VECTRA® FITNESS

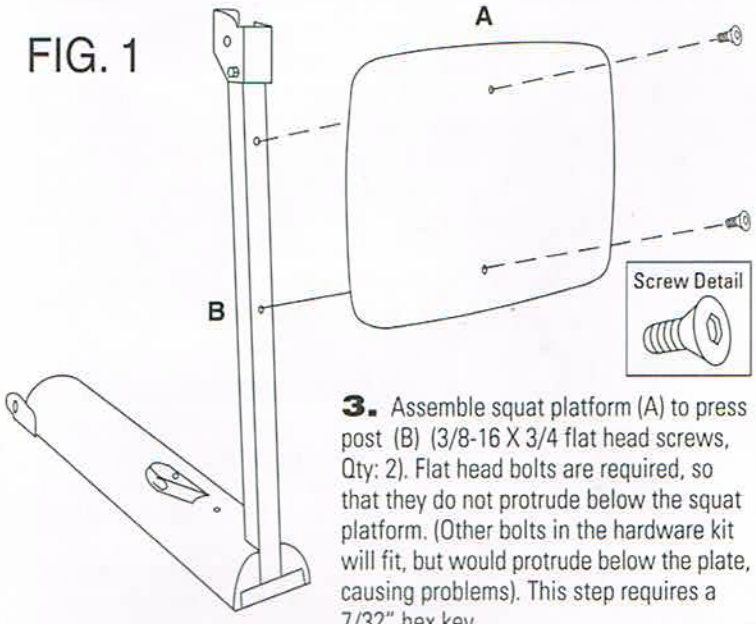
On-Line® 1400
Owner's Manual

Tools Required:
Wrenches: one each 7/16", 1/2", and two each 9/16" end wrenches
Hex Keys: 7/32", 5/16"
Phillips 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. It is necessary to have access to all sides of the unit during assembly. Once the unit is assembled, it may be slid into a corner for use.

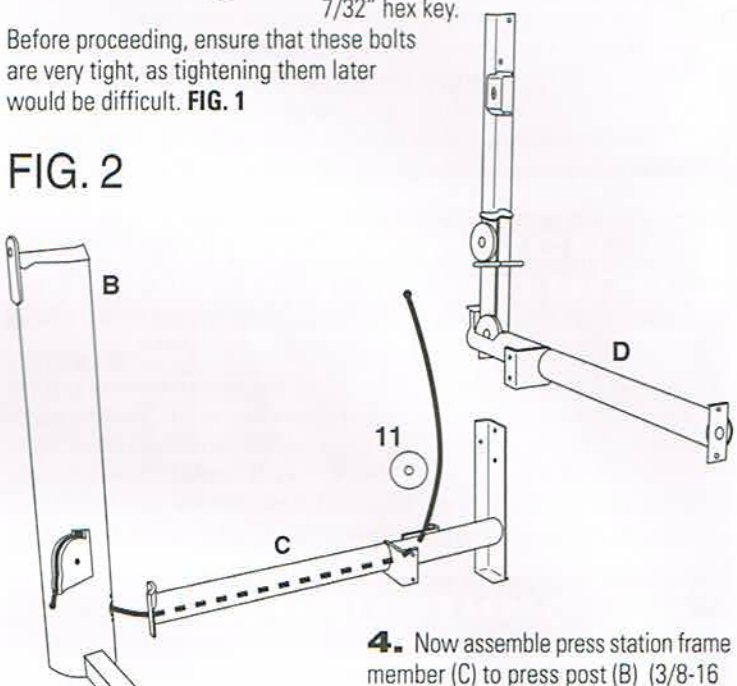
2. Unbox entire unit, taking care to not bang parts together lifting them from their foam supports. **(NOTE: LEAVE ALL CABLE RETAINERS IN PLACE.)** Lay large items, such as the main column down until needed to prevent them from accidentally falling over. To make assembly as easy as possible, many cables are pre-routed at the factory. Route and attach cables when the instructions call for it. After routing any cable, resecure it to prevent it from coming unrouted before going on. Some bolts should be tightened very tight only after the instructions say to do so. All bolts should be tight at the end of assembly.

FIG. 1



3. Assemble squat platform (A) to press post (B) (3/8-16 X 3/4 flat head screws, Qty: 2). Flat head bolts are required, so that they do not protrude below the squat platform. (Other bolts in the hardware kit will fit, but would protrude below the plate, causing problems). This step requires a 7/32" hex key. Before proceeding, ensure that these bolts are very tight, as tightening them later would be difficult. **FIG. 1**

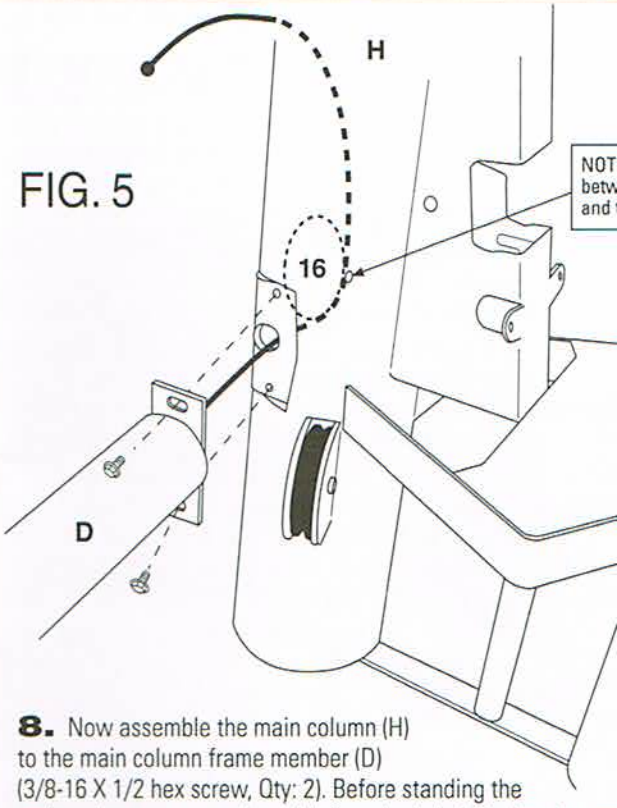
FIG. 2



4. Now assemble press station frame member (C) to press post (B) (3/8-16

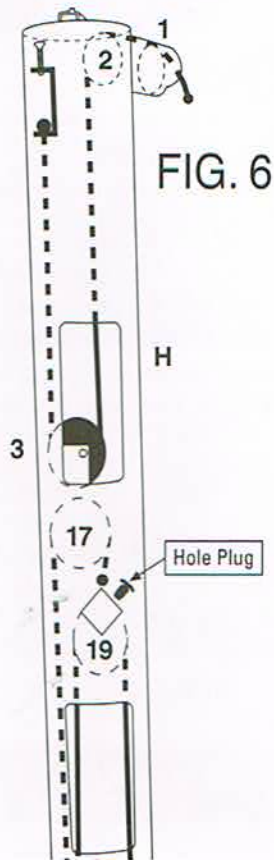
Assembly

FIG. 5



8. Now assemble the main column (H) to the main column frame member (D) (3/8-16 X 1/2 hex screw, Qty: 2). Before standing the main column up, route the cable into the hole in its bracket, an pulley (#16) located there such that it heads up inside the column. I There is a small diameter pin near this pulley. Make sure the c between the pin and the pulley. To do this remove the lower pl panel and feel under the pulley. Next stand the main column u to the frame member pulling any spare cable into the main col

FIG. 6



9. With both plastic access pa continue routing the cable insi column (H). From pulley #16 it g up inside the main column to t pulley (#17) of a double movin assembly located there. It is im the cable go around the lower correct direction to prevent tw make sure that the double mov hanging straight down with the support it hanging straight. Rou such that it goes up the rear o (the side near you when lookin access cutouts), over pulley #1 down near the front of the ma Terminate this cable at a singl pulley bracket #19 that you wi inside the column. To attach it ball end into the keyhole shape pulley bracket. Secure it by inser hole plug into the large end of Ensure that the cables below t bracket do not loop around the up from pulley #16. **FIG. 6**

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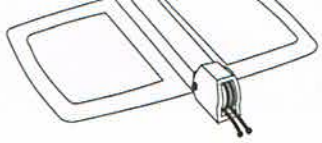


of the press post (B) into the frame member, down its length, around the pulley (#11) and out. To do this it will be necessary to temporarily remove the pulley. Ensure that the pulley bolt is very tight after reinstalling it. Leave the four bolts connecting the frame member to the press post a little loose, until told to tighten them later in these instructions. (Note: any pulley numbers mentioned in the text or shown on these drawings correspond with the cable diagram on the other side of this manual. Refer to that diagram as necessary during the assembly process if you'd like another perspective.) **FIG. 2**

5. Now attach main column frame member (D) to press station frame member (C) (3/8-16 X 1/2 hex screw, Qty: 3). **FIG. 2**

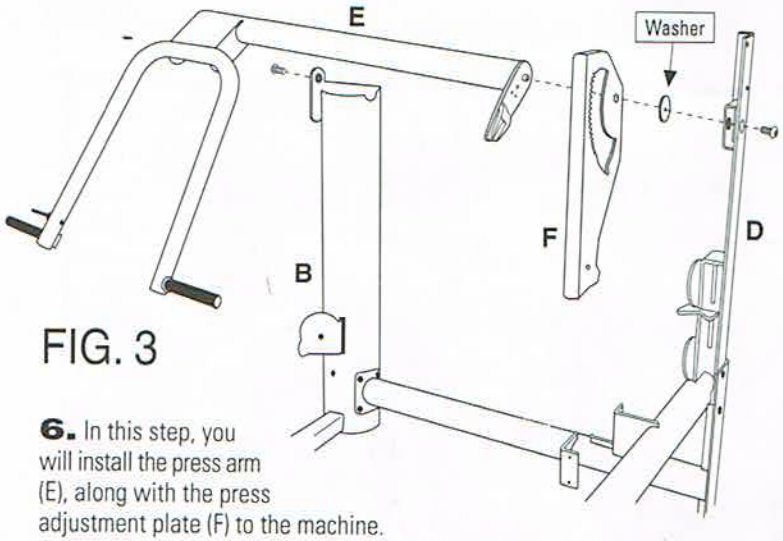


FIG. 3

6. In this step, you will install the press arm (E), along with the press adjustment plate (F) to the machine. (large 1/2" i.d. washer, Qty: 1, and 1/2-13 X 1 button head screws, Qty: 2). Begin by placing the press adjustment plate onto the press arm such that the latch pin is in one of the notches and the large hole is over the post on the end of the press arm. Next place one of the bolts through the ball bearing installed in the main column frame member (D). Thread the washer onto this bolt. Now position the press arm assembly according to the diagram and thread this bolt into the internally thread post mentioned above. Insert the second bolt through the bearing at the top of the press post (B) and into the press arm assembly. The press adjustment plate should be supported in a "V" shaped notch in the main column frame member. Tighten the two bolts installed in this step very tight with a 5/16" hex key. **FIG. 3**

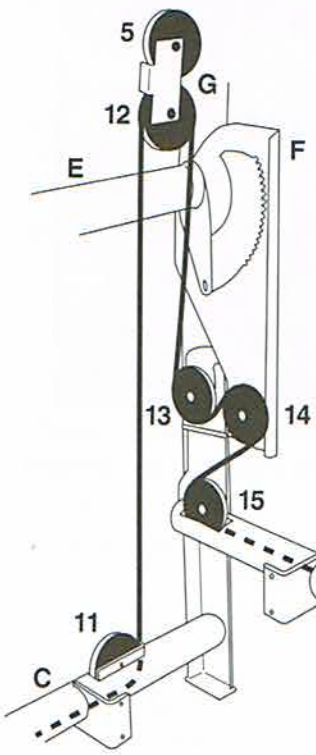


FIG. 4

7. Now route the cable emerging from the press station frame member (C) as follows: first route it around one pulley (#12) of the double moving pulley unit (G), next it goes under pulley #13, over pulley #14, and then down into the main column frame member (D) and around pulley #15. It needs to continue along the length of this frame member and exit through the large round hole in the bracket welded on its end. Place the double moving pulley unit (G) on the floor for now. **FIG. 4**

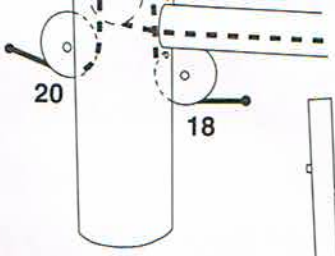
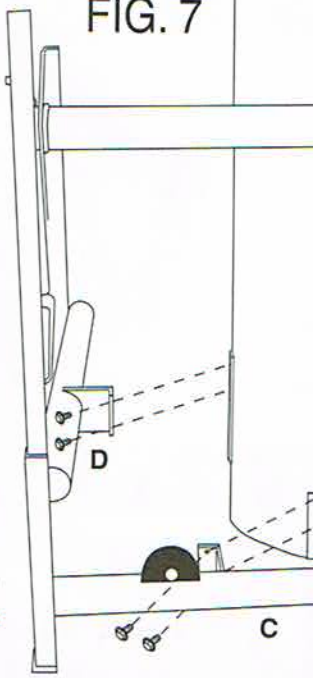
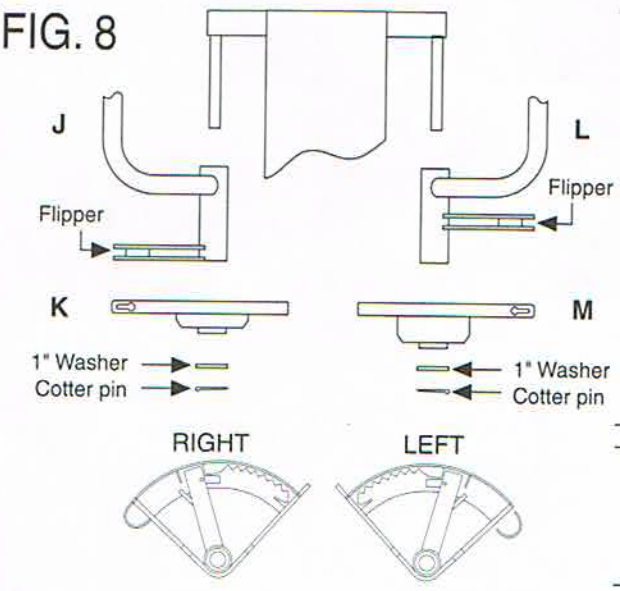


FIG. 7



10. In preparation for attaching the stack column (I) to the two frame members, place the guide rods inside. First, place a rubber bumper (located inside of the top plate hardware box) around the end of each guide rod at the end that does not have the bolt. The two guide rods now go into the open back of the stack column such that the end with the rubber bumper ends up on a locator tube at the base of the column. **IMPORTANT:** The guide rods need to be in stack column (I) now because ceiling height might insertion difficult or impossible. Now assemble the stack column frame members (C & D). (3/8-16 X 1/2 hex screws, qty: 4) Becaus column needs to be held off the ground to align the holes, placing 3 of scrap cardboard under the stack column on the floor will save effort. At this stage you may tighten the stack column bolts and th hold the two frame members to each other. **FIG. 7**

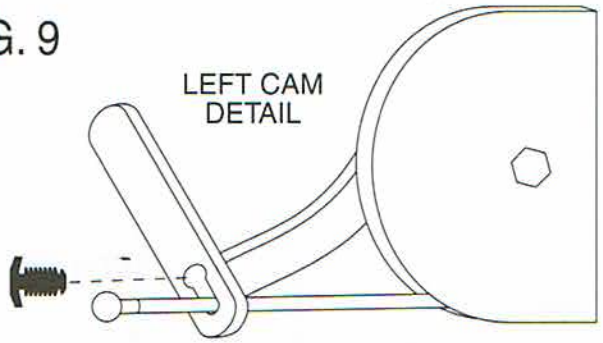
FIG. 8



11. Now install right butterfly arm (J) (arm closest to stack col its vertical pivot bar. The right arm is the one with the spring moun and related assembly at the lowest point on the arm. The right can cam with the bushing supported by the shortest connector. Slip the the assembly that holds the spring mounted flipper, such that the engages the notches on the underside of the cam and such that the all line up. Now slide the two items as one up the pivot shaft. Ins washer and then cotter pin, bend end. Repeat this process for the (L) and cam (M). Test the ratcheting system at this point. If any pro suspected, look up into the ratcheting mechanism from below. If t mounted flipper is not in the notched section, take the cam and ar pivot and after getting the flipper in the right area, reinstall the car as an assembly. **FIG. 8**

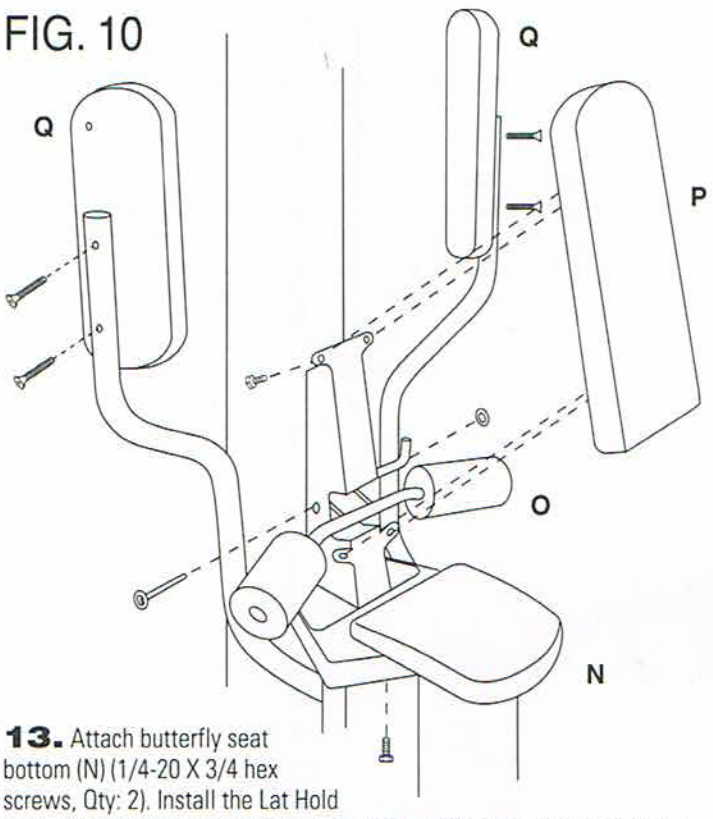
nstructions

FIG. 9



12. Connect butterfly cable ends to butterfly cams (K &M). Use plastic hole plugs in keyholes to prevent disconnection. **FIG. 9**

FIG. 10

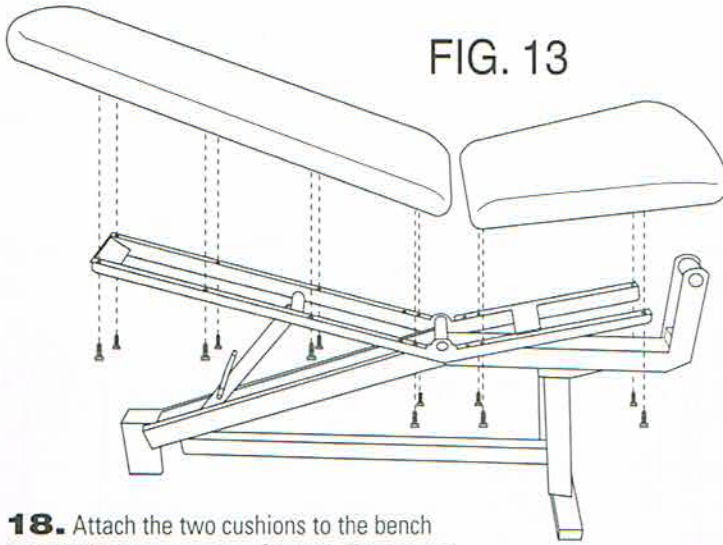


13. Attach butterfly seat bottom (N) (1/4-20 X 3/4 hex screws, Qty: 2). Install the Lat Hold Down (O) with the blue lever on your right pointing up. Line up the 1/2" holes and insert the pivot (1/2" diameter rod and shaft retainers). Install shaft retainer with a hammer (tip: hold a weight plate against opposite end of shaft). Attach butterfly seat back (P) (1/4-20 X 3/4 hex screws, Qty: 4). Install butterfly arm pads (Q) now. Notice that the screws are not centered in the two pads. The standard way to install the two pads places the pads closest to the center of the exercise station. To do this, flip the pads such that the edge nearest the row of three screws is furthest from the main column. Now attach them to the butterfly arms with long screws (1/4-20 X 2.25 oval head phillips screws, Qty: 4). passing through the holes in the butterfly arms and entering the lower two of the three holes in the pads. The short screw holds the two pad components together through the upper hole of each pad. Note: This is the standard way to install the pads and fits most people best. The pads may be attached inverted, such that they are both further from the center of the exercise station. This provides additional chest clearance for larger individuals. Tighten all butterfly station pad mounting screws firmly. **FIG. 10**

FIG. 11

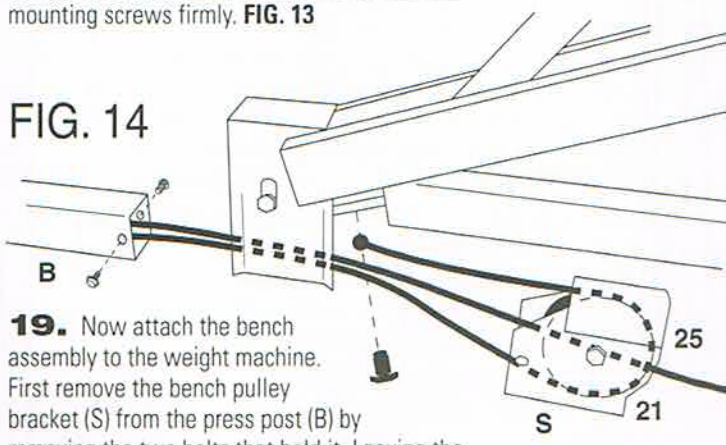
14. Now install the weight stack inside the stack column (I). Ensure that the guide rods are

FIG. 13



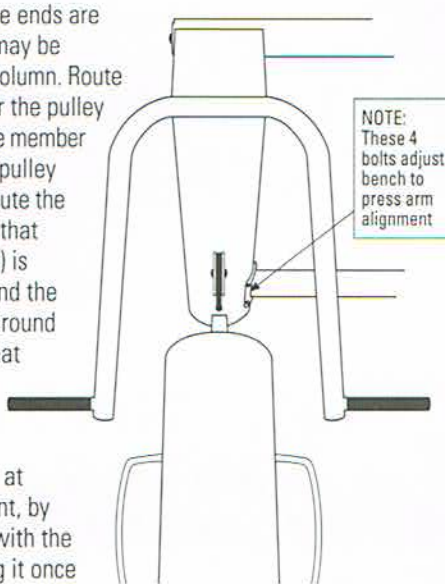
18. Attach the two cushions to the bench (1/4-20 X 3/4 hex screws, Qty: 12). Tighten pad mounting screws firmly. **FIG. 13**

FIG. 14



19. Now attach the bench assembly to the weight machine. First remove the bench pulley bracket (S) from the press post (B) by removing the two bolts that hold it. Leaving the cables routed as they are, pull the bracket horizontally away from the machine about 10 inches (25cm) and place it on the floor. Now align the bench hitch section (portion with the wheel), and start it onto the square frame where the pulley bracket was bolted, just enough such that the wheel is on the frame. Now the two cable ends need to be attached to opposite ends of the bench. The cable end farthest from the weight stack loops back and attaches inside the bench hitch section near the wheel. Insert the ball end into the keyhole and secure with a plastic hole plug. The second cable end, the one nearer the weight stack attaches to a similar keyhole on the leg developer cam. After inserting it, secure it with a plastic hole plug. Next slide the bench further onto the frame and slide the bench pulley bracket (S) back onto the frame. Secure it with the two bolts removed previously, tighten them firmly. **FIG. 14**

20. Now that all the cable ends are attached, the cable system may be completed behind the stack column. Route the cable from the stack over the pulley (#4) on the stack column frame member and down to double moving pulley unit (G) from step 7 above. Route the cable around pulley #5 such that double moving pulley unit (G) is between the stack column and the press arm. Route the cable around this pulley in the direction that matches the diagram to prevent twisted cables. Secure the cable end to the stack column frame member at the provided attachment point, by removing the small bracket with the keyhole and then reattaching it once



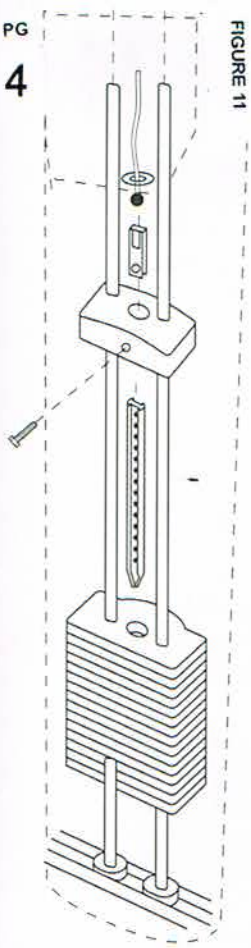


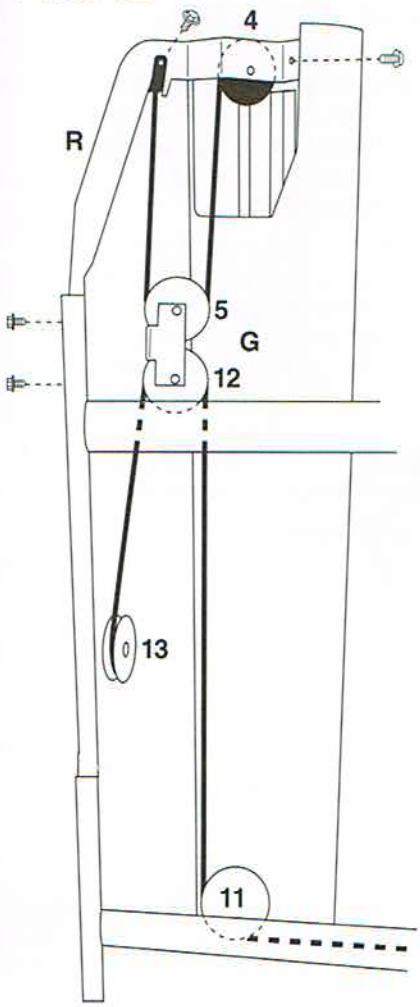
FIGURE 11

bottom end of each one holding a rubber bumper and positioned over a locator tube. Load the weight plates (15 for a 160 lbs. stack or 20 for a 210 lbs. stack) one at a time by placing them on the guide rods at the top of the column with selector pin groove on the bottom facing away from the back of the machine. **IMPORTANT:** To safely keep plates from banging together the following procedure is suggested: after releasing each plate, pull the guide rods apart to slow the fall of the plate. **DO NOT** try to catch plates with hands or feet. **USE EXTREME CAUTION. FIG. 11**

15. After all weight plates are in place, assemble the top plate, selector shaft, rubber finish washer and U-clip (the U-clip is about 1-1/2 inches long for a 210 lbs. stack, and about 7 inches long for a 160 lbs. stack) to the end of the loose cable (PN 59920) cable end, securing with 3/8-16 X 3 hex screw. To do this, insert the cable end into the keyhole in the U-clip. Insert the blunt end of the selector shaft from below into the center hole of the top plate until it is approximately flush on top. Now insert the U-clip ends down into the top plate around the selector shaft end. Secure with the cross bolt. Once the bolt is very tight, slide the rubber finish washer onto the cable and down onto the top of the U-clip. **FIG. 11**

16. Now lower the top plate assembly down the guide rods making sure the side with the bolt is toward the back of the machine. Leave the cable hanging out the top of the column for a moment and attach the guide rods to the support bracket at the top of the stack column (I). To do this remove the bolt in the top of each guide rod, and reinsert it through the bracket. Make sure that the nylon bushings are in the top of the guide rods on top of the threaded inserts installed at the factory. Tighten these bolts, and test the guide rod spacing by pulling the top plate to the top of the column using the cable. If the top plate is sticky near the top of the guide rods, loosen the bolts and adjust the spacing before proceeding. **FIG. 11**

FIG. 12



17. Now install the stack column frame member (R) as shown (3/8-16 X 1/2 hex screw, Qty: 4). This frame member goes on the inside of the angle of the main column frame member (D), not on its outside. Tighten these four bolts very tight. **FIG. 12**

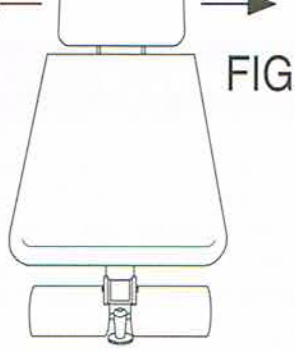


FIG. 15

21. Check the press arm 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. The adjustment screw is behind the stack a few inches from the latch pin. When correctly adjusted, the latch pin will be forced by the spring all the way against the far end of the position notch. When operated, the adjustment lever will pull it free of the notches such that no clicking is heard during adjustment. **It is very importan** that it be adjusted such that it goes all the way to the end of each notch wit just the pressure of the spring. There is a jam nut on the adjustment screw — tighten it to prevent the adjustment from changing over time.

22. At this point, all assembly behind the stack is complete, and all the bolt in that region should be tight. The machine may now be moved in to a corner.

23. Adjust the center of the bench at this point. Move it side to side until it is centered in the press arm. Once it is centered, tighten the four bolt securing the press station frame member (C) to the press post (B). **FIG.15**

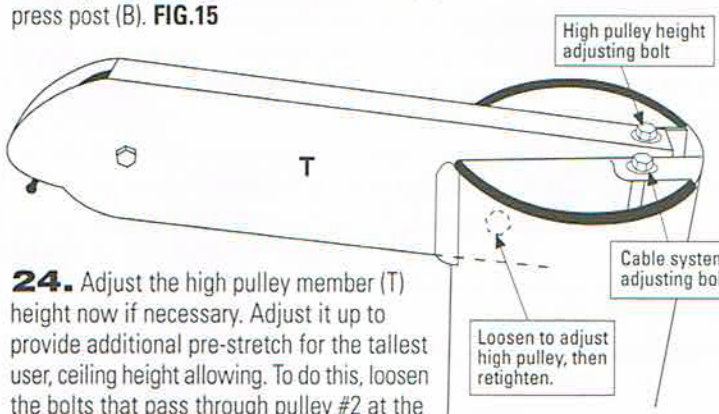


FIG. 16

24. Adjust the high pulley member (T) height now if necessary. Adjust it up to provide additional pre-stretch for the tallest user, ceiling height allowing. To do this, loosen the bolts that pass through pulley #2 at the top of the main column (H). You will need two 9/16" end wrenches for this as most other wrenches will not fit. Now tighten (or loosen if adjusting down) the bolt on the top of the back of the high pulley member (T). Once the chosen adjustmen is reached, retighten the bolts that pass through pulley #2. They must be very tight. The lower two frame bolts that attach the main column frame membe (D) to the main column (H) should now be tightened, taking care to see that the base of the main column is flat on the floor. **FIG.16**

25. Tension the cable system by locating the adjustment screw on the right of the high pulley member (T) at the top of the main column (H). Adjust the cable tension as follows: tighten the adjustment screw until the top plate lifts slightly. Loosen the bolt until the top plate just touches the first weight plate. Check that the weight selector pin can be inserted in all weight plates. **FIG. 16**

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

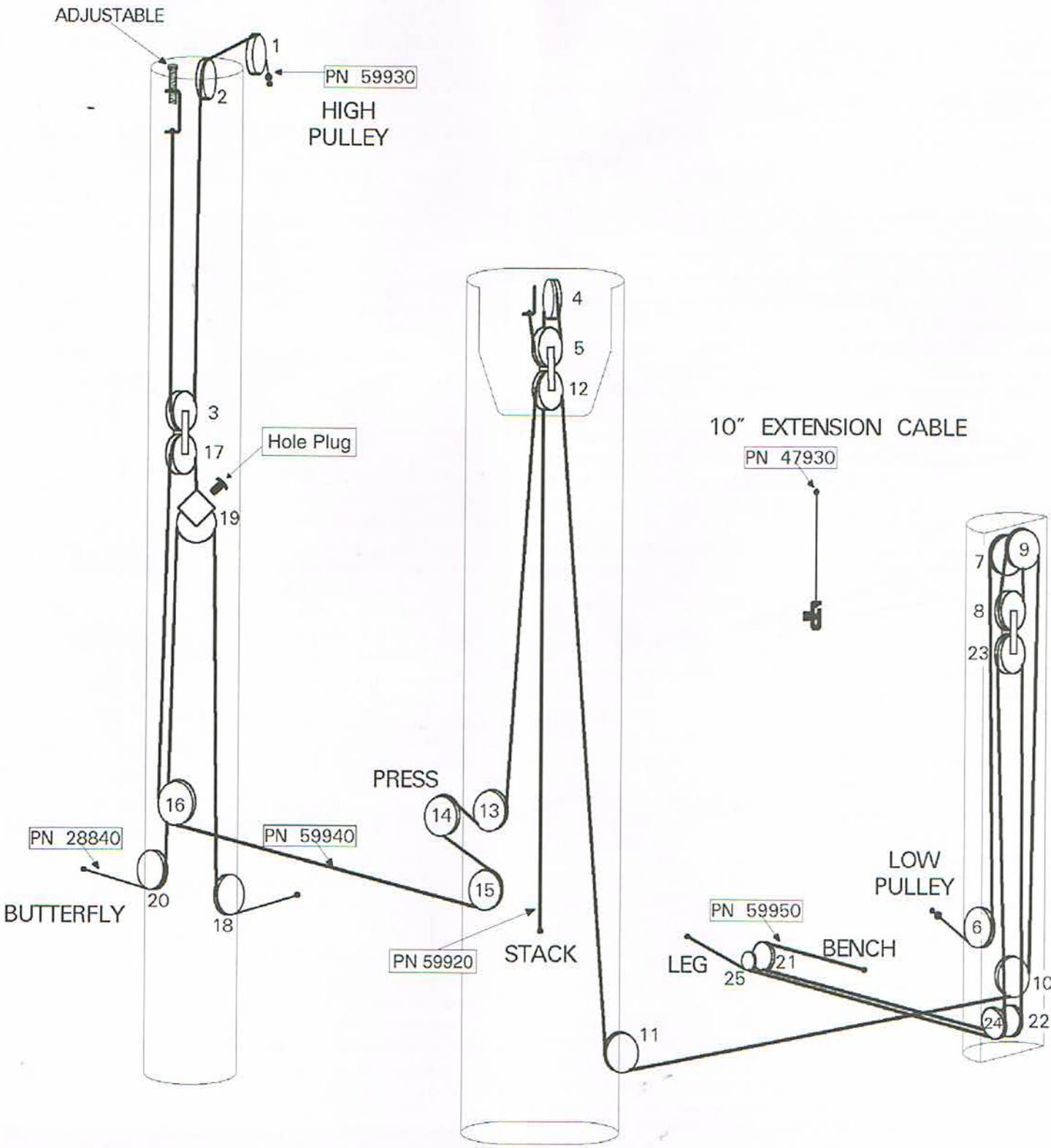
27. Attach lat bar to cable at high pulley.

28. Apply weight stack number labels per instructions printed on label sheets. Affix the "PRESS ARM ADDS 10 lbs." label (located on the weight stack label sheet) to the press arm. Hang the Exercise Chart on the wall nearby for convenient reference, frame or laminate as desired.

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

Vectra On-Line® 1400 Cable Diagram

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. For example, if you are installing an entire set of cables start at pulley #1. If you are installing only a new low pulle cable (PN 59940) for example, you would begin at pulley #6. **Note:** Where applicable, text and other drawings in this manual that mention or show pulleys contain corresponding numbers.



Introduction

We at Vectra Fitness appreciate your selecting our On-Line® 1400 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 On-Line® 1400.

Routine Inspection & Maintenance

The Vectra On-Line® 1400 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 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, ankle strap, squart attachments. etc.) for damaged mounting eyes, springs, 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 wheel, wheel suspension spring and bench feet. Replace any damaged or malfunctioning parts.
7. Inspect leg developer screws and pivots for tightness and function. Inspect spring and lever. Replace any damaged or malfunctioning parts.
8. Inspect bench cushion latching mechanisms. Replace any damaged or malfunctioning parts.
9. Inspect cable retaining plugs and spring plungers. Replace 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 pad on bench that grips the frame tube (located near wheel). Inspect similar pads on calf block. Replace any damaged or missing pads.
14. Inspect high pulley member bolts for tightness. Tighten if 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 fittings at each end of each cable. Access panels are provided, where necessary, for this purpose. Replace worn, frayed, or damag cables immediately. The actual wire strands, the fittings, and the nylon jack 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 attenti 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 I AN EARLY INDICATION OF INTERNAL PROBLEMS SUCH AS WEAR OR FRAYIN
3. Read and follow all instructions in your owner's manual, on your exercise cha and on product warning label. 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. Allo older children to use the machine only with adult supervision.
6. Keep body, hair, and clothing 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 a defective parts are repaired or replaced. Refer to the "Routine Inspection an Maintenance" section of your manual for specific inspection rules. Use only Vectra authorized replacement parts.
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 Vectra supplied pi or a Vectra authorized replacement.
9. Ensure that any 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 lockin mechanism could result in an injury.
10. Obtain assistance to free jammed weight plates, pulleys, etc. Do not attemp to free jammed weight plates by yourself. Falling weight plates can cause serious injury. Do not pin trhe weight stack or top plate in an elevated positi and do not use the machine if found in this condition.
11. Do not drop the weight plates. Lift only as much as you can control safely. Nev use dumbbells or other means to incrementally increase the weight resistanc Use only those means provided by Vectra. 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 verticall only and do not push horizontally with your feet while lifting.

Replace the warning label on product if damaged, illegible, or removed.