KEISER®

SERVICE BULLETIN 28-5500B

SUBJECT: 2821 Exercise Arm Replacement

KEISER CORPORATION has always taken pride in designing and engineering the highest quality equipment on the market. Since we always find ways to improve our products, parts and machine designs, KEISER is issuing these service bulletins to keep all customers abreast of all-important changes in our exercise machines.

These instructions are being issued to show our customers the correct procedure to replace the old 2821 exercise arms. If you have any questions performing this procedure, please call our Service Department at **(800) 888-7009.**

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| *Tools Required*: | 7/32" & 1/8" Allen wrench | Needle Nose Pliers |
| | 9/16" & 1/2" Sockets | Adjustable Wrench |
| | Wire Cutters | Black Electric Tape |

1. Please read entire service bulletin prior to replacing exercise arm.

2. Disconnect quick disconnect (Item # 96) from the air system (ex. Track, wall or floor).

3. Release all air from exercise machine, by pressing the plus or minus button.

4. Remove bolt (Item # 36) from the drag link (Item # 43), repeat for left and right side.
   *Tools required: 9/16 socket and a 7/32 Allen wrench.*

5. Remove bolts (Item # 4) from bearing housing (Item # 45), repeat for left and right side.
   *Tools required: 1/2 socket and an adjustable wrench.*

6. With one cut, cut all wires and hoses as they come out of the frame, located near (Item # 4).

7. Pull black plastic cap (Item # 44) off of shaft.

8. Loosen both set screws on (Item # 46) and slide bearing housing off exercise arm.
   *Tools required: 1/8 Allen wrench.*

9. Set the exercise arm aside and remove the bearing housing (Item # 45) from the exercise arm.

10. Pull off plastic plugs (Item # 48) to gain access to bolts.

11. Remove and discard bolt (Item # 67) from shaft (Item # 72). (Bolt will be replaced with a new one)
    *Tools required: 9/16 socket and an adjustable wrench.*

12. Cut off all remaining plastic zip ties from the previously cut wires back to the processor box (Item # 112).

**NOTE:** The upholstery, plastic rivets, placards, bearing housings and most hardware will be re-used in this application.

13. Re-install bearing housings (Item # 45) onto new exercise arm. Do not tighten at this time.

14. Insert new exercise arm, by sliding the bearing housings (Item # 45) into the frame. Refer to drawing on page 4 on which way the angled side of bearing housing is facing.

**NOTE:** All hardware being replaced must not be tightened at this time.

15. Replace bolts (Item # 4), repeat for left and right side.

16. Replace bolt (Item # 36) to re-install drag link (Item # 43), repeat for left and right side.

17. With old shaft (Item # 72) still in place on machine, slide new shaft into place causing old shaft to push out of machine.

**NOTE:** Milled end should be on the right side of frame as you are sitting on the machine.

18. Insert new shorter bolt to replace (Item # 67) (See illustration, page 5, for proper installation)

19. Temporarily plug in quick disconnect (Item # 96) to determine the high-pressure hose. The hose blowing air out is the high-pressure hose, mark with a piece of black tape.

20. Disconnect quick disconnect (Item # 96) from the air system.

21. Locate the hose with plastic barb on the new exercise arm.

22. Push the black taped hose onto the barbed hose. Making sure that the hose is pushed on all the way. Wetting the end of the hose will help glide the barb into the hose easier.

23. Pull both wires through the frame by pushing in at the top and pulling out at the bottom.

24. Disconnect the thumb button wires from the processor box (Item # 112) and discard.

**NOTE:** Make sure not to pull on the barbed hose connected to the new exercise arm.

25. Pull the remaining two hoses out by pushing in at the top and pulling out at the bottom.

26. Identify the plastic "Y" (Item # 102) where the hoses are connected.

27. Remove old hoses from the plastic "Y" and discard old hoses.

28. The only hose remaining should be the barbed hose connected to the exercise arm.

29. The Flow Restrictor (Item # 100) must be installed onto the replacement hose with the In-line filter (Item # 97). Do not tighten set screw until steps 30 through 37 have been completed.

**NOTE:** Failure to install and properly adjust the Flow Restrictor can result in bodily harm.

30. Tape all the new hoses to the barbed hose with black electric tape. Try to keep the hoses and wires side by side in a flat position to prevent a large cluster. Extend your tape line 1-inch each way from the center to prevent hoses and wires from coming apart as you feed them through the frame.

31. Very carefully push wires and hoses into the top of the frame near (Item # 4), at the same time pull on the barbed hose at the bottom of the frame to aid in its movement.

32. Snap and secure rubber grommet into 1-inch hole on the frame.

33. Push wire and hose harness into grommet until taped area of harness is centered.

34. There should be enough slack at the top of the arm for the exercise arm to make a full stoke.

35. The end of the hoses should be pre-marked, follow tape markings on hoses to be connected.

36. Now you can tighten all hardware and secure the exercise arm.

37. Replace the 1-inch plastic plugs (Item # 48), be careful to position wires and hoses, so that they are free to move inside the frame.

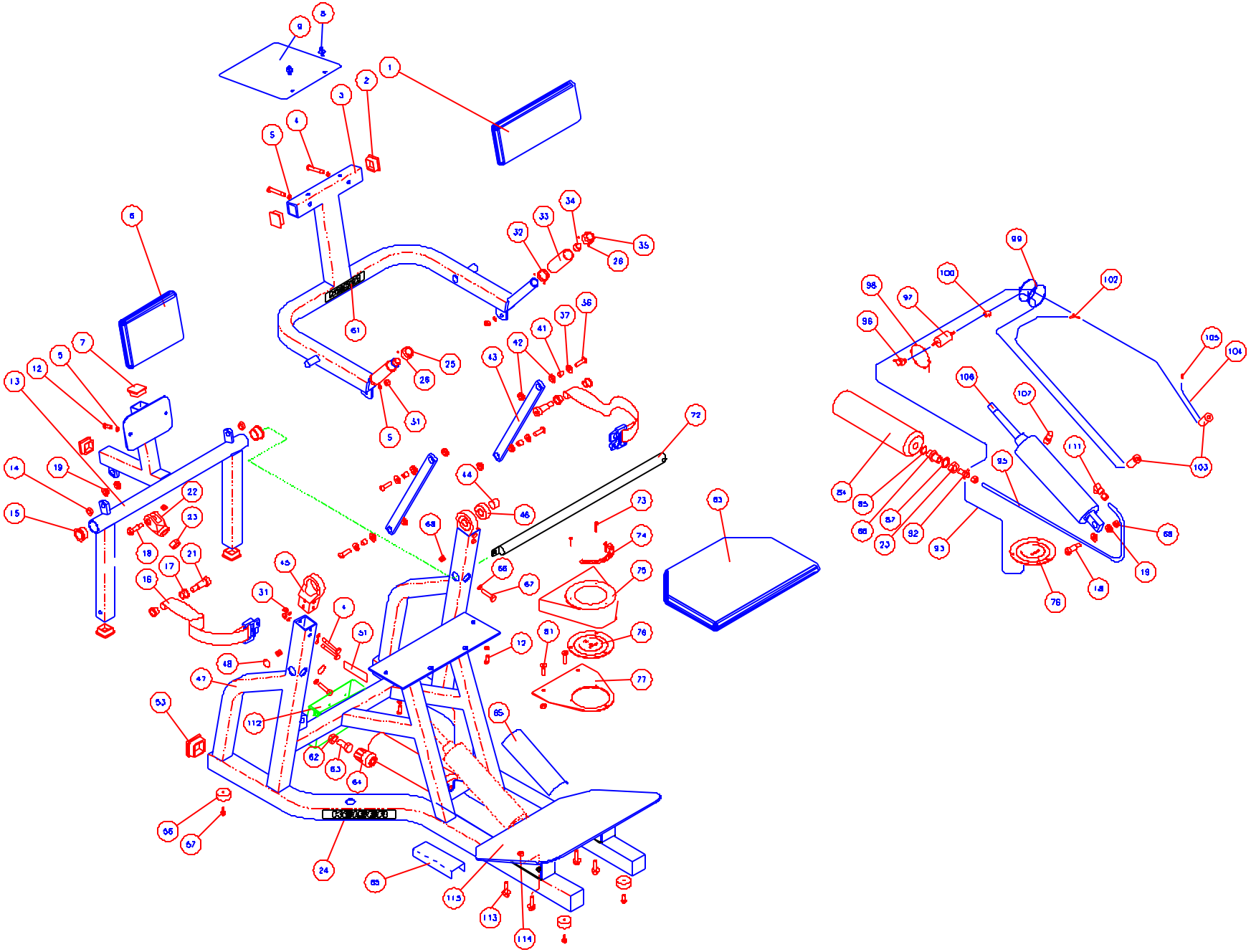
38. Depress the negative thumb button until the resistance displays zero. Lower the exercise arm to a fully reclined position.

39. Tighten the set screw on the Flow Restrictor (Item # 100) to prevent the exercise arm from rising to the starting position too rapidly.

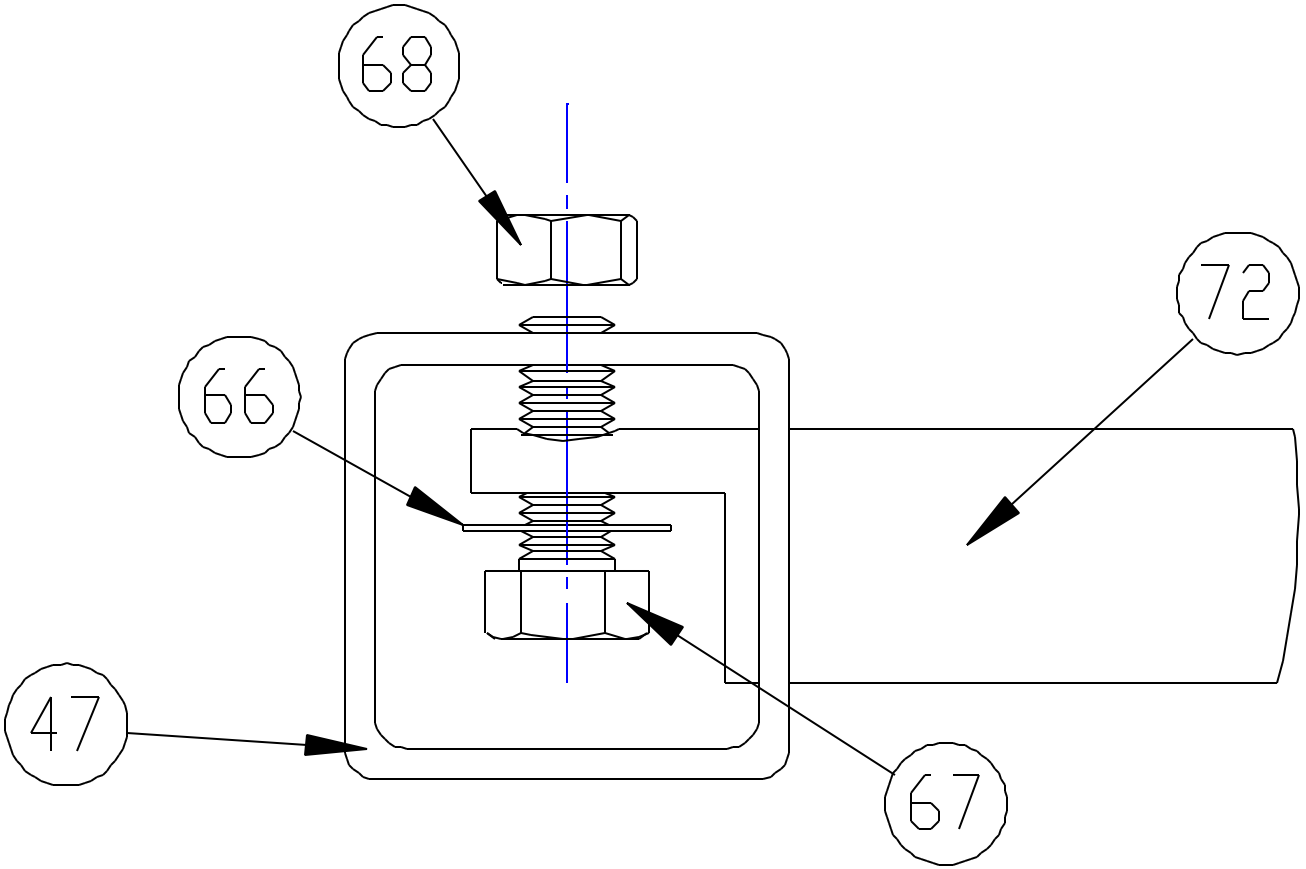
**NOTE:** Failure to properly adjust the Flow Restrictor can result in bodily harm.

40. Test the rate of return by depressing the positive thumb button until the exercise arm rises completely. Repeat steps 38-40 until the exercise arm rises safely.

***If you have any problems please call our Service Department (800) 888-7009***



# ***2821 EXERCISE ARM SHAFT ILLUSTRATION***




***FRONT/RIGHT OF MACHINE***

***TOP VIEW***

***NOTE: ITEM #67 IS BEING REPLACED WITH A 1-INCH BOLT.***