

Diagram 17

SPECIFICATIONS

WEIGHT: Less than 2 pounds, complete with carrying case. DIMENSIONS: In carrying case 8" x 91/2" x 2" - less footboard

MATERIALS: Shaft and Spool Rust-proof aluminum alloy, chrome plated Bullet Pin Stainless steel Screw and Spap Ring .. Coated metal Casing and Slip Sleeve . Anodized aluminum Line Specially braided nylon

Door Strap Nylon

Handles Hardwood, sealed and natural finish

Carrying Case Plastic with metal zipper

Bumper Vinyl compound

Manual

ACCESSORIES (Optional at extra cost)

FOOTBOARD

LONG LINE HARNESS SET (50' heavy duty nylon line and 2 nylon Shoulder Harnesses)

SHOULDER HARNESS

HEAVY DUTY NYLON LINE

12 FOOT REPLACEMENT LINE

15" WEB LOOP WITH SLIDE—Used As— Anchoring Strap
Physical Therapy Strap
Head Strap Foot Strap

INSTRUCTION MANUAL

for

EXER-GENIE® exerciser

Copyright © 1966, 1967, 1968, 1970 EXER-GENIE, INC. U.S.A.

TYPICAL TEN STATION CIRCUIT FOR MEN

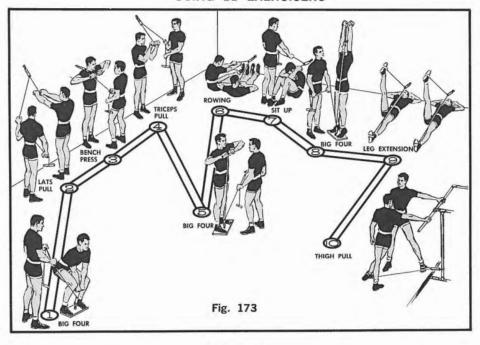
USING 11 EXERCISERS

INTRODUCTION
GENERAL INFORMATION 1
CARE OF YOUR EXER-GENIE® exerciser
EXER-GENIE exerciser (Assembly)
OPERATING INSTRUCTIONS (Resistance Control) 3
ANCHORING INSTRUCTIONS 4
TO REMOVE & REPLACE HANDLES 5
TO SHORTEN LINE 5
ACCESSORY ATTACHMENT 6, 7
EXERCISE METHODS 7
ANATOMY CHART 8
EXERCISE INDEX 9
WARRANTY Inside front cover
PROGRESS CHART Inside back cover

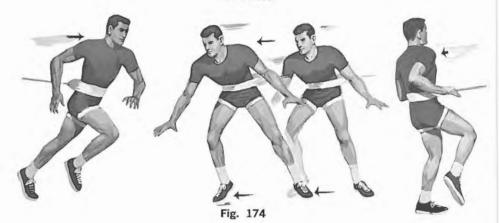
EXERCISE INSTRUCTIONS

TABLE OF CONTENTS

SINGLE	FLOOR SERIES: TOTAL ROW 10, 11 ROW 12 LATS 13 TRICEPS 14 CHEST 15 SIT UP 15 LEG 16 THIGH 17
SINGLE	STANDING SERIES: CHEST 18 LATS 19 SCAPULAR 19 TRICEPS 20 FORWARD BEND 21 HIP 21 THIGH 22 JOGGING 23
SINGLE	CHAIR SERIES: CHEST 23 SCAPULAR 23 LATS 24 TRICEPS 25 FORWARD BEND 26 KNEE 26 LEG 27
MEN'S	SERIES: BIG FOUR 28, 29 CURL 29 TOTAL ROW 30, 31 ROW 32, 33 NECK 33 CHEST 34



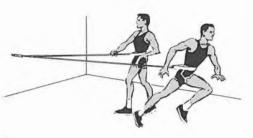
RUNNING



An essential augmentation to the ten station circuit. One 'buddy' runs against resistance to the end of a 50' heavy duty line* as partner in harness* walks back to point of anchor.

Proper form and running technique may be analyzed and corrected while subjects work to develop leg strength and balance.

*See accessories page 64



THE TEN STATION CIRCUIT

The ten station circuit requires only a small area. It can be used without preparation indoors or outdoors with minimum supervision. It is adaptable to individual or group conditioning.

The EXER-GENIE exerciser with its compactness, portability and versatility is ideally suited to circuit training.

ADVANTAGES OF THE CIRCUIT

Since two students or athletes can occupy each station as many as twenty may work out at one time. The coach does not need to organize the class according to size or strength. As partner controls resistance with the trail line, each person can exercise to the limits of his personal capacity throughout the circuit in 10 - 15 minutes.

Circuit exercises available for sports such as football, basketball, wrestling, swimming and tennis.

TYPICAL TEN STATION CIRCUIT FOR WOMEN USING 11 EXERCISERS

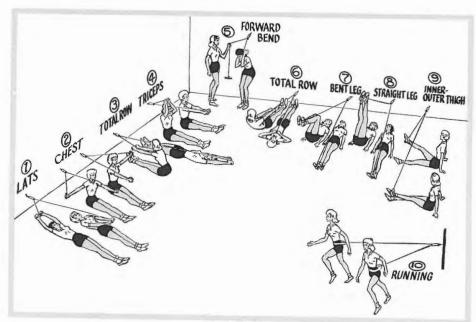


Fig. 172

TABLE OF CONTENTS

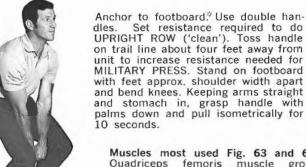
MEN'S																
			inue	ed												
	SCAPL	JLAR .														. 34
	LATS															. 35
	BENCH															
	BICEP															
	FOREA															
	FORW		END													
	SIT U															39
	SIDE E	BEND .														39
	LEG															40
	THIGH															41
	LEG P	10														
	JOGGII	VG .						٠.								42
DUAL	FLOOR	SERIE	S.													
	TOTAL															44.
	ROW															45
	LATS															46
	TRICER															46
	CHEST									. ,						46
	FORWA	RD BE	ND	(St	andi	1g)										47
	SIT UI							٠.								47
	THIGH															48
	JOGGII	VG														49 50
																50
DUAL	CHAIR															
	ROW									, .						51
	LATS															52
	CHEST															52
	TRICER				, .											53
	TRICER		ND		 											53 53
	TRICER		ND													53 53 54
	TRICEF FORWA LEG		ND		 											53 53
	TRICEF FORWA LEG	RD BE	ND													53 53 54 55
	TRICEF FORWA LEG		ND													53 53 54 55
	TRICEF FORWA LEG THIGH	INT	ND													53 53 54 55
	TRICEF FORWA LEG THIGH FOOTB	INT	ND				N	T	0	"	P	EC	IF	IC	CS'	53 53 54 55 57
	TRICEF FORWA LEG THIGH FOOTB BASKE TRACK	INT	RO	DU	JCT	10	N	T	0	· · ·	P	EC	il.	ıc	S	53 53 54 55 57
	TRICEF FORWA LEG THIGH FOOTB BASKE TRACK BASEB	INT ALL IBALL	RO	DU	JCT	10	N	T	0	· · ·	PI	EC	il.	IC	S	53 53 54 55 57
	FOOTB BASKE TRACK BASEB WREST	INT ALL TBALL LING	RO	DU	JCT	10	N	T	0	•	iP)	EC	ZIF.	10	CS'	53 53 54 55 57 57 58
	FOOTB BASKE TRACK BASES WREST SWIMM	INT ALL TBALL LING	RO	DU	JCT	10	N	T	0	"	SPI	EC	il.	ıc	CS'	53 54 55 57 57 58 58 59 59
	FOOTB BASKE TRACK BASEB WREST SWIMM TENNIS	INT ALL TBALL LING	RO	DU	JCT	10	N	T	0	'S	SPI	EC	:IF	=10	CS'	53 53 54 55 57 57 58 59 59 60
	FOOTB BASKE TRACK BASEB WREST SWIMM TENNIS GOLF	INT ALL IBALL ALL LING ING	RO	DU	JCT	IO	N	T	0	*S	iP!	EC	il F	ıc	CS'	53 53 54 55 57 57 58 59 59 60 60
	FOOTB BASKE TRACK BASEB WREST SWIMM TENNIS	INT ALL IBALL ALL LING ING	RO	DU	JCT	10	N	T	0	*S	iP!	EC	il F	ıc	CS'	53 53 54 55 57 57 58 59 59 60
	FOOTB BASKE TRACK BASEB WREST SWIMM TENNIS GOLF	INT ALL IBALL ALL LING ING	RO	DU	JCT	IO	N	Τ'	0	· · · · · · · · · · · · · · · · · · ·	iP)	EC	:IF	ıc	CS'	53 53 54 55 57 57 58 59 59 60 60
	FOOTB BASKE TRACK BASEB WREST SWIMM TENNIS GOLF BOWLIF	INT ALL ING ING	RO	DU	STA	IO	N	T	0	'S	(C)	EC	T	=10	CS'	53 53 54 55 57 57 58 59 59 60 60
	FOOTB. BASKETTRACK BASEB. WREST SWIMM TENNIS GOLF BOWLIT	INT ALL ING ING ING	RO	DU	ST.	IO AT	N	T	0	'S	(C)	EC	T	=10	CS'	53 53 54 55 57 58 58 59 59 60 60 61
	FOOTB BASKE TRACK BASEB WREST SWIMM TENNIS GOLF	INT ALL ING ING ING	RO	DU	ST.	IO AT	N	T	0	'S	CI	EC	T	IC	CS'	53 53 54 55 57 57 58 59 59 60 60
	FOOTB. BASKETTRACK BASEB. WREST SWIMM TENNIS GOLF BOWLIT	INT ALL ING ING ING	RO	DU N AL EDU	ST.	AT CAT	N C	TO NOTE OF THE PROPERTY OF THE	CIR	'S	(C)	EC	T	IC	CS'	53 53 54 55 57 58 59 59 60 61
	FOOTB. BASKETTRACK BASEB. WREST SWIMM TENNIS GOLF BOWLIT	INT ALL ING ING ING I'S PH'	RO	DU N AL EDU	ST. EDU JCAT	AT CAT	N C	TO NOTE OF THE PROPERTY OF THE	CIR	'S	(C)	EC	T	IC	CS'	53 53 54 55 57 58 59 59 60 61 62 63
	FOOTB. BASKETTRACK BASEB. WREST SWIMM TENNIS GOLF BOWLIT	INT ALL IBALL ALL LING ING I'S PHYSIC	RO	N AL EDU	ST. EDU JCAT	AT CAT	N IO	TO NOTE OF THE PROPERTY OF THE	CIRCUI	'S	CI IT	UI	T	=10	CS'	53 53 54 55 57 57 58 59 59 60 61 62 63

MEN'S SERIES

GENERAL CONDITIONING

BIG FOUR

ISOMETRIC HOLD



Muscles most used Fig. 63 and 64: Quadriceps femoris, Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Biceps femoris, Semitendinosus, Semimembranosus.



LEG PRESS

Fig. 64

Ease mostanco and intraighteek, legs.

Fig. 63



The 'curl' (Fig. 69-70) may be included as part of the Big Four in place of the 'CLEAN' (Fig. 65-66).

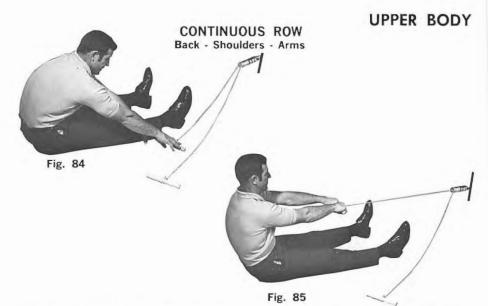
Drop trail line. Keeping hands close to body, pull to chin ('clean').

Muscles most used. Trapezius, Serratus anterior, Deltoid, Supraspinatus, Biceps brachii, Brachialis, Brachioradialis.



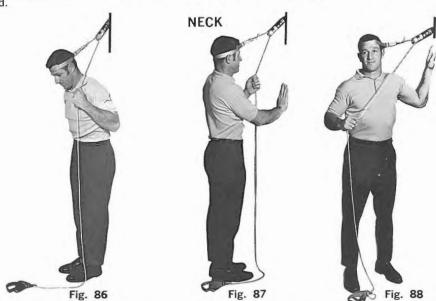
*See accessories. Pg. 64

Rotate hands, bringing elbows down.



Anchor 18" above floor. Use double handles. Assume position away from unit, grasp handle and row through to chest. Drop handle, stretch forward and grasp other handle to continue rowing.

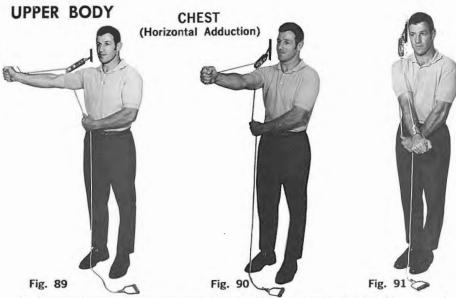
Muscles most used: Biceps brachii. Brachialis, Brachioradialis, Posterior Deltoid. Infraspinatus, Teres minor, long head of Triceps brachii, Middle Trapezius, Rhomboid.



Anchor at head level. Attach 15" web loop with slide.* Grasp handle and pull isometrically for 10 seconds. Ease resistance and flex head away from unit (to front, back and each side).

Muscles most used: Forward: Sternocleidomastoid; Backward: Erector spinae muscle group; Side: Sternocleidomastoid, Erector spinae muscle group.

*See accessories Pg. 64, Pg. 6, Diagram 7



Anchor at shoulder level. Use wire handles. With arm extended to side, grasp handle and pull isometrically for 10 seconds. Keeping arm straight, ease resistance and move arm to front of body. As arm crosses center of body, rotate palm and move arm downward.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.

RECIPROCATING CHEST (Horizontal Adduction)



Anchor at shoulder level. Use wire handles. With arms extended slightly forward, grasp handles and push isometrically for 10 seconds. Keeping elbows locked, alternately move arms in arc from side to front.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.

RECIPROCATING SCAPULAR (Horizontal Abduction)



Anchor at shoulder level. Use wire handles. Facing unit with arms extended and slightly forward from sides, grasp handles and pull isometrically for 10 seconds. Keeping arms straight, alternately move arms in arc from front to side.

Muscles most used: Trapezius, Rhomboid, Deltoid, Triceps brachii, Infraspinatus, Teres minor.

NOTE: Do not twist at waist

RECIPROCATING STRAIGHT LEG (Hip Extension)



Fig. 61

Anchor overhead when seated. Attach 15" web loops.* Controlling resistance on trail line with lowered leg, push isometrically for 10 seconds. Keeping knees locked and toes pointed, move leg in downward sweep. While maintaining resistance, lowered leg moves to exercise position and exercised leg assumes control of resistance.

Muscles most used: Semitendinosus, Semimembranosus, Biceps femoris, Gluteus maximus, Gastrocnemius.

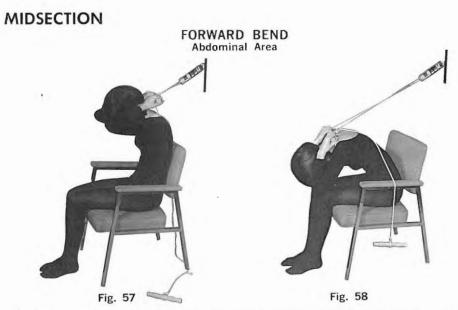
RECIPROCATING BENT LEG (Knee and Hip Extension)



Fig. 62

Anchor overhead when seated. Attach 15" web loops.* Do not point toes. Bend knee and bring one thigh as close to body as possible. Extend other leg to control resistance on trail line. Push isometrically for 10 seconds. Push bent leg to full extension. While maintaining resistance other leg moves into bent knee position and exercised leg assumes control of resistance.

Muscles most used: Quadriceps (Rectus femoris, Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Semitendinosus, Semimembranosus, Biceps femoris.

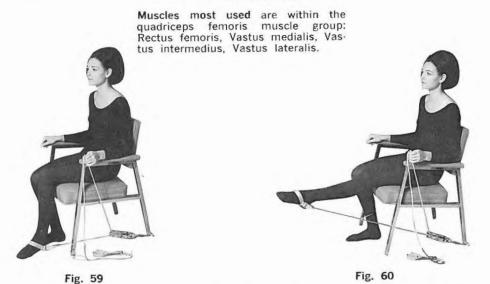


Anchor above head when seated. Use double handles. With head lowered and elbows forward, grasp handle behind neck and pull isometrically for 10 seconds. Ease resistance and bend forward and down.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

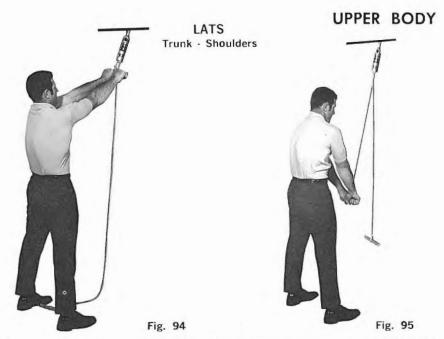
LEGS

KNEE EXTENSION



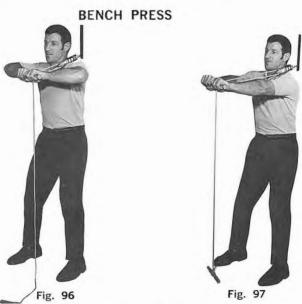
Anchor to back leg of chair. Attach 15" web loop.* With knee bent, push isometrically for 10 seconds. Ease resistance and push leg to full extension.

*See accessories. Pg. 6, Diagrams 8 & 9



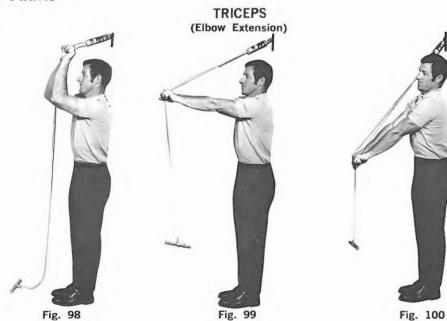
Anchor overhead. Use double handles. Extend arms overhead, grasp handle and pull down isometrically for 10 seconds. Keeping elbows locked, ease resistance and pull to thighs.

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.



Anchor at chin level. Use double handles. Grasp handle and push isometrically for 10 seconds. Ease resistance and push arms to full extension.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis, Biceps brachii, Triceps brachii, Pectoralis minor, Serratus anterior.



Anchor above head. Use double handles. With elbows bent and forward, grasp handle above head and push isometrically for 10 seconds. Ease resistance and push arms to full extension.

Muscle most used: Triceps brachii

RECIPROCATING TRICEPS



Fig. 101

Anchor at head level. Use wire handles. With elbows bent and forward, grasp handles and push isometrically for 10 seconds. Alternately push arms to full extension.

Muscle most used: Triceps brachii.







Anchor above head when seated. Use double handles. With elbows bent and forward, grasp handle above head and push isometrically for 10 seconds. Ease resistance and push arms to full extension.

Muscle most used: Triceps brachii

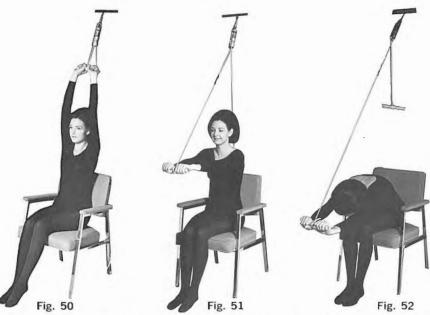
RECIPROCATING TRICEPS



Fig. 56

Anchor above head when seated. Use wire handles. With elbows bent and forward, grasp handles and push isometrically for 10 seconds. Alternately push arms to full extension.

Muscle most used: Triceps brachii



Anchor overhead when seated. Use double handles. Extend arms overhead, grasp handle and pull down isometrically for 10 seconds. Keeping elbows locked, ease resistance and pull to knees.

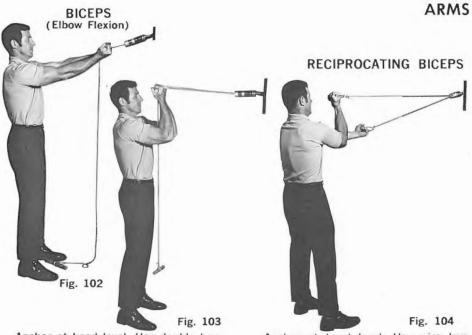
Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.

RECIPROCATING LATS



Anchor overhead. Use wire handles. Extend arms, grasp handles and pull isometrically for 10 seconds. Keeping elbows locked, alternately exercise arms with downward sweep.

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.

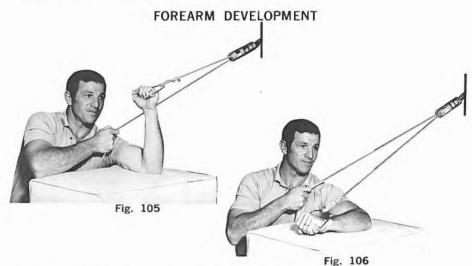


Anchor at head level. Use double handles. Keeping elbows up and arms extended, grasp handle and pull isometrically for 10 seconds. Ease resistance and pull handle toward head.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis.

Anchor at head level, Use wire handles. With elbows bent, grasp handles and pull isometrically for 10 seconds. Alternately flex and extend elbows.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis.



Anchor 6"-10" above table. Use wire handles. Position forearm at right angle to table or desk. Grasp handle and pull isometrically for 10 seconds. Ease resistance and sweep arm downward. Repeat with other arm.

Muscles most used: Teres major, Latissimus dorsi, Subscapularis, Pectoralis major, Brachioradialis, Ulnar flexor, Round pronator, Radial flexor.

MIDSECTION



FORWARD BEND Abdominal Area



Anchor at head level. Use double handles. Keeping knees bent and head lowered, grasp handle behind neck. With elbows forward, pull isometrically for 10 seconds. Ease resistance and bend downward as far as possible.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

FORWARD BEND



Fig. 109



Fig. 110

Anchor at head level when seated. Use double handles, with elbows forward and head lowered, grasp handle behind neck and pull isometrically for 10 seconds. Ease resistance and bend forward and down.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

GENERAL CONDITIONING

JOGGING

Anchor at waist level. Attach harness* and place around midsection. Jog against resistance.



Fig. 47

SINGLE CHAIR SERIES

UPPER BODY

RECIPROCATING CHEST (Horizontal Adduction)



Anchor at shoulder level when seated. Use wire handles. With arms extended slightly forward, grasp handles and push isometrically for 10 seconds. Keeping elbows locked, alternately move arms in arc from side to front.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.

RECIPROCATING SCAPULAR
(Horizontal Abduction)



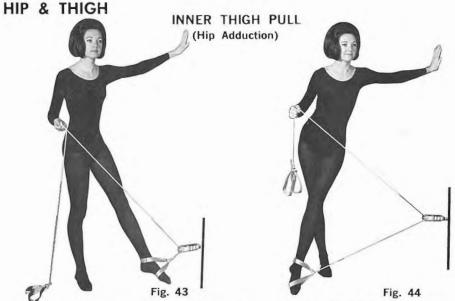
Anchor at shoulder level when seated. Use wire handles. Facing unit with arms extended and slightly forward from sides, grasp handle and pull isometrically for 10 seconds. Keeping elbows locked, alternately move arms in arc from front to side.

Muscles most used: Trapezius, Deltoid, Triceps brachii, Infraspinatus, Teres minor.

NOTE: Do not twist at waist

*See accessories. Pg. 6, Diagrams 10 & 11

SIT UP Abdominal Area



Anchor 18' above floor, Attach 15" web loop. Placing hand against wall for support, stand sideways to unit with feet apart and pull with leg isometrically for 10 seconds. Ease resistance and swing leg across as far as possible. Face opposite direction to work other thigh.

Muscles most used: Adductor brevis, Adductor magnus, Adductor longus, Gracilis.



Anchor 18" above floor. Attach 15" web loop.* Stand sideways to unit and place hand against wall for support. Cross leg toward unit and push with leg isometrically for 10 seconds. Ease resistance and swing leg away from unit as far as possible. Face opposite direction to work other thigh.

Muscles most used: Gluteus medius, Biceps femoris, Vastus lateralis, Semimembranosus, Tractus iliotibialis.

*See accessories. Pg. 6, Diagrams 8 & 9



Anchor 6" above floor. Use double handles. Keeping knees bent and feet flat on floor, grasp handle behind neck. With elbows forward and lower back on floor, raise shoulders and pull isometrically for 10 seconds. Ease resistance and curl forward until elbows touch knees. Feet may be held down by partner or object.

NOTE: Do not arch back.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

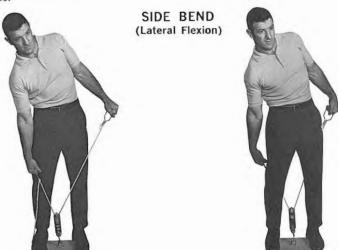


Fig. 113 Fig. 114 (Alt.)

Anchor to footboard. Use wire handles. Shorten line (Pg. 5, Diagram 6). Keeping shoulders back, bend directly to side, grasp handles and pull isometrically for 10

Muscles most used: Internal oblique, External oblique, Rectus abdominis, Erector spinae.

seconds. Bend to other side. Pull isometrically for 10 seconds and return.

*See accessories pg. 64

RECIPROCATING STRAIGHT LEG

(Hip Extension)

Anchor 18" above floor

Anchor overhead when seated

Fig. 115

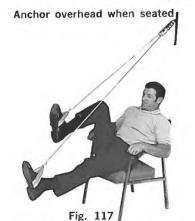
Muscles most used Semitendinosus, Semimembranosus, Biceps femoris, Gluteus maximus, Gastrocnemius.

Attach 15" web loops.* Keeping toes pointed, bring one leg up and over body. Controlling resistance on trail line with lowered leg, push isometrically for 10 seconds. Keeping knees locked, move leg in downward sweep. While maintaining resistance, other leg moves to exercise position and exercised leg assumes control of resistance.

Note: Both legs may be exercised simultaneously (Pg. 16, Fig. 20)

RECIPROCATING BENT LEG

(Knee and Hip Extension)



Muscles most used: Quadriceps (Rectus femoris. Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Semitendinosus, Semimembranosus, Biceps femoris.

Anchor 18" above floor



Attach 15" web loops.* Do not point toes. Bend knee and bring one thigh as close to body as possible. Extend other leg to control resistance on trail line. Push isometrically for 10 seconds. Push bent leg to full extension. While maintaining resistance other leg moves into bent knee position and exercised leg assumes control of resistance.

Note: Both legs may be exercised simultaneously (Pg. 16, Fig. 22) *See accessories. Pg. 6, Diagrams 8 & 9



FORWARD BEND Abdominal Area



MIDSECTION

Anchor overhead. Used double handles. Keeping knees bent and head lowered, grasp handle behind neck with overhand grip. With elbows forward, pull isometrically for 10 seconds. Ease resistance and bend downward as far as possible.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

HIP AND LEG



Anchor 18" above floor. Attach 15" web loop.* Facing door, bring foot close to unit and pull isometrically for 10 seconds. Ease resistance and pull leg backward.

Muscles most used: Gluteus maximus, Semitendinosus, Semimembranosus, Biceps femoris, Gastrocnemius.

*See accessories. Pg. 6, Diagrams 8 & 9



Anchor 18' above floor. Attach 15" web loop.* Push leg forward isometrically for 10 seconds. Ease resistance and push leg forward to full extension.

Muscles most used: Tensor fasciae latae, Rectus femoris, Adductor magnus, Vastus lateralis, Vastus medialis.

Fig. 122

TRICEPS (Elbow Extension)



Anchor above head. Use double handles. With elbows bent and forward, grasp handle above head and push isometrically for 10 seconds. Ease resistance and push arms to full exten-

Muscle most used: Triceps brachii



Fig. 37

Anchor to footboard. Use double handles. Preset resistance. Keeping elbows forward, grasp handle behind head with underhand grip and push arms to full extension overhead.

Muscle most used: Triceps brachii

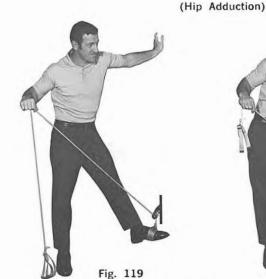


Fig. 120

Anchor 18" above floor. Attach 15" web loops. Stand sideways to unit and place hand against wall for support. With feet apart, pull with leg isometrically for 10 seconds. Ease resistance and swing leg across as far as possible. Face opposite direction to work other thigh.

INNER THIGH PULL

Muscles most used: Adductor brevis, Adductor magnus, Adductor longus, Gracilis.

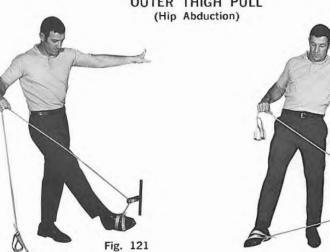
RECIPROCATING TRICEPS



Anchor at head level. Use wire handles. With elbows bent and forward, grasp handles and push isometrically for 10 seconds. Alternately push arms to full extension.

Muscle most used: Triceps brachii.

OUTER THIGH PULL



Anchor 18" above floor. Attach 15" web loops.* Stand sideways to unit and place hand against wall for support. Cross leg toward unit and push with leg isometrically for 10 seconds. Ease resistance and swing leg away from unit as far as possible. Face opposite direction to work other thigh.

Muscles most used: Gluteus medius, Biceps femoris, Vastus lateralis, Semimembranosus, Tractus iliotibialis.

*See accessories. Pg. 6, Diagrams 8 & 9

Fig. 38





Fig. 123

Fig. 124

Anchor to footboard.* Attach harness* to end of line (Pg. 6, Diagram 12.) Stand on footboard with knees bent. Lift isometrically for 10 seconds. Straighten back, ease resistance and push legs to complete extension. End with heel raise.

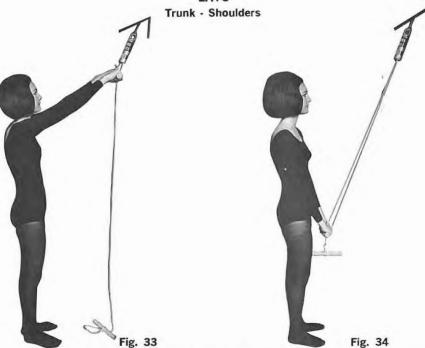
NOTE: Do not lift with back.

Muscles most used: Quadriceps (Rectus femoris, Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Biceps femoris, Semitendinosus, Semimembranosus.

GENERAL CONDITIONING



Anchor at waist level. Attach harness* and place around midsection (pg. 6, diagrams 10 & 11). Jog against resistance.



Anchor overhead. Use double handles. Extend arms, grasp handle and pull down isometrically for 10 seconds. Keeping elbows locked and arms straight, ease resistance and pull to thighs.

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.

RECIPROCATING SCAPULAR

(Horizontal Abduction)



Anchor at shoulder level. Use wire handles. Facing unit with arms extended and slightly forward from sides, grasp handles and pull isometrically for 10 seconds. Keeping arms straight, alternately move arms in arc from front to side.

NOTE: Do not twist at waist

Muscles most used: Trapezius, Deltoid, Infraspinatus, Teres minor, Triceps Brachii.

*See accessories pg. 64

Fig. 35

UPPER BODY

STANDING SERIES

(Ho

Fig. 29





Anchor at shoulder level. Use wire handles. With arm extended to side, grasp handle and pull isometrically for 10 seconds. Keeping arm straight, ease resistance and move arm to front of body. As arm crosses center of body, rotate palm and move arm downward.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.

RECIPROCATING CHEST

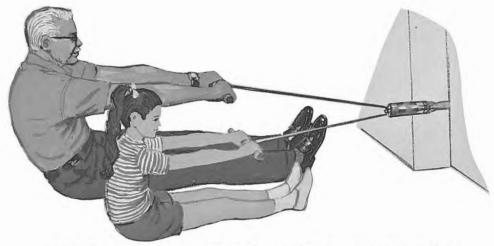


Anchor at shoulder level. Use wire handles. With arms extended and slightly forward from side, grasp handles and push isometrically for 10 seconds. Keeping elbows locked, alternately move arms in arc from side to front.

NOTE: Do not twist at waist.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.

DUAL EXERCISES



EXERCISE TOGETHER - WEAK AND STRONG - OLD AND YOUNG

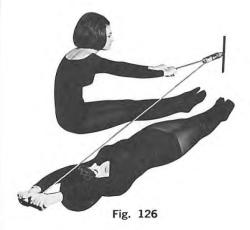
With partner controlling resistance on the trail line, individuals with differences in strength and size may exercise together, each working to capacity.

DUAL SERIES

GENERAL CONDITIONING

TOTAL ROW

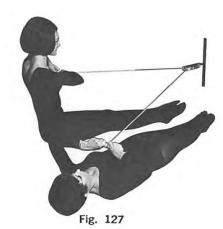
Anchor 18" above floor. Use double handles. Partners alternately control resistance while moving to starting position.



Grasp handle close to unit and pull isometrically for 10 seconds against partner controlled resistance.

Keeping elbows high, row to chest as partner eases resistance.

Muscles most used: Biceps brachii, Brachioradialis, Brachialis, Posterior Deltoid, Infraspinatus, Teres minor, long head of Triceps brachii, Middle Trapezius, Rhomboid.



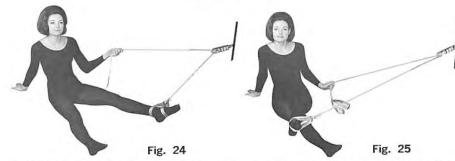
Lower back to floor as partner begins sit up.

Muscles most used: Erector spinae muscle group.



HIP AND THIGH

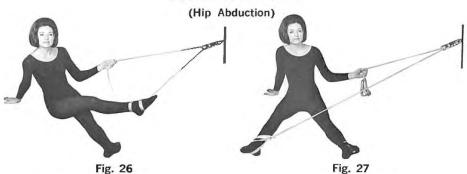
INNER THIGH PULL (Hip Adduction)



Anchor 18" above floor. Attach 15" web loop.* With feet apart, pull with leg isometrically for 10 seconds. Ease resistance and swing leg across as far as possible. Face opposite direction to work other thigh.

Muscles most used: Adductor brevis, Adductor magnus, Adductor longus, Gracilis.

OUTER THIGH PULL



Anchor 18' above floor. Attach 15" web loop. Cross leg toward unit and push isometrically for 10 seconds. Ease resistance and swing leg out as far as possible. Face opposite direction to work other thigh.

Muscles most used: Gluteus medius. Biceps femoris. Vastus medialis, Semimembranosus, Tractus iliotibialis.

INNER or OUTER THIGH PULL

(Hip Adduction and Abduction)



Anchor 18" above floor. Attach 15" web loops.* Alternately work thighs in scissors motion. Face opposite direction and repeat.

Fig. 28

*See accessories. Pg. 6, Diagrams 8 & 9



44

LEGS

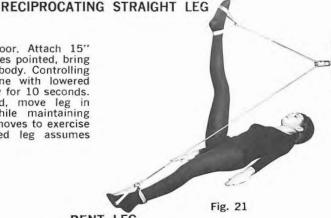
Fig. 20

STRAIGHT LEG (Hip Extension)

Anchor 18" above floor. Attach 15" web loop. Keeping knees locked and toes pointed, bring legs up and over body and push downward isometrically for 10 seconds. Ease resistance and move legs in downward sweep.

Muscles most used: Semitendinosus, Semimembranosus, Biceps femoris, Gluteus maximus, Gastrocnemius.

Anchor 18" above floor. Attach 15" web loops. *Keeping toes pointed, bring one leg up and over body. Controlling resistance on trail line with lowered leg, push isometrically for 10 seconds. Keeping knees locked, move leg in downward sweep. While maintaining resistance, other leg moves to exercise position and exercised leg assumes control of resistance.

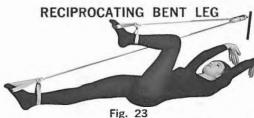


BENT LEG (Knee and Hip Extension)



Anchor 18" above floor. Attach 15" web loops.* Do not point toes. Bend knees and bring thighs as close to body as possible. Push isometrically for 10 seconds. Ease resistance and push legs to full extension.

Muscles most used: Quadriceps (Rectus femoris, Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Semitendinosus, Semimembranosus, Biceps femoris.



Anchor 18" above floor. Attach 15" web loops.* Do not point toes. Bend knee and bring one thigh as close to body as possible. Extend other leg to control resistance on trail line. Push isometrically for 10 seconds. Push bent leg away from head. While maintaining resistance other leg moves into bent knee position and exercised leg assumes control of resistance.

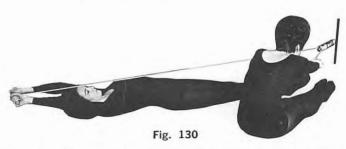
*See accessories. Pg. 6, Diagrams 8 & 9

GENERAL CONDITIONING



With hands at chest, continue lowering back to floor as partner extends arms and completes sit up.

Muscles most used: 1st partner: Erector spinae muscle group. 2nd partner: Rectus abdominis, External oblique, Internal oblique.



'Press' arms overhead to complete extension as partner assumes starting position.

Muscles most used: Deltoid, Triceps brachii, Supraspinatus, Trapezius, Serratus anterior.

UPPER BODY

SCAPULAR ROW

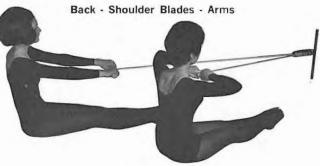
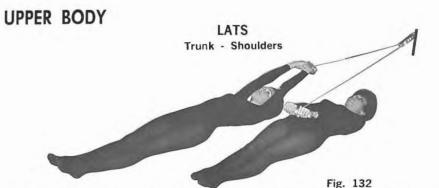


Fig. 131

Anchor 18" above floor. Use double handles. Extend arms forward, grasp handle and pull isometrically for 10 seconds against partner controlled resistance. Keeping elbows high, row to chest as partner eases resistance to assume starting position.

Muscles most used: Trapezius, Rhomboid.



Anchor 18" above floor. Use double handles. Extend arms overhead, grasp handle and pull isometrically for 10 seconds against partner controlled resistance. Keeping elbows locked, pull down to thighs as partner eases resistance to assume starting position.

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.



Anchor 18" above floor. Use double handles. With elbows bent and forward, grasp handle above head and push isometrically for 10 seconds against partner controlled resistance. Push arms to full extension as partner eases resistance to assume starting position.

Muscle most used: Triceps brachii.





Anchor 18" above floor. Use wire handles, With arm extended, grasp handle and pull isometrically for 10 seconds against partner controlled resistance. Keeping arm straight, work arm in arc from side to front as partner eases resistance to assume starting position.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.



(Horizontal Adduction)

Anchor 18" above floor. Use wire handles. With arms extended slightly forward, grasp handles and push isometrically for 10 seconds. Keeping elbows locked, alternately move arms in arc from side to front.

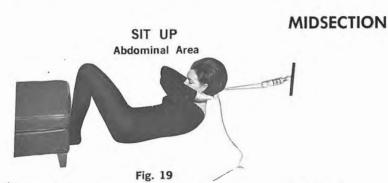
NOTE: Do not twist at waist.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.



Anchor 18" above floor. Use wire handles. With arms extended and elbows locked, grasp handles and pull isometrically for 10 seconds. Keeping elbows locked, alternately work one arm upward.

Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.



Anchor 6" above floor. Use double handles. Keeping knees bent and feet flat on floor, grasp handle behind neck. With elbows forward and lower back on floor, raise shoulders and pull isometrically for 10 seconds. Ease resistance and curl forward until elbows touch knees. Feet may be held down by partner or object.

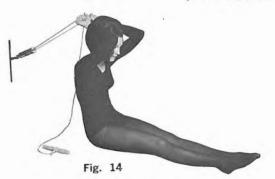
NOTE: Do not arch back.

See alternate Forward Bend (Pg. 26, Fig. 57, 58).

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

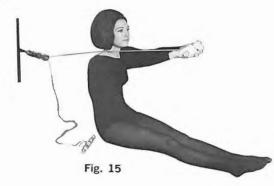
TRICEPS

(Elbow Extension)



Anchor 18" above floor. Use double handles. With elbows bent and forward, grasp handles above head and push isometrically for 10 seconds. Ease resistance and push arms to full extension.

Muscle most used: Triceps brachii.

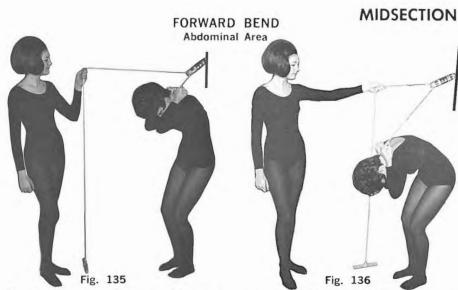


RECIPROCATING TRICEPS



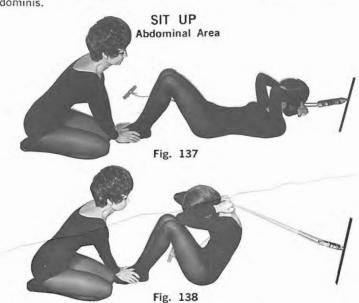
Anchor 18" above floor. Use wire handles. With elbows bent and forward, grasp handles and push isometrically for 10 seconds. Alternately push arms to full extension.

Muscle most used: Triceps brachii.



Anchor at head level. Use double handles. Keeping knees bent and head lowered, grasp handle behind neck with overhand grip. With elbows forward pull isometrically for 10 seconds against partner controlled resistance. Bend downward as partner eases resistance.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.



Anchor 6" above floor. Use double handles. Feet are held flat on floor by partner. Keeping knees bent, grasp handle behind neck with overhand grip. With elbows forward and lower back on floor, raise shoulders and pull isometrically for 10 seconds. Ease resistance and curl forward until elbows touch knees.

NOTE: Do not arch back.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

STRAIGHT LEG

(Hip Extension)



Anchor 18" above floor. Attach 15" web loops.* Keep knees locked and toes pointed. Bring legs up and over body and push downward isometrically for 10 seconds against partner controlled resistance. Move legs in downward sweep as partner eases resistance to assume starting position.

Muscles most used: Semitendinosus, Semimembranosus, Biceps femoris, Gluteus maximus, Gastrocnemius.

BENT LEG

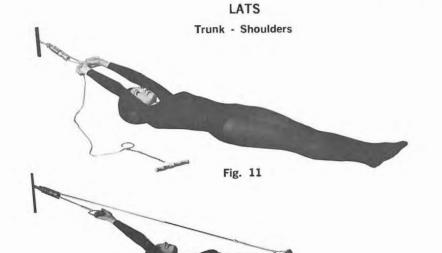
(Knee and Hip Extension)



Fig. 140

Anchor 18" above floor. Attach 15" web loops.* Do not point toes. Bend knees and bring thighs as close to body as possible. Push isometrically for 10 seconds against partner controlled resistance. Push legs to full extension as partner eases resistance to assume starting position.

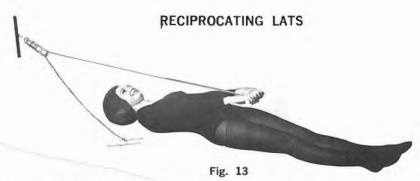
Muscles most used: Quadriceps (Rectus femoris, Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Semitendinosus, Semimembranosus, Biceps femoris.



Anchor 18" above floor. Use double handles. Extend arms overhead, grasp handle and pull isometrically for 10 seconds. Keeping elbows locked, ease resistance and pull to thighs.

Fig. 12

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.



Anchor 18" above floor. Use wire handles. Extend arms, grasp handles and pull isometrically for 10 seconds. Keeping elbows locked, alternately exercise arms with downward sweep.

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.

SCAPULAR ROW

Back - Shoulder Blades - Arms



Anchor 18" above floor. Use double handles. Extend arms forward, grasp handle and pull isometrically for 10 seconds. Keeping elbows high, ease resistance and row to chest.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis, Posterior Deltoid, Infraspinatus, Teres minor, Long head of Triceps brachii, Middle Trapezius, Rhomboid.

CONTINUOUS ROW

Back - Shoulder Blades - Arms



Fig. 9



Fig. 10

Anchor 18" above floor. Use double handles. Assume position away from unit, grasp handle and row through to chest. Drop handle, stretch forward and grasp other handle to continue rowing.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis, Posterior Deltoid, Infraspinatus, Teres minor, Long head of Triceps brachii, Middle Trapezius, Rhomboid.

INNER THIGH PULL

(Hip Adduction)



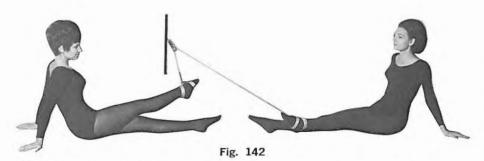
Fig. 141

Anchor 18" above floor. Attach 15" web loops.* Sit sideways to unit. With feet apart, person nearest unit pulls isometrically for 10 seconds against partner controlled resistance. Pull leg away from unit as partner eases resistance to assume starting position. Face opposite direction to work other thigh.

Muscles most used: Adductor brevis, Adductor magnus, Adductor longus, Gracilis.

OUTER THIGH PULL

(Hip Abduction)



Anchor 18" above floor. Attach 15" web loops,* Sit sideways to unit facing each other. With leg crossed in starting position, pull isometrically for 10 seconds against partner controlled resistance. Pull leg away from unit as partner eases resistance to assume starting position. Exchange positions to work other thigh.

Muscles most used: Gluteus medius, Biceps femoris, Vastus lateralis, Semimembranosus, Tractus iliotibialis.

Note: Inner and/or Outer Thighs may be exercised from either position shown in Fig. 141 and 142.

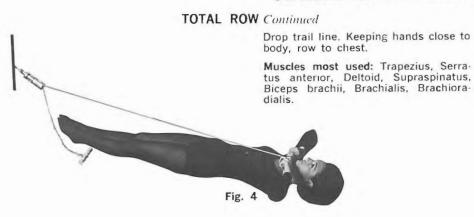
*See accessories. Pg. 6, Diagrams 8 & 9

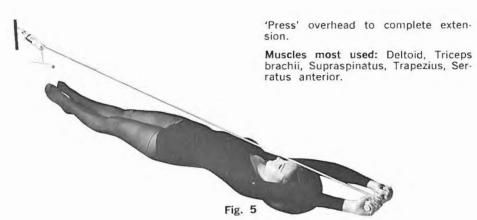
GENERAL CONDITIONING

JOGGING Fig. 143

Anchor at waist level. Attach harness* to line and place around midsection. Jog against resistance, alternately moving forward and backward.

GENERAL CONDITIONING







Drop handle. Reaching forward, pull body to sitting position.

Muscles most used: Rectus abdominis, External oblique, Internal oblique.

FLOOR SERIES

GENERAL CONDITIONING

TOTAL ROW



Anchor 18" above floor. Use double handles. With legs straight and feet against wall, grasp handle close to unit and pull isometrically for 10 seconds.

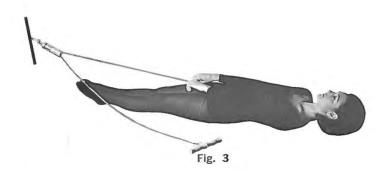
Fig. 1

Keeping elbows high, ease resistance and row to chest.

Muscles most used: Biceps Brachii, Brachioradialis, Brachialis, Posterior Deltoid, Infraspinatus, Teres minor, Long head of Triceps brachii, Middle Trapezius, Rhomboid.



Fig. 2



Extend arms; lower back to floor.

Muscles most used: Erector spinae muscle group.

DUAL CHAIR SERIES

UPPER BODY

SCAPULAR ROW

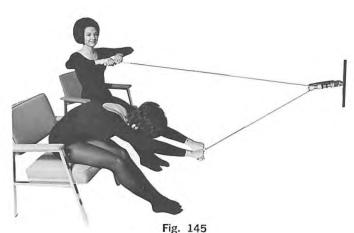


Fig. 144

Anchor at shoulder level when seated. Use double handles. Extend arms forward, grasp handle and pull isometrically for 10 seconds against partner controlled resistance. Keeping elbows high, row to chest as partner eases resistance to assume starting position.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis, Posterior Deltoid, Infraspinatus, Teres minor, long head of Triceps brachii, Middle Trapezius, Rhomboid

(Back Extensor)



Alternate to Fig. 144

Note: Includes lower back in exercise.

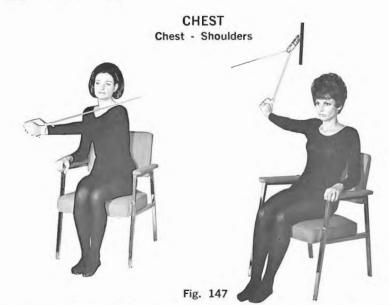
UPPER BODY

LATS Trunk - Shoulders



Anchor overhead. Use double handles. Extend arms overhead, grasp handle and pull down isometrically for 10 seconds against partner controlled resistance. Keeping elbows locked, pull down to knees as partner eases resistance to assume starting position.

Muscles most used: Latissimus dorsi, Pectoralis major, Teres major, Deltoid, Triceps brachii.



Anchor at shoulder level when seated. Use wire handles. Extend arm to side, lock elbow, grasp handle and pull isometrically for 10 seconds against partner controlled resistance. Keeping arm straight, work arm in arc from side to front as partner eases resistance to assume starting position.

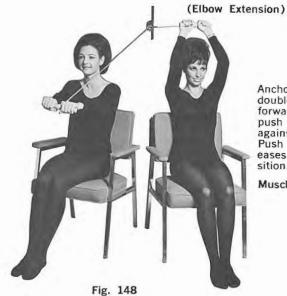
Muscles most used: Deltoid, Pectoralis major, Coracobrachialis.

EXERCISE INDEX

SINGLE EXERCISES

SINGLE EXERCISES	2.62.7.22		
	EMPHASIS	PAGE	NO.
VPPER BODY: Neck Continuous Row Scapular Row Scapular Lats Upright Row Triceps Bench Press Biceps Curl Forearm Development Chest	Neck Back, Shoulder blades, Arms Back, Shoulder blades, Arms Shoulder blades Trunk, Shoulders Back, Shoulders, Arms Arms Arms, Trunk Arms Arms Forearm Chest, Shoulders	32 14, 20 35 37 29 37	
MIDSECTION: Sit Up	Abdomen	21, 26	
LEGS, HIP, THIGH: Straight Leg Leg Press Bent Leg Hip Extension Hip Flexion Knee Extension Inner Thigh Pull Outer Thigh Pull Inner or Outer Thigh Pull	Hip, Outer Thigh	21 21 26	, 40
GENERAL CONDITIONING:			
Big Four		28, 29	
DUAL EXERCISES			
UPPER BODY: Scapular Row Lats Triceps Chest	Back, Shoulder blades, Arms Trunk, Shoulders Arms Chest, Shoulders	46, 52 46, 53	
MIDSECTION:			
Sit Up	Abdomen		
LEGS, HIP, THIGH: Straight Leg Bent Leg Inner Thigh Pull Outer Thigh Pull Inner or Outer Thigh Pull	Hamstrings, Calf, Buttocks Quadriceps (Thigh) Hip, Inner Thigh Hip, Outer Thigh Hip, Inner or Outer Thigh	48, 54 49 49	
GENERAL CONDITIONING:			

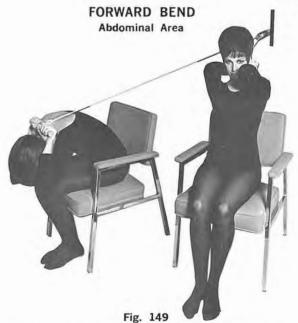
TRICEPS



Anchor above head when seated. Use double handles. With elbows bent and forward, grasp handle above head and push isometrically for 10 seconds against partner controlled resistance. Push arms to full extension as partner eases resistance to assume starting po-

Muscle most used: Triceps brachii.

MIDSECTION



Anchor at head level when seated. Use double handles. Keeping elbows forward, grasp handle behind neck and pull isometrically for 10 seconds against partner controlled resistance. Bend forward until elbows touch knees as partner eases resistance to assume starting position.

Muscles most used: Rectus abdominis, External oblique, Internal oblique, Transverse abdominis.

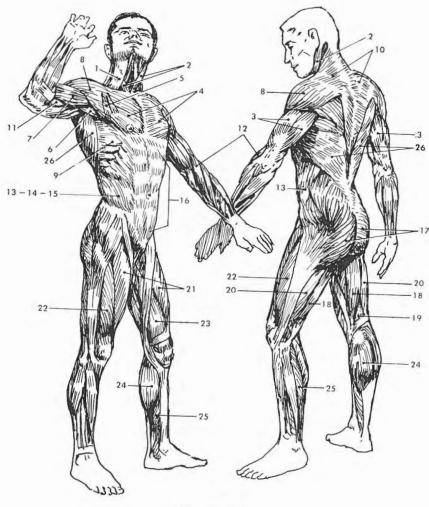


Diagram 16 MUSCLES

- 1. Platysma
- 2. Sternocleidomastoid
- 3. Triceps brachii
- 4. Pectoralis major
- 5. Pectoralis minor
- 6. Coracobrachialis
- 7. Biceps brachii
- 8. Deltoid
- 9. Serratus anterior
- 11. Brachialis
- 12. Brachioradialis
- 10. Trapezius
- 13. External oblique

- 14. Internal oblique
- Erector spinae
 Rectus abdominis
- 17. Gluteus maximus
- 18. Semitendinosus
- 19. Semimembranosus
- 20. Biceps femoris
- 21. Rectus femoris
- 22. Vastus lateralis
- 23. Vastus medialis
- 24. Gastrocnemius
- 25. Soleus
- 26. Latissimus dorsi

STRAIGHT LEG

(Hip Extension)



Anchor overhead when seated. Attach 15" web loops.* Keeping knee locked and toes pointed, raise leg and push downward isometrically for 10 seconds against partner controlled resistance. Move in downward sweep as partner eases resistance to assume starting position.

Note: Both legs may be exercised simultaneously (Fig. 151).

Muscles most used: Semitendinosus, Semimembranosus, Biceps femoris, Gluteus maximus, Gastrocnemius.

BENT LEG

(Knee and Hip Extension)



Fig. 151

Anchor overhead when seated. Attach 15" web loops.* Do not point toes. Bend knees and bring thighs as close to body as possible. Push isometrically for 10 seconds against partner controlled resistance. Push legs to full extension as partner eases resistance to assume starting position.

Muscles most used: Quadriceps (Rectus femoris, Vastus medialis, Vastus intermedius, Vastus lateralis), Gluteus maximus, Semitendinosus, Semimembranosus, Biceps femoris.

EXERCISE METHODS

Using the versatile EXER-GENIE exerciser, isometric and isotonic exercises can be done separately or combined into a single exercise, not only building strength but also developing endurance and increasing flexibility.

ISOMETRIC EXERCISE

is the contraction of muscles by pushing or pulling against an immovable object for strength development only.

ISOTONIC EXERCISE

involves motion as in calisthenics or weight training-for development of strength, endurance and body flexibility.

EXERCISING ISOTONICALLY ONLY:

Eliminate isometric phase of exercise. Resistance is normally determined by the individual's ability to complete a minimum of 8 repetitions or a maximum of 12 repetitions through the desired range of motion using preset resistance. Periodically allow unit to cool during prolonged use.

COMBINING ISOMETRIC AND ISOTONIC EXERCISES:

- a. Apply sufficient pressure in one of the following ways so the line does not move through the exerciser while you push or pull isometrically for 10 seconds creating fatigue in the muscle:
 - Finger pressure as in diagram No. 15
 - Hand as in Reciprocating Lats (pg. 13 fig. 13).

 - Hand as in Straight Leg (pg. 16 fig. 20). Foot as in Straight Leg (pg. 16 fig. 21).
 - Partner as in Total Row (pg. 44 fig. 126).
- b. Without hesitating for even a moment, ease the pressure on the trail line partially or completely as exercise dictates and move the tired muscle isotonically through the full range of motion. Each exercise should take approx 20-25 seconds.
- c. To repeat exercise, retract line to starting position.

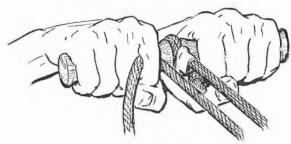
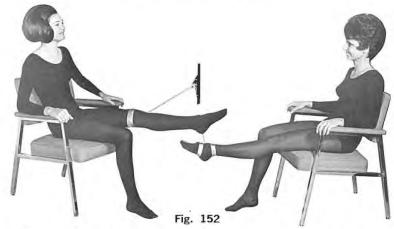


Diagram 15

HIP AND THIGH

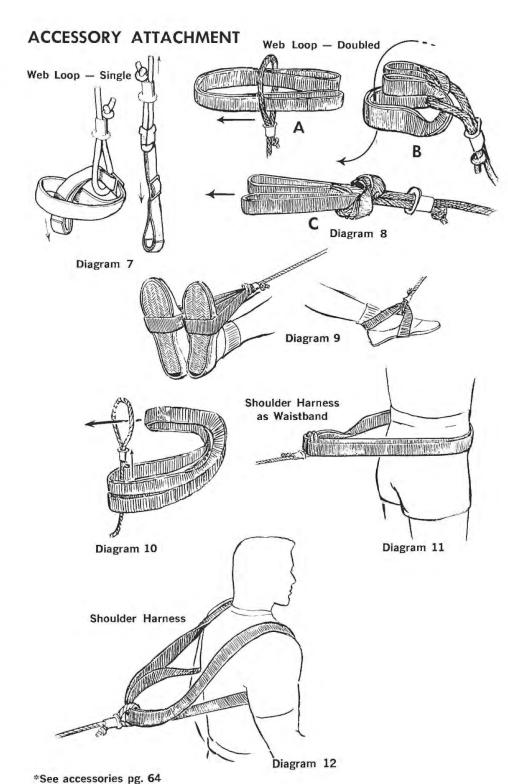
INNER or OUTER THIGH PULL

(Hip Adduction or Abduction)



Anchor 18" above floor. Attach 15" web loops.* Sit sideways to unit, facing each other. Place loops around knee or ankle and pull isometrically for 10 seconds. Alternately work thighs. Switch loops to other leg and repeat. Exchange positions and repeat.

Note: for details see Inner Thigh (pg. 49, fig. 141); Outer Thigh (pg. 49, fig. 142).



*See accessories. Pg. 6, Diagrams 8 & 9

INTRODUCTION TO 'SPECIFICS'

"Specifics" is a precise simulation of the athletic performance against resistance through the exact plane of motion, ranges of motion, and at precise joint angles at velocities not less than 75% of maximum limb velocity. Resistance settings on the EXER-GENIE exerciser must be sufficiently low to permit proper form. Do not hold isometrically.

"Specifics" allows the athlete to concentrate on skill development while he develops strength and flexibility.

By utilizing the 50 foot heavy duty line an athlete may work through his complete range of motion, step forward and repeat his motion through the full length of line. Lay trail line nearby so it may feed freely with no kinks or excessive drag. If a standard 10 foot line is used, remove handle from trail line to avoid excessive resistance.

As optimum levels of strength, flexibility and muscle endurance are essential to the performance of any sport skill, EXER-GENIE exerciser resistance training should supplement skill drills in an athlete's sport throughout the year. Off-season training is essential for developing strength, endurance and flexibility and in-season training helps mantain levels of conditioning. To increase flexibility, slowly stretch the muscles at the completion of each exercise.

Daily running or jogging for 12 to 15 minutes preceding or following the EXER-GENIE exerciser resistance work is highly recommended. This may be accomplished by running (pg. 58, fig. 157) or jogging (pg. 23, fig. 47).

The EXER-GENIE exerciser is an effective coaches' aid permitting study and correction of sports techniques in slow motion detail.

Conditioning involves a *twelve month* effort on the part of the dedicated athlete. A *daily routine* of exercise during the sport season, off-season and preseason consists of resistance exercises, "specifics" for the sport specialty of the athlete, and skill drills to maintain and develop timing.

Perform exercises in one smooth, continuous movement. Breathe normally while exercising.

To attach sports equipment such as balls to end of line use reinforced nylon filament tape (pg. 7, diagram 14). Use loop at end of line to attach baseball bat, etc. (pg. 7, diagram 13).

TO REMOVE AND REPLACE HANDLES

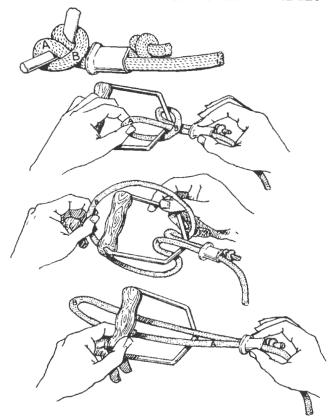


Diagram 5

CAUTION: Through laboratory tests, a reasonable safety factor has been established for wooden handles when used with resistances of not more than 250 pounds. For resistances in excess of 250 pounds, an equal length of $^3\!4''$ galvanized pipe (available at any hardware store) may be substituted for wooden handles. (See Diagram 15.)

TO SHORTEN LINE

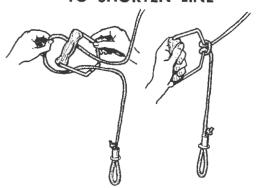
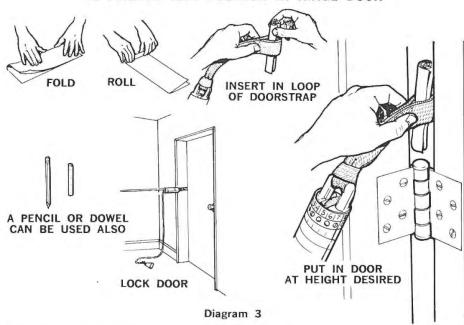


Diagram 6

ANCHORING INSTRUCTIONS

TO ANCHOR AND POSITION IN HINGE DOOR



Take sheets of paper (81/2 x 11 inches) and fold them in half lengthwise. Beginning at the top of the folded sheet, roll the paper steadily downward. Try to keep the roll as tight as possible. When you have finished, you will have a cigar-shaped object which will slip snugly into the loop. Position the strap between the door and the door frame on the top or hinged edge of an open door. Close the door securely. When properly secured, the paper roll will be on one side of the closed door and the EXER-GENIE exerciser will be on the other. When using the footboard, hook the hammock hook directly through the metal eye of the exerciser.

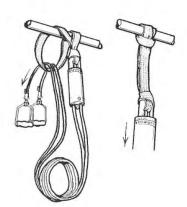


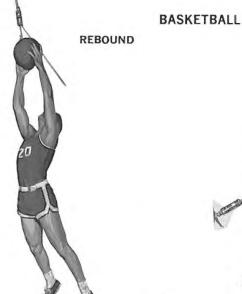
Diagram 4

To anchor to stall bars, pipe rails, fences, etc. use the 15" web loop* as shown in diagram 4.

*See accessories pg. 64

For development of leg power, drive, balance and running techniques.

Anchor at head level. Set 2 to 3 lbs. resistance. Attach football to end of line (pg. 7, diagram 14). Pass against resistance, maintaining proper form.



Anchor to high fixture. Set resistance low and use coach control. Attach long line to rebound basketball (pg. 7,

Fig. 155

diagram 14). As coach controls height, motion and resistance of ball, player jumps, pulls ball down and moves out.



Anchor 18" above floor, Attach basketball to end of line (pg. 7, diagram 14). Pass against resistance, maintaining proper form.

*See accessories

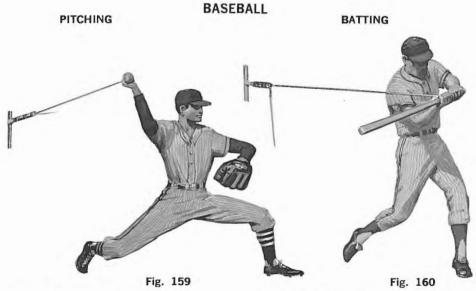
SPECIFICS

Anchor at waist level. Preset resistance. Attach long line harness* (pg. 6, diagram 10 and 11 or 12). Sprinter starts from blocks and runs to end of line. For two-man power sprint see pg. 57, fig. 153.

For development of strength, endurance and running techniques.

Fig. 157

Anchor at waist level. Set 2 to 3 lbs. resistance. Attach shot to end of line (pg. 6, diagram 14). Put the shot, maintaining proper form.



Anchor at head level. Set 2 to 3 lbs. resistance. Attach baseball to end of line (pg. 6, diagram 14). Pitch against resistance, maintaining proper form.

Anchor at shoulder level. Set 2 to 3 lbs. resistance. Attach bat to line between hands (pg. 6, diagram 13). Bat against resistance, maintaining proper form.

OPERATING INSTRUCTIONS

Resistance can be varied from free movement through maximum effort to individual exercises. By revolving the casing around the shaft according to instructions, you will be able to preset resistance. This resistance is achieved by friction from the movement of specially braided line spiraling around the shaft. The amount of line passing over the shaft determines resistance.

SETTING RESISTANCE:

Near the top of the casing you will see a series of holes. Projecting out of one of them is a small button, called the **BULLET PIN** which will spring back to the touch. Directly above the holes is a row of numbers (from 0 through 13) which identify the holes for quick reference. Below the holes another series of numbers spiral down the casing. These numbers are **CALIBRATED RESISTANCE READINGS** (the approximate amount of pound force required to move the nylon line through the cylinder at a rate of one inch per second). Your exerciser is normally packaged with the bullet pin set on 0 and the lines pull through the exerciser freely, indicating no resistance. Grasping the metal eye with one hand, hold the casing in the other and depress the bullet pin with the thumb. While the bullet pin is depressed, move the casing up or down slightly so the pin will not re-engage prematurely. The casing may now be revolved freely to the desired resistance. (Note: It will probably be necessary to complete one or more revolutions to arrive at the desired resistance.)

TO INCREASE RESISTANCE:

Rotate the CASING to the left following spiral chart downward with thumbnail. Permit the bullet pin to emerge at one of the numbered holes. Refer in a direct line below the bullet pin to the spiral series of numbers printed on the casing to determine the approximate resistance. If, for example, the bullet pin has emerged at the hole marked "7", the resistance will be either less than one pound, or 4 pounds, or 115 pounds, or 320 pounds, depending on which revolution has been completed. By pulling one of the lines, it will be obvious at which resistance the EXER-GENIE exerciser is set and with a little practice it will not be necessary to count the revolutions.

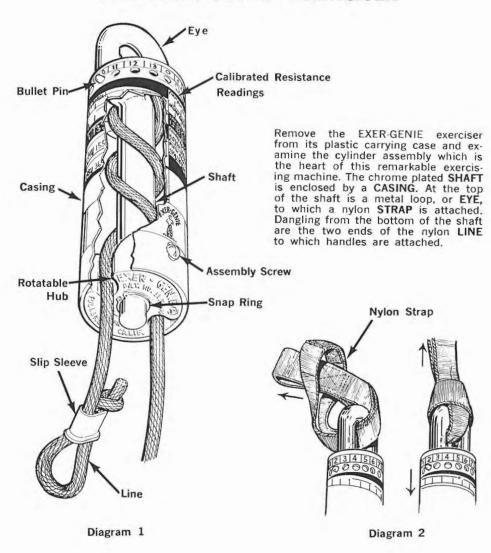
NOTE: The resistance tends to increase with high humidity or moisture. Reduce resistance until moisture is worked out of line.

TO RETURN TO ZERO RESISTANCE:

Reverse the direction in which you turn the casing, or grasp eye or strap with hand. With other hand release bullet pin, pull casing downward from eye. Now, simultaneously pull both ends of line away from unit. Re-engage bullet pin at nearest "O" position. To double check, look through slots in top of exerciser to make sure the line drops directly through and is not wound around the shaft.

SPECIFICS

THE EXER-GENIE® EXERCISER



TO DISASSEMBLE:

Remove screw from lower end of casing. Depress bullet pin and pull casing over eye.

TO REASSEMBLE:

Thread line through eye of shaft. Keeping the bullet pin directly in line with lower screw hole, lay line parallel to shaft in slots on sides of lower spool. Replace outer casing and assembly screw.

WRESTLING

WAIST DEVELOPER





Anchor at waist level. Use wire handles. Grasp handles and alternately pull one arm across back and drive other arm across waist. Face other direction and repeat.

SKIING



Anchor to footboard.* Use double handles. Exercise as indicated on pages 28-29 (Big Four).

SWIMMING

FREESTYLE

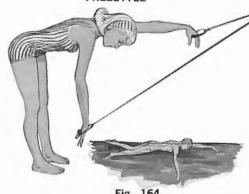
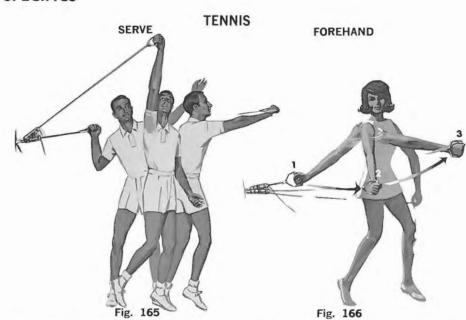


Fig. 164

Anchor overhead. Use wire handles. Bend forward arms outstretched in 'catch' position for butterfly. Grasp handles and alternately pull with arms through swimming stroke, maintaining proper form.

SPECIFICS



Anchor at shoulder level. Set 2 to 3 lbs. resistance. Use wire handle. Assume service stance. Grasp handle, elbow bent, hand at jaw level. Serve against resistance, maintaining proper form.

Fig. 167

Anchor at hip level. Set 2 to 3 lbs. resistance. Use wire handle. Assume normal stance at right angle to unit. Drive against resistance, maintaining proper form.

GOLF

Anchor above head. Set 2 to 3 lbs. resistance. Use wire handle. Swing against resistance, maintaining proper form.

Fig. 168

GENERAL INFORMATION

Results can be achieved with your EXER-GENIE exerciser by making time, not finding time, for exercise.

Important: Any person starting an exercise program should do so only after consultation with his doctor. Use should be restricted to those persons physically able to exercise in the various ways described in this manual.

- * Select exercises and establish a program to suit personal need.
- * Start your conditioning routine sensibly at moderate resistance. As you build strength, increase the resistance.
- * Exercise regularly, preferably each day.
- * Perform exercises in one smooth, continuous movement. Breathe normally while exercising.
- * When coordination is desired it is suggested that the movement be done reciprocally.
- * Chest, thigh and straight leg exercises are not recommended for children.
- * Exercises shown in this manual are suitable for both men and women.
- * To avoid numerous changes, 15" web loops* may be used in lieu of wire handles. To use double handle, slip web loop over handle.
- * For overall conditioning, it is suggested that every exercise program include the following: (See page 9.)

MEN

Big Four or Total Row Sit Up or Forward Bend Leg exercises Jogging

WOMEN

Total Row Forward Bend Leg exercises Jogging

CARE OF YOUR EXER-GENIE® EXERCISER

Keep exerciser free of dirt, sand, or other abrasive material. Keep line free of oil, grease, gum, etc. Replace worn or frayed line.

TO CLEAN LINE:

Remove handles and aluminum sleeves. Remove line from exerciser and wash in lukewarm water with any household detergent. NEVER use hot water. Rinse and dry.

^{*}See Accessories pg. 64

INTRODUCTION

Great physical effort was required of primitive man, as hunter and warrior, for survival. No doubt this "necessity" enabled him to attain a degree of physical fitness through environment.

Awareness of the importance of sound physical conditioning evolved in early civilization. Greek education consisted of a balance of academics, physical education and sports. We are told males would start physical training at an early age in barracks and gymnasiums with games, exercises, running and jumping. As they grew older they would participate in athletic contests such as speed and distance running, wrestling, weight, discus and javelin throwing, archery, and chariot racing. A desire for sturdy children motivated physical training for girls and women. Spectator sports and swimming were predominant with the Romans. Both Romans and Greeks played games similar to our football and hockey.

Although physical education approached oblivion during the dark ages, a revival came with the Age of Chivalry and horseback riding, jousting, swordsmanship, archery, boxing, wrestling and swimming.

Writings and teachings of physical education were advanced with the Renaissance and continued to the present time. Much knowledge has been gained, especially in recent years and we continue learning through studies, research, technology and practical application.

In our age of automation as horsepower continues to replace muscle power the realm of physical education and body conditioning is ever expanding and the layman as well as the athlete is becoming increasingly aware of the importance of physical conditioning.





Fig. 170

Fig. 171

Anchor 3' to 4' above floor. Use wire handle. Bowl against resistance, maintaining proper form.

BIG FOUR Continued

HEEL RAISE

UPRIGHT ROW Back - Shoulders - Arms



Anchor to footboard,* Use double handles. Grasp handle with palms down and pull isometrically for 10 seconds. Drop trail line. Keeping hands close to body, pull to chin.

Muscles most used: Trapezius, Deltoid, Supraspinatus, Biceps brachii, Brachialis, Brachioradialis, Serratus anterior.



Fig. 81



MILITARY PRESS

'Press' arms overhead to full extension.

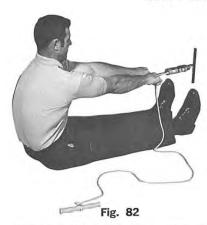
Muscles most used: Deltoid, Triceps brachii, Supraspinatus, Trapezius, Serratus anterior.

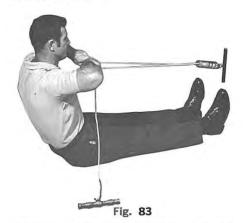
Stretch and finish with heel raise.

Muscles most used: Gastrocnemius, Soleus.



SCAPULAR ROW Back - Shoulder Blades - Arms





Anchor 18" above floor. Use double handles. Extend arms forward, grasp handle and pull isometrically for 10 seconds. Keeping elbows high, ease resistance and row to chest.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis, Posterior Deltoid, Infraspinatus, Teres minor, Long head of Triceps brachii, Middle Trapezius, Rhomboid.

*See Accessories pg. 64



Fig. 69

Anchor to footboard. Use double handles. Grasp handle with underhand grip (palms up) and lift isometrically for 10 seconds. Drop trail line. Keeping upper arms at sides, 'curl' to chin.

CURL

Alternate to Fig. 65 - 66

Note: For wrist development repeat exercise using overhand (palms down) grip.

Muscles most used: Biceps brachii, Brachialis, Brachioradialis.



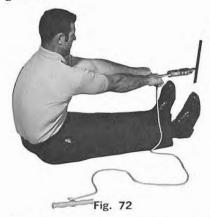
GENERAL CONDITIONING

GENERAL CONDITIONING

TOTAL ROW Alternate to Big Four

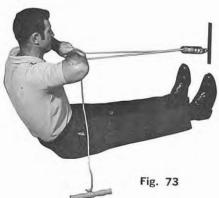


Anchor 18" above floor. Use double handles. With feet against wall, bend knees and assume rowing position. Grasp handle and pull isometrically for 10 seconds.



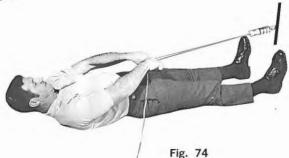
Ease resistance and straighten legs.

Muscles most used: Quadriceps (Rectus femoris, Vastus medialis, Vastus intermedius, Vastus lateralis.)



Keeping elbows high, ease resistance and row to chest.

Muscles most used: Biceps brachii, Brachioradialis, Brachialis, Posterior deltoid, Infraspinatus, Teres minor, Long head of Triceps brachii, Middle Trapezius, Rhomboid.



Extend arms; lower back to floor.

Muscles most used: Erector spinae muscle group.

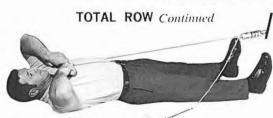
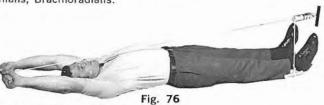


Fig. 75

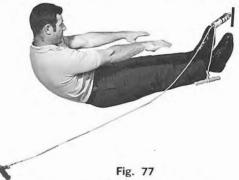
Drop trail line. Keeping hands close to body, row to chin ('clean').

Muscles most used: Trapezius, Deltoid, Serratus anterior, Supraspinatus, Biceps brachii, Brachialis, Brachioradialis.



'Press' overhead to complete extension.

Muscles most used: Deltoid, Triceps brachii. Supraspinatus, Trapezius, Serratus anterior.



Drop handle. Reaching forward, pull body to sitting position.

Muscles most used: Rectus abdominis, External oblique, Internal oblique.



Row through, straightening legs as back is lowered to floor.

Muscles most used: Gluteus maximus assisted by hamstrings including: Biceps femoris, Semitendinosus, Semimembranosus, Erector spinae.