BALER

SERVICE MANUAL

AGCO ®

1734 / 5134
Round Baler

AGCO
Your Agriculture Company

Bale Size Indication

FIG. 10: A gauge (1) on the right-hand side of the machine has reference marks to use in determining bale size. An indicator or pointer connected to the right-hand bale density torque arm moves downward under the gauge as the bale increases in size. The marks are for reference only and do not indicate the exact bale size. To know the relationship of the diameter of the bale to the bale size gauge, stop and measure as the indicator reaches the reference marks while building the first bale.

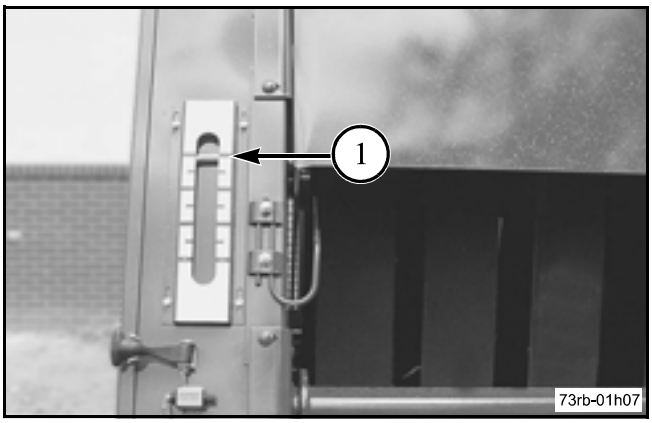

FIG. 10

Bale Full Audible Alert

FIG. 11: The baler is equipped with a mechanical audible alert mechanism (1) that tells the operator when the bale has reached full size and is ready to be wrapped. The audible alert rod contacts the sprocket (2) that is connected to the right-hand end of the front bale density roll. The audible alert mechanism makes a sharp intermittent sound which is easily heard. The operator must begin the wrapping procedure as soon as the audible alert sounds. The audible alert will continue to sound until the bale is discharged from the bale chamber.

If the operator continues to fill the bale chamber after the audible alert sounds, the idler is lifted off the pickup drive belt by the clutch rod to disengage the pickup assembly, which stops the feeding of the baler.

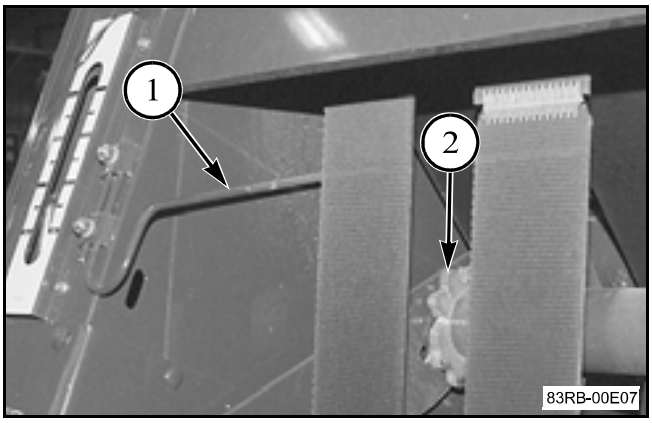

FIG. 11

TRAVEL ON PUBLIC ROADS

FIG. 28: Make sure you understand the speed, brakes, steering, stability, and load characteristics of this machine and the tractor before you travel on public roads.

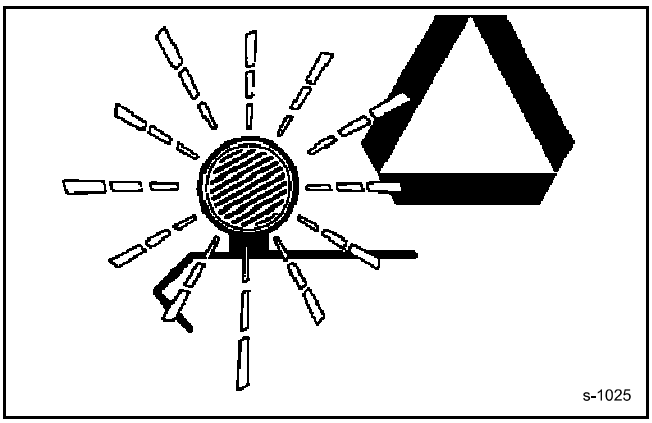

FIG. 28

Use good judgment when traveling on public roads. Maintain complete control of the machine at all times. Never coast down hills.

The maximum speed of farm equipment is governed by local regulations. Adjust travel speed to maintain control at all times. See Specifications for the maximum speed for this machine.

Make sure the tractor is in the proper operating condition according to the tractor operator manual. Make sure the tractor brakes and the machine brakes, if equipped, are adjusted correctly. The tractor must have enough weight and braking capacity, especially when operating on roads and terrain that is not even. To achieve proper braking capacity, use tractor of recommended size and weight to tow the machine. See Specifications for the minimum tractor weight.

Be aware of other traffic on the road. Keep well over to your own side of the road and pull over, whenever possible, to let faster traffic pass.

Familiarize yourself with and obey all road regulations that apply to your machine. Consult your local law enforcement agency for local regulations regarding movement of farm equipment on public roads. Use headlights, flashing warning lights, taillights and turn signals, day and night, unless prohibited by local law.

Make sure all the flashers are operating prior to driving on the road. Make sure reflectors are correctly installed, in good condition, and wiped clean. Make sure the Slow Moving Vehicle (SMV) emblem is clean, visible, and correctly mounted on the rear of the machine.

Do not operate the baler on the road with a bale in the chamber.

Be aware of the overall width, length, height, and weight of the equipment. Be careful when transporting the machine on narrow roads and across narrow bridges.

Always install the safety transport chain between the implement and the tractor drawbar.

- Use a safety transport chain with a strength rating equal to or more than the gross weight of the towed machines.
- Connect the safety transport chain to the tractor drawbar and use a retainer on the hitch pin.
- Supply only enough slack in the safety transport chain to permit turning.
- Do not use the safety transport chain as a tow chain for towing.

Always slide the hitch pin lock plate over the hitch pin and install the Klik pin when connecting the baler to the tractor.

DRIVES

PTO speed ..... 540 rev/min
Pickup ..... belt and chain driven
Forming belts ..... chain driven
Gearbox ..... 540 rev/min, 90 degree

PICKUP

Width
- on flare ..... 1054 mm (41.5 in)
- inside, panel to panel ..... 965 mm (38 in)
- tine to tine ..... 858 mm (33.78 in)
- gathering wheel to gathering wheel (optional) ..... 1359 mm (53.5 in)

Number of bars 3
Number and type of tines ..... 21, double
Tine control ..... cam track
Windguard ..... standard

BALE WRAPPING MECHANISM

Type
- standard ..... manual rope pull
- optional kit ..... electric actuated

Number of twine balls 2
Type of twine ..... plastic or sisal
Number of twines ..... 2, single twine arm

TRACTOR REQUIREMENTS

PTO speed ..... 540 rev/min
Recommended minimum PTO power ..... 22 kW (30 hp)
Hydraulics ..... single remote
Electrical system ..... 12 Vdc
Tractor tire spacing, minimum between rear tires ..... 1054 mm (41.5 in)
Minimum tractor weight ..... 1361 kg (3000 lb)

LUBRICATION

Grease fitting lubricant ..... No. 2 multi-purpose Lithium grease
Roller chain lubricant ..... clean engine oil
Gearbox
- capacity ..... 0.83 liter (1-3/4 pint)
- lubricant ..... SAE EP 90W

Wheel bearing lubricant ..... heavy duty wheel bearing grease

FIG. 10: Set the shaft yoke on the vise so the trunnions of the cross are supported by the jaws of the vise. Hit the shaft yoke to force the bearing cap part way out of the shaft yoke.

NOTE: When hitting the a yoke NEVER hit the area around the hole for the bearing cap. Distortion of the hole will make removal of the bearing cap difficult.

Repeat the procedure to push the other bearing cap part way out of the shaft yoke.

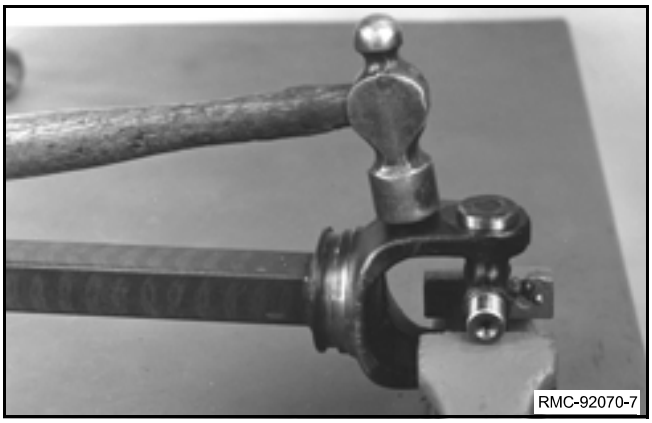

FIG. 10

FIG. 11: Fasten one of the bearing caps in the vise. Make sure the jaws of the vise are as close to the shaft yoke as possible. Hit the shaft yoke to drive the shaft yoke up off the bearing cap. Do not remove the other bearing cap from the shaft yoke at this time.

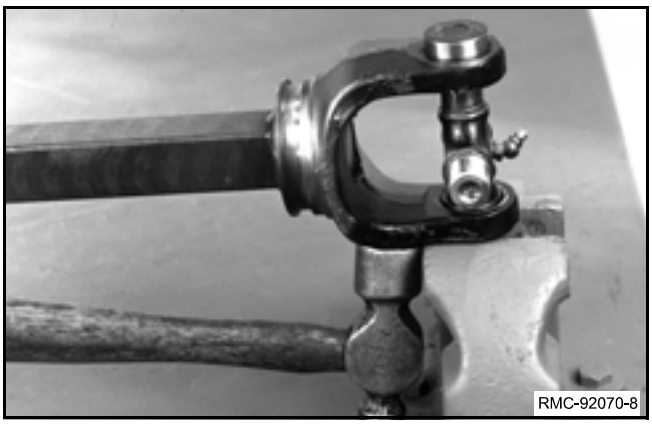

FIG. 11

FIG. 12: Remove the cross from the shaft yoke.

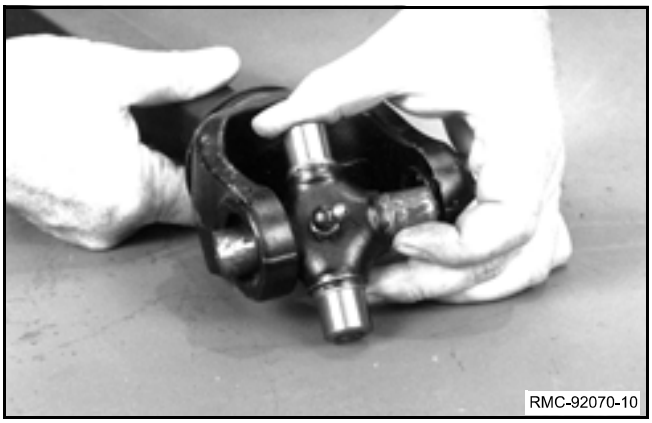

FIG. 12

FIG. 13: Use the hammer and the driver to remove the bearing caps from the clamp yoke and the shaft yoke.

Discard the cross, the bearing caps, and the snap rings.

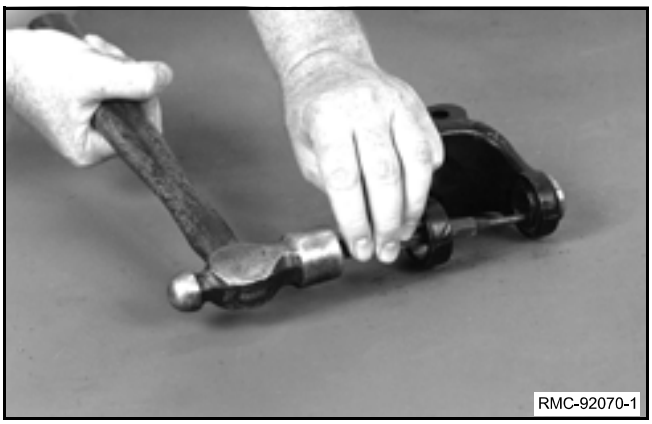

FIG. 13

Components

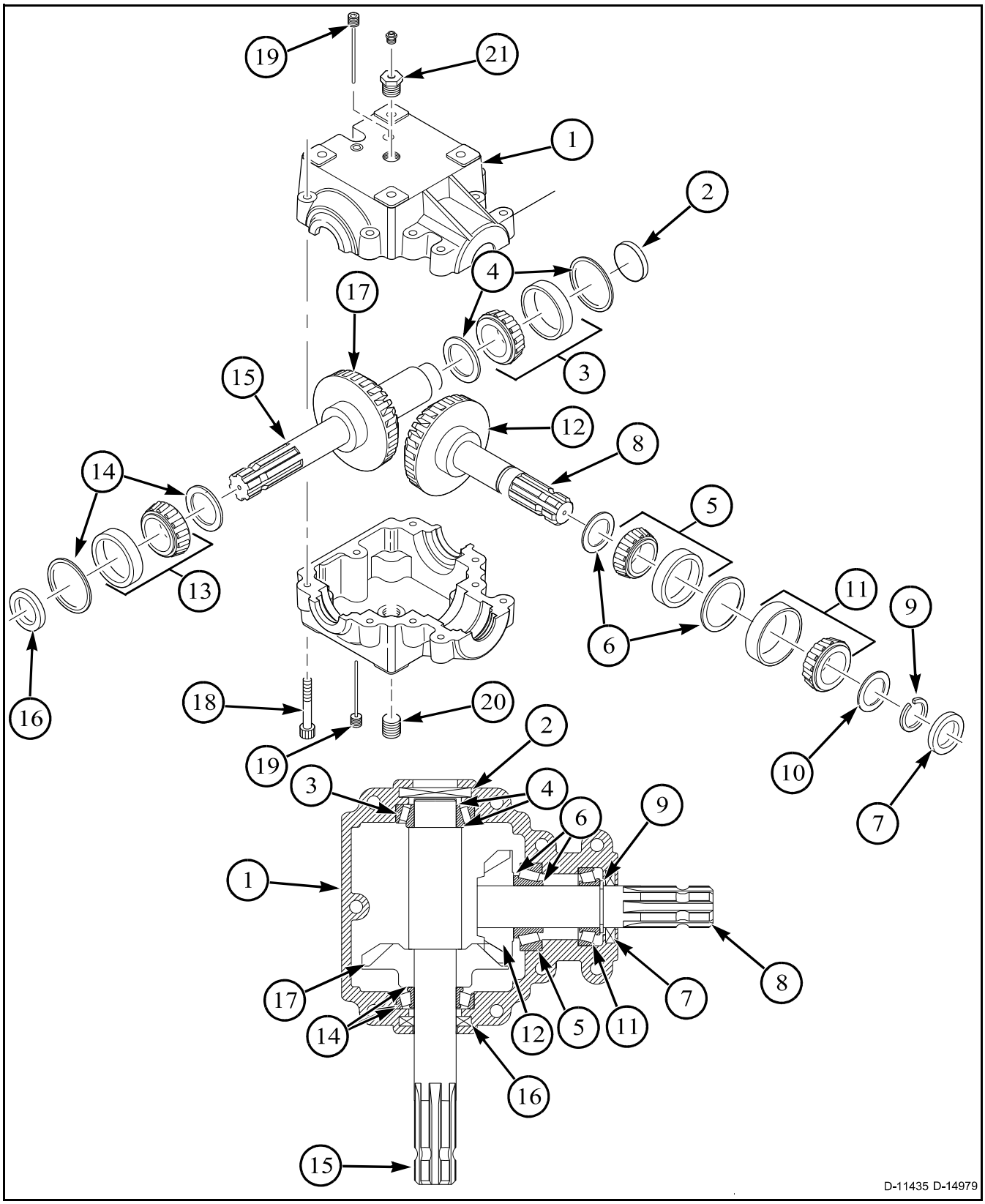

FIG. 34

FIG. 34: Serial Number (HR14101 and up)

Tension

FIG. 46: The correct tension is important for the proper operation of roller chains.

A chain that is too tight will wear excessively and apply extra loads to the sprockets, shafts, and bearings.

A chain that is too loose will ride up on the sprocket teeth and cause excessive wear.

When correctly adjusted, roller chains must deflect slightly by hand. The chain deflection (A) must be 2 to 3 percent of the distance (B) between the shaft centers when applying 2.3 kg (5 pounds) of force in the middle of the span. This is approximately 6 mm of deflection per 300 mm (1/4 inch of deflection per 1 ft) of distance between the shaft centers.

Rotate the sprockets by hand and check the tension at several positions. Set the tension at the tightest point.

Tighten all roller chains using the tensioners (1).

Refer to the following photos for drive chain adjustments

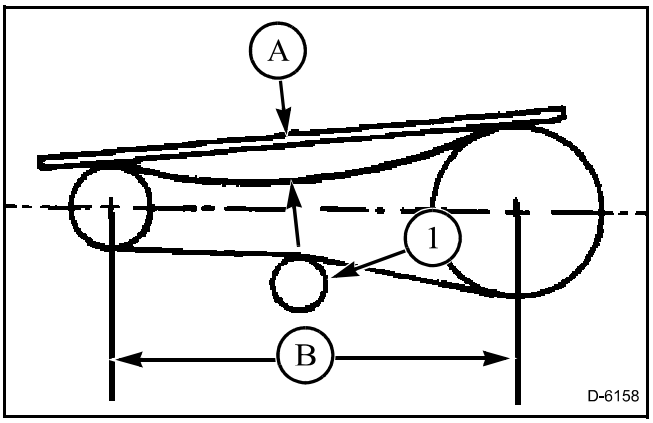

FIG. 46

FIG. 47: Drive roll chain (1)

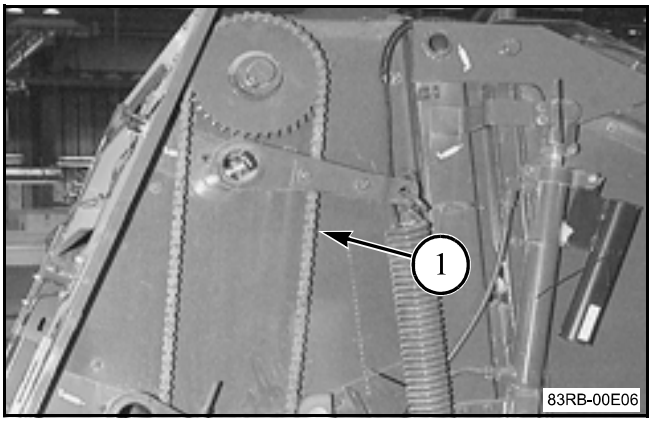

FIG. 47

FIG. 48: Starting roll chain (1)

Tensioner Sprocket (2)

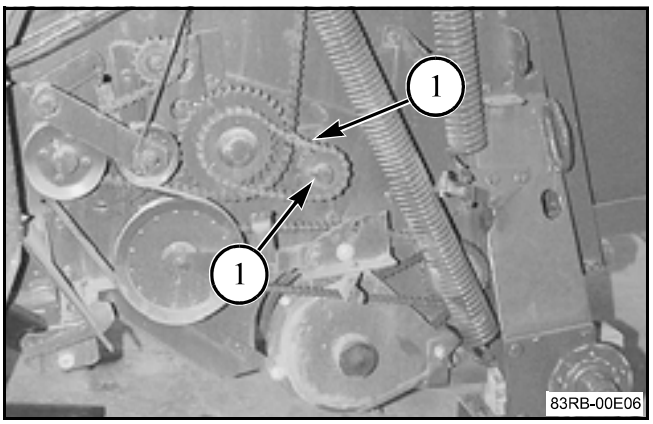

FIG. 48

Installation

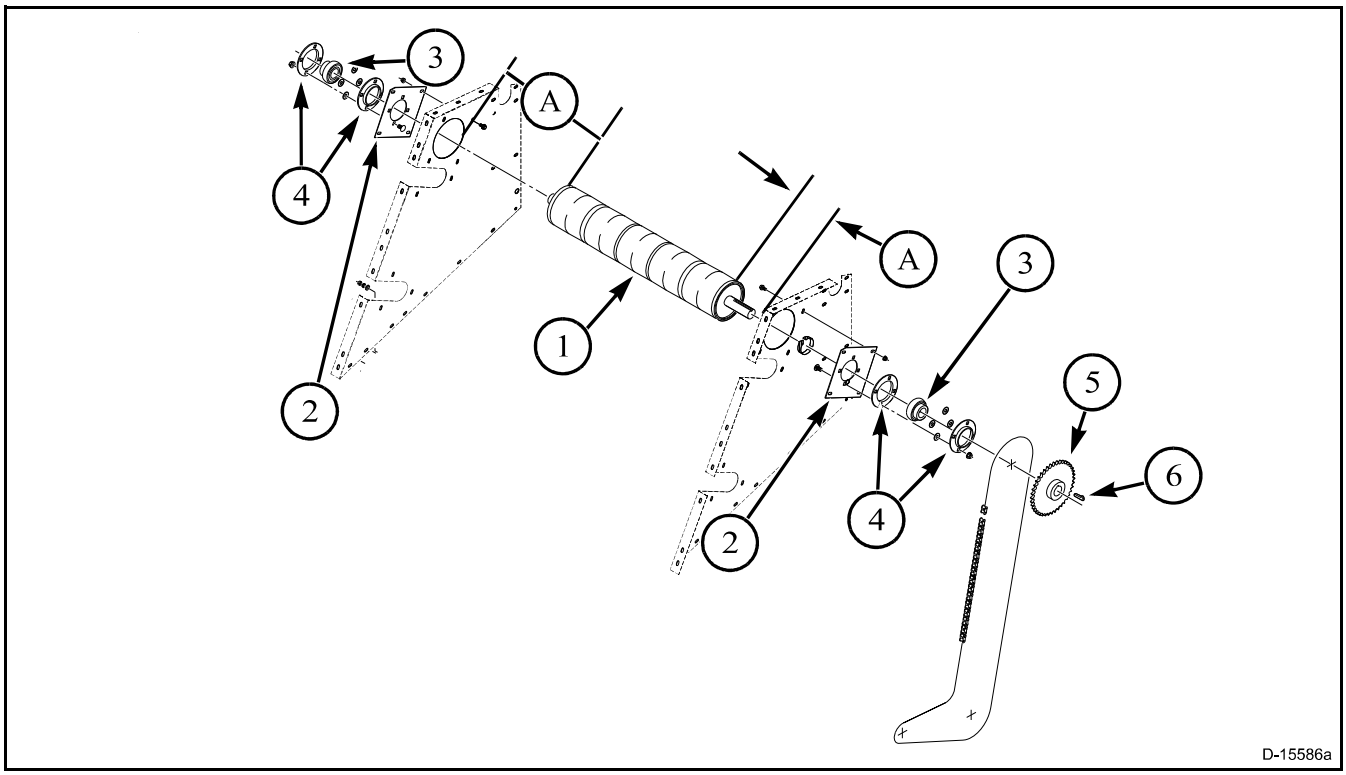

FIG. 70

FIG. 70: Install the drive roll (1) into the baler. Put the drive roll under the forming belts, if installed.

Install the bearing plate (2).

Install the bearings (3) and flanges (4) on both sides.

Make sure the drive roll in centered in the bale chamber. The distance (A) from the groove in the upper drive roll to the main frame must be equal within 2 mm (0.08 in) on both sides.

Install the locking collars onto the drive roll shaft. Do not move the drive roll when installing the locking collars. Tighten the lock collar in the direction of normal shaft rotation. When facing the left-hand side of the baler, normal shaft rotation is clockwise. Do not tighten the locking collar too much. Tighten the set screw. Make sure the drive roll is still centered in the bale chamber.

Remove the hoist.

Remove the pipe that is holding the forming belts or install the forming belts.

Install the drive roll sprocket (5) and gib key (6). See Gib Key Removal and Installation in the General Information division.

IMPORTANT: Make sure the sprockets are properly aligned. Refer to the Sprocket Alignment section in this division.

FIG. 13: The Windguard Rods (1) can be removed individually with out removing the winguard assembly. remove the 5/8-11 Hex Top Lock Nut (2).

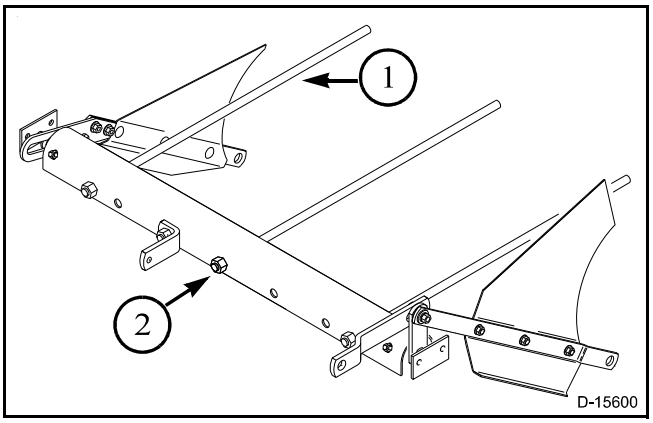

FIG. 13

FIG. 39: Remove the right-hand flanges (1) and bearing locking collar (2) first.

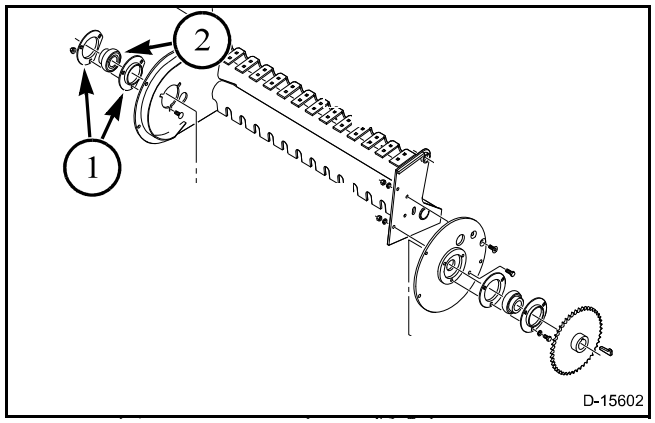

FIG. 39

FIG. 40: Remove the sprocket (1) from the rotor shaft. See Gib Key Removal and Installation in the General Service Procedures section.

Loosen the set screw on the bearing locking collar (2). Use a punch to loosen the locking collar by driving the locking collar in the opposite direction of normal shaft rotation. The rotor shaft normally rotates up in the front.

Support the rotor shaft.

Remove the three 3/8-16 x 1 washer head machine screws (3) and hardened plain washers from the bearing flanges (4).

Remove the bearing flanges, bearing (5), and lock collar from the rotor shaft.

Remove the three cap screws (6) and flange top lock nuts from the camtrack (7).

Remove the cam track.

Use a suitable lifting device to remove the rotor shaft.

Remove the rotor assembly from the left-hand side of the baler.

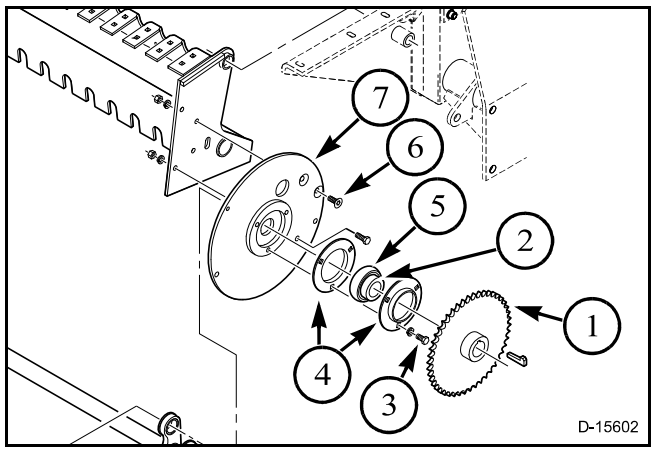

FIG. 40

FIG. 41: Loosen the spiralock nut (1). Remove the cam follower bearing (2). Loosen the locknut (3). Remove the capscrew (4) from the support tine (5).

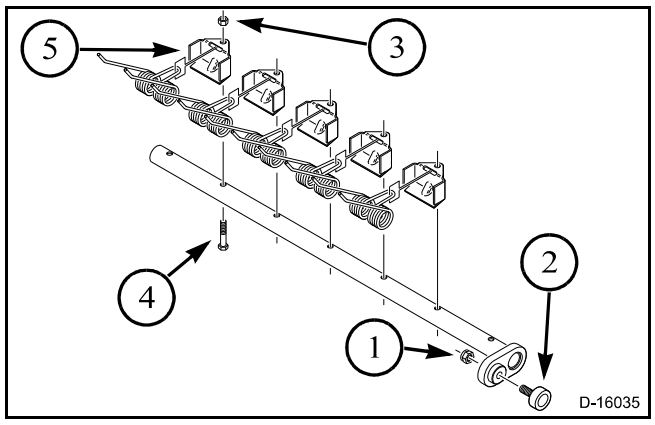

FIG. 41

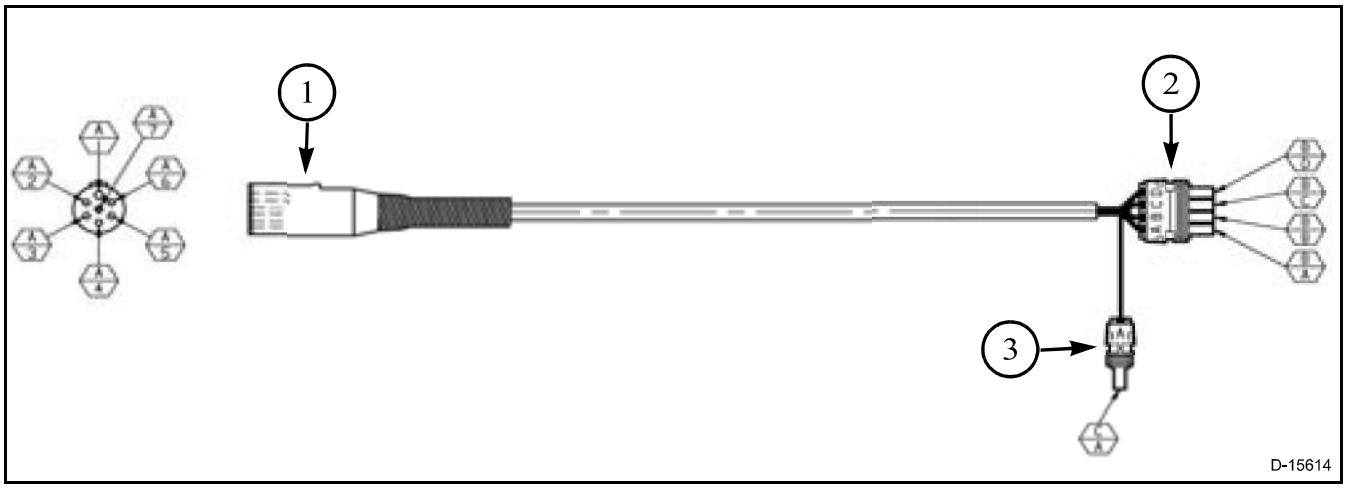

FIG. 4

FIG. 4: Harness Wire

(1) Cable Plug

(2) 4-Way Tower Connector

(3) 1-Way Tower Connector

A	B	C	Wire Gauge	Wire Color	FUNCTION
1	A		16	White	Ground
2		A	18	Black	Work Lights
3	C		18	Yellow	Left-Hand Flashing and Turn Signals
4					Not Used
5	B		18	Green	Right-Hand Flashing and Turn Signal
6	D		18	Brown	Tail Lamp
7					Not Used

ELECTRIC ACTUATOR

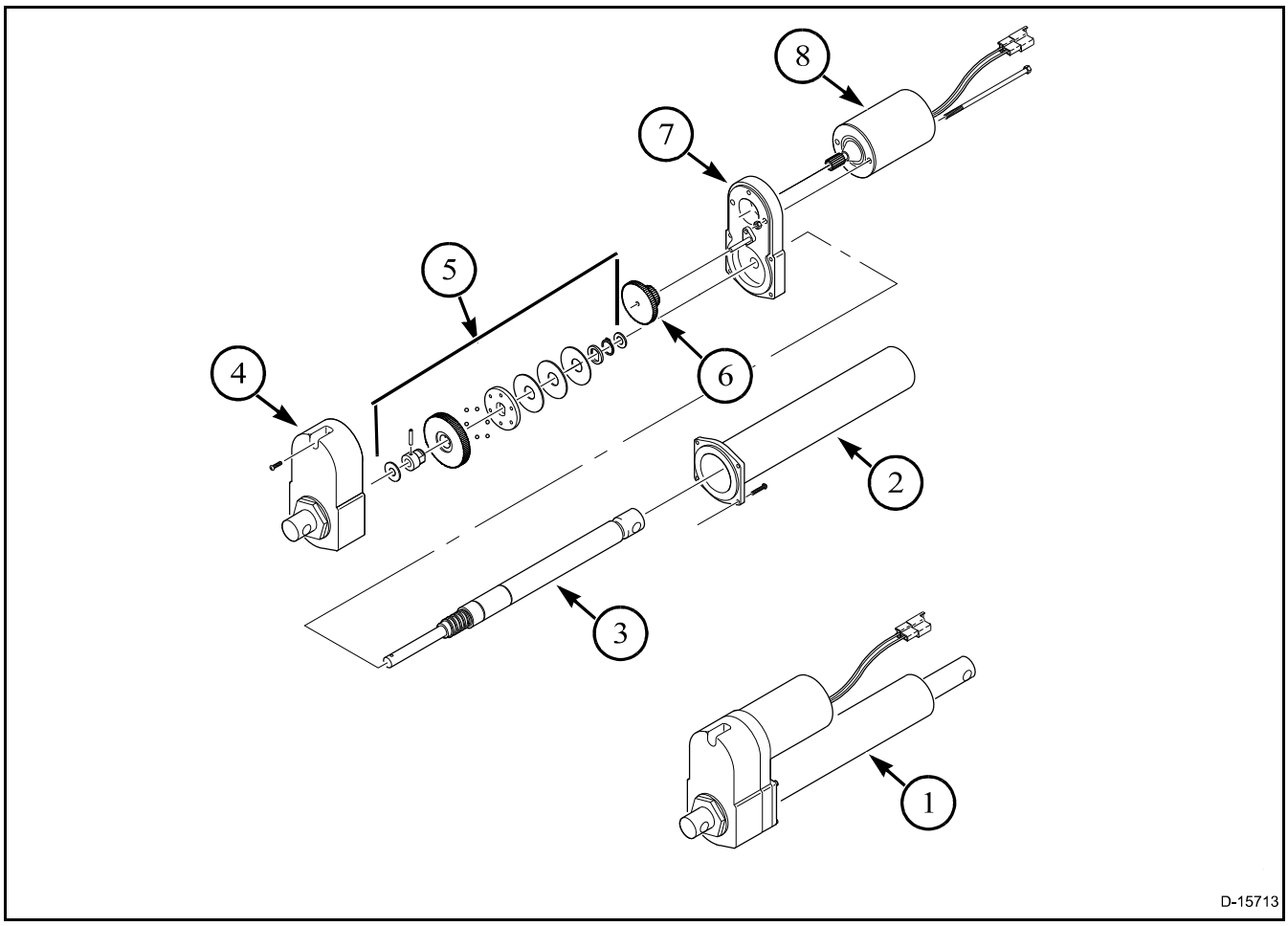

FIG. 19

FIG. 19: Electric Actuator Components

(1) Cylinder Assembly 50 mm (2 in) bore x 356 mm (14 in) stroke

(2) 7/8-14 Half Nut

(3) Piston

(4) Rod

(5) Guide

(6) 3/8-16 x 1 3/4 Capscrew

(7) Clevis- Rod

(8) 3/8-16 Nut

To adjust the rear tailgate roll do the following:

FIG. 11: Lower Tailgate Roll

Loosen the adjusting bolt (1) at each end of the tailgate roll 180 degrees to 270 degrees. Use a hammer to lightly tap the head of the adjusting bolt or use a pry bar in the hole (2) next to the roll to move the tailgate roll. When the adjustment is correct, tighten the adjusting bolt.

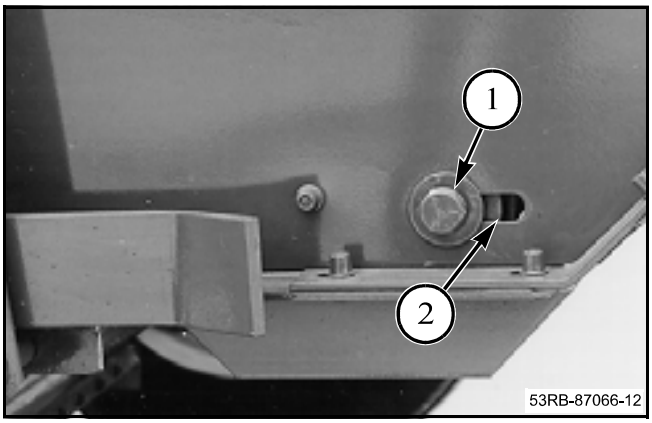

FIG. 11

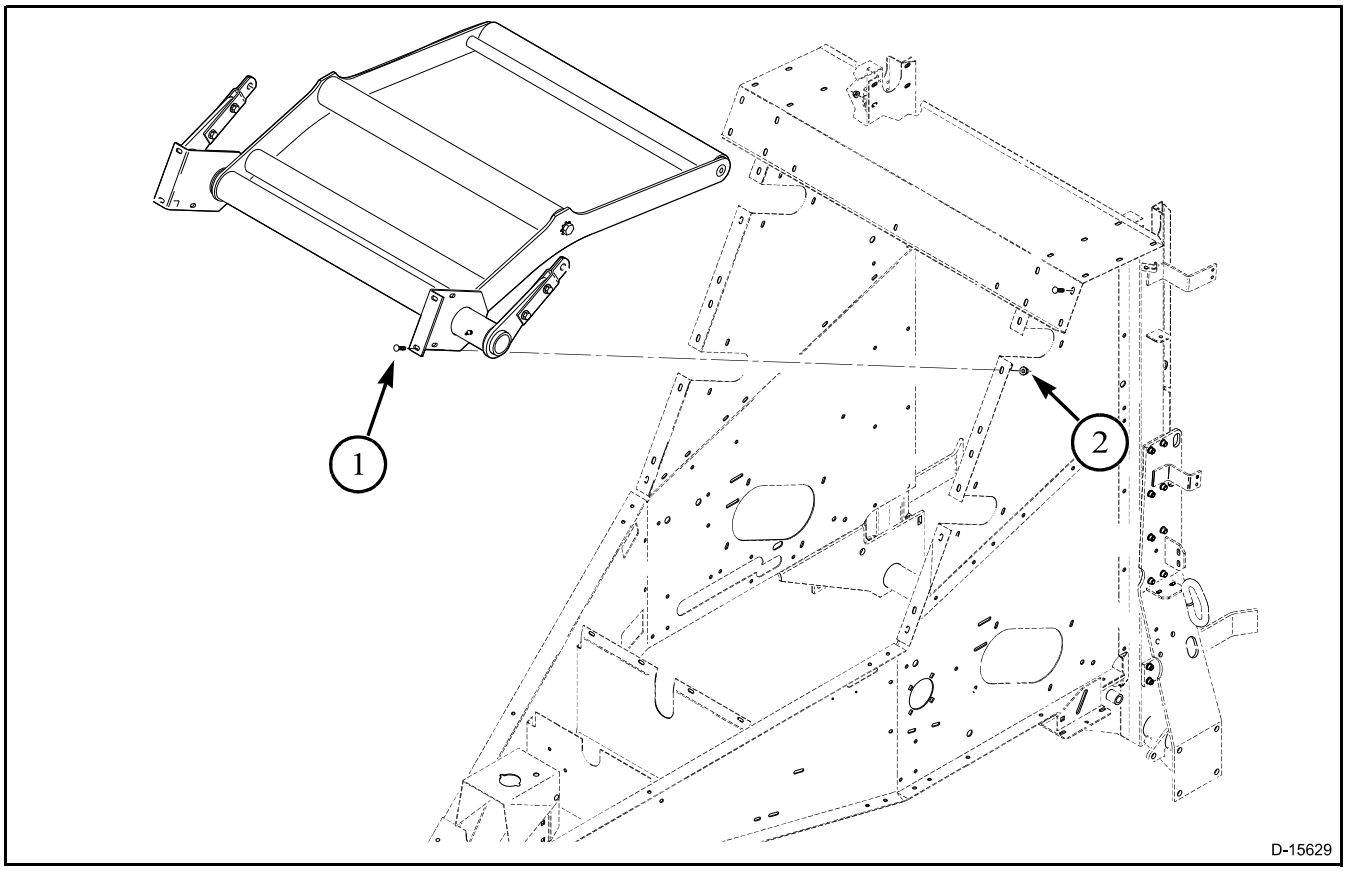

FIG. 36

FIG. 36: Use a suitable lifting device to hold the belt tension arm (1).

Remove the four round head square neck bolts (2) and the lock nuts.

Remove the belt tension arm (1) from the baler.

NOTES

Problem	Possible Cause	Correction
Twine is loose on the bale	Tension on twine tensioner is too loose	Increase the twine tension. If the twine does not feed, the tension is probably too tight.
	Twine is not in tensioners	Check and route twine correctly.
	Groove is worn in the tensioners	Replace the tensioners.
Twine drops off the ends of the bale	Not filling the sides of the baler properly	Concentrate on a driving pattern that fills the sides of the baler by crowding the edges of the windrow.
	Twine arm moving too far	Adjust the twine arm position switches.
	Twine guide rod needs adjustment	Adjust the twine guide rod.

FIG. 20: Insert the pin (1) to the rod end of the tailgate cylinder (2) on both sides of the baler. Insert the cotter pin (3).

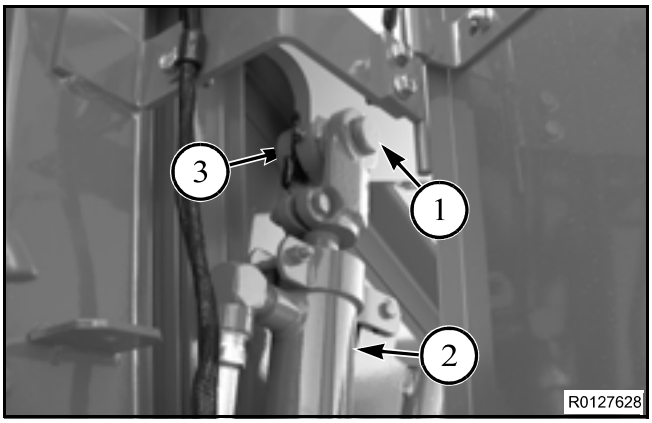

FIG. 20

FIG. 21: Install the wire harness clamps (1) along the side of the baler for the tailgate lamp wires (2).

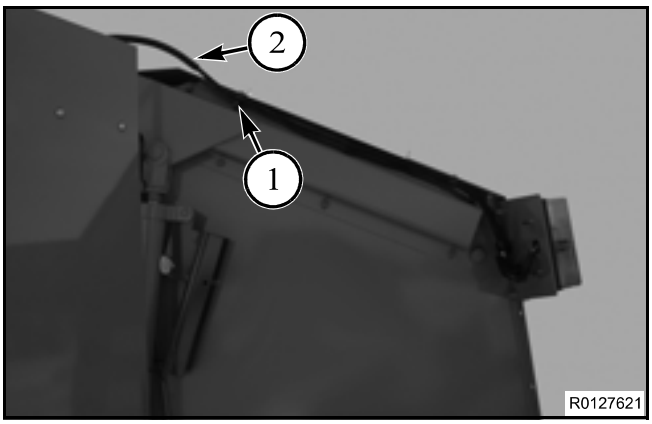

FIG. 21

FIG. 22: Connect the tailgate lamp wire harness to both sides of the baler.

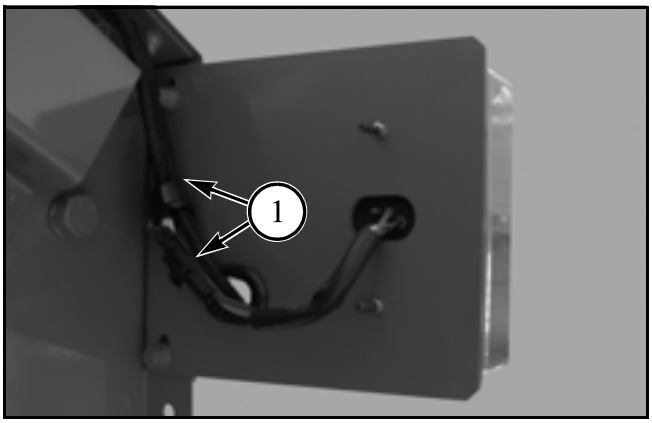

FIG. 22