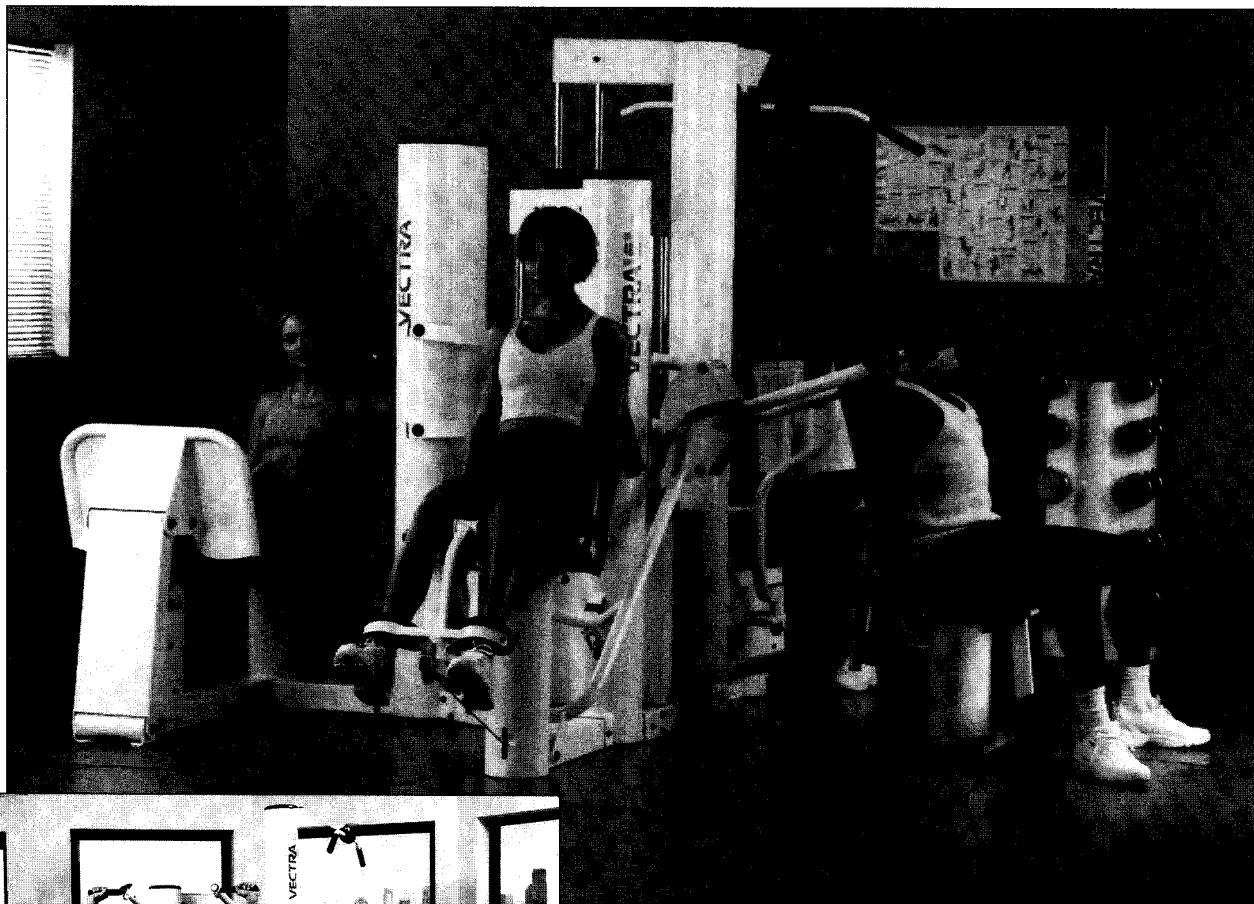
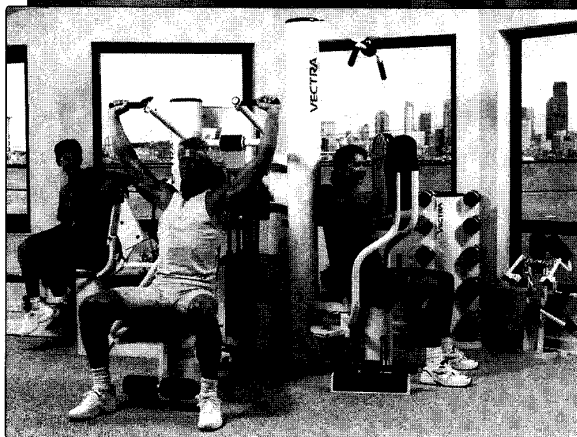


VECTRA[®] FITNESS



On-Line 4850



On-Line 3850

Owner's Manual

- ***On-Line 3850***
- ***On-Line 4850 (part 1)***

Introduction

We at Vectra Fitness appreciate your selection for your fitness program, and invite your questions and comments. We're sure that you'll be pleased with your new Vectra Fitness gym.

This owner's manual provides you with safety rules, assembly instructions 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 Vectra Fitness gym.

Routine Inspection & Maintenance

Vectra Fitness gyms are 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 SAFETY CHECK DAILY:

1. Inspect cables, cable ends and nylon jacket very carefully. Refer to Warning Label for specific information on inspecting cables. This same information is repeated in this manual and on your exercise chart. **Replace any damaged or worn cables.** Annual cable replacement (semiannual in multi-user settings) is strongly recommended as an additional precaution. The rate at which cables wear depends on many factors including: repetitions, weight setting, misuse, abuse, etc. Because of this, periodic cable replacement is not a sufficient safeguard against unexpected breakage. Nothing short of a thorough, careful daily inspection constitutes an adequate safety program.

PERFORM THE FOLLOWING CHECKS WEEKLY:

1. Inspect frame and pulley bolts for tightness. Tighten if necessary.*
2. Inspect accessory items (lat bar, curl bar, abdominal strap, ankle strap, etc.) for damaged mounting eyes, broken stitches, etc. Replace any damaged or worn items.
3. Inspect weight selector pin for proper fit and retention in selector shaft. Replace improperly functioning pin with Vectra replacement pin only.
4. Inspect press arm adjustment lever for proper engagement. Replace improperly functioning parts only with VECTRA replacement parts.
5. Inspect press arm mounting screws for tightness. Tighten if necessary.*
6. Inspect bench bolts. Tighten bolts if necessary.* Inspect bench wheels, wheel suspension springs and bench feet. Replace any damaged or malfunctioning parts.
7. Inspect leg developer mounting screws for tightness. Tighten if necessary.*
8. Inspect leg/ab seat bolts and cushion bolts for tightness. Tighten if necessary.*
9. Inspect cable retaining plugs, aluminum stop balls and associated set screws, and spring plungers. Replace or tighten if necessary.
10. Inspect butterfly arm mounting screws for tightness. Tighten if necessary.*
11. Inspect butterfly adjustment mechanism for proper function. Replace improperly functioning parts only with VECTRA replacement parts.
12. Adjust cable system tension if necessary (see assembly instructions for details).
13. Inspect row seat back mechanism for proper adjustment/latching function. Repair or replace as necessary.
14. Inspect wheels on press arm. Repair or replace as necessary.

PERFORM THE FOLLOWING CHECKS MONTHLY:

1. Inspect all foam hand grips, pads, etc. Replace any damaged, worn, or loose parts.
2. Inspect weight plates for cracks, damaged bushings, etc. Replace if necessary. Check bolt, tighten if necessary.
3. 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.
4. Clean upholstery with mild soap and water as desired.
5. 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.

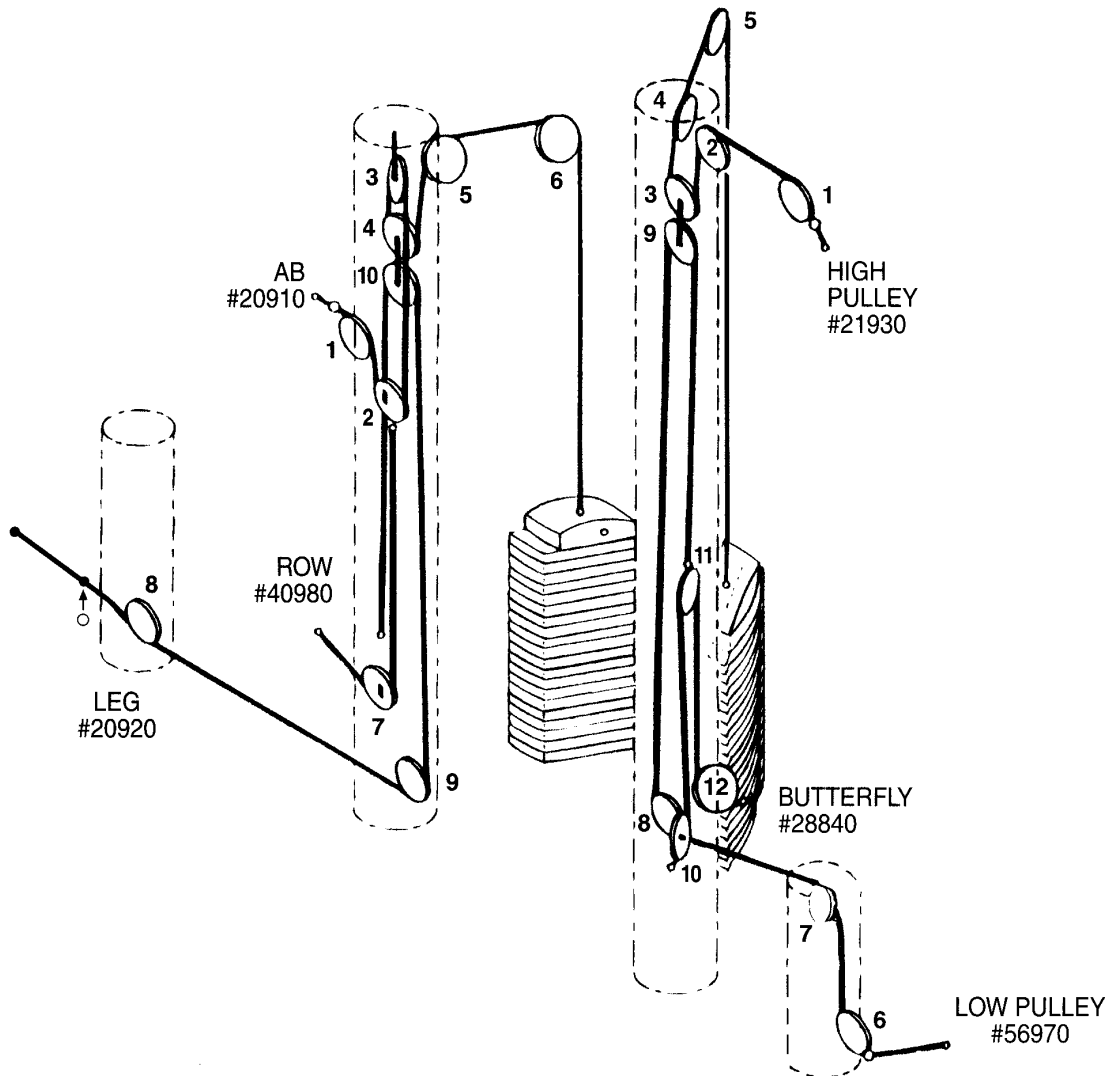
Safety Rules

Warning:

Serious injury can occur if you are 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 daily. Pay particular attention to areas near the fittings at each end of each cable. Access panels are provided for this purpose. Replace worn, frayed, or damaged cables immediately. The actual wire strands, the fittings and the nylon jacket itself must all be scrutinized. Using or allowing a machine to be used with a suspect cable can result in serious injury.
2. Inspect the nylon jacket of each cable carefully, again paying particular attention to the cable ends. This nylon jacket is essential for cable life and safety. Any cable should be replaced if the nylon jacket is missing, is damaged in any way, has pulled or shrunk away from the fittings at the end of the cable, or is discolored. **DISCOLORATION, DARKENING OR BULGING OF THE JACKET IS AN EARLY INDICATION OF INTERNAL PROBLEMS SUCH AS WEAR OR FRAYING.**
3. Read and follow all instructions in your Owner's Manual, the labels on the product and on your exercise chart. Additional copies are available from Vectra Fitness, Inc. or your dealer. Do not use this machine until you have taken the time to become completely familiar with its safe operation.
4. Consult your physician before beginning your exercise program.
5. Do not allow young children to use or play with or around this machine. Allow older children to use the machine only with adult supervision.
6. Keep head and limbs clear of weights and moving parts at all times. Keep fingers clear of moving parts while making adjustments.
7. Inspect the gym for loose or worn parts; damaged, frayed or worn 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.
8. Ensure that the weight selector pin is in good working condition and fully engaged in the selector shaft prior to lifting. Use only the factory supplied pin or a factory authorized replacement.
9. Ensure that the locking mechanisms are properly engaged prior to lifting. Locking mechanisms secure the following in position during use: seat pads, accessory items such as squat attachments and lat hold downs, cable attachments, press arms, leg developers, etc. An improperly engaged locking mechanism could result in an injury.
10. 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.
11. Do not drop the weight plates. Lift only as much weight as you can control safely. Don't be careless, stay alert.
12. Serious injury could result if equipment moves while in use. To prevent this, ensure that the floor is even, strong and not too slippery. If equipment slides too easily on floor, place equipment on rubber matting. Errors in lifting form could also result in bench moving in use. To prevent this, lift weight vertically only and do not push horizontally with your feet while lifting.

Vectra On-Line 4850 / On-Line 3850 Cable Diagrams



Note: The pulleys on this diagram are numbered to make the installation of new cables as easy as possible. Simply start threading the cables through the pulleys beginning with the lowest number and working up. Since this machine comprises two separate cable systems, both sets start at #1. If you are installing an entire set of cables start at either pulley #1, complete that system then start at the other pulley #1. If you are installing only a new leg cable (PN 20920), you would begin at pulley #8. Note: where applicable, text and other drawings in this manual that mention or show pulleys contain corresponding numbers.

Tools Required:

Wrenches: One each (1/2", 3/4"), two each (7/16", 9/16")
Hex Keys: 1/8", 5/16"
Phillips head screwdriver, hammer, pliers

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 your floor if desired.
2. Unbox entire unit. (NOTE: LEAVE ALL CABLES AND CABLE RETAINERS IN PLACE.)

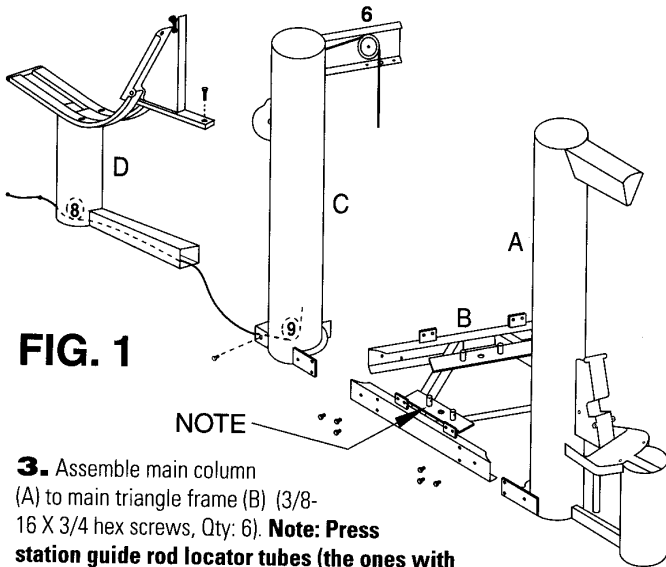


FIG. 1

- 3.** Assemble main column (A) to main triangle frame (B) (3/8-16 X 3/4 hex screws, Qty: 6). **Note: Press station guide rod locator tubes (the ones with cross holes) face front.** Now assemble the ab/row column (C) to the main triangle frame (B) (3/8-16 X 3/4 hex screws, Qty: 6). The row seat adjustment mechanism—upper portion of ab/leg seat column (D)—is shipped almost entirely assembled. To complete this assembly pull E-ring off of clevis pin with pliers, and remove clevis pin. Now rotate mechanism into position, and reinstall clevis pin and E-ring. *Ensure that the cable exiting the bottom of the ab/row column (C) goes around the associated pulley (#9) and leaves the column through the large square opening. Take this cable

and thread it into the large square tube at the base of the ab/leg seat column (D). This cable passes under pulley #8 and exits through the slot in the front of the column. Note: this cable will be easiest to route if the ab/leg seat column (D) is lying on its side to allow easy access to the area below pulley #8. Now attach the ab/leg seat column (D) to the ab/row column (C) (3/8-16 X 3/4 hex screws, Qty: 2, and 3/8-16 X 1 1/2 hex screw, Qty: 1). **IMPORTANT: VERIFY THAT THE CABLE ROUTING IS CORRECT BETWEEN PULLEYS #8 & #9 BEFORE PROCEEDING.** FIG. 1

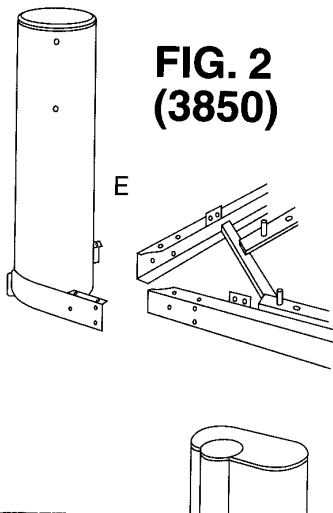


FIG. 2
(3850)

4. Now assemble either the rear

Assembly I

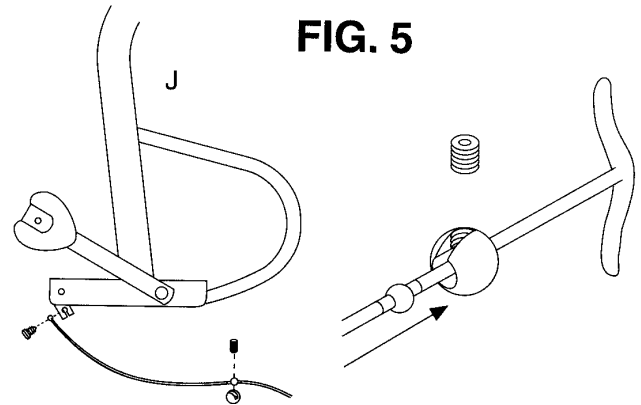
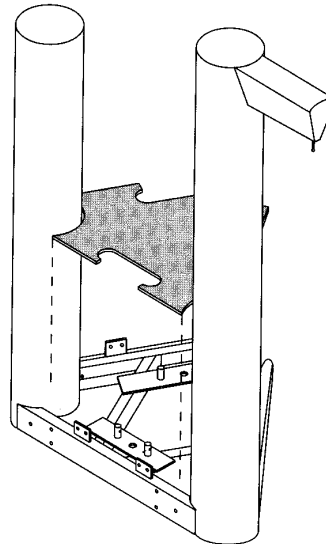


FIG. 5

- 7.** Attach the aluminum ball to the leg developer cable as shown. Note: Aluminum ball must be installed correctly to take the cable force. Counter bore facing away from machine. Make sure that the set screw enters the slot straight and is not cross threaded. Tighten set screw with 1/8" hex key. Now attach cable end to the leg developer, securing it with a plastic hole plug. FIG. 5

FIG. 6



- 8. IMPORTANT: IF YOU ARE ASSEMBLING A 4850, SWITCH TO THE MANUAL SUPPLIED WITH THE AL (ARM-LEG) UNIT AT THIS POINT. Begin there at step 4. Completely assemble that unit, then return here and resume the assembly with the next step. IF YOU ARE ASSEMBLING A 3850, CONTINUE ASSEMBLY WITH THE NEXT STEP.**

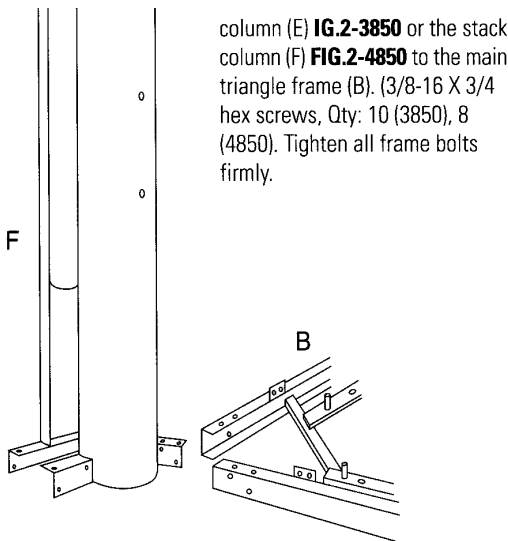
9. Place the triangular floor piece in position on the triangular frame. **NOTE: THE FLOOR PIECE MUST BE IN PLACE PRIOR TO ASSEMBLING THE WEIGHT STACKS.** Check the location of the machine in the room at this point. It will be very difficult to move after the weight stacks are in place. FIG. 6

- 10.** Attach the press station guide rods (K) to the locator tubes (1/4-20 X 1-1/4 hex screw and nut, Qty. 2 ea.). Slide the rubber bumper (L) down the guide rods. Load the 20 weight plates one at a time with selector groove on the bottom facing out (load 15 lb. plates first, if optional heavy stack is being installed). **USE EXTREME CAUTION.** FIG. 7

11. Slide the rubber finish washer (M) onto the tabs at the base of the press housing (N). Note: Each stack has one of these, but the one for the press station has the largest rectangular hole. Assemble the press housing (N) to the top plate (O) and selector shaft (P) (3/8-16 X 3 hex screw, Qty. 1). FIG. 7

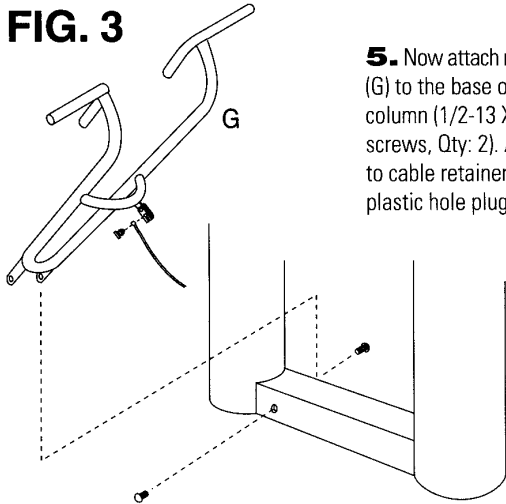
12. Now bolt the lower press pivot lever (Q) (the lower lever is the one with the bend) to the press housing (N) (1/2-13 X 1 button head screw, Qty: 1).

**FIG. 2
(4850)**



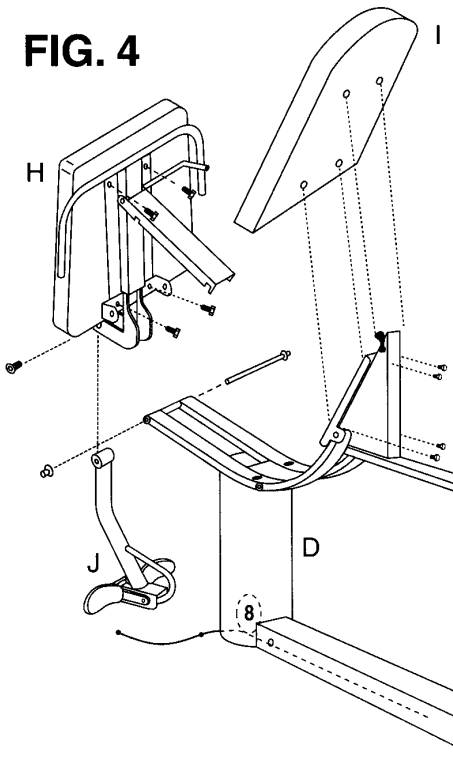
column (E) **IG.2-3850** or the stack column (F) **FIG.2-4850** to the main triangle frame (B). (3/8-16 X 3/4 hex screws, Qty: 10 (3850), 8 (4850). Tighten all frame bolts firmly.

FIG. 3



5. Now attach row arm assembly (G) to the base of the ab/leg seat column (1/2-13 X 1 button head screws, Qty: 2). Attach row cable to cable retainer and secure with plastic hole plug. **FIG. 3**

FIG. 4



6. Install leg/ab seat assembly (H) to column (D) (1/2" shaft and 1 shaft retainer). Install shaft retainer with hammer. Note: it is easier to attach seat cushion to assembly first (1/4-20 X 3/4 hex screws, Qty: 4). Attach leg/ab seat back (I) to frame (1/4-20 X 3/4 hex screws, Qty: 4). Attach the leg developer (J) to the seat bottom assembly (1/2-13 X 1 button head screw, Qty: 2).

FIG. 4

it such that the bend matches the drawing. **FIG. 7** Bolt the upper press pivot lever (R) (the upper lever is straight and has a spring attachment bracket on it) to the press housing (N) (1/2-13 X 1 button head screw, Qty: 2). It attaches to the press housing to the bearings farthest from the top plate. Assemble it such that the spring attachment bracket is down, matching the drawing. **FIG. 7**

13. Take the large assembly created in the previous step and lower it onto the guide rods (K). This is easiest if the stack is leaning away from the machine. With the top plate (O) resting on top of the stack, carefully bring the back end of the lower press pivot lever (Q) into alignment with the lower bolt holes on the column (1/2-13 X 1 button head screw, Qty: 2). Likewise, bolt the upper press pivot lever (R) to the column (1/2-13 X 1 button head screw, Qty: 2). Tighten the eight pivot bolts very tight. If you are assembling a 4850, there are 4 hole plugs to cover the bolts at the column end of the press pivot levers. The design of the parts on the 3850 is different so no plugs are necessary. **FIG. 7**

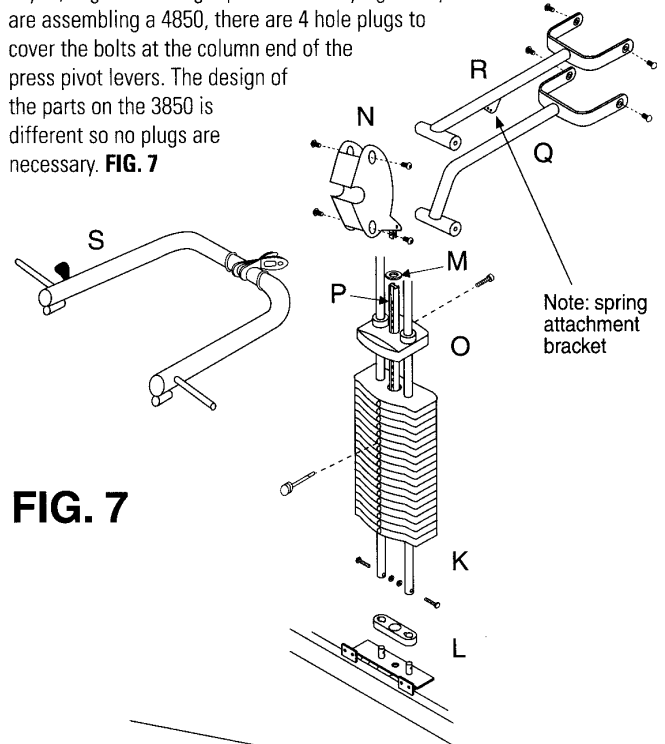


FIG. 7

FIG. 8

14. One at a time attach the two springs to the bracket inside of the front of the press housing (N). With the press housing lifted to its highest point, attach the other end of each spring to the bracket on the underside of the upper press pivot lever. Use gloves and care in doing this to prevent pinching. **FIG. 8** Note: the installation of the springs is optional. Each spring reduces the weight of the press arm by 20 pounds. If both springs are installed, the press arm will add only 10lbs. to the stack weight. (affix the "PRESS ARM ADDS 10lbs." label to the press housing (N). If only one spring is installed, affix the "PRESS ARM ADDS 30lbs." label. If no springs are installed, affix the "PRESS ARM ADDS 50lbs." label. Suggestion: If uncertain how many springs to install, install them both. They can be removed later if you find yourself wanting additional weight. **FIG. 8**

nstructions

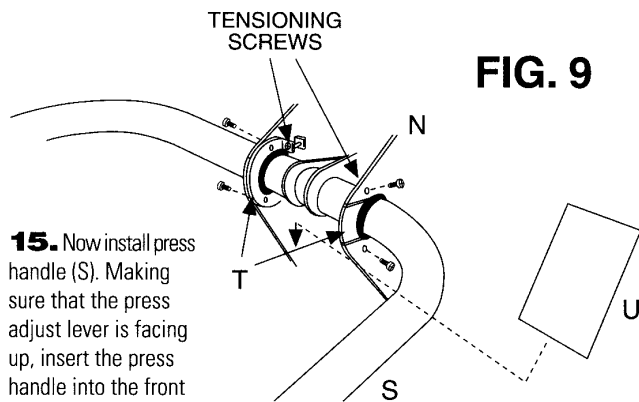


FIG. 9

15. Now install press handle (S). Making sure that the press adjust lever is facing up, insert the press handle into the front of the press housing (N) such that the pin in the back of the handle engages one of the notches with a bracket from the press handle (S) on each side. **Fig. 9** A nylon bushing should be positioned (slot towards the rear) to engage each side of the press housing. Note: the press handle (S) will be on center relative to the press housing (N), even though the brackets are off center inside the press housing. Secure each bushing with a bushing cap (T), bent flanges up. Install the screws in the sides (1/4-20 X 1/2 pan head phillips, Qty: 4) and the tensioning screws (1/4-20 X 1-1/4 oval head, Qty: 2). Tighten the 4 side screws finger tight. Now tighten the tensioning screws until the slop is taken up. Do not over tighten. Once the slop is removed from the pivot, but the joint still rotates easily, tighten the 4 cross screws. Check the adjustment lever's operation at this point. When the lever is operated in either direction, the pin should retract fully, allowing the press handle to rotate. When the lever is released, the pin should lock the press handle by snapping all the way into the next notch. Adjust with phillips screwdriver if necessary. When correctly adjusted, the latch pin will be forced by the spring all the way against the far end of the slot it travels in. The adjustment lever will pull it almost, but not all the way, to the other end of the slot. **It is very important** that it be adjusted such that it goes all the way to the end of the slot with the pressure of the spring. Now install the plastic cover (U). With the textured side out, insert the lower end into the front of the press housing, curve it back and insert the other end up into the press housing. **FIG. 9**

16. Attach the upper stack support (V) to the main column (A) (3/8-16 X 1/2 hex screw, Qty: 2). Do not route the cable yet. **FIG. 10** Assemble the longest guide rods, rubber bumper, weight plates, and a top plate/selector shaft assembly (again, load 15 lb. plates first, if optional heavy stack is being installed). Important: make sure the threaded insert inside of each guide rod is located at the top. If these inserts are down and you force the rod onto the locator tube, you

FIG. 10

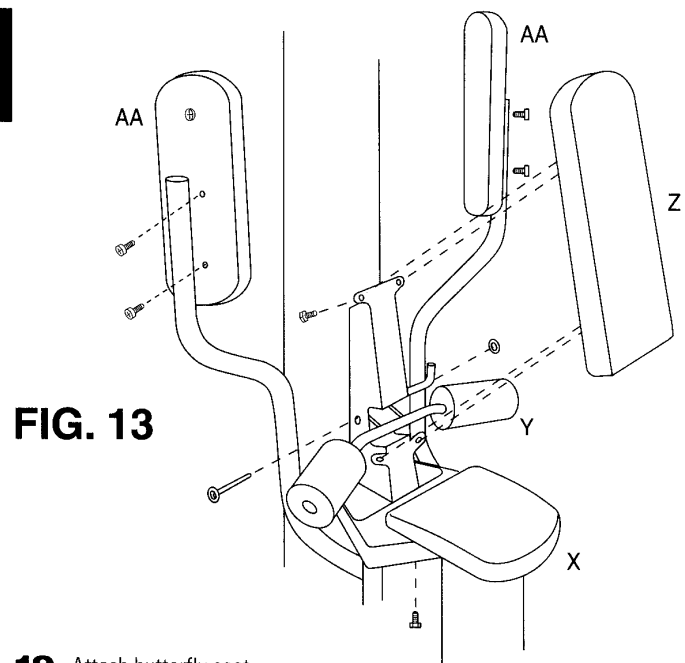
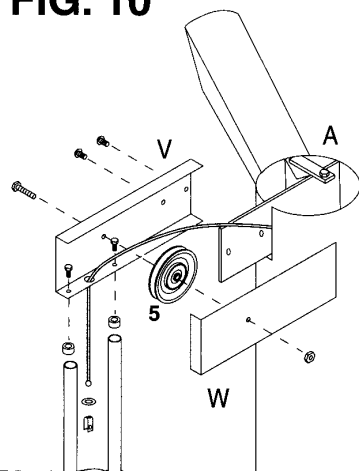
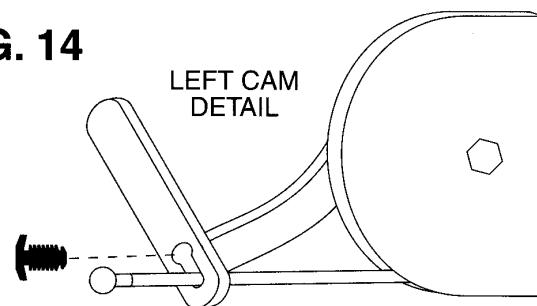


FIG. 13

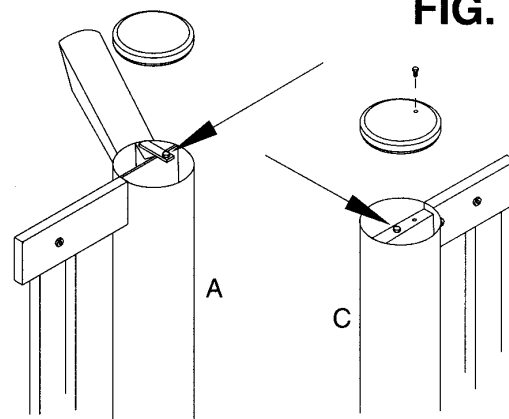
19. Attach butterfly seat bottom (X) (1/4-20 X 3/4 hex screws, Qty: 2). Install the Lat Hold Down (Y) with the blue lever on the right pointing up. Line up the 1/2" holes and insert the pivot (1/2" diameter rod and shaft retainers). Install shaft retainers with a hammer. Attach butterfly seat back (Z) (1/4-20 X 3/4 hex screws, Qty: 4). Install butterfly arm pads such that metal brackets on each arm are hidden between the two upholstered parts (AA). Tighten mounting screws firmly. **FIG. 13**

FIG. 14



20. Connect butterfly cables to butterfly cams. Use plastic hole plugs in keyholes to prevent disconnection. **FIG. 14**

FIG. 15



could push the insert in too far. Remove the pulley from the upper stack support (V) and attach the guide rods (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 (W). Slide a rubber finish washer over cable before attaching cable to U-clip. The top plate, selector shaft, and cable end are secured with a U-clip and a 3/8-16 X 3 hex screw. **FIG. 10**

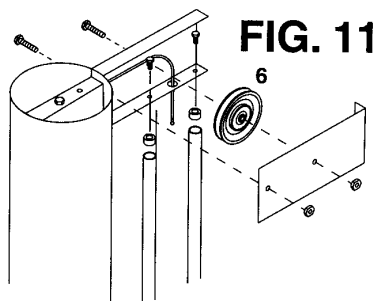
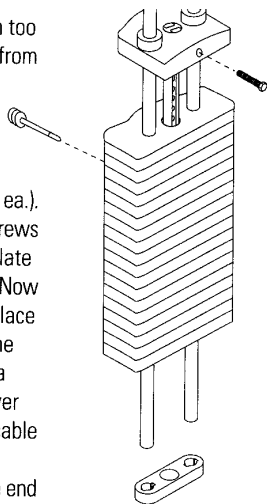
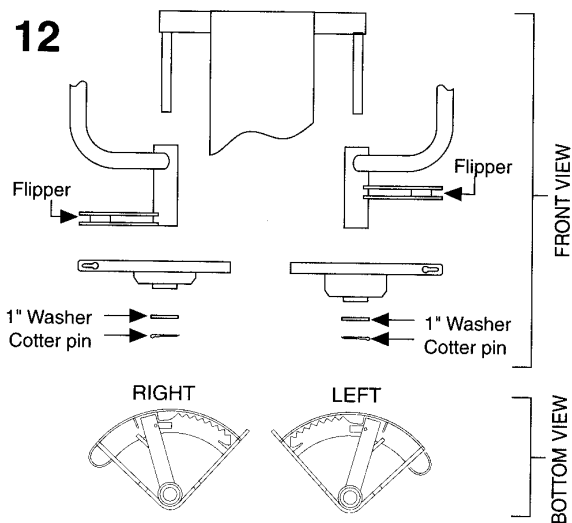


FIG. 11

17. Repeat the previous step for the ab/row column stack using the remaining set of guide rods. **FIG. 11**

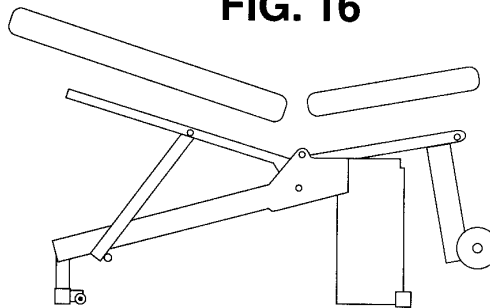
18. Install right butterfly arm (arm closest to press handles) on its vertical pivot bar. The right arm is the one with the spring mounted flipper and related assembly at the lowest point on the arm. The right cam is the cam with the bushing supported by the shortest connector. Slip the cam over the assembly that holds the spring mounted flipper, such that the flipper engages the notches on the underside of the cam and such that the bushings all line up. Now slide the two items as one up the pivot shaft. Install 1" washer and then cotter pin, bend end. Repeat this process for the left arm and cam. Test the ratcheting system at this point. If any problems are suspected, look up into the ratcheting mechanism from below. If the spring mounted flipper is not in the notched section, take the cam and arm off the pivot and after getting the flipper in the right area, reinstall the cam and arm as an assembly. **FIG. 12**

FIG. 12



21. Next tension the cable systems in the main column (A) and the ab/row column (C) by locating the adjustment bolt at the top of each column. The adjustment bolts are located under the column caps. Tighten each bolt until the respective top plate lifts slightly. Loosen the bolt until the top plate just touches the weight plates. Check that the weight selector pin engages at each weight plate completely. Replace/install the column caps. **FIG. 15**

FIG. 16

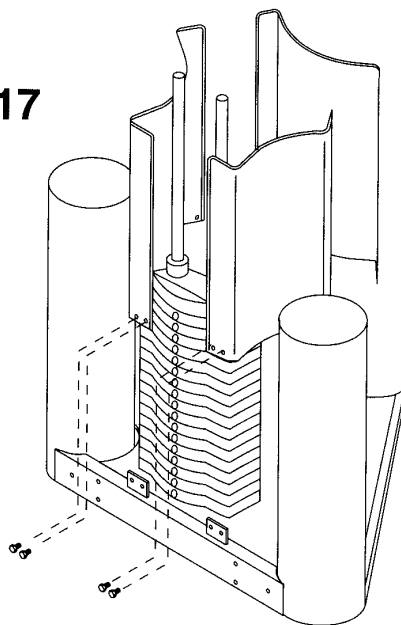


22. Make sure that all cables move freely when all stations are operated. Immediately fix any cable rubbing problems.

23. Attach the cushions to the bench (1/4-20 X 3/4 hex screws, Qty: 12). Tighten mounting screws firmly.

FIG. 16

FIG. 17



24. Attach lat bar to cable at high pulley. Attach the ab strap at the ab pulley.

25. Apply weight stack number labels per instructions printed on label sheets.

26. Attach the three weight stack guards (3/8-16 X 1/2 hex screws, Qty. 12). **FIG. 17**

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

Vectra On-Line 4850 / On-Line 3850 Limited Warranty

Vectra Fitness, Inc. warrants, to the original owner only, this Vectra gym to be free from defects in materials and workmanship for component specific periods as outlined below. Purchaser must retain bill of sale to establish warranty rights. This warranty is valid only if machine is purchased from a Vectra authorized dealer. Defective parts will be repaired or replaced at Vectra's option, when returned to Vectra Fitness, Inc. prepaid with prior authorization. No allowances for labor will be made.

Warranty Period: (All periods are from date of purchase by original consumer)

Home Use:

| | | | |
|----------------------------|----------|----------------------------------|--------|
| Structural Frame | 10 years | Cables | 1 year |
| Weight Stack | .5 years | Bearings | 1 year |
| Guide Rods | .5 years | Upholstery | 1 year |
| Pulleys | .5 years | Other parts not listed | 1 year |

Home use is defined as use in a family's home by the members of that family.

Commercial/Institutional use:

| | | | |
|----------------------------|----------|----------------------------------|--------|
| Structural Frame | .5 years | Cables | 1 year |
| Weight Stack | .5 years | Bearings | 1 year |
| Guide Rods | .5 years | Upholstery | 1 year |
| Pulleys | 1 year | Other parts not listed | 1 year |

Conditions and Exceptions: Failures due to normal wear, damage, misuse, abuse, neglect, alteration, improper assembly, repairs other than by an authorized Vectra Service Center, or lack of maintenance are not covered. Use of a weight stack that is heavier than the heaviest stack that Vectra Fitness sells for use on the machine voids this warranty. This warranty does not cover damages sustained during shipment. Title passes to buyer upon delivery to carrier. If product is damaged in transit, file claim with carrier.

Repairs to the Structural Frame and Weight Stack will be made only if such repairs are necessary to make the machine functional as designed. Repairs for other reasons will not be made. Cosmetics are not covered by this warranty. This is a powder coated steel product, and as such rust-resistant in most settings. Any rusting and/or corrosion is completely outside the scope of this warranty. Owners who live in humid climates or intend to install this machine in a humid area such as outside, near a pool, hot tub, or sauna should apply an automotive wax to delay rusting. The corrosive effects of sweat, cleaners, body lotions, sunlight, etc. are also the responsibility of the owner.

It is our policy to replace components rather than entire machines or assemblies. It is also our policy to repair rather than replace frame components. Such repairs of structural parts will be made using appropriate technology and may be visible. Repaired items will be repainted as needed, but the new paint may not match the old.

Replacement and Repair Expenses: Vectra Fitness will provide only replacement parts or repair to parts under this warranty, and will pay for standard ground shipping of such parts to the consumer. The owner of the machine is responsible for all other costs. Such costs may include, but are not limited to: labor charges for service, removal, repair, and re-installation of the Vectra product or any component part; shipping, delivery, handling, and administrative charges for returning parts to Vectra; all necessary or incidental costs related to installation of the replacement part.

Claim Procedure: Please contact the Vectra authorized dealer from whom you purchased your machine should warranty service be required. Items returned to Vectra without prior factory authorization or freight collect will not be accepted. Vectra assigned RMA number MUST be prominently shown on OUTSIDE of carton. Copies of original bill of sale MUST accompany any merchandise returned for warranty service. Also each returned item must be accompanied by the following information: RMA number assigned by Vectra, product serial number, description of problem experienced, and instructions for return of repaired/replaced part. Parts should be shipped to Vectra Fitness in their original carton or equivalent packaging. Vectra Fitness will not be responsible for any loss or damage incurred in shipping.

No other express warranty has been made or will be made on behalf of Vectra Fitness with respect to any Vectra product or the operation, repair or replacement of any Vectra product. Vectra Fitness shall not be responsible for injury, loss of use of the Vectra product, inconvenience, loss or damage to personal property, whether direct or indirect, and incidental or consequential damages. This warranty is LIMITED STRICTLY to the terms stated herein and no other express warranties or remedies shall be binding on us. THIS WARRANTY AND ALL WARRANTIES WHICH MAY BE IMPLIED UNDER STATE LAW, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE, EXPIRE WITH THE TRANSFER OF OWNERSHIP FROM THE ORIGINAL OWNER. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE SHALL BE LIMITED TO ONE YEAR FROM DATE OF PURCHASE. REPAIR OF THE PRODUCT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. IN NO EVENT SHALL WE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, FOR BREACH OF THIS WARRANTY, OR ANY OTHER WARRANTY EXPRESS OR IMPLIED. Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

Consumers Rights: This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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Protected by one or more of the following Patent Numbers: RE34,572; 4,900,018; 4,986,538; 5,336,148; 5,378,216; 5,395,295; 5,462,510; 5,605,523; D320,246; D320,247; D320,248; D329,563; CN1,309,738; CN2,023,972; J3,117,451.

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PN 56910 Rev.- 7/01
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