

# INTRODUCTION

Welcome to Midwest Motorcycle Supply's Engine Reference Guide.

In an effort to make servicing your V-Twin® engine easier, the staff at Midwest Motorcycle Supply have put together what we believe to be the most comprehensive list of replacement parts for the heart of your motorcycle. We hope that this reference guide serves as more than just a book, we envision this guide as more of a tool that can be used for years to come. Starting with the Evolution® family of engines this reference guide, through time, will expand to include Shovelhead®, Panhead® & other older Vintage V-Twin® engines.

We would also like to take this time to thank all supporters of Midwest® & Ultima® products. It is because of you that we have grown to be one of the world's leading providers of high quality aftermarket motorcycle parts & accessories. Thank You & Ride Safe!!!

Every attempt has been made to insure proper fitment of our parts for the applications listed in this guide. It is the end users responsibility to exercise good judgement in the part selection, installation & maintenance of their motor when installing parts referred to in this reference guide. Midwest MC Supply has no control over the judgement of others & assumes no responsibility or liability of any nature for the failure of others to use good judgement.

Midwest Motorcycle Supply, Est. in 1971, is one of the world's leading manufacturers and distributors for aftermarket parts and accessories for American made motorcycles. As a manufacturer we have the capability to produce many of the products you are currently purchasing from other distributors . . . at a fraction of the cost! See examples of our product line at ***www.ultimaproducts.com*** We are committed to keeping up to date on industry research and technical data, as well as legislation and sales demographics & statistics for the benefit of our Dealers.

Ultima Company LLC is not a representative of any other motorcycle engine manufacturer and the parts we sell are not necessarily recommended by any other motorcycle engine manufacturer.

All words used in this catalog denoting any motorcycle engine manufacturer, engine models or part numbers are intended for use as reference only.

Although our replacement engines and engine parts are not original factory equipment for some manufacturers, our intention is to provide an exceptional quality replacement part that will outperform the original equipment of many OEM manufacturers.

Harley-Davidson® Parts: Harley® and Harley-Davidson® and other model names of Harley® motorcycles are used as a reference only. Some H-D® part numbers are also used as reference only. We are not an authorized Harley® dealer and in no way do we have, or intend to imply any kind of business relationship with Harley-Davidson Motor Company®. Our intention is to provide products that can be used on a Harley-Davidson® motorcycle.

Names and words that are registered trademarks of Harley-Davidson® Inc. Milwaukee, WI, such as Evolution®, Harley-Davidson®, Harley®, H-D®, HD®, and Softail® are not intended to imply that they are Harley-Davidson® original equipment by their use in connection with Harley-Davidson® factory part numbers.

All other trademarks, registered trademarks and brand names used in this catalog are the property of their respective holders.

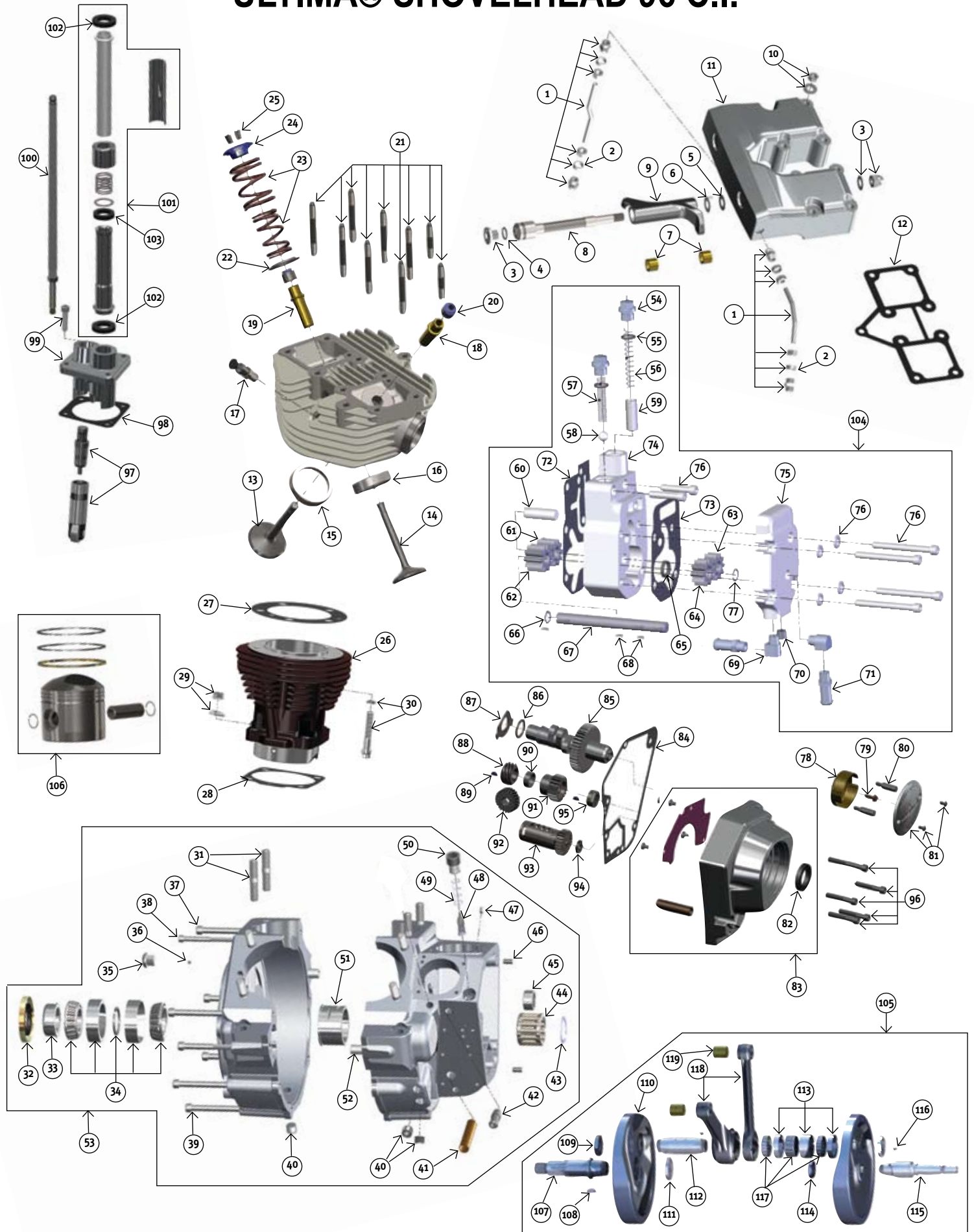
Ultima is not a representative of any other motor or motorcycle manufacturer. All words used in this “Midwest Reference Guide” are intended for use as reference only.

Although our motor replacement parts are not original equipment for some motor manufacturers, our intention is to provide an exceptional quality replacement part that meets, exceeds & outperforms the original equipment of many manufacturers. Names & words used in this “Midwest Reference Guide” that are registered trademarks of S&S® Cycle, Merch Performance® & Rev Tech® are not intended to imply that they are S&S® Cycle, Merch Performance® or Rev Tech® original equipment.

#### WARNING

Serious injury, death and property damage can result from the improper use, control, alteration, or maintenance of motorcycles. The dealer and dealers customers must exercise good judgement in the use, control, alteration, part selection and installation, and maintenance of motorcycles. Ultima® has no control over the judgement of others and assumes no responsibility or liability of any nature for the failure of others to use good judgement.

# ULTIMA® SHOVELHEAD 96 C.I.



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#	PART#	DESCRIPTION	OEM#	QTY	#	PART#	DESCRIPTION	OEM#	QTY
1	71-137	Rocker cover & feed oil lines. 66-84		kit	77	98-325	Snap ring	26348-36	each
2	95-127	Oil line sleeve/O-ring	63529-57	each	78	53-528	Ignition rotor (gold)	32402-83	each
3	41-779	Rocker shaft hardware		set	79	53-529	Ignition rotor screw	2611C	each
4	95-701	O-ring	11101	each	80	91-352	Ignition timing screws	32606-82	each
5	91-277	Rocker arm shim .005"		each	81	89-114	Ignition cover, Ultima w/screws		each
	91-469	Rocker arm shim .010"		each	82	96-299A	Oil seal	83162-51	each
	91-470	Rocker arm shim .020"		each	83	88-110	Cam cover	25268-84A	each
6	91-549	Rocker arm spacer	17452-66	each	84	78-672	Gasket, cam cover	25225-70B	each
7	95-356	Bushing	17428-57	each	85	114-16	Cam for Ultima 96" Shovelhead, Andrews BH		each
8	91-287	Rocker arm shaft	17611-66A	each	86	98-378	Cam shim .070"	25554-36	each
9	91-313	Rear exh./front int. rocker arm	17360-66	each		98-375	Cam shim .055"	25551-36	each
	91-314	Front exh./rear int. rocker arm	17375-66	each		98-376	Cam shim .060"	25552-36	each
10	40-318	Chrome rocker cover hdwre kit, 66-84, 18 hex nuts/18 flat washers	7753 6016	kit		98-377	Cam shim .065"	25553-36	each
11	89-344	Rocker arm covers, chrome, 66-84 includes chrome spacers		set		98-379	Cam shim .075"	25555-36	each
12	78-700	Rocker box gasket		each		98-380	Cam shim .080"	25556-36	each
13	91-1	Intake valve		each	87	98-372	Washer, cam thrust	25550-57	each
14	91-2	Exhaust valve		each	88	98-359	Gear, oil pump drive	26349-73	each
15	91-573	Intake valve seat		each	89	98-305	Woodruff key	23985-54	each
16	91-572	Exhaust valve seat		each	90	98-89	Pinion gear spacer	24703-54B	each
17	93-772	Compression release 10mm		each	91	98-588	Gear, pinion Red	24043-78	each
18	91-706	Valve guide, int.		each		98-585	Gear, pinion Orange	24040-78	each
19	91-724	Valve guide, exh.		each		98-586	Gear, pinion White	24041-78	each
20	91-342	Valve guide seal		each		98-587	Gear, pinion Yellow	24042-78	each
21	91-688	Rocker box stud kit 66-84 8 long, 2 short, 1 motor mt.		kit		98-589	Gear, pinion Blue	24044-78	each
22	91-346	Valve spring seat		each		98-590	Gear, pinion Green	24045-78	each
23	91-548	Springs		set		98-591	Gear, pinion Black	24046-78	each
24	91-546	Valve spring collar		set	92	98-358	Gear, oil pump driven	26345-73	each
25	91-244	Valve keepers		set	93	98-512	Breather gear std.	25313-77	each
26	93-261	Front cylinder, black 3-5/8 bore stock height		each		98-494	Breather gear +.030" 77 & ltr	25313-77	each
	93-262	Rear cylinder, black 3-5/8 bore stock height		each	94	98-80	Breather gear shim .110" 79 & ltr	25313-77A	each
27	78-703	Head gasket		each		98-81	Breather gear shim .115" 79 & ltr	25321-79	each
28	78-702	Base gasket		each		98-82	Breather gear shim .120" 79 & ltr	25322-79	each
29	41-943	Base stud nuts & washers		kit		98-83	Breather gear shim .125" 79 & ltr	25323-79	each
30	93-421	Head bolt & washer kit, cad plated 48-84	6469	kit	95	98-302	Nut, pinion	24023-54	each
31	41-993	Cylinder base stud set 78-84 8 pcs.	16837-78	set	96	40-614	Bolt kit for Ultima cam cvr. Chrome		kit
32	95-805	Oil seal	12026	each	97	91-636	Hydraulic lifter, Jims powerglide		each
33	98-360	Spacer, sprocket shaft 71-99 BT	24002-700	each	98	78-670	Front tappet guide gasket		each
34	95-320	Bearing & race set	9028	set		78-671	Rear tappet guide gasket		each
35	98-490A	Timing plug	720	each	99	91-638	Tappet guide set, chrome		set
36	98-545	Set screw 10-24		each	100	91-262	Pushrod set		set
37	300-533	Case bolt 5/16-18 x 2-3/4		each	101	91-331	Pushrod cover assy. Chrome		set
38	300-535	Case bolt 1/4-20 x 4.0		each	102	95-701	O-ring Pushrod cover upper & lower	11101	each
39	300-534	Case bolt 5/16-18 x 3-1/2		each	103	95-241	O-ring Pushrod cover middle	11132	each
40	98-544	1/4 pipe plug for case		each	104	98-517	Oil pump complete H.O. 92 & ltr polished		each
41	300-453	Bushing, oil pump 36 & ltr		each		98-520	Oil pump complete H.O. 92 & ltr black		each
42	21-123	Spigot tube	63533-41	each	105	98-524	Crankshaft assy. 4.625" stroke .792" wristpin		assy.
43	98-531	Pinion bearing retaining ring	11177	each	106	93-140	Ultima Shovelhead piston set by Ross rings, clips & pins included std. bore		set
44	95-602	Pinion bearing White	24626-87	each		93-141	Ultima Shovelhead piston set by Ross rings, clips & pins included .005" over		set
	95-603	Pinion bearing Green	24628-87	each		93-142	Ultima Shovelhead piston set by Ross rings, clips & pins included .010" over		set
*	95-604	Pinion bearing Red	24641-87	each		93-143	Ultima Shovelhead piston set by Ross rings, clips & pins included .020" over		set
	95-605	Pinion bearing Blue	24643-87	each	107	98-339	Sprocket shaft		each
45	95-173	Cam bearing	9058	each	108	94-137	Woodruff key	23985-56	each
46	98-540	Dowel pin .250"x.500"	358	each	109	98-421	Nut, crank pin 1"-20	23969-83	each
47	98-543	3/16 Hi pressure plug		each	110	98-652	Crankshaft halves only 4.625" Stroke .792 wristpin		each
48	98-510	Screen, crankcase	24981-70	each	111	98-539	Nut, sprocket shaft 1-1/8"-16	24017-80	each
49	98-511	Spring, crankcase 70-99 BT	24982-70	each	112	98-537	Crankpin w/nut & key		each
50	98-538	Screen plug		each	113	95-145	Rod race set for 7.44" rods		each
51	95-429	Bearing race	24599-58B	each	114	98-422	Nut, pinion shaft 3/4"-20	24016-80	each
52	300-541	Alignment pin .500" x.500"		each	115	98-546	Pinion Shaft std length		each
53	206-21	96" Ultima Shovelhead case assembly, natural		assy	116	98-475	Woodruff key	11218	each
54	41-888	Spring cap	26263-80	kit	117	95-259	Rod roller bearings & retainer cage	24385-40B	each
55	95-828	O-ring 84-99	11105	pkg. 5	118	98-573	Connecting rods H-beam 7.440" w/bushings & races		each
56	98-619	Plunger spring	26207-83	each	119	95-142	Replacement wristpin bushing .792"	24334-36	each
57	98-620	Check ball spring	26262-80	each					
58	98-617	Check ball	8873	each					
59	98-623	Plunger	26400-82	each					
60	98-618	Idler pin	26327-68	each					
61	98-605	Gear, return idle 10T		each					
62	98-604	Gear, return drive 10T		each					
63	98-607	Gear, feed idle 10T		each					
64	98-606	Gear, feed drive 10T		each					
65	95-753	Oil seal	26227-58	pkg. 5					
66	98-329	Clip ring	11002	each					
67	98-334	Drive shaft	26346-70	each					
68	98-272	Woodruff key	26348-15	each					
69	21-185	Spigot elbow		each					
70	98-622	Pressure plug	45830-48	each					
71	21-123	Spigot tube	63533-41	each					
72	98-625	Base gasket 92 & ltr		each					
73	98-627	Cover gasket 92 & ltr		each					
74	98-602	Pump base H.O. 92 & ltr pol.		each					
75	98-603	Pump cover H.O. 92 & ltr pol.		each					
76	41-740	Oil pump hardware kit		each					

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