

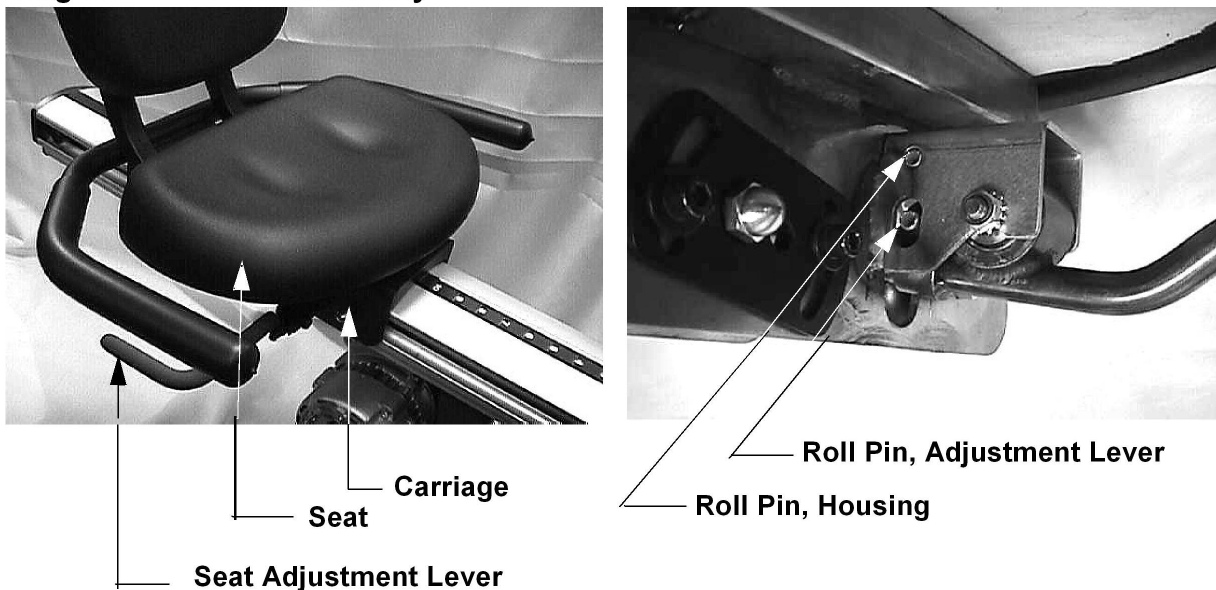
## Procedure 7.4 - Replacing All or Part of a Seat Carriage Assembly (Recumbent Cycle)

### Note:

The seat carriage assembly was modified on April 1, 2000. If you have a unit manufactured prior to April 1, 2000 and are experiencing a problem with the seat rocking, it is recommended that the seat carriage be upgraded by installing a 58012-101 seat carriage upgrade kit. The seat carriage and seat carriage parts described in this procedure refer to the seat carriage assembly manufactured starting April 1, 2000.

1. For C842 and C846 version 2 units, skip to step 15. For C846 version 1 units, continue with step 2.
2. Set the on/off switch in the off position.
3. The seat carriage assembly consists of the following: carriage, seat, wheels and seat adjustment assembly (See Diagram 7.4).

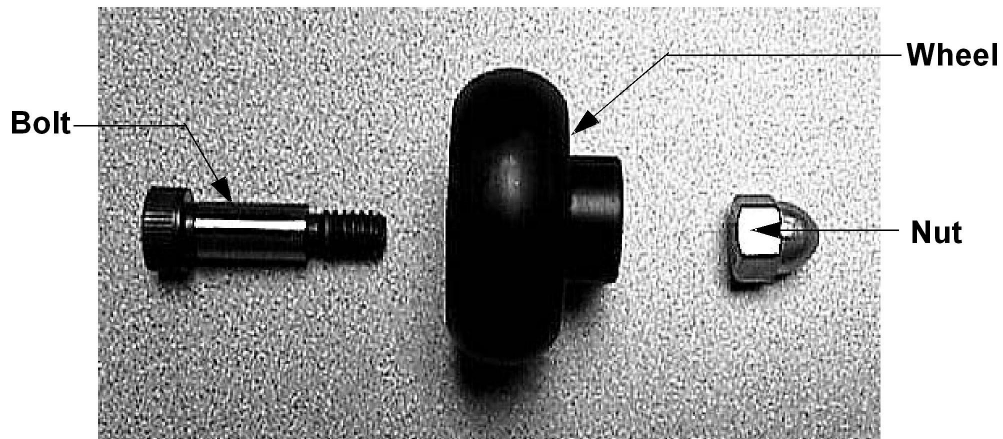
**Diagram 7.4 - Seat Assembly**



4. Remove the two seat stops (one each side) from the rear portion of the frame that the seat slides on. Remove the end cap from the frame. See Diagram 7.8.
5. Lift up on the seat adjustment lever and slide the seat assembly off of the rear of cycle's frame. Place the seat assembly upside down on a solid work surface.
6. If you are replacing the seat, remove the screws that fasten the seat to the carriage. Set the replacement seat on the carriage, hand start all of the seat mounting screws. Tighten all of the seat mounting screws.

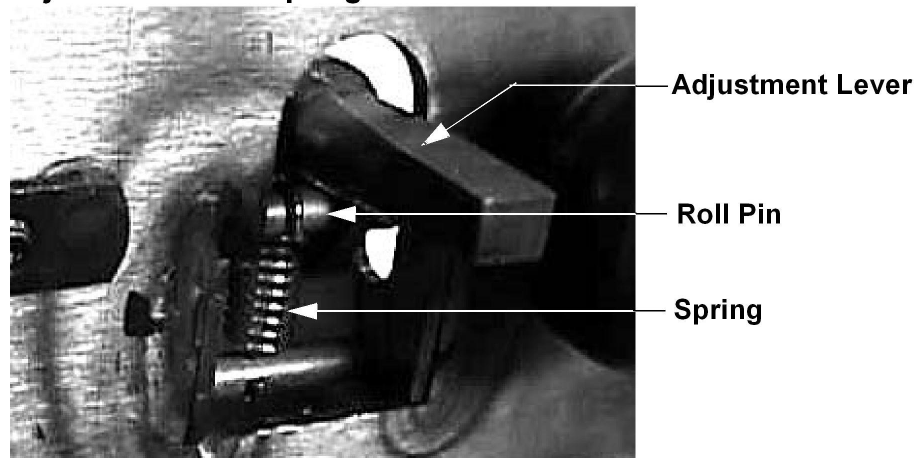
7. If you are replacing one or all of the seat wheels, hold the wheel bolt with an allen wrench and use a socket wrench to remove the nut from the wheel assembly. Repeat this procedure for each wheel being replaced. Slide the wheel bolt into the replacement wheel (See Diagram 7.5). Set the wheel and bolt in it's mounting position on the inside of the seat carriage. Thread the nut onto the wheel bolt. Hold the wheel bolt with an allen wrench and torque the wheel nut to 120 in/lb.

**Diagram 7.5 - Seat wheel Assembly**

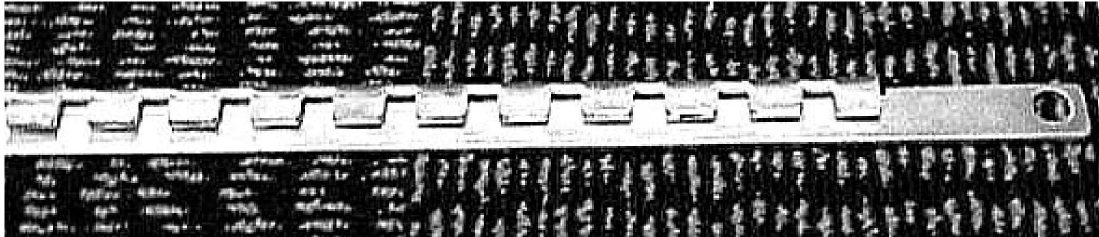


8. If you are replacing all or part of the seat adjustment assembly, gently tap the roll pin out of the adjustment lever (See Diagram 7.6). Loosen the nuts that fasten the seat adjustment lever into the seat adjustment housing, slide the seat adjustment lever out of the seat adjustment housing

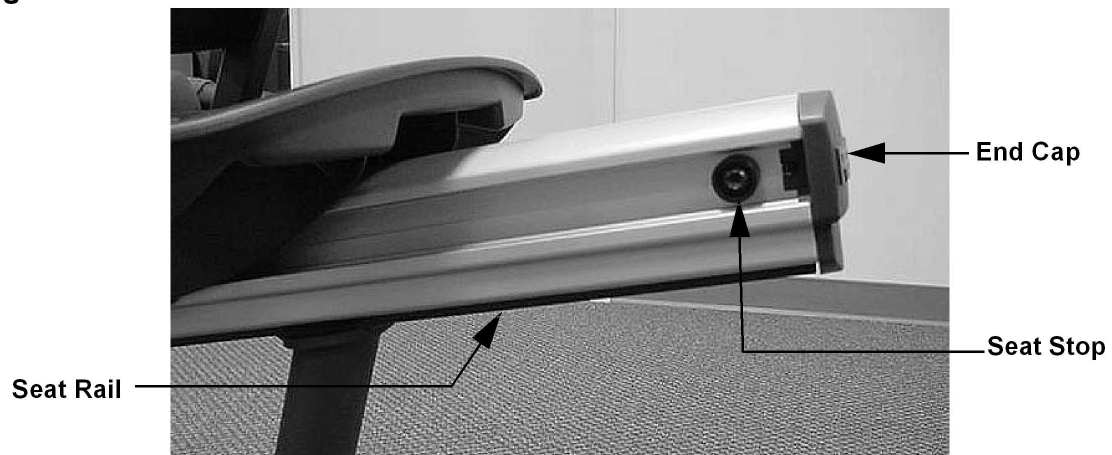
**Diagram 7.6 - Seat Adjust Lever and Spring**



9. Set the replacement adjustment lever in it's mounting position. Slide the roll pin into the housing and through the loop on the spring. Gently, tap the roll pin onto the housing so that the roll pin is flush with the housing.
10. Tighten the nuts that fasten the adjustment lever to the housing.

**Diagram 7.7 - Seat Guide**

11. Loosen the bolts that retains the front end of each of the seat guides to the cycle frame (See Diagram 7.7). Raise the rear of the seat guides and securely tighten the front bolts. The guide must be up as far as possible or the seat will not slide freely.
12. Slide the seat onto the cycle's frame. Slide the end cap onto the end of the frame. Slide both seat stop/bolts through end cap and the rear of the seat guide and thread them into the cycle's frame. Securely tighten the seat guide bolts.
13. Lift the seat adjustment lever and ensure that the seat freely travels throughout its full range and securely locks into position when the seat adjustment lever is released.
14. If the seat movement, in step 13, is too tight or there is excessive side to side wobble, adjust the seat per Procedure 5.3.
15. There is a hand held heart rate cable the connects the seat carriage to the seat rail. Care must be taken when removing the seat carriage to avoid damaging the hand held heart rate cable.
16. Move the seat to its most forward position. Remove the seat accessory tray by carefully spreading the tabs and sliding the tray off of the acorn nuts.

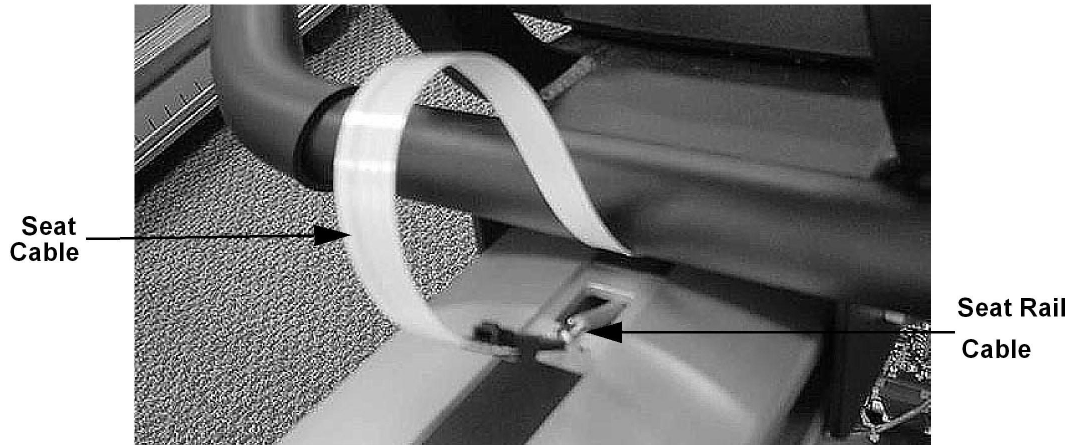
**Diagram 7.8 - Seat Rail**

17. Loosen but do not remove the two screws retaining the end cap. Remove the end cap. Remove both seat stops, one each side.
18. Locate the plate that covers the hand held heart rate cable, on the seat rail near the rear of

the seat. Remove the plate. The cable may be stuck to the plate with double sided tape.

19. Remove the two screws that fasten the plate to the seat rail. Extract enough cable from the seat rail to access the cable connectors. Carefully, pull all excess cable out from under the seat, so that it is looped behind the seat. See Diagram 7.9. Disconnect the two cables.

#### Diagram 7.9 - Hand Held Heart Rate Cable



20. Slide the seat rail cable back into the access hole. The seat carriage must travel over this cable, so it must be below the surface of the seat rail. Release the seat lever, hold the cable attached to the seat straight back from the seat as you slide the entire seat and seat carriage off of the rear of the seat rail. See Diagram 7.10.

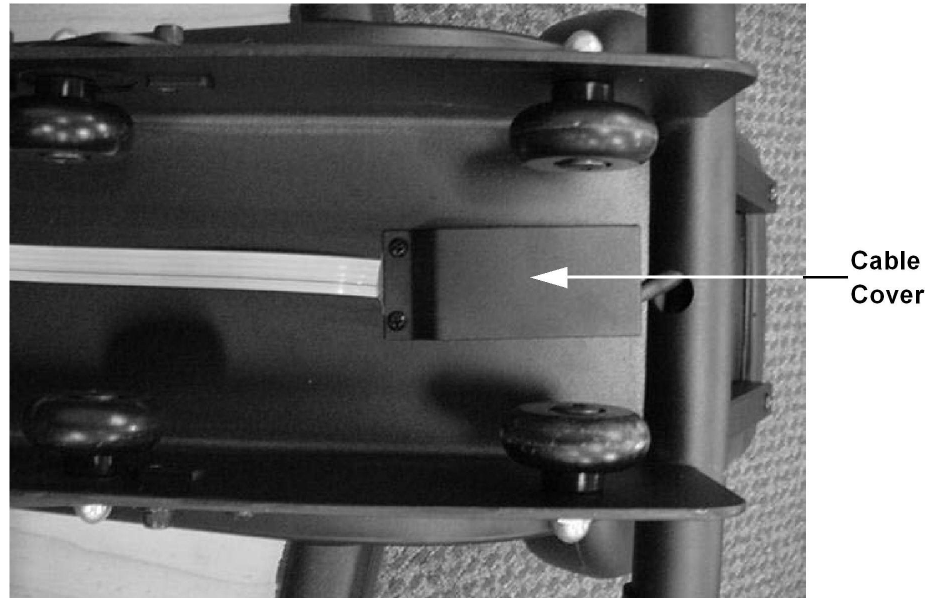
#### Diagram 7.10 - Hand Held Heart Rate Cable



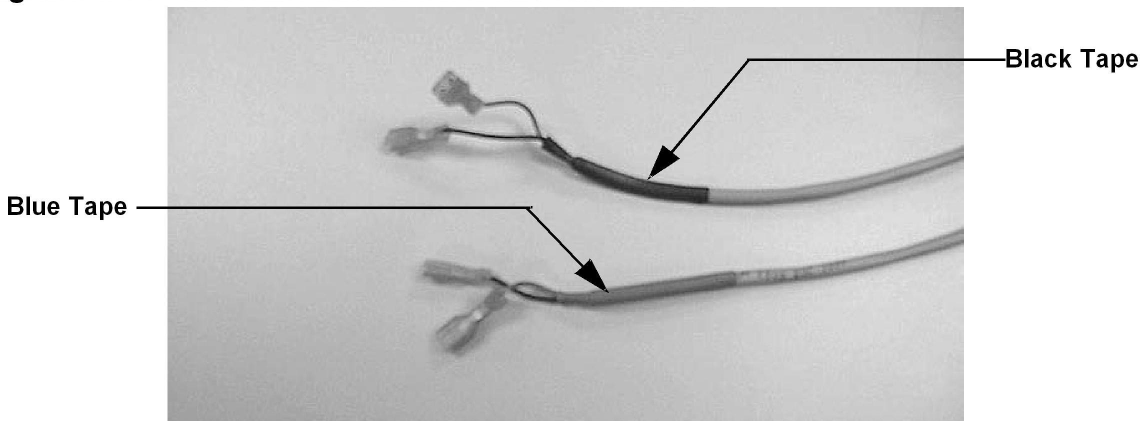
21. If you are performing maintenance on the seat wheels or seat lever perform the appropriate tasks between steps 6 and 11. Return to step 31. when the maintenance procedures are complete. If you are performing maintenance on the hand held heart rate cables in the seat assembly, continue with step 22.

22. Remove the plate that covers the hand held heart rate cable on the bottom of the seat. See Diagram 7.11. The cable may be stuck to the plate with double sided tape.

### Diagram 7.11 - Seat Bottom



23. Disconnect the external hand held heart rate cable from the internal hand held heart rate cable.
24. If only the external cable is being replaced, skip to step 29. If the internal cable is being replaced continue with step 25.
25. Remove the screws retaining the hand held heart rate contact plates from both the left and right seat handlebars. Disconnect the cable from all four hand held heart rate contact plates. Draw the internal cable out of the bottom of the seat.
26. feed the replacement internal hand held heart rate cable into the seat. The cable with the blue tape will feed into the right handlebar and the cable with the black tape will feed into the left handlebar. See Diagram 7.12.

**Diagram 7.12 - Internal Hand Held Heart Rate Cable**

27. Feed the wire ends out of the handlebars so that the black wire comes out of the top of the handlebars and the red wire comes out of the bottom of the handlebar.
28. Connect the the black wires to the hand held heart rate top contact plates and the red wires to the bottom contact plates. Fasten the hand held heart rate contact plates with the screws removed in step 25.
29. Connect the existing or replacement external hand held heart rate cable to the internal hand held heart rate cable. Feed the cable connectors into seat.
30. Replace the cover plate removed in step 22. Before replace the cover plate mounting screws, be sure that the cable is centered on the cover plate so that the cover plate mounting screws will not damage the external hand held heart rate cable.
31. With the seat cable extended to the rear of the seat, slide the seat onto the seat rail to its most forward position.
32. Extract the hand held heart rate cable from the seat rail and connect it to the the hand held heart rate seat cable. The cables should again look as they did in Diagram 7.9.
33. Slide the cable connectors back into the seat rail and replace the plate removed in step 18. Stick the plate to the double sided tape on the cable and fasten the plate to the seat rail with the screws previously removed.
34. Carefully feed all of the excess cable back under the seat.
35. Replace both seat stops. Replace the end cap.
36. If necessary, adjust the seat wheels per Procedure 5.3.