# **Assembly Instructions**



# SimplEbale - Main wiring harness kit Kit number: ACX3743320

**1840 Baler** 



## **CALIFORNIA**

## **Proposition 65 Warning**

**WARNING:** Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

**WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.



## How to use this manual

## Transport damage and missing parts

Examine the machine and parts carefully for possible damage that occurred during transport. Speak to the person that is responsible for transport immediately if you find damage.

Make an order for missing parts.

#### General

If more assistance is necessary you should speak to your AGCO dealer.

This manual is only applicable to the models specified on the front cover.

## **Fastener torques**

Always replace fasteners with fasteners of the same specification. Tighten all fasteners to the correct torque values.

You can find the list of torque values in the service manual or the assembly instructions of the machine. If the torque value is different, it is specified in the procedure.

#### Special tools

If it is necessary to use a special tool in a procedure, the tool identification is specified in the procedure.

#### Illustrations

The illustrations do not always show the same machine specification or machine configuration. The procedure is the same unless the instruction tells you differently.

The illustrations in this manual use a color system to help you follow the instruction correctly.

Color	Description	Functions
	Target/focus item The primary component in the step is this color.	Primary component, decal location, component location
	Connectors, fasteners All components that attach the primary component to a different component are this color.	Fasteners, electrical connectors
	Primary alternative If there are 2 primary components in the illustration, 1 of the 2 components is this color.	Secondary component
	Secondary alternative If there are 3 primary components in the illustration, 1 of the 3 components is this color.	Tertiary component
	Special tool Where the special tools or equipment are in an illustration, they are this color.	Pressure gauges, specified tools
	Parts that you move A component that you must move, and that is not necessary to remove from the machine.	Electrical wires, hydraulic hoses



#### Part number references

All parts that are supplied in the kit are referenced in the bill of materials.

Each part is added to a table in the installation steps, below is an example.

Number	Part number	Description	Quantity
(1)	X446235234000	Long key	5
(2)	X446234100000	Short key	2
(3)	653620031930	Shaft	1

- Number As shown in the illustration
- Part number Component part number
- Description Component name
- Quantity Number of components required for the step



# 1.1 Safety icons

The safety warnings show in the manual with these icons:



#### DANGER:

This is an immediately dangerous situation which, if you ignore it, will cause death or injury.



#### **WARNING:**

This is an immediately dangerous situation which, if you ignore it, can cause death or injury.



#### **CAUTION:**

This is an immediately dangerous situation which, if you ignore it, can cause injury.



Fig. 1

# **Secondary information**

2 types of secondary information are shown when necessary.

**IMPORTANT:** This identifies special instructions or procedures which, if not followed can cause damage to the machine. It might also cause damage to the process, or the area around the machine.

NOTE: Information to help you do the procedure, or help you to understand.



# 1.2 Safety instructions



Make sure that you have the Operator's Manual for the machine you are to install the kit to. Read and obey all safety instructions in the Operator's Manual of the machine before you continue with these instructions

If you do not obey the instructions, there is a risk of injury.

In most conditions you can prevent injuries if you see dangerous situations before an injury occurs.

The person that installs this kit must be an approved technician and have the necessary tools.

Do not change the equipment. An adjustment not specified by the manufacturer can change the function of the machine and cause damage or personal injury.

Only use AGCO approved replacement parts.



#### **WARNING:**

To prevent injury and machine damage, you must:

- Use the Personal Protective Equipment (PPE) applicable to the task.
  - Eye protection
  - Hand protection
  - Foot protection
  - Ear protection.
- Park the machine on a solid level surface.
- Disengage the PTO, if installed.
- Set the transmission to park and apply the parking brake.
- Set the control console to OFF.
- Stop the engine and remove the key.
- Look and listen! Wait for the parts that move to stop before you start the work.
- Put wheel chocks in front of and behind the wheels before you do work on or below the machine.
- Remove or release all sources of energy, for example:
  - Disconnect the battery.
  - Release of pressure from a system.
  - Lock the parts that move.
- Clean the oil, dirt, and crop material from the area on the machine where you do the work.

Good safety procedures prevent accidents to you and each person near you.



# 1.3 Waste disposal

Incorrect disposal of waste can cause pollution to the environment. Some examples of dangerous waste materials include oil, fuel, coolant, battery chemicals and air-conditioning refrigerant.

- Only use an approved container to collect the waste material. Always seal the container after you drain the fluids.
- Do not drain or spill waste on the ground, down a water drainage system or into water sources.
- Air-conditioning refrigerant released into the air can cause damage to the environment. The local regulations recommend that only an approved technician removes and recycles the air-conditioning refrigerant.
- Obey pollution laws.
- Speak with the local authorities on the correct procedure to discard of the waste.

Recycling centres or approved dealers have the correct equipment for the disposal of used oil.

Do not discard material with this symbol in the general waste.

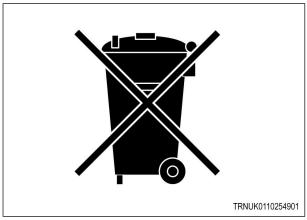


Fig. 2

Recycle used materials with this symbol.

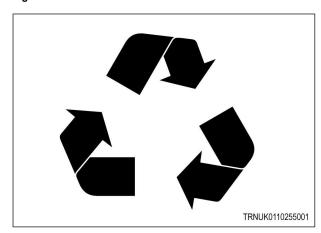


Fig. 3





# 2.1 Bill of materials

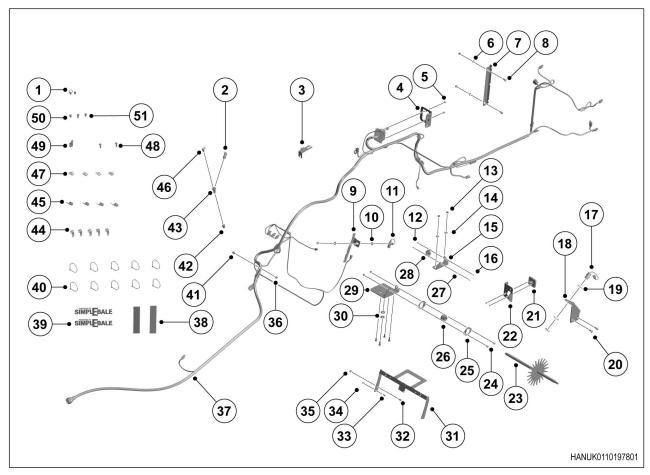


Fig. 1

Number	Part number	Description	Quantity
(1)	71448175	Cable tie - edge, small, flexible	2
(2)	71420981	Pressure transducer	1
(3)	ACX4656760	Guide tool	1
(4)	ACX4083110	Bracket	1
(5)	3012141X1	Bolt - M6 x 16 mm	2
(6)	705533	Washer - 3/8	4
(7)	ACX3743880	Bracket	1
(8)	700047	Carriage bolt - 3/8 x 1	6
(9)	ACX4646900	Bracket	1
(10)	052886	Washer - 1/2	2
(11)	700742535	Proximity sensor - M12	1
(12)	700738861	Bolt - 32 x 3/4	2
(13)	700711238	Nut - 3/8	11
(14)	700702916	Washer - 3/8	6
(15)	ACX3744540	Bracket	1
(16)	704494	Nut - 8/32	2



Number	Part number	Description	Quantity
(17)	700742919	Proximity sensor - M30	1
(18)	ACX3743210	Bracket	1
(19)	740068	Washer - 1/4 x 18	2
(20)	700054	Carriage bolt - 3/8 x 1 1/4	4
(21)	ACX3743840	Switch panel	1
(22)	ACX3743850	Switch panel bracket	1
(23)	ACX4648950	Star wheel assembly	1
(24)	700013	Carriage bolt - 5/16 x 3/4	2
(25)	700717515	Bearing flange	2
(26)	71113372	Bearing	1
(27)	700707087	Washer - PW8	4
(28)	ACW7165550	Hall effect sensor	1
(20)	ACW7165560	Hall effect sensor magnet	1
(29)	ACX4646880	Star wheel bracket	1
(30)	705582	Washer - 5/8 – plain	2
(31)	ACX4148940	Support	1
(32)	7883325	Bolt - 5/16 x 3/4	3
(33)	7883275	Bolt - 1/4 x 3/4	2
(34)	1703354	Nut - 1/4	2
(35)	704726	Nut - 5/16	2
(36)	700750160	Nut - ground cable	1
(37)	ACX3745010	Wiring harness	1
(38)	700717403	Reflector - yellow	2
(39)	ACX4505110	Decal	2
(40)	7724347	Cable tie	17
(41)	700750153	Bolt - ground cable	1
(42)	ACX4476590	Fitting - straight	1
(43)	ACX4476600	Fitting - T	1
(44)	70936778	Wiring harness bracket - J	5
(45)	70937682	Wiring harness clamp	4
(46)	791038	Fitting - 90°	1
(47)	755751	Cable bracket	4
(48)	7883382	Bolt - 3/8 x 1	3
(49)	700717627	Wiring harness bracket - double	1
(50)	71451548	Cable clip - edge	3



Number	Part number	Description	Quantity
(51)	3019122X1	Cable tie	2
(52)[1]	71432179	Cable tie	3

<sup>[1]</sup> Not shown in graphic





# 3.1 Installation

# 3.1.1 Install the wiring harness

**NOTE**: To make this procedure easy to understand, the illustrations can show some components removed.

# **Procedure**

1. Put the wiring harness (1) in the correct position.

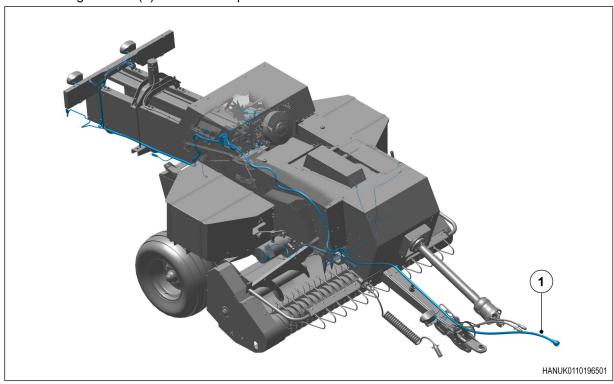


Fig. 1

Number	Part number	Description	Quantity
(1)	ACX3745010	Wiring harness	1

2. Install the two clamps (1) with the bolts (2).

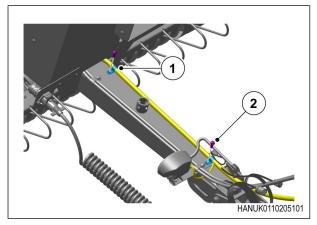


Fig. 2

Number	Part number	Description	Quantity
(1)	755751	Cable bracket	2
(2)	7883382	Bolt - 3/8 x 1	2



3. Install the clamps (1) with the existing fasteners.

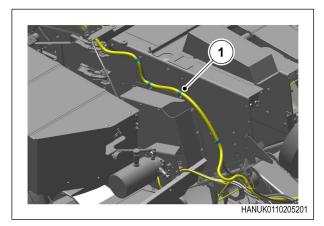


Fig. 3

Number	Part number	Description	Quantity
(1)	70936778	Wiring harness bracket - J	4

4. Install the 2 cable ties (1).

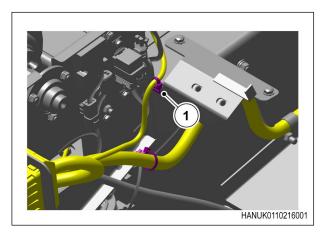


Fig. 4

Number	Part number	Description	Quantity
(1)	71448175	Cable tie - edge, small, flexible	2



**5.** Install the cable ties (1) and the clamp (2) with the existing fastener.

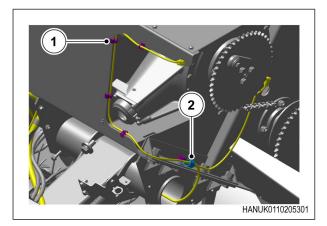


Fig. 5

Number	Part number	Description	Quantity
(1)	700750444	Cable tie - edge, small, fixed	4
(2)	70937682	Wiring harness clamp	1

**6.** Install the clamp (1) with the bolt (4) and the nut (3), then install the clamps (2) with the existing fasteners.

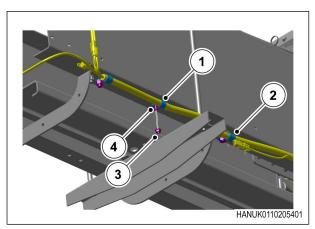


Fig. 6

Number	Part number	Description	Quantity
(1)	755751	Cable bracket	1
(2)	70937682	Wiring harness clamp	2
(3)	700711238	Nut - 3/8	1
(4)	700047	Carriage bolt - 3/8 x 1	1



7. Install the bracket (3) with the bolts (4), the washers (2) and the nuts (1). Make sure that the wiring harness is routed in the bracket (3).

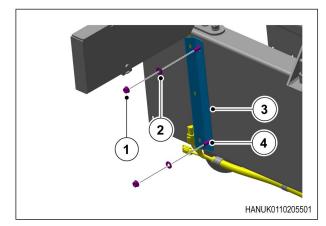


Fig. 7

Number	Part number	Description	Quantity
(1)	700711238	Nut - 3/8	2
(2)	705533	Washer - 3/8	2
(3)	ACX3743880	Channel route bracket	1
(4)	700047	Carriage olt - 3/8 x 1	2

- **8.** Remove the paint from the contact area for the chassis ground.
- **9.** Install the chassis ground with the bolt (1) and the nut (2).

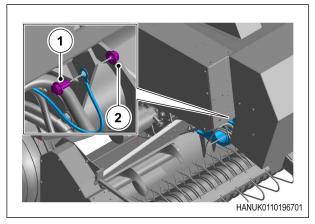


Fig. 8

Number	Part number	Description	Quantity
(1)	700750153	Bolt - ground cable	1
(2)	700750160	Nut - ground cable	1



# 3.1.2 Install the sensors and modules

## **Procedure**

1. Remove the existing fastener and the clip.

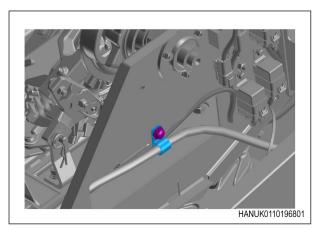


Fig. 9

2. Use the correct tool to make the top hole (1) a diameter of 10 mm.

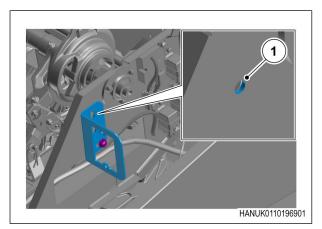


Fig. 10

- 3. Install the bracket with the bolt (2) and the nut (1) and the existing fastener.
- **4.** Install the clamp (3) with the existing fastener.

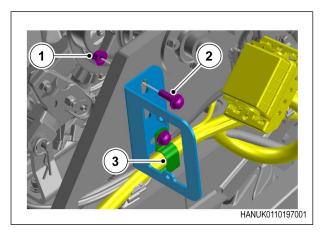


Fig. 11

Number	Part number	Description	Quantity
(1)	700711238	Nut - 3/8	1
(2)	7883382	Bolt - 3/8 x 1	1
(3)	700717627	Wiring harness bracket - double	1
(-)	ACX4083110	Bracket	1





**5.** Install the fuse box to the bracket with the bolts (1).

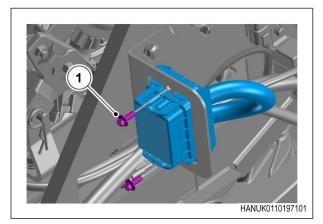


Fig. 12

Number	Part number	Description	Quantity
(1)	3012141X1	Bolt - M6 x 16 mm	2

- **6.** Loosely install the bracket (1) with the existing fastener.
- 7. Use the bracket as a guide to make an 8 mm hole at the top position (A).

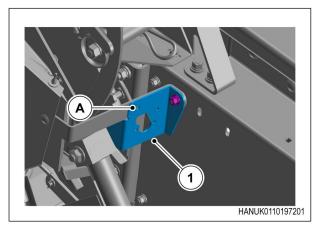


Fig. 13

Number	Part number	Description	Quantity
(1)	ACX3743850	Switch panel bracket	1



**8.** Install the switch panel (1) to the bracket (2) with the nuts (3).

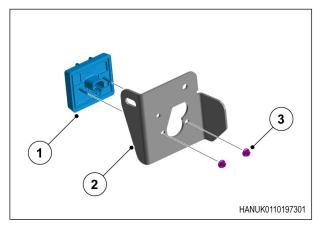


Fig. 14

Number	Part number	Description	Quantity
(1)	ACX3743840	Switch panel	1
(2)	ACX3743850	Switch panel bracket	1
(3)	3019122X1	Nut - M5	2

- **9.** Install the switch panel assembly with the bolt (3) and the nut (1).
- **10.** Connect the wiring harness to the switch panel, then install the clamp (2) with the existing fastener.

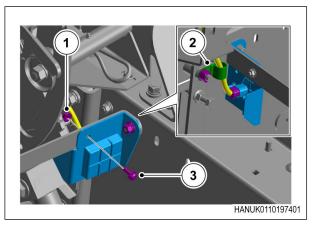


Fig. 15

Number	Part number	Description	Quantity
(1)	71432179	Nut - 5/16	1
(2)	70937682	Wiring harness clamp	1
(3)	7883325	Bolt - 5/16 x 3/4	1



**11.** Install the 2 cable clips (1) to hold the harness away from the knotters.

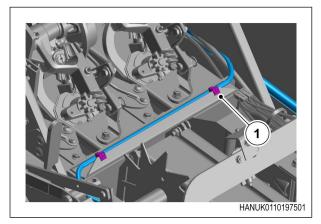


Fig. 16

Number	Part number	Description	Quantity
(1)	71451548	Cable clip - edge	2

**12.** Install the sensor (1) to the bracket (3) with the washers (2) and the nut (4). Make sure that the serrated surface of the nut contacts the washer. Do not fully tighten the fasteners.

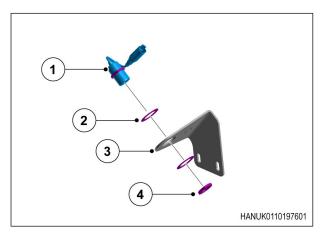


Fig. 17

Number	Part number	Description	Quantity
(1)	700742919	Proximity sensor - M30	1
(2)	740068	Washer - 1/4 x 18	2
(3)	ACX3743210	Bracket	1



**13.** Install the sensor assembly with the bolts (3), the washers (2) and the nuts (1).

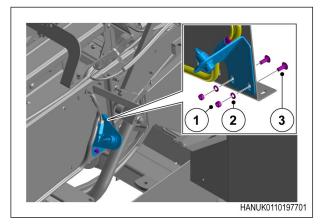


Fig. 18

Number	Part number	Description	Quantity
(1)	700711238	Nut - 3/8	2
(2)	700702916	Washer - 3/8	2
(3)	700054	Carriage bolt - 3/8 x 1 1/4	2

- **14.** Use the fasteners to adjust the sensor, the distance (A) must be 3 mm to 7 mm.
- **15.** Turn over the baler by hand to make sure the needle carriage does not contact the sensor.
- **16.** Pull back on the needle carriage by hand to make sure that the needle carriage does not contact the sensor due to excessive wear.

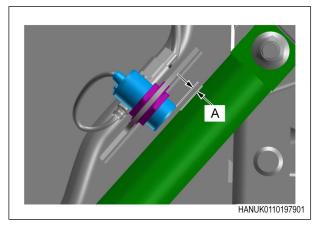


Fig. 19

17. Remove the 4 fasteners.

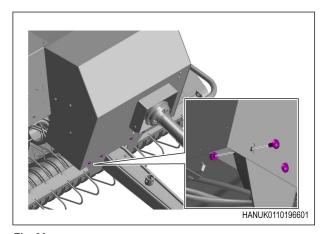


Fig. 20



**18.** Install the sensor (3) to the bracket (1) with the washers (2) and the nuts (4). Make sure that the serrated surface of the nut contacts the washer. Do not fully tighten the fasteners.

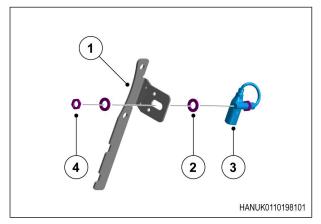


Fig. 21

Number	Part number	Description	Quantity
(1)	ACX4646900	Bracket	1
(2)	052886	Washer - 1/2	2
(3)	700742535	Proximity sensor - M12	1

- **19.** Install the sensor assembly with the existing fasteners, then connect the wiring harness.
- 20. Install the clamp (1) with the existing fastener.

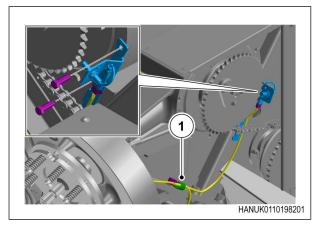


Fig. 22

Number	Part number	Description	Quantity
(1)	70937682	Wiring harness clamp	1

**21.** Use the fasteners to adjust the sensor, the distance (A) must be 1 mm to 3 mm.

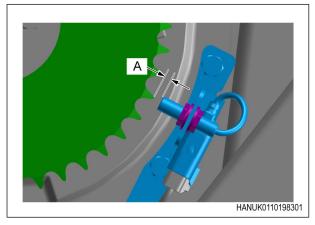


Fig. 23



22. Remove the pressure gauge assembly.

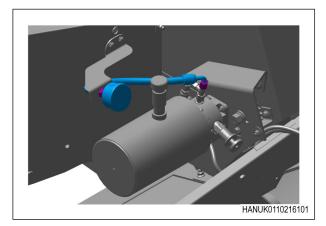


Fig. 24

23. Disconnect the hose, then remove the fitting.

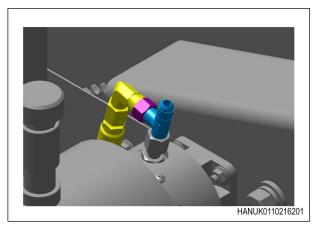


Fig. 25

**24.** Remove, but do not discard the fitting.

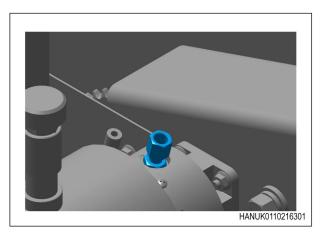


Fig. 26



25. Install the fitting (1).

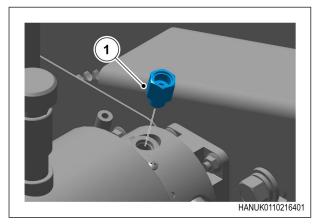


Fig. 27

Number	Part number	Description	Quantity
(1)	ACX4476590	Fitting - straight	1

**26.** Install the fittings (1) and (2) with the fitting removed in step 24, then install the pressure transducer (3).

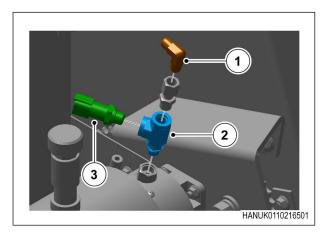


Fig. 28

Number	Part number	Description	Quantity
(1)	791038	Fitting - 90°	1
(2)	ACX4476600	Fitting - T	1
(3)	71420981	Pressure transducer	1

**27.** Connect the hose and the electrical connector.

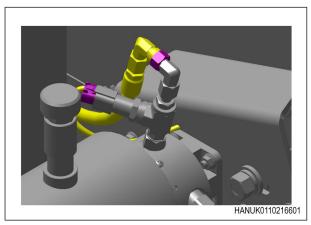


Fig. 29



## After finishing the procedure

Do a check of the hydraulic oil level, fill as necessary.

# 3.1.3 Install the star wheel

## **Procedure**

1. Install the support (1) with the bolts (2) and (4), and the nuts (3) and (5).

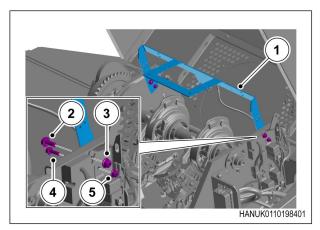


Fig. 30

Number	Part number	Description	Quantity
(1)	ACX4148940	Support	1
(2)	7883325	Bolt - 5/16 x 3/4	2
(3)	704726	Nut - 5/16	2
(4)	7883275	Bolt - 1/4 x 3/4	2
(5)	1703354	Nut - 1/4	2

**2. IMPORTANT:** *Make sure that the bale chamber is empty.* 

Trip the metering arm, then turn over the baler by hand until the metering arm is in the reset position.

Remove the fasteners then remove the star wheel assembly.

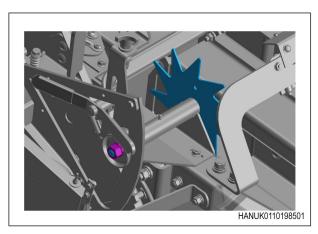


Fig. 31



**4.** Install the star wheel assembly (1) with the existing fasteners.

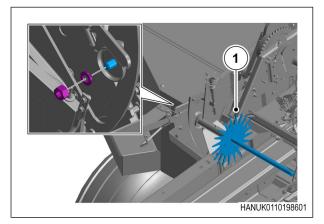


Fig. 32

Number	Part number	Description	Quantity
(1)	ACX4648950	Star wheel assembly	1

- **5.** Put the bearing (2) and the bearing flanges (1) on the shaft.
- 6. Install the magnet (3) with the fasteners.

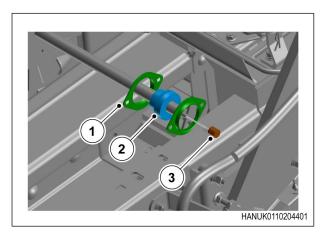


Fig. 33

Number	Part number	Description	Quantity
(1)	700717515	Bearing flange	2
(2)	71113372	Bearing	1
(3)	ACW7165560	Hall effect sensor magnet	1

- 7. Install a bolt (4) with the 2 washers (2) to the front hole.
- 8. Install the bracket (3) with the bolts (4), washers (1) and the nuts (5). Make sure that the star wheel shaft is perpendicular to the bale chamber.

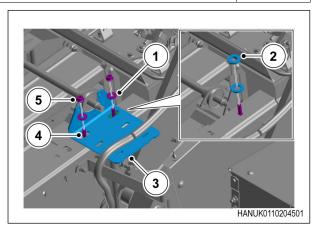


Fig. 34



Number	Part number	Description	Quantity
(1)	700702916	Washer - 3/8	2
(2)	705582	Washer - 5/8 – plain	2
(3)	ACX4646880	Star wheel bracket	1
(4)	700054	Carriage bolt - 3/8 x 1 1/4	2
(5)	700711238	Nut - 3/8	2

9. Install the bolts (1) and the nuts (2).

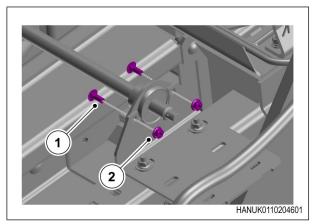


Fig. 35

Number	Part number	Description	Quantity
(1)	700013	Carriage bolt - 5/16 x 3/4	2
(2)	71432179	Nut - 5/16	2

**10.** Lock the bearing collar on the shaft, then tighten the bearing collar fasteners.

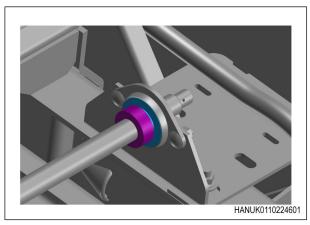


Fig. 36



- **11.** Rotate the star wheel (1) towards the rear of the baler so that the knotter trip arm (3) is aligned with the clutch dog.
- **12.** Set to reset arm to the highest point on the reset cam (4).
- **13.** Loosen the star wheel mount bolts and move the shaft to obtain a 5 mm gap between the metering spool and the knotter trip arm.

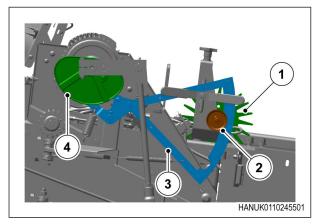


Fig. 37

**14.** Install the sensor (3) to the bracket (5) with the bolts (4), the washers (2) and the nuts (1). Do not fully tighten the fasteners.

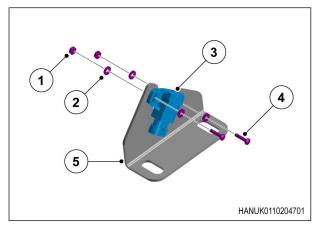


Fig. 38

Number	Part number	Description	Quantity
(1)	704494	Nut - 8/32	2
(2)	700707087	Washer - PW8	4
(3)	ACW7165550	Hall effect sensor	1
(4)	700738861	Bolt - 32 x 3/4	2
(5)	ACX3744540	Bracket	1



**15.** Install the sensor assembly with the bolts (3), the washers (2) and the nuts (1). Do not fully tighten the fasteners.

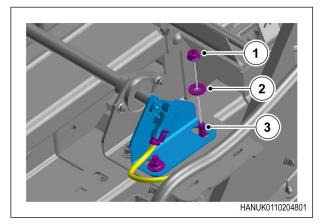


Fig. 39

Number	Part number	Description	Quantity
(1)	700711238	Nut - 3/8	2
(2)	700702916	Washer - 3/8	2
(3)	700047	Carriage bolt - 3/8 x 1	2

- **16.** Use the guide tool (1) to align the sensor. The top of the sensor must align with the holes in the special tool.
- **17.** Adjust the sensor so that there is a 1 mm 3 mm between the sensor and the magnet.
- **18.** Tighten the fasteners, then remove the guide tool

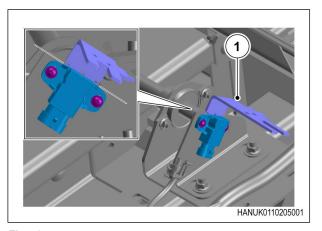


Fig. 40

Number	Part number	Description	Quantity
(1)	ACX4656760	Guide tool	1



**19.** Install the 2 cable ties (1) to the main wiring harness.

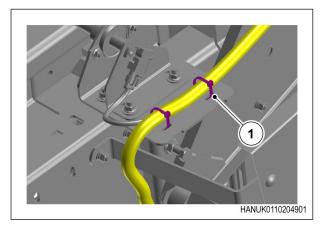


Fig. 41

Number	Part number	Description	Quantity
(1)	7724347	Cable tie	2

# 3.1.4 Install the Decals

## **Procedure**

1. Install the reflectors (1) to both sides of the machine.

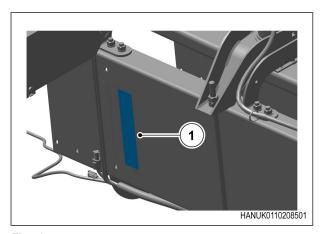


Fig. 42

Number	Part number	Description	Quantity
(1)	700717403	Reflector - yellow	2



2. Install the decals (1) to both sides of the machine, the decals should be installed below the Hesston decal.

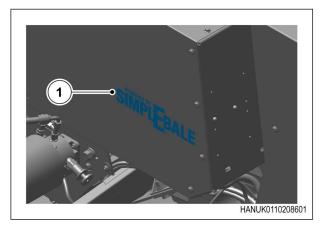


Fig. 43

Number	Part number	Description	Quantity
(1)	ACX4505110	Decal	2

# After finishing the procedure

32

Do a check of the operation of the kit.

