2.240"	390	1.060"
7437 [Ⓛ]	1.465"	1.080"	0.800"	2	L	2.260"	380	1.050"
7733 [Ⓛ]	1.465"	1.085"	0.790"	2	L	2.470"	320	1.030"
7736	1.440"	1.040"	0.950"	1 + Damper	L	2.100"	345	1.150"

VALVE SPRINGS **PART NUMBER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
7737	1.510"	1.086"	0.965"	1 + Damper	L	2.220"	345	1.310"
7739	1.420"	1.015"	0.925"	1 + Damper	R	2.160"	340	1.150"
<u>7930</u> ^D	1.460"	1.000"	.690"	2 + Damper	L	2.360"	350	1.070"
<u>7937</u> ^D	1.465"	1.000"	0.720"	2 + Damper	L	2.360"	350	1.080"
<u>8333</u> ^D	1.515"	1.120"	0.800"	2	L	2.480"	350	1.210"
<u>8335</u> ^D	1.515"	1.120"	0.795"	2	L	2.480"	322	1.210"
<u>8337</u> ^D	1.515"	1.120"	0.800"	2	L	2.350"	360	1.114"
<u>8937</u> ^D	1.530"	1.120"	0.760"	2 + Damper	L	2.335"	390	1.180"
9731	1.550"	1.125"	1.000"	1 + Damper	L	2.460"	320	1.180"
<u>9936</u> ^D	1.539"	1.120"	0.765"	2 + Damper	L	2.460"	400	1.180"
<u>9941</u> ^D	1.540"	1.025"	0.740"	2 + Damper	R	2.380"	440	1.140"
<u>9945</u> ^D	1.560"	1.010"	0.690"	2 + Damper	L	2.475"	460	1.200"
<u>9950</u> ^D	1.540"	1.130"	0.725"	2 + Damper	L	2.430"	485	1.150"

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

VALVE SPRINGS

VALVE SPRINGS **OUTSIDE DIAMETER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
0514	0.838"	0.612"		1	L	1.500"	145	0.710"
0511	0.937"	0.697"		1	L	1.490"	123	0.740"
5844-IRH	0.950"	0.710"		1	R	1.955"	95	0.750"
0513	0.953"	0.697"		1	L	1.937"	132	0.930"
1832	0.970" TOP 1.105" BOT	0.585" TOP 0.745" BOT		1 Conical	R	1.810"	310	0.900"
1808	0.970" TOP 1.060" BOT	0.650" TOP 0.727" BOT		1 Conical	R	1.970"	220	0.880"
1809	0.970" TOP 1.060" BOT	0.650" TOP 0.740" BOT		1 Conical	R	2.180"	205	0.900"
1804	0.995" TOP 1.060" BOT"	0.635" TOP 0.700" BOT		1 Conical	R	2.060"	280	1.020"
0507	1.000"	0.760"		1	L	2.050"	75	0.750"
4403	1.000"	0.700"		1	R	1.900"	260	0.945"
0615	1.015"	0.740"		1	L	2.000"	135	0.870"
0515	1.015"	0.725"		1	L	2.165"	155	1.060"
4511X	1.035" TOP 1.290" BOT	0.665" TOP 0.910" BOT		1 Conical	R	2.230"	365	1.100"
4918	1.040" TOP 1.275" BOT	0.640" TOP 0.875" BOT		1 Conical	R	2.335"	314	1.090"
4231	1.045" TOP 1.275" BOT	0.650" TOP 0.870" BOT		1 Conical	R	2.260"	300	1.100"
1511ML	1.050" TOP 1.295" BOT	0.643" TOP 0.908" BOT		1 Conical	R	2.180"	385	1.100"
4164	1.050"	0.735"		1	R	1.740"	265	0.840"
4435	1.060" TOP 1.200" BOT	0.640" TOP 0.800" BOT		1 Conical	R	2.220"	350	1.150"
4021	1.065" TOP 1.255" BOT	0.670" TOP 0.875" BOT		1 Conical	R	1.960"	350	1.190"
0613	1.080"	0.796"		1	R	2.230"	130	1.000"
0612	1.090"	0.810"		1	R	2.055"	120	0.880"
4162	1.100"	0.765"		1	R	1.895"	260	0.980"
4420	1.110" TOP 1.440" BOT	0.660" TOP 0.990" BOT		1 Conical	R	2.445"	360	1.200"
<u>4177</u> ^D	1.113"	0.805"	0.636"	2	R	1.660"	230	0.730"
2021	1.140"	0.840"		1	R	1.650"	235	0.750"
<u>2834</u> ^D	1.140"	0.830"	0.612"	2	R	1.650"	390	0.830"
<u>2836</u> ^D	1.140"	0.830"	0.612"	2	R	1.650"	355	0.830"
4163	1.160"	0.835"		1	R	1.980"	260	0.975"
<u>4429</u> ^D	1.167"	0.860"	0.660"	2	R	1.820"	240	0.810"

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

VALVE SPRINGS **OUTSIDE DIAMETER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
4038	1.200"	0.860"		1	R	1.830"	380	0.920"
4220 ^D	1.210"	0.926"	0.700"	2	R	1.900"	200	0.820"
5038	1.211"	0.857"		1	R	1.780"	340	1.010"
4250 ^D	1.212"	0.930"	0.695"	2	R	1.960"	250	0.805"
4830	1.220"	0.860"	0.755"	1 + Damper	R	2.140"	310	1.120"
4835	1.220"	0.860"	0.765"	1 + Damper	R	2.170"	340	1.090"
5037	1.230"	0.875"		1	R	2.060"	265	1.230"
4931	1.230"	0.880"	0.770"	1 + Damper	R	2.020"	275	1.140"
4936	1.230"	0.875"	0.780"	1 + Damper	R	2.000"	330	1.120"
4719	1.240"	0.920"	0.840"	1	L	2.090"	250	0.930"
4320	1.245"	0.910"		1	L	2.105"	210	0.950"
4836	1.250"	0.875"	0.780"	1 + Damper	R	2.040"	405	1.080"
4828	1.250"	0.870"		1	R	2.030"	360	1.080"
4028	1.250"	0.920"		1	L	2.105"	190	0.950"
4833	1.255"	0.868"	0.780"	1 + Damper	R	2.030"	415	1.100"
4718	1.255"	0.920"	0.835"	1	L	2.100"	230	0.930"
6038	1.255"	0.900"		1	R	2.050"	340	1.170"
4845	1.260"	0.880"	0.785"	1 + Damper	R	2.130"	380	1.140"
4843	1.265"	0.875"	0.760"	1 + Damper	R	2.015"	411	1.160"
4235	1.270"	0.885"	0.752"	1 + Damper	R	2.200"	390	1.080"
4823	1.275"	0.930"	0.850"	1 + Damper	L	2.170"	275	0.960"
4330 ^D	1.280"	0.926"	0.700"	2	R	1.960"	315	0.925"
4334 ^D	1.280"	0.950"	0.710"	2	L	2.130"	340	0.950"
5080	1.283"	0.930"		1	R	1.750"	240	0.930"
4438 ^D	1.290"	0.948"	0.690"	2	R	2.345"	365	1.050"

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

VALVE SPRINGS **OUTSIDE DIAMETER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
4207X ^D	1.304"	0.950"	0.680"	2	R	2.300"	430	1.000"
4439 ^D	1.305"	0.950"	0.690"	2	R	2.300"	375	1.020"
4209X ^D	1.324"	0.950"	0.689"	2	R	2.330"	495	1.000"
5835 ^D	1.330"	0.971"	0.720"	2	R	1.920"	335	0.950"
5827	1.330"	0.980"		1	R	1.860"	228	0.840"
5828 ^D	1.330"	0.980"	0.660"	2	R	1.860"	350	0.840"
5833 ^D	1.330"	0.990"	0.760"	2	R	2.160"	330	0.900"
5107	1.330"	0.960"		1	R	1.920"	230	0.930"
5825	1.330"	0.960"		1	R	1.935"	230	0.950"
5838 ^D	1.330"	0.980"	0.690"	2	R	1.930"	395	0.950"
5078 ^D	1.332"	0.990"	0.715	2	L	1.835"	330	1.070"
5854 ^D	1.335"	0.980"	0.690"	2	R	1.960"	410	0.900"
5840 ^D	1.335"	1.000"	0.720"	2	R	1.930"	345	0.860"
1025	1.370"	1.005"		1	L	2.110"	265	1.030"
5088	1.375"	0.960"		1	R	2.050"	335	1.200"
5092	1.390"	1.000"		1	R	2.035"	245	1.120"
7739	1.420"	1.015"	0.925"	1 + Damper	R	2.160"	340	1.150"
5014	1.420"	1.010"		1	L	2.145"	310	1.250"
5094	1.420"	1.000"		1	L	2.120"	350	1.265"
7332 ^D	1.445"	1.090"	0.800"	2	L	2.335"	315	1.050"
7736	1.440"	1.040"	0.950"	1 + Damper	L	2.100"	345	1.150"
7331 ^D	1.450"	1.090"	0.800"	2	L	2.350"	330	1.100"
7333 ^D	1.450"	1.090"	0.820"	2	L	2.345"	330	1.050"
7334 ^D	1.455"	1.080"	0.810"	2	L	2.440"	320	1.050"
7342 ^D	1.460"	1.080"	0.800"	2	R	2.240"	390	1.060"
7930 ^D	1.460"	1.000"	.690"	2 + Damper	L	2.360"	350	1.070"
7937 ^D	1.465"	1.000"	0.720"	2 + Damper	L	2.360"	350	1.080"
7733 ^D	1.465"	1.085"	0.790"	2	L	2.470"	320	1.030"

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

VALVE SPRINGS **OUTSIDE DIAMETER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
7335	1.465"	1.070"		1	L	2.410"	285	1.040"
7437 ^D	1.465"	1.080"	0.800"	2	L	2.260"	380	1.050"
7341 ^D	1.470"	1.080"	0.800"	2	L	2.280"	430	1.050"
5077	1.500"	1.080"	0.99	1 + Damper	R	1.960"	355	1.095"
5091	1.500"	1.080"	0.99	1 + Damper	R	1.960"	355	1.095"
7737	1.510"	1.086"	0.965"	1 + Damper	L	2.220"	345	1.310"
5002	1.510"	1.090"	0.970"	1 + Damper	L	2.200"	345	1.300"
8333 ^D	1.515"	1.120"	0.800"	2	L	2.480"	350	1.210"
8335 ^D	1.515"	1.120"	0.795"	2	L	2.480"	322	1.210"
8337 ^D	1.515"	1.120"	0.800"	2	L	2.350"	360	1.114"
8937 ^D	1.530"	1.120"	0.760"	2 + Damper	L	2.335"	390	1.180"
9936 ^D	1.539"	1.120"	0.765"	2 + Damper	L	2.460"	400	1.180"
9950 ^D	1.540"	1.130"	0.725"	2 + Damper	L	2.430"	485	1.150"
9941 ^D	1.540"	1.025"	0.740"	2 + Damper	R	2.380"	440	1.140"
9731	1.550"	1.125"	1.000"	1 + Damper	L	2.460"	320	1.180"
4910 ^D	1.550"	1.150"	0.800"	2	R	2.460"	555	1.110"
9945 ^D	1.560"	1.010"	0.690"	2 + Damper	L	2.475"	460	1.200"
4920 ^D	1.560"	1.110"	0.780"	2	R	2.475"	620	1.180"

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

CUSTOM GRINDING SERVICE

Many engine builders know precisely the specifications of the camshaft they wish to run and Crow Cams custom grinding service gives access to Australia’s largest choice of masters listed on the following pages. All custom ground cams are produced on our CNC cam grinding machines and cam specs are read directly from each camshaft Roller Camshafts are priced according to the type of billet used. These profiles will vary slightly with changes in base circle diameter. For the LS family engines, see separate listing.

HYDRAULIC ROLLER PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.006"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
1561	193	202	98	101	262	264	.275	.275	112
26	195	196	101	101	270	277	.273	.273	112
907	197	206	111	118	254	265	.288	.300	109
759	200	210	110	121	267	277	.289	.307	112
1524	200	207	102	107	262	270	.274	.274	109
1562	202	207	106	110	275	285	.275	.275	113
1339	203	209	109	113	268	275	.281	.281	118
1440	205	214	105	111	274	283	.268	.271	111
1335	206	212	111	116	256	265	.283	.283	114
50	207	209	110	112	265	268	.280	.280	117
160	207	207	113	113	267	267	.281	.281	112
1430	207	218	126	135	262	274	.315	.315	114
1563	207	210	115	118	276	281	.295	.295	112
1752	208	207	129	128	261	260	.321	.320	112
1309	209	214	119	122	275	282	.300	.300	114
1338	210	210	115	115	272	272	.282	.282	118
1350	210	210	114	114	280	260	.278	.277	115
1487	210	222	101	110	285	298	.259	.260	114
1336	211	209	115	113	278	270	.285	.284	119
1368	211	211	114	114	275	275	.277	.277	116
913	213	226	132	145	267	283	.324	.334	116
1331	213	209	122	118	277	280	.288	.288	115
1370	213	213	123	123	288	288	.311	.311	114
1414	213	223	124	134	277	287	.307	.318	112
1755	213	212	133	132	268	264	.315	.316	113
757	214	218	123	124	280	280	.311	.311	110