

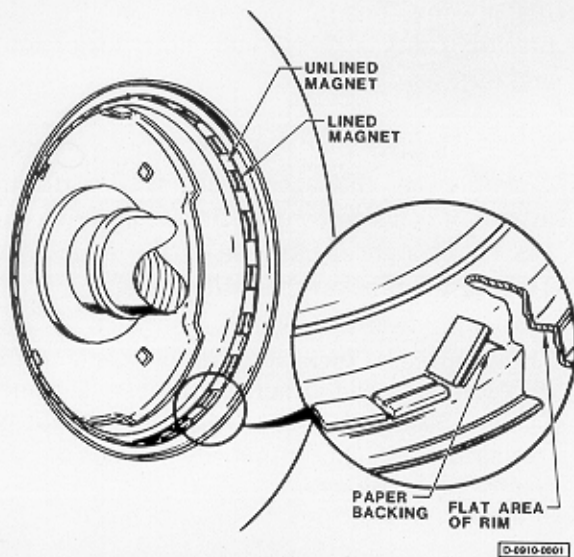


# INSTALLATION INSTRUCTIONS

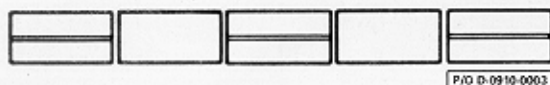
## UNIVERSAL DISTANCE SENSOR

1. The Universal Distance Sensor consists of magnets positioned on the front wheel rim and a pick up assembly secured to the front axle. To install the Universal Distance Sensor proceed as follows:

2. Thoroughly clean all dirt and grease from the inside flat portion of the wheel rim. Allow the cleaned area of the rim to dry. **NOTE:** Remove all loose paint and rust. Use sandpaper to scuff up the flat area of the rim.

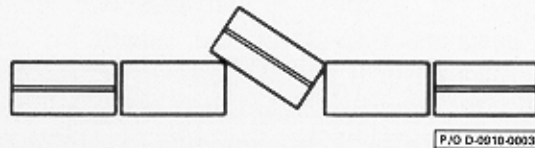


3. Refer to the above illustration and place the magnets around the flat area of the rim. Do not remove the paper backing from the magnets at this time. The magnets must alternate (lined then unlined) around the circumference of the rim. If two like magnets (lined or unlined) end up together or close enough that another magnet will not fit when the rim is full, then one magnet must be added to or deleted from the magnet ring.



The above illustration shows the ideal situation where the total number of magnets fit on the rim in an alternate fashion.

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The above illustration shows the condition where two like magnets are on the rim and the opposite type magnet will not fit. If the space between the like magnets is 1/4-inch or greater then add a magnet as described in the following procedure, To Add a Magnet. If the like magnets are spaced less than a 1/4-inch apart then one of the like magnets will have to be removed as described in the following procedure, deleting a magnet.



The above illustration shows the condition where two unlike magnets are on the rim with a space less than another magnet. This condition is to be treated as deleting a magnet.

### To Add a Magnet:

- a. Determine the length needed to add the magnet. Remove several magnets from the magnet ring. **NOTE:** The more magnets removed the less that will be cut from each magnet.
- b. Using a straight edge and a sharp knife, carefully cut an amount off each magnet that adds up to the length determined. **NOTE:** If one inch was required to add the magnet and 16 magnets were removed from the rim, then you would cut 1/16-inch from each magnet.

**IMPORTANT: DO NOT CUT MORE THAN 1/16-INCH FROM EACH MAGNET.**

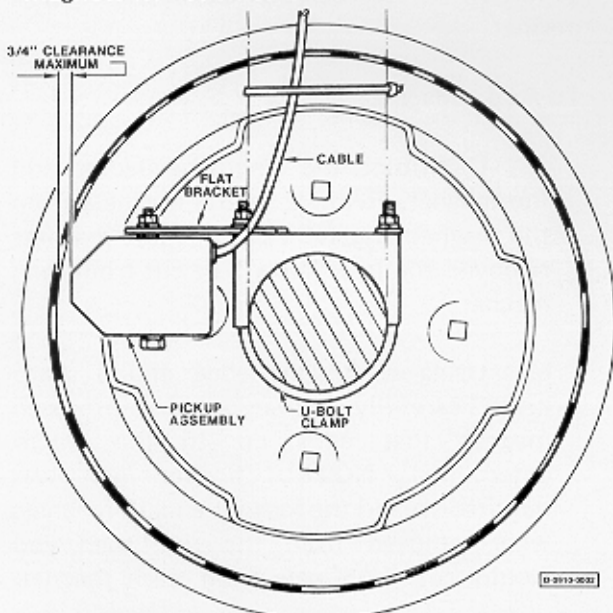


### To Delete a Magnet:

- a. If a space is between two unlike magnets (less than the length of one magnet) or if two like magnets are together with less than a 1/4-inch space between them (remove one of the like magnets) proceed as follows.
- b. The magnets must be equally spaced around the rim to fill the circumference.

**IMPORTANT: DO NOT SPACE THE MAGNETS MORE THAN 1/16-INCH APART.**

4. After the magnets are trimmed to fit on the rim or equally spaced to fit on the rim, the paper backing on each magnet must be removed and the magnet stuck in place on the rim. After the magnets are stuck in place apply pressure to each magnet by using a narrow roller or by firmly tapping the magnet surface with a ball peen hammer. **NOTE:** The temperature of the magnets and rim must be 60°F or above so that the adhesive on the magnets will stick to the rim.



5. Refer to the above illustration and install the U-bolt clamp on the spindle between the

inner hub and steering pivot as shown. Install the flat bracket (slotted hole) on the front leg of the U-bolt clamp as shown using a flatwasher (on both sides of the flat bracket), lockwasher and nut.

### IMPORTANT

**THE SENSOR MUST PIVOT WITH THE WHEEL AND STAY ADJACENT TO THE MAGNETS AS THE FRONT WHEEL IS STEERED.**

Install the pickup assembly on the flat bracket using a 2 1/2-inch bolt, lockwasher and nut.

6. Position the pickup and bracket assembly so that the face of the pickup assembly is centered over the magnet ring and has a clearance between 1/4" and 3/4". Tighten the bracket mounting bolts.

7. Route the pick up assembly cable to the location of the tractor harness Distance Cable. Secure the cable where it will not be damaged during normal operation of the tractor using tie wraps.

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