# NGS Troublshooter

# How to adjust the Smart Release™ mechanism

## *Tools needed: Smart Release™ Adjusting Tool Part #SP 71709*

## ! CAUTION !

**Use extreme care when servicing the Schwinn® Indoor cycling bike with the chain guard removed. If your fingers or other parts of the body come into contact with moving parts inside the bike, amputation or other serious injury may occur. Prior to commencing any maintenance on the chain drive, familiarize yourself with all moving parts. Never leave a Schwinn® bike unattended with the chain guard removed.**

Procedure

Only a mechanic trained to work on SCHWINN® IC bicycles should perform this procedure. Adjustments to release pressure of the patented Smart Release™ mechanism should only be performed to restore the mechanism to factory specifications. Never attempt to lock out the Smart Release™ mechanism by over tightening the adjustment plate. Adjust-ments to the Smart Release™ mechanism can be performed without disassembling the bike. The only tool necessary is the Smart Release™ adjusting tool (Part # 71709): It is advisable to have a 45 or 50 LB dumbbell available.

Prior to adjusting the release pressure of the mechanism it is recommended to ride the bike and purposely force the Smart Release™ mechanism to break free. Do this by pedaling up to a moderate cadence with little or no resistance on the flywheel, applying back pressure to the cranks sufficient to release the mechanism (ONLY PERFORM THIS PROCESS IF YOU ARE FAMILIAR WITH AND TRAINED TO WORK ON SCHWINN® SMART RELEASE™ MECHANISM).

Repeat this process several times to ensure that the mechanism is up to operating temperature and to feel the initial setting of the mechanism.

1. Insert the Smart Release™ adjusting tool from the front of the bike into the space between the chain guard and the flywheel.

2. Rotate the flywheel until the 7-mm-diameter hole in the Smart Release™ adjusting plate (#66 in the Fig. 1) is visible from the front of the bike.

3. Secure the flywheel from rotating by tightening the resistance mechanism until it provides significant force on theflywheel. In order to reproduce the factory setting in the field; place a 45- or 50 LB dumbbell on the right side pedal (chain guard side) with the crank in the 9 o'clock position. When properly adjusted the Smart Release™ mechanism should break free allowing the crank arm to rotate down under this amount of load.

4. With the dumbbell in place and the flywheel locked from rotating, Insert the tool so that the bend in the tool corre-sponds to the shape of the flywheel (see Fig. 2 ).

5. Carefully insert the pin of the tool into the hole of the Smart Release™ adjusting plate (#66). Hold the tool with your left-hand, hold the outer edge of the flywheel with your right hand.

6. To increase the release pressure (make the breakaway force higher) pull the handle of the tool UP toward the top of the flywheel (see Fig. 3).

7. Only small movements in the adjusting ring are necessary to effect the release pressure, generally no more than 45– 50 degrees movement of the tool handle are required for proper adjustment of the release pressure.

8. To decrease the release pressure (make the breakaway force lower), push the handle of the adjusting tool DOWN toward the bottom of the flywheel (see Fig. 3).

9. Once the proper tension has been achieved, the technician should test ride the bike to ensure the factory specified resistance has been achieved.

10. Attempts to over tighten the Smart Release™ mechanism can result in damage to the pin of the Smart Release™ adjusting tool, adjusting plate #66 or the conical spring #64. The adjustable Smart Release™ mechanism is NOT designed to be locked up completely. DO NOT ATTEMPT TO TIGHTEN THE MECHANISM BEYOND FACTORY SPECIFIED SETTINGS