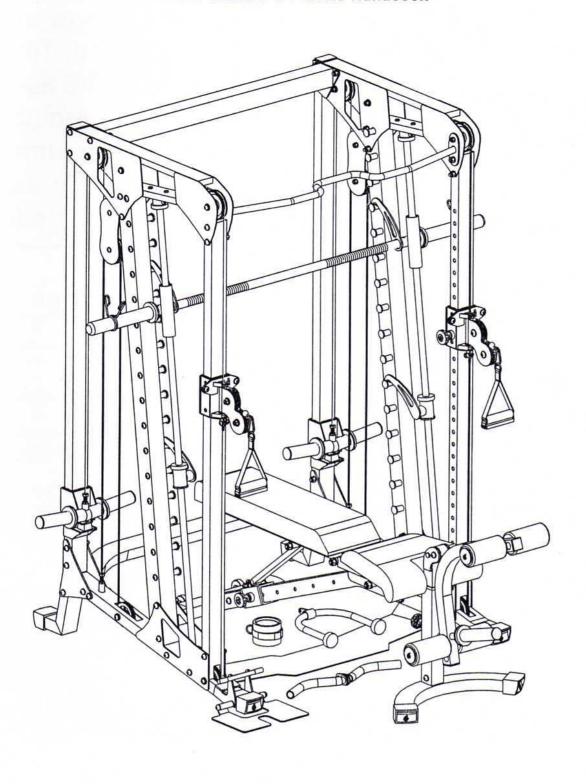


Nautilus® NT-CC1 Smith Machine with Cable Crossover

Owner's Manual & Fitness Handbook



WARNING!

To reduce the risk of serious injury, read the following important precautions before using the Nautilus® NT-CC1 Smith Machine with Cable Crossover. Before beginning this or any exercise program, consult your physician. This is especially important for persons over the age of 35 or persons with pre-existing health problems. Read all instructions before using. We assume no responsibility for personal injury or property damage sustained by, or through the use of, this product.

Important Precautions and Warnings

- IMPORTANT! This Nautilus product has a maximum user weight limit of 136 kgs. (300 lbs.) and is not designed to be used with any load greater than the supplied weight of 93 kgs. (205 lbs.). Do not use any means to increase the resistance of the machine that is not specified in this Owner's Manual.
- It is the responsibility of the owner to ensure that all users of this equipment are adequately informed of all precautions.
- Read all instructions and warnings in this manual, on the machine, and in the accompanying literature before using this equipment.
- If you feel pain, lightheadedness, dizziness or shortness of breath at any time while exercising, stop immediately, begin cooling down, and consult your physician.
- Use this equipment only on a level surface. Cover the floor or carpet beneath this equipment for protection.
- Inspect and tighten all parts often. Replace any worn cables or other parts immediately! DO NOT USE IF YOU NOTICE WEAR!

- Keep children and pets away from this equipment at all times.
- 8. Always wear athletic shoes for foot protection.
- Keep hands and feet away from moving parts and do not wear loose clothing when you are near the equipment.
- Never release the weight bar or cable handles while weights are raised. The weights will fall with great force.
- 11. Make sure that the cables remain on the pulleys at all times. If the cables bind while you are exercising, stop immediately and make sure that the cables are on all of the pulleys.
- When weights are on the weight bar, always secure them with the spring clips provided.
- Before each use, check the cable clips on both ends of the cables to ensure they are securely fastened.

Read all warnings posted on the unit.

Table of Contents

Warranty Information	1
Get to Know Your Machine	2
Machine Maintenance	
Define Your Goals	
Exercises	
Bench:	
Leg Extension	5
Smith Machine and Bench:	
Chest Press	5
Military Press	6
Chest Press (Incline)	6
Shoulder Shrug	
Squat	
Calf Raise (Standing)	
Seated Calf Raise	
Cable Crossover:	
Low Rows (Seated)	g
Standing Bicep Curl	
Oblique Crunch	
Standing Lateral Raise (with straps at elbows)	
Lower Back Extension	
Triceps Pushdown	
Lat Rows (Standing)	

Shrugs	12
Pullups (Wide Grip)	
Pullups (Narrow Grip)	13
Hip Adduction	14
Hip Abduction	14
Shoulder Press (Seated)	15
Shoulder Press (Standing)	15
Rear Deltoid Row (Seated)	
Rear Deltoid Row (Standing)	
Seated Ab Crunch	17
Trunk Rotation (Seated)	17
Trunk Rotation (Standing)	18
Hip Extension (Standing)	18
Standing Hip Flexion	
Leg Kickback (Standing)	
Decline Chest Press	
Incline Chest Press	20
Chest Press	21
Chest Press (Standing)	21
Chest Flys	
Chest Flys (Standing)	22
Muscle Chart	23

Warranty Information

What Is Covered

Nautilus warrants to the original purchaser of this Nautilus product that the equipment is free from defects in materials or workmanship, with the exceptions stated below. This warranty is not transferable or applicable to any person other than the original purchaser.

Warranty

The Nautilus® NT-CC1 Smith Machine with Cable Crossover is intended for home use only. Do not use this equipment in any commercial, rental or institutional setting. General warranty is: 10 years – frame, 3 years – moving components, 1 year – wear items, 90 days – labor. Please refer to the enclosed Consumer Product Warranty for more information and be sure to complete the Warranty Registration Form.

Wear Items Defined: Wear items are parts/components that might need to be replaced due to normal use during the life of the product. User-life for wear items will vary, depending on uncontrolled parameters (i.e., placement environment, frequency of use, type of user, scheduled maintenance, etc.). Wear items vary for each product but will include, and not be limited to: cables, pulleys, hand grips, ankle cuffs, tricep rope, upholstery, bearings, pivots, etc.

Warranties Do Not Cover

- Damage due to use by persons who weigh more than 300 pounds.
- Damage due to abuse, accident, failure to follow instructions or warnings in the Owner's Manual, misuse,

mishandling, accident or Acts of God (such as floods or power surges).

- Consequential or incidental damage. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- Use in any institutional or commercial settings such as health clubs, schools or recreation centres.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

What We Will Repair

During your Warranty Coverage Period, Nautilus will repair any Nautilus equipment that proves to be defective in materials or workmanship. In the event repair is not possible, Nautilus, at its option, will either replace your equipment or refund your purchase price, less shipping and handling.

How To Obtain Service

To obtain service for a Nautilus Fitness Product, contact an authorized Nautilus Fitness Retailer. You may also contact a Nautilus company representative at 877-417-0519 to help you locate a dealer in your area.

How State Law Applies

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

Get To Know Your Machine

When you buy any exercise equipment you need stability, durability, and quality – and you want long term results. But these alone are not enough: more than anything else, you need equipment that's designed by the people who set the standards for ergonomic correctness and precision during exercise.

At Nautilus, our expertise in the science of human performance goes into every piece of fitness equipment we offer. We design our machines to be stable, comfortable, easy to use, and to provide the body support you need to exercise with proper form, while avoiding injury.

As a supplier of fitness equipment to health clubs worldwide, the Nautilus name has become synonymous with

- Ultimate performance
- · Optimum results
- · Maximum durability.

As you pursue your fitness goals, you can be sure that the same care, craftsmanship and rigourous standards that we put into our professional equipment, go into our full line of home gym equipment, too.

Nautilus... Making the world stronger since 1970.

The Nautilus® NT-CC1 Smith Machine with Cable Crossover



Machine Maintenance

Daily:

After each use, wipe machine free of sweat with a clean, dry cloth. Upholstery can be cleaned with a mild detergent or spray cleaner.

Weekly:

If used often, your machine should be thoroughly cleaned using a clean cloth and an ammonia-based cleanser. Wipe machine down completely and be sure to touch up any scratches with touch-up paint to prevent rusting.

Define Your Goals

Your body will do what you train it to do. That's why it's important to define your goals and focus on them. Here are some fitness concepts that will help you define your goals and choose your fitness program.

Muscle Strength is the maximum force that you can exert against resistance at one time. Your muscle strength comes into play when you pick up a heavy bag of groceries or lift a small child. It is developed when a localized muscle is worked both positively (concentric) and negatively (eccentric) at a resistance – great enough so you can perform only five to eight repetitions of the exercise before the muscle fails. Each set of repetitions is followed by a rest interval that typically runs three times longer than the set. Later, between exercise sessions, the muscle overcompensates for the stress and usually increases in both strength and size.

Muscle Endurance is the ability to perform repeated contractions. It comes into play when you cross-country ski or work on your feet all day. Endurance training addresses the slow-twitch, endurance muscle fibers, which depend on oxygen for energy. To develop muscle endurance, use low resistance and high repetitions – about 15-20 repetitions in each set, three sets to each exercise, working the muscle only to fatigue.

Muscle Power is the combination of strength and speed of the muscular contraction. This is often misinterpreted as a) being directly associated with certain skill or sport and/or b) meaning that you must move fast. Load is actually a more important factor than speed when attempting to improve power. When training to achieve muscular power, pick a resistance that fatigues you in the 3-5 repetition range. When performing these reps, it is more important to think of contracting the muscles faster rather than attempting to move faster. Performing sport simulation exercises usually results in deterioration of the motor pattern or skill. The biomechanically sound method of improving power in your sport is to train for power using the correct joint movements, as described in this manual. Then practice the skill associated with your sport, learning to apply this newly achieved power. Body Composition is the ratio of fat weight (fat) to lean weight (muscle, bone and tissue). As you age, the ratio

shifts. The fat weight increases and the lean weight decreases. Training for muscle strength will generally increase muscle size and aerobic conditioning will help burn extra calories. Performing these two forms of exercise, either at different times or together, will create the greatest changes in body fat weight.

Balanced Strength and alignment are the result of equal strength developed in all parts of the body. It comes into play in your standing and sitting posture, and in your ability to perform just about any activity safely and effectively. An over-development of the back will round the shoulders; weak or stretched abdominals can cause lower back pain. You want a balance of muscle strength in front and back. In addition, you need a balance of strength between your middle, lower, and upper body.

Flexibility is the ability of a muscle or group of muscles to move the joint through a full range of motion. Flexibility comes into play when you execute an overhand serve or stretch for the top shelf in the kitchen. It is a cooperative movement of opposite muscle groups. When a muscle contracts, its opposite muscle group must relax for the action to occur. Increased flexibility means an increased range of motion, made possible by this simultaneous contracting and relaxing. Good flexibility is important in protecting the body from injury and can be achieved through the balanced strength training programs that are included in this manual.

Cardiovascular Endurance is the ability of the heart and lungs to supply oxygen and nutrients to exercising muscles over an extended period of time. It comes into play when you jog a mile or ride a bike. It is a critical component of overall fitness and health.

Define Your Goals

Reaching Your Goals

To reach your goals, follow a consistent, well-designed program that provides balanced development to all parts of the body and includes both aerobic and strength exercise. Only then will you meet your goals safely and efficiently. The workout routines found in this manual are professionally designed and written to target specific fitness goals. Should you not find one specific program to your liking, you can design your own, based on sound information and the principles found in this manual.

Design Your Own Program

You may want to design your own personal program specifically geared to your goals and lifestyle. Designing a program is easy, as long as you follow the guidelines below.

Understand fitness and its components:

Improperly designed programs can be dangerous. Take some time to review this manual as we as other fitness guides.

Know your current fitness level:

Before you start any fitness program you should consult a physician who will help you determine your current abilities.

Identify your goals:

Goals are critical to choosing and designing an exercise program that fits and enhances your lifestyle, but so is strategy. It's important not to rush the process and try to accomptish too much too soon. That will lead to setbacks and discouragement. Instead, set a series of smaller achievable goals.

Select complementary exercises:

Be sure to pair exercises that address compound joint movements and single joint movements. In addition, select exercises that address complementary muscle groups.

Put first things first:

During each session, first work muscle groups that need the most training.

Remember your cardiovascular component:

Any fitness program must contain a cardiovascular fitness component to be complete. So complement your resistance training with aerobic exercise such as walking, running, or bicycling.

Training variables:

When designing your own program there are several variables that, when mixed properly, will equal the right fitness formula for you. In order to find out the best formula, you must experiment with several combinations of variables.

The variables are as follows:

- Training Frequency: The number of times you train per week. We recommend daily activity but not daily training of the same muscle group.
- Training Intensity: The amount of resistance used during your repetitions.
- Training Volume: The number of repetitions and sets performed.
- Rest interva s: The time you rest between sets and the time you rest between workouts.

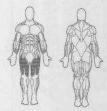
Once you've established a base of fitness, follow these basic principles:

- Isolate muscle groups: Focus work on specific muscle groups.
- Progressive Loading: The gradual systematic increase of repetitions, resistance and length of exercise period.

Leg Extension

Muscles Worked:

This exercise emphasizes the muscles on the front of the upper thigh, the quadriceps muscle group.



Starting Position:

- Adjust the seat pad to the elevated position and the top portion of the bench in the flat position.
- Sit on the seat facing away from the machine with your knees near the pivot point and the lower roller pads on the front of your shin (see picture).
- Position your thighs at hip width pointing your kneecaps straight to the front.
- Sit up straight with your chest lifted, abs tight and maintain a very slight arch in your lower back.

Motion:

- Tighten your quads and straighten your legs by moving your feet forward and then upward until your legs are completely straight and your kneecaps are pointing up toward the ceiling (not turned outward).
- Then slowly return to the starting position keeping tension in your quads during the entire movement.



Start

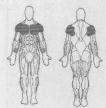


Finish

Chest Press

Muscles Worked:

This exercise emphasizes the chest muscles (pectoralis major), also involving the front shoulder muscles (anterior deltoid).



Starting Position:

- Adjust the bench to a flat position and adjust the bar to a proper height that allows you to safely push the bar off the rack and place it back on the rack when the exercise is completed.
- Lie down on the bench so that the bar is lined up slightly higher than the nipple line.
- Reach up and grab the bar with the hands in a position such that when the bar is lowered toward the chest, the wrist and forearm are lined up straight over the elbow.
- Stabilize your core and lower body by keeping the feet flat on the floor directly in a vertical line under the knee.

- Raise the chest and slightly pinch the shoulder blades together. Maintain a slight comfortable arch in the lower back.
- Push up and rotate the bar to lift it off the rack. Align it approximately with the nipple line.

- Slowly move the bar toward the body allowing the elbows to bend outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain over the elbows throughout the movement.
- Stop the movement when the upper arms are approximately straight out to the side (elbows will be level with the shoulders) and the bar is approximately over the nipple line.
- Slowing return to the starting position with arms straight to the front at shoulder width and in line with the chest. Keep the chest muscles tight throughout the movement.



Start

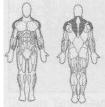


Finish

Military Press

Muscles Worked:

This exercise emphasizes the front shoulder muscles (anterior deltoid and a portion of the middle deltoid) and the triceps, muscles on the back of the upper arm.



Starting Position:

- Place the bench to the flat position and adjust the bar to the proper height so that when you are seated on the bench facing the bar you can place your hands under the bar with your arms at your side and elbows bent. The bar should be adjusted so you can safely lift the bar off the rack and place it back on the rack after the exercise has been completed.
- While sitting on the bench facing the bar from the back side of the machine, sit close enough so you can grasp the bar with your palms facing away from you and your elbows bent.
- Your feet should be flat on the floor and directly in line under your knees. Stabilize your

- lower body from your ankles, through your knees and up into your hips.
- Slightly arch your lower back and lift your chest to stabilize your core.
- Grab the bar so that your hand is in line with your forearm and elbow. Your elbows should be bent to approximately 90 degrees.
- · Lift the bar off the rack and rotate to release.

Motion:

- Slowly move the bar upward in a plane slightly in front of your face so that your elbows straighten to a point where they are parallel to each other. The hands should remain over the elbows throughout the entire movement.
- Stop when your upper arms are approximately straight over your shoulders, controlling the movement of the bar.
- Slowly lower the bar by letting the elbows bend and the upper arm move straight out from your sides (elbows will be level with the shoulders or slightly below).



Start

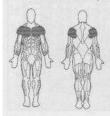


Finish

Chest Press (Incline)

Muscles Worked:

This exercise emphasizes the chest muscles (pectoralis major), also involving the front shoulder muscles (anterior deltoid).

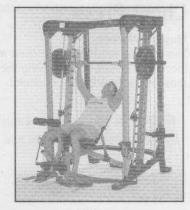


Starting Position:

- Adjust the bench to an inclined bench position and the bar to the proper height to safely push the bar off the rack and place it back when the exercise is completed.
- Sit back on the bench so that the bar is lined up slightly above the nipple line.
- Reach up and grab the bar with the hands in a position such that when the bar is lowered toward the chest, the wrist and forearm are lined up straight over the elbow.
- Stabilize the core and lower body by keeping the feet flat on the floor directly in a vertical line with the knee.

- Raise the chest and slightly pinch the shoulder blades together. Maintain a slight comfortable arch in the lower back.
- Push up on the bar and lift it off the rack.
 Align it approximately at the nipple line.

- Slowly lower the bar toward the chest allowing the elbows to bend outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain over the elbows throughout the movement.
- Stop the movement when the upper arms are approximately straight out to the side (elbows will be level with the shoulders) and the bar is approximately over the nipple line.
- Slowly return to the starting position with the arms straight upward at shoulder width and in line with the chest. Keep the chest muscle tight throughout the movement.



Start



Finish

Shoulder Shrug

Muscles Worked:

This exercise emphasizes the upper trapezius and other small muscles of the upper shoulder region.



Starting Position:

- Stand on the backside of the Smith machine facing forward.
- Grasp the bar with a grip width slightly wider than your shoulders, palms facing toward the back.

Motion:

- Raise your shoulders toward the back of your head, making sure your head/neck position does not move.
- Slowly allow the shoulders to return downward without slouching and rounding the upper back.



Start



Finish

Squat

Muscles Worked:

The squat is often considered a total body exercise, the glutes, adductors, hamstrings and quads are the primary movers. The spinal erectors work to stabilize the spine.



Starting Position:

- Adjust the bar height on the Smith machine to slightly lower than shoulder height when standing facing the bar from the back side.
- Grab the bar and hold it behind your head and over your shoulders.
- Hands should be positioned slightly wider than shoulder width, with the palms facing forward.
- Bend your knees slightly so you are comfortable, while keeping good spinal posture.

- Slowly lower your body by sticking your hips back and bending your knees and ankles. Keep the chest up and back slightly arched.
- · Lower to approximately 90 degrees.
- Push the bar upward by standing up straight, ending in the starting position.



Start

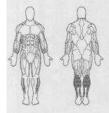


Finish

Calf Raise (Standing)

Muscles Worked:

This exercise emphasizes the muscles of the lower leg (gastrocnemius and soleus).



Starting Position:

- Move the bench to a position that allows you to place the front of your foot (ball of the foot) on the bench support leg when you are standing under the bar.
- Stand facing toward the front of the machine, place the bar across the back of the shoulders and the front of your feet on the bench support leg.

Motion:

- With the leg straight, do not lock out the knee, push up on the ball of your foot lifting the heel.
- Slowly return to the starting position without losing tension on the calf muscle.



Start

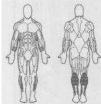


Finish

Seated Calf Raise

Muscles Worked:

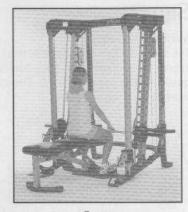
This exercise emphasizes the muscles of the lower leg (gastrocnemius and soleus).



Starting Position:

- Put the bench in the flat position and place it in line with the bar on the Smith machine so that when you are seated facing the back of the machine the bar is resting on your lower thigh (just above the knee joint).
- Place the front portion of your feet (balls of your feet) on the lower bench leg.

- After releasing the bar, lift your heels off the floor.
- Return to the starting position, maintaining tension on the calf muscles.



Start

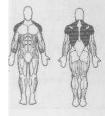


Finish

Low Rows (Seated)

Muscles Worked:

his exercise emphasizes the latissimus dorsi, teres najor and rear deltoid. These muscles make up the arge pulling muscles of the back.

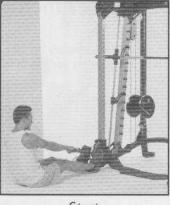


Starting Position:

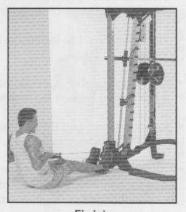
- Sit on the floor facing the machine with your feet against the footplate. Grab the single bar with the palms facing down.
- Keep the chest lifted and a slight arch in the lower back.

Motion:

- With your arms straight out in front of you, initiate the movement by pinching your shoulder blades together while pulling your upper arm downward and backward toward the sides of your body until your wrist comes to the bottom of the rib cage.
- Slowly return to the starting position.



Start

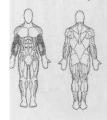


Finish

Standing Bicep Curl

Muscles Worked:

his exercise emphasizes the elbow flexors, which nelude the biceps, brachialis and brachioradialis.

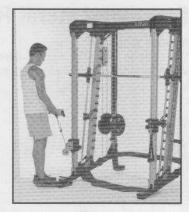


Starting Position:

- Lower the pulleys down toward the lowest position. Stand facing the machine at a distance so that when you stand up straight and hold the handles you feel the resistance.
- Grab the handles with your palms facing forward and your upper arms at your sides.
- Tighten your abs, lift your chest and maintain a slight arch in your lower back.

Notion:

- Curl the handles forward, then upward and then toward your shoulders while keeping your elbows at your sides.
- Slowly lower back to the starting position,



Start

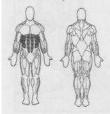


Finish

Oblique Crunch

Muscles Worked:

This exercise emphasizes the side abs (obliques) as well as the upper and lower front abs (rectus abdominus).



Starting Position:

- Place the bench slightly in front of the Cable Cross, centred between the pulleys.
- The bench should be inclined to a 45-degree angle.
- Set the pulleys slightly below shoulder height when leaning back on the bench.
- Reach over and grab the right handle and bring it up to the right shoulder.
- Open the webbing of the handle and slide your arm through it so it is positioned around the front of the shoulder.

 Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.

Motion:

- Tighten your abs and move in a diagonal direction, slowly moving your right ribs toward your left hip.
- Move as far as you can, the lower back should not lose contact with the bench when fully crunched.
- Slowly reverse the motion returning to the starting position without relaxing the abs.
- After doing a set, switch to the other handle and repeat a set on the other side.



Start

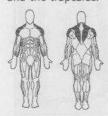


Finish

Standing Lateral Raise (with straps at elbows)

Muscles Worked:

This exercise works the side shoulder muscles, which includes the middle deltoid, supraspinatus and the trapezius.



Starting Position:

- Open the webbing on each handle so you can slide your arm through it.
- Slide the cuff of the handle up to the elbow (not at or past the elbow joint).
- Facing away from the machine, stand centred between the pulleys and slightly out in front so the cables can move freely through the pulleys.
- Lean slightly forward at the hips, keeping a slight arch in the lower back. Keep your head and chest up.
- Let your upper arms hang in the direction of the resistance with the elbow bent to 90

- Raise your arms by leading with your elbow out to your sides to almost shoulder level.
- · Lift your elbow and hand at the same speed.
- Keep the side of your arm/elbow facing out/up throughout the movement.
- Slowly bring your arms back to the starting position without relaxing.



Start



Finish

Lower Back Extension

Muscles Worked:

This exercise works the muscles of the lower back, which include the erector spinae and the deep spinal muscles.



Starting Position:

- With the bench in a flat position, centre it between the pulleys and slightly out in front of the Cable Cross.
- Set the pulleys slightly higher than the height of the bench.
- Open the handgrip webbing so you can slide your arms through each handle.
- Sit on the bench facing the machine and slide the handgrips up to your elbows.
- Cross your arms in front of your chest and pull them tightly toward your body.

- Place your feet flat on the floor.
- Sit up straight, lift your chest, tighten your core muscles and maintain a slight arch in your lower back.
- · Pinch your shoulder blades together slightly.
- Lean forward from the hips, releasing some of the tension from the cables.

Motion:

- Keeping your chest lifted and move your entire torso backward, pivoting at the hips.
- Slowly return to the starting position without slouching or changing your spinal alignment.



Start

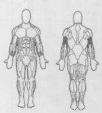


Finish

Triceps Pushdown

Muscles Worked:

This exercise works the triceps, the muscles on the backside of the upper arm.



Starting Position:

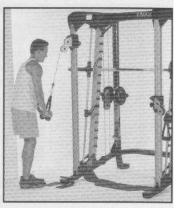
- Move the pulley on one side of the Cable Cross to the highest position.
- Hook up the short bar or the rope to the cable.
- Stand facing the machine and grab the bar/ rope with the palms facing downward.
- Adjust your stance so the pulley is slightly in front of you; this may be altered after the first repetition.
- Keeping your arms bent to about 90 degrees, bring your upper arms in to your sides and maintain that position.

• Lift your chest and tighten your abs to stabilize your spine and maintain a slight arch in the lower back.

- Keep your upper arms stable next to your side; slowly straighten your arms by arcing downward and then inward toward your hips.
- · Straighten your arms completely.
- With a slow, controlled movement, bring your arms back to the starting position at about a 90-degree bend at the elbow.



Start

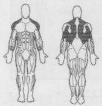


Finish

Lat Rows (Standing)

Muscles Worked:

This exercise emphasizes the latissimus dorsi, teres major and rear deltoid. These muscles make up the large pulling muscles of the back. The hips and spinal muscles are also challenged as stabilizers.

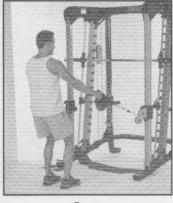


Starting Position:

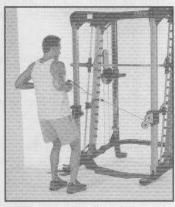
- Adjust the height of the pulleys slightly above the height of your knees.
- Stand with your feet shoulder width apart and face the centre of the machine.
- Grab each of the handles and stand far enough away so that when your arms are extended you feel resistance from the machine.
- Lean forward slightly at the hip, keeping a slight arch in the lower back and the knees slightly bent.

Motion:

- With your arms out in front of you, initiate
 the movement by pinching your shoulder
 blades together while pulling your upper arm
 downward and backward toward the sides of
 your body until your wrist comes to the bottom
 of the rib cage.
- · Slowly return to the starting position.



Start

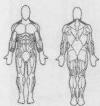


Finish

Shrugs

Muscles Worked:

The primary muscles emphasized are the upper trapezius and other associated muscles of the upper shoulder.

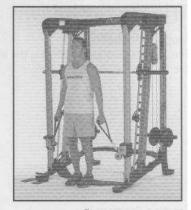


Starting Position:

- Lower the pulleys to a position below your knees so that when you grab the handles you feel tension.
- Stand facing the machine, reach down and grab the handles with your palms facing each other or facing backward, whichever is more comfortable.
- Let your arms hang, extending in the direction of the pulleys.

Motion:

 Raise your shoulders toward the back of your head; make sure your head/neck position does not move. Slowly allow the shoulders to return downward without slouching or rounding the upper back.



Start



Finish

Pullups (Wide Grip)

Muscles Worked:

This exercise emphasizes the latissimus dorsi, teres major and rear deltoid. These muscles make up the large pulling muscles of the back. The biceps are also involved.



Starting Position:

- Stand in the centre of the machine directly under the pullup bar.
- Reach up and grab the bar with your palms facing forward and slightly wider than shoulder width apart.
- Bend your knees so your feet are not touching the ground.

Motion:

 Lift your chest and slightly arch your low back while pulling yourself up to the bar.

- Lead the movement with your elbows by driving them down and in toward your body.
- Lower yourself back down keeping tension on your back muscles throughout the movement.



Start



Finish

Pullups (Narrow Grip)

Muscles Worked:

This exercise emphasizes the latissimus dorsi, teres major and rear deltoid. These muscles make up the large pulling muscles of the back. The biceps are also involved.



Starting Position:

- Stand in the centre of the machine directly under the pullup bar.
- Reach up and grab the bar with your palms facing toward you and at about shoulder width apart.
- Bend your knees so your feet are not touching the ground.

Motion:

 Lift your chest and slightly arch your low back while pulling yourself up to the bar.

- Lead the movement with your elbows by driving them down and in toward your body.
- Lower yourself back down, keeping tension on your back muscles throughout the movement.



Start



Finish

Hip Adduction

Muscles Worked:

This exercise will focus on the adductor muscle group. It will also work on the opposite hip muscle (gluteus medius) of the leg that you stand on.



Starting Position:

- Place the ankle cuff around the ankle of the leg you are going to exercise.
- Move the pulley to the lowest position and attach the cable to the ankle cuff.
- Stand facing sideways away from the pulley so you feel resistance when the leg is away from the midline of the body.
- Keep the chest lifted, abs tight and a slight arch in the lower back.
- After completing the exercise on one leg, switch to the other.

Motion:

- Keep your hips and spine still, slowly move your leg to midline/centre, away from the pulley.
- Slowly control the leg back toward the pulley, returning to the starting position.



Start



Finish

Hip Abduction

Muscles Worked:

This exercise will strengthen the side hip muscles, gluteus medius, especially on the standing/ support side.



Starting Position:

- Lower the pulley on one side of the machine to the lowest position.
- Attach the ankle cuff to one leg and stand sideways with the leg attached to the resistance farthest from the pulley.
- Stand up straight, chest lifted, abs tight and maintain a very slight arch in the lower back.
- Adjust your standing position so there is some tension at the start of the movement.

- Keep the hips and spine stable and slowly move your attached leg away from the centre/ midline of your body.
- Slowly move the leg back to midline keeping tension on the hip.



Start



Finish

Shoulder Press (Seated)

Muscles Worked:

This exercise emphasizes the front shoulder (anterior deltoid), part of the middle shoulder (middle deltoid), the rotator cuff muscles, upper back muscles (trapezius) and the triceps.



Starting Position:

- Adjust the pulleys to approximately the height of the bench.
- Adjust the bench to the flat position and place it toward the front of the Cable Cross directly in the centre with the leg curl attachment facing outward.
- Sit on the bench facing away from the machine.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.

- Hold the handles with the palms facing forward.
- · Raise the handles to just above shoulder height.

Motion:

- Straighten the arms upward, focusing on a position directly above your head or slightly forward over the forehead to move your hands toward.
- Slowly return to the starting position, keeping tension on the shoulder muscles throughout the range of movement.



Start



Finish

Shoulder Press (Standing)

Muscles Worked:

This exercise emphasizes the front shoulder (anterior deltoid), part of the middle shoulder (middle deltoid), the rotator cuff muscles, upper back muscles (trapezius) and the triceps. Core and hips will also be challenged through stabilizing the upper hody.



Starting Position:

- · Adjust the pulleys to chest height.
- Stand in front of the machine facing outward and slightly forward.
- Grab the handles and stand with the chest lifted, abs tight and a slight arch in the lower back.
- With your palms facing forward, bring your hands up to shoulder level.

- Straighten the arms upward, focusing on a position directly above your head or slightly forward over the forehead to move your hands toward.
- Slowly return to the starting position, keeping tension on the shoulder muscles throughout the range.
- Keep the cables in line with your arms as you press



Start



Finish

Rear Deltoid Row (Seated)

Muscles Worked:

This exercise emphasizes the back portion of the shoulders (rear deltoid and the back portion of the middle deltoid. It also works the upper lat, teres minor, trapezius and rhomboid muscles.



Starting Position:

- Adjust the pulleys to shoulder height when you are seated on the bench.
- Adjust the bench to the flat position and place it in the centre of the pulleys slightly forward from the Cable Cross.
- · Sit on the bench facing the machine.
- Cross the handles and grasp them with your palms facing down.
- Arms out straight in front of you, angled toward the pulley.

- Adjust yourself on the bench so there is resistance at the start of the motion.
- Sit up straight, lift your chest and slightly pinch your shoulder blades together

Motion:

- Allow your arms to bend as you pull, moving the elbows outward, then backward, keeping a 90 degree angle between your torso and arm motion.
- Forearms should always point in the direction of the cables.
- Move until your elbows are slightly behind your shoulders, then slowly reverse the motion keeping the shoulder muscles tightened during the entire motion.



Start



Finish

Rear Deltoid Row (Standing)

Muscles Worked:

This exercise emphasizes the back portion of the shoulders (rear deltoid and the back portion of the middle deltoid. It also works the upper lat, teres minor, trapezius and rhomboid muscles. Core and hip muscles will also be challenged from stabilizing.



Starting Position:

- Adjust the pulleys to shoulder height when you are standing in front of the Cable Cross.
- Cross the handles and grasp them with your palms facing down.
- Arms out straight in front of you, angled toward the pulley.
- Adjust your stance so there is resistance at the start of the motion.

 Stand up straight facing the machine, lift your chest and slightly pinch your shoulder blades together.

- Allow your arms to bend as you pull, moving the elbows outward then backward, keeping a 90 degree angle between your torso and arm motion.
- Forearms should always point in the direction of the cables.
- Move until your elbows are slightly behind your shoulders, then slowly reverse the motion keeping the shoulder muscles tightened during the entire movement.



Start



Finish

Seated Ab Crunch

Muscles Worked:

This exercise emphasizes the abdominal area, including the upper and lower front abs (rectus abdominus) and the side abs (obliques).



Starting Position:

- Place the bench in the incline position (about 45 degrees) and centre it between the pulleys facing outward
- The backside of the bench should be slightly out in front of the Cable Crossover.
- Adjust the pulleys so they are slightly lower than shoulder height when leaning back on the bench.
- Open the webbing on the handgrips, sit on the bench and grab the handles and slide them over the front of your respective shoulders.

 Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.

Motion:

- Tighten your abs and only move your torso.
- · Slowly move your lower ribs toward your hips.
- Move as far as you can without moving your hips and neck.
- The lower back should not lose contact with the bench when fully crunched.
- Slowly reverse the action to the starting position, maintaining tension in the abs.



Start

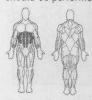


Finish

Trunk Rotation (Seated)

Muscles Worked:

This exercise involves the deepest trunk and spinal muscles. The spine is more limited in rotation than you might realize and therefore should be performed with light resistance.



Starting Position:

- Place the bench in the flat position and centre it between the pulleys slightly in front of the Cable Cross.
- Adjust the pulley height so that when you are seated on the bench facing sideways and your arms are extended in front of you at chest level, the pulley is at the same height as your hands.
- Keep the elbows slightly straight, lift your chest, tighten your abs and maintain a very slight arch in the lower back.

- Tighten your entire abdominal area and slowly rotate your rib cage/arms away from the pulley, approximately 30-40 degrees.
- Rotate past your midline as far as you can be under control and with comfort.
- · Slowly return to the starting position.



Start



Finish

Trunk Rotation (Standing)

Muscles Worked:

This exercise involves the deepest trunk and spinal muscles. The spine is more limited in rotation than you might realize and therefore should be worked with light resistance.



Starting Position:

- Stand facing sideways, centred in front of one of the pulleys of the Cable Cross.
- Adjust the pulley height so that when you stand and your arms are extended in front of you at chest level, the pulley is the same height as your hands.
- Keep the elbows slightly straight, lift your chest, tighten your abs and maintain a very slight arch in the lower back.
- Keep the feet at approximately shoulder width.

Motion:

- Tighten your entire abdominal area and slowly rotate your rib cage/arms away from the pulley approximately 30-40 degrees.
- Rotate past your midline as far as can be performed under control and with comfort.
- Slowly return to the starting position.



Start

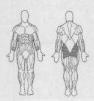


Finish

Hip Extension (Standing)

Muscles Worked:

This exercise emphasizes the gluteus maximus muscle group. Hip, knee, ankle and spinal stabilizers will also be challenged.

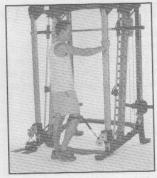


Starting Position:

- Move one of the pulleys to a position at the height of your knee.
- Open the handgrip so you can slide it up to the knee joint.
- Stand facing the pulley with your support leg and hip slightly bent.
- With the attached leg, start with the knee slightly bent.
- Maintain good posture with your spine, keep the chest lifted and a slight arch in the lower back.

 After completing the exercise with one leg, switch and work the other leg.

- Extend the leg backwards, while maintaining a slight bend at the knee.
- Slowly move your leg as far as you can without allowing any movement to occur at your waist.
- · Slowly return to the starting position.
- Switch to the other leg when the exercise is completed.



Start



Finish

Standing Hip Flexion

Muscles Worked:

This exercise focuses on the iliopsoas and the rectus femoris, muscles on the front of the upper leg and hip.



Starting Position:

- Adjust the pulley height so that it is slightly below the knee.
- Open the handgrip so you can slide your leg through the opening.
- Stand facing away from one of the pulleys, slide the handgrip slightly above the knee joint.
- Keep your spine in good posture with your chest lifted, abs tight and a slight curve in the lower back.
- After completing the exercise with one leg, switch and work the other leg.

Motion:

- Initiate the movement by lifting your knee up and toward your torso.
- Allow the knee to bend as you move, bringing your knee upward as far as you can without allowing any movement to occur at your waist or lower back.
- Slowly return to the starting position, keeping tension on the hip flexor muscles.
- Switch to the other leg.



Start



Finish

Leg Kickback (Standing)

Muscles Worked:

This exercise emphasizes the gluteus maximus and the hamstring muscle groups.



Starting Position:

- Move one of the pulleys to the lowest position.
- Open the handgrip so you can slide it on to your ankle.
- Stand facing the pulley with your support leg and hip slightly bent.
- With the attached leg, start with the knee bent to 90 degrees.
- Maintain good posture with your spine, keep the chest lifted and a slight arch in the lower back.

- Extend the leg backwards, while straightening the knee.
- Slowly move your leg as far as you can without allowing any movement to occur at your waist.
- · Slowly return to the starting position.
- Switch to the other leg when the exercise is completed.



Start



Finish

Decline Chest Press

Muscles Worked:

This exercise emphasizes the chest muscle (pec major) and shoulder muscles (anterior deltoid, front portion of the middle deltoid). It also involves the triceps muscle group.



Starting Position:

- Place the bench in the incline position to about 45 degrees and centre it slightly in front of the Cable Crossover facing outward.
- Adjust the pulleys to approximately shoulder height when you are leaning back against the bench (adjust to your own comfort level).
- Sit on the bench and reach to each side.
 Grabbing the handles with the cable positioned under the forearm, your grip will have your thumbs through the handle and your knuckles on top.
- Arms should be directly in line with the cables, palms down and wrists straight.

- If the cable rubs on your forearm, press at a slightly lower angle.
- Raise your chest and slightly pinch your shoulder blades together.
- Maintain a very slight arch in your lower back.

Motion:

- Slowly move your elbows outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain in line with the elbows throughout the movement.
- Stop when your upper arms are approximately straight out to your sides; your elbows will be level with your shoulders or slightly behind.
- Slowly press forward moving your hands toward the centre, then return to the starting position.
- From the 45-degree-inclined bench, the pressing motion will be straight out, parallel to the floor.
- Keep the chest muscles tight throughout the movement.



Start



Finish

Incline Chest Press

Muscles Worked:

This exercise emphasizes the chest muscle (pec major) and shoulder muscles (anterior deltoid, front portion of the middle deltoid). It also involves the triceps muscle group.



Starting Position:

- Place the bench in the incline position to about 45 degrees and centre it slightly in front of the Cable Crossover facing outward.
- Adjust the pulleys slightly below shoulder height when you are leaning back against the bench (adjust to comfort for your specifications).
- Sit on the bench and reach to each side, grabbing the handles with the cable positioned over the forearm.
- Arms should be directly in line with the cables, palms down and wrists straight.

- If the cables rub on the forearm, adjust your pressing motion to a slightly higher angle.
- Raise your chest and slightly pinch your shoulder blades together.
- · Maintain a very slight arch in your lower back.

- Slowly move your elbows outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain in line with the elbows throughout the movement.
- Stop when your upper arms are approximately straight out to your sides, your elbows will be level with you shoulders or slightly behind.
- Slowly press upward moving your hands toward the centre, then return to the starting position.
- From the 45 degree inclined bench, the pressing motion will be upward from your torso.
- Keep the chest muscles tight throughout the movement.



Start



Finish

Chest Press

Muscles Worked:

This exercise emphasizes the chest muscle (pec major) and shoulder muscles (anterior deltoid, front portion of the middle deltoid). It also involves the triceps muscle group.



Starting Position:

- Place the bench in the incline position to about 45 degrees and centre it slightly in front of the Cable Crossover facing outward.
- Adjust the pulleys to approximately shoulder height when you are leaning back against the bench (adjust to comfort for your specifications).
- Sit on the bench and reach to each side grabbing the handles with the cable positioned over the forearm.
- Arms should be directly in line with the cables, palms down and wrists straight.

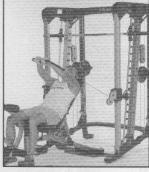
- If the cables rub on the forearm, adjust your pressing motion to a slightly higher angle.
- Raise your chest and slightly pinch your shoulder blades together.
- · Maintain a very slight arch in your lower back.

Motion:

- Slowly move your elbows outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain in line with the elbows throughout the movement.
- Stop when your upper arms are approximately straight out to your sides, your elbows will be level with you shoulders or slightly behind.
- Slowly press forward moving your hands toward the centre, then return to the starting position.
- From the 45 degree inclined bench, the pressing motion will be straight out from the torso (90 degrees).
- Keep the chest muscles tight throughout the movement.



Start



Finish

Chest Press (Standing)

Muscles Worked:

This exercise emphasizes the chest muscle (pec major) and shoulder muscles (anterior deltoid, front portion of the middle deltoid). It also involves the triceps muscle group. The standing position will also challenge the muscles of the hips, knees, ankles and spine due to the higher degree of stabilization.



Starting Position:

- Adjust the pulleys to approximately shoulder height when you are standing in front of the Cable Cross (adjust to comfort for your specifications).
- Reach to each side, grabbing the handles with the cable positioned over the forearm.
- Facing out, stand so that you are centred and slightly in front of the machine.
- Arms should be directly in line with the cables, palms down and wrists straight.

- If the cables rub on the forearm, adjust your pressing motion to a slightly higher angle.
- Raise your chest and slightly pinch your shoulder blades together.
- · Maintain a very slight arch in your lower back.
- Feet should be position in either a staggered or shoulder-width position.

- Slowly move your elbows outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain in line with the elbows throughout the movement.
- Stop when your upper arms are approximately straight out to your sides, your elbows will be level with your shoulders or slightly behind.
- Slowly press forward moving your hands toward the centre, then return to the starting position.
- Keep the chest muscles tight throughout the movement.



Start



Finish

Chest Fly

Muscles Worked:

This exercise emphasizes the chest muscle (pec major) and shoulder muscles (anterior deltoid, front portion of the middle deltoid).



Starting Position:

- Place the bench in the incline position to about 45 degrees and centre it slightly in front of the Cable Crossover facing outward.
- Adjust the pulleys to approximately shoulder height when you are leaning back against the bench (adjust to your own comfort level).
- Sit on the bench and reach to each side, grabbing the handles with the cable positioned over the forearm.
- Arms should be directly in line with the cables, palms facing in and wrists straight.

- If the cables rub on the forearm, adjust your fly motion to a slightly higher angle.
- Raise your chest and slightly pinch your shoulder blades together.
- · Maintain a very slight arch in your lower back.

Motion:

- Slowly move your arms outward, maintaining a slight bend in the elbow throughout the movement.
- Stop when your upper arms are approximately straight out to your sides, your elbows will be level with your shoulders or slightly behind.
- Slowly return to the starting position keeping the chest muscles tight throughout the movement.



Start

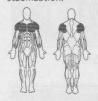


Finish

Chest Fly (Standing)

Muscles Worked:

This exercise emphasizes the chest muscle (pec major), shoulder muscles (anterior deltoid, front portion of the middle deltoid). It also involves the biceps muscle group. The standing position will also challenge the muscles of the hips, knees ankles and spine due to the higher degree of stabilization.



Starting Position:

- Adjust the pulleys to approximately shoulder height when you are standing in front of the cable cross (adjust to your own comfort level).
- Reach to each side grabbing the handles with the cable positioned over the forearm.
- Facing out stand so that you are centred slightly in front of the machine

- Arms should be directly in line with the cables, palms down and wrists straight.
- If the cables rub on the forearm, adjust your fly motion to a slightly higher angle.
- Raise your chest and slightly pinch your shoulder blades together.
- · Maintain a very slight arch in your lower back.
- Feet should be position in either a staggered or shoulder width position.

- Slowly move your elbows outward, maintaining a slight bend in the elbows throughout the movement.
- Stop when your upper arms are approximately straight out to your sides, your elbows will be level with your shoulders or slightly behind.
- · Slowly return to the starting position.
- Keep the chest muscles tight throughout the movement



Start



Finish

Muscle Chart

