SB521
SB531
SB541
SB541C
SB551

Square Baler

SERVICE MANUAL

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CASE IH AGRICULTURE

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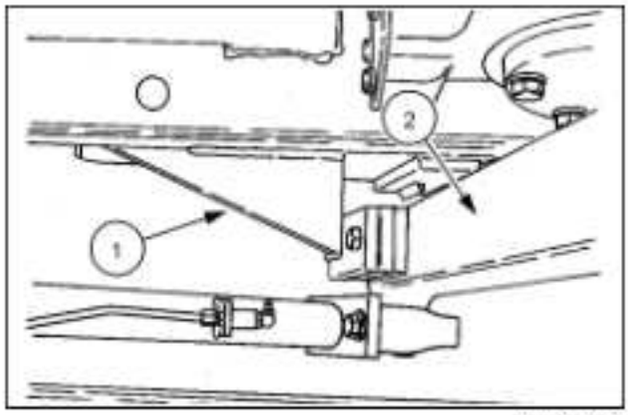
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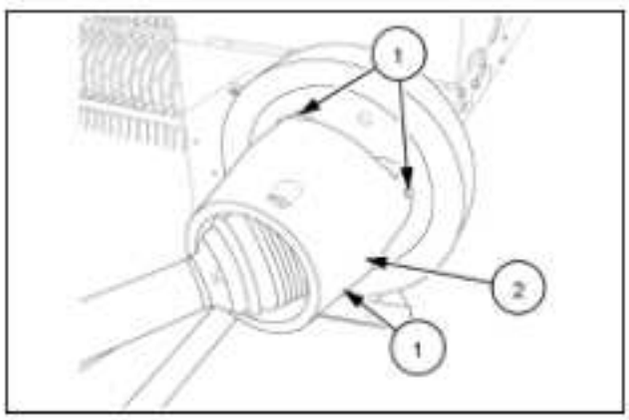
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4. The flywheel or plunger must be locked to check the clutch setting. This can be done by tripping the knotter or twister and turning the flywheel by hand until the needles move forward enough to fully extend the needle protection latch **(1)**.
5. Rotate the flywheel backwards until the crank arm **(2)**, is in front of the needle protection latch. The latch will give an audible indication when it snaps out. Turn the flywheel in the normal direction of travel so the crank arm is against the needle protection latch.



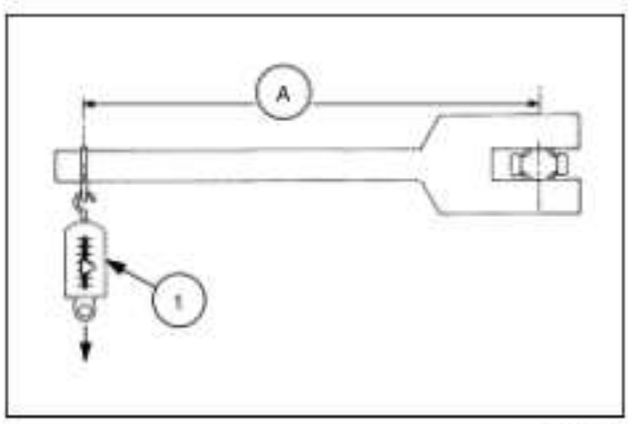
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6. The clutch should be set at:
   - SB521 – **678 N·m** (**500 lb ft**)
   - SB531 – **815 N·m** (**600 lb ft**)
   - SB541 – **1015 N·m** (**750 lb ft**)
   - SB541C – **1015 N·m** (**750 lb ft**)
   - SB551 – **1015 N·m** (**750 lb ft**)
7. Remove three mounting screws **(1)**, (one hidden) for the PTO clutch shield **(2)**, and slide the shield forward on the PTO.



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8. Use the PTO Slip clutch tool and spring scale **(1)**, for an accurate torque setting. Insert the tool between the universal joint yokes and attach the spring scale at a point on the bar **152 cm** (**60 in**), **(A)**, from the center of the PTO shaft.



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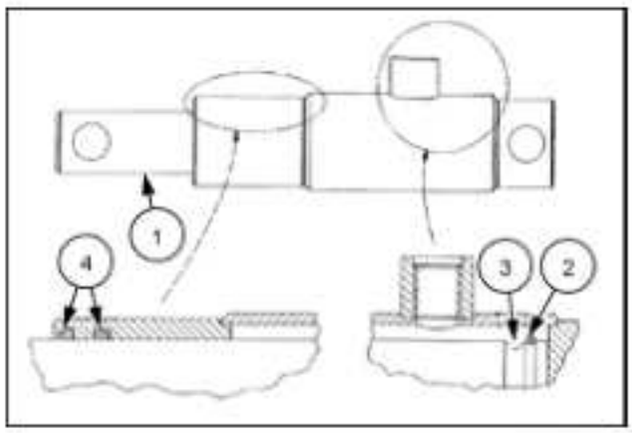
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Pickup lift circuit - Assemble

Pickup lift cylinder

NOTICE: *Use* ***CASE IH AKCELA NEXPLORE™ FLUID*** *for all hydraulic oil references.*

1. Coat the new seals **(4)**, with hydraulic oil and install in the barrel. Coat the rod **(1)**, and retaining ring **(2)**, with hydraulic oil. Place the ring in the notch **(3)**, in the rod. Install the rod in the barrel until the snap ring is visible through the port.
2. Insert a screw driver through the port and work the retaining ring **(2)**, from the notch **(3)**, and into the groove in the rod.
3. Install the adapter fitting and elbow in the cylinder.



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Knotter stack - Troubleshooting

Problem	Possible Cause	Correction
Forming bow knots. 	Not enough tension on the billhook cam spring.	Tighten spring nut to obtain a spring length of **17 mm** (**0.67 in**).
	Twine disc timing is incorrect.	Time the twine disc. See "Twine disc timing" (**Twine guide system - Adjust (68.150)**) for more information.
	The twine knife is dull.	Sharpen the twine knife.
	Tension on the twine holder spring is too low.	Tighten twine holder tension spring bolt a quarter-turn at a time.
	Twine clamps onto only one twine or part of a twine.	• Install a new billhook tongue, billhook roller, and/or the roller cam on the knotter frame. • Shim the billhook pinion so that the roller has full contact with cam.
	Knife arm travel is too short.	Adjust the knife arm to clear the billhook by **10 - 13 mm** (**0.394 - 0.512 in**).
	Incorrect billhook for twine.	• For sisal twine – Use a wide opening billhook. • For plastic twine – Use a narrow opening billhook.
	Baling is too loose.	• Increase pressure on tension rails. • Install additional hay wedges.
Metering wheel shaft failure	High density bales	Install shim spacers between the bottom of the metering wheel shaft supports and the top of the bale case.
Knots are hanging on the billhook.	Knife arm scraper is not adjusted properly.	Reshape knife arm. Scraper must rub the bottom of the billhook.
	Knife arm travel is too short.	Adjust the knife arm to clear the end of billhook by **10 - 13 mm** (**0.394 - 0.512 in**).
	Knife arm roller is excessively worn or is missing.	Replace roller.
	The knotter knife is dull.	Sharpen or replace knife.
	Tension on the twine holder spring is low.	Tighten the bolt of twine holder spring a quarter-turn at a time.
	Twine disc timing is too slow.	Adjust the twine disc timing. See "Twine disc timing" (**Twine guide system - Adjust (68.150)**) for more information.
	Wear, nicks, or roughness on the billhook or on the billhook tongue.	Install a new billhook tongue or new billhook.
	Groove in the billhook tongue.	Install a new billhook tongue.
	Twine fingers are too slow.	• Adjust the twine fingers. • Check the needle adjustment.
	Twine finger cam is excessively worn.	Install a new twine finger cam.
	Too much tension on the billhook cam.	Loosen the spring nut quarter-turn at a time.
	Billhook cam is binding on the adjustment bolt.	File the edges smooth of the cam hole.
	Groove worn into the cam gear lobe for the knife arm.	Install a new cam gear.
	Roller end of knife arm is damaged.	Install a new knife arm.

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