BASELINE® BUBBLE INCLINOMETER
Measurement Chart



Inclinometers and goniometers are devices used to measure range-of-motion. Range-of-motion can be measured from the neutral position to give a reading of flexion, extension, abduction, adduction, pronation, supination, dorsiflexion, plantarflexion, etc. or it can measure the entire range to yield a total range-of-motion of the joint.

The inclinometer is simple to use: place it near the joint to be measured; turn the dial until the scale reads zero; take the joint through its range; read the range-of-motion (in degrees) directly from the dial.

12-1056 Baseline® Bubble Inclinometer

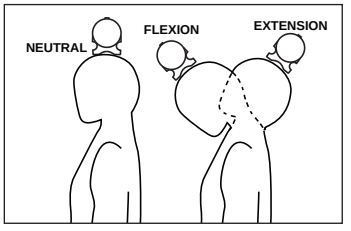
7 14905 01496 2

Fabrication Enterprises Inc.
P.O. Box 1500
White Plains, NY 10602 (USA)
tel: 1-914-345-9300
fax: 1-914-345-9800
www.Fab-Ent.com

Authorized CE representative:
RMS UK Ltd.
28 Trinity Road
Nailsea, Somerset BS48 4NU (UK)

Baseline® is a trademark of Goldberg
©2012 all rights reserved.

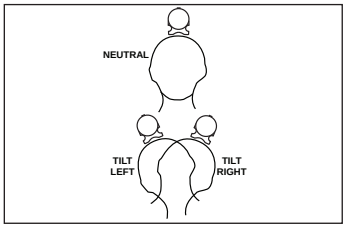
NECK



FLEXION & EXTENSION

- Put head in neutral position
- Place goniometer on top of head, set zero
- Flex or extend neck
- Read result

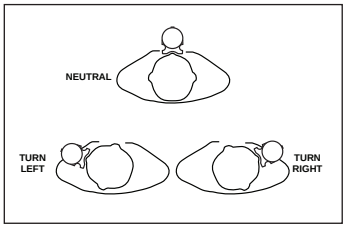
Note: *Be careful of the goniometer slipping on hair*



LATERAL MOVEMENT

- Put head in neutral position
- Place goniometer on top of head, set zero
- Abduct neck
- Read result

Note: *Be careful of the goniometer slipping on hair*

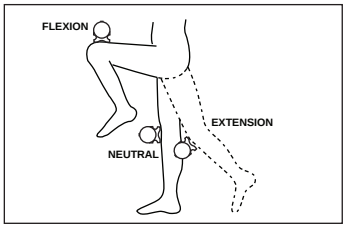


ROTATION

- Lay subject supine, with head in neutral position
- Place goniometer on forehead, set zero
- Rotate neck
- Read result

Note: *Ensure both shoulders are in contact with the bed*

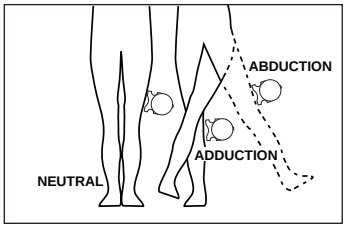
HIP



FLEXION & EXTENSION

- Stand subject upright, preferably supported
- Place goniometer on thigh, set zero
- Flex or extend hip
- Read result

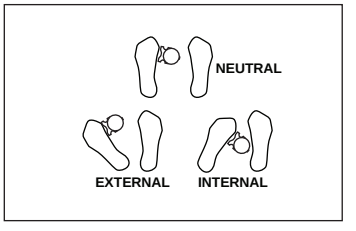
Note: *A different result will be obtained with the knee in flexion due to pelvic tilt and lumbar flexion*



ABDUCTION & ADDUCTION

- Stand subject upright, feet apart (or lay them on their side)
- Place goniometer on thigh, set zero
- Abduct or adduct hip with the body stabilized
- Read result

Note: *Pelvic tilt may occur*

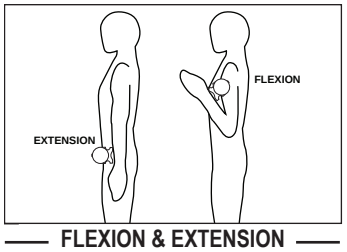


ROTATION

- With the goniometer on its side, set true zero
- Lay subject supine with knee in full extension. Neutral position is found by drawing a line from between the big and second toes to the center of the heel. Using the goniometer rotate hip until zero
- Place goniometer on side of foot, set zero
- Internally or externally rotate hip
- Read result

Note: *There is no rotation of the fully extended knee unless severe joint laxity is present*

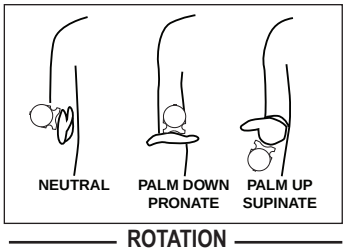
ELBOW



FLEXION & EXTENSION

- Put elbow and shoulder at neutral position at zero degrees of extension
- Place goniometer on forearm, set zero
- Flex elbow
- Read result

Note: Stabilize shoulder and upper arm to prevent error

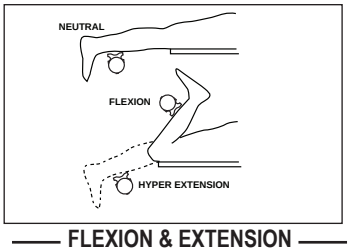


ROTATION

- Put shoulder at neutral position, elbow at 90º flexion, thumb uppermost
- Place goniometer on the back of the hand, set zero
- Pronate or supinate elbow
- Read result from inner or outer dial

Note: *Twisting of the hand may indicate greater range of motion*

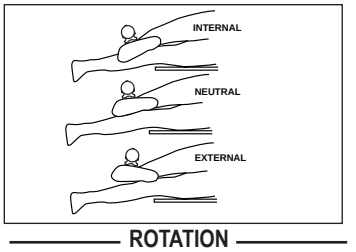
KNEE



FLEXION & EXTENSION

- Lay subject prone, knee over edge of the bed
- Place goniometer on shin, set zero
- Flex or hyperextend knee
- Read result

Note: *Test can be performed with subject standing and hip stabilized*

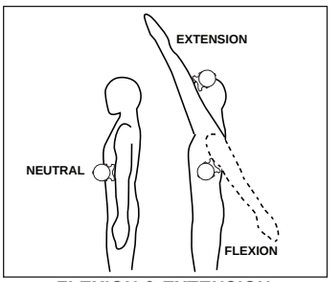


ROTATION

- Lay subject on side, knee at 90º flexion, rotationally neutral
- Place goniometer on side of foot, set zero
- Internally or externally rotate knee
- Read result

Note: *It is very difficult to determine neutral position, so more useful to quote total range of motion*

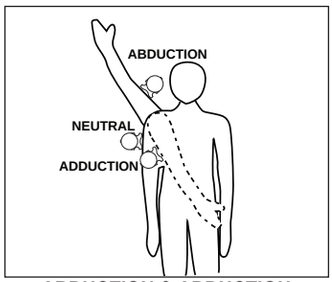
SHOULDER



FLEXION & EXTENSION

- Place goniometer on upper arm, set zero
- Flex or extend shoulder
- Read result

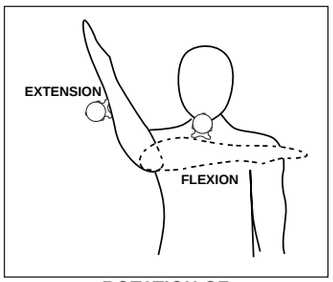
Note: *Do not allow the subject to twist*



ABDUCTION & ADDUCTION

- Put shoulder into neutral position
- Place goniometer on upper arm, set zero
- Abduct or adduct shoulder
- Read result

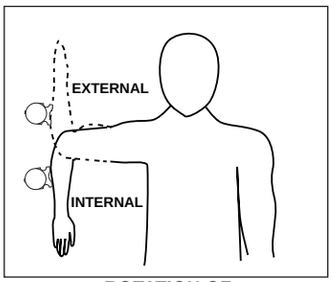
Note: *Do not allow the subject's body to twist*



ROTATION OF FLEXED SHOULDER

- Put shoulder at 90º flexion, elbow at 90º flexion, forearm and upper arm horizontal
- Place goniometer on forearm, set zero
- Internally or externally rotate shoulder
- Read result from inner or outer dial

Note: *Keep subject's arm horizontal*

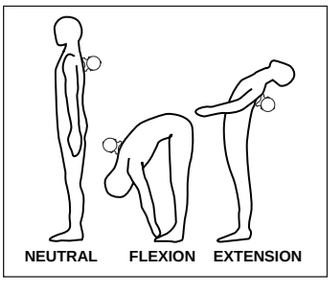


ROTATION OF ABDUCTED SHOULDER

- Put shoulder at 90º abduction, elbow at 90º flexion, forearm and upper arm horizontal
- Place goniometer on forearm, set zero
- Internally or externally rotate shoulder
- Read result from inner or outer dial

Note: *Keep the subject's arm horizontal*

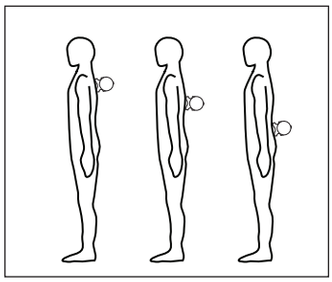
SPINE



FLEXION & EXTENSION

- Stand subject upright
- Place goniometer on region of spine to be tested, set zero
- Flex or extend the spine
- Read result

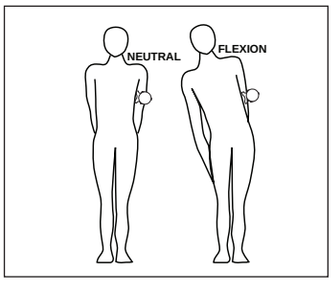
Note: *If the subject is clothed, the goniometer may slip during flexion*



PLOTTING CURVATURE

- With the goniometer on it s side, set true zero
- Stand subject upright
- Place the goniometer at different levels of the spine
- Read result at each level and plot

Note: *Kyphotic and Lordotic curvatures are shown as positive or negative values*

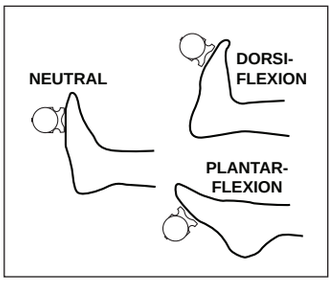


LATERAL MOVEMENT

- Stand subject upright
- Place goniometer on ribs under arm, set zero
- Laterally flex the spine
- Read result

Note: *The higher the goniometer is placed the greater will be the measured compound angle*

ANKLE

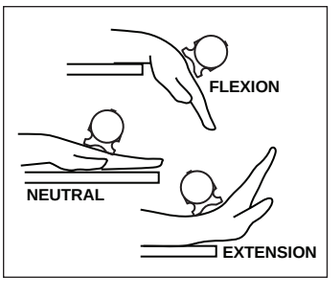


DORSIFLEXION & PLANTARFLEXION

- Lay subject supine, with foot over edge of bed
- Place goniometer on the sole of foot, set zero
- Plantarflex or dorsiflex the ankle
- Read result

Note: *More accurate readings can be obtained when the subject wears flat shoes to reduce the curvature of the foot*

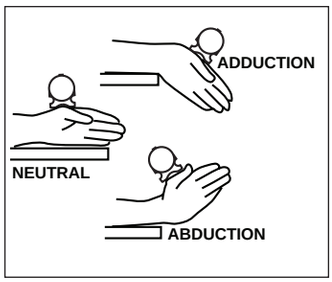
WRIST



FLEXION & EXTENSION

- Put hand and forearm prone on table
- Place goniometer behind MCP joints on back of hand, set zero
- Move hand over edge of table, flex or extend wrist
- Read result from inner or outer dial

Note: *Ensure forearm and elbow are always in contact with the table*

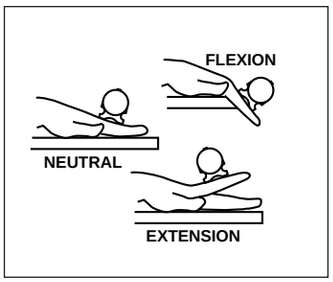


ABDUCTION & ADDUCTION

- Place side of hand, forearm and elbow on table
- Place goniometer on side of hand, set zero
- Move hand over edge of table, abduct or adduct wrist
- Read result

Note: *Ensure back of the hand is always in vertical plane. To eliminate abduction/adduction of MCP joints put fingers in full flexion*

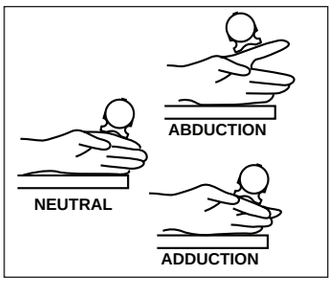
MCP JOINT



FLEXION & EXTENSION

- Put hand prone on table, finger over the edge
- Place goniometer on finger, set zero
- Flex or extend MCP
- Read result

Note: *Maintain full extension of the PIP joint. For small fingers a wooden splint may be taped to the finger*



ABDUCTION & ADDUCTION

- Put side of hand, forearm and elbow on table
- Place goniometer on finger, set zero
- Abduct or adduct MCP
- Read result

Note*: Ensure the little finger, wrist and elbow are always in contact with the table*