Motorcycles registered in the United States, 2002–18

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The following tables summarize the U.S. motorcycle population between 2002 and 2018, based on Insurance Institute of Highway Safety (IIHS) analyses of data provided by IHS Markit. Registration counts as of January 1 of each year were provided by year, state, and Vehicle Identification Number (VIN) pattern (first 10 digits). The Highway Loss Data Institute (HLDI) decoded VIN patterns to determine make, series, and model year, and information maintained by HLDI on motorcycle type and antilock braking system (ABS) availability were appended to each record by make/series/model year. Only on-road classes of motorcycles were included.

Since the VIN information is constantly improving, the counts in this paper may differ slightly from the previous version.

Selected observations

- The number of on-road motorcycles registered in the U.S. has been generally increasing throughout these years, doubling from 4.2 million in 2002 to 8.3 million in 2018 (Table 1). Registrations declined from 2017 to 2018 to slightly below the 2015 number.
- California and Florida have the largest number of registered motorcycles by large margins.
- Cruisers and touring bikes are the largest classes of registered motorcycles (Table 2).
- Choppers are a relatively new class designation from manufacturers. This class probably is undercounted, as similar motorcycles are custom builds and not identifiable from VIN numbers.
- Scooter registrations have been increasing but also may be undercounted, as many have engines smaller than 50 cubic centimeters (cc) and state laws (including registration requirements) vary widely for vehicles with such small engines.
- Antilock braking system (ABS) availability has increased greatly among the on-road motorcycle fleet, from standard on 0.5% of registered motorcycles in 2002 to 12.3% in 2018 (Table 3).

  Similarly, registered motorcycles for which ABS was an optional feature increased from 3.7% in 2002 to 16.3% in 2018.
- The average age of registered motorcycles has increased from 8.7 years in 2002 to 12.0 years in 2018 (Table 4b). Half of motorcycles registered in 2018 were at least 11 years old.

Table 1. On-road motorcycles registered in the United States by state, 2002–18

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alabama	57,081	65,542	75,890	87,366	100,594	112,942	124,662	137,458	142,413	146,656	150,835	154,927	158,483	161,752	165,001	169,316	171,704
Alaska	12,513	13,761	15,152	16,455	17,836	19,395	20,910	22,366	23,365	23,758	24,260	24,943	25,436	25,630	25,760	26,035	25,115
Arizona	74,067	81,636	90,788	101,016	114,956	130,446	142,486	153,774	157,306	160,105	165,753	173,083	182,631	189,741	199,034	205,998	204,619
Arkansas	31,276	36,489	42,013	47,931	55,908	63,277	70,964	79,999	82,197	81,702	80,638	78,458	77,800	76,476	74,965	74,097	72,484
California	400,615	445,052	495,813	551,757	612,176	669,474	718,163	771,839	779,994	780,858	796,013	819,151	858,194	891,881	929,687	955,400	950,780
Colorado	101,031	111,432	120,166	128,975	138,021	147,696	158,670	169,130	171,069	170,211	168,630	169,790	177,349	180,784	185,400	186,902	188,081
Connecticut	54,676	60,483	66,398	71,445	76,391	81,876	86,661	90,594	91,117	90,535	88,363	91,798	91,219	91,296	91,381	93,449	92,130
Delaware	12,427	13,708	15,187	16,882	18,838	20,761	21,873	23,276	23,749	24,253	25,405	25,868	26,065	26,273	26,522	26,520	26,035
District of Columbia	2,361	2,588	2,662	2,585	2,700	2,998	3,316	3,514	3,722	3,984	4,256	4,414	4,965	5,109	5,193	5,158	5,294
Florida	232,947	265,959	306,715	354,730	412,057	468,286	506,191	545,617	544,802	534,407	539,191	535,835	553,474	571,829	590,442	595,972	588,815
Georgia	96,194	110,287	124,974	140,773	156,494	173,581	188,514	205,376	207,273	208,729	208,293	205,688	204,481	206,979	209,997	209,344	213,836
Hawaii	16,939	18,246	19,621	20,787	22,631	24,030	25,120	26,476	26,586	26,682	26,692	23,975	29,203	31,288	28,434	32,599	53,745
Idaho	27,294	29,720	32,636	35,867	40,170	45,388	50,768	56,805	57,204	55,659	57,896	56,936	59,801	61,788	63,274	63,927	64,227
Illinois	198,848	215,725	234,085	249,998	259,714	281,176	307,057	328,122	331,915	333,071	322,562	316,712	319,016	317,407	316,456	295,886	300,247
Indiana	115,708	127,719	138,652	149,424	159,266	168,251	177,976	192,201	197,322	197,709	200,767	201,765	205,393	209,041	227,955	232,939	231,182
Iowa	70,638	76,226	83,692	91,644	99,774	108,409	117,414	127,807	133,687	137,831	141,729	144,905	149,421	153,785	157,406	160,375	160,790
Kansas	45,157	49,569	54,749	60,478	66,738	73,905	81,029	89,854	94,183	97,178	99,426	100,385	101,813	102,832	103,206	103,547	103,074
Kentucky	50,971	60,499	70,133	79,747	89,412	98,085	107,089	114,624	117,597	117,187	117,544	116,492	117,043	118,813	118,612	117,604	116,831
Louisiana	49,050	55,917	62,493	68,458	74,285	82,842	89,023	96,160	98,245	97,500	91,432	89,438	92,210	92,046	92,119	90,149	87,422
Maine	21,454	26,228	29,919	34,499	38,635	41,879	40,209	49,716	52,226	48,533	52,251	56,087	54,429	57,317	57,517	57,035	56,127
Maryland	63,574	72,372	81,070	91,052	101,033	111,046	119,442	125,195	127,016	125,871	123,689	120,482	121,451	122,176	120,355	118,185	114,460
Massachusetts	91,145	102,901	113,285	120,389	125,225	130,185	134,110	138,033	138,588	137,422	140,984	140,448	141,234	142,638	145,020	146,362	146,078
Michigan	169,755	184,193	198,801	212,376	225,192	237,259	250,166	262,130	260,521	257,067	252,423	248,425	247,694	245,561	246,323	249,568	248,944
Minnesota	118,929	131,979	144,790	157,500	168,906	180,532	192,858	207,028	210,868	211,413	208,361	207,425	211,581	216,384	217,548	213,137	184,210
Mississippi	24,751	28,666	32,976	37,432	42,147	47,657	51,962	57,305	57,953	57,600	54,737	51,566	52,825	52,722	51,579	50,456	50,372
Missouri	65,593	74,000	83,040	93,117	104,149	115,842	126,138	137,164	141,043	142,043	140,305	135,608	137,331	138,396	138,662	139,475	136,901
Montana	18,376	20,580	24,266	27,797	21,915	24,028	26,232	30,078	32,505	33,912	35,136	38,485	46,331	50,106	53,572	56,839	59,075
Nebraska	22,396	25,347	28,833	32,559	36,298	40,424	44,492	49,180	51,940	53,332	52,714	52,199	53,868	54,403	53,840	54,835	53,673
Nevada	33,192	37,109	41,225	46,987	53,428	59,370	64,290	67,513	67,205	65,996	65,170	65,409	68,655	71,272	73,494	74,365	75,236
New Hampshire	43,790	40,153	39,957	52,079	65,910	70,272	72,832	75,297	74,930	73,847	73,374	73,752	74,539	75,878	77,795	79,607	80,980
New Jersey	103,668	114,903	126,398	135,975	146,552	152,337	161,376	165,441	164,178	158,709	162,155	157,939	157,734	157,767	160,042	161,062	160,878
New Mexico	31,818	35,231	39,261	43,129	47,813	53,348	59,119	65,619	67,732	68,975	66,374	65,986	66,668	67,143	66,530	61,694	63,217
New York	232,608	248,557	250,592	268,274	285,818	288,402	306,704	326,221	335,008	339,768	334,859	350,787	356,488	358,168	362,362	367,918	367,813
North Carolina	120,488	136,420	148,747	165,333	183,197	201,135	217,551	233,706	232,548	223,350	223,070	215,444	215,923	214,282	239,495	252,798	236,636
North Dakota	12,941	14,432	16,110	18,124	20,350	22,795	25,431	28,412	29,783	30,269	32,353	27,933	34,230	36,431	37,585	37,576	37,486
Ohio	215,905	235,821	255,380	274,777	295,303	315,582	338,219	361,671	364,542	364,209	361,802	366,714	372,036	379,779	383,678	389,241	388,108
Oklahoma	49,669	56,734	63,705	70,519	78,255	89,466	99,791	110,377	113,939	115,699	116,183	116,880	119,804	122,354	123,353	122,307	120,365
Oregon	61,209	66,156	71,723	76,326	82,448	90,276	98,954	109,779	114,326	114,233	114,541	111,636	118,111	120,742	123,609	126,597	128,221
Pennsylvania	206,384	228,187	248,431	274,580	302,766	330,817	350,726	377,545	392,104	403,454	405,807	405,305	408,821	365,991	380,161	390,520	393,509
Rhode Island	16,502	18,486	20,482	22,549	24,427	26,149	27,523	28,707	28,891	28,879	28,395	28,328	28,426	28,607	28,338	28,691	28,620
South Carolina	60,732	67,935	73,028	79,827	87,735	97,359	106,804	115,604	113,509	107,761	111,981	102,496	114,780	128,105	134,760	137,319	134,589
South Dakota	21,709	24,116	26,668	29,219	32,012	34,861	37,602	40,561	41,963	42,758	44,186	45,125	47,130	48,396	49,544	49,306	50,342
Tennessee	74,168	83,340	93,692	107,026	122,774	138,831	155,033	170,071	170,956	169,989	166,262	164,145	157,714	148,341	91,544	39,152	28,663
Texas	208,525	237,510	269,941	303,050	344,019	385,582	425,346	476,486	481,192	471,748	450,369	433,220	444,323	450,901	401,763	386,967	378,782
Utah	34,894	38,567	43,304	48,275	54,106	61,929	71,587	84,510	89,478	94,112	98,933	98,214	97,575	91,204	87,043	86,881	86,720
Vermont	14,146	15,878	17,419	18,833	20,479	22,480	24,318	26,166	26,602	26,534	25,299	24,709	24,744	24,642	24,824	24,589	24,156
Virginia	92,461	104,860	117,364	132,600	147,997	163,454	176,953	189,688	194,026	192,593	188,649	190,644	190,109	199,863	204,703	204,499	200,422
Washington	112,458	122,426	134,660	150,413	168,284	188,282	206,290	225,438	230,361	229,623	234,421	231,752	231,831	235,907	242,010	244,186	229,677
West Virginia	25,148	28,912	32,423	36,485	40,953	45,671	50,538	55,201	56,451	56,104	56,984	54,309	53,827	53,245	53,357	53,054	52,641
Wisconsin	164,640	175,590	193,468	205,314	224,525	239,225	259,323	275,945	287,852	298,819	292,870	306,863	302,007	313,658	306,384	318,336	306,678
Wyoming	13,274	15,015	16,837	18,569	20,399	22,715	25,320	27,633	28,133	27,894	26,302	25,720	26,185	26,305	26,671	25,751	25,181
Total	4,196,095	4,653,162	5,129,614	5,661,302	6,231,011	6,802,008	7,345,125	7,928,412	8,062,115	8,060,531	8,050,624	8,048,598	8,212,401	8,313,434	8,374,305	8,393,525	8,305,171

Table 2. On-road motorcycles registered in the United States by type of motorcycle, 2002–18

	Chopper		Standard		Cruiser		Touring		Sport Touring		Unclad Sport		Sport		Super Sport		Dual Purpose		Scooter		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2002	0	0.0	435,302	10.4	2,029,156	48.4	621,004	14.8	36,111	0.9	33,010	0.8	296,906	7.1	362,471	8.6	183,483	4.4	198,652	4.7	4,196,095	100.0
2003	746	<0.1	425,838	9.2	2,294,179	49.3	696,369	15.0	43,239	0.9	48,559	1.0	315,410	6.8	413,372	8.9	199,034	4.3	216,416	4.7	4,653,162	100.0
2004	3,826	0.1	411,534	8.0	2,566,486	50.0	775,662	15.1	52,752	1.0	65,798	1.3	329,935	6.4	467,987	9.1	214,943	4.2	240,691	4.7	5,129,614	100.0
2005	9,531	0.2	402,696	7.1	2,856,429	50.5	863,229	15.2	62,180	1.1	85,845	1.5	345,263	6.1	533,158	9.4	233,747	4.1	269,224	4.8	5,661,302	100.0
2006	16,170	0.3	391,784	6.3	3,142,873	50.4	961,398	15.4	71,368	1.1	106,132	1.7	364,640	5.9	606,584	9.7	257,869	4.1	312,193	5.0	6,231,011	100.0
2007	21,415	0.3	375,269	5.5	3,407,910	50.1	1,071,026	15.7	80,513	1.2	124,237	1.8	389,065	5.7	681,742	10.0	287,072	4.2	363,759	5.3	6,802,008	100.0
2008	24,752	0.3	364,661	5.0	3,647,702	49.7	1,173,429	16.0	90,558	1.2	142,437	1.9	410,087	5.6	752,107	10.2	317,870	4.3	421,522	5.7	7,345,125	100.0
2009	26,397	0.3	355,049	4.5	3,859,997	48.7	1,260,865	15.9	104,472	1.3	163,481	2.1	431,716	5.4	800,862	10.1	355,927	4.5	569,646	7.2	7,928,412	100.0
2010	29,686	0.4	335,794	4.2	3,891,826	48.3	1,323,827	16.4	113,152	1.4	173,372	2.2	430,446	5.3	792,949	9.8	369,311	4.6	601,752	7.5	8,062,115	100.0
2011	31,417	0.4	316,128	3.9	3,860,393	47.9	1,373,470	17.0	121,784	1.5	176,984	2.2	421,007	5.2	770,353	9.6	374,740	4.6	614,255	7.6	8,060,531	100.0
2012	32,491	0.4	297,870	3.7	3,799,351	47.2	1,427,216	17.7	131,048	1.6	181,085	2.2	416,273	5.2	739,380	9.2	385,149	4.8	640,761	8.0	8,050,624	100.0
2013	32,887	0.4	284,405	3.5	3,740,349	46.5	1,484,269	18.4	139,855	1.7	182,755	2.3	413,848	5.1	708,658	8.8	399,801	5.0	661,771	8.2	8,048,598	100.0
2014	33,447	0.4	282,318	3.4	3,746,519	45.6	1,577,739	19.2	150,944	1.8	189,063	2.3	419,364	5.1	698,459	8.5	429,250	5.2	685,298	8.3	8,212,401	100.0
2015	33,632	0.4	277,013	3.3	3,716,583	44.7	1,656,981	19.9	162,216	2.0	202,817	2.4	420,652	5.1	684,847	8.2	452,317	5.4	706,376	8.5	8,313,434	100.0
2016	33,557	0.4	277,756	3.3	3,649,886	43.6	1,717,873	20.5	177,680	2.1	215,393	2.6	424,514	5.1	671,555	8.0	475,701	5.7	730,390	8.7	8,374,305	100.0
2017	33,519	0.4	281,806	3.4	3,592,278	42.8	1,769,517	21.1	190,113	2.3	229,447	2.7	425,076	5.1	649,858	7.7	498,231	5.9	723,680	8.6	8,393,525	100.0
2018	33,189	0.4	284,955	3.4	3,498,596	42.1	1,806,444	21.8	197,355	2.4	239,032	2.9	411,041	4.9	601,566	7.2	516,943	6.2	716,050	8.6	8,305,171	100.0

Table 3. On-road motorcycles registered in the United States by availability of antilock braking systems (ABS), 2002–18

	Standard		Optional		Not available		Total	
	N	%	N	%	N	%	N	%
2002	7,718	0.5	58,260	3.7	1,515,455	95.8	1,581,433	100.0
2003	10,768	0.5	89,437	4.2	2,009,641	95.3	2,109,846	100.0
2004	14,362	0.5	124,062	4.6	2,542,792	94.8	2,681,216	100.0
2005	17,583	0.5	155,788	4.7	3,125,220	94.7	3,298,591	100.0
2006	21,394	0.5	187,003	4.7	3,756,015	94.7	3,964,412	100.0
2007	27,381	0.6	217,217	4.7	4,404,714	94.7	4,649,312	100.0
2008	33,820	0.6	279,350	5.3	4,978,207	94.1	5,291,377	100.0
2009	44,795	0.7	408,858	6.8	5,522,657	92.4	5,976,310	100.0
2010	56,592	0.9	507,419	8.1	5,666,344	90.9	6,230,355	100.0
2011	79,847	1.3	586,470	9.2	5,688,211	89.5	6,354,528	100.0
2012	126,825	2.0	675,902	10.5	5,659,140	87.6	6,461,867	100.0
2013	184,596	2.8	783,653	12.0	5,576,861	85.2	6,545,110	100.0
2014	264,814	3.9	918,195	13.6	5,591,241	82.5	6,774,250	100.0
2015	412,718	5.9	999,073	14.3	5,567,929	79.8	6,979,720	100.0
2016	578,307	8.1	1,062,714	14.9	5,469,425	76.9	7,110,446	100.0
2017	742,974	10.3	1,119,723	15.5	5,354,159	74.2	7,216,856	100.0
2018	892,499	12.3	1,176,648	16.3	5,171,751	71.4	7,240,898	100.0

Table 4a. On-road motorcycles registered in the United States by vehicle age, 2002–18

	<1 year		1–3 years		4–6 years		7–9 years		10+ years		Total*	
	N	%	N	%	N	%	N	%	N	%	N	%
2002	101,841	2.4	1,204,789	28.7	709,535	16.9	519,083	12.4	1,642,089	39.1	4,196,095	100.0
2003	105,201	2.3	1,413,906	30.4	819,910	17.6	571,787	12.3	1,724,400	37.1	4,653,162	100.0
2004	64,934	1.3	1,645,502	32.1	987,988	19.3	616,391	12.0	1,797,892	35.0	5,129,614	100.0
2005	109,893	1.9	1,749,553	30.9	1,211,470	21.4	674,396	11.9	1,899,968	33.6	5,661,302	100.0
2006	109,876	1.8	1,886,239	30.3	1,429,328	22.9	778,129	12.5	2,012,317	32.3	6,231,011	100.0
2007	101,225	1.5	1,956,859	28.8	1,695,732	24.9	933,869	13.7	2,100,288	30.9	6,802,008	100.0
2008	71,900	1.0	2,143,890	29.2	1,748,156	23.8	1,137,033	15.5	2,230,991	30.4	7,345,125	100.0
2009	78,076	1.0	2,203,004	27.8	1,879,150	23.7	1,337,670	16.9	2,418,318	30.5	7,928,412	100.0
2010	33,195	0.4	1,842,156	22.8	1,977,806	24.5	1,577,105	19.6	2,620,838	32.5	8,062,115	100.0
2011	32,197	0.4	1,350,250	16.8	2,188,799	27.2	1,609,205	20.0	2,870,146	35.6	8,060,531	100.0
2012	52,771	0.7	1,012,355	12.6	2,117,256	26.3	1,692,515	21.0	3,166,760	39.3	8,050,624	100.0
2013	35,833	0.4	818,454	10.2	1,891,737	23.5	1,742,836	21.7	3,551,465	44.1	8,048,598	100.0
2014	46,922	0.6	965,181	11.8	1,361,916	16.6	1,967,700	24.0	3,868,165	47.1	8,212,401	100.0
2015	37,730	0.5	1,091,263	13.1	1,003,620	12.1	1,919,597	23.1	4,259,637	51.2	8,313,434	100.0
2016	33,290	0.4	1,118,854	13.4	837,490	10.0	1,709,326	20.4	4,674,676	55.8	8,374,305	100.0
2017	30,825	0.4	1,096,319	13.1	981,481	11.7	1,212,972	14.5	5,071,330	60.4	8,393,525	100.0
2018	26,466	0.3	1,031,027	12.4	1,102,478	13.3	892,319	10.7	5,206,409	62.7	8,305,171	100.0

* Total includes motorcycles with unknown model year.

Table 4b. Average and median age (years) of on-road motorcycles registered in the United States, 2002–18

	Average	Median
2002	8.7	7
2003	8.6	6
2004	8.4	6
2005	8.4	6
2006	8.3	6
2007	8.2	6
2008	8.3	6
2009	8.4	6
2010	8.8	7
2011	9.3	7
2012	9.8	8
2013	10.3	8
2014	10.7	9
2015	11.1	10
2016	11.4	10
2017	11.8	11
2018	12.0	11

Motorcycle classes

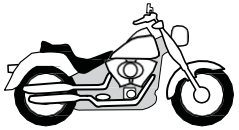
Chopper

Chopper-style motorcycles are closely related to cruisers. They have a longer wheelbase that results from an extended front fork configuration. The lengthened wheelbase reduces maneuverability. Choppers generally are highly customized and, as a result, costlier. As the term “chopper” implies, the motorcycle is derived by chopping off or removing parts from a typical cruiser with the intent of reducing weight or bulk for the sake of speed. Its reduced maneuverability is exaggerated further by a wide rear tire that assists in acceleration.

Standard

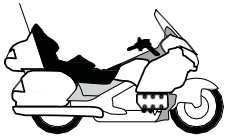
Standard motorcycle designs are basic and usually do not utilize technological advances in chassis and engine design. Many standard motorcycles are generic enough to remain in production for 10 years or more without redesign. Riding position typically is upright and similar to that of a cruiser, but with foot pegs placed farther rearward. The riding position, coupled with better ground clearance than a cruiser, gives standard motorcycles better handling characteristics. Engine displacements are smaller than those for cruisers.

Cruiser



Cruiser motorcycles mimic the style of American motorcycles from the 1930s to the early 1960s, such as those made by Harley-Davidson and Indian. Although cruisers have benefited from advances in technology and metallurgy, the basic design is still very similar to early motorcycles. The riding position places the feet forward of the seat and the hands near shoulder height, and the upper body is erect or leaning back slightly. This position allows long-distance comfort but compromises some degree of control. Cruisers have limited turning ability because of a low-slung design. Cruiser engines produce more torque and less peak horsepower compared with motorcycles from the sport classes. Cruisers are among the heaviest of motorcycles and can be used with a sidecar.

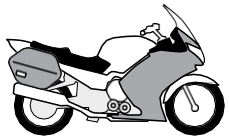
Touring



Touring motorcycles are equipped with high-displacement/high-torque engines for carrying a passenger and luggage. The Honda Goldwing, which is a popular motorcycle in this class, has an 1,800 cubic centimeter engine. Touring motorcycles are among the longest and heaviest motorcycles. Honda Goldwings can weigh

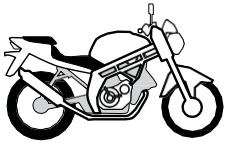
in excess of 900 pounds. Touring motorcycles offer wind protection for the rider, high-capacity fuel tanks, the ability to carry luggage, and an upright riding position that is comfortable for long distances. Although any motorcycle can be equipped and used for touring, touring motorcycles are designed for this purpose. They incorporate technological advances such as antilock brakes and airbags and are more likely to include features such as reverse gear, cruise control, heated hand grips, driver-to-passenger communication systems, navigation, and audio systems.

Sport touring



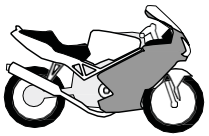
Sport-touring motorcycles are similar in design to sport motorcycles but have some features typically found on touring motorcycles. Sport-touring motorcycles typically are derived from sport-class frames and share components such as engines and drive trains. Sport tourers normally are equipped with touring features such as saddlebags, high windshields, larger fairings, heated grips, and larger seats—features not found on other sport-class motorcycles. Among the other sport-class motorcycles, sport tourers tend to have the largest engines and riding positions that are more upright. More than any other sport-class motorcycle, sport tourers can accommodate passengers due to larger engines, upright riding positions, and larger seats.

Unclad sport



Unclad-sport motorcycles occupy a relatively new market niche. Often referred to as “naked” or “hooligan” motorcycles, unclad-sport motorcycles are derivatives of sport/super-sport motorcycles. They do not have full body panels or fairing coverings typically found on sport/super-sport motorcycles. Compared with sport and super-sport motorcycles, unclad-sport motorcycles generally have lower horsepower. The riding position places the feet under the seat and the hands below shoulder height. The rider’s knees are bent and the upper body has a slight forward lean, giving unclad-sport motorcycles a riding position that is more comfortable than the sport class. The reduced horsepower and riding position make them more user friendly and suitable for everyday riding. Some motorcycles in this class serve as beginner motorcycles, whereas others are as powerful and agile as some sport and super-sport motorcycles and are targeted at premium customers (e.g., BMW and Ducati).

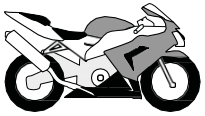
Sport



Sport motorcycles are light and powerful. Their power-to-weight ratios are second only to the super-sport class. They benefit from advances in design and technology intended for racing; however, they are not considered racing-specification machines. The riding position places the feet under the seat and the hands below shoulder height. The rider’s knees are bent, and the upper body has a forward lean. This riding position improves control when cornering and accelerating. All sport motorcycles have extensive body paneling and fairing covers to provide wind protection and assist in aerodynamics. Sport motorcycles can be equipped with side bags or a rear trunk to provide limited touring ability, but they do not have the features and amenities typically found in the touring or sport-touring

classes. Sport motorcycles have a wide range of engine displacements. The riding position and lower power-to-weight ratios make sport-class motorcycles more suitable for street use than super-sport motorcycles. Sport motorcycles are capable of high speeds, but they do not offer the acceleration, stability, and handling of racing-specification machines.

Super sport

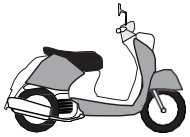


Super-sport motorcycles are consumer versions of the motorcycles used by factory-racing teams and use racing specifications as benchmarks in design. Their range of engine displacements is limited to meet racing requirements of the class. The power-to-weight ratios of super-sport motorcycles are higher than any other mass-produced motor vehicle. As racing specification machines, measures are taken to reduce weight and increase power, thus making these motorcycles quick in acceleration, nimble in handling, and capable of high speeds. The riding position is suitable for racing, and places the feet under the seat and the hands below shoulder height. The rider's knees are bent and the upper body has a forward lean. There also is less space between the seat and feet than for sport motorcycles to provide better rider/racer control. Super-sport motorcycles have tight-fitting body paneling and fairing coverings, but generally only offer wind protection when the rider is in a crouched riding position.

Dual purpose

Dual-purpose motorcycles are similar to off-road motorcycles. However, they are equipped with road-ready features such as turn signals, brake lights, and horns. They also use four-stroke engines for compliance with emissions requirements. They generally have larger displacement engines than off-road motorcycles, along with a more comfortable riding position.

Scooter



Scooters are characterized by small wheels, automatic transmissions, small engines, and a step-through configuration that allows riders to place both feet on a running board with knees together. However, larger scooters with engine displacements greater than 250 cc are becoming more popular. The BMW C650GT and the Suzuki Burgman are examples of the increasing displacements of highway-capable scooters.