

Holden Camshaft Listings

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Holden V8 1969-87

253-304-308 cu. in.

Hydraulic Lifter Camshafts

APPLICATION	SERIES AND GRIND NUMBER. COMPONENTS	CAM PART NO.	LIFTERS PART NO.	Deg. @ .050" Cam Lift Int./Exh.	Deg Adv Dur. Int./Exh.	Deg. Lobe Separation	Open/Close @ .050" Cam Lift Int./Exh.	Lash Hot Int. Exh.	Gross Lift Int. Exh. ³
HYDRAULIC - smooth idle, good low end torque, economy and throttle response, Suits 253 auto. BASIC RPM1000-3500	PowerMax H254 (was HE254A) Chart A	243971	99284-16 ^r C73-16 ^q C969C-16 ^p	190 200	254 264	112	-12 22 38 -17	.000 .000	.411 .435
HYDRAULIC - smooth idle, improved torque & H.P. over stock. Good economy, works well with LPG. Suits stock 308 or sports 253 BASIC RPM 1200-4100	PowerMax H-202.275-2S-12 Chart A	C241	99284-16 ^r C73-16 ^q C969C-16 ^p	202 206	264 268	112	-6 28 40 -14	.000 .000	.440 .448
HYDRAULIC - smooth idle in 308, slight lobe in 253 Broad power band, delivers excellent everyday street performance & fuel efficiency. BASIC RPM 1500-4500	PowerMax H264 (was RV-264A) Chart A	244521	99284-16 ^r C73-16 ^q C969C-16 ^p	206 214	268 276	112	-4 30 44 -10	.000 .000	.448 .464
HYDRAULIC - Good idle with lobe. Good all round performance with 9.5:1 compression & basic intake & exhaust modifications, strong low-mid range torque. BASIC RPM 1800-4800	PowerMax H276 (was CCH276A) Chart A	244611	99284-16 ^r 99293-16 ^t C969C-16 ^p	218 218	280 280	110	4 34 44 -6	.000 .000	.472 .472
HYDRAULIC - Fair idle, strong mid-range and top end. Will run 11's in auto 2700lb street car. Needs 9.5-10:1 comp, 3.5 gears, hi-stall converter etc. BASIC RPM 2500-6200	H226/314-2S-8 Chart B	244661	99284-16 ^r 99384-16 ^s C969C-16 ^p	226 230	286 292	108	10 36 48 2	.000 .000	.502 .496
HYDRAULIC - Fair idle, strong mid range-top end street & strip performance. Needs 9.5-10:1 comp 3.08-3.5 gears, hi-stall converter etc. for best results. BASIC RPM 2200-6000	PowerMax H286 (was CCH286A) Chart A	244621	99284-16 ^r 99384-16 ^s C969C-16 ^p	230 230	292 292	110	10 40 50 0	.000 .000	.496 .496
HYDRAULIC - Rough idle, strong power in mid range and top end -6500 RPM. Needs 10-10.5:1 comp. 3.5-3.9 gear, hi-stall converter, modified heads etc. for serious use. BASIC RPM 3000-6500	CCH304A Chart B	244631	99284-16 ^r 99384-16 ^s C969C-16 ^p	236 236	296 296	110	10 46 50 6	.000 .000	.520 .520
HYDRAULIC - Rough idle, excellent top end power in street/strip car. Needs 11:1 comp. 3.7- 4.1 gears, hi-stall converter, mod. heads, hi-intensity ignition for best results. BASIC RPM 3500-7000	CCH-314A Chart B	244641	99284-16 ^r 99384-16 ^s C969C-16 ^p	246 246	306 306	110	15 51 55 11	.000 .000	.538 .538

Note:

1. RPM figures are for 304-308 engines, for 253 engines add 500rpm, for 350 engines subtract 500rpm.
2. All camshafts other than H254 and C241 work best with compression ratios of at least 9.5:1.
3. All valve lifts shown are calculated at 1.6 ratio. If using roller rockers, ratio will be 1.65 and lift will increase.

Important:

Camshaft selection is extremely important in 253 engines. Generally stock engines run best with H254, mild motors can use C241, modified motors can use H264 but larger cam choice requires careful selection.

Holden V8 69-87

253-304-308 cu. in.

Mechanical & Roller Lifter Camshafts

APPLICATION	SERIES AND GRIND NUMBER. COMPONENTS	CAM PART NO.	LIFTERS PART NO.	Deg. @ .050" Cam Lift Int. Exh.	Deg Adv. Dur. Int. Exh.	Deg. Lobe Separation	Open/ Close @ .050" Cam Lift Int./Exh.	Lash Hot Int. Exh.	Gross Lift Int./Exh. ³
MECHANICAL - Good idle with lope, broad power band with good mid-range performance excellent replacement for GROUP A. Works best with 9.5:1 comp. and all normal street modifications. BASIC RPM 2800-6500	CC272 Chart C	244681	99250-16	236 246	272 282	112	8 48 57 9	.026 .026	.508 .527
MECHANICAL - Fair to rough idle. Broad power band with good low end and mid range performance. use 10:1 - 11:1 comp. Killer street/strip cam. BASIC RPM 3400-7200	CC280-2 Chart C	244671	99250-16	244 248	280 284	109	16 48 56 12	.026 .026	.533 .562
MECHANICAL - Rough idle, good mid-range and top-end performance. Ideal street/strip use with 10-10.5:1 comp. 3.5-4.1 gears, hi-stall converter, intake and exhaust. BASIC RPM 3800-7500	CC288 Chart C	244691	99250-16	252 260	288 296	108	19 53 59 21	.026 .026	.572 .591
MECHANICAL - Rough idle, good mid-range and strong top end performance. Good auto cam for serious racers. Needs 11:1 comp. good heads, 3.89 - 4.33 gears, hi-stall, HI-6 ignition. BASIC RPM 4300-8000	CC300A Chart C	244701	99250-16	264 268	300 304	108	26 58 64 24	.026 .026	.601 .610
MECHANICAL - Rough idle, higher torque peak than CC300A gives excell. mid-top end perf. Good manual cam in car with hi-comp, good heads, deep gears etc. BASIC RPM 4600-8000	CC304 Chart C	244711	99250-16	268 272	304 308	108	28 60 66 26	.026 .026	.610 .620
MECHANICAL - Rough idle, radical competition for maximum top end performance. Use in manual car weighing under 2500lbs. BASIC RPM 5000-8500	CC320A Chart C	244721	99250-16	280 280	316 316	108	36 64 72 28	.026 .026	.639 .639
ROLLER - Rough idle, pro-street use with broad power band and strong mid-range. Needs hi-comp. 3.5 - 4.11 gears, hi-stall, good heads, HI6 ignition etc. BASIC RPM 3400-7000	R-244/3294-2-6.00 Chart D	248111	24518-16	244 254	280 290	106	20 44 57 17	.026 .026	.527 .546
ROLLER - Rough idle, excellent mid-upper RPM, torque & horsepower in serious street/strip car. Needs hi-comp. deep gears, hi-stall, flowed heads, HI6 ignition etc. BASIC RPM 4200-7600	R-264/3528-2-6.00 Chart D	248121	24518-16	264 274	300 310	106	30 54 67 27	.026 .026	.564 .584

Note:

1. RPM figures are for 304-308 engines, for 253 engines add 500rpm, for 350 engines subtract 500rpm.
2. All camshafts other than H254 and C241 work best with compression ratios of at least 9.5:1.
3. All valve lifts shown are calculated at 1.6 ratio. If using roller rockers, ratio will be 1.65 and lift will increase.
4. Large range of custom flat tappet and roller cams available. Call for details.

Holden V8 88-97

5000CC (304 cu. in.) P.F.I

Hydraulic & Mechanical Lifter Camshafts

APPLICATION	SERIES AND GRIND NUMBER. COMPONENTS	CAM PART NO.	LIFTERS PART NO.	Deg. @ .050" Cam Lift Int./Exh.	Deg. Adv. Dur. Int./Exh.	Deg. Lobe Separation	Open/Close @ .050" Cam Lift Int./Exh.	Lash Hot Int. Exh.	Gross Lift Int. Exh. ³
HYDRAULIC - Smooth idle, good low end torque, economy & throttle response. Ideal stock replacement in single throttle body vehicles offering torque & HP improvements throughout the entire rev range. BASIC RPM 1200-3800	Compucam H260 Chart A	883901	99284-16 ^r C73-16 ^q C969C-16 ^p	198	260	113	-9 27	.000	.432
				198	260		37 -19	.000	.432
HYDRAULIC - Good idle and fuel efficiency, wide power band with excellent low-mid range torque & HP. Use as SV5000 replacement for everyday performance. BASIC RPM 1500-4000	Compucam H268 Chart A	883931	99284-16 ^r C73-16 ^q C969C-16 ^p	206	268	112	-4 30	.000	.448
				206	268		40 -14	.000	.448
HYDRAULIC - Good idle with lope, mid-upper rev range improvements while maintaining strong bottom end torque, best in twin throttle body vehicles. Use with all normal modifications or as GROUP A replacement. BASIC RPM 1800-4500	Compucam H276 Chart A	883941	99284-16 ^r 99384-16 ^s C969C-16 ^p	214	276	110	2 32	.000	.464
				214	276		42 -8	.000	.464
HYDRAULIC - Fair idle, strong mid-upper rev range performance. Ideal in well developed engines for street or moderate competition use. BASIC RPM 2200-5500	Compucam H284 Chart A⁴	884201	99284-16 ^r 99384-16 ^s C969C-16 ^p	222	284	112	4 38	.000	.480
				222	284		48 -6	.000	.480
HYDRAULIC - Fair idle, strong mid range-top end street and strip performance. Needs 9.5-10:1 comp. 3.08-3.5 gears, hi-stall converter etc. for best results. BASIC RPM 2500-6000	Compucam H286 Chart A⁴	884301	99284-16 ^r 99384-16 ^s C969C-16 ^p	230	292	110	10 40	.000	.496
				230	292		50 0	.000	.496
HYDRAULIC - Rough idle, strong power in mid-range and top end -6500RPM. needs 10-10.5:1 comp. 3.5-3.9 gear, hi stall converter, Modified heads etc. For Serious use. BASIC RPM 3000-6500	Compucam H304 Chart B	884401	99284-16 ^r 99384-16 ^s C969C-16 ^p	236	296	110	10 46	.000	.520
				236	296		50 6	.000	.520
MECHANICAL - Fair idle with lope. Broad power band with good mid range performance. Use as Group A replacement. Works best with 9.5-10:1 comp. and all normal street modifications. BASIC RPM 3500-7000	F-272-2 Chart C	883681	99250-16	236	272	112	6 50	.026	.508
				246	282		55 11	.026	.527
MECHANICAL - Fair to Rough idle. Broad power band with good low end and mid-range performance. 10:1 - 11:1 comp. Has run 10's in Commodores. Will RPM 7500+ BASIC RPM 3400-7200	F-280-2 Chart C	883671	99250-16	244	280	109	16 48	.026	.553
				248	284		56 12	.026	.562
MECHANICAL - Rough idle. Good mid range & top end performance. Ideal street/strip, use with 10 - 10.5:1 comp. 3.5 - 4.11 gears. Hi stall converter intake & exh. modifications. BASIC RPM 4000-7500	F-288-2 Chart C	883691	99250-16	252	288	108	19 53	.026	.572
				260	296		59 21	.026	.591
MECHANICAL - Rough idle. Good mid range & strong top end performance. Good auto cam for serious racers. Needs 11 - 12:1 comp. Good heads 3.89 - 4.33 gears, hi stall & HI-6 ignition. BASIC RPM 4200-7800	F-300-2 Chart C	883701	99250-16	264	300	108	25 59	.026	.601
				268	304		63 25	.026	.610

Note:

1. RPM figures are for 304-308 engines for 253 engines add 500rpm, for 350 engines subtract 500rpm.
2. All camshafts other than H254 and C241 work best with compression ratios of at least 9.5:1.
3. All valve lifts shown are calculated at 1.6 ratio. If using roller rockers, ratio will be 1.65 and lift will increase.
4. Can also use CR96802-16 optional Valve Spring with +.050" Locks- CR99095-1.

Holden V8 88-97 5000CC (304 cu. in.) P.F.I Roller Lifter Camshafts

APPLICATION	SERIES AND GRIND NUMBER. COMPONENTS	CAM PART NO.	LIFTERS PART NO.	Deg. @ .050" Cam Lift Int./Exh.	Deg. Adv Dur. Int. Exh.	Deg. Lobe Separation	Open/ Close @ .050" Cam Lift Int./Exh.	Lash Hot Int. Exh.	Gross Lift Int. Exh. ³
HYDRAULIC ROLLER - Fair idle, moderate perf. usage, good mid range torque & horsepower. Street & mild bracket racing. Needs hi stall conv. & 9.5 - 10:1 comp. for best results. BASIC RPM 2200-5400	HR-220/339-2S-12RF Chart E	888131	24532-16 ²	220 228	284 292	112	3 37 51 -3	.000 .000	.542 .563
HYDRAULIC ROLLER - Fair idle, moderate performance usage. Good mid range torque & horsepower. Street & bracket racing. Needs 3000 + converter & 9.5 - 10.5:1 comp. BASIC RPM 3000-6500	HR-224/345-2S-10RF Chart E	888141	24532-16 ²	224 230	286 292	110	7 37 50 0	.000 .000	.552 .563
HYDRAULIC ROLLER - Fair idle. Performance usage - good mid range torque & horsepower. Street & bracket racing - needs 3000 + converter & 9.5 - 10.5:1 comp. BASIC RPM 3000-6500	HR-228/352-2S-10RF Chart E	888151	24532-16 ²	228 232	290 294	110	9 39 51 1	.000 .000	.563 .574
MECHANICAL ROLLER - Good idle. Street performance usage. Good low & mid range torque & horsepower. Auto trans with 3000 + converter. 9.5 - 10.5:1 comp. BASIC RPM 3000-6500	SR-228/338-2S-10 Chart D	888161	24518-16 ²	228 236	278 286	110	9 39 53 3	.020 .020	.541 .560
MECHANICAL ROLLER - Fair idle. Moderate performance usage. Good mid range torque & horsepower. Mild bracket racing. Auto trans. with 3500 + converter. 9.5 - 10.5:1 comp. BASIC RPM 3500-7000	SR-236/350-2S-10 Chart D	888171	24518-16 ²	236 244	286 294	110	13 43 57 7	.020 .020	.560 .579
MECHANICAL ROLLER - Fair idle. Performance usage. Good mid & upper rpm torque & horse-power. Bracket racing. Auto trans with 3500 + converter. 10.5 - 11.5:1 comp. BASIC RPM 3800-7200	SR-244/362-2S-12 Chart D	888181	24518-16 ²	244 252	294 302	112	15 49 63 9	.020 .020	.579 .598
MECHANICAL ROLLER - Rough idle. Performance usage. Bracket racing. Good mid range torque + horsepower. Auto trans with race converter. 11 - 12.5:1 comp. BASIC RPM 3800-7200	R-244/3294-2-6 Chart D	888191	24518-16 ²	244 254	280 290	106	20 44 57 17	.026 .026	.527 .546

Note:

1. RPM figures are for 304-308 engines, for 253 engines add 500rpm, for 350 engines subtract 500rpm.
2. All roller lifters (except for stock or 10530-16) should be checked in the block to ensure the oil gallery is not unmasked on full lift, otherwise oil pressure problems at low RPM could occur.
3. All valve lifts shown are calculated at 1.6 ratio. If using roller rockers, ratio will be 1.65 and lift will increase.
4. Large range of custom flat tappet and roller cams available. Call for details.

Holden V8 97 onw. VT 304-350 P.F.I

Roller Lifter Camshafts

APPLICATION	SERIES AND GRIND NUMBER. COMPONENTS	CAM PART NO.	LIFTERS PART NO.	Deg. @ .050" Cam Lift Int./Exh.	Deg. Adv. Dur. Int. Exh.	Deg. Lobe Separation	Open/Close @ .050" Cam Lift Int./Exh.	Lash Hot Int. Exh.	Gross Lift Int. Exh. ³
HYDRAULIC ROLLER - HSV Cam as fitted to 5.0L 195Kw & 5.7L 220Kw engines. No ECU changes needed on std engine. VT onward. BASIC RPM 1500-4700 (O.E. Pn. 92063624)	Compucam 2020 Chart A	889700	Stock or 10530-16	206	268	112	-14 40	.000	.448
				206	268		30 -4	.000	.448
HYDRAULIC ROLLER - Performance Cam designed to replace standard Cam and HSV Cam without any other changes. Free flow exhaust recommended. VT onw. BASIC RPM 1600-5000	Compucam 2030 Chart A	889711	Stock or 10530-16	214	278	112	-5 34.5	.000	.464
				214	278		43.5 -9.5	.000	.464
HYDRAULIC ROLLER - Fair idle. Moderate performance usage. Good mid range torque & horsepower. Street & mild bracket racing. Auto trans with 2500 + converter. 9.5 - 10:1 comp. BASIC RPM 2500-6000	HR-222/339-2S-12 Chart E	888231	Stock or 10530-16	222	284	112	4 38	.000	.542
				230	292		52 -2	.000	.563
HYDRAULIC ROLLER - Fair idle. Moderate performance usage. Good mid range torque & horsepower. Street & bracket racing. Auto trans with 3000 + converter. 9.5 - 10.5:1 comp. BASIC RPM 2800-6200	HR-226/345-2S-10 Chart E	888241	Stock or 10530-16	226	288	110	8 38	.000	.552
				230	292		0 50	.000	.563
HYDRAULIC ROLLER - Fair idle. Performance usage. Good mid range torque & horsepower. Street & bracket racing. Auto trans with 3000 + converter. 9.5 - 10.5:1 comp. BASIC RPM 3000-6500	HR-230/352-2S-10 Chart E	888251	Stock or 10530-16	230	292	110	10 40	.000	.563
				234	296		52 2	.000	.574
MECHANICAL ROLLER - Good idle. Street performance usage. Good low & mid range torque & horsepower. Auto trans with 3000 + converter. 9.5 - 10.5:1 comp. BASIC RPM 3000-6500	SR-228/338-2S-10 Chart D	888161	24518-16 ²	228	278	110	9 39	.020	.541
				236	286		53 3	.020	.560
MECHANICAL ROLLER - Fair idle. Moderate performance usage. Good mid range torque & horsepower. Mild bracket racing. Auto trans. with 3500 + converter. 9.5 - 10.5:1 comp. BASIC RPM 3500-7000	SR-236/350-2S-10 Chart D	888171	24518-16 ²	236	286	110	13 43	.020	.560
				244	294		57 7	.020	.579
MECHANICAL ROLLER - Fair idle. Performance usage. Good mid & upper rpm torque & horsepower. Bracket racing. Auto trans with 3500 + converter. 10.5 - 11.5:1 comp. BASIC RPM 3800-7200	SR-244/362-2S-12 Chart D	888181	24518-16 ²	244	294	112	15 49	.020	.579
				252	302		63 9	.020	.598
MECHANICAL ROLLER - Rough idle. Performance usage. Bracket racing. Good mid range torque + horsepower. Auto trans with race converter. 11 - 12.5:1 comp. BASIC RPM 3800-7200	R-244/3294-2-6 Chart D	888191	24518-16 ²	244	280	106	20 44	.026	.527
				254	290		57 17	.026	.546

Note:

1. All camshafts other than Compucam 2020 and 2030 work best with compression ratios of at least 9.5:1.
2. All roller lifters (except for stock or 10530-16) should be checked in the block to ensure the oil gallery is not unmasked on full lift, otherwise oil pressure problems at low RPM could occur.
3. All valve lifts shown are calculated at 1.6 ratio. If using roller rockers, ratio will be 1.65 and lift will increase.
4. Large range of custom roller cams available. Call for details.

Note: RPM figures are based on 304 engines, for 350 engines subtract 500RPM.

Holden V8 Valve Train Chart

Chart	A		B		C		D		E	
Valve Springs	99848-16		99838-16	a	99893-16	a	99893-16	a	96870-16	a
Retainers, steel heat treated	99915-16	t	99936-16	t	99953-16	t	99944-16	t	99943-16	t
Valve stem seals teflon	99820-16	a	99820-16	a	99820-16	a	99820-16	a	99820-16	a
Valve locks stamped heat treated	99041-1	b								
Valve locks machined steel heat treated	99097-1	b	99097-1	b	99097-1	b	99097-1	b	99097-1	b
Pushrods C/Moly heat treated	24621-16	c	24621-16	c	24622-16	f	24624-16	i	24625-16	k
					24623-16	h			95643-16	l
Pro Series 1pc pushrods	95654-16	d	95654-16	d		g	95656-16	j	95645-16	k
	95642-16	e							95643-16	l
Timing gear set Premium	RCS6000	m	RCS6000	m	RCS6000	m	RCS6000	m	RCS6000	m
Timing gear set Econo	REC6000	n	REC6000	n	REC6000	n	REC6000	n	REC6000	n
Energizer R/Rockers 1.65 x 7/16	24744-16	a	24744-16	a	24744-16	a	24744-16	a	24744-16	a
Energizer Bolt on kit 1.65	24745-16	o	24745-16	o					24745-16	o
Blue Racer R/Rockers 1.65 x 7/16	3066	a	3066	a	3066	a	3066	a	3066	a
Blue Racer Bolt on kit 1.65	3067	o	3067	o					3067	o
Gold Race R/Rockers 1.65 x 7/16	28758-16	a	28758-16	a	28758-16	a	28758-16	a	28758-16	a
Oil pump gear - Coated Steel	88950-1		88950-1		88950-1		88950-1		88950-1	
Rocker bridge shim kit	99179-1		99179-1		99179-1		99179-1		99179-1	

IMPORTANT NOTE: CR99003-1 Crane Super Lube Must Be Used During Run-In Of All Hydraulic & Solid Flat Tappet Cams.

^a Must Machine Cyl. Heads. 99892-16 can be used as an upgraded endurance spring in place of 99893-16.

^b Optional Locks - Tall assy. Heat treated +.050" CR99095-1
- Short assy. Heat treated -.050" CR99096-1

^c 8.688" (Std)

^d 8.70" (+.012")

^e For Cams 889700 / 889710 Use STK 8.083" or 95642-16 8.10"

^f 8.865" (+.175")

^g 8.850" (+.160")

^h 9.00" for L34 Heads (+.312")

ⁱ 8.786" (+.098")

^j 8.80" (+.112")

^k 8.250" Use with 888131, 888141, 888151 Cams.

^l 8.150" Use with 888231, 888241, 888251 Cams.

^m Rollmaster with 9 keyway crank gear Iwis Chain.

ⁿ Rollmaster with 3 keyway crank gear Rolon Chain.

^o Includes Roller Rockers / Posilocks / Studs / Guideplates / Loctite. Fits without machining Heads.

^p CRC969C-16 Chilled Iron Base Lifters.

^q C73-16 Replacement Hydraulic Lifters.

^r 99284-16 Anti-Pump Lifters.

^s 99384-16 Hi Intensity Hydraulic Lifters.

^t Nominal Installed Height with 99097-16 locks & Std length Valves.

99915-16	1.730"
99936-16	1.715"
99953-16	1.840"
99944-16	1.780"
99943-16	1.840"