

**TORO**

MODEL NO. 03433

**INSTALLATION  
INSTRUCTIONS****GRASS COLLECTION SYSTEM  
REELMASTER® 216****TENSION COUNTERBALANCE SPRINGS**

**IMPORTANT:** The additional weight of the baskets installed on the cutting units requires a change in counterbalance.

**WARNING**

Use caution when tensioning springs as they are under heavy load.

Steps 1 thru 3, in this section, pertain to traction units with serial numbers 80001 thru 29999.

1. Remove capscrews securing counterbalance arms (Fig. 1). Clevis pin and hairpin cotter retains arm in position. Insert a 3/4" socket with long extension bar onto counterbalance arm pivot hex (Fig. 1). Remove hairpin cotter and clevis pin once spring pressure is removed from the arm. Rotate counterbalance arm down into relaxed position. Do this on (3) cutting units. Refer to Operator's Manual for further safety instructions.

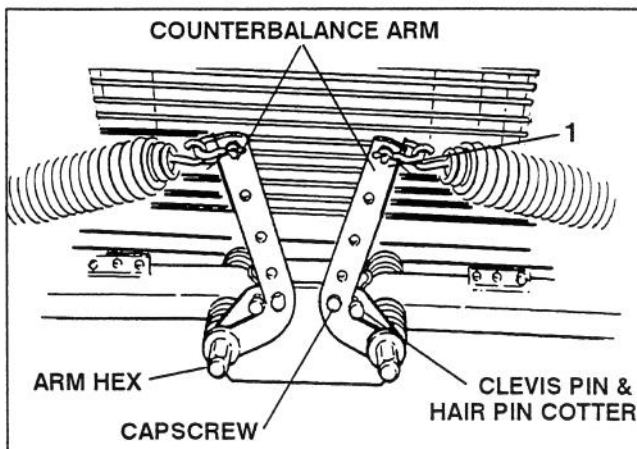


Figure 1

2. Pivot counterbalance arm back and install clevis pin in the top hole of the arm (Fig. 1). Reinstall hairpin cotter.

3. Reposition counterbalance arm using extension arm and socket. Reinstall clevis pin, hairpin cotter and capscrew to lock arms in position.

Steps 4 and 5, in this section, pertain to traction units with serial numbers 30001 & Up.

4. Remove hairpin cotter and clevis pin securing spring shackle to counterbalance arm (Fig. 2). Do not remove other clevis pin.

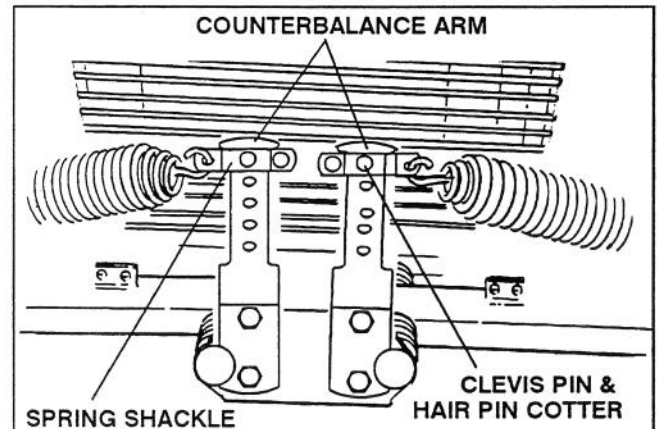


Figure 2

5. Move shackle up on counterbalance arm, until aligned with top hole of arm. Reinstall clevis pin and hairpin cotter.

**INSTALL FRONT CUTTING SHIELDS**

**Note:** To change the front cutting units to throw grass clippings forward, the rear shields must be lowered (Step 4). The rear cutting unit throw remains the same.

1. Remove the top shield from the front two cutting units. The shields removed may be saved for future use if the basket assemblies are ever removed (Fig. 3).

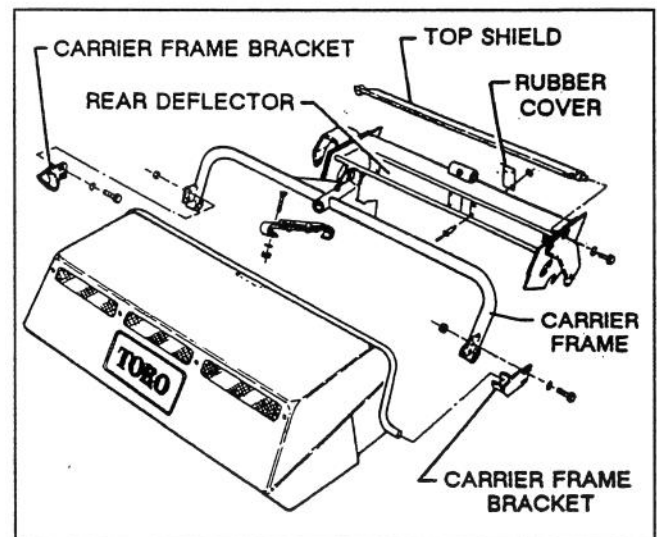


Figure 3

2. Loosen the side plate bolts holding the rear deflectors in position and rotate the rear deflector up to install rubber, middle and end covers.

3. Using the pop rivets and backup washers, supplied with kit, mount the covers to the outside of the deflectors. Rivet heads to be positioned toward the reel (Fig. 3).

4. Rotate the rear deflector all the way down and tighten the side plate bolts to hold the rear deflector in position.

5. Install the new shield on top of the front two cutting units (Fig. 3). Use the original side plate mounting bolts but reverse and thread into deflector with the lockwasher under the head of the bolt (Fig. 3).

6. As an initial adjustment, position the new top shields at about 30° for best direction into the front baskets. Readjust shield to grass conditions.

7. Using dimensions shown in figure 4, locate and affix a danger decal to each front shield.

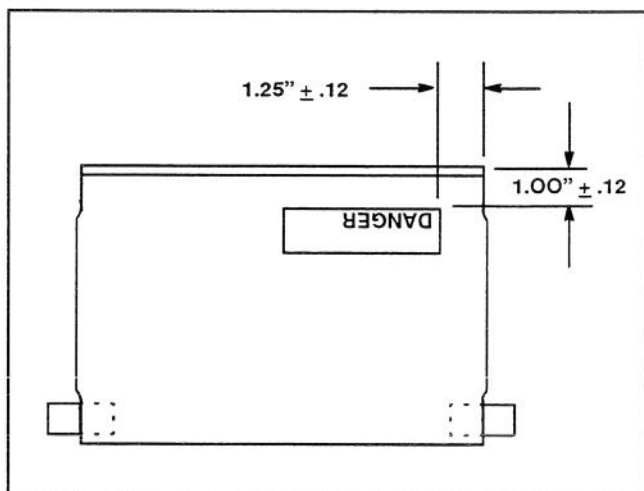


Figure 4

## MOUNT BASKET BRACKETS

**NOTE:** The rear carrier frame brackets and hanger bracket are different then the front two baskets.

**Step 1, in this section, pertain to traction units with serial numbers 80001 thru 29999.**

1. Mount the **longer**, carrier frame brackets to all (3) carrier frames with 3/8-16 x 1-1/4" lg. capscrews and flatwashers, locating brackets as shown in figures 3 & 5. Capscrew heads to be positioned toward center of cutting units.

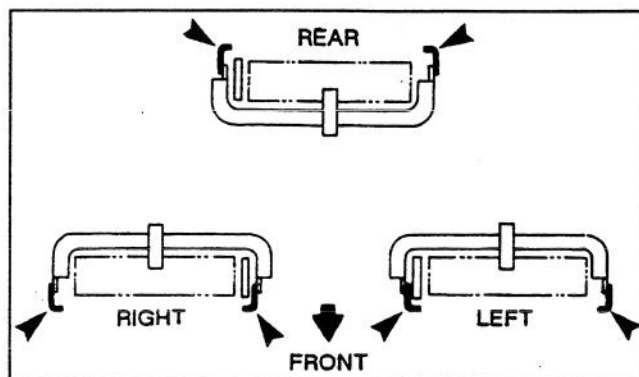


Figure 5

**Steps 2 and 3, in this section, pertain to traction units with serial numbers 30001 & Up.**

2. Loosely mount basket mounts to all (3) carrier frames with U-bolts and locknuts. Position basket mounts on front sides of front carrier frames and on rear sides of rear carrier frames, as shown in figures 5 & 9. Slide basket mounts down until they bottom out on end of carrier frame, then tighten locknuts.

3. Mount the **shorter**, carrier frame brackets to the basket mounts with 3/8-16 x 1-1/2" lg. capscrews and flatwashers, locating brackets as shown in figure 6. Install a spacer between carrier frame bracket and basket mount when mounting outboard ends of front carrier frames. Capscrew heads to be positioned toward center of cutting units.

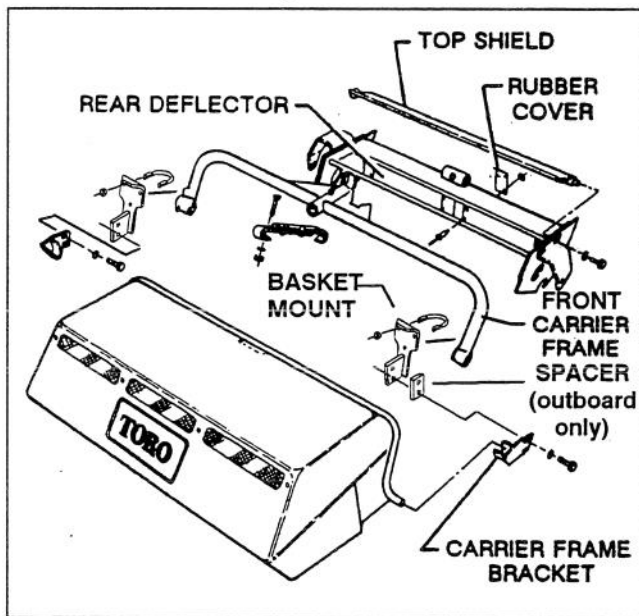


Figure 6

## ADJUST CARRIER FRAME BRACKETS

1. Adjust brackets so that the basket support rods fall easily into the brackets. Install front and rear baskets.

**REAR CARRIER FRAME:** Adjust the brackets so that the bottom of the lower basket flap contacts the top of the roller.

**FRONT CARRIER FRAME:** Adjust the brackets far enough ahead so that the lip of the basket does not contact the reel during operation.

## INSTALL REAR BASKET FLAP

1. Remove rear basket assembly.
2. Loosen cutting unit rear deflector mounting capscrews and pivot deflector upward to gain access (Fig. 7).

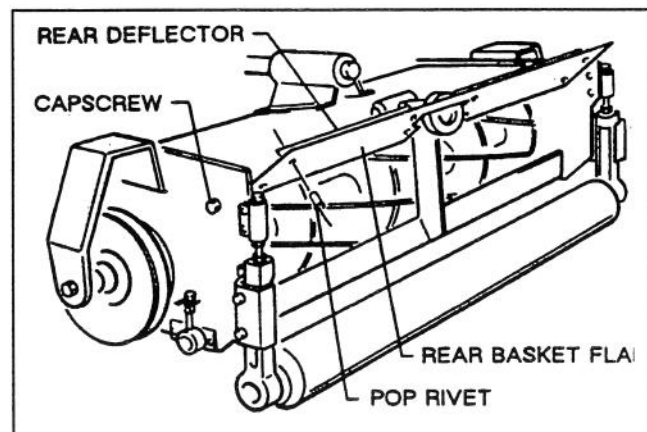


Figure 7

3. Place rear basket flap under rear deflector and fasten with (8) pop rivets, supplied in kit (Fig. 5). Head of pop rivet to be positioned on under side of rear basket flap (Fig. 5).
4. Initially, adjust rear deflector 30° up from ground. Tighten rear deflector capscrews.

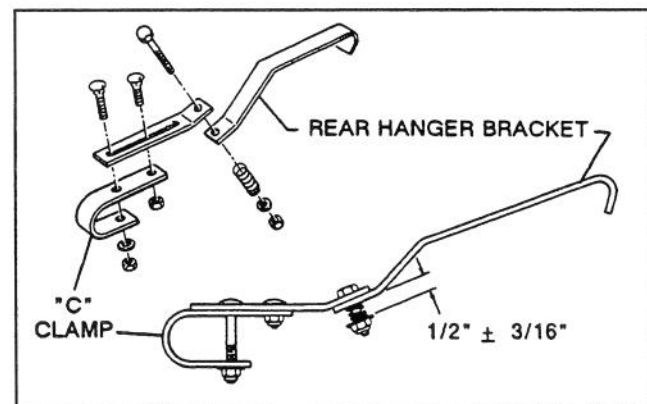


Figure 8

## INSTALL SLIDING HANGER BRACKETS

1. Assemble rear hanger bracket (Fig. 8).

**Note:** When assembling rear hanger bracket for installation on traction units with serial numbers 30001 & Up, use rear hanger bracket curve and bend in end.

2. Position the rear hanger bracket "C" shaped clamp over the rear carrier frame (Fig. 9 & 10) on the right hand side of the carrier frame pivot. Secure 1/8" from the outside of the pivot tube with capscrews, flatwashers and locknuts. Position the other end of hanger bracket in basket cutout and hook over the basket support rod.

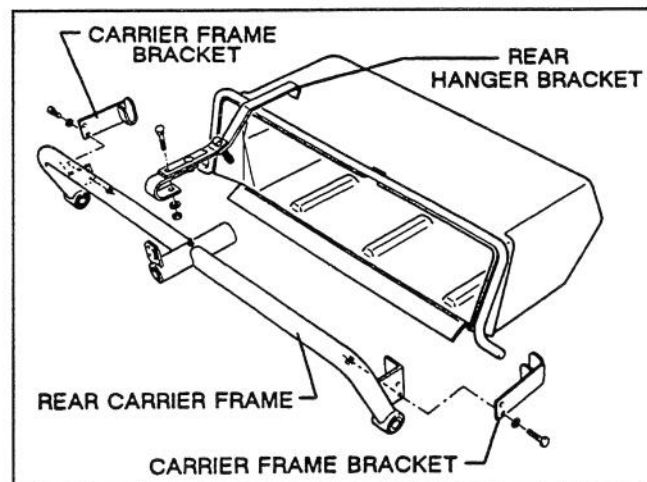


Figure 9

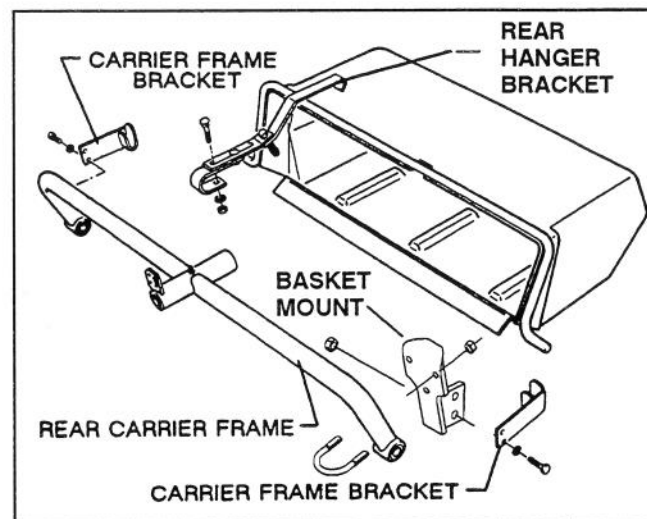


Figure 10

3. Adjust the sliding hanger bracket so the rear basket is parallel with the ground and tighten the assembly bolts.

4. With the front baskets installed, latch the hanger assemblies over the notch on the carrier frame.

5. Adjust the sliding hanger so that the bottom of the front baskets are parallel with the ground and there is no contact between the lip of the basket and the reel during operation. Tighten front hanger assembly bolts,

## ADD REAR BALLAST

This unit complies with ANSI B71 .4-1984 Standard when equipped with the following rear ballast.

- a) Calcium Chloride in rear tire.
- b) Rear Weight, TORO Part No. 62-5140
- c) Rear Weight, TORO Part No. 62-7470

**IMPORTANT:** If a puncture occurs in a tire with calcium chloride, remove unit from turf area as quickly as possible. To prevent possible damage to turf, immediately soak affected area with water.

