







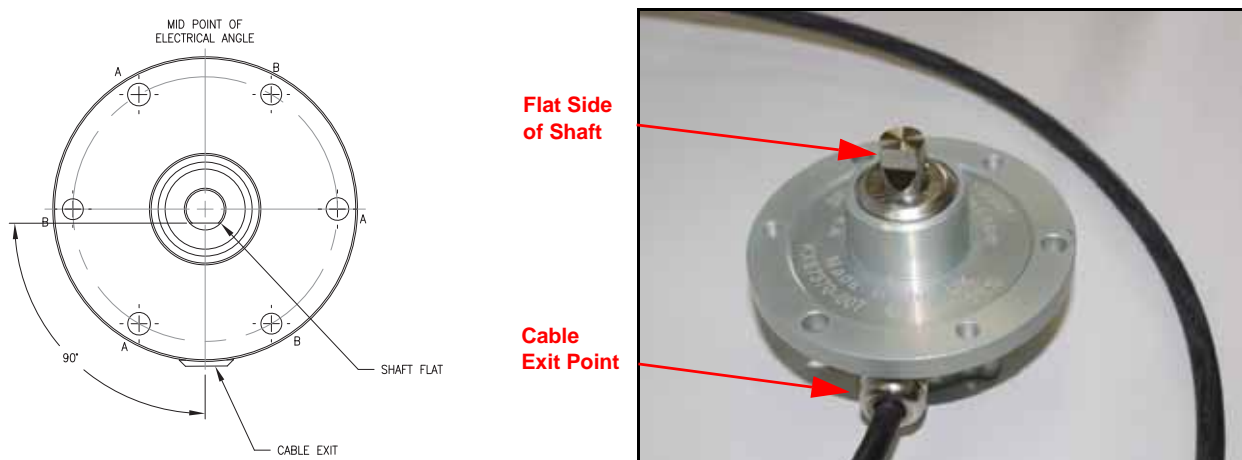
# Wheel Angle Sensor (WAS) Installation Sheet

TABLE 1. WAS Installation Kit (P/N 117-0192-042)

Picture	Item Description	Part Number	Qty.
Not Pictured	Sheet - Wheel Angle Sensor (WAS) Installation	016-0191-003	1
	Sensor - 100° Rotary Wheel Angle	063-0181-013	1
	Bracket - WAS	107-0172-228	1
	Bracket - WAS Arm	116-0159-671	1
	Cable - 10' WAS Extension	115-4001-206	1
	Bolt - 1/2"-13 x 7" Hex	311-0058-113	1
	Nut - 1/2"-13 Zinc Hex	312-1001-166	1

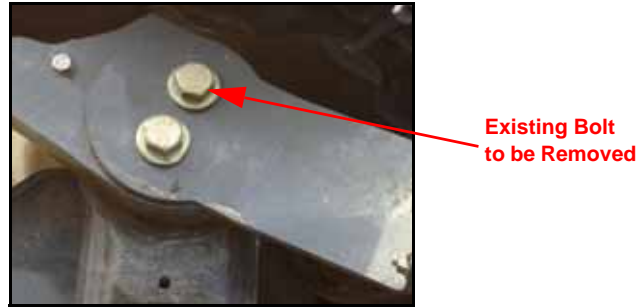
1. Park the machine on a level surface, with the wheels pointing straight ahead.

FIGURE 1. Rotary Sensor Assembly Alignment



2. Align the flat side of the shaft on the rotary sensor assembly (P/N 063-0181-013) so that it is parallel with the cable exit point as shown in the figure above.

FIGURE 2. WAS Installation Location



3. Remove the top bolt in the machine's kingpin on the right side of the axle as shown in Figure 2.

FIGURE 3. Rotary Sensor Installed



4. Install the rotary sensor assembly on the WAS mounting bracket (P/N 107-0172-228) using the supplied hardware.
5. Using care not to move the sensor shaft, slide the WAS arm bracket (P/N 116-0159-671) onto the rotary sensor shaft.
6. Insert the supplied set screw through the hole in the arm bracket, tightening it against the flat spot on the sensor shaft.
7. Secure the WAS assembly to the machine's kingpin using the machine's bolt that was removed in step 3.
8. Install the 1/2"-13 hex nut (P/N 312-1001-166) on the 1/2"-13 x 7" hex bolt (P/N 311-0058-113).
9. Insert the head of the bolt into the slot on the WAS arm bracket and position the end of the bolt over the hole in the axle.
10. Screw the bolt into the hole in the axle until the head of the bolt rests on the WAS arm bracket.
11. Tighten the nut on the end of the bolt until it is snug against the axle.

FIGURE 4. WAS Cable Connection Wiring



12. Locate and disconnect the 12-pin Deutsch plug on the SmarTrax valve harness located under the right-rear corner of the cab.
13. Remove the cavity plugs in cavities 4, 6, and 10 as shown in Figure 4.
14. Connect the pins from the 10' WAS extension cable (P/N 115-4002-206) into the correct cavities as shown.
15. Connect the 3-pin connector of the WAS extension cable to the installed rotary sensor cable.