

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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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

INFORMATION COPY
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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	Gasoline engines and parts specially designed for gasoline engines, not produced in same establishment	336312 00 4			
2	Diesel engines and parts specially designed for diesel engines	333618 03 1			
3	Drive train components and parts	336350 07 9			
4	Car bodies	336211 01 6			
5	Refrigeration compressors, compressor units, condensing units, fin coils, and other refrigeration, air-conditioning, and heat transfer equipment	001900 A6 6			
6	Shocks, struts, and other suspension equipment and parts	336330 00 6			
7	Exhaust systems and parts, including mufflers, pipes, and catalytic converters	336399 01 9			
8	Machine tool accessories, including cutting tools	333515 01 3			
9	Fluid power products (hydraulic and pneumatic)				
	Hydraulic and pneumatic fluid power pumps, motors, and hydrostatic transmissions	333996 01 5			
10	Valves	332912 07 0			
11	Cylinders and rotary actuators	333995 01 7			

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CONTINUE WITH **16** ON PAGE 9

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		
	Fluid power products (hydraulic and pneumatic) - Continued				
12	Hose or tube fittings and assemblies	332912 03 9			
13	Filters	333999 01 9			
14	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)				
15	Automotive stampings (including body parts, hubcaps, fenders, etc.) . .	336370 00 2			
16	Steel springs, excluding wire (including leaf, helical, and torsion bar) . .	332611 00 3			
17	Motor vehicle metal hardware (lock units, door and window handles, hinges, license plate brackets, panel knobs, etc.)	332510 11 4			
18	Bolts, nuts, screws, rivets, washers, and screw machine products	332722 03 2			
19	Other fabricated metal products	332000 49 6			
20	Forgings	332100 01 5			
21	Castings (rough and semifinished)	331000 35 6			
22	Metal shapes and forms, excluding castings, forgings, and fabricated metal products, including nonferrous	331000 33 1			
23	Ball and roller bearings (mounted or unmounted)	332991 01 7			
24	Pneumatic tires and inner tubes	326210 03 6			
25	Rubber and plastics hose and belting	326220 01 9			
26	Fabricated rubber products, excluding tires, tubes, hose, belting, and gaskets	326000 17 1			
27	Gaskets and packing and sealing devices (all types)	339991 03 6			
28	Fabricated plastics products, including components, housings, accessories, etc. (excluding gaskets, hose, and belting)	326100 33 6			
29	Glass and glass products, including windows and mirrors	327200 05 1			
30	Seats (purchased separately for automobiles, trucks, and buses)	336360 03 7			
31	Seat covers, seat belts, and shoulder harnesses	336360 07 8			
32	Automotive air bag assemblies and parts thereof	336399 11 8			

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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			
33	Automotive trimmings, textile (panels, headliners, etc.)	336360 01 1				
34	Carpeting	314110 03 2				
35	Ceramic and ceramic composite parts, components, and accessories	327000 35 2				
36	Glues and adhesives	325520 03 9				
37	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	325510 03 0				
38	Engine electrical equipment	336322 00 3				
39	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; excluding automotive lamps)	336321 00 5				
40	Automotive lamps (bulbs and sealed beams)	335110 03 7				
41	Storage batteries, automotive	335911 03 8				
42	Automotive radios and loudspeakers	334310 01 8				
43	Purchased computers for incorporation into motor vehicles, trucks, or buses	334111 03 6				
44	Semiconductors and related devices and electronic control modules	001900 C1 5				
45	Motor vehicle clusters, meters, and gauges, excluding electrical not produced in same establishment (including speedometers, fuel level, oil pressure, etc.)	334514 00 7				
46	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				
47	TOTAL (<i>Should equal total reported in 16, line A1</i>)	771000 00 7				

17-21 Not Applicable.

33601105

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

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	Unit of measure for quantities	Products shipped and other receipts				
				Quantity	Value, f.o.b. plant			
					\$ Bil.	Mil.	Thou.	
0734		0730	0736	0732	0731			
1	Passenger cars, knockdown or assembled; chassis for sale separately; and passenger car bodies Complete vehicles, knockdown or assembled, produced on passenger car chassis (<i>Include in the value of shipments the extra equipment billed with all vehicles</i>) (<i>Report minivans and sport utility vehicles on line 4. For vehicles to be assembled abroad, report the value on same basis as for domestic interplant shipments of knockdown vehicles.</i>)	336111 0100 8	number					
2	Passenger car bodies	336211 5125 8						
3	Kit cars	336211 5127 4						
4	Trucks, truck tractors and bus chassis (chassis of own manufacture) including minivans and sport utility vehicles 14,000 lb or less gvw	336112 0100 6	number					
5	14,000-33,000 lb gvw	336120 1100 8						
6	33,001 lb or more gvw	336120 2100 7						
7	Buses, including military (except trolley) and firefighting vehicles (chassis of own manufacture) Buses, including military (except trolley buses)	336120 3101 4						
8	Firefighting vehicles	336120 3104 8						

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33601113

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	Unit of measure for quantities	Products shipped and other receipts			
				Quantity	Value, f.o.b. plant		
					\$ Bil.	Mil.	Thou.
0734		0730	0736	0732	0731		
9	Combat and wheeled tactical vehicles or carriers						
	Tanks and parts	336992 0111 8					
10	Self-propelled weapons and parts	336992 0214 0					
11	Other full-tracked combat vehicles and parts, including armored utility vehicles (including parts)	336992 0217 3					
12	Complete nonarmored vehicles produced on purchased chassis, not designed primarily for transporting persons or goods, nec	336211 9123 9					
13	Other trucks, complete, produced on purchased chassis, nsk (<i>Specify kind.</i>) ↘	336211 9YWV 1					
14	Gasoline engines and gasoline engine parts for motor vehicles, new Gasoline engines, new (with or without cylinder heads, fuel pumps, water pumps, and other standard accessories)	336312 1101 9					
15	Intake manifolds	336312 1504 4					
16	Exhaust manifolds	336312 1507 7					
17	Fuel injection systems (multipoint)	336312 1224 9					
18	Flywheels and flexplates	336312 1527 5					
19	Timing gears, sprockets, and chains	336312 1531 7					
20	Engine cooling fans (including hubs and clutches)	336312 1457 5					
21	Other parts and accessories for gasoline engines	336312 1YWV 5					
22	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					
23	Parts and accessories for internal combustion engines (except aircraft and gasoline automotive engines and gas turbines) Crankshafts, engine	333618 F106 6					
24	Camshafts, engine	333618 F111 6					
25	Flywheels	333618 F116 5					

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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	Unit of measure for quantities	Products shipped and other receipts				
				Quantity	Value, f.o.b. plant			
					\$ Bil.	Mil.	Thou.	
0734		0730	0736	0732	0731			
	Parts and accessories for internal combustion engines (except aircraft and gasoline automotive engines and gas turbines) - Continued							
	Engine bearings (halves)							
26	Main (crankshaft)	333618 F121 5						
27	Connecting rods	333618 F126 4						
28	Other (camshaft, balance shaft, etc.)	333618 F131 4						
29	Engine oil pumps	333618 F136 3						
30	Engine blocks	333618 F151 2						
31	Cylinder liners (sleeves)	333618 F156 1						
32	Cylinder heads	333618 F161 1						
33	Intake manifolds and exhaust manifolds	333618 F166 0						
34	Valve guides, seats, and tappets	333618 F171 0						
35	Rocker arms and parts	333618 F176 9						
36	Fuel injection systems (multipoint)	333618 F281 7						
37	Super-chargers (including turbochargers)	333618 F196 7						
	Other parts and accessories (Specify.) ↘							
38		333618 FYWV 3						
	Drive train components, new (except wheels and brakes)							
	Transmissions (except auxiliary and parts)							
39	Car and light truck, manual	336350 1101 9						
40	Car and light truck, automatic	336350 1104 3						
41	Heavy truck and bus type, manual	336350 1207 4						
42	Heavy truck and bus type, automatic	336350 1211 6						
43	Parts for manual transmissions	336350 1313 0						
44	Parts for automatic transmissions	336350 1316 3						
45	Transaxles (except auxiliary and parts)	336350 1519 2						
46	All other motor vehicle parts and accessories	336399 7550 8						

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33601139

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	Unit of measure for quantities	Products shipped and other receipts			
				Quantity	Value, f.o.b. plant		
					\$ Bil.	Mil.	Thou.
0734		0730	0736	0732	0731		
47	Automotive job stampings (truck, bus, and passenger car)	336370 0100 0					
48	Construction-type scrapers, graders, rollers, and off-highway trucks, coal haulers, trailers, wagons and rough terrain forklifts (excluding parts)	333120 WYWW 1					
49	Special dies and tools, die sets, jigs, and fixtures Jigs and fixtures, all types Gauging and checking types Less than 1,000 lb weight	333514 0101 4					
50	1,000 lb weight or more	333514 0103 0					
51	All other jigs and fixtures (holding, positioning, layout, assembly, etc.) Less than 1,000 lb weight Work-holding fixtures	333514 0109 7					
52	Other than work-holding fixtures	333514 0106 3					
53	1,000 lb weight or more	333514 0112 1					
54	Standard catalog components and parts for jigs and fixtures, including drill bushings	333514 0215 2					
55	Metalworking forming and drawing dies, all sizes Press brake dies	333514 0318 4					
56	Forming and drawing dies 500 lb weight or less	333514 0321 8					
57	501 to 3,000 lb weight	333514 0326 7					
58	More than 3,000 lb weight	333514 0332 5					
59	Metalworking stamping, forging, extrusion, wiredrawing, and straightening dies Stamping dies (including lamination and blanking), progressive type High-speed steel	333514 0535 3					
60	Carbide	333514 0538 7					
61	Other (Specify kind.) ↴ <div style="background-color: #f0f0f0; height: 15px; width: 100%;"></div>	333514 0429 9					
62	All other metalworking dies, including lamination and blanking dies (punch, trim, notch, pierce, perforate, etc.)	333514 0423 2					

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33601147

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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	Unit of measure for quantities	Products shipped and other receipts				
				Quantity	Value, f.o.b. plant			
					\$ Bil.	Mil.	Thou.	
0734		0730	0736	0732	0731			
	All other products made in this establishment - 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.							
63		18						
64		26						
65		34						
66		42						
67		59						
68		67						
	Contract work - Receipts for work done for others on their materials (Specify products worked on and kind of work.) ↴							
69		000930 0000 8						
70	Miscellaneous receipts (including receipts for repair work, scrap, refuse, etc.)	000999 8000 5						
71	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						
72	TOTAL (Should equal 4, line A)	770000 0000 8						

23-27 Not Applicable.



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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 |



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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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