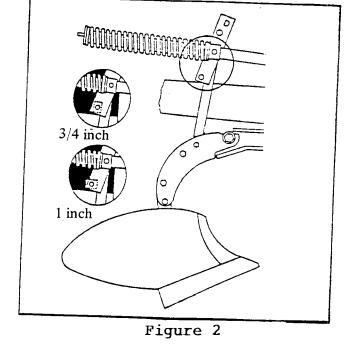


Figure 1



### AUTOMATIC RESET BEAM

Automatic reset beam uses springs to automatically return bottom assembly to operating position after contacting obstacle. Stopping operation is not necessary unless object lodges in plow or adjustment is necessary.



CAUTION: DO NOT USE HANDS OR FEET TO DISLODGE OBSTRUCTIONS HOLD-ING PLOW BOTTOMS IN TRIPPED POSITION. STAND CLEAR PLOW BOTTOM AND USE APPRO-PRIATE SAFETY AID TO DIS-LODGE OBSTRUCTION.

Reset can be adjusted in two ways, by spring tension and repositioning stop block.

Spring tension is originally adjusted at 25 inches overall spring length for average soil conditions. Loosen adjusting nuts when bottom does not trip after hitting obstacle, tends to ride-over or lift plow out of ground. Tighten adjusting nuts when bottoms do not reset or trips too frequently.

Stop block can be repositioned for further adjustment. Original position setting is for average trip resistance. To adjust, place bolt in shear bolt hole. Loosen spring nuts to release all spring tension. Remove pin from push link end. Reposition stop block. Maximum tripping resistance setting is 3/4 inch position. Average tripping resistance setting is one inch position. Screw push link until end contacts stop block and pin can be inserted. Replace and secure pin. Retighten spring nuts to obtain 25 inches overall spring length. Remove shear bolt. Check pivot bolt to provide a snug non-binding fit between beam and gusset plates.

### SHEAR BOLT BEAM

When obstacle is struck, shear bolt breaks, allowing bottom assembly to pivot back and up.

To reset, back up a few feet and allow bottom assembly to pivot back into working position. Install new shear bolt. Check pivot bolt to provide a snug non-binding fit between beam and gusset plates.

Always clear plow over obstruction before continuing operation.

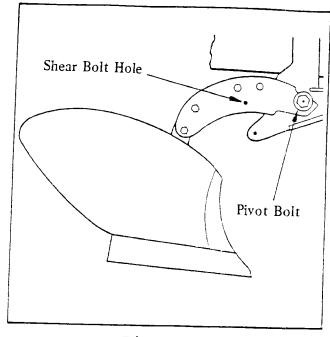
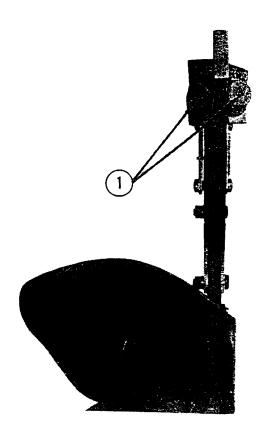


Figure 3



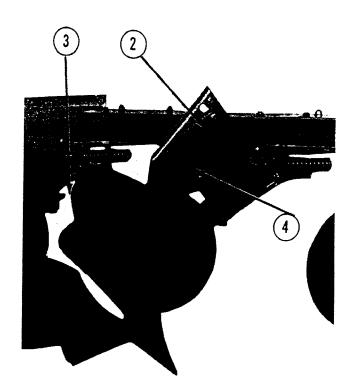


FIGURE 4

FIGURE 5

#### Cushioned Trip Beams

The cushioned trip beams was designed to prevent damage to the bottom or share if it strikes an obstruction.

The resistance to tripping will have to be adjusted in the field. Adjust the bolts (1) fig. (4), so the springs measure  $6-1/4^{11}$  long for proper tension see fig. (6).

If the plow trips excessively or too easily, tighten springs enough for soil conditions.

If bent shares result, loosen springs slightly.

To reset the cushioned trip after a bottom has been tripped, back the tractor and at the same time raise the plow, the spring action will automatically reset the bottoms.

To facilitate changing shares, raise the plow out of ground. Trip the bottom by pulling the roller straps (2) fig. (5) to the rear, at the same time, lift the bottom upwards with the moldboard brace (3), secure the bottom in the raised position by using a screw driver, or drift pin at point (4).

After any adjustment on the trip beam, be sure its properly lubricated.

NOTE: Do not tighten pivot bolt too tight to insure normal tripping action. If the cushion trip does not reset properly, check the trip roller slots for dirt accumulation.

SAFETY FIRST - DO NOT work or stand in front of Bottom or Beam when in tripped position.

DO NOT try to clean the spring trip notches with Fingers.

Clean notches in trip whenever changing shares.

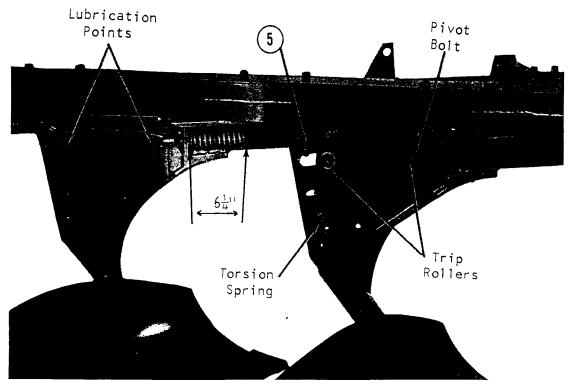


FIGURE 6

If excessive wear occurs between gusset plate and beam, shim washers can be removed between bushing and gusset plate at (point 5 - fig. 6), also tighten pivot bolt to reduce any slack.

CAUTION: CHECK THE PIVOT BOLT, ROLLER STRAP BOLTS AND UPPER REAR BOLT ON THE GUSSET PLATES EACH DAY FOR TIGHTNESS.

MAKE SURE THE PIVOT BOLT PERMITS THE BOTTOMS TO TRIP.

# A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT

## Safety-Trip Standards

A

CAUTION: Standards can strike persons too close during tripping or resetting. Stay clear of standards when plowing. Stay clear of reset path of standard when it is in partially tripped position.

The safety-trip standard trip load is adjustable by removing shims to increase trip load or adding shims to decrease trip load.

The shims are located inside the toggle link under the spring link.

To reset the standard after it has tripped, raise the plow into transport position and the standard will return to working position. When the standard is fully tripped, the share point will raise 430 mm (16-15/16 inches) above the bottom of the furrow.

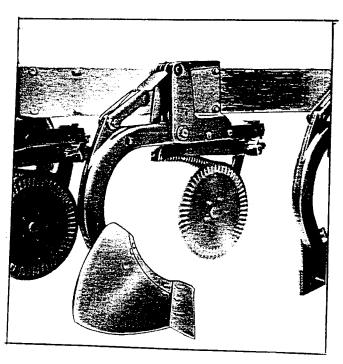


Figure 7

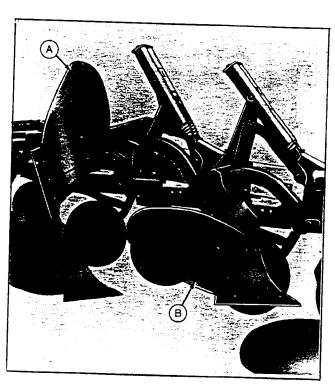


Figure 8

### Spring Reset Standards



CAUTION: Standards can strike persons too close during tripping or resetting. Stay clear of standards when plowing. Stay clear of reset path of standard when it is in partially tripped position.

The bottoms are held in the plowing position by spring tension which is not adjustable. The spring pressure allows the standards and bottoms to trip back and up to clear large obstructions, or to float over small obstructions and return to the plowing position without stopping the tractor.

A—Standard in Fully Tripped Position B—Standard in Float Position

## **ADJUSTING TRIP BEAMS (Toggle Spring Series)**

The Toggle Spring Plow is equipped with spring release trip beams to protect the plow against rocks, stumps or other obstructions. An obstruction trips the spring loaded assembly and the bottom swings back to ride over the obstruction. This assembly resets by backing the plow with it raised, so only the tripped beams drags against sod.

When first starting the plow, adjust the spring tension on the trip mechanism by tightening the adjusting screw, Figure 9, finger tight. If excessive tripping is encountered in the field, apply more tension by turning the adjusting screw down one turn each trial run until all bottoms are tripping at about the same load. Lock the adjusting screws in place with the jam nuts, Figure 9.

**NOTE:** The adjusting screws may not all be the same height above the spring retainers.

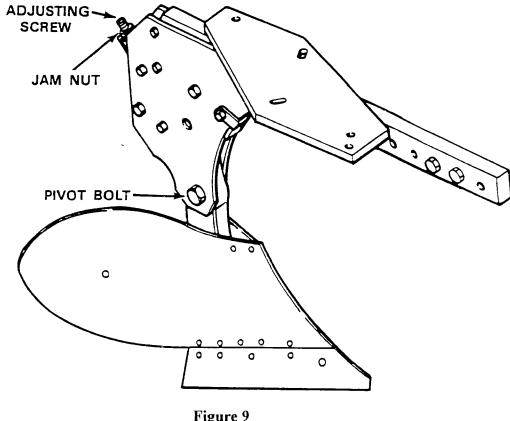


Figure 9

Each bottom pivots on a bolt provided with a slotted nut and cotter pin, Figure 9. If looseness develops between the plates and plow standard, tighten the nut and then turn it back one notch so that the cotter pin can be inserted. Excessive tightness will prevent the bottom from tripping properly.