HSR Series Carbs

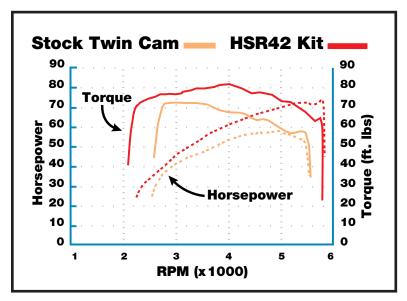
42/45/48

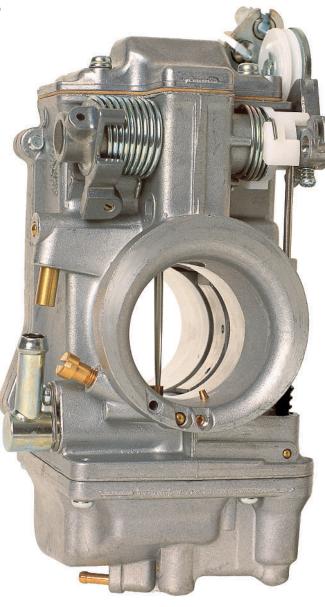
Smoothbore Carburetors

Going fast has never been so easy!
The number one performance carburetor for Harley-Davidsons and American Big Twins now slips onto any late model Harley-Davidson using the original throttle cables. Mikuni's Twin Cam, Big Twin and Sportster / Buell Easy Kits even use Harley's existing manifold, choke cable and air filter.

Keep a Harley's stock factory look and fit with better throttle response, improved acceleration, increased power and torque. Mikuni's smoothbore, flatslide throttle with roller bearings, and accelerator pump technology delivers peak performance from idle to Wide Open Throttle.

Available in 42, 45, and 48mm throttle bores for use with stock, mild, and highly modified engines.





Bolt On a 25% Power and Torque Increase!

Mikuni's Easy Kit dramatically improves the performance of Harley-Davidson's Twin Cam engine and delivers unmatched throttle response and acceleration! Used with a Screamin' Eagle Air Filter and an aftermarket exhaust system like the optional Screamin' Eagle Mufflers, the HSR42 Easy Kit adds 25% more horsepower to the output of Harley's Twin Cam motor. Maximum horsepower is increased from 57.8 to 72.2 hp, and maximum torque from 71.4 to 80.7 ft/lbs.

HSR Kits

42/45/48 Smoothbore Kits

Every Mikuni Carburetor Kit is an easy bolt-on application. Each HSR carburetor in the kit comes pre-jetted and ready to run!

■ Easy Kits 42/45mm Keep your stock look with our uniquely designed Easy Kit which uses your stock manifold and cables. Our special adapter retains your stock airbox or use the Screamin' Eagle performance air filter kit.

California A.R.B. Legal Kits available for EVO Big Twin applications.

Race Kits 48mm A real racing carburetor for monster motors. The new HSR48 delivers the highest airflow with accurate fuel metering for more power and precise throttle control. An extended main jet and larger needle valve assembly assure

maximum fuel flow to very powerful

engines. Intended for use

by experienced

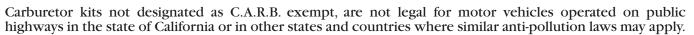
builders.

Total Kits ► 42/45mm

Go for high flow! The complete Total Kit includes a special manifold, rubber flange and high flow air filter. Total Kits allow fitment of a HSR42 or 45mm carburetor to any Big Twin Evolution or Twin Cam model. Our high flow filter supports 100 horsepower with no loss from filter restriction. (Manifold clamps, seals are not included in the kit).

Sportster / Buell Kits Mikuni offers two different HSR42 Kits for Sportsters and Buells. One kit, just for Sportsters includes a special airbox

Mikuni offers two different HSR42 Kits for Sportsters and Buells. One kit, just for Sportsters includes a special airbox backing plate as shown to work with the stock oval cover and a Screamin' Eagle high flow replacement filter. The other kit, without the backing plate, works on Buells and Sportsters with an aftermarket performance air filter assembly.



2



HSR Applications



Mikuni HSR Series Carburetor Kits

HSR Carbs use stock Harley-Davidson throttle cables.

The latest 42/45/48mm smoothbore carburetors from Mikuni install quickly using the original stock throttle cables. The HSR flatslide carb delivers excellent throttle response and control. The smoothbore allows the engine to reach its full power potential, so you accelerate and pass with confidence. You'll get good gas mileage and many years of dependable, carefree performance. These kits cover more models with fewer part numbers. Kits include instructions and hardware for each application.

Easy Kits for Sportsters, Big Twin and Twin Cam models

These kits are designed to work with your original Harley-Davidson intake manifold, choke cable, air cleaner and throttle cables. You can run other high performance air filters designed for the CV type carb by using the special adapter included in the kit.

42-7 1990 to 1999 1340 Big Twin Evo with stock CV type manifold. Includes 42mm carb, airbox adapter and chrome cover.

42-181999 to present Twin Cam, 1990 to '99 Big Twin Evo Includes 42mm carb, air box adapter, instructions. Twin Cam and Evo engines require the use of an aftermarket air cleaner. Will not work with stock air box.

42-101994 to 2004 Sportster 1200.
Includes 42mm carb, with special air box back plate. Requires the use of the stock oval cover and a Screamin' Eagle high flow replacement filter.

42-11 1994 to 2006 Sportster 1200, Buell models.

Must use with aftermarket performance air filter.

1999 to present Twin Cam, 1990 to '99 Big Twin Evo Includes 45mm carb, air box adapter, instructions. Must use a H-D Screamin' Eagle Manifold Kit: Nos. 29634-00 (HTTC), 29635-99 (TC), or 29636-99 (Evo)

Total Kits for Big Twin Evolutions & Twin Cam models

These kits are complete with everything needed for a total installation. Kits include an HSR 42mm or 45mm carburetor, new performance manifold, rubber flange, high flow air filter, chrome cover, chrome breather kit and mounting hardware. Stock throttle cables from 1990 and later models can be used. Note: 1984 to 1989 Evo models will need new cables from a similar 1990 to 1995 model.

	1101172 1(1(3)
42-8	1984 to 1999 1340 Big Twin Evo.
	Includes breather kit #KHS-020 for 1993 and later
	models. Note: 1984 to 1989 models require cables
	from 1990 to 1995 model bikes.
42-19	1999 to present Twin Cam 88/95.

Includes new breather kit #KHS-030 for Twin Cams. Note: Use your stock throttle cables.

HSR45 Kits

HSR42 Kite

45-2 1984 to 1999 1340 Big Twin Evo.
Includes a 45 mm big bore carburetor, breather kit #KHS-020 and a 45mm flange.

15-3 1984 to 1999 1340 Big Twin Evo. Same as kit above without intake manifold.

45-4 1999 to present Twin Cam 88/95.
Includes 45mm carb, breather kit #KHS-030, new manifold with MAPS location and 45mm flange.

Big Twin Evo CA Legal Kits

These kits may be used in California when all stock original components are unchanged. Kits are exempt from emission laws when installed according to instructions.

42-6 1990 to 1998 1340 Big Twin Evolution models sold in



Race Kit 48mm for Big Motors

Designed for the serious race engine builder and exteme street motor enthusiast looking for more power. Recommended for 120ci engines or bigger with high flow heads and cams. Kits include a 48mm smoothbore carb, rubber mounting flange (78mm bolt hole centers), choke cable, four main jets. Builder supplies manifold and appropriate air filter or velocity stack. Uses stock Harley CV type cables.

48-2 HSR48 Race Kit, Standard
 Standard cast alloy body, cadium fittings
 48-2P HSR48 Race Kit, Polished
 Hand polished cast alloy body, chrome fittings

Parts



Individual HSR42/45 Carburetors

For the performance engine builder needing the carburetor only for specific custom applications. Available in standard aluminum finish or the polished version. (Note: Choke cable is included, except on TM42-6 which will use stock choke cable from CV type carb).

TM42-6	HSR 42mm Carburetor, Standard finish
TM42-6PK	HSR 42mm Carburetor, Polished version
TM45-2K	HSR 45mm Carburetor, Standard finish
TM45-2PK	HSR 45mm Carburetor, Polished version

HSR Accessories

Crankcase Head-Breather Kits

For the installation of HSR Carburetor Kits using the Mikuni K&N high flow filter on Big Twins and Twin Cams.

KHS-020 To mount HSR42/45 carb and filter to Evo Big Twins, includes the new chrome banjos,

vent bolts and brackets. **KHS-030** Vent bolts and brackets.

To mount HSR42/45 carb and filter to Twin

Cam engine, includes the new chrome banjos, vent bolts and brackets.

Jet Assortment Kit for HSR

Jet Assortment Kits contain 44 pieces in a special jet box. Included are 2 ea. of a wide range of Main Jets, Pilot Jets, Needles, A/P Nozzles, Needle Clips, Needle Washers.



KHS-025 HSR42 Jet
Kit with box, 44 piece assortment.

KHS-045 HSR45 Jet Kit with box, 44 piece assortment. HSR48 Jet Kit with box, 44 piece assortment.

HSR42/45/48 Carb Rebuild Kits

All the necessary parts and gaskets to freshen up an HSR carb. Includes needle valve assembly, O-rings, gaskets, screws, and instructions. Shown at right:

KHS-016 Rebuild Kit for HSR42/45 Carb with 4.2 needle valve
KHS-017 Rebuild Kit for HSR42/45 Carb with 2.3 needle valve
KHS-031 Rebuild Kit for HSR48 Carb with 4.5 needle valve

Optional and Replacement Parts

990-605-065

TM42/32

990-662-002 HS42/001K HS42/001-CHR-K HS42/002

HS42/003 HS42/018-42K

HS42/018-45K

HS42/061-45

HS42/061-45TC

HS42/062-42K

HS42/062-45K

HS42/062-48K

HS42/012

HS42/012-300 HS42/059 HS42/060

KHS-028 KHS-029 KHS-032 Short Idle Screw Adjuster (optional). Uses standard spring. Long Idle Cable Adjuster

(standard). Spring not included.
Choke Cable, enrichener.
Air Box Adapter Kit, std. finish
Air Box Adapter Kit, chrome finish

Adapter Screws, use three per adapter.

O-Ring Seal for airbox adapter. Rubber Flange Adapter, early 42mm black w/stainless steel clamp. Rubber Flange Adapter, early 45mm black w/stainless steel clamp. Intake Manifold for HSR42/45 mm.

Evo style without hole.

Intake Manifold for HSR42/45 mm,
This Compatite with MADS hole.

Twin Cam style with MAPS hole. Rubber Flange Adapter,

42mm black w/stainless steel clamp. **Rubber Flange Adapter**, 45mm black w/stainless steel clamp.

Rubber Flange Adapter, 48mm black w/stainless steel clamp.

Air Filter Mikuni 2.5 inch standard in kits, washable Air Filter Mikuni 3.0 inch high performance, washable

Air Cleaner Cover, chrome w/cutouts Air Cleaner Cover, chrome wo/cutouts Chrome Carb Top 42/45 wo/Mikuni Chrome Carb Top 42/45 w/Mikuni

Chrome Carb Top 48 w/Mikuni logo

Jetting Parts

High speed (main), low speed (pilot) jets, jet needles and accelerator pump nozzle for the HSR42/45/48 carburetors.

VM28/486-(size) N100.604-(size) J8-8DDY01-(size)

J8-8CFY02-(size) J8-8CFY15-(size) TM42/11-(size)

N124.063

Pilot Jets, sizes 15 to 50
Main Jets, sizes 140 to 240
HSR42 Jet Needles, size 95, 96, 97 and 98, standard in HSR42 is 97.
HSR45 Jet Needles same as above HSR48 Jet Needles same as above Accelerator Pump Nozzle, size 50, 60, and 70, standard is 70.
Accelerator Pump O-Ring



.

HSR Replacement

58.

-95 ▲ Richer

Richer

Std

HSR42/45/48 Parts List 52. N133.037

PART NO.

- C5=0410-B KHS-028/05
- CW2=0414-B 776-39005
- HS42/081
- TM42/04 4. BS32/126
- 826-03002 J8-8DDY01-97
- 7a. J8-8CFY02-97 7b. J8-8CFY15-97
- TM42/03
- TM42/08-1A B40I/56
- 10. B40I/10
- 11. 834-23041 TM42/08-3.0 12.
- 13. 739-13002 14. TM42/16
- 15. TM42/13
- 15a. TM48/04 16. TM42/10
- 17. 925-98006
- 18. 53974 19. TM42/51
- 19a. TM42/53 20. B3=0520-B
- 21. VM28/204
- 22. TM42/38 23. C2=0514-B
- 640-12001 24.
- VM14/241 25. N189.192 26.
- 27. TM42/06
- 27a. TM48/02
- 28. 616-94029 29. 925-19011
- 30. TM42/43
- N138.019 TM42/48
- 33. M12F/46-BB MC-0316-B 34
- 35. TM42/47
- TM42SS1/01 0 36a. TM48SS1/01
- 37. B36/95
- 38: TM42/36 39. B30/205
- TM40/89 40. 40a. TM42/17
- 41. BN38/43
- 42. TM42/46 B30/1069 43.
- 44 N3=04 45. TM42/19
- 46. 700-15012 47. TM42/15
- 48. C2=0410 49. 604-26014
- 49a. VM20/584
- 50. N133.206 51. VM12/205

DESCRIPTION

- Screw, Top Cover (HSR42/45) Screw, Top Cover (HSR48) Screw, Top Cover (HSR42/45/48)
- Top Cover (42/45) Top Cover (HSR48)
- E-Ring, Jet Needle
- Washer, Jet Needle Jet Needle (42) Jet Needle (45)
- -96 -97 -98 ¥ Leaner Lever, T.V. (HSR48)
- Packing, Link Lever Pin, Link Lever
- Screw. Needle Retainer Clip. Needle Retainer
- Sealing Ring, T.V. (48)
- Bolt, Bracket Spacer, Bracket
- Screw
- Starter Nut, Choke
- Bodv (HSR42/45)
- Seal, Spigot Body
- Lever, A/P Pin, Throttle Lever
- Screw, A/P Spring, A/P Mixing Body (42/45) Mixing Body (48)
- Packing, Shaft (Plastic) Adjusting Screw, A/P
- Rolt
- Pin, Return Lever Lever, Return
- Nut, Throttle Stop Spring, Throttle Return
- Plate, Fuel Joint Retainer
- Screw, Pilot Air Optional Short Screw, Pilot Air

- Gasket, Top Cover
- Jet Needle (48) Lever, T.V. (42/45)
- E-Ring, Link Lever
- Throttle Valve (Slide) Sealing Ring, T.V. (42/45)
- Seal, Throttle Valve
- Pulley, Cable Bracket E-Ring, Cable Bracket Bracket Assíy, Cable
- Bracket Assív, Sportster
- Plate, Lock Tab
- Spring, Starter Plunger Starter Plunger
- Body (HSR48)
- Ring (Steel)
- Lever, Throttle Spring, A/P
- ORing, A/P Screw
- Plate, Lock Tab for Shaft
- Adjusting Screw, Throttle
- Shaft, Throttle
- Screw, Fuel Joint
- Spring, Pilot Air Washer, Pilot Air

- 53. TM40/27
- 54. KV/10 55. B30/398 56.
- VM22/138 57. 730-09018 925-15001 Ring, Idle Adjuster
- 59. TM42/32 59a. 990-605-065 Idle Adjuster (Short) Air Jet (Blank) BS30/97-00 60.
- 784-430000-Y-6 61. Needle Jet (723) 62. TM42/11-70 Nozzle, Accel, Pump O-Ring, A/P 63. N124.063
- VM28/486-25 65. TM42/12 65a. TM42/12-1A Extender, Main Jet (48) 66. N100.604-160
- 67. 616-33003 68. VM13/216 69. 786-27001-4.2 69a. 786-27002-1A-4.5
- 70. 859-32027 71. BV26/22 C2=0410 73.
- 74. TM42/05 75. N122.028 76. VM28/254
- 77. TM32/41 77a. TM32/41-1D 78. C2=0412-B
- 79. TM36/44-1A 80. TM36/64 81.
- VM14SC13/89 82. N198.063 83. 84. 990-662-002
- 85. TM29/31 BVK28/128

ORing, Pilot Air Fuel Joint

- O-Ring, Fuel Joint Packing, Idle Adjuster Washer, Idle Adjuster Spring, Idle Adjuster Idle Adjuster (Long)
 - -70 | Std -60 Leaner -50 ¥Leaner
- Pilot Jet (Sportster 20) Extender, Main Jet (42/45) Main Jet (45-175, 48-190)
- O-Ring N.V. Screw, N.V. Retainer Needle Valve Assbly (42/45) Needle Valve Assbly (48)
- Float Assív Pin, Float Screw, Float Pin 616-94028 Packing, Float Bowl Float, Chamber Body Hose, Overflow O-Ring, Drain Plug
- Drain plug (42/45) Drain plug (48) Screw. Flt Bowl, short Rod, A/P
- Boot, A/P Rod TM36/60 Plunger, A/P Spring, A/P
- Rubber Cap, Purge Port Choke Cable Pull Choke Assembly

Alternate Parts Jot Noodles:

oct necuics.			
HSR42	HSR45	HSR48	
J8-8DDY01-95	J8-8CFY02-95	J8-8CFY15-95	Richer
J8-8DDY01-96	J8-8CFY02-96	J8-8CFY15-96	Richer
J8-8DDY01-97	J8-8CFY02-97	J8-8CFY15-97	Std
.18-8DDY01-98	.18-8CFY02-98	.18-8CFY15-98	Leaner

Clip. Rubber Cap

Accelerator Pump Nozzles:

Accelerator	Fullip 140
TM42/11-70	Std
TM42/11-60	Leaner
TM42/11-50	Leaner

Needle Valve Assemblies:

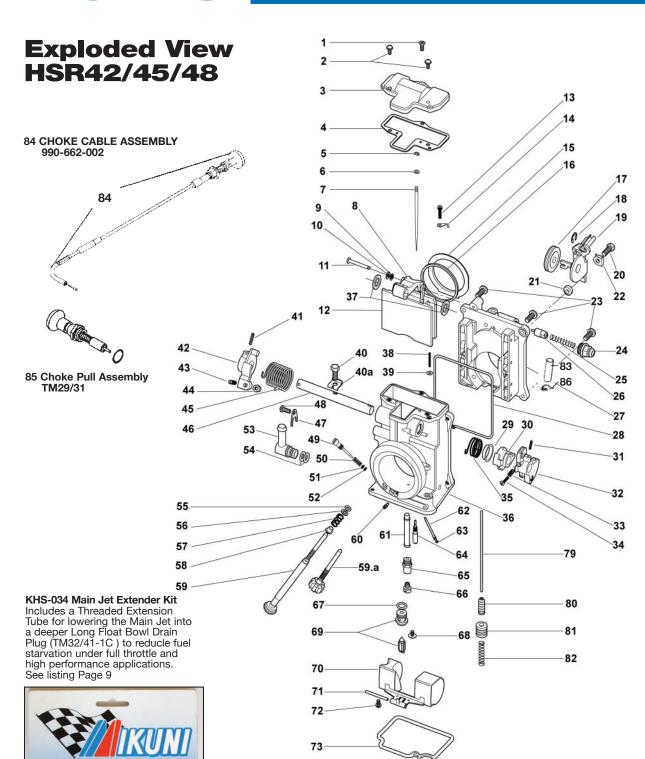
786-27002-1A-4.5 Std (HSR48) Std (HSR42/45) 786-27001-4.2 786-27001-3.5 Smaller 786-27001-2.3 Pressure feed only

Rebuild Kit:

HSR42/45: KHS-016 HSR48: KHS-031

- 1. Lined through Part Numbers are not available.
- 2. Parts in **Bold** are included in Rebuild Kits

Parts

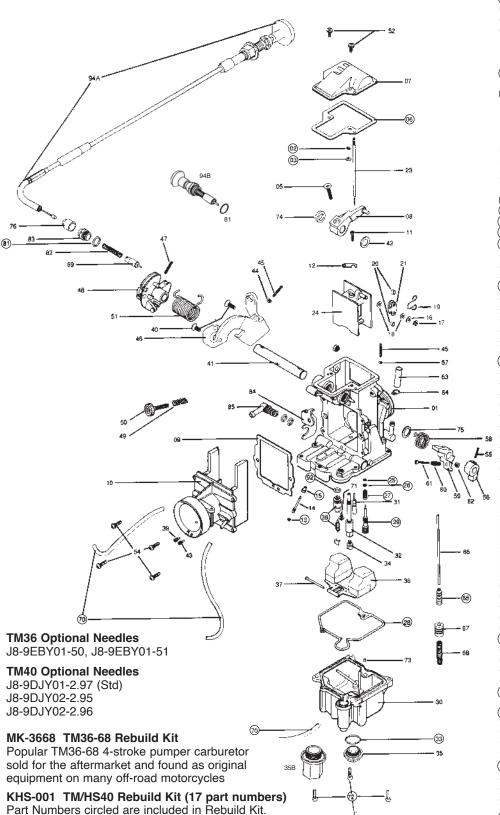




Not legal for sale or use in California on pollution controlled motor vehicles, or in other states where similar laws may apply.

HS Replacement

HS40 Carburetor Exploded View same as TM40-6 and TM36-68



PART NUMBER (000-000) = NO AVAILABLE STOCK

9DZH6-50

Choke Cable Assy 94B Chokeknob, Short

		1	ГМ36 Ј
NO.	DESCRIPTION	PART NO.	
01	Mixing body	TM4055/01	
02)	E. Ring	BS32/126	
03 04	Washer, Needle clip	826-03002	
05	Allen Screw Screw, synch lock	739-13001 C5 = 0514	
<u>66</u>	Gasket, top cover	TM 36/39	
07	Top Cover	TM 36/59	
08 09	Lever Assy Gasket, funnel	TM 36/57 TM 36/42a	
10	Funnel	TM 40/03	
11	Screw, T.V. Plate	C2 = 0310	
12	Plate, T.V. Lever	TM 36/12	
(13) 14	O'Ring, A/P Nozzle Pump, Nozzle	N124.063 TM 36/43	
(15)	Plug, A/P Nozzle	TM 29/14	
16	Washer, T. V. Lever	M-10/56	
17 18	E. Ring, A/P Nozzle	BSW 28/70 D-401/10	
19	Packing, T.V. Lever Clip T.V. Lever	TM 27/05 A	
20	Ring, T.V. Lever	TM 29/65	
21	Plate, T.V. Lever	TM 27/04	
22 23	Connector Plate, T.V. Jet Needle	TM 36/54 J8-9DJY01	9DZH
24	Throttle, Valve	N/A	JUZII
25) 26)	O'Ring, Fuel Screw	N 133.037	
26)	Washer, Ruel Screw	VM 12/33	
27) 28)	Spring, Fuel Screw O'Ring Float Bowl	N 133.206 616-94021	
Ž9)	Screw, Pilot Fuel	604-26003	
30	Float Chamber Body	TM 40/12	
31 32	Pilot Jet Needle Jet	VM 28/486-17.5 784-13002-Y6	-12.5 -P-8
33	O'Ring Drain Plug	VM 28/254	-1 -0
34	Main Jet	N 100.604-165	-130
35 25 D	Drain Plug	TM 32/41	
35B 36	Drain Plug, Long (36) Float Assy	TM32/41-1C 859-32011	
37	Pin, Float	VM 30/160	
38	Needle Valve Assy (36)	786-36011-3.3	
38)A 39	Needle Valve Assy (40) Main Air Jet (Plugged)	990-786-044	
40	Screw, Crank Bracket	BS30/97 C5 = 0512-B	
41	Shaft, Throttle	700 15004	
42	Packing	DO 00/07 4 4	4.0
43 44	Pilot Air Jet Hexagon Nut	BS 30/97-1.1 N2 = 03 B	-1.0
45	Adjust Screw	TM 36/48	
46	Bracket, Bell Crank	TM 40/14	
47 48	Pin, Throttle Bell Crank Lever Assy, Bell Crank	N 138.019 TM 40/23	
49	Spring, Idle Adjust	N150.025	
50	Adjuster, Idle	TM 40/91	
51	Spring, Throttle Return	TM 40/25	
52 54	Screw, Top Cover Screw, Air Funnel	CW2 = 0408 VM 38/133	
55	Pin, A/P Locate	BN 38/43	
56	Lever, A/Pump	TM 36/18	
57 58	O'Ring Spring, A/Pump	B 30/205 TM 40/33	
59	Lever, APump	TM 36/17	
60	Spring, A/P Adj	M12F/46a	
61	Screw, A/P Adj	MC-0316	
62 63	Hexagon nut, A/P Adj CAP, Vacuum Fitting	N3 = 03-B N148.013	
64	Spring Clip, Vac Fit	BVK28/128	
65)	CAP, A/P Rubber	TM 36/64	
66 67	Rod, A/Pump	TM 36/44	
68	Plunger Spring, A/Pump	TM 36/60 VM 14SC13/89	
69	Plunger, Starter	VM 38/148	
70	Hose	888-23026	
71 72	Screw, N.V. Holder Screw, Float Bowl	VM 13/216 C2 = 0412-B	
73	Starter Jet	VM 17/1002-45	
74	Packing, Shaft	VM 28/174	
75 76	Ring. A/P Spring	E 204040	
76 81)	Cap, Starter Cable O'Ring, Starter	VM 12/43 N 138.198	
82	Spring Starter	VM 16/42	
83	Guide Holder	640-12001	
84	Plate, Fuel Inlet	TM 40/26	
85 92	Inlet, Fuel O'Ring, needle valve	TM 40/27 KV/10	
94	Choke Cable Assv	990-662-001	



Mikuni HSR and TM Carburetor Parts and Accessories

The following Mikuni American Accessories are available for use with Mikuni HS40, HSR42/45/48 Carnuretor Kits. These parts are available through your Mikuni Dealer.

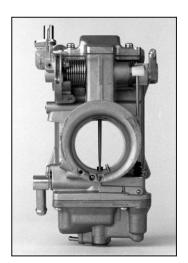
ACCESSORIES	Part Nos. HS40	HSR42/45/48
Carburetor Rebuild Kit (Includes gaskets & needle valve)	KHS-001	KHS-016, KHS-031 (48)
HSR Easy Tool Kit (Includes Wrench, T-Handle, 2 Bits)		KHS-033
Mikuni Air Filter - Standard 2.5 / High Flow		HS 42/012 (2.5')
Mikuni Air Filter - Extra Wide 3.0 / High Flow		HS 42/012-300 (3.0")
Chrome Air Cleaner Cover (OEM / cut-outs)		HS42/059
Chrome Air Cleaner Cover (Aftermarket / No cut-outs)	RS36/24-200-CHR	HS42/060
EVO Head Breather Kit (1991 to present Sportsters / 1993 to present 1340's)		KHS-020
Twin Cam Head Breather Kit		KHS-030
EVO 1340 Manifold		HS42/061-45
Twin Cam Manifold		HS42/061-45TC
Rubber Flange, Early Style (with clamp)	KHS-004	HS42/018-42K HS42/018-45K
Rubber Flange, New Style (with clamp)	KHS-004	HS42/062-42K HS42/062-45K HS42/062-48K
Choke Cable Assembly Choke Pull Assembly	990-662-001	990-662-002 TM29/31
Optional Short Idle Screw		990-605-065
HSR Main Jet Extension Kit for high performance application	KHS-034	



HSR Easy Tool Kit KHS-033 Includes: Wrench 17mm x 11/16' loosen/tighten choke nut, drain plug. Main Jet T-Wrench, Phillips/Flat Head Screwdriver, Ball End 2.5 Allen for jet needle retainer.

EARLY GEN 1 HSR Carburetor Designs

Early Style HSR42/45 Manufactured before year 2000 with throttle linkage on left. Uses Mikuni throttle cables.





LATER GEN 2

OEM Harley-Davidson

throttle cables.

