



# Tachometer and Speedometer Kit

## for Workman HD Series Utility Vehicle

Model No. 115-7786

### Installation Instructions

## Installation

### Loose Parts

Use the chart below to verify that all parts have been shipped.

Description	Qty.	Use
Instrument cluster	1	
Sensor	1	
Magnetic pickup wheel	1	
Magnetic pick up mount	1	
Bolt, (3/8 x 3/4 inch)	1	Install the tachometer and speedometer kit
Nut, (3/8 inch)	1	
Magnetic sensor	1	
Jam nut	2	
Loctite, blue (not supplied)	A/R	

**Note:** Determine the left and right-hand sides of the machine from the normal operating position.

1. Stop the engine, set the parking brake, and remove the key from the ignition switch.
2. Remove the positive (+) battery cable from the battery.
3. Remove the hood. Refer to the vehicle Operator's Manual for the hood removal instructions.
4. Unplug the wire harness connector from the instrument cluster (Figure 1).

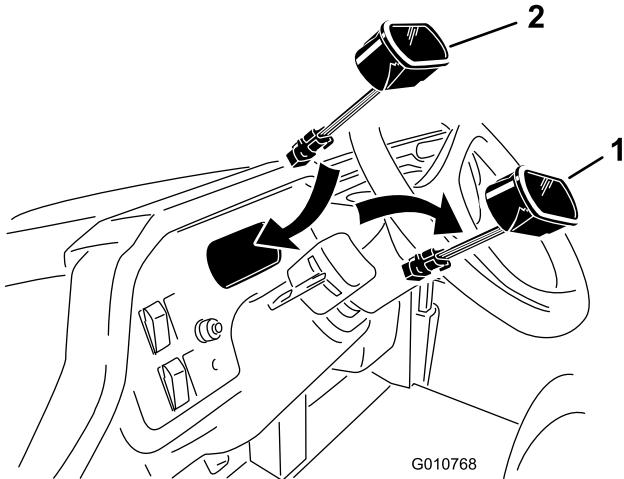


Figure 1

1. Old instrument cluster

2. New instrument cluster

5. To remove the instrument cluster from the dash, squeeze the cluster mounting tabs and push it out through the dash opening.
6. Snap the new instrument cluster into the dash opening and plug the harness connectors together (Figure 1).
7. Remove the screw securing the plug to the top of the transmission (Figure 2). Remove and discard the plug but retain the screw for reuse.

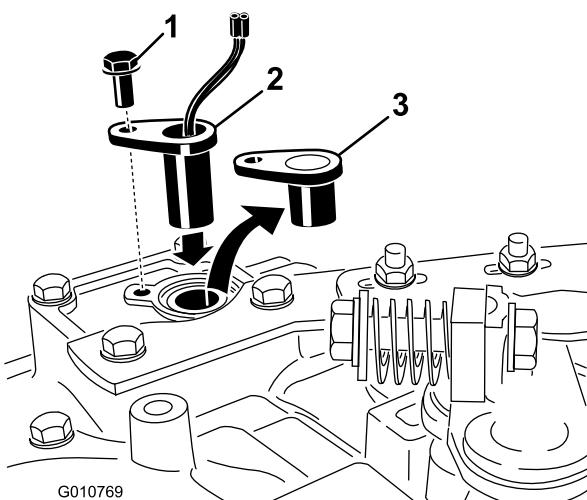


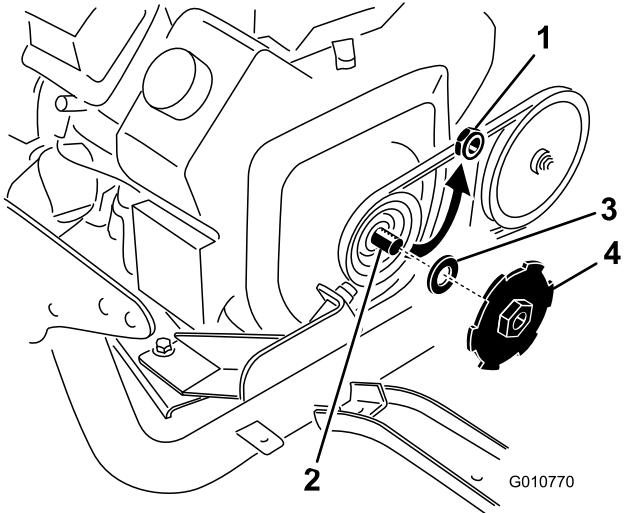
Figure 2

1. Screw

2. Sensor

3. Plug

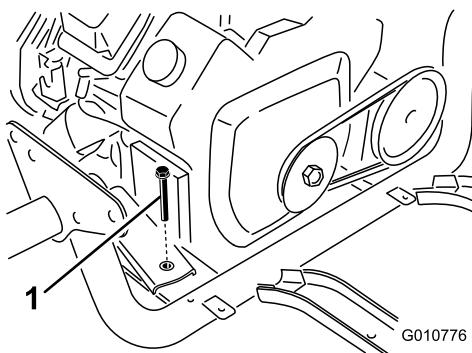
8. Insert the sensor into the top of the transmission and secure it in place with the screw previously removed (Figure 2).
9. On the main vehicle harness, locate the connector for the speed sensor and plug it into the sensor.
10. Remove the nut from the engine crankshaft (Figure 3). Do not remove the washer or the pulley.



**Figure 3**

1. Nut	3. Washer
2. Apply blue Loctite here	4. Mag pick up wheel

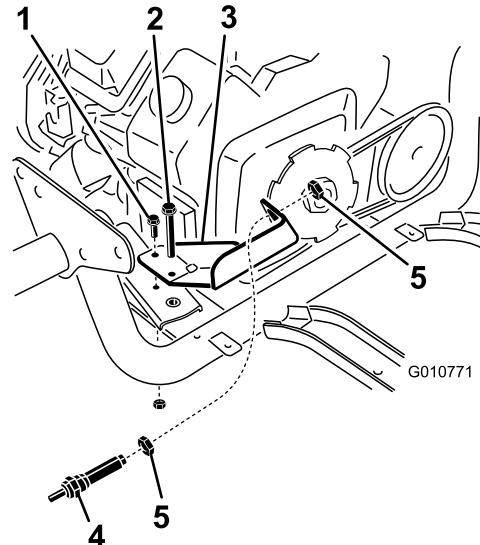
11. Apply blue Loctite to the crankshaft threads (Figure 3).
12. Thread the magnetic pickup wheel onto the crankshaft and tighten to 75 ft-lbs. (Figure 3).
13. Remove the right front engine mount bolt (Figure 4). Retain the bolt for reuse.



**Figure 4**

1. Engine mount bolt

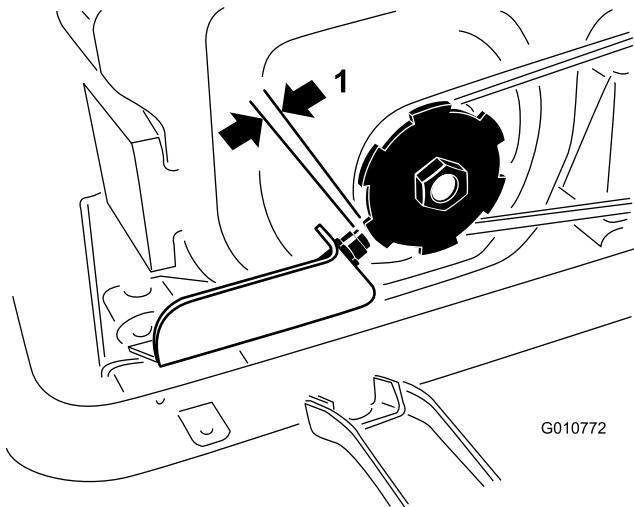
14. Install the magnetic pick up mount to the engine mount with a new bolt and washer and the bolt previously removed (Figure 5).



**Figure 5**

1. New bolt and nut	4. Magnetic sensor
2. Engine mount bolt	5. Jam nut (2)
3. Mag pick up mount	

15. Loosely install magnetic sensor to the magnetic pick up mount with the jam nuts (Figure 5).
16. Adjust the sensor in or out until the clearance between the end of it and the magnetic pickup wheel is .060–.120 inch (Figure 6). Tighten the jam nuts after the adjustment is attained.



**Figure 6**

1. .060–.120 inch gap

17. On the main vehicle harness, locate the connector for the magnetic sensor and plug it into the sensor.
18. Connect the positive (+) battery cable to the battery.
19. Check operation and adjust as required.