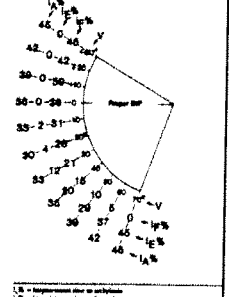
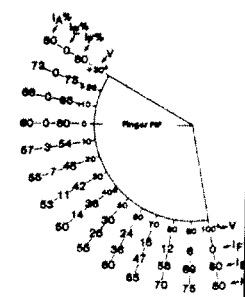


Figure 19. Finger Impairments Due to Abnormal Motion at the DIP Joint. Relative value of functional unit is 45%.†



†L.S. = Impairment due to ankylosis
 †L.F. = Impairment due to loss of extension
 †L.V. = Impairment due to loss of flexion
 †M.A. = Measured angle of motion
 †P.M. = Position of flexion

Figure 21. Finger Impairments Due to Abnormal Motion at the PIP Joint. Relative value of functional unit is 80%.†



†L.S. = Impairment due to ankylosis
 †L.F. = Impairment due to loss of extension
 †L.V. = Impairment due to loss of flexion
 †M.A. = Measured angle of motion
 †P.M. = Position of flexion

Figure 22. Neutral Position (top) and Flexion (bottom) of Finger MP Joint

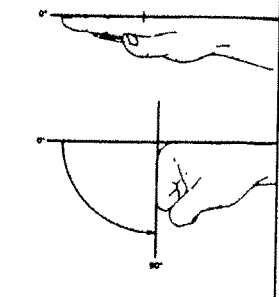
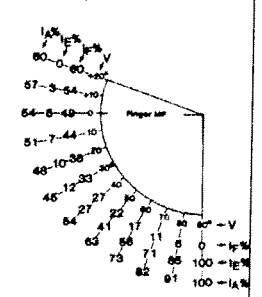


Figure 23. Finger Impairments Due to Abnormal Motion at the MP Joint. Relative value of functional unit is 100%.†



†L.S. = Impairment due to ankylosis
 †L.F. = Impairment due to loss of extension
 †L.V. = Impairment due to loss of flexion
 †M.A. = Measured angle of motion
 †P.M. = Position of flexion

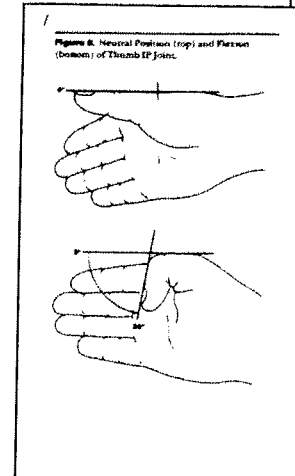
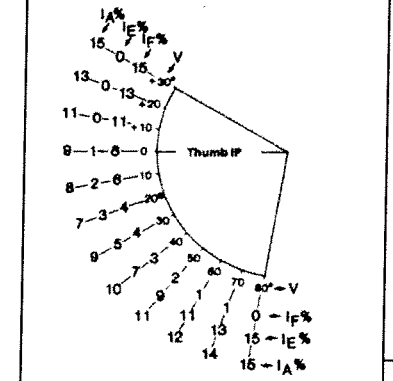


Figure 10. Thumb Impairments Due to Abnormal Motion at the IP Joint. Relative value of functional unit is 15% of total thumb motion.†



†L.S. = Impairment due to ankylosis
 †L.F. = Impairment due to loss of extension
 †L.V. = Impairment due to loss of flexion
 †M.A. = Measured angle of motion
 †P.M. = Position of flexion

Figure 11. Neutral Position (top) and Flexion (bottom) of Thumb MP Joint

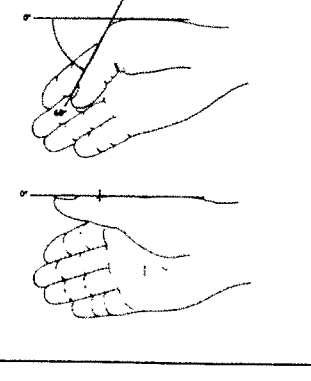
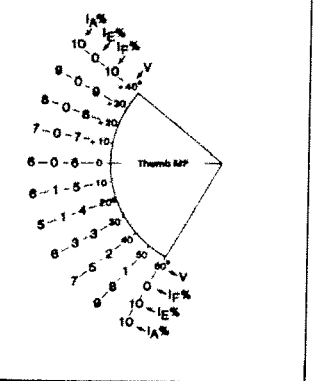


Figure 13. Thumb Impairments Due to Abnormal Motion at the MP Joint. Relative value of functional unit is 10% of total thumb motion.†



†L.S. = Impairment due to ankylosis
 †L.F. = Impairment due to loss of extension
 †L.V. = Impairment due to loss of flexion
 †M.A. = Measured angle of motion
 †P.M. = Position of flexion

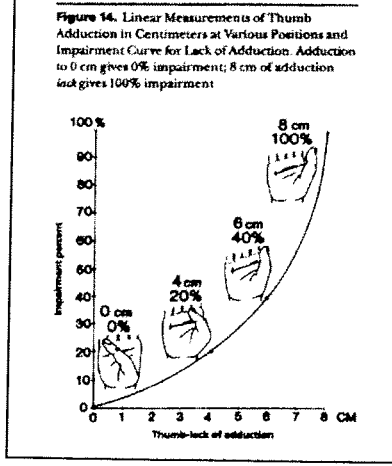


Table 5. Thumb Impairment Values Due to Lack of Adduction and to Ankylosis. Relative value of functional unit is 20% of total thumb motion. Motion ranges from 8 to 0 cm of adduction.*

Measured lack of adduction (cm)	% Thumb impairment due to	
	Abnormal motion	Ankylosis
8	20	20
7	12	19
6	8	17
5	6	15
4	4	10
3	3	15
2	2	17
1	0	19
0	0	20

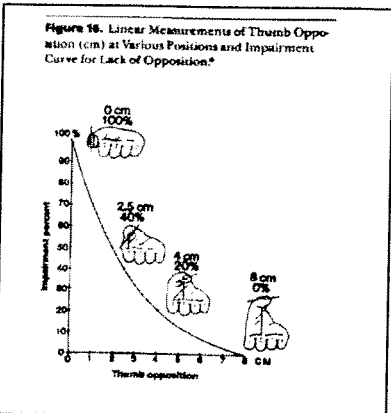


Table 7. Thumb Impairments Due to Lack of Opposition and to Ankylosis. Relative value of functional unit is 45% of total thumb motion. Motion ranges from 0 to 8 cm of opposition.*

Measured opposition (cm)	% Thumb impairment due to	
	Abnormal motion	Ankylosis
0	45	45
1	31	40
2	22	38
3	13	31
4	9	27
5	5	22
6	3	24
7	0	27
8	0	29

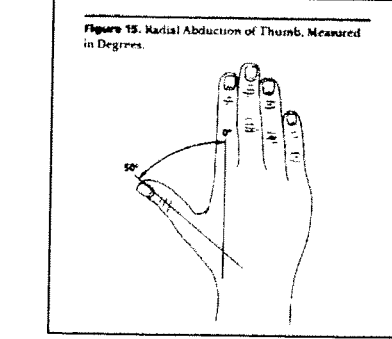


Table 8. Thumb Impairments Due to Lack of Radial Abduction and to Ankylosis. Relative value of functional unit is 10% of total thumb motion. Motion ranges from 0° to 50° radial abduction.

Measured radial abduction (°)	% Thumb impairment due to	
	Abnormal motion	Ankylosis
0	10	10
10	9	10
20	7	10
30	3	10
40	1	10
50	0	10

*Data from Swanson, A.B., Cronin-Hagerl, C. & Cronin Swanson, C.P. p. 124, Fig. 8-20.

Figure 26. Wrist Flexion (above) and Extension (below)

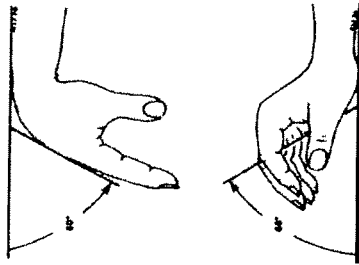
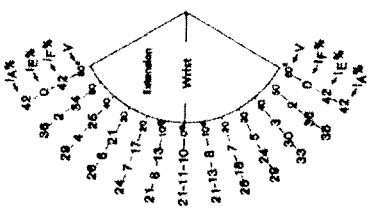


Figure 24. Upper Extremity Impairments Due to Lack of Flexion and Extension of Wrist Joint. Relative value of this functional unit to upper extremity impairment is 42%.†



† % = Impairment due to subjects
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function

Figure 27. Radial Deviation (left) and Ulnar Deviation (right) of Right Wrist

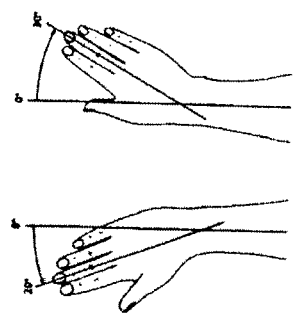
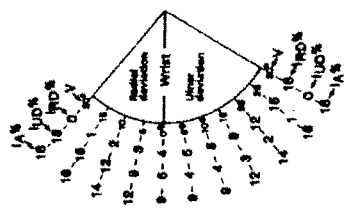


Figure 28. Upper Extremity Impairments Due to Abnormal Radial and Ulnar Deviations of Wrist Joint. Relative value of this functional unit to upper extremity impairment is 18%.†



† % = Impairment due to subjects
 ‡ % = Impairment due to loss of function

Figure 30. Flexion and Extension of Elbow.

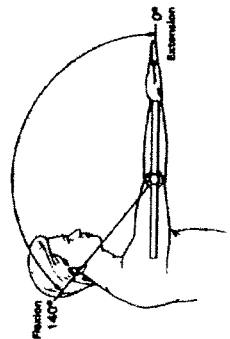
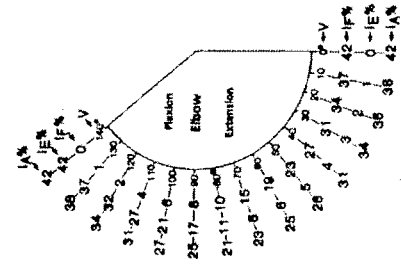


Figure 32. Upper Extremity Impairments Due to Lack of Flexion and Extension of the Elbow Joint. Relative value of this functional unit to upper extremity impairment is 43%.†



† % = Impairment due to subjects
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function
 † % = Impairment due to loss of motion
 ‡ % = Impairment due to loss of function

Figure 31. Pronation and Supination of Forearm.

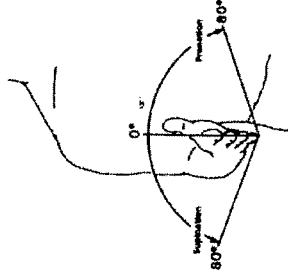
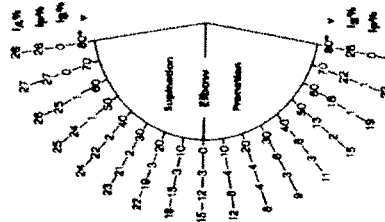


Figure 33. Upper Extremity Impairments Due to Lack of Pronation and Supination. Relative value of this functional unit to upper extremity impairment is 25%.†



† % = Impairment due to subjects
 ‡ % = Impairment due to loss of function

Fig. 36, p. 42 Shoulder Extension and Flexion

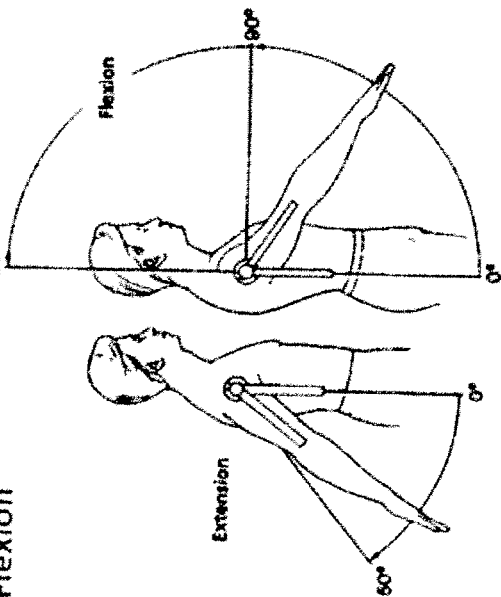


Fig. 39, p. 43 Shoulder Abduction and Adduction

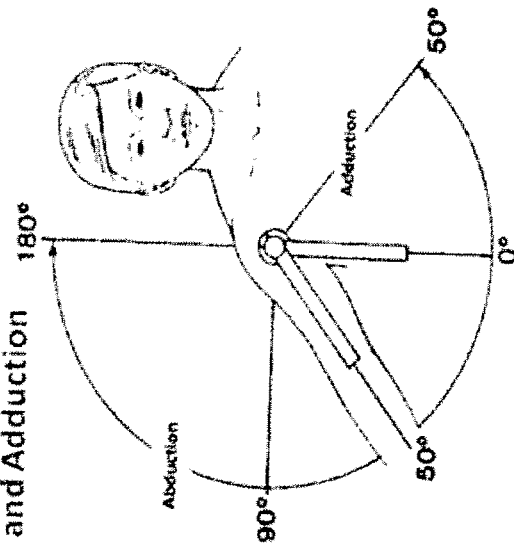


Fig. 42, p. 44 Shoulder External Rotation and Internal

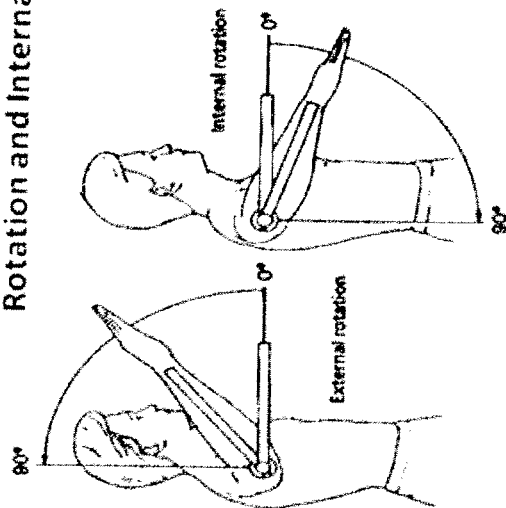


Fig. 38, p. 43

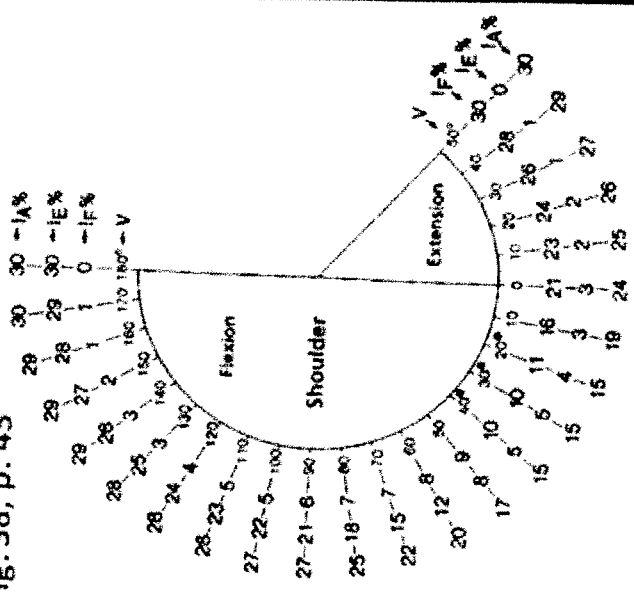


Fig. 41, p. 44

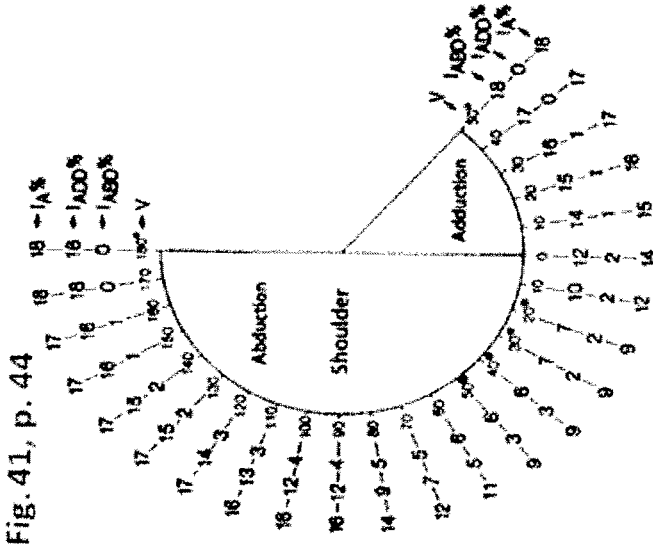


Fig. 44, p. 45

