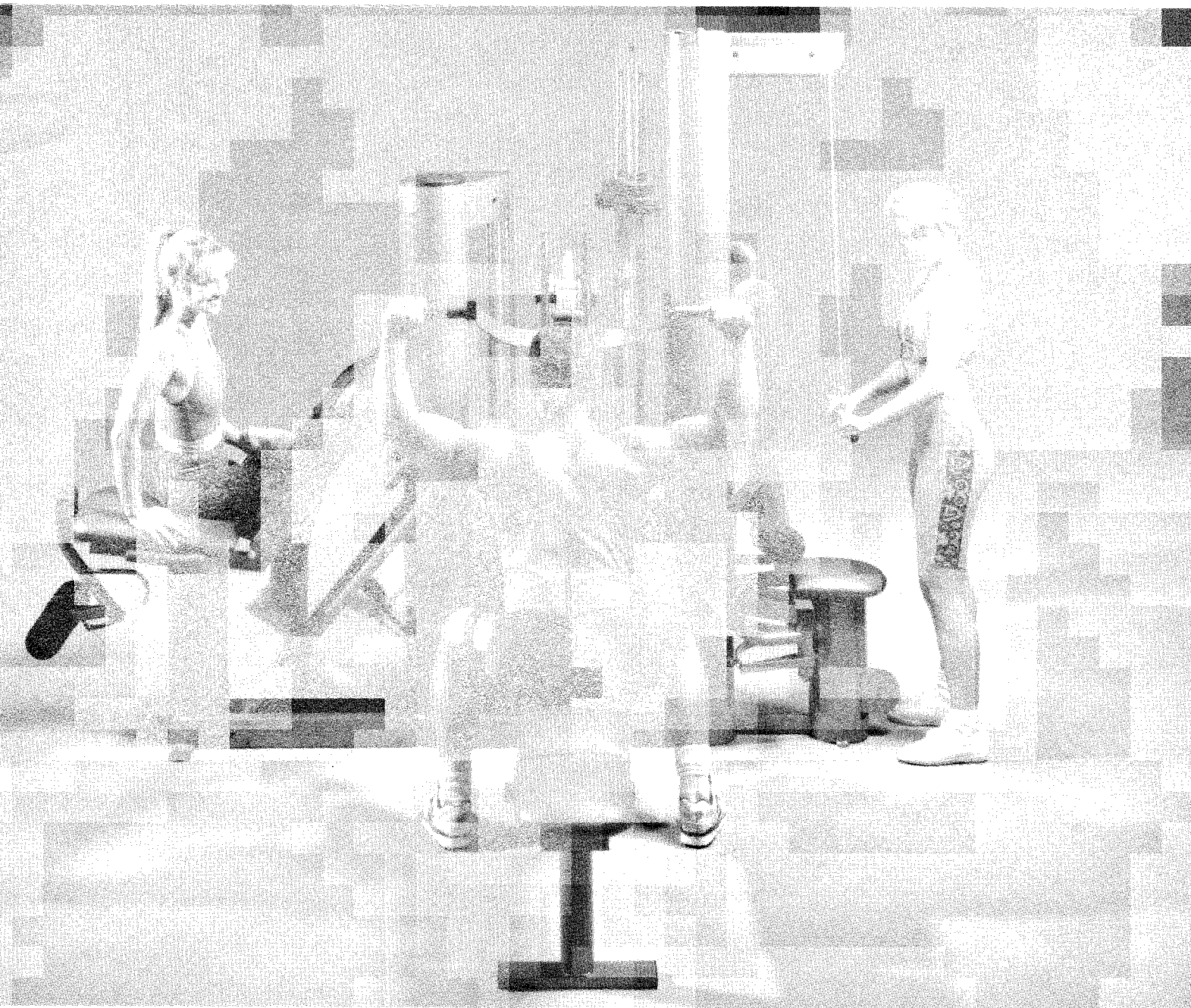


VECTRA



ON-LINE® 3500
OWNER'S MANUAL

Introduction

Your new Vectra On-Line® 3500 is designed and manufactured to provide you with many years of convenient and reliable service.

This owner's manual provides you with safety rules, assembly instructions, exercise program guidelines, and routine inspection and maintenance information to enable you to get the most from your gym. Please read through this manual carefully before you assemble and use your On-Line® 3500.

We at Vectra appreciate your selecting our On-Line® 3500 for your fitness program, and invite your questions and comments. We're sure that you'll be pleased with your new Vectra gym.

Safety Rules

WARNING

Serious injury can occur if struck by falling weights or moving parts. The risk that you assume by using this type of equipment can be reduced by obeying a few simple rules:

1. **IMPORTANT:** Cables are a wear item. It is your responsibility to prevent unexpected breakage. To do this, inspect every cable regularly. Pay particular attention to areas near the fittings at each end of each cable. Access panels are provided on columns for this purpose. Replace worn, frayed, or damaged cables immediately. Using or allowing a machine to be used with a suspect cable can result in serious injury.
2. Read and follow all instructions in your Owner's Manual and on your exercise chart. Additional copies are available from Vectra Fitness, Inc. or your dealer.
3. Consult your physician before beginning your exercise program.
4. Do not allow young children to use or play with this machine. Allow older children to use the machine only with adult supervision.
5. Keep head and limbs clear of weights and moving parts at all times.
6. Inspect the gym for loose or worn parts, damaged or frayed cables, broken weight plates, etc. Do not use or allow the machine to be used until any defective parts are repaired or replaced. Refer to the "Routine Inspection and Maintenance" section of this manual for specific inspection rules.
7. Insure that the weight selector pin is properly engaged in the selector shaft. Use only the factory supplied pin or a factory authorized replacement.
8. Insure that the locking mechanisms are properly engaged prior to lifting.
9. Obtain assistance to free jammed weight plates, pulleys, etc. Do not attempt to free jammed weight plates by yourself. Falling weight plates can cause serious injury.
10. Do not drop the weight plates. Lift only as much weight as you can control safely.

Assembly Instructions

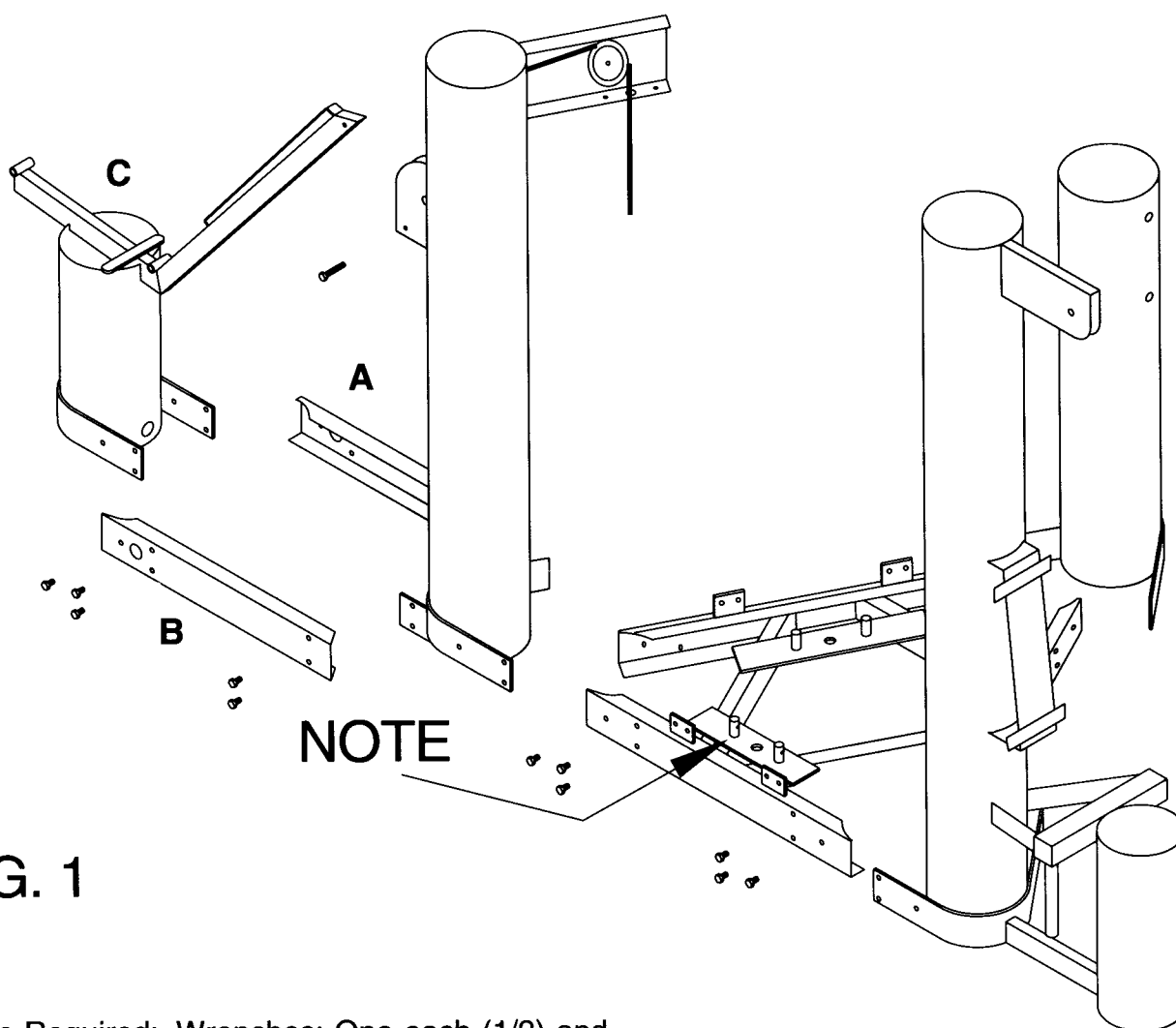


FIG. 1

Tools Required: Wrenches: One each (1/2) and two each (7/16, 9/16)
Hex Keys: 1/8, 1/4, 5/16
Philips head screwdriver

1. Select location for your machine. Set machine up in a well lighted and well ventilated area where you will enjoy exercising. Use rubber floor matting or carpet remnants to protect floor if desired.
2. Unbox entire unit.
(NOTE: LEAVE ALL CABLES AND RETAINERS IN PLACE.)
3. Assemble the three columns and the triangular frame piece. (3/8-16 x 3/4 hex screws, Qty: 15)
Note: Press station guide rod locator tubes (the ones with holes) face front. (Fig. 1)
4. Assemble the right (A) and left frame (B) members and the leg/ab seat column (C) to the machine (3/8-16 x 3/4 hex screw, Qty: 11: 3/8-16 x 1-3/4 hex screw and nut, Qty: 1 ea.). (Fig. 1)
Tighten all frame bolts firmly.

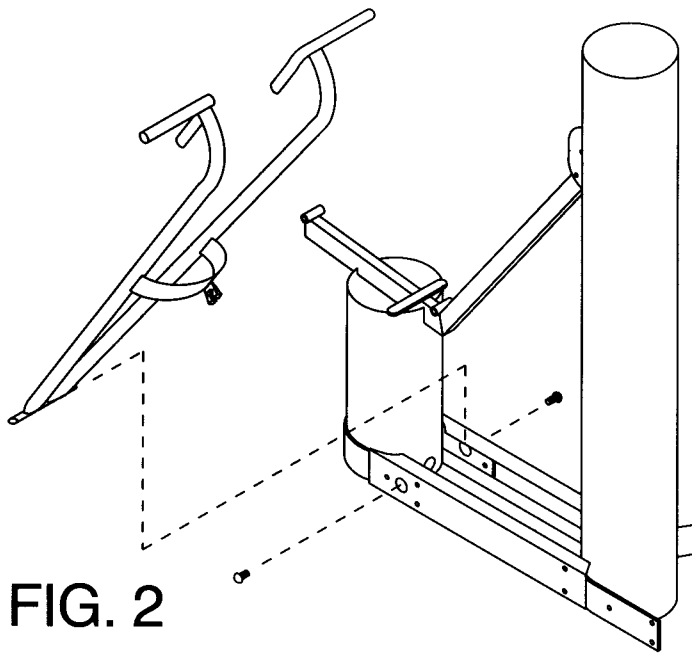


FIG. 2

5. Attach row arm assembly to the base of the seat column. (1/2-13 x 1 button screw, Qty: 2) (Fig. 2)
Attach row cable to cable retainer and secure with plastic hole plug. (Fig. 2A)

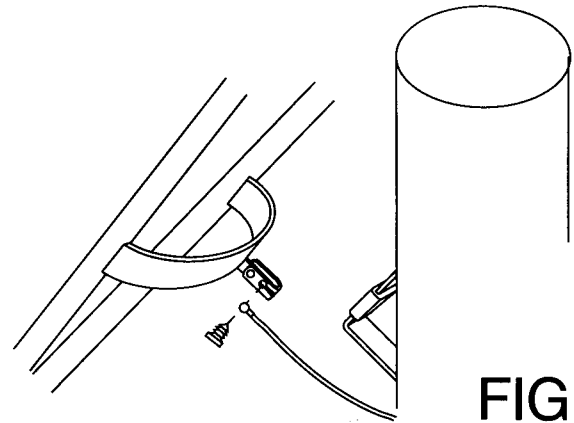


FIG. 2A

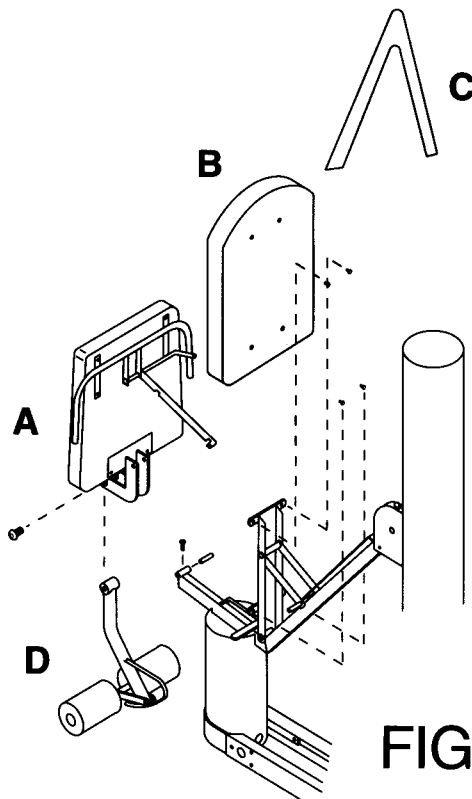


FIG. 3

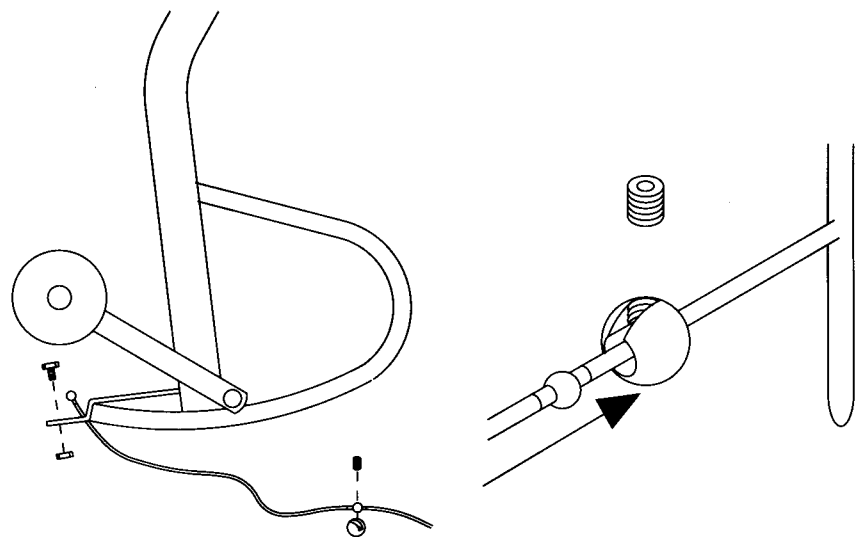


FIG. 3A

6. Install leg/ab seat bottom assembly (A) to column. (1/2" rod and 1/4-20 x 1/2 screw) (Fig. 3)
Attach leg/ab seat back (B) to frame. (1/4-20 x 3/4 hex screws, Qty: 4)
Attach abdominal crunch strap (C) to the cable at the top of the seat back.
Attach the leg developer (D) to the seat bottom assembly. (1/2-13 x 1 button head screw, Qty: 2). (Fig 3)
7. Route the cable at the base of the row column through the row arm pivot and the pulley inside the base of seat column, exiting through the slot in the front of the column. Attach the aluminum ball to the cable as shown (Fig. 3A) and attach the cable end to the leg developer, securing it with the 1/4-20 x 1/2 screw and nut. (Caution: cable must be routed correctly. Above pivot, between pulley and keeper, between floor supports.)

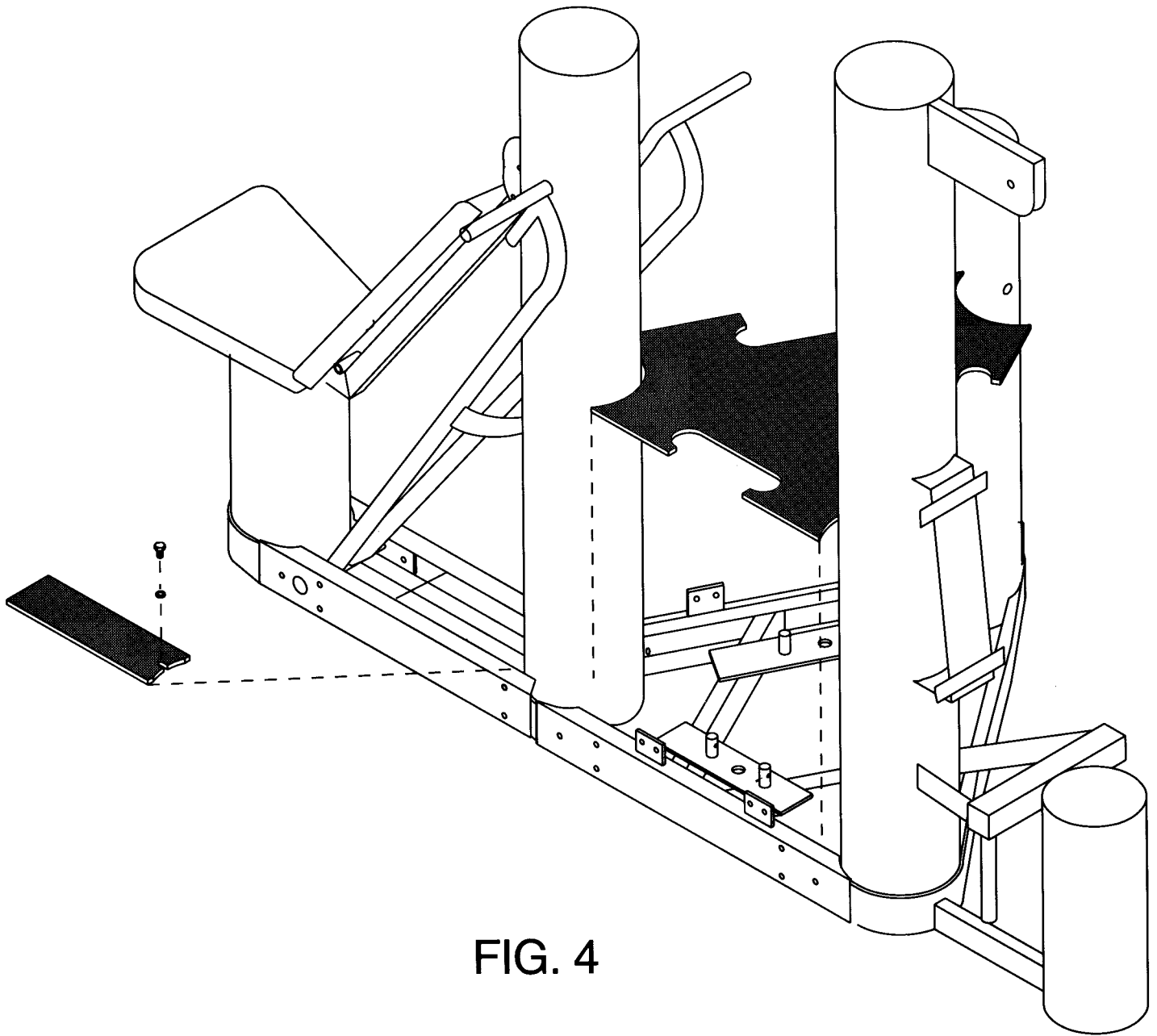


FIG. 4

8. Install the triangular floor piece and the smaller rectangular piece (3/8-16 x 3/4 hex screw, washer, Qty: 1 ea.) (Fig. 4)

NOTE: TRIANGULAR FLOOR PIECE MUST BE IN PLACE PRIOR TO ASSEMBLING THE WEIGHT STACKS.

FIG. 5

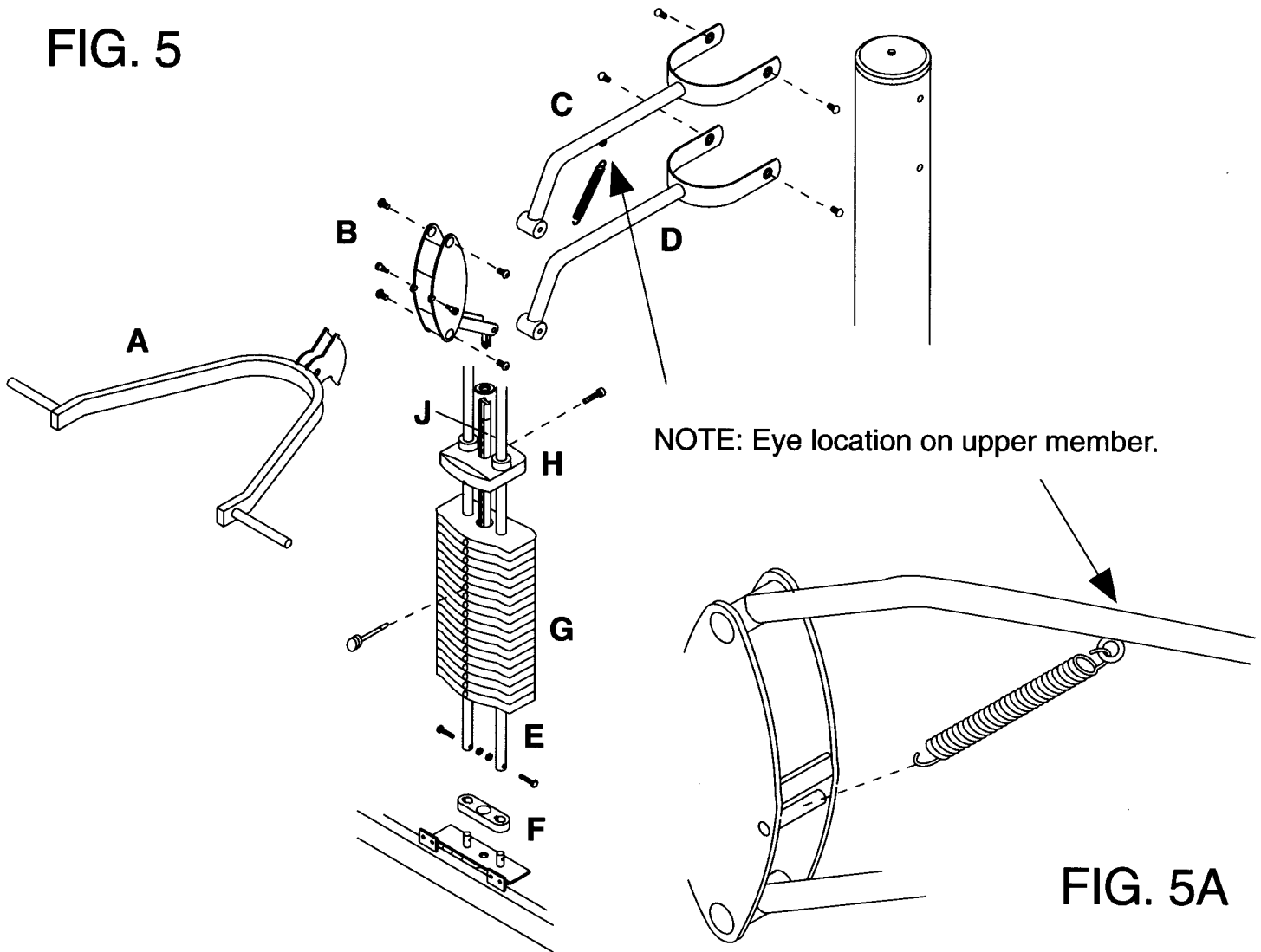


FIG. 5A

9. Attach the press station guide rods (E) to the locator tubes (1/4-20 x 1-1/4 hex screw and nut, Qty: 2 ea.)
Assemble the rubber bumper (F), weight plates (G) (20 each), and top plate (H) onto the guide rods. (Fig. 5)
10. Assemble the press handle adjustment assembly (B) to the top plate (H) and selector shaft (J) (3/8-16 x 3 hex screw, Qty: 1)
11. Bolt the lower press pivot arm (D) to the bearings on the bottom of the press handle adjustment assembly (B) (1/2-13 x 1 button head screw, Qty: 2). Now attach the other end of the pivot arm to the rear column (1/2-13 x 1 button head screw, Qty: 2). Likewise, attach the upper pivot arm (C). Note: the upper arm has an eye welded on the round tube. (Fig. 5)
12. Attach the spring to the eye on the upper pivot arm. Lifting the press arms to their highest position, attach the other end of the spring to the lower pin at the rear of the press handle adjustment assembly. (Fig. 5A) **THE HOOK MUST POINT UP AS SHOWN AND BE BETWEEN THE 2 SETS OF SPRING COILS.**
Note: The installation of this spring is optional. It is designed to reduce the minimum weight of the press station from 45 lbs. (20kg) to 30 lbs. (14kg).
13. Attach the press handle (A) to the adjustment assembly (B) (1/2 x 1/2 shoulder screw, Qty: 2)

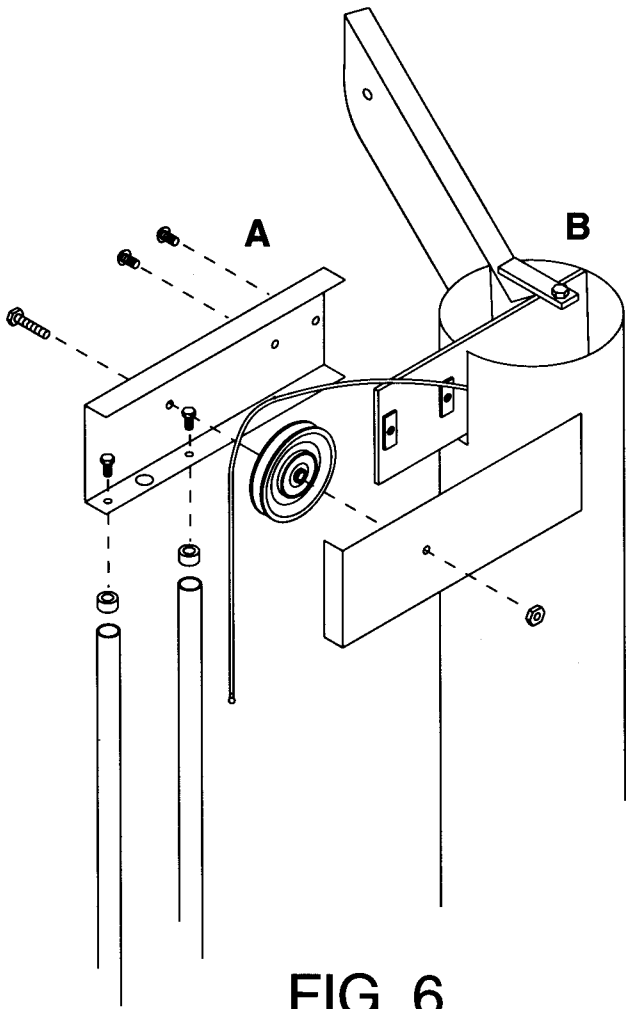


FIG. 6

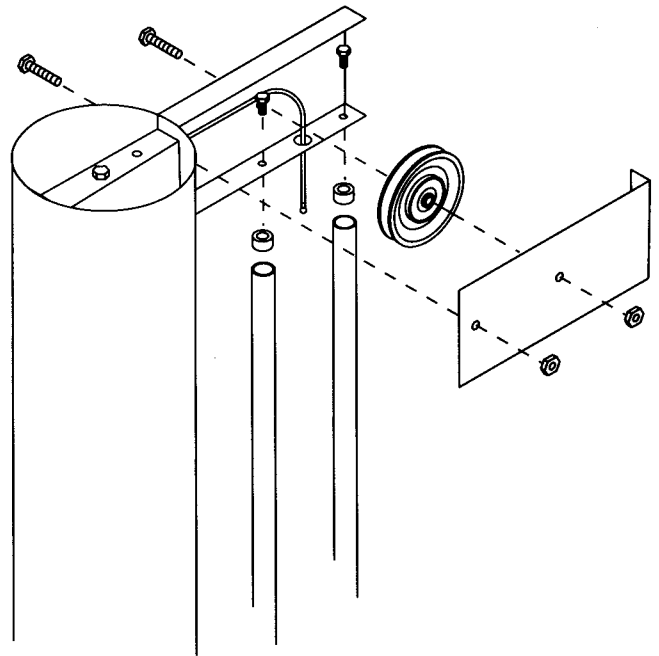


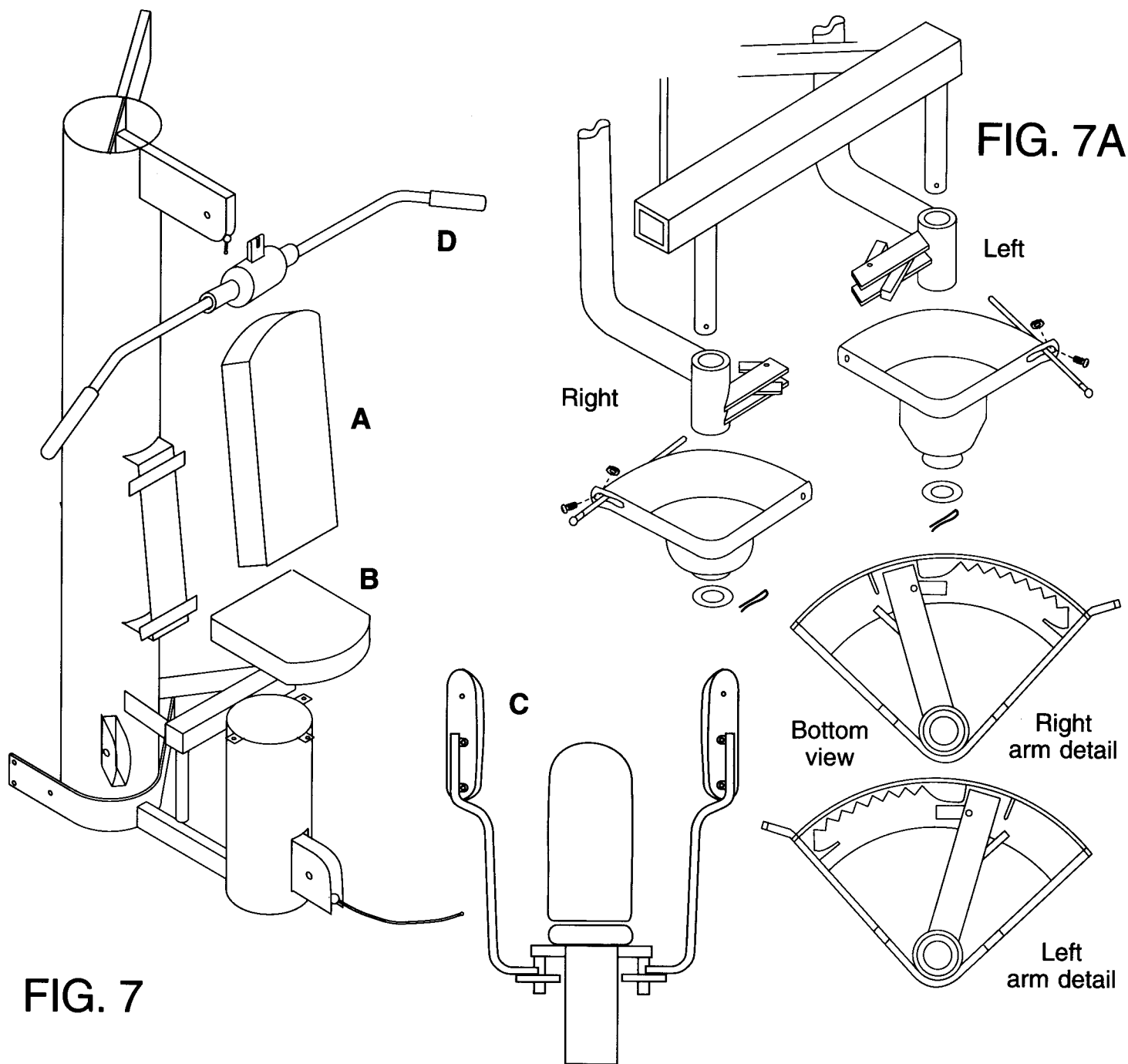
FIG. 6A

14. Attach the upper stack support (A) to the butterfly/high pulley column (B) (3/8-16 x 1/2 hex screw, Qty: 2). Do not route the cable yet. (Fig. 6)

Assemble the guide rods, rubber bumper, weight plates, top plate, and selector shaft.

Remove the pulley from the upper stack support and attach the guide rods to the support (5/16-18 x 1-1/2 hex screw and spacer, Qty: 2 ea.). Tighten the guide rod screws while holding the top plate raised to the full height. Now route the cable and replace the pulley along with the cover plate (C). The top plate, selector shaft and cable end are secured with a "U" shaped clip and 3/8-16 x 3 hex screw).

15. Repeat step 14 for the row/ab column. (Fig. 6A)



16. Install right butterfly arm on pivot bar. Tilt right cam to install. Install washer and then drive cotter pin in fully and bend end. Repeat for left side. (Fig. 7A)
 Note: Butterfly arms should now adjust pre stretch by click-ratcheting backwards to desired use or storage position. Pull butterfly arms around forward from rear-most storage position to reset the ratchets.

17. Install butterfly seat back (A) and seat bottom (B) (1/4-20 x 3/4 hex screw, Qty: 7).
 Attach butterfly arm pads (C) with screws and washers provided. (Fig. 7)

18. Attach lat bar (D) to high pulley. (Fig. 7)

19. Tension the cable systems in the butterfly/high pulley column and the leg/ab column by locating the adjustment bolt at the top of the column. Rotate the screw until the top plate just begins to lift. Check that the selector pin engages each weight plate completely. (Fig. 8)
Attach the column cap to the top of the leg/ab column (3/8-16 x 1-3/4 hex screw).

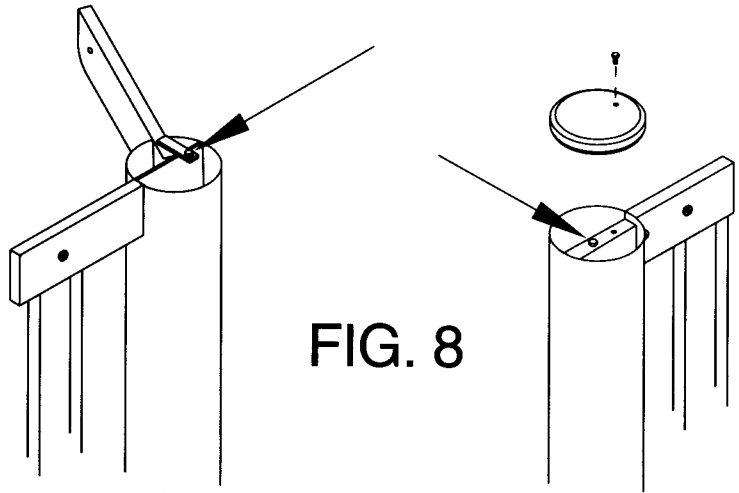


FIG. 8

20. Attach the three weight stack guards (3/8-16 x 1/2 hex screw, Qty: 12).(Fig. 9)

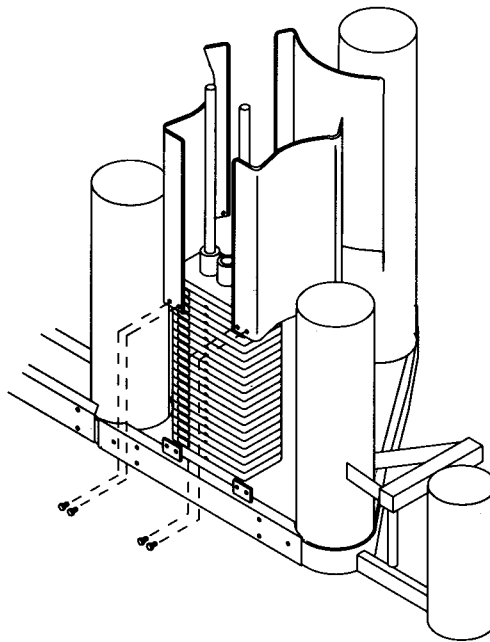


FIG. 9

21. Attach the seat back (A) and seat bottom (B) to the free standing bench (1/4-20 x 3/4 hex screw, Qty: 12). (Fig. 10)
22. Apply the labels to the weight plates and top plate per instructions with labels.
23. Make sure cables move freely when machine is operated. Immediately fix a cable rubbing problem.

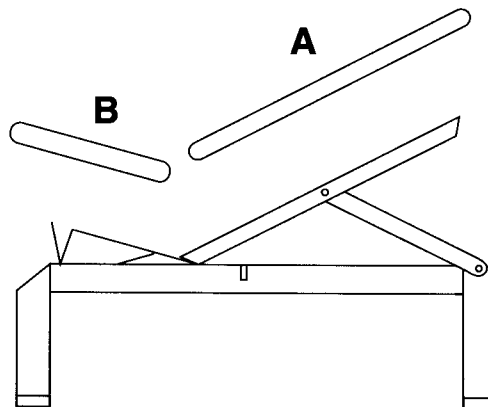
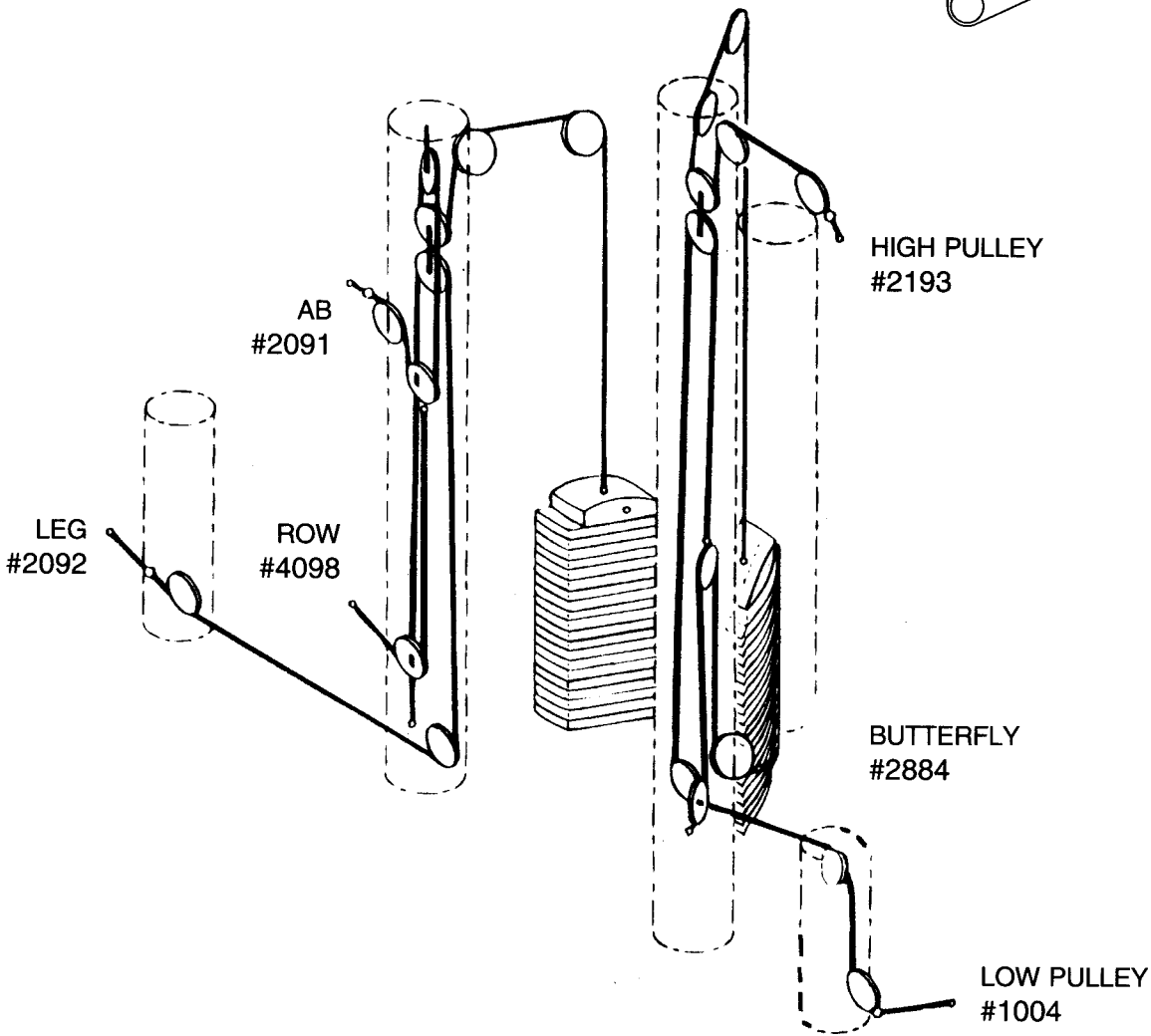
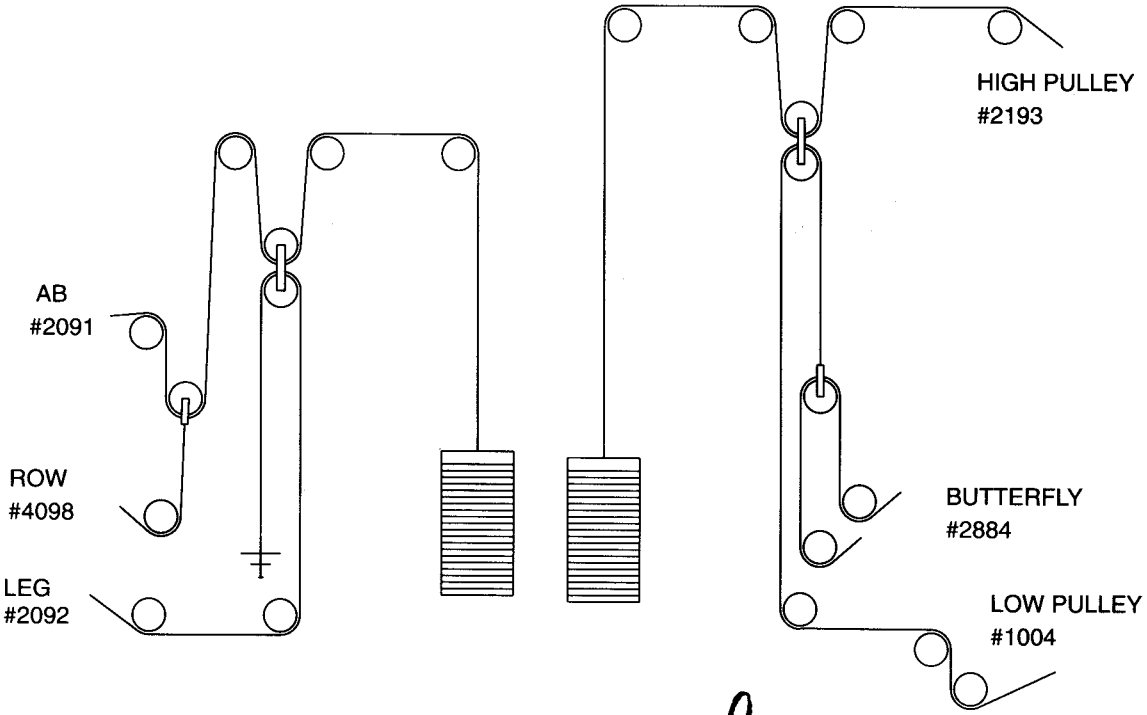


FIG. 10

If you have any questions, PLEASE contact the full-service dealer where you purchased this machine.

Vectra On-Line 3500 cable diagram



Exercise Program Guidelines

You already know that regular physical exercise is a key element in improving your general health and strength, raising your mental and physical energy levels, reducing your risk of cardiovascular disease, and enhancing your appearance. You'll be pleased by the way your Vectra gym will help you reach your personal fitness goals.

Weight resistance exercise with the On-Line® 3500 offers you many benefits.

- Weight settings are easily matched to your goals and fitness level.
- Progressive weight increases and regular exercise result in dramatic improvements in your fitness and appearance.
- Ergonomically correct stations enable you to concentrate on specific parts of your body.
- Vectra's patented On-Line® cable system lets you exercise efficiently. You can do a full body workout in just minutes, spending your fitness session exercising without fussing with your gym.
- Vectra's top quality design and construction will provide you with years of professional level exercise in your own home.

Your first step in getting the most from your On-Line® 3500 is to set up an exercise program tailored to your personal fitness objectives. The following sections will first provide you with general guidelines applicable to any program. Next, we will discuss a general purpose conditioning program and two supplementary specialized programs in more detail.

The following guidelines apply to any exercise program.

- First, be sure to consult your physician before beginning your exercise program. This is especially important if you are planning a rehabilitation program following a serious injury or illness.
- Use your exercise specialty dealer as a resource for information and advice. Your professional dealer can provide you with reference materials, help you contact sports clinics and personal trainers, and give you tips on staying motivated and following your program.
- Motivation is key to your success. Do anything you can to make your regular workouts pleasant and challenging, not just another dull chore. You might set a goal of bench pressing 20 more pounds in one month. Or try competing with a partner, or keeping a wall chart showing your progress.

By exercising regularly as described in the following sections, you will see a significant improvement in your performance in 4-8 weeks. And that's the best motivation of all!

- "No pain, no gain". Well, not exactly. You should always be aware of the difference between fatigue and pain. You can expect to feel tired after exercising, but you should not feel sharp "stabbing" pains. Stop exercising if you experience this excessive pain.

Consult your physician if pain persists.

- As with any form of exercise, you should perform a stretching routine before working out on your Vectra gym. This will help you develop a full range of motion, improve your joint flexibility, and eliminate the possibility of straining “cold” muscles.
- Be sure to breathe properly while you exercise. Your natural tendency is to hold your breath while lifting weights, which leads to a light-headed, dizzy sensation. Instead, exhale when lifting the weights and inhale when lowering the weights.
- Start your weight training with weights you can lift comfortably and increase the weight gradually. You’ll make quick progress without strain and soreness.
- Keep up the good work!

General Purpose Program

This next section presents a general purpose weight training program for your Vectra gym. This program is suitable for most people. If your fitness goal is overall conditioning, aerobic training, weight reduction/control, stress reduction, etc., this is the program for you.

This general purpose program features the use of relatively light weights and many repetitions. You exercise alternate muscle groups without taking rest periods between exercises. The On-Line® cable system lets you keep moving without pausing to adjust your machine, so you obtain the benefits of aerobic conditioning in addition to the benefits of weight training.

- Follow a “circuit” of exercises that alternates muscle groups, (i.e. chest press, leg extension, abdominal crunch, leg curl, etc.). Include a balance of upper body and lower body exercises. The poster included with your machine outlines a good starting program.
- Perform 10-15 repetitions of each exercise before moving to the next station on your circuit.
- Perform 2 or more complete circuits for your exercise session.
- Keep moving between stations to enhance the aerobic training effect and burn more calories.
- Follow your program at least every other day. If you exercise daily, take care to keep the weights light enough to avoid excessive muscle soreness.
- Select your starting weight at each station as follows. Begin with a weight that you can comfortably lift for 15 repetitions. Your muscles should feel tired but not painfully exhausted after 15 repetitions.
- After following your program for 1-2 weeks, begin increasing the weight gradually, one plate at a time. A good rule of thumb to follow is to go up a plate when you can perform 15 repetitions without feeling tired. Initially, it typically takes 2-3 weeks at a given weight to go up to the next level.

If you experience excessive muscle soreness, reduce the weight one plate and then continue exercising in sets of 10-15 repetitions.

Always increase weight gradually to avoid straining or pulling your muscles.

- Here is an example general purpose circuit you can use as a guide to develop your own exercise program.

1. Stretching/warm-up
2. Incline press
3. Leg extension
4. Abdominal crunch
5. Leg curl
6. Butterfly
7. Lat pulldown
8. Inner/outer thigh pull or squats

Specialty Program #1

This next section presents a specialty program for fitness enthusiasts who wish to maximize their muscle size and strength in a "body builder" type development program.

This development program should only be undertaken after 3-6 months of general fitness training. You should remember that professional athletes work all day, every day for years to reach their peak. You can achieve peak performance too, but work carefully and allow yourself plenty of time to reach your goals.

This specialty program emphasizes the use of relatively heavy weights and fewer repetitions. You perform 2 sets of repetitions at each station before moving to the next exercise, with a brief rest between sets. Vectra's ball bearing pivots and all-steel construction allow you to lift heavy weights smoothly and confidently.

- Follow a "circuit" of exercises that concentrates on the muscle groups you want to develop, and includes exercises to maintain strength in your other muscle groups.
- Perform 2 sets of 5-8 repetitions of each exercise before moving to the next station. Rest for 1 minute between sets.
- Perform 1 complete circuit for your exercise session.
- Work out every other day. The rest day between exercise sessions prevents you from developing chronic muscle soreness.
- Select your starting weight at each station as follows. Begin with a weight that you can controllably lift for only 8 repetitions. Your muscles should feel quite tired after 8 repetitions.
- After following your program for 1-2 weeks, begin increasing the weight gradually, one plate at a time. A good rule of thumb to follow is to go up a plate when you can perform 8 repetitions without feeling tired. Initially, it should typically take 2-3 weeks at a given weight to go up to the next level.

If you experience excessive muscle soreness, reduce the number of repetitions to 5 and then continue exercising with the same weight.

Always increase the weight gradually to avoid straining or pulling your muscles.

Specialty Program #2

This next section presents a specialty program for sports enthusiasts who wish to optimize their performance in a specific sport.

Since overall fitness is essential to good performance in any sport, you should begin this program only after 3-6 months of general fitness training.

This program is based on the general purpose program described earlier, and incorporates some features of the muscle development program for concentrating on specific muscle groups.

The heavy weight/few repetitions principle is applied to the sports- specific muscle groups you want to develop. The light weight/many repetitions concept is applied to all other muscle groups to achieve all-around conditioning.

- Refer to your specialty dealer, sports coach, or weight training reference book for advice on specific exercises applicable to your sport.
- Incorporate these sports-specific exercises into a general-purpose program as described above. Use the heavy weight/5-8 repetitions concept described in the muscle development specialty program for these exercises.
- Enhance your total fitness profile by performing 3 general purpose circuits for each exercise session.

Routine Inspection and Maintenance

The Vectra On-Line® 3500 is designed to provide years of trouble-free service with minimal routine maintenance. You can be confident of continued top quality performance by carrying out the following periodic inspection.

PERFORM THE FOLLOWING CHECKS AT LEAST ONCE A MONTH.

1. Inspect cables and cable ends for visible wear, fraying or loose ends. Adjust cable system tension if necessary. **Replace any damaged or worn cables.**
2. Inspect frame and pulley bolts for tightness. Tighten if necessary.*
3. Inspect accessory items (lat bar, curl bar, abdominal strap, ankle strap, etc.) for damaged mounting eyes, broken stitches, etc. Replace any damaged items.
4. Inspect weight selector pin for proper fit in selector shaft. Replace improperly functioning pin with Vectra replacement pin only.
5. Inspect handlebar adjustment lever for proper engagement. Replace improperly functioning parts only with VECTRA replacement parts.
6. Inspect handlebar mounting screws for tightness. Tighten if necessary.*
7. Inspect incline bench mounting bolts. The seat brace to seat back mounting bolts should be snug but not clamped tight. Tighten mounting bolts if necessary.*
8. Inspect leg developer mounting screws for tightness. Tighten if necessary.*
9. Inspect leg/ab seat pivot mounting bolt for tightness. Tighten if necessary.*
10. Inspect leg developer and butterfly quick connect cable mounting screws. Tighten screws if necessary.
11. Inspect press arm mounting screws for tightness. Tighten if necessary.*
12. Inspect all foam hand grips. Replace any damaged, worn, or loose hand grips.
13. Inspect weight plates for cracks, damaged bushings, etc. Replace if necessary.
14. Vectra's stainless steel guide rods DO NOT REQUIRE LUBRICATION or anti-rust treatment. Simply keep them free of grit, sticky or gummy sprays, etc.
15. Clean upholstery with mild soap and water as desired.
16. If unit is in a humid area, such as near a pool, hot tub or sauna, or in certain climates, use of an auto wax should delay rusting.

*If any bolts seem to loosen periodically, use loctite 242 for a long-term cure.

LIMITED WARRANTY

Vectra Fitness, Inc. warrants the Vectra On-Line 3500 against defects in materials and workmanship for a period of one year from date of purchase. The frame itself is warranted for a total of five years.

Defective parts will be repaired or replaced at Vectra's option, when returned to Vectra Fitness, Inc. prepaid with prior authorization.

Normal wear and damage from misuse or abuse are not covered by this warranty.

No allowances for labor will be made. Title passes to buyer upon delivery to common carrier. If product is damaged in transit, file claim with carrier.

Please contact the authorized dealer from whom you purchased your gym should your machine require warranty service. Items returned to Vectra without prior factory authorization or freight collect will not be accepted. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

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Protected by one or more of the following Patent Numbers 4,809,972;
4,900,018; 4,986,538; D320,246; D320,247; D320,248; D329,563;
1,309,738 (Canadian).
Other Patents Pending

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