

ARNOLD SCHWARZENEGGER
GOVERNOR OF CALIFORNIA

**SCHEDULE FOR RATING
PERMANENT DISABILITIES**

UNDER THE PROVISIONS OF THE

LABOR CODE OF THE STATE OF CALIFORNIA

Compiled and Published by
STATE OF CALIFORNIA

LABOR AND WORKFORCE DEVELOPMENT AGENCY
DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF WORKERS' COMPENSATION

ANDREA LYNN HOCH
Administrative Director

January 2005

AUTHORITY

Labor Code section 4660, amended effective April 19, 2004, provides:

4660(a) In determining the percentages of permanent disability, account shall be taken of the nature of the physical injury or disfigurement, the occupation of the injured employee, and his or her age at the time of the injury, consideration being given to an employee's diminished future earning capacity.

(b)(1) For purposes of this section, the "nature of the physical injury or disfigurement" shall incorporate the descriptions and measurements of physical impairments and the corresponding percentages of impairments published in the American Medical Association (AMA) Guides to the Evaluation of Permanent Impairment (5th Edition).

(2) For purposes of this section, an employee's diminished future earning capacity shall be a numeric formula based on empirical data and findings that aggregate the average percentage of long-term loss of income resulting from each type of injury for similarly situated employees. The administrative director shall formulate the adjusted rating schedule based on empirical data and findings from the Evaluation of California's Permanent Disability Rating Schedule, Interim Report (December 2003), prepared by the RAND Institute for Civil Justice, and upon data from additional empirical studies.

(c) The Administrative Director shall amend the schedule for the determination of the percentage of permanent disability in accordance with this section at least once every five years. This schedule shall be available for public inspection and, without formal introduction in evidence, shall be prima facie evidence of the percentage of permanent disability to be attributed to each injury covered by the schedule.

(d) The schedule shall promote consistency, uniformity, and objectivity. The schedule and any amendment thereto or revision thereof shall apply prospectively and shall apply to and govern only those permanent disabilities that result from compensable injuries received or occurring on and after the effective date of the adoption of the schedule, amendment or revision, as the fact may be. For compensable claims arising before January 1, 2005, the schedule as revised pursuant to changes made in legislation enacted during the 2003-04 Regular and Extraordinary Sessions shall apply to the determination of permanent disabilities when there has been either no comprehensive medical-legal report or no report by a treating physician indicating

the existence of permanent disability, or when the employer is not required to provide the notice required by Section 4061 to the injured worker.

(e) On or before January 1, 2005, the administrative director shall adopt regulations to implement the changes made to this section by the act that added this subdivision.

Pursuant to this authority, the Administrative Director has adopted this revised Schedule for Rating Permanent Disabilities.

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	Introduction and Instructions	1-1
2	Impairment Number/Earning Capacity Adjustment	2-1
3	Occupations and Group Numbers	3-1
4	Occupational Variants	4-1
5	Occupational Adjustment	5-1
6	Age Adjustment	6-1
7	Examples	7-1
8	Combined Values Chart	8-1

SECTION 1 - INTRODUCTION AND INSTRUCTIONS

I.	Introduction	1-2
II.	Rating Procedures	
	A. Use of the AMA Guides	1-3
	B. Calculation of Rating	
	1. Impairment Number.....	1-4
	2. Impairment Standard.....	1-4
	3. Adjustment for Diminished Future Earning Capacity	1-5
	4. Occupational Grouping.....	1-8
	5. Occupational Variant	1-9
	6. Occupational Adjustment.....	1-9
	7. Age Adjustment	1-9
	8. Final Permanent Disability Rating.....	1-9
	9. Rating Formula	1-9
	C. Additional Rating Procedures	
	1. Formula for Combining Impairments and Disabilities	1-10
	2. Adjusting AMA Impairments and Combining Ratings	1-11
	3. Rating Impairment Based on Pain	1-12
	4. Rating Psychiatric Impairment	1-12

SECTION 1 – INTRODUCTION AND INSTRUCTIONS

I. INTRODUCTION

This Schedule for Rating Permanent Disabilities (hereinafter referred to as the “Schedule”) has been adopted by the Administrative Director pursuant to Labor Code section 4660. In accordance with this section, the schedule shall be amended at least once every five years.

The extent of permanent disability that results from an industrial injury can be assessed once an employee's condition becomes permanent and stationary. Permanent and stationary is defined as the point in time when the employee has reached maximal medical improvement (MMI), meaning his or her condition is well stabilized and unlikely to change substantially in the next year with or without medical treatment. (AMA Guides, p. 2.)

The calculation of a permanent disability rating is initially based on a evaluating physician’s impairment rating, in accordance with the medical evaluation protocols and rating

procedures set forth in the American Medical Association (AMA) *Guides to the Evaluation of Permanent Impairment, 5th Edition* (hereinafter referred to as the “AMA Guides”), which is hereby incorporated by reference.

Initial impairment ratings are consolidated by body part (see *Adjusting AMA Impairments and Combining Ratings* on page 1-11) and converted to a whole person impairment rating (hereinafter referred to as “impairment standard”). The impairment standard is then adjusted to account for diminished future earning capacity, occupation and age at the time of injury to obtain a final permanent disability rating.

A permanent disability rating can range from 0% to 100%. Zero percent signifies no reduction of earning capacity, while 100% represents permanent total disability. A rating between 0% and 100% represents permanent partial disability. Permanent total disability represents a level of disability at which an employee has sustained a total loss of earning

capacity. Some impairments are conclusively presumed to be totally disabling. (Lab. Code, §4662.)

Each rating corresponds to a fixed number of weeks of compensation. Compensation is paid based on the number of weeks and the weekly compensation rate, in accordance with Labor Code section 4658.

II RATING PROCEDURES

A. Use of the AMA Guides

The AMA Guides are used by evaluating physicians to determine the extent of an individual's impairment. The AMA Guides use different scales to describe impairment for different parts and regions of the body. For example, finger impairment is measured using a finger scale that can range from 0% to 100%. Other commonly used scales in the AMA Guides are the hand, upper extremity, foot, lower extremity and whole person scales.

The scales that correspond to different body regions are equivalent to a percentage of the whole person scale; therefore

these scales are converted to the whole person scale to determine the appropriate impairment rating. For example, an upper extremity impairment in the range of 0% to 100% is equivalent to a whole person impairment in the range of 0% to 60%. The upper extremity impairment is converted to a whole person impairment by multiplying by .6.

When combining two or more ratings to create a composite rating, the ratings must be expressed in the same scale. (See *Formula for combining impairments and disabilities* on page 1-10.)

The whole person impairment scale is referred to as WPI (whole person impairment). The upper and lower extremity scales are referred to as UE (upper extremity) and LE (lower extremity), respectively.

A final permanent disability rating is obtained only after the impairment rating obtained from an evaluating physician is adjusted for diminished future earning capacity, occupation and age at the time of injury.

B. Calculation of Rating

This schedule utilizes an impairment number and an impairment standard. The impairment standard is then modified to reflect diminished future earning capacity, the occupation and the age at the time of injury.

1. Impairment Number

The impairment number identifies the body part, organ system and/or nature of the injury and takes the form of “xx.xx.xx.xx”. The first two digits correspond to the chapter number in the AMA Guides which address the body part/organ system. Subsequent pairs of digits further refine the identification of the impairment.

For example, soft tissue lesion of the neck rated under the range of motion (ROM) method would be represented as follows:

15.	01.	02.	02
Spine	Neck	ROM method	Soft tissue lesion

Under Section 2 of the Permanent Disability Rating Schedule, an appropriate impairment number can be found for most impairments.

2. Impairment Standard

After identification of the appropriate disability number(s), the next step is to calculate all relevant impairment standard(s) for the impairments being evaluated. An impairment standard is a whole person impairment rating under the AMA Guides, provided by the evaluating physician.

If an impairment based on an objective medical condition is not addressed by the AMA Guides, physicians should use clinical judgment, comparing measurable impairment resulting from the unlisted objective medical condition to measurable impairment resulting from similar objective medical conditions with similar impairment of function in performing activities of daily living. (AMA Guides, p. 11.)

A single injury can result in multiple impairments of several parts of the body. For example, an injury to the arm could result in limited elbow range of motion and shoulder instability. Multiple impairments must be combined in a prescribed manner to produce a final overall rating. (See, *Adjusting AMA Impairments and Combining Ratings* on page 1-11.)

It is not always appropriate to combine all impairment standards resulting from a single injury, since two or more impairments may have a duplicative effect on the function of the injured body part. The AMA Guides provide some direction on what impairments can be used in combination. Lacking such guidance, it is necessary for the evaluating physician to exercise his or her judgment in avoiding duplication.

The impairment standard is assumed to represent the degree of impairment for a theoretical average worker, i.e., a worker with average occupational demands on all parts of the body and at the average age of 39.

3. *Adjustment for Diminished Future Earning Capacity*

The adjustment for diminished future earning capacity (FEC) is applied to the impairment standard in accordance with procedures outlined in section 2 of the Schedule. An impairment must be expressed using the whole person impairment scale before applying the FEC adjustment.

The methodology and FEC Adjustment table is premised on a numerical formula based on empirical data and findings that aggregate the average percentage of long-term loss of income resulting from each type of injury for similarly situated employees. The empirical data was obtained from the interim report, “Evaluation of California’s Permanent Disability Rating Schedule (December 2003), prepared by the RAND Institute for Justice. The result is that the injury categories are placed into different ranges (based on the ratio of standard ratings to proportional wage losses). Each of these ranges will generate a FEC adjustment between 10% and 40% for each injury category.

(a) Summary of Methodology:

1. RAND data was used to establish the ratio of average California standard ratings to proportional wage losses for each of 22 injury categories. (*Data for Adjusting Disability Ratings to Reflect Diminished Future Earnings and Capacity in Compliance with SB 899*, December 2004, RAND Institute for Civil Justice, Seabury, Reville, Neuhauser.) These ratios are listed in Table B ~~below~~.

2. The range of the ratios for all injury categories is .45 to 1.81. This numeric range was divided into eight evenly spaced ranges. (See the Range of Ratios columns in Table A ~~below~~.) Each injury category will fall within one of these eight ranges, based on its rating/wage loss ratio.

3. A series of FEC adjustment factors were established to correspond to the eight ranges described above. (See column 4 of Table A ~~below~~.) The smallest adjustment factor is 1.1000 which will result in a 10% increase when applied to the AMA whole person impairment rating. The largest is 1.4000 which will result in a 40% increase. The six intermediate adjustment

factors are determined by dividing the difference between 1.1 and 1.4 into seven equal amounts.

4. The formula for calculating the maximum and minimum adjustment factors is $([1.81/a] \times .1) + 1$ where a equals the minimum or maximum rating/loss ratio from Table B ~~below~~. AMA whole person impairment ratings for injury categories that correspond to a greater relative loss of earning capacity will receive a higher FEC adjustment. For example, a psychiatric impairment receives a higher FEC adjustment because RAND data shows that a relatively high wage loss corresponds to the average psychiatric standard permanent disability rating. A hand impairment would receive a lower FEC adjustment because RAND data shows a relatively low wage loss relative to the average psychiatric standard permanent disability rating.

The FEC rank and adjustment factors that correspond to relative earnings for the eight evenly-divided ranges are listed ~~below~~ in Table A. The ratio of earnings to losses and the corresponding rank for each injury category are listed ~~below~~ in Table B. To adjust an impairment standard for earning

capacity, multiply it by the appropriate adjustment factor from Table B A and round to the nearest whole number percentage. Alternatively, a table is provided at the end of Section 2 of the Schedule which provides the earning capacity adjustment for all impairment standards and FEC ranks.

Table A

Range of Ratios			
Low	High	FEC Rank	Adjustment Factor
1.647	1.810	One	1.100000
1.476	1.646	Two	1.1429857
1.305	1.475	Three	1.185714
1.134	1.304	Four	1.2286571
0.963	1.133	Five	1.271429
0.792	0.962	Six	1.3143286
0.621	0.791	Seven	1.357143
0.450	0.620	Eight	1.400000

Table B

Part of the Body	Ratio of Rating over Losses	FEC Rank
Hand/fingers	1.810	One
Vision	1.810	One
Knee	1.570	Two
Other	1.530	Two
Ankle	1.520	Two
Elbow	1.510	Two
Loss of grasping power	1.280	Four
Wrist	1.210	Four
Toe(s)	1.110	Five
Spine Thoracic	1.100	Five
General lower extremity	1.100	Five
Spine Lumbar	1.080	Five
Spine Cervical	1.060	Five
Hip	1.030	Five
General upper extremity	1.000	Five
Heart disease	0.970	Five
General Abdominal	0.950	Six
PT head syndrome	0.930	Six
Lung disease	0.790	Seven
Shoulder	0.740	Seven
Hearing	0.610	Eight
Psychiatric	0.450	Eight

The FEC Rank for the "Other" category is based on average ratings and proportional earning losses for the following impairments:

Impaired rib cage
Cosmetic disfigurement
General chest impairment
Facial disfigurement or impairment
Impaired mouth or jaw
Speech impairment
Impaired nose
Impaired nervous system
Vertigo
Impaired smell
Paralysis
Mental Deterioration
Epilepsy
Skull aperture

4. Occupational Grouping

After the rating is adjusted for diminished future earning capacity, it is then modified to take into account the requirements of the specific occupation that the employee was engaged in when injured.

The Schedule divides the labor market into 45 numbered occupational groups. Each group is assigned a three-digit code called an occupational group number. The first digit of the code refers to the arduousness of the duties, ranking jobs

from 1 to 5 in ascending order of physical arduousness; the second digit separates occupations into broad categories sharing common characteristics; the third digit differentiates between occupations within these groups. (See Occupational Group Chart in Section 3B of the Schedule for a breakdown of all occupational groups.)

To identify the appropriate occupational group number, look up the occupation in the list contained in Section 3A of the Schedule. Each job title is listed along with its corresponding group number. The appropriate occupation can generally be found listed under a scheduled or alternative job title. If the occupation cannot be found, an appropriate occupational group is determined by analogy to a listed occupation(s) based on a comparison of duties. (The table Occupational Group Characteristics in Section 3C of the Schedule provides a description of each occupational group to facilitate the determination of a group number.)

5. Occupational Variant

Section 4 of the Schedule contains tables that cross-reference impairment numbers and occupational group numbers to produce an "occupational variant," which is expressed as a letter. These tables are designed so that variant "F" represents average demands on the injured body part for the particular impairment being rated, with letters "E", "D" and "C" representing progressively lesser demands, and letters "G" through "J" reflecting progressively higher demands.

6. Occupational Adjustment

After the rating has been adjusted for diminished future earning capacity, the rating is adjusted next for occupation by reference to tables found in Section 5 of the Schedule. To use this section, find the earning capacity-adjusted rating in the column entitled "Rating" and then read across the table to the column headed with the appropriate occupational variant. The intersection of the row and column contains the occupation-adjusted rating.

7. Age Adjustment

Finally, the rating is adjusted to account for the worker's age on the date of injury. Section 6 of the Schedule contains tables for determining the age adjustment. To use this section, find the occupation-adjusted rating in the column entitled "Rating" and read across the table to the column with the injured worker's age on the date of injury.

8. Final Permanent Disability Rating

The number identified on the age adjustment table represents the final overall permanent disability rating percentage for a single impairment. (See Subdivisions C.1. and C.2. on pages 10 and 11 to combine multiple impairments and disabilities.)

9. Rating Formula

The final rating is generally expressed as a rating formula, as in the following example:

15.01.02.02 – 8 - [5]10 - 470H – 13 – 11%

Each component is described below:

15.01.02.02 – Impairment number for cervical spine,
soft tissue lesion

8% – Impairment standard

10% – Rating after adjustment for earning capacity
based on FEC rank 5

470 – Occupational group number for Furniture
assembler, heavy

H – Occupational variant

13% – Rating after occupational adjustment

11% – Rating after adjustment for age of 30

C. Additional Rating Procedures

1. Formula for Combining Impairments and Disabilities

Impairments and disabilities are generally combined using the following formula where “a” and “b” are the decimal equivalents of the impairment or disability percentages:

$$a + b(1-a)$$

For example, the result of combining 15% and 25% would be calculated as follows:

$$.25 + .15(1-.25)$$

$$.25 + .15(.75)$$

$$.25 + .1125 = .3625 = 36\%$$

Impairment ratings must be expressed in the same scale to be combined. For example, it would be inappropriate to combine 15% UE with 20% WPI. Likewise, one cannot combine an impairment rating with a disability rating.

Except as specified in the section below, when combining three or more ratings on the same scale into a single rating, combine the two largest ratings first, rounding the result to the nearest whole percent. Then combine that result with the next larger rating, and so on, until all ratings are combined. Each successive calculation result must be rounded before performing the next.

2. *Adjusting AMA Impairments and Combining Ratings*

As used here, the term “adjusting” refers to adjusting an AMA impairment rating for diminished future earning capacity, occupation and age.

Except as specified below, all impairments are converted to the whole person scale, adjusted, and then combined to determine a final overall disability rating.

Multiple impairments involving the hand or foot are combined using standard AMA Guides protocols. The resulting impairment is converted to whole person impairment and adjusted before being combined with other impairments of the same extremity.

Multiple impairments such as those involving a single part of an extremity, e.g. two impairments involving a shoulder such as shoulder instability and limited range of motion, are combined at the upper extremity level, then converted to whole person impairment and adjusted before being combined with other parts of the same extremity. Note that some impairments

of the same body part may not be combined because of duplication.

Impairments with disability numbers in the 16.01 and 17.01 series are converted to whole person impairment and adjusted before being combined with any other impairment of the same extremity.

Impairments of an individual extremity are adjusted and combined at the whole person level with other impairments of the same extremity before being combined with impairments of other body parts. For example, an impairment of the left knee and ankle would be combined before further combination with an impairment of the opposing leg or the back.

The composite rating for an extremity (after adjustments) may not exceed the amputation value of the extremity adjusted for earning capacity, occupation and age. The occupational variant used to rate an entire extremity shall be the highest variant of the involved individual impairments.

3. *Rating Impairment Based on Pain*

Pursuant to Chapter 18 of the AMA Guides, a whole person impairment rating based on the body or organ rating system of the AMA Guides (Chapters 3 through 17) may be increased by 0% up to 3% WPI if the burden of the worker's condition has been increased by pain-related impairment in excess of the pain component already incorporated in the WPI rating in Chapters 3-17. (AMA Guides, p. 573.)

A physician may perform a formal pain-related impairment assessment if deemed necessary to justify the increase of an impairment rating based on the body or organ rating system. (See Section 18.3f of the AMA Guides starting on page 575.)

The maximum allowance for pain resulting from a single injury is 3% WPI regardless of the number of impairments resulting from that injury.

The addition of up to 3% for pain is to be made at the whole person level. For example, if an elbow impairment were

to be increased by 3% for pain, the rating for the elbow would first be converted to the whole person scale, and then increased. The resultant rating would then be adjusted for diminished future earning capacity, occupation and age.

In the case of multiple impairments, the evaluating physician shall, when medically justifiable, attribute the pain in whole number increments to the appropriate impairments. The additional percentage added for pain will be applied to the respective impairments as described in the preceding paragraph.

4. *Rating Psychiatric Impairment*

Psychiatric impairment shall be evaluated by the physician using the Global Assessment of Function (GAF) scale shown below. The resultant GAF score shall then be converted to a whole person impairment rating using the GAF conversion table below.

(a) Instructions for Determining a GAF score:

STEP 1: Starting at the top level of the GAF scale, evaluate each range by asking "is either the individual's symptom severity OR level of functioning worse than what is indicated in the range description?"

STEP 2: Keep moving down the scale until the range that best matches the individual's symptom severity OR the level of functioning is reached, whichever is worse.

STEP 3: Look at the next lower range as a double-check against having stopped prematurely. This range should be too severe on both symptom severity and level of functioning. If it is, the appropriate range has been reached (continue with step 4). If not, go back to step 2 and continue moving down the scale.

STEP 4: To determine the specific GAF rating within the selected 10 point range, consider whether the individual is functioning at the higher or lower end of the 10 point range. For example, consider an individual who hears voices that do not influence his behavior (e.g., someone with long-standing Schizophrenia who accepts his hallucinations as part of his illness). If the voices occur relatively infrequently (once a week or less) a rating of 39 or 40 might be most appropriate. In contrast, if the individual hears voices almost continuously, a rating of 31 or 32 would be more appropriate.

(b) Global Assessment of Functioning (GAF) Scale

Consider psychological, social, and occupational functioning on a hypothetical continuum of mental health-illness. Do not include impairment in functioning due to physical (or environmental) limitations.

Code

91 – 100 Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms.

81 – 90 Absent or minimal symptoms (e.g., mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g., an occasional argument with family members).

71 – 80 If symptoms are present, they are transient and expectable reactions to psychosocial stressors (e.g., difficulty concentrating after family argument); no more than slight impairment in social, occupational, or school functioning (e.g., temporarily falling behind in schoolwork).

61 – 70 Some mild symptoms (e.g., depressed mood and mild insomnia) OR some difficulty in social, occupational, or school functioning (e.g., occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships.

51 – 60 Moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with peers or co-workers).

41 – 50 Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job).

31 – 40 Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment thinking, or mood (e.g., depressed man avoids friends, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home and is failing at school).

21 – 30 Behavior is considerably influenced by delusions or hallucinations OR serious impairment in communication or judgment (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g., stays in bed all day; no job, home or friends).

11 – 20 Some danger of hurting self or others (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement) OR occasionally fails to maintain minimal personal

hygiene (e.g., smears feces) OR gross impairment in communication (e.g., largely incoherent or mute).

1 – 10 Persistent danger of severely hurting self or others (e.g., recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.

0 Inadequate information.

(c) Converting the GAF Score to a Whole Person

Impairment

Locate the GAF score in the table below and read across to determine the corresponding whole person impairment (WPI) rating.

GAF	WPI
1	90
2	89
3	89
4	88
5	87
6	87
7	86
8	85
9	84
10	84
11	83
12	82
13	82
14	81
15	80
16	80
17	79
18	78
19	78
20	77
21	76
22	76
23	75
24	74
25	73
26	73
27	72
28	71
29	71
30	70
31	69
32	67
33	65

GAF	WPI
34	63
35	61
36	59
37	57
38	55
39	53
40	51
41	48
42	46
43	44
44	42
45	40
46	38
47	36
48	34
49	32
50	30
51	29
52	27
53	26
54	24
55	23
56	21
57	20
58	18
59	17
60	15
61	14
62	12
63	11
64	9
65	8
66	6

GAF	WPI
67	5
68	3
69	2
70	0
71	0
72	0
73	0
74	0
75	0
76	0
77	0
78	0
79	0
80	0
81	0
82	0
83	0
84	0
85	0
86	0
87	0
88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0

GAF	WPI
100	0

SECTION 2 – IMPAIRMENT NUMBER/EARNING CAPACITY ADJUSTMENT

<u>Category</u>	<u>Body Part/Function</u>	<u>Page</u>
03	Cardiovascular System – Heart & Aorta	2-2
04	Cardiovascular System – Systemic & Pulmonary Arteries	2-2
05	Respiratory System	2-2
06	Digestive System	2-2
07	Urinary & Reproductive Systems	2-2
08	Skin	2-2
09	Hematopoietic System	2-2
10	Endocrine System	2-2
11	Ear, Nose & Throat	2-2
12	Visual System	2-2
13	Central & Peripheral Nervous System	2-2
14	Mental & Behavioral Disorders	2-3
15	Spine	2-3
16	Upper Extremities	2-4
17	Lower Extremities	2-4
18	Pain	2-5

Use this section to determine an impairment number and a future earning capacity (FEC) rank for each body part being evaluated. Then use the table at the end of this section to adjust the impairment standard for earning capacity. If the impairment is not addressed by the AMA Guides, choose the closest applicable impairment number, and replace the last pair of digits with the number 99. For example, a condition that was analogized to a spinal cord disorder affecting the respiratory system (impairment no. 13.10.01.00) would take the impairment number 13.10.01.99.

<u># Impairment</u>	<u>FEC Rank</u>	<u>Impairment</u>
03 – CARDIOVASCULAR SYSTEM – HEART & AORTA		
03.01.00.00	5	Valvular Heart Disease
03.02.00.00	5	Coronary Heart Disease
03.03.00.00	5	Congenital Heart Disease
03.04.00.00	5	Cardiomyopathies
03.05.00.00	5	Pericardial Heart Disease
03.06.00.00	5	Arrhythmia
04 – CARDIOVASCULAR SYSTEM – SYSTEMIC & PULMONARY ARTERIES		
04.01.00.00	5	Hypertensive Cardiovascular Disease
04.02.00.00	5	Aortic Disease
04.03.01.00	5	Peripheral Vascular Disease, Upper Extremities
04.03.02.00	5	Peripheral Vascular Disease, Lower Extremities
04.04.00.00	7	Pulmonary Circulation Disease
05 – RESPIRATORY SYSTEM		
05.01.00.00	7	Asthma
05.02.00.00	7	Respiratory Disorders
05.03.00.00	7	Cancer
06 – DIGESTIVE SYSTEM		
06.01.00.00	6	Upper Digestive Tract
06.02.00.00	6	Colon, Rectum, Anus
06.03.00.00	6	Enterocutaneous Fistulas
06.04.00.00	6	Liver/Biliary Tract
06.05.00.00	6	Hernias
07 – URINARY & REPRODUCTIVE SYSTEMS		
07.01.00.00	2	Upper Urinary Tract
07.02.00.00	2	Urinary Diversion
07.03.00.00	2	Bladder
07.04.00.00	2	Urethra
07.05.00.00	2	Reproductive System

<u>Impairment#</u>	<u>FEC Rank</u>	<u>Impairment</u>
08 – SKIN		
08.01.00.00	2	Disfigurement
08.02.00.00	2	Scars & Skin Grafts
08.03.00.00	2	Contact Dermatitis
08.04.00.00	2	Latex Allergy
08.05.00.00	2	Skin Cancer
09 – HEMATOPOIETIC SYSTEM		
09.01.00.00	2	Hematopoietic Impairment
10 – ENDOCRINE SYSTEM		
10.01.00.00	2	Diabetes Mellitus
11 – EAR, NOSE & THROAT		
11.01.01.00	8	Ear – Hearing Impairment
11.01.02.00	8	Ear – Vestibular Disorder
11.02.01.00	2	Face/cosmetic
11.02.02.00	2	Face/eye/cosmetic
11.03.01.00	2	Nose/Throat/Related Structures – Respiration
11.03.02.00	2	Nose/Throat/Related Structures – Mastication & Deglutition
11.03.03.00	2	Nose/Throat/Related Structures – Olfaction & Taste
11.03.04.00	2	Nose/Throat/Related Structures – Voice & Speech
12 – VISUAL SYSTEM		
12.01.00.00	1	Visual Acuity
12.02.00.00	1	Visual Field
12.03.00.00	1	Visual System
13 – CENTRAL & PERIPHERAL NERVOUS SYSTEM		
13.01.00.00	6	Consciousness Disorder
13.02.00.00	2	Episodic Neurologic Disorder
13.03.00.00	6	Arousal Disorder
13.04.00.00	2	Cognitive Impairment

<u># Impairment</u>	<u>FEC Rank</u>	<u>Impairment</u>
13.05.00.00	2	Language Disorder
13.06.00.00	8	Behavioral/Emotional Disorder
13.07.01.00	2	Cranial Nerve – Olfactory
13.07.02.00	1	Cranial Nerve – Optic
13.07.03.00	2	Cranial Nerve – Oculomotor, Trochlear & Abducens
13.07.04.00	2	Cranial Nerve – Trigeminal
13.07.05.00	2	Cranial Nerve – Facial
13.07.06.01	8	Cranial Nerve – Vestibulocochlear – Vertigo
13.07.06.02	8	Cranial Nerve – Vestibulocochlear – Tinnitus
13.07.07.00	2	Cranial Nerve – Glossopharyngeal & Vagus
13.07.08.00	2	Cranial Nerve – Spinal Accessory
13.07.09.00	2	Cranial Nerve – Hypoglossal
13.08.00.00	5	Station, Gait, Movement
13.09.00.00	5	Upper Extremities
13.10.01.00	7	Spinal Cord Disorder – Respiratory
13.10.02.00	2	Spinal Cord Disorder – Urinary
13.10.03.00	2	Spinal Cord Disorder – Anorectal
13.10.04.00	2	Spinal Cord Disorder – Sexual
13.11.01.01	5	Chronic Pain – Upper Extremities – Causalgia
13.11.01.02	5	Chronic Pain – Upper Extremities – Post-traumatic Neuralgia
13.11.01.03	5	Chronic Pain – Upper Extremities – Reflex Sympathetic Dystrophy
13.11.02.01	5	Chronic Pain – Lower Extremities – Causalgia
13.11.02.02	5	Chronic Pain – Lower Extremities – Post-traumatic Neuralgia
13.11.02.03	5	Chronic Pain – Lower Extremities – Reflex Sympathetic Dystrophy
13.12.01.01	5	Peripheral Nerve System – Spine – Sensory
13.12.01.02	5	Peripheral Nerve System – Spine – Motor
13.12.02.01	5	Peripheral Nerve System – Upper Extremity – Sensory
13.12.02.02	5	Peripheral Nerve System – Upper Extremity – Motor
13.12.03.01	5	Peripheral Nerve System – Lower Extremity – Sensory
13.12.03.02	5	Peripheral Nerve System – Lower Extremity – Motor

<u>Impairment#</u>	<u>FEC Rank</u>	<u>Impairment</u>
14 – MENTAL & BEHAVIORIAL DISORDERS		
14.01.00.00	8	Psychiatric – Mental and Behavioral
15 – SPINE		
15.01.01.00	5	Cervical – Diagnosis-related Estimate (DRE)
15.01.02.01	5	Cervical – Range of Motion (ROM) – Fracture
15.01.02.02	5	Cervical – Range of Motion – Soft Tissue Lesion
15.01.02.03	5	Cervical – Range of Motion – Spondylolysis, no operation
15.01.02.04	5	Cervical – Range of Motion – Stenosis, with operation
15.01.02.05	5	Cervical – Range of Motion – Nerve Root/Spinal Cord- Sensory
15.01.02.06	5	Cervical – Range of Motion – Nerve Root/Spinal Cord – Motor
15.02.01.00	5	Thoracic – Diagnosis-related Estimate
15.02.02.01	5	Thoracic – Range of Motion – Fracture
15.02.02.02	5	Thoracic – Range of Motion – Soft Tissue Lesion
15.02.02.03	5	Thoracic – Range of Motion – Spondylolysis, no operation
15.02.02.04	5	Thoracic – Range of Motion – Stenosis, with operation
15.02.02.05	5	Thoracic – Range of Motion – Nerve Root/Spinal Cord – Sensory
15.02.02.06	5	Thoracic – Range of Motion – Nerve Root/Spinal Cord – Motor
15.03.01.00	5	Lumbar – Diagnosis-related Estimate
15.03.02.01	5	Lumbar – Range of Motion – Fracture
15.03.02.02	5	Lumbar – Range of Motion – Soft Tissue Lesion
15.03.02.03	5	Lumbar – Range of Motion – Spondylolysis, no operation
15.03.02.04	5	Lumbar – Range of Motion – Stenosis, with operation
15.03.02.05	5	Lumbar – Range of Motion – Nerve Root/Spinal Cord – Sensory
15.03.02.06	5	Lumbar – Range of Motion – Nerve Root/Spinal Cord – Motor
15.04.01.00	5	Corticospinal Tract – One Upper Extremity
15.04.02.00	5	Corticospinal Tract – Two Upper Extremities
15.04.03.00	5	Corticospinal Tract – Station/Gait Disorder

<u># Impairment</u>	<u>FEC Rank</u>	<u>Impairment</u>
15.04.04.00	2	Corticospinal Tract – Bladder Impairment
15.04.05.00	2	Corticospinal Tract – Anorectal Impairment
15.04.06.00	2	Corticospinal Tract – Sexual Impairment
15.04.07.00	7	Corticospinal Tract – Respiratory Impairment
15.05.01.00	5	Pelvic – Healed Fracture
15.05.02.00	5	Pelvic – Healed Fracture with Displacement
15.05.03.00	5	Pelvic – Healed Fracture with Deformity
16 – UPPER EXTREMITIES		
16.01.01.01	5	Arm – Amputation/Deltoid insertion proximally
16.01.01.02	5	Arm – Amputation/Bicipital insertion proximally
16.01.01.03	5	Arm – Amputation/Wrist proximally
16.01.01.04	5	Arm – Amputation/All fingers at MP joint proximally
16.01.02.01	5	Arm – Peripheral neuropathy – Brachial plexus
16.01.02.02	4	Arm – Peripheral neuropathy – Entrapment/compression – Carpal tunnel
16.01.02.03	5	Arm – Peripheral neuropathy – Entrapment/compression – Other
16.01.02.04	5	Arm – Peripheral neuropathy – CRPS I
16.01.02.05	5	Arm – Peripheral neuropathy – CRPS II
16.01.03.00	5	Arm – Peripheral vascular
16.01.04.00	4	Arm – Grip/pinch strength
16.01.05.00	5	Arm – Other
16.02.01.00	7	Shoulder – Range of motion
16.02.02.00	7	Shoulder – Other
16.03.01.00	2	Elbow/forearm – Range of motion
16.03.02.00	2	Elbow/forearm – Other
16.04.01.00	4	Wrist – Range of motion
16.04.02.00	4	Wrist – Other
16.05.01.00	1	Hand/multiple fingers – Range of motion
16.05.02.00	1	Hand/multiple fingers – Amputation
16.05.03.00	1	Hand/multiple fingers – Sensory
16.05.04.00	1	Hand/multiple fingers – Other
16.06.01.01	1	Thumb – Range of motion
16.06.01.02	1	Thumb – Amputation

<u>Impairment#</u>	<u>FEC Rank</u>	<u>Impairment</u>
16.06.01.03	1	Thumb – Sensory
16.06.01.04	1	Thumb – Other
16.06.02.01	1	Index – Range of motion
16.06.02.02	1	Index – Amputation
16.06.02.03	1	Index – Sensory
16.06.02.04	1	Index – Other
16.06.03.01	1	Middle – Range of motion
16.06.03.02	1	Middle – Amputation
16.06.03.03	1	Middle – Sensory
16.06.03.04	1	Middle – Other
16.06.04.01	1	Ring – Range of motion
16.06.04.02	1	Ring – Amputation
16.06.04.03	1	Ring – Sensory
16.06.04.04	1	Ring – Other
16.06.05.01	1	Little – Range of motion
16.06.05.02	1	Little – Amputation
16.06.05.03	1	Little – Sensory
16.06.05.04	1	Little – Other
17 – LOWER EXTREMITIES		
17.01.01.00	5	Leg – Limb Length
17.01.02.01	5	Leg – Amputation/Knee proximally
17.01.02.02	5	Leg – Amputation/MTP joint proximally
17.01.03.00	5	Leg – Skin Loss
17.01.04.00	5	Leg – Peripheral Nerve
17.01.05.00	5	Leg – Vascular
17.01.06.00	5	Leg – Causalgia/RSD
17.01.07.00	5	Leg – Gait Derangement
17.01.08.00	5	Leg – Other
17.02.10.00	5	Pelvis – Diagnosis-based estimate (DBE) – Fracture
17.03.01.00	5	Hip – Muscle Atrophy
17.03.02.00	5	Hip – Ankylosis
17.03.03.00	5	Hip – Arthritis
17.03.04.00	5	Hip – Range of Motion

<u># Impairment</u>	<u>FEC Rank</u>	<u>Impairment</u>	<u>Impairment#</u>	<u>FEC Rank</u>	<u>Impairment</u>
17.03.05.00	5	Hip – Muscle Strength	17.07.04.00	2	Ankle – Range of Motion
17.03.06.00	5	Hip – Other	17.07.05.00	2	Ankle – Muscle Strength
17.03.10.01	5	Hip – Diagnosis-based Estimate – Hip/Replacement	17.07.06.00	2	Ankle – Other
17.03.10.02	5	Hip – Diagnosis-based Estimate – Hip/Femoral Neck Fracture	17.07.10.01	2	Ankle – Diagnosis-based Estimate – Ligament Instability
17.03.10.03	5	Hip – Diagnosis-based Estimate – Hip/Arthroplasty	17.07.10.02	2	Ankle – Diagnosis-based Estimate – Fracture
17.03.10.04	5	Hip – Diagnosis-based Estimate – Trochanteric bursitis	17.08.01.00	2	Foot – Muscle Atrophy
17.04.10.00	5	Femur – Diagnosis-based Estimate – Fracture	17.08.02.00	2	Foot – Ankylosis
17.05.01.00	2	Knee – Muscle Atrophy	17.08.03.00	2	Foot – Arthritis
17.05.02.00	2	Knee – Ankylosis	17.08.04.00	2	Foot – Range of Motion
17.05.03.00	2	Knee – Arthritis	17.08.05.00	2	Foot – Muscle Strength
17.05.04.00	2	Knee – Range of Motion	17.08.06.00	2	Foot – Other
17.05.05.00	2	Knee – Muscle Strength	17.08.10.01	2	Foot – Diagnosis-based Estimate – Hind Foot Fracture
17.05.06.00	2	Knee – Other	17.08.10.02	2	Foot – Diagnosis-based Estimate – Loss of Tibia
17.05.10.01	2	Knee – Diagnosis-based Estimate – Subluxation/dislocation	17.08.10.03	2	Foot – Diagnosis-based Estimate – Intra-articular Fracture
17.05.10.02	2	Knee – Diagnosis-based Estimate – Fracture	17.08.10.04	2	Foot – Diagnosis-based Estimate – Calvus
17.05.10.03	2	Knee – Diagnosis-based Estimate – Patellectomy	17.08.10.05	2	Foot – Diagnosis-based Estimate – Rocker Bottom
17.05.10.04	2	Knee – Diagnosis-based Estimate – Meniscectomy	17.08.10.06	2	Foot – Diagnosis-based Estimate – Avascular Necrosis
17.05.10.05	2	Knee – Diagnosis-based Estimate – Cruciate/collateral Ligament	17.08.10.07	2	Foot – Diagnosis-based Estimate – Metatarsal fracture
17.05.10.06	2	Knee – Diagnosis-based Estimate – Plateau Fracture	17.09.01.00	5	Toes – Muscle Atrophy
17.05.10.07	2	Knee – Diagnosis-based Estimate – Supra/Intercondylar Fracture	17.09.02.00	5	Toes – Ankylosis
17.05.10.08	2	Knee – Diagnosis-based Estimate – Total Replacement	17.09.03.00	5	Toes – Arthritis
17.05.10.09	2	Knee – Diagnosis-based Estimate – Proximal Tibial osteotomy	17.09.04.00	5	Toes – Range of Motion
17.06.10.00	5	Tibia/fibula – Diagnosis-based Estimate – fracture	17.09.05.00	5	Toes – Muscle Strength
17.07.01.00	2	Ankle – Muscle Atrophy	17.09.06.00	5	Toes – Amputation
17.07.02.00	2	Ankle – Ankylosis	17.09.07.00	5	Toes – Other
17.07.03.00	2	Ankle – Arthritis	18 – PAIN		
			18.00.00.00	Variable	Pain – use FEC rank for involved body part.

FUTURE EARNING CAPACITY (FEC) ADJUSTMENT TABLE

Directions: To adjust for earning capacity, look up the impairment standard in the top row (bolded numbers), and read down to the entry corresponding to the applicable future earning capacity rank

FEC Rank	AMA Whole Person Impairment Standard																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
One	1	2	3	4	6	7	8	9	10	11	12	13	14	15	17	18	19	20	21	22
Two	1	2	3	5	6	7	8	9	10	11	13	14	15	16	17	18	19	21	22	23
Three	1	2	4	5	6	7	8	9	11	12	13	14	15	17	18	19	20	21	23	24
Four	1	2	4	5	6	7	9	10	11	12	14	15	16	17	18	20	21	22	23	25
Five	1	3	4	5	6	8	9	10	11	13	14	15	17	18	19	20	22	23	24	25
Six	1	3	4	5	7	8	9	11	12	13	14	16	17	18	20	21	22	24	25	26
Seven	1	3	4	5	7	8	10	11	12	14	15	16	18	19	20	22	23	24	26	27
Eight	1	3	4	6	7	8	10	11	13	14	15	17	18	20	21	22	24	25	27	28

FEC Rank	AMA Whole Person Impairment Standard																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
One	23	24	25	26	28	29	30	31	32	33	34	35	36	37	39	40	41	42	43	44
Two	24	25	26	27	29	30	31	32	33	34	35	37	38	39	40	41	42	43	45	46
Three	25	26	27	28	30	31	32	33	34	36	37	38	39	40	42	43	44	45	46	47
Four	26	27	28	29	31	32	33	34	36	37	38	39	41	42	43	44	45	47	48	49
Five	27	28	29	31	32	33	34	36	37	38	39	41	42	43	45	46	47	48	50	51
Six	28	29	30	32	33	34	35	37	38	39	41	42	43	45	46	47	49	50	51	53
Seven	29	30	31	33	34	35	37	38	39	41	42	43	45	46	48	49	50	52	53	54
Eight	29	31	32	34	35	36	38	39	41	42	43	45	46	48	49	50	52	53	55	56

FEC Rank	AMA Whole Person Impairment Standard																			
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
One	45	46	47	48	50	51	52	53	54	55	56	57	58	59	61	62	63	64	65	66
Two	47	48	49	50	51	53	54	55	56	57	58	59	61	62	63	64	65	66	67	69
Three	49	50	51	52	53	55	56	57	58	59	60	62	63	64	65	66	68	69	70	71
Four	50	52	53	54	55	57	58	59	60	61	63	64	65	66	68	69	70	71	72	74
Five	52	53	55	56	57	58	60	61	62	64	65	66	67	69	70	71	72	74	75	76
Six	54	55	57	58	59	60	62	63	64	66	67	68	70	71	72	74	75	76	78	79
Seven	56	57	58	60	61	62	64	65	67	68	69	71	72	73	75	76	77	79	80	81
Eight	57	59	60	62	63	64	66	67	69	70	71	73	74	76	77	78	80	81	83	84

FEC Rank	AMA Whole Person Impairment Standard																			
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
One	67	68	69	70	72	73	74	75	76	77	78	79	80	81	83	84	85	86	87	88
Two	70	71	72	73	74	75	77	78	79	80	81	82	83	85	86	87	88	89	90	91
Three	72	74	75	76	77	78	79	81	82	83	84	85	87	88	89	90	91	92	94	95
Four	75	76	77	79	80	81	82	84	85	86	87	88	90	91	92	93	95	96	97	98
Five	78	79	80	81	83	84	85	86	88	89	90	92	93	94	95	97	98	99	100	100
Six	80	81	83	84	85	87	88	89	91	92	93	95	96	97	99	100	100	100	100	100
Seven	83	84	86	87	88	90	91	92	94	95	96	98	99	100	100	100	100	100	100	100
Eight	85	87	88	90	91	92	94	95	97	98	99	100	100	100	100	100	100	100	100	100

FEC Rank	AMA Whole Person Impairment Standard																			
	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
One	89	90	91	92	94	95	96	97	98	99	100	100	100	100	100	100	100	100	100	100
Two	93	94	95	96	97	98	99	100	100	100	100	100	100	100	100	100	100	100	100	100
Three	96	97	98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Four	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Five	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Six	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Seven	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Eight	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

SECTION 3 - OCCUPATIONS AND GROUP NUMBERS

Section 3 contains two parts. Part A contains an alphabetized list of occupations with their scheduled occupational group numbers. Find the occupation in the alphabetical list and record the associated group number. Note that some occupations may have more than one title and that all variations may not be listed. Also note that some titles may appear more than once, but pertain to different industries. Care should be taken to ensure that the industry designated also matches the occupation under consideration.

Part B contains an occupational group chart which illustrates the overall system for classifying occupations into groups. Part C contains a description and sample occupations of each group. This information may be useful if the occupation cannot be located in Part A. Simply determine the basic functions and activities of the occupation under consideration and relate it to a comparable scheduled occupation to determine the appropriate group number.

After establishing the occupation and group number, turn to Section 4 to determine the occupational variant.

Group No.	Occupation	Industry	Group No.	Occupation	Industry
-----------	------------	----------	-----------	------------	----------

PART A – LIST OF OCCUPATIONS AND GROUP NUMBERS

111	ABTRACTOR	profess. & kin.	220	ANESTHESIOLOGIST	medical ser.
110	ACADEMIC DEAN	education	310	ANGIOGRAM TECHNOLOGIST	medical ser.
110	ACCOUNT EXECUTIVE	business ser.	491	ANIMAL KEEPER	amuse. & rec.
111	ACCOUNT INFORMATION CLERK	utilities	390	ANIMAL TRAINER	amuse. & rec.
111	ACCOUNTANT	profess. & kin.	491	ANIMAL RIDE ATTENDANT	amuse. & rec.
111	ACCOUNTANT, PROPERTY	profess. & kin.	210	ANNOUNCER	radio-tv broad.
111	ACCOUNTING CLERK	clerical	460	ANODIZER	any industry
590	ACROBAT	amuse. & rec.	380	ANTENNA INSTALLER	any industry
210	ACTOR	amuse. & rec.	380	ANTENNA INSTALLER, SATELLITE	any industry
310	ACUPRESSURIST	medical ser.		COMMUNICATIONS	
211	ADDRESSING MACHINE OPERATOR	clerical	110	APPEALS REFEREE	government ser.
111	ADMINISTRATIVE ANALYST	any industry	111	APPOINTMENT CLERK	clerical
211	ADMINISTRATIVE CLERK	clerical	212	APPRAISER, ART	any industry
212	ADMINISTRATOR, HEALTH CARE FACILITY	medical ser.	212	APPRAISER, BUSINESS EQPT.	any industry
111	ADMISSIONS EVALUATOR	education	213	APPRAISER, REAL ESTATE	real estate
212	AIR ANALYST	profess. & kin.	330	ARBOR PRESS OPERATOR	any industry
481	AIR CONDITIONING INSTALLER SERV., WINDOW UNIT	construction	370	ARC CUTTER	welding
480	AIR HAMMER OPERATOR	construction	212	ARCHITECT	profess. & kin.
212	AIR TRAFFIC CONTROL SPECIALIST, TOWER	government ser.	111	ARCHIVIST	profess. & kin.
380	AIRCRAFT BODY REPAIRER	air trans.	320	ARMATURE BANDER	any industry
380	AIRCRAFT BONDED STRUCTURES REPAIRER	aircraft mfg.	350	ARMORED CAR DRIVER	business ser.
460	AIRCRAFT SERVICE WORKER	air trans.	390	ARMORED CAR GUARD	business ser.
341	AIRCRAFT SERVICE ATTENDANT	air trans.	111	ART DIRECTOR	motion picture
380	AIRFRAME AND POWER PLANT MECHANIC	aircraft mfg.	221	ARTIFICIAL FLOWER MAKER	button & notion
213	AIRLINE TRANSPORTATION AGENT	air trans.	220	ARTIFICIAL PLASTIC EYE MAKER	optical goods
213	AIRPLANE INSPECTOR	air trans.	480	ASPHALT RAKER	construction
250	AIRPLANE PILOT, COMMERCIAL	air trans.	351	ASPHALT SURFACE HEATER OPERATOR	construction
322	AIRPLANE FLIGHT ATTENDANT	air trans.	351	ASPHALT DISTRIBUTOR TENDER	construction
380	ALARM SERVICE TECHNICIAN	business ser.	351	ASPHALT PAVING MACHINE OPERATOR	construction
111	ALARM SIGNAL OPERATOR	any industry	120	ASSEMBLER	jewelry-silver.
560	AMBULANCE ATTENDANT	medical ser.	221	ASSEMBLER	house. appl.
560	AMBULANCE DRIVER	medical ser.	221	ASSEMBLER, ELECTRIC MOTOR	elec. equip.
340	AMUSEMENT PARK ATTENDANT	amuse. & rec.	370	ASSEMBLER, INTERNAL COMBUSTION ENGINE	engine-turbine
210	AMUSEMENT PARK ENTERTAINER	amuse. & rec.	370	ASSEMBLER, MOTOR VEHICLE	auto. mfg.
			221	ASSEMBLER, MUSICAL INSTRUMENTS	musical inst.

Group No.	Occupation	Industry
320	ASSEMBLER, OFFICE MACHINES	office machines
221	ASSEMBLER, PRODUCTION	any industry
120	ASSEMBLER, SEMICONDUCTOR	electron. comp.
221	ASSEMBLER, SMALL PRODUCTS	any industry
380	ASSEMBLER, SUBASSEMBLY	aircraft mfg.
380	ASSEMBLER-INSTALLER, GENERAL	aircraft mfg.
590	ATHLETE, PROFESSIONAL	amuse. & rec.
390	ATHLETIC TRAINER	amuse. & rec.
111	ATTENDANCE CLERK	education
111	AUCTION CLERK	retail trade
210	AUCTIONEER	retail trade
212	AUDIO OPERATOR	radio-tv broad.
221	AUDIO VIDEO REPAIRER	any industry
251	AUDIOVISUAL PRODUCTION SPECIALIST	profess. & kin.
111	AUDIT CLERK	clerical
111	AUDITOR	profess. & kin.
251	AUDITOR, FIELD	profess. & kin.
330	AUTOCLAVE OPERATOR	aircraft mfg.
370	AUTOMATED EQUIPMENT INSTALLER	machinery mfg.
370	AUTOMOBILE ASSEMBLER	auto. mfg.
340	AUTOMOBILE DETAILER	automotive ser.
111	AUTOMOBILE LOCATOR	retail trade
321	AUTOMOBILE UPHOLSTERER	automotive ser.
340	AUTOMOBILE WASHER & POLISHER	automotive ser.
460	AUTOMOBILE WRECKER	wholesale tr.
370	AUTOMOBILE ACCESSORIES INSTALLER	automotive ser.
370	AUTOMOBILE BODY REPAIRER	automotive ser.
214	AUTOMOBILE REPAIR SERVICE ESTIMATOR	automotive ser.
370	AUTOMOBILE SERVICE STATION MECHANIC	automotive ser.
321	AUTO PAINTER	any industry
380	AWNING MAKER	tex. prod., nec.
240	BABYSITTER	domestic ser.
460	BAGGAGE HANDLER	r.r. trans.
212	BAGGAGE SCREENER, AIRPO	air transport.
214	BAGGER	retail trade; groceries
490	BAILIFF	government ser.

Group No.	Occupation	Industry
322	BAKER	hotel & rest.
460	BAKER HELPER	bakery products
420	BAKER	bakery products
322	BAKERY SUPERVISOR	bakery products
330	BAND-SAWING MACHINE OPERATOR	fabrication, nec
230	BAND SAWMILL OPERATOR	saw. & plan.
211	BANK CLERK	financial
290	BARBER	personal ser.
330	BARREL ASSEMBLER	wood. container
460	BARREL FILLER	beverage
322	BARTENDER	hotel & rest.
221	BASKET MAKER	wood. container
230	BATCH STILL OPERATOR	chemical
321	BATTERY ASSEMBLER, DRY CELL	elec. equip.
321	BATTERY REPAIRER	any industry
290	BEAUTICIAN	personal ser.
230	BED LASTER	boot & shoe
491	BEEKEEPER	agriculture
360	BELLHOP	hotel & rest.
221	BENCH WORKER	optical goods
330	BENDING MACHINE OPERATOR	any industry
493	BICYCLE MESSENGER	business ser.
320	BICYCLE REPAIRER	any industry
480	BILLBOARD & SIGN ERECTOR	fabrication, nec
480	BILLBOARD ERECTOR HELPER	construction
112	BILLING CLERK	clerical
213	BILLPOSTER	business ser.
230	BINDERY WORKER	print. & pub.
212	BIOCHEMIST	profess. & kin.
110	BIOLOGY SPECIMEN TECHNICIAN	profess. & kin.
320	BIOMEDICAL EQUIPMENT TECHNICIAN	profess. & kin.
430	BLACKSMITH	forging
460	BLACKSMITH HELPER	forging
480	BLASTER	mining;
332	BLENDER	construction
240	BLIND AIDE	petrol. refin.
330	BLISTER MACHINE OPERATOR	personal ser.
220	BLOCKER AND CUTTER, CONTACT LENS	any industry optical goods

Group No.	Occupation	Industry	Group No.	Occupation	Industry
221	BLOCKER, HAND	hat & cap	481	BRICKLAYER APPRENTICE	construction
230	BLUEPRINTING MACHINE OPERATOR	any industry	480	BRICKLAYER HELPER	construction
380	BOAT REPAIRER	ship-boat mfg.	482	BRIDGE MAINTENANCE WORKER	construction
380	BOAT RIGGER	retail trade	482	BRIDGE WORKER	construction
380	BOATBUILDER, WOOD	ship-boat mfg.	331	BRIQUETTE MACHINE OPERATOR	fabrication, nec
390	BODYGUARD	personal ser.	330	BROACHING MACHINE OPERATOR, PRODUCTION	machine shop
332	BOILER OPERATOR	any industry	321	BROOM STITCHER	fabrication, nec
332	BOILER TENDER	any industry	492	BUCKER	logging
430	BOILERMAKER	struct. metal	111	BUDGET ANALYST	government ser.
460	BOILERMAKER HELPER	struct. metal	321	BUFFER	any industry
111	BONDING AGENT	business ser.	230	BUFFING MACHINE TENDER, AUTOMATIC	any industry
322	BONER, MEAT	meat products	480	BUILDING CLEANER, OUTSIDE	any industry
221	BOOK REPAIRER	any industry	213	BUILDING INSPECTOR	government ser.
320	BOOKBINDER	print. & pub.	213	BUILDING INSPECTOR	insurance
112	BOOKKEEPER	clerical	380	BUILDING MAINTENANCE REPAIRER	any industry
112	BOOKKEEPER, GENERAL LEDGER	clerical	351	BULLDOZER OPERATOR	any industry
351	BOOM CONVEYOR OPERATOR	any industry	380	BURGLAR ALARM INSTALLER/REPAIRER	business ser.
330	BORING MACHINE OPERATOR	woodworking	330	BURNING MACHINE OPERATOR	welding
230	BOTTLE PACKER	beverage	250	BUS DRIVER	motor trans.
390	BOUNCER	amuse. & rec.	322	BUS PERSON	hotel & rest.
390	BOUNTY HUNTER	business ser.	110	BUSINESS MANAGER	amuse. & rec.
221	BOW MAKER	any industry	111	BUSINESS REPRESENTATIVE, LABOR UNION	profess. & kin.
493	BOWLER, PROFESSIONAL	amuse. and rec.	420	BUTCHER, ALL-ROUND	meat products
331	BOWLING BALL MOLDER	toy-sport equip.	322	BUTCHER, MEAT	hotel & rest.
321	BOX MAKER, PAPERBOARD	any industry	240	BUTLER	domestic ser.
321	BOX MAKER, WOOD	wood. container	460	BUTTERMAKER	dairy products
230	BOX PRINTING MACHINE OPERATOR	any industry	230	BUTTONHOLE AND BUTTON SEWING MACHINE OPERATOR	garment
230	BOX BLANK MACHINE OPERATOR	wood. container	320	CABINETMAKER	woodworking
460	BOX FOLDING MACHINE OPERATOR	paper goods	320	CABLE ASSEMBLER AND SWAGER	aircraft mfg.
321	BOX SPRING MAKER	furniture	350	CABLE CAR OPERATOR	r.r. transportation
211	BRAILLE OPERATOR	print. & pub.	380	CABLE INSTALLER-REPAIRER	utilities
111	BRAILLE PROOFREADER	nonprofit org.	380	CABLE MAINTAINER	utilities
370	BRAKE REPAIRER	automotive ser.	480	CABLE PULLER	construction
330	BRAKE PRESS OPERATOR	any industry	380	CABLE SPLICER	construction
330	BRAZING MACHINE OPERATOR	welding	481	CABLE TELEVISION INSTALLER	radio-tv broad.
330	BREAD WRAPPING MACHINE OPERATOR	any industry	380	CABLE TESTER	tel. & tel.
332	BREWERY CELLAR WORKER	beverage	120	CAD DESIGNER	profess. & kindred
331	BRICK AND TILE MAKING MACHINE OPERATOR	brick & tile			
481	BRICKLAYER	construction			

Group No.	Occupation	Industry
360	CADDIE	amuse. & rec.
322	CAFETERIA ATTENDANT	hotel & rest.
480	CAGER	mine & quarry
221	CAKE DECORATOR	bakery products
120	CALLIGRAPHER	profess. & kin.
360	CAMERA OPERATOR	motion picture
220	CAMERA REPAIRER	photo. appar.
390	CAMP COUNSELOR	amuse. & rec.
340	CAMPGROUND ATTENDANT	amuse. & rec.
230	CAN-FILLING AND CLOSING MACHINE TENDER	can. & preserv.
221	CANDLEMAKER	fabrication, nec
331	CANDY MAKER	sugar & conf.
221	CANER	furniture
230	CANNERY WORKER, HAND OR MACHINE	can. & preserv.
420	CANVAS REPAIRER	any industry
230	CAP-LINING MACHINE OPERATOR	any industry
320	CAPACITOR ASSEMBLER	elec. equip.
211	CARD DEALER	amusement and rec.
322	CAR HOP	hotel & rest.
460	CARBIDE POWDER PROCESSOR	machine shop
110	CARDIAC MONITOR TECHNICIAN	medical ser.
212	CARDIOPULMONARY TECHNOLOGIST	medical ser.
240	CARDROOM ATTENDANT	amuse. & rec.
360	CARGO AGENT	air trans.
380	CARPENTER	construction
380	CARPENTER APPRENTICE	construction
480	CARPENTER HELPER	construction
380	CARPENTER, ACOUSTICAL	construction
380	CARPENTER, MAINTENANCE	any industry
380	CARPENTER, RAILCAR	railroad equip.
481	CARPENTER, ROUGH	construction
380	CARPENTER, SHIP	ship-boat mfg.
480	CARPET CUTTER	retail trade
481	CARPET LAYER	retail trade
321	CARPET SEWER	carpet & rug
230	CARPET WEAVER	carpet & rug
480	CARPET LAYER HELPER	retail trade
120	CARTOGRAPHER	prof. & kindred

Group No.	Occupation	Industry
330	CARTON-FORMING MACHINE OPERATOR	any industry
460	CARTON-FORMING MACHINE TENDER	paper goods
120	CARTOONIST, MOTION PICTURES	motion picture
111	CASEWORKER	social ser.
320	CASH REGISTER SERVICER	any industry
111	CASHIER	clerical
214	CASHIER-CHECKER	retail trade
230	CASING MACHINE OPERATOR	meat products
330	CASTER	smelt. & refin.
331	CASTER	jewelry-silver.
320	CASTING REPAIRER	any industry
322	CATERER	personal ser.
491	CATTLE HERDER	agriculture
480	CAULKER	construction
330	CELLOPHANE BAG MACHINE OPERATOR	paper goods
481	CEMENT MASON	construction
480	CEMENT SPRAYER, NOZZLE	construction
480	CEMENT MASON HELPER	construction
480	CEMENTER, OILWELL	petrol. & gas
331	CENTER MACHINE OPERATOR	sugar & conf.
380	CENTRAL OFFICE REPAIRER	tel. & tel.
331	CENTRIFUGAL EXTRACTOR OPERATOR	any industry
230	CENTRIFUGE OPERATOR, PLASMA PROCESSING	medical ser.
230	CENTRIFUGE SEPARATOR OPERATOR	chemical
110	CEPHALOMETRIC ANALYST	medical ser.
331	CERAMIC COATER, MACHINE	any industry
460	CHAIN OFFBEARER	saw. & plan.
492	CHAIN SAW OPERATOR	logging
331	CHAR CONVEYOR TENDER	sugar & conf.
230	CHARGE PREPARATION TECHNICIAN	electron. comp.
492	CHASER	logging
250	CHAUFFEUR	any industry
111	CHECK CASHIER	business ser.
360	CHECKER	laundry & rel.
214	CHECKER, GROCERY	retail trade

Group No.	Occupation	Industry
360	CHECKER, UNLOADER	clerical
360	CHECKER, WAREHOUSE	retail trade
240	CHECKROOM ATTENDANT	any industry
322	CHEESE CUTTER	dairy products
322	CHEESEMAKER	dairy products
322	CHEF DE FROID	hotel & rest.
212	CHEMICAL ENGINEER	profess. & kin.
212	CHEMICAL LABORATORY TECHNICIAN	profess. & kin.
230	CHEMICAL PREPARER	chemical
212	CHEMIST	profess. & kin.
240	CHILD MONITOR	domestic ser.
111	CHILD SUPPORT OFFICER	government ser.
340	CHILD-CARE ATTENDANT, HANDICAPPED	education
340	CHILDREN'S INSTITUTION ATTENDANT	any industry
341	CHIMNEY SWEEP	any industry
460	CHIPPER, ROUGH	any industry
311	CHIROPRACTOR	medical ser.
311	CHIROPRACTOR ASSISTANT	medical ser.
460	CHOCOLATE PRODUCTION MACHINE OPERATOR	sugar & conf.
560	CHOKER SETTER	logging
492	CHOPPER	logging
491	CHRISTMAS TREE FARM WORKER	forestry
320	CHUCKING LATHE OPERATOR	machine shop
330	CIRCULAR SAWYER, STONE	stonework
212	CIVIL ENGINEER	profess. & kin.
251	CLAIM ADJUSTER, FIELD	insurance; business ser.
111	CLAIM ADJUSTER, INSIDE	insurance
111	CLAIMS CLERK	insurance
221	CLAY MODELER	any industry
340	CLEANER, COMMERCIAL OR INSTITUTIONAL	any industry
340	CLEANER, EQUIPMENT	any industry
340	CLEANER, HOSPITAL	medical ser.
340	CLEANER, LABORATORY EQUIPMENT	any industry
341	CLEANER, WINDOW	any industry
210	CLERGY MEMBER	profess. & kin.

Group No.	Occupation	Industry
111	CLERK, ADVERTISING SPACE	print. & pub.
111	CLERK, ANIMAL HOSPITAL	medical ser.
112	CLERK, BILLING	clerical
111	CLERK, COLLECTION	clerical
111	CLERK, CONTRACT, AUTOMOBILE	retail trade
111	CLERK, COURT	government ser.
111	CLERK, CREDIT	clerical
111	CLERK, ELECTION	government ser.
214	CLERK, FILE	clerical
211	CLERK, GENERAL	clerical
211	CLERK, INVENTORY CONTROL	clerical
214	CLERK, SALES	retail trade
360	CLERK, SHIPPING	clerical
112	CLERK, STATISTICAL	clerical
111	CLERK, WIRE TRANSFER	financial
112	CLERK-TYPIST	clerical
110	CLINICAL PSYCHOLOGIST	profess. & kin.
330	CLOTH PRINTER	any industry
221	CLOTH TESTER, QUALITY	textile
390	COACH, PROFESSIONAL ATHLETES	amuse. & rec.
331	COATER OPERATOR	any industry
331	COATING MACHINE OPERATOR	paper & pulp
320	COBBLER	boot & shoe
322	COFFEEMAKER	hotel & rest.
230	COFFEE ROASTER	food prep., nec
230	COIL WINDER	elec. equip.
221	COIL WINDER, REPAIR	any industry
214	COIN COUNTER AND WRAPPER	clerical
251	COIN MACHINE COLLECTOR	business ser.
370	COIN MACHINE SERVICE REPAIRER	svc. ind. mach.
111	COLLECTION CLERK	clerical
251	COLLECTOR, OUTSIDE	clerical
230	COLOR PRINTER OPERATOR	photofinishing
111	COLUMNIST/COMMENTATOR	print. & pub.
111	COMMUNITY ORGANIZATION WORKER	social serv.
250	COMMUNITY SERVICE OFFICER, PATROL	social serv.
240	COMPANION	domestic ser.
221	COMPOSITOR, TYPESETTER	print. & pub.
230	COMPOUNDER	petrol. refin.
360	COMPRESSED GAS PLANT WORKER	chemical

Group No.	Occupation	Industry
332	COMPRESSOR OPERATOR	any industry
112	COMPUTER KEYBOARD OPERATOR	clerical
230	COMPUTER OPERATOR, MAINFRAME	clerical
111	COMPUTER PROCESSING SCHEDULER	clerical
112	COMPUTER PROGRAMMER	profess. & kin.
320	COMPUTER REPAIRER	office machines
111	COMPUTER SECURITY SPECIALIST	profess. & kin.
320	COMPUTER SET-UP PERSON	business serv.
111	COMPUTER SUPPORT ANALYST	profess. & kin.
351	CONCRETE PAVING MACHINE OPERATOR	construction
480	CONCRETE STONE FINISHER	concrete prod.
480	CONCRETE VIBRATOR OPERATOR	construction
340	CONDUCTOR, ALL RAILS	r.r. trans.
213	CONDUCTOR, PASSENGER CAR	r.r. trans.
370	CONSTRUCTION EQUIPMENT MECHANIC	construction
110	CONSULTANT, EDUCATION	education
230	CONTACT LENS MOLDER	optical goods
330	CONTOUR BAND SAW OPERATOR, VERTICAL	machine shop
213	CONTRACTOR	construction
120	CONTROLS DESIGNER	profess. & kin.
360	CONVEYOR FEEDER-OFFBEARER	any industry
360	CONVEYOR TENDER	any industry
370	CONVEYOR MAINTENANCE MECHANIC	any industry
360	CONVEYOR SYSTEM OPERATOR	any industry
322	COOK	domestic ser.
322	COOK	any industry
322	COOK ASSISTANT	hotel & rest.
322	COOK, CHIEF	hotel & rest.
322	COOK, FAST FOOD	hotel & rest.
322	COOK, PASTRY	hotel & rest.
322	COOK, SPECIALTY	hotel & rest.
110	COORDINATOR, SKILL-TRAINING PROGRAM	government ser.
111	COPY READER	print. & pub.
111	COPY WRITER	profess. & kin.
112	COPYIST	any industry
480	CORE DRILL OPERATOR	any industry

Group No.	Occupation	Industry
330	COREMAKER	paper goods
331	COREMAKER, FLOOR	foundry
490	CORRECTION OFFICER	government ser.
290	COSMETOLOGIST	personal ser.
110	COUNSELOR	profess. & kin.
390	COUNSELOR, CAMP	amuse. & rec.
322	COUNTER ATTENDANT, CAFETERIA	hotel & rest.
250	COURIER	any industry
111	COURT CLERK	government ser.
112	COURT REPORTER	clerical
491	COWPUNCHER	agriculture
360	CRANE FOLLOWER	any industry
360	CRANE HOOKER	any industry
351	CRANE OPERATOR	any industry
360	CRATE MAKER	any industry
111	CREDIT AUTHORIZER	clerical
111	CREDIT CLERK	clerical
111	CREDIT COUNSELOR	profess. & kin.
460	CREMATOR	personal ser.
111	CREW SCHEDULER	air trans.
230	CRIMPING MACHINE OPERATOR	any industry
330	CROSSBAND LAYER	millwork-plywood
460	CRUSHER OPERATOR	concrete prod.
112	CRYPTOGRAPHIC MACHINE OPERATOR	clerical
330	CRYSTAL GROWER	comm. equip.
330	CRYSTAL SLICER	electron. comp.
212	CURATOR	museums
211	CURRENCY COUNTER	financial
340	CUSTODIAN	any industry
360	CUSTODIAN, ATHLETIC EQUIPMENT	amuse. & rec.
211	CUSTODIAN, PROPERTY	government ser.
211	CUSTOMER SERVICE CLERK	retail trade
213	CUSTOMER SERVICE REPRESENTATIVE	utilities
112	CUSTOMER SERVICE REPRESENTATIVE – INSIDE	utilities
212	CUSTOMS BROKER	financial
330	CUT-OFF SAW OPERATOR	woodworking
330	CUT-OFF SAW OPERATOR, METAL	machine shop
230	CUTTER	photofinishing
330	CUTTER OPERATOR	any industry

Group No.	Occupation	Industry
230	CUTTER, MACHINE	any industry
230	CUTTING MACHINE OPERATOR, AUTOMATED	aircraft mfg.
460	CUTTING MACHINE OPERATOR	textile
330	CUTTING MACHINE TENDER	any industry
460	CYLINDER FILLER	chemical
460	CYLINDER PRESS FEEDER	print. & pub.
120	CYTOTECNOLOGIST	medical ser.
460	DAIRY PROCESSING EQUIPMENT OPERATOR	dairy products
590	DANCER	amuse. & rec.
111	DATA BASE ADMINISTRATOR	profess. & kin.
380	DATA COMMUNICATIONS INSTALLER	any industry
112	DATA ENTRY CLERK	clerical
221	DECAL APPLIER	any industry
491	DECKHAND	water trans., fishing & hunt.
331	DECONTAMINATOR, RADIOACTIVE MATERIAL	any industry
221	DECORATOR	bakery products
380	DECORATOR, SPECIAL EVENT	any industry
480	DECORATOR, STREET AND BUILDING	any industry
322	DELI CUTTER-SLICER	retail trade
250	DELIVERER, CAR RENTAL	automotive ser.
250	DELIVERER, FLORAL ARRANGEMENTS	retail trade
213	DELIVERER, NON-DRIVING	clerical
250	DELIVERER, PIZZA	retail trade
212	DEMONSTRATOR	retail trade
212	DENTAL ASSISTANT	medical ser.
220	DENTAL HYGIENIST	medical ser.
220	DENTAL LABORATORY TECHNICIAN	protective dev.
220	DENTIST	medical ser.
490	DEPUTY, COURT	government ser.
480	DERRICK WORKER, WELL SERVICE	petrol. & gas
230	DESIGN PRINTER, BALLOON	rubber goods
490	DETECTIVE	government ser.
390	DETECTIVE, STORE	retail trade
212	DIALYSIS TECHNICIAN	medical ser.
330	DIE CASTING MACHINE OPERATOR	foundry

Group No.	Occupation	Industry
330	DIE CUTTER	any industry
120	DIE DESIGNER	machine shop
320	DIE MAKER	machine shop
320	DIE SINKER	machine shop
322	DIETARY AIDE, HOSPITAL SERVICES	medical ser.
212	DIETITIAN, CLINICAL	profess. & kin.
322	DINING ROOM ATTENDANT	hotel & rest.
351	DINKEY OPERATOR	any industry
221	DIPPER	jewelry-silver.
331	DIPPER	any industry
110	DIRECTOR, FUNDRAISING	nonprofit org.
110	DIRECTOR, MOTION PICTURE	motion picture
212	DIRECTOR, RECREATION CENTER	social ser.
110	DIRECTOR, REGULATORY AGENCY	government ser.
110	DIRECTOR, RESEARCH AND DEVELOPMENT	any industry
110	DIRECTOR, SERVICE	retail trade
210	DIRECTOR, SOCIAL	hotel & rest.
112	DIRECTORY ASSISTANCE OPERATOR	tel. & tel.
322	DISHWASHER, HAND OR MACHINE	hotel & rest.
111	DISPATCHER, MOTOR VEHICLE	clerical
380	DISPLAY MAKER	fabrication, nec
330	DISPLAY SCREEN FABRICATOR	electron. comp.
360	DISPLAYER, MERCHANDISE	retail trade
460	DISTILLERY WORKER, GENERAL	beverage
221	DISTRESSER	furniture
480	DITCH DIGGER	construction
492	DIVER	any industry
230	DIVIDING MACHINE OPERATOR	bakery products
111	DOCUMENT PREPARER, MICROFILMING	business ser.
491	DOG CATCHER	government ser.
491	DOG GROOMER	personal ser.
251	DOG LICENSER	nonprofit org.
560	DOLLY PUSHER	radio-tv broad.
390	DOUBLE	motion picture
460	DOUGH BRAKE MACHINE OPERATOR	bakery products
322	DOUGH MOLDER, HAND	bakery products
322	DOUGHNUT MAKER	bakery products
330	DOWEL MACHINE OPERATOR	woodworking
120	DRAFTER, ARCHITECTURAL	profess. & kin.

Group No.	Occupation	Industry
120	DRAFTER, ASSISTANT	profess. & kin.
120	DRAFTER, CIVIL	profess. & kin.
120	DRAFTER, ELECTRICAL	profess. & kin.
120	DRAFTER, ELECTROMECHANISMS DESIGN	profess. & kin.
120	DRAFTER, LANDSCAPE	profess. & kin.
120	DRAFTER, MECHANICAL	profess. & kin.
351	DRAGLINE OPERATOR	any industry
380	DRAPERY HANGER	retail trade
110	DRAWINGS CHECKER, ENGINEERING	profess. & kin.
221	DRESSMAKER	any industry
230	DRIER OPERATOR	food prep., nec
331	DRIER OPERATOR	chemical
330	DRILL PRESS OPERATOR	machine shop
330	DRILL PRESS OPERATOR, NUMERICAL CONTROL	machine shop
321	DRILLER, HAND	any industry
240	DRIVE-IN THEATER ATTENDANT	amuse. & rec.
251	DRIVER'S LICENSE EXAMINER	government ser.
350	DRIVER, NEWSPAPER DELIVERY	wholesale tr.
430	DROPHAMMER OPERATOR	aircraft mfg.
430	DRUM STRAIGHTENER	any industry
340	DRY CLEANER	laundry & rel.
331	DRY-PRESS OPERATOR	brick & tile
380	DRY WALL APPLICATOR	construction
481	DUCT INSTALLER	construction
330	DYNAMITE PACKING MACHINE OPERATOR	chemical
212	ECHOCARDIOGRAPH TECHNICIAN	medical ser.
110	EDITOR, MANAGING, NEWSPAPER	print. & pub.
111	EDITOR, NEWSPAPER	print. & pub.
111	EDITOR, PUBLICATIONS	print. & pub.
112	EDITORIAL WRITER	print. & pub.
221	EGG CANDLER	any industry
380	ELECTRIC METER INSTALLER	utilities
221	ELECTRIC MOTOR ASSEMBLER	elec. equip.
320	ELECTRIC MOTOR CONTROL UNIT ASSEMBLER	elec. equip.
320	ELECTRIC SIGN ASSEMBLER	fabrication, nec
212	ELECTRICAL ENGINEER	profess. & kin.
212	ELECTRICAL TECHNICIAN	profess. & kin.

Group No.	Occupation	Industry
221	ELECTRICAL APPLIANCE REPAIRER, SMALL	any industry
370	ELECTRICAL APPLIANCE SERVICER	any industry
460	ELECTRICAL APPLIANCE UNCRATER	any industry
221	ELECTRICAL INSTRUMENT REPAIRER	any industry
380	ELECTRICIAN	construction
380	ELECTRICIAN	ship-boat mfg.
380	ELECTRICIAN APPRENTICE	construction
380	ELECTRICIAN HELPER	any industry
370	ELECTRICIAN, AUTOMOTIVE	automotive ser.
380	ELECTRICIAN, MAINTENANCE	any industry
380	ELECTRICIAN, POWERHOUSE	utilities
460	ELECTROLESS PLATER, PRINTED CIRCUIT BOARD PANELS	electron. comp.
290	ELECTROLOGIST	personal ser.
220	ELECTROMECHANICAL TECHNICIAN	inst. & app.
320	ELECTROMEDICAL EQUIPMENT REPAIRER	any industry
212	ELECTROMYOGRAPHIC TECHNICIAN	medical ser.
221	ELECTRONIC COMPONENT PROCESSOR	electron. comp.
221	ELECTRONICS ASSEMBLER	comm. equip.
212	ELECTRONICS TECHNICIAN	profess. & kin.
221	ELECTRONICS TESTER	comm. equip.
212	ELECTRONICS DESIGN ENGINEER	profess. & kin.
351	ELEVATING GRADER OPERATOR	construction
482	ELEVATOR CONSTRUCTOR	construction
380	ELEVATOR EXAMINER AND ADJUSTER	any industry
460	ELEVATOR OPERATOR, FREIGHT	any industry
380	ELEVATOR REPAIRER	any industry
111	ELIGIBILITY WORKER	government ser.
420	EMBALMER	personal ser.
331	EMBOSSEER	any industry
230	EMBOSSING PRESS OPERATOR	print. & pub.
460	EMERGENCY MEDICAL TECHNICIAN	medical ser.
111	EMPLOYEE RELATIONS SPECIALIST	profess. & kin.
111	EMPLOYMENT INTERVIEWER	profess. & kin.
320	ENGINE LATHE OPERATOR	machine shop
213	ENGINEER, AERONAUTICAL TEST	aircraft mfg.
111	ENGINEER, AERONAUTICAL DESIGN	aircraft mfg.

Group No.	Occupation	Industry	Group No.	Occupation	Industry
212	ENGINEER, AGRICULTURAL	profess. & kin.	213	EXTRA, ACTOR	amuse. & rec.;
212	ENGINEER, AUTOMOTIVE	auto. mfg.			motion picture
111	ENGINEER, BIOMEDICAL	profess. & kin.	330	EXTRUDER OPERATOR	rubber goods
212	ENGINEER, CHEMICAL	profess. & kin.	220	EYEGLASS LENS CUTTER	optical goods
212	ENGINEER, CIVIL	profess. & kin.	230	FABRIC STRETCHER	furniture
111	ENGINEER, ELECTRO-OPTICAL	profess. & kin.	320	FABRICATING MACHINE OPERATOR, METAL	any industry
212	ENGINEER, ELECTRONICS DESIGN	profess. & kin.	221	FABRICATOR, FOAM RUBBER	any industry
212	ENGINEER, FACTORY LAY-OUT	profess. & kin.	330	FABRICATOR/ASSEMBLER, METAL PRODUCTS	any industry
213	ENGINEER, FIELD SERVICE	profess. & kin.	210	FACULTY MEMBER, COLLEGE OR UNIVERSITY	education
212	ENGINEER, MECHANICAL	profess. & kin.	492	FALLER	logging
111	ENGINEER, NUCLEAR	profess. & kin.	492	FALLER, TIMBER	logging
111	ENGINEER, PACKAGING	profess. & kin.	491	FARM LABORER, GENERAL	agriculture
111	ENGINEER, POWER DISTRIBUTION	utilities	351	FARM MACHINE OPERATOR	agriculture
111	ENGINEER, PRODUCT SAFETY	profess. & kin.	491	FARMER, GENERAL	agriculture
212	ENGINEER, RAILROAD	profess. & kin.	491	FARMWORKER, FRUIT	agriculture
213	ENGINEER, SOILS	profess. & kin.	491	FARMWORKER, VEGETABLE	agriculture
320	ENGRAVER, HAND, HARD METALS	engraving	120	FASHION ARTIST	retail trade
120	ENGRAVER, HAND, SOFT METALS	engraving; jewelry	251	FASHION COORDINATOR	retail trade
230	ENGRAVER, MACHINE	engraving	212	FASHION DESIGNER	profess. & kin.
213	ENVIRONMENTAL ANALYST	profess. & kin.	322	FAST FOODS WORKER	hotel & rest.
111	EQUAL OPPORTUNITY REPRESENTATIVE	government ser.	460	FEEDER	print. & pub.
340	EQUIPMENT CLEANER	any industry	331	FELTING MACHINE OPERATOR	tex. prod., nec
370	EQUIPMENT INSTALLER, VEHICLES	any industry	481	FENCE ERECTOR	construction
111	ESCROW OFFICER	profess. & kin.	330	FIBERGLASS LAMINATOR	ship-boat
111	ESTATE PLANNER	insurance			mfg.; vehicles nec.
213	ESTIMATOR/CRUISER	forestry	330	FIBERGLASS MACHINE OPERATOR	glass products
221	ETCHED CIRCUIT PROCESSOR	electron. comp.	213	FIELD ENGINEER	radio-tv broad.
221	ETCHER	engraving	214	FILE CLERK	clerical
320	ETCHER, HAND	print. & pub.	221	FILLER	tex. prod., nec
370	EVAPORATIVE COOLER INSTALLER	any industry	230	FILM DEVELOPER	motion picture
111	EXAMINER	government ser.	230	FILM OR VIDEOTAPE EDITOR	motion picture
390	EXERCISE PHYSIOLOGIST	medical ser.	230	FILM PRINTER	motion picture
491	EXERCISER, HORSE	amuse. & rec.	214	FILM OR TAPE LIBRARIAN	clerical
380	EXHIBIT BUILDER	museums	331	FILTER OPERATOR	any industry
111	EXPEDITER	clerical	460	FILTER PRESS OPERATOR	any industry
360	EXPEDITER, MATERIAL	clerical	320	FINAL ASSEMBLER	office machines
380	EXPERIMENTAL AIRCRAFT MECHANIC	aircraft mfg.	110	FINANCIAL PLANNER	profess. & kin.
213	EXTERMINATOR	business ser.	110	FINANCIAL AIDS OFFICER	education
480	EXTERMINATOR, TERMITE	business ser.	120	FINGERNAIL FORMER	personal ser.

Group No.	Occupation	Industry
490	FIRE FIGHTER	any industry
490	FIRE LOOKOUT	forestry
490	FIRE RANGER	forestry
320	FIRE EXTINGUISHER REPAIRER	any industry
490	FIRE INSPECTOR	government serv.
332	FIRER, HIGH PRESSURE	any industry
320	FIRESETTER	elec. equip.
360	FIREWORKS DISPLAY SPECIALIST	any industry
490	FISH AND GAME WARDEN	government ser.
322	FISH CLEANER	can. & preserv.
491	FISH FARMER	fishing & hunt.
491	FISH HATCHERY LABORER	fishing & hunt.
492	FISHER, DIVING	fishing & hunt.
491	FISHER, LINE	fishing & hunt.
491	FISHER, NET	fishing & hunt.
481	FITTER	construction, pipe lines
430	FITTER, METAL	any industry
320	FIXTURE REPAIRER-FABRICATOR	any industry
213	FLAGGER, TRAFFIC CONTROL	construction
230	FLATWORK FINISHER	laundry & rel.
322	FLIGHT ATTENDANT	air trans.
212	FLIGHT ENGINEER	air trans.
211	FLIGHT INFORMATION EXPEDITER	air trans.
380	FLOOR LAYER	construction
480	FLOOR FINISHER HELPER	construction
221	FLORIST	retail trade
460	FLOUR BLENDER	grain-feed mills
230	FOLDER SEAMER, AUTOMATIC	any industry
230	FOLDING MACHINE OPERATOR	print. & pub.
330	FOLDING MACHINE OPERATOR	paper goods
330	FOLDING MACHINE OPERATOR	textile
322	FOOD ASSEMBLER, KITCHEN	hotel & rest.
492	FOREST WORKER	forestry
490	FOREST FIRE FIGHTER	forestry
213	FORESTER	profess. & kin.
491	FORESTER AIDE	forestry
460	FORGE HELPER	forging
430	FORGING PRESS OPERATOR	forging
351	FORKLIFT OPERATOR	any industry
481	FORM BUILDER	construction
480	FORM STRIPPER	construction

Group No.	Occupation	Industry
480	FORM TAMPER	construction
480	FORM TAMPER OPERATOR	construction
320	FORMER, HAND	any industry
331	FORMING MACHINE OPERATOR	glass mfg.
111	FORMS ANALYST	profess. & kin.
331	FOURDRINIER MACHINE OPERATOR	paper & pulp
470	FRAME REPAIRER	furniture
370	FRAME STRAIGHTENER	motor-bicycles
230	FREEZER OPERATOR	dairy products
491	FRUIT PICKER	agriculture
360	FRUIT BUYING INSPECTOR	can. & preserv.
331	FRUIT GRADER OPERATOR	agriculture
332	FUEL ATTENDANT, PLANT	any industry
480	FUMIGATOR	business ser.
212	FUND RAISER	nonprofit org.
340	FUNERAL ATTENDANT	personal ser.
560	FUNERAL CAR CHAUFFEUR	personal ser.
212	FUNERAL DIRECTOR	personal ser.
341	FURNACE CLEANER	any industry
380	FURNACE INSTALLER AND REPAIRER, HOT AIR	any industry; utilities
321	FURNITURE ASSEMBLER	furniture
470	FURNITURE ASSEMBLER/HEAVY	woodworking
360	FURNITURE CRATER	any industry
221	FURNITURE FINISHER	woodworking
560	FURNITURE MOVER	motor trans.
321	FURNITURE UPHOLSTERER	any industry
221	FURRIER	fur goods
370	GARAGE SERVICER, TRANSPORTATION EQUIPMENT	any industry
560	GARBAGE COLLECTOR, MANUAL	motor trans.
491	GARDENER	domestic ser.
221	GARMENT CUTTER, HAND	any industry
321	GARMENT CUTTER, MACHINE	any industry
332	GAS COMPRESSOR OPERATOR	any industry
332	GAS ENGINE OPERATOR	any industry
320	GAS METER ADJUSTER	utilities
212	GATE AGENT	air trans.
213	GEOLOGIST	profess. & kin.
221	GIFT WRAPPER	retail trade
221	GILDER, METAL LEAF	any industry
230	GINNER	agriculture

Group No.	Occupation	Industry	Group No.	Occupation	Industry
221	GLASS BLOWER, HAND	glass mfg	290	HAIR STYLIST	personal ser.
420	GLASS CUTTER	any industry	211	HAND LABELER	any industry
221	GLASS FINISHER	glass products	380	HANDYPERSON	any industry
370	GLASS INSTALLER	automotive ser.	110	HARBOR MASTER	government ser.
370	GLASS INSTALLER	woodworking	380	HARDWOOD FLOOR LAYER	construction
321	GLASS POLISHER	glass mfg.	320	HARNESS MAKER	leather prod.
380	GLAZIER	construction	230	HAT AND CAP SEWER	hat & cap
330	GLUER	woodworking	110	HAZARDOUS WASTE MANAGEMENT SPECIALIST	government ser.
251	GOLF COURSE RANGER	amuse. & rec.	110	HEARING OFFICER	government ser.
390	GOLF INSTRUCTOR	amuse. & rec.	112	HEARING REPORTER	clerical
493	GOLFER, PROFESSIONAL	amuse. & rec.	330	HEAT TREATER	heat treating
340	GOLF RANGE ATTENDANT	amuse. & rec.	430	HEATER	forging
360	GRAINER, MACHINE	any industry	380	HEATING AND AIR CONDITIONING INSTALLER-SERVICER	construction
110	GRANT COORDINATOR	profess. & kin.	230	HEMMER, AUTOMATIC	tex. prod., nec
230	GRANULATOR OPERATOR	sugar & conf.	420	HIDE PULLER	meat products
120	GRAPHIC DESIGNER	profess. & kin.	480	HOD CARRIER	construction
480	GRAVE DIGGER	real estate	351	HOISTING ENGINEER	any industry
340	GREASER	any industry	111	HOLTER SCANNING TECHNICIAN	medical ser.
460	GREEN CHAIN OFFBEARER	millwork-plywood	340	HOME ATTENDANT	personal ser.
331	GRINDER OPERATOR	grain-feed mills	491	HORSESHOER	agriculture
320	GRINDER OPERATOR, PRECISION	machine shop	213	HORTICULTURIST	profess. & kin.
330	GRINDER SET-UP OPERATOR, CENTERLESS	machine shop	111	HOSPITAL ADMITTING CLERK	medical ser.
330	GRINDER, BENCH	any industry	240	HOST/HOSTESS	any industry
321	GRINDER, DISK, BELT OR WHEEL	any industry	211	HOTEL CLERK	hotel & rest.
330	GRINDER, TOOL	any industry	470	HOUSEHOLD APPLIANCE INSTALLER	any industry
460	GRINDER-CHIPPER, ROUGH	any industry	340	HOUSEKEEPER, DOMESTIC	domestic ser.; hotel & rest.
330	GRINDING MACHINE TENDER	machine shop	332	HYDROELECTRIC STATION OPERATOR	utilities
482	GRIP	amuse. & rec.	331	ICE CREAM MAKER	dairy products
482	GRIP, PROPERTY HANDLER	motion picture	460	ICE CUTTER	food prep., nec
482	GRIP, STAGE CONSTRUCTION	motion picture	120	ILLUSTRATOR	profess. & kin.
214	GROCERY CHECKER	retail trade	110	IMPORT-EXPORT AGENT	any industry
230	GROMMET MACHINE OPERATOR	any industry	111	INDUSTRIAL ENGINEER	profess. & kin.
491	GROOM	any industry	213	INDUSTRIAL HYGIENIST	profess. & kin.
491	GROUNDKEEPER	any industry	111	INFORMATION CLERK	clerical
490	GROUP SUPERVISOR	government ser.	111	INFORMATION AND REFERRAL AIDE	government ser.
490	GUARD, CORRECTIONAL FACILITY	government ser.	230	INJECTION WAX MOLDER	foundry; jewelry- silver.
240	GUARD, SCHOOL-CROSSING	government ser.			
590	GUIDE, ALPINE	personal ser.			
213	GUIDE, ESTABLISHMENT	any industry			
491	GUIDE, HUNTING AND FISHING	amuse. & rec.			
220	GUNSMITH	any industry			

Group No.	Occupation	Industry	Group No.	Occupation	Industry
230	INJECTION MOLDING MACHINE TENDER	plastic prod.	120	INTEGRATED CIRCUIT LAYOUT DESIGNER	profess. & kin.
330	INKER	print. & pub.	214	INTERIOR DESIGNER	profess. & kin.
460	INMATE, LABORER	any industry	220	INTERNIST	medical ser.
120	INSPECTOR	jewelry-silver.	210	INTERPRETER	profess. & kin.
221	INSPECTOR	plastic prod.	212	INTERPRETER, DEAF	profess. & kin.
221	INSPECTOR	pharmaceut.	111	INTERVIEWER, EMPLOYMENT	profess. & kin.
213	INSPECTOR, AGRICULTURAL COMMODITIES	government ser.	212	INTERVIEWER/SURVEY WORKER	clerical
213	INSPECTOR, AIR CARRIER	government ser.	360	INVENTORY CLERK	clerical
213	INSPECTOR, AIRPLANE	air trans.	251	INVESTIGATOR	government ser.
221	INSPECTOR, CANNED FOOD RECONDITIONING	can. & preserv.	111	INVESTIGATOR, CREDIT FRAUD	retail trade
320	INSPECTOR, EDDY CURRENT	steel & rel.	251	INVESTIGATOR, INSIDE/OUTSIDE	business ser.
221	INSPECTOR, ELECTRONICS	comm. equip.	490	INVESTIGATOR, VICE	government ser.
221	INSPECTOR, FABRIC	any industry	110	INVESTMENT ANALYST	financial
251	INSPECTOR, FOOD AND DRUG	government ser.	111	INVOICE CONTROL CLERK	clerical
321	INSPECTOR, FURNITURE	furniture	491	IRRIGATOR, GRAVITY FLOW	agriculture
221	INSPECTOR, GARMENT	any industry	491	IRRIGATOR, SPRINKLING SYSTEM	agriculture
221	INSPECTOR, GLASS	any industry	480	JACKHAMMER OPERATOR	mine & quarry
251	INSPECTOR, HEALTH CARE FACILITIES	government ser.	490	JAILER	government ser.
120	INSPECTOR, JEWEL	clock & watch	340	JANITOR	any industry
213	INSPECTOR, METAL FABRICATING	any industry	120	JEWELER	jewelry-silver.
221	INSPECTOR, METAL FINISH	any industry	320	JIG MAKER	machine shop
221	INSPECTOR, PRINTED CIRCUIT BOARDS	electron. comp.	330	JIG-BORING MACHINE OPERATOR, NUMERICAL CONTROL	machine shop
251	INSPECTOR, QUALITY ASSURANCE	government ser.	330	JIGSAW OPERATOR	woodworking
251	INSPECTOR, TRANSPORTATION	motor trans.	212	JOB ANALYST	profess. & kin.
213	INSPECTOR, WEIGH STATION	government ser.	110	JOB DEVELOPMENT SPECIALIST	profess. & kin.
493	INSTRUCTOR, AEROBICS	amuse. & rec.	320	JOB SETTER, HONING	machine shop
251	INSTRUCTOR, DRIVING	education	590	JOCKEY	amuse. & rec.
390	INSTRUCTOR, PHYSICAL EDUCATION	education	380	JOINER	ship-boat mfg.
390	INSTRUCTOR, SPORTS	amuse. & rec.	330	JOINTER OPERATOR	woodworking
214	INSTRUCTOR, VOCATIONAL TRAINING	education	110	JUDGE	government ser.
320	INSTRUMENT REPAIRER	any industry	221	KEY CUTTER	any industry
220	INSTRUMENT MAKER AND REPAIRER	any industry	230	KICK PRESS OPERATOR	any industry
380	INSULATION WORKER	construction	230	KILN OPERATOR	woodworking
221	INTEGRATED CIRCUIT FABRICATOR	electron. comp.	360	KILN WORKER	pottery & porc.
			322	KITCHEN HELPER	hotel & rest.
			230	KNITTING MACHINE OPERATOR, <u>HOSIERY</u>	knitting
			330	KNITTING MACHINE OPERATOR	knitting
			492	KNOT BUMPER	logging

Group No.	Occupation	Industry	Group No.	Occupation	Industry
212	LABORATORY ASSISTANT, BLOOD AND PLASMA	medical ser.	340	LAUNDERER, HAND	laundry & rel.
340	LABORATORY EQUIPMENT CLEANER	any industry	491	LAWN SERVICE WORKER	agriculture
220	LABORATORY TESTER	any industry	110	LAWYER	profess. & kin.
460	LABORER	meat products	320	LAY-OUT MAKER	sheet metal; any industry
460	LABORER	pharmaceut.	120	LAY-OUT TECHNICIAN	optical goods
460	LABORER, CHEMICAL PROCESSING	chemical	491	LEAD PONY RIDER, RACETRACK	amuse. & rec.
480	LABORER, CONCRETE PAVING	construction	221	LEATHER CUTTER	leather prod.
480	LABORER, CONCRETE MIXING PLANT	construction	230	LEATHER GARMENT PRESSER	laundry & rel.
480	LABORER, CONSTRUCTION	construction	320	LEATHER WORKER	leather prod.
491	LABORER, FARM	agriculture	110	LEGISLATIVE ASSISTANT	government ser.
360	LABORER, GENERAL	plastic prod.	220	LENS EXAMINER	optical goods
460	LABORER, GENERAL	machine shop	230	LENS HARDENER	optical goods
460	LABORER, GENERAL	nonfer. metal	320	LENS MOUNTER, OPTICAL	optical goods
460	LABORER, GENERAL	steel & rel.	220	LENS POLISHER, HAND	optical goods
460	LABORER, MILL	woodworking	220	LENS FABRICATING MACHINE TENDER	optical goods
460	LABORER, PETROLEUM REFINERY	petrol. refin.	214	LIBRARIAN	library
480	LABORER, ROAD	construction	212	LIBRARIAN, CATALOG	library
460	LABORER, SHIPYARD	ship-boat mfg.	214	LIBRARY ASSISTANT	library
480	LABORER, WRECKING & SALVAGING	construction	211	LICENSE CLERK	government ser.
460	LABORER, YARD	paper & pulp	590	LIFEGUARD	amuse. & rec.
331	LACQUERER	plastic prod.	250	LIGHT RAIL CAR OPERATOR	r.r. trans.
330	LAMINATING MACHINE FEEDER	wood prod., nec.	341	LIGHT FIXTURE SERVICER	any industry
330	LAMINATING MACHINE OPERATOR	furniture	482	LINE INSTALLER-REPAIRER	tel. & tel.; utilities
430	LAMINATING PRESS OPERATOR	plastic prod.	341	LINE SERVICE ATTENDANT	air trans.
330	LAMINATOR	ship-boat	213	LINE WALKER	petrol. & gas
		mfg.; vehicles nec.	360	LINEN ROOM CLERK	hotel & rest.
213	LAND SURVEYOR	profess. & kin.	110	LITERARY AGENT	business ser.
491	LANDSCAPE GARDENER	agriculture	491	LIVESTOCK YARD ATTENDANT	any industry
370	LASER TECHNICIAN/REPAIRER	electron. comp.	460	LOADER/UNLOADER	any industry
230	LASER BEAM MACHINE OPERATOR	welding	110	LOAN OFFICER	financial
230	LASER BEAM TRIM OPERATOR	electron. comp.	212	LOCATION MANAGER	motion picture
330	LATHE OPERATOR, NUMERICAL CONTROL	machine shop	120	LOCK ASSEMBLER	cutlery-hrdwr.
330	LATHE OPERATOR, SWING-TYPE	woodworking	221	LOCKSMITH	any industry
330	LATHE OPERATOR, WOOD-TURNING	woodworking	250	LOCOMOTIVE ENGINEER	r.r. trans.
460	LATHE SPOTTER	millwork-plywood	213	LOG SCALER	logging
330	LATHE TENDER	machine shop	491	LOG SORTER	logging
380	LATHER, METAL OR WOOD	construction	492	LOGGER, ALL-ROUND	logging
			351	LOGGING TRACTOR OPERATOR	forestry
			370	LOOM FIXER	narrow fabrics
			340	LUBRICATION SERVICER	automotive ser.

Group No.	Occupation	Industry
320	LUGGAGE REPAIRER	any industry
221	LUMBER GRADER	woodworking
460	LUMBER HANDLER/STACKER	woodworking
360	LUMBER SORTER	woodworking
350	LUNCH TRUCK DRIVER	hotel & rest.
370	MACHINE ASSEMBLER/BUILDER	machinery mfg.
360	MACHINE FEEDER	any industry
460	MACHINE FEEDER, RAW STOCK	tex. prod., nec
330	MACHINE MOLDER	foundry
230	MACHINE OPERATOR, ROOFING MATERIALS	build. mat., nec
320	MACHINE SET-UP OPERATOR	machine shop
221	MACHINE TESTER	office machines
320	MACHINIST	machine shop
320	MACHINIST, AUTOMOTIVE	automotive ser.
370	MACHINIST, BENCH	machinery mfg.
112	MAGNETIC TAPE COMPOSER OPERATOR	print. & pub.
211	MAIL CLERK	clerical
230	MAILING MACHINE OPERATOR	print. & pub.
370	MAINTENANCE MACHINIST	machine shop
470	MAINTENANCE MECHANIC	any industry
380	MAINTENANCE REPAIRER, BUILDING	any industry
470	MAINTENANCE REPAIRER, INDUS. MACHINES & PLANTS	any industry
480	MAINTENANCE WORKER, MUNICIPAL	government ser.
311	MAKE-UP ARTIST, BODY	amuse. & rec.
110	MANAGEMENT ANALYST	profess. & kin.
212	MANAGEMENT TRAINEE	any industry
212	MANAGER, ADVERTISING AGENCY	business ser.
212	MANAGER, APARTMENT HOUSE	real estate
213	MANAGER, AUTOMOBILE SERVICE STATION	retail trade
110	MANAGER, BENEFITS	profess. & kin.
110	MANAGER, BUS TRANSPORTATION	motor trans.
212	MANAGER, CONVENTION	hotel & rest.
212	MANAGER, CUSTOMER SERVICES	business ser.
213	MANAGER, DAIRY FARM	agriculture
110	MANAGER, DATA PROCESSING	profess. & kin.
110	MANAGER, DEPARTMENT	any industry

Group No.	Occupation	Industry
212	MANAGER, FAST FOOD SERVICES	retail trade
110	MANAGER, HOTEL OR MOTEL	hotel & rest.
212	MANAGER, HOTEL RECREATIONAL FACILITIES	amuse. & rec.
212	MANAGER, LABOR RELATIONS	profess. & kin.
212	MANAGER, MOBILE HOME PARK	real estate
213	MANAGER, NURSERY	agriculture
111	MANAGER, OFFICE	any industry
212	MANAGER, PARTS	retail trade
111	MANAGER, PERSONNEL	profess. & kin.
213	MANAGER, PROPERTY	real estate
212	MANAGER, QUALITY CONTROL	profess. & kin.
212	MANAGER, RETAIL STORE	retail trade
212	MANAGER, STAGE	amuse. & rec.
212	MANAGER, THEATER	amuse. & rec.
110	MANAGER, TRAFFIC	air trans.; any industry
212	MANAGER, VEHICLE LEASING AND RENTAL	automotive ser.
212	MANAGER, WAREHOUSE	any industry
120	MANICURIST	personal ser.
330	MARBLE POLISHER, MACHINE	stonework
481	MARBLE SETTER	construction
480	MARBLE SETTER HELPER	construction
211	MARKER	retail trade
111	MARKET RESEARCH ANALYST	profess. & kin.
221	MASKER, PARTS	any industry
311	MASSEUR/MASSEUSE	personal ser.
212	MASTER CONTROL OPERATOR	radio-tv broad.
221	MAT CUTTER, PICTURE FRAMES	wood prod., nec
360	MATERIAL EXPEDITER	clerical
460	MATERIAL STACKER	any industry
321	MATTRESS MAKER	furniture
322	MEAT CARVER, DISPLAY	hotel & rest.
322	MEAT CLERK	retail trade
322	MEAT CUTTER	retail trade
331	MEAT GRINDER	meat products
380	MECHANIC, AIRCRAFT	aircraft mfg.
370	MECHANIC, AUTOMOBILE	automotive ser.
470	MECHANIC, DIESEL	any industry
370	MECHANIC, FRONT-END	automotive ser.
481	MECHANIC, POWERHOUSE	utilities

Group No.	Occupation	Industry
380	MECHANIC, RADAR	any industry
370	MECHANIC, RADIATOR	automotive ser.
481	MECHANIC, REFRIGERATION	svc. ind. mach.
370	MECHANIC, ROCKET ENGINE COMPONENT	aircraft mfg.
470	MECHANIC, SAFE AND VAULT	business ser.
370	MECHANIC, SMALL ENGINE	any industry
370	MECHANIC, TRACTOR	automotive ser.
370	MECHANIC, TRANSMISSION	automotive ser.
370	MECHANIC, TUNE-UP	automotive ser.
214	MEDIA SPECIALIST, SCHOOL LIBRARY	library
212	MEDICAL ASSISTANT, OFFICE	medical ser.
220	MEDICAL LABORATORY TECHNOLOGIST	medical ser.
470	MEDICAL EQUIPMENT REPAIRER	protective dev.
212	MEDICAL LABORATORY TECHNICIAN	medical ser.
211	MEDICAL RECORD CLERK	medical ser.
321	MELTER	jewelry-silver.
340	MENTAL RETARDATION AIDE, INSTITUTION	medical ser.
213	MESSENGER, NON-DRIVING	clerical
430	METAL FABRICATOR	any industry
321	METAL GRINDER AND FINISHER	any industry
321	METAL SPRAYER, PRODUCTION	any industry
331	METAL CLEANER, IMMERSION	any industry
230	METALLIZATION EQUIPMENT TENDER, SEMICONDUCTORS	comm. equip.
212	METALLURGICAL TESTER	profess. & kin.
213	METER READER	utilities
320	METER REPAIRER	any industry
220	MICROELECTRONICS TECHNICIAN	electron. comp.
230	MICROFILM PROCESSOR	business ser.
212	MICROPHONE BOOM OPERATOR	motion picture
491	MILKER, MACHINE	agriculture
331	MILL OPERATOR	any industry
320	MILLING MACHINE OPERATOR, NUMERICAL CONTROL	machine shop
481	MILLWRIGHT	any industry
480	MILLWRIGHT HELPER	any industry
213	MINE INSPECTOR	mine & quarry

Group No.	Occupation	Industry
560	MINER	mine & quarry
560	MINER HELPER	mine & quarry
221	MINIATURE SET CONSTRUCTOR	motion picture
460	MIXER	paint & varnish
460	MIXER, CLAY	brick & tile
480	MIXER, CONCRETE	construction
460	MIXER, DOUGH	bakery products
460	MIXER, FLOUR	bakery products
480	MIXER, MORTAR	construction
221	MIXER, PAINT (HAND)	any industry
460	MIXER, PAINT (MACHINE)	any industry
331	MIXER, SAND (MACHINE)	foundry
331	MIXING MACHINE OPERATOR	food prep., nec
460	MIXING MACHINE OPERATOR	any industry
380	MOBILE HOME ASSEMBLER	mfd. bldgs.
212	MOBILE HOME PARK MANAGER	real estate
240	MODEL	garment
221	MODEL MAKER	any industry
240	MODEL, ARTISTS'	any industry
213	MODEL, PHOTOGRAPHERS'	any industry
321	MOLD REPAIRER	any industry
221	MOLD AND MODEL MAKER, PLASTER	concrete prod.
330	MOLDER	aircraft mfg.
420	MOLDER, HAND	brick & tile
320	MOLDER, PATTERN	foundry
230	MOLDING MACHINE TENDER, COMPRESSION	plastic prod.
340	MORGUE ATTENDANT	medical ser.
230	MOTION PICTURE PROJECTIONIST	amuse. & rec.
351	MOTOR-GRADER OPERATOR	construction
351	MOTORBOAT OPERATOR	any industry
370	MOTORCYCLE ASSEMBLER	motor-bicycles
250	MOTORCYCLE DRIVER, DELIVERY	retail trade
490	MOTORCYCLE POLICE OFFICER	government ser.
370	MOTORCYCLE REPAIRER	automotive ser.
120	MOUNTER, HAND	photofinishing
310	MRI TECHNOLOGIST	medical ser.
370	MUFFLER INSTALLER	automotive ser.
460	MUNITIONS HANDLER	ordnance
212	MUSEUM ATTENDANT & GUIDE	museums
380	MUSEUM PREPARATOR	museums

Group No.	Occupation	Industry
220	MUSICIAN, INSTRUMENTAL	amuse. & rec.
330	NAILING MACHINE OPERATOR	any industry
111	NAVIGATOR	air trans.
360	NEWS GATHERING TECHNICIAN	radio-tv broad.
210	NEWSCASTER	radio-tv broad.
330	NIBBLER OPERATOR	any industry
111	NIGHT AUDITOR	hotel & rest.
460	NITROGLYCERIN DISTRIBUTOR	chemical
310	NUCLEAR MEDICINE TECHNOLOGIST	medical ser.
330	NUMERICAL CONTROL MACHINE OPERATOR	machine shop
340	NURSE AIDE	medical ser.
220	NURSE ANESTHETIST	medical ser.
212	NURSE CASE MANAGER	medical ser.
311	NURSE, GENERAL DUTY	medical ser.
311	NURSE, LICENSED VOCATIONAL	medical ser.
311	NURSE, PRIVATE DUTY	medical ser.
212	NURSE, SCHOOL	medical ser.
311	NURSE-MIDWIFE	medical ser.
460	NUT ROASTER	can. & preserv.
212	OCCUPATIONAL ANALYST	profess. & kin.
311	OCCUPATIONAL THERAPIST	medical ser.
340	OCCUPATIONAL THERAPY AIDE	medical ser.
213	OCCUPATIONAL SAFETY AND HEALTH INSPECTOR	government ser.
211	OFFICE CLERK, GENERAL	clerical
320	OFFICE MACHINE SERVICER	any industry
330	OFFSET PRESS HELPER	print. & pub.
230	OFFSET DUPLICATING MACHINE OPERATOR	clerical
230	OFFSET PRESS OPERATOR	print. & pub.
480	OIL WELL DRILLER	petrol. & gas
340	OILER	any industry
332	OPERATING ENGINEER	any industry
332	OPERATING ENGINEER, REFRIGERATION	any industry
111	OPTICAL ENGINEER	profess. & kin.
220	OPTICIAN, DISPENSING	optical goods
220	OPTICIAN, LENS GRINDER	optical goods
220	OPTOMETRIST	medical ser.
491	ORCHARD SPRAYER, HAND	agriculture

Group No.	Occupation	Industry
360	ORDER CHECKER	clerical
111	ORDER CLERK	clerical
214	ORDER CLERK	clerical
214	ORDER FILLER, CATALOG SALES	retail trade
460	ORDERLY	medical ser.
481	ORNAMENTAL IRON WORKER	construction
120	ORTHODONTIC TECHNICIAN	protective dev.
320	ORTHOTICS TECHNICIAN	protective dev.
310	ORTHOTIST	medical ser.
331	OVEN TENDER	bakery products
351	OVERHEAD CRANE OPERATOR	any industry
331	OXIDIZED FINISH PLATER	any industry
221	OXIDIZER	jewelry-silver.
330	PACKAGE SEALER, MACHINE	any industry
330	PACKAGER, MACHINE	any industry
360	PACKER, AGRICULTURAL PRODUCE	agriculture
360	PACKER, HAND	any industry
380	PAINTER	construction
480	PAINTER HELPER	construction
221	PAINTER, AIRBRUSH	any industry
482	PAINTER, BRIDGE, STRUCTURAL STEEL	construction
321	PAINTER, BRUSH	any industry
120	PAINTER, HAND, DECORATIVE	any industry
380	PAINTER, SIGN	any industry
321	PAINTER, SPRAY GUN	any industry
321	PAINTER, TOUCH-UP	any industry
350	PAINTER, TRAFFIC LINE	construction
380	PAINTER, TRANSPORTATION EQUIPMENT	aircraft mfg.
230	PALLETIZER OPERATOR, AUTOMATIC	any industry
230	PAPER CUTTER, MACHINE	beverage
460	PAPER-BALING MACHINE TENDER	any industry
331	PAPER-MAKING MACHINE OPERATOR	paper & pulp
460	PAPERCUTTING MACHINE OPERATOR	print. & pub.
380	PAPERHANGER	construction
321	PARACHUTE RIGGER	air trans.
211	PARALEGAL	profess. & kin.
490	PARAMEDIC	medical ser.

Group No.	Occupation	Industry	Group No.	Occupation	Industry
211	PARIMUTUEL TICKET SELLER	amuse. & rec.	221	PIANO TUNER	any industry
490	PARK RANGER	government ser.	491	PICKER, FRUIT	agriculture
250	PARKING ENFORCEMENT OFFICER	government ser.	330	PICKING MACHINE OPERATOR	any industry
240	PARKING LOT ATTENDANT, BOOTH	automotive serv.	221	PICTURE FRAMER	retail trade
214	PARKING LOT ATTENDANT	automotive ser.	351	PILE-DRIVER OPERATOR	construction
490	PAROLE OFFICER	profess. & kin.	370	PINSETTER ADJUSTER, AUTOMATIC	toy-sport equip.
214	PARTS CLERK	clerical	380	PINSETTER MECHANIC, AUTOMATIC	any industry
214	PARTS ORDER AND STOCK CLERK	clerical	380	PIPE COVERER AND INSULATOR	ship-boat mfg.
460	PASTEURIZER	dairy products	481	PIPE FITTER	construction
250	PATROL OFFICER, VOLUNTEER	government serv.	480	PIPE LAYER	construction
230	PATTERN-PUNCHING MACHINE OPERATOR	tex. prod., nec	481	PIPE FITTER HELPER	construction
320	PATTERNMAKER, ALL-AROUND	foundry	480	PIPE LAYER HELPER	construction
320	PATTERNMAKER, METAL	foundry	380	PIPE ORGAN TUNER AND REPAIRER	any industry
320	PATTERNMAKER, WOOD	foundry	480	PIPELINER	pipe lines
221	PEELER, HAND	can. & preserv.	214	PIT BOSS/FLOOR PERSON	amusement & rec.
230	PEELER, MACHINE	can. & preserv.	330	PLANER OPERATOR	woodworking
320	PERCUSSION INSTRUMENT REPAIRER	any industry	430	PLANER OPERATOR, METAL CASTINGS	machine shop
310	PERFUSIONIST	medical ser.	212	PLANT ENGINEER	profess. & kin.
390	PERSONAL TRAINER	amuse. & rec.	321	PLASTER MAKER	nonmet. min.
111	PERSONNEL RECORDS CLERK	clerical	320	PLASTER MOLDER	foundry
111	PERSONNEL RECRUITER	profess. & kin.	420	PLASTER DIE MAKER	pottery & porc.
220	PHARMACIST	medical ser.	380	PLASTERER	construction
220	PHLEBOTOMIST	medical ser.	480	PLASTERER HELPER	construction
211	PHOTOCOPYING MACHINE OPERATOR	clerical	230	PLATEN PRESS FEEDER	print. & pub.
221	PHOTOENGRAVER	print. & pub.	230	PLATEN PRESS OPERATOR	print. & pub.
221	PHOTOFINISHING LABORATORY WORKER	photofinishing	330	PLATER	electroplating
213	PHOTOGRAPHER	amuse. & rec.	460	PLATER, ELECTROLESS, PRINTED CIRCUIT BOARDS	electron. comp.
212	PHOTOGRAPHER, STILL	profess. & kin.	460	PLATER, HOT DIP	galvanizing
221	PHOTOGRAPHIC PLATE MAKER	electron. comp.	460	PLATER, PRINTED CIRCUIT BOARD PANELS	electron. comp.
213	PHOTOJOURNALIST	print. & pub.	221	PLATER, SEMICONDUCTOR WAFERS & COMPONENTS	electron. comp.
230	PHOTOTYPESETTER OPERATOR	print. & pub.	230	PLEATING MACHINE OPERATOR	any industry
310	PHYSIATRIST	medical ser.	481	PLUMBER	construction
311	PHYSICAL THERAPIST	medical ser.	481	PLUMBER APPRENTICE	construction
340	PHYSICAL THERAPY AIDE	medical ser.	481	PLUMBER HELPER	construction
212	PHYSICIAN ASSISTANT	medical ser.	370	PNEUMATIC TOOL REPAIRER	any industry
220	PHYSICIAN, GENERAL PRACTITIONER	medical ser.	380	PNEUMATIC TUBE REPAIRER	any industry
320	PIANO TECHNICIAN	any industry	220	PODIATRIST	medical ser.
			251	POLICE ARTIST	government ser.

Group No.	Occupation	Industry
490	POLICE CAPTAIN	government ser.
111	POLICE CLERK	government ser.
490	POLICE OFFICER	government ser.
490	POLICE OFFICER, STATE HIGHWAY	government ser.
120	POLISHER, EYEGLASS FRAMES	optical goods
321	POLISHER/BUFFER	any industry
330	POLISHING MACHINE OPERATOR	any industry
212	POLYGRAPH EXAMINER	profess. & kin.
360	PORTER	air trans.
360	PORTER, BAGGAGE	hotel & rest.
330	POTTERY MACHINE OPERATOR	pottery & porc.
322	POULTRY DRESSER	agriculture
430	POWER BRAKE OPERATOR	any industry
230	POWER BARKER OPERATOR	paper & pulp
332	POWER PLANT OPERATOR	utilities
330	POWER PRESS TENDER	any industry
332	POWER REACTOR OPERATOR	utilities
351	POWER SHOVEL OPERATOR	any industry
481	POWERHOUSE MECHANIC	utilities
370	PRECISION ASSEMBLER & REPAIRER	aircraft mfg.
320	PRECISION ASSEMBLER, BENCH	aircraft mfg.
110	PRESIDENT	any industry
230	PRESS OPERATOR	laundry & rel.
330	PRESS OPERATOR, CYLINDER	print. and pub.
430	PRESS OPERATOR, HEAVY DUTY	any industry
331	PRESS OPERATOR, MEAT	meat products
230	PRESS OPERATOR, OFFSET	print. & pub.
330	PRESS OPERATOR, ROTOGRAVURE	print. & pub.
321	PRESSER, ALL-AROUND	laundry & rel.
221	PRESSER, HAND	any industry
321	PRESSER, MACHINE	any industry
230	PRINT DEVELOPER, AUTOMATIC	photofinishing
221	PRINTED CIRCUIT BOARD ASSEMBLER, HAND	comm. equip.
120	PRINTED CIRCUIT DESIGNER	profess. & kin.
320	PRINTER, JOB	print. & pub.
390	PROBATION OFFICER	profess. & kin.
251	PROCESS SERVER	business ser.
360	PRODUCE CLERK, RETAIL	retail trade
212	PRODUCER	radio-tv broad.
212	PROMPTER	amuse. & rec.
211	PROOFREADER	print. & pub.

Group No.	Occupation	Industry
111	PROOFREADER, PRODUCTION	print. & pub.
380	PROP MAKER	amuse. & rec.
320	PROSTHETICS TECHNICIAN	protective dev.
310	PROSTHETIST	medical ser.
311	PSYCHIATRIC TECHNICIAN	medical ser.
340	PSYCHIATRIC WARD ATTENDANT	medical ser.
110	PSYCHOLOGIST, CLINICAL	profess. & kin.
110	PSYCHOLOGIST, COUNSELING	profess. & kin.
110	PUBLIC HEALTH SERVICE OFFICER	government ser.
380	PUBLIC ADDRESS SETTER-UP & SERVICER	any industry
111	PUBLIC RELATIONS REPRESENTATIVE	profess. & kin.
212	PULMONARY FUNCTION TECHNICIAN	medical ser.
470	PUMP INSTALLER	any industry
370	PUMP SERVICER	any industry
330	PUMP MACHINE OPERATOR	any industry
332	PUMP STATION OPERATOR, WATERWORKS	waterworks
330	PUNCH PRESS OPERATOR	any industry
430	PUNCH PRESS OPERATOR, AUTOMATIC	any industry
251	PURCHASING AGENT	profess. & kin.
111	PURSER	water trans.
321	PUTTY GLAZER, POTTERY	any industry
221	QUALITY ASSURANCE MONITOR	auto. mfg.
212	QUALITY CONTROL TECHNICIAN	profess. & kin.
480	QUARRY WORKER	mine & quarry
120	QUICK SKETCH ARTIST	amuse. & rec.
221	RACKET STRINGER	toy-sport equip.
330	RADIAL ARM SAW OPERATOR	woodworking
320	RADIAL DRILL PRESS SETUP	machine shop
310	RADIATION THERAPY TECHNOLOGIST	medical ser.
212	RADIOGRAPHER, INDUSTRIAL	any industry
310	RADIOLOGIC TECHNOLOGIST	medical ser.
380	RADIOLOGICAL EQUIPMENT SPECIALIST	inst. & app.
212	RADIOTELEPHONE OPERATOR	any industry
481	RAILROAD CAR BUILDER	railroad equip.
481	RAILWAY CAR REPAIRER	railroad equip.

Group No.	Occupation	Industry
460	RAMP ATTENDANT	air trans.
111	RATER	insurance
251	REAL ESTATE AGENT	profess. & kin.
321	REAMER, HAND	machine shop
330	REAMING MACHINE TENDER	nonfer. metal
111	RECEPTIONIST	clerical
212	RECORDING ENGINEER	radio-tv broad.
360	RECORDING STUDIO SET-UP WORKER	recording
230	RECORDIST	motion picture
214	RECREATION AIDE	social ser.
310	RECREATIONAL THERAPIST	medical ser.
111	RECRUITER, PERSONNEL	profess. & kin.
111	REGISTRATION CLERK	government ser.
212	REHABILITATION CENTER MANAGER	government ser.
481	REINFORCING IRON WORKER	construction
221	REPAIRER	furniture
220	REPAIRER, ART OBJECTS	any industry
320	REPAIRER, OFFICE MACHINES	any industry
320	REPAIRER, SALVAGED PARTS	any industry
320	REPAIRER, SMALL APPLIANCE	house. appl.
320	REPAIRER, WIND INSTRUMENT	any industry
220	REPAIRER/ADJUSTER	office machines
251	REPORTER	print. & pub.
110	REPORTS ANALYST	profess. & kin.
213	REPOSSESSOR	clerical
460	RESAW OPERATOR	woodworking
111	RESEARCHER	profess. & kin.
111	RESERVATION CLERK	clerical
111	RESERVATIONS AGENT	air trans.
311	RESPIRATORY THERAPIST	medical ser.
340	RESPIRATORY THERAPY AIDE	medical ser.
240	REST ROOM ATTENDANT	any industry
380	RESTORATION TECHNICIAN	museums
214	RETAIL CLERK	retail trade
111	REVIEWER, FINAL APPLICATION	insurance
330	REWINDER OPERATOR	paper goods
230	RICE GRADER	grain-feed mills
240	RIDE OPERATOR	amuse. & rec.
482	RIGGER	ship-boat mfg.
482	RIGGER, HIGH	amuse. & rec.

Group No.	Occupation	Industry
481	RIGGER/SLINGER	any industry
330	RIPSAW OPERATOR	woodworking
230	RIVET AND BOLT MAKER	any industry
330	RIVETER, HYDRAULIC	any industry
481	RIVETER, PNEUMATIC	any industry
330	RIVETING MACHINE OPERATOR, AUTOMATIC	aircraft mfg.
330	RIVETING MACHINE OPERATOR	any industry
351	ROAD ROLLER OPERATOR	construction
330	ROBOTIC MACHINE OPERATOR	aircraft mfg.
470	ROBOTICS SERVICE TECHNICIAN	machinery mfg.
351	ROCK DRILL OPERATOR	construction
560	ROLL TENDER/SETTER	print. & pub.
330	ROLLER MACHINE OPERATOR	metal prod., nec
230	ROLLING MILL ATTENDANT	steel & rel.
380	ROOFER	construction
480	ROOFER HELPER	construction
322	ROOM SERVICE CLERK	hotel & rest.
480	ROTARY DRILLER	petrol. & gas
480	ROTARY DRILLER HELPER	petrol. & gas
230	ROUGHER, BAR MILL	steel & rel.
480	ROUGHNECK	petrol. & gas
480	ROUSTABOUT	petrol. & gas
211	ROUTER	clerical
330	ROUTER OPERATOR	any industry
330	ROUTER OPERATOR	woodworking
460	RUBBER CUTTER	rubber goods
230	RUBBER MILL OPERATOR	plastic-synth.
340	RUG CLEANER, HAND OR MACHINE	laundry & rel.
321	RUG REPAIRER	laundry & rel.
420	SADDLE MAKER	leather prod.
212	SAFETY ENGINEER	profess. & kin.
212	SAFETY MANAGER	profess. & kin.
380	SAIL MAKER	ship-boat mfg.
322	SALAD MAKER	water trans.
212	SALES AGENT, INSURANCE	insurance
214	SALES CLERK	retail trade
251	SALES REP, FARM, GARDEN EQPT. & SUPPLIES	wholesale tr.
212	SALES REP, ADVERTISING	print. & pub.
251	SALES REP, COMPUTERS AND EDP SYSTEMS	wholesale tr.

Group No.	Occupation	Industry
212	SALES REP, DATA PROCESSING SERVICES	business ser.
251	SALES REP, DOOR-TO-DOOR	retail trade
212	SALES REP, FINANCIAL SERVICES	financial
251	SALES REP, LIVESTOCK	wholesale tr.
251	SALES REP, OFFICE MACHINES	retail trade
251	SALES REP, RECREATION, SPORTING GOODS	wholesale tr.
251	SALES REP, SECURITY SYSTEMS	business ser.
212	SALES REP, UPHOLSTERY, FURNITURE REPAIR	retail trade
251	SALES REP, WOMEN'S AND GIRLS' APPAREL	wholesale tr.
251	SALESPERSON, AUTOMOBILES	retail trade
214	SALESPERSON, GENERAL MERCHANDISE	retail trade
214	SALESPERSON, PARTS	retail trade
214	SALESPERSON, SHOES	retail trade
430	SALVAGE CUTTER	welding
480	SANDBLASTER	any industry
330	SANDER, MACHINE	woodworking
322	SANDWICH MAKER	hotel & rest.
331	SAUSAGE MAKER	meat products
331	SAUSAGE STUFFER	meat products
321	SAW BLADE FILER	any industry
360	SAWMILL WORKER	saw. & plan.
330	SAWYER	plastic prod.; plastic-synth.
230	SAWYER, CIRCULAR HEAD	saw. & plan.
230	SAWYER, CORK SLABS	wood prod., nec
330	SAWYER, TRIMMER	saw. & plan.
111	SCHEDULER	clerical
212	SCHOOL PRINCIPAL	education
111	SCOREBOARD OPERATOR	amuse. & rec.
251	SCOUT, PROFESSIONAL SPORTS	amuse. & rec.
460	SCRAP HANDLER	any industry
320	SCREEN MAKER, PHOTOGRAPHIC PROCESS	any industry
221	SCREEN MAKER, WALLPAPER	paper goods
330	SCREW MACHINE OPERATOR, MULTIPLE SPINDLE	machine shop
330	SCROLL MACHINE OPERATOR	struct. metal

Group No.	Occupation	Industry
321	SCULPTOR	stonework
112	SECRETARY	clerical
112	SECRETARY, LEGAL	clerical
112	SECRETARY, MEDICAL	medical ser.
112	SECRETARY, SOCIAL	clerical
212	SECURITY GUARD, GATE	any industry
213	SECURITY GUARD, PLANT	any industry
390	SECURITY OFFICER	any industry
230	SEED PELLETTER	agriculture
212	SEISMOLOGIST	profess. & kin.
330	SEMICONDUCTOR PROCESSOR	electron. comp.
380	SEPTIC TANK INSTALLER	construction
480	SEPTIC TANK SERVICER	construction
214	SERVICE MANAGER	automotive ser.
213	SERVICE REPRESENTATIVE	utilities
340	SERVICE STATION ATTENDANT	automotive ser.
213	SET DESIGNER	motion picture
320	SETTER, AUTOMATIC SPINNING LATHE	any industry
360	SET-UP PERSON, TRADE SHOW	retail trade
480	SEWAGE DISPOSAL WORKER	sanitary ser.
221	SEWER, HAND	any industry
480	SEWER LINE REPAIRER	sanitary ser.
341	SEWER PIPE CLEANER	business ser.
230	SEWING MACHINE OPERATOR	tex. prod., nec
370	SEWING MACHINE REPAIRER	any industry
330	SHAPER OPERATOR	woodworking
330	SHAPING MACHINE OPERATOR	machine shop
430	SHEAR OPERATOR	any industry
370	SHEETMETAL MECHANIC	any industry
320	SHEETMETAL FABRICATING MACHINE OPERATOR	any industry
491	SHELLFISH GROWER	fishing & hunt.
490	SHERIFF, DEPUTY	government ser.
481	SHIPFITTER	ship-boat mfg.
480	SHIPFITTER HELPER	ship-boat mfg.
360	SHIPPING AND RECEIVING CLERK	clerical
214	SHIPPING CHECKER	clerical
380	SHIPWRIGHT	ship-boat mfg.
221	SHOE REPAIRER	personal ser.
214	SHOP ESTIMATOR	automotive ser.
210	SHOW HOST/HOSTESS	radio-tv broad.

Group No.	Occupation	Industry
250	SHUTTLE BUS DRIVER	any industry
380	SIDER	construction
341	SIGN POSTER	any industry
120	SIGN WRITER, HAND	any industry
221	SILK SCREEN ETCHER	engraving
221	SILK SCREEN PRINTER	any industry
221	SILK SCREEN FRAME ASSEMBLER	any industry
220	SILVERSMITH	jewelry-silver.
210	SINGER	amuse. & rec.
493	SKI INSTRUCTOR	amuse. & rec.
240	SKI LIFT OPERATOR	amuse. & rec.
590	SKI PATROLLER	amuse. & rec.
221	SKI REPAIRER, PRODUCTION	toy-sport equip.
420	SKINNER	meat products
480	SKIP TENDER	mine & quarry
111	SKIP TRACER	clerical
460	SLASHER TENDER	textile
230	SLICING MACHINE OPERATOR	bakery products
460	SLITTING MACHINE OPERATOR HELPER	any industry
331	SLURRY BLENDER	cement
370	SMOG TECHNICIAN	automotive ser.
590	SMOKE JUMPER	forestry
351	SNOWPLOW OPERATOR	government ser.
230	SOAP MAKER	soap & rel.
111	SOCIAL WORKER	social ser.
111	SOFTWARE ENGINEER	profess. & kin.
213	SOIL CONSERVATIONIST	profess. & kin.
481	SOLAR ENERGY SYSTEM INSTALLER	any industry
470	SOLAR FABRICATION TECHNICIAN	machine shop
120	SOLDERER	jewelry-silver.
111	SORTER	clerical
221	SORTER, AGRICULTURAL PRODUCE	agriculture
221	SORTER, REMNANT	textile
214	SORTER-PRICER	nonprofit org.
212	SOUND MIXER	motion picture
212	SOUND EFFECTS TECHNICIAN	radio-tv broad.
322	SOUS CHEF	hotel & rest.
490	SPECIAL AGENT	government ser.
390	SPECIAL POLICEMAN	any industry
212	SPEECH PATHOLOGIST	profess. & kin.
331	SPINNER	sugar & conf.

Group No.	Occupation	Industry
430	SPINNER, HYDRAULIC	any industry
330	SPINNING LATHE OPERATOR	any industry
221	SPORTS EQUIPMENT REPAIRER	any industry
221	SPOT CLEANER	laundry & rel.
111	SPOTTER, PHOTOGRAPHIC	photofinishing
330	SPRAY PAINTING MACHINE OPERATOR	any industry
460	SPREADER MACHINE, CLOTH	textile
491	STABLE ATTENDANT	any industry
230	STAMPING PRESS OPERATOR	any industry
390	STAND-IN	motion picture
330	STAPLING MACHINE OPERATOR	any industry
380	STATION INSTALLER AND REPAIRER	tel. & tel.
332	STATIONARY ENGINEER	any industry
111	STATISTICIAN, APPLIED	profess. & kin.
340	STEAM CLEANER	automotive ser.
482	STEEL ERECTOR	construction
380	STEEL PLATE CAULKER	any industry
482	STEEPLE JACK	construction
112	STENOCAPTIONER	radio-tv broad.
112	STENOGRAPHER	clerical
112	STENOTYPE OPERATOR	clerical
330	STEREOTYPE CASTER & MOLDER	print. & pub.
230	STERILIZER	medical ser.
351	STEVEDORE	water trans.
230	STILL TENDER	any industry
230	STITCHER, STANDARD MACHINE	boot & shoe
230	STITCHER, WIRE, SADDLE AND SIDE	print. & pub.
214	STOCK CLERK	clerical
360	STOCK CLERK	clerical
360	STOCK CLERK	retail trade
214	STOCK CLERK, AUTOMOTIVE EQPT.	clerical
321	STONE CARVER	stonework
480	STONE DRILLER	stonework
220	STONE SETTER	jewelry-silver.
480	STONE SPLITTER OPERATOR	stonework
321	STONECUTTER, HAND	stonework
330	STONECUTTER, MACHINE	stonework
380	STONEMASON	construction
120	STONER	jewelry-silver.
470	STOVE REFINISHER	any industry
321	STRAIGHTENER, HAND	any industry

Group No.	Occupation	Industry	Group No.	Occupation	Industry
330	STRAIGHTENING PRESS OPERATOR	any industry	230	TACKING MACHINE OPERATOR	any industry
330	STRANDING MACHINE OPERATOR	elec. equip.	221	TAILOR, ALTERATION	garment
460	STRAPPING MACHINE OPERATOR	wood. container	221	TAILOR, CUSTOM	garment
340	STREET CLEANER/SWEEPER, MANUAL	government ser.	460	TANK CLEANER	any industry
380	STREET LIGHT SERVICER	utilities	380	TAPER	construction
351	STREET SWEEPER OPERATOR	government ser.	120	TAPER, PRINTED CIRCUIT LAYOUT	electron. comp.
111	STRESS ANALYST	aircraft mfg.	330	TAPPING MACHINE TENDER	nut & bolt
212	STRESS TEST TECHNICIAN	medical ser.	111	TAX CLERK	clerical
230	STRETCHING MACHINE TENDER, FRAME	leather mfg.	111	TAX PREPARER	business ser.
221	STRIPER & LETTERER, HAND, MOTORCYCLES	any industry	250	TAXI DRIVER	motor trans.
331	STRIPPER-ETCHER, PRINTED CIRCUIT BOARDS	electron. comp.	311	TAXIDERMIST	profess. & kin.
482	STRUCTURAL STEEL WORKER	construction	214	TEACHER AIDE	education
482	STRUCTURAL STEEL WORKER HELPER	construction	212	TEACHER, ADULT EDUCATION	education
380	STUCCO MASON	construction	214	TEACHER, ELEMENTARY SCHOOL	education
590	STUNT PERFORMER	amuse. & rec.	214	TEACHER, INDUSTRIAL ARTS	education
320	SUBASSEMBLER	machinery mfg.	214	TEACHER, LEARNING DISABLED	education
332	SUBSTATION OPERATOR	utilities	214	TEACHER, MUSIC	education
250	SUBWAY CAR OPERATOR	r.r. trans.	390	TEACHER, PHYSICAL EDUCATION	education
332	SUPERCALENDER OPERATOR	paper & pulp	214	TEACHER, PHYSICALLY IMPAIRED	education
212	SUPERINTENDENT, BUILDING	any industry	214	TEACHER, PRESCHOOL/KINDERGARTEN	education
213	SUPERINTENDENT, CONSTRUCTION	construction	212	TEACHER, SECONDARY SCHOOL	education
212	SUPERINTENDENT, PLANT PROTECTION	any industry	214	TEACHER, VOCATIONAL TRAINING	education
360	SUPPLY CLERK	clerical	120	TECHNICAL ILLUSTRATOR	profess. & kin.
220	SURGEON	medical ser.	112	TELEGRAPH OPERATOR	clerical
230	SURGICAL DRESSING MAKER, MACHINE	protective dev.	112	TELEPHONE OPERATOR	clerical
212	SURGICAL TECHNICIAN	medical ser.	112	TELEPHONE ANSWERING SERVICE OPERATOR	business ser.
213	SURVEYOR	surveying/cartographic	350	TELEPHONE DIRECTORY DELIVERER	business ser.
360	SURVEYOR HELPER	any industry	111	TELEVISION CONSOLE MONITOR	radio-tv broad.
340	SWIMMING POOL SERVICER	any industry	380	TELEVISION RECEIVER/ANTENNA INSTALLER	any industry
111	SWITCHBOARD OPERATOR, POLICE DISTRICT	government ser.	470	TELEVISION TECHNICIAN	radio-tv broad.
331	SYRUP MAKER	beverage	320	TELEVISION AND RADIO REPAIRER	any industry
111	SYSTEMS ANALYST	profess. & kin.	211	TELLER	financial
111	SYSTEMS PROGRAMMER	profess. & kin.	214	TELLER, VAULT	financial
			320	TEMPLATE MAKER	any industry
			380	TERRAZZO INSTALLER	construction
			480	TERRAZZO INSTALLER HELPER	construction
			220	TEST TECH, SEMICONDUCTOR PROCESSING EQUIPMENT	electron. comp.
			320	TESTER, NONDESTRUCTIVE	profess. & kin.

Group No.	Occupation	Industry
212	TESTING MACHINE OPERATOR, METAL	profess. & kin.
370	THERMAL CUTTER, HAND	welding
330	THERMAL CUTTING-MACHINE OPERATOR	welding
320	THERMOSTAT REPAIRER	inst. & app.
221	THREAD CUTTER, HAND OR MACHINE	any industry
330	THREADING MACHINE OPERATOR	machine shop
321	THROWER	pottery & porc.
212	TICKET AGENT	any industry
213	TICKET INSPECTOR, TRANSPORTATION	r.r. transportation
230	TICKET PRINTER	any industry
240	TICKET TAKER	amuse. & rec.
330	TILE MAKER	brick & tile
380	TILE SETTER	construction
480	TILE SETTER HELPER	construction
330	TIMBER-SIZER OPERATOR	saw. & plan.
212	TIME AND MOTION STUDY ANALYST	profess. & kin.
321	TIRE BUILDER, AUTOMOBILE	rubber tire
460	TIRE CHANGER	automotive ser.
460	TIRE MOLDER	rubber tire
321	TIRE RECAPPER	automotive ser.
460	TIRE REPAIRER	automotive ser.
420	TIRE TRIMMER, HAND	rubber tire
211	TITLE SEARCHER	real estate
211	TOLL COLLECTOR	government ser.
220	TOOL DESIGNER	profess. & kin.
330	TOOL DRESSER	any industry
320	TOOL MAKER	machine shop
320	TOOL MAKER, BENCH	machine shop
120	TOOL PROGRAMMER, NUMERICAL CONTROL	electron. comp.
360	TOOL AND EQUIPMENT RENTAL CLERK	business ser.
360	TOOL CRIB ATTENDANT	clerical
430	TORCH STRAIGHTENER AND HEATER	any industry
221	TOUCH-UP PAINTER, HAND	any industry
482	TOWER ERECTOR	construction

Group No.	Occupation	Industry
212	TOXICOLOGIST	pharmaceut.
221	TOY ASSEMBLER	toy-sport equip.
351	TRACTOR OPERATOR	any industry
351	TRACTOR CRANE OPERATOR	any industry
111	TRAFFIC CLERK	business ser.
212	TRAFFIC ENGINEER	government ser.
490	TRAFFIC OFFICER	government ser.
111	TRAIN DISPATCHER	r.r. trans.
112	TRANSCRIBING MACHINE OPERATOR	clerical
370	TRANSFORMER ASSEMBLER	elec. equip.
111	TRANSLATOR, DOCUMENTS	profess. & kin.
492	TREE CUTTER	agriculture
491	TREE PRUNER, LOW LEVEL/BUCKET	agriculture
482	TREE SURGEON	agriculture
482	TREE TRIMMER	tel. & tel.
230	TRIMMER, MACHINE	garment
322	TRIMMER, MEAT	meat products
221	TROPHY ASSEMBLER	jewelry-silver.
350	TRUCK DRIVER	any industry
350	TRUCK DRIVER, CONCRETE MIXING	construction
350	TRUCK DRIVER, DUMP TRUCK	any industry
350	TRUCK DRIVER, GARBAGE	motor trans.
350	TRUCK DRIVER, LOGS	logging
351	TRUCK DRIVER, ROAD OILING	construction
350	TRUCK DRIVER, SALES ROUTE	retail trade
350	TRUCK DRIVER, TANK TRUCK	petrol. refin.
350	TRUCK DRIVER, TOW TRUCK	automotive ser.
350	TRUCK DRIVER, TRACTOR-TRAILER	any industry
460	TRUCK LOADER	any industry
460	TRUCK DRIVER HELPER	any industry
380	TRUSS BUILDER, CONSTRUCTION	construction
320	TUBE ASSEMBLER, CATHODE RAY	electron. comp.
221	TUBE BENDER, HAND	any industry
341	TUBE CLEANER	any industry
330	TUBULAR FURNITURE MAKER	any industry
111	TUMOR REGISTRAR	medical ser.
332	TURBINE ATTENDANT	utilities
332	TURBINE OPERATOR	utilities
330	TURRET LATHE OPERATOR	machine shop
212	TUTOR	education
221	TYPESETTER/COMPOSITOR	print. & pub.

Group No.	Occupation	Industry
230	TYPESETTING MACHINE TENDER	print. & pub.
112	TYPIST	clerical
212	ULTRASOUND TECHNOLOGIST	medical ser.
214	UMPIRE	amuse. & rec.
110	UNDERWRITER, MORTGAGE LOAN	financial
321	UPHOLSTERY REPAIRER	furniture
110	URBAN PLANNER	profess. & kin.
370	USED CAR RENOVATOR	retail trade
240	USHER	amuse. & rec.
330	UTILITY OPERATOR	saw. & plan.
320	VACUUM CLEANER REPAIRER	any industry
351	VACUUM CLEANER OPERATOR, INDUSTRIAL	any industry
250	VALET, PARKING	automotive serv.
330	VARIETY SAW OPERATOR	woodworking
112	VARITYPE OPERATOR	clerical
214	VAULT CASHIER	business ser.
213	VENDOR	amuse. & rec.
340	VENETIAN BLIND CLEANER AND REPAIRER	any industry
311	VETERINARIAN	medical ser.
311	VETERINARIAN, LABORATORY ANIMAL CARE	medical ser.
311	VETERINARY TECHNICIAN	medical ser.
212	VIDEOTAPE OPERATOR, STUDIO	radio-tv broad.
110	VOCATIONAL REHABILITATION CONSULTANT	government ser.
212	VOICE PATHOLOGIST	profess. & kin.
221	WAFER FAB OPERATOR	electron. comp.
322	WAITER/WAITRESS	hotel & rest.
480	WALLPAPER REMOVER, STEAM	construction
360	WAREHOUSE WORKER	any industry
331	WASHER, MACHINE	any industry
340	WASHER, MACHINE	laundry & rel.
460	WASHING MACHINE LOADER AND PULLER	laundry & rel.
460	WASTE DISPOSAL ATTENDANT, RADIOACTIVE	any industry
332	WASTE TREATMENT OPERATOR	chemical
332	WASTEWATER TREATMENT PLANT OPERATOR	sanitary ser.
220	WATCH REPAIRER	clock & watch

Group No.	Occupation	Industry
380	WATER METER INSTALLER	waterworks
332	WATER PUMP TENDER	any industry
460	WATER SOFTENER SERVICER AND INSTALLER	business ser.
332	WATER TREATMENT PLANT OPERATOR	waterworks
481	WAYS MAN	ship-boat mfg.
230	WEAVER, TEXTILE	nonmet. min.
330	WEB PRESS OPERATOR HELPER, OFFSET	print. & pub.
330	WEB PRESS OPERATOR	print. & pub.
360	WEIGHER, PRODUCTION	any industry
214	WEIGHER, SHIPPING AND RECEIVING	clerical
240	WEIGHT REDUCTION SPECIALIST	personal services
460	WELDER HELPER	welding
430	WELDER, ARC	welding
370	WELDER, COMBINATION	welding
370	WELDER, GAS	welding
370	WELDER, GUN	welding
370	WELDER, PRODUCTION LINE	welding
430	WELDER, TACK	welding
380	WELDER-FITTER	welding
330	WELDING MACHINE OPERATOR, ARC	welding
480	WELL DIGGER	construction
480	WELL PULLER	petrol. & gas
480	WELL DRILL OPERATOR	construction
480	WELL DRILL OPERATOR HELPER	construction
320	WHEEL LACER AND TRUER	motor-bicycles
482	WIND GENERATING ELECTRIC POWER INSTALLER	construction
482	WIND TURBINE TECHNICIAN	construction; utilities
330	WINDER	paper goods
460	WINDER OPERATOR, FLOOR COVERINGS	fabrication
230	WINDER, MAGNETIC TAPE	recording
330	WINDER, YARN	tex. prod., nec
330	WINDING-MACHINE OPERATOR, CLOTH	textile
341	WINDOW CLEANER	any industry

Group No.	Occupation	Industry	Group No.	Occupation	Industry
380	WINDOW REPAIRER	any industry			
213	WINE MAKER	beverage			
240	WINE STEWARD/STEWARDESS	hotel & rest.			
332	WINERY WORKER	beverage			
221	WIRE HARNESS ASSEMBLER	elec. equip.			
330	WIRE DRAWING MACHINE TENDER	nonfer. metal			
230	WIRE WRAPPING MACHINE OPERATOR	electron. comp.			
330	WOOD-CARVING MACHINE OPERATOR	woodworking			
321	WOOL AND PELT GRADER	meat products			
112	WORD PROCESSING MACHINE OPERATOR	clerical			
330	WRAPPING MACHINE OPERATOR	any industry			
480	WRECKER, CONSTRUCTION	construction			
112	WRITER, PROSE, FICTION AND NONFICTION	profess. & kin.			
112	WRITER, TECHNICAL PUBLICATIONS	profess. & kin.			
212	XRAY OPERATOR, INDUSTRIAL	any industry			
310	XRAY TECHNOLOGIST	medical ser.			
460	YARD ATTENDANT, BUILDING MATERIALS	retail trade			
351	YARDER OPERATOR, FIXED/PORTABLE	logging			

PART B - OCCUPATIONAL GROUP CHART

OCCUPATION DESIGNATOR		STRENGTH DESIGNATOR				
		1 Very Light	2 Light	3 Medium	4 Heavy	5 Very Heavy
1	Professional, Technical, Clerical	110, 111, 112 Case worker Auditor Editor	210, 211, 212, 213, 214 Adm. clerk Bank clerk Clerk, general	310, 311 Physical therapist Chiropractor Psych. tech.		
2	Hand Intensive	120 Drafter, civil Cartoonist Assemb/semi-cond.	220, 221 Dentist Microelect. tech. Surgeon	320, 321, 322 Die maker Meter repair Precision assem.	420 Butcher Saddle maker Hide puller	
3	Machine Operators, Tenders		230 Coil winder Cutter, machine Palletizer oper.	330, 331, 332 Bend. mach. Oper. Cut-off sawyer Laminating mach.	430 Boiler maker Metal fabricator Welder-arc	
4	Cleaners, Attendants		240 Child monitor Restroom attend. Ticket taker	340, 341 Auto washer Janitor Nurse's aide		
5	Drivers		250, 251 Coin-mach. collector Bus driver	350, 351 Truckdriver/ Tractor-trailer Truckdriver/ dump		
6	Laborers, Material Handlers			360 Warehouse worker Crate maker Material expediter	460 Baker's helper Material stacker Ramp attendant	560 Ambul. Attendant Furniture mover Miner
7	Mechanics, Installers, Repairers, Servicers			370 Mechanic-tractor Precision assem. Welder, gas	470 Mechanic-diesel Furn. assem/heavy TV tech.	

OCCUPATION DESIGNATOR		1 Very Light	2 Light	3 Medium	4 Heavy	5 Very Heavy
8	Construction Workers			380 Electrician Carpenter-Const Handy person	480, 481, 482 Bricklayer Carpenter/ Rough Millwright	
9	Miscellaneous		290 Beautician Barber Cosmetologist	390 Security officer Counselor, camp	490, 491, 492, 493 Farm laborer Gardener Log sorter	590 Athlete Jockey Dancer

PART C – OCCUPATIONAL GROUP CHARACTERISTICS

Group 110			Typical occupations: Billing Clerk, Computer Keyboard Operator, Secretary	Grip Leg Psych	E C I
Professional Occupations	Spine Shoulder Elbow	C C D			
Some use of keyboards but less than 112 or 112; greater standing and walking demands than 112 and 120.	Wrist Finger motion. Grip Leg	D F D D	Group 120		
Typical occupations: Lawyer, Loan Officer, Urban Planner	Psych	J	Most Technical Occupations	Spine Shoulder Elbow Wrist Finger motion Grip	D E G H H F
			Precision work requiring skill and dexterity; use of hand tools; more sitting than 110 and 111.	Leg Psych	C I
			Typical occupations: Electrical drafter, Illustrator, Jeweler		
Group 111			Group 210		
Professional and Clerical Occupations	Spine Shoulder Elbow	C D F	Mostly Professional Occupations	Spine Shoulder Elbow Wrist Finger motion Grip	D C D D E C
Substantial use of keyboards; greater demands for standing and walking than 112 and 120.	Wrist Finger motion Grip Leg	G G E D	Extensive speech and hearing; standing and sitting; may require driving to business locations; other physical demands at the lower end of the light category.	Psych	I
Typical occupations: Accountant, Claims Clerk, Reservations Agent	Psych	I	Typical occupations: Actor, Announcer. Clergy member		
Group 112					
Mostly Clerical Occupations	Spine Shoulder	D D			
Highest demand for use of keyboard; prolonged sitting.	Elbow Wrist Finger motion	G H I			

Group 211

Mostly Clerical Occupations	Spine	D
	Shoulder	D
Emphasis on frequent fingering, handling, and possibly some keyboard work; spine and leg demands similar to 210.	Elbow	F
	Wrist	G
	Finger motion	G
	Grip	E
	Leg	E
Typical occupations: Bank clerk, Inventory clerk, License clerk	Psych	H

Group 212

Mostly Professional and Medical Occupations	Spine	E
	Shoulder	E
	Elbow	E
Work predominantly performed indoors, but may require driving to locations of business; less use of hands than 211; slightly higher demands on spine than 210 & 211.	Wrist	F
	Finger motion	F
	Grip	E
	Leg	E
Typical occupations: Chemist, Dialysis Technician, Secondary School Teacher	Psych	J

Group 213

Mostly Professional Occupations	Spine	F
	Shoulder	E
Work performed indoors and outdoors; occasional climbing and uneven ground required, therefore spine and legs have slightly higher variants for this strength level.	Elbow	E
	Wrist	E
	Finger motion	F
	Grip	E
	Leg	F
	Psych	I

Typical occupations: Airplane Inspector, Meter Reader, Property Manager

Group 214

Clerical (physically active) Occupations; Educators, & Retail Sales Occupations	Spine	F
	Shoulder	F
	Elbow	F
	Wrist	G
Very high demand for speech, hearing and vision; high demand for fingering and handling; spine and leg demands at highest level for 200 series.	Finger motion	G
	Grip	F
	Leg	F
	Psych	I

Typical occupations: Auto Shop Estimator, Elementary School Teacher, Retail Sales Clerk

Group 220

Fine precision Occupations in medical, electronic and optical industries	Spine	E
	Shoulder	F
	Elbow	G
	Wrist	H
Very high demands for vision; high demands for hand activity – use of hand tools; highest variants in this strength category for fingering and arm Disabilities.	Finger motion	H
	Grip	F
	Leg	E
	Psych	J

Typical occupations: Dental Hygienist, Instrument Maker & Repairer, Surgeon

Group 221

Light Assembly Occupations, Food Preparation Occupations	Spine	E
	Shoulder	F
	Elbow	G
Vision important; repetitive fingering and use of hand tools; similar to 220 for all parts of body except for wrist and finger motion which is one variant lower.	Wrist	G
	Finger motion	G
	Grip	F
	Leg	E
	Psych	F

Typical occupations: Assembler, small products Inspector, electronics Produce Sorter

Group 230

Machine Operator and Tenders	Spine	E
	Shoulder	F
Average demands for this strength level on spine and legs; hand activities are most significant.	Elbow	F
	Wrist	F
	Finger motion	G
	Grip	G
	Leg	E
Typical occupations: Bottle Packer, Circular Saw Operator, Offset Press Operator	Psych	F

Group 240

Mostly Attendants (providing services)	Spine	E
	Shoulder	D
	Elbow	E
Minimal hand activities; low on arm activities; average for 200 series on spine and legs.	Wrist	E
	Finger motion	E
	Grip	D
	Leg	E
Typical occupations: Host/Hostess,	Psych	G

Parking Lot Attendant, booth, Weight Reduction Specialist

Group 250

Public Transportation Drivers & Light Delivery Drivers	Spine	F
	Shoulder	F
	Elbow	G
Operates light automotive equipment over public thoroughfares; vision, hearing and other head disabilities important; highest variants for spine and leg activities in 200 series (along with 213 & 214); grip demands similar to 251.	Wrist	F
	Finger motion	F
	Grip	F
	Leg	F
	Psych	H

Typical occupations: Parking Enforcement Officer, Subway Car Operator, Taxi Driver

Group 251

Outside Sales, Inspectors, & Business Agents (performing extensive driving to reach business locations)	Spine	E
	Shoulder	D
	Elbow	F
	Wrist	E
Work requires extensive driving of light automotive equipment over public thoroughfares to reach business locations; vision, hearing and other head disabilities important; average demand for spine and leg activities for this strength level; arms are one variant lower than 250.	Finger motion	F
	Grip	F
	Leg	E
	Psych	I

Typical occupations: Food & Drug Inspector, Real Estate Agent. Sales, Rep. sporting goods

Group 290

Personal Attendants	Spine	E
	Shoulder	G
Vision important; cosmetic appearance important; arms variants at high end for 200 series.	Elbow	G
	Wrist	H
	Finger motion	G
	Grip	F
Typical occupations: Hair Stylist	Leg	E
	Psych	H

Group 310

Medical Occupations	Spine	F
	Shoulder	F
Low end of 300 series for most parts of body; head disabilities, including speech, hearing, PTHS are highest in 300 series.	Elbow	F
	Wrist	F
	Finger motion	F
	Grip	F
	Leg	F
Typical occupations: Acupressurist, MRI Technologist, X-ray Technologist	Psych	I

Group 311

Mostly Medical Occupations	Spine	G
	Shoulder	F
Medical treatments performed result in higher spine demands; head disabilities are at the highest levels.	Elbow	G
	Wrist	G
	Finger motion	G
	Grip	F
Typical occupations: Masseur/Masseuse Nurse – LVN, Psychiatric Technician	Leg	F
	Psych	J

Group 320

Assemblers	Spine	F
	Shoulder	F
Precision work requiring use of hand tools; highest arm variants for the 320 series; lower end variants for 300 series for spine & leg (same as 321 & 322); highest head variants in 320 series.	Elbow	H
	Wrist	I
	Finger motion	H
	Grip	H
	Leg	F
	Psych	H
Typical occupations: Machinist, Office Machine Servicer, Television & Radio Repairer		

Group 321

Assemblers	Spine	F
	Shoulder	F
Use of hand tools required; precision requirements less than 320 – arm variants slightly lower; same demand on spine and legs as 320 & 322.	Elbow	G
	Wrist	H
	Finger motion	G
	Grip	G
	Leg	F
Typical occupations: Furniture	Psych	F

Assembler, Garment Cutter, machine
Painter, spray gun

Observation and control of
machinery; occasional stooping
required; mechanical adjustments
performed; variants similar to 332.

Elbow F
Wrist F
Finger motion F
Grip F
Leg F
Psych F

Typical occupations: Coating
Machine Op, Mixing Machine Op,
food prep; Washer, machine

Group 322

Food Preparation and Service
Occupations

Spine F
Shoulder F
Elbow G
Wrist G
Finger motion G
Grip G
Leg F
Psych G

Least precise work in 320 series –
arm variants the lowest; spine & legs
same as 320 & 321

Typical occupations: Airline Flight
Attendant, Cook, Waiter/Waitress

Group 332

Observation of Large Stationary
Equipment

Spine F
Shoulder F
Elbow F
Wrist E
Finger motion F
Grip F
Leg F
Psych G

Work performed in a plant or other
large facility, some mechanical
adjustments of machinery performed
lowest variants for 300 series for most
parts of body.

Typical occupations: Brewery Cellar
Worker, Power Reactor Operator,
Stationary Engineer

Group 330

Press Operators, Sawyers, etc.

Spine F
Shoulder F
Elbow G
Wrist F
Finger motion G
Grip G
Leg F
Psych F

Most demanding on arms of machine
operations series (330s); spine and
legs at lower end for 300 series, &
same as 331 & 322.

Typical occupations: Blister Machine
Operator, Power Press Tender,
Tubular Furniture Maker

Group 340

Mostly Cleaners

Spine G
Shoulder F
Elbow G
Wrist F
Finger motion F
Grip F
Leg G
Psych D

Work involves cleaning equipment
and/or buildings; operation of
cleaning devices, some lifting, some
climbing, lowest variants for head
disabilities of 300 series; lower end of
300 series for arms; highest demands
are for spine & leg activities

Typical occupations: Auto Washer &
Polisher, Janitor, Nurse Aide

Group 331

Machine Tending & Processing

Spine F
Shoulder F

Group 341

Cleaners (working at high levels)	Spine	G
	Shoulder	G
Work generally performed at high levels – higher end of 300 series for spine & legs; average demands on arms.	Elbow	G
	Wrist	F
	Finger motion	F
	Grip	F
	Leg	G
Typical occupations: Aircraft Service Attendant, Sign Poster, Window Cleaner	Psych	D

Group 350

Truck Drivers	Spine	G
	Shoulder	F
Operate heavy vehicle over public thoroughfares; may do some loading of materials, may tie down loads, may hook up hoses, etc., and performs related duties; head disabilities highest in 300 series.	Elbow	H
	Wrist	F
	Finger motion	G
	Grip	G
	Leg	G
	Psych	H
Typical occupations: Armored Car Driver, Lunch Truck Driver, Truck Driver		

Group 351

Heavy Equipment Operators	Spine	G
	Shoulder	G
Operates heavy construction equipment at work sites; arm demands at lower end of 300 series; spine & leg demands at higher end of 300 series.	Elbow	H
	Wrist	G
	Finger motion	G
	Grip	G
	Leg	G
	Psych	G
Typical occupations: Crane Operator, Forklift Operator, Snowplow Operator		

Group 360

Porters, Packers	Spine	G
	Shoulder	G
Significant lifting and carrying required; significant walking required; may occasionally climb at low levels; variants are “G” for most parts of body; head disabilities are mostly “F” or lower.	Elbow	G
	Wrist	F
	Finger motion	F
	Grip	G
	Leg	G
	Psych	E
Typical occupations: Clerk, Shipping; Conveyor Tender; Warehouse worker		

Group 370

Mechanical Assembly, Installation, Repairers	Spine	G
	Shoulder	G
	Elbow	I
Mechanical work on automobiles, machinery and other equipment, requiring a combination of some skill and significant physical effort; highest variants in 300 series for arm	Wrist	J
	Finger motion	H
	Grip	H
	Leg	G
	Psych	H

and head disabilities

Typical occupations: Automobile Accessories Installer; Mechanic, automobile; Welder, Combination

Group 380

Skilled Construction Work

Spine	H
Shoulder	H
Elbow	I
Wrist	J
Finger motion	H
Grip	H
Leg	I
Psych	H

Work requires construction of buildings or large structure; strenuous demands on arms, legs & spine result in highest variants in 300 series; significant climbing required.

Typical occupations: Burglar Alarm, Carpenter Electrician

Group 390

Security Officers, Coaches

Spine	G
Shoulder	G
Elbow	G
Wrist	G
Finger motion	G
Grip	G
Leg	H
Psych	H

Inside and outside work requiring significant walking, some uneven ground, and climbing –leg demands are most significant aspect of duties; work may be high risk but not necessarily highly physical; demands for arms & spine are at middle of 300 series.

Typical occupations: Bodyguard, Instructor, Physical education, Security Officer

Group 420

Meat Processing +

Spine	H
Shoulder	G
Elbow	H
Wrist	I
Finger motion	G
Grip	H
Leg	G
Psych	F

Heavy demands placed on arms; spine demand similar to most in 400 series; leg demands lowest in 400 series.

Typical occupations: Baker, Butcher, Glass Cutter

Group 430

Machine-assisted Metal Shaping

Spine	H
Shoulder	H
Elbow	I
Wrist	H
Finger motion	H
Grip	H
Leg	H
Psych	G

Heavy demands on spine & legs in lifting & carrying; work performed at ground level; requires use of heavy hand tools or force with arms.

Typical occupations: Boilermaker, Power Brake Operator, Shear Operator

Group 460

Material Handlers & Machine Loaders & Unloaders

Spine	H
Shoulder	G
Elbow	G
Wrist	G
Finger motion	F
Grip	G
Leg	H
Psych	E

Strenuous demands on spine & legs for lifting and carrying heavy objects; lowest demand for specialized arm activities in 400 series.

Typical occupations: Baggage Handler, Chain Offbearer, Laborer,

Group 470

Installers & Repairers	Spine	H
	Shoulder	H
Strenuous demands on all parts of body – variants are at the higher end of the 400 series.	Elbow	I
	Wrist	J
	Finger motion	H
	Grip	H
Typical occupations: Household Appliance Installer, Maintenance Mechanic, Television Technician	Leg	H
	Psych	H

Group 480

Construction Helpers, Oil Field Workers & Some Skilled Construction Workers	Spine	I
	Shoulder	H
	Elbow	H
	Wrist	G
Heavy laboring work at construction sites or other work sites; very strenuous use of spine for lifting and exerting force; heavy demands on arms (similar to 492); leg requirements lower than for 481 & 492.	Finger motion	G
	Grip	G
	Leg	H
	Psych	E
Typical occupations: Carpenter Helper; Laborer, construction; Roughneck		

Group 481

Skilled Construction Workers	Spine	I
	Shoulder	H
Work requires construction of buildings or large structures; skilled work performed at various levels, with significant demands for climbing, but lower demands on legs than 482; strenuous use of arms (same as 470).	Elbow	I
	Wrist	J
	Finger motion	H
	Grip	H
	Leg	I
	Psych	H
Typical occupations: Cable Television Installer, Millwright, Pipe Fitter		

Group 482

Skilled Construction Workers	Spine	J
	Shoulder	I
Construction and maintenance work performed at high and dangerous levels – balance required; demands on spine & legs similar to 590; very strenuous use of arms.	Elbow	J
	Wrist	J
	Finger motion	I
	Grip	J
	Leg	J
	Psych	I
Typical occupations: Bridge Maintenance Worker, Grip (movie industry), Tree Trimmer		

Group 490

Mostly Sworn Officers – Police & Fire (legal presumptions apply)	Spine	I
	Shoulder	I
	Elbow	I
Workers called upon to perform demanding activities in unpredictable and dangerous circumstances;	Wrist	H
	Finger motion	H
	Grip	I

significant demands on all parts of body.

Leg I
Psych J

Typical occupations: Fire Fighter, Paramedic, Police Officer

Group 491

Agricultural & Livestock Workers

Spine H
Shoulder G
Elbow G
Wrist G
Finger motion F
Grip G
Leg H
Psych D

Work requires tending the land and/or caring for animals; physical demands & variants similar to 460 but slightly lower in mental demands.

Typical occupations: Dog Catcher; Farmer, General; Gardener

Group 492

Logging & Fishing Occupations

Spine I
Shoulder H
Elbow H
Wrist H
Finger motion G
Grip H
Leg I
Psych E

Very physical work performed outside; high demand on spine & legs for balancing, working on rugged terrain, and climbing; arm and other variants similar to 560.

Typical occupations: Buckler, Logger, all-round

Group 493

Mostly Professional Athletes

Spine H
Shoulder H
Elbow H
Wrist H
Finger motion G
Grip H
Leg I
Psych H

Substantial athletic performance required but less arduous than Group 590

Typical occupations: Bowler, professional, Ski instructor, Aerobic instructor

Group 560

Mostly Material Handlers

Spine J
Shoulder H
Elbow H
Wrist H
Finger motion G
Grip H
Leg I
Psych D

Requires lifting of large and/or very heavy objects or exerting very significant force – very strenuous demands placed on spine & legs.

Typical occupations: Ambulance Attendant; Furniture Mover; Garbage Collector, manual

Group 590

Mostly Professional Athletes

Spine J
Shoulder J
Elbow J
Wrist J
Finger motion I
Grip J
Leg J
Psych I

Peak athletic performance requiring whole body strength with specialized training and skills; highest variants for all parts of the body.

Typical occupations: Athlete, professional; Stunt Performer

SECTION 4 - OCCUPATIONAL VARIANTS

Use this section to determine the occupational variant for the particular impairment and occupation under consideration.

Locate the row on which the impairment number appears*, and the column headed by the group number. Record the letter appearing at the intersection of the row and column. This letter is the "Occupational Variant" which is represented by a letter between "C" and "J" inclusive.

After establishing the occupational variant, turn to Section 5, page 5-1 to adjust the rating for occupation.

*All impairment numbers contain eight numbers in the form XX.XX.XX.XX. Ranges of impairment numbers with the same variants are represented in two ways. As an example, numbers beginning with 03.01-, 03.02- and 03.03- are represented as 03.01--03.03. And all impairment numbers beginning with 13.11.01- are shown as 13.11.01.XX.

		110	111	112	120		210	211	212	213	214	220	221	230	240	250	251	290		310	311	320	321	322	330
03.01 -- 03.06	CARDIO-HEART	G	F	E	E		F	F	G	G	G	G	E	E	F	G	G	F		G	H	F	F	F	F
04.01.00.00	HYPERTENSION	G	F	E	E		F	F	G	G	G	G	E	E	F	G	G	F		G	H	F	F	F	F
04.02.00.00	AORTIC DISEASE	G	F	E	E		F	F	G	G	G	G	E	E	F	G	G	F		G	H	F	F	F	F
04.03.01.00	PERIPH - UE	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G
04.03.02.00	PERIPH - LE	D	D	D	D		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F
04.04.00.00	PULM CIRC	F	E	D	D		H	E	F	F	F	E	E	E	E	F	F	F		F	G	F	F	F	F
05.01 -- 05.03	RESPIRATORY	F	E	D	D		H	E	F	F	F	E	E	E	E	F	F	F		F	G	F	F	F	F
06.01.00.00	UPPER DIGEST	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F
06.02.00.00	COLON, RECTUM	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F
06.03.00.00	FISTULAS	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F
06.04.00.00	LIVER	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F
06.05.00.00	HERNIA	C	C	C	C		C	D	E	F	F	D	D	E	E	F	E	D		F	G	F	F	F	F
07.01 -- 07.04	URINARY	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F
07.05.00.00	REPRODUCTIVE	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F
08.01 -- 08.02	SKIN-SCARS	I	I	I	H		J	I	I	H	J	J	G	E	J	H	J	J		I	J	E	E	H	E
08.03 -- 08.04	DERMATITIS	F	F	F	F		F	F	F	F	F	G	F	F	F	F	F	H		F	G	G	F	H	F
08.05.00.00	SKIN CANCER	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F
09.01.00.00	HEMATOPOIETIC	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F
10.01.00.00	DIABETES	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F
11.01.01.00	EAR-HEARING	J	H	I	F		J	H	I	H	J	H	D	E	H	H	J	I		J	J	E	D	H	E
11.01.02.00	VESTIBULAR	D	D	D	D		E	D	E	H	F	F	F	F	E	G	F	E		F	F	F	F	F	F
11.02.01.00	FACE-COSMETIC	I	I	I	H		J	I	I	H	J	J	G	E	J	H	J	J		I	J	E	E	H	E
11.02.02.00	FACE-EYE	I	I	J	J		J	I	I	I	J	J	H	G	G	I	I	J		I	J	I	H	H	G
11.03.01.00	NOSE - SMELL	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	G		F	F	F	F	H	F
11.03.02.00	MASTICATION	I	H	H	F		J	H	I	H	J	I	F	F	G	G	I	H		H	I	F	F	G	F
11.03.03.00	TASTE-SMELL	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	G		F	F	F	F	H	F
11.03.04.00	VOICE-SPEECH	J	I	I	F		J	I	I	H	J	I	D	D	H	H	J	I		I	I	D	C	G	D
12.01 -- 12.03	VISION	H	I	J	J		I	I	I	I	I	J	H	G	F	I	H	I		I	I	I	H	G	G

		331	332	340	341	350	351	360	370	380	390		420	430	460	470	480	481	482	490	491	492	493		560	590
03.01 -- 03.06	CARDIO-HEART	F	F	G	G	H	G	G	G	H	H		H	H	H	H	H	H	I	I	H	H	I		H	J
04.01.00.00	HYPERTENSION	F	F	G	G	H	G	G	G	H	H		H	H	H	H	H	H	I	I	H	H	I		H	J
04.02.00.00	AORTIC DISEASE	F	F	G	G	H	G	G	G	H	H		H	H	H	H	H	H	I	I	H	H	I		H	J
04.03.01.00	PERIPH - UE	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	I		H	J
04.03.02.00	PERIPH - LE	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J
04.04.00.00	PULM CIRC	F	F	G	G	G	G	G	G	H	H		G	H	G	H	H	H	I	I	G	H	I		H	J
05.01 -- 05.03	RESPIRATORY	F	F	G	G	G	G	G	G	H	H		G	H	G	H	H	H	I	I	G	H	I		H	J
06.01.00.00	UPPER DIGEST	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
06.02.00.00	COLON, RECTUM	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H	H		G	H
06.03.00.00	FISTULAS	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
06.04.00.00	LIVER	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
06.05.00.00	HERNIA	F	F	G	G	G	F	G	G	H	G		H	H	H	H	H	H	J	H	H	H	H		I	J
07.01 -- 07.04	URINARY	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H	H		G	H
07.05.00.00	REPRODUCTIVE	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
08.01 -- 08.02	SKIN-SCARS	E	E	G	E	G	E	F	F	F	H		E	E	F	F	E	F	E	J	E	E	I		E	I
08.03 -- 08.04	DERMATITIS	G	F	G	G	F	F	F	G	G	F		H	F	F	G	F	G	F	F	F	F	F		F	F
08.05.00.00	SKIN CANCER	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H	H		G	H
09.01.00.00	HEMATOPOIETIC	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
10.01.00.00	DIABETES	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
11.01.01.00	EAR-HEARING	E	G	F	E	H	G	G	G	G	H		D	F	F	G	F	G	H	I	F	F	I		F	I
11.01.02.00	VESTIBULAR	F	F	F	I	G	G	F	H	J	G		F	G	F	H	G	J	J	I	F	H	I		H	J
11.02.01.00	FACE-COSMETIC	E	E	G	E	G	E	F	F	F	H		E	E	F	F	E	F	E	J	E	E	I		E	I
11.02.02.00	FACE - EYE	F	G	F	F	I	H	F	H	H	H		G	G	F	H	F	H	I	J	F	G	I		F	I
11.03.01.00	NOSE - SMELL	F	F	F	F	H	F	F	F	G	H		F	G	F	F	F	G	I	J	F	G	F		F	J
11.03.02.00	MASTICATION	F	F	F	F	G	F	F	F	F	G		F	F	F	F	F	F	G	H	F	G	F		F	G
11.03.03.00	TASTE-SMELL	F	F	F	F	F	F	F	F	F	G		F	F	F	F	F	F	F	G	F	F	F		F	F
11.03.04.00	VOICE-SPEECH	D	F	G	F	H	F	G	F	G	H		C	D	F	F	F	G	G	I	F	G	H		F	H
12.01 -- 12.03	VISION	F	G	F	F	I	H	F	H	H	G		G	G	F	H	F	H	I	I	F	G	I		F	I

		110	111	112	120		210	211	212	213	214	220	221	230	240	250	251	290		310	311	320	321	322	330		
13.01.00.00	CONSCIOUSNESS	I	H	H	H		H	H	H	I	H	H	G	F	G	H	H	G		H	H	H	F	G	F		
13.02.00.00	EPISODIC NEURO	H	G	I	I		H	G	H	I	H	I	H	F	F	J	I	H		I	I	I	G	H	H		
13.03.00.00	AROUSAL	I	H	H	H		H	H	H	I	H	H	G	F	G	H	H	G		H	H	H	F	G	F		
13.04.00.00	COGNITIVE IMP	I	H	H	H		H	H	H	I	H	H	G	F	G	H	H	G		H	H	H	F	G	F		
13.05.00.00	LANGUAGE DISOR	J	I	I	F		J	I	I	H	J	I	D	D	H	H	J	I		I	I	D	C	G	D		
13.06.00.00	BEHAV-EMOT	J	I	I	H		I	H	J	I	I	J	F	F	G	H	I	H		I	J	H	F	G	F		
13.07.01.00	CRANIAL-OLFACTORY	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	G		F	F	F	F	H	F		
13.07.02.00	CRANIAL-OPTIC	H	I	J	J		I	I	I	I	I	J	H	G	F	I	H	I		I	I	I	H	G	G		
13.07.03.00	CRANIAL-OCULO	H	I	J	J		I	I	I	I	I	J	H	G	F	I	H	I		I	I	I	H	G	G		
13.07.04.00	CRANIAL-TRIGEM	I	H	H	F		J	H	I	H	J	I	F	F	G	G	I	H		H	I	F	F	G	F		
13.07.05.00	CRANIAL-FACIAL	I	I	I	H		J	I	I	H	J	J	G	E	J	H	J	J		I	J	E	E	H	E		
13.07.06.01	CRANIAL-VERTIGO	D	D	D	D		E	D	E	H	F	F	F	F	E	G	F	E		F	F	F	F	F	F		
13.07.06.02	CRANIAL-TINNITUS	J	H	I	F		J	H	I	H	J	H	D	E	H	H	J	I		J	J	E	D	H	E		
13.07.07.00	CRANIAL-GLOSSO	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F		
13.07.08.00	CRANIAL-SPINAL ACC	This impairment can affect swallowing and speech, head turning and shoulder motion. Use variant from 11.03.04.00, 15.01.XX.XX, or 16.02.01.00 as appropriate.																									
13.07.09.00	CRANIAL-HYPOGLOS	J	I	I	F		J	I	I	H	J	I	D	D	H	H	J	I		I	I	D	C	G	D		
13.08.00.00	STATION GAIT	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
13.09.00.00	UPPER EXTREM	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
13.10.01.00	SPINAL-RESPIR	F	E	D	D		H	E	F	F	F	E	E	E	E	F	F	F		F	G	F	F	F	F		
13.10.02.00	SPINAL-URINARY	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F		
13.10.03.00	SPINAL-ANORECT	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F		
13.10.04.00	SPINAL-SEXUAL	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F		
13.11.01.XX	PAIN-UE	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
13.11.02.XX	PAIN-LE	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
13.12.01.XX	PERIPH-SPINE	C	C	D	D		D	D	E	F	F	E	E	E	E	F	E	E		F	G	F	F	F	F		
13.12.02.XX	PERIPH-UE	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
13.12.03.XX	PERIPH-LE	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
14.01.00.00	PSYCHIAETRIC	J	I	I	H		I	H	J	I	I	J	F	F	G	H	I	H		I	J	H	F	G	F		

		331	332	340	341	350	351	360	370	380	390		420	430	460	470	480	481	482	490	491	492	493		560	590
13.01.00.00	CONSCIOUSNESS	F	F	D	H	H	G	E	H	I	G		F	H	E	H	F	I	J	I	D	G	G		E	J
13.02.00.00	EPISODIC NEURO	G	G	F	I	J	J	F	I	J	G		G	I	G	I	H	J	J	J	G	H	G		H	J
13.03.00.00	AROUSAL	F	F	D	H	H	G	E	H	I	G		F	H	E	H	F	I	J	I	D	G	G		E	J
13.04.00.00	COGNITIVE IMP	F	F	D	H	H	G	E	H	I	G		F	H	E	H	F	I	J	I	D	G	G		E	J
13.05.00.00	LANGUAGE DISOR	D	F	G	F	H	F	G	F	G	H		C	D	F	F	F	G	G	I	F	G	H		F	H
13.06.00.00	BEHAV-EMOT	F	G	D	D	H	G	E	H	H	H		F	G	E	H	E	H	I	J	D	E	H		D	I
13.07.01.00	CRANIAL-OLFACTORY	F	F	F	F	F	F	F	F	F	G		F	F	F	F	F	F	F	G	F	F	F		F	F
13.07.02.00	CRANIAL-OPTIC	F	G	F	F	I	H	F	H	H	G		G	G	F	H	F	H	I	I	F	G	I		F	I
13.07.03.00	CRANIAL-OCULO	F	G	F	F	I	H	F	H	H	G		G	G	F	H	F	H	I	I	F	G	I		F	I
13.07.04.00	CRANIAL-TRIGEM	F	F	F	F	G	F	F	F	F	G		F	F	F	F	F	F	G	H	F	G	G		F	G
13.07.05.00	CRANIAL-FACIAL	E	E	G	E	G	E	F	F	F	H		E	E	F	F	E	F	E	J	E	E	H		E	I
13.07.06.01	CRANIAL-VERTIGO	F	F	F	I	G	G	F	H	J	G		F	G	F	H	G	J	J	I	F	H	I		H	J
13.07.06.02	CRANIAL-TINNITUS	E	G	F	E	H	G	G	G	G	H		D	F	F	G	F	G	H	I	F	F	I		F	I
13.07.07.00	CRANIAL-GLOSSO	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
13.07.08.00	CRANIAL-SPINAL ACC	This impairment can affect swallowing and speech, head turning and shoulder motion. Use variant from 11.03.04.00, 15.01.XX.XX, or 16.02.01.00 as appropriate.																								
13.07.09.00	CRANIAL-HYPOGLOS	D	F	G	F	H	F	G	F	G	H		C	D	F	F	F	G	G	I	F	G	H		F	H
13.08.00.00	STATION GAIT	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J
13.09.00.00	UPPER EXTREM	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J
13.10.01.00	SPINAL-RESPIR	F	F	G	G	G	G	G	G	H	H		G	H	G	H	H	I	I	G	H	I		H	J	
13.10.02.00	SPINAL-URINARY	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H		G	H	
13.10.03.00	SPINAL-ANORECT	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H		G	H	
13.10.04.00	SPINAL-SEXUAL	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F
13.11.01.XX	PAIN-UE	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J
13.11.02.XX	PAIN-LE	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J
13.12.01.XX	PERIPH-SPINE	F	F	G	G	G	G	G	G	H	G		H	H	H	H	I	I	J	I	H	I	H		J	J
13.12.02.XX	PERIPH-UE	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J
13.12.03.XX	PERIPH-LE	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J
14.01.00.00	PSYCHIAETRIC	F	G	D	D	H	G	E	H	H	H		F	G	E	H	E	H	I	J	D	E	H		D	I

		110	111	112	120		210	211	212	213	214	220	221	230	240	250	251	290		310	311	320	321	322	330		
15.01 -- 15.03	SPINE-DRE-ROM	C	C	D	D		D	D	E	F	F	E	E	E	E	F	E	E		F	G	F	F	F	F		
15.04.01.00	CORTIC-ONE UE	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
15.04.02.00	CORTIC-TWO UE	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
15.04.03.00	CORTIC-GAIT	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
15.04.04.00	CORTIC-BLADDER	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F		
15.04.05.00	CORTIC-ANOREC	F	F	F	F		F	F	F	H	F	F	F	F	G	G	G	F		F	F	F	F	F	F		
15.04.06.00	CORTIC-SEXUAL	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F		
15.04.07.00	CORTIC-RESPIR	F	E	D	D		H	E	F	F	F	E	E	E	E	F	F	F		F	G	F	F	F	F		
15.05.XX.XX	PELVIC	C	C	D	D		D	D	E	F	F	E	E	E	E	F	E	E		F	G	F	F	F	F		
16.01.01.XX	ARM-AMPUT	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.01.02.01	BRACHIAL PLEX	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.01.02.02	CARPAL TUNNEL	D	G	H	H		D	G	F	E	G	H	G	F	E	F	E	H		F	G	I	H	G	F		
16.01.02.03	ENTRAP-OTHER	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.01.02.04	CRPS I	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.01.02.05	CRPS II	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.01.03.00	PERIPH VASC	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.01.04.00	ARM-GRIP/PINCH	D	E	E	F		C	E	E	E	F	F	F	G	D	F	F	F		F	F	H	G	G	G		
16.01.05.00	ARM-OTHER	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.02.01.00	SHOULDER-ROM	C	D	D	E		C	D	E	E	F	F	F	F	D	F	D	G		F	F	F	F	F	F		
16.02.02.00	SHOULDER-OTHER	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.03.01.00	ELBOW-ROM	D	F	G	G		D	F	E	E	F	G	G	F	E	G	F	G		F	G	H	G	G	G		
16.03.02.00	ELBOW-OTHER	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.04.01.00	WRIST-ROM	D	G	H	H		D	G	F	E	G	H	G	F	E	F	E	H		F	G	I	H	G	F		
16.04.02.00	WRIST-OTHER	E	G	H	H		E	G	F	E	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.05.XX.XX	HAND	F	G	I	H		E	G	F	F	G	H	G	G	E	F	F	G		F	G	H	G	G	G		
16.06.01.XX	THUMB	F	G	G	H		E	G	F	F	G	H	H	G	E	F	F	H		F	G	H	G	G	G		
16.06.02.XX	INDEX	F	H	I	I		E	H	G	F	H	I	H	G	E	F	F	H		G	H	I	H	H	G		
16.06.03.XX	MIDDLE	F	H	I	I		E	H	G	F	H	I	H	G	E	F	F	H		G	H	I	H	H	G		
16.06.04.XX	RING	F	G	I	G		E	G	F	F	G	G	G	F	E	F	F	F		F	G	H	G	G	F		
16.06.05.XX	LITTLE	F	G	I	G		E	G	F	F	G	G	G	F	E	F	F	F		F	G	H	G	G	F		

		331	332	340	341	350	351	360	370	380	390		420	430	460	470	480	481	482	490	491	492	493		560	590	
15.01 -- 15.03	SPINE-DRE-ROM	F	F	G	G	G	G	G	G	H	G		H	H	H	H	I	I	J	I	H	I	H		J	J	
15.04.01.00	CORTIC-ONE UE	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
15.04.02.00	CORTIC-TWO UE	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
15.04.03.00	CORTIC-GAIT	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
15.04.04.00	CORTIC-BLADDER	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H	H		G	H	
15.04.05.00	CORTIC-ANOREC	F	F	F	H	G	G	F	F	H	G		F	F	F	F	H	H	H	H	H	H	H		G	H	
15.04.06.00	CORTIC-SEXUAL	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F		F	F	
15.04.07.00	CORTIC-RESPIR	F	F	G	G	G	G	G	G	H	H		G	H	G	H	H	H	I	I	G	H	I		H	J	
15.05.XX.XX	PELVIC	F	F	G	G	G	G	G	G	H	G		H	H	H	H	I	I	J	I	H	I	H		J	J	
16.01.01.XX	ARM-AMPUT	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.02.01	BRACHIAL PLEX	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.02.02	CARPAL TUNNEL	F	E	F	F	F	G	F	J	J	G		I	H	G	J	G	J	J	H	G	H	H		H	J	
16.01.02.03	ENTRAP-OTHER	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.02.04	CRPS I	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.02.05	CRPS II	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.03.00	PERIPH VASC	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.04.00	ARM-GRIP/PINCH	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.01.05.00	ARM-OTHER	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.02.01.00	SHOULDER-ROM	F	F	F	G	F	G	G	G	H	G		G	H	G	H	H	H	I	I	G	H	H		H	J	
16.02.02.00	SHOULDER-OTHER	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.03.01.00	ELBOW-ROM	F	F	G	G	H	H	G	I	I	G		H	I	G	I	H	I	J	I	G	H	H		H	J	
16.03.02.00	ELBOW-OTHER	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.04.01.00	WRIST-ROM	F	E	F	F	F	G	F	J	J	G		I	H	G	J	G	J	J	H	G	H	H		H	J	
16.04.02.00	WRIST-OTHER	F	F	F	F	G	G	G	H	H	G		H	H	G	H	G	H	J	I	G	H	H		H	J	
16.05.XX.XX	HAND	F	F	F	F	G	G	F	H	H	G		G	H	F	H	G	H	I	H	F	G	G		G	I	
16.06.01.XX	THUMB	F	F	F	F	G	G	F	H	H	G		H	H	G	H	G	H	I	H	G	H	G		H	I	
16.06.02.XX	INDEX	F	F	F	F	G	G	F	I	I	G		G	H	F	I	G	I	I	H	F	G	G		G	I	
16.06.03.XX	MIDDLE	F	F	F	F	G	G	F	I	I	G		G	H	F	I	G	I	I	H	F	G	G		G	I	
16.06.04.XX	RING	F	F	F	F	F	F	F	H	H	G		G	H	F	H	G	H	H	H	F	G	G		G	I	
16.06.05.XX	LITTLE	F	F	F	F	F	F	F	H	H	G		G	H	F	H	G	H	H	H	F	G	G		G	I	

		110	111	112	120		210	211	212	213	214	220	221	230	240	250	251	290		310	311	320	321	322	330		
17.01.01.00	LEG-LENGTH	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.01.02.XX	LEG-AMPUT	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.01.03.00	LEG-SKIN LOSS	D	D	D	D		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.01.04.00	LEG-PERIPH NRV	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.01.05.00	LEG-VASCULAR	D	D	D	D		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.01.06.00	LEG-CAUSALGIA	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.01.07.00	LEG-GAIT	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.01.08.00	LEG-OTHER	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.02.10.00	PELVIS-FX.	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.03.XX.XX	HIP	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.04.10.00	FEMUR-FX	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.05.XX.XX	KNEE	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.06.10.00	TIBIA-FX	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.07.XX.XX	ANKLE	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.08.01.00	FOOT-ATROPHY	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.08.02.00	FOOT-ANKYLOSIS	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.08.03.00	FOOT-ARTHRITIS	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.08.04.00	FOOT-ROM	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.08.05.00	FOOT-STRENGTH	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.08.06.00	FOOT-OTHER	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.08.10.XX	FOOT-DBE	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.09.01.00	TOE-ATROPHY	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.09.02.00	TOE-ANKYLOSIS	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.09.03.00	TOE-ARTHRITIS	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.09.04.00	TOE-ROM	C	C	C	C		D	D	D	E	D	D	D	D	D	D	D	D		D	E	E	E	E	E		
17.09.05.00	TOE-STRENGTH	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.09.06.00	TOE-AMPUTATION	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		
17.09.07.00	TOE-OTHER	D	D	C	C		E	E	E	F	F	E	E	E	E	F	E	E		F	F	F	F	F	F		

		331	332	340	341	350	351	360	370	380	390		420	430	460	470	480	481	482	490	491	492	493		560	590	
17.01.01.00	LEG-LENGTH	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	I		G	H	
17.01.02.00	LEG-AMPUT	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.01.03.00	LEG-SKIN LOSS	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.01.04.00	LEG-PERIPH NRV	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.01.05.00	LEG-VASCULAR	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.01.06.00	LEG-CAUSALGIA	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.01.07.00	LEG-GAIT	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.01.08.00	LEG-OTHER	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.02.10.00	PELVIS-FX.	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.03.XX.XX	HIP	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.04.10.00	FEMUR-FX	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.05.XX.XX	KNEE	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.06.10.00	TIBIA-FX	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.07.XX.XX	ANKLE	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.08.01.00	FOOT-ATROPHY	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.08.02.00	FOOT-ANKYLOSIS	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	I		G	H	
17.08.03.00	FOOT-ARTHRITIS	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.08.04.00	FOOT-ROM	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	I		G	H	
17.08.05.00	FOOT-STRENGTH	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.08.06.00	FOOT-OTHER	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.08.10.XX	FOOT-DBE	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	I		I	J	
17.09.01.00	TOE-ATROPHY	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	H		G	H	
17.09.02.00	TOE-ANKYLOSIS	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	H		G	H	
17.09.03.00	TOE-ARTHRITIS	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	H		G	H	
17.09.04.00	TOE-ROM	E	F	E	G	E	E	E	F	G	F		F	F	F	F	G	G	H	G	F	G	H		G	H	
17.09.05.00	TOE-STRENGTH	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	H		I	J	
17.09.06.00	TOE-AMPUTATION	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	H		I	J	
17.09.07.00	TOE-OTHER	F	F	G	G	G	G	G	G	I	H		G	H	H	H	H	I	J	I	H	I	H		I	J	

SECTION 5 - OCCUPATIONAL ADJUSTMENT

Use this table to adjust the rating for occupation.

Locate the row on which the rating (after adjustment for diminished future earning capacity) appears and the column headed by the occupation variant (obtained from the Occupational Variant Table in Section 4). Record the number appearing at the intersection of this row and column. This is the rating after adjustment for occupation.

After adjusting the rating for occupation, turn to Section 6, page 6-1 to adjust for age.

OCCUPATIONAL ADJUSTMENT TABLE

Standard Rating									Standard Rating									
	Percent	C	D	E	F	G	H	I		J	Percent	C	D	E	F	G	H	I
0	0	0	0	0	0	0	0	0										
1	1	1	1	1	2	2	2	2	26	19	22	24	26	29	31	34	37	
2	1	2	2	2	3	3	4	4	27	20	23	25	27	30	33	35	38	
3	2	2	3	3	4	5	5	6	28	21	24	26	28	31	34	36	39	
4	3	3	4	4	5	6	7	8	29	22	24	27	29	32	35	37	40	
5	3	4	4	5	6	7	8	9	30	23	25	28	30	33	36	38	41	
6	4	5	5	6	7	8	9	11	31	24	26	29	31	34	37	40	43	
7	5	5	6	7	8	10	11	12	32	25	27	30	32	35	38	41	44	
8	6	6	7	8	9	11	12	14	33	25	28	30	33	36	39	42	45	
9	6	7	8	9	11	12	14	15	34	26	29	31	34	37	40	43	46	
10	7	8	9	10	12	13	15	16	35	27	30	32	35	38	41	44	47	
11	7	9	10	11	13	14	16	18	36	28	31	33	36	39	42	45	48	
12	8	10	11	12	14	16	17	19	37	29	32	34	37	40	43	46	49	
13	9	10	12	13	15	17	18	20	38	30	32	35	38	41	44	47	50	
14	10	11	13	14	16	18	20	22	39	31	33	36	39	42	45	48	51	
15	11	12	14	15	17	19	21	23	40	32	34	37	40	43	46	49	52	
16	11	13	14	16	18	20	22	24	41	33	35	38	41	44	47	50	54	
17	12	14	15	17	19	21	23	26	42	34	36	39	42	45	48	51	55	
18	13	15	16	18	20	22	24	27	43	35	37	40	43	46	49	52	56	
19	14	15	17	19	21	24	26	28	44	36	38	41	44	47	50	53	57	
20	15	16	18	20	22	25	27	29	45	36	39	42	45	48	51	54	58	
21	16	17	19	21	23	26	28	31	46	37	40	43	46	49	52	55	59	
22	16	18	20	22	24	27	29	32	47	38	41	44	47	50	53	56	60	
23	17	19	21	23	26	28	31	33	48	39	42	45	48	51	54	57	61	
24	18	20	22	24	27	29	32	34	49	40	43	46	49	52	55	58	62	
25	18	21	23	25	28	30	33	36	50	41	44	47	50	53	56	59	62	

OCCUPATIONAL ADJUSTMENT TABLE

Standard Rating Percent									Standard Rating Percent								
	C	D	E	F	G	H	I	J		C	D	E	F	G	H	I	J
51	42	45	48	51	54	57	60	64	76	68	70	73	76	78	80	82	84
52	43	46	49	52	55	58	61	65	77	69	71	74	77	79	81	83	85
53	44	47	50	53	56	59	62	65	78	70	72	75	78	80	82	84	86
54	45	48	51	54	57	60	63	66	79	71	74	76	79	81	83	84	86
55	46	49	52	55	58	61	64	67	80	72	75	77	80	82	83	85	87
56	47	50	53	56	59	62	65	68	81	73	76	78	81	83	84	86	88
57	48	51	54	57	60	63	66	69	82	74	77	79	82	84	85	87	88
58	49	52	55	58	61	64	67	70	83	76	78	81	83	84	86	87	89
59	50	53	56	59	62	65	68	71	84	77	79	82	84	85	87	88	90
60	51	54	57	60	63	66	69	72	85	78	81	83	85	86	88	89	90
61	52	55	58	61	64	67	69	72	86	79	82	84	86	87	89	90	91
62	53	56	59	62	65	68	70	73	87	81	83	85	87	88	89	90	92
63	54	57	60	63	66	69	71	74	88	82	84	86	88	89	90	91	92
64	55	58	61	64	67	69	72	75	89	84	85	87	89	90	91	92	93
65	56	59	62	65	68	70	73	76	90	85	87	88	90	91	92	93	94
66	57	60	63	66	69	71	74	77	91	86	88	89	91	92	93	93	94
67	58	61	64	67	70	72	75	77	92	88	89	91	92	93	93	94	95
68	59	62	65	68	71	73	76	78	93	89	91	92	93	94	94	95	96
69	60	63	66	69	71	74	76	79	94	91	92	93	94	95	95	96	96
70	61	64	67	70	72	75	77	80	95	93	93	94	95	96	96	97	97
71	62	65	68	71	73	76	78	80	96	94	94	95	96	96	97	98	98
72	63	66	69	72	74	77	79	81	97	95	96	96	97	97	98	98	98
73	65	67	70	73	75	77	79	82	98	97	97	98	98	98	98	98	99
74	66	68	71	74	76	78	80	83	99	98	99	99	99	99	99	100	100
75	67	69	72	75	77	79	81	83	100	100	100	100	100	100	100	100	100

SECTION 6 - AGE ADJUSTMENT

Use this table to modify the rating for age.

Locate the row on which the rating (already adjusted for earning capacity and occupation) appears, and the column headed by the age at time of injury. Record the number appearing at the intersection of the row and column. This is the rating adjusted for earning capacity, occupation and age.

Rating	AGE AT TIME OF INJURY									
	21 and under	22 - 26	27 - 31	32 - 36	37 - 41	42 - 46	47 - 51	52 - 56	57 - 61	62 and over
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	3	3	3
3	2	2	3	3	3	3	3	4	4	4
4	3	3	3	4	4	4	5	5	5	6
5	4	4	4	5	5	5	6	6	6	7
6	5	5	5	6	6	6	7	7	8	8
7	5	6	6	7	7	8	8	9	9	10
8	6	6	7	7	8	9	9	10	10	11
9	7	7	8	8	9	10	10	11	12	12
10	8	8	9	9	10	11	11	12	13	13
11	8	9	10	10	11	12	13	13	14	15
12	9	10	10	11	12	13	14	15	15	16
13	10	11	11	12	13	14	15	16	16	17
14	11	11	12	13	14	15	16	17	18	19
15	12	12	13	14	15	16	17	18	19	20
16	12	13	14	15	16	17	18	19	20	21
17	13	14	15	16	17	18	19	20	21	22
18	14	15	16	17	18	19	20	21	23	24
19	15	16	17	18	19	20	22	23	24	25
20	16	17	18	19	20	21	23	24	25	26
21	17	18	19	20	21	22	24	25	26	27
22	17	18	20	21	22	23	25	26	28	29
23	18	19	20	22	23	24	26	27	29	30
24	19	20	21	23	24	25	27	28	30	31
25	20	21	22	24	25	27	28	29	31	32

Rating	AGE AT TIME OF INJURY									
	21 and under	22 - 26	27 - 31	32 - 36	37 - 41	42 - 46	47 - 51	52 - 56	57 - 61	62 and over
26	21	22	23	25	26	28	29	31	32	33
27	22	23	24	26	27	29	30	32	33	35
28	23	24	25	27	28	30	31	33	34	36
29	24	25	26	28	29	31	32	34	36	37
30	24	25	27	28	30	32	33	35	37	38
31	25	26	28	30	31	33	35	36	38	39
32	26	27	29	31	32	34	36	37	39	40
33	27	28	30	32	33	35	37	38	40	42
34	28	29	31	33	34	36	38	39	41	43
35	29	30	32	34	35	37	39	41	42	44
36	30	31	33	35	36	38	40	42	43	45
37	31	32	34	36	37	39	41	43	44	46
38	32	33	35	37	38	40	42	44	46	47
39	33	34	36	38	39	41	43	45	47	48
40	34	35	37	39	40	42	44	46	48	50
41	35	36	38	40	41	43	45	47	49	51
42	36	37	39	41	42	44	46	48	50	52
43	36	37	39	41	43	45	47	49	51	53
44	37	38	40	42	44	46	48	50	52	54
45	38	39	41	43	45	47	49	51	53	55
46	39	40	42	44	46	48	50	52	54	56
47	40	41	43	45	47	49	51	53	55	57
48	41	42	44	46	48	50	52	54	56	58
49	42	43	45	47	49	51	53	55	57	59
50	43	44	46	48	50	52	54	56	58	60

<i>Rating</i>	AGE AT TIME OF INJURY									
	21 and under	22 - 26	27 - 31	32 - 36	37 - 41	42 - 46	47 - 51	52 - 56	57 - 61	62 and over
51	44	45	47	49	51	53	55	57	59	61
52	45	46	48	50	52	54	56	58	60	62
53	46	47	49	51	53	55	57	59	61	63
54	47	48	50	52	54	56	58	60	62	64
55	48	49	51	53	55	57	59	61	63	65
56	49	50	52	54	56	58	60	62	64	66
57	50	51	53	55	57	59	61	63	65	67
58	51	53	55	57	58	60	62	64	66	68
59	52	54	56	58	59	61	63	65	67	69
60	53	55	57	59	60	62	64	66	68	70
61	54	56	58	60	61	63	65	67	69	71
62	55	57	59	61	62	64	66	68	69	71
63	57	58	60	62	63	65	67	69	70	72
64	58	59	61	63	64	66	68	70	71	73
65	59	60	62	64	65	67	69	71	72	74
66	60	61	63	65	66	68	70	72	73	75
67	61	62	64	66	67	69	70	72	74	76
68	62	63	65	67	68	70	71	73	75	77
69	63	64	66	68	69	71	72	74	76	78
70	64	65	67	69	70	72	73	75	76	78
71	65	66	68	70	71	73	74	76	77	79
72	66	67	69	71	72	74	75	77	78	80
73	68	69	70	72	73	75	76	78	79	81
74	69	70	71	73	74	76	77	79	80	82
75	70	71	72	74	75	77	78	80	81	83

Rating	AGE AT TIME OF INJURY									
	21 and under	22 - 26	27 - 31	32 - 36	37 - 41	42 - 46	47 - 51	52 - 56	57 - 61	62 and over
76	71	72	73	75	76	78	79	80	82	83
77	72	73	74	76	77	79	80	81	82	84
78	73	74	75	77	78	80	81	82	83	85
79	74	75	76	78	79	81	82	83	84	86
80	76	77	78	79	80	81	82	84	85	86
81	77	78	79	80	81	82	83	85	86	87
82	78	79	80	81	82	83	84	86	87	88
83	79	80	81	82	83	84	85	86	87	89
84	80	81	82	83	84	85	86	87	88	89
85	81	82	83	84	85	86	87	88	89	90
86	83	83	84	85	86	87	88	89	90	91
87	84	85	85	86	87	88	89	90	91	92
88	85	86	86	87	88	89	90	91	91	92
89	86	87	87	88	89	90	91	91	92	93
90	88	88	89	89	90	91	91	92	93	93
91	89	89	90	90	91	92	92	93	94	94
92	90	90	91	92	92	93	93	94	94	95
93	91	92	92	93	93	94	94	95	95	96
94	92	93	93	94	94	95	95	95	96	96
95	94	94	94	95	95	96	96	96	97	97
96	95	95	95	96	96	96	97	97	97	98
97	96	96	97	97	97	97	97	98	98	98
98	97	98	98	98	98	98	98	98	99	99
99	99	99	99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100	100	100	100

SECTION 7 – EXAMPLES

The examples in this section illustrate all the basic components of disability rating including converting AMA scales, adjusting for diminished future earning capacity, occupation and age.

Example A – Multiple impairments within a single extremity

A 30-year-old stevedore injures his right arm resulting in the following impairment ~~percentages~~ratings:

Limited motion of index finger = 50% Digit impairment
Limited motion of ring finger = 80% Digit impairment
Limited motion of shoulder = 20% Upper extremity (UE)
Shoulder instability = 12% UE

1. Follow AMA protocols¹ for combining individual finger impairments into one overall hand impairment. The hand impairment for this example is 18%.

2. Convert hand impairment² to whole person scale.

$$18\% \text{ Hand impairment} \times .9 = 16\% \text{ UE}$$

$$16\% \text{ UE} \times .6 = 10\% \text{ Whole person impairment (WPI)}$$

3. Combine³ shoulder impairments.

$$20\% \text{ UE} \text{ C } 12\% \text{ UE} = 30\% \text{ UE}$$

4. Convert overall shoulder impairment to whole person scale

$$30\% \text{ UE} \times .6 = 18\% \text{ WPI}$$

5. Apply earning capacity, occupation and age adjustments⁴ to hand and shoulder ratings:

$$\text{Hand: } 16.05.01.00 - 10 - [1]11 - 351G - 13 - 11 \text{ PD}$$

$$\text{Shoulder: } 16.02.02.00 - 18 - [7]24 - 351G - 27 - 24 \text{ PD}$$

6. Combine adjusted ratings for hand and shoulder to obtain final disability.

$$24\% \text{ PD} \text{ C } 11\% \text{ PD} = 32\% \text{ PD}$$

The final overall PD rating for this example is 32%.

Example B – Applying the single extremity maximum

A 30-year-old stevedore sustains an injury to his left leg resulting in the following impairment ~~percentages~~ratings:

Amputation of left leg below knee = 80% LE

Limited motion of left knee = 35% LE

Pain in stump is substantially aggravated by performing ADL's = 3% add-on⁵

¹ See Chapter 16 of the AMA Guides, 5th edition for protocols.

² See AMA Guides, 5th edition, pages 438-439, for upper extremity conversion factors.

³ The symbol used to represent the operation of combining is "C". Use the Combined Values Chart on page 8-2 of the Schedule to combine ratings.

⁴ Rating adjustments and formulas are explained in Section 1 of this Schedule, ~~starting on page XX.~~

⁵ See Section 1 of PDRS, ~~page XX,~~ for information regarding add-on's for pain.

1. Convert individual impairments⁶ to the whole person scale.

Left leg amputation: $80\% \text{ LE} \times .4 = 32\% \text{ WPI}$

Left knee motion: $35\% \text{ LE} \times .4 = 14\% \text{ WPI}$

2. Apply 3% add-on for pain.

$32\% \text{ WPI} + 3\% \text{ WPI} = 35\% \text{ WPI}$

3. Apply earning capacity, occupation and age adjustments⁷ to each whole person impairment.

L leg amp.: $17.01.02.02 - 35 - [5]45 - 351G - 48 - 44 \text{ PD}$

L knee motion: $17.05.04.00 - 14 - [2]16 - 351G - 18 - 16 \text{ PD}$

4. Combine⁸ the adjusted impairments for the left leg.

$44\% \text{ PD } \mathbf{C} \text{ } 16\% \text{ PD} = 53\% \text{ PD}$

5. Calculate the maximum value for a single leg adjusted for earning capacity, age and occupation. The maximum rating for a leg before adjustments is 40%.

$17.01.02.01 - 40 - [5]51 - 351G - 54 - 50 \text{ PD}$

⁶ See AMA Guides, 5th edition, page 527, for lower extremity conversion factors.

⁷ Rating adjustments and formulas are explained in Section 1 of this Schedule, ~~starting on page XX.~~

⁸ The symbol used to represent the operation of combining is "C". Use the Combined Values Chart on page 8-2 of the Schedule to combine ratings.

6. Compare the results of step 4 and 5 above. Choose the lower as the final value. The correct disability rating for the left leg is 50% PD.

Example C – Multiple impairments to different regions of body

A 30-year-old stevedore sustains injuries to his right arm, low back and legs resulting in the following ~~disability~~ impairment ratings.

Herniated lumbar disk (DRE Category 3) = 10% WPI

Limited motion of right index finger = 50% Digit impairment

Limited motion of right ring finger = 80% Digit impairment

Limited motion of right shoulder = 20% Upper extremity (UE)

Right shoulder instability = 12% UE

Amputation of left ~~foot~~ leg two inches below knee = 80% LE

Limited motion of left knee = 35% LE

Pain in stump is substantially aggravated by performing ADL's = 3% add-on⁹

Limited motion of right knee = 8% LE

1. Calculate disability rating for the back by adjusting the back impairment rating for earning capacity, occupation and age.

$15.03.01.00 - 10 - [5]13 - 351G - 15 - 13 \text{ PD}$

⁹ See Section 1 of PDRS, ~~page XX,~~ for information regarding add-on's for pain.

2. Calculate disability rating for right arm in accordance with Example A above. The overall disability rating for the arm is 39% PD after adjustment for earning capacity, occupation and age.
3. Calculate the disability rating for the left leg in accordance with Example B above. The overall disability rating for the left leg is 61% PD after adjustment for earning capacity, occupation and age.
4. Calculate disability rating for the right leg as follows:

- a. Convert the lower extremity impairment rating for the right knee to whole person impairment.

$$8\% \text{ LE} \times .4 = 3\% \text{ WPI}$$

- b. Adjust the right knee impairment rating for earning capacity, occupation and age.

$$17.05.04.00 - 3 - [2]4 - 351G - 5 - 4 \text{ PD}$$

5. Combine the ratings for the right arm, back, and each leg in the order from the largest to the smallest. The final overall PD rating for this example is 71%.

$$50\% \text{ PD (left leg)} \text{ C } 32\% \text{ PD (right arm)} = 66\% \text{ PD}$$

$$66\% \text{ PD C } 13\% \text{ PD (back)} = 70\% \text{ PD}$$

$$70\% \text{ PD C } 4\% \text{ PD (right leg)} = 71\% \text{ PD}$$

SECTION 8 - COMBINED VALUES CHART

Use this chart to combine two or more impairments, or two or more disabilities. When combining groups of three or more values, always combine the larger two first, and then successively combine the result with the next smaller until all values are combined.

COMBINED VALUES CHART (CON'T)

51	51	52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76		
52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78
53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78		
54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78				
55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78						
56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78								
57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78										
58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78												
59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78														
60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																
61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																		
62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																				
63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																						
64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																								
65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																										
66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																												
67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																														
68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																																
69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																																		
70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																																				
71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78																																						
72	72	73	73	74	74	75	75	76	76	77	77	78	78																																								
73	73	74	74	75	75	76	76	77	77	78	78																																										
74	74	75	75	76	76	77	77	78	78																																												
75	75	76	76	77	77	78	78																																														
76	76	77	77	78	78																																																
77	77	78	78																																																		
78	78	79	79																																																		
79	79	80	80																																																		
80	80	81	81																																																		
81	81	82	82																																																		
82	82	83	83																																																		
83	83	84	84																																																		
84	84	85	85																																																		
85	85	86	86																																																		
86	86	87	87																																																		
87	87	88	88																																																		
88	88	89	89																																																		
89	89	90	90																																																		
90	90	91	91																																																		
91	91	92	92																																																		
92	92	93	93																																																		
93	93	94	94																																																		
94	94	95	95																																																		
95	95	96	96																																																		
96	96	97	97																																																		
97	97	98	98																																																		
98	98	99	99																																																		
99	99	100	100																																																		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

