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Census File Number

Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997

INSTRUCTIONS

1. General – The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in item 18B. Please review the entire list and report separately each item consumed. Leave blank if you do not consume the item. If you use materials, parts, and supplies which are not listed, describe and report them in the "Cost of all other materials . . ." line at the end of this section. If you consumed less than \$25,000 of a listed material, include the value with "Cost of all other materials . . .," Census material code 970099 8.

Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.

If quantities are requested, please use the unit of measure specified.

If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.

2. Valuation of Materials Consumed – The value of the materials, etc., consumed should be based on the delivered cost; i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials.

Materials received from other plants within your company should be reported at their full economic value (the value assigned by the shipping plant, plus the cost of freight and other handling charges).

If purchases or transfers do not differ significantly from the amounts actually put into production, you may report the cost of purchases or transfers. However, if consumption differs significantly from the amounts purchased or transferred, these amounts should be adjusted for changes in the materials and supplies inventories by adding the beginning inventory to the amount purchased or transferred and subtracting ending inventory.

3. Contract Work – Include as materials consumed those you purchased for use by others making products for you under contract. Amounts paid to the companies doing the contract work should be reported in item 10, line e, and should include freight in and out. On the other hand, materials owned by others but used in this establishment in making products for others under contract or on commission should be excluded.

4. Resales – Cost for products bought and sold or transferred from other establishments of your company and sold without further manufacture, processing, or assembly should be reported in item 10, line b, not in item 17 below. The value of these products shipped by this establishment should be reported in item 18B under Census product code 99989 00 6, "Resales."

5. Produced and Consumed – Forgings, foundries, and screw machine products – Report the quantities produced and used in manufacturing other products made in this establishment in item 19. Note that the materials used to produce these items should be reported in item 17.

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Line No.	Materials, parts, and supplies (A)		Census material code (B)	Consumption of purchased materials and of materials received from other establishments of your company			
				Cost, including delivery cost (freight-in) (E)			
				574 Millions	Thou- sands	Dollars	
1	FLUID POWER PRODUCTS (Hydraulic and pneumatic)	Pumps, motors, and hydrostatic transmissions	359412 4	\$			
2		Cylinders and rotary actuators	359301 9				
3		Filters	356921 7				
4		Hose or tube fittings and assemblies	349261 8				
5		Valves	349271 7				
6	FABRICATED METAL PRODUCTS (Except forgings)	Bolts, nuts, screws, washers, rivets, and screw machine products	345001 2				
7		Metal stampings	346901 2				
8		All other fabricated metal products	340067 8				
9	FORGINGS	Iron and steel forgings	346200 9				
10		Nonferrous forgings	346300 7				
11	CASTINGS (Rough and semifinished)	Iron and steel	332001 7				
12		Aluminum and aluminum-base alloy	336005 4				
13		Other nonferrous	336003 9				
14	Shapes and Forms (Except castings, forgings, and fabricated metal products)	STEEL	Bars, bar shapes, and plates	331007 5			
15			Sheet and strip	331022 4			
16			Structural shapes and sheet piling	331023 2			
17			All other	331091 9			
18		Nonferrous	336002 1				

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Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 – Continued

Line No.	Materials, parts, and supplies (A)	Census material code (B)	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in) (E)		
			574 Millions	Thou- sands	Dollars
19	Metal powders	339915 1	\$		
20	ENGINES Diesel and semidiesel	351920 4			
21	Gasoline and other carburetor	351905 5			
22	Engine electrical equipment (spark plugs, magnetos, generators, starters, etc.)	369401 5			
23	Electric motors and generators	362100 0			
24	BEARINGS (Mounted or unmounted) Ball	356218 8			
25	Roller	356201 4			
26	Speed changers, gears, and industrial high-speed drives	356601 5			
27	Tires and inner tubes	301100 4			
28	Rubber and plastics hose and belting	305201 6			
29	Fabricated plastics products (except gaskets)	308006 6			
30	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	285101 2			
31	Cabs purchased for installation on farm machinery	352390 9			
32	Cost of all other materials and components, parts, containers, and supplies consumed <i>Describe the principal materials, etc., included in this value.</i>	970099 8			
33	TOTAL Sum of lines 1–32 should equal item 10, line a		\$		

Item 18A – Not applicable to this report

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997

INSTRUCTIONS

- General** – The manufactured products and services listed below are generally made in your industry. If you make products that are not listed, describe and report them in the "All other products made in this establishment" section at the end of item 18B. PLEASE DO NOT COMBINE PRODUCT LINES.
If quantities are requested, please use the unit of measure specified.
If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.
- Valuation of Products** – Report the value of the products shipped and services performed at the net selling value, f.o.b. plant to the customer; i.e., after discounts and allowances, and exclusive of freight charges and excise taxes.
If you transfer products to other establishments within your company, you should assign the full economic value to the transferred products; i.e., include all direct costs of production and a reasonable proportion of all other costs and profits.
- Contract Work** – Report PRODUCTS MADE BY OTHERS FOR YOU FROM YOUR MATERIALS on the specific lines as if they were made in this establishment. On the other hand, do not report on the specific product lines PRODUCTS THAT YOU MADE FROM MATERIALS

OWNED BY OTHERS. Report only the amount that you received for "commission or contract receipts" under Census product code 93000 00 8.

- Resales** – Do not report on the specific product lines those PRODUCTS BOUGHT AND SOLD OR TRANSFERRED FROM OTHER ESTABLISHMENTS OF YOUR COMPANY AND SOLD WITHOUT FURTHER MANUFACTURE. Report only a value under Census product code 99989 00 6, "Resales."
- Detailed Data Reported Elsewhere** – Items denoted by an asterisk (*) require totals for groups of products covered in the more frequent Current Industrial Reports (CIR). If you report on the CIR forms, the sum of the detailed CIR products should equal the total reported on this census form.
NOTE: Only CIR totals are requested; do not duplicate detail reported on the CIR.
The Current Industrial Reports related to this report are as follows:
 - MA35A, Farm Machinery and Lawn and Garden Equipment
 - MA35D, Construction Machinery
 - MA35L, Internal Combustion Engines
 - MA35N, Fluid Power Products, Including Aerospace
 - MA35P, Pumps (Except Hydraulic) and Compressors
 - MA36L, Electric Lighting Fixtures

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Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued

Line No.	Products and services *Item corresponds to products reported on Current Industrial Reports (A)		Census product code 581 (B-1)	Corresponds to the sum of products reported for 1997 on –		Products shipped and other receipts			
				CIR form (B-2)	Item codes (B-3)	Quantity (Number) 583 (D)	Value, f.o.b. plant (E)		
							584 Millions	Thou- sands	Dollars
1	WHEEL TRACTORS (Sold with or without attachments) (Excluding parts)	Farm-type (power take off hp) (2- and 4-wheel drive) (exclude contractors' off-highway wheel tractors, garden tractors, turf tractors, and motor tillers)* (Report attachments sold separately in product codes 35232 00 - 35236 00, 3523C 00, and 3523E 00, and parts sold separately in product code 35239 26.)	35231 00 0	MA35A	6101-6187		\$		
2		Nonfarm-type (contractors' off-highway) (2- and 4-wheel drive) (for use on natural terrain) (including towing units, loaders, and bare wheel tractors), rubber-tired dozers, and self-propelled wheeled log skidders* (Report attachments sold separately in product code 35310 00 and parts sold separately in product code 35319 45 on lines 12 and 16, respectively.)	35315 00 1	MA35D	1140-2000				
3	Farm conveyors, stackers, and bale throwers		35232 71 9						
4	Farm dairy machines and equipment, sprayers and dusters (except aerial types), farm elevators, and farm blowers and attachments (35232)*		35232 00 8	MA35A	6204-6216 6219-6265 6270-6275				
5	Planting, seeding, and fertilizing machinery and attachments (35233)*		35233 00 6		6321-6384				
6	Harvesting machinery and attachments (35235)*		35235 00 1		6511-6583				
7	Haying machinery and attachments (35236)*		35236 00 9		6613-6683				
8	Plows, including plowshares (primary tillage equipment), and harrows, rollers, pulverizers, and similar equipment; and cultivators and weeders (secondary tillage equipment) and attachments (3523C)*		3523C 00 6		6441-6463 6715-6731 6770-6795				
9	Hand clippers for animals		3523E 80 3						
10	Metal stalls and corrals		3523E 84 5						
11	All other farm machinery and equipment (excluding parts), including stalk shredders and cutters or rotary mowers; feed grinders and crushers; poultry, hog, and barnyard equipment; farm wagons; self-propelled irrigation systems; etc., except commercial turf equipment (3523E)*		3523E 00 1	MA35A	6811-6824 6831-6845 6851-6857 6860-6861 6870-6875 6880-6887 6891-6895				
12	Construction machinery for mounting on nonfarm tractors and other prime movers (excluding parts and snow clearing attachments)*		35310 00 2	MA35D	9121-9124 9206-9444				
13	Parts for Farm Machinery, for Sale Separately (35239)	PARTS FOR FARM MACHINERY (Except operator cabs)	35239 26 8						
14		Parts for wheel tractors (farm-type)							
15		Parts (except for wheel tractors)	35239 31 8						
15		Operator cabs for farm equipment*	35239 53 2						
16	Parts for contractors' off-highway wheel tractors, crawler tractors, and tractor shovel loaders (sold separately)		35319 45 8						
17	Commercial turf and grounds care equipment (including parts and attachments) (3523F)*		3523F 00 9	MA35A	8101-8118 8123-8143				

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued

Line No.	Products and services *Item corresponds to products reported on Current Industrial Reports (A)		Census product code (B-1)	Corresponds to the sum of products reported for 1997 on –		Products shipped and other receipts					
				CIR form (B-2)	Item codes (B-3)	Quantity (Number) (D)	Value, f.o.b. plant (E)				
							581	584	Thou-	Dollars	
											Millions
18	Nonpowered lawnmowers		35241 01 7								
19	Consumer nonriding lawn, garden, and snow equipment (35241)*		35241 00 9	MA35A	8202–8265						
20	Consumer riding lawn, garden, and snow equipment (35244)*		35244 00 3		8270–8285						
21	Parts and attachments for consumer lawn, garden, and snow equipment (35246)*		35246 00 8		8267–8268 8311–8335						
22	Gray iron castings (All other uses)		33219 98 1								
23	Grain bins and vats, excluding drying floors, fans, and heaters (steel and aluminum)		34443 14 3								
24	PREFABRICATED METAL BUILDINGS (Steel and aluminum)	Grain storage buildings (including farm- and commercial-types)	34482 14 1								
25		Other farm service buildings (livestock shelters, machinery storage, etc.) (excluding wood frame buildings)	34482 15 8								
26	Automotive job stampings (truck, bus, and passenger car)		34650 00 2								
27	Gasoline and gas-gasoline engines (except aircraft, automobile, highway truck, bus, tank, and outboard marine) (35191)*		35191 00 6	MA35L	9101–9207						
28	Diesel, semidiesel, and dual-fuel engines (except automobile, highway truck, bus, and tank) (35193)*		35193 00 2		9331–9353						
29	Parts and Accessories for Internal Combustion Engines (Except aircraft and gasoline automotive engines and gas turbines) (35199)	Connecting rods	35199 01 7								
30		Crankshafts, engine	35199 08 2								
31		Camshafts, engine	35199 09 0								
32		Flywheels	35199 21 5								
33		ENGINE BEARINGS (halves)	Main (crankshaft)	35199 24 9							
34			Connecting rod	35199 25 6							
35			Other (camshaft, balance shaft, etc.)	35199 33 0							
36		ENGINE PUMPS, NEW	Oil	35199 27 2							
37			Fuel	35199 31 4							
38			Water	35199 32 2							
39		Engine blocks		35199 35 5							
40		Cylinder liners (sleeves)		35199 39 7							
41		Cylinder heads		35199 49 6							
42		Intake manifolds and exhaust manifolds		35199 63 7							
43		Valve guides, seats, and tappets		35199 67 8							
44		Rocker arms and parts		35199 71 0							
45		Fuel injection systems (multipoint)		35199 75 1							
46		Governors, engine speed		35199 83 5							
47		Radiators, stationary engine		35199 87 6							
48		Superchargers, including turbochargers		35199 91 8							
49	Other parts and accessories		35199 99 1								

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Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued

Line No.	Products and services *Item corresponds to products reported on Current Industrial Reports (A)		Census product code 581 (B-1)	Corresponds to the sum of products reported for 1997 on –		Products shipped and other receipts			
				CIR form (B-2)	Item codes (B-3)	Quantity (Number) 583 (D)	Value, f.o.b. plant (E)		
							584 Millions	Thou- sands	Dollars
50	Scrapers, graders, rollers, rough terrain forklifts, and continuous ditchers and treachers (excluding parts)(35316) (Report attachments sold separately in product code 35310 00 on line 12)		35316 00 9	MA35D	8601–8616 8636–9118		\$		
51	Log splitters		35318 27 8						
52	Vertical earth augers and power post hole diggers (excluding water well and blast hole drills)		35318 47 6						
53	Snow clearing attachments for mounting on tractors or trucks, including V-shaped snow plows, single blades and wings, and snow blowers (except rotary snow blowers)		35318 23 7						
54	Electric Power-driven Handtools (Excluding battery-powered) and Parts	Drills – electric, power driven handtools		35465 10 3					
55		SAWS– JIG AND SABER	Armature mounted on ball bearings	35465 11 1					
56			Armature mounted on other than ball bearings	35465 13 7					
57		Reciprocating saws		35465 14 5					
58		Screwdrivers and nut-runners		35465 22 8					
59		Hammers, percussion and rotary, without drill chuck		35465 21 0					
60		Right-angle polishers, circular sanders, and grinders	Less than 7 inch wheel drive	35465 24 4					
61			7 inch wheel drive or more	35465 27 7					
62		Shears and nibblers		35465 28 5					
63		Other electric power-driven handtools – <i>Specify kind</i>		35465 39 2					
64	Parts, attachments, and accessories for electric-powered handtools (except battery-powered) (sold separately) (excluding saw blades, drill bits, router bits, screwdrivers, motors, and switches)		35465 39 2						
65	Internal combustion engine driven chain saws		35463 01 7						
66	Industrial pumps (except hydraulic fluid power pumps, automotive circulating pumps, and measuring and dispensing pumps) (35612)* (Include the value of the driver if shipped as a complete unit.)		35612 00 1	MA35P	1098–1298				
67	Fluid power cylinders and related items*		35930 00 7	MA35N	4501–4847				
68	Fluid power pumps, motors, and hydrostatic transmission components (including the value of the driver if shipped as complete unit)*		35940 00 6		5504–5589				
69	Parts and attachments for fluid power pumps, motors, and hydrostatic transmissions (35949)*		35949 00 7		5591–5597				
70	Receipts for machine shop job work and job order repair (35995)		35995 00 0						
71	Outdoor lighting equipment (including parts and accessories) (36485)*		36485 00 1	MA36L	2510–2587				
72	Bicycles complete; wheels of all diameter and all speeds (including lightweight, road, mountain, all terrain, and cruiser type)		37511 48 2						

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Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued

Line No.	Products and services *Item corresponds to products reported on Current Industrial Reports (A)	Census product code (B-1)	Corresponds to the sum of products reported for 1997 on –		Products shipped and other receipts			
			CIR form (B-2)	Item codes (B-3)	Quantity (Number) (D)	Value, f.o.b. plant (E)		
						584 Millions	Thou- sands	Dollars
73	Other cycles, including unicycles and adult tricycles – <i>Specify kind</i>	37511 09 4				\$		
74	Other parts for travel and camping trailers (including bodies and chassis); pickup campers and caps (excluding appliances and furnishings)	37922 68 9						
75	ALL OTHER PRODUCTS MADE IN THIS ESTABLISHMENT <i>Describe and report separately each product with a sales value of \$50,000 or more which cannot be assigned to one of the lines above. Specify unit of measure for quantity.</i>	18						
76		26						
77		34						
78		42						
79		59						
80		67						
81	CONTRACT WORK Receipts for work done for others on their own materials <i>Describe below products worked on and kind of work.</i>	93000 00 8						
82	MISCELLANEOUS RECEIPTS	Sales of scrap and refuse	99980 13 8					
83		Receipts for research and developmental work	99980 41 9					
84		Other miscellaneous receipts (including receipts for repair work, etc.)	99980 98 9					
85	RESALES Sales of products bought and sold without further manufacture, processing, or assembly in this establishment. The cost of such items should be reported in item 10, line b.	99989 00 6						
86	TOTAL value of shipments and other receipts Sum of lines 1–85, column (E)	77000 00 8				\$		

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Item 19. SELECTED PRODUCTS PRODUCED IN THIS ESTABLISHMENT AND USED IN MANUFACTURING OTHER PRODUCTS MADE IN THIS ESTABLISHMENT

INSTRUCTIONS

1. Report below the quantity of each listed item produced in this establishment and used in manufacturing other products made in this establishment.
2. Purchases or receipts of the items specified below should be reported only in item 17.
3. Materials used to produce the items specified below should be reported in item 17.
4. Quantities produced for sale as such and not for incorporation in other products should be reported in item 18B.
5. Report quantities in the unit of measure specified in column (D).

Line No.	Item (A)	Census code		Was this operation performed at this establishment during 1997?		Unit of measure for quantities (D)	Quantities produced in this establishment and used in manufacturing other products made in this establishment (E)
		591	(B)	592 (C)			
				Yes	No		
1	Ferrous foundries	1001	7	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Short tons	
2	NONFERROUS FOUNDRIES (Except die-casting)	1002	5	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Thousand pounds	
3		1003	3	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
4		1004	1	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
5		1005	8	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
6	Nonferrous die-casting foundries	1006	6	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
7	Precision turned products (on screw machines, turning centers, and CNC equipment)	1007	4	1 <input type="checkbox"/>	2 <input type="checkbox"/>		

Items 20 and 21 - Not applicable to this report

REMARKS - Please use this space for any explanations that may be essential in understanding your reported data.

Item 22. CERTIFICATION - This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report (<i>Print or type</i>)				Telephone	Area code	Number	Extension
667	1			2			
Name of company				Address (<i>Number and street, city, State, ZIP Code</i>)			
Period covered		FROM: Month	Day	Year	TO: Month	Day	Year
		666	1		2		
Signature of authorized person				Title			Date