

**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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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  
DO NOT USE TO REPORT

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		
<b>1</b>	Fabricated metal products (excluding forgings)				
	Metal stampings . . . . .	332000 AC 2			
<b>2</b>	Bolts, nuts, screws, rivets, washers, and screw machine products . . . . .	332722 03 2			
<b>3</b>	All other fabricated metal products . . . . .	332000 85 0			
<b>4</b>	Forgings . . . . .	332100 01 5			
	Castings (rough and semifinished)				
<b>5</b>	Iron and steel . . . . .	331510 01 6			
<b>6</b>	Aluminum and aluminum-base alloy . . . . .	331520 05 6			
<b>7</b>	Other nonferrous castings . . . . .	331520 03 1			

33505082

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		
	Shapes and forms (excluding castings, forgings, and fabricated metal products)				
	Steel				
<b>8</b>	Bars, bar shapes, and plate . . . . .	331200 07 1			
<b>9</b>	Sheet and strip . . . . .	331200 17 0			
<b>10</b>	Wire and wire products . . . . .	331200 25 3			
<b>11</b>	All other steel shapes and forms . . . . .	331200 15 4			
	Copper and copper-base alloy				
<b>12</b>	Bare wire (for electrical conduction only) . . . . .	331000 93 5			
<b>13</b>	Rods, bars, and mechanical wire (including extruded and/or drawn shapes) . . . . .	331421 05 7			
<b>14</b>	Other copper and copper-base alloy shapes and forms . . . . .	331421 39 6			
<b>15</b>	Aluminum and aluminum-base alloy . . . . .	331000 39 8			
<b>16</b>	All other nonferrous shapes and forms . . . . .	331000 83 6			
<b>17</b>	Magnet wire . . . . .	331000 97 6			
<b>18</b>	Insulated copper wire and cable (excluding magnet wire) . . . . .	331000 A3 3			
<b>19</b>	Primary aluminum and aluminum-base alloy refinery shapes . . . . .	331312 01 7			
	Engines				
<b>20</b>	Diesel and semidiesel . . . . .	333618 11 4			
<b>21</b>	Gasoline and other carburetor . . . . .	333618 05 6			
<b>22</b>	Fractional horsepower electric motors (less than 1 hp) . . . . .	335312 11 2			
<b>23</b>	Integral horsepower electric motors and generators (1 hp or more) . . . . .	335312 21 1			
<b>24</b>	Ball and roller bearings (mounted or unmounted) . . . . .	332991 01 7			
<b>25</b>	Plain bearings and bushings . . . . .	333613 01 6			
<b>26</b>	Speed changers, gears, and industrial high-speed drives . . . . .	333612 00 0			
<b>27</b>	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits . . . . .	334413 00 2			

CONTINUE WITH **16** ON PAGE 10

CONTINUE ON PAGE 10

33505090

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			
28	Carbon brushes . . . . .	335991 05 5				
29	Ceramic magnets (ferrite) . . . . .	327113 03 1				
30	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	326100 13 8				
31	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	325211 05 0				
32	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	325510 03 0				
33	Electrical industrial capacitors, resistors, rheostats, and coil windings . . . . .	335000 07 1				
34	Electrical transmission, distribution, and control equipment . . . . .	001900 B1 6				
35	Paperboard containers, boxes, and corrugated paperboard . . . . .	322210 01 4				
36	Cost of all other materials and components, parts, containers, and supplies consumed (Specify the principal materials, etc., included in this value.) ↴	009700 99 8				
37	<b>TOTAL</b> (Should equal total reported in 16, line A1) . . . . .	771000 00 7				

17 Not Applicable.



33505108

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

**18** TYPE OF OPERATION

(Mark "X" the "Yes" box for each operation performed. Mark the "No" box for all others.)

**Operations performed in this establishment during 2002**

**Rewinding armatures or repairing electric motors owned by others on a custom basis in a repair shop**

0620 727  Yes (Report the value of work done in 2, line 8.)

728  No

**Rebuilding, remanufacturing, or rewinding armatures on a factory basis**

729  Yes (Report the value of shipments for this activity in 2, line 9.)

730  No

**Rebuilding or remanufacturing complete electric motors on a factory basis**

731  Yes (Report the value of shipments for this activity in the appropriate product code in 2, lines 1-6.)  
(Rebuilt or remanufactured complete electric motors must have been dismantled and reconstructed, as necessary; all parts cleaned and made free from rust and corrosion; damaged, defective, worn, and missing parts restored or replaced; and other operations performed necessary to put the product in sound working condition.)

732  No

**19-21** Not Applicable.

**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.

CONTINUE WITH 2 ON PAGE 12

33505116

**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	Products shipped and other receipts				
			Value, f.o.b. plant				
			\$ Bil.	Mil.	Thou.		
	0734	0730	0731				
<b>1</b>	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					
<b>2</b>	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					
<b>3</b>	Land transportation motors, generators, and control equipment (excluding parts) see line 7. (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 5100 8					
<b>4</b>	Prime mover generator sets (excluding steam or hydraulic turbine) (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 7100 6					
<b>5</b>	Motor generator sets and other rotating equipment (including hermetics) (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*						
<b>6</b>	Fractional	335312 9100 4					
<b>7</b>	Integral	335312 A100 2					
<b>8</b>	Parts and supplies for motors, generators, generator sets, and other rotating equipment (excluding motors for built-in jobs) (Report motors for built-in jobs in appropriate classification above.) (Corresponds to value of shipments reported on CIR Form MA335H, Motors and Generators, for 2002)*	335312 C100 0					
<b>9</b>	Custom repair shop rewinding of armatures or repairing electric motors	000976 9410 3					
<b>10</b>	Rewinding armatures on a factory basis	335312 E100 8					
<b>11</b>	Turbines, turbine generators, turbine generator sets, and parts	333611 0YWW 2					
<b>12</b>	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					
<b>13</b>	Diesel, semidiesel, and dual-fuel engines (excluding automobile, highway truck, bus, and tank) (Corresponds to value of shipments reported on CIR Form MA333L, Internal Combustion Engines, for 2002)*	333618 3100 2					
<b>14</b>	Multistage blowers	333412 0329 8					
<b>15</b>	Other centrifugal fans and blowers (excluding parts.) (Report parts on line 29.) (Specify kind.) ↘	333412 0YWW 5					
<b>16</b>	Commercial, institutional, and industrial general-purpose transformers, all voltages, single- and three-phase (excluding electric utility distribution transformers)	335311 7YVW 2					
<b>17</b>	Power regulators, boosters, and other transformers (including parts and accessories for all transformers)	335311 9YVW 0					

CONTINUE WITH **22** ON PAGE 13

33505124

**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	Products shipped and other receipts			
			Value, f.o.b. plant			
			\$ Bil.	Mil.	Thou.	
	0734	0730	0731			
<b>17</b>	Low voltage panelboards and distribution boards and other switching and interrupting devices, 1000 volts or less ( <i>Report higher voltages on line 18.</i> ) (Corresponds to value of shipments reported on CIR Form MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 2002.)*	335313 3100 8				
<b>18</b>	Switchgear, except ducts and relays (Corresponds to value of shipments reported on CIR Form MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 2002)*	335313 A100 0				
<b>19</b>	Relays and industrial controls Relays for electronic circuitry, industrial control overload, and switchgear type (Corresponds to value of shipments reported on CIR Form MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 2002.)*	335314 1100 8				
<b>20</b>	Specific-purpose industrial controls (Corresponds to value of shipments reported on CIR Form MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 2002.)*	335314 3100 6				
<b>21</b>	General-purpose industrial controls (Corresponds to value of shipments reported on CIR Form MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 2002)*	335314 5100 4				
<b>22</b>	Solenoids for industrial use (excluding solenoid-actuated regulating valves)	335999 6104 3				
<b>23</b>	Parts for industrial controls and motor-control accessories (Corresponds to value of shipments reported on CIR Form MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 2002)*	335314 7100 2				
<b>24</b>	Cranking motors (Starters) Automotive types, new	336322 5101 4				
<b>25</b>	Other types, new	336322 5104 8				
<b>26</b>	Rebuilt, all types	336322 5201 2				
<b>27</b>	Aeronautical, nautical, and navigational instruments, except aircraft engine instruments (Corresponds to value of shipments reported on CIR Form MA334B, Selected Instruments and Related Products, for 2002)*	334511 1100 0				
<b>28</b>	Process control instruments (Corresponds to value of shipments reported on CIR Form MA334B, Selected Instruments and Related Products, for 2002)*	334513 0100 7				

CONTINUE WITH 22 ON PAGE 14

33505132

**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	Products shipped and other receipts		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
<b>29</b>	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			
<b>30</b>		26			
<b>31</b>		34			
<b>32</b>		42			
<b>33</b>		59			
<b>34</b>		67			
<b>35</b>	Contract work - Receipts for work done for others on their materials ( <i>Specify products worked on and kind of work.</i> ) ↴	000930 0000 8			
<b>36</b>	Miscellaneous receipts (excluding custom repair shop rewinding of armatures or repairing electric motors reported on line 8) . . . . .	000999 8098 9			
<b>37</b>	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			
<b>38</b>	<b>TOTAL</b> ( <i>Should equal 4, line A</i> ) . . . . .	770000 0000 8			

**23-27** Not Applicable.



33505140

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

**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"/>
<b>1.</b> Product design/engineering . . . . .			
<b>2.</b> Order fulfillment			
0923 <input type="checkbox"/>	8072 <input type="checkbox"/>	0943 <input type="checkbox"/>	0963 <input type="checkbox"/>
<b>a.</b> 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>b.</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"/>
<b>c.</b> Warehousing of finished products . . . . .			
0926 <input type="checkbox"/>	8075 <input type="checkbox"/>	0946 <input type="checkbox"/>	0966 <input type="checkbox"/>
<b>d.</b> 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"/>
<b>e.</b> 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"/>
<b>f.</b> 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"/>
<b>g.</b> Processing of returned merchandise . . . . .			

**B.** During 2002 did this establishment:

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



33505157



**29 OPERATIONAL STATUS**

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

0011 <input type="checkbox"/> In operation	0013 <input type="checkbox"/> Temporarily or seasonally inactive							
0012 <input type="checkbox"/> Under construction, development, or exploration	0014 <input type="checkbox"/> Ceased operation - Give date at right →	0018 <table border="1"> <tr> <th>Month</th> <th>Day</th> <th>Year</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Month	Day	Year			
Month	Day	Year						
	0015 <input type="checkbox"/> Sold or leased to another operator - Give date at right AND enter new name and mailing address below ↴	→						

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 <input type="checkbox"/> Yes	0079 <input type="checkbox"/> No - Enter time period covered →	FROM	Month	Year	TO	Month		
		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.**

33505165