

Strength Training Equipment

OWNER'S MANUAL

www.MedXonline.com

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MedX 96, Inc. 1401 NE 77th Street Ocala, FL 34479 (352) 622-2112

Technical Support: 800-528-3159

EQUIPMENT MAINTENANCE

Note: Very Important:

for Technical Support

Call: 800-528-3159

DAMPEN CLOTH, DON'T SPRAY MACHINE

Do not spray any type of cleaning solution – including water – directly onto any part of the machine, be it the frame, upholstery, or weight stack rod. Spray into, or soak, the cleaning cloth, then apply to the machine.

MedX exercise equipment requires very little maintenance, however minimum care helps assure top working condition. Please address the following:

Weight Stack Rod

Keep the weight stack rod free of dust by wiping with a cloth soaked in rubbing alcohol*. This procedure should be performed approximately once per month. Clean the rod both between the weight stacks, and at its base. Access the rod by removing magnetic shields. Allow the alcohol to dry completely before utilizing the machine (otherwise it could dry out oilimpregnated bushings).

Drive Belt

On machines utilizing a Kevlar® belt in the drive mechanism, the belt may after several years - require adjustment due to linear expansion (stretching). Should this problem occur, call MedX customer support for further instructions.

Bearings

Bearings equipped with grease nibs should be lubricated every few months, depending on use. MedX recommends an all-purpose lithium grease #2. Very little grease is needed, avoid injecting too much.

Painted Metal Frame

Painted metal surfaces should be cleaned periodically to prevent buildup of perspiration and body oils which might cause damage or corrosion. MedX recommends cleaning with a solution of dish soap and warm water (10% soap, 90% water) applied with a soft, white cloth. Rinse with a waterdampened cloth and dry thoroughly. To further protect painted metal surfaces, a light coat of spray furniture wax may be used.

Upholstery

Standard upholstery on MedX machines is Boltaflex with PreFixx® protective finish. While staining and soiling exposures are common to upholstery fabrics, most may be removed by using the following cleaning methods.**

Light Soiling – A solution of 10% liquid dish soap with warm water applied with a soft damp cloth. If necessary, a solution of liquid cleanser and water applied with a soft bristle brush. Wipe away the residue with a water-dampened cloth.

Heavy Soiling - Dampen a soft white cloth with lighter fluid (naptha) and rub gently. Rinse with a water-dampened cloth.

Difficult Stains - Dampen a soft white cloth with a solution of household bleach (sodium hypochlorite), 10% bleach,

90% water. Rub gently. Rinse with a water-dampened cloth to remove bleach concentration.

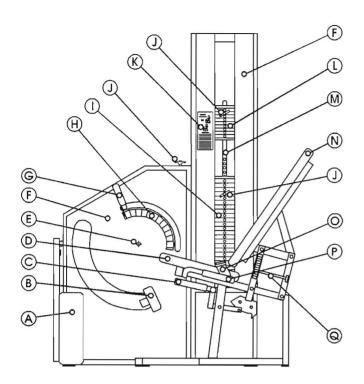
The same procedure can be used with full strength household bleach, if necessary. Allow bleach to puddle on the affected area or apply with a soaked cloth for approximately 30 minutes. Rinse with a water-dampened cloth to remove any remaining bleach concentration.

Disinfect/Sanitize

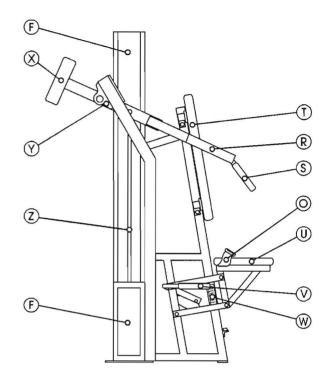
Dampen a soft white cloth with rubbing alcohol and rub gently. Rinse with a water dampened cloth to remove any remaining alcohol concentration. Note: To restore luster, a light coat of spray furniture wax can be used. Apply for 30 seconds and follow with a light buffing using a clean white cloth.

- * Cleaning agents may be harmful to your skin, eyes, etc. Follow product manufacturer's recommended precautions. MedX 96, Inc., cannot be held responsible for damages or injuries resulting from the use or misuse of cleaning and maintenance products.
- ** When using strong cleaning agents such as rubbing alcohol or bleach, it is advisable to first test on an inconspicuous area. Cleaning agents may contain harsh or unknown solvents and are subject to formula changes by the product manufacturer without notice. Avoid use of paper towels.

TYPICAL FEATURES



- A Injured Limb Support: Provides support for injured limb while allowing for full-range exercise of uninjured limb. Also allows for selected single limb exercise.
- B Resistance Arm: Fully padded resistance arm engages weight stack.
- C Seat Back Adjustment: Provides proper joint-axis positioning to insure safe, full range exercise.
- D• Seat: Fixed Position (Some machines have height adjustable seats).
- E Center of Machine Rotation: Reference point assures proper joint-axis alignment.
- F Shielding: Most moving parts are shielded, reducing the chance of accident or injury. Shields are easily removed for service and maintenance.
- G• Hand Lever: Assists machine entry/exit and set-up of range of motion limits.
- H• Goniometer: Incremental range of motion indicator in degrees.
- I Lower Weight Stack: Twenty-pound plates. Selfaligning plates eliminate troublesome guiderods.
- J Ball-Lock Selector Pin: Used to select upper and lower weights and to limit range of motion, if desired.
- K Placard: Illustrated instructions of proper exercise procedures and positions.
- L• Upper Weight Stack: Two-pound plates (18 lb. total). Self-aligning plates.
- M• Weight Stack Lifting Rod: Center mounted, stainless rod lifts weights from below, rather than pulling from above.



- $_{\mbox{N}\, \bullet}$ Adjustable Seat Back: Angled seat back is laterally adjustable to assure proper joint-axis alignment.
- Seat Belt: Maintains proper body position and eliminates unwanted movement.
- P Hand Grips: Reduces upper body movement and helps insure consistently correct exercise position.
- Q• Seat Back Position Indicator: Insures proper machine set-up from workout to workout.
- R Movement Arm: Engages resistance/weight stack. Bearing mounted for smoothness and alignment.
- S Handlebars: Angled and rubber covered for optimum position and grip. Some machines have dual handlebars which allows exercise variation.
- T Seat Back: Two-position seat back provides alternate body position and additional muscle involvement.
- $_{\mbox{${\sf U}$}}\mbox{$\bullet$}$ Seat: Height adjustable to allow proper full-range exercise and alignment.
- $_{\bigvee} {\scriptstyle \bullet}$ Seat Height Adjustment: Easily adjustable for optimum body position.
- $W^{\scriptscriptstyle ullet}$ Seat Height Indicator: Insures proper adjustment from workout to workout.
- X• Movement Arm Counterweight: Machine components are counterweighted to provide fair, honest exercise.
- Pillow Block Bearings: Quality, low friction bearings are used at points of high torque transfer to provide smooth motion and maintain alignment.
- Z Steel Connecting Rods: Whenever possible, steel rods are used rather than chain or cable to reduce unwanted friction and noise.

TRAINING GUIDELINES

Every individual has different physiological characteristics. Because of these differences, it is difficult to establish training protocols that are absolutely correct for everyone. People vary as to size, age, gender and condition. In addition to these obvious differ-

ences there are variations of fiber type, recovery ability, adaptation response and ability to withstand training. Non-physical factors such as goals, desires and motivation must also be considered.

For these reasons, MedX recommends three basic protocols which vary in the number of repetitions and duration of each exercise set.

Select Protocol According to Fiber Type Characteristics

- A- Standard Protocol: 8 to 12 repetitions, 60- to 90-second duration Most average people should use this protocol.
- B- Fast-twitch: 5 to 8 repetitions, 45- to 60-second duration Extreme fast-twitch subjects should use this protocol.
- C- Slow-twitch: 12 to 15 repetitions, 90- to 120-second duration Extreme slow-twitch subjects should use this Protocol.

Inexperienced individuals, new to training, should use the standard protocol. Over a period of time, with consistent training and record keeping, it will be possible to modify the protocol so that it better suits the individual. If satisfactory results and progress are being produced then consideration should be given before making any modifications. When results fail to show progressive improvement over a span of several weeks or more, adjust the protocol.

Muscle fiber type varies among individuals. It also may vary from muscle to muscle in the same individual. Some people might use standard protocol for their arms while using extreme slow-twitch protocol for their legs.

Consistent training and accurate record keeping are perhaps the most important factors when developing or modifying training protocols. If records indicate that progress is not being produced for a significant period of time, perhaps the protocol should be adjusted for that exercise. Monitor the training for a month then evaluate the records. If progress is being made, then continue with that protocol. If performance has not improved, try a different protocol. Continue to adjust and modify until satisfactory gains are produced.

Be aware that each individual has a specific potential for increases in size and strength. When a person approaches his maximum potential for size and strength, continued increases will become more difficult. Whenever desired or maximum potential levels have been reached then a protocol should be developed to maintain gains.

RECOMMENDATIONS

- 1. Obtain a complete physical examination before beginning rigorous training.
- 2. Establish a workout protocol prior to training.
- 3. Record each workout for future reference.
- 4. Always verify correct machine set-up and proper body position.
- 5. Perform exercise throughout the greatest range of pain free movement.
- 6. Maintain good form at all times.
- Avoid tight gripping which tends to elevate blood pressure.
- Perform exercise in a controlled, slow and delibrate manner.
- Avoid throwing, slamming or jerking the weight.
- Do not contort your body or alter your form as you fatigue.
- Breathe normally, do not hold your breath.
- Do not grit your teeth.
- Exercise until unable to complete another repetition in good form.
- 7. Move quickly from machine to machine.
- 8. To compare results and thus chart progress, perform workouts in the same order at regular interval (such as an identical workout once each week, or every other week).
- 9. Exercise the larger muscles first and proceed to the smaller muscles.
- 10. Tailor workouts for 20 to 30 minutes duration.
- 11. Rest a minimum of 48 hours and not more than 96 hours between workouts.

Log on to: MedXonline for latest information

Ongoing research produces advances in equipment design, testing procedures, training programs and rehabilitation protocol. As new technology develops, it will be incorporated into machine production and recommended procedures for conditioning and rehabilitation.

MedX 96, Inc., reserves the right to effect modifications of equipment produced and procedures recommended. Log on to www.MedXonline.com for latest information.

MedX 96, Inc., recommends that this equipment be used under the direction of properly trained, owner-authorized personnel. MedX further recommends a complete physical examination prior to beginning any training, conditioning or rehabilitation program.

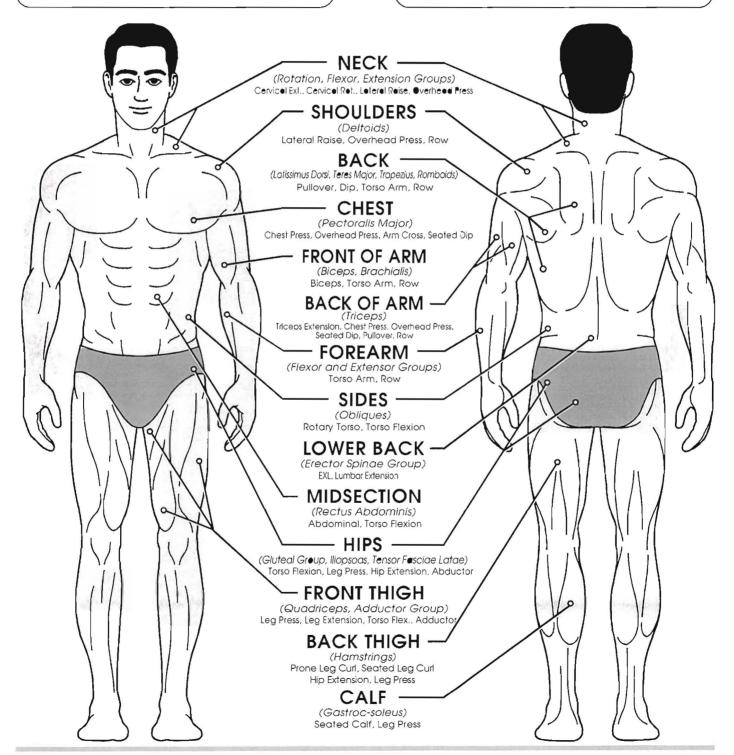
MUSCLE GROUPS

WORKOUT SEQUENCE

- 1 HIPS
- 4 ARMS
- 2 LEGS
- 5 WAIST
- 3 TORSO
- 6 NECK

TRAINING GUIDELINES

- TRAIN HARDER BUT BRIEFER
- EXERCISE PROGRESSIVELY
- CONTROL THE RESISTANCE
- **WORK LARGER MUSCLES FIRST**
- KEEP ACCURATE RECORDS



LEG PRESS

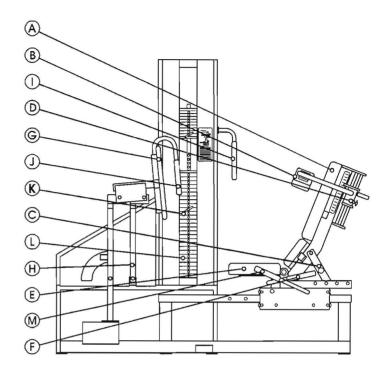
MUSCLE GROUP - Muscles of the legs and buttocks.

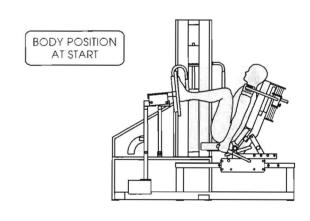
MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly setup this machine. Select seat back A position and adjust shoulder pads **B** before sitting in the machine. To adjust the seat back A, lift the release handle C, move the seat back to the desired position and release the handle. To adjust the shoulder pads **B**, pull the spring loaded release pin D, move the shoulder pads to the desired position and release the pin. To adjust the seat E, push down on the release handle F. move the seat to the desired position and release the handle. Seat can be moved forward by simply pulling or pushing and will automatically lock into position. Sitting in the machine, push forward on the foot pads G until the movement arms H are against the stops. Adjust the seat E forward by pulling on the upper pair of handlebars I. When properly positioned, knees should be slightly bent when legs are extended and movement arms H are against the stops. Using the center-mounted handlebar J, pull the foot pads back until your knees are as near your chest as is comfortable. Insert the selector pin K in the weight stack L at the desired level of resistance. It is recommended that the same weight be selected on both weight stacks. Note seat position, seat back angle, shoulder pad position and weight stack selections for future reference.

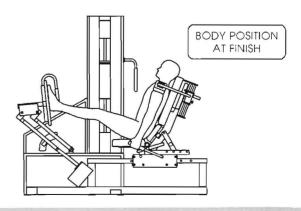


EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Lightly grip the handlebars **M** on either side of the seat **E** to reduce upper body movement and maintain proper position. Push foot pads forward with heels as far as you can. Movement through full extension should take at least 4 seconds. Do not lock out your legs in the extended position. Pause for 1 second. Return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

The starting position can be varied by removing the selector pins \mathbf{K} from the weight stacks \mathbf{L} , moving the movement arms \mathbf{H} to the desired starting position and inserting the selector pins at the desired level of resistance.







LEG EXTENSION

MUSCLE GROUP - Quadriceps

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly set-up and adjust this machine. Lift the release handle A and move the seat back B to the rear most position. Sitting in the machine, pull the selector pin C from the weight stack D, slide feet behind the movement arm E. Align the axis of the knee with the axis of rotation of the machine F. Pull the seat back B forward until it contacts the back. Fasten the seat belt G securely. Replace the selector pin in the weight stack D at the desired level of resistance. Note the seat back position H for future reference,

EXERCISE

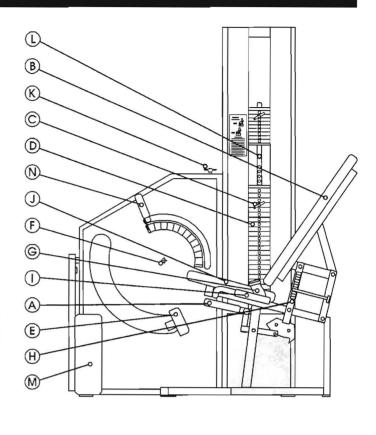
EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Lightly grip the handlebars I beside the seat J to reduce upper body movement and maintain proper position. Extend both legs smoothly. Movement through full extension should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form. (Do not grip handlebars tightly with hands).

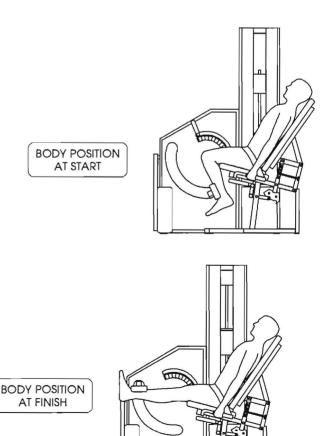
COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

The range of movement can be limited in extension, flexion or both. To limit extension, insert the auxiliary selector pin ${\bf K}$ in one of the weight stack pin ${\bf L}$ holes above the bottom weight stack ${\bf D}$. To limit the range in flexion, pull the selector pin from the weight stack and move the movement arm to the desired starting position and insert the selector pin at the desired level of resistance.

An injured limb support ${\bf M}$ can be positioned to provide support for an injured limb while allowing for full-range exercise of the uninjured limb.

A hand lever ${\bf N}$ assists machine entry/exit and adjusting range of motion.

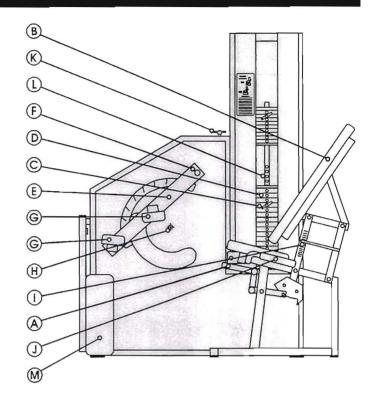




SEATED LEG CURL

MUSCLE GROUP - Muscles of the hamstrings

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly adjust this machine. Lift the release handle A and move the seat back B to the rear most position. Sitting in the machine, pull the pin on the shin pad to make room for legs to slide in-between the padded resistance arm G. Align knees with the axis of rotation H, and pull position handle F tight, inserting the pin. Pull seat B forward until it makes firm contact with your lower back. Note the seat back position I for future reference.



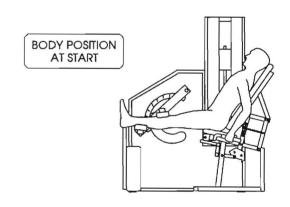
EXERCISE

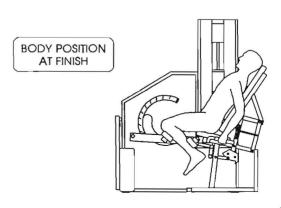
EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Lightly grip the handlebars J to reduce upper body movement and maintain proper position. Flex your legs as far as possible. Movement from start to full flexion should take at 4 least seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

The range of movement can be limited in extension, flexion or both. To limit extension, insert the auxilliary selector pin ${\bf K}$ in one of the stack pin holes ${\bf L}$ above the bottom weight stack ${\bf D}$. To limit the range in flexion, pull the selector pin from the weight stack and move the movement arm to the desired starting position and insert the selector pin at the desired level of resistance.

An injured limb support \mathbf{M} can be positioned to provide support for an injured limb while allowing for full-range exercise of the uninjured limb.

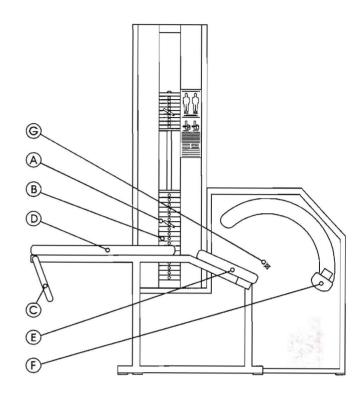




PRONE LEG CURL

MUSCLE GROUP - Muscles of the hamstrings

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly align knees with the axis of rotation of the machine. Select the desired weight by inserting the selector pin A into the weightstack B. Step between the angled seat pad E and the resistance pad F. Lower upper body onto the seat pad D with hips above the angle. Grasp handlebars C and push or pull to align knees with the machine axis of rotation G.

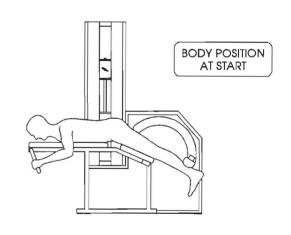


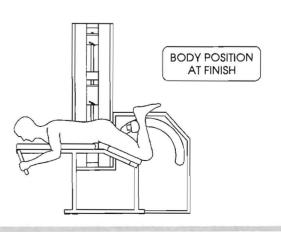
EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Lightly grip the handlebars **C** to reduce upper body movement and maintain proper position. Flex your legs as far as possible. Movement from start to full flexion should take at 4 least seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

To limit the range of movement in extension, pull the selector pin from the weight stack and move the movement arm to the desired starting position and insert the selector pin at the desired level of resistance.

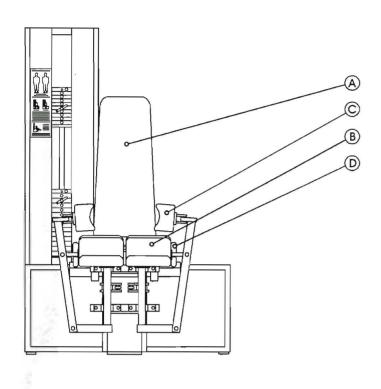




HIP ABDUCTOR

MUSCLES - Abductor muscle group.

MACHINE SET-UP AND ADJUSTMENT - Set-up and adjustment is relatively simple for this machine. Adjust seat back A to the desired angle. Release pin is located on rear side of seat back. Three positions are available. Sit on seat and place legs together on movement arm pads B. Adjust thigh pads C firmly against outer thighs. Note seat back and thigh pad position for future reference.



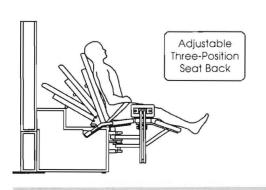
BODY POSITION

AT START

EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. resistance arm pads to fit snugly against outer thighs with legs together. Fasten seat belt and lightly grip the handlebars **D** beside the seat to reduce upper body movement and maintain proper position. Smoothly spread both legs as wide as possible. Movement to full spread should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause. immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form. (Do not grip handlebars tightly with hands).

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

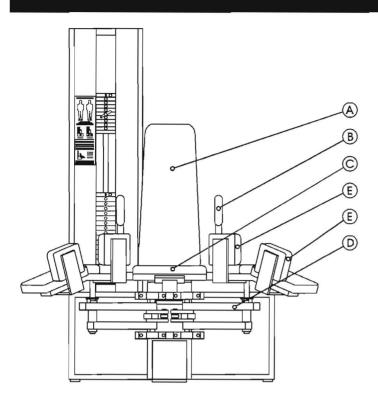


BODY POSITION

AT FINISH

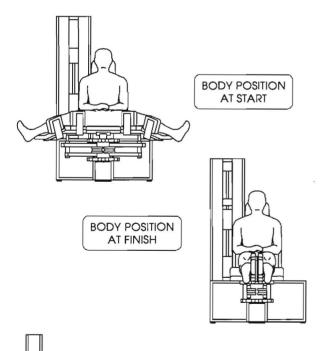
Exercise and muscle involvement can be modified by utilizing the three-position seat back.

HIP ADDUCTOR



MUSCLES - Adductor muscle group.

MACHINE SET-UP AND ADJUSTMENT - Set-up and adjustment is relatively simple for this machine. Adjust seat back A to the desired angle. Release pin is located on rear side of seat back. Three positions are available. Sit on seat B and press down on handlebars C. This releases movement arms D and brings them together for easier entry. Position legs outside of thigh pads E. Slowly release handlebars C allowing movement arms D to reach desired starting position.



EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Movement arms can be released by pressing the handlebars **B** on either side of the seat. This facilitates machine mounting and allows greater stretch in the starting position. Smoothly bring both legs together. Movement from full spread to closure should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

Exercise and muscle involvement can be modified by utilizing the three-position seat back.

Adjustable Three-Position Seat Back

SEATED CALF

The MedX Seated Calf provides straight-leg calf exercise for working the gastrocnemius muscle, and also bent-leg flexion and extension of the foot to emphasize the soleus muscle.

Seated position eliminates spinal compression prevalent in standing heel raises.



Seat adjusts for leg length.

Footboard lever for user access.

EXERCISE

- 1. Release lever beneath seat to adjust seat back according to leg length. Note setting.
- 2. Remove selector pins from bottom both weight stacks so that no resistance is on machine.
- 3. Sit in machine.
- 4. To position feet, push footboard lever forward and place feet flat on platform, aligning ankles with pivot point of platform. You should now be in position to exercise, except there is virtually no resistance on the machine.
- 5. Keeping feet set, dorsi flex ankles fully (point toes toward shins) while simultaneously pulling on footboard lever. Maintain contact with the footboard through the balls of your feet; your heels are likely to lift. Continue pulling until small top plates of weight stacks rest upon the full stacks.
- 6. Pin appropriate resistance into weight stacks. Make sure there is no gap, or suspension, be-

tween the selected resistance and the idle plates

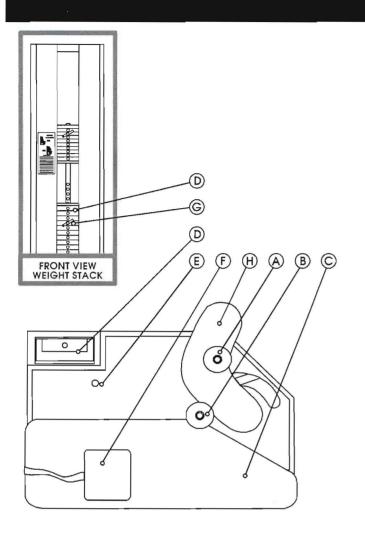


Flat-footed flexion and extension.

lower on the stack. If there is, you need to pull further before pinning the resistance.

- 7. Grip handles beside seat to stabilize torso.
- 8. Rotate footboard until your heels again contact the footboard.
- 9. Initiate exercise by allowing feet to dorsi flex (toes pointing toward shins), lowering weight into starting (stretch) position. Keep heels on platform.
- 10. Once at full stretch, rotate forward (plantar flex) as far as possible.
- 11. Pause in the fully contracted position.
- 12. Lower weight into stretch position and repeat. **NOTE:** Exercise can be performed with knee joints locked, or bent. Note seat setting to standardize.

HIP EXTENSION



MUSCLE GROUP - Muscles of the hamstrings, gluteus and low back.

MACHINE SET-UP AND ADJUSTMENT - For optimum results special attention should be given to proper body position. Enter the machine from the diagonal corner by lifting the left leg up, over and down between the solid roller pad A and the split roller pad B. Sit down on the end of the large flat pad C. Lie down facing the weight stack D and lift the right leg up, over and down between the roller pads. Grasp the handlebar E with an underhanded grip, palms facing you. Position your body so that the split roller pad B is firmly against your pelvis. The roller pad A behind the knee is removable which allows easier entry for the physically impaired. An attached pillow F is provided to support the head and help maintain proper body position during exercise.

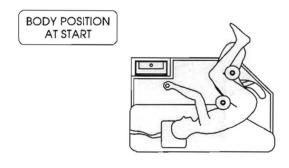
EXERCISE

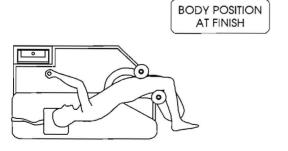
EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. While lightly gripping the handlebar, extend your lower body by rotating at the hip. Arch your back as far as possible. Movement from flexion to full extension should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

Range of movement can be varied by changing torso position. To increase range of movement, pull your torso toward the handlebar **E**. To decrease range of movement, push your torso away from the handlebar.

To reduce the range of movement in flexion, remove the selector pin ${\bf G}$ from the weight stack ${\bf D}$, move the movement arm ${\bf H}$ to the desired starting position and insert the selector pin at the desired level of resistance.





PULLOVER

BODY POSITION AT START **BODY POSITION** AT FINISH

MUSCLES - Muscles of the back, arms and shoulders.

MACHINE SET-UP AND ADJUSTMENT - Proper set-up and adjustment is critical for this machine. Align the shoulder axis with the rotational axis of the machine by positioning the seat A until the top of the shoulder is even with the rotation axis indicators B on the movement arms C. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. The seat will automatically lock into position while being raised. To lower seat height, lift the front of the seat while simultaneously lifting the seat release handle D. Lower seat to desired height and release the handle. This machine has a two-position seat back E to accommodate small individuals or those with thin upper torsos. Most normal individuals will use the rear position. To move the seat back to the forward position, pull it forward and down. To move the seat back to the rear position, lift it up and push back. When properly positioned, your elbows do not slide on the elbow pads F when exercising full range. Fasten seat belt G securely. Note seat position H for future reference.

EXERCISE

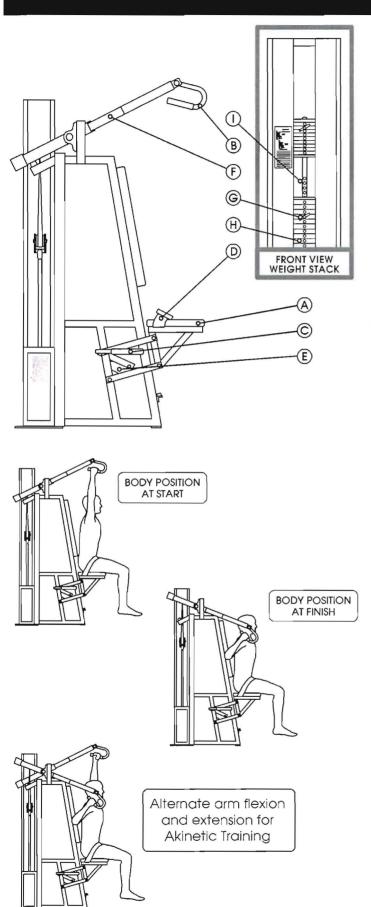
EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Push down on each foot pedal I to bring the movement arms **C** forward which allows for easier machine entry. Place your elbows on the elbow pads and grasp the handlebars **J** lightly. Use handlebars to position your hands, not for pushing or pulling. Rotate your arms forward and down as far as you can. Movement through full-range should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range fo pain free movement.

Vary the starting position by removing the selector pin **K** from the weight stack **L**, moving the movement arm **C** to the desired starting position and inserting the selector pin at the desired level of resistance. This machine has two independent movement arms and weight stacks. Exercise can be performed one arm at a time, alternating arms or positive accentuated.

ALTERNATE SEAT BACK POSITION

TORSO ARM



MUSCLE GROUP - Muscles of the arms, shoulders and upper back.

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly adjust this machine. Seat A must be properly positioned to insure the most beneficial full-range exercise. Adjust the seat A so that you can just grasp the pivoting handlebars B. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. The seat will automatically lock into position while being raised. To lower seat height, lift the front of the seat while simultaneously lifting the seat release handle C. Lower seat to desired height and release the handle. Fasten the seat belt D securely. Note seat position E for future reference.

EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Grasp the handlebars **B** and pull the movement arms **F** as far down as you can. Movement through full-range should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

The starting position can be varied by removing the selector pin **G** from the weight stack **H**, moving the movement arms **F** to the desired starting position and inserting the selector pin at the desired level of resistance.

INSTRUCTIONS FOR AKINETIC TRAINING - Select a resistance which is approximately 2/3 the resistance used in normal training. Insert the limiter pin in the stack pin holes I above the 20 lb. plates. Lift the weight slowly by pulling down with both hands until reaching the selected stop position. Keep the weight against the stop while alternately flexing one arm and extending the other. Perform the exercise in a smooth, deliberate fashion using 2 - 3 seconds per stroke. Continue the exercise until you are unable to keep the weight against the stop. Appropriate increases in resistance should be made as endurance increases.

MUSCLE GROUP - Muscles of the arms, shoulders and upper torso.

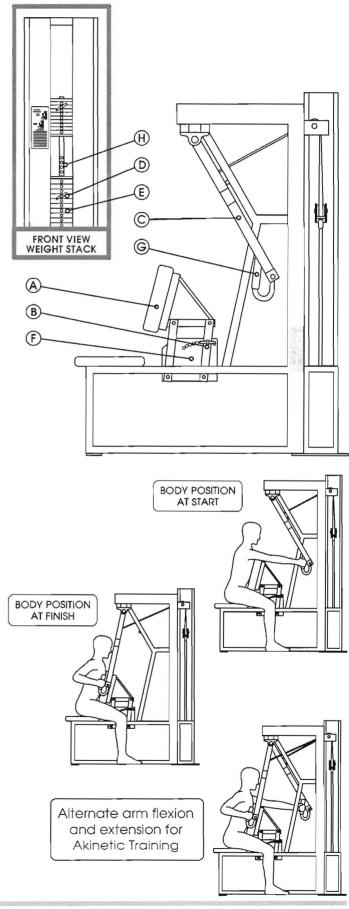
MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly adjust this machine. Position chest pad A for maximum stretch and range of movement. Release the spring pin B on the right side of the adjustment mechanism. Move the chest pad A to the desired position and release the pin. The spring loaded pin will automatically lock. The movement arm C starting position should be adjusted for the desired amount of stretch. This is accomplished by removing the selector pin D from the weight stack E, moving the movement arm C to the desired starting position and inserting the selector pin D at the desired level of resistance. Note the chest pad and movement arm starting position **F** for future reference.

EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. While keeping your chest against the chest pad **A**, pull the handlebars **G** back as far as you can. Movement through full-range should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue to exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results; exercise should be performed throughout the greatest range of pain free movement. Partial range repetitions may be performed by varying the starting position.

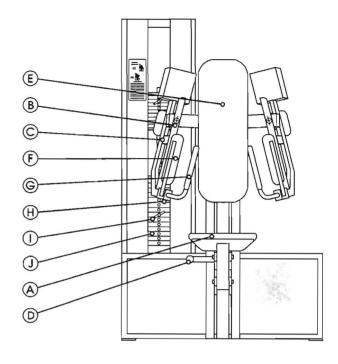
INSTRUCTIONS FOR AKINETIC TRAINING - Select a resistance which is approximately 2/3 the resistance used in normal training. Insert the limiter pin in the stack pin holes H above the 20 lb. plates. Lift the weight slowly by pulling with both hands until reaching the selected stop position. Keep the weight against the stop while alternately flexing one arm and extending the other. Perform the exercise in a smooth, deliberate manner using 2 - 3 seconds per stroke. Continue the exercise until you are unable to keep the weight against the stop. Appropriate increases in resistance should be made as endurance increases.



LATERAL RAISE

MUSCLES - Muscles of the shoulders and neck.

MACHINE SET-UP AND ADJUSTMENT - Proper set-up and adjustment is critical for this machine. Align the shoulder axis with the rotational axis of the machine by lowering the seat A until the top of the shoulder is even with the rotation axis indicators B on the movement arms C. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. The seat will automatically lock into position while being raised. To lower seat, lift the front of the seat while simultaneously lifting the seat release handle D. Lower seat to desired height and release the handle. This machine has a two-position seat back E to accommodate small individuals or those with thin upper torsos. Most normal individuals will use the rear position. To move the seat back to the forward position, pull it forward and down. To move the seat back to the rear position, lift it up and push back. When properly positioned, your elbows do not slide on the elbow pads F when exercising full range. Angle adjustable handlebars G should be positioned to accomodate individual physical characteristics. Adjust by pulling the release pin H on the underside of the handlebar, selecting the desired angle and releasing the pin. Note seat and handlebar position for future reference.



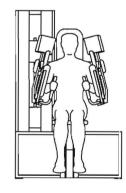
EXERCISE

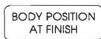
EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Place your elbows on the elbow pads and grasp the handlebars lightly. Rotate your arms by pushing up and out as far as you can. Movement through full-range should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

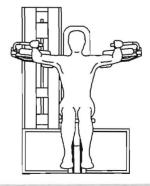
The starting position may be varied by removing the selector pin I from the weight stack J, moving the movement arm C to the desired starting position and inserting the selector pin at the desired level of resistance.

Opening the handlebars produces less impingement in the shoulder joints allowing greater range of movement.





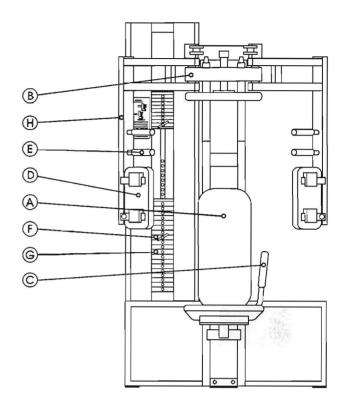




ARM CROSS

MUSCLE GROUP - Chest Muscles

MACHINE SET-UP AND ADJUSTMENT - Proper set-up and adjustment is critical for this machine. Position the laterally adjustable seat back A so the shoulders are directly under the rotational axes B of the machine. Move the seat back A forward by pulling, seat back will automatically lock into position. To move backward, pull the release handle C, move the seat back to the desired position and release the handle. Place forearms upright on arm pads D so that upper arms are parallel to the floor. Move arm pads in or out to adjust for arm length and chest clearance. Hook hands over handlebars E or pads D to support arms and maintain proper position throughout exercise. Note seat back and arm pad position for future reference.

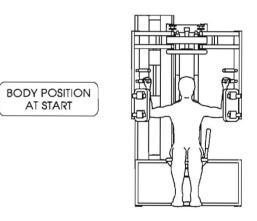


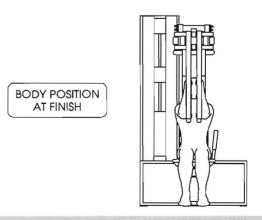
EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Smoothly and slowly rotate your upper arms, bringing your elbows toward each other. Movement through full-range should take at least 4 seconds. Pause for 1 second. Return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

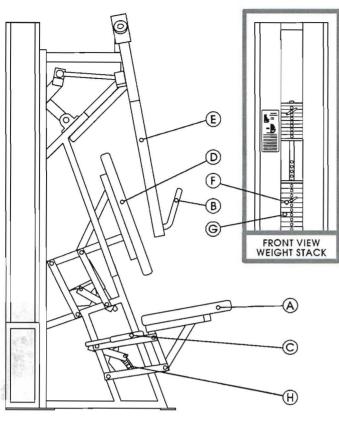
COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

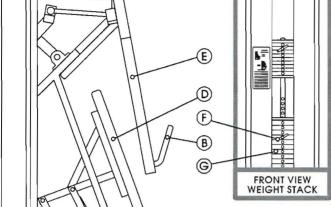
Vary the starting position by removing the selector pin **F** form the weight stack **G**, moving the movement arms **H** to the desired starting position and inserting the selector pin at the desired level of resistance.





CHEST PRESS







MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly setup and adjust this machine. Seat height and seat back position both must be properly adjusted to insure the most beneficial and safe full-range exercise. Adjust the seat A height so that your hands, when on the handlebars B, are even with your arm pits at the starting position. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. Seat will automatically lock into position when being raised. To lower seat height, lift the front of the seat while simultaneously lifting the seat release handle C. Lower to desired height and release the handle. The seat back **D** should be positioned so that the handlebars **B** almost touch (approx. 2 inches) at full extension. Back and shoulders should remain against the back pad during exercise. movement arm E starting position should be adjusted for the desired amount of stretch. This is accomplished by removing the selector pin F from the weight stack G then moving the movement arm E to the desired starting position and inserting the selector pin at the desired level of resistance. Note the seat, seat back and movement arm starting position H for future reference.



EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. movement arms as far forward as vou can. Movement through full-range should take at least 4 seconds. Do not pause with your arms in the lockedout position. Return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

Exercise and muscle involvement can be modified by varying the movement arm starting position and by varying the hand position on the handlebars.

OVERHEAD PRESS

D FRONT VIEW WEIGHT STACK

MUSCLE GROUP - Muscles of the arms, shoulders, neck and upper torso.

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly setup this machine. Seat and seat back must be properly positioned to insure the most beneficial and safe full-range exercise. Adjust the seat A so that you can just grasp the handlebars B. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. The seat will automatically lock into position while being raised. To lower the seat, lift the front of the seat while simultaneously lifting the seat release handle C. Lower to desired height and release the handle. Back pad D should be positioned to accommodate desired exercise. Fasten seat belt **E** securely. Note seat position **F** for future reference. (Dual handlebars and two position seat back allow user to perform traditional military style press).

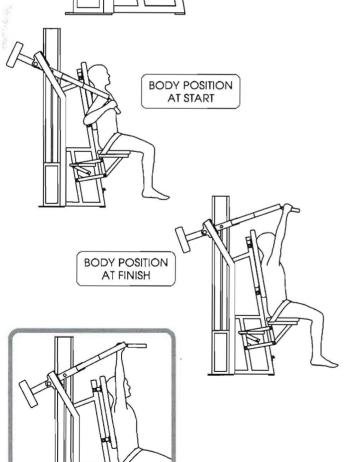
EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Lift the weight smoothly by pushing the movement arm **G** upward as far as you can. Movement through full-range should take at least 4 seconds. Do not pause with your arms in the locked out position. Return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form. (Do not grip handlebars tightly with hands).

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

The starting position can be varied by removing the selector pin \mathbf{H} from the weight stack \mathbf{I} , moving the movement arm \mathbf{G} to the desired starting position and inserting the selector pin at the desired level of resistance.

Exercise and muscle involvement can be modified by utilizing the two-position seat back and dual handlebars.



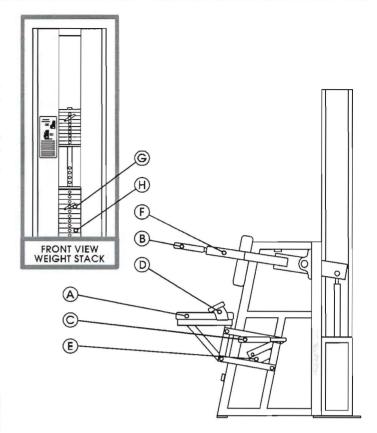
ALTERNATE HANDLEBARS

AND SEAT BACK POSITION

SEATED DIP

MUSCLE GROUP - Muscles of the arms, shoulders and upper torso.

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly setup and adjust this machine. Seat height is important to insure the most beneficial and safe full-range exercise. Adjust the seat A so that you can just grasp the handlebars B from above when raising your hands and arms as high as possible. Grip should be similar to grip used when doing dips on fixed bars. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. The seat will automatically lock into position while being raised. To lower seat , lift the front of the seat while simultaneously lifting the seat release handle C. Lower to desired height and release the handle. Fasten the seat belt **D** securely. Note seat position **E** for future reference.



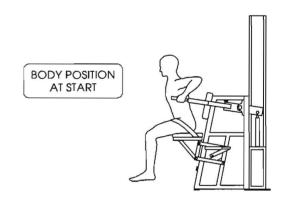
EXERCISE

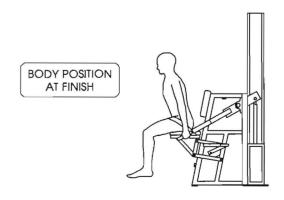
EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Grasp the handlebars **B**, lean forward and push the movement arm **F** downward as far as you can. Movement through full-range should take at least 4 seconds. Do not pause with your arms in the locked out position. Return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

The starting position can be varied by removing the selector pin **G** from the weight stack **H**, moving the movement arm **F** to the desired starting position and inserting the selector pin at the desired level of resistance.

Exercise and muscle involvement can be modified by leaning backward while exercising. This position increases the amount of triceps involvement.

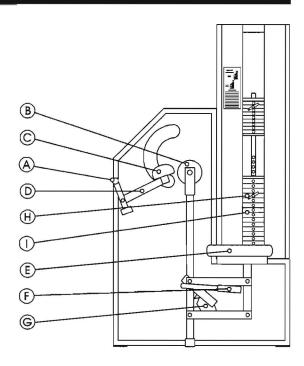




ARM CURL

MUSCLE GROUP - Biceps

MACHINE SET-UP AND ADJUSTMENT - For optimum results, special care should be taken to properly adjust seat height on this machine. In the starting position, your arms should be straight when grasping the pivoting handlebars A. Your elbows should be over the opening between the fixed roller pad B and the flat pad C on the movement arm D. Seat cannot be adjusted while supporting your body weight. Raise the seat E by lifting. The seat will automatically lock into position while being raised. To lower seat height, lift the front of the seat while simultaneously lifting the seat release handle F. Lower to desired height and release the handle. Note seat position G for future reference. Position feet forward, not under the seat.

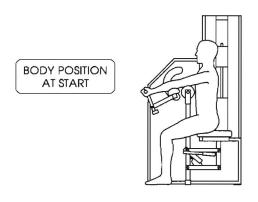


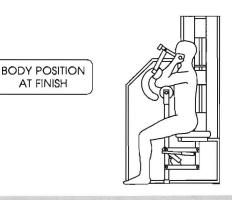
EXERCISE

EXERCISE -Select a resistance with which you can perform 8 to 12 repetitions. While maintaining an open-handed grip on the handlebars **A** and without moving your elbows, rotate the movement arm **D** toward you as far as possible. Movement through full range should take at least 4 seconds. Pause for 1 second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and deliberate. Avoid throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form.

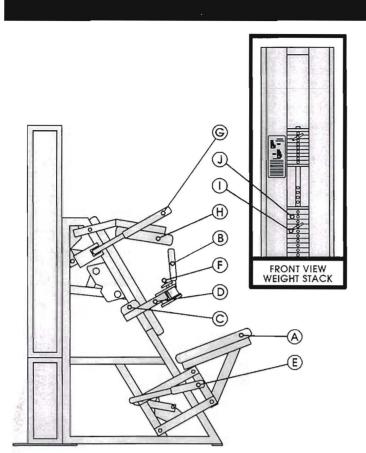
COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

The starting position can be varied by removing the selector pin **H** from the weight stack **I**, moving the movement arm to the desired starting position and inserting the selector pin at the desired level of resistance.



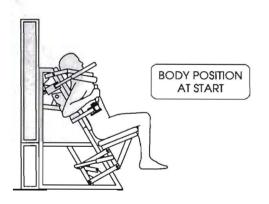


TRICEPS EXTENSION



MUSCLE GROUP - Triceps

MACHINE SET-UP AND ADJUSTMENT - Proper set-up and adjustment is critical for this machine. Alian the elbow axis with the rotational axis of the machine. This is accomplished by adjusting the seat A height and handlebar **B** position. Adjust the seat so that your forearms rest on the forearm pads C on the movement arm D. Seat cannot be adjusted while supporting your body weight. Raise the seat A by lifting. The seat will automatically lock into position while being raised. To lower the seat height, lift the front of the seat while simultaneously lifting the seat release handle E. Lower seat to desired height and release the handle. Align the elbows with the axis of rotation of the machine. by positioning the adjustable handlebars B. Pull the release pin F. move the handlebars to the desired position and release the pin. When properly positioned, there should be little or no movement of the forearms on the position reference pads C when exercising full range. After being properly positioned in the machine, pull the shoulder pad handle G down until the shoulder pads H are firmly against your shoulders. Note seat and handlebar position for future reference.

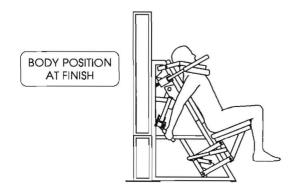


EXERCISE

EXERCISE - Select a resistance with which you can perform 8 to 12 complete repetitions. Firmly grip the handlebars near the top and hold your arms close to your body. Rotate your forearms down and back as far as you can. Movement through full-range should take at least 4 seconds. Pause for second and return to the starting position using a count of at least 4 seconds. Do not pause, immediately begin the next repetition. All movement should be controlled and delibrate. Aviod throwing or jerking the weight. Continue the exercise until you are unable to complete a repetition in good form. To release the shoulder pads **H**, pull down on the shoulder pad release handle **G**. Pads will automatically rise.

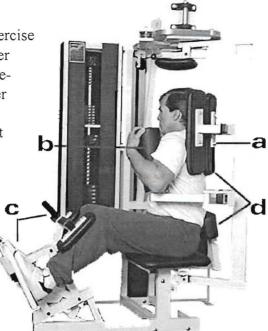
COMMENTS - For best results, exercise should be performed throughout the greatest range of pain free movement.

Vary the starting position by removing the selector pin I from the weight stack ${\bf J}$, moving the movement arm ${\bf D}$ to the desired starting position and inserting the selector pin at the desired level of resistance.



ROTARY TORSO

The new MedX Rotary Torso exercise machine features upper and lower body restraint mechanisms that securely wedge the body for proper isolation of the waistline area muscles. Shoulder, arm and chest muscles are neutralized by a (a) system of padding arranged to match the contour of the exerciser's upper back, along with (b) swiveling vertical roller pads around which the exerciser's arms are placed. As each repetition is executed, the upper body muscles are



back pads. So as fatigue makes the exercise more demanding, instead of interference from surrounding muscles (typical in most exercises), the MedX Rotary Torso exercise machine actually secures isolation of the targeted muscles.

The lower body is neutralized by a (c) foot-pressing and shin-pad mechanism. When properly positioned, pushing with the legs drives the buttocks firmly against the (d) seat back. This essentially locks the pelvis, keeping the hip and gluteus muscles from assisting in rotation of the torso.

EXERCISE

inclined to exert force. This

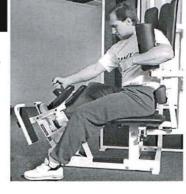
1 Sit in the machine, putting just one foot on the foot platform, while leaving the other on the floor. Scoot backward until pressed tightly against the pad. Grasp the shin pad handle and pull the foot platform in as far as possible. Brace yourself with the leg set on the floor. Pull until legs are tightly wedged. Once this has been achieved, slide the offleg onto the foot platform also.

clever system directs the force toward pressing the upper body into the

2 Select a resistance aimed at permitting 8 but not more than 12 repetitions performed in good form (or in accordance with whatever training protocol you prefer).

3 Select a degree of stretch for the starting position. You may rotate as little as 90

degrees or all the way up to 132 degrees. This selection is made from the seated position via a **spring-loaded overhead lever**. Press the lever to release the torso restraint. While keeping the lever pressed, swivel in one direction until in line with the **selector hole** matching your



desired range of motion. Release the lever. Wiggle to make sure it's securely locked.

4 Hook your arms tightly around the swiveling vertical rollers. Squeeze inward very tightly.

5 Once your back is securely wedged and your pelvis is firmly pressed into the seat pad, begin the exercise by rotating toward

the center line of your body. Press with your back shoulder. Cross the center line, and go as far in the other direction as possible. Pause. Reverse direction smoothly and control the movement until just before the weights touch. Repeat.

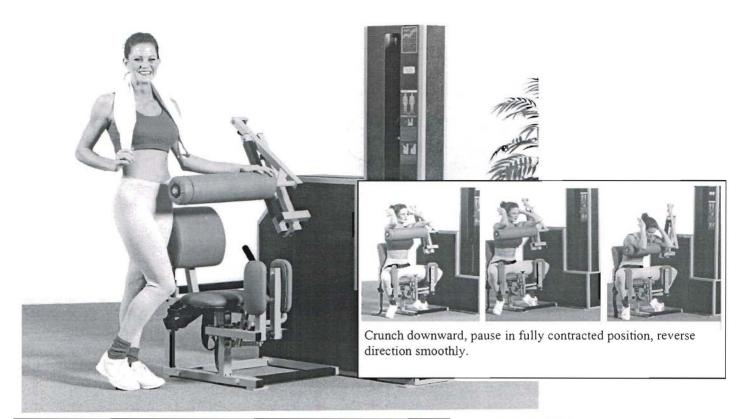
After completing a set of rotation to one side, release the torso restraint by pressing

the overhead lever, swivel to the opposite side and place the lever into the appropriate selector hole. Repeat step 5.



6 To exit the machine, press lever with right foot.

ABDOMINAL



EXERCISE

- 1. Before sitting, make sure tubular pad that serves as the machine's movement arm (circled) is in UP position.
- 2. Select a resistance aimed at permitting at least 8 but not more than 12 repetitions.
- 3. Sit in machine, and press lever beside seat to spread knees as wide as possible (neutralizes hip flexor interference).
- 4. Pull the machine's movement arm to upper chest level, arching torso backward to pull the pad as low as possible.
- 5. Place your upper arms on the movement arm tubular pad and your hands to the side of your head.
- 6. Initiate movement by "crunching" downward, which means pulling your chest toward your hips (be sure to keep lower back compressed against pad and DO NOT bend from the waist). See photos.
- 7. Pause in contracted ("crunched") position then smoothly reverse direction and return to starting position, then repeat.
- 8. When finished, pull lever between knees to release knee pads. Photo at right.



Keep lower back pressed against the pad (DO NOT bend from the waist.

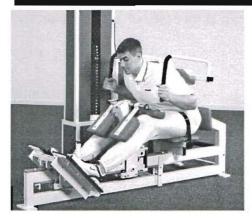


Optional hand position...reaching from underneath.



Release knee pads to exit.

EXL







The Exercise Lumbar features a similarly effective pelvic restraint system to that used on the Medical Lumbar Extension machine. Without pelvic restraint, the larger muscles of the glutes and hamstrings extend the torso with little or no contribution from the paravertebral musculature.

The EXL features the design characteristics indigenous to the MedX selectorized line, including patented compound weight stack with resistance settings in 2-pound increments, low-inertial weight travel for gentleness to the joints.

SPECIFICATIONS

Length: 751/4 inches

Width: 45¾ inches

Height: 74 inches

Weight: 1,127 pounds

(500-lb. weight

stack)

Targeted muscles:

paravertebrals (lumbar)

Minimum Resistance:

20 ft-lbs (stack) 34

ft-lbs. total

Maximum Resistance:

500 ft-lbs. (stack),

514 ft-lbs. total

Incremental: 2 ft-lbs.

Range: 80 deg.



Range lever close up.

Pelvic Restraint

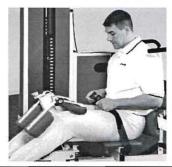
Foot Rest slides horizontally via pushbutton. Set it so that knees are slightly higher than hips.





The Thigh Pad and Shin Pad function as one unit, centered top and bottom of the knee. The release putton for horizontal placement of the Knee Restraint is under the thighs.



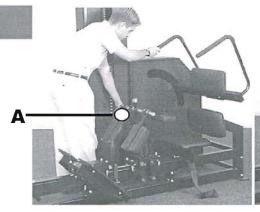




SEE NEXT PAGE FOR INSTRUCTIONS

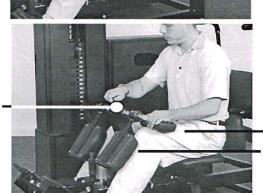
EXERCISE

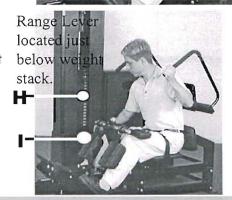
- Make sure seat is accessible. If necessary, release Range Lever (A) to position movement arm at full extension, then move Knee Restraint (B) and Foot Rest (C) forward.
- 2. Sit in machine, pressing pelvis firmly into rear pad.
- 3. To set Foot Rest the appropriate distance, press release button and move it along the track. Try to achieve approximately 120degree bend in the knees. Release button.
- 4. Fasten seat belt (D).
- 5. To set Knee Restraint appropriate distance, press release button and move along track, You'll find this button approximately below your knee joint (Item B in photo upper right corner).
- 6. Tighten Knee Restraint via Handle (E). The Thigh Pad (F) and Shin Pad (G) should be approximately equal distance from the crest of the knee. If you feel excessive pressure on one in comparison to the other, reposition either the Knee Restraint, the Foot Rest or both.
- 7. Set appropriate resistance by inserting pins in both weight stacks (H).
- 8. Release Range Lever by pulling handle upright. Grasp left Movement Arm handle (I), and bend forward as far as possible without pain to establish starting point. Reengage Range Lever (push forward) in the most appropriate of five position settings.
- Lightly grasp both Movement Arm handles.
- Initiate exercise by extending the spine (pushing back) as far as possible without pain. Pause at full contraction.
- Release tension, allowing weight to lower as you bend forward (stretch) to your fully flexed position.
- 12. Smoothly reverse direction and repeat contraction.
- Perform in accordance with desired protocol. Reverse entry instructions to exit machine.

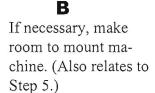














Smaller trainees should strap on extra seat pad.

Press against pelvic pad and fasten seat belt tightly.

Thigh Pad and Shin Pad should be equal distance from knee.

G Pressure on each should be equally distributed.

Knee should be slightly higher than hip.

WEBSITE RESOURCES

LOG ON TODAY www.MedXonline.com

Home page: www.medxonline.com/

Locate a MedX-equipped rehab clinic: www.medxonline.com/Backpainclinics.htm *

Customer Support: www.medxonline.com/Support/ * Containing links to:

 Medical Exercise banner, advertising logo

 Download Medical Lumbar web-formatted Slides

- Download workout chart-generating Software for Windows95
- Wording for press releases, posters, correspondence, etc.
- Downloadable Photos of Exercise Equipment
- Medical Machines dimensions/specifications
- Premium Selectorized equipment (weight stacks) dimensions/specifications
- Avenger Training System (plateloaders) dimensions/specifications
- Photos/Illustrations of Medical Equipment
- Medical Machine dimensions/specifications (footprint diagrams)
- Stretch Machine Photos and downloadable workout chart
- Sample floorplans

Medical Machines Master Page: www.medxonline.com/

Spine_rehab/

Avenger/

Premium Selectorized Machines Master Page:

www.medxonline.com/ strengthtrainingequip.html/

Avenger Training System Master Page: www.medxonline.com/

Golf Program: www.medxonline.com/ Golf/ Directory of ALL products: www.medxonline.com/Products/

Exercise Science Update: www.medxonline.com/Exsci/

Company overview: www.medxonline.com/company.html

US, Canada sales reps: www.medxonline.com/ exercise therapy pros.htm

International sales reps: www.medxonline.com/ spine rehab pros.html

^{*} Subject of change without notice