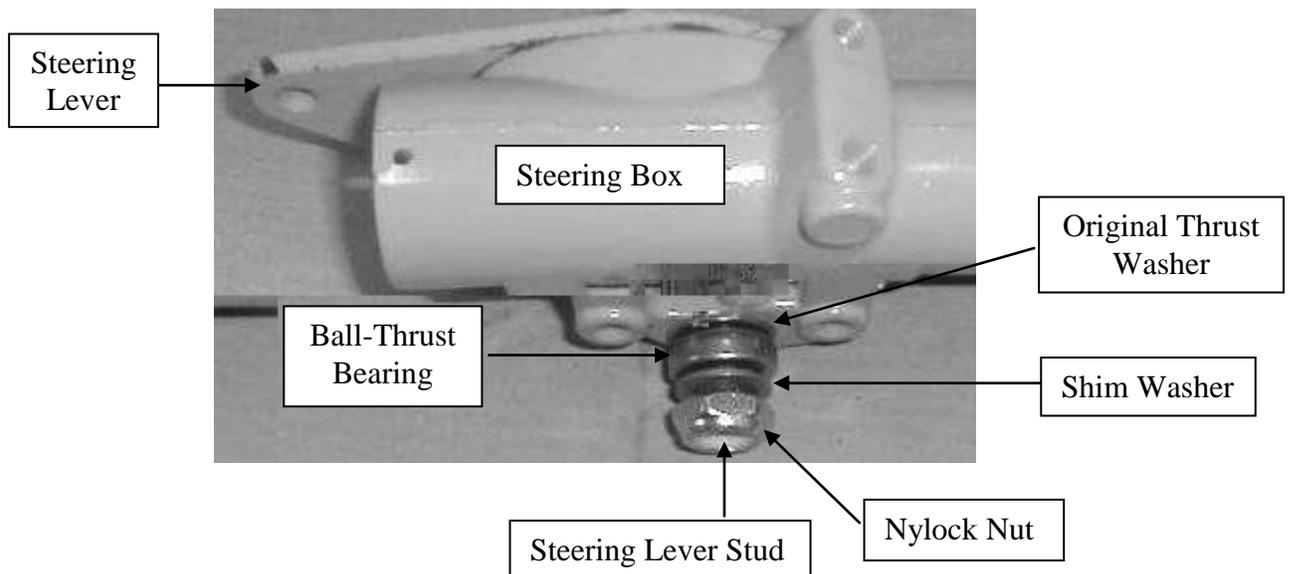


KIRK ENGINES, INC.

The following instructions are for the installation of the Super Steering Upgrade Kit for International Harvester-made Cub Cadet garden tractors.

To get proper life and functionality from this device, it is important that these instructions be followed explicitly. If condition of internal components in steering box is questionable (i.e., excessive slop or binding) this modification will be of no benefit. Make certain that all rod ends and front wheel spindles are in good condition before performing this upgrade. Refer to the picture below for component names and location. This upgrade may be performed with steering box installed in tractor.



- 1) Clean exterior of steering box housing thoroughly.
- 2) Remove existing jam nut, adjusting nut, and thrust washer from steering lever stud (15/16 wrench required).
- 3) Clean stud threads, washer, and washer seating surface of old grease and dirt.
- 4) Slide original thrust washer over steering lever stud.
- 5) Pack the NICE 605 ball-thrust bearing with clean grease of the same grade used to lubricate the fittings on your tractor.
- 6) Slide the ball-thrust bearing onto steering lever stud with bearing nomenclature (lettering) facing outward (away from the steering box).

- 7) Slide the shim washer onto steering lever stud to rest against ball-thrust bearing surface.
- 8) Thread the Nylock nut onto steering lever stud such that it just comes to rest against the shim washer (15/16 wrench required).
- 9) Carefully and slowly tighten the Nylock nut until all visible clearance and endplay is taken out of steering lever. **Do not over tighten the Nylock nut as damage to the thrust bearing may result!** Have an assistant rock the steering wheel right to left while observing motion of the steering lever. Lever should move rotationally without any observable endplay or rocking.
- 10) As a final check, turn steering wheel fully from left to right (stop-to-stop) position. No binding or change in resistance should be felt. If so, back the Nylock nut out about 1/8 turn and repeat test.
- 11) Test drive tractor. A noticeable reduction in steering effort should be immediately evident. No further adjustments should be necessary.

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