

TECHNICAL SERVICE BULLETIN

NSS Enterprises, Inc.



Please post for your Service Department to see

To: NSS Distributors & Service Centers
Date: December 13, 2005
Product: Champ Series
Subject: Brush and Squeegee Actuator Adjustment Instructions

PRODUCT IMPROVEMENT

Revised Adjustment Instructions

Original Release: April 15, 2003 Vol. 04.03 No. 76.19

NSS has new parts available to improve the service and repair of the brush and squeegee lift actuators for the Champ and Wrangler 2730/3330 machines.

First, the actuator setting instructions, which outline how to adjust the extension and retraction settings for the actuator, have been updated to include the specific settings for all different applications. These instructions will be included with any order of the actuator assembly **7690549**. We have attached a copy of these instructions to this memo for your records. You may order additional copies of these instructions individually if needed as part number **7692091**.

Also, the actuator's internal limit switches are now available for service replacement. If an actuator is out of adjustment for any reason, these limit switches will be damaged and the actuator will not operate. Prior to the availability of these switches, the only repair solution was actuator replacement. The part number for one replacement limit switch is **7692201**. One or both of the switches may need to be replaced. If either or both of the switches are replaced, please refer to these instructions to verify the correct setting of actuator.

**If you have questions please contact:
NSS Technical Services 800-261-3499**



ACTUATOR SETTING INSTRUCTIONS

Champ Series

Initial Actuator Adjustment Procedures

Replacement actuators must be adjusted prior to installation. Actuators have two limit switches. One limit switch controls the extended length and one controls the retracted length. The actuator must **not** be at the end of its travel when adjusting the settings. Damage to the limit switches will occur. Limit switches on replacement actuators are preset at the factory close to the maximum and minimum stroke available and therefore, **require adjustment prior to installation.**

To extend the actuator, connect the red actuator wire terminal to battery positive and yellow actuator wire terminal to battery negative. To retract the actuator, connect yellow actuator wire terminal to battery positive and blue actuator wire terminal to battery negative. Adjust the limit settings with a 7/32" socket; **remember not to be at the end of the travel.** The measurements listed below are approximate settings and should be made before connecting the actuator to the brush deck or squeegee lift cable.

Champ 29 Initial Settings

Brush Actuator

- Extend 4 5/8" – 4 3/4"
- Retract 1 3/8" – 1 1/2"

Squeegee Actuator

- Extend 5 3/8" – 5 1/2"
- Retract 2 7/16" – 2 1/2"

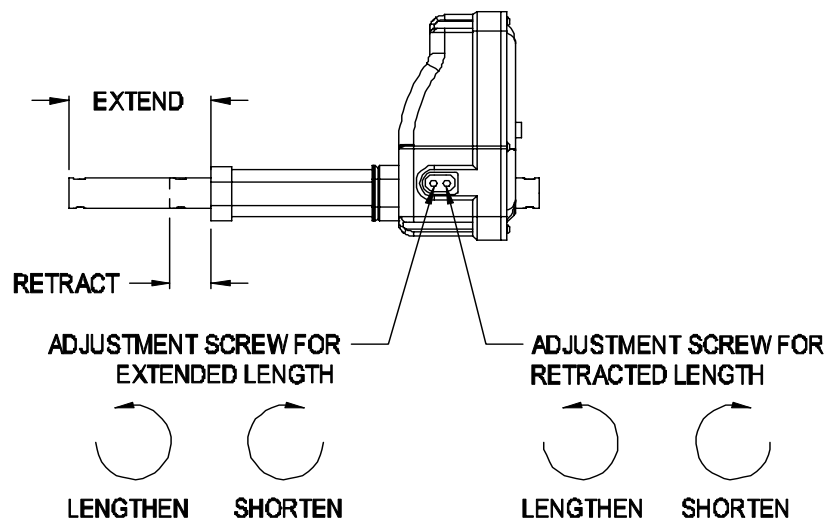
Champ 33 - 35 Initial Settings

Brush Actuator

- Extend 5 3/8" – 5 1/2"
- Retract 1 3/8" – 1 1/2"

Squeegee Actuator

- Extend 5 1/8" – 5 1/4"
- Retract 2 1/2" – 2 5/8"

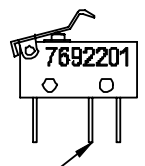


Final Actuator Adjustment Procedures

The *brush deck* should come up snug to the bottom of the frame and travel one halfway down the slot on the brush deck when brushes are in operation. For the brush lift actuator, remove the rubber plug (located in the front on the brush lift actuator) covering the adjustment screws. Use the machine's emergency stop switch or key switch to stop the actuator so it is not at either end of its travel. The middle is the best position. After the actuator is set, remember to replace the rubber plug.

The *squeegee* should be left a little loose so it can still swing to the side in the up position and have the top of the mounting area of the squeegee bracket 1 3/4 inch from the floor in the down position (with no squeegee on it). For the squeegee lift actuator, simply remove the plug from the bottom side of the actuator. Use the machine's emergency stop switch or key switch to stop the actuator so it is not at either the end of its travel. The middle is the best position. After the actuator is set, remember to replace the rubber plug.

Note: The diagram on the plug will help determine which direction to turn the screw. The shape of the plug will help to determine which screw to turn.



If replacing limit switch
do NOT use this terminal

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