

16 DETAILED COST OF MATERIALS, PARTS, AND SUPPLIES

General - The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in **2**. 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 that are not listed, describe and report them in the "Cost of all other materials . . ." 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 009700 99 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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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.

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 amount 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.

Contract Work - Include all 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 **15**, line A5, and should include freight in and out. On the other hand, materials owned by others but used at this establishment in making products for others under contract or on commission should be excluded.

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 **15**, line A2, not in **16**. The value of these products shipped by this establishment should be reported in **2** under Census product code 000999 8900 6, "Resales."

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Line No.	Materials, parts, and supplies	Census material code	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in)		
			\$ Bil.	Mil.	Thou.
0634		0630	0631		
1	Core parts purchased for use in remanufacturing or rebuilding	009998 26 1			
	Fluid power products (hydraulic and pneumatic)				
2	Pumps, motors, and hydrostatic transmissions	333996 01 5			
3	Valves	332912 07 0			
4	Cylinders and rotary actuators	333995 01 7			
5	Hose or tube fittings and assemblies	332912 03 9			
6	Filters	333999 01 9			
7	Other fluid power products (excluding pumps, compressors, valves, cylinders, rotary actuators, hose or tube fittings and assemblies, and filters)	001900 89 3			
	Fabricated metal products (excluding forgings)				
8	Bolts, nuts, screws, rivets, washers, and screw machine products	332722 03 2			
9	Automotive stampings (including body parts, hubcaps, fenders, etc.)	336370 00 2			
10	Other fabricated metal products (excluding fluid power)	332000 19 9			

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If not shown, please enter your 11-digit Census File Number (CFN) from the mailing address.

16 DETAILED COST OF MATERIALS, PARTS, AND SUPPLIES - Continued

Line No.	Materials, parts, and supplies	Census material code	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in)		
			\$ Bil.	Mil.	Thou.
0634		0630	0631		
11	Forgings	332100 01 5			
	Castings (rough and semifinished)				
12	Iron and steel	331510 01 6			
13	Aluminum and aluminum-base alloy	331520 05 6			
14	Other nonferrous	331520 03 1			
	Shapes and forms (excluding castings, forgings, and fabricated metal products)				
	Steel				
15	Bars, bar shapes, and plate	331200 07 1			
16	Sheet and strip	331200 17 0			
17	All other steel shapes and forms	331200 33 7			
18	Copper and copper-base alloy	331421 11 5			
19	Aluminum and aluminum-base alloy	331000 39 8			
20	All other nonferrous shapes and forms	331000 83 6			
21	Ball and roller bearings (mounted or unmounted)	332991 01 7			
22	Current-carrying wiring devices	335931 01 0			
23	Insulated wire and cable (excluding magnet wire)	331000 99 2			
24	Magnet wire	331000 97 6			
25	Speed changers, gears, and industrial high-speed drives	333612 00 0			
26	Turbochargers	333618 13 0			
27	Injection fuel pumps	333618 15 5			
28	Machined engine blocks	333618 17 1			
29	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and other shapes	325211 05 0			
30	Plastics products consumed in the form of sheets, rods, tubes, and other shapes	326100 13 8			
31	Fabricated plastics products (excluding gaskets, hoses, and belting)	326100 07 0			

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16 DETAILED COST OF MATERIALS, PARTS, AND SUPPLIES - Continued					
Line No.	Materials, parts, and supplies	Census material code	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in)		
			\$ Bil.	Mil.	Thou.
0634		0630	0631		
32	Fabricated rubber products (excluding tires, tubes, hose, belting, and gaskets)	326000 17 1			
33	Rubber and plastics hose and belting	326220 01 9			
34	Gaskets and packing and sealing devices (all types)	339991 03 6			
	Components for electronic circuitry, excluding tubes				
35	Printed circuit boards	334412 00 4			
36	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits	334413 00 2			
37	Capacitors	334414 00 0			
38	Resistors	334415 00 7			
39	Other components and accessories, nec (<i>Specify kind.</i>) ↘	001900 D3 0			
	Engine electrical equipment for internal combustion engines				
40	Spark plugs	336322 01 1			
41	Generators	336322 02 9			
42	Starting motors	336322 03 7			
43	Distributors	336322 04 5			
44	Ignition coils	336322 05 2			
45	Ignition harness and cable sets	336322 06 0			
46	Magnetos, magneto-dynamos, and magnetic flywheels	336322 07 8			
47	All other engine electrical equipment (<i>Report automotive-type special-purpose switches on line 22.</i>)	336322 19 3			
48	Used engine electrical equipment for rebuilding, or to be used in rebuilding (starting motors, generators, etc.)	001900 33 1			
49	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses)	325000 23 0			
50	Ceramic and ceramic composite parts, components, and accessories	327000 35 2			

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16 DETAILED COST OF MATERIALS, PARTS, AND SUPPLIES - Continued

Line No.	Materials, parts, and supplies	Census material code	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in)		
			\$ Bil.	Mil.	Thou.
0634		0630	0631		
51	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products, including all ink vehicles and varnishes	325510 03 0			
52	Chemicals and allied products				
	Glues and adhesives	325520 03 9			
53	Other chemicals and allied products	325000 41 2			
54	Flexible packaging materials	001900 03 4			
55	Paper and paperboard containers	322200 15 5			
56	Cost of all other materials and components, parts, containers, and supplies consumed (<i>Specify the principal materials, etc., included in this value.</i>) ↴	009700 99 8			
57	TOTAL (<i>Should equal total reported in 16, line A1</i>)	771000 00 7			

17-21 Not Applicable.



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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE

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 2. 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 code 000930 0000 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 code 000999 8900 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 form, the sum of the detailed products should equal the total reported on this form. For corresponding survey item codes, see paragraph 4, "Comparability," of CIR Instruction Manual.

NOTE: Only totals are requested; do not duplicate detail reported on the CIR.

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Motor vehicle electrical and electronic equipment, nec				
	Ignition harness and cable sets				
	Ignition harness sets				
1	Automotive type	336322 1101 8			
2	Other (including tractor, stationary engine, and aircraft)	336322 1104 2			
	Cable sets				
3	Automotive type	336322 1201 6			
4	Aircraft and other types	336322 1204 0			
	Battery charging alternators, generators, and regulators				
	Battery charging alternators and generators for internal combustion engines				
5	Automotive types, new	336322 3101 6			
6	Other types, new	336322 3104 0			
7	Rebuilt, all types	336322 3201 4			
8	Regulators for battery charging alternators and generators (new and rebuilt)	336322 3204 8			
	Starting (engine cranking) motors				
9	Automotive types, new	336322 5101 4			
10	Other types, new	336322 5104 8			
11	Rebuilt, all types	336322 5201 2			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers			
			Value, f.o.b. plant			
			\$ Bil.	Mil.	Thou.	
	0734	0730	0731			
	Motor vehicle electrical and electronic equipment, nec - Continued					
12	Spark plugs (all types)	336322 7100 4				
	Other complete electrical and electronic equipment for internal combustion engines					
13	Ignition coils (all types)	336322 9101 0				
14	Distributors (all types)	336322 9301 6				
15	Magnetos, magneto-dynamos, magnetic flywheels	336322 9304 0				
16	Other complete ignition equipment (including electronic ignitions) . .	336322 9307 3				
17	Electronic systems for complete engine control, using computers or microcomputers	336322 9201 8				
	Other complete electrical and/or electronic equipment for internal combustion engines (including complete engine control equipment except computers and microprocessors) (Specify kind.) ↘					
18		336322 9309 9				
	Parts for engine electrical and/or electronic equipment					
19	Armatures, field coils, and drive-end housings for cranking motors . .	336322 A101 8				
20	Armatures and field coils for alternators and generators	336322 A204 0				
	Parts for ignition distributors					
21	Distributor heads and rotors	336322 A307 1				
22	Breaker point sets	336322 A409 5				
23	Condensers (capacitors)	336322 A512 6				
	Other parts for engine electrical and/or electronic equipment (Specify kind.) ↘					
24		336322 A615 7				
	Other electrical and electronic equipment, except engine					
25	Windshield wiper/washer subassemblies, including pumps	336322 C111 5				
26	Rebuilt windshield wiper-washer units	336322 C127 1				
27	Block and battery heaters	336322 C114 9				
28	Other automotive heaters and other heater parts	336322 C115 6				
29	Permanent defrosters	336322 C104 0				

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued					
Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Motor vehicle electrical and electronic equipment, nec - Continued Other electrical and electronic equipment, except engine - Continued				
30	Cruise control units	336322 C102 4			
31	Rebuilt cruise control units	336322 C124 8			
32	Instrument board assemblies	336322 C121 4			
33	Wiring harness sets, except ignition	336322 C107 3			
34	Electronic control modular chips for motor vehicles	336322 C119 8			
35	Other automotive electrical equipment, except engine	336322 C122 2			
36	Other rebuilt electrical equipment, except engine electrical equipment (Specify kind.) ↴ 	336322 C130 5			
37	Parts and supplies for electric motors and generators and other rotating equipment (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 C100 0			
38	Switches for electrical circuitry (including vehicular switches) (Corresponds to value of shipments reported on CIR Form MA335K, Wiring Devices and Supplies, for 2002)*	335931 5100 5			
39	Motor vehicle instruments (Specify kind.) ↴ 	334514 5100 0			
40	Search and detection, navigation and guidance systems and equipment (Corresponds to value of shipments reported on CIR Form MA334B, Selected Instruments and Related Products, for 2002)*	334511 3100 8			
41	Home, portable, and automobile radios, and radio-phonograph-tape recorder-compact disc combinations (Corresponds to value of shipments reported on CIR Form MA334M, Consumer Electronics, for 2002, item codes 1134 - 1142)*	334310 1100 7			
42	Gasoline engines and gasoline engine parts for motor vehicles, new (Report remanufactured gasoline engines and gasoline engine parts for motor vehicles on lines 152, 153, 154, 155, 156, and 157.) Gasoline engines, new (with or without cylinder heads, fuel pumps, water pumps, and other standard accessories)	336312 1101 9			
43	Intake manifolds	336312 1504 4			
44	Exhaust manifolds	336312 1507 7			
45	Crankshafts, engine	336312 1511 9			
46	Camshafts, engine	336312 1514 3			
47	Rocker arms and parts	336312 1517 6			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Gasoline engines and gasoline engine parts for motor vehicles, new (Report remanufactured gasoline engines and gasoline engine parts for motor vehicles on lines 152, 153, 154, 155, 156, and 157.) - Continued				
48	Valve guides, seats, and tappets	336312 1521 8			
49	Fuel injection systems	336312 1224 9			
50	Flywheels and flexplates	336312 1527 5			
51	Timing gears, sprockets, and chains	336312 1531 7			
	Engine bearings (halves)				
52	Main	336312 1534 1			
53	Connecting rod	336312 1537 4			
54	Other (balance shaft, camshaft, etc.)	336312 1541 6			
	Oil pumps, new				
55	Engine	336312 1544 0			
56	Power steering (Report rebuilt steering and suspension components on lines 165, 166, and 167.)	336330 1526 9			
57	Fuel pump assemblies (excluding kits)	336312 1351 0			
58	Water pump assemblies (excluding kits)	336312 1354 4			
59	Engine cooling fans (including hubs and clutches)	336312 1457 5			
60	Radiators, complete (Report stationary engine radiators for internal combustion engines on line 81.)	336399 7401 4			
61	Radiator shells and cores (Report stationary engine radiators for internal combustion engines on line 81.)	336399 7405 5			
62	Thermostats (engine cooling system)	336312 1467 4			
63	PCV (positive crankcase ventilation) valves	336312 1571 3			
	All other parts and accessories for gasoline automotive engines (Specify kind.) ↘				
64		336312 1574 7			
65	Diesel, semidiesel, and dual-fuel engines for automobiles, highway trucks, and buses (Corresponds to the value of shipments reported on CIR Form MA333L, Internal Combustion Engines, for 2002.)*	333618 5100 0			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Parts and accessories for internal combustion engines (except aircraft and gasoline automotive engines and gas turbines)				
66	Crankshafts, engine	333618 F106 6			
67	Camshafts, engine	333618 F111 6			
68	Engine blocks	333618 F151 2			
69	Cylinder liners (sleeves)	333618 F156 1			
70	Intake manifolds and exhaust manifolds	333618 F166 0			
71	Valve guides, seats, and tappets	333618 F171 0			
72	Rocker arms and parts	333618 F176 9			
73	Fuel injection systems (multipoint)	333618 F281 7			
74	Super-chargers (including turbochargers)	333618 F196 7			
75	Flywheels	333618 F116 5			
	Engine bearings (halves)				
76	Main (crankshaft)	333618 F121 5			
77	Connecting rod	333618 F126 4			
78	Other (balance shaft, camshaft, etc.)	333618 F131 4			
79	Engine oil pumps	333618 F136 3			
80	Other parts and accessories	333618 F199 1			
81	Stationary engine radiators for internal combustion engines, except aircraft and gasoline automotive engines and gas turbines	336399 7409 7			
	Drive train components, new (except wheels and brakes) <i>(Report remanufactured drive train components on lines 168, 169, 170, 171, 172, and 173.)</i>				
	Transmissions (except auxiliary and parts) <i>(Report transaxles on line 90.)</i>				
	Car and light truck type				
82	Manual	336350 1101 9			
83	Automatic	336350 1104 3			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Drive train components, new (except wheels and brakes) (Report remanufactured drive train components on lines 168, 169, 170, 171, 172, and 173.) - Continued				
	Transmissions (except auxiliary and parts) (Report transaxles on line 90.) - Continued				
	Heavy truck and bus type				
84	Manual	336350 1207 4			
85	Automatic	336350 1211 6			
86	Parts for manual transmissions	336350 1313 0			
87	Parts for automatic transmissions	336350 1316 3			
88	Motor vehicle axles	336350 1435 1			
89	Motor vehicle axle parts	336350 1436 9			
90	Transaxles	336350 1519 2			
91	Clutch disc and facing assemblies	336350 1522 6			
92	Gear shifters	336350 1525 9			
93	Drive shafts	336350 1528 3			
94	Universal joints	336350 1531 7			
95	Wheel hubs (sold separately)	336350 1537 4			
96	Other drive train components	336350 1541 6			
	Motor vehicle wheels, new				
	Car and light truck type				
97	Steel	336399 5101 2			
98	Aluminum	336399 5104 6			
99	Other (including combination)	336399 5107 9			
100	Heavy truck and bus type (including those for truck trailers and trailer coaches)	336399 5111 1			
101	Trailer hitches (for travel trailers, automobile trailers, and light duty truck trailers)	336999 3307 4			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Brake parts and assemblies, new <i>(Report remanufactured brake parts and assemblies on lines 158, 159, 160, 161, 162, 163 and 164.)</i>				
	Brake cylinders, new				
102	Wheel (sold separately)	336340 1101 0			
103	Master (sold separately)	336340 1104 4			
104	Brake valves	336340 1707 4			
105	Brake assemblies (drum) (including backing plates, shoes, linings (except asbestos), cylinders, etc., if sold together)	336340 1211 7			
106	Brake assemblies (disc/caliper) (including rotors, calipers, pads (except asbestos), cylinders, etc., if sold together)	336340 1313 1			
107	Brake drums (with or without hub) sold separately	336340 1416 2			
108	Brake rotors/discs (with or without hub) sold separately	336340 1519 3			
109	Brake shoes (with or without lining) sold separately	336340 1722 3			
110	Metallic or semimetallic brake linings (excluding asbestos)	336340 1625 8			
111	Automotive brake hose assemblies	336340 1745 4			
	Brake power actuation units				
112	Air	336340 1737 1			
113	Hydraulic	336340 1741 3			
114	Vacuum	336340 1744 7			
115	Other brake parts	336340 1747 0			
	Steering and suspension <i>(Report rebuilt steering and suspension components on lines 165, 166, and 167.)</i>				
116	Shock absorbers	336330 1101 1			
117	Struts	336330 1514 5			
118	Tie rod ends	336330 1204 3			
119	Steering idler arms, drag links, and control arms	336330 1307 4			
120	Ball joints	336330 1511 1			
121	Automotive power steering hose assemblies	336330 1528 5			
122	Steering wheels, columns, and gearboxes	336330 1417 1			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Steering and suspension (<i>Report rebuilt steering and suspension components on lines 165, 166, and 167.</i>) - Continued				
123	Rack and pinion steering gears	336330 1521 0			
124	Integral gears and manual steering gears	336330 1524 4			
125	Other steering and suspension components	336330 1531 9			
	Filters for internal combustion engines, new				
	Oil				
126	Light-duty (car and light truck)	336399 1101 6			
127	Heavy-duty	336399 1104 0			
	Fuel				
128	Light-duty (car and light truck)	336399 1107 3			
129	Heavy-duty	336399 1111 5			
	Air				
130	Light-duty (car and light truck)	336399 1113 1			
131	Heavy-duty	336399 1116 4			
132	Other (including coolant and hydraulic)	336399 1119 8			
	Exhaust system parts, new				
133	Mufflers (including standard, sports or glass pack, and resonators)	336399 3101 4			
134	Pipes (including exhaust, intermediate, connecting, crossover, tail, and side pipes)	336399 3104 8			
135	Catalytic converters	336399 3107 1			
	All other motor vehicle parts and accessories, new (<i>Report other remanufactured parts and accessories on lines 7, 8, 11, 26, 31, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, and 173.</i>)				
	Motor vehicle bumper assemblies, bumpers, and parts, new				
136	For cars and light trucks with GVWR of 10,000 lb and less (classes 1 and 2)	336399 7103 6			
137	For heavy trucks with GVWR greater than 10,000 lb	336399 7105 1			
138	Automotive frames	336399 7204 2			
139	Fuel tanks	336399 7307 3			
140	Automotive air-conditioning hose assemblies	336399 7514 4			
141	Windshield wiper blades	336399 7524 3			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers			
			Value, f.o.b. plant			
			\$ Bil.	Mil.	Thou.	
0734		0730	0731			
	All other motor vehicle parts and accessories, new (<i>Report other remanufactured parts and accessories on lines 7, 8, 11, 26, 31, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, and 173.</i>) - Continued					
142	Convertible tops	336399 7527 6				
143	Sunroof and parts	336399 7531 8				
144	Heater cores	336322 C118 0				
145	Motor vehicle doors, new	336399 7532 6				
146	Truck and trailer liftgates, new	336399 7525 0				
147	Dumptruck lifting mechanisms	336211 5115 9				
148	Fifth wheels	336211 5133 2				
149	Automotive airbag assemblies and parts thereof	336399 7534 2				
150	Luggage and utility racks	332510 5101 8				
	All other motor vehicle parts (<i>Specify kind.</i>) 7					
151		336399 7550 8				
	Rebuilt gasoline engines and engine parts for motor vehicles					
	Rebuilt gasoline engines					
152	Car and light truck type	336312 3107 4				
153	Heavy truck and bus type	336312 3111 6				
154	Rebuilt fuel pumps	336312 3101 7				
155	Rebuilt water pumps	336312 3104 1				
156	Rebuilt carburetors	336311 1105 2				
157	Other rebuilt engine parts, and components	336312 3121 5				
	Rebuilt motor vehicle brake parts and assemblies					
	Rebuilt brake power actuation units					
158	Air	336340 3111 7				
159	Vacuum	336340 3114 1				
160	Hydraulic	336340 3117 4				
161	Rebuilt brake shoe assemblies (drum brake)	336340 3101 8				

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If not shown, please enter your 11-digit Census File Number (CFN) from the mailing address.

22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Rebuilt motor vehicle brake parts and assemblies - Continued				
162	Rebuilt brake caliper assemblies (disc brake)	336340 3104 2			
163	Rebuilt brake master cylinders	336340 3107 5			
164	Other rebuilt brake systems and parts	336340 3121 6			
	Rebuilt motor vehicle steering and suspension components				
165	Rebuilt rack and pinion steering assemblies	336330 3104 3			
166	Rebuilt power steering pumps	336330 3101 9			
167	Other rebuilt steering and suspension components	336330 3121 7			
	Rebuilt motor vehicle transmissions and drive train parts				
	Rebuilt transmissions including drive lines and axles, and parts				
	Car and light truck type				
168	Automatic	336350 3104 1			
169	Manual	336350 3107 4			
170	Heavy-duty truck and bus type	336350 3111 6			
171	Other rebuilt transmission parts including clutch and facing assemblies, gear shifters, universal joints, and wheel hubs	336350 3114 0			
172	Rebuilt clutch discs and pressure plates	336350 3101 7			
173	Other rebuilt drive train parts and components	336350 3117 3			
	Other rebuilt motor vehicle parts (<i>Specify kind.</i>) ↴				
174		336399 7554 0			
	Special dies and tools, die sets, jigs, and fixtures				
	Jigs and fixtures, all types				
	Gauging and checking types				
175	Less than 1,000 lb weight	333514 0101 4			
176	1,000 lb weight or more	333514 0103 0			

CONTINUE WITH 22 ON PAGE 22

33606211

22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Special dies and tools, die sets, jigs, and fixtures - Continued				
	Jigs and fixtures, all types - Continued				
	All other jigs and fixtures (holding, positioning, layout, assembly, etc.) Less than 1,000 lb weight				
177	Work-holding fixtures	333514 0109 7			
178	Other than work-holding fixtures	333514 0106 3			
179	1,000 lb weight or more	333514 0112 1			
180	Standard catalog components and parts for jigs and fixtures, including drill bushings	333514 0215 2			
	Dies, metalcutting only				
181	Press brake dies	333514 0318 4			
	Forming and drawing dies:				
182	500 lb weight or less	333514 0321 8			
183	501 to 3,000 lb weight	333514 0326 7			
184	More than 3,000 lb weight	333514 0332 5			
	Stamping dies (including lamination and blanking dies) Progressive-type dies				
185	High-speed steel	333514 0535 3			
186	Carbide	333514 0538 7			
187	Other	333514 0429 9			
188	All other stamping-type dies (punch, trim, notch, pierce, etc.)	333514 0423 2			
	Forging dies (including cold forging and heading)				
189	Open-die type	333514 0541 1			
190	Closed-die type	333514 0543 7			
	Extrusion and wire-drawing and straightening dies				
191	Ceramic and ceramic composite	333514 0546 0			
192	High-speed steel	333514 0549 4			
193	Carbide	333514 0655 9			
194	Other	333514 0652 6			

CONTINUE WITH **22** ON PAGE 23

33606229

If not shown, please enter your 11-digit Census File Number (CFN) from the mailing address.

22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Special dies and tools, die sets, jigs, and fixtures - Continued				
	Dies, metalcutting only - Continued				
	All other dies				
195	High-speed steel	333514 0658 3			
196	Carbide	333514 0661 7			
197	Other	333514 0663 3			
	Standard and special components and parts for dies				
198	Die sets	333514 0666 6			
	Standard punches				
199	Steel	333514 0769 8			
200	Carbide	333514 0772 2			
201	Other	333514 0775 5			
202	Industrial models and prototypes	333514 0878 7			
	Other specially designed tooling (Specify kind.) ↴				
203		333514 0981 9			
204	Gray iron castings (excluding cast iron, ductile iron, and molds for heavy steel ingots)	331511 9YVW 9			
205	Job stampings, automotive	336370 0100 0			
	Parts for farm machinery and equipment, sold separately, except parts for wheel tractors (excluding engine parts) (Corresponds to value of shipments reported on CIR Form MA333A, Farm Machinery and Lawn and Garden Equipment)* (Specify kind.) ↴				
206		333111 CYVW 2			
207	Parts for wheel tractors (replacement only) (Corresponds to value of shipments reported on CIR Form MA333A, Farm Machinery and Lawn and Garden Equipment, for 2002)*	333111 C110 7			
	Parts and attachments for industrial trucks and tractors				
208	Parts and attachments for industrial work trucks fitted with lifting or handling equipment	333924 3101 2			
209	Parts and attachments for other vehicles	333924 3106 1			
210	Parts and attachments for machinery other than vehicles	333924 3111 1			
211	Military tanks and parts	336992 0111 8			

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CONTINUE ON PAGE 24

33606237

22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued					
Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Civilian aircraft engine parts and accessories				
212	For spark ignition reciprocating or rotary internal combustion engines . .	336412 7307 4			
213	For other engines	336412 7411 4			
214	Pistons, piston rings, and piston pins (engine)	336311 3YWV 5			
215	Gasoline and gas-gasoline engines (excluding aircraft, automobile, highway truck, bus, tank, and outboard marine) (Corresponds to value of shipments reported on CIR Form MA333L, Internal Combustion Engines, for 2002)* . .	333618 1100 4			
216	Power transmission equipment (except speed changers, drives, gears, and hydrostatic transmissions) (excluding automotive, truck, bus, and aircraft) .	333613 3YWV 7			
217	Motor vehicle mechanical air-conditioning systems (Corresponds to value of shipments reported on CIR Form MA333M, Refrigeration and Heating Equipment, for 2002)*				
	Passenger automobiles	336391 7110 8			
218	Buses	336391 7120 7			
219	All other	336391 7130 6			
220	Receipts for machine shop job work and job order repairs	332710 0100 1			
221	Fractional horsepower motors (rated at less than 746 watts) (excluding hermetics) (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 1100 2			
222	Integral horsepower motors and generators other than for land transportation equipment (rated at 746 watts or more), excluding hermetics (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 3100 0			
223	Land transportation motors, generators, control equipment, and parts (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 5100 8			
224	Motor-generator sets and other rotating equipment (including hermetics, fractional) (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 9100 4			
225	Automobile coil springs For domestic replacement and shipments for export (including shipments to U.S. motor vehicle manufacturers for resale)	332611 1101 8			
226	Shipments to U.S. motor vehicle manufacturers or their suppliers for use in original equipment	332611 1106 7			

CONTINUE WITH 22 ON PAGE 25

33606245

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services *Items correspond to products reported on Current Industrial Reports (CIR)	Census product code	Total shipments, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
227	All other products made in this establishment - <i>Specify and report each product with sales value of \$50,000 or more that cannot be assigned to one of the "listed products and services". For all remaining products, write "Other" and report a single total value.</i>	18			
228		26			
229		34			
230		42			
231		59			
232		67			
233	Contract work - Receipts for work done for others on their materials (<i>Specify products worked on and kind of work.</i>) ↴	000930 0000 8			
234	Miscellaneous receipts Sales of scrap and refuse	000999 8013 8			
235	Receipts for research and developmental work	000999 8041 9			
236	Other miscellaneous receipts (including receipts for repair work, etc.) . .	000999 8098 9			
237	Resales - Sales of products bought and sold without further manufacture, processing, or assembly (The cost of such items should be reported in 15, line A2.)	000999 8900 6			
238	TOTAL (Should equal 4, line A)	770000 0000 8			

23-27 Not Applicable.



33606252

28 ESTABLISHMENT ACTIVITIES

A. Indicate activities that were performed by this establishment or were performed for this establishment by another company during 2002.
(Mark "X" ALL that apply.)

This activity was performed -			
By this establishment	By another establishment of this company	By another company	Not at all
0921 <input type="checkbox"/>	8071 <input type="checkbox"/>	0941 <input type="checkbox"/>	0961 <input type="checkbox"/>
1. Product design/engineering			
2. Order fulfillment			
0923 <input type="checkbox"/>	8072 <input type="checkbox"/>	0943 <input type="checkbox"/>	0963 <input type="checkbox"/>
a. Bundling or kitting (combining multiple items into a prepackaged product)			
0924 <input type="checkbox"/>	8073 <input type="checkbox"/>	0944 <input type="checkbox"/>	0964 <input type="checkbox"/>
b. Pick and pack (taking goods from inventory and packaging them to fill orders).			
0925 <input type="checkbox"/>	8074 <input type="checkbox"/>	0945 <input type="checkbox"/>	0965 <input type="checkbox"/>
c. Warehousing of finished products			
0926 <input type="checkbox"/>	8075 <input type="checkbox"/>	0946 <input type="checkbox"/>	0966 <input type="checkbox"/>
d. Breaking bulk (reducing large shipments into smaller portions for customers)			
0927 <input type="checkbox"/>	8076 <input type="checkbox"/>	0947 <input type="checkbox"/>	0967 <input type="checkbox"/>
e. Local delivery (within a city, town, or other local area, including adjoining towns and suburban areas)			
0928 <input type="checkbox"/>	8077 <input type="checkbox"/>	0948 <input type="checkbox"/>	0968 <input type="checkbox"/>
f. Long distance delivery (beyond local areas and commercial zones)			
0932 <input type="checkbox"/>	8078 <input type="checkbox"/>	0952 <input type="checkbox"/>	0972 <input type="checkbox"/>
g. Processing of returned merchandise			

B. During 2002 did this establishment:

- | | | |
|--|-----------------------------------|----------------------------------|
| 1. Manage inventory owned by this establishment AND held at this location? | 0936 <input type="checkbox"/> Yes | 0937 <input type="checkbox"/> No |
| 2. Manage inventory owned by this establishment BUT held at a customer's location? | 0956 <input type="checkbox"/> Yes | 0957 <input type="checkbox"/> No |
| 3. Manage inventory owned by another company BUT held at this location? | 0976 <input type="checkbox"/> Yes | 0977 <input type="checkbox"/> No |
| 4. Manage inventory owned by another company AND held somewhere other than at this location? | 0994 <input type="checkbox"/> Yes | 0995 <input type="checkbox"/> No |
| 5. Contract with another firm for any of your production using materials owned by this location? | 8041 <input type="checkbox"/> Yes | 8042 <input type="checkbox"/> No |
| 6. Send any partially completed products to a foreign facility for processing that were then returned to this establishment for completion? | 8044 <input type="checkbox"/> Yes | 8045 <input type="checkbox"/> No |
| 7. Manufacture products for a government to their specifications? | 8047 <input type="checkbox"/> Yes | 8048 <input type="checkbox"/> No |
| 8. Manufacture products for another business to their specifications? | 8016 <input type="checkbox"/> Yes | 8017 <input type="checkbox"/> No |
| 9. Manufacture products for a final retail customer to their specifications? | 8060 <input type="checkbox"/> Yes | 8062 <input type="checkbox"/> No |



33606260

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29 OPERATIONAL STATUS

Activity that best describes this establishment's status at the end of 2002
(Mark "X" only ONE box.)

- 0011 In operation
- 0012 Under construction, development, or exploration
- 0013 Temporarily or seasonally inactive
- 0014 Ceased operation - Give date at right →
- 0015 Sold or leased to another operator - Give date at right AND enter new name and mailing address below ↴

0018	Month	Day	Year

0060 Name of new owner or operator	0061 Employer Identification Number		
	Enter EIN of new owner (9 digits) →	-	
0062 Mailing address (number and street, P.O. Box, etc.)			
0063 City, town, village, etc.	0064 State	0065 ZIP Code	
		-	

Remarks (Please use this space for any explanations that may be essential in understanding your reported data.)

30 CERTIFICATION - This report is substantially accurate and was prepared in accordance with the instructions.

Is the time period covered by this report a calendar year?

- 0078 Yes
- 0079 No - Enter time period covered →

FROM	Month	Year	TO	Month	Year
0070			0071		

0072 Name of person to contact regarding this report	0073 Title

Telephone	Area code	Number	Extension	Fax	Area code	Number
0074		-		0075		-

0076 Internet e-mail address	Date completed	Month	Day	Year
	0069			

Thank you for completing your 2002 Economic Census form.
PLEASE PHOTOCOPY THIS FORM FOR YOUR RECORDS AND RETURN THE ORIGINAL.

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