

Farm Machinery and Lawn and Garden Equipment: 2001

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SUMMARY OF FINDINGS

During 2001, factory shipments of farm machinery and equipment, including parts and attachments, produced by original equipment manufacturers (OEM), totaled \$11,947.3 million, a 0.3-percent decrease from the 2000 shipments of \$11,989.2 million.

Shipments of farm dairy machines, sprayers, dusters, elevators, farm blowers, and parts totaled \$787.9 million, a decrease of 10 percent from the 2000 total of \$877.4 million. The value of shipments for harvesting machinery and parts increased 18 percent, from \$1,765.7 in 2000 to \$2,084.3 in 2001. Haying machinery and parts increased 14 percent, from \$705.3 in 2000 to \$804.8 in 2001.

The value of shipments for commercial turf and grounds care equipment, including parts, was \$2,013.5 million in 2001, a 10-percent decrease from the \$2,239.1 million reported for 2000.

The value of shipment for consumer lawn, garden, and snow equipment, including parts and attachments, was \$5,757.7 million in 2001, a 7-percent decrease from the \$6,212.8 million in 2000.

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

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Richard Hough, 301-763-4823.

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: 1996 to 2001
(Value in millions of dollars)

Product description	2001	2000	1999	1998	1997	1996
Farm dairy machines, sprayers, dusters, elevators, and farm blowers 1/.....	787.9	877.4	816.8	993.6	816.6	839.2
Planting, seeding, and fertilizing machinery 1/.....	986.2	897.9	752.4	1,091.1	1,154.6	862.3
Harvesting machinery 1/.....	2,084.3	1,765.7	1,553.1	3,095.6	3,259.4	2,966.8
Haying machinery 1/.....	804.8	705.3	638.6	848.0	794.8	670.3
Plows, harrows, rollers, pulverizers, cultivators, and weeders 1/.....	515.9	501.0	464.7	631.2	696.3	542.0
Commercial turf and grounds care equipment 2/.....	2,013.5	2,239.1	1,656.8	1,361.6	1,238.8	1,118.5
Consumer nonriding lawn, garden, and snow equipment 3/.....	2,793.7	2,766.8	3,082.5	2,979.1	3,051.6	2,957.0
Consumer riding lawn, garden, and snow equipment 3/.....	2,964.0	3,446.0	3,388.9	3,276.8	2,942.9	2,861.0

1/A "Parts" category and a 7-digit product class total from Table 2 has 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: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2001		2000	
			Quantity	Value	Quantity	Value
333111	Farm machinery and equipment, including parts and attachments	(NA)	(X)	11,947,328	(X)	11,989,197
3331111	Wheel tractors (except contractors' off-highway wheel tractors, garden tractors, turf tractors, and motor tillers) and attachments	(NA)	(X)	(D)	(X)	(D)
3331111001	Wheel tractors, farm-type (PTO hp)	(NA)	(X)	(D)	(X)	(D)
	2-wheel drive, including front wheel assist types	6	(D)	(D)	(D)	(D)
3331111006	4-wheel drive, including tractors with, equal size tires, front and rear	4	(D)	(D)	(D)	(D)
3331111011	Attachments for wheel tractors, farm-type.....	9	(X)	30,889	(X)	31,134
333111C116	Parts for wheel tractors, farm-type	14	(X)	(D)	(X)	(D)
3331113	Farm dairy machines, sprayers, dusters, elevators, and farm blowers	(NA)	(X)	653,880	(X)	705,470
3331113 pt.	Farm dairy machines and equipment	17	(X)	b/ 116,533	(X)	a/ 119,708
Mechanical installations:						
3331113001	Milking machines, complete, suspended and floor-type bucket, single and double units	5	(D)	(D)	(D)	(D)
3331113004	Pipeline milking units, complete, including claws, shells, inflations, air tubes, with or without pulsator	7	(D)	(D)	(D)	(D)
	Other farm dairy machines and equipment....	15	(X)	(D)	(X)	(D)
	Attachments for farm dairy machines and equipment	6	(X)	(D)	(X)	(D)
	Parts for farm dairy machines and equipment, replacement units only.....	10	(X)	61,869	(X)	61,871
3331113 pt.	Sprayers and dusters	(NA)	(X)	502,168	(X)	536,654
Power sprayers, field and row crop types only:						
3331113016	Self-propelled	11	2,814	305,423	a/r/ 2,935	331,505
3331113021	Tractor mounted	19	a/ 6,604	14,534	7,580	r/ 15,244
Other than tractor mounted:						
3331113024	Power take-off driven, piston pump type	6	a/ 779	a/ 3,396	864	r/ 3,993
3331113028	Nonpiston pump type	11	a/ 2,245	a/ 6,520	a/ 2,842	b/ 8,872
3331113032	Other power sprayers, over 4 g.p.m.	6	(X)	(D)	(X)	(D)
Power sprayers, other than row crop and field types, over 4 g.p.m.:						
331113036	Power take-off driven	6	b/ 368	3,465	b/ 534	b/ 4,761
3331113041	Engine-driven.....	11	a/ 1,002	3,848	b/ 1,199	b/ 4,672
3331113044	Air carried type power sprayers (field, row crop, and orchard types)	4	c/ 548	c/ 4,183	r/ 559	r/ 4,254
3331113048	Foggers and mist sprayers portable.....	4	(D)	(D)	(D)	(D)
3331113052	Hand-pulled and garden-type, 4 g.p.m. and under	10	78,870	10,741	r/ 102,744	r/ 12,777
Sprayers, agricultural hand:						
3331113056	Under 1 gallon.....	4	627,376	3,503	756,108	3,799
1 gallon and over:						
3331113061	Compressed air or gas	6	6,859,773	99,297	7,885,939	101,813
3331113064	Other, including knapsack, hose end and flame sprayers and sprayer pumps...	7	(X)	20,994	(X)	16,661
3331113068	Dusters, power, hand, all types	6	75,546	792	68,467	856
3331113072	All other sprayers	8	(X)	1,154	(X)	3,373
3331113076	Attachments for sprayers and dusters	13	(X)	13,684	(X)	13,951
333111C223	Parts for sprayers and dusters, replacement units only.....	28	(X)	69,189	(X)	101,692
3331113 pt.	Farm elevators and blowers	(NA)	(X)	35,179	(X)	49,108
Farm elevators, portable:						
3331113081	Single and double chain	9	1,882	2,890	1,932	4,223

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2001				2000			
			Quantity		Value		Quantity		Value	
3331113088	Auger type	10	c/	5,585	14,346		7,679		20,617	
	Other farm portable and stationary augers and elevators	11		(X) a/	10,725		(X) b/		15,987	
3331113092	Other farm blowers, including forage blowers, combination grain and forage blowers	5		(X)	1,433		(X) a/r/		1,996	
	Attachments for farm elevators and blowers.....	9		(X)	5,785		(X)		6,285	
	Parts for farm elevators and for grain and forage blowers, replacement units only.....	20		(X) a/	3,001		(X)		8,383	
3331117	Planting, seeding, and fertilizing machinery	(NA)		(X)	858,628		(X)		764,759	
3331117001	Corn planters, corn and cotton planters, and lister plant pull-type and mounted (total rows mounted).....	9		(D)	(D)		(D)		(D)	
3331117008	Grain drills (fixed frame), all types	11		4,917	94,863		4,961		94,823	
3331117011	Transplanters (pull-type or mounted) and broadcast seeders (end-gate, mounted and drawn)	9	a/	8,408	a/ 5,222	a/	9,651		6,548	
	Fertilizer distributors (pull-type or mounted):									
3331117018	Dry, including lime spreaders.....	26	a/	25,039	40,052	b/r/	18,407	r/	36,082	
3331117021	Liquid and anhydrous ammonia.....	17	a/	5,964	a/ 20,809		7,497		21,092	
3331117028	Manure spreaders, rear discharge.....	12		4,219	28,236		3,986		25,320	
3331117031	Manure spreaders, side discharge.....	6		2,614	29,772		2,684		28,231	
3331117038	Manure pumps, liquid.....	9	a/	894	4,491		767		3,866	
3331117041	Front and rear tractor mounted loaders (farm-type), manure and general utility (except beet and sugar cane loaders)	13	b/	39,318	b/ 109,552	a/	33,753	a/	95,782	
3331117048	Row crop unit planters (quantity in rows)	9		43,225	64,394	r/	39,456	r/	48,345	
3331117051	Other planting, seeding, and fertilizing machinery.....	29		(X)	(D)		(X)		(D)	
3331117058	Attachments for planting, seeding, and fertilizing machinery	24		(X)	51,804		(X)		49,651	
333111C229	Parts for planting, seeding, and fertilizing machinery, replacement units only	66		(X)	127,598		(X)		133,123	
3331119	Harvesting machinery.....	(NA)		(X)	1,851,502		(X)		1,533,113	
3331119001	Combines (harvester-threshers), grain-types only (self-propelled and pull-type)	9		(D)	(D)		(D)		(D)	
3331119011	Small grain header for combines, all sizes	6		(D)	(D)		(D)		(D)	
3331119021	Corn heads, all sizes	6		(D)	(D)		(D)		(D)	
3331119031	Other grain-type combines	2		(X)	(D)		(X)		(D)	
	Field forage harvesters:									
3331119041	Shear bar, self-propelled type and pull-type (basic machines)	3		(D)	(D)	b/	1,743	b/	38,010	
3331119051	Attachments for shear bar type forage harvester	3		(X)	(D)		(X)		(D)	
3331119061	Flail-type (horizontal knives or vertical free-swinging knives or hammers), including discharge spouts	3		(D)	(D)		(D)		(D)	
3331119071	Other harvesting machinery, including potato diggers, cane harvesting equipment, and picker-shellers	46		(X)	(D)		(X)		(D)	
3331119081	Attachments for harvesting machinery, including platform and seeder, reel, straw spreaders, load levelers, weed stripper, grate unit, knife grinders, and stalk walkers.....	21		(X)	96,078		(X)		98,455	
333111C22A	Parts for harvesting machinery, replacement units only	52		(X)	232,771		(X) r/		232,559	
333111A	Haying machinery	(NA)		(X)	726,264		(X)		627,138	
333111A001	Mowers, cutter bar type, including drum and disk	7		4,080	20,423		2,921		13,996	
333111A011	Mower-conditioners and windrowers with conditioner auger and draper-type (pull-type and self-propelled)	8		13,556	223,323		12,947		203,554	

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2001				2000			
			Quantity		Value		Quantity		Value	
333111A021	Rakes, side delivery, cylinder type, and finger wheel type	10	a/	8,743	a/	34,930	a/	9,112		34,602
333111A031	Hay balers, hay stackers, (field type), hay bale loaders, bale throwing attachments	18		22,260		391,459		19,437		322,510
333111A041	Other haying machinery	15		(X)		(D)		(X)		(D)
333111A051	Other attachments for haying machinery (stripper, bale chute and knife attachments).....	10		(X)		(D)		(X)		(D)
333111C22C	Parts for haying machinery, replacement units only	24		(X)		78,545		(X)		78,113
333111E	Plows, harrows, rollers, pulverizers, cultivators, and weeders	(NA)		(X)		398,729		(X)		390,658
333111E pt.	Plows (primary tillage equipment)	(NA)		(X)		98,420		(X)		129,265
333111E001	Subsoilers, deep tillage	24		4,242		34,808		4,245		34,055
333111E009	Terracing and ditching plows	10		337		668	r/	220		420
	Chisel plows, deep tillage (chisel or sweep type):									
333111E011	Pull-type	10		915		11,977		914		11,349
333111E019	Mounted	12		546		2,799	r/	595	r/	3,964
333111E021	Other plows (except snow plows)	14		(X)	a/	15,063		(X)		33,769
333111E059	Middlebusters and disc bedders	13		2,752		2,729		3,636		4,086
333111E031	Attachments for plows (coulters, jointers, root cutters subsoilers, fertilizer distributors, etc.), excluding lister planting attachments.....	23		(X)		25,446		(X)	b/	34,596
333111E039	Plowshares (quantity in thousands of pounds).....	6		2,669,211		4,930	r/	5,953,817		7,026
333111C22E	Parts for plows (except plowshares, replacement units only)	21		(X)		42,392		(X)		43,908
333111E pt.	Harrows, rollers, pulverizers and similar equipment (secondary tillage)	(NA)		(X)		183,025		(X)		169,436
333111E041	Spike-tooth harrow sections and spring-tooth and tine-tooth harrow sections	19		16,824		13,069		17,267		12,947
333111E049	Disc harrows, single, tandem, and offset	22		12,111		80,026		11,595		60,867
333111E051	Combination tillage equipment, roller/harrows, disc or coulter/field cultivators, disc or coulter/spring tooth	27	a/	6,538		27,354	r/	7,306		32,511
333111E058	Blade terracers or scrapers (farm-size)	34		39,849		22,914	r/	46,219		22,511
333111E061	Land levelers	7		1,335		2,084		1,559	r/	2,450
333111E069	Other harrows, rollers, pulverizers, and similar equipment	25		(X)		27,710		(X)		27,745
333111E071	Attachments for harrows, rollers, pulverizers, and similar equipment	14		(X)		9,868		(X)		10,405
333111C22G	Parts for harrows, rollers, pulverizers, and similar equipment, replacement units only.....	37		(X)		39,884		(X)		36,816
333111E pt.	Cultivators and weeders	(NA)		(X)		117,284		(X)		91,957
333111E079	Corn and cotton type cultivators, shank and sweep type (front and rear mounted).....	17	c/	1,694	a/	11,084		1,790	a/	10,227
333111E081	Rotary cultivators, ground and power driven.....	10		2,918		6,759	r/	2,894	r/	5,958
333111E089	Field cultivators	14		5,862		62,140		5,191		45,247
333111E091	Other cultivators and weeders, including tool bars (basic units)	18		(X)	a/	7,624		(X)	r/	6,320
333111E099	Attachments for cultivators and weeders (front mounting frame, disc weeders, rear section, and drawbars)	22		(X)		29,677		(X)	r/	24,205
333111C22J	Parts for cultivators and weeders, replacement units only	27		(X)		34,866		(X)	r/	29,614
333111G	All other farm machinery and equipment (except parts)	(NA)		(X)		1,387,300		(X)		1,517,987
333111G pt.	Stalk shredders and cutters or rotary mowers (PTO)	41		(X)		234,483		(X)	r/	219,518
333111G002	Flail type (without spout)	15	b/	1,164	b/	9,641	b/	1,235	b/	10,637

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2001				2000			
			Quantity		Value		Quantity		Value	
333111G004	Horizontal blade type:									
333111G006	66 inches cutting width and under	27	a/	84,243	54,783	r/	90,508	r/	55,532	
	Over 66 inches up to 100 inches cutting width	23	a/	48,686	78,942	r/	51,926		75,099	
333111G008	Over 100 inches cutting width	17	a/	13,517	91,117		11,668		78,250	
333111C22L	Parts for stalk shredders, and cutters or rotary mowers (PTO), replacement units only.....	28		(X)	34,766		(X)		32,299	
333111G pt.	Machines for preparing crops for market or for use	(NA)		(X)	197,160		(X)		258,149	
333111G012	Feed grinders and crushers, power	11	a/	742	12,196		1,754		22,749	
333111G014	Feed mixers, farm-size, stationary and portable	16		3,318	64,474	r/	4,032	r/	70,214	
333111G016	Combination grinder-mixers	5		(D)	(D)		(D)		(D)	
	Dryers (grain, hay, and seed):									
333111G018	Heated air crop dryers	16	b/	5,698	29,550	a/	6,607		42,416	
333111G022	Crop drying fans (over 15,000 c.f.m. at approximately 1-inch pressure)	9		(D)	(D)		(D)		(D)	
333111G024	Other machines for preparing crops for market or for use	37		(X)	68,087		(X)	r/	90,359	
333111G026	Attachments for machines for preparing crops for market or for use	15		(X)	13,299		(X)		13,195	
333111C22N	Parts for machines for preparing crops for market or for use, replacement units only.....	38		(X)	34,425	a/	(X)		44,175	
333111G pt.	Farm poultry equipment	(NA)		(X)	248,768		(X)		262,168	
333111G028	Incubators, quantity represents egg capacity in thousands	9		54,812	37,496	r/	55,483		37,570	
333111G032	Brooders, floor and hanging (gas, electric, oil, coal, wood and battery)	11		124,805	23,924		142,890	r/	26,983	
333111G034	Nests and cages	9		2,146,520	30,891		3,384,926	r/	46,392	
333111G036	Poultry feeders (trough, hanging, and mechanical) and waterers (except turkey feeders and waterers)	11		4,532,130	53,356		6,446,958		65,913	
333111G038	Other farm poultry equipment, including turkey waterers, mechanized egg graders, and egg washers	16		(X)	94,886		(X)		75,362	
333111G042	Attachments for farm poultry equipment.....	14		(X)	8,215		(X)		9,948	
333111C22P	Parts for farm poultry equipment, replacement units only.....	16		(X)	18,841	a/	(X)		20,215	
333111G pt.	Hog equipment	(NA)		(X)	136,421		(X)		111,875	
333111G044	Feeding equipment	27	a/	156,125	52,721		119,825		41,659	
333111G046	Handling equipment	14	c/	497,842	41,192	r/	396,002	r/	35,000	
333111G048	Watering equipment	17	a/	432,952	3,884		404,169		3,760	
333111G052	Other hog equipment	22		(X)	37,166	a/	(X)		30,102	
333111G054	Attachments for hog equipment	10		(X)	1,458		(X)		1,354	
333111C22T	Parts for hog equipment, replacement units only	17		(X)	(D)		(X)		(D)	
333111G pt.	Other barn and barnyard equipment	(NA)		(X)	151,724		(X)		180,812	
333111G056	Silo and grain bin unloaders, forage and grain, including sealed storage unloaders (farm-type)	13	c/	13,854	33,262		33,630		42,426	
	Cattle and dairy barn equipment:									
333111G058	Feeding equipment	31		81,817	20,573		112,762	a/	24,130	
333111G062	Handling equipment	30	b/	564,225	38,025	a/r/	571,588	b/	47,517	
333111G064	Water equipment	21		367,911	27,757	r/	359,284		26,072	
XXX	Other barn and barnyard equipment	34		(X)	27,196		(X)	r/	34,074	
333111G068	Attachments for barn and barnyard equipment.	17		(X)	4,911		(X)	r/	6,593	
333111C22U	Parts for barn and barnyard equipment, replacement units only	25		(X)	14,982		(X)		16,116	
333111G pt.	Farm wagons, and other farm transportation equipment	(NA)		(X)	135,401		(X)		147,929	

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2001		2000	
			Quantity	Value	Quantity	Value
333111G072	Wagons (chassis only) and trailer gears, excluding motor trucks, 4-wheel.....	29	19,086	43,327 a/	19,913 b/	42,486
	Boxes and racks for mounting on wagons and trailer gears:					
333111G074	Manual unloading or dump	8	1,142	3,564 r/	1,232 r/	3,482
333111G076	Gravity unloading, grain-type only	7	4,783	6,901 a/	5,207 a/	8,274
333111G078	Power unloading	16	2,213	22,456 a/	3,235 a/	29,203
333111G082	Boxes with integral running gear, grain- and forage-types	12	2,965	19,852	3,325	22,522
333111G084	Other farm transportation equipment	18	(X)	37,903	(X) r/	40,740
333111G086	Attachments for farm transportation equipment	11	(X) a/	1,398	(X) a/	1,222
333111C232	Parts for farm transportation equipment, including operator cabs for farm tractors.....	31	(X)	(D)	(X)	(D)
333111G pt.	Irrigation systems	(NA)	(X)	283,343	(X)	337,536
333111G088	Self-propelled irrigation systems, center-pivot (quantity is in ten-tower equivalents).....	6	8,368	258,267	9,871	303,801
333111G092	All other systems using 100-foot flexible hose feeder line and over	9	(X) a/	25,076	(X) r/	33,735
333111C22V	Parts for irrigation systems, replacement units only.....	8	(X)	(D)	(X)	(D)
333111J	Commercial turf and grounds care equipment, including parts and attachments	(NA)	(X)	2,013,513	(X)	2,239,097
333111J pt.	Commercial turf and grounds mowing equipment	(NA)	(X)	1,713,373	(X)	1,867,106
333111J001	Powered nonriding mowers	18 b/	118,671	186,284 b/r/	125,658 r/	195,886
333111J006	Riding reel-type turf mowers, including greens mowers	5	(D)	(D)	(D)	(D)
333111J011	Riding rotary turf mowers	20 a/	133,180	901,271 a/r/	136,420 r/	872,552
333111J016	Gang rotary cutting units, reel and rotary, individual sections	8	(D)	(D)	(D)	(D)
333111J021	Flail mower cutting units, including gang.....	7	(D)	(D)	(D)	(D)
333111J026	Other mowing equipment	9	(X)	44,692	(X)	58,010
333111J031	Parts for commercial turf and grounds mowing equipment	35	(X)	145,412	(X)	135,599
333111J036	Attachments for commercial turf and grounds mowing equipment	22	(X)	43,155	(X)	41,064
333111J pt.	Other commercial turf and grounds care equipment	(NA)	(X)	300,140	(X)	371,991
333111J041	Sod cutters and sod harvesters	3	(D)	(D)	(D)	(D)
333111J046	Seeders, spreaders, and top dresser attachments	10	879,075	27,512	1,072,095 r/	32,376
333111J051	Aerators, spikers, and pluggers	15	11,720	25,131	18,601 r/	42,586
333111J056	Dethatchers	11	7,262	4,998	8,769	6,377
333111J061	Power brooms, blowers, vacuums, and sweepers	16	17,499	25,304	18,363	25,601
333111J066	Irrigation systems (except agricultural and residential)	2	(D)	(D)	(D)	(D)
333111J071	Other commercial turf and grounds care equipment, including trap rakes, transport trailers and turf tractors and trucks.....	24	(X)	140,167	(X)	173,772
333111J076	Parts for other commercial turf and grounds care equipment	23	(X)	16,795	(X)	17,083
333111J081	Attachments for other commercial turf and and grounds care equipment	17	(X)	40,740	(X)	43,142
333112	Lawn and garden equipment	(NA)	(X)	5,757,675	(X)	6,216,592
3331121 pt.	Consumer nonriding lawn, garden, and snow equipment	(NA)	(X)	2,641,123	(X)	2,594,609

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2001		2000	
			Quantity	Value	Quantity	Value
	Lawnmowers:					
	Push-type: reel (powered and nonpowered)					
	rotary-gas powered	15	3,765,178	535,251	4,089,841	562,452
3331121006	Rotary, self-propelled, gas-powered	16	2,194,081	605,637	r/ 2,164,420	r/ 584,253
3331121021	Electric, all types, including battery-powered	5	(D)	(D)	(D)	(D)
3331121026	Rotary garden motor tillers	11	398,890	107,387	r/ 481,029	171,763
3331121031	2-wheel tractors walking type (except rotary tillers)	2	(D)	(D)	(D)	(D)
	Snow throwers (snow blowers) (except attachment-type):					
3331121036	Single stage	6	438,045	129,781	r/ 344,280	r/ 98,509
3331121041	Dual stage	6	436,720	263,527	r/ 343,275	r/ 194,429
	Powered lawn edgers/trimmers:					
3331121046	Fixed blade	11	576,630	77,487	r/ 586,688	r/ 91,512
3331121051	Other than fixed blades	11	7,862,561	504,960	r/ 8,135,924	r/ 469,474
3331121056	Shredders and shredder-grinders	4	(D)	(D)	(D)	(D)
3331121061	Yard vacuums and blowers	7	3,048,013	242,470	r/ 2,959,942	r/ 210,581
3331121066	Other consumer nonriding lawn, garden, and snow equipment	13	(X) c/	99,619	(X) r/	98,127
3331123 pt.	Consumer riding lawn, garden, and snow equipment	(NA)	(X)	2,385,160	(X)	2,802,671
	Lawn tractors and riding mowers, front engine:					
3331123001	Under 10.0 hp (under 7.5 kW)	4	(D)	(D)	(D)	(D)
3331123011	10.0 hp and over (7.5 kW and over)	8	1,342,977	1,578,861	r/ 1,490,704	r/ 1,779,458
	Lawn tractors and riding mowers, rear engine:					
3331123021	Under 10.0 hp (under 7.5 kW)	5	(D)	(D)	(D)	(D)
3331123031	10.0 hp and over (7.5 kW and over)	11	103,400	160,473	127,488	204,250
	Garden tractors:					
3331123041	Under 16.0 hp (under 12.0 kW)	6	6,183	19,837	9,204	27,390
3331123051	16.0 hp to 19.9 hp (12.0 kW to 14.9 kW)	6	(D)	(D)	(D)	(D)
333113061	20.0 hp and over (15.0 kW and over)	10	114,518	319,626	r/ 176,147	492,331
3331123071	Other consumer riding lawn, garden, and snow equipment	6	(X)	(D)	(X)	(D)
3331127 pt.	Parts and attachments for consumer lawn, garden, and snow equipment	(NA)	(X)	731,392	(X)	819,312
	Nonriding:					
3331127001	Parts	29	(X)	117,313	(X)	130,916
3331127011	Attachments	12	(X)	35,245	(X) r/	41,250
	Riding:					
	Parts:					
3331127021	For tractors and riding mowers	21	(X)	319,941	(X)	366,892
3331127031	For other equipment	7	(X) a/	6,507	(X) r/	5,398
	Attachments:					
3331127041	Rotary mower decks	10	(X)	56,216	(X) r/	73,274
3331127051	Rotary tiller attachments	9	(X)	(D)	(X)	(D)
3331127061	Blades, dozer	9	(X)	21,388	(X) r/	23,021
3331127071	Snow throwers	9	(X)	(D)	(X)	(D)
3331127081	Carts and wagons	12	(X) a/	29,895	(X)	29,248
3331127091	All other attachments	23	(X)	124,150	(X)	124,466

D Withheld to avoid disclosing data for individual companies. NA Not available. pt. Part. 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: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Imports for consumption 2/	
	Quantity	Value	Quantity	Value	Quantity	Value
2001						
Farm-type wheel tractors.....	(D)	(D)	30,578	736,133	103,690	1,292,944
Sprayers and dusters (except aerial types).....	(X)	488,484	(NA)	36,920	(NA)	33,993
Planting machinery and fertilizer distributors, pull-type or mounted.....	(X)	806,824	17,714	64,448	212,866	41,505
Disc harrows.....	12,111	80,026	1,011	5,029	43,357	2,331
Other harrows, rollers, pulverizers, and similar equipment	68,096	93,131	4,558	5,988	6,572	11,631
Combines.....	(D)	(D)	4,437	298,851	9,466	129,805
Other harvesting machines.....	18,589	581,362	2,060	53,440	10,790	50,359
Field forage harvesters.....	1,008	21,597	1,244	13,058	1,400	39,503
Hay mowers, mower-conditioners and windrowers.....	165,246	478,229	19,123	60,184	54,736	117,260
Other haymaking machines.....	(X)	(D)	2,171	31,332	8,907	19,601
Balers, including pickup balers.....	22,260	391,459	7,462	101,387	3,553	22,584
Other plows.....	(X)	68,044	2,186	6,658	29,069	5,180
Cultivators and weeder.....	14,191	87,607	20,490	18,875	217,193	36,542
Machinery for preparing animal feed.....	(D)	(D)	7,660	48,609	7,698	31,174
Other machines for preparing crops for market or for use.....	(D)	(D)	5,566	27,738	46,187	8,681
Farm poultry incubators and brooders.....	(NA)	61,420	40,036	20,987	61,718	6,688
Nests and cages (poultry equipment)....	(X)	30,891	67,841	55,388	312,486	15,193
Self-propelled irrigation systems, center-pivot.....	8,368	258,267	1,924	37,497	166	390
All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over.....	6,040	25,076	(NA)	169,749	(NA)	24,299
Farm wagons and other farm transportation equipment.....	36,787	134,003	-	-	118,221	10,139
Riding turf mowers and flail and gang mowers.....	(D)	(D)	21,224	61,876	2,914	1,053
Snowblowers (snowthrowers).....	874,765	393,308	62,811	33,972	31,217	21,706
Powered lawn and hedge trimmers.....	8,439,191	582,447	1,198,565	80,960	4,007,986	216,718
2000						
Farm-type wheel tractors.....	(D)	(D)	32,788	722,072	109,925	1,383,860
Sprayers and dusters (except aerial types).....	(X) r/	522,703	(NA)	34,070	(NA)	29,419
Planting machinery and fertilizer distributors, pull-type or mounted.....	(X) r/	751,190	18,739	64,688	133,695	33,603
Disc harrows.....	11,595	60,867	1,096	5,841	67,563	2,113
Other harrows, rollers, pulverizers, and similar equipment	77,257	98,164	5,116	5,480	14,345	9,457
Combines.....	(D)	(D)	4,830	349,934	1,263	108,237
Other harvesting machines.....	15,585	493,708	2,407	52,456	5,755	44,756
Field forage harvesters.....	1,798	38,773	1,266	14,889	799	47,597
Hay mowers, mower-conditioners and windrowers.....	171,205	437,068	19,852	52,360	58,229	103,735
Other haymaking machines.....	(X)	(D)	2,106	24,808	7,016	14,529
Balers, including pickup balers.....	19,437	322,510	10,990	92,296	2,661	15,558
Other plows.....	(X)	87,643	3,959	11,708	34,958	3,363

Continued

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 2001 and 2000
[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Imports for consumption 2/		
	Quantity	Value	Quantity	Value	Quantity	Value	
Cultivators and weeders.....	13,561	r/	67,752	14,792	18,308	203,368	35,844
Machinery for preparing animal feed.....	(D)	(D)	5,266	41,615	67,397	27,216	
Other machines for preparing crops for market or for use.....	(D)	(D)	3,441	22,162	48,465	9,640	
Farm poultry incubators and brooders.....	(NA)		64,553	26,960	13,950	38,648	2,760
Nests and cages (poultry equipment)....	(X)	r/	46,392	115,289	67,956	200,895	11,968
Self-propelled irrigation systems, center-pivot.....	9,871		303,801	2,420	42,738	69	558
All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over.....	7,846	r/	33,735	(NA)	192,811	(NA)	21,242
Farm wagons and other farm transportation equipment.....	39,778	r/	146,707	-	-	102,351	12,652
Riding turf mowers and flail and gang mowers.....	(D)	(D)	18648	61,839	3,484	2,155	
Snowblowers (snowthrowers).....	687,555	r/	292,938	69,200	38,339	12,751	10,130
Powered lawn and hedge trimmers.....	8,722,612	r/	560,986	1,354,900	89,604	4,353,832	206,968

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. r/Revised by 5 percent or more from previously published data. 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: 2001

Product code	Product description	Export code 1/	Import code 2/
3331111001, 006, 3331123041, 051, 061	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
3331113016, 021, 024, 028, 032, 036, 041, 044, 048, 052, 056, 061, 064, 068, 072	Sprayers and dusters (except aerial types).....	8424.81.1000 8424.81.9030	8424.81.1000 8424.81.9040 8424.81.9090
3331117001, 008, 011, 048	Planting machinery.....	8432.30.0010 8432.30.0090	8432.30.0010 8432.30.0090
3331117018, 021, 028, 031, 038, 041, 051	Fertilizer distributors pull-type or mounted.....	8432.40.0000	8432.40.0000
333111E041, 051, 058, 061, 069	Other harrows, rollers, pulverizers, and similar equipment.....	8432.29.0090	8432.29.0090
333111E049	Disc harrows.....	8432.21.0000	8432.21.0000
3331119001	Combines.....	8433.51.0010 8433.51.0090	8433.51.0010 8433.51.0090
3331119011, 021, 031, 071	Other harvesting machines.....	8433.52.0000 8433.59.0090 8433.53.0000	8433.52.0000 8433.59.0090 8433.53.0000
3331119041, 061	Field forage harvesters.....	8433.59.0010	8433.59.0010

Continued

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
333111A001, 011, 333111G002, 004, 006, 008	Hay mowers, mower-conditioners and windrowers.....	8433.20.0020 8433.20.0040 8433.20.0060	8433.20.0020 8433.20.0040 8433.20.0060
333111A021, 041	Other haymaking machinery.....	8433.30.0000	8433.30.0000
333111A031	Balers, including pickup balers.....	8433.40.0000	8433.40.0000
333111E001, 009, 011, 019, 021, 059	Other plows.....	8432.10.0040 8432.10.0060	8432.10.0040 8432.10.0060
333111E079, 081, 089, 091	Cultivators and weeders.....	8432.29.0040 8432.29.0060 8432.29.0080	8432.29.0040 8432.29.0060 8432.29.0080
333111G012, 014, 016	Machinery for preparing animal feed.....	8436.10.0000	8436.10.0000
333111G024, 018, 022	Other machines for preparing crops for market or for use.....	8419.31.0000 8436.80.0060	8419.31.0000 8436.80.0060
333111G028, 032	Farm poultry incubators and brooders.....	8436.21.0000	8436.21.0000
333111G034	Nests and cages (poultry equipment).....	8436.29.0000 8433.60.0000	8436.29.0000 8433.60.0000
333111G088	Self-propelled irrigation systems, center-pivot.....	8424.81.9010	8424.81.9010
333111G092	All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over.....	8424.81.9020	8424.81.9020
333111G072, 074, 076, 078, 082, 084	Farm wagons and other farm transportation equipment.....	8716.80.1000	8716.80.1000
333111J001, 026	Other commercial and turf grounds mowers.....	8433.19.0040 8433.19.0050	8433.19.0040 8433.19.0050
333111J006, 011, 016	Riding turf mowers.....	8433.19.0010 8433.19.0030	8433.19.0010 8433.19.0030

Continued

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
333111J021	Flail and gang mowers.....	8433.19.0020	8433.19.0020
3331121036, 041	Snowblowers (snowthrowers).....	8430.20.0060	8430.20.0060
3331121046, 051	Powered lawn and hedge trimmers.....	8467.89.5030 8508.80.0070	8467.89.5030 8508.80.0070

1/Source: 2001 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, (2001).

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.