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.

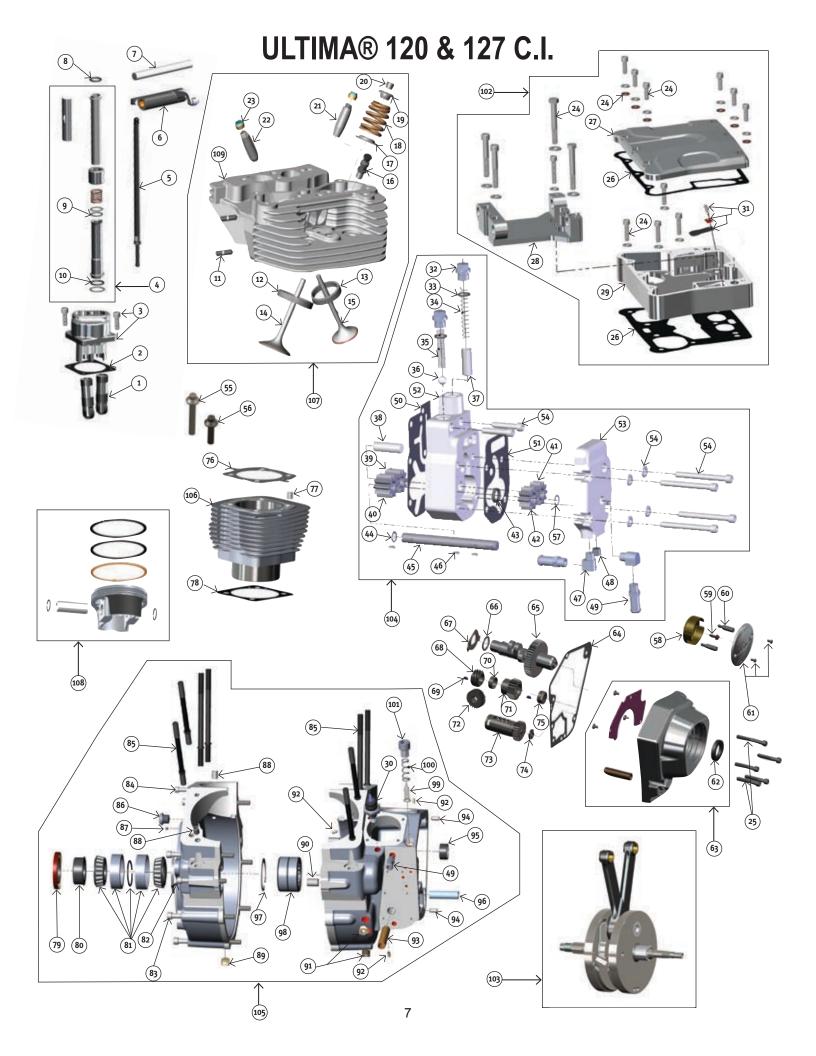
All other trademarks, registered trademarks and brand names used in this catalog are the property of their respective holders.

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.

COPYRIGHT ULTIMA® COMPANY LLC 2009 REV 04/20/09



ULTIMA® 120 & 127 C.I.

		OL				G I	<i>L1</i> U .11.		
#	PART#	DESCRIPTION	OEM#	QTY	#	PART#	DESCRIPTION	OEM#	QTY
1	91-880	Ultima® lifter	18523-86	Sold each		98-587	Gear, pinion Yellow	24042-78	Sold each
2	78-670	Rear Tappet block gasket		Sold each		98-589	Gear, pinion Blue	24044-78	Sold each
-	78-671	Front Tappet block gasket		Sold each		98-590	Gear, pinion Green	24045-78	Sold each
3	91-697			Sold each		98-591	7.1	24045-76	Sold each
		Tappet blocks big bore motors, w/hardware			70		Gear, pinion Black		
4	91-775	Pushrod cover assembly		Sold each	72	98-358	Gear, oil pump driven	26345-73	Sold each
5	91-795	Pushrod set adjustable		Sold as set	73 *	98-512	Breather gear std.	25313-77	Sold each
6	91-699	Rocker arm set		Sold as set		98-494	Breather gear +.030" 77 & ltr	25313-77	Sold each
7	91-666	Rocker arm shaft	17611-83	Sold each	74 *	98-80	Breather gear shim .110" 79 & ltr	25313-77A	Sold each
8	78-675	Pushrod O-ring upper	11157	Sold each		98-81	Breather gear shim .115" 79 & ltr	25321-79	Sold each
9	78-673	Pushrod O-ring middle	11132	Sold each		98-82	Breather gear shim .120" 79 & ltr	25322-79	Sold each
10	78-674	Pushrod O-ring bottom	11145	Sold each		98-83	Breather gear shim .125" 79 & Itr	25323-79	Sold each
11	66-242	Exhaust stud	16715-83	Sold each	75	98-302	Nut, pinion	24023-54	Sold each
12	91-569A		107 13-03	Sold each	76	78-680	1	24020-04	Sold each
		2.250"x1.815" Intake valve seat (2.100)				1	Head gasket front or rear		
13	91-568A	1.880"x1.495" Exhaust valve seat (1.700)		Sold each	77	300-541	Dowel pin .500"x.500"		Sold each
14	91-747	Intake valve 2.100"x4.580"		Sold each	78	78-679	Base gasket front		Sold each
15	91-748	Exhaust valve 1.700"x4.620"		Sold each		78-684	Base gasket rear		Sold each
16	93-772	compression release		Sold each	79	95-805	Oil seal	12026	Sold each
17	91-337	Spring seat		Sold each	80	98-360	Spacer, sprocket shaft 71-99 BT	24002-700	Sold each
18	91-861	Conical valve spring std.		Sold each	81	95-320	Bearing & race set	9028	Sold as set
19	91-338	Retainer steel		Sold each	82	300-533	Case bolt 5/16-18 x 2-3/4		Sold each
20	91-339	Ultima® keeper/lock 7 degree		Sold each	83	300-534	Case bolt 5/16-18 x 3-1/2		Sold each
21 *	91-780	Valve guide int. std.		Sold each	84	300-535	Case bolt 1/4-20 x 4.0		Sold each
۷' ا		•				1			
	91-782	Valve guide int. +.001"		Sold each	85	98-547	6.125 Cylinder stud		Sold each
	91-784	Valve guide int. +.002"		Sold each	86	98-490A	Timing plug		Sold each
22 *	91-781	Valve guide exh. std.		Sold each	87	98-545	Set screw 10-24		Sold each
	91-783	Valve guide exh. +.001"		Sold each	88	300-541	Dowel pin .500"x.500"		Sold each
	91-785	Valve guide exh. +.002"		Sold each	89	98-544	1/4 pipe plug for case		Sold each
23	91-770	Valve seal for BT, XL & TC		Sold each	90	300-541	Alignment pin .500" x.500"		Sold each
24	89-519	Rkr box hardware kit (2 rocker boxes)		Sold as kit	91	98-544	1/4 pipe plug for case		Sold each
25	40-614	Cam cover bolt kit		Sold as kit	92	98-543	3/16 Hi pressure plug		Sold each
26	77-109	Rkr box gasket kit (2 rocker boxes)		Sold as kit	93	300-453	Bushing, oil pump 36 & ltr		Sold each
27	89-541	Rkr box cover		Sold each	94	98-540	Dowel pin .250"x.500"		Sold each
28	89-542	Rkr box center section		Sold each	95	95-173	Cam bearing	9058	Sold each
								9000	
29	89-540	Rkr box base	00504.04	Sold each	96	98-542	Breather seperator tube		Sold each
30	17-65	Oil pressure switch	26561-84	Sold each	97	98-581	Case pinion bearing retaining ring		Sold each
31	89-518	Rkr box reed valve kit (1 rocker box)		Sold as kit	98	95-809	Needle bearing 1.5" shaft 1.25" width	24626-87	Sold each
32	41-888	Spring cap	26263-80	Sold as kit	99	98-510	Screen, crankcase	24981-70	Sold each
33	95-828	O-ring 84-99	11105	Sold pkg. 5	100	98-511	Spring, crankcase 70-99 BT	24982-70	Sold each
34	98-619	Plunger spring	26207-83	Sold each	101	98-538	Screen plug		Sold each
35	98-620	Check ball spring	26262-80	Sold each	102	89-516	Rocker box set. (2 rocker boxes)		Sold as set
36	98-617	Check ball	8873	Sold each	103	98-555	Crank assembly 4.250" Stroke 120" Complete		Sold each
37	98-623	Plunger	26400-82	Sold each	1.00	98-556	Crank assembly 4.500" Stroke 127" Complete	+	Sold each
38	98-618	Idler pin	26327-68	Sold each	104	98-517	Oil pump complete H.O. 92 & ltr polished		Sold each
			20321-00		104				
39	98-605	Gear, return idle 10T		Sold each	405	98-520	Oil pump complete H.O. 92 & ltr black		Sold each
40	98-604	Gear, return drive 10T		Sold each	105	206-48	Motor case 92 & ltr 4.250" bore. natural		Sold each
41	98-607	Gear, feed idle 10T		Sold each		206-49	Motor case 92 & ltr 4.250" bore. black		Sold each
42	98-606	Gear, feed drive 10T		Sold each		206-78	Motor case 92 & Itr 4.250" bore. Polished		Sold each
43	95-753	Oil seal	26227-58	Sold pkg. 5	106	93-934	120" & 127" Front cylinder natural 4.250" bore		Sold each
44	98-329	Clip ring	11002	Sold each		93-935	120" & 127" Rear cylinder natural 4.250" bore		Sold each
45	98-334	Drive shaft	26346-70	Sold each		93-936	120" & 127" Front cylinder black 4.250" bore		Sold each
46	98-272	Woodruff key	26348-15	Sold each		93-937	120" & 127" Rear cylinder black 4.250" bore		Sold each
47	21-185	Spigot elbow	T	Sold each	T	93-34	120" & 127" Front cylinder polished 4.250" bore	I	Sold each
48	98-622	Pressure plug	45830-48	Sold each		93-35	120" & 127" Rear cylinder polished 4.250" bore		Sold each
49	21-123	Spigot tube	63533-41	Sold each	107	93-930	Front cylinder head 4.250" natural assembled		Sold each
50	98-625	Base gasket 92 & ltr	00000-41	Sold each	'''	93-930	Rear cylinder head 4.250" natural assembled		Sold each
		•			1	93-931			
51	98-627	Cover gasket 92 & Ltr		Sold each	1		Front cylinder head 4.250" black assembled		Sold each
52	98-602	Pump base H.O. 92 & ltr pol.		Sold each	1	93-933	Rear cylinder head 4.250" black assembled		Sold each
53	98-603	Pump cover H.O. 92 & ltr pol.		Sold each	1	93-30	Front cylinder head 4.250 polished assembled		Sold each
54	41-740	Oil pump hardware kit		Sold each	1	93-31	Rear cylinder head 4.250" polished assembled		Sold each
55	40-616	Head bolt long	16478-85	Sold each	108 *	93-970	Piston set w/rings,clips,pins 120" 4.250" std		Sold as set
56	40-617	Head bolt short	16480-92	Sold each	1	93-971	Piston set w/rings,clips,pins 120" 4.250" +.005"	1	Sold as set
57	98-325	Snap ring	26348-36	Sold each		93-972	Piston set w/rings,clips,pins 120" 4.250" +.010"		Sold as set
58	53-528	Ignition rotor (gold)	32402-83	Sold each	1	93-973	Piston set w/rings,clips,pins 120" 4.250" +.020"		Sold as set
59	53-529	Ignition rotor screw	2611C	Sold each	1	93-974	Piston set w/rings,clips,pins 120" 4.250" +.030"		Sold as set
60	91-352	Ignition timing screws	32606-82	Sold each	*	93-975	Piston set w/rings,clips,pins 127" 4.250" std		Sold as set
61	89-114	Ignition cover, Ultima w/screws	02300 02	Sold each	1	93-976	Piston set w/rings,clips,pins 127 4.250 std Piston set w/rings,clips,pins 127 4.250" +.005"		Sold as set
	96-299A	Oil seal	83162 51	Sold each	1	93-976	Piston set w/rings,clips,pins 127 4.250 +.005 Piston set w/rings,clips,pins 127 4.250" +.010"		
62			83162-51		1				Sold as set
63	88-110	Cam cover	25268-84A	Sold each	1	93-978	Piston set w/rings,clips,pins 127" 4.250" +.020"		Sold as set
64	78-672	Gasket, cam cover	25225-70B	Sold each		93-979	Piston set w/rings,clips,pins 127" 4.250" +.030"		Sold as set
65	114-245	Cam for 120" & 127" Ultima® motor MW264		Sold each	109	93-930M	Ft cyl head 4.250" natural bare w/guides & seats		Sold each
66 *	98-378	Cam shim .070"	25554-36	Sold each	1	93-931M	Rr cyl head 4.250" natural bare w/guides & seats		Sold each
	98-375	Cam shim .055"	25551-36	Sold each		93-932M	Ft cyl head 4.250" black bare w/guides & seats		Sold each
	98-376	Cam shim .060"	25552-36	Sold each	1	93-933M	Rr cyl head 4.250" black bare w/guides & seats		Sold each
	98-377	Cam shim .065"	25553-36	Sold each	1	93-930P	Ft cyl head 4.250" polished bare w/guides & seats		Sold each
	98-379	Cam shim .075"	25555-36	Sold each	1	93-931P	Rr cyl head 4.250" polished bare w/guides & seats		Sold each
	98-380	Cam shim .080"	25556-36	Sold each	1		,,	I	1
67	98-372	Washer, cam thrust	25550-57	Sold each	Ev	ery attempt	has been made to insure proper fitment of our	parts for the	applications
							uide. It is the end users responsibility to exercise		
68	98-359	Gear, oil pump drive	26349-73	Sold each					
69	98-305	Woodruff key	23985-54	Sold each	ı parı	selection. I	nstallation & maintenance of their motor when i	ristalling part	s referred to

70

71

98-89

98-588

98-585

98-586

Woodruff key

Pinion gear spacer

Gear, pinion Red

Gear, pinion Orange

Gear, pinion White

24043-78

24040-78

24041-78

24703-54B

Sold each

Sold each

Sold each

Sold each

8

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.