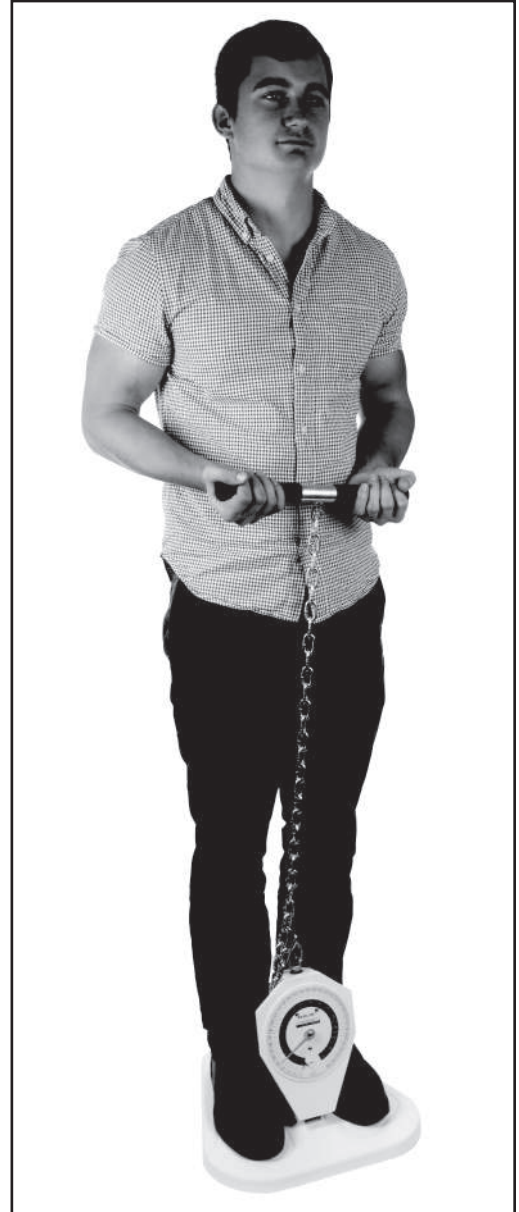


Back-Leg-Chest Dynamometer



Baseline® back-leg-chest dynamometer

Measure strength of back, leg and chest. Base provides sure footing. Chain length is adjusted to accommodate for height differences or to vary the point of force application. Shows pounds and kilograms. Pointer remains at maximum until reset. Unit comes with everything in upper left picture. Available models below.

REF	12-0403	large base, 229 kg / 660 lb. adult
	12-0400	regular base, 272 kg / 600 lb. adult
	12-0401	regular base, 150 kg / 330 lb. adolescent
	12-0402	regular base, 75 kg / 165 lb. child



additional back-leg-chest hardware accessories

handles

12-0442	single handle
12-0441	double handle

bases

12-0406	regular base
12-0407	large base

chains/straps

12-0443	chain (ft)
12-0444	strap (ft)

ovals

12-0445	snap oval
12-0446	threaded oval



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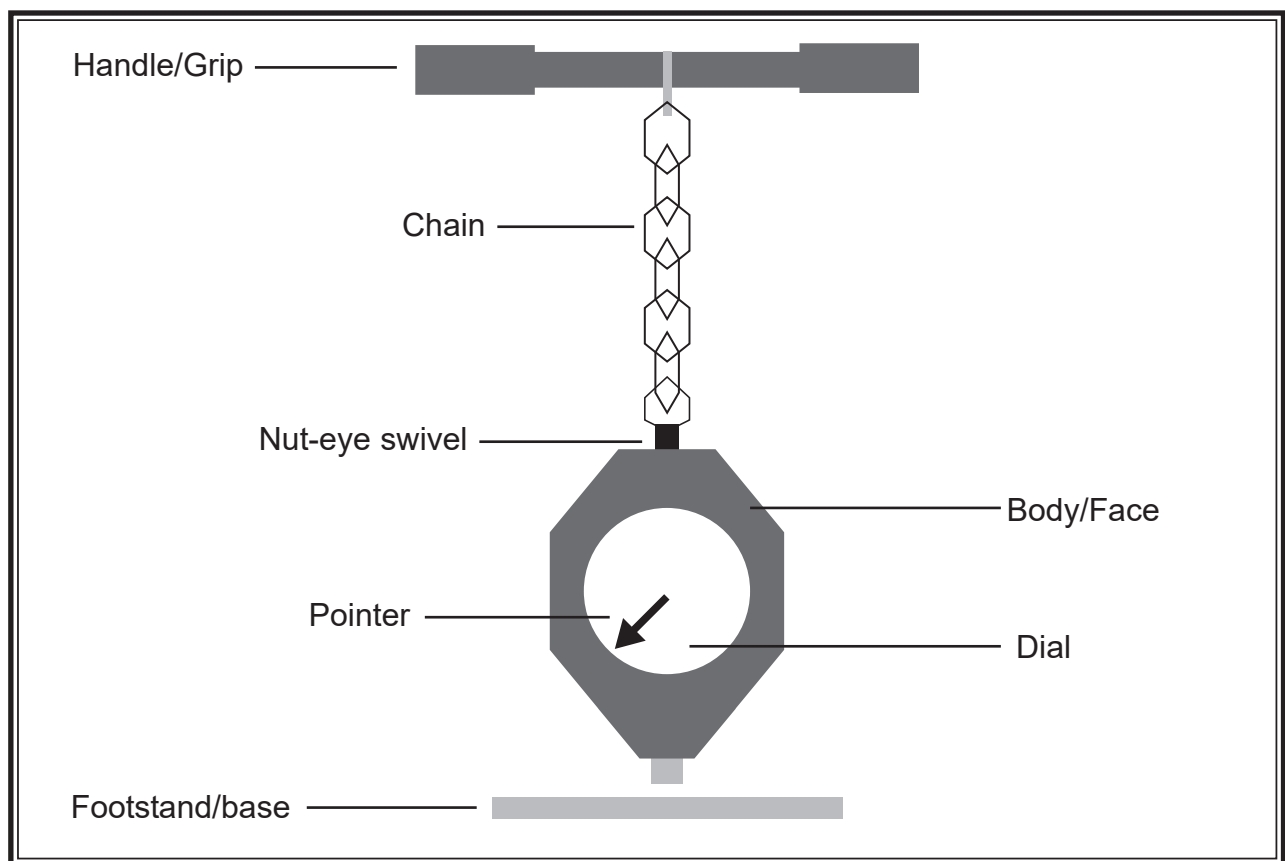


Parts and Assembly

The following parts make up the Back-Leg-Chest dynamometer: Body (face), Dial, Pointer, Footstand (base), Grip and Chain. Locate all of these parts. When assembled, should look like diagram and like photographs on previous page.

To assemble your unit:

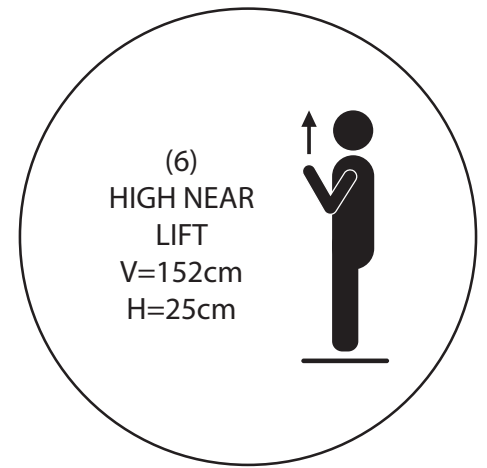
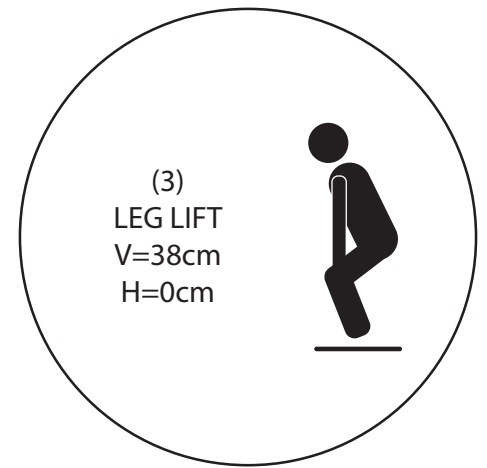
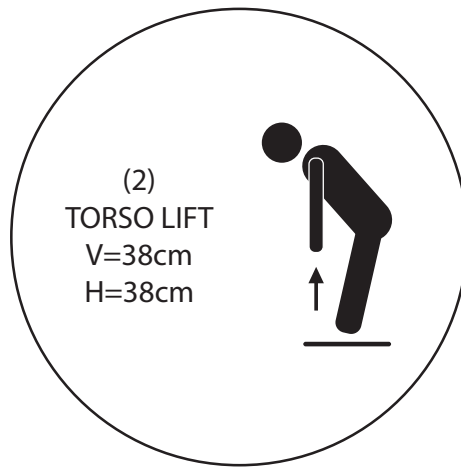
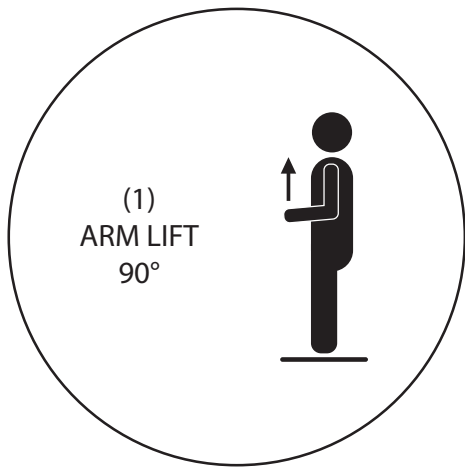
- 1) Locate and remove contents from packaging.
- 2) Attach handle/chain unit to swivel on top of face by using adjustable chain link. Make chain shorter by putting adjustable chain link higher on the chain. If chain is not long enough obtain additional chain footage (stock number 12-0443). Unit is now ready for use.



Back-Leg-Chest dynamometer in raised position

Testing Protocol

1. Subject should stand with both feet on base. (see picture on upper right corner of previous page)
2. Adjust chain to accommodate test protocol. Perform the test. Subject should lift in a gradual vertical motion.
3. The pointer on the dial indicates the force exerted. Each test should consist of three trial measurements. The result is the average.



Maximal Voluntary Isometric Strength (Kilograms)

Test	MALE							FEMALE						
	Sample Size	Coeff. of Variation	Population Percentile					Sample Size	Coeff. of Variation	Population Percentile				
			10	25	50	75	90			10	25	50	75	90
Arm Lift (1)	1052	0.07	23	31	39	48	56	187	0.08	9	15	22	28	34
Torso Lift (2)	1052	0.09	26	34	45	60	77	187	0.10	13	17	24	33	44
Leg Lift (3)	638	---	19	69	91	114	134	133	---	5	27	40	53	64
High Far Lift (4)	309	0.09	16	19	23	28	34	35	0.12	9	11	13	16	19
Floor Lift (5)	309	0.08	59	74	91	108	123	35	0.08	32	44	56	69	80
High Near Lift (6)	309	0.08	35	44	55	66	76	35	0.11	16	12	29	36	42

References: Keyserling, W.M., Herrin, G.D. and Chaffin, D.B. "An Analysis of Selected Work Muscle Strength." Proceedings of the Human Factors Society 22nd Annual Meeting, Detroit 1978.