

STANDARD REPLACEMENT CAMS & VALVE SPRINGS

| Make / Capacity | Cylinder | Year | Application | Engine | Part Number | Valve Spring |
|-----------------|----------|------|-------------|--------|-------------|--------------|
|-----------------|----------|------|-------------|--------|-------------|--------------|

NOTE: If the model you require is not listed here check custom grind listing.

| FORD | | | | | | |
|------------------|----|---------|-----------|--------------|--------------|---------|
| 302-351ci | V8 | 1968-84 | Falcon | Cleveland | 21000 | 5094-16 |
| 351ci | V8 | 1970-71 | Falcon GT | HO Solid Cam | 21726 | 7738-16 |
| 351ci | V8 | 1969-70 | Falcon | Windsor | 62000 | 5062-16 |
| 390-428ci | V8 | 1963-71 | Galaxie | FE Engine | 19000 | |

| FORD COMMERCIAL | | | | | | |
|------------------|----|---------|-------------------|----------------------|----------------|--|
| 200-250ci | 6 | 1976-85 | Falcon Ute, P'Van | | 14000 * | |
| 200-250ci | 6 | 1986-88 | Falcon Ute, P'Van | Unleaded | 14002 * | |
| 200-250ci | 6 | 1979-88 | Falcon Ute, P'Van | EFI | 14678 * | |
| 302ci | V8 | 1985-86 | F Series | EFI 302 firing order | 15001 | |
| 302ci | V8 | 1986-90 | F Series | EFI 351 firing order | 62001 | |
| 351ci | V8 | 1990-93 | F Series | EFI 351 firing order | 62002 | |

| HOLDEN | | | | | | |
|--------------------|----|-----------|----------------------------------|---------------------------|---------------|---------|
| 1196cc | 4 | 1994-97 | Barina | C12NZ | 276000 | |
| 1396cc | 4 | 1994-97 | Barina | C14NZ | 276000 | |
| 1396cc | 4 | 1998-on | Barina | C14SE | 373000 | |
| 1471 cc | 4 | 1985-87 | Gemini RB | FWD 4XC1 | 242000 | |
| 1584 cc | 4 | 1976-82 | Gemini | G 161Z | 78000 | 5078-8 |
| 1598cc | 4 | 1996-98 | Astra | C16SE | 261001 | |
| 1598-1796cc | 4 | 1987-90 | Astra | Family II EFI | 92004 | |
| 1598cc | 4 | 1980-86 | Camira | Family II Carb. | 92000 | |
| 1798cc | 4 | 1980-86 | Camira | Family II Throttle Body | 92003 | |
| 1798cc | 4 | 1980-86 | Camira | Family II Multi Point EFI | 92002 | |
| 1998 cc | 4 | 1984-87 | Camira | Family II FI | 92001 | |
| 149-202ci | 6 | 1964-80 | Red engine | | 35002 | |
| 202 ci | 6 | | Red engine | XU1 | 35604 | 4823-12 |
| 202 ci | 6 | | Red engine | Bathurst XU1 | 35616 | 4823-12 |
| 202 ci | 6 | 1980-87 | Commodore | Blue,Carby | 35002 | |
| 202 ci | 6 | 1986-87 | Commodore | EFI engine | 35678 | |
| 253-308ci | V8 | 1970-86 | | Red and Blue eng. | 5613 | 4931-16 |
| 4987cc | V8 | 1988 | Commodore | Walkinshaw | 4000 | 4833-16 |
| 4987cc | V8 | 1989-97 | Commodore VN-VS EFI engine | | 4000 | 4931-16 |
| 4987cc | V8 | 1999 | Commodore VT | Holden Eng Hyd Roll | 4002 | 4843-16 |
| 5700cc | V8 | 1999 | Commodore VT Holden Eng Hyd Roll | | 4003 | 4843-16 |
| 5700cc | V8 | 1993-1994 | Commodore | HSV 215 | 4001 | 4833-16 |

STANDARD REPLACEMENT CAMS & VALVE SPRINGS

| Make / Capacity | Cylinder | Year | Application | Engine | Part Number | Valve Spring |
|-----------------|----------|------|-------------|--------|-------------|--------------|
|-----------------|----------|------|-------------|--------|-------------|--------------|

NOTE: If the model you require is not listed here check custom grind listing.

| HOLDEN | | | | | | | |
|--------------------|----|--------------|---|-----------------------|---------------|---------|---------|
| 307-350ci | V8 | 1968-78 | Chev. | Small Block | 1613 | 4931-16 | |
| 3800cc | V6 | 1989-91 | Commodore VN | Roller Hydraulic | 607000 | 7328-12 | |
| | | | For engines with single spring and damper use | | | | 4835-12 |
| 3800cc | V6 | 1991-93 | Series 2 VN-VR | Roller Hydraulic | 774000 | 4936-12 | |
| 3800cc | V6 | 1993-on | VS,VT,VY, VX | Roller Hydraulic | 853000 | 4021-12 | |
| 5700cc | V8 | 1999-on | VT-VZ | LS1 Engine | 871000 | 4231-16 | |
| 5700cc | V8 | 2004-on | VZ | 300kw Engine | 871001 | | |
| 6000-6200cc | V8 | 2010-present | VE | Single Bolt (Non AFM) | 872000 | | |

| HOLDEN COMMERCIAL | | | | | | |
|--------------------|---|---------|--------------|--------------|---------------|--------|
| 1389cc | 4 | 1994-97 | Combo | C14SE | 373000 | |
| 1584cc | 4 | 1980-83 | Rodeo | G161Z | 78000 | 5078-8 |
| 1817cc | 4 | 1983-84 | Rodeo | G180Z | 78000 | 5078-8 |
| 1949cc | 4 | 1983-85 | Rodeo | G200Z | 78200 | 5078-8 |
| 2200-2400cc | 4 | 1999-on | Rodeo TF, RA | C22NE, C24NE | 92004 | |

| KIA | | | | | | |
|----------------|---|---------|--------|--|---------------|--------|
| 1498 cc | 4 | 1996-98 | Mentor | | 224001 | 5080-8 |

| LEYLAND | | | | | | |
|---------------|----|---------|-----|----------------------|--------------|--------|
| 1800cc | 4 | 1962-78 | MGB | Suit Slot Drive Only | 38000 | 5840-8 |
| 3500cc | V8 | 1978-80 | P76 | | 37000 | |

| MAZDA | | | | | | |
|---------------|---|---------|-------|--------------------------|---------------|--------|
| 1600cc | 4 | 1985-89 | 323 | B6 Belt drive | 224000 | 5080-8 |
| 1600cc | 4 | 1985-89 | 323 | B6 Belt drive hyd tappet | 224001 | 5080-8 |
| 2188cc | 4 | 1987-97 | B2200 | F2 12 Valve EFI | 304000 | |
| 2605cc | 4 | 1989-on | | G6 12 Valve | 42100 | |

| NISSAN | | | | | | |
|--------------------|---|-----------|--------|----------------------|---------------|---------|
| 1598-1796cc | 4 | 1987-92 | Pulsar | LE18, Family II eng. | 92004 | |
| 4169cc | 6 | 1988-2000 | Patrol | TB42 & TB45 | 442000 | 5840-12 |
| 4759cc | 6 | 2001-on | Patrol | TB48 In | 538000 | 4164-24 |
| | | | | Ex | 539000 | |

| ROVER, RANGE ROVER | | | | | | |
|---------------------|----|---------|-------|--|--------------|--|
| 3500-4500 cc | V8 | 1966-81 | Rover | | 37000 | |

| TOYOTA COMMERCIAL | | | | | | |
|--------------------|---|---------|--------------|----------|---------------|---------|
| 1998-2237cc | 4 | 1983-on | Torago,Hilux | 3Y,4Y | 288000 | |
| 2887-4230cc | 6 | 1961-89 | Landcruiser | F,2F,3F | 99000 | 4828-12 |
| 4476cc | 6 | 1992-03 | Landcruiser | 1Z-FE In | 528000 | |
| | | | | Ex | 529000 | |

TUFF SOUNDS FOR HOT RODS

Hot Rod and Street Machine builders often ask for cam combinations that will produce a tough idle and engine note without sacrificing street driveability or engine reliability. The range of Crow Hot Rod hydraulic grinds are designed with increased overlap to produce a lumpy idle that will stand out in the crowd.

Two options are available for popular US small block V8s one suitable for standard torque converters with good power and torque from 1600 rpm and the second to suit 2400 stall converters with stronger mid range and top end power from 2500 rpm.



CROW CAMS TUFF CAM

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash Intake | Lash Exhaust | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|-------------|--------------|-----------|--------------|------------------|----------|----------|-----------|------------|-----------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| CHEVROLET SMALL BLOCK HYDRAULIC ROCKER RATIO 1.50 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range (See Fitting notes 1) | 1600 - 4600 | 1603-8 | 280 | 280 | 214 | 214 | .442" | .442" | 108 | | | HT817C-16 | 4843-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8350 | PR-937 | CRCSB153 |
| Lumpy idle, strong mid / high range performance (See Fitting notes 1) | 2500 - 5500 | 1686 | 292 | 292 | 224 | 224 | .507" | .507" | 108 | | | HT817C-16 | 4843-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8350 | PR-937 | CRCSB153 |
| FORD WINDSOR 289W-302W ROCKER RATIO 1.62 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range (See Fitting notes 1 & 7) | 1600 - 4600 | 15890-8 | 272 | 280 | 212 | 217 | .467" | .475" | 108 | | | HT900-16 | 7736-16 | 1.700" | 11700-16 | 11701-16 | KG317-16 | CS8302W | See Notes | CRFW163 |
| Lumpy idle, strong mid / high range performance (See Fitting notes 1 & 7) | 2500 - 5500 | 15689 | 282 | 289 | 222 | 230 | .480" | .486" | 106 | | | HT900-16 | 7736-16 | 1.700" | 11700-16 | 11701-16 | KG317-16 | CS8302W | See Notes | CRFW163 |
| FORD CLEVELAND 302C - 351C RPM ROCKER RATIO 1.73 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range (See Fitting notes 1 & 2) | 1600 - 4600 | 21666-8 | 268 | 288 | 204 | 214 | .481" | .512" | 108 | | | HT900-16 | 7738-16 | 1.820" | 12700-16 | 11702-16 | KG317-16 | CS8351C | PR-414 | CRFCL177 |
| Lumpy idle, strong mid / high range performance. (See Fitting notes 1 & 2) | 2500 - 5500 | 21689 | 282 | 289 | 222 | 230 | .512" | .519" | 106 | | | HT900-16 | 7738-16 | 1.820" | 12700-16 | 11702-16 | KG317-16 | CS8351C | PR-414 | CRFCL177 |
| FORD FLAT HEAD (1949 & Onward) USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY | | | | | | | | | | | | | | | | | | | | |
| Mild cam good bottom end power, for street engine | 1500 - 4800 | 63582 | 273 | 289 | 210 | 215 | .314" | .327" | 111 | | | | | | | | | | | |
| Medium cam lumpy idle good mid range power | 2200 - 5200 | 635290 | 285 | 290 | 228 | 228 | .363" | .364" | 110 | | | | | | | | | | | |
| Hot cam, lumpy idle, good upper RPM range need well prepared engine | 2500 - 5500 | 635289 | 298 | 292 | 244 | 244 | .406" | .406" | 109 | | | | | | | | | | | |
| For all pre 1949 SV engines use this part number, ask about the many grinds available for Flat Head Fords | | 633900 | | | | | | | | | | | | | | | | | | |

Note: Springs marked with xxxx-xx² denotes that it is a double spring.

FITTING NOTES: 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

FITTING NOTES:

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.