

TORO®

MODEL NO. 04452 — 50001 & UP

**INSTALLATION
INSTRUCTIONS****DIRECT SUSPENSION PULL FRAME**

GREENSMaster® 300

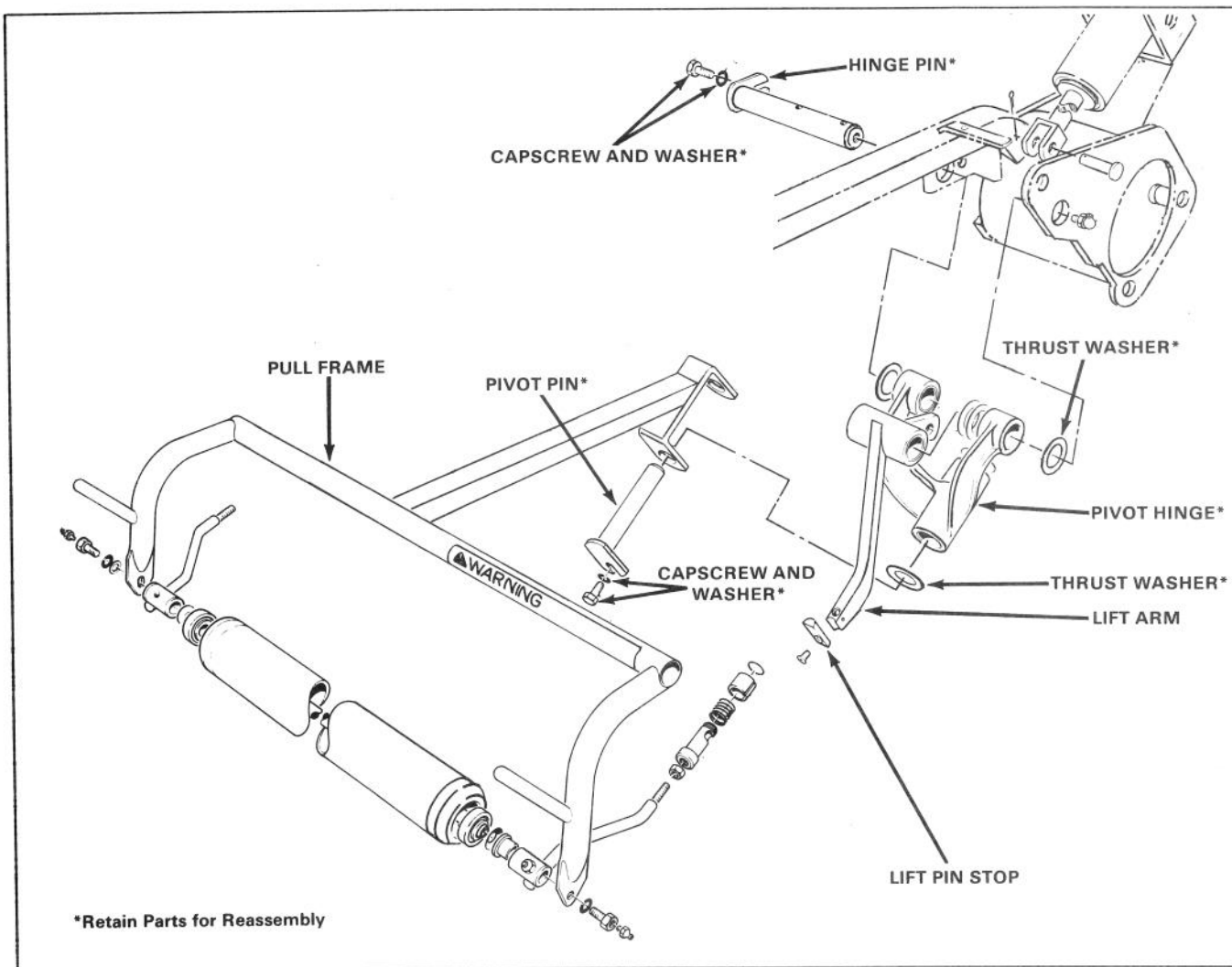


Figure 1

DISASSEMBLY (Fig. 1)

1. Lower the cutting units and disconnect the pull rods from each end of the cutting units.
2. Loosen mount nuts and remove reel drive motors. Cover motors with a plastic bag and cover bearing housing of each cutting unit.
3. Roll the cutting unit forward off the lift arm and slide it out from beneath the pull frame.
4. Locate the capscrew at the base of the rear of the pull frame, which secures the pull frame pivot pin and remove it.

5. Slide the pivot pin out of frame, disconnecting pull frame from traction unit. Retain capscrew, lockwasher, and thrust washers for use when re-assembling new parts.

6. Remove cotter pin and clevis pin securing hydraulic cylinders to right and left lift arms. Remove capscrew, lockwasher, and washer to disconnect center hydraulic cylinder from lift arm.

7. Locate and remove capscrew securing pivot hinge and lift arm hinge pin to frame.

8. Slide the hinge pin out of frame, disconnecting pivot hinge and lift arm from traction unit. Retain capscrew, lockwasher, and thrust washers for use when reassembling new parts.

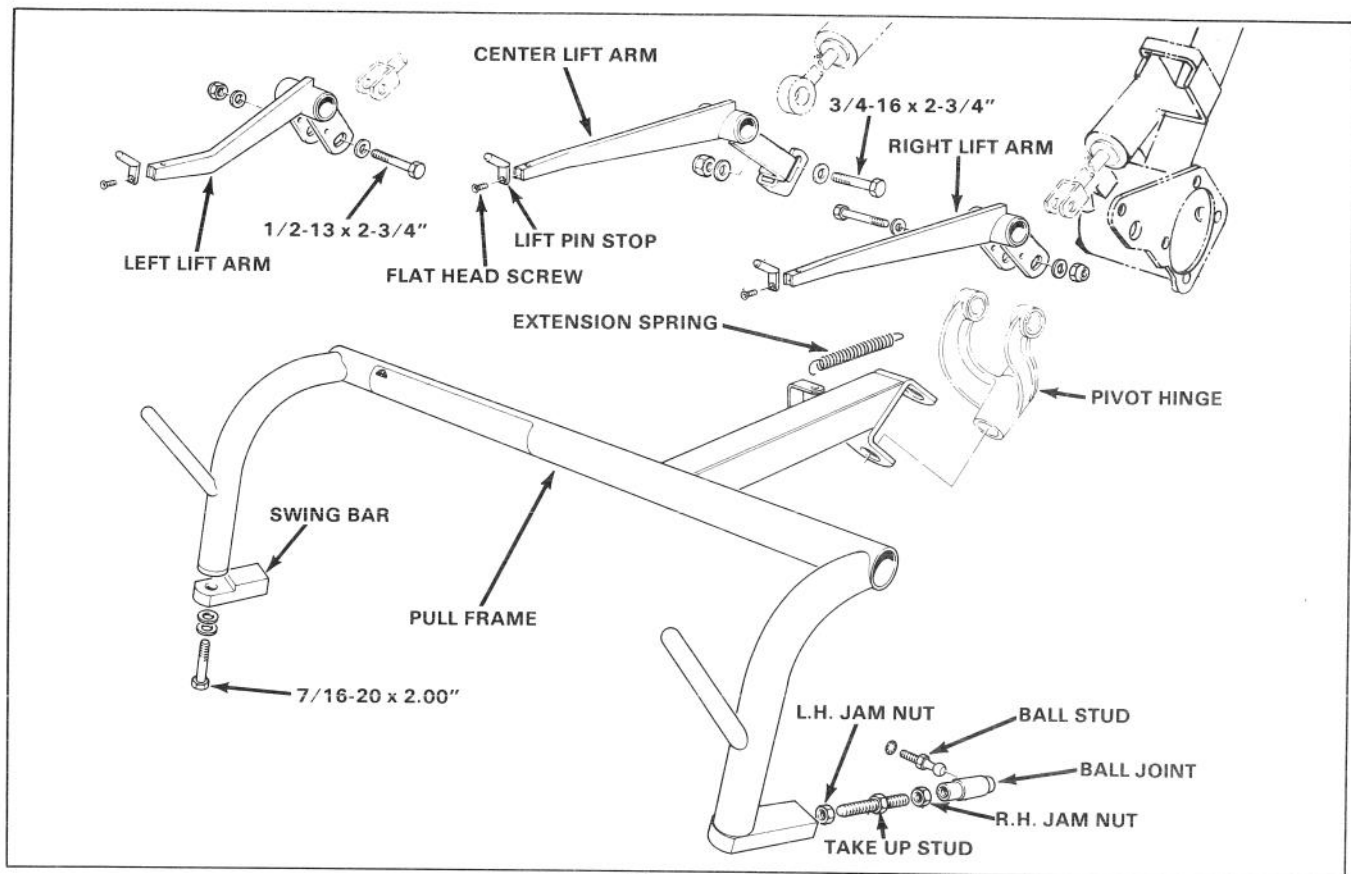


Figure 2

ASSEMBLY (Fig. 2)

1. Secure a lift pin stop to each lift arm with a flat head socket screw.
2. Install lift arm and pivot hinge to traction unit frame with hinge pin and thrust washers previously removed. Use thrust washers only as needed to remove any play in assembled parts. See Fig. 2 for lift arm identification.
3. Secure pivot hinge to frame with capscrew and lockwasher.
4. Secure hydraulic cylinders to left and right lift arms with 1/2-13 x 2-3/4" lg. capscrews, (2) 13/32" I.D. washers and locknuts. Secure center cylinder to lift arm with 3/4-16 x 2-3/4" lg. capscrew, (2) 13/16" I.D. washers and locknut.
5. Loosely install swing bar to right leg of each pull frame with a 7/16-20 x 2" lg. capscrew and (2) 15/32" I.D. washers.
6. Loosely thread a right and left hand jam nut, evenly onto appropriate ends of take up stud. Thread ball joint (right hand thread) onto appropriate end of take up stud. Thread opposite end of take up stud into bottom of pull frame. Repeat assembly on other end of pull frame and on remaining pull frames, but do not tighten.
7. Mount pull frame to pivot hinge with pivot pin and thrust washers previously removed. Use thrust washers only as needed to remove any play in assembled parts.

Note: Right and center pull frames are alike.

8. Secure the pivot pin with the capscrew and lockwasher previously removed.
9. Hook an extension spring to lift arm and pull frame.
10. Remove ball stud from each side of cutting unit and install new larger ball studs and lockwashers.
11. Slide the cutting units under the pull frames and position the hoop on the top of cutting units over the lift arms.
12. Remove the protective covers from the cutting units and reel drive motor shafts. Coat the spline shaft of the motor with clean grease and install the motor by rotating the motor clockwise so the motor flanges clear the studs. Rotate the motor counter-clockwise until the flanges are encircling the studs and tighten the mounting nuts. Ensure the washers are against the nuts.
13. Slide the sleeve back on the ball joint so the socket fits over the cutting unit ball stud. Rotate the take up stud in or out if ball stud and ball joint do not align. Tighten capscrew securing swing bar to right leg of pull frame.
14. Mount the baskets on the pull frames, and adjust the take up studs until there is 1/4" to 3/8" clearance between the front lip of the basket and the reel blades. Be sure the basket lips are equi-distant from the reel blades all across each reel. If the basket is too close to the reel, it is possible the reel might contact the basket when raised off the ground.
15. Tighten the jam nuts on take up studs to secure adjustment.