

Farm Machinery and Lawn and Garden Equipment: 2005

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SUMMARY OF FINDINGS

During 2005, factory shipments of farm machinery and equipment, including parts and attachments, produced by original equipment manufacturers (OEM), totaled \$19,167.2 million, a 6-percent increase from the 2004 shipments of \$18,008.4 million. Shipments of farm dairy machines, sprayers, dusters, elevators, farm blowers,

and parts totaled \$1,414.0 million, an increase of 29 percent, from the 2004 total of \$1,097.7 million. The value of shipments for planting, seeding, fertilizing machinery, and parts are relatively the same, from \$1,118.7 million in 2004 to \$1,114.4 million in 2005. The value of shipments for harvesting machinery and parts increased 18 percent, from \$3,522.4 million in 2004 to \$4,145.4 million in 2005. Haying machinery and parts increased 10 percent, from \$1,302.6 million in 2004 to \$1,437.0 million in 2005.

The value of shipments for commercial turf and grounds care equipment, including parts, was \$2,322.6 million in 2005, a 11-percent increase from the \$2,091.7 million reported for 2004.

The value of shipments for consumer lawn, garden, and snow equipment, including parts and attachments, was \$7,310.1 million in 2005, a 4-percent increase over the \$6,999.9 million in 2004.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Investment Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Vance Davis, 301-763-4790
For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

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Table 1. Value of Shipments of Farm Machinery and Lawn and Garden Equipment by Type of Equipment: 2000 to 2005
[Value in millions of dollars]

Product description	2005	2004	2003	2002	2001	2000
Farm dairy machines, sprayers, dusters, elevators, and farm blowers 1/.....	1,414	1,098	807	742	877	817
Planting, seeding, and fertilizing machinery 1/.....	1,114	1,119	1,299	851	898	752
Harvesting machinery 1/.....	4,145	3,522	1,878	1,625	1,766	1,553
Haying machinery 1/.....	1,437	1,303	1,339	1,172	705	639
Plows, harrows, rollers, pulverizers, cultivators, and weeders 1/.....	674	638	458	426	501	465
Commercial turf and grounds care equipment 2/.....	2,323	2,092	1,836	1,697	2,239	1,657
Consumer nonriding lawn, garden, and snow equipment 3/.....	3,228	3,125	3,175	2,609	2,767	3,083
Consumer riding lawn, garden, and snow equipment 3/.....	4,082	3,875	3,801	3,330	3,446	3,389

1/A "Parts" category and a 7-digit product class total from Table 2 have been summed to derive the product group totals.

2/The 7-digit product class total from Table 2 already includes the "Parts and attachments" from this product group.

3/The "Parts and attachments" categories for lawn and garden equipment have been added to the 7-digit product class total from Table 2.

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2005 and 2004
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2005		2004	
			Quantity	Value	Quantity	Value
333111	Farm machinery and equipment, including parts and attachments.....	(NA)	(X)	19,167,151	(X)	r/ 18,008,373
3331111	Wheel tractors (except contractors' off-highway wheel tractors, garden tractors, turf tractors, and motor tillers) and attachments.....	(NA)	(X)	(D)	(X)	(D)
3331111101	Wheel tractors, farm-type (PTO hp).....	(NA)	(X)	(D)	(X)	(D)
3331111106	2-wheel drive, including front wheel assist types.....	8	(D)	(D)	(D)	(D)
3331111111	4-wheel drive, including tractors with, equal size tires, front and rear.....	6	(D)	(D)	(D)	(D)
333111C116	Attachments for wheel tractors, farm-type.....	13	(X) a/	87,283	(X) a/r/	82,686
333111C116	Parts for wheel tractors, farm-type.....	14	(X)	(D)	(X)	(D)
3331113	Farm dairy machines, sprayers, dusters, elevators, and farm blowers.....	(NA)	(X)	1,264,424	(X)	946,472
3331113 pt.	Farm dairy machines and equipment.....	13	(X)	144,158	(X)	a/ 120,997
3331113101	Mechanical installations: Milking machines, complete, suspended and floor-type bucket, single and double units.....	4	517 c/	1,423	(D)	(D)
3331113104	Pipeline milking units, complete, including claws, shells, inflations, air tubes, with or without pulsator.....	5	(D)	(D)	(D)	(D)
3331113106	Other farm dairy machines and equipment.....	10	12,864	60,714	20,038	54,641
3331113108	Attachments for farm dairy machines and equipment.....	3	(X)	(D)	(X)	(D)
333111C221	Parts for farm dairy machines and equipment, replacement units only.....	7	(X)	34,157	(X)	(D)
3331113 pt.	Sprayers and dusters.....	(NA)	(X)	1,073,532	(X)	r/ 781,734
3331113116	Power sprayers, field and row crop types only: Self-propelled.....	13	6,555	799,846	r/ 4,620	r/ 532,738
3331113121	Tractor mounted.....	20	b/ 5,377	b/ 33,179	a/ 4,724	a/ 23,309
3331113124	Other than tractor mounted: Power take-off driven, piston pump type.....	6	c/ 373	a/ 2,236	c/ 381	a/ 2,240
3331113128	Nonpiston pump type.....	12	b/ 1,994	a/ 15,117	a/r/ 1,625	a/r/ 7,397
3331113132	Other power sprayers, over 4 g.p.m.	2	(X)	(D)	(X)	(D)
3331113136	Power sprayers, other than row crop and field types, over 4 g.p.m.: Power take-off driven.....	5	c/ 296	c/ 2,274	b/ 335	b/ 2,494
3331113141	Engine-driven.....	15	c/ 1,613	c/ 6,005	a/ 1,204	a/r/ 5,292
3331113144	Air carried type power sprayers (field, row crop, and orchard types).....	4	c/ 628	c/ 4,656	c/r/ 707	b/ 5,360
3331113148	Foggers and mist sprayers portable.....	4	(D)	(D)	(D)	(D)
3331113152	Hand-pulled and garden-type, 4 g.p.m. and under.....	9	(D)	(D)	119,321	18,798
3331113156	Sprayers, agricultural hand: Under 1 gallon.....	4	816,800	3,497	785,931	3,608
3331113161	1 gallon and over: Compressed air or gas.....	7	a/ 9,283,935	a/ 122,212	10,542,793	121,201
3331113164	Other, including knapsack, hose end and flame sprayers and sprayer pumps.....	7	1,174,049	19,014	715,619	19,071
3331113168	Dusters, power, hand, all types.....	7	54,758	b/ 617	112,131	a/ 796
3331113172	All other sprayers.....	5	(X)	b/ 572	(X)	520
3331113176	Attachments for sprayers and dusters.....	15	(X)	31,359	(X)	25,385
333111C223	Parts for sprayers and dusters, replacement units only.....	27	(X)	112,569	(X)	114,505
3331113 pt.	Farm elevators and blowers.....	(NA)	(X)	b/ 46,734	(X)	b/r/ 43,741
3331113181	Farm elevators, portable: Single and double chain.....	6	c/ 2,912	c/ 6,978	c/ 3,379	c/ 8,273
3331113188	Auger type.....	9	c/ 7,307	a/ 24,754	c/r/ 6,406	b/r/ 19,632
3339227257	Other farm portable and stationary augers and elevators.....	8	(X)	b/ 10,542	(X)	b/ 11,501
3331113192	Other farm blowers, including forage blowers, combination grain and forage blowers.....	6	643	b/ 2,796	664	2,746
3331113194	Attachments for farm elevators and blowers.....	4	(X)	1,664	(X)	r/ 1,589

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2005 and 2004
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2005				2004			
			Quantity		Value		Quantity		Value	
333111C225	Parts for farm elevators and for grain and forage blowers, replacement units only.....	6	(X)		2,872		(X)	r/	2,526	
3331117	Planting, seeding, and fertilizing machinery.....	(NA)	(X)		964,840		(X)		1,206,400	
3331117101	Corn planters, corn and cotton planters, and lister plant pull-type and mounted (total rows mounted).....	6	(D)		(D)		(D)		(D)	
3331117108	Grain drills (fixed frame), all types.....	11	3,516		85,145		4,155		99,264	
3331117111	Transplanters (pull-type or mounted) and broadcast seeders (end-gate, mounted and drawn).....	5	b/	5,292	a/	3,809	a/	6,922		4,129
	Fertilizer distributors (pull-type or mounted):									
3331117118	Dry, including lime spreaders.....	24	c/	8,785	c/	48,707	c/	9,498	b/	47,956
3331117121	Liquid and anhydrous ammonia.....	16	a/	5,385		27,586	a/r/	6,087		24,989
3331117128	Manure spreaders, rear discharge.....	15		8,216		55,836	a/r/	8,461	r/	46,367
3331117131	Manure spreaders, side discharge.....	3		1,978		36,624		2,161		31,661
3331117138	Manure pumps, liquid.....	7		(D)		(D)		(D)		(D)
3331117141	Front and rear tractor mounted loaders (farm-type), manure and general utility (except beet and sugar cane loaders)	13	b/	77,074		223,862	a/r/	89,196	r/	224,235
3331117148	Row crop unit planters (quantity in rows).....	9		39,435		59,621		42,295		55,372
3331117151	Other planting, seeding, and fertilizing machinery.....	26		14,976		297,883		27,659	a/	354,834
3331117158	Attachments for planting, seeding, and fertilizing machinery.....	21	(X)		49,335		(X)		45,746	
333111C229	Parts for planting, seeding, and fertilizing machinery, replacement units only.....	65	(X)		113,608		(X)		135,446	
3331119	Harvesting machinery.....	(NA)	(X)		3,899,908		(X)	r/	3,311,534	
3331119101	Combines (harvester-threshers), grain-types only (self-propelled and pull-type).....	10		15,811		2,710,488	r/	14,201	r/	2,090,734
3331119111	Small grain header for combines, all sizes.....	7	a/	8,899		174,190	r/	14,463		247,153
3331119121	Corn heads, all sizes.....	7		(D)		(D)	r/	4,896	r/	344,213
3331119131	Other grain-type combines.....	2		(D)		(D)		(D)		(D)
	Field forage harvesters:									
3331119141	Shear bar, self-propelled type and pull-type (basic machines).....	3		1,105		31,222	r/	1,110		30,278
3331119151	Attachments for shear bar type forage harvester.....	1	(X)		(D)		(X)		(D)	
3331119161	Flail-type (horizontal knives or vertical free-swinging knives or hammers), including discharge spouts.....	4	a/	150	b/	1,919		150		1,828
3331119171	Other harvesting machinery, including potato diggers, cane harvesting equipment, and picker-shellers.....	42		5,994		586,322		5,113	r/	488,587
3331119181	Attachments for harvesting machinery, including platform and seeder, reel, straw spreaders, load levelers, weed stripper, grate unit, knife grinders, and stalk walkers.....	22	(X)		95,250		(X)	r/	99,742	
333111C22A	Parts for harvesting machinery, replacement units only.....	48	(X)		245,522		(X)		210,839	
333111A	Haying machinery.....	(NA)	(X)		1,350,792		(X)	a/r/	1,180,446	
333111A101	Mowers, cutter bar type, including drum and disk.....	8		(D)		(D)		(D)		(D)
333111A111	Mower-conditioners and windrowers with conditioner auger and draper-type (pull-type and self-propelled).....	11		22,899		462,167	r/	19,675	r/	309,070
333111A121	Rakes, side delivery, cylinder type, and finger wheel type.....	11		8,047		40,483		8,327		38,882
333111A131	Hay balers, hay stackers, (field type), hay bale loaders, bale throwing attachments	9		23,578		464,779	r/	24,189	r/	453,416
333111A141	Other haying machinery.....	20		20,722	a/	85,179		26,719	a/r/	106,274
333111A151	Other attachments for haying machinery (stripper, bale chute and knife attachments).....	12	(X)		(D)		(X)		(D)	
333111C22C	Parts for haying machinery, replacement units only.....	24	(X)		86,159		(X)		122,155	
333111E	Plows, harrows, rollers, pulverizers, cultivators, and weeders.....	(NA)	(X)		534,252		(X)		506,677	
333111E pt.	Plows (primary tillage equipment).....	(NA)	(X)		102,659		(X)	r/	101,300	

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2005 and 2004
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Product code	Product description	No. of cos.	2005				2004			
			Quantity		Value		Quantity		Value	
333111E101	Subsoilers, deep tillage.....	24		2,928		34,749	r/	3,909		39,233
333111E109	Terracing and ditching plows.....	11	b/	578	a/	1,786	b/	588	a/	1,674
	Chisel plows, deep tillage (chisel or sweep type):									
333111E111	Pull-type.....	10		1,261		26,489		1,410		26,185
333111E119	Mounted.....	10	b/	556	a/	530	b/	559	a/	580
333111E121	Other plows (except snow plows).....	14		2,980		16,061		3,799		13,783
333111E159	Middlebusters and disc bedders.....	15	b/	3,245	a/	4,716	b/	3,136	b/	3,455
333111E131	Attachments for plows (coulters, jointers, root cutters subsoilers, fertilizer distributors, etc.), excluding lister planting attachments.....	19		(X)		15,771		(X)		13,804
333111E139	Plowshares (quantity in thousands of pounds).....	6	c/	12,542	b/	2,557	a/r/	12,325	b/r/	2,586
333111C22E	Parts for plows (except plowshares, replacement units only).....	20		(X)		43,654		(X)		37,782
333111E pt.	Harrows, rollers, pulverizers and similar equipment (secondary tillage).....	(NA)		(X)		296,827		(X)	r/	279,323
333111E141	Spike-tooth harrow sections and spring-tooth and tine-tooth harrow sections.....	17		(D)		(D)	b/	16,347	b/	7,469
333111E149	Disc harrows, single, tandem, and offset.....	22		23,404		111,632	a/	20,409		116,364
333111E151	Combination tillage equipment, roller/harrows, disc or coulters/field cultivators, disc or coulters/spring tooth.....	24	b/	5,734		52,406	b/	6,069		49,036
333111E158	Blade terracers or scrapers (farm-size).....	37	a/	38,787	a/	30,448	a/	48,999	a/	32,303
333111E161	Land levelers.....	13		(D)		(D)		4,680		16,565
333111E169	Other harrows, rollers, pulverizers, and similar equipment.....	27		12,167		50,889		12,561		44,043
333111E171	Attachments for harrows, rollers, pulverizers, and similar equipment.....	18		(X)		(D)		(X)	b/r/	13,543
333111C22G	Parts for harrows, rollers, pulverizers, and similar equipment, replacement units only.....	34		(X)		57,147		(X)	r/	57,783
333111E pt.	Cultivators and weedeers.....	(NA)		(X)	a/	134,766		(X)	a/	126,054
333111E179	Corn and cotton type cultivators, shank and sweep type (front and rear mounted).....	12	c/	946	a/	4,601	c/	1,001	a/	5,194
333111E181	Rotary cultivators, ground and power driven.....	6	c/	3,472	c/	7,478	c/	3,165	c/	7,087
333111E189	Field cultivators.....	16	b/	5,677		73,324	b/	5,948		66,380
333111E191	Other cultivators and weedeers, including tool bars (basic units).....	17		3,514	a/	7,069		3,526	a/	6,898
333111E199	Attachments for cultivators and weedeers (front mounting frame, disc weedeers, rear section, and drawbars).....	19		(X)	a/	42,294		(X)	a/	40,495
333111C22J	Parts for cultivators and weedeers, replacement units only.....	25		(X)		38,961		(X)		35,492
333111G	All other farm machinery and equipment (except parts).....	(NA)		(X)		2,145,947		(X)		2,141,146
333111G pt.	Stalk shredders and cutters or rotary mowers (PTO)	39		(X)	a/	266,570		(X)	a/	262,463
333111G102	Flail type (without spout).....	12	a/	2,450	a/	18,596	a/	2,258	a/	15,600
	Horizontal blade type:									
333111G104	66 inches cutting width and under.....	25	b/	78,217	b/	51,466	b/	85,031	b/	52,520
333111G106	Over 66 inches up to 100 inches cutting width.....	23	a/	53,951	a/	79,860	a/	56,579	a/	76,499
333111G108	Over 100 inches cutting width.....	17		(D)		(D)		(D)		(D)
333111C22L	Parts for stalk shredders, and cutters or rotary mowers (PTO), replacement units only.....	29		(X)		39,117		(X)	r/	34,984
333111G pt.	Machines for preparing crops for market or for use.....	(NA)		(X)	b/	252,598		(X)	a/	242,785
333111G112	Feed grinders and crushers, power.....	12		(D)		(D)	b/	1,137		44,121
333111G114	Feed mixers, farm-size, stationary and portable.....	13	b/	2,870	b/	75,399		2,664		63,399
333111G116	Combination grinder-mixers.....	3		(D)		(D)		(D)		(D)
333111G117	Cotton ginning machinery.....	(NA)		-		-		-		-
	Dryers (grain, hay, and seed):									
333111G118	Heated air crop dryers.....	13	c/	4,965	b/	52,428	b/	5,461	b/r/	50,647
333111G122	Crop drying fans (over 15,000 c.f.m. at approximately 1-inch pressure).....	6		5,974		5,598		6,143		5,723
333111G124	Other machines for preparing crops for market or for use.....	30		11,399	b/	74,175		10,467		67,012

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[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2005		2004	
			Quantity	Value	Quantity	Value
333111G126	Attachments for machines for preparing crops for market or for use.....	12	(X)	5,931	(X)	7,758
333111C22N	Parts for machines for preparing crops for market or for use, replacement units only.....	34	(X) b/	44,020	(X)	39,404
333111G pt.	Farm poultry equipment.....	(NA)	(X)	336,367	(X)	365,044
333111G128	Incubators, quantity represents egg capacity in thousands.....	8	972,941 b/	37,633	810,129 b/	53,803
333111G132	Brooders, floor and hanging (gas, electric, oil, coal, wood and battery).....	12	687,162 a/	35,477	c/ 642,177 a/	37,564
333111G134	Nests and cages.....	9	c/ 2,403,367	41,170	c/ 3,036,509	53,423
333111G136	Poultry feeders (trough, hanging, and mechanical) and waterers (except turkey feeders and waterers).....	13	c/ 16,877,998	92,394	c/ 14,930,419 r/	94,426
333111G138	Other farm poultry equipment, including turkey waterers, mechanized egg graders, and egg washers.....	18	887,594	121,120	835,232 r/	117,375
333111G142	Attachments for farm poultry equipment.....	10	(X)	8,573	(X)	8,453
333111C22P	Parts for farm poultry equipment, replacement units only.....	14	(X)	16,825	(X) a/	15,048
333111G pt.	Hog equipment.....	(NA)	(X) a/	126,445	(X)	109,080
333111G144	Feeding equipment.....	23	a/ 143,622 a/	33,872	a/ 152,076	43,774
333111G146	Handling equipment.....	12	a/ 579,961 a/	46,785	a/ 409,840	33,717
333111G148	Watering equipment.....	15	258,674	3,322	353,541	4,074
333111G152	Other hog equipment.....	20	573,644 a/	40,798	387,891 a/	26,258
333111G154	Attachments for hog equipment.....	11	(X)	(D)	(X)	(D)
333111C22T	Parts for hog equipment, replacement units only.....	15	(X)	(D)	(X)	(D)
333111G pt.	Other barn and barnyard equipment.....	(NA)	(X) a/	243,519	(X) a/r/	218,942
333111G156	Silo and grain bin unloaders, forage and grain, including sealed storage unloaders (farm-type).....	11	a/ 2,473	8,716	a/r/ 2,463 r/	8,925
333111G158	Cattle and dairy barn equipment: Feeding equipment.....	30	85,672	50,051	99,372 a/	56,235
333111G162	Handling equipment.....	33	a/ 1,306,501	89,908	b/r/ 1,298,911 a/r/	80,134
333111G164	Water equipment.....	22	370,325	37,606	r/ 424,799 r/	36,907
333111G166	Other barn and barnyard equipment.....	31	126,742 a/	31,170	129,755 a/	25,952
333111G168	Attachments for barn and barnyard equipment.....	18	(X)	26,068	(X) r/	10,789
333111C22U	Parts for barn and barnyard equipment, replacement units only.....	21	(X)	11,492	(X)	11,304
333111G pt.	Farm wagons, and other farm transportation equipment.....	(NA)	(X) a/	161,742	(X)	155,849
333111G172	Wagons (chassis only) and trailer gears, excluding motor trucks, 4-wheel.....	25	15,391	33,929	15,829	32,079
333111G174	Boxes and racks for mounting on wagons and trailer gears: Manual unloading or dump.....	10	(D)	(D)	(D)	(D)
333111G176	Gravity unloading, grain-type only.....	7	(D)	(D)	(D)	(D)
333111G178	Power unloading.....	11	2,988	40,797	2,656 r/	33,065
333111G182	Boxes with integral running gear, grain- and forage-types.....	11	2,747	35,644	3,509	32,887
333111G184	Other farm transportation equipment.....	17	5,216 b/	29,494	7,364	38,794
333111G186	Attachments for farm transportation equipment.....	9	(X)	(D)	(X)	1,413
333111C232	Parts for farm transportation equipment, including operator cabs for farm tractors.....	28	(X) b/	99,079	(X) b/	91,951
333111G pt.	Irrigation systems.....	(NA)	(X)	758,706	(X)	786,983
333111G188	Self-propelled irrigation systems, center-pivot (quantity is in ten-tower equivalents).....	7	(D)	(D)	22,651	(D)
333111G192	All other systems using 100-foot flexible hose feeder line and over.....	9	(D)	(D)	(D)	(D)
333111C22V	Parts for irrigation systems, replacement units only.....	8	(X) b/	84,275	(X) b/	82,021
333111J	Commercial turf and grounds care equipment, including parts and attachments.....	(NA)	(X)	2,322,597	(X)	2,091,688

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[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2005		2004	
			Quantity	Value	Quantity	Value
333111J pt.	Commercial turf and grounds mowing equipment..... (NA)		(X)	1,973,610	(X)	1,709,636
333111J101	Powered nonriding mowers.....	15	76,099	133,073	84,453	137,217
333111J106	Riding reel-type turf mowers, including greens mowers.....	5	(D)	(D)	(D)	(D)
333111J111	Riding rotary turf mowers.....	21	195,618	1,181,758	172,617	1,081,051
333111J116	Gang rotary cutting units, reel and rotary, individual sections.....	7	44,500	87,978	31,782	63,535
333111J121	Flail mower cutting units, including gang.....	4	(D)	(D)	(D)	(D)
333111J126	Other mowing equipment.....	7	15,703	48,869	17,237	r/ 49,227
333111J131	Parts for commercial turf and grounds mowing equipment.....	37	(X)	222,995	(X)	185,544
333111J136	Attachments for commercial turf and grounds mowing equipment.....	19	(X)	48,250	(X)	66,792
333111J pt.	Other commercial turf and grounds care equipment..... (NA)		(X) a/	348,987	(X) a/	382,052
333111J141	Sod cutters and sod harvesters.....	4	(D)	(D)	(D)	(D)
333111J146	Seeders, spreaders, and top dresser attachments....	11	541,388 a/	24,945	535,979 a/	24,032
333111J151	Aerators, spikers, and pluggers.....	13	b/ 16,842 b/	45,090	b/ 15,621 b/	36,796
333111J156	Dethatchers	11	88,571	12,297	85,807	10,285
333111J161	Power brooms, blowers, vacuums, and sweepers.....	12	11,295	19,307	17,754	25,532
333111J166	Irrigation systems (except agricultural and residential).....	2	(D)	(D)	(D)	(D)
333111J171	Other commercial turf and grounds care equipment, including trap rakes, transport trailers and turf tractors and trucks.....	22	189,283 a/	161,107	193,298 a/	165,660
333111J176	Parts for other commercial turf and grounds care equipment.....	22	(X)	37,749	(X)	a/ 41,004
333111J181	Attachments for other commercial turf and and grounds care equipment.....	14	(X) b/	31,049	(X)	52,387
333112	Lawn and garden equipment..... (NA)		(X)	7,303,772	(X)	6,992,931
3331121 pt.	Consumer nonriding lawn, garden, and snow equipment..... (NA)		(X) a/	3,057,906	(X) r/	2,967,087
3331121104	Lawnmowers: Push-type: reel (powered and nonpowered) rotary-gas powered.....	16	b/ 4,696,775 b/	639,146	4,611,567	615,947
3331121106	Rotary, self-propelled, gas-powered	19	2,400,914 a/	581,065	2,593,717	617,699
3331121121	Electric, all types, including battery-powered.....	6	(D)	(D)	(D)	(D)
3331121126	Rotary garden motor tillers.....	16	542,341 a/	150,658	535,244	150,605
3331121131	2-wheel tractors walking type (except rotary tillers).....	2	(D)	(D)	(D)	(D)
3331121136	Snow throwers (snow blowers) (except attachment-type): Single stage.....	8	532,056	189,919	379,146	127,407
3331121141	Dual stage.....	7	b/ 663,131 b/	380,885	r/ 617,272 r/	369,357
3331121146	Powered lawn edgers/trimmers: Fixed blade.....	13	1,084,036	166,838	r/ 1,032,499 r/	150,460
3331121151	Other than fixed blades.....	12	6,232,219	496,495	6,347,952	r/ 452,701
3331121156	Shredders and shredder-grinders.....	8	132,493	39,168	199,266	61,056
3331121161	Yard vacuums and blowers.....	13	2,798,091	267,136	3,877,415	r/ 295,588
3331121166	Other consumer nonriding lawn, garden, and snow equipment.....	21	680,177	107,462	695,736	94,831
3331123 pt.	Consumer riding lawn, garden, and snow equipment..... (NA)		(X)	3,517,005	(X)	3,205,647
3331123101	Lawn tractors and riding mowers, front engine: Under 10.0 hp (under 7.5 kW).....	1	(D)	(D)	(D)	(D)
3331123111	10.0 hp and over (7.5 kW and over).....	10	a/ 1,901,578 a/	2,190,935	1,693,404	2,017,590
3331123121	Lawn tractors and riding mowers, rear engine: Under 10.0 hp (under 7.5 kW).....	2	(D)	(D)	(D)	(D)
3331123131	10.0 hp and over (7.5 kW and over).....	14	a/ 173,166 a/	296,082	131,759	210,980
3331123141	Garden tractors: Under 16.0 hp (under 12.0 kW)	4	a/ 885 a/	3,217	1,394	4,705
3331123151	16.0 hp to 19.9 hp (12.0 kW to 14.9 kW).....	7	(D)	(D)	(D)	(D)
3331123161	20.0 hp and over (15.0 kW and over).....	11	177,885	416,903	209,602	553,636
3331123171	Other consumer riding lawn, garden, and snow equipment.....	7	46,320	148,198	(D)	(D)

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2005 and 2004
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2005		2004	
			Quantity	Value	Quantity	Value
3331127 pt.	Parts and attachments for consumer lawn, garden, and snow equipment.....	(NA)	(X) a/	728,861	(X) r/	820,197
	Nonriding:					
3331127101	Parts.....	36	(X)	120,851	(X) r/	115,463
3331127111	Attachments.....	15	(X)	49,287	(X)	42,262
	Riding:					
	Parts:					
3331127121	For tractors and riding mowers.....	21	(X) a/	240,861	(X) r/	287,170
3331127131	For other equipment.....	5	(X)	4,013	(X)	6,973
	Attachments:					
3331127141	Rotary mower decks.....	7	(X)	67,682	(X)	96,301
3331127151	Rotary tiller attachments.....	5	(X) a/	6,386	(X)	6,991
3331127161	Blades, dozer.....	11	(X) a/	21,561	(X)	27,886
3331127171	Snow throwers.....	4	(X) c/	5,174	(X)	18,579
3331127181	Carts and wagons.....	9	(X) a/	39,833	(X)	47,134
3331127191	All other attachments.....	25	(X) a/	173,213	(X)	171,438

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. pt. Partial. r/Revised by 5 percent or more from previously published data. X Not applicable.

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of the item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of item is estimated.

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 2005 and 2004
[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Imports for consumption 2/		Apparent consumption	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2005								
Farm-type wheel tractors.....	(D)	(D)	37,763	1,242,818	192,486	2,680,292	(D)	(D)
Sprayers and dusters (except aerial types).....	(X)	1,042,173	(X)	73,837	(X)	28,958	(X)	997,294
Planting machinery and fertilizer distributors, pull-type or mounted.....	(X)	915,505	27,846	102,980	135,153	99,085	(X)	889,238
Disc harrows.....	23,404	111,632	2,560	8,725	53,206	2,464	74,050	105,371
Other harrows, rollers, pulverizers, and similar equipment.....	79,513	172,554	5,138	7,125	18,545	11,292	92,920	176,721
Combines.....	15,811	2,710,488	6,114	634,534	719	57,235	10,416	2,133,189
Other harvesting machines.....	(X)	1,059,859	6,758	143,264	5,110	39,650	(X)	956,245
Field forage harvesters.....	1,255	33,141	752	12,606	1,766	79,901	2,269	100,436
Hay mowers, mower-conditioners and windrowers.....	221,872	979,411	32,375	62,190	48,967	153,213	238,464	1,070,434
Other haymaking machines.....	28,769	125,662	2,039	44,497	18,578	57,891	45,308	139,056
Balers, including pickup balers.....	23,578	464,779	7,977	132,306	4,544	35,468	20,145	367,941
Other plows.....	11,548	84,331	3,585	12,036	3,063	7,828	11,026	80,123
Cultivators and weeder.....	13,609	92,472	24,508	21,587	283,651	66,254	272,752	137,139
Machinery for preparing animal feed.....	(D)	(D)	4,858	44,559	41,514	42,616	(D)	(D)
Other machines for preparing crops for market or for use.....	(D)	(D)	2,437	26,628	55,829	8,390	(D)	(D)
Farm poultry incubators and brooders.....	1,660,103	73,110	69,304	27,177	97,152	4,823	1,687,951	50,756
Nests and cages (poultry equipment).....	2,403,367	41,170	99,324	74,749	563,747	43,643	2,867,790	10,064
Self-propelled irrigation systems, center-pivot.....	21,285	663,630	1,953	50,792	52	314	19,646	613,152
All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over.....	(X)	(D)	(X)	226,963	(X)	51,355	(X)	(D)
Farm wagons and other farm transportation equipment.....	33,980	159,744	-	-	285,161	20,699	319,141	180,443
Riding turf mowers and flail and gang mowers.....	253,013	1,513,410	25,526	116,100	4,291	5,295	231,778	1,402,605
Snowblowers (snowthrowers).....	1,195,187	570,804	171,214	110,080	242,769	67,597	1,266,742	528,321
Powered lawn and hedge trimmers.....	7,316,255	663,333	883,413	84,638	2,051,440	157,093	8,484,282	735,788
2004								
Farm-type wheel tractors.....	(D)	(D)	29,894	1,000,736	214,346	2,373,556	(D)	(D)
Sprayers and dusters (except aerial types).....	(X)	756,349	(X)	69,367	(X)	32,456	(X)	719,438
Planting machinery and fertilizer distributors, pull-type or mounted.....	(X)	1,160,654	27,846	102,980	135,153	99,085	(X)	1,156,759
Disc harrows.....	14,093	116,364	1,733	6,815	13,520	2,996	25,880	112,545
Other harrows, rollers, pulverizers, and similar equipment.....	79,513	149,416	5,015	5,679	31,642	15,178	106,140	158,915
Combines.....	14,201	2,090,734	5,325	528,920	993	38,428	9,869	1,600,242
Other harvesting machines.....	(X)	1,087,247	4,378	114,765	2,937	36,217	(X)	1,008,699
Field forage harvesters.....	1,255	32,106	675	9,108	2,149	65,253	2,729	88,251
Hay mowers, mower-conditioners and windrowers.....	224,725	805,552	42,523	60,359	67,116	165,242	249,318	910,435
Other haymaking machines.....	35,046	145,156	1,353	21,694	22,513	58,301	56,206	181,763
Balers, including pickup balers.....	24,189	453,416	6,068	91,747	4,097	35,338	22,218	397,007
Other plows.....	13,401	84,910	4,071	9,855	3,739	6,805	13,069	81,860
Cultivators and weeder.....	13,640	85,559	11,640	17,072	22,069	58,067	24,069	126,554
Machinery for preparing animal feed.....	(D)	(D)	3,816	38,240	80,068	42,004	(D)	(D)
Other machines for preparing crops for market or for use.....	(D)	(D)	2,572	24,787	22,320	3,462	(D)	(D)
Farm poultry incubators and brooders.....	1,452,306	91,367	22,260	13,510	110,257	7,690	1,540,303	85,547

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 2005 and 2004
[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Imports for consumption 2/		Apparent consumption	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Nests and cages (poultry equipment).....	3,036,509	53,423	69,643	55,676	880,407	63,806	3,847,273	61,553
Self-propelled irrigation systems, center-pivot.....	36,796	691,394	1,682	44,136	119	460	35,233	647,718
All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over.....	(X)	(D)	(X)	228,574	(X)	46,610	(X)	(D)
Farm wagons and other farm transportation equipment.....	37,219	153,788	-	-	341,263	19,898	378,482	173,686
Riding turf mowers and flail and gang mowers.....	210,359	1,263,739	25,181	90,484	3,105	5,921	188,283	1,179,176
Snowblowers (snowthrowers).....	996,418	496,764	142,508	86,590	276,736	85,274	1,130,646	495,448
Powered lawn and hedge trimmers.....	7,380,451	603,161	633,857	63,409	1,478,631	112,616	8,225,225	652,368

- Represents zero. D Withheld to avoid disclosing data for individual companies. X Not applicable.

1/Source: Census Bureau report, EM 545, U.S. Exports.

2/Source: Census Bureau report, IM 145, U.S. Imports for Consumption.

Note: For comparison of North American Industry Classification System (NAICS)-based product codes, Schedule B export codes, and HTSUSA import codes, see Table 4.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2005

Product code	Product description	Export code 1/	Import code 2/
3331111101, 106, 3331123141, 151, 161	Farm-type wheel tractors.....	8701.90.1005 8701.90.1010 8701.90.1015 8701.90.1030 8701.90.1035 8701.90.1040 8701.90.1045 8701.90.1050 8701.90.1055 8701.90.1060 8701.90.1065 8701.90.1070	8701.90.1005 8701.90.1010 8701.90.1015 8701.90.1030 8701.90.1035 8701.90.1040 8701.90.1045 8701.90.1050 8701.90.1055 8701.90.1060 8701.90.1065 8701.90.1070
3331113116, 121, 124, 128, 132, 136, 141, 144, 148, 152, 156, 161, 164, 168, 172	Sprayers and dusters (except aerial types).....	8424.81.1000 8424.81.9030	8424.81.1000 8424.81.9040 8424.81.9090
3331117101, 108, 111, 148	Planting machinery.....	8432.30.0010 8432.30.0090	8432.30.0010 8432.30.0090
3331117118, 121, 128, 131, 138, 141, 151	Fertilizer distributors pull-type or mounted.....	8432.40.0000	8432.40.0000
333111E141, 151, 158, 161, 169	Other harrows, rollers, pulverizers, and similar equipment.....	8432.29.0090	8432.29.0090
333111E149	Disc harrows.....	8432.21.0000	8432.21.0000
3331119101	Combines.....	8433.51.0010 8433.51.0090	8433.51.0010 8433.51.0090
3331119111, 121, 131, 171	Other harvesting machines.....	8433.52.0000 8433.59.0090 8433.53.0000	8433.52.0000 8433.59.0090 8433.53.0000
3331119141, 161	Field forage harvesters.....	8433.59.0010	8433.59.0010
333111A101, 111, 333111G102, 104, 106, 108	Hay mowers, mower-conditioners and windrowers.....	8433.20.0020 8433.20.0040 8433.20.0060	8433.20.0020 8433.20.0040 8433.20.0060

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2005

Product code	Product description	Export code 1/	Import code 2/
333111A121, 141	Other haymaking machinery.....	8433.30.0000	8433.30.0000
333111A131	Balers, including pickup balers.....	8433.40.0000	8433.40.0000
333111E101, 109, 111, 119, 121, 159	Other plows.....	8432.10.0040 8432.10.0060	8432.10.0040 8432.10.0060
333111E179, 181, 189, 191	Cultivators and weeders.....	8432.29.0040 8432.29.0060 8432.29.0080	8432.29.0040 8432.29.0060 8432.29.0080
333111G112, 114, 116	Machinery for preparing animal feed.....	8436.10.0000	8436.10.0000
333111G124, 118, 122	Other machines for preparing crops for market or for use.....	8419.31.0000 8436.80.0060	8419.31.0000 8436.80.0060
333111G128, 132	Farm poultry incubators and brooders.....	8436.21.0000	8436.21.0000
333111G134	Nests and cages (poultry equipment).....	8436.29.0000 8433.60.0000	8436.29.0000 8433.60.0000
333111G188	Self-propelled irrigation systems, center-pivot.....	8424.81.9010	8424.81.9010
333111G192	All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over.....	8424.81.9020	8424.81.9020
333111G172, 174, 176, 178, 182, 184	Farm wagons and other farm transportation equipment.....	8716.80.1000	8716.80.1000
333111J101, 126	Other commercial and turf grounds mowers.....	8433.19.0040 8433.19.0050	8433.19.0040 8433.19.0050
333111J106, 111, 116	Riding turf mowers.....	8433.19.0010 8433.19.0030	8433.19.0010 8433.19.0030
333111J121	Flail and gang mowers.....	8433.19.0020	8433.19.0020
3331121136, 141	Snowblowers (snowthrowers).....	8430.20.0060	8430.20.0060
3331121146, 151	Powered lawn and hedge trimmers.....	8467.89.5030	8467.89.5030

1/Source: 2005 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated, (2005).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31–33 Manufacturing
- 42 Wholesale Trade
- 44–45 Retail Trade
- 48–49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and

returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on farm machinery and equipment have been collected by the Census Bureau since 1920; data on lawn and garden equipment since 1978. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.